

Content:

Pump type group 00

Pump type group 10

Pump type group 20

Pump type group 30

Old Catalogue version

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General description

The gear pumps are designed for transforming the mechanical energy as energy of the working liquid (pressure and flow rate). They are simplified in construction and they have a relatively low cost. All these benefits ensure their wide application in the hydraulic systems.

Drive arrangements

The pump drive may be direct or indirect (by gear, chains, or belt transmissions). Both drives should not impose axial or radial forces on the pump shaft. Oldham coupling serrated drive adapters are used with direct drive. For indirect drive refer to the manufacturer.

The gear pumps are designed to work at the conditions mentioned below:

- Working liquid:	hydraulic oils with viscosity 16 ... 200 mm ² /s;
- Degree of filtration:	15 ... 25 ì m;
- Ambient temperature range:	- 22 ... 55 °C;
- Fluid temperature range:	- 25 ... 80 °C;
- Inlet pressure, absolute:	0.8 ... 2.2 bar;
- Fluid velocity (suction line)	0,5 ... 1 m/s
- Outlet pressure	up to 250 bar.

The gear pumps made by "Caproni" are produced in 5 different groups: 00, 10, 20 and 20H, 30 and 40. The displacements of the pumps are in the range from 0.25 to 60 cm³.

Group 00	q = 0.25 ... 2 cm ³ ;
Group 10	q = 1 ... 9.8 cm ³ ;
Group 20	q = 4.5 ... 25 cm ³ ;
Group 20H	q = 15 ... 36 cm ³ ;
Group 30	q = 20 ... 60 cm ³ ;
Group 40	q = 46 ... 60 cm ³ .

There are different variants of flanges, shafts and ports for each pump group (standard; Germany; USA ...).

We offer the next variants too:

- tandem pumps;
- pumps with build-in valves;
- reversible pumps;
- reversible gear motors.

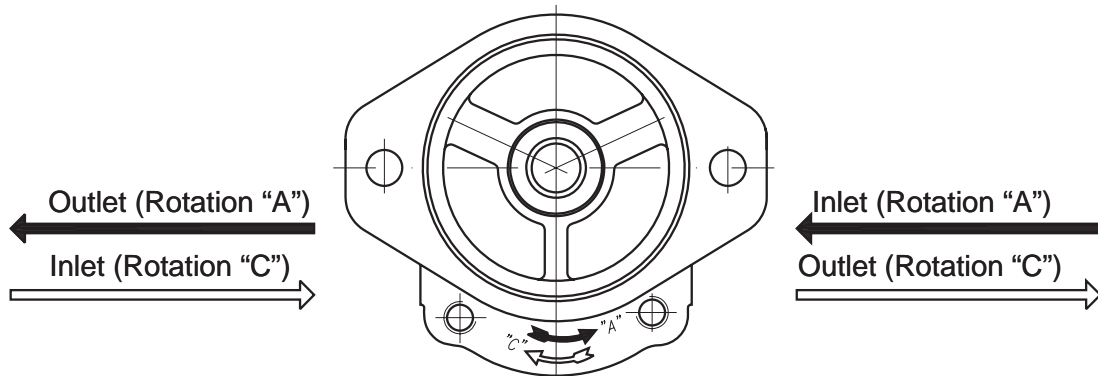
Used symbols:

n - speed of rotation	[min ⁻¹];
p - pressure	[bar];
q - displacement	[cm ³];
η - total efficiency $\eta = \eta_q \cdot \eta_{hm}$	[-];
η_{hm} - hydromechanical efficiency	[-];
η_q - volumetric efficiency	[-].

Commonly used formulas:

Flow:	$Q = \frac{q \cdot n \cdot \eta}{1000}$	[l/min]
Torque:	$M \cong \frac{q \cdot p}{20 \cdot \pi}$	[N.m]
Drive power:	$P = \frac{Q \cdot p}{600}$	[kW]

A relationship between the direction of rotation and the place of the inlet and outlet ports of the pumps



How to order:

Group	Rotation	Displacement code	Drive shaft	Pump code	Ports
00 10 20 30 40	A ↻ C ↻ R ↻		X - Through the front cover Y - Through the both covers	***(*)	- A flange with metric threads P4- A flange with UNC threads M - Metric G - GAS U - SAE J475

Group 00	
Code	cm ³
0,25	0,25
0,3	0,3
0,5	0,5
0,75	0,75
1	1
1,25	1,25
1,5	1,5
1,75	1,75
2	2

Group 10	
Code	cm ³
1	1
1,25	1,25
1,6	1,6
2	2
2,5	2,5
2,65*	2,65
3,15	3,15
3,65	3,65
4,2	4,2
4,7*	4,7
5	5
5,7	5,7
6,1	6,1
7,4	7,4
8*	8
8,5	8,5
9,8	9,8

Group 20	
Code	cm ³
4,5	4,5
6,3	6,3
7*	7
8,2	8,2
10	10
11	11,3
12	12
14	14
15	15
16	16
17*	17,3
19	19
22	22
25	25
28	28
32	32
36	36

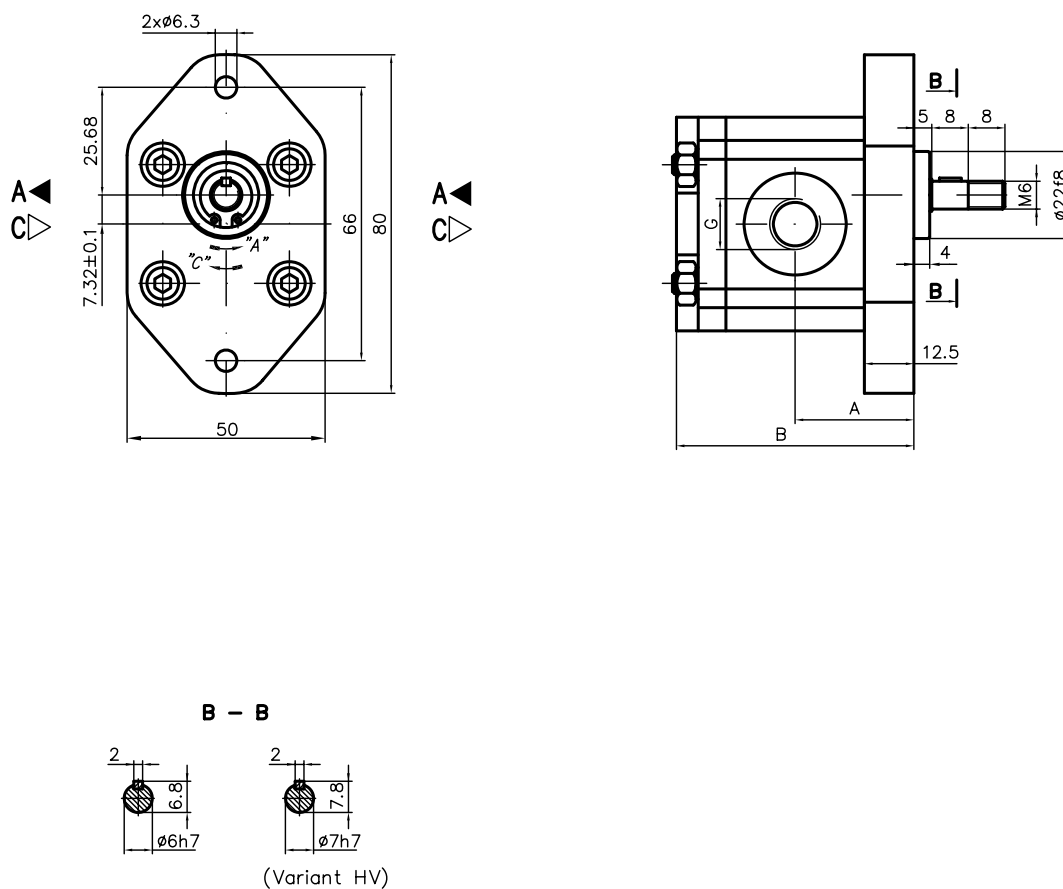
Group 20H	
Code	cm ³
15	15
16	16
19	19
22	22
25	25
28	28
32	32
36	36

Group 30	
Code	cm ³
20	20
22,5	22,5
25	25
28	28
32	32
36	36
42	42
46	46
50	50
55	55
60	60

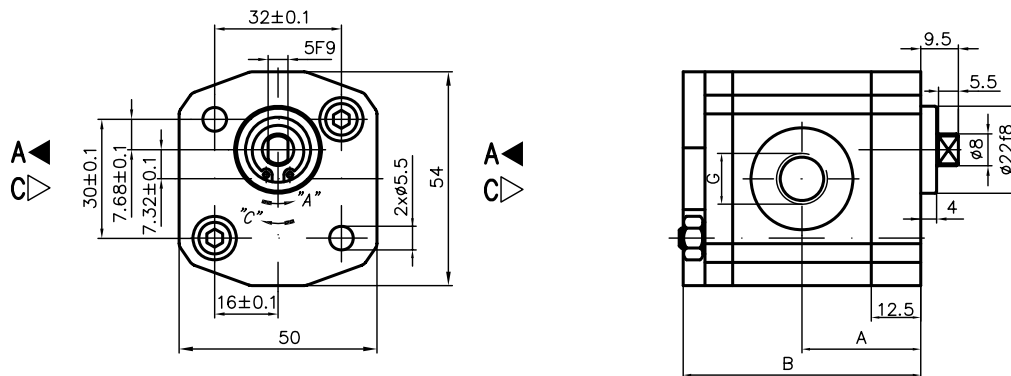
Group 40	
Code	cm ³
36	36
42	42
46	46
50	50
55	55
60	60

Example: 20A14X073 - Hydraulic gear pump, 20 group, direction of rotation - counter clockwise, displacement 14 cm³, modification 073.

* - These pumps - only under a special order

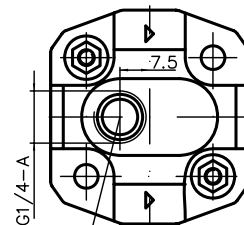
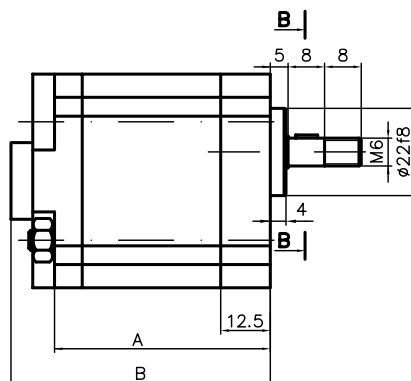
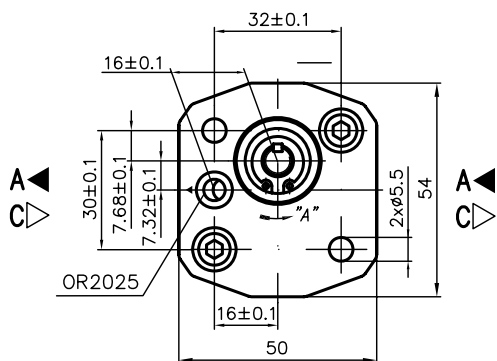


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
										G			G
00A(C)0,25X032	0,25	0,3	0,8	200	3500	27,6	55,3						
00A(C)0,3X032	0,3	0,4	0,9	200	3500	27,7	55,7						
00A(C)0,5X032	0,5	0,7	1,6	200	3500	28,7	57,5						
00A(C)0,75X032	0,75	1,0	2,3	200	3500	29,9	59,8						
00A(C)1X032	1	1,4	3,2	200	3500	31,0	62,0			1/4"			1/4"
00A(C)1,25X032	1,25	1,7	3,4	200	3000	32,1	64,2						
00A(C)1,5X032	1,5	2,1	3,5	175	2500	33,2	66,5						
00A(C)1,75X032	1,75	2,4	4,1	160	2500	34,3	68,7						
00A(C)2X032	2	2,8	3,7	160	2000	35,5	70,9						



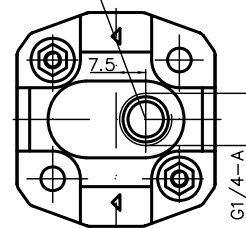
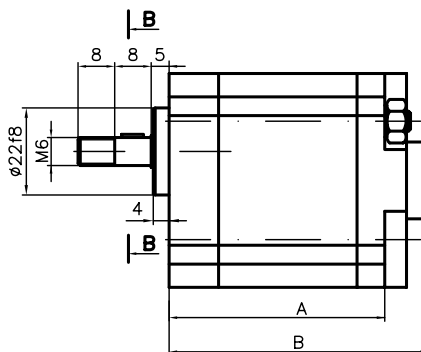
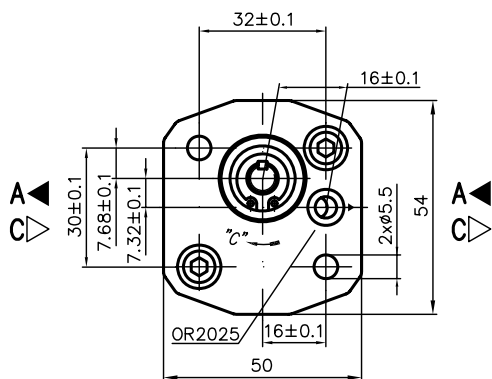
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
										G			G
00A(C)0,25X033...	0,25	0,3	0,8	200	3500	27,6	55,3						
00A(C)0,3X033...	0,3	0,4	0,9	200	3500	27,7	55,7						
00A(C)0,5X033...	0,5	0,7	1,6	200	3500	28,7	57,5						
00A(C)0,75X033...	0,75	1,0	2,3	200	3500	29,9	59,8						
00A(C)1X033...	1	1,4	3,2	200	3500	31,0	62,0			1/4"			1/4"
00A(C)1,25X033...	1,25	1,7	3,4	200	3000	32,1	64,2						
00A(C)1,5X033...	1,5	2,1	3,5	175	2500	33,2	66,5						
00A(C)1,75X033...	1,75	2,4	4,1	160	2500	34,3	68,7						
00A(C)2X033...	2	2,8	3,7	160	2000	35,5	70,9						

Rotation "A"

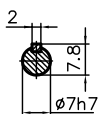
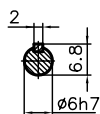


IN

Rotation "C"

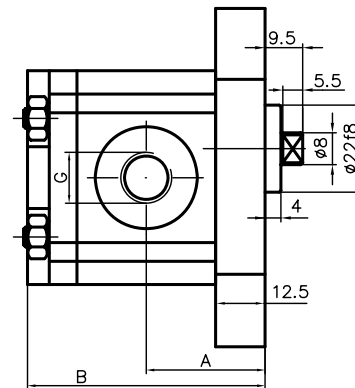
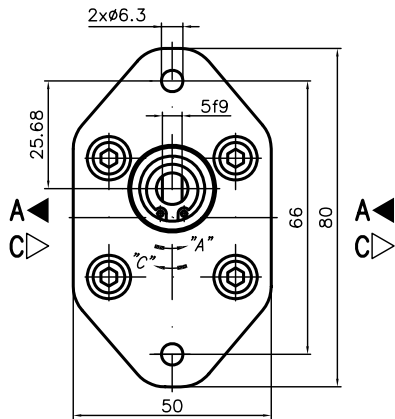


B - B

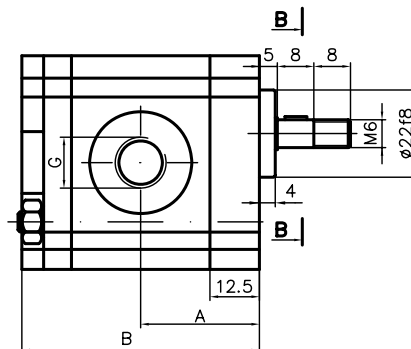
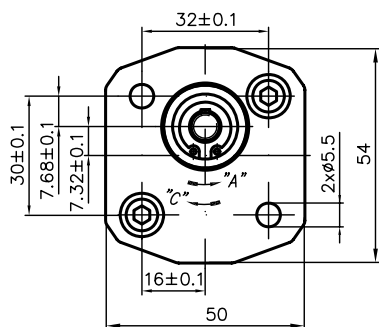


(Variant HV)

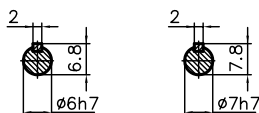
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension						
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet G			Outlet	
00A(C)0,25X034	0,25	0,3	0,8	200	3500	55,3	60,8	1/4"	ø5,5			
00A(C)0,3X034	0,3	0,4	0,9	200	3500	55,7	61,2					
00A(C)0,5X034	0,5	0,7	1,6	200	3500	57,5	63,0					
00A(C)0,75X034	0,75	1,0	2,3	200	3500	59,8	65,3					
00A(C)1X034	1	1,4	3,2	200	3500	62,0	67,5					
00A(C)1,25X034	1,25	1,7	3,4	200	3000	64,2	69,7					
00A(C)1,5X034	1,5	2,1	3,5	175	2500	66,5	72,0					
00A(C)1,75X034	1,75	2,4	4,1	160	2500	68,7	74,2					
00A(C)2X034	2	2,8	3,7	160	2000	70,9	76,4					



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
										G			G
00A(C)0,25X043	0,25	0,3	0,8	200	3500	27,6	55,3						
00A(C)0,3X043	0,3	0,4	0,9	200	3500	27,7	55,7						
00A(C)0,5X043	0,5	0,7	1,6	200	3500	28,7	57,5						
00A(C)0,75X043	0,75	1,0	2,3	200	3500	29,9	59,8						
00A(C)1X043	1	1,4	3,2	200	3500	31,0	62,0			1/4"			1/4"
00A(C)1,25X043	1,25	1,7	3,4	200	3000	32,1	64,2						
00A(C)1,5X043	1,5	2,1	3,5	175	2500	33,2	66,5						
00A(C)1,75X043	1,75	2,4	4,1	160	2500	34,3	68,7						
00A(C)2X043	2	2,8	3,7	160	2000	35,5	70,9						

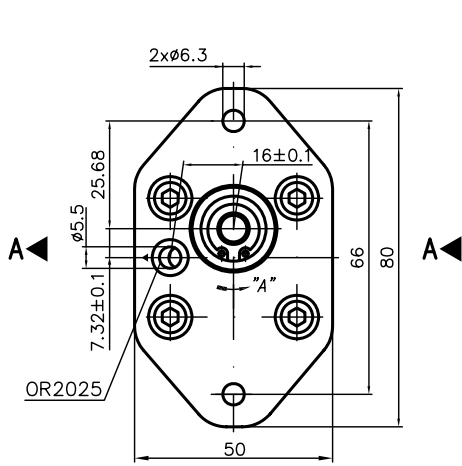


B - B

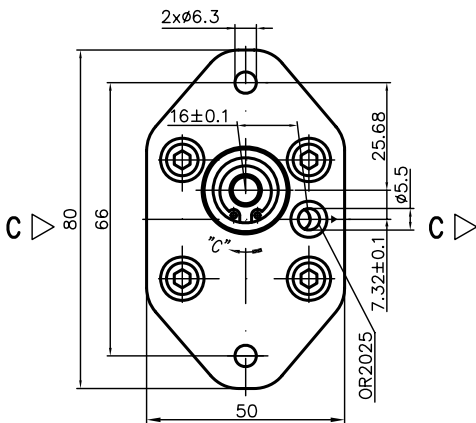
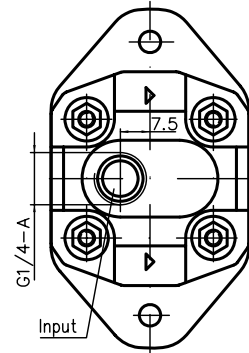
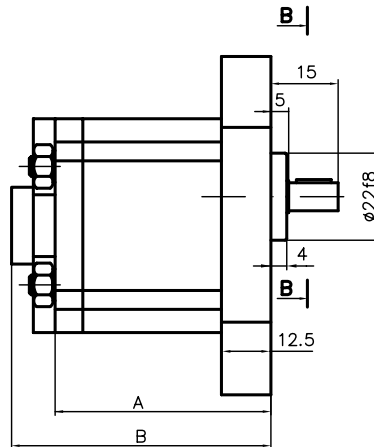


(Variant HV)

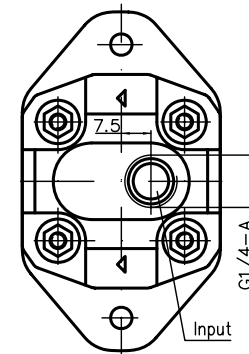
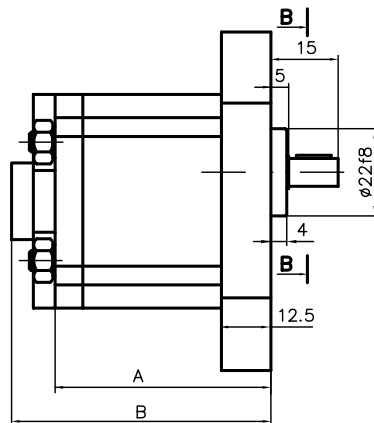
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
										G			G
00A(C)0,25X044	0,25	0,3	0,8	200	3500	27,6	55,3						
00A(C)0,3X044	0,3	0,4	0,9	200	3500	27,7	55,7						
00A(C)0,5X044	0,5	0,7	1,6	200	3500	28,7	57,5						
00A(C)0,75X044	0,75	1,0	2,3	200	3500	29,9	59,8						
00A(C)1X044	1	1,4	3,2	200	3500	31,0	62,0			1/4"			1/4"
00A(C)1,25X044	1,25	1,7	3,4	200	3000	32,1	64,2						
00A(C)1,5X044	1,5	2,1	3,5	175	2500	33,2	66,5						
00A(C)1,75X044	1,75	2,4	4,1	160	2500	34,3	68,7						
00A(C)2X044	2	2,8	3,7	160	2000	35,5	70,9						



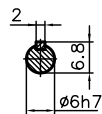
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Rotation "C"

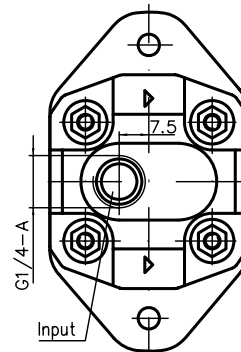
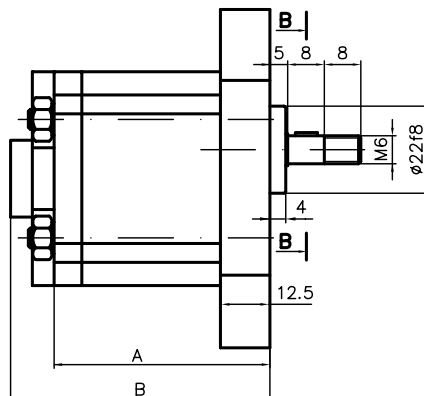
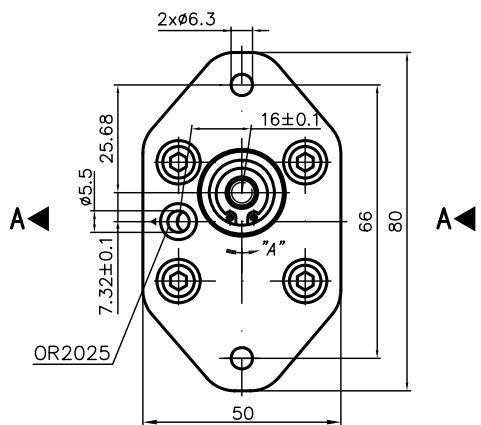


B - B

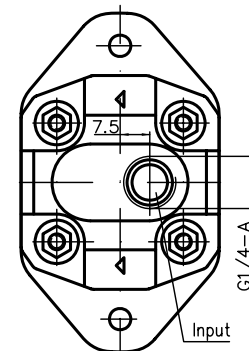
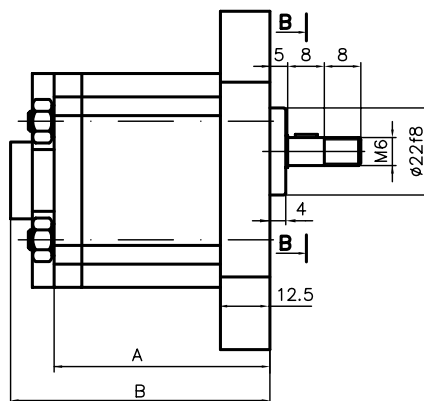
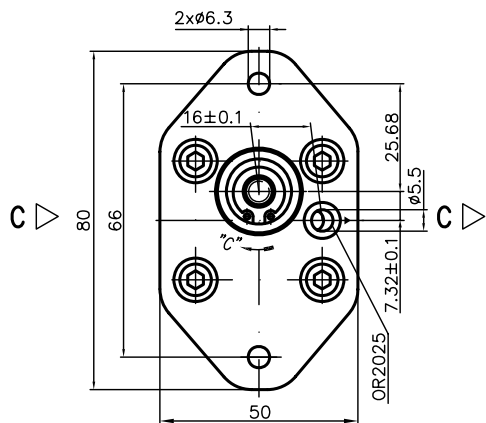


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet		Outlet			
00A(C)0,25X045H	0,25	0,3	0,9	120	4000	55,3	60,8						
00A(C)0,3X045H	0,3	0,4	1,1	120	4000	55,7	61,2						
00A(C)0,5X045H	0,5	0,7	1,8	120	4000	57,5	63,0						
00A(C)0,75X045H	0,75	1,0	2,7	120	4000	59,8	65,3						
00A(C)1X045H	1	1,4	3,6	120	4000	62,0	67,5			1/4"		φ5,5	
00A(C)1,25X045H	1,25	1,7	4,6	120	4000	64,2	69,7						
00A(C)1,5X045H	1,5	2,1	5,6	120	4000	66,5	72,0						
00A(C)1,75X045H	1,75	2,4	6,5	120	4000	68,7	74,2						
00A(C)2X045H	2	2,8	7,4	120	4000	70,9	76,4						

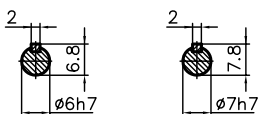
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Rotation "C"



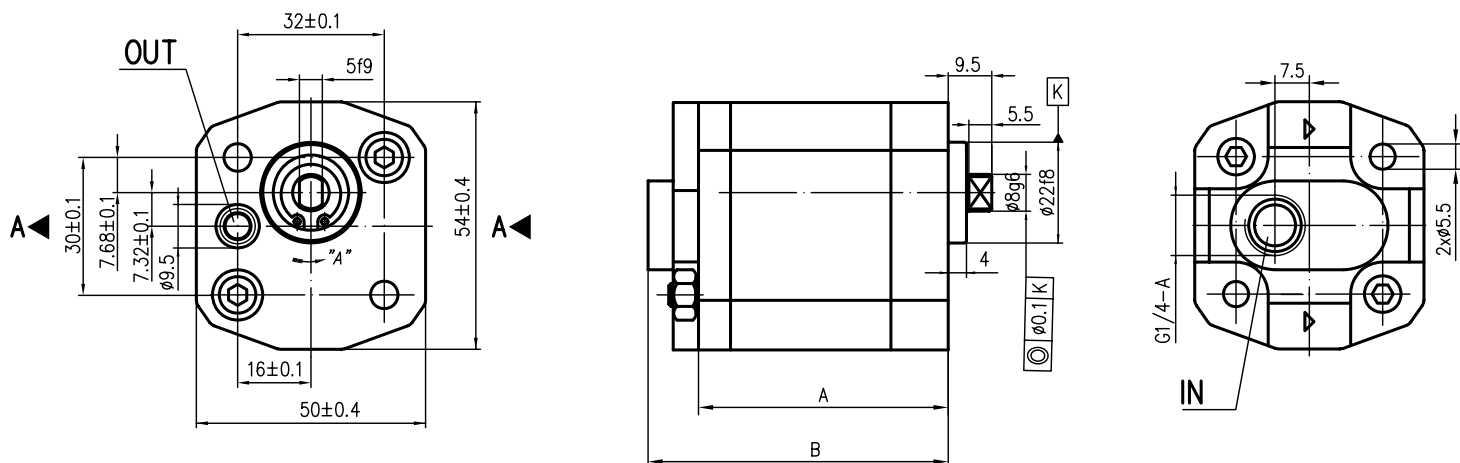
B - B



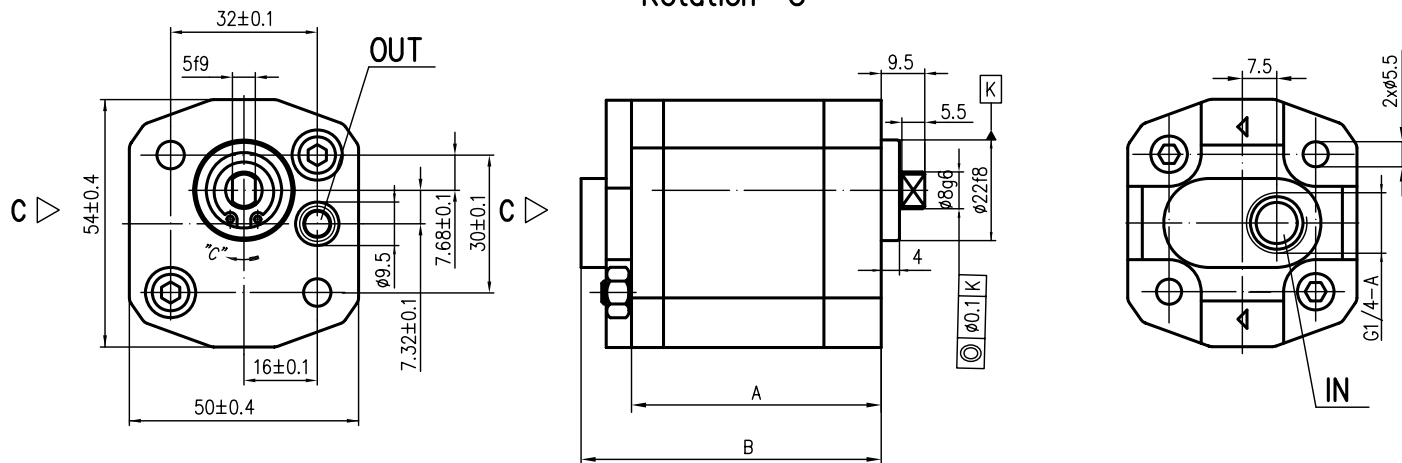
(Variant HV)

Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension						
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet		Outlet		
00A(C)0,25X046	0,25	0,3	0,8	200	3500	55,3	60,8	1/4"	ø5,5			
00A(C)0,3X046	0,3	0,4	0,9	200	3500	55,7	61,2					
00A(C)0,5X046	0,5	0,7	1,6	200	3500	57,5	63,0					
00A(C)0,75X046	0,75	1,0	2,3	200	3500	59,8	65,3					
00A(C)1X046	1	1,4	3,2	200	3500	62,0	67,5					
00A(C)1,25X046	1,25	1,7	3,4	200	3000	64,2	69,7					
00A(C)1,5X046	1,5	2,1	3,5	175	2500	66,5	72,0					
00A(C)1,75X046	1,75	2,4	4,1	160	2500	68,7	74,2					
00A(C)2X046	2	2,8	3,7	160	2000	70,9	76,4					

Rotation "A"

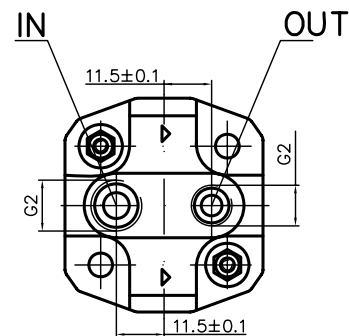
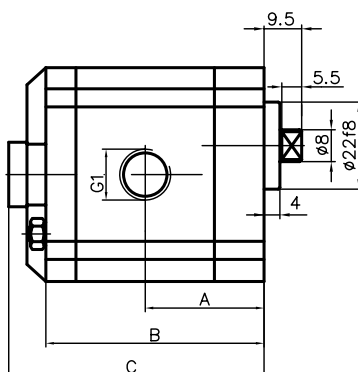
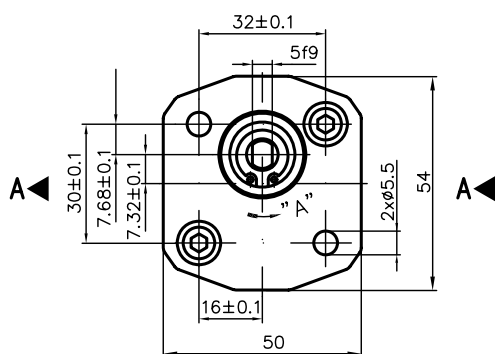


Rotation "C"

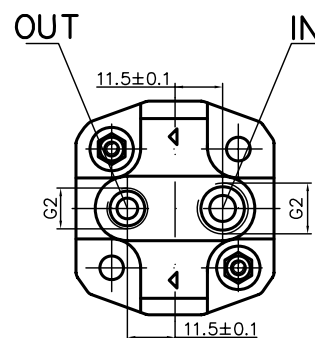
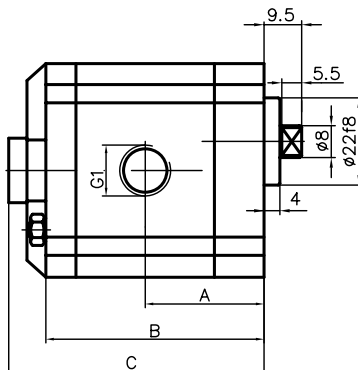
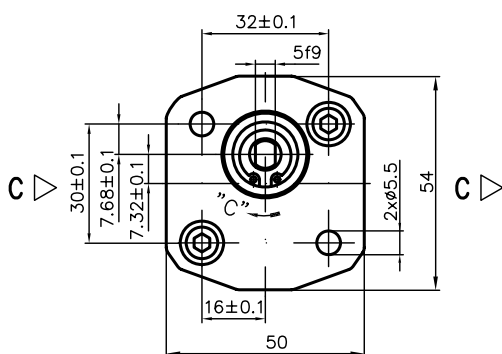


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet		Outlet			
00A(C)0,25X047	0,25	0,3	0,8	200	3500	55,3	60,8						
00A(C)0,3X047	0,3	0,4	0,9	200	3500	55,7	61,2						
00A(C)0,5X047	0,5	0,7	1,6	200	3500	57,5	63,0						
00A(C)0,75X047	0,75	1,0	2,3	200	3500	59,8	65,3						
00A(C)1X047	1	1,4	3,2	200	3500	62,0	67,5			1/4"			Ø5,5
00A(C)1,25X047	1,25	1,7	3,4	200	3000	64,2	69,7						
00A(C)1,5X047	1,5	2,1	3,5	175	2500	66,5	72,0						
00A(C)1,75X047	1,75	2,4	4,1	160	2500	68,7	74,2						
00A(C)2X047	2	2,8	3,7	160	2000	70,9	76,4						

Rotation "A"

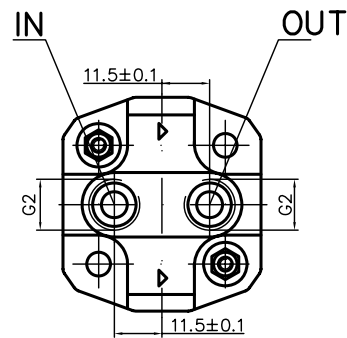
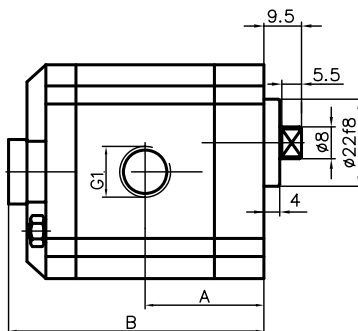
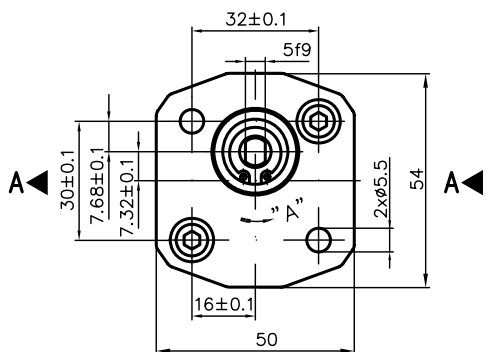


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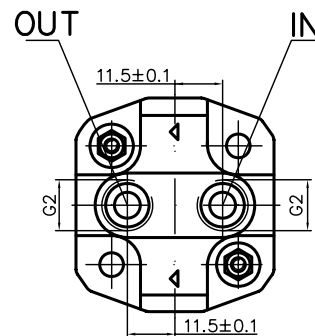
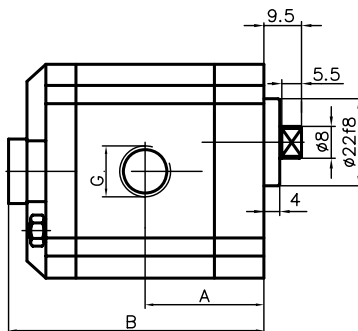
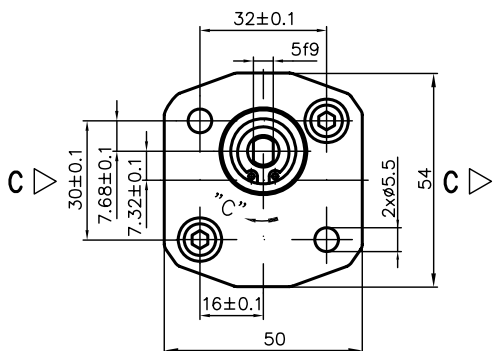


Type	Displacement	Flow		Pressure	max Speed	Dimension							
		at 1500 rpm	at max rpm			P _{nom}	n	A	B	C	Inlet		Outlet
	cm ³ /rev	l/min	l/min	bar	rpm	mm	mm		G1	G2		G1	G2
00A(C)0,25X048W1	0,25	0,3	0,8	200	3500	27,6	55,3	60,8	1/4"	1/4"		1/4"	1/8"
00A(C)0,3X048W1	0,3	0,4	0,9	200	3500	27,7	55,7	61,2					
00A(C)0,5X048W1	0,5	0,7	1,6	200	3500	28,7	57,5	63,0					
00A(C)0,75X048W1	0,75	1,0	2,3	200	3500	29,9	59,8	65,3					
00A(C)1X048W1	1	1,4	3,2	200	3500	31,0	62,0	67,5					
00A(C)1,25X048W1	1,25	1,7	3,4	200	3000	32,1	64,2	69,7					
00A(C)1,5X048W1	1,5	2,1	3,5	175	2500	33,2	66,5	72,0					
00A(C)1,75X048W1	1,75	2,4	4,1	160	2500	34,3	68,7	74,2					
00A(C)2X048W1	2	2,8	3,7	160	2000	35,5	70,9	76,4					

Rotation "A"

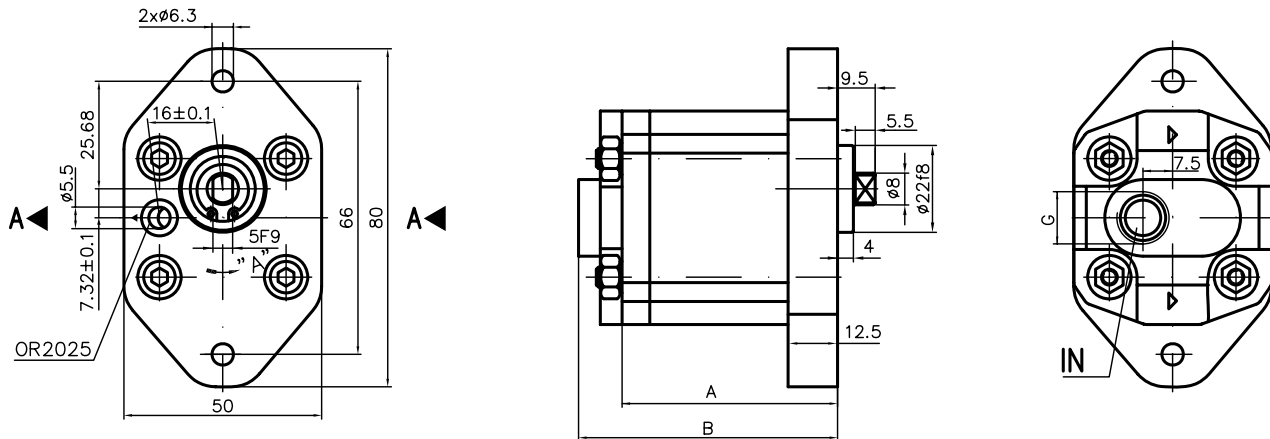


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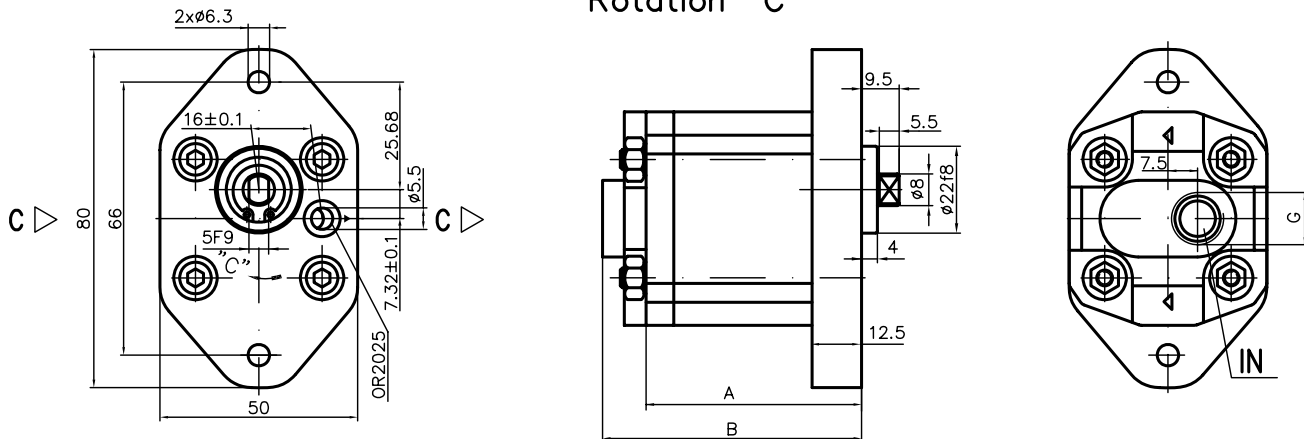


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension						
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	C mm	Inlet G1 G1		Outlet G2 G2	
00A(C)0,25X048W2	0,25	0,3	0,8	200	3500	27,6	55,3	60,8	1/4"	1/4"	1/4"	1/4"
00A(C)0,3X048W2	0,3	0,4	0,9	200	3500	27,7	55,7	61,2				
00A(C)0,5X048W2	0,5	0,7	1,6	200	3500	28,7	57,5	63,0				
00A(C)0,75X048W2	0,75	1,0	2,3	200	3500	29,9	59,8	65,3				
00A(C)1X048W2	1	1,4	3,2	200	3500	31,0	62,0	67,5				
00A(C)1,25X048W2	1,25	1,7	3,4	200	3000	32,1	64,2	69,7				
00A(C)1,5X048W2	1,5	2,1	3,5	175	2500	33,2	66,5	72,0				
00A(C)1,75X048W2	1,75	2,4	4,1	160	2500	34,3	68,7	74,2				
00A(C)2X048W2	2	2,8	3,7	160	2000	35,5	70,9	76,4				

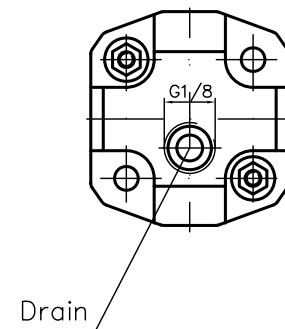
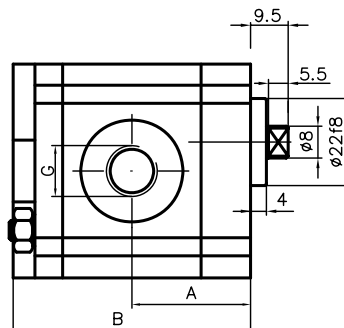
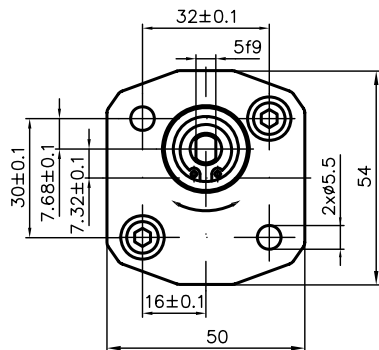
Rotation "A"



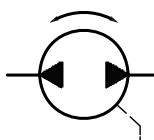
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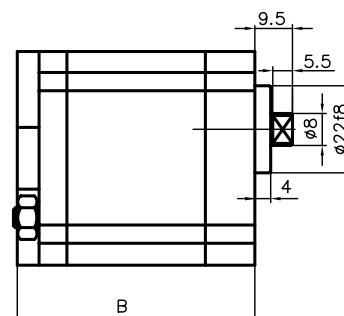
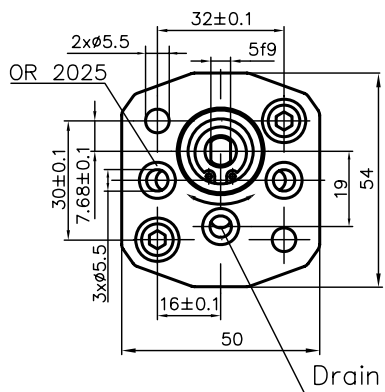
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet		Outlet			
00A(C)0,25X049	0,25	0,3	0,8	200	3500	55,3	60,8						
00A(C)0,3X049	0,3	0,4	0,9	200	3500	55,7	61,2						
00A(C)0,5X049	0,5	0,7	1,6	200	3500	57,5	63,0						
00A(C)0,75X049	0,75	1,0	2,3	200	3500	59,8	65,3						
00A(C)1X049	1	1,4	3,2	200	3500	62,0	67,5			1/4"			$\phi 5,5$
00A(C)1,25X049	1,25	1,7	3,4	200	3000	64,2	69,7						
00A(C)1,5X049	1,5	2,1	3,5	175	2500	66,5	72,0						
00A(C)1,75X049	1,75	2,4	4,1	160	2500	68,7	74,2						
00A(C)2X049	2	2,8	3,7	160	2000	70,9	76,4						



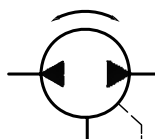
P_{max}=170bar



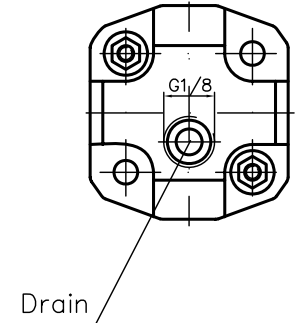
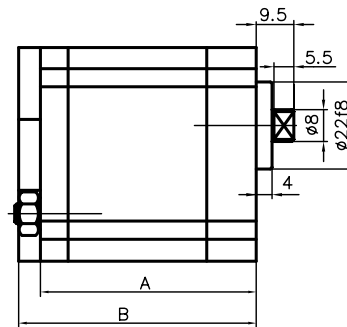
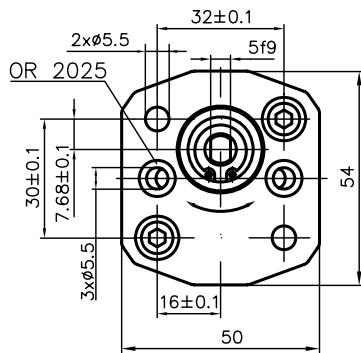
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet		Outlet			
00R0,25X051	0,25	0,3	0,8	170	3500	27,6	55,3						
00R0,3X051	0,3	0,4	0,9	170	3500	27,7	55,7						
00R0,5X051	0,5	0,7	1,6	170	3500	28,7	57,5						
00R0,75X051	0,75	1,0	2,3	170	3500	29,9	59,8						
00R1X051	1	1,4	3,2	170	3500	31,0	62,0			1/4"			1/4"
00R1,25X051	1,25	1,7	3,4	170	3000	32,1	64,2						
00R1,5X051	1,5	2,1	3,5	170	2500	33,2	66,5						
00R1,75X051	1,75	2,4	4,1	160	2500	34,3	68,7						
00R2X051	2	2,8	3,7	160	2000	35,5	70,9						



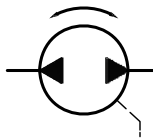
Pmax=170bar



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet			
00R0,25X052	0,25	0,3	0,8	170	3500	27,6	55,3							
00R0,3X052	0,3	0,4	0,9	170	3500	27,7	55,7							
00R0,5X052	0,5	0,7	1,6	170	3500	28,7	57,5							
00R0,75X052	0,75	1,0	2,3	170	3500	29,9	59,8							
00R1X052	1	1,4	3,2	170	3500	31,0	62,0		∅5,5				∅5,5	
00R1,25X052	1,25	1,7	3,4	170	3000	32,1	64,2							
00R1,5X052	1,5	2,1	3,5	170	2500	33,2	66,5							
00R1,75X052	1,75	2,4	4,1	160	2500	34,3	68,7							
00R2X052	2	2,8	3,7	160	2000	35,5	70,9							

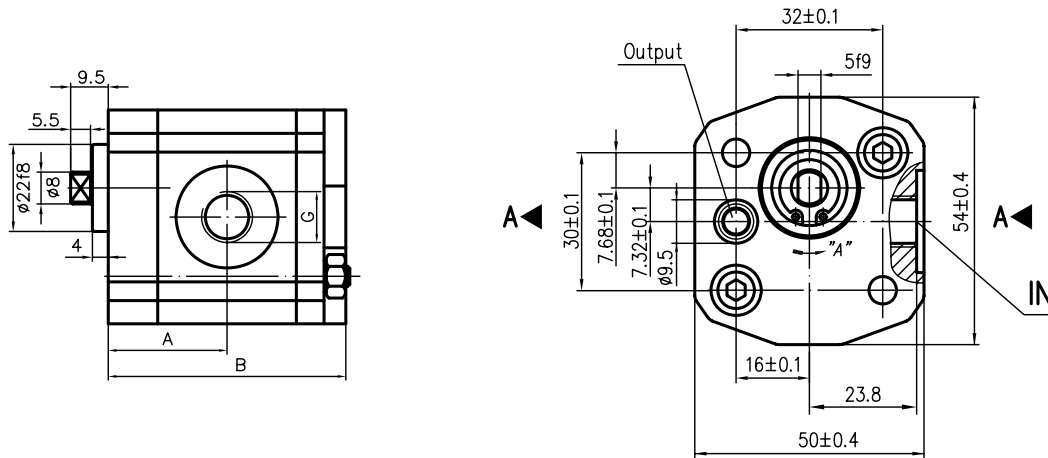


P_{max}=170bar

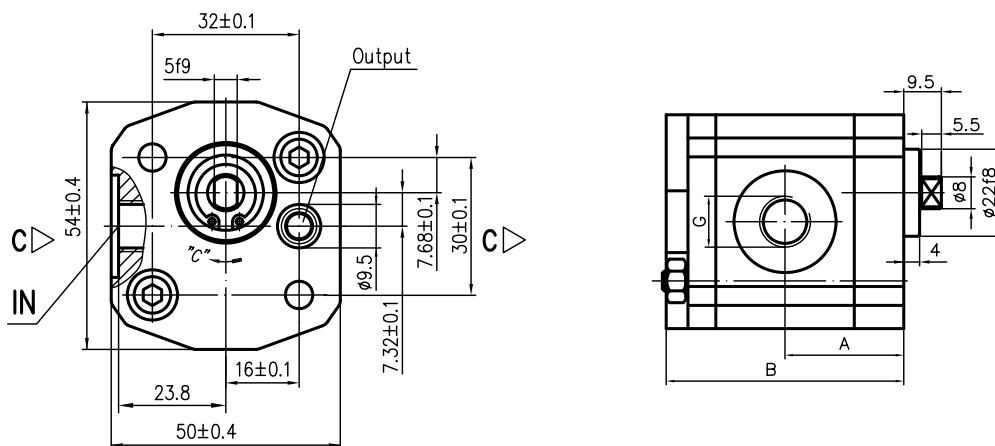


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet		Outlet			
00R0,25X060	0,25	0,3	0,8	170	3500	27,6	55,3						
00R0,3X060	0,3	0,4	0,9	170	3500	27,7	55,7						
00R0,5X060	0,5	0,7	1,6	170	3500	28,7	57,5						
00R0,75X060	0,75	1,0	2,3	170	3500	29,9	59,8						
00R1X060	1	1,4	3,2	170	3500	31,0	62,0		Ø5,5			Ø5,5	
00R1,25X060	1,25	1,7	3,4	170	3000	32,1	64,2						
00R1,5X060	1,5	2,1	3,5	170	2500	33,2	66,5						
00R1,75X060	1,75	2,4	4,1	160	2500	34,3	68,7						
00R2X060	2	2,8	3,7	160	2000	35,5	70,9						

Rotation "A"



Rotation "C"



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension						
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet	
									G			G
00A(C)0,25X063	0,25	0,3	0,8	200	3500	27,6	55,3					
00A(C)0,3X063	0,3	0,4	0,9	200	3500	27,7	55,7					
00A(C)0,5X063	0,5	0,7	1,6	200	3500	28,7	57,5					
00A(C)0,75X063	0,75	1,0	2,3	200	3500	29,9	59,8					
00A(C)1X063	1	1,4	3,2	200	3500	31,0	62,0		1/4"			$\phi 5,5$
00A(C)1,25X063	1,25	1,7	3,4	200	3000	32,1	64,2					
00A(C)1,5X063	1,5	2,1	3,5	175	2500	33,2	66,5					
00A(C)1,75X063	1,75	2,4	4,1	160	2500	34,3	68,7					
00A(C)2X063	2	2,8	3,7	160	2000	35,5	70,9					

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General description

The gear pumps are designed for transforming the mechanical energy as energy of the working liquid (pressure and flow rate). They are simplified in construction and they have a relatively low cost. All these benefits ensure their wide application in the hydraulic systems.

Drive arrangements

The pump drive can be direct or indirect (by gear, chains, or belt transmissions). Both drives should not impose axial or radial forces on the pump shaft. Oldham coupling serrated drive adapters are used with direct drive. For indirect drive refer to the manufacturer.

The gear pumps are designed to work at the conditions mentioned below:

- Working liquid: hydraulic oils with viscosity 16 ... 200 mm²/s;
- Degree of filtration: 15 ... 25 ì m;
- Ambient temperature range: - 22 ... 55 °C;
- Fluid temperature range: - 25 ... 80 °C;
- Inlet pressure, absolute: 0.8 ... 2.2 bar;
- Fluid velocity (suction line) 0,5 ... 1 m/s
- Outlet pressure up to 250 bar.

The gear pumps made by "Caproni" are produced in 5 different groups: 00, 10, 20 and 20H, 30 and 40. The displacements of the pumps are in the range from 0.25 to 60 cm³.

Group 00	q = 0.25 ... 2 cm ³ ;
Group 10	q = 1 ... 9.8 cm ³ ;
Group 20	q = 4.5 ... 25 cm ³ ;
Group 20H	q = 15 ... 36 cm ³ ;
Group 30	q = 20 ... 60 cm ³ ;
Group 40	q = 46 ... 60 cm ³ .

There are different variants of flanges, shafts and ports for each pump group (standard; Germany; USA ...).

We offer the next variants too:

- tandem pumps;
- pumps with build-in valves;
- reversible pumps;
- reversible gear motors.

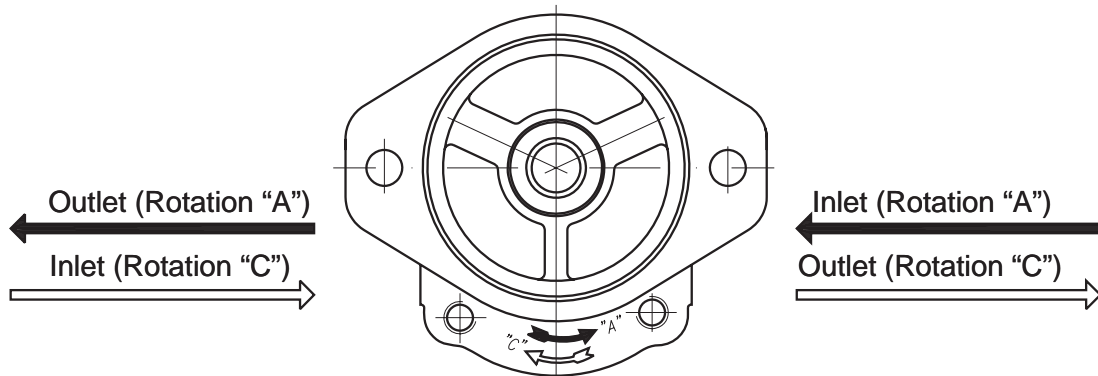
Used symbols:

n - speed of rotation	[min ⁻¹];
p - pressure	[bar];
q - displacement	[cm ³];
η - total efficiency $\eta = \eta_q \cdot \eta_{hm}$	[-];
η_{hm} - hydromechanical efficiency	[-];
η_q - volumetric efficiency	[-].

Commonly used formulas:

Flow:	$Q = \frac{q \cdot n \cdot \eta}{1000}$	[l/min]
Torque:	$M \cong \frac{q \cdot p}{20 \cdot \pi}$	[N.m]
Drive power:	$P = \frac{Q \cdot p}{600}$	[kW]

A relationship between the direction of rotation and the place of the inlet and outlet ports of the pumps



How to order:

Group	Rotation	Displacement code	Drive shaft	Pump code	Ports
00 10 20 30 40	A ↻ C ↻ R ↻		X - Through the front cover Y - Through the both covers	***(*)	- A flange with metric threads P4- A flange with UNC threads M - Metric G - GAS U - SAE J475

Group 00	
Code	cm ³
0,25	0,25
0,3	0,3
0,5	0,5
0,75	0,75
1	1
1,25	1,25
1,5	1,5
1,75	1,75
2	2

Group 10	
Code	cm ³
1	1
1,25	1,25
1,6	1,6
2	2
2,5	2,5
2,65*	2,65
3,15	3,15
3,65	3,65
4,2	4,2
4,7*	4,7
5	5
5,7	5,7
6,1	6,1
7,4	7,4
8*	8
8,5	8,5
9,8	9,8

Group 20	
Code	cm ³
4,5	4,5
6,3	6,3
7*	7
8,2	8,2
10	10
11	11,3
12	12
14	14
15	15
16	16
17*	17,3
19	19
22	22
25	25
28	28
32	32
36	36

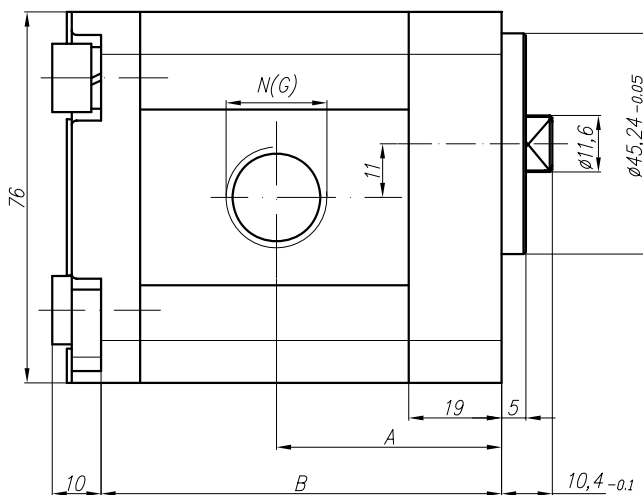
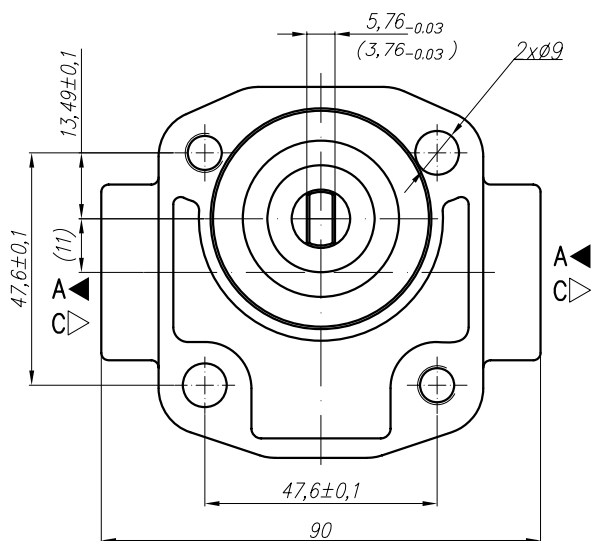
Group 20H	
Code	cm ³
15	15
16	16
19	19
22	22
25	25
28	28
32	32
36	36

Group 30	
Code	cm ³
20	20
22,5	22,5
25	25
28	28
32	32
36	36
42	42
46	46
50	50
55	55
60	60

Group 40	
Code	cm ³
36	36
42	42
46	46
50	50
55	55
60	60

Example: 20A14X073 - Hydraulic gear pump, 20 group, direction of rotation - counter clockwise, displacement 14 cm³, modification 073.

* - These pumps - only under a special order

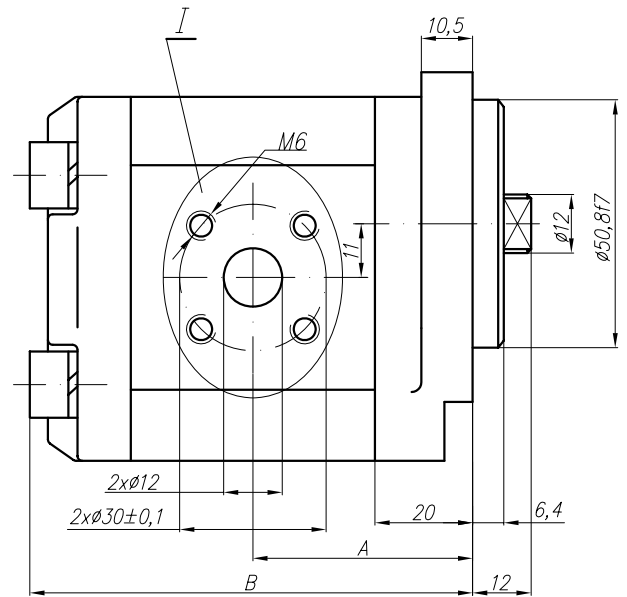
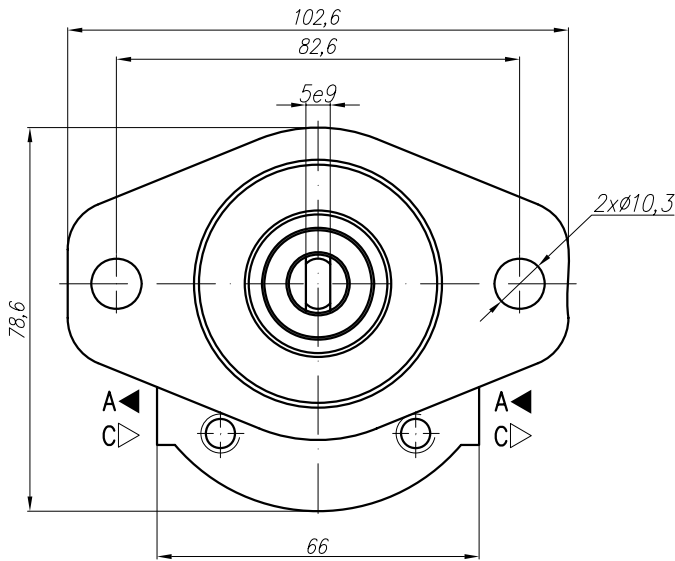


Variants:

- for drive shaft 3,76 - ...001-3
- for G ports - ...001G

Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet		Outlet					
						A mm	B mm	G	N	U	G	N	U
10A(C)1X001	1	1,40	3,26	250	3500	40,1	69,1	G1/2	1/2" NPTF-14		G1/2	1/2" NPTF-14	
10A(C)1,25X001	1,25	1,74	4,07	250	3500	40,6	70,1						
10A(C)1,6X001	1,6	2,23	5,21	250	3500	41,3	71,5						
10A(C)2X001	2	2,82	6,58	250	3500	42,1	73,2						
10A(C)2,5X001	2,5	3,53	8,23	250	3500	43,1	75,2						
* 10A(C)2,65X001	2,65	3,74	8,72	250	3500	43,4	75,8						
10A(C)3,15X001	3,15	4,44	10,36	250	3500	44,5	77,8						
10A(C)3,65X001	3,65	5,15	12,01	250	3500	45,4	79,8						
10A(C)4,2X001	4,2	5,92	13,82	250	3500	46,5	82,0						
* 10A(C)4,7X001	4,7	6,63	15,46	250	3500	47,5	84,1						
10A(C)5X001	5	7,05	14,10	250	3000	48,1	85,2						
10A(C)5,7X001	5,7	8,12	16,25	200	3000	49,5	88,0						
10A(C)6,1X001	6,1	8,69	14,49	200	2500	50,4	89,8						
10A(C)7,4X001	7,4	10,55	17,58	180	2500	53,1	95,3						
* 10A(C)8X001	8	11,40	15,20	150	2000	54,4	97,7						
10A(C)8,5X001	8,5	12,11	16,15	150	2000	55,4	99,8						
10A(C)9,8X001	9,8	13,97	18,62	120	2000	58,0	105,0						

* - These pumps - only under a special order

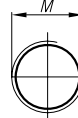


I – variants

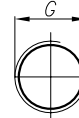
Variants:

- ...X017 - Normal version (flange);
- ...X017M - for M ports (see the picture I and the table below);
- ...X017G - for G ports (see the picture I and the table below);
- ...X017U - for U ports (see the picture I and the table below).

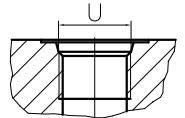
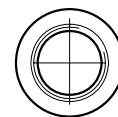
Variant M



Variant G

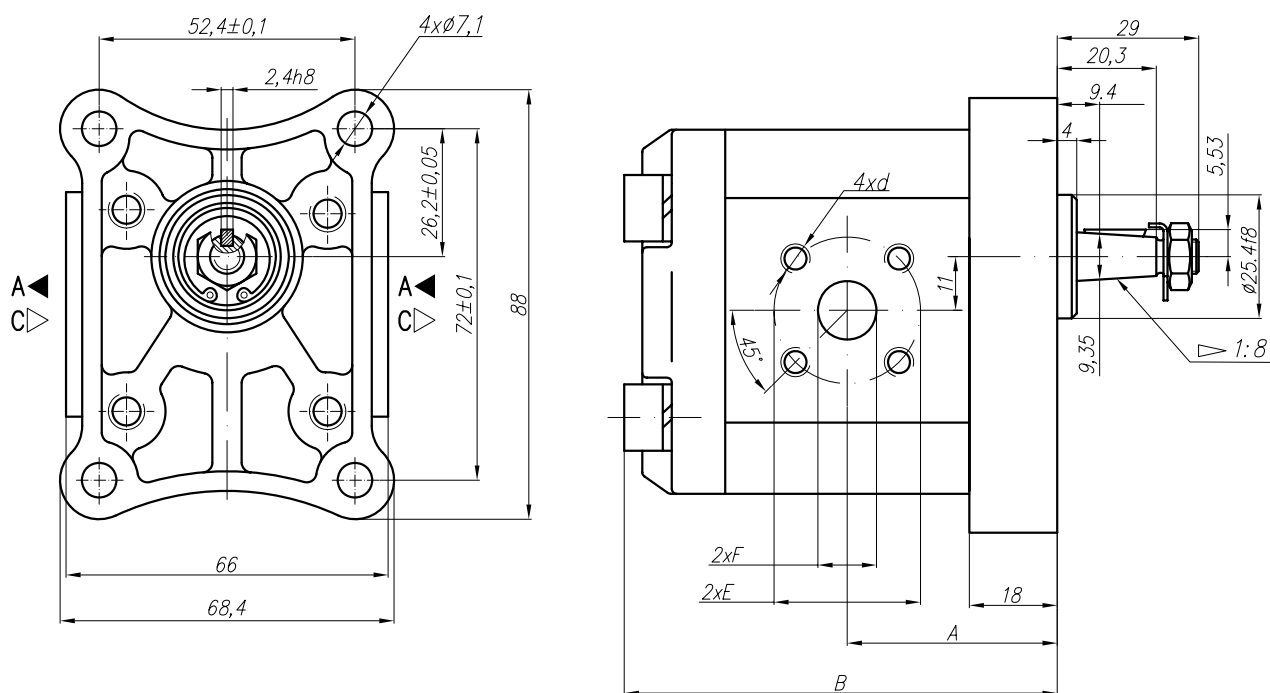


Variant U (SAEJ475 (ISO R725))



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
10A(C)1X017	1	1,40	3,26	250	3500	41,1	83	M16x1,5	G 3/8" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)1,25X017	1,25	1,74	4,07	250	3500	41,5	84						
10A(C)1,6X017	1,6	2,23	5,21	250	3500	42,3	85,6						
10A(C)2X017	2	2,82	6,58	250	3500	43,1	87,2						
10A(C)2,5X017	2,5	3,53	8,23	250	3500	44,1	89,2						
* 10A(C)2,65X017	2,65	3,74	8,72	250	3500	44,4	89,8	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)3,15X017	3,15	4,44	10,36	250	3500	45,5	91,8						
10A(C)3,65X017	3,65	5,15	12,01	250	3500	46,4	93,9						
10A(C)4,2X017	4,2	5,92	13,82	250	3500	47,5	96,1						
* 10A(C)4,7X017	4,7	6,63	15,46	250	3500	48,5	98						
10A(C)5X017	5	7,05	14,10	250	3000	49,1	99,2	M22x1,5	7/8" - 14UNF	M18x1,5	3/4" - 16UNF		
10A(C)5,7X017	5,7	8,12	16,25	200	3000	50,5	102						
10A(C)6,1X017	6,1	8,69	14,49	200	2500	51,4	103,8						
10A(C)7,4X017	7,4	10,55	17,58	180	2500	54,1	109,2						
* 10A(C)8X017	8	11,40	15,20	150	2000	55,4	111,7						
10A(C)8,5X017	8,5	12,11	16,15	150	2000	56,4	113,7	M22x1,5	7/8" - 14UNF	M18x1,5	3/4" - 16UNF		
10A(C)9,8X017	9,8	13,97	18,62	120	2000	59	119						

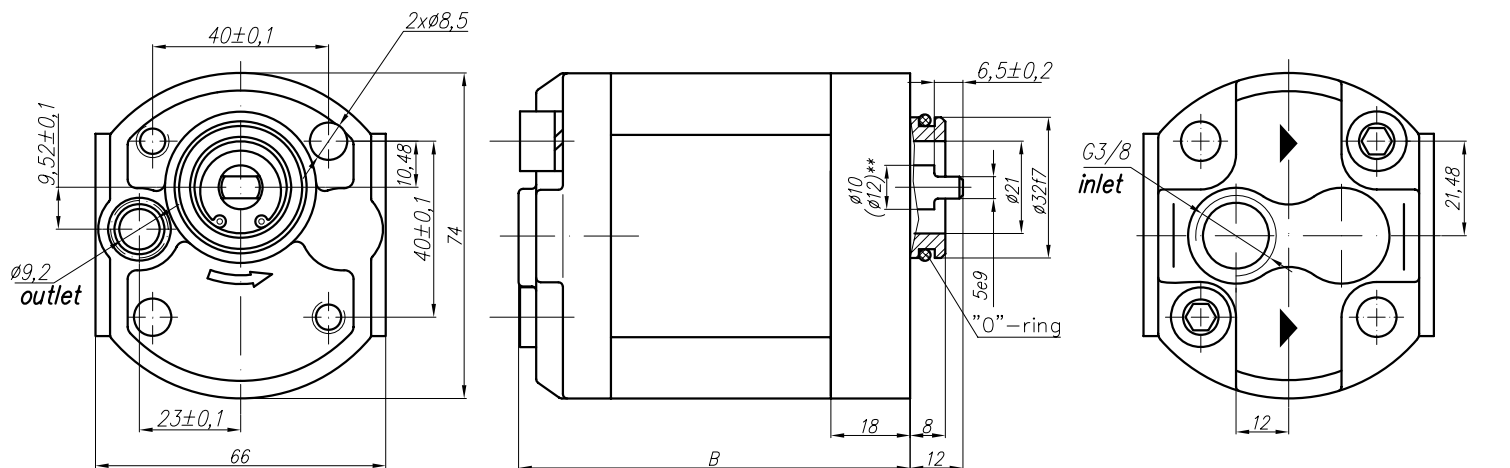
* - These pumps - only under a special order



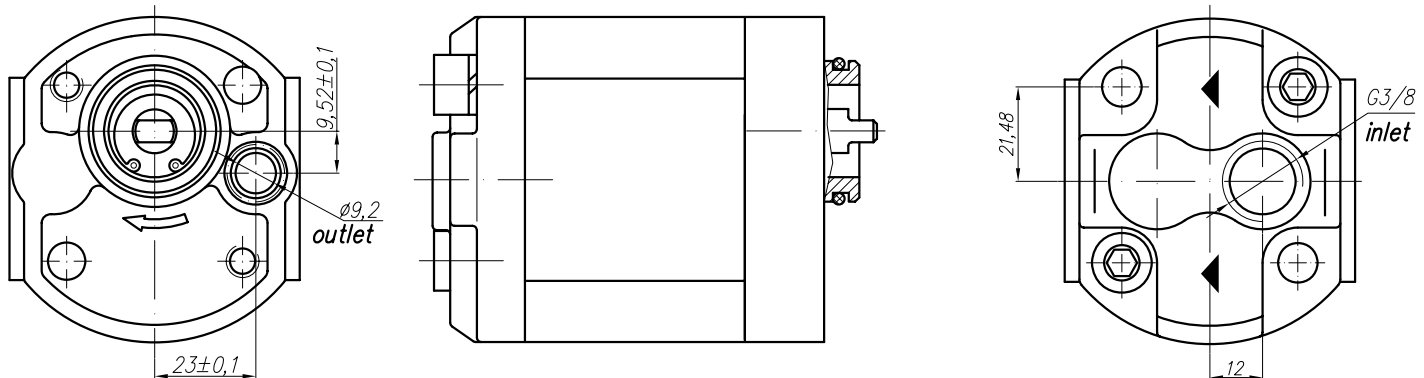
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	M	G	U
10A(C)1X026	1	1,40	3,26	250	3500	39,1	81						
10A(C)1,25X026	1,25	1,74	4,07	250	3500	39,5	82						
10A(C)1,6X026	1,6	2,23	5,21	250	3500	40,3	83,6						
10A(C)2X026	2	2,82	6,58	250	3500	41,1	85,2						
10A(C)2,5X026	2,5	3,53	8,23	250	3500	42,1	87,2						
* 10A(C)2,65X026	2,65	3,74	8,72	250	3500	42,4	87,8						
10A(C)3,15X026	3,15	4,44	10,36	250	3500	43,5	89,8						
10A(C)3,65X026	3,65	5,15	12,01	250	3500	44,4	91,9						
10A(C)4,2X026	4,2	5,92	13,82	250	3500	45,5	94,1	∅30	∅12	M6	∅30	∅12	M6
* 10A(C)4,7X026	4,7	6,63	15,46	250	3500	46,1	96						
10A(C)5X026	5	7,05	14,10	250	3000	47,1	97,2						
10A(C)5,7X026	5,7	8,12	16,25	200	3000	48,5	100,1						
10A(C)6,1X026	6,1	8,69	14,49	200	2500	49,4	101,8						
10A(C)7,4X026	7,4	10,55	17,58	180	2500	52,1	107,2						
* 10A(C)8X026	8	11,40	15,20	150	2000	53,4	109,7						
10A(C)8,5X026	8,5	12,11	16,15	150	2000	54,4	111,7						
10A(C)9,8X026	9,8	13,97	18,62	120	2000	57	117						

* - These pumps - only under a special order

Rotation "A" - (anticlockwise)



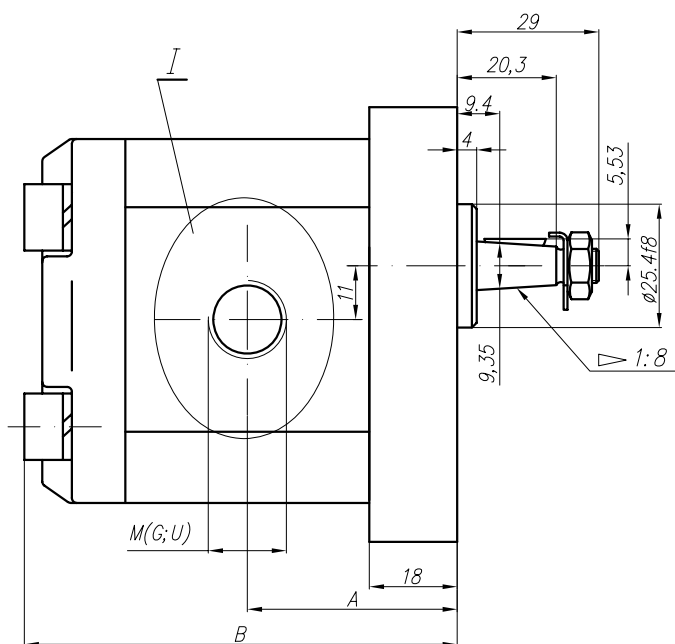
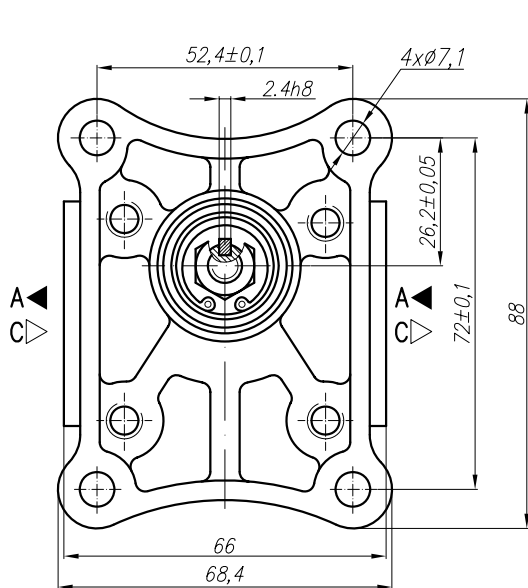
Rotation "C" - (clockwise)



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
10A(C)1X027	1	1,40	3,26	250	3500	71	81						
10A(C)1,25X027	1,25	1,74	4,07	250	3500	72	82						
10A(C)1,6X027	1,6	2,23	5,21	250	3500	73,6	83,6						
10A(C)2X027	2	2,82	6,58	250	3500	75,2	85,2						
10A(C)2,5X027	2,5	3,53	8,23	250	3500	77,2	87,2						
* 10A(C)2,65X027	2,65	3,74	8,72	250	3500	77,8	87,8						
10A(C)3,15X027	3,15	4,44	10,36	250	3500	79,8	89,8						
10A(C)3,65X027	3,65	5,15	12,01	250	3500	81,9	91,9						
10A(C)4,2X027	4,2	5,92	13,82	250	3500	84,1	94,1						
* 10A(C)4,7X027	4,7	6,63	15,46	250	3500	87,1	97,1						
10A(C)5X027	5	7,05	14,10	250	3000	87,2	97,2						
10A(C)5,7X027	5,7	8,12	16,25	200	3000	90,1	100,1						
10A(C)6,1X027	6,1	8,69	14,49	200	2500	91,8	101,8						
10A(C)7,4X027	7,4	10,55	17,58	180	2500	97,2	107,2						
* 10A(C)8X027	8	11,40	15,20	150	2000	99,7	109,7						
10A(C)8,5X027	8,5	12,11	16,15	150	2000	101,7	111,7						
10A(C)9,8X027	9,8	13,97	18,62	120	2000	107	117						

* - These pumps - only under a special order

** - For a shaft with dia 12 see the pump 302 (p. 32)



I – variants

Variants:

...X053M - for M ports (see the picture I and the table below);

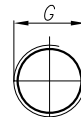
...X053G - for G ports (see the picture I and the table below);

...X053U - for U ports (see the picture I and the table below).

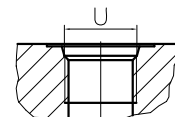
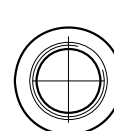
Variant M



Variant G



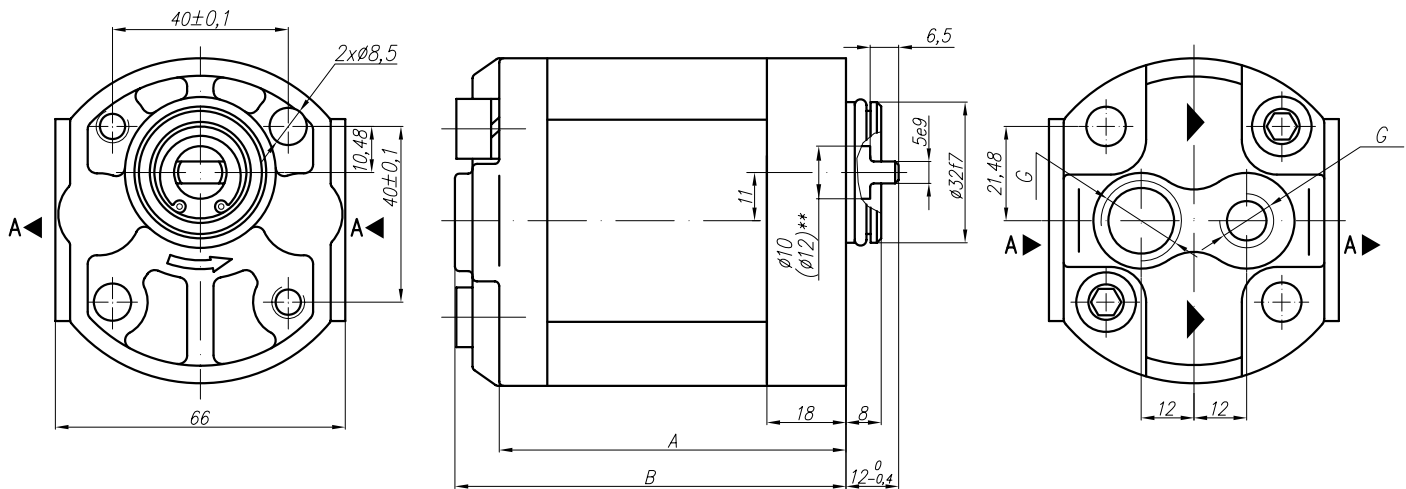
Variant U (SAEJ475 (ISO R725))



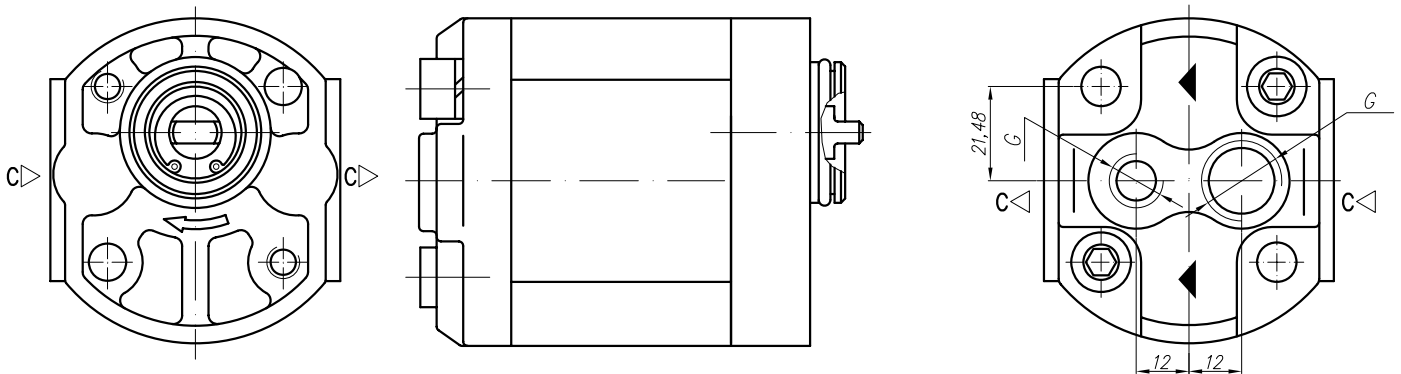
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
10A(C)1X053	1	1,40	3,26	250	3500	39,1	81	M16x1,5	G 3/8" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)1,25X053	1,25	1,74	4,07	250	3500	39,5	82						
10A(C)1,6X053	1,6	2,23	5,21	250	3500	40,3	83,6						
10A(C)2X053	2	2,82	6,58	250	3500	41,1	85,2						
10A(C)2,5X053	2,5	3,53	8,23	250	3500	42,1	87,2	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
* 10A(C)2,65X053	2,65	3,74	8,72	250	3500	42,4	87,8						
10A(C)3,15X053	3,15	4,44	10,36	250	3500	43,5	89,8	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)3,65X053	3,65	5,15	12,01	250	3500	44,4	91,9						
10A(C)4,2X053	4,2	5,92	13,82	250	3500	45,5	94,1	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
* 10A(C)4,7X053	4,7	6,63	15,46	250	3500	46,1	96						
10A(C)5X053	5	7,05	14,10	250	3000	47,1	97,2	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)5,7X053	5,7	8,12	16,25	200	3000	48,5	100,1						
10A(C)6,1X053	6,1	8,69	14,49	200	2500	49,4	101,8	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)7,4X053	7,4	10,55	17,58	180	2500	52,1	107,2						
* 10A(C)8X053	8	11,40	15,20	150	2000	53,4	109,7	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)8,5X053	8,5	12,11	16,15	150	2000	54,4	111,7						
10A(C)9,8X053	9,8	13,97	18,62	120	2000	57	117	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF

* - These pumps - only under a special order

Rotation "A" - (anticlockwise)



Rotation "C" - (clockwise)

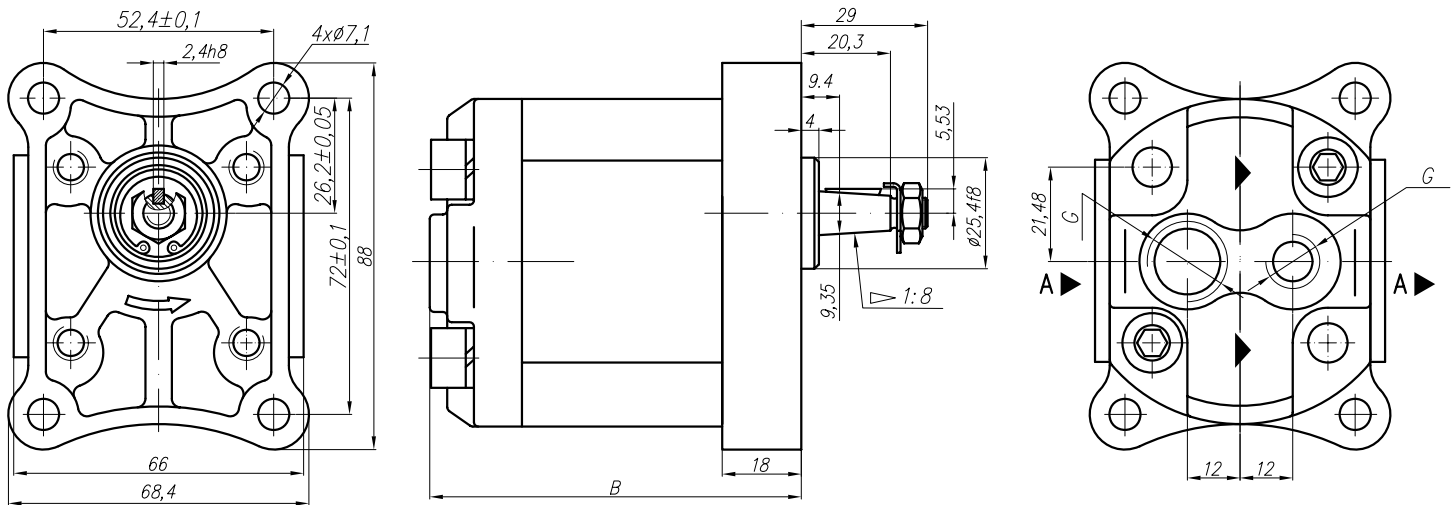


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
10A(C)1X054	1	1,40	3,26	250	3500	71	81	G 3/8" - A				G 1/4" - A	
10A(C)1,25X054	1,25	1,74	4,07	250	3500	72	82						
10A(C)1,6X054	1,6	2,23	5,21	250	3500	73,6	83,6						
10A(C)2X054	2	2,82	6,58	250	3500	75,2	85,2						
10A(C)2,5X054	2,5	3,53	8,23	250	3500	77,2	87,2						
* 10A(C)2,65X054	2,65	3,74	8,72	250	3500	77,8	87,8						
10A(C)3,15X054	3,15	4,44	10,36	250	3500	79,8	89,8						
10A(C)3,65X054	3,65	5,15	12,01	250	3500	81,9	91,9						
10A(C)4,2X054	4,2	5,92	13,82	250	3500	84,1	94,1						
* 10A(C)4,7X054	4,7	6,63	15,46	250	3500	87,1	97,1						
10A(C)5X054	5	7,05	14,10	250	3000	87,2	97,2						
10A(C)5,7X054	5,7	8,12	16,25	200	3000	90,1	100,1						
10A(C)6,1X054	6,1	8,69	14,49	200	2500	91,8	101,8						
10A(C)7,4X054	7,4	10,55	17,58	180	2500	97,2	107,2						
* 10A(C)8X054	8	11,40	15,20	150	2000	99,7	109,7						
10A(C)8,5X054	8,5	12,11	16,15	150	2000	101,7	111,7						
10A(C)9,8X054	9,8	13,97	18,62	120	2000	107	117						

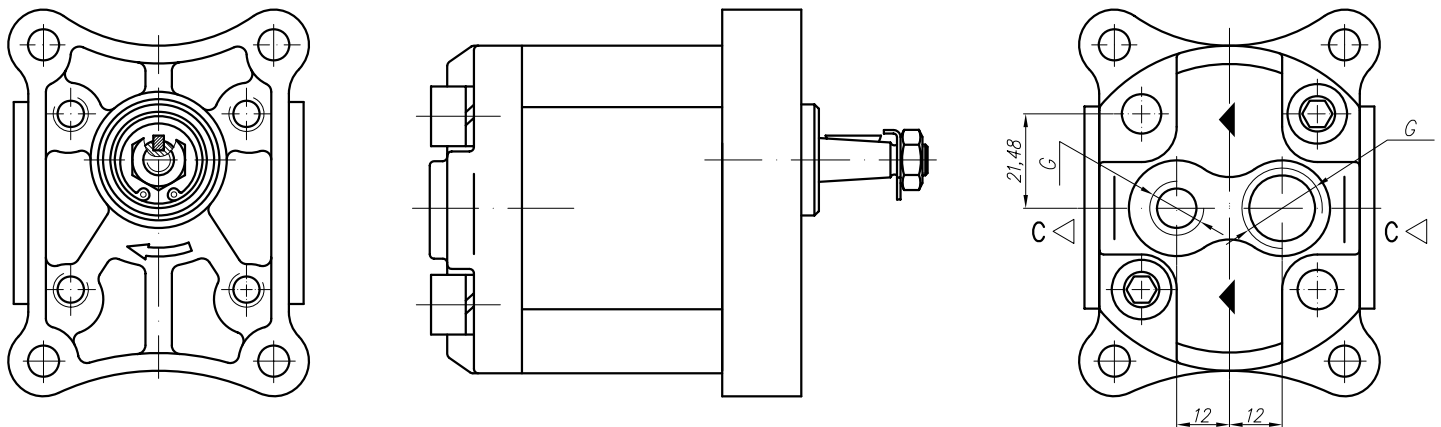
* - These pumps - only under a special order

** - Shaft dia is 10 mm for displ. 1 ... 6,1 ccm and 12 mm for displ. 7,4 ccm and more

Rotation "A" - (anticlockwise)

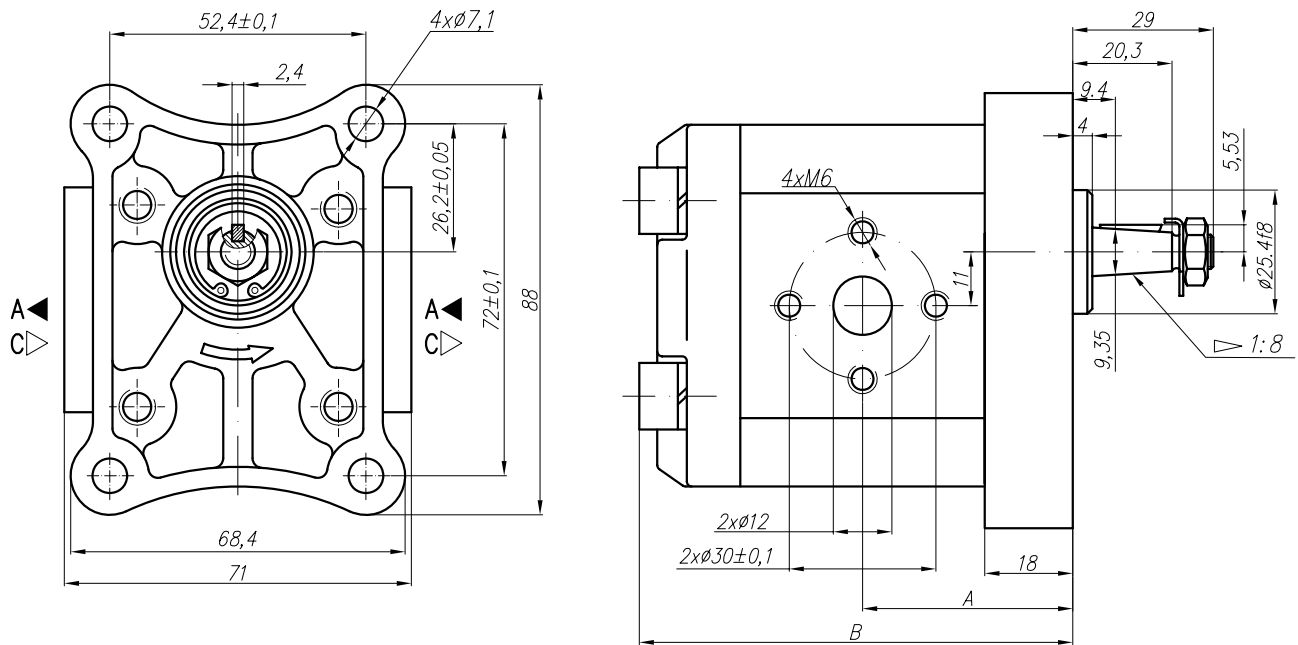


Rotation "C" - (clockwise)



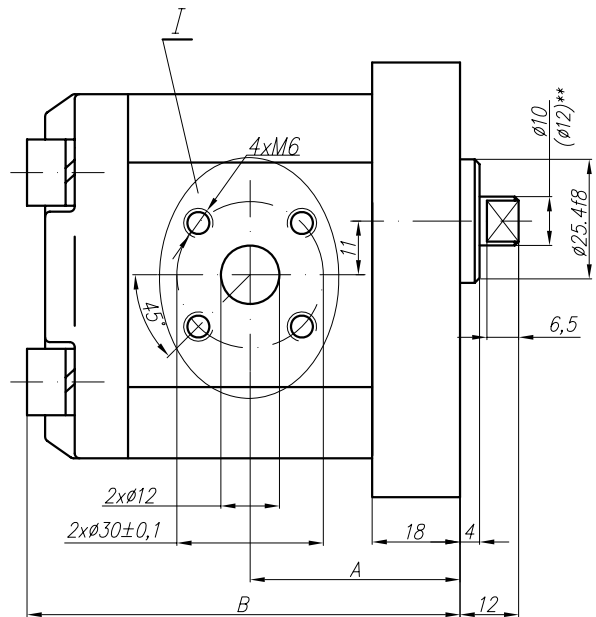
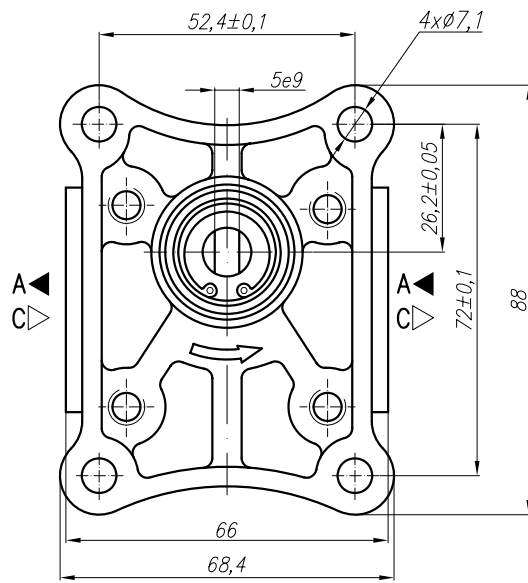
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
10A(C)1X055	1	1,40	3,26	250	3500	71	81	G 3/8" - A				G 1/4" - A	
10A(C)1,25X055	1,25	1,74	4,07	250	3500	72	82						
10A(C)1,6X055	1,6	2,23	5,21	250	3500	73,6	83,6						
10A(C)2X055	2	2,82	6,58	250	3500	75,2	85,2						
10A(C)2,5X055	2,5	3,53	8,23	250	3500	77,2	87,2						
* 10A(C)2,65X055	2,65	3,74	8,72	250	3500	77,8	87,8						
10A(C)3,15X055	3,15	4,44	10,36	250	3500	79,8	89,8						
10A(C)3,65X055	3,65	5,15	12,01	250	3500	81,9	91,9						
10A(C)4,2X055	4,2	5,92	13,82	250	3500	84,1	94,1						
* 10A(C)4,7X055	4,7	6,63	15,46	250	3500	87,1	97,1						
10A(C)5X055	5	7,05	14,10	250	3000	87,2	97,2						
10A(C)5,7X055	5,7	8,12	16,25	200	3000	90,1	100,1						
10A(C)6,1X055	6,1	8,69	14,49	200	2500	91,8	101,8						
10A(C)7,4X055	7,4	10,55	17,58	180	2500	97,2	107,2						
* 10A(C)8X055	8	11,40	15,20	150	2000	99,7	109,7						
10A(C)8,5X055	8,5	12,11	16,15	150	2000	101,7	111,7						
10A(C)9,8X055	9,8	13,97	18,62	120	2000	107	117						

* - These pumps - only under a special order



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet		Outlet					
						A mm	B mm	M	G	U	M	G	U
10A(C)1X056	1	1,40	3,26	250	3500	39,1	81						
10A(C)1,25X056	1,25	1,74	4,07	250	3500	39,5	82						
10A(C)1,6X056	1,6	2,23	5,21	250	3500	40,3	83,6						
10A(C)2X056	2	2,82	6,58	250	3500	41,1	85,2						
10A(C)2,5X056	2,5	3,53	8,23	250	3500	42,1	87,2						
* 10A(C)2,65X056	2,65	3,74	8,72	250	3500	42,4	87,8						
10A(C)3,15X056	3,15	4,44	10,36	250	3500	43,5	89,8						
10A(C)3,65X056	3,65	5,15	12,01	250	3500	44,4	91,9						
10A(C)4,2X056	4,2	5,92	13,82	250	3500	45,5	94,1						
* 10A(C)4,7X056	4,7	6,63	15,46	250	3500	46,1	96						
10A(C)5X056	5	7,05	14,10	250	3000	47,1	97,2						
10A(C)5,7X056	5,7	8,12	16,25	200	3000	48,5	100,1						
10A(C)6,1X056	6,1	8,69	14,49	200	2500	49,4	101,8						
10A(C)7,4X056	7,4	10,55	17,58	180	2500	52,1	107,2						
* 10A(C)8X056	8	11,40	15,20	150	2000	53,4	109,7						
10A(C)8,5X056	8,5	12,11	16,15	150	2000	54,4	111,7						
10A(C)9,8X056	9,8	13,97	18,62	120	2000	57	117						

* - These pumps - only under a special order

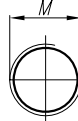


I – variants

Variants:

- ...X057 - Normal version (flange);
- ...X057M - for M ports (see the picture I and the table below);
- ...X057G - for G ports (see the picture I and the table below);
- ...X057U - for U ports (see the picture I and the table below).

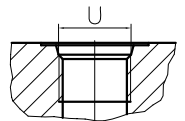
Variant M



Variant G



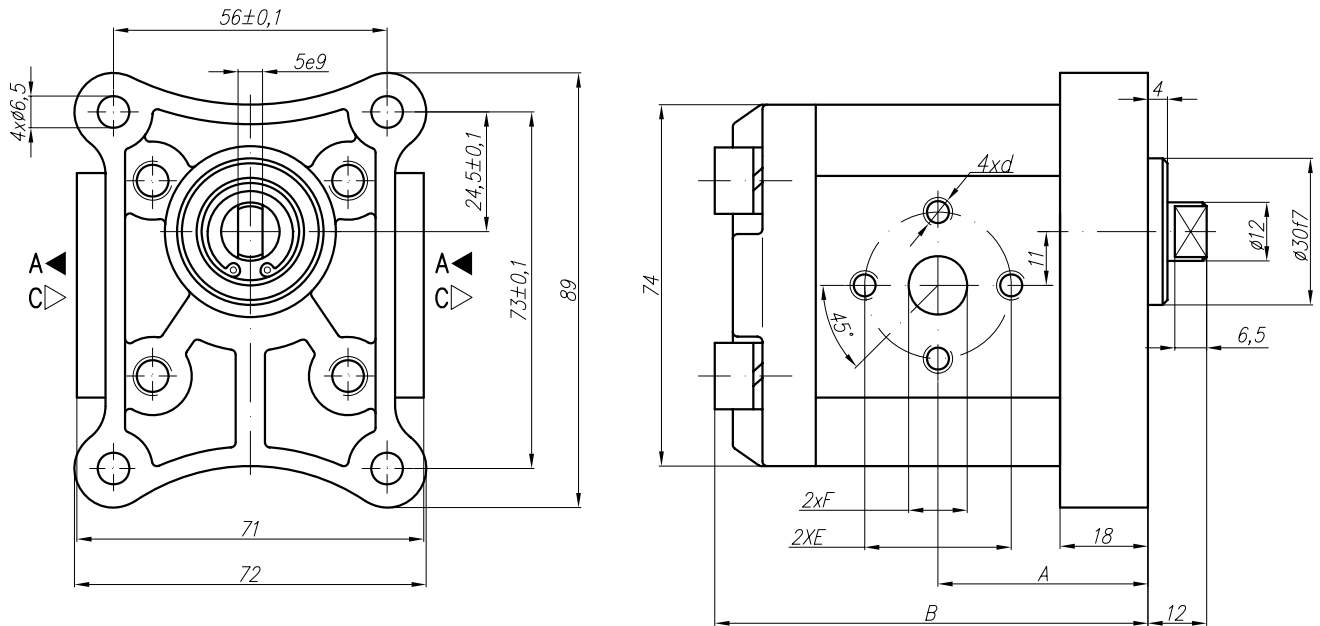
Variant U (SAEJ475 (ISO R725))



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	M	G	U	M	G	U
10A(C)1X057	1	1,40	3,26	250	3500	39,1	81	M16x1,5	G 3/8" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)1,25X057	1,25	1,74	4,07	250	3500	39,5	82						
10A(C)1,6X057	1,6	2,23	5,21	250	3500	40,3	83,6						
10A(C)2X057	2	2,82	6,58	250	3500	41,1	85,2						
10A(C)2,5X057	2,5	3,53	8,23	250	3500	42,1	87,2	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
* 10A(C)2,65X057	2,65	3,74	8,72	250	3500	42,4	87,8						
10A(C)3,15X057	3,15	4,44	10,36	250	3500	43,5	89,8	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)3,65X057	3,65	5,15	12,01	250	3500	44,4	91,9						
10A(C)4,2X057	4,2	5,92	13,82	250	3500	45,5	94,1	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
* 10A(C)4,7X057	4,7	6,63	15,46	250	3500	46,1	96						
10A(C)5X057	5	7,05	14,10	250	3000	47,1	97,2	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)5,7X057	5,7	8,12	16,25	200	3000	48,5	100,1						
10A(C)6,1X057	6,1	8,69	14,49	180	2500	49,4	101,8	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)7,4X057	7,4	10,55	17,58	180	2500	52,1	107,2						
* 10A(C)8X057	8	11,40	15,20	150	2000	53,4	109,7	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)8,5X057	8,5	12,11	16,15	150	2000	54,4	111,7						
10A(C)9,8X057	9,8	13,97	18,62	120	2000	57	117	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF

* - These pumps - only under a special order

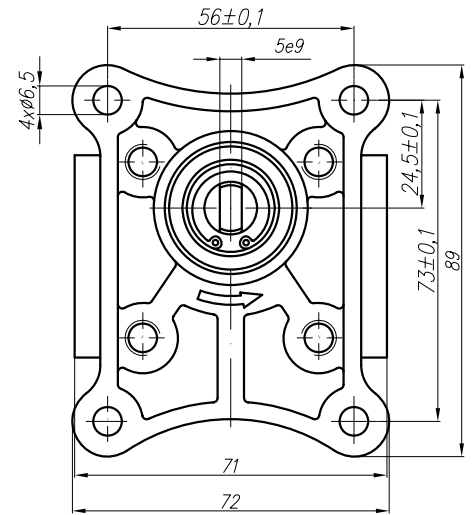
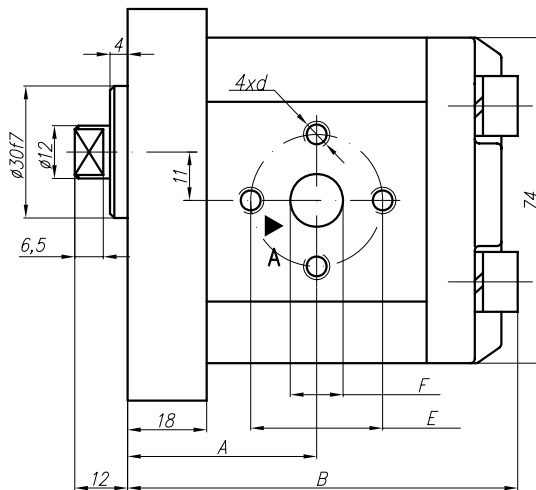
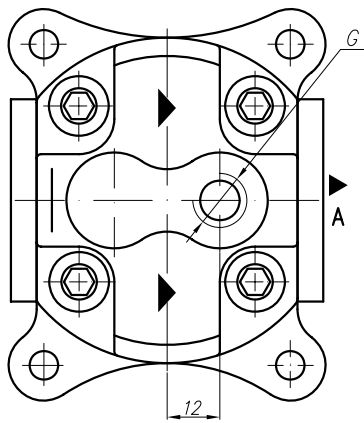
** - Shaft dia is 10 mm for displ. 1 ... 6,1 ccm and 12 mm for displ. 7,4 ccm and more



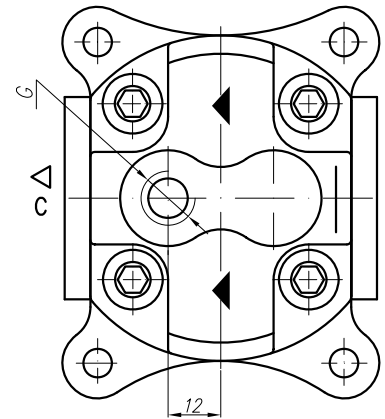
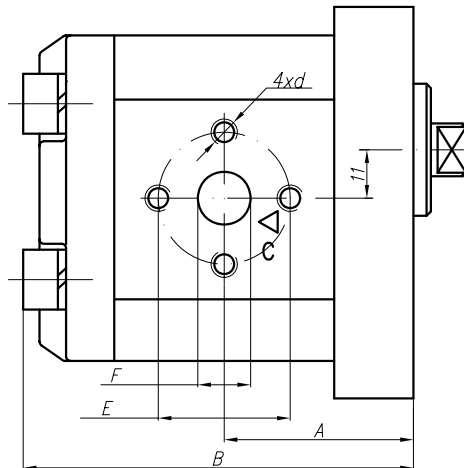
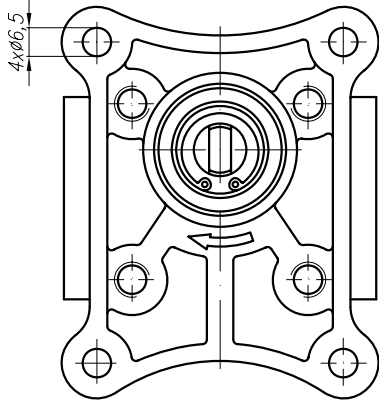
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet		Outlet		A mm	B mm		
10A(C)1X115	1	1,40	3,26	250	3500	39,1	81	ø30	ø12	M6	ø30	ø12	M6
10A(C)1,25X115	1,25	1,74	4,07	250	3500	39,5	82						
10A(C)1,6X115	1,6	2,23	5,21	250	3500	40,3	83,6						
10A(C)2X115	2	2,82	6,58	250	3500	41,1	85,2						
10A(C)2,5X115	2,5	3,53	8,23	250	3500	42,1	87,2						
* 10A(C)2,65X115	2,65	3,74	8,72	250	3500	42,4	87,8						
10A(C)3,15X115	3,15	4,44	10,36	250	3500	43,5	89,8						
10A(C)3,65X115	3,65	5,15	12,01	250	3500	44,4	91,9						
10A(C)4,2X115	4,2	5,92	13,82	250	3500	45,5	94,1						
* 10A(C)4,7X115	4,7	6,63	15,46	250	3500	46,1	96						
10A(C)5X115	5	7,05	14,10	250	3000	47,1	97,2						
10A(C)5,7X115	5,7	8,12	16,25	200	3000	48,5	100,1						
10A(C)6,1X115	6,1	8,69	14,49	200	2500	49,4	101,8						
10A(C)7,4X115	7,4	10,55	17,58	180	2500	52,1	107,2						
* 10A(C)8X115	8	11,40	15,20	150	2000	53,4	109,7						
10A(C)8,5X115	8,5	12,11	16,15	150	2000	54,4	111,7						
10A(C)9,8X115	9,8	13,97	18,62	120	2000	57	117						

* - These pumps - only under a special order

Rotation "A" - (anticlockwise)



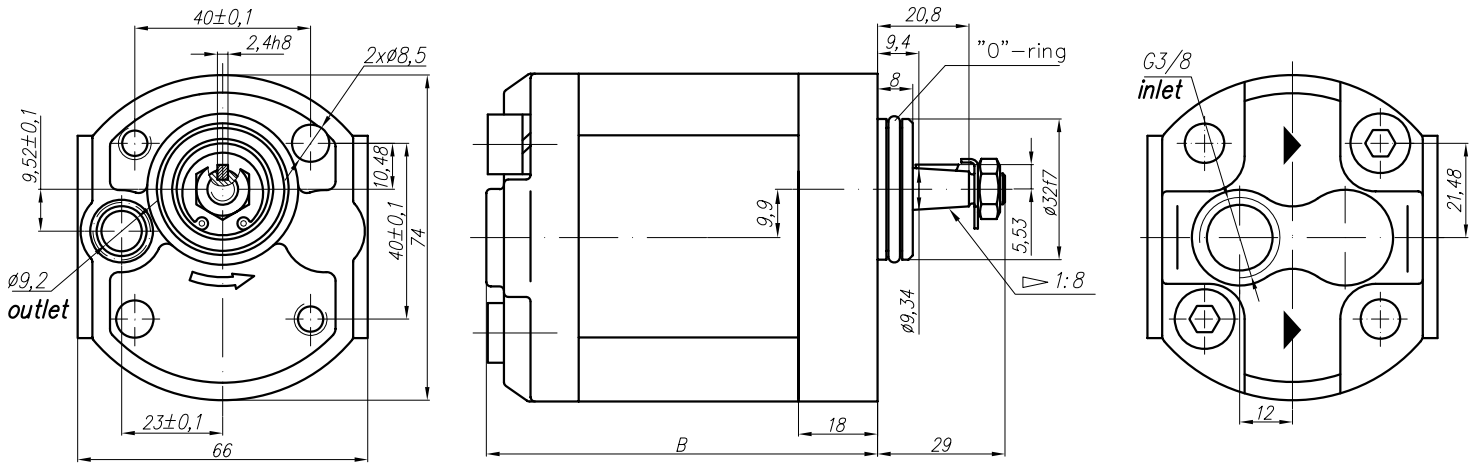
Rotation "C" - (clockwise)



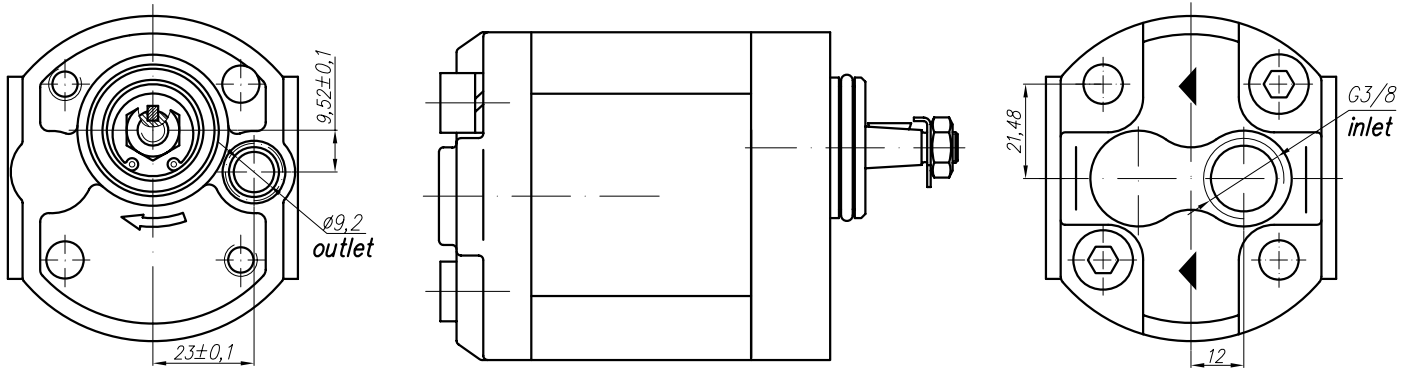
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension						
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet	
						E	F	d	M	G	U	
10A(C)1X125	1	1,40	3,26	250	3500	39,1	81					
10A(C)1,25X125	1,25	1,74	4,07	250	3500	39,5	82					
10A(C)1,6X125	1,6	2,23	5,21	250	3500	40,3	83,6					
10A(C)2X125	2	2,82	6,58	250	3500	41,1	85,2					
10A(C)2,5X125	2,5	3,53	8,23	250	3500	42,1	87,2					
* 10A(C)2,65X125	2,65	3,74	8,72	250	3500	42,4	87,8					
10A(C)3,15X125	3,15	4,44	10,36	250	3500	43,5	89,8					
10A(C)3,65X125	3,65	5,15	12,01	250	3500	44,4	91,9					
10A(C)4,2X125	4,2	5,92	13,82	250	3500	45,5	94,1	ø 30	ø 12	M6		
* 10A(C)4,7X125	4,7	6,63	15,46	250	3500	46,1	96					
10A(C)5X125	5	7,05	14,10	250	3000	47,1	97,2					
10A(C)5,7X125	5,7	8,12	16,25	200	3000	48,5	100,1					
10A(C)6,1X125	6,1	8,69	14,49	200	2500	49,4	101,8					
10A(C)7,4X125	7,4	10,55	17,58	180	2500	52,1	107,2					
* 10A(C)8X125	8	11,40	15,20	150	2000	53,4	109,7					
10A(C)8,5X125	8,5	12,11	16,15	150	2000	54,4	111,7					
10A(C)9,8X125	9,8	13,97	18,62	120	2000	57	117					

* - These pumps - only under a special order

Rotation "A" - (anticlockwise)

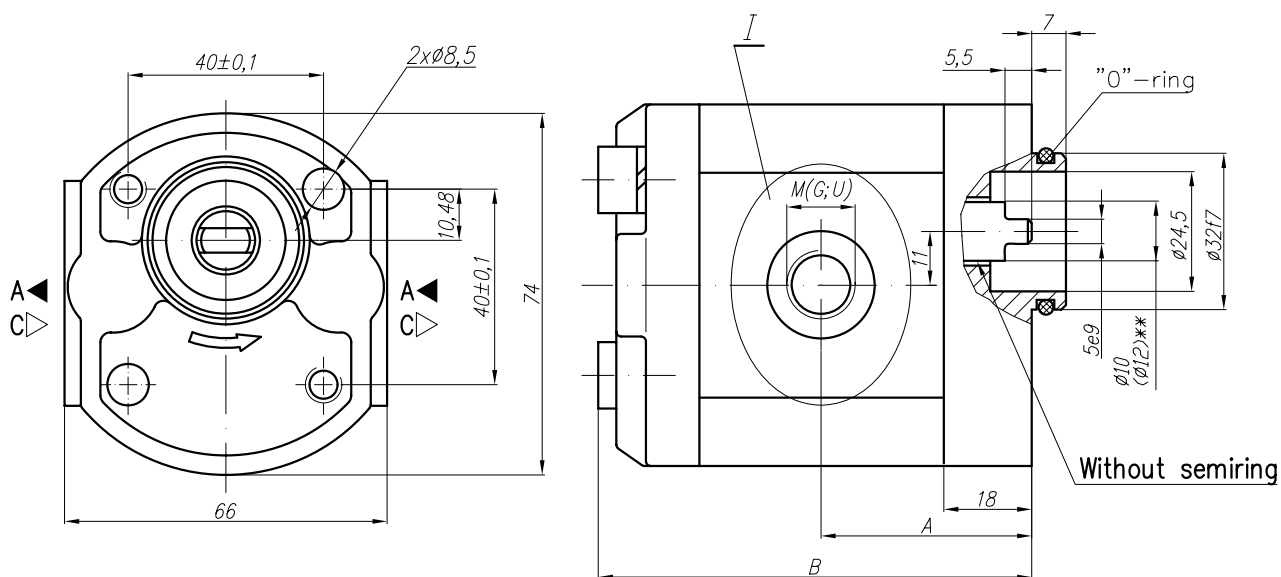


Rotation "C" - (clockwise)



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm		B mm		Inlet			Outlet
								M	G	U	M	G	U
10A(C)1X131	1	1,40	3,26	250	3500	71	81						
10A(C)1,25X131	1,25	1,74	4,07	250	3500	72	82						
10A(C)1,6X131	1,6	2,23	5,21	250	3500	73,6	83,6						
10A(C)2X131	2	2,82	6,58	250	3500	75,2	85,2						
10A(C)2,5X131	2,5	3,53	8,23	250	3500	77,2	87,2						
* 10A(C)2,65X131	2,65	3,74	8,72	250	3500	77,8	87,8						
10A(C)3,15X131	3,15	4,44	10,36	250	3500	79,8	89,8						
10A(C)3,65X131	3,65	5,15	12,01	250	3500	81,9	91,9						
10A(C)4,2X131	4,2	5,92	13,82	250	3500	84,1	94,1						
* 10A(C)4,7X131	4,7	6,63	15,46	250	3500	87,1	97,1						
10A(C)5X131	5	7,05	14,10	250	3000	87,2	97,2						
10A(C)5,7X131	5,7	8,12	16,25	200	3000	90,1	100,1						
10A(C)6,1X131	6,1	8,69	14,49	200	2500	91,8	101,8						
10A(C)7,4X131	7,4	10,55	17,58	180	2500	97,2	107,2						
* 10A(C)8X131	8	11,40	15,20	150	2000	99,7	109,7						
10A(C)8,5X131	8,5	12,11	16,15	150	2000	101,7	111,7						
10A(C)9,8X131	9,8	13,97	18,62	120	2000	107	117						

* - These pumps - only under a special order



I - variants

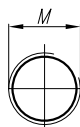
Variants:

...X 135 M - for M ports (see the picture I and the table below);

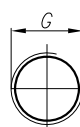
...X 135 G - for G ports (see the picture I and the table below);

...X 135 U - for U ports (see the picture I and the table below).

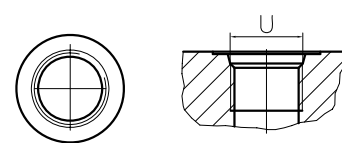
Variant M



Variant G



Variant U (SAEJ475 (ISO R725))

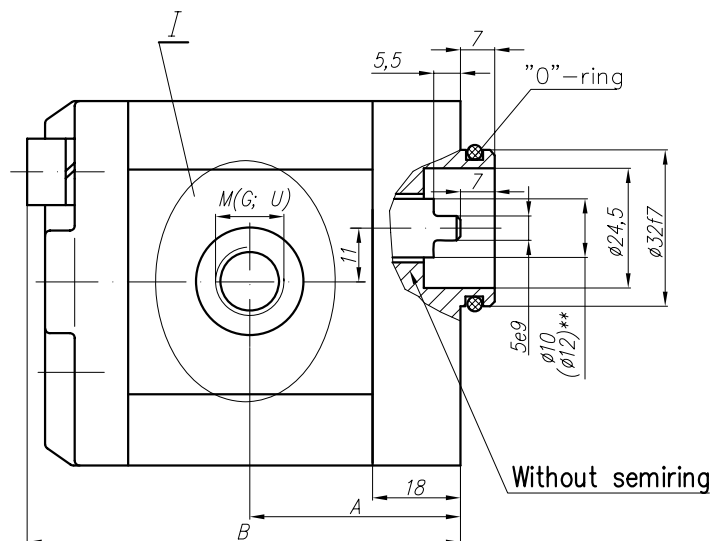
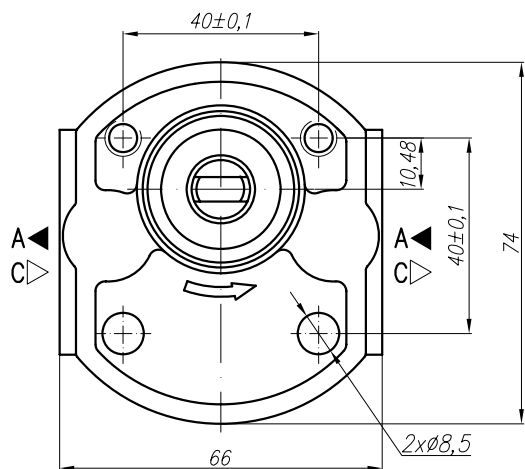


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	M	G	U	M	G	U
10A(C)1X135	1	1,40	3,26	250	3500	39,1	81	M16x1,5	G 3/8" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)1,25X135	1,25	1,74	4,07	250	3500	39,5	82						
10A(C)1,6X135	1,6	2,23	5,21	250	3500	40,3	83,6						
10A(C)2X135	2	2,82	6,58	250	3500	41,1	85,2						
10A(C)2,5X135	2,5	3,53	8,23	250	3500	42,1	87,2						
* 10A(C)2,65X135	2,65	3,74	8,72	250	3500	42,4	87,8	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)3,15X135	3,15	4,44	10,36	250	3500	43,5	89,8						
10A(C)3,65X135	3,65	5,15	12,01	250	3500	44,4	91,9	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)4,2X135	4,2	5,92	13,82	250	3500	45,5	94,1						
* 10A(C)4,7X135	4,7	6,63	15,46	250	3500	46,1	96						
10A(C)5X135	5	7,05	14,10	250	3000	47,1	97,2	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)5,7X135	5,7	8,12	16,25	200	3000	48,5	100,1						
10A(C)6,1X135	6,1	8,69	14,49	200	2500	49,4	101,8						
10A(C)7,4X135	7,4	10,55	17,58	180	2500	52,1	107,2	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
* 10A(C)8X135	8	11,40	15,20	150	2000	53,4	109,7						
10A(C)8,5X135	8,5	12,11	16,15	150	2000	54,4	111,7	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)9,8X135	9,8	13,97	18,62	120	2000	57	117						

* - These pumps - only under a special order

** - Shaft dia is 10 mm for displ. 1 ... 6,1 ccm and 12 mm for displ. 7,4 ccm and more

The pump 10A(C)...X142 is a second section of multiple pump Gr.21.

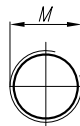


Variants:

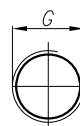
- ...X142M - for M ports (see the picture I and the table below);
- ...X142G - for G ports (see the picture I and the table below);
- ...X142U - for U ports (see the picture I and the table below).

I - variants

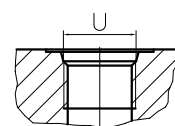
Variant M



Variant G



Variant U (SAEJ475 (ISO R725))

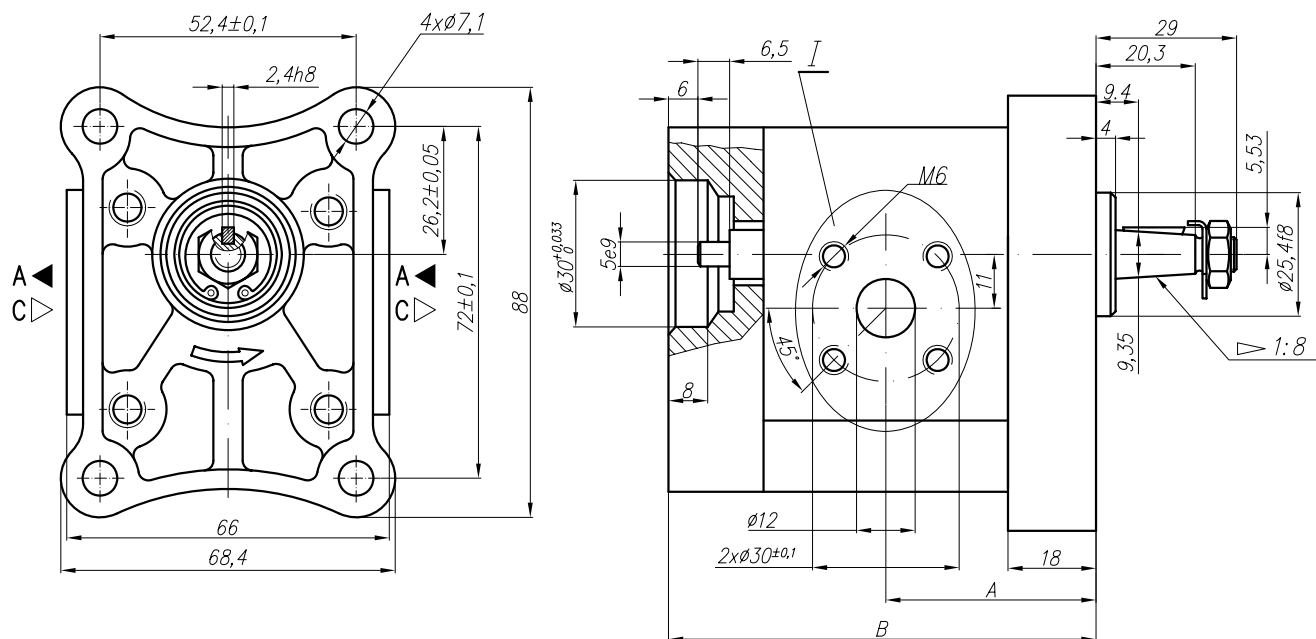


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
10A(C)1X142	1	1,40	3,26	250	3500	39,1	81	M16x1,5	G 3/8" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)1,25X142	1,25	1,74	4,07	250	3500	39,5	82						
10A(C)1,6X142	1,6	2,23	5,21	250	3500	40,3	83,6						
10A(C)2X142	2	2,82	6,58	250	3500	41,1	85,2	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)2,5X142	2,5	3,53	8,23	250	3500	42,1	87,2						
* 10A(C)2,65X142	2,65	3,74	8,72	250	3500	42,4	87,8	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)3,15X142	3,15	4,44	10,36	250	3500	43,5	89,8						
10A(C)3,65X142	3,65	5,15	12,01	250	3500	44,4	91,9	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)4,2X142	4,2	5,92	13,82	250	3500	45,5	94,1						
* 10A(C)4,7X142	4,7	6,63	15,46	250	3500	46,1	96	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)5X142	5	7,05	14,10	250	3000	47,1	97,2						
10A(C)5,7X142	5,7	8,12	16,25	200	3000	48,5	100,1	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)6,1X142	6,1	8,69	14,49	200	2500	49,4	101,8						
10A(C)7,4X142	7,4	10,55	17,58	180	2500	52,1	107,2	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
* 10A(C)8X142	8	11,40	15,20	150	2000	53,4	109,7						
10A(C)8,5X142	8,5	12,11	16,15	150	2000	54,4	111,7	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)9,8X142	9,8	13,97	18,62	120	2000	57	117						

* - These pumps - only under a special order

** - Shaft dia is 10 mm for displ. 1 ... 6,1 ccm and 12 mm for displ. 7,4 ccm and more

The pump 10A(C)...X174 is a first section of multiple pump Gr.11.

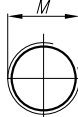


I – variants

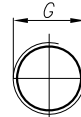
Variants:

- ...X174 - Normal version (flange);
- ...X174M - for M ports (see the picture I and the table below);
- ...X174G - for G ports (see the picture I and the table below);
- ...X174U - for U ports (see the picture I and the table below).

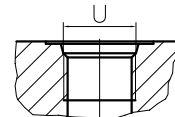
Variant M



Variant G



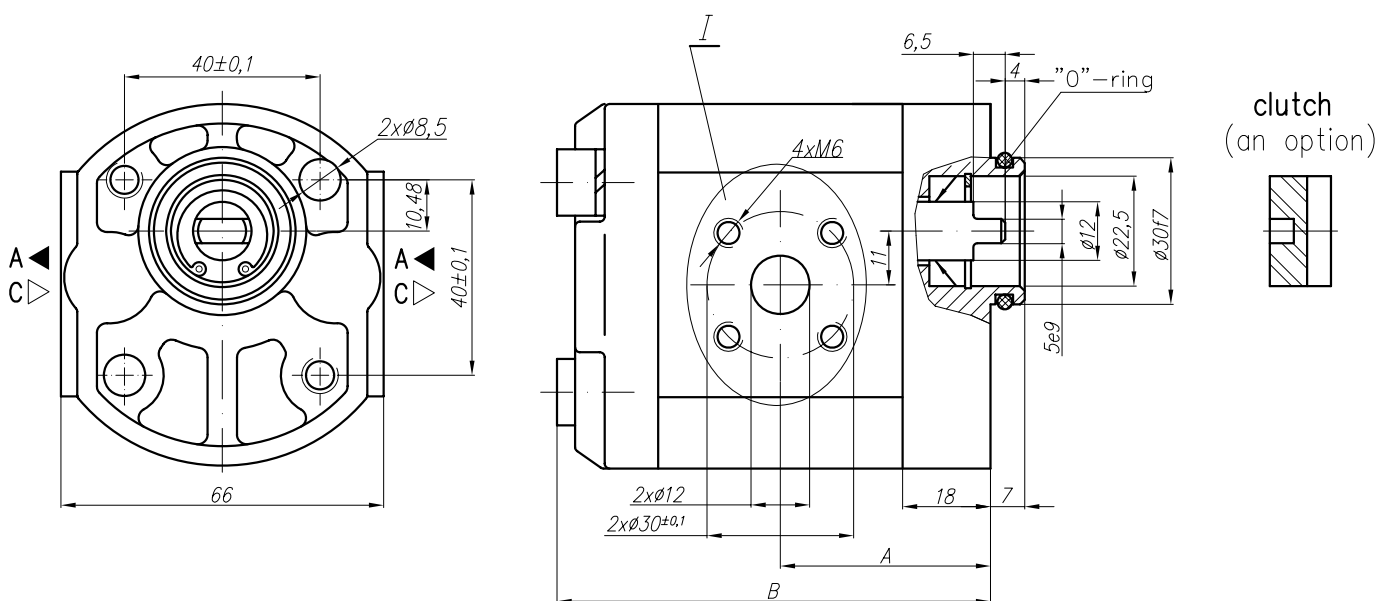
Variant U (SAEJ475 (ISO R725))



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet			
								M	G	U	M	G	U	
10A(C)1X174	1	1,40	3,26	250	3500	39,1	81	M16x1,5	G 3/8" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B	
10A(C)1,25X174	1,25	1,74	4,07	250	3500	39,5	82							
10A(C)1,6X174	1,6	2,23	5,21	250	3500	40,3	83,6							
10A(C)2X174	2	2,82	6,58	250	3500	41,1	85,2							
10A(C)2,5X174	2,5	3,53	8,23	250	3500	42,1	87,2							
* 10A(C)2,65X174	2,65	3,74	8,72	250	3500	42,4	87,8	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B	
10A(C)3,15X174	3,15	4,44	10,36	250	3500	43,5	89,8							
10A(C)3,65X174	3,65	5,15	12,01	250	3500	44,4	91,9	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF	
10A(C)4,2X174	4,2	5,92	13,82	250	3500	45,5	94,1							
* 10A(C)4,7X174	4,7	6,63	15,46	250	3500	46,1	96							
10A(C)5X174	5	7,05	14,10	250	3000	47,1	97,2	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF	
10A(C)5,7X174	5,7	8,12	16,25	200	3000	48,5	100,1							
10A(C)6,1X174	6,1	8,69	14,49	200	2500	49,4	101,8							
10A(C)7,4X174	7,4	10,55	17,58	180	2500	52,1	107,2	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF	
* 10A(C)8X174	8	11,40	15,20	150	2000	53,4	109,7							
10A(C)8,5X174	8,5	12,11	16,15	150	2000	54,4	111,7							
10A(C)9,8X174	9,8	13,97	18,62	120	2000	57	117							

* - These pumps - only under a special order

The pump 10A(C)...X175 is a second section of multiple pump Gr.11.

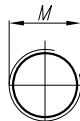


Variants:

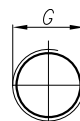
- ...X175 - Normal version (flange);
- ...X175M - for M ports (see the picture I and the table below);
- ...X175G - for G ports (see the picture I and the table below);
- ...X175U - for U ports (see the picture I and the table below).

I - variants

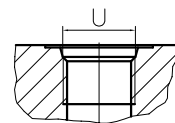
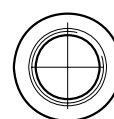
Variant M



Variant G

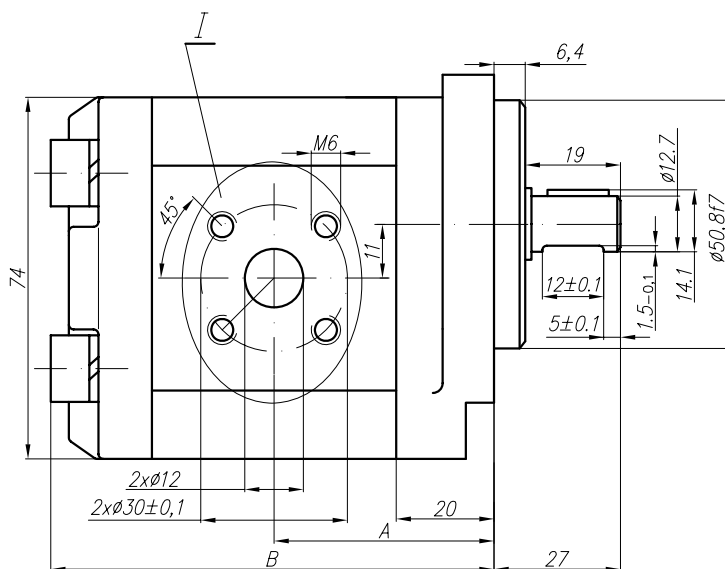
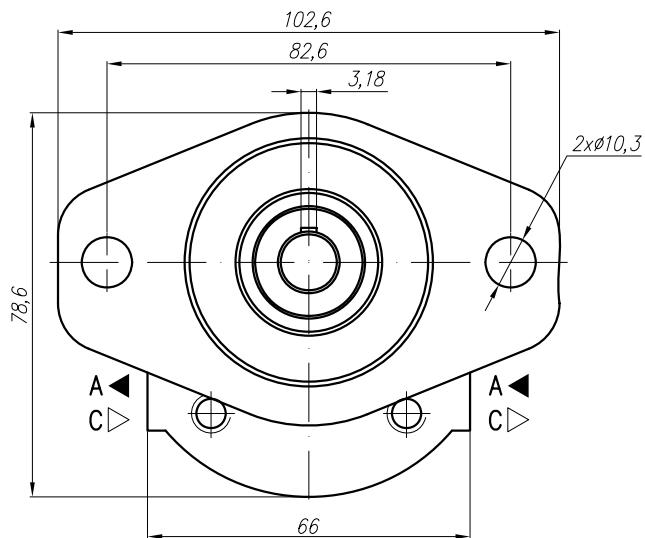


Variant U (SAEJ475 (ISO R725))



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
10A(C)1X175	1	1,40	3,26	250	3500	39,1	81	M16x1,5	G 3/8" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)1,25X175	1,25	1,74	4,07	250	3500	39,5	82						
10A(C)1,6X175	1,6	2,23	5,21	250	3500	40,3	83,6						
10A(C)2X175	2	2,82	6,58	250	3500	41,1	85,2						
10A(C)2,5X175	2,5	3,53	8,23	250	3500	42,1	87,2						
* 10A(C)2,65X175	2,65	3,74	8,72	250	3500	42,4	87,8	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)3,15X175	3,15	4,44	10,36	250	3500	43,5	89,8						
10A(C)3,65X175	3,65	5,15	12,01	250	3500	44,4	91,9						
10A(C)4,2X175	4,2	5,92	13,82	250	3500	45,5	94,1						
* 10A(C)4,7X175	4,7	6,63	15,46	250	3500	46,1	96						
10A(C)5X175	5	7,05	14,10	250	3000	47,1	97,2	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	3/4" - 16UNF	
10A(C)5,7X175	5,7	8,12	16,25	200	3000	48,5	100,1						
10A(C)6,1X175	6,1	8,69	14,49	200	2500	49,4	101,8						
10A(C)7,4X175	7,4	10,55	17,58	180	2500	52,1	107,2						
* 10A(C)8X175	8	11,40	15,20	150	2000	53,4	109,7						
10A(C)8,5X175	8,5	12,11	16,15	150	2000	54,4	111,7						
10A(C)9,8X175	9,8	13,97	18,62	120	2000	57	117						

* - These pumps - only under a special order

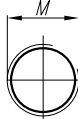


I – variants

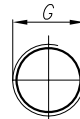
Variants:

- ...X176 - Normal version (flange);
- ...X176M - for M ports (see the picture I and the table below);
- ...X176G - for G ports (see the picture I and the table below);
- ...X176U - for U ports (see the picture I and the table below).

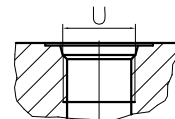
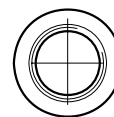
Variant M



Variant G



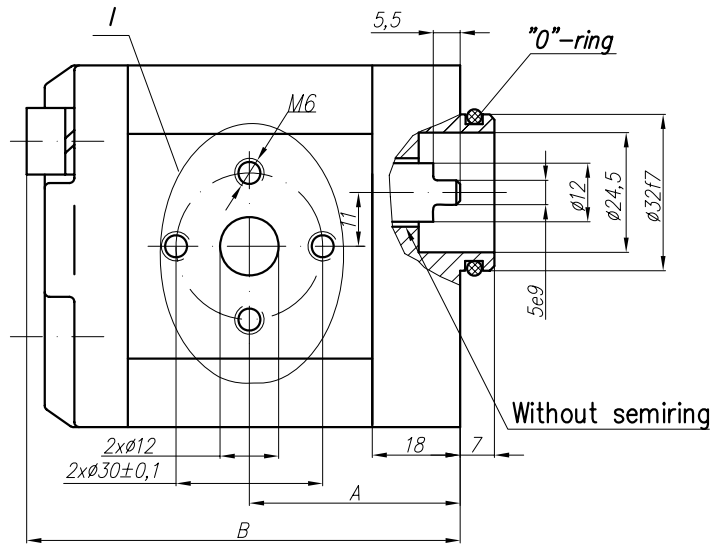
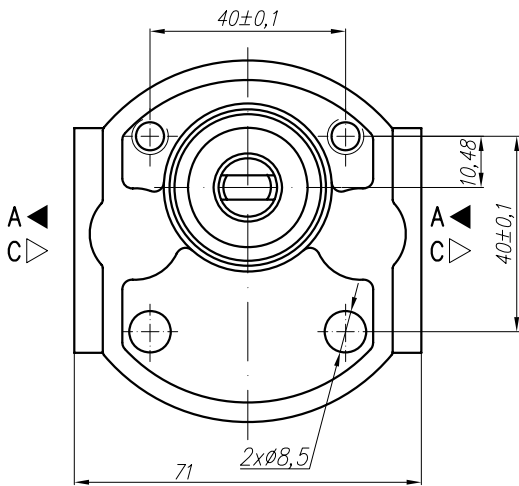
Variant U (SAEJ475 (ISO R725))



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
10A(C)1X176	1	1,40	3,26	250	3500	41,1	83	M16x1,5	G 3/8" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)1,25X176	1,25	1,74	4,07	250	3500	41,5	84						
10A(C)1,6X176	1,6	2,23	5,21	250	3500	42,3	85,6						
10A(C)2X176	2	2,82	6,58	250	3500	43,1	87,2						
10A(C)2,5X176	2,5	3,53	8,23	250	3500	44,1	89,2						
* 10A(C)2,65X176	2,65	3,74	8,72	250	3500	44,4	89,8	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)3,15X176	3,15	4,44	10,36	250	3500	45,5	91,8						
10A(C)3,65X176	3,65	5,15	12,01	250	3500	46,4	93,9						
10A(C)4,2X176	4,2	5,92	13,82	250	3500	47,5	96,1						
* 10A(C)4,7X176	4,7	6,63	15,46	250	3500	48,5	98						
10A(C)5X176	5	7,05	14,10	250	3000	49,1	99,2	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	3/4" - 16UNF	
10A(C)5,7X176	5,7	8,12	16,25	200	3000	50,5	102						
10A(C)6,1X176	6,1	8,69	14,49	200	2500	51,4	103,8						
10A(C)7,4X176	7,4	10,55	17,58	180	2500	54,1	109,2						
* 10A(C)8X176	8	11,40	15,20	150	2000	55,4	111,7						
10A(C)8,5X176	8,5	12,11	16,15	150	2000	56,4	113,7						
10A(C)9,8X176	9,8	13,97	18,62	120	2000	59	119						

* - These pumps - only under a special order

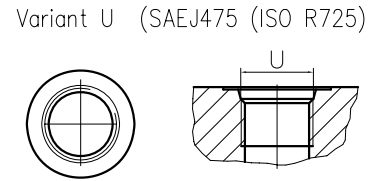
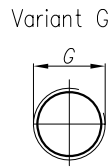
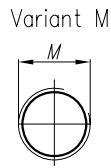
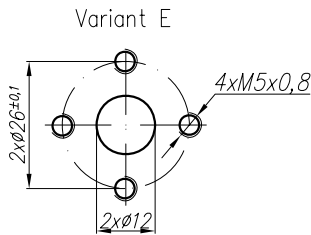
The pump 10A(C)...X179 is a second section of multiple pump Gr.21.



Variants:

- ...X179 - Normal version (flange);
- ...X179E - "Italy" ports (see the picture I and the table below)
- ...X179M - for M ports (see the picture I and the table below);
- ...X179G - for G ports (see the picture I and the table below);
- ...X179U - for U ports (see the picture I and the table below).

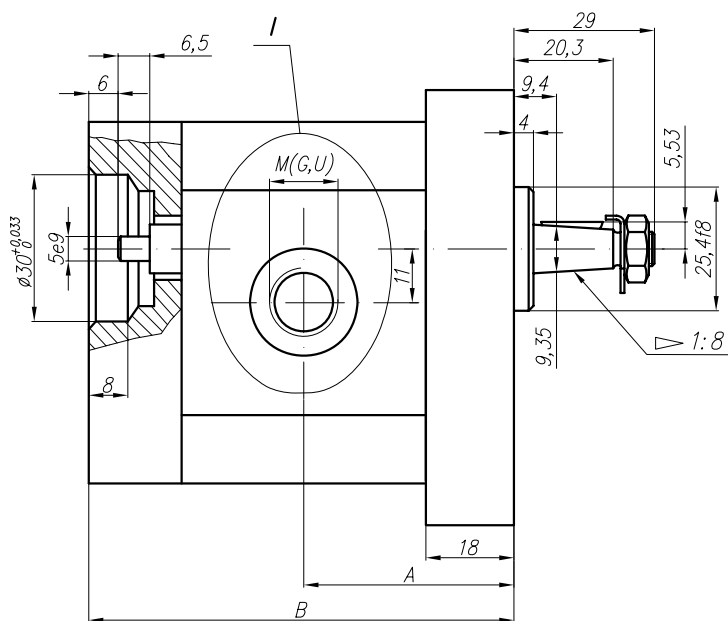
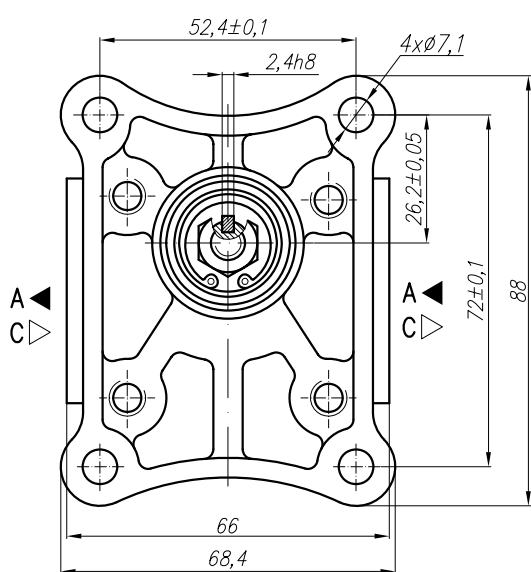
I – variants



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
10A(C)1X179	1	1,40	3,26	250	3500	39,1	81	M16x1,5	G 3/8" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)1,25X179	1,25	1,74	4,07	250	3500	39,5	82						
10A(C)1,6X179	1,6	2,23	5,21	250	3500	40,3	83,6						
10A(C)2X179	2	2,82	6,58	250	3500	41,1	85,2						
10A(C)2,5X179	2,5	3,53	8,23	250	3500	42,1	87,2	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
* 10A(C)2,65X179	2,65	3,74	8,72	250	3500	42,4	87,8						
10A(C)3,15X179	3,15	4,44	10,36	250	3500	43,5	89,8	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/4" - A	3/4" - 16UNF
10A(C)3,65X179	3,65	5,15	12,01	250	3500	44,4	91,9						
10A(C)4,2X179	4,2	5,92	13,82	250	3500	45,5	94,1						
* 10A(C)4,7X179	4,7	6,63	15,46	250	3500	46,1	96						
10A(C)5X179	5	7,05	14,10	250	3000	47,1	97,2	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/4" - A	3/4" - 16UNF
10A(C)5,7X179	5,7	8,12	16,25	200	3000	48,5	100,1						
10A(C)6,1X179	6,1	8,69	14,49	200	2500	49,4	101,8	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/4" - A	3/4" - 16UNF
10A(C)7,4X179	7,4	10,55	17,58	180	2500	52,1	107,2						
* 10A(C)8X179	8	11,40	15,20	150	2000	53,4	109,7	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/4" - A	3/4" - 16UNF
10A(C)8,5X179	8,5	12,11	16,15	150	2000	54,4	111,7						
10A(C)9,8X179	9,8	13,97	18,62	120	2000	57	117	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/4" - A	3/4" - 16UNF

* - These pumps - only under a special order

The pump 10A(C)...X181 is a first section of a multiple pump Gr.11.



I – variants

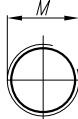
Variants:

...X181M - for M ports (see the picture I and the table below);

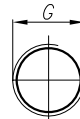
...X181G - for G ports (see the picture I and the table below);

...X181U - for U ports (see the picture I and the table below).

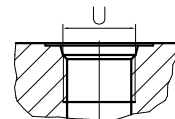
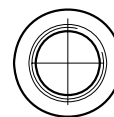
Variant M



Variant G



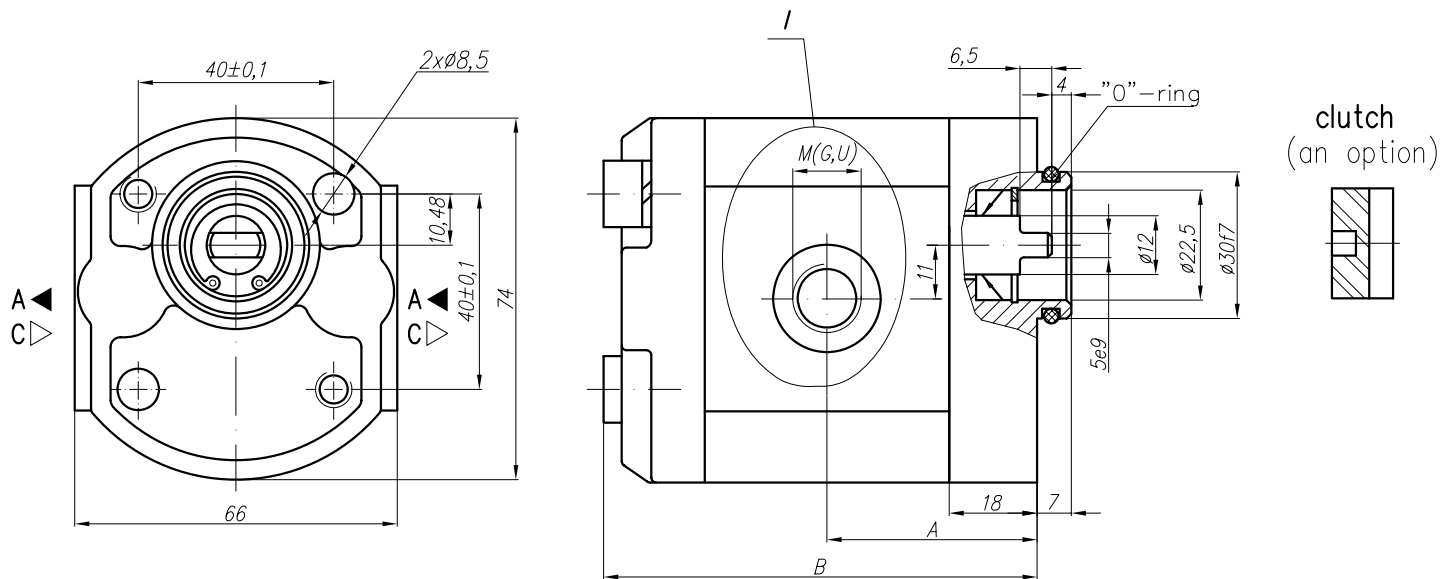
Variant U (SAEJ475 (ISO R725))



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
10A(C)1X181	1	1,40	3,26	250	3500	39,1	79	M16x1,5	G 3/8" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)1,25X181	1,25	1,74	4,07	250	3500	39,5	80						
10A(C)1,6X181	1,6	2,23	5,21	250	3500	40,3	81,6						
10A(C)2X181	2	2,82	6,58	250	3500	41,1	83,2						
10A(C)2,5X181	2,5	3,53	8,23	250	3500	42,1	85,2	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
* 10A(C)2,65X181	2,65	3,74	8,72	250	3500	42,4	85,8						
10A(C)3,15X181	3,15	4,44	10,36	250	3500	43,5	87,8	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)3,65X181	3,65	5,15	12,01	250	3500	44,4	89,9						
10A(C)4,2X181	4,2	5,92	13,82	250	3500	45,5	92,1						
* 10A(C)4,7X181	4,7	6,63	15,46	250	3500	46,1	94						
10A(C)5X181	5	7,05	14,10	250	3000	47,1	95,2	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)5,7X181	5,7	8,12	16,25	200	3000	48,5	98,1						
10A(C)6,1X181	6,1	8,69	14,49	200	2500	49,4	99,8	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)7,4X181	7,4	10,55	17,58	180	2500	52,1	105,2						
* 10A(C)8X181	8	11,40	15,20	150	2000	53,4	107,7	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)8,5X181	8,5	12,11	16,15	150	2000	54,4	109,7						
10A(C)9,8X181	9,8	13,97	18,62	120	2000	57	115	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF

* - These pumps - only under a special order

The pump 10A(C)...X182 is a second section of a multiple pump Gr.11.



I – variants

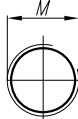
Variants:

...X182M - for M ports (see the picture I and the table below);

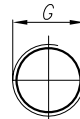
...X182G - for G ports (see the picture I and the table below);

...X182U - for U ports (see the picture I and the table below).

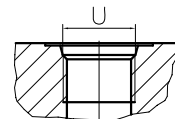
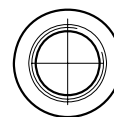
Variant M



Variant G



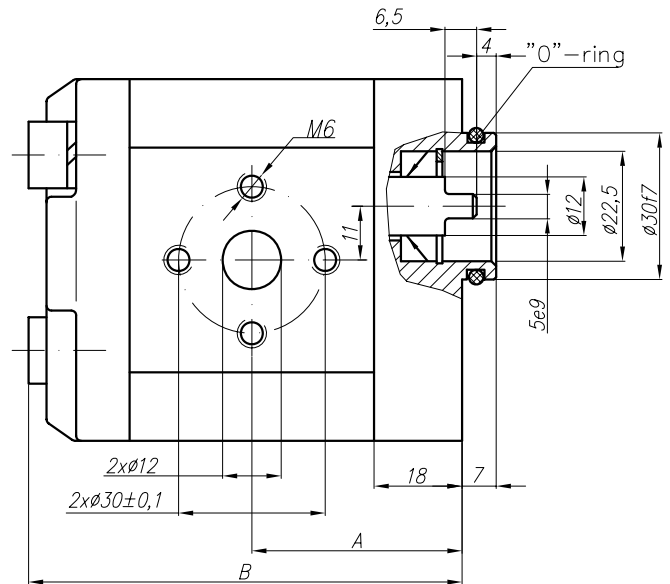
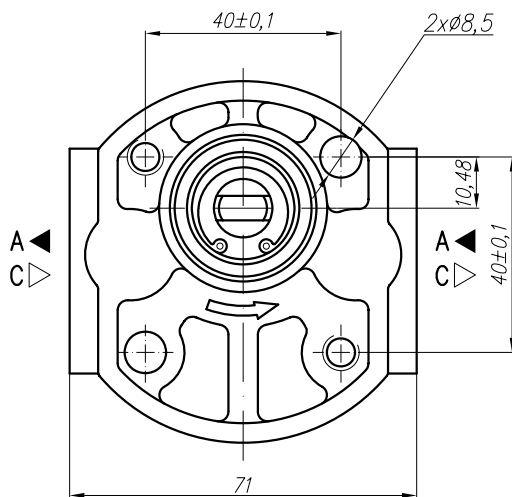
Variant U (SAEJ475 (ISO R725))



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
10A(C)1X182	1	1,40	3,26	250	3500	39,1	81	M16x1,5	G 3/8" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)1,25X182	1,25	1,74	4,07	250	3500	39,5	82						
10A(C)1,6X182	1,6	2,23	5,21	250	3500	40,3	83,6						
10A(C)2X182	2	2,82	6,58	250	3500	41,1	85,2						
10A(C)2,5X182	2,5	3,53	8,23	250	3500	42,1	87,2	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
* 10A(C)2,65X182	2,65	3,74	8,72	250	3500	42,4	87,8						
10A(C)3,15X182	3,15	4,44	10,36	250	3500	43,5	89,8	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)3,65X182	3,65	5,15	12,01	250	3500	44,4	91,9						
10A(C)4,2X182	4,2	5,92	13,82	250	3500	45,5	94,1	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
* 10A(C)4,7X182	4,7	6,63	15,46	250	3500	46,1	96						
10A(C)5X182	5	7,05	14,10	250	3000	47,1	97,2	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)5,7X182	5,7	8,12	16,25	200	3000	48,5	100,1						
10A(C)6,1X182	6,1	8,69	14,49	200	2500	49,4	101,8	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)7,4X182	7,4	10,55	17,58	180	2500	52,1	107,2						
* 10A(C)8X182	8	11,40	15,20	150	2000	53,4	109,7	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)8,5X182	8,5	12,11	16,15	150	2000	54,4	111,7						
10A(C)9,8X182	9,8	13,97	18,62	120	2000	57	117	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF

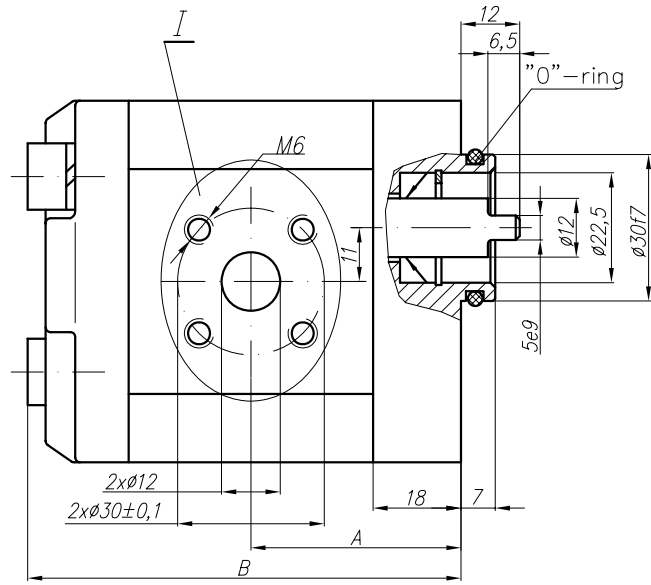
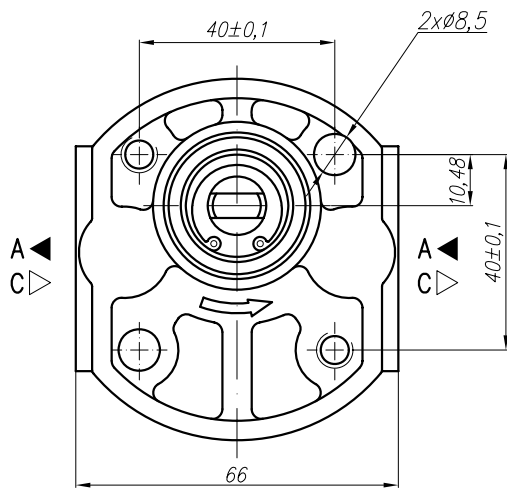
* - These pumps - only under a special order

The pump 10A(C)...X231 is a second section of a multiple pump Gr.11.



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	E	F	d
10A(C)1X231	1	1,40	3,26	250	3500	39,1	79						
10A(C)1,25X231	1,25	1,74	4,07	250	3500	39,5	80						
10A(C)1,6X231	1,6	2,23	5,21	250	3500	40,3	81,6						
10A(C)2X231	2	2,82	6,58	250	3500	41,1	83,2						
10A(C)2,5X231	2,5	3,53	8,23	250	3500	42,1	85,2						
* 10A(C)2,65X231	2,65	3,74	8,72	250	3500	42,4	85,8						
10A(C)3,15X231	3,15	4,44	10,36	250	3500	43,5	87,8						
10A(C)3,65X231	3,65	5,15	12,01	250	3500	44,4	89,9						
10A(C)4,2X231	4,2	5,92	13,82	250	3500	45,5	92,1	∅30	∅12	M6	∅30	∅12	M6
* 10A(C)4,7X231	4,7	6,63	15,46	250	3500	46,1	94						
10A(C)5X231	5	7,05	14,10	250	3000	47,1	95,2						
10A(C)5,7X231	5,7	8,12	16,25	200	3000	48,5	98,1						
10A(C)6,1X231	6,1	8,69	14,49	200	2500	49,4	99,8						
10A(C)7,4X231	7,4	10,55	17,58	180	2500	52,1	105,2						
* 10A(C)8X231	8	11,40	15,20	150	2000	53,4	107,7						
10A(C)8,5X231	8,5	12,11	16,15	150	2000	54,4	109,7						
10A(C)9,8X231	9,8	13,97	18,62	120	2000	57	115						

* - These pumps - only under a special order

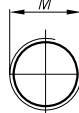


I – variants

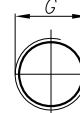
Variants:

- ...X238 - Normal version (flange);
- ...X238M - for M ports (see the picture I and the table below);
- ...X238G - for G ports (see the picture I and the table below);
- ...X238U - for U ports (see the picture I and the table below).

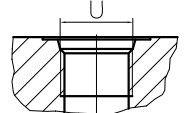
Variant M



Variant G

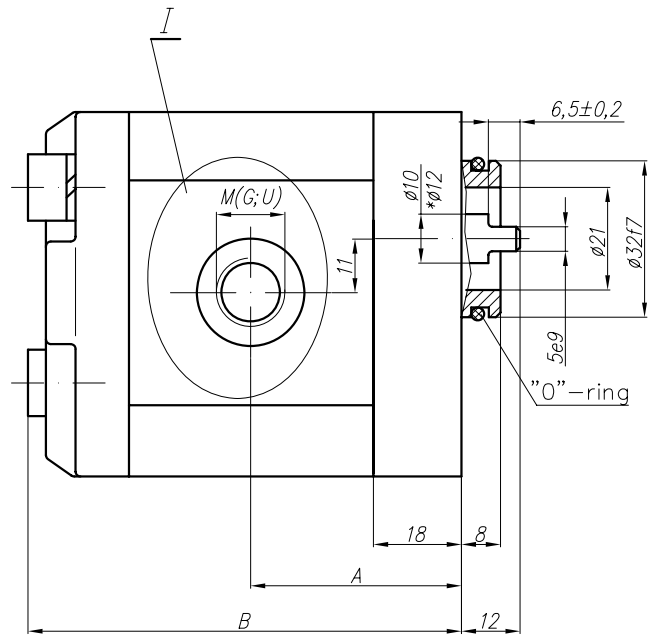
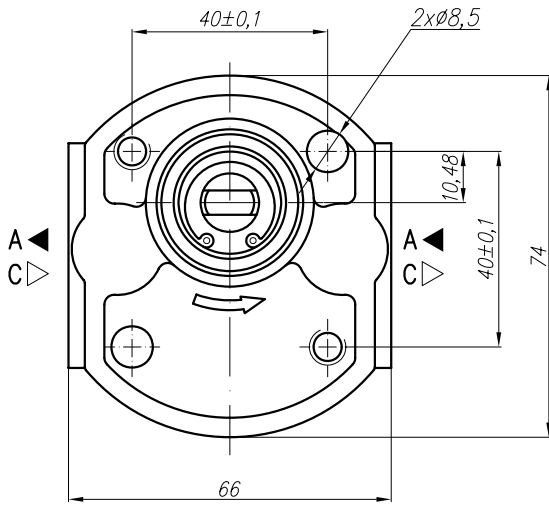


Variant U (SAEJ475 (ISO R725))



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
10A(C)1X238	1	1,40	3,26	250	3500	39,1	81	M16x1,5	G 3/8" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)1,25X238	1,25	1,74	4,07	250	3500	39,5	82						
10A(C)1,6X238	1,6	2,23	5,21	250	3500	40,3	83,6						
10A(C)2X238	2	2,82	6,58	250	3500	41,1	85,2						
10A(C)2,5X238	2,5	3,53	8,23	250	3500	42,1	87,2						
* 10A(C)2,65X238	2,65	3,74	8,72	250	3500	42,4	87,8	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)3,15X238	3,15	4,44	10,36	250	3500	43,5	89,8						
10A(C)3,65X238	3,65	5,15	12,01	250	3500	44,4	91,9	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)4,2X238	4,2	5,92	13,82	250	3500	45,5	94,1						
* 10A(C)4,7X238	4,7	6,63	15,46	250	3500	46,1	96						
10A(C)5X238	5	7,05	14,10	250	3000	47,1	97,2	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)5,7X238	5,7	8,12	16,25	200	3000	48,5	100,1						
10A(C)6,1X238	6,1	8,69	14,49	200	2500	49,4	101,8	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)7,4X238	7,4	10,55	17,58	180	2500	52,1	107,2						
* 10A(C)8X238	8	11,40	15,20	150	2000	53,4	109,7	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)8,5X238	8,5	12,11	16,15	150	2000	54,4	111,7						
10A(C)9,8X238	9,8	13,97	18,62	120	2000	57	117	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF

* - These pumps - only under a special order

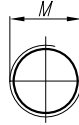


I – variants

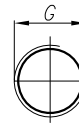
Variants:

- ...X244M - for M ports (see the picture I and the table below);
- ...X244G - for G ports (see the picture I and the table below);
- ...X244U - for U ports (see the picture I and the table below).

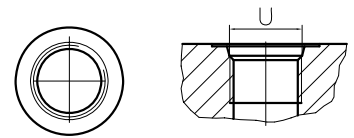
Variant M



Variant G



Variant U (SAEJ475 (ISO R725))

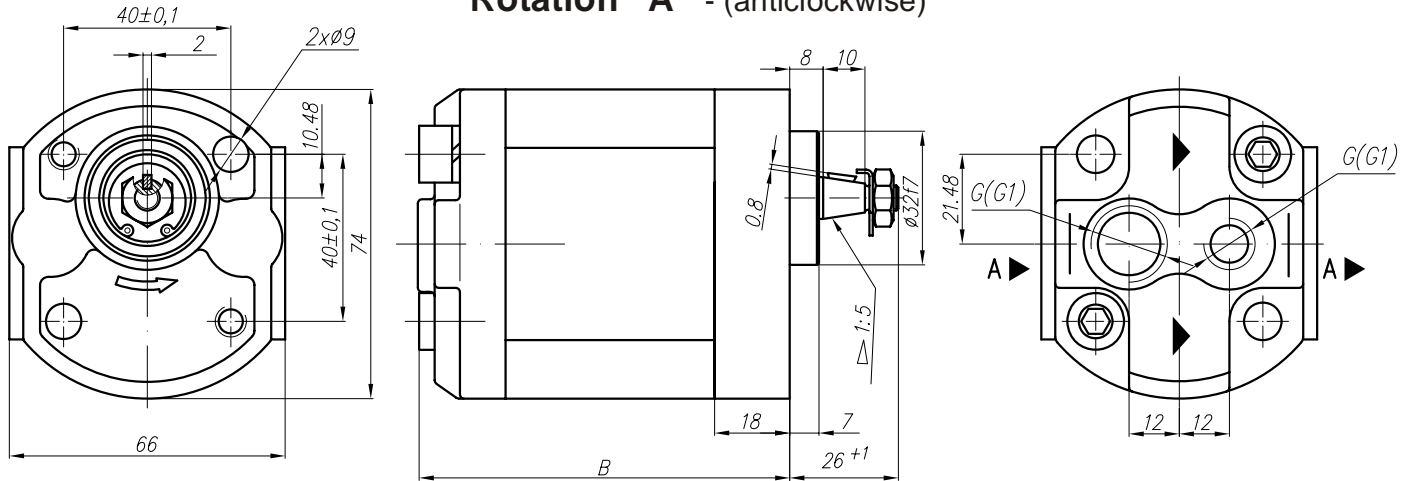


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
10A(C)1X244	1	1,40	3,26	250	3500	39,1	81	M16x1,5	G 3/8" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)1,25X244	1,25	1,74	4,07	250	3500	39,5	82						
10A(C)1,6X244	1,6	2,23	5,21	250	3500	40,3	83,6						
10A(C)2X244	2	2,82	6,58	250	3500	41,1	85,2	M20x1,5	G 1/2" - A				
10A(C)2,5X244	2,5	3,53	8,23	250	3500	42,1	87,2						
* 10A(C)2,65X244	2,65	3,74	8,72	250	3500	42,4	87,8						
10A(C)3,15X244	3,15	4,44	10,36	250	3500	43,5	89,8	M22x1,5	7/8" - 14UNF	M18x1,5	3/4" - 16UNF		
10A(C)3,65X244	3,65	5,15	12,01	250	3500	44,4	91,9						
10A(C)4,2X244	4,2	5,92	13,82	250	3500	45,5	94,1						
* 10A(C)4,7X244	4,7	6,63	15,46	250	3500	46,1	96	M22x1,5	7/8" - 14UNF	M18x1,5	3/4" - 16UNF		
10A(C)5X244	5	7,05	14,10	250	3000	47,1	97,2						
10A(C)5,7X244	5,7	8,12	16,25	200	3000	48,5	100,1						
10A(C)6,1X244	6,1	8,69	14,49	200	2500	49,4	101,8	M22x1,5	7/8" - 14UNF	M18x1,5	3/4" - 16UNF		
10A(C)7,4X244	7,4	10,55	17,58	180	2500	52,1	107,2						
* 10A(C)8X244	8	11,40	15,20	150	2000	53,4	109,7						
10A(C)8,5X244	8,5	12,11	16,15	150	2000	54,4	111,7	M22x1,5	7/8" - 14UNF	M18x1,5	3/4" - 16UNF		
10A(C)9,8X244	9,8	13,97	18,62	120	2000	57	117						

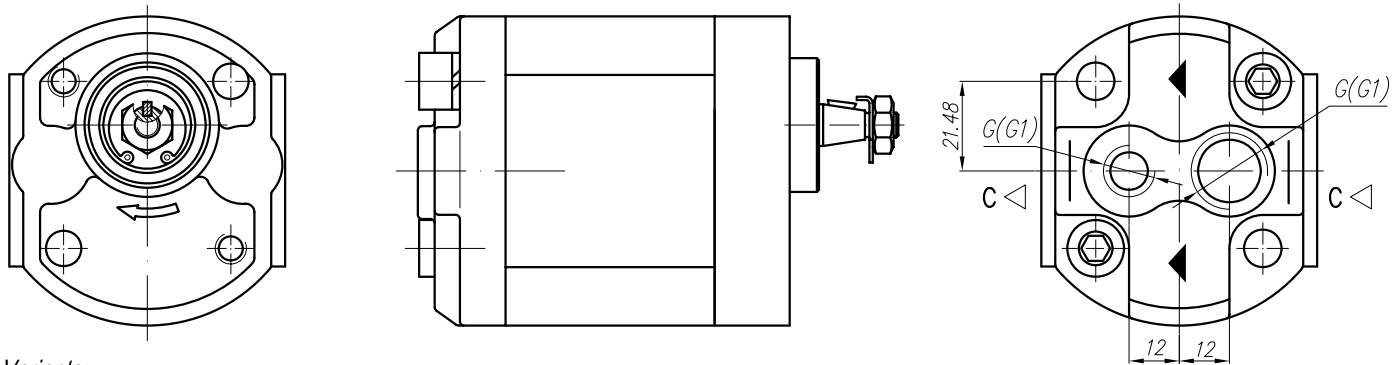
* - These pumps - only under a special order

** - Shaft dia is 10 mm for displ. 1 ... 6,1 ccm and 12 mm for displ. 7,4 ccm and more

Rotation "A" - (anticlockwise)



Rotation "C" - (clockwise)

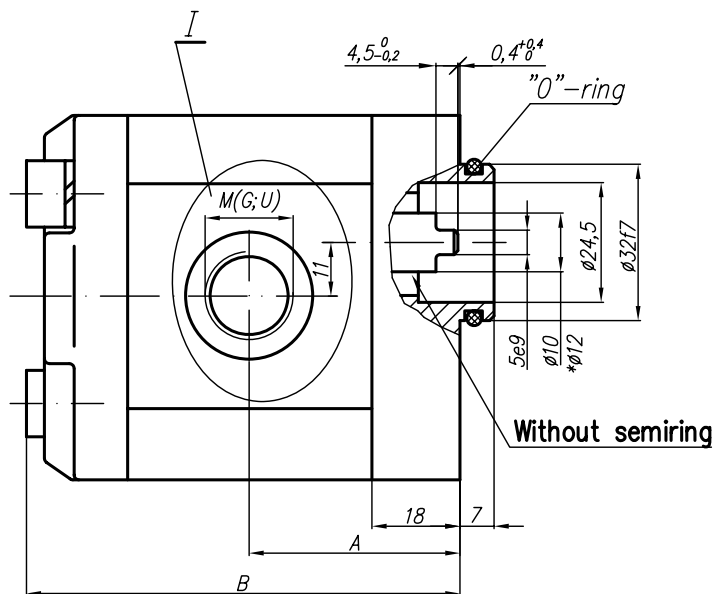
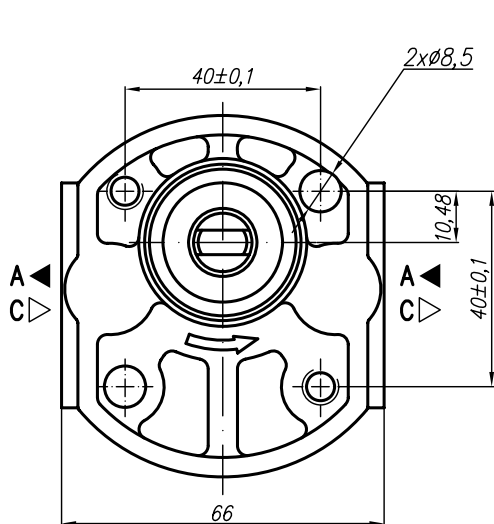


Variants:

- ...X254G - for G ports (see the picture and the table);
- ...X254G1 - for G1 ports (see the picture and the table).

Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet		Outlet			
10A(C)1X254	1	1,40	3,26	250	3500	71	81						
10A(C)1,25X254	1,25	1,74	4,07	250	3500	72	82						
10A(C)1,6X254	1,6	2,23	5,21	250	3500	73,6	83,6						
10A(C)2X254	2	2,82	6,58	250	3500	75,2	85,2						
10A(C)2,5X254	2,5	3,53	8,23	250	3500	77,2	87,2						
* 10A(C)2,65X254	2,65	3,74	8,72	250	3500	77,8	87,8						
10A(C)3,15X254	3,15	4,44	10,36	250	3500	79,8	89,8						
10A(C)3,65X254	3,65	5,15	12,01	250	3500	81,9	91,9						
10A(C)4,2X254	4,2	5,92	13,82	250	3500	84,1	94,1						
* 10A(C)4,7X254	4,7	6,63	15,46	250	3500	87,1	96						
10A(C)5X254	5	7,05	14,10	250	3000	87,2	97,2						
10A(C)5,7X254	5,7	8,12	16,25	200	3000	90,1	100,1						
10A(C)6,1X254	6,1	8,69	14,49	200	2500	91,8	101,8						
10A(C)7,4X254	7,4	10,55	17,58	180	2500	97,2	107,2						
* 10A(C)8X254	8	11,40	15,20	150	2000	99,7	109,7						
10A(C)8,5X254	8,5	12,11	16,15	150	2000	101,7	111,7						
10A(C)9,8X254	9,8	13,97	18,62	120	2000	107	117						

* - These pumps - only under a special order



I - variants

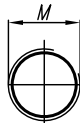
Variants:

...X255M - for M ports (see the picture I and the table below);

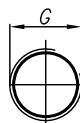
...X255G - for G ports (see the picture I and the table below);

...X255U - for U ports (see the picture I and the table below).

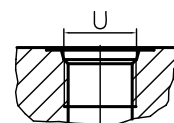
Variant M



Variant G



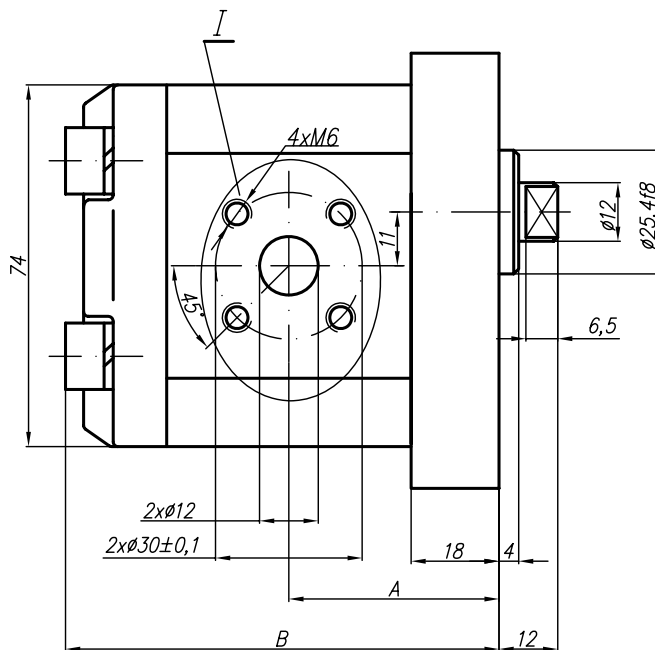
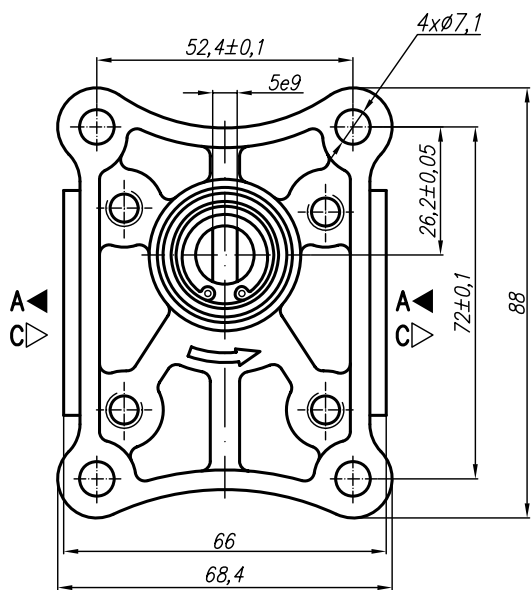
Variant U (SAEJ475 (ISO R725))



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
10A(C)1X255	1	1,40	3,26	250	3500	39,1	81	M18x1,5	G 3/8" - A	3/4" - 16UNF - 2B	M14x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)1,25X255	1,25	1,74	4,07	250	3500	39,5	82						
10A(C)1,6X255	1,6	2,23	5,21	250	3500	40,3	83,6						
10A(C)2X255	2	2,82	6,58	250	3500	41,1	85,2						
10A(C)2,5X255	2,5	3,53	8,23	250	3500	42,1	87,2						
* 10A(C)2,65X255	2,65	3,74	8,72	250	3500	42,4	87,8						
10A(C)3,15X255	3,15	4,44	10,36	250	3500	43,5	89,8						
10A(C)3,65X255	3,65	5,15	12,01	250	3500	44,4	91,9						
10A(C)4,2X255	4,2	5,92	13,82	250	3500	45,5	94,1						
* 10A(C)4,7X255	4,7	6,63	15,46	250	3500	46,1	97,1						
10A(C)5X255	5	7,05	14,10	250	3000	47,1	97,2	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	3/4" - 16UNF	
10A(C)5,7X255	5,7	8,12	16,25	200	3000	48,5	100,1						
10A(C)6,1X255	6,1	8,69	14,49	200	2500	49,4	101,8						
10A(C)7,4X255	7,4	10,55	17,58	180	2500	52,1	107,2						
* 10A(C)8X255	8	11,40	15,20	150	2000	53,4	109,7						
10A(C)8,5X255	8,5	12,11	16,15	150	2000	54,4	111,7						
10A(C)9,8X255	9,8	13,97	18,62	120	2000	57	117						

* - These pumps - only under a special order

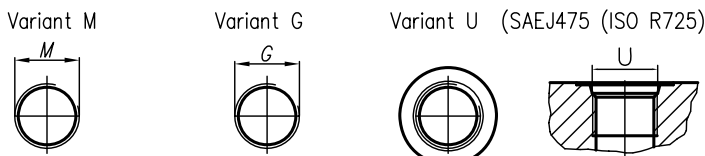
** - Shaft dia is 10 mm for displ. 1 ... 6,1 ccm and 12 mm for displ. 7,4 ccm and more



Variants:

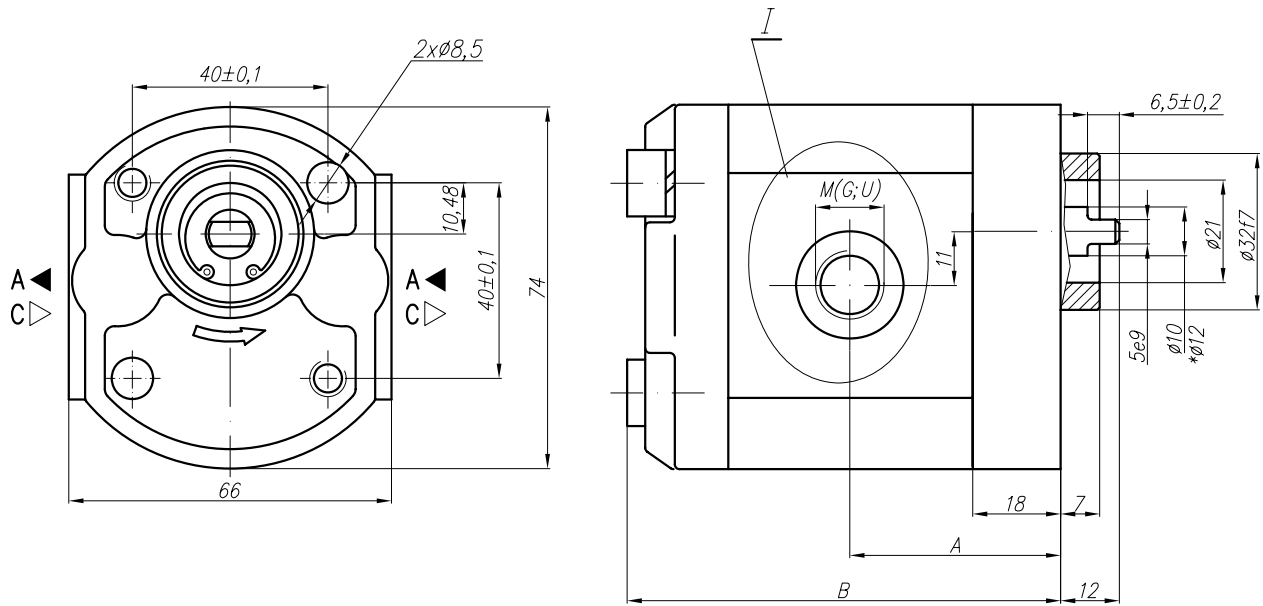
- ...X257 - Normal version (flange);
- ...X257M - for M ports (see the picture I and the table below);
- ...X257G - for G ports (see the picture I and the table below);
- ...X257U - for U ports (see the picture I and the table below).

I - variants



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
10A(C)1X257	1	1,40	3,26	250	3500	39,1	81	M16x1,5	G 3/8" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)1,25X257	1,25	1,74	4,07	250	3500	39,5	82						
10A(C)1,6X257	1,6	2,23	5,21	250	3500	40,3	83,6						
10A(C)2X257	2	2,82	6,58	250	3500	41,1	85,2						
10A(C)2,5X257	2,5	3,53	8,23	250	3500	42,1	87,2						
* 10A(C)2,65X257	2,65	3,74	8,72	250	3500	42,4	87,8	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)3,15X257	3,15	4,44	10,36	250	3500	43,5	89,8						
10A(C)3,65X257	3,65	5,15	12,01	250	3500	44,4	91,9	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/4" - A	3/4" - 16UNF
10A(C)4,2X257	4,2	5,92	13,82	250	3500	45,5	94,1						
* 10A(C)4,7X257	4,7	6,63	15,46	250	3500	46,1	96						
10A(C)5X257	5	7,05	14,10	250	3000	47,1	97,2	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/4" - A	3/4" - 16UNF
10A(C)5,7X257	5,7	8,12	16,25	200	3000	48,5	100,1						
10A(C)6,1X257	6,1	8,69	14,49	200	2500	49,4	101,8	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/4" - A	3/4" - 16UNF
10A(C)7,4X257	7,4	10,55	17,58	180	2500	52,1	107,2						
* 10A(C)8X257	8	11,40	15,20	150	2000	53,4	109,7	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/4" - A	3/4" - 16UNF
10A(C)8,5X257	8,5	12,11	16,15	150	2000	54,4	111,7						
10A(C)9,8X257	9,8	13,97	18,62	120	2000	57	117	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/4" - A	3/4" - 16UNF

* - These pumps - only under a special order



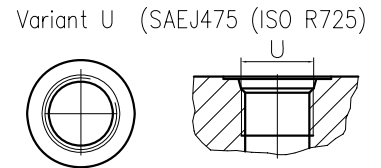
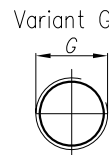
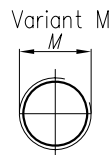
I – variants

Variants:

...X278M - for M ports (see the picture I and the table below);

...X278G - for G ports (see the picture I and the table below);

...X278U - for U ports (see the picture I and the table below).

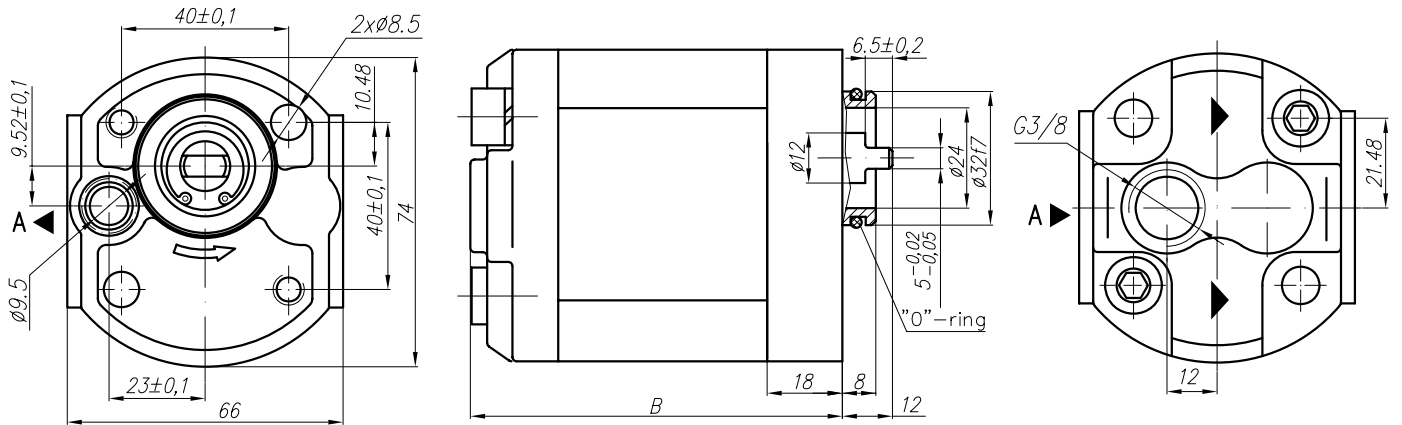


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
10A(C)1X278	1	1,40	3,26	250	3500	39,1	81	M16x1,5	G 3/8" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)1,25X278	1,25	1,74	4,07	250	3500	39,5	82						
10A(C)1,6X278	1,6	2,23	5,21	250	3500	40,3	83,6						
10A(C)2X278	2	2,82	6,58	250	3500	41,1	85,2	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)2,5X278	2,5	3,53	8,23	250	3500	42,1	87,2						
* 10A(C)2,65X278	2,65	3,74	8,72	250	3500	42,4	87,8						
10A(C)3,15X278	3,15	4,44	10,36	250	3500	43,5	89,8	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)3,65X278	3,65	5,15	12,01	250	3500	44,4	91,9						
10A(C)4,2X278	4,2	5,92	13,82	250	3500	45,5	94,1						
* 10A(C)4,7X278	4,7	6,63	15,46	250	3500	46,1	96	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)5X278	5	7,05	14,10	250	3000	47,1	97,2						
10A(C)5,7X278	5,7	8,12	16,25	200	3000	48,5	100,1						
10A(C)6,1X278	6,1	8,69	14,49	180	2500	49,4	101,8	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)7,4X278	7,4	10,55	17,58	180	2500	52,1	107,2						
* 10A(C)8X278	8	11,40	15,20	150	2000	53,4	109,7						
10A(C)8,5X278	8,5	12,11	16,15	150	2000	54,4	111,7	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)9,8X278	9,8	13,97	18,62	120	2000	57	117						

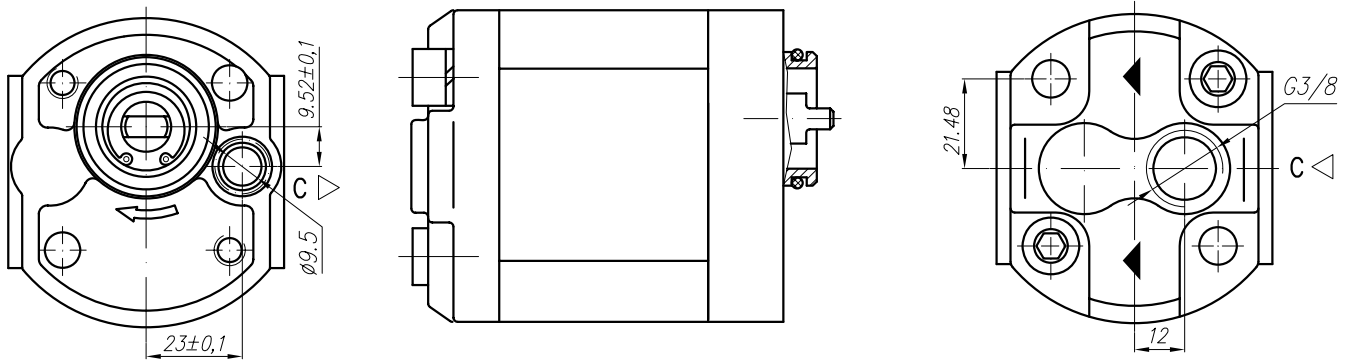
* - These pumps - only under a special order

** - Shaft dia is 10 mm for displ. 1 ... 6,1 ccm and 12 mm for displ. 7,4 ccm and more

Rotation "A" - (anticlockwise)



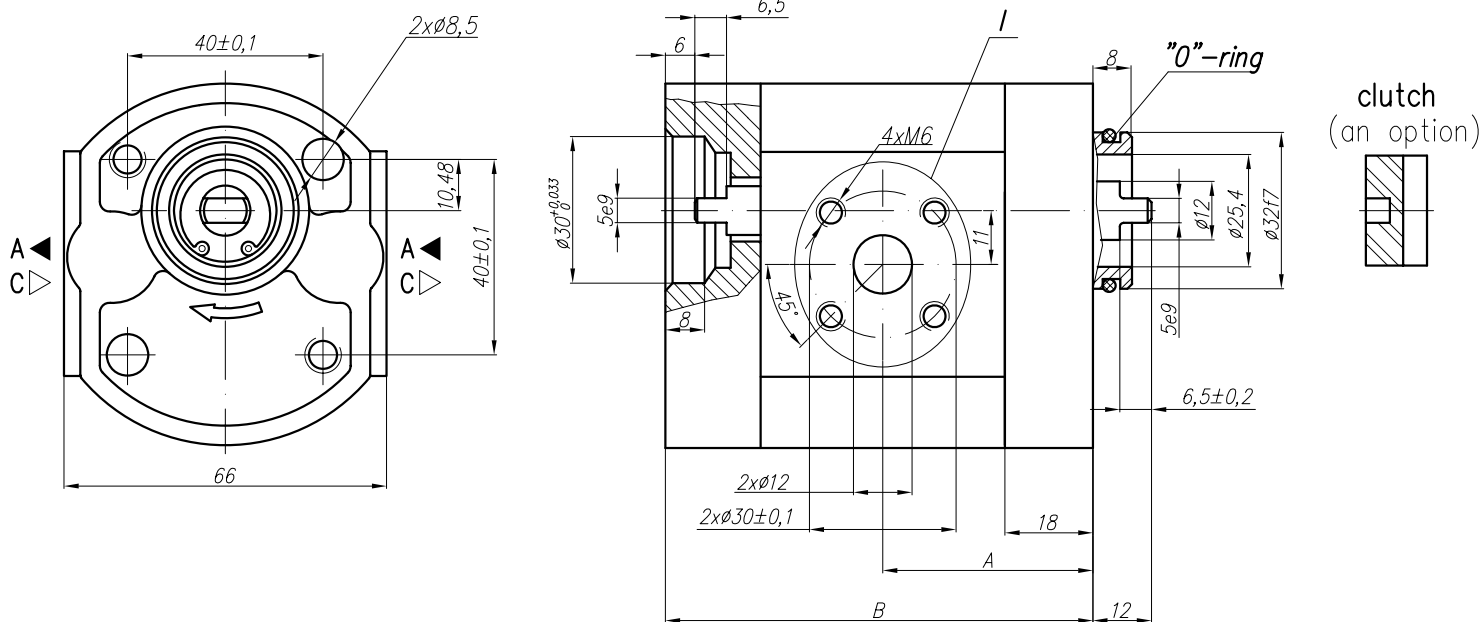
Rotation "C" - (clockwise)



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension						
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet	
								M	G	U		
10A(C)1X302	1	1,40	3,26	250	3500	71	81					
10A(C)1,25X302	1,25	1,74	4,07	250	3500	72	82					
10A(C)1,6X302	1,6	2,23	5,21	250	3500	73,6	83,6					
10A(C)2X302	2	2,82	6,58	250	3500	75,2	85,2					
10A(C)2,5X302	2,5	3,53	8,23	250	3500	77,2	87,2					
* 10A(C)2,65X302	2,65	3,74	8,72	250	3500	77,8	87,8					
10A(C)3,15X302	3,15	4,44	10,36	250	3500	79,8	89,8					
10A(C)3,65X302	3,65	5,15	12,01	250	3500	81,9	91,9					
10A(C)4,2X302	4,2	5,92	13,82	250	3500	84,1	94,1					
* 10A(C)4,7X302	4,7	6,63	15,46	250	3500	87,1	97,1					
10A(C)5X302	5	7,05	14,10	250	3000	87,2	97,2					
10A(C)5,7X302	5,7	8,12	16,25	200	3000	90,1	100,1					
10A(C)6,1X302	6,1	8,69	14,49	180	2500	91,8	101,8					
10A(C)7,4X302	7,4	10,55	17,58	180	2500	97,2	107,2					
* 10A(C)8X302	8	11,40	15,20	150	2000	99,7	109,7					
10A(C)8,5X302	8,5	12,11	16,15	150	2000	101,7	111,7					
10A(C)9,8X302	9,8	13,97	18,62	120	2000	107	117					

* - These pumps - only under a special order

The pump 10A(C)...X303 is a first section of a multiple pump Gr. 11 for mini power packs.

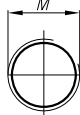


I – variants

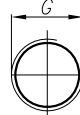
Variants:

- ...X303 - Normal version (flange);
- ...X303M - for M ports (see the picture I and the table below);
- ...X303G - for G ports (see the picture I and the table below);
- ...X303U - for U ports (see the picture I and the table below).

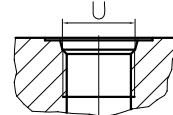
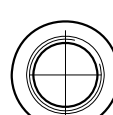
Variant M



Variant G

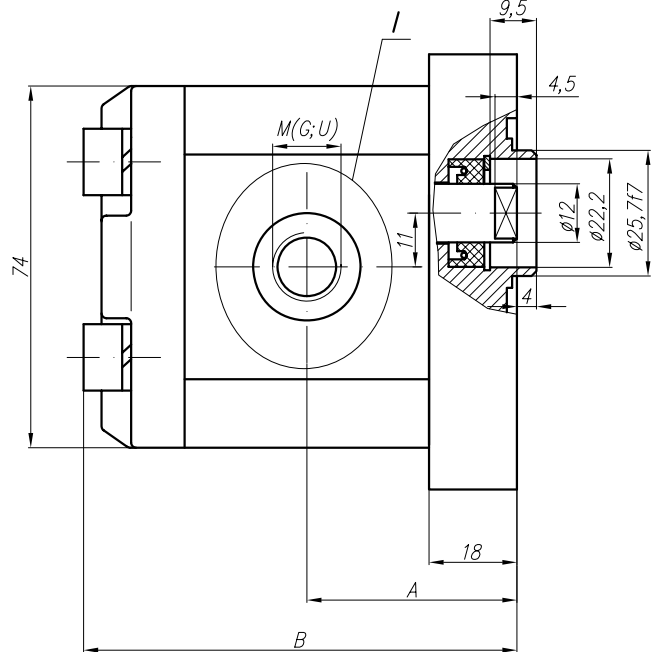
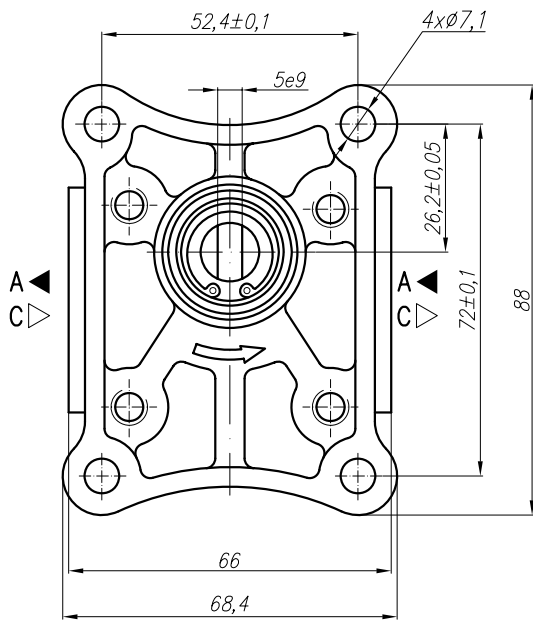


Variant U (SAEJ475 (ISO R725))



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
10A(C)1X303	1	1,40	3,26	250	3500	39,1	79	M16x1,5	G 3/8" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)1,25X303	1,25	1,74	4,07	250	3500	39,5	80						
10A(C)1,6X303	1,6	2,23	5,21	250	3500	40,3	81,6						
10A(C)2X303	2	2,82	6,58	250	3500	41,1	83,2	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)2,5X303	2,5	3,53	8,23	250	3500	42,1	85,2						
* 10A(C)2,65X303	2,65	3,74	8,72	250	3500	42,4	85,8						
10A(C)3,15X303	3,15	4,44	10,36	250	3500	43,5	87,8	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)3,65X303	3,65	5,15	12,01	250	3500	44,4	89,9						
10A(C)4,2X303	4,2	5,92	13,82	250	3500	45,5	92,1						
* 10A(C)4,7X303	4,7	6,63	15,46	250	3500	46,1	94	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)5X303	5	7,05	14,10	250	3000	47,1	95,2						
10A(C)5,7X303	5,7	8,12	16,25	200	3000	48,5	98,1						
10A(C)6,1X303	6,1	8,69	14,49	200	2500	49,4	99,8	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)7,4X303	7,4	10,55	17,58	180	2500	52,1	105,2						
* 10A(C)8X303	8	11,40	15,20	150	2000	53,4	107,7						
10A(C)8,5X303	8,5	12,11	16,15	150	2000	54,4	109,7	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)9,8X303	9,8	13,97	18,62	120	2000	57	115						

* - These pumps - only under a special order

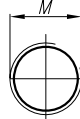


I – variants

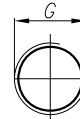
Variants:

- ...X317M - for M ports (see the picture I and the table below);
- ...X317G - for G ports (see the picture I and the table below);
- ...X317U - for U ports (see the picture I and the table below).

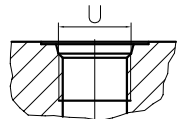
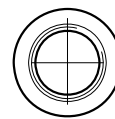
Variant M



Variant G



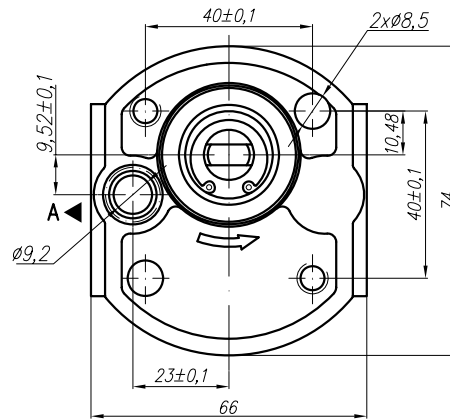
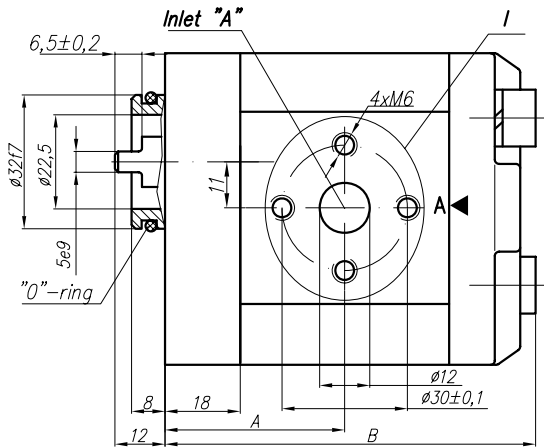
Variant U (SAEJ475 (ISO R725))



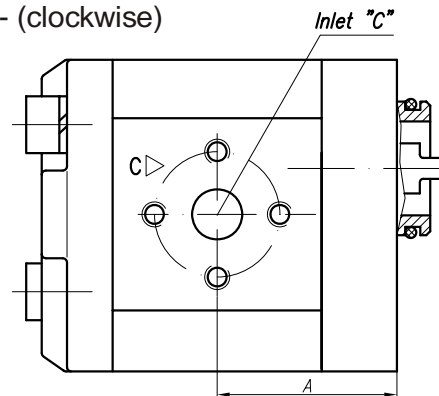
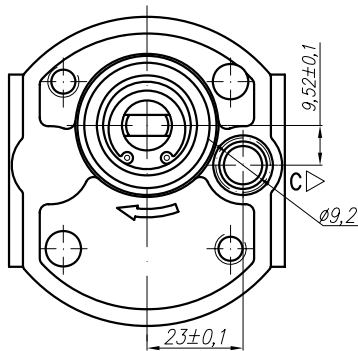
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet			
								M	G	U	M	G	U	
10A(C)1X317	1	1,40	3,26	250	3500	39,1	81	M16x1,5	G 3/8" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B	
10A(C)1,25X317	1,25	1,74	4,07	250	3500	39,5	82							
10A(C)1,6X317	1,6	2,23	5,21	250	3500	40,3	83,6							
10A(C)2X317	2	2,82	6,58	250	3500	41,1	85,2							
10A(C)2,5X317	2,5	3,53	8,23	250	3500	42,1	87,2							
* 10A(C)2,65X317	2,65	3,74	8,72	250	3500	42,4	87,8	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B	
10A(C)3,15X317	3,15	4,44	10,36	250	3500	43,5	89,8							
10A(C)3,65X317	3,65	5,15	12,01	250	3500	44,4	91,9	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF	
10A(C)4,2X317	4,2	5,92	13,82	250	3500	45,5	94,1							
* 10A(C)4,7X317	4,7	6,63	15,46	250	3500	46,1	96							
10A(C)5X317	5	7,05	14,10	250	3000	47,1	97,2	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF	
10A(C)5,7X317	5,7	8,12	16,25	200	3000	48,5	100,1							
10A(C)6,1X317	6,1	8,69	14,49	180	2500	49,4	101,8	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF	
10A(C)7,4X317	7,4	10,55	17,58	180	2500	52,1	107,2							
* 10A(C)8X317	8	11,40	15,20	150	2000	53,4	109,7	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF	
10A(C)8,5X317	8,5	12,11	16,15	150	2000	54,4	111,7							
10A(C)9,8X317	9,8	13,97	18,62	120	2000	57	117							

* - These pumps - only under a special order

Rotation "A" - (anticlockwise)



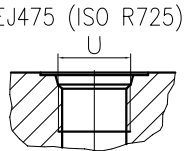
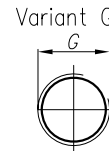
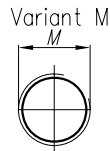
Rotation "C" - (clockwise)



Variants:

- ...X330 - Normal version (flange);
- ...X330M - for M port (see the picture I and the table below);
- ...X330G - for G port (see the picture I and the table below);
- ...X330U - for U port (see the picture I and the table below).

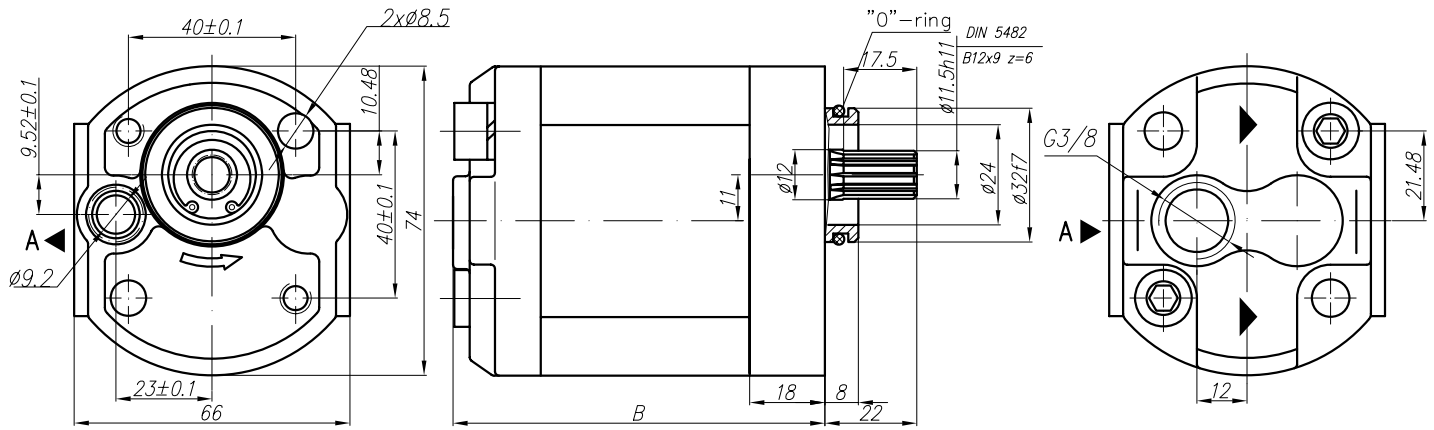
I - variants (inlet only)



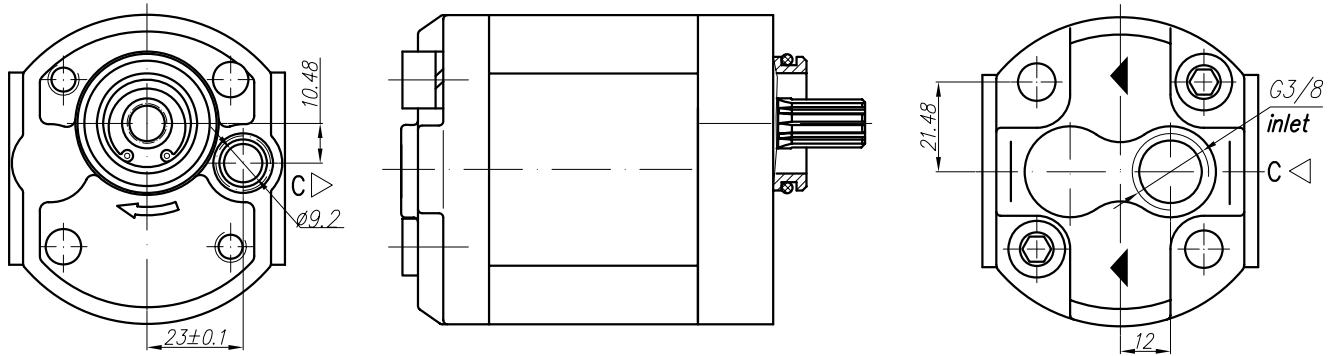
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	M	G	U	M	G	U
10A(C)1X330	1	1,40	3,26	250	3500	39,1	81	M16x1,5	G 3/8" - A	3/4" - 16UNF - 2B			
10A(C)1,25X330	1,25	1,74	4,07	250	3500	39,5	82						
10A(C)1,6X330	1,6	2,23	5,21	250	3500	40,3	83,6						
10A(C)2X330	2	2,82	6,58	250	3500	41,1	85,2						
* 10A(C)2,65X330	2,65	3,74	8,72	250	3500	42,4	87,8						
10A(C)3,15X330	3,15	4,44	10,36	250	3500	43,5	89,8	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B			
10A(C)3,65X330	3,65	5,15	12,01	250	3500	44,4	91,9						
10A(C)4,2X330	4,2	5,92	13,82	250	3500	45,5	94,1						
* 10A(C)4,7X330	4,7	6,63	15,46	250	3500	46,1	96						
10A(C)5X330	5	7,05	14,10	250	3000	47,1	97,2						
10A(C)5,7X330	5,7	8,12	16,25	200	3000	48,5	100,1	M22x1,5	7/8" - 14UNF				
10A(C)6,1X330	6,1	8,69	14,49	180	2500	49,4	101,8						
10A(C)7,4X330	7,4	10,55	17,58	180	2500	52,1	107,2						
* 10A(C)8X330	8	11,40	15,20	150	2000	53,4	109,7						
10A(C)8,5X330	8,5	12,11	16,15	150	2000	54,4	111,7						
10A(C)9,8X330	9,8	13,97	18,62	120	2000	57	117						

* - These pumps - only under a special order

Rotation "A" - (anticlockwise)



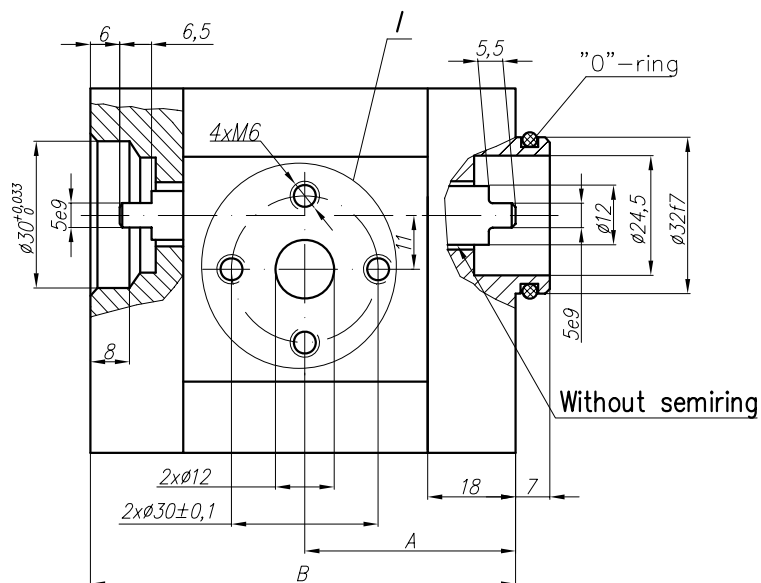
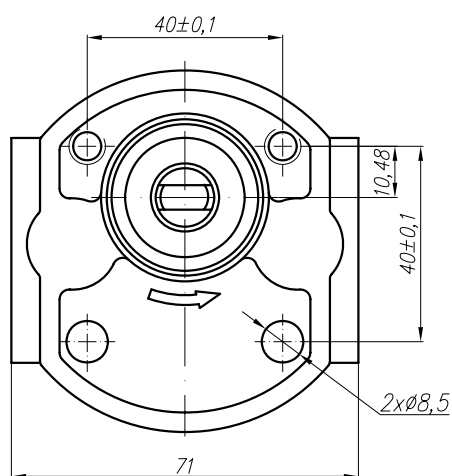
Rotation "C" - (clockwise)



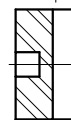
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U			
10A(C)1X340	1	1,40	3,26	250	3500		81						
10A(C)1,25X340	1,25	1,74	4,07	250	3500		82						
10A(C)1,6X340	1,6	2,23	5,21	250	3500		83,6						
10A(C)2X340	2	2,82	6,58	250	3500		85,2						
10A(C)2,5X340	2,5	3,53	8,23	250	3500		87,2						
* 10A(C)2,65X340	2,65	3,74	8,72	250	3500		87,8						
10A(C)3,15X340	3,15	4,44	10,36	250	3500		89,8						
10A(C)3,65X340	3,65	5,15	12,01	250	3500		91,9						
10A(C)4,2X340	4,2	5,92	13,82	250	3500		94,1						
* 10A(C)4,7X340	4,7	6,63	15,46	250	3500		97,1						
10A(C)5X340	5	7,05	14,10	250	3000		97,2						
10A(C)5,7X340	5,7	8,12	16,25	200	3000		100,1						
10A(C)6,1X340	6,1	8,69	14,49	180	2500		101,8						
10A(C)7,4X340	7,4	10,55	17,58	180	2500		107,2						
* 10A(C)8X340	8	11,40	15,20	150	2000		109,7						
10A(C)8,5X340	8,5	12,11	16,15	150	2000		111,7						
10A(C)9,8X340	9,8	13,97	18,62	120	2000		117						

* - These pumps - only under a special order

The pump 10A(C)...X343 is a middle section of a multiple pump Gr. 211 or 311.



clutch
(an option)



Variants:

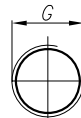
- ...X343 - Normal version (flange);
- ...X343M - for M ports (see the picture I and the table below);
- ...X343G - for G ports (see the picture I and the table below);
- ...X343U - for U ports (see the picture I and the table below).

I - variants

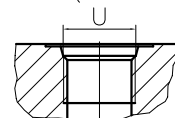
Variant M



Variant G



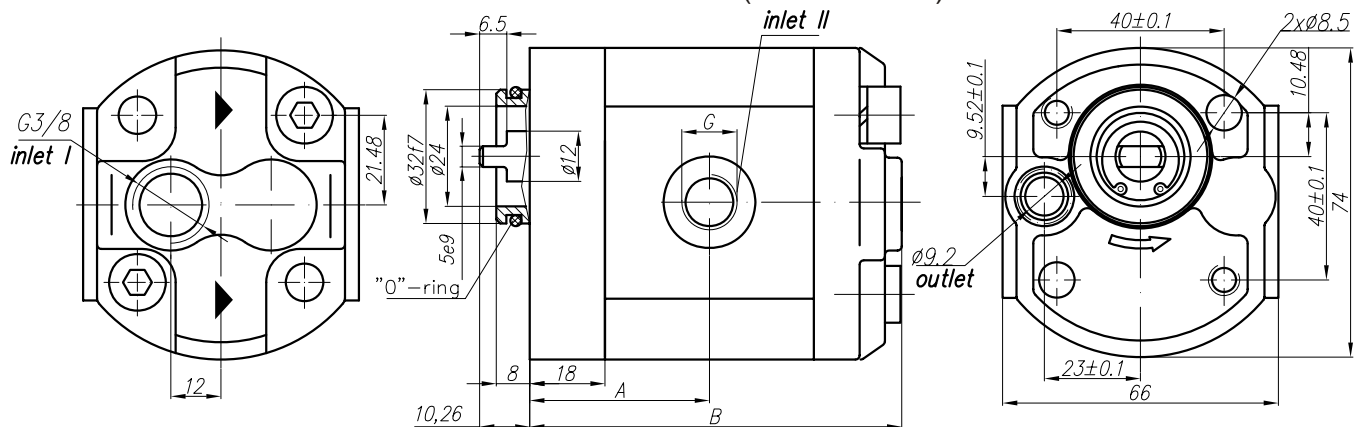
Variant U (SAEJ475 (ISO R725))



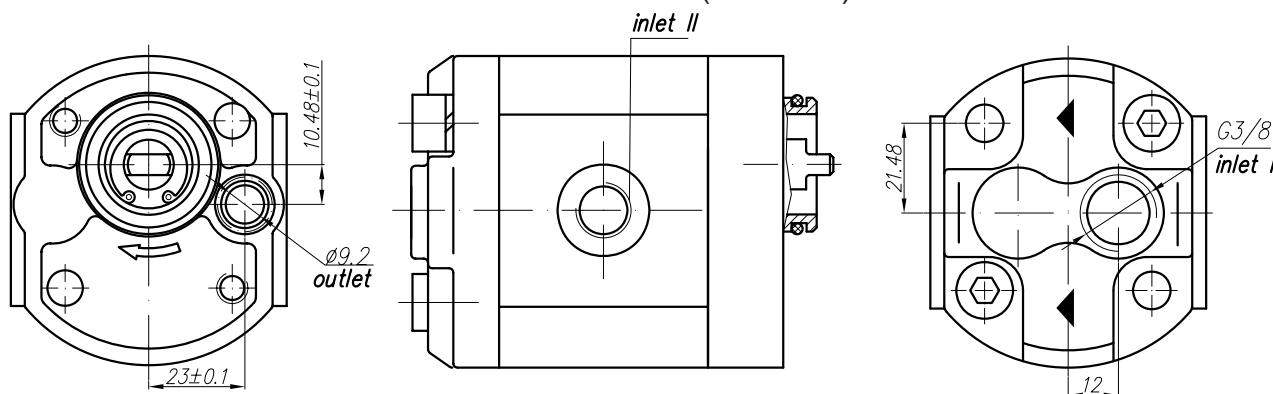
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
10A(C)1X343	1	1,40	3,26	250	3500	39,1	79	M16x1,5	G 3/8" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)1,25X343	1,25	1,74	4,07	250	3500	39,5	80						
10A(C)1,6X343	1,6	2,23	5,21	250	3500	40,3	81,6						
10A(C)2X343	2	2,82	6,58	250	3500	41,1	83,2						
10A(C)2,5X343	2,5	3,53	8,23	250	3500	42,1	85,2						
* 10A(C)2,65X343	2,65	3,74	8,72	250	3500	42,4	85,8	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)3,15X343	3,15	4,44	10,36	250	3500	43,5	87,8						
10A(C)3,65X343	3,65	5,15	12,01	250	3500	44,4	89,9						
10A(C)4,2X343	4,2	5,92	13,82	250	3500	45,5	92,1						
* 10A(C)4,7X343	4,7	6,63	15,46	250	3500	46,1	94						
10A(C)5X343	5	7,05	14,10	250	3000	47,1	95,2	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	3/4" - 16UNF	
10A(C)5,7X343	5,7	8,12	16,25	200	3000	48,5	98,1						
10A(C)6,1X343	6,1	8,69	14,49	200	2500	49,4	99,8						
10A(C)7,4X343	7,4	10,55	17,58	180	2500	52,1	105,2						
* 10A(C)8X343	8	11,40	15,20	150	2000	53,4	107,7						
10A(C)8,5X343	8,5	12,11	16,15	150	2000	54,4	109,7						
10A(C)9,8X343	9,8	13,97	18,62	120	2000	57	115						

* - These pumps - only under a special order

Rotation "A" - (anticlockwise)

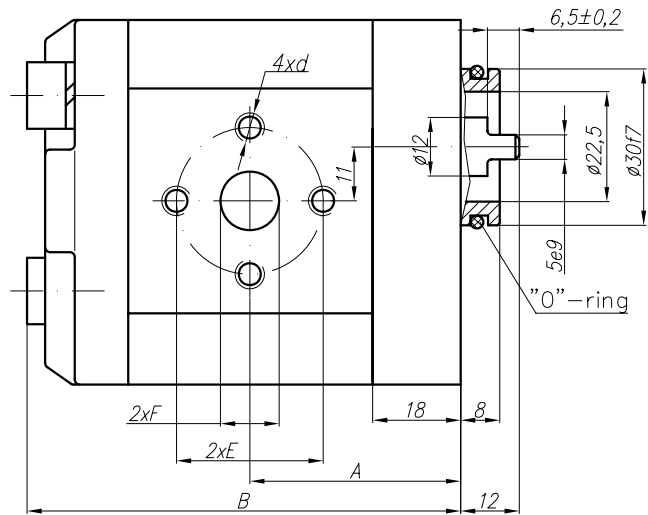
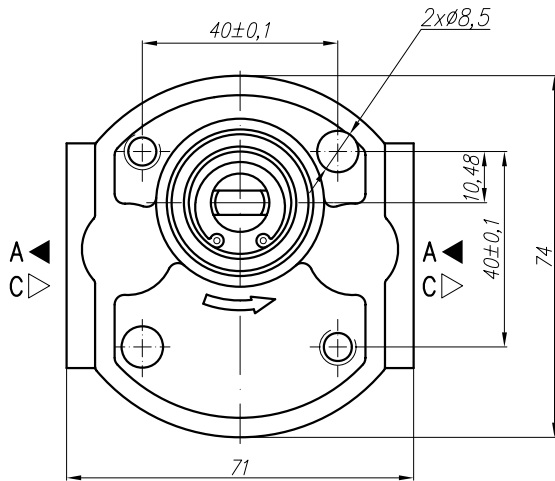


Rotation "C" - (clockwise)



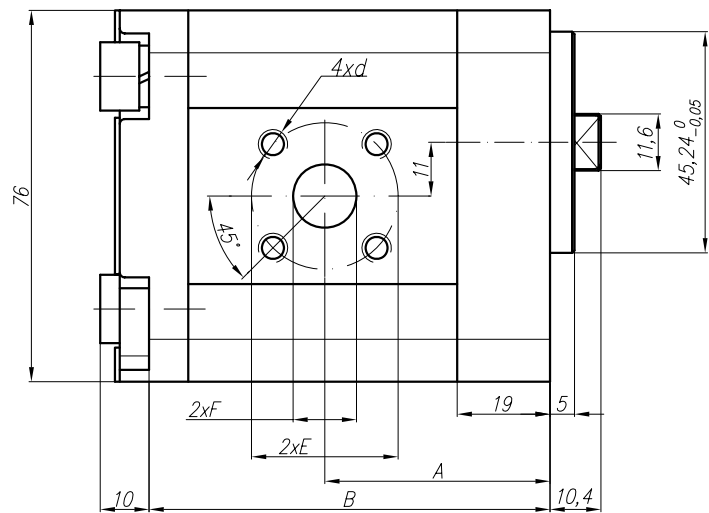
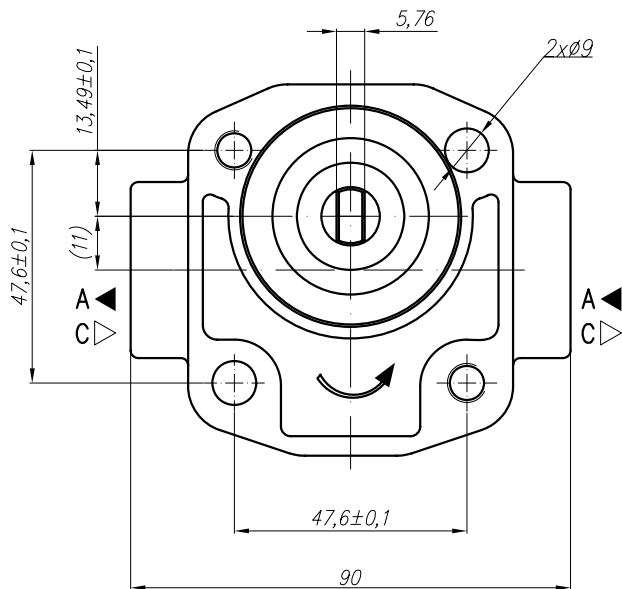
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet		Outlet			
								I	II				
10A(C)1X348	1	1,40	3,26	250	3500	39,1	81						
10A(C)1,25X348	1,25	1,74	4,07	250	3500	39,5	82						
10A(C)1,6X348	1,6	2,23	5,21	250	3500	40,3	83,6						
10A(C)2X348	2	2,82	6,58	250	3500	41,1	85,2						
10A(C)2,5X348	2,5	3,53	8,23	250	3500	42,1	87,2						
* 10A(C)2,65X348	2,65	3,74	8,72	250	3500	42,4	87,8						
10A(C)3,15X348	3,15	4,44	10,36	250	3500	43,5	89,8						
10A(C)3,65X348	3,65	5,15	12,01	250	3500	44,4	91,9						
10A(C)4,2X348	4,2	5,92	13,82	250	3500	45,5	94,1						
* 10A(C)4,7X348	4,7	6,63	15,46	250	3500	46,1	97,1						
10A(C)5X348	5	7,05	14,10	250	3000	47,1	97,2						
10A(C)5,7X348	5,7	8,12	16,25	200	3000	48,5	100,1						
10A(C)6,1X348	6,1	8,69	14,49	180	2500	49,4	101,8						
10A(C)7,4X348	7,4	10,55	17,58	180	2500	52,1	107,2						
* 10A(C)8X348	8	11,40	15,20	150	2000	53,4	109,7						
10A(C)8,5X348	8,5	12,11	16,15	150	2000	54,4	111,7						
10A(C)9,8X348	9,8	13,97	18,62	120	2000	57	117						

* - These pumps - only under a special order



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	E	F	d
10A(C)1X375	1	1,40	3,26	250	3500	39,1	81						
10A(C)1,25X375	1,25	1,74	4,07	250	3500	39,5	82						
10A(C)1,6X375	1,6	2,23	5,21	250	3500	40,3	83,6						
10A(C)2X375	2	2,82	6,58	250	3500	41,1	85,2						
10A(C)2,5X375	2,5	3,53	8,23	250	3500	42,1	87,2						
* 10A(C)2,65X375	2,65	3,74	8,72	250	3500	42,4	87,8						
10A(C)3,15X375	3,15	4,44	10,36	250	3500	43,5	89,8						
10A(C)3,65X375	3,65	5,15	12,01	250	3500	44,4	91,9						
10A(C)4,2X375	4,2	5,92	13,82	250	3500	45,5	94,1	∅30	∅12	M6	∅30	∅12	M6
* 10A(C)4,7X375	4,7	6,63	15,46	250	3500	46,1	97,1						
10A(C)5X375	5	7,05	14,10	250	3000	47,1	97,2						
10A(C)5,7X375	5,7	8,12	16,25	200	3000	48,5	100,1						
10A(C)6,1X375	6,1	8,69	14,49	200	2500	49,4	101,8						
10A(C)7,4X375	7,4	10,55	17,58	180	2500	52,1	107,2						
* 10A(C)8X375	8	11,40	15,20	150	2000	53,4	109,7						
10A(C)8,5X375	8,5	12,11	16,15	150	2000	54,4	111,7						
10A(C)9,8X375	9,8	13,97	18,62	120	2000	57	117						

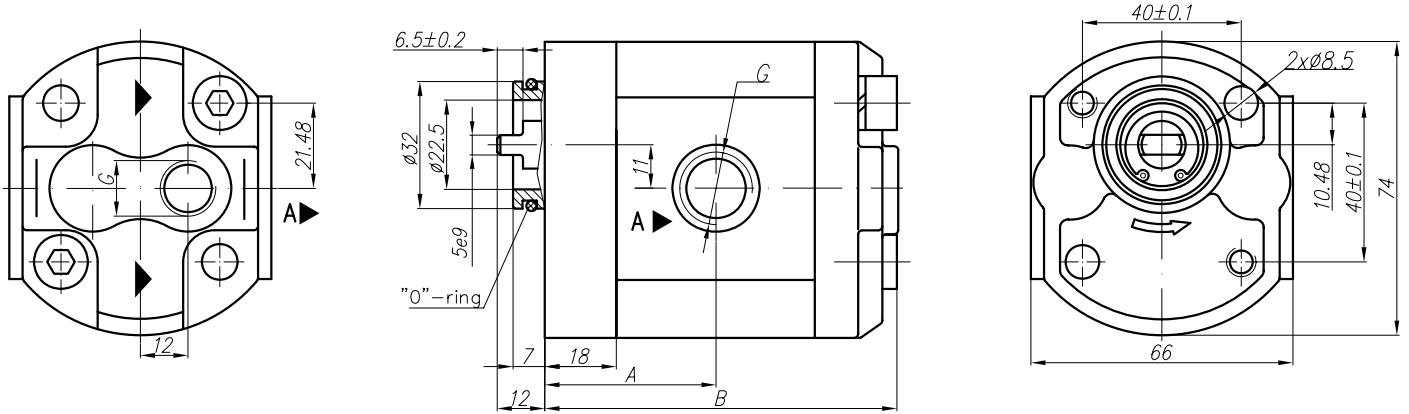
* - These pumps - only under a special order



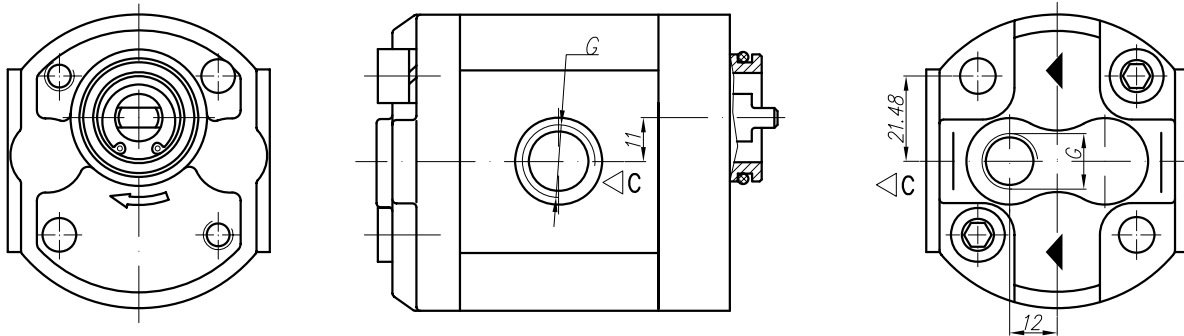
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	E	F	d
10A(C)1X394	1	1,40	3,26	250	3500	40,1	69,1						
10A(C)1,25X394	1,25	1,74	4,07	250	3500	40,6	70,1						
10A(C)1,6X394	1,6	2,23	5,21	250	3500	41,3	71,5						
10A(C)2X394	2	2,82	6,58	250	3500	42,1	73,2						
10A(C)2,5X394	2,5	3,53	8,23	250	3500	43,1	75,2						
* 10A(C)2,65X394	2,65	3,74	8,72	250	3500	43,4	75,8						
10A(C)3,15X394	3,15	4,44	10,36	250	3500	44,5	77,8						
10A(C)3,65X394	3,65	5,15	12,01	250	3500	45,4	79,8						
10A(C)4,2X394	4,2	5,92	13,82	250	3500	46,5	82,0	∅30	∅13	M6	∅30	∅13	M6
* 10A(C)4,7X394	4,7	6,63	15,46	250	3500	47,5	84,1						
10A(C)5X394	5	7,05	14,10	250	3000	48,1	85,2						
10A(C)5,7X394	5,7	8,12	16,25	200	3000	49,5	88,0						
10A(C)6,1X394	6,1	8,69	14,49	200	2500	50,4	89,8						
10A(C)7,4X394	7,4	10,55	17,58	180	2500	53,1	95,3						
* 10A(C)8X394	8	11,40	15,20	150	2000	54,4	97,7						
10A(C)8,5X394	8,5	12,11	16,15	150	2000	55,4	99,8						
10A(C)9,8X394	9,8	13,97	18,62	120	2000	58,0	105,0						

* - These pumps - only under a special order

Rotation "A" - (anticlockwise)



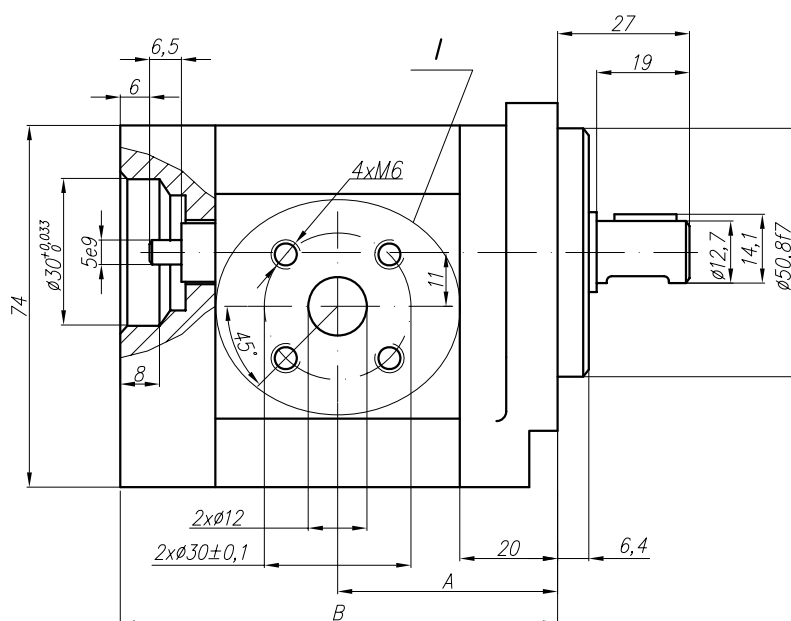
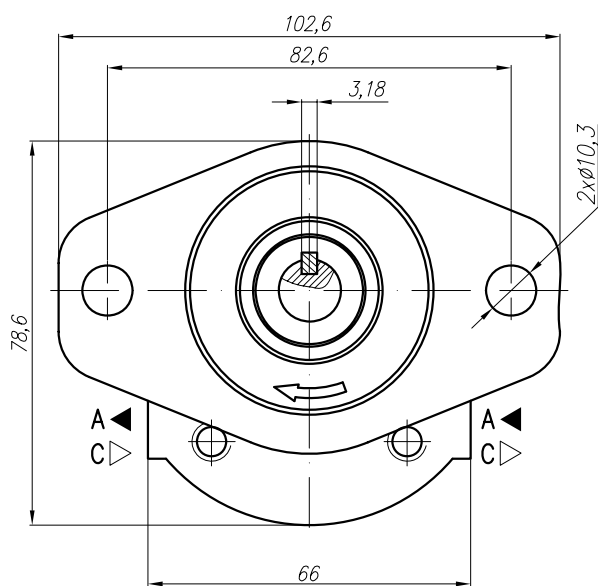
Rotation "C" - (clockwise)



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension						
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet		Outlet		
10A(C)1X400	1	1,40	3,26	250	3500	39,1	81	G 3/8" - A				
10A(C)1,25X400	1,25	1,74	4,07	250	3500	39,5	82					
10A(C)1,6X400	1,6	2,23	5,21	250	3500	40,3	83,6					
10A(C)2X400	2	2,82	6,58	250	3500	41,1	85,2					
10A(C)2,5X400	2,5	3,53	8,23	250	3500	42,1	87,2					
* 10A(C)2,65X400	2,65	3,74	8,72	250	3500	42,4	87,8	G 1/2" - A				
10A(C)3,15X400	3,15	4,44	10,36	250	3500	43,5	89,8					
10A(C)3,65X400	3,65	5,15	12,01	250	3500	44,4	91,9					
10A(C)4,2X400	4,2	5,92	13,82	250	3500	45,5	94,1					
* 10A(C)4,7X400	4,7	6,63	15,46	250	3500	46,1	97,1					
10A(C)5X400	5	7,05	14,10	250	3000	47,1	97,2					
10A(C)5,7X400	5,7	8,12	16,25	200	3000	48,5	100,1					
10A(C)6,1X400	6,1	8,69	14,49	200	2500	49,4	101,8					
10A(C)7,4X400	7,4	10,55	17,58	180	2500	52,1	107,2					
* 10A(C)8X400	8	11,40	15,20	150	2000	53,4	109,7					
10A(C)8,5X400	8,5	12,11	16,15	150	2000	54,4	111,7	G 3/8" - A				
10A(C)9,8X400	9,8	13,97	18,62	120	2000	57	117					

* - These pumps - only under a special order

The pump 10A(C)...X416 is a first section of a multiple pump Gr.11.



I - variants

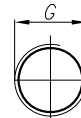
Variants:

- ...X416 - Normal version (flange);
- ...X416M - for M ports (see the picture I and the table below);
- ...X416G - for G ports (see the picture I and the table below);
- ...X416U - for U ports (see the picture I and the table below).

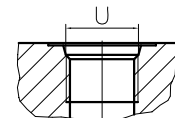
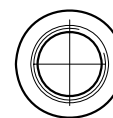
Variant M



Variant G

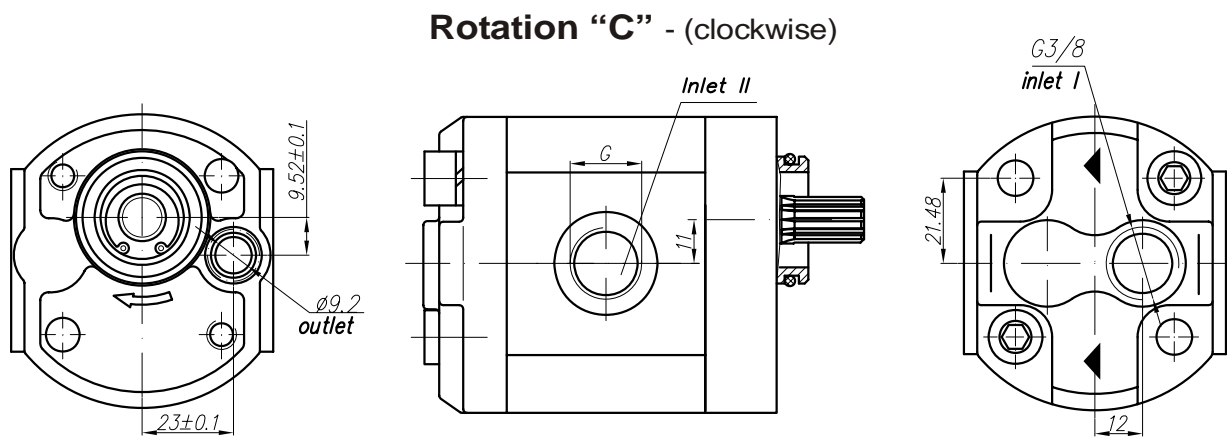
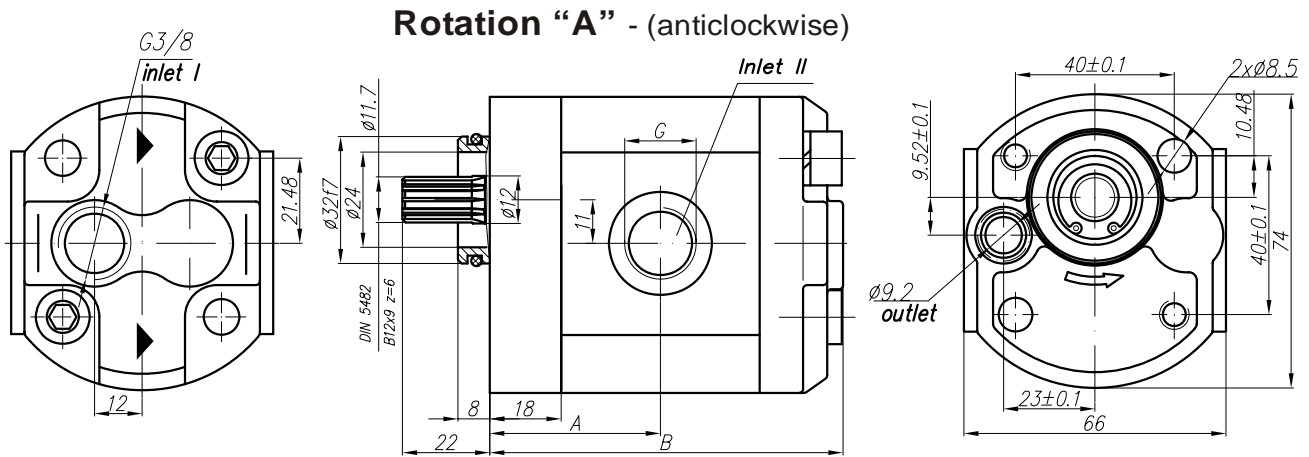


Variant U (SAEJ475 (ISO R725))



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
10A(C)1X416	1	1,40	3,26	250	3500	41,1	83	M16x1,5	G 3/8" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)1,25X416	1,25	1,74	4,07	250	3500	41,5	84						
10A(C)1,6X416	1,6	2,23	5,21	250	3500	42,3	85,6						
10A(C)2X416	2	2,82	6,58	250	3500	43,1	87,2						
10A(C)2,5X416	2,5	3,53	8,23	250	3500	44,1	89,2						
10A(C)2,65X416	2,65	3,74	8,72	250	3500	44,4	89,8	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)3,15X416	3,15	4,44	10,36	250	3500	45,5	91,8						
10A(C)3,65X416	3,65	5,15	12,01	250	3500	46,4	93,9						
10A(C)4,2X416	4,2	5,92	13,82	250	3500	47,5	96,1						
* 10A(C)4,7X416	4,7	6,63	15,46	250	3500	48,5	98						
10A(C)5X416	5	7,05	14,10	250	3000	49,1	99,2	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)5,7X416	5,7	8,12	16,25	200	3000	50,5	102						
10A(C)6,1X416	6,1	8,69	14,49	200	2500	51,4	103,8						
10A(C)7,4X416	7,4	10,55	17,58	180	2500	54,1	109,2						
* 10A(C)8X416	8	11,40	15,20	150	2000	55,4	111,7						
10A(C)8,5X416	8,5	12,11	16,15	150	2000	56,4	113,7	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)9,8X416	9,8	13,97	18,62	120	2000	59	119						

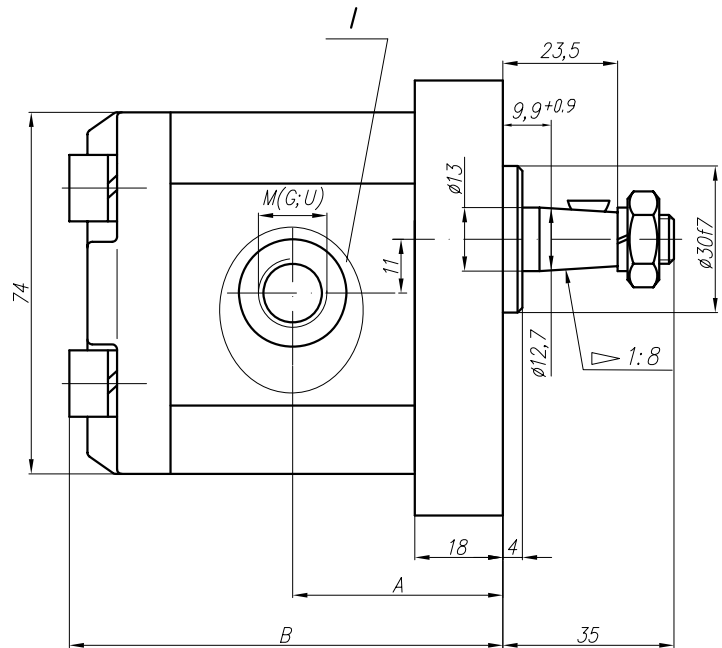
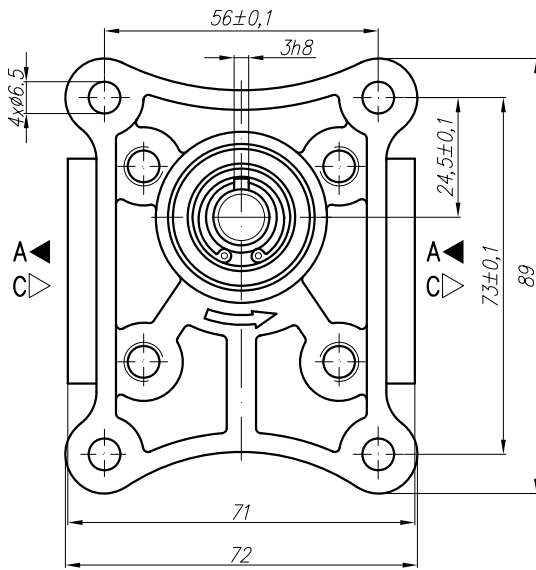
* - These pumps - only under a special order



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension					
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet		Outlet	
								I	II		
10A(C)1X417	1	1,40	3,26	250	3500	71	81				
10A(C)1,25X417	1,25	1,74	4,07	250	3500	72	82				
10A(C)1,6X417	1,6	2,23	5,21	250	3500	73,6	83,6				
10A(C)2X417	2	2,82	6,58	250	3500	75,2	85,2				
10A(C)2,5X417	2,5	3,53	8,23	250	3500	77,2	87,2				
* 10A(C)2,65X417	2,65	3,74	8,72	250	3500	77,8	87,8				
10A(C)3,15X417	3,15	4,44	10,36	250	3500	79,8	89,8				
10A(C)3,65X417	3,65	5,15	12,01	250	3500	81,9	91,9				
10A(C)4,2X417	4,2	5,92	13,82	250	3500	84,1	94,1				
* 10A(C)4,7X417	4,7	6,63	15,46	250	3500	87,1	97,1				
10A(C)5X417	5	7,05	14,10	250	3000	87,2	97,2				
10A(C)5,7X417	5,7	8,12	16,25	200	3000	90,1	100,1				
10A(C)6,1X417	6,1	8,69	14,49	200	2500	91,8	101,8				
10A(C)7,4X417	7,4	10,55	17,58	180	2500	97,2	107,2				
* 10A(C)8X417	8	11,40	15,20	150	2000	99,7	109,7				
10A(C)8,5X417	8,5	12,11	16,15	150	2000	101,7	111,7				
10A(C)9,8X417	9,8	13,97	18,62	120	2000	107	117				

* - These pumps - only under a special order

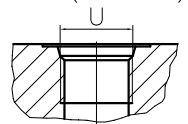
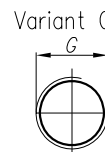
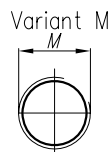
The pump is similar to "1GAS - Marzocchi" - (difference at shaft dia and the cone)



Variants:

- ...X418M - for M ports (see the picture I and the table below);
- ...X418G - for G ports (see the picture I and the table below);
- ...X418U - for U ports (see the picture I and the table below).

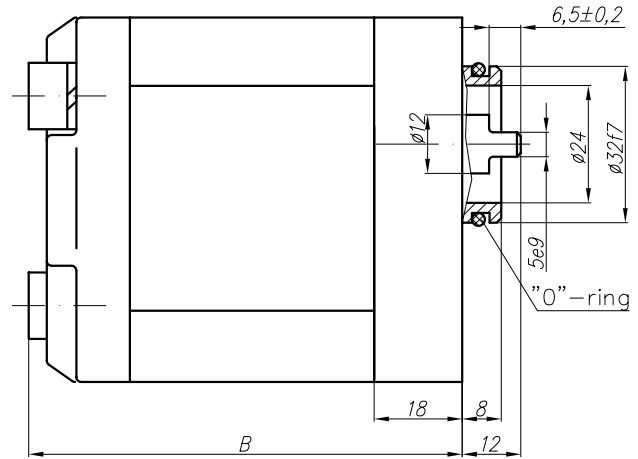
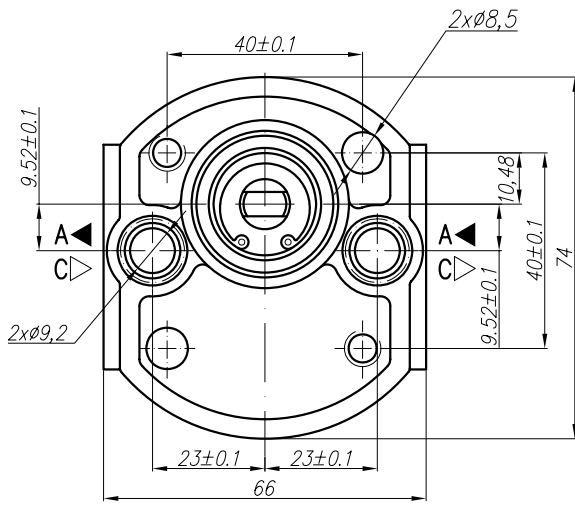
I - variants



Variant U (SAEJ475 (ISO R725))

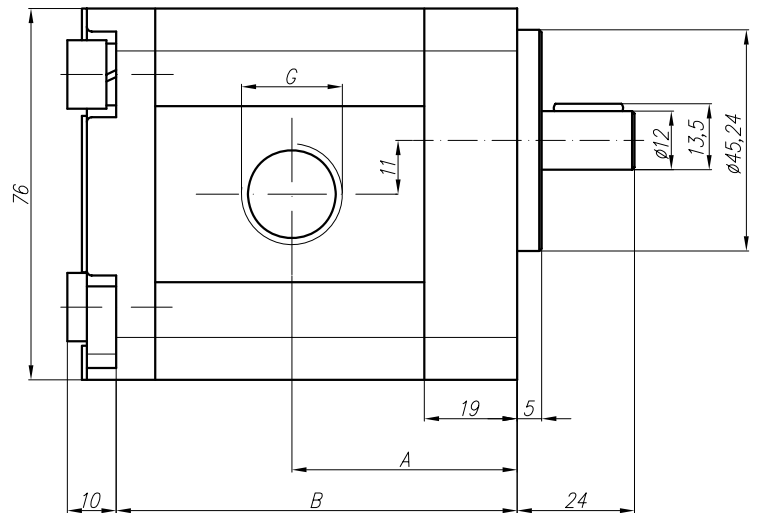
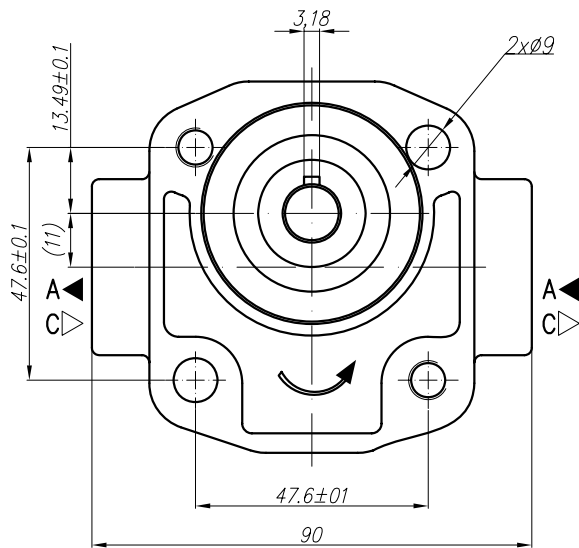
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
10A(C)1X418	1	1,40	3,26	250	3500	39,1	81	M16x1,5	G 3/8" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)1,25X418	1,25	1,74	4,07	250	3500	39,5	82						
10A(C)1,6X418	1,6	2,23	5,21	250	3500	40,3	83,6						
10A(C)2X418	2	2,82	6,58	250	3500	41,1	85,2						
10A(C)2,5X418	2,5	3,53	8,23	250	3500	42,1	87,2						
* 10A(C)2,65X418	2,65	3,74	8,72	250	3500	42,4	87,8	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)3,15X418	3,15	4,44	10,36	250	3500	43,5	89,8						
10A(C)3,65X418	3,65	5,15	12,01	250	3500	44,4	91,9	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)4,2X418	4,2	5,92	13,82	250	3500	45,5	94,1						
* 10A(C)4,7X418	4,7	6,63	15,46	250	3500	46,1	97,1						
10A(C)5X418	5	7,05	14,10	250	3000	47,1	97,2	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)5,7X418	5,7	8,12	16,25	200	3000	48,5	100,1						
10A(C)6,1X418	6,1	8,69	14,49	200	2500	49,4	101,8	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)7,4X418	7,4	10,55	17,58	180	2500	52,1	107,2						
* 10A(C)8X418	8	11,40	15,20	150	2000	53,4	109,7	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)8,5X418	8,5	12,11	16,15	150	2000	54,4	111,7						
10A(C)9,8X418	9,8	13,97	18,62	120	2000	57	117						

* - These pumps - only under a special order



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet		Outlet			
10A(C)1X442	1	1,40	3,26	250	3500		81						
10A(C)1,25X442	1,25	1,74	4,07	250	3500		82						
10A(C)1,6X442	1,6	2,23	5,21	250	3500		83,6						
10A(C)2X442	2	2,82	6,58	250	3500		85,2						
10A(C)2,5X442	2,5	3,53	8,23	250	3500		87,2						
* 10A(C)2,65X442	2,65	3,74	8,72	250	3500		87,8						
10A(C)3,15X442	3,15	4,44	10,36	250	3500		89,8						
10A(C)3,65X442	3,65	5,15	12,01	250	3500		91,9						
10A(C)4,2X442	4,2	5,92	13,82	250	3500		94,1	∅9,2				∅9,2	
* 10A(C)4,7X442	4,7	6,63	15,46	250	3500		97,1						
10A(C)5X442	5	7,05	14,10	250	3000		97,2						
10A(C)5,7X442	5,7	8,12	16,25	200	3000		100,1						
10A(C)6,1X442	6,1	8,69	14,49	200	2500		101,8						
10A(C)7,4X442	7,4	10,55	17,58	180	2500		107,2						
* 10A(C)8X442	8	11,40	15,20	150	2000		109,7						
10A(C)8,5X442	8,5	12,11	16,15	150	2000		111,7						
10A(C)9,8X442	9,8	13,97	18,62	120	2000		117						

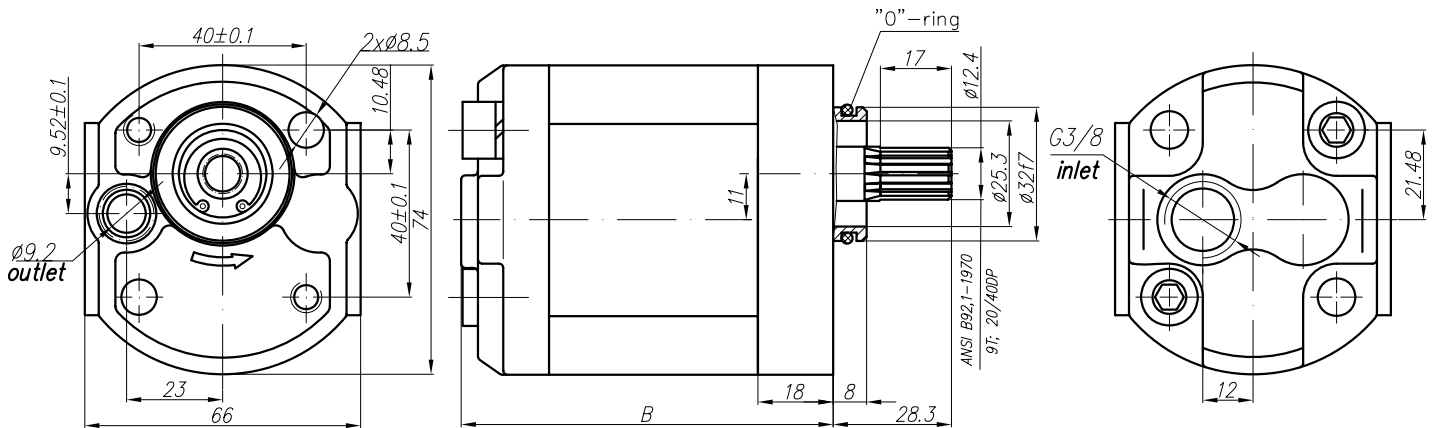
* - These pumps - only under a special order



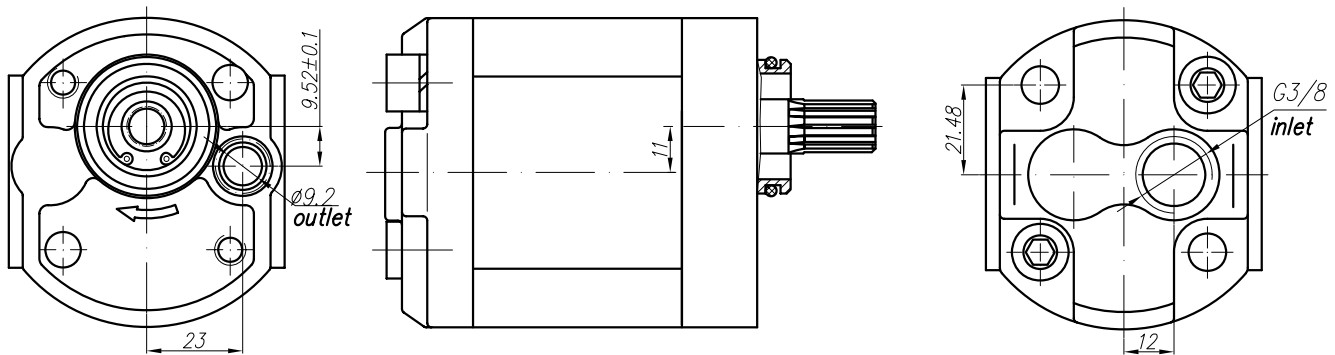
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet		Outlet			
								M	G	U	M	G	U
10A(C)1X445	1	1,40	3,26	250	3500	40,1	69,1						
10A(C)1,25X445	1,25	1,74	4,07	250	3500	40,6	70,1						
10A(C)1,6X445	1,6	2,23	5,21	250	3500	41,3	71,5						
10A(C)2X445	2	2,82	6,58	250	3500	42,1	73,2						
10A(C)2,5X445	2,5	3,53	8,23	250	3500	43,1	75,2						
* 10A(C)2,65X445	2,65	3,74	8,72	250	3500	43,4	75,8						
10A(C)3,15X445	3,15	4,44	10,36	250	3500	44,5	77,8		1/2" NPTF-14				
10A(C)3,65X445	3,65	5,15	12,01	250	3500	45,4	79,8						
10A(C)4,2X445	4,2	5,92	13,82	250	3500	46,5	82,0						
* 10A(C)4,7X445	4,7	6,63	15,46	250	3500	47,5	84,1						
10A(C)5X445	5	7,05	14,10	250	3000	48,1	85,2						
10A(C)5,7X445	5,7	8,12	16,25	200	3000	49,5	88,0						
10A(C)6,1X445	6,1	8,69	14,49	200	2500	50,4	89,8						
10A(C)7,4X445	7,4	10,55	17,58	180	2500	53,1	95,3						
* 10A(C)8X445	8	11,40	15,20	150	2000	54,4	97,7						
10A(C)8,5X445	8,5	12,11	16,15	150	2000	55,4	99,8						
10A(C)9,8X445	9,8	13,97	18,62	120	2000	58,0	105,0						

* - These pumps - only under a special order

Rotation "A" - (anticlockwise)

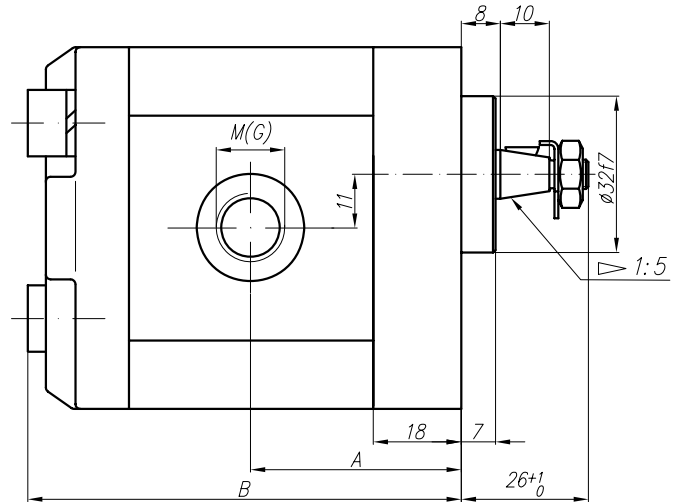
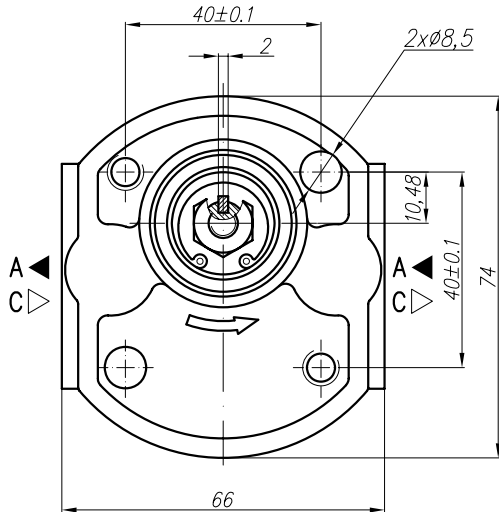


Rotation "C" - (clockwise)



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension						
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet	
								M	G	U		
10A(C)1X459	1	1,40	3,26	250	3500	71	81					
10A(C)1,25X459	1,25	1,74	4,07	250	3500	72	82					
10A(C)1,6X459	1,6	2,23	5,21	250	3500	73,6	83,6					
10A(C)2X459	2	2,82	6,58	250	3500	75,2	85,2					
10A(C)2,5X459	2,5	3,53	8,23	250	3500	77,2	87,2					
* 10A(C)2,65X459	2,65	3,74	8,72	250	3500	77,8	87,8					
10A(C)3,15X459	3,15	4,44	10,36	250	3500	79,8	89,8					
10A(C)3,65X459	3,65	5,15	12,01	250	3500	81,9	91,9					
10A(C)4,2X459	4,2	5,92	13,82	250	3500	84,1	94,1					
* 10A(C)4,7X459	4,7	6,63	15,46	250	3500	87,1	97,1					
10A(C)5X459	5	7,05	14,10	250	3000	87,2	97,2					
10A(C)5,7X459	5,7	8,12	16,25	200	3000	90,1	100,1					
10A(C)6,1X459	6,1	8,69	14,49	200	2500	91,8	101,8					
10A(C)7,4X459	7,4	10,55	17,58	180	2500	97,2	107,2					
* 10A(C)8X459	8	11,40	15,20	150	2000	99,7	109,7					
10A(C)8,5X459	8,5	12,11	16,15	150	2000	101,7	111,7					
10A(C)9,8X459	9,8	13,97	18,62	120	2000	107	117					

* - These pumps - only under a special order

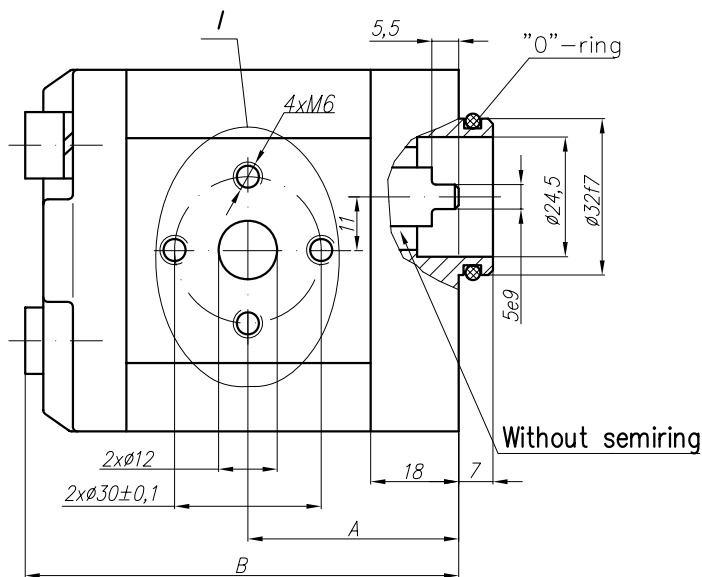
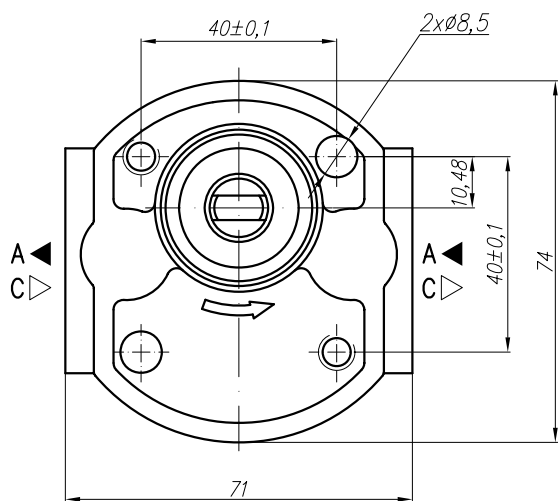


Variants:

- ...X465M - for M ports (see the table);
- ...X465G - for G ports (see the table).

Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet		Outlet					
						A mm	B mm	M	G	U	M	G	U
10A(C)1X465	1	1,40	3,26	250	3500	39,1	81	M18x1,5	G 3/8" - A		M14x1,5		
10A(C)1,25X465	1,25	1,74	4,07	250	3500	39,5	82						
10A(C)1,6X465	1,6	2,23	5,21	250	3500	40,3	83,6						
10A(C)2X465	2	2,82	6,58	250	3500	41,1	85,2						
10A(C)2,5X465	2,5	3,53	8,23	250	3500	42,1	87,2						
* 10A(C)2,65X465	2,65	3,74	8,72	250	3500	42,4	87,8		G 1/2" - A				
10A(C)3,15X465	3,15	4,44	10,36	250	3500	43,5	89,8						
10A(C)3,65X465	3,65	5,15	12,01	250	3500	44,4	91,9						
10A(C)4,2X465	4,2	5,92	13,82	250	3500	45,5	94,1						
* 10A(C)4,7X465	4,7	6,63	15,46	250	3500	46,1	97,1						
10A(C)5X465	5	7,05	14,10	250	3000	47,1	97,2	M22x1,5					
10A(C)5,7X465	5,7	8,12	16,25	200	3000	48,5	100,1						
10A(C)6,1X465	6,1	8,69	14,49	200	2500	49,4	101,8						
10A(C)7,4X465	7,4	10,55	17,58	180	2500	52,1	107,2						
* 10A(C)8X465	8	11,40	15,20	150	2000	53,4	109,7						
10A(C)8,5X465	8,5	12,11	16,15	150	2000	54,4	111,7	M18x1,5					
10A(C)9,8X465	9,8	13,97	18,62	120	2000	57	117						

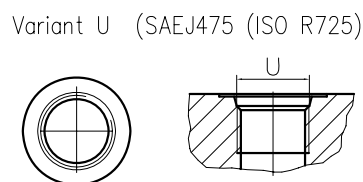
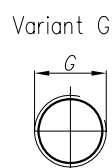
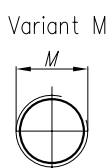
* - These pumps - only under a special order



Variants:

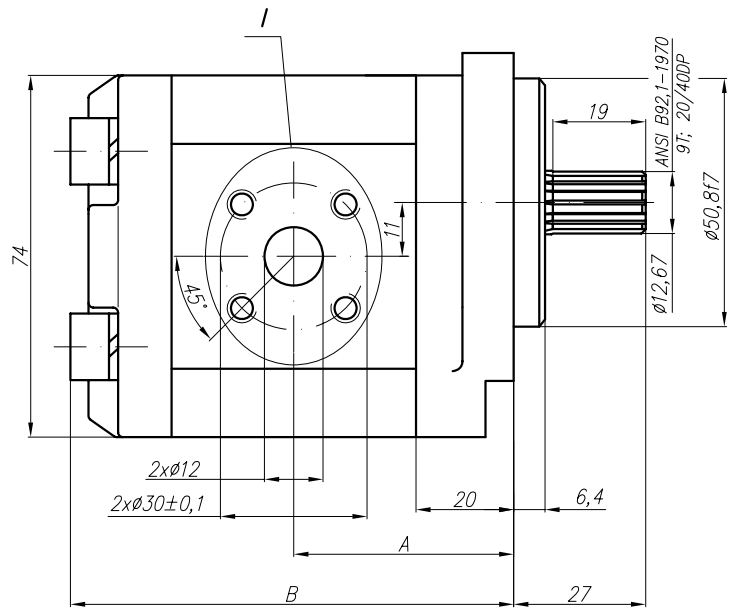
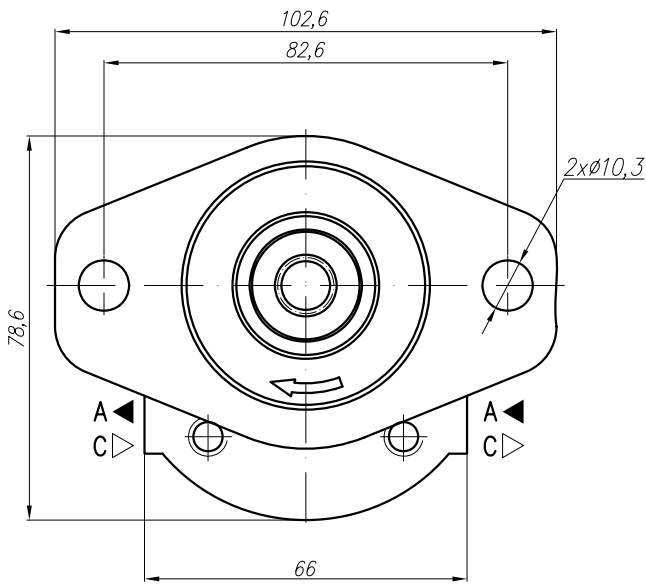
- ...X475 - Normal version (flange);
- ...X475M - for M ports (see the picture I and the table below);
- ...X475G - for G ports (see the picture I and the table below);
- ...X475U - for U ports (see the picture I and the table below).

I - variants



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
10A(C)1X475	1	1,40	3,26	250	3500	39,1	81	M16x1,5	G 3/8" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)1,25X475	1,25	1,74	4,07	250	3500	39,5	82						
10A(C)1,6X475	1,6	2,23	5,21	250	3500	40,3	83,6						
10A(C)2X475	2	2,82	6,58	250	3500	41,1	85,2						
10A(C)2,5X475	2,5	3,53	8,23	250	3500	42,1	87,2						
* 10A(C)2,65X475	2,65	3,74	8,72	250	3500	42,4	87,8	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)3,15X475	3,15	4,44	10,36	250	3500	43,5	89,8						
10A(C)3,65X475	3,65	5,15	12,01	250	3500	44,4	91,9						
10A(C)4,2X475	4,2	5,92	13,82	250	3500	45,5	94,1						
* 10A(C)4,7X475	4,7	6,63	15,46	250	3500	46,1	97,1						
10A(C)5X475	5	7,05	14,10	250	3000	47,1	97,2	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	3/4" - 16UNF	
10A(C)5,7X475	5,7	8,12	16,25	200	3000	48,5	100,1						
10A(C)6,1X475	6,1	8,69	14,49	200	2500	49,4	101,8						
10A(C)7,4X475	7,4	10,55	17,58	180	2500	52,1	107,2						
* 10A(C)8X475	8	11,40	15,20	150	2000	53,4	109,7						
10A(C)8,5X475	8,5	12,11	16,15	150	2000	54,4	111,7						
10A(C)9,8X475	9,8	13,97	18,62	120	2000	57	117						

* - These pumps - only under a special order



I – variants

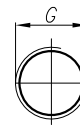
Variants:

- ...X476 - Normal version (flange);
- ...X476M - for M ports (see the picture I and the table below);
- ...X476G - for G ports (see the picture I and the table below);
- ...X476U - for U ports (see the picture I and the table below).

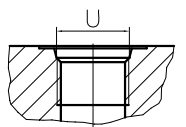
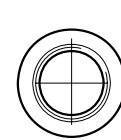
Variant M



Variant G



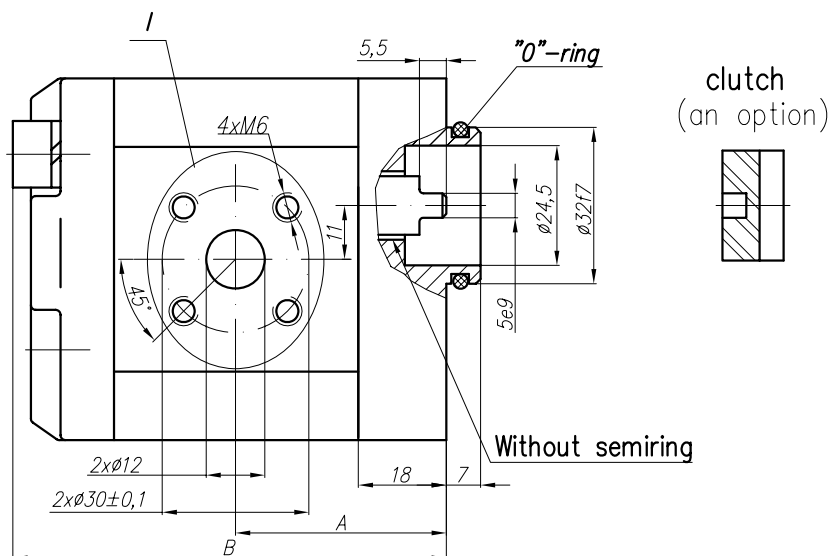
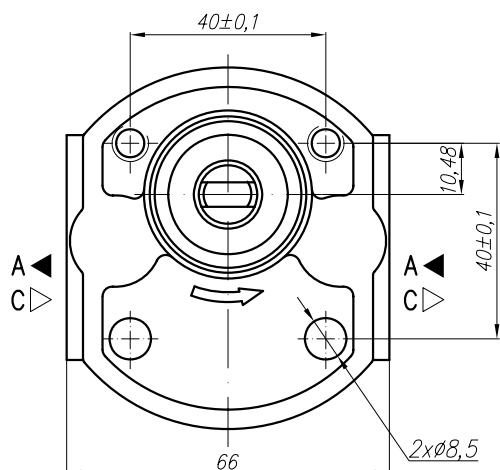
Variant U (SAEJ475 (ISO R725))



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
10A(C)1X476	1	1,40	3,26	250	3500	41,1	83	M16x1,5	G 3/8" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)1,25X476	1,25	1,74	4,07	250	3500	41,5	84						
10A(C)1,6X476	1,6	2,23	5,21	250	3500	42,3	85,6						
10A(C)2X476	2	2,82	6,58	250	3500	43,1	87,2						
10A(C)2,5X476	2,5	3,53	8,23	250	3500	44,1	89,2						
* 10A(C)2,65X476	2,65	3,74	8,72	250	3500	44,4	89,8	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)3,15X476	3,15	4,44	10,36	250	3500	45,5	91,8						
10A(C)3,65X476	3,65	5,15	12,01	250	3500	46,4	93,9						
10A(C)4,2X476	4,2	5,92	13,82	250	3500	47,5	96,1						
* 10A(C)4,7X476	4,7	6,63	15,46	250	3500	48,1	98						
10A(C)5X476	5	7,05	14,10	250	3000	49,1	99,2	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	3/4" - 16UNF	
10A(C)5,7X476	5,7	8,12	16,25	200	3000	50,5	102,1						
10A(C)6,1X476	6,1	8,69	14,49	200	2500	51,4	103,8						
10A(C)7,4X476	7,4	10,55	17,58	180	2500	54,1	109,2						
* 10A(C)8X476	8	11,40	15,20	150	2000	55,4	111,7						
10A(C)8,5X476	8,5	12,11	16,15	150	2000	56,4	113,7						
10A(C)9,8X476	9,8	13,97	18,62	120	2000	59	119						

* - These pumps - only under a special order

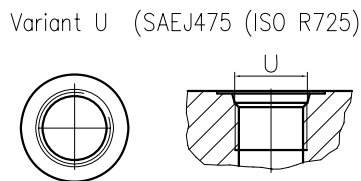
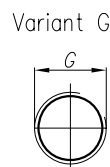
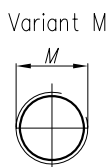
The pump 10A(C)...X479 is a second section of a multiple pump Gr.21.



I – variants

Variants:

- ...X479 - Normal version (flange);
- ...X479M - for M ports (see the picture I and the table below);
- ...X479G - for G ports (see the picture I and the table below);
- ...X479U - for U ports (see the picture I and the table below).

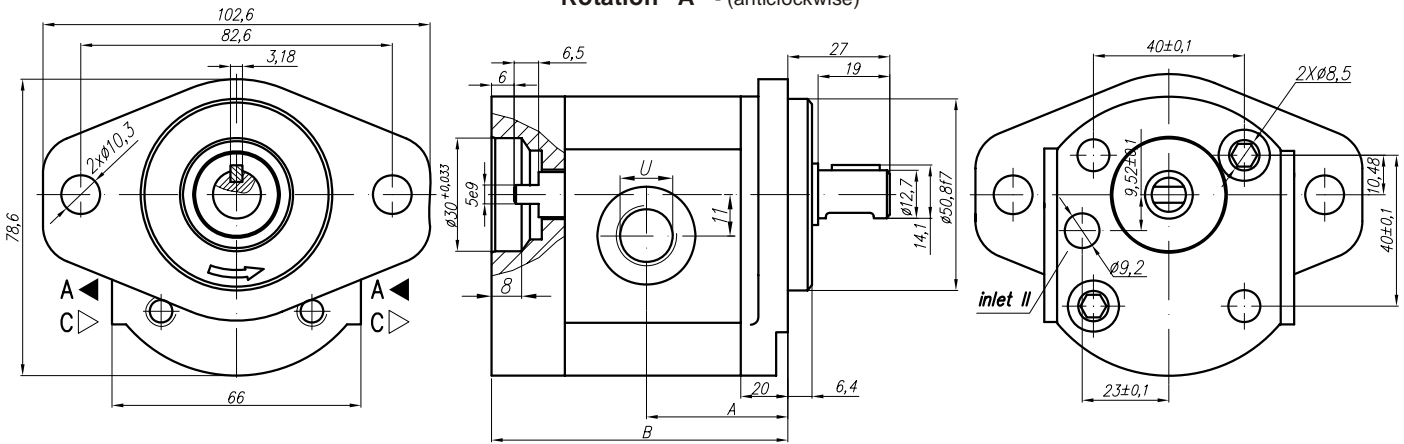


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
10A(C)1X479	1	1,40	3,26	250	3500	39,1	81	M16x1,5	G 3/8" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)1,25X479	1,25	1,74	4,07	250	3500	39,5	82						
10A(C)1,6X479	1,6	2,23	5,21	250	3500	40,3	83,6						
10A(C)2X479	2	2,82	6,58	250	3500	41,1	85,2						
10A(C)2,5X479	2,5	3,53	8,23	250	3500	42,1	87,2	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
* 10A(C)2,65X479	2,65	3,74	8,72	250	3500	42,4	87,8						
10A(C)3,15X479	3,15	4,44	10,36	250	3500	43,5	89,8	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)3,65X479	3,65	5,15	12,01	250	3500	44,4	91,9						
10A(C)4,2X479	4,2	5,92	13,82	250	3500	45,5	94,1	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
* 10A(C)4,7X479	4,7	6,63	15,46	250	3500	46,1	97,1						
10A(C)5X479	5	7,05	14,10	250	3000	47,1	97,2	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)5,7X479	5,7	8,12	16,25	200	3000	48,5	100,1						
10A(C)6,1X479	6,1	8,69	14,49	200	2500	49,4	101,8	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)7,4X479	7,4	10,55	17,58	180	2500	52,1	107,2						
* 10A(C)8X479	8	11,40	15,20	150	2000	53,4	109,7	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF
10A(C)8,5X479	8,5	12,11	16,15	150	2000	54,4	111,7						
10A(C)9,8X479	9,8	13,97	18,62	120	2000	57	117	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF

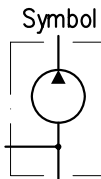
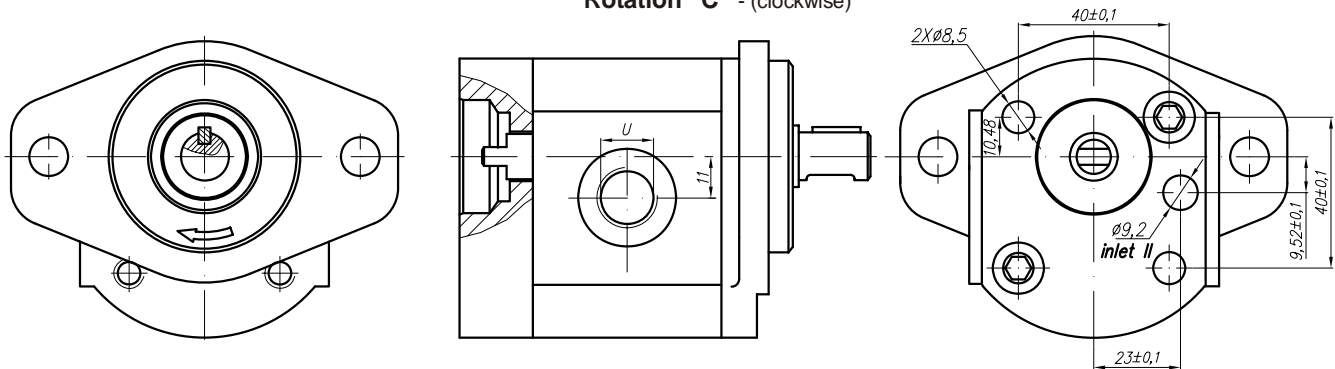
* - These pumps - only under a special order

The pump 10A(C)...X484 is the first section of the tandem pump with common suction port

Rotation "A" - (anticlockwise)



Rotation "C" - (clockwise)

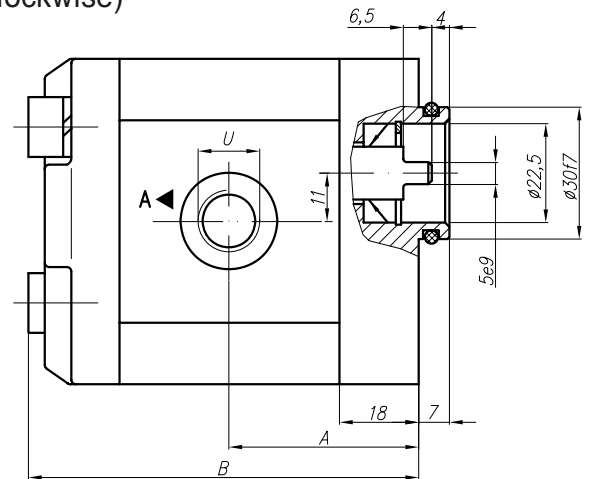
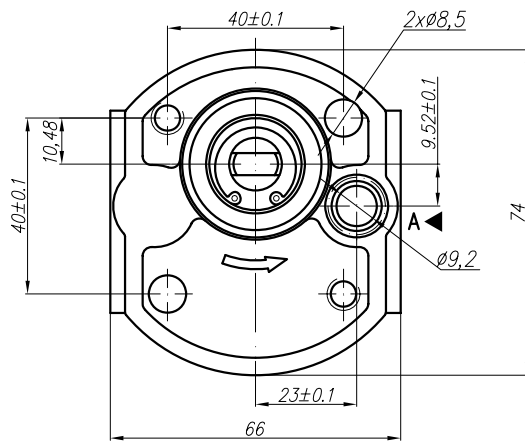


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	M	G	U	M	G	U
10A(C)1X484	1	1,40	3,26	250	3500	41,1	83						
10A(C)1,25X484	1,25	1,74	4,07	250	3500	41,5	84						
10A(C)1,6X484	1,6	2,23	5,21	250	3500	42,3	85,6						
10A(C)2X484	2	2,82	6,58	250	3500	43,1	87,2						
10A(C)2,5X484	2,5	3,53	8,23	250	3500	44,1	89,2						
* 10A(C)2,65X484	2,65	3,74	8,72	250	3500	44,4	89,8						
10A(C)3,15X484	3,15	4,44	10,36	250	3500	45,5	91,8						
10A(C)3,65X484	3,65	5,15	12,01	250	3500	46,4	93,9						
10A(C)4,2X484	4,2	5,92	13,82	250	3500	47,5	96,1						
* 10A(C)4,7X484	4,7	6,63	15,46	250	3500	48,1	98						
10A(C)5X484	5	7,05	14,10	250	3000	49,1	99,2						
10A(C)5,7X484	5,7	8,12	16,25	200	3000	50,5	102,1						
10A(C)6,1X484	6,1	8,69	14,49	200	2500	51,4	103,8						
10A(C)7,4X484	7,4	10,55	17,58	180	2500	54,1	109,2						
* 10A(C)8X484	8	11,40	15,20	150	2000	55,4	111,7						
10A(C)8,5X484	8,5	12,11	16,15	150	2000	56,4	113,7						
10A(C)9,8X484	9,8	13,97	18,62	120	2000	59	119						

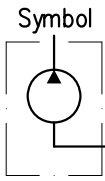
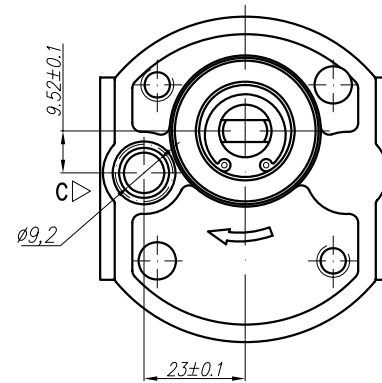
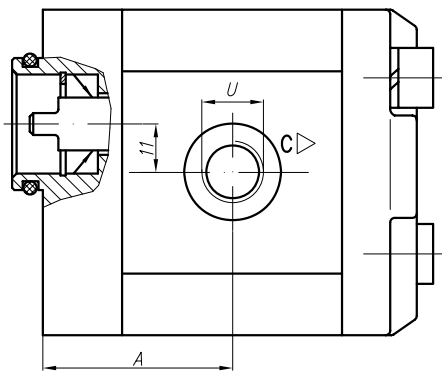
* - These pumps - only under a special order

The pump 10A(C)...X485 is the second section of the tandem pump with common suction port

Rotation "A" - (anticlockwise)



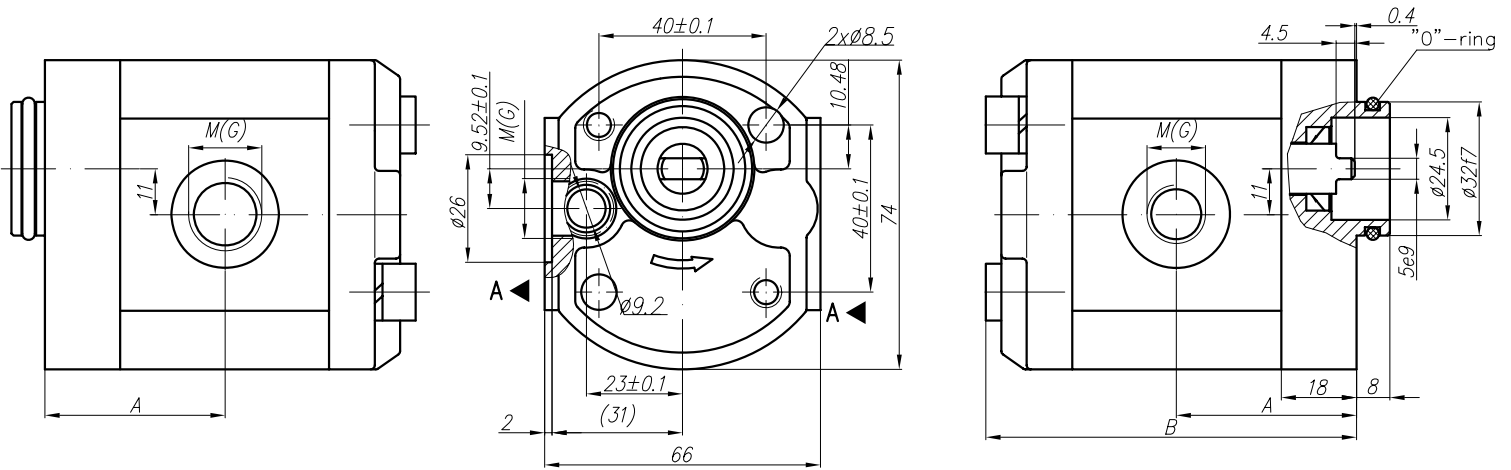
Rotation "C" - (clockwise)



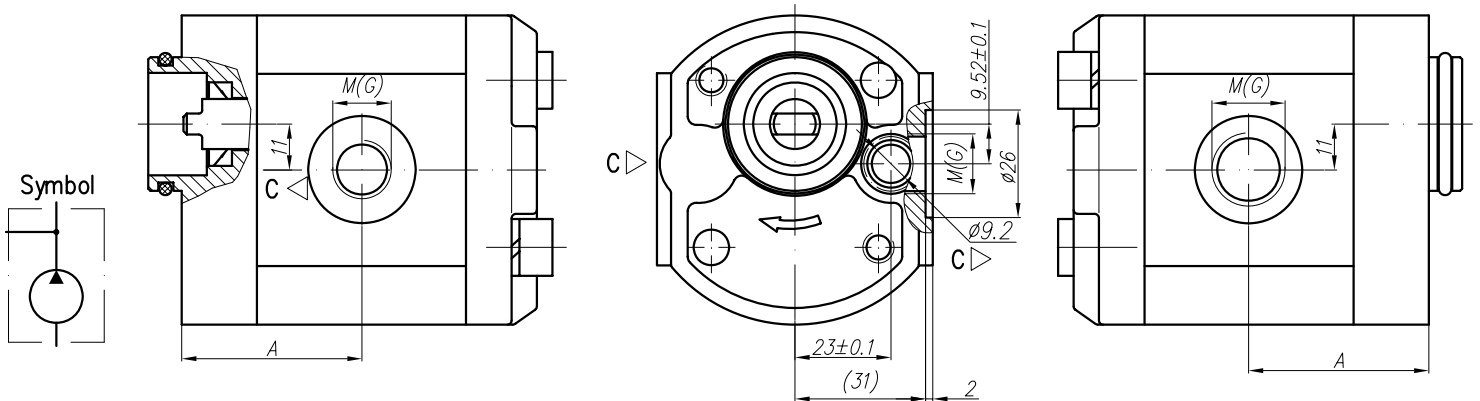
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet		Outlet			
10A(C)1X485	1	1,40	3,26	250	3500	39,1	81				M	G	U
10A(C)1,25X485	1,25	1,74	4,07	250	3500	39,5	82						
10A(C)1,6X485	1,6	2,23	5,21	250	3500	40,3	83,6						
10A(C)2X485	2	2,82	6,58	250	3500	41,1	85,2						
10A(C)2,5X485	2,5	3,53	8,23	250	3500	42,1	87,2						
* 10A(C)2,65X485	2,65	3,74	8,72	250	3500	42,4	87,8						
10A(C)3,15X485	3,15	4,44	10,36	250	3500	43,5	89,8						
10A(C)3,65X485	3,65	5,15	12,01	250	3500	44,4	91,9						
10A(C)4,2X485	4,2	5,92	13,82	250	3500	45,5	94,1						
* 10A(C)4,7X485	4,7	6,63	15,46	250	3500	46,1	97,1						
10A(C)5X485	5	7,05	14,10	250	3000	47,1	97,2						
10A(C)5,7X485	5,7	8,12	16,25	200	3000	48,5	100,1						
10A(C)6,1X485	6,1	8,69	14,49	200	2500	49,4	101,8						
10A(C)7,4X485	7,4	10,55	17,58	180	2500	52,1	107,2						
* 10A(C)8X485	8	11,40	15,20	150	2000	53,4	109,7						
10A(C)8,5X485	8,5	12,11	16,15	150	2000	54,4	111,7						
10A(C)9,8X485	9,8	13,97	18,62	120	2000	57	117						

* - These pumps - only under a special order

Rotation "A" - (anticlockwise)



Rotation "C" - (clockwise)



Variants:

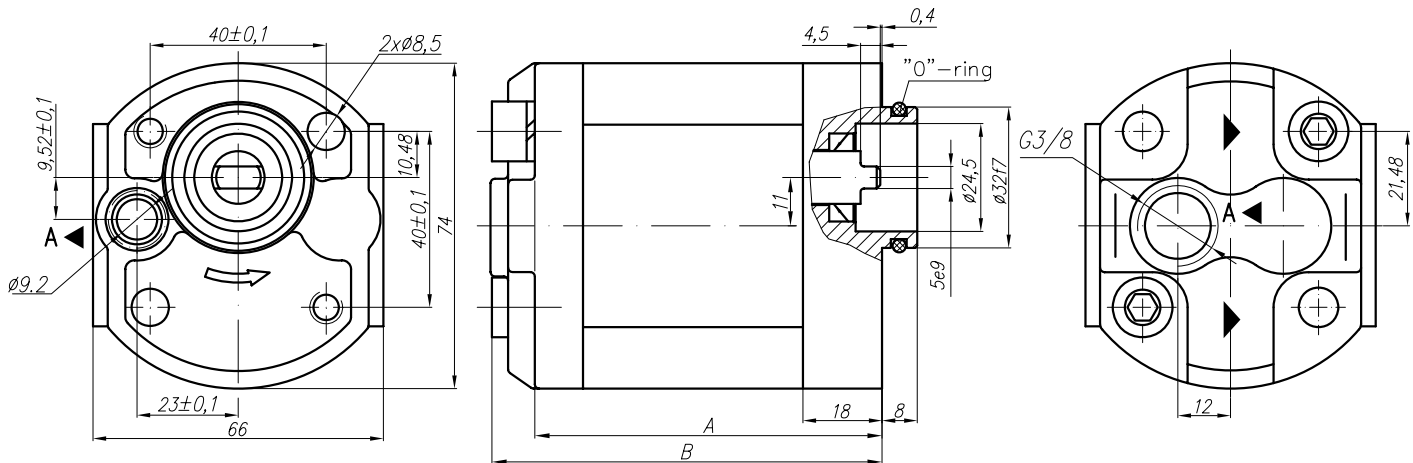
...X488M - for M ports (see the picture and the table);

...X488G - for G ports (see the picture and the table).

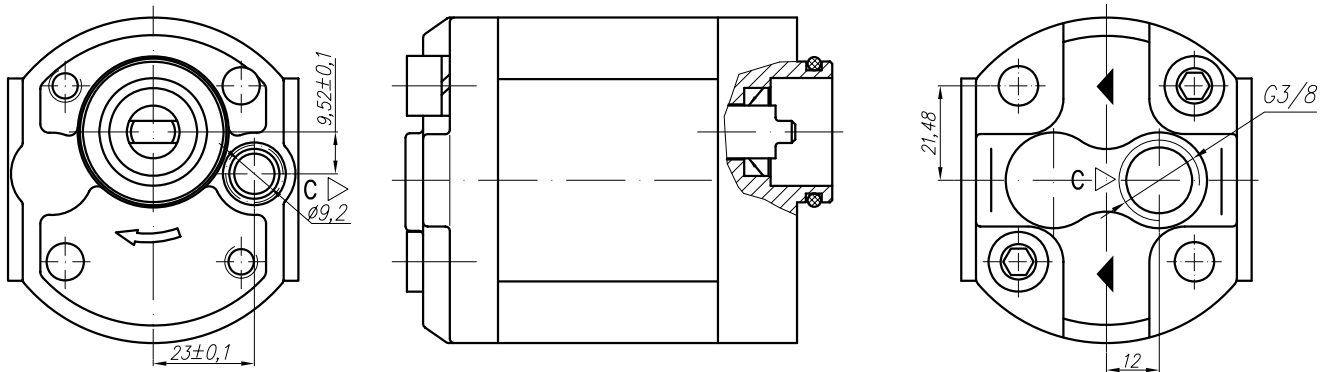
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			Inlet		Outlet						
						A mm	B mm	M	G	U	M	G	U	
10A(C)1X488	1	1,40	3,26	250	3500	39,1	81	M18x1,5	G 3/8" - A					
10A(C)1,25X488	1,25	1,74	4,07	250	3500	39,5	82							
10A(C)1,6X488	1,6	2,23	5,21	250	3500	40,3	83,6							
10A(C)2X488	2	2,82	6,58	250	3500	41,1	85,2							
* 10A(C)2,65X488	2,65	3,74	8,72	250	3500	42,4	87,8							
10A(C)3,15X488	3,15	4,44	10,36	250	3500	43,5	89,8							
10A(C)3,65X488	3,65	5,15	12,01	250	3500	44,4	91,9	M14x1,5	G 1/2" - A					
10A(C)4,2X488	4,2	5,92	13,82	250	3500	45,5	94,1							
* 10A(C)4,7X488	4,7	6,63	15,46	250	3500	46,1	96							
10A(C)5X488	5	7,05	14,10	250	3000	47,1	97,2							
10A(C)5,7X488	5,7	8,12	16,25	200	3000	48,5	100,1							
10A(C)6,1X488	6,1	8,69	14,49	200	2500	49,4	101,8							
10A(C)7,4X488	7,4	10,55	17,58	180	2500	52,1	107,2							
* 10A(C)8X488	8	11,40	15,20	150	2000	53,4	109,7							
10A(C)8,5X488	8,5	12,11	16,15	150	2000	54,4	111,7							
10A(C)9,8X488	9,8	13,97	18,62	120	2000	57	117							

* - These pumps - only under a special order

Rotation "A" - (anticlockwise)



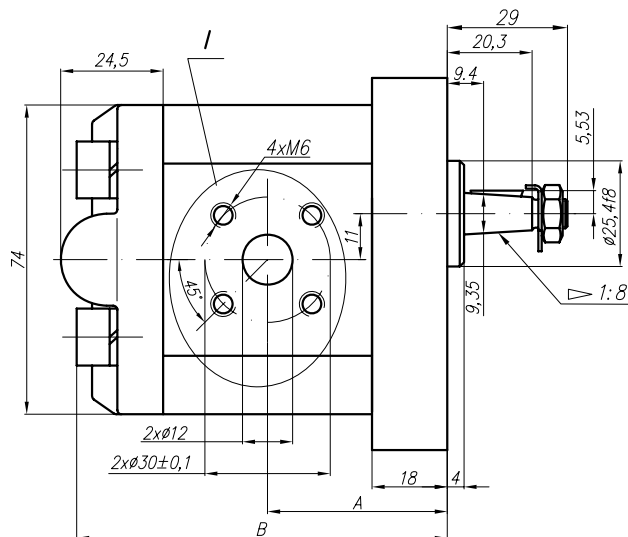
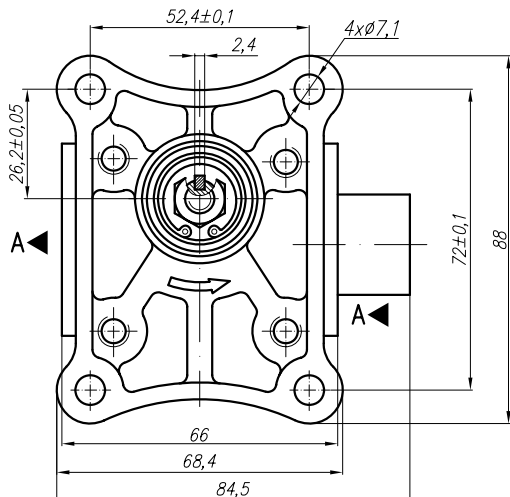
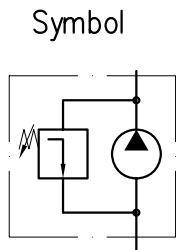
Rotation "C" - (clockwise)



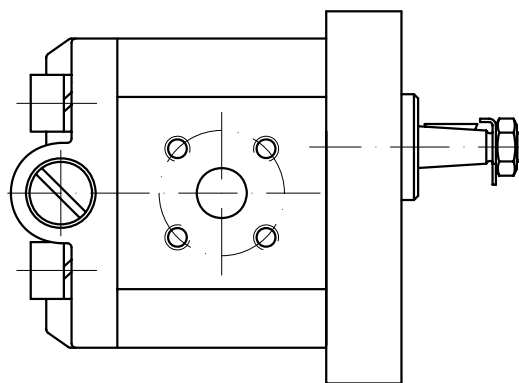
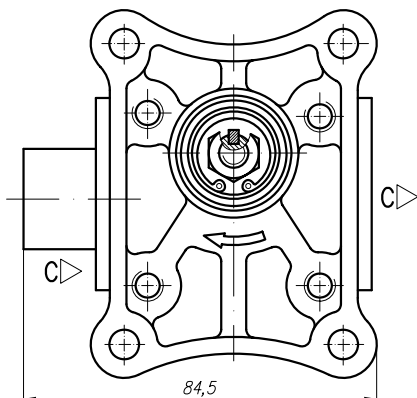
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U			
10A(C)1X489	1	1,40	3,26	250	3500	71	81						
10A(C)1,25X489	1,25	1,74	4,07	250	3500	72	82						
10A(C)1,6X489	1,6	2,23	5,21	250	3500	73,6	83,6						
10A(C)2X489	2	2,82	6,58	250	3500	75,2	85,2						
10A(C)2,5X489	2,5	3,53	8,23	250	3500	77,2	87,2						
* 10A(C)2,65X489	2,65	3,74	8,72	250	3500	77,8	87,8						
10A(C)3,15X489	3,15	4,44	10,36	250	3500	79,8	89,8						
10A(C)3,65X489	3,65	5,15	12,01	250	3500	81,9	91,9						
10A(C)4,2X489	4,2	5,92	13,82	250	3500	84,1	94,1						
* 10A(C)4,7X489	4,7	6,63	15,46	250	3500	87,1	97,1						
10A(C)5X489	5	7,05	14,10	250	3000	87,2	97,2						
10A(C)5,7X489	5,7	8,12	16,25	200	3000	90,1	100,1						
10A(C)6,1X489	6,1	8,69	14,49	200	2500	91,8	101,8						
10A(C)7,4X489	7,4	10,55	17,58	180	2500	97,2	107,2						
* 10A(C)8X489	8	11,40	15,20	150	2000	99,7	109,7						
10A(C)8,5X489	8,5	12,11	16,15	150	2000	101,7	111,7						
10A(C)9,8X489	9,8	13,97	18,62	120	2000	107	117						

* - These pumps - only under a special order

Rotation "A" - (anticlockwise)



Rotation "C" - (clockwise)



I - variants

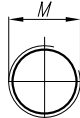
Pump variants:

- ...X491 - Normal version (flange);
- ...X491M - for M ports (see the picture I and the table below);
- ...X491G - for G ports (see the picture I and the table below);
- ...X491U - for U ports (see the picture I and the table below).

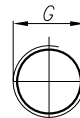
Valve variants:

- A2A1 - pressure range 70 ... 180 bar;
- A2A2 - pressure range 40 ... 100 bar;
- A2A4 - pressure range 15 ... 50 bar.

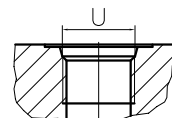
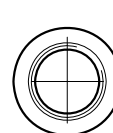
Variant M



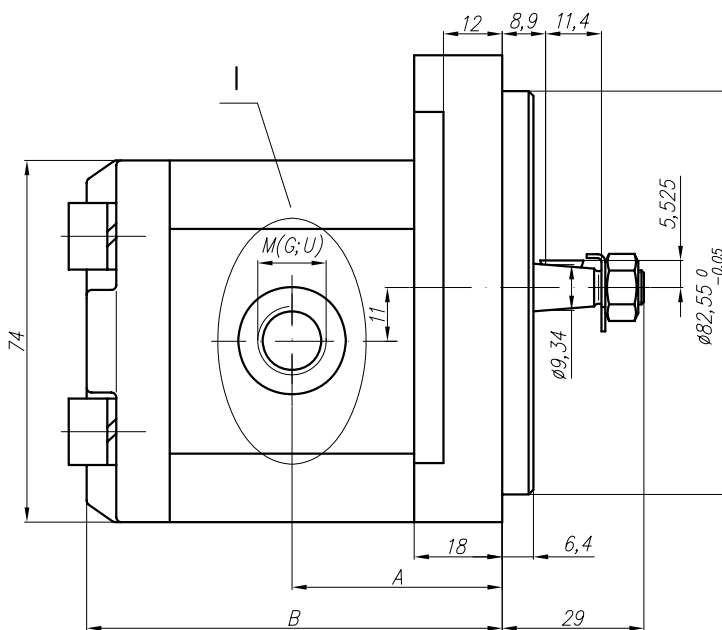
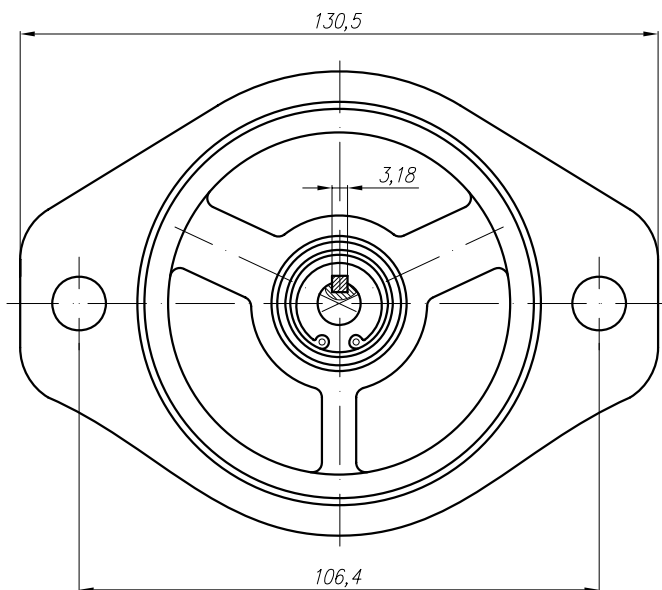
Variant G



Variant U (SAEJ475 (ISO R725))



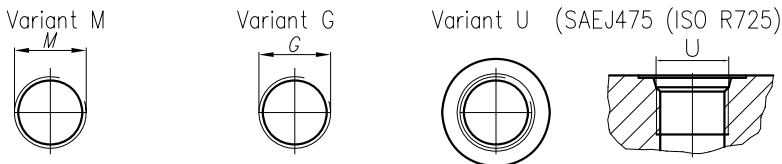
Type	Displacement cm ³ /rev	Flow		Pressure bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	M	G	U	M	G	U
10A(C)1X491/A2A...	1	1,40	3,26	A2A1 - 70...180 A2A2 - 40...100 A2A4 - 15...50	3500	41,1	83	M16x1,5	G 3/8" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)1,25X491/A2A...	1,25	1,74	4,07		3500	41,5	84						
10A(C)1,6X491/A2A...	1,6	2,23	5,21		3500	42,3	85,6						
10A(C)2X491/A2A...	2	2,82	6,58		3500	43,1	87,2	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)2,5X491/A2A...	2,5	3,53	8,23		3500	44,1	89,2						
10A(C)3,15X491/A2A...	3,15	4,44	10,36		3500	45,5	91,8	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)3,65X491/A2A...	3,65	5,15	12,01		3500	46,4	93,9						
10A(C)4,2X491/A2A...	4,2	5,92	13,82		3500	47,5	96,1	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)5X491/A2A...	5	7,05	16,45		3500	49,1	99,2						
10A(C)5,7X491/A2A...	5,7	8,12	16,25		3000	50,5	102	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)6,1X491/A2A...	6,1	8,69	14,49		2500	51,4	103,8						



Variants:

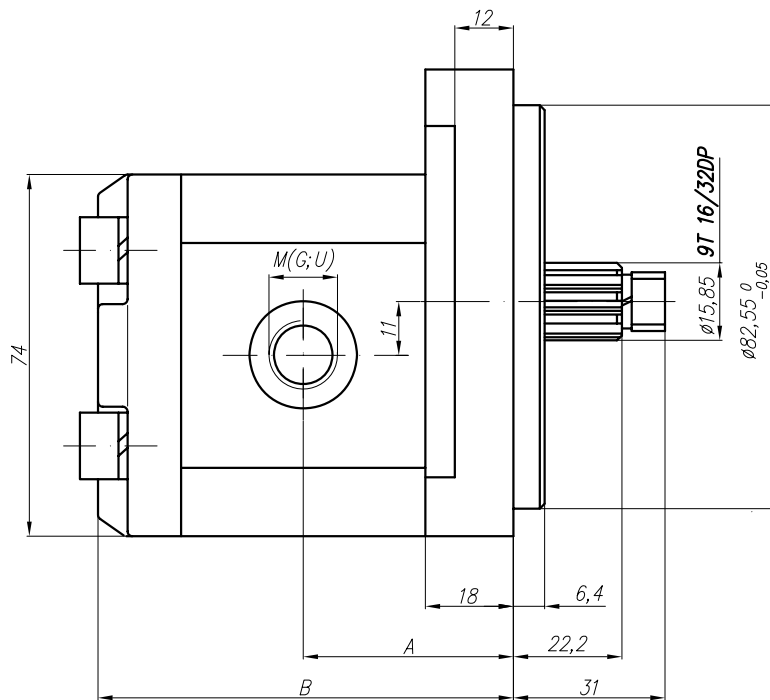
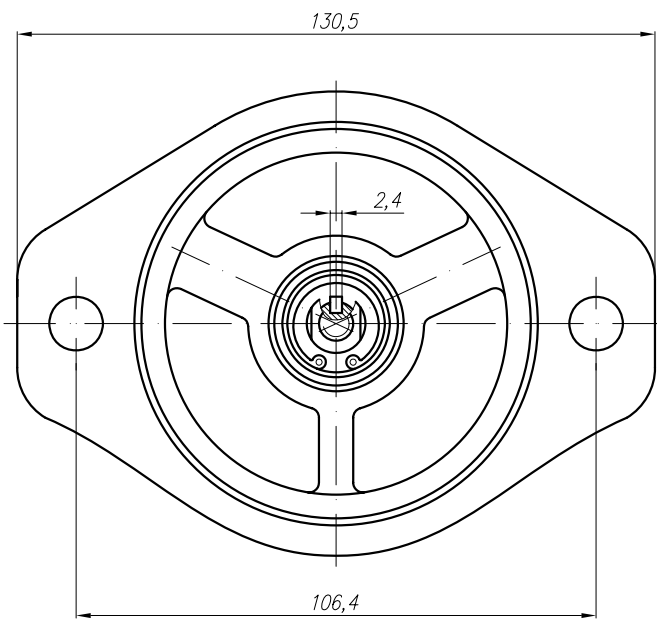
- ...X501M - for M ports (see the picture I and the table below);
- ...X501G - for G ports (see the picture I and the table below);
- ...X501U - for U ports (see the picture I and the table below).

I – variants



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
10A(C)1X501	1	1,40	3,26	250	3500	39,1	81	M16x1,5	G 3/8" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)1,25X501	1,25	1,74	4,07	250	3500	39,5	82						
10A(C)1,6X501	1,6	2,23	5,21	250	3500	40,3	83,6						
10A(C)2X501	2	2,82	6,58	250	3500	41,1	85,2						
10A(C)2,5X501	2,5	3,53	8,23	250	3500	42,1	87,2						
* 10A(C)2,65X501	2,65	3,74	8,72	250	3500	42,4	87,8	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)3,15X501	3,15	4,44	10,36	250	3500	43,5	89,8						
10A(C)3,65X501	3,65	5,15	12,01	250	3500	44,4	91,9	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)4,2X501	4,2	5,92	13,82	250	3500	45,5	94,1						
* 10A(C)4,7X501	4,7	6,63	15,46	250	3500	46,1	97,1						
10A(C)5X501	5	7,05	14,10	250	3000	47,1	97,2	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)5,7X501	5,7	8,12	16,25	200	3000	48,5	100,1						
10A(C)6,1X501	6,1	8,69	14,49	200	2500	49,4	101,8						

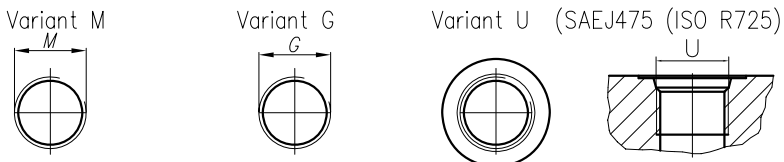
* - These pumps - only under a special order



Variants:

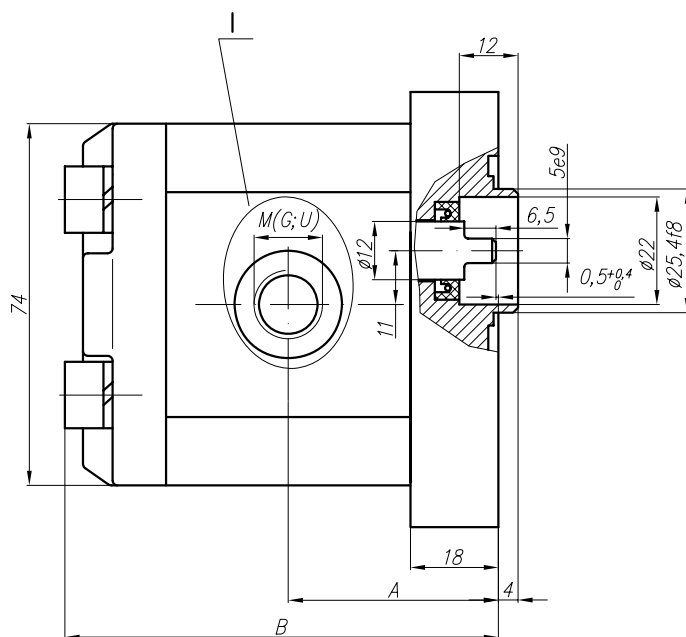
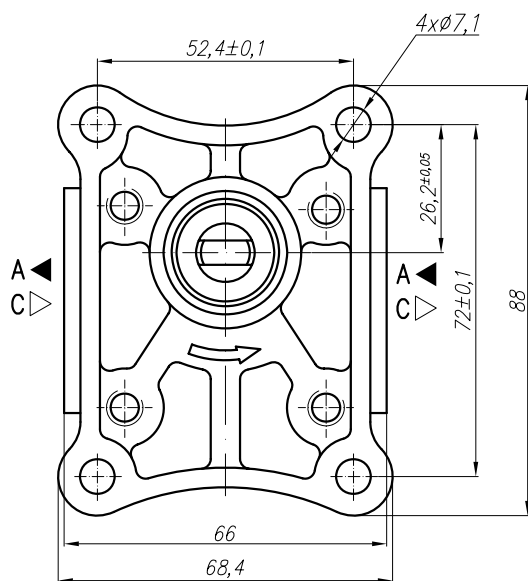
- ...X502M - for M ports (see the picture I and the table below);
- ...X502G - for G ports (see the picture I and the table below);
- ...X502U - for U ports (see the picture I and the table below).

I - variants



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
10A(C)1X502	1	1,40	3,26	250	3500	39,1	81	M16x1,5	G 3/8" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)1,25X502	1,25	1,74	4,07	250	3500	39,5	82						
10A(C)1,6X502	1,6	2,23	5,21	250	3500	40,3	83,6						
10A(C)2X502	2	2,82	6,58	250	3500	41,1	85,2						
10A(C)2,5X502	2,5	3,53	8,23	250	3500	42,1	87,2						
* 10A(C)2,65X502	2,65	3,74	8,72	250	3500	42,4	87,8	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)3,15X502	3,15	4,44	10,36	250	3500	43,5	89,8						
10A(C)3,65X502	3,65	5,15	12,01	250	3500	44,4	91,9	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)4,2X502	4,2	5,92	13,82	250	3500	45,5	94,1						
* 10A(C)4,7X502	4,7	6,63	15,46	250	3500	46,1	97,1	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)5X502	5	7,05	14,10	250	3000	47,1	97,2						
10A(C)5,7X502	5,7	8,12	16,25	200	3000	48,5	100,1	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)6,1X502	6,1	8,69	14,49	200	2500	49,4	101,8						

* - These pumps - only under a special order



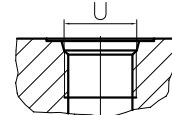
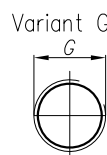
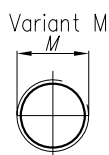
Variants:

...X510M - for M ports (see the picture I and the table below);

...X510G - for G ports (see the picture I and the table below);

...X510U - for U ports (see the picture I and the table below).

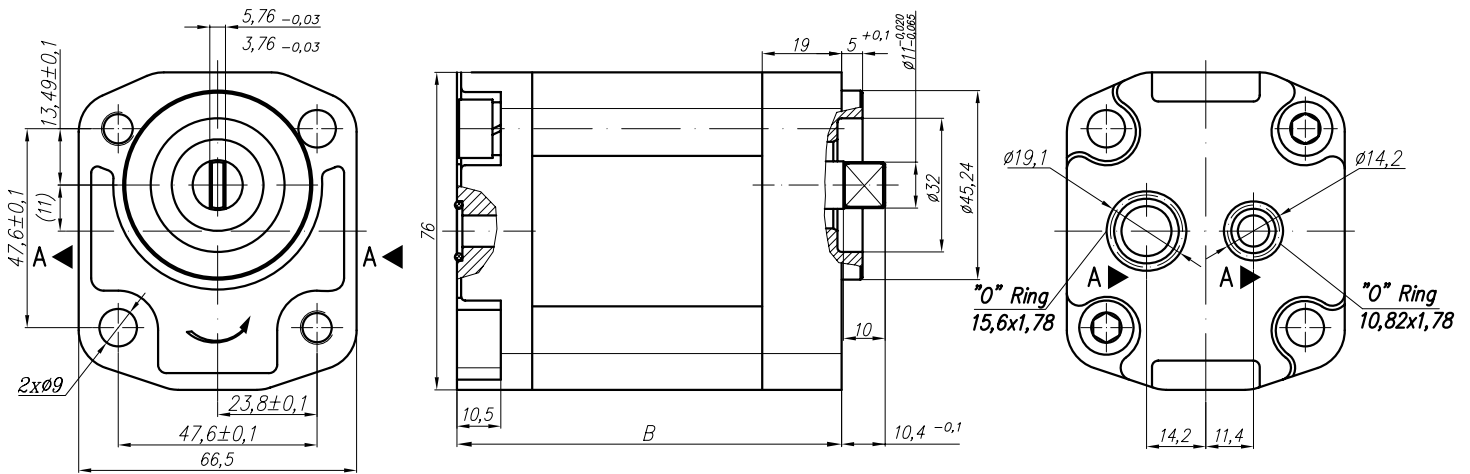
I - variants



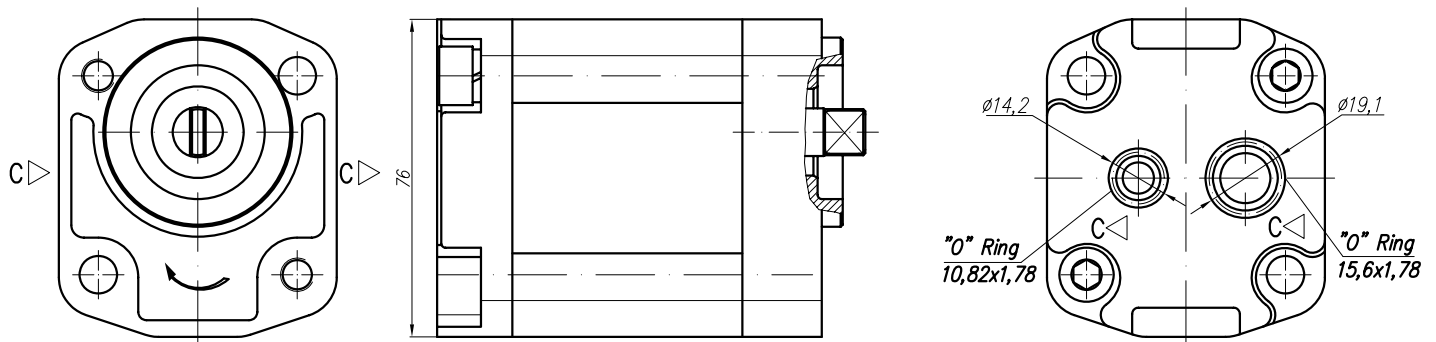
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
10A(C)1X510	1	1,40	3,26	250	3500	39,1	81	M16x1,5	G 3/8" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)1,25X510	1,25	1,74	4,07	250	3500	39,5	82						
10A(C)1,6X510	1,6	2,23	5,21	250	3500	40,3	83,6						
10A(C)2X510	2	2,82	6,58	250	3500	41,1	85,2						
10A(C)2,5X510	2,5	3,53	8,23	250	3500	42,1	87,2						
* 10A(C)2,65X510	2,65	3,74	8,72	250	3500	42,4	87,8	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B
10A(C)3,15X510	3,15	4,44	10,36	250	3500	43,5	89,8						
10A(C)3,65X510	3,65	5,15	12,01	250	3500	44,4	91,9						
10A(C)4,2X510	4,2	5,92	13,82	250	3500	45,5	94,1						
* 10A(C)4,7X510	4,7	6,63	15,46	250	3500	46,1	97,1						
10A(C)5X510	5	7,05	14,10	250	3000	47,1	97,2	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	3/4" - 16UNF	
10A(C)5,7X510	5,7	8,12	16,25	200	3000	48,5	100,1						
10A(C)6,1X510	6,1	8,69	14,49	200	2500	49,4	101,8						
10A(C)7,4X510	7,4	10,55	17,58	180	2500	52,1	107,2						
* 10A(C)8X510	8	11,40	15,20	150	2000	53,4	109,7						
10A(C)8,5X510	8,5	12,11	16,15	150	2000	54,4	111,7						
10A(C)9,8X510	9,8	13,97	18,62	120	2000	57	117						

* - These pumps - only under a special order

Rotation "A" - (anticlockwise)



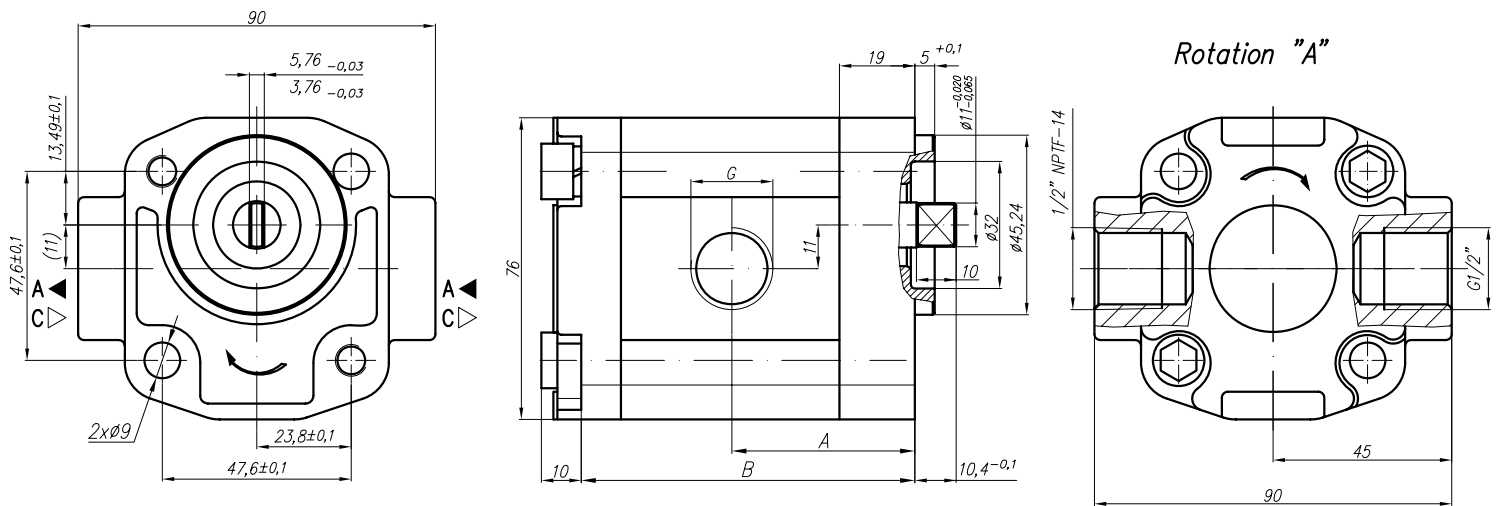
Rotation "C" - (clockwise)



Variants:

- for drive shaft 3,76 - ...531-3

Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet		Outlet			
10A(C)1X531	1	1,40	3,26	250	3500		78,2						
10A(C)1,25X531	1,25	1,74	4,07	250	3500		79,2						
10A(C)1,6X531	1,6	2,23	5,21	250	3500		80,6						
10A(C)2X531	2	2,82	6,58	250	3500		82,2						
10A(C)2,5X531	2,5	3,53	8,23	250	3500		84,2						
10A(C)3,15X531	3,15	4,44	10,36	250	3500		87						
10A(C)3,65X531	3,65	5,15	12,01	250	3500		89,6						
10A(C)4,2X531	4,2	5,92	13,82	250	3500		90,3						
10A(C)5X531	5	7,05	14,10	250	3000		94,9						
10A(C)5,7X531	5,7	8,12	16,25	200	3000		97,8						
10A(C)6,1X531	6,1	8,69	14,49	200	2500		100,8						



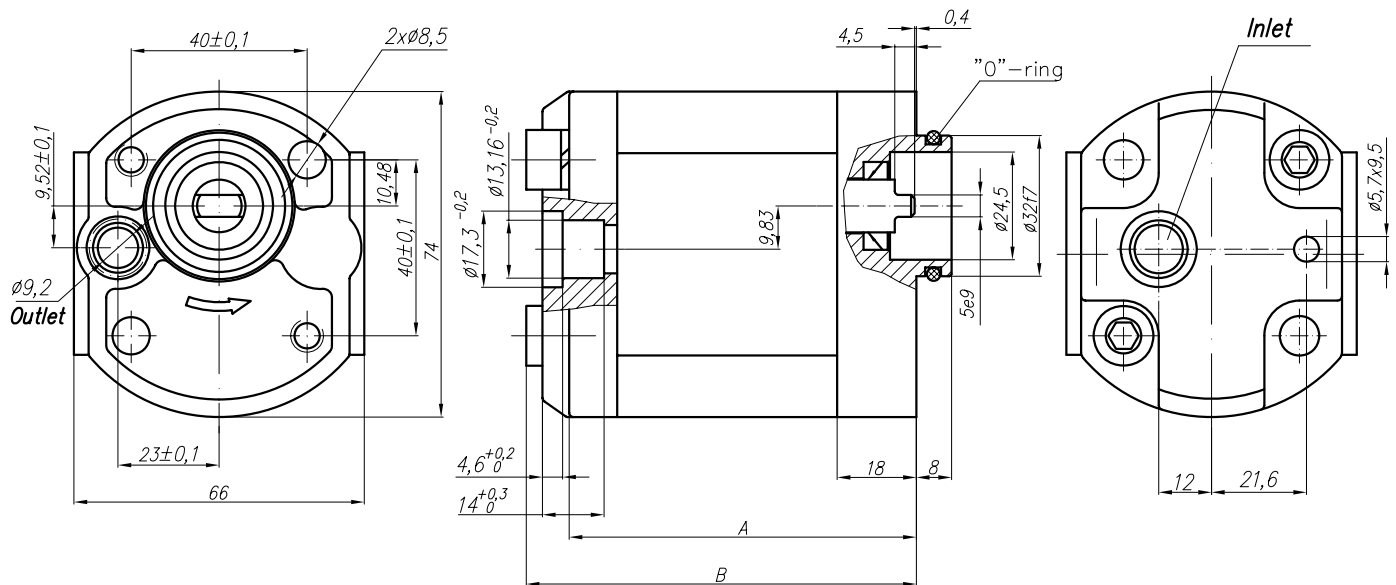
Variants:

- for drive shaft 3,76 - ...551-3

Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet M		Outlet M G U			
10A(C)1X551	1	1,40	3,26	250	3500	40,1	69,1						
10A(C)1,25X551	1,25	1,74	4,07	250	3500	40,6	70,1						
10A(C)1,6X551	1,6	2,23	5,21	250	3500	41,3	71,5						
10A(C)2X551	2	2,82	6,58	250	3500	42,1	73,2						
10A(C)2,5X551	2,5	3,53	8,23	250	3500	43,1	75,2						
* 10A(C)2,65X551	2,65	3,74	8,72	250	3500	43,4	75,8						
10A(C)3,15X551	3,15	4,44	10,36	250	3500	44,5	77,8						
10A(C)3,65X551	3,65	5,15	12,01	250	3500	45,4	79,8						
10A(C)4,2X551	4,2	5,92	13,82	250	3500	46,5	82,0						
* 10A(C)4,7X551	4,7	6,63	15,46	250	3500	47,5	84,1						
10A(C)5X551	5	7,05	14,10	250	3000	48,1	85,2						
10A(C)5,7X551	5,7	8,12	16,25	200	3000	49,5	88,0						
10A(C)6,1X551	6,1	8,69	14,49	200	2500	50,4	89,8						
10A(C)7,4X551	7,4	10,55	17,58	180	2500	53,1	95,3						
* 10A(C)8X551	8	11,40	15,20	150	2000	54,4	97,7						
10A(C)8,5X551	8,5	12,11	16,15	150	2000	55,4	99,8						
10A(C)9,8X551	9,8	13,97	18,62	120	2000	58,0	105,0						

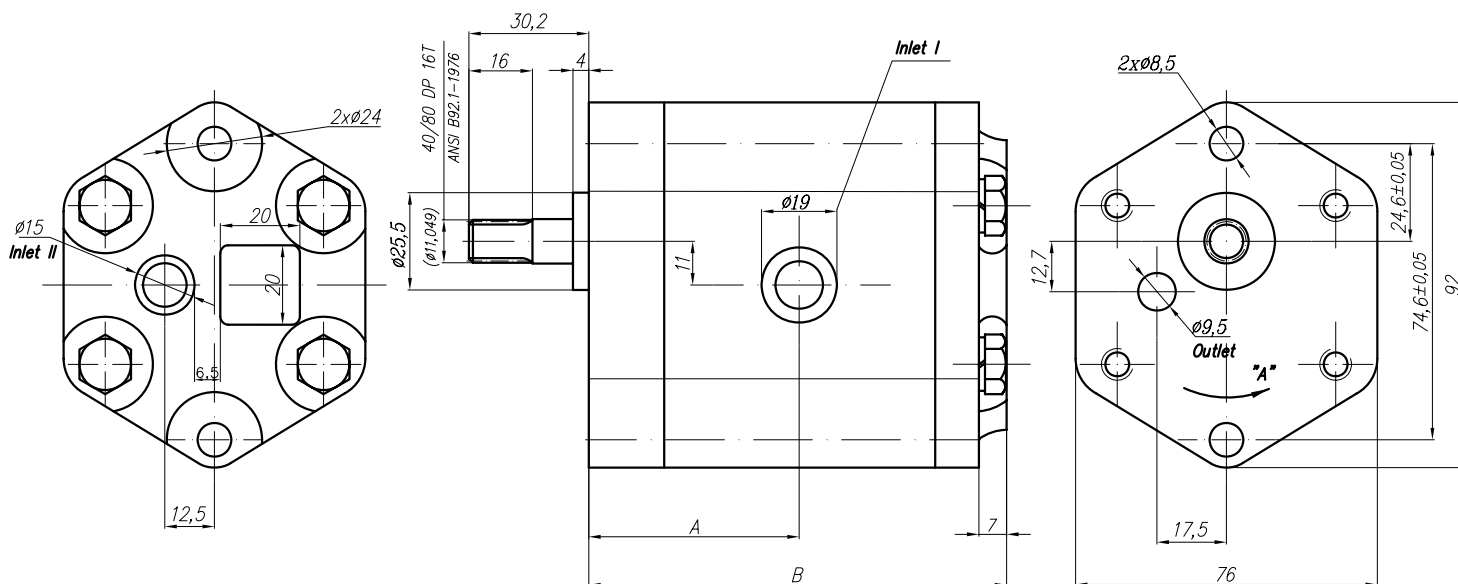
* - These pumps - only under a special order

Rotation "A" - (anticlockwise)



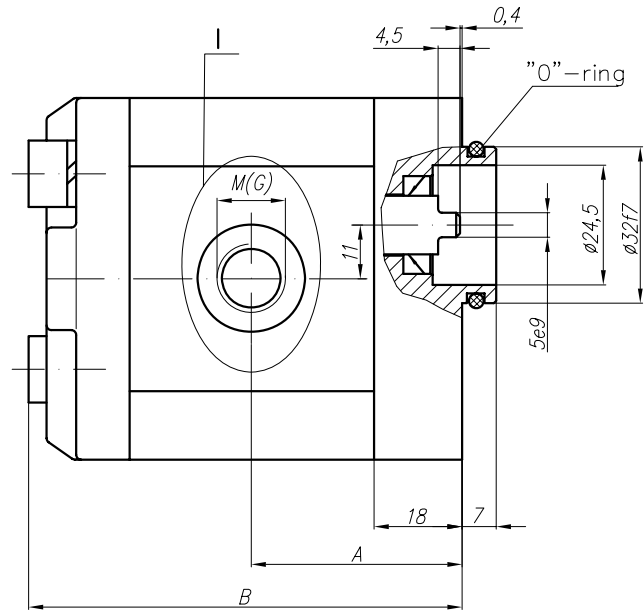
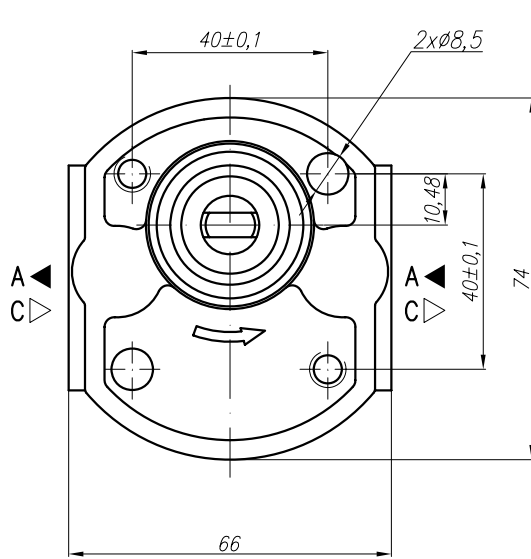
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet		Outlet			
10A1X552	1	1,40	3,26	250	3500	71	81						
10A1,25X552	1,25	1,74	4,07	250	3500	72	82						
10A1,6X552	1,6	2,23	5,21	250	3500	73,6	83,6						
10A2X552	2	2,82	6,58	250	3500	75,2	85,2						
10A2,5X552	2,5	3,53	8,23	250	3500	77,2	87,2						
* 10A2,65X552	2,65	3,74	8,72	250	3500	77,8	87,8						
10A3,15X552	3,15	4,44	10,36	250	3500	79,8	89,8						
10A3,65X552	3,65	5,15	12,01	250	3500	81,9	91,9						
10A4,2X552	4,2	5,92	13,82	250	3500	84,1	94,1						∅9,2
* 10A4,7X552	4,7	6,63	15,46	250	3500	87,1	97,1						
10A5X552	5	7,05	14,10	250	3000	87,2	97,2						
10A5,7X552	5,7	8,12	16,25	200	3000	90,1	100,1						
10A6,1X552	6,1	8,69	14,49	200	2500	91,8	101,8						
10A7,4X552	7,4	10,55	17,58	180	2500	97,2	107,2						
* 10A8X552	8	11,40	15,20	150	2000	99,7	109,7						
10A8,5X552	8,5	12,11	16,15	150	2000	101,7	111,7						
10A9,8X552	9,8	13,97	18,62	120	2000	107	117						

* - These pumps - only under a special order



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet		Outlet			
								I	II				
10A(C)1X571	1	1,40	3,26	250	3500	40,1	79,1						
10A(C)1,25X571	1,25	1,74	4,07	250	3500	40,6	80,1						
10A(C)1,6X571	1,6	2,23	5,21	250	3500	41,3	81,5						
10A(C)2X571	2	2,82	6,58	250	3500	42,1	83,2						
10A(C)2,5X571	2,5	3,53	8,23	250	3500	43,1	85,2						
* 10A(C)2,65X571	2,65	3,74	8,72	250	3500	43,4	85,8						
10A(C)3,15X571	3,15	4,44	10,36	250	3500	44,5	87,8						
10A(C)3,65X571	3,65	5,15	12,01	250	3500	45,4	89,8						
10A(C)4,2X571	4,2	5,92	13,82	250	3500	46,2	92	Ø19	Ø15			Ø9,5	
* 10A(C)4,7X571	4,7	6,63	15,46	250	3500	47,5	94,1						
10A(C)5X571	5	7,05	14,10	250	3000	48,1	95,2						
10A(C)5,7X571	5,7	8,12	16,25	200	3000	49,5	98						
10A(C)6,1X571	6,1	8,69	14,49	200	2500	50,3	99,8						
10A(C)7,4X571	7,4	10,55	17,58	180	2500	53,1	105,2						
* 10A(C)8X571	8	11,40	15,20	150	2000	54,4	107,7						
10A(C)8,5X571	8,5	12,11	16,15	150	2000	55,4	109,8						
10A(C)9,8X571	9,8	13,97	18,62	120	2000	58	115						

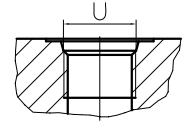
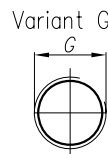
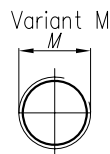
* - These pumps - only under a special order



Variants:

- ...X575M - for M ports (see the picture I and the table below);
- ...X575G - for G ports (see the picture I and the table below);
- ...X575U - for U ports (see the picture I and the table below).

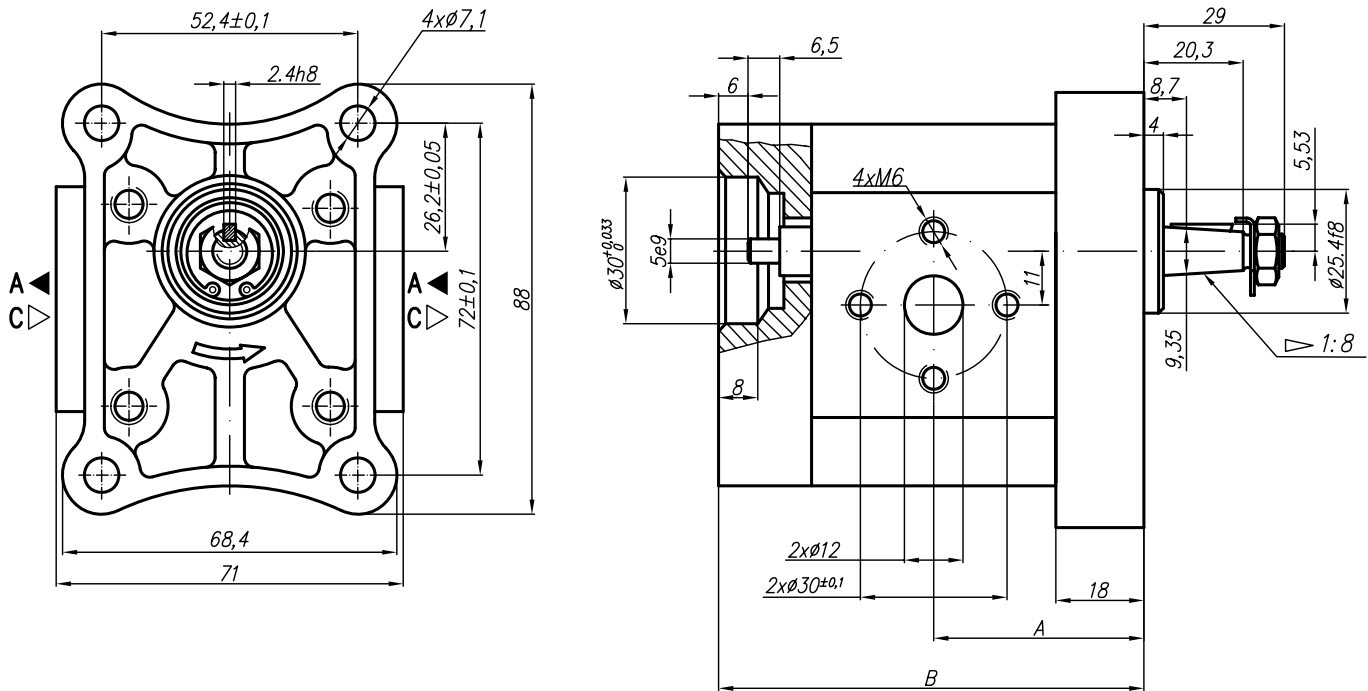
I – variants



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet			
								M	G	U	M	G	U	
10A(C)1X575	1	1,40	3,26	250	3500	39,1	81	M16x1,5	G 3/8" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B	
10A(C)1,25X575	1,25	1,74	4,07	250	3500	39,5	82							
10A(C)1,6X575	1,6	2,23	5,21	250	3500	40,3	83,6							
10A(C)2X575	2	2,82	6,58	250	3500	41,1	85,2							
10A(C)2,5X575	2,5	3,53	8,23	250	3500	42,1	87,2							
* 10A(C)2,65X575	2,65	3,74	8,72	250	3500	42,4	87,8	M20x1,5	G 1/2" - A	3/4" - 16UNF - 2B	M16x1,5	G 3/8" - A	9/16" - 18UNF - 2B	
10A(C)3,15X575	3,15	4,44	10,36	250	3500	43,5	89,8							
10A(C)3,65X575	3,65	5,15	12,01	250	3500	44,4	91,9							
10A(C)4,2X575	4,2	5,92	13,82	250	3500	45,5	94,1							
* 10A(C)4,7X575	4,7	6,63	15,46	250	3500	46,1	96							
10A(C)5X575	5	7,05	14,10	250	3000	47,1	97,2	M22x1,5	G 1/2" - A	7/8" - 14UNF	M18x1,5	G 3/8" - A	3/4" - 16UNF	
10A(C)5,7X575	5,7	8,12	16,25	200	3000	48,5	100,1							
10A(C)6,1X575	6,1	8,69	14,49	200	2500	49,4	101,8							
10A(C)7,4X575	7,4	10,55	17,58	180	2500	52,1	107,2							
10A(C)8X575	8	11,40	15,20	150	2000	53,4	109,7							
10A(C)8,5X575	8,5	12,11	16,15	150	2000	54,4	111,7							
10A(C)9,8X575	9,8	13,97	18,62	120	2000	57	117							

* - These pumps - only under a special order

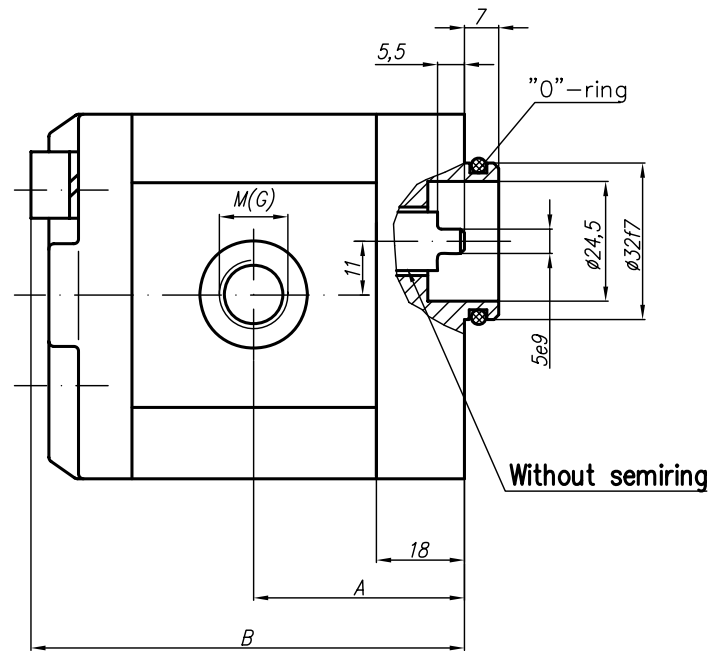
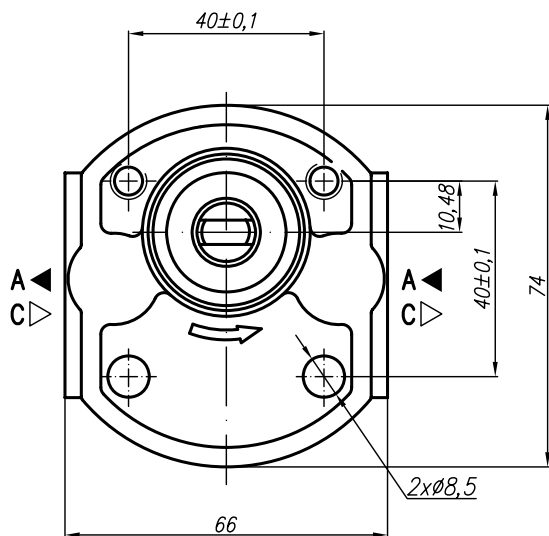
The pump 10A(C)...X576 is a first section of multiple pump Gr.11.



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	E	F	d
10A(C)1X576	1	1,40	3,26	250	3500	39,1	79,1						
10A(C)1,25X576	1,25	1,74	4,07	250	3500	39,5	80,1						
10A(C)1,6X576	1,6	2,23	5,21	250	3500	40,3	81,5						
10A(C)2X576	2	2,82	6,58	250	3500	41,1	83,2						
10A(C)2,5X576	2,5	3,53	8,23	250	3500	42,1	85,2						
* 10A(C)2,65X576	2,65	3,74	8,72	250	3500	42,4	85,8						
10A(C)3,15X576	3,15	4,44	10,36	250	3500	43,5	87,8						
10A(C)3,65X576	3,65	5,15	12,01	250	3500	44,4	89,8						
10A(C)4,2X576	4,2	5,92	13,82	250	3500	45,5	92	∅30	∅12	M6	∅30	∅12	M6
* 10A(C)4,7X576	4,7	6,63	15,46	250	3500	46,1	94,1						
10A(C)5X576	5	7,05	16,45	250	3500	47,1	95,2						
10A(C)5,7X576	5,7	8,12	16,25	200	3000	48,5	98						
10A(C)6,1X576	6,1	8,69	14,49	180	2500	49,4	99,8						
10A(C)7,4X576	7,4	10,55	17,58	180	2500	52,1	105,2						
* 10A(C)8X576	8	11,40	15,20	150	2000	53,4	107,7						
10A(C)8,5X576	8,5	12,11	16,15	150	2000	54,4	109,8						
10A(C)9,8X576	9,8	13,97	18,62	120	2000	57	115						

* - These pumps - only under a special order

The pump 10A(C)...X579 is a second section of multiple pump Gr.21.



Variants:

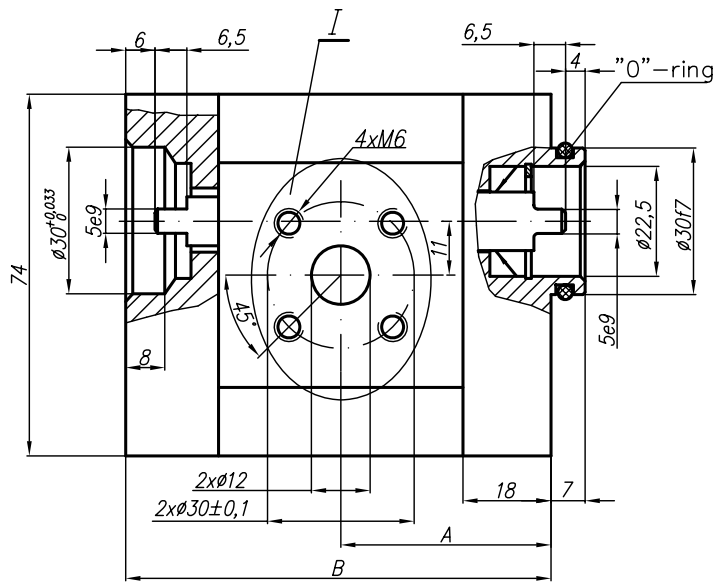
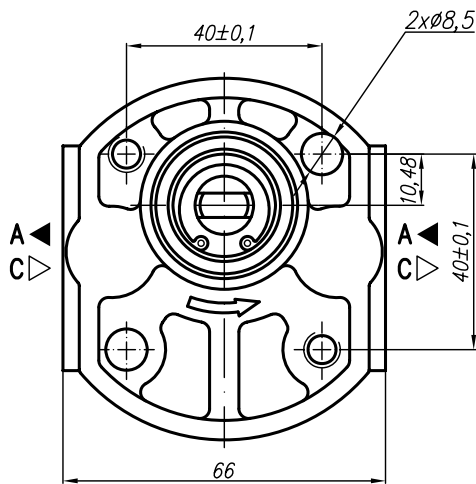
...X579M - for M ports (see the table);

...X579G - for G ports (see the table).

Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	M	G	U	M	G	U
10A(C)1X579	1	1,40	3,26	250	3500	39,1	81	M18x1,5	G 3/8" - A				
10A(C)1,25X579	1,25	1,74	4,07	250	3500	39,5	82						
10A(C)1,6X579	1,6	2,23	5,21	250	3500	40,3	83,6						
10A(C)2X579	2	2,82	6,58	250	3500	41,1	85,2						
10A(C)2,5X579	2,5	3,53	8,23	250	3500	42,1	87,2						
* 10A(C)2,65X579	2,65	3,74	8,72	250	3500	42,4	87,8						
10A(C)3,15X579	3,15	4,44	10,36	250	3500	43,5	89,8						
10A(C)3,65X579	3,65	5,15	12,01	250	3500	44,4	91,9						
10A(C)4,2X579	4,2	5,92	13,82	250	3500	45,5	94,1						
* 10A(C)4,7X579	4,7	6,63	15,46	250	3500	46,1	96						
10A(C)5X579	5	7,05	14,10	250	3000	47,1	97,2	G 1/2" - A					
10A(C)5,7X579	5,7	8,12	16,25	200	3000	48,5	100,1						
10A(C)6,1X579	6,1	8,69	14,49	200	2500	49,4	101,8						
10A(C)7,4X579	7,4	10,55	17,58	180	2500	52,1	107,2						
* 10A(C)8X579	8	11,40	15,20	150	2000	53,4	109,7						
10A(C)8,5X579	8,5	12,11	16,15	150	2000	54,4	111,7	M22x1,5					
10A(C)9,8X579	9,8	13,97	18,62	120	2000	57	117						

* - These pumps - only under a special order

The pump 10A(C)...X594 is a middle section of a multiple pump gr. 111.

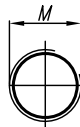


I – variants

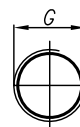
Variants:

- ...X594 - Normal version (flange);
- ...X594M - for M ports (see the picture I and the table below);
- ...X594G - for G ports (see the picture I and the table below);
- ...X594U - for U ports (see the picture I and the table below).

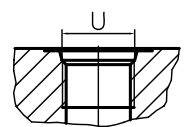
Variant M



Variant G



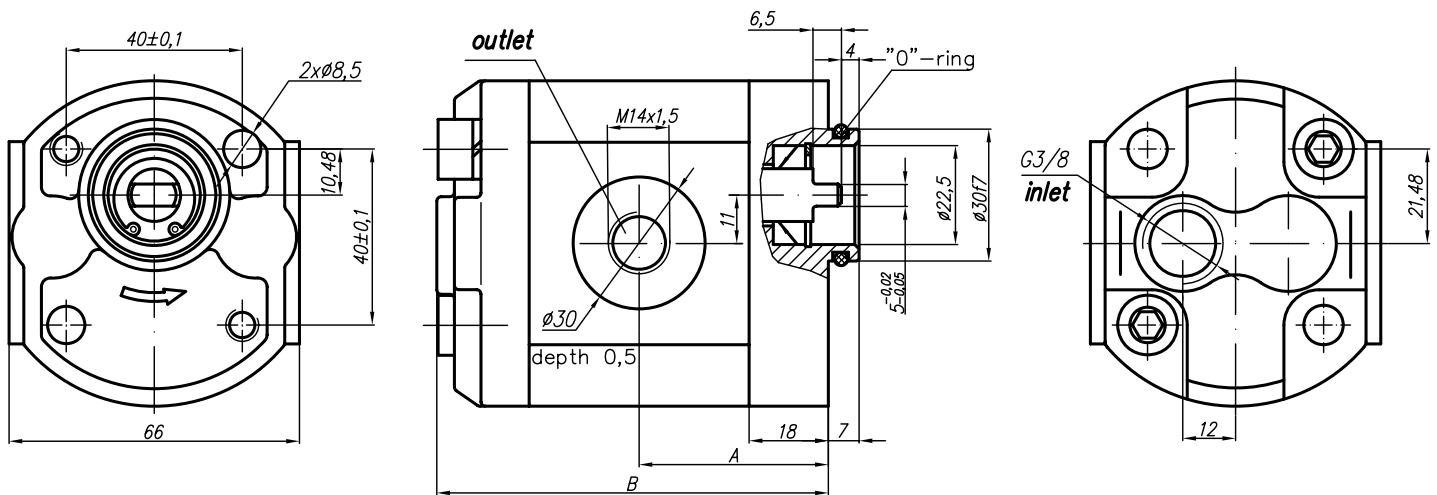
Variant U (SAEJ475 (ISO R725))



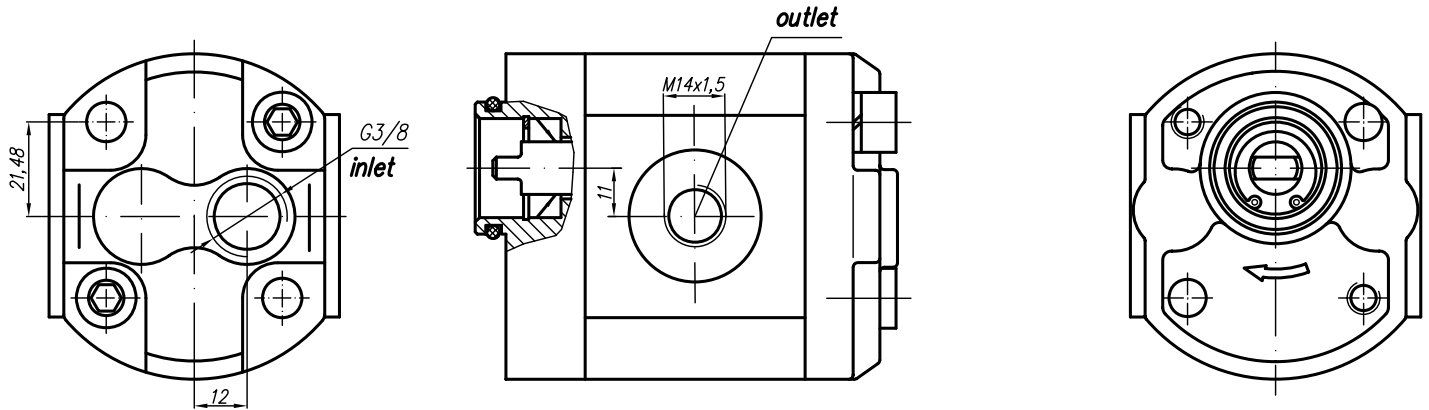
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
10A(C)1X594	1	1,40	3,26	250	3500	39,1	79						
10A(C)1,25X594	1,25	1,74	4,07	250	3500	39,5	80						
10A(C)1,6X594	1,6	2,23	5,21	250	3500	40,3	81,6						
10A(C)2X594	2	2,82	6,58	250	3500	41,1	83,2						
10A(C)2,5X594	2,5	3,53	8,23	250	3500	42,1	85,2						
* 10A(C)2,65X594	2,65	3,74	8,72	250	3500	42,4	85,8						
10A(C)3,15X594	3,15	4,44	10,36	250	3500	43,5	87,8						
10A(C)3,65X594	3,65	5,15	12,01	250	3500	44,4	89,9						
10A(C)4,2X594	4,2	5,92	13,82	250	3500	45,5	92,1						
* 10A(C)4,7X594	4,7	6,63	15,46	250	3500	46,1	94						
10A(C)5X594	5	7,05	14,10	250	3000	47,1	95,2						
10A(C)5,7X594	5,7	8,12	16,25	200	3000	48,5	98,1						
10A(C)6,1X594	6,1	8,69	14,49	200	2500	49,4	99,8						
10A(C)7,4X594	7,4	10,55	17,58	180	2500	52,1	105,2						
* 10A(C)8X594	8	11,40	15,20	150	2000	53,4	107,7						
10A(C)8,5X594	8,5	12,11	16,15	150	2000	54,4	109,7						
10A(C)9,8X594	9,8	13,97	18,62	120	2000	57	115						

* - These pumps - only under a special order

Rotation "A" - (anticlockwise)



Rotation "A" - (clockwise)



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet		Outlet					
						A mm	B mm	M	G	U	M	G	U
10A(C)1X649	1	1,40	3,26	250	3500	39,1	81	G 3/8" - A			M14x1,5		
10A(C)1,25X649	1,25	1,74	4,07	250	3500	39,5	82						
10A(C)1,6X649	1,6	2,23	5,21	250	3500	40,3	83,6						
10A(C)2X649	2	2,82	6,58	250	3500	41,1	85,2						
10A(C)2,5X649	2,5	3,53	8,23	250	3500	42,1	87,2						
* 10A(C)2,65X649	2,65	3,74	8,72	250	3500	42,4	87,8						
10A(C)3,15X649	3,15	4,44	10,36	250	3500	43,5	89,8						
10A(C)3,65X649	3,65	5,15	12,01	250	3500	44,4	91,9						
10A(C)4,2X649	4,2	5,92	13,82	250	3500	45,5	94,1						
* 10A(C)4,7X649	4,7	6,63	15,46	250	3500	46,1	96						
10A(C)5X649	5	7,05	16,45	250	3500	47,1	97,2						
10A(C)5,7X649	5,7	8,12	16,25	200	3000	48,5	100,1						
10A(C)6,1X649	6,1	8,69	14,49	180	2500	49,4	101,8						
10A(C)7,4X649	7,4	10,55	17,58	180	2500	52,1	107,2						
* 10A(C)8X649	8	11,40	15,20	150	2000	53,4	109,7						
10A(C)8,5X649	8,5	12,11	16,15	150	2000	54,4	111,7						
10A(C)9,8X649	9,8	13,97	18,62	120	2000	57	117						

* - These pumps - only under a special order

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General description

The gear pumps are designed for transforming the mechanical energy as energy of the working liquid (pressure and flow rate). They are simplified in construction and they have a relatively low cost. All these benefits ensure their wide application in the hydraulic systems.

Drive arrangements

The pump drive may be direct or indirect (by gear, chains, or belt transmissions). Both drives should not impose axial or radial forces on the pump shaft. Oldham coupling serrated drive adapters are used with direct drive. For indirect drive refer to the manufacturer.

The gear pumps are designed to work at the conditions mentioned below:

- Working liquid:	hydraulic oils with viscosity 16 ... 200 mm ² /s;
- Degree of filtration:	15 ... 25 ì m;
- Ambient temperature range:	- 22 ... 55 °C;
- Fluid temperature range:	- 25 ... 80 °C;
- Inlet pressure, absolute:	0.8 ... 2.2 bar;
- Fluid velocity (suction line)	0,5 ... 1 m/s
- Outlet pressure	up to 250 bar.

The gear pumps made by "Caproni" are produced in 5 different groups: 00, 10, 20 and 20H, 30 and 40. The displacements of the pumps are in the range from 0.25 to 60 cm³.

Group 00	q = 0.25 ... 2 cm ³ ;
Group 10	q = 1 ... 9.8 cm ³ ;
Group 20	q = 4.5 ... 25 cm ³ ;
Group 20H	q = 15 ... 36 cm ³ ;
Group 30	q = 20 ... 60 cm ³ ;
Group 40	q = 46 ... 60 cm ³ .

There are different variants of flanges, shafts and ports for each pump group (standard; Germany; USA ...).

We offer the next variants too:

- tandem pumps;
- pumps with build-in valves;
- reversible pumps;
- reversible gear motors.

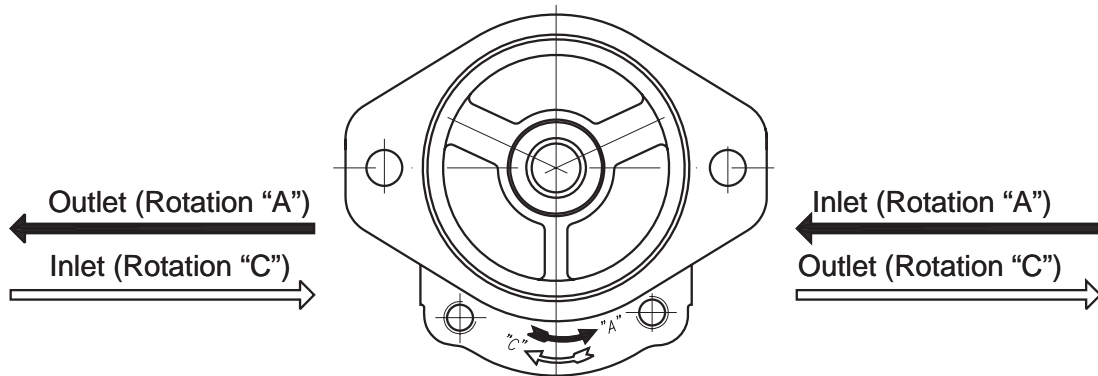
Used symbols:

n - speed of rotation	[min ⁻¹];
p - pressure	[bar];
q - displacement	[cm ³];
η - total efficiency $\eta = \eta_q \cdot \eta_{hm}$	[-];
η_{hm} - hydromechanical efficiency	[-];
η_q - volumetric efficiency	[-].

Commonly used formulas:

Flow:	$Q = \frac{q \cdot n \cdot \eta}{1000}$	[l/min]
Torque:	$M \cong \frac{q \cdot p}{20 \cdot \pi}$	[N.m]
Drive power:	$P = \frac{Q \cdot p}{600}$	[kW]

A relationship between the direction of rotation and the place of the inlet and outlet ports of the pumps



How to order:

Group	Rotation	Displacement code	Drive shaft	Pump code	Ports
00 10 20 30 40	A ↻ C ↻ R ↻		X - Through the front cover Y - Through the both covers	***(*)	- A flange with metric threads P4- A flange with UNC threads M - Metric G - GAS U - SAE J475

Group 00	
Code	cm ³
0,25	0,25
0,3	0,3
0,5	0,5
0,75	0,75
1	1
1,25	1,25
1,5	1,5
1,75	1,75
2	2

Group 10	
Code	cm ³
1	1
1,25	1,25
1,6	1,6
2	2
2,5	2,5
2,65*	2,65
3,15	3,15
3,65	3,65
4,2	4,2
4,7*	4,7
5	5
5,7	5,7
6,1	6,1
7,4	7,4
8*	8
8,5	8,5
9,8	9,8

Group 20	
Code	cm ³
4,5	4,5
6,3	6,3
7*	7
8,2	8,2
10	10
11	11,3
12	12
14	14
15	15
16	16
17*	17,3
19	19
22	22
25	25
28	28
32	32
36	36

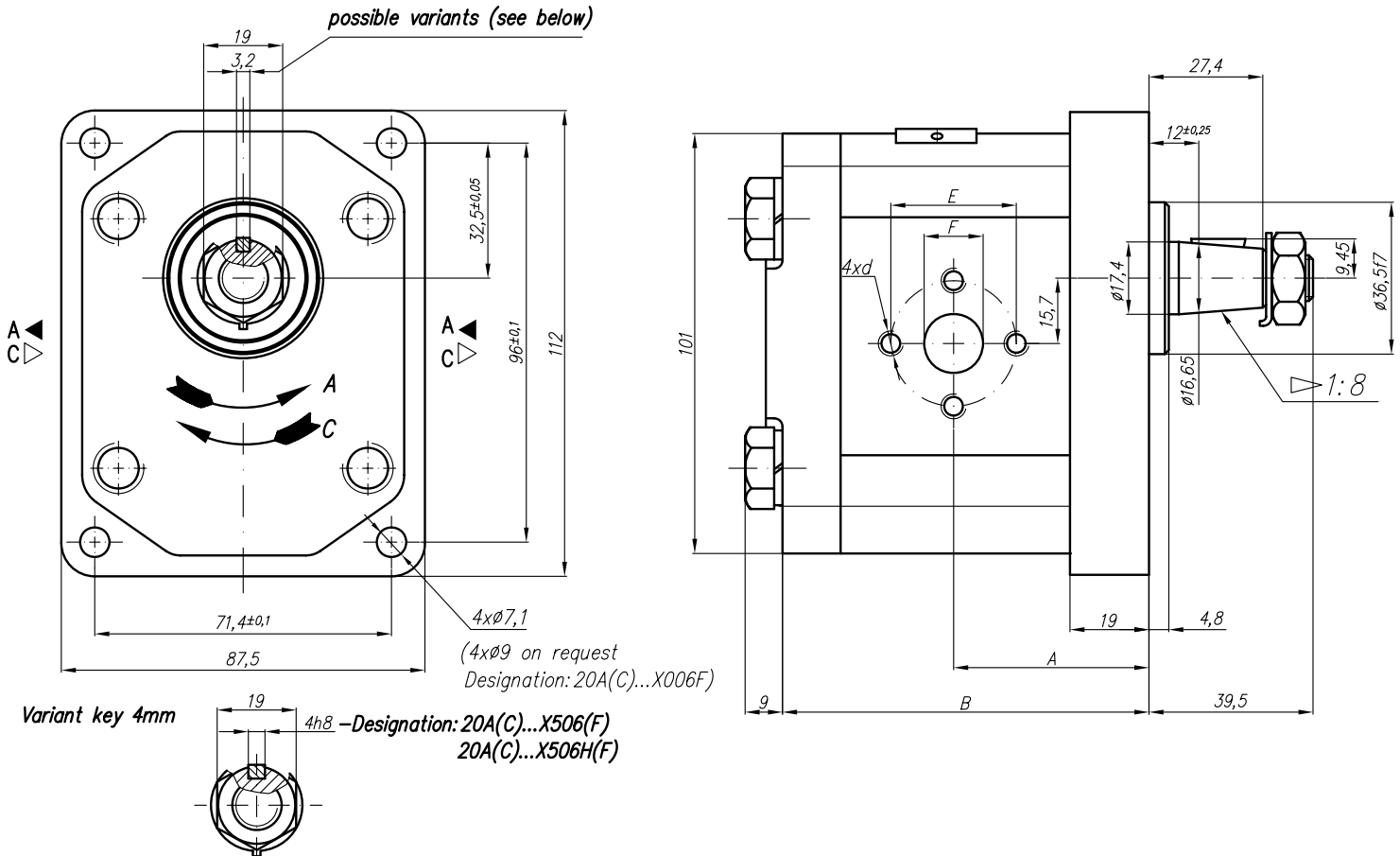
Group 20H	
Code	cm ³
15	15
16	16
19	19
22	22
25	25
28	28
32	32
36	36

Group 30	
Code	cm ³
20	20
22,5	22,5
25	25
28	28
32	32
36	36
42	42
46	46
50	50
55	55
60	60

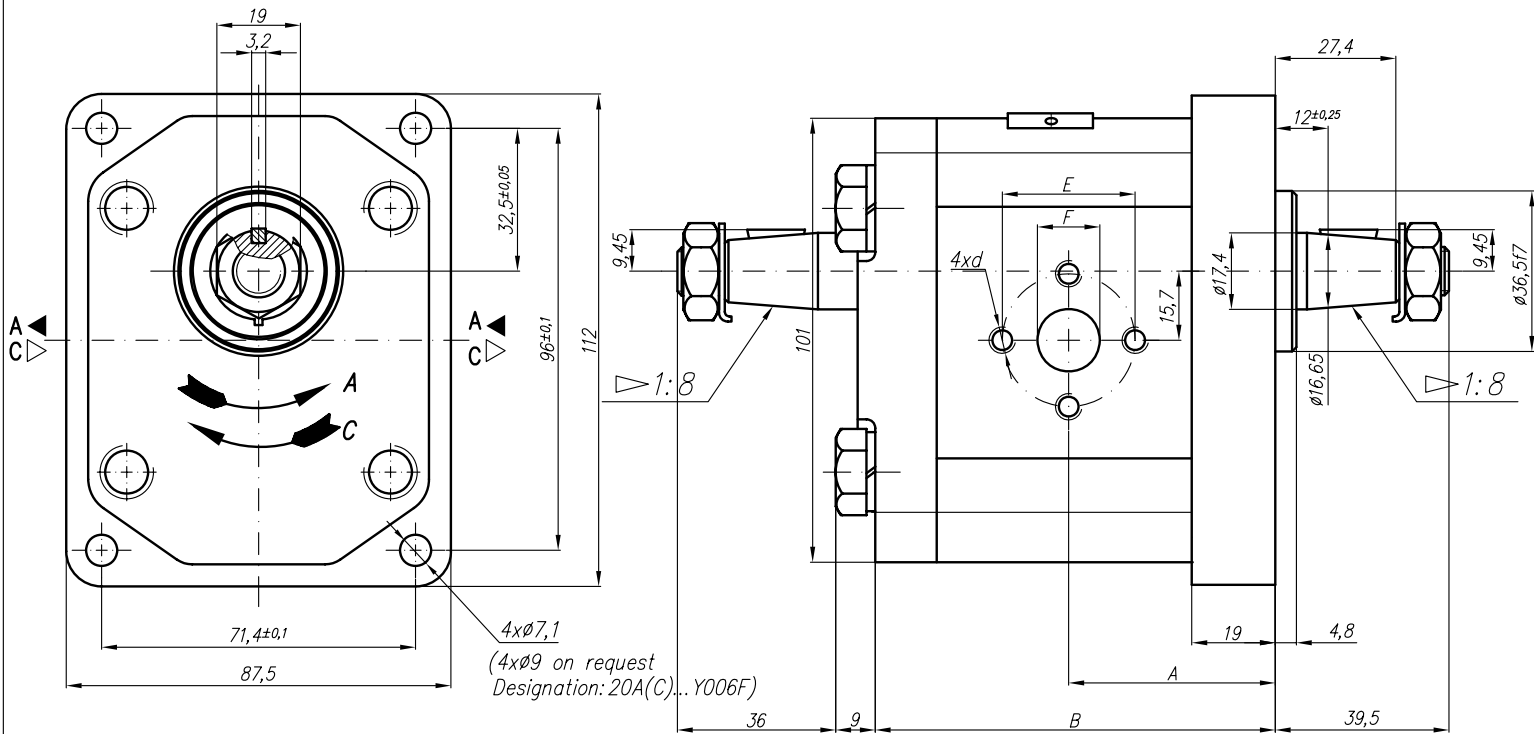
Group 40	
Code	cm ³
36	36
42	42
46	46
50	50
55	55
60	60

Example: 20A14X073 - Hydraulic gear pump, 20 group, direction of rotation - counter clockwise, displacement 14 cm³, modification 073.

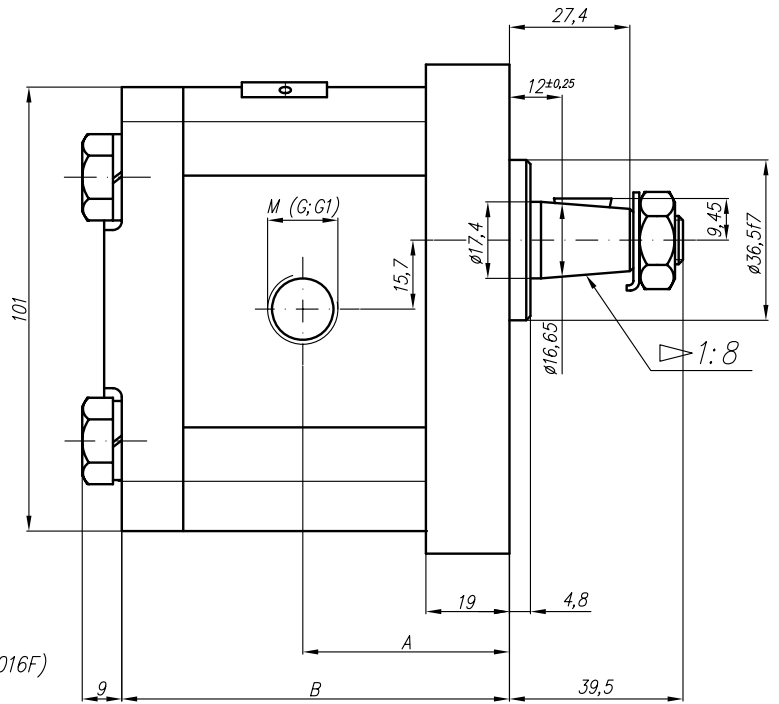
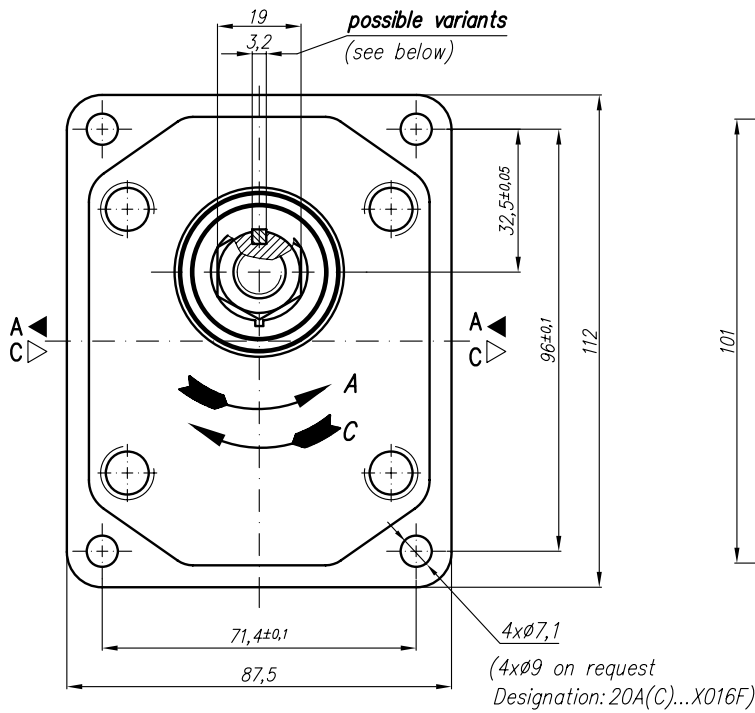
* - These pumps - only under a special order



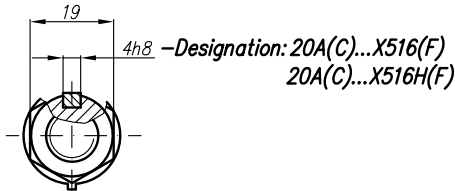
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	E mm	F mm	d mm	E mm	F mm	d mm
20A(C)4,5X006	4,5	6,14	14,33	250	3500	42,5	80	30,2	13,1	M6-6H		13,1	
20A(C)6,3X006	6,3	8,69	20,29	250	3500	42,5	80						
20A(C)8,2X006	8,2	11,32	26,40	250	3500	42,5	80						
20A(C)10X006	10	13,95	32,55	250	3500	47	89						
20A(C)11X006	11,3	15,76	36,78	250	3500	48	91,1						
20A(C)12X006	12	16,92	39,48	250	3500	48,6	92,3						
20A(C)14X006	14	19,95	46,55	250	3500	50	95,4						
20A(C)15X006	15	21,60	36,00	250	2500	51	96,9	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)16X006	16	23,04	38,40	250	2500	52	98,6						
20A(C)19X006	19	27,36	45,60	200	2500	54	103,5						
20A(C)22X006	22	31,68	42,24	180	2000	57	108,5						
20A(C)25X006	25	36,00	48,00	160	2000	59,2	113,4				39,7	19	M8
20A(C)14X006H	14	20,16	47,04	250	3500	55,3	105,7						
20A(C)15X006H	15	21,60	43,20	250	3000	56	107,2						
20A(C)16X006H	16	23,04	46,08	250	3000	56,9	108,8						
20A(C)17,3X006H	17,3	24,91	49,82	230	3000	58	110,9						
20A(C)18,2X006H	18,2	26,21	52,42	210	3000	58,8	112,5						
20A(C)19X006H	19	27,36	54,72	200	3000	59,4	113,8	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)22X006H	22	31,68	52,80	180	2500	61,9	118,8						
20A(C)25X006H	25	36,00	60,00	160	2500	64,3	123,7						
20A(C)28X006H	28	40,32	67,20	130	2500	66,8	128,5						
20A(C)32X006H	32	46,08	61,44	120	2000	70	134,8						
20A(C)36X006H	36	51,84	69,12	100	2000	73,2	141,4				39,7	19	M8-6H



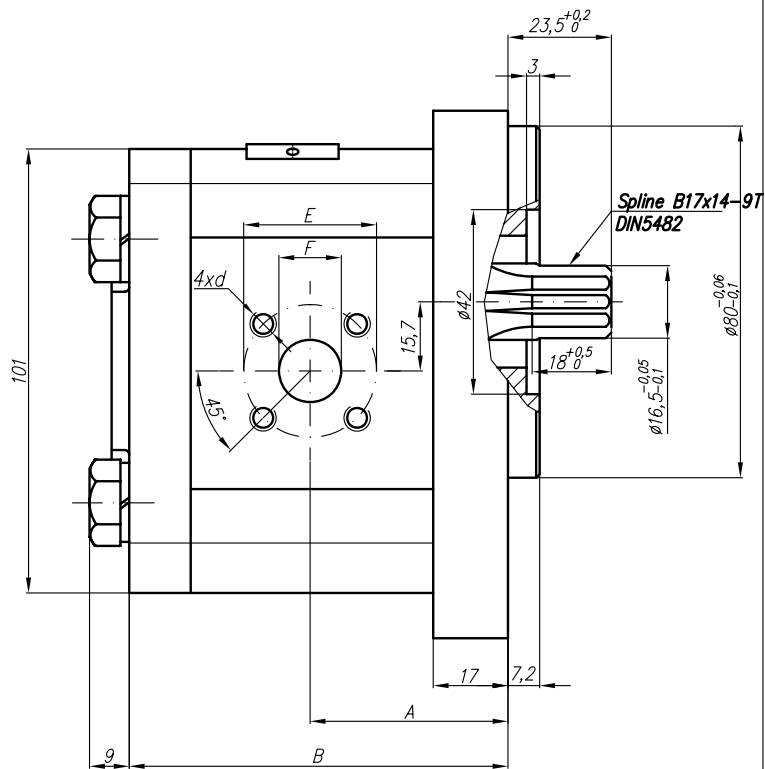
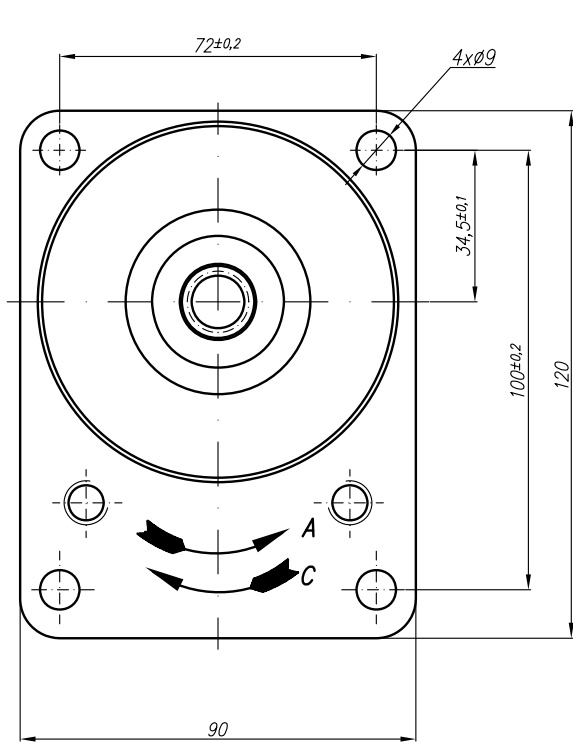
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension						
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet	
						E	F	d	E	F	d	
20A(C)4,5Y006	4,5	6,14	14,33	250	3500	42,5	80					
20A(C)6,3Y006	6,3	8,69	20,29	250	3500	42,5	80	30,2	13,1	M6-6H	13,1	
20A(C)8,2Y006	8,2	11,32	26,40	250	3500	42,5	80					
20A(C)10Y006	10	13,95	32,55	250	3500	47	89					
20A(C)11Y006	11,3	15,76	36,78	250	3500	48	91,1					
20A(C)12Y006	12	16,92	39,48	250	3500	48,6	92,3					
20A(C)14Y006	14	19,95	46,55	250	3500	50	95,4					
20A(C)15Y006	15	21,60	36,00	250	2500	51	96,9	39,7	19	M8-6H	14,2	
20A(C)16Y006	16	23,04	38,40	250	2500	52	98,6					
20A(C)19Y006	19	27,36	45,60	200	2500	54	103,5					
20A(C)22Y006	22	31,68	42,24	180	2000	57	108,5					
20A(C)25Y006	25	36,00	48,00	160	2000	59,2	113,4					
								39,7	19	M8	19	



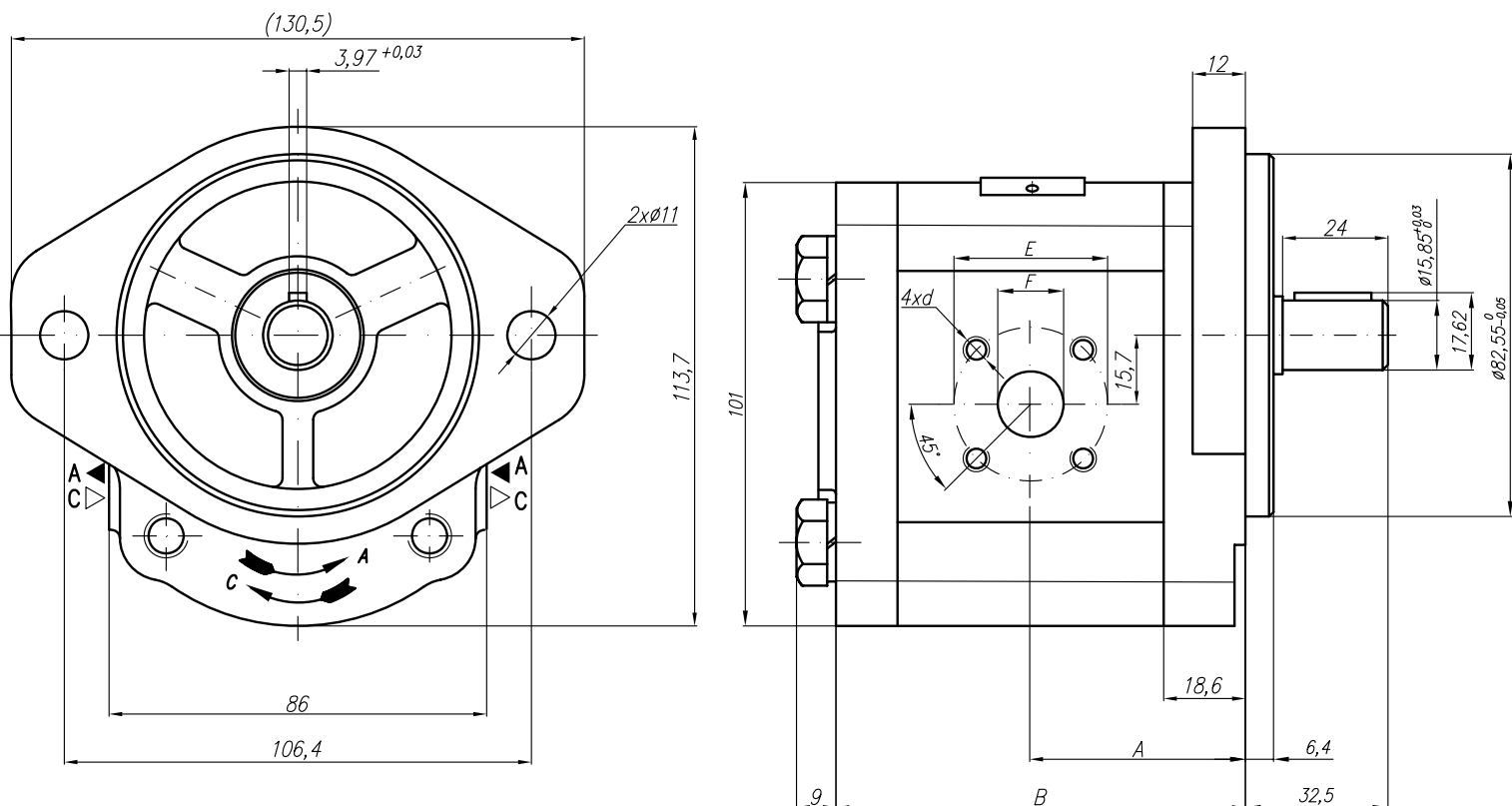
Variant key 4mm



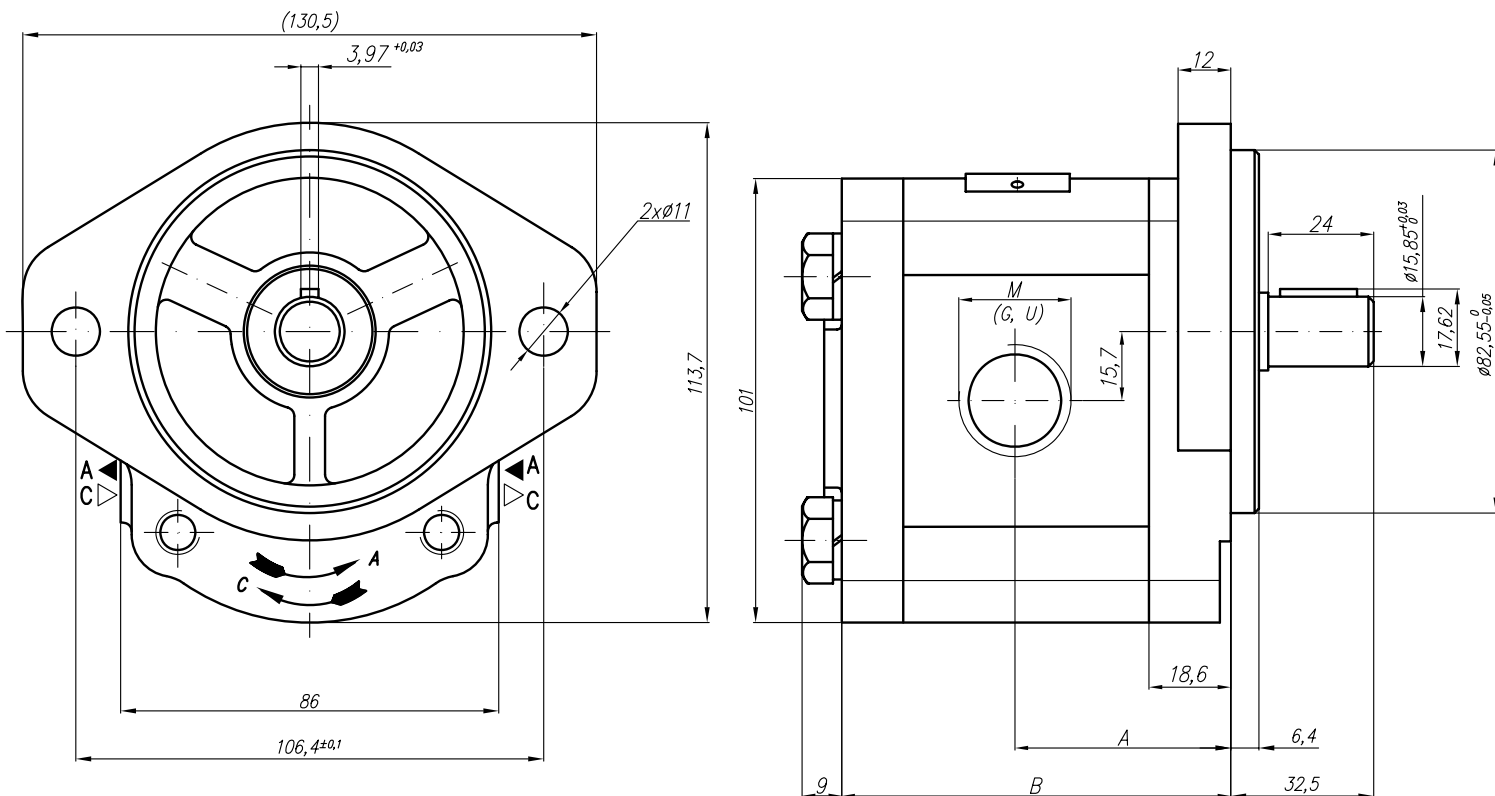
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension													
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet								
								M	G	G1	M	G	G1						
20A(C)4,5X016...	4,5	6,14	14,33	250	3500	42,5	80	M20x1,5	G1/2		M16x1,5	G1/2							
20A(C)6,3X016...	6,3	8,69	20,29	250	3500	42,5	80												
20A(C)8,2X016...	8,2	11,32	26,40	250	3500	42,5	80												
20A(C)10X016...	10	13,95	32,55	250	3500	47	89												
20A(C)11X016...	11,3	15,76	36,78	250	3500	48	91,1												
20A(C)12X016...	12	16,92	39,48	250	3500	48,6	92,3												
20A(C)14X016...	14	19,95	46,55	250	3500	50	95,4												
20A(C)15X016...	15	21,60	36,00	250	2500	51	96,9												
20A(C)16X016...	16	23,04	38,40	250	2500	52	98,6												
20A(C)19X016...	19	27,36	45,60	200	2500	54	103,5												
20A(C)22X016...	22	31,68	42,24	180	2000	57	108,5	G1		M20x1,5	G1/2								
20A(C)25X016...	25	36,00	48,00	160	2000	59,2	113,4												
20A(C)14X016H	14	20,16	47,04	250	3500	55,3	105,7	M20x1,5	G3/4		M16x1,5	G1/2							
20A(C)15X016H...	15	21,60	43,20	250	3000	56	107,2												
20A(C)16X016H...	16	23,04	46,08	250	3000	56,9	108,8												
20A(C)17,3X016H...	17,3	24,91	49,82	230	3000	58	110,9												
20A(C)18,2X016H...	18,2	26,21	52,42	210	3000	58,8	112,5												
20A(C)19X016H...	19	27,36	54,72	200	3000	59,4	113,8												
20A(C)22X016H...	22	31,68	52,80	180	2500	61,9	118,8												
20A(C)25X016H...	25	36,00	60,00	160	2500	64,3	123,7												
20A(C)28X016H...	28	40,32	67,20	130	2500	66,8	128,5							M27x2	G1		M20x1,5	G3/4	
20A(C)32X016H...	32	46,08	61,44	120	2000	70	134,8												
20A(C)36X016H...	36	51,84	69,12	100	2000	73,2	141,4												



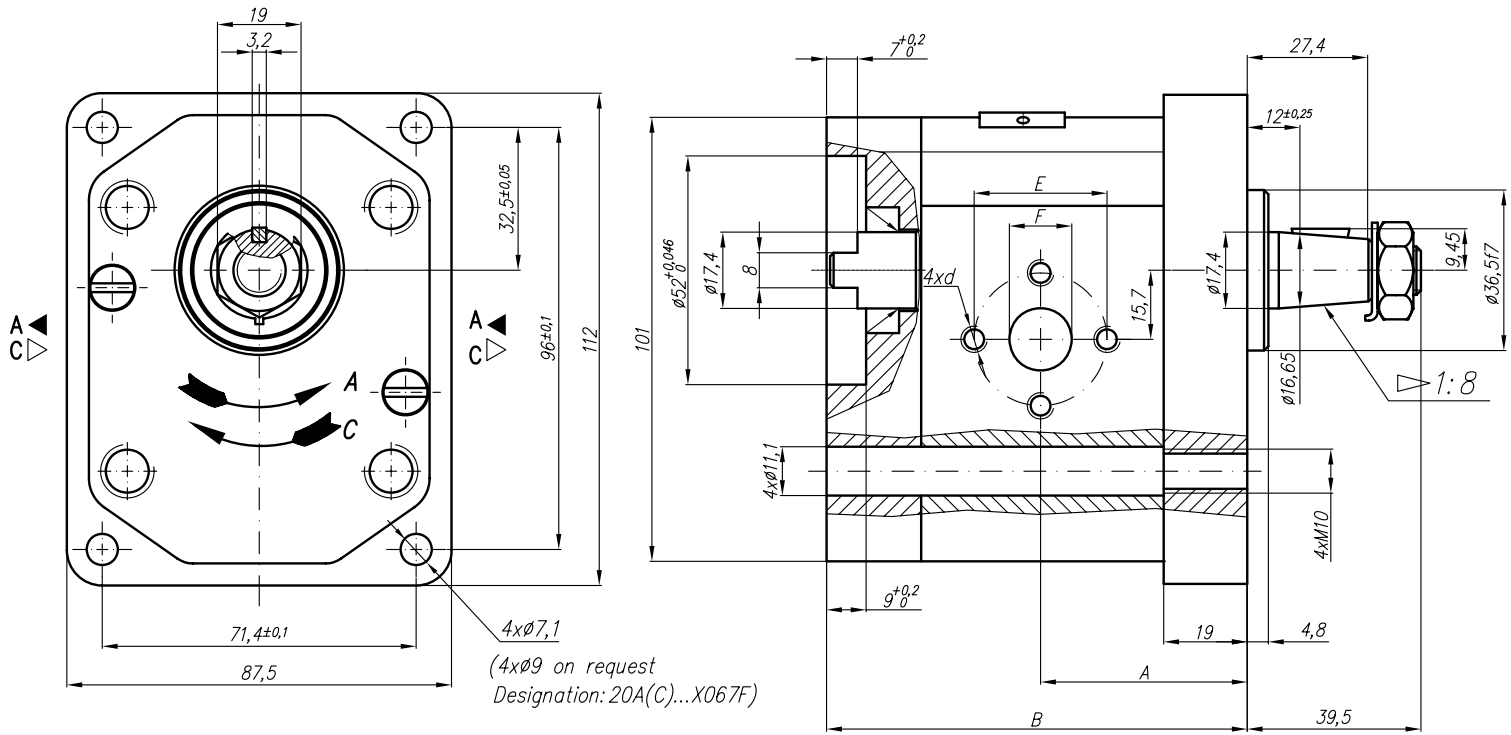
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	E mm	F mm	d mm	E mm	F mm	d mm
20A(C)4,5X021	4,5	6,14	14,33	250	3500	39,8	78	40	15	M6-6H	35	15	M6-6H
20A(C)6,3X021	6,3	8,69	20,29	250	3500	41	81						
20A(C)8,2X021	8,2	11,32	26,40	250	3500	43,1	83,9						
20A(C)10X021	10	13,95	32,55	250	3500	47,5	87						
20A(C)11X021	11,3	15,76	36,78	250	3500	47,5	89,1						
20A(C)12X021	12	16,92	39,48	250	3500	47,5	90,3						
20A(C)14X021	14	19,95	46,55	250	3500	47,5	93,4						
20A(C)15X021	15	21,60	36,00	250	2500	47,5	94,9						
20A(C)16X021	16	23,04	38,40	250	2500	47,5	96,6						
20A(C)19X021	19	27,36	45,60	200	2500	47,5	101,5						
20A(C)22X021	22	31,68	42,24	180	2000	55	106,5						
20A(C)25X021	25	36,00	48,00	160	2000	57,2	111,4						



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet			
						E	F	d	E	F	d			
20A(C)4,5X022	4,5	6,14	14,33	250	3500	41,4	79,6	40	20	M6-6H	35	15	M6-6H	
20A(C)6,3X022	6,3	8,69	20,29	250	3500	42,6	82,6							
20A(C)8,2X022	8,2	11,32	26,40	250	3500	44,7	85,5							
20A(C)10X022	10	13,95	32,55	250	3500	49,1	88,6							
20A(C)11X022	11,3	15,76	36,78	250	3500	49,1	90,7							
20A(C)12X022	12	16,92	39,48	250	3500	49,1	91,9							
20A(C)14X022	14	19,95	46,55	250	3500	49,1	95							
20A(C)15X022	15	21,60	36,00	250	2500	49,1	96,5							
20A(C)16X022	16	23,04	38,40	250	2500	49,1	98,2							
20A(C)19X022	19	27,36	45,60	200	2500	49,1	103,1							
20A(C)22X022	22	31,68	42,24	180	2000	56,6	108,1							
20A(C)25X022	25	36,00	48,00	160	2000	58,8	113							

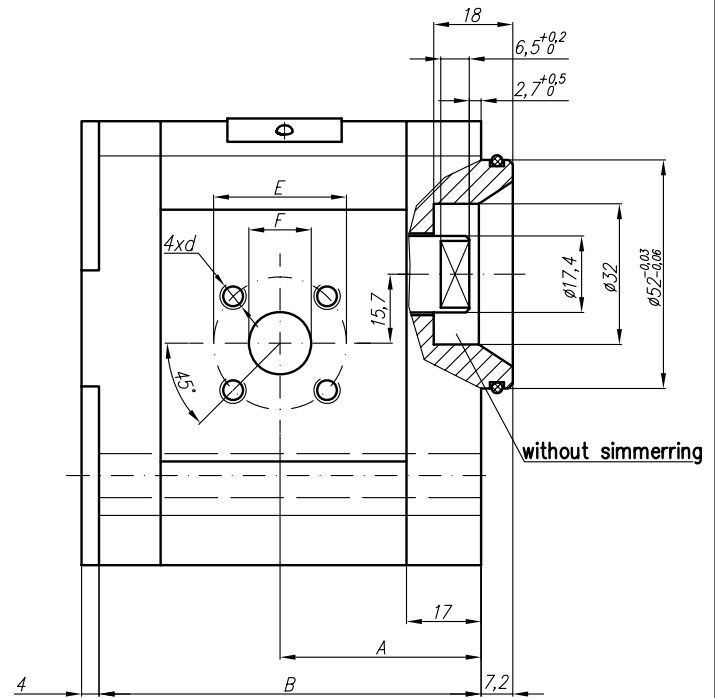
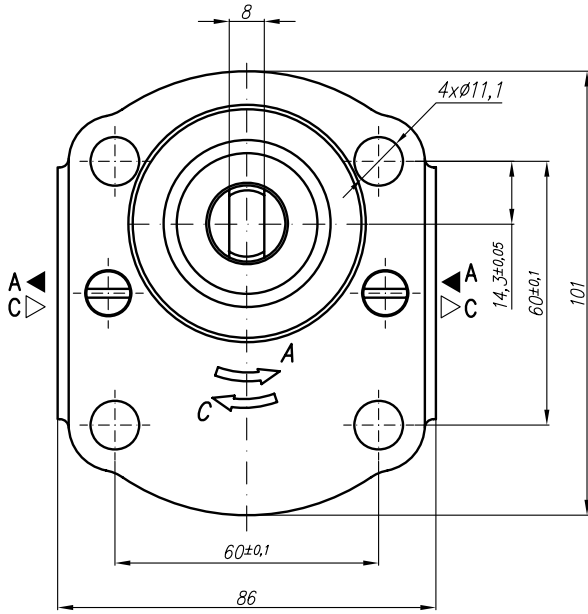


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension													
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet								
								M	G	U	M	G	U						
20A(C)4,5X030...	4,5	6,14	14,33	250	3500	41,4	79,6	M20x1,5	G1/2	1 1/16"-12UNF	M16x1,5	G1/2	7/8"-14UNF						
20A(C)6,3X030...	6,3	8,69	20,29	250	3500	42,6	82,6												
20A(C)8,2X030...	8,2	11,32	26,40	250	3500	44,7	85,5												
20A(C)10X030...	10	13,95	32,55	250	3500	49,1	88,6		G3/4										
20A(C)11X030...	11,3	15,76	36,78	250	3500	49,1	90,7												
20A(C)12X030...	12	16,92	39,48	250	3500	49,1	91,9		G3/4										
20A(C)14X030...	14	19,95	46,55	250	3500	49,1	95												
20A(C)15X030...	15	21,60	36,00	250	2500	49,1	96,5		G3/4										
20A(C)16X030...	16	23,04	38,40	250	2500	49,1	98,2												
20A(C)19X030...	19	27,36	45,60	200	2500	49,1	103,1		M20x1,5										
20A(C)22X030...	22	31,68	42,24	180	2000	56,6	108,1												
20A(C)25X030...	25	36,00	48,00	160	2000	58,8	113												
20A(C)14X030H...	14	20,16	47,04	250	3500	55,3	105,7		M20x1,5		G3/4			1 1/16"-12UNF	M16x1,5	G1/2	7/8"-14UNF		
20A(C)15X030H...	15	21,60	43,20	250	3000	55,6	106,8												
20A(C)16X030H...	16	23,04	46,08	250	3000	56,5	108,4												
20A(C)17,3X030H...	17,3	24,91	49,82	230	3000	57,6	110,5												
20A(C)18,2X030H...	18,2	26,21	52,42	210	3000	58,4	112,1												
20A(C)19X030H...	19	27,36	54,72	200	3000	59	113,4												
20A(C)22X030H...	22	31,68	52,80	180	2500	61,5	118,4												
20A(C)25X030H...	25	36,00	60,00	160	2500	63,9	123,3												
20A(C)28X030H...	28	40,32	67,20	130	2500	66,4	128,1	M27x2		G1		1 5/16"-12UNF	M20x1,5					G3/4	1 1/16"-12UNF
20A(C)32X030H...	32	46,08	61,44	120	2000	69,6	134,4												
20A(C)36X030H...	36	51,84	69,12	100	2000	72,8	141												



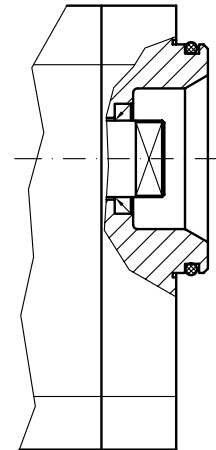
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	E mm	F mm	d mm	E mm	F mm	d mm
20A(C)4,5X067	4,5	6,14	14,33	250	3500	42,5	87,2	30,2	13,1	M6-6H	30,2	13,1	M6-6H
20A(C)6,3X067	6,3	8,69	20,29	250	3500	44	90,2						
20A(C)8,2X067	8,2	11,32	26,40	250	3500	45,5	93,1						
20A(C)10X067	10	13,95	32,55	250	3500	47	96,2						
20A(C)11X067	11,3	15,76	36,78	250	3500	48	98,2						
20A(C)12X067	12	16,92	39,48	250	3500	48,6	99,5						
20A(C)14X067	14	19,95	46,55	250	3500	50	102,6						
20A(C)15X067	15	21,60	36,00	250	2500	51	104,1	39,7	19	M8-6H			
20A(C)16X067	16	23,04	38,40	250	2500	52	105,8						
20A(C)19X067	19	27,36	45,60	200	2500	54	110,7						
20A(C)22X067	22	31,68	42,24	180	2000	57	115,7						
20A(C)25X067	25	36,00	48,00	160	2000	59,2	120,6	39,7	19	M8			

20A(C)14X067H	14	20,16	47,04	250	3500	55,3	112,9	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)15X067H	15	21,60	43,20	250	3000	56	114,4						
20A(C)16X067H	16	23,04	46,08	250	3000	56,9	116						
20A(C)17,3X067H	17,3	24,91	49,82	230	3000	58	118,1						
20A(C)18,2X067H	18,2	26,21	52,42	210	3000	58,8	119,7						
20A(C)19X067H	19	27,36	54,72	200	3000	59,4	121						
20A(C)22X067H	22	31,68	52,80	180	2500	61,9	126						
20A(C)25X067H	25	36,00	60,00	160	2500	64,3	130,9						
20A(C)28X067H	28	40,32	67,20	130	2500	66,8	135,7						
20A(C)32X067H	32	46,08	61,44	120	2000	70	142						
20A(C)36X067H	36	51,84	69,12	100	2000	73,2	148,6						

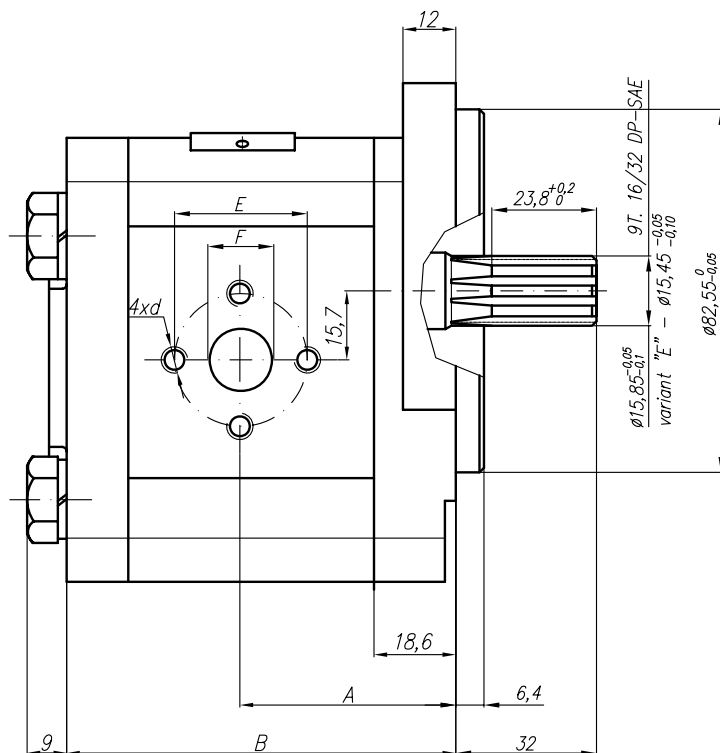
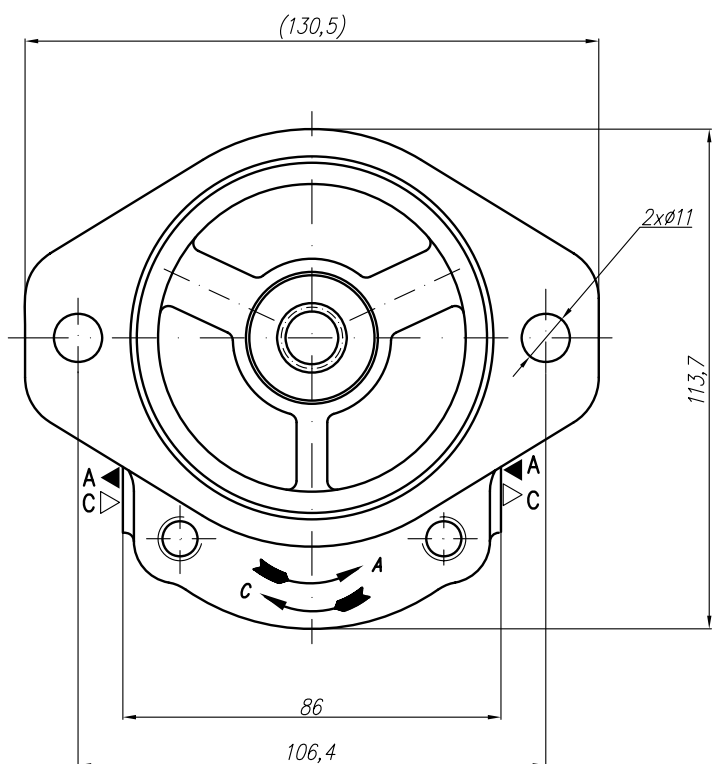


Variant with simmerring in front cover

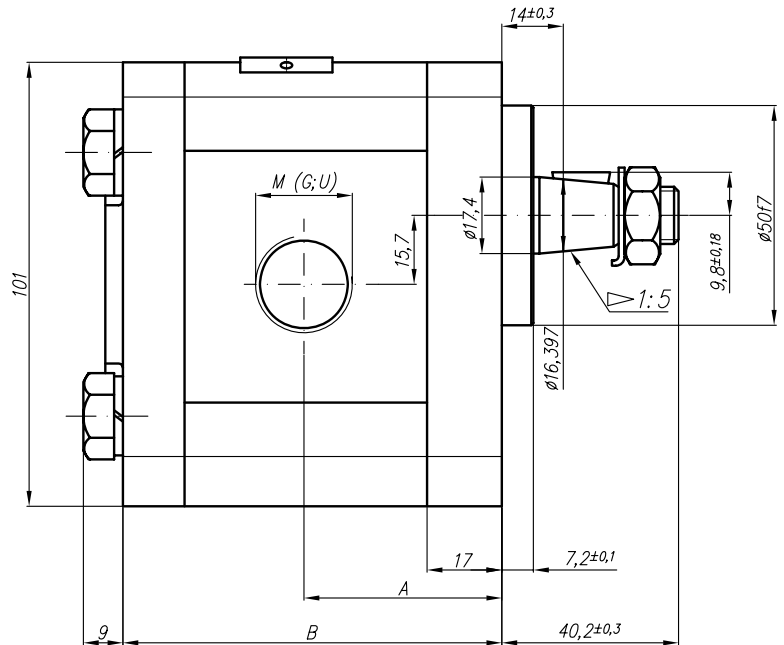
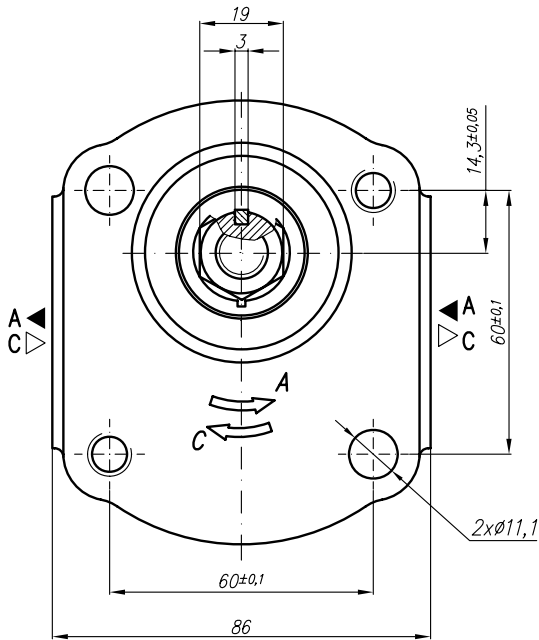
Designation: 20A(C)...X188AS



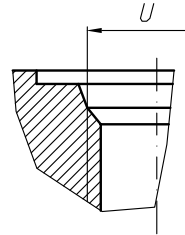
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
						E	F	d	E	F	d		
20A(C)4,5X072	4,5	6,14	14,33	250	3500	37,3	75,1	40	20	M6-6H	35	15	M6-6H
20A(C)6,3X072	6,3	8,69	20,29	250	3500	38,6	78						
20A(C)8,2X072	8,2	11,32	26,40	250	3500	40,6	78						
20A(C)10X072	10	13,95	32,55	250	3500	45	87						
20A(C)11X072	11,3	15,76	36,78	250	3500	45	89,1						
20A(C)12X072	12	16,92	39,48	250	3500	45	90,3						
20A(C)14X072	14	19,95	46,55	250	3500	45	93,4						
20A(C)15X072	15	21,60	36,00	250	2500	45	94,9						
20A(C)16X072	16	23,04	38,40	250	2500	45	96,5						
20A(C)19X072	19	27,36	45,60	200	2500	45	101,5						
20A(C)22X072	22	31,68	42,24	180	2000	52,5	106,5						
20A(C)25X072	25	36,00	48,00	160	2000	57,2	111,4						



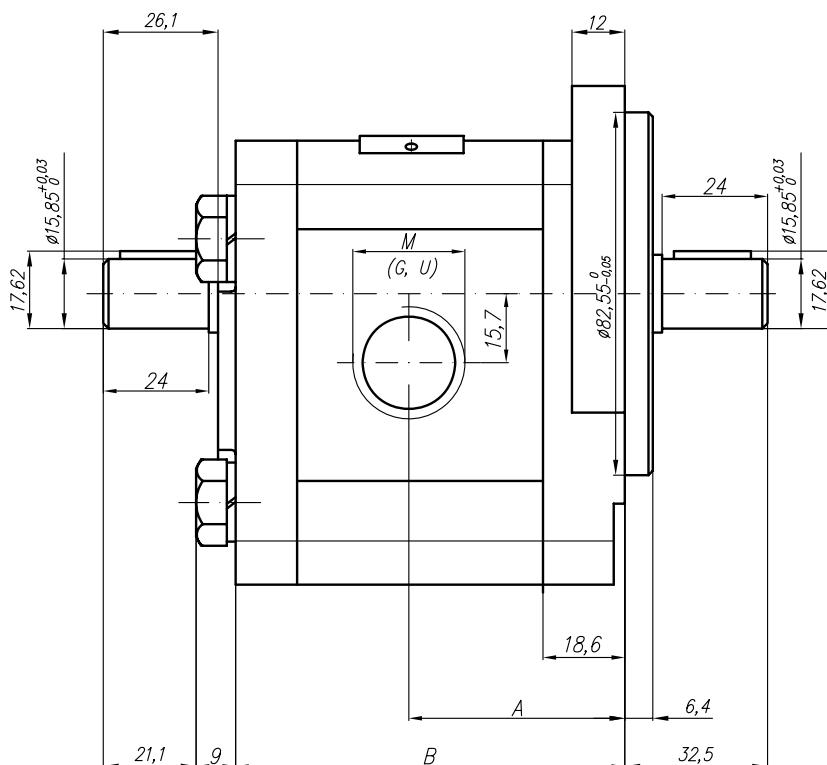
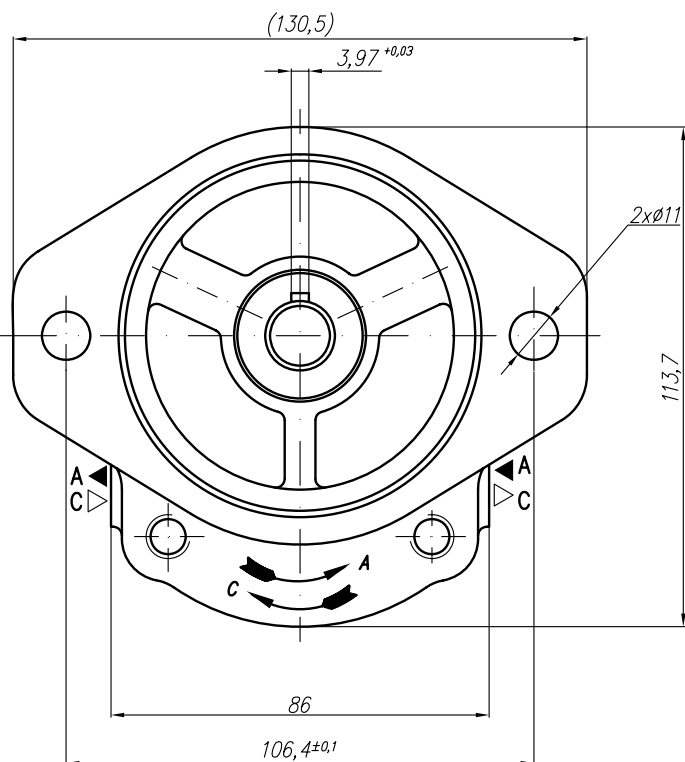
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	E	F	d
20A(C)4,5X073	4,5	6,14	14,33	250	3500	42,1	79,6	30,2	13,1	M6-6H	30,2	13,1	M6-6H
20A(C)6,3X073	6,3	8,69	20,29	250	3500	42,1	79,6						
20A(C)8,2X073	8,2	11,32	26,40	250	3500	42,1	79,6						
20A(C)10X073	10	13,95	32,55	250	3500	46,6	88,7	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)11X073	11,3	15,76	36,78	250	3500	47,6	90,7						
20A(C)12X073	12	16,92	39,48	250	3500	48,2	91,9						
20A(C)14X073	14	19,95	46,55	250	3500	49,6	95	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)15X073	15	21,60	36,00	250	2500	50,6	96,5						
20A(C)16X073	16	23,04	38,40	250	2500	51,6	98,2						
20A(C)19X073	19	27,36	45,60	200	2500	53,6	103,1	39,7	19	M8	39,7	19	M8
20A(C)22X073	22	31,68	42,24	180	2000	56,6	108,1						
20A(C)25X073	25	36,00	48,00	160	2000	58,8	113						
20A(C)14X073H	14	20,16	47,04	250	3500	54,9	105,3	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)15X073H	15	21,60	43,20	250	3000	55,6	106,8						
20A(C)16X073H	16	23,04	46,08	250	3000	56,5	108,4						
20A(C)17,3X073H	17,3	24,91	49,82	230	3000	57,6	110,5	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)18,2X073H	18,2	26,21	52,42	210	3000	58,4	112,1						
20A(C)19X073H	19	27,36	54,72	200	3000	59	113,4						
20A(C)22X073H	22	31,68	52,80	180	2500	61,5	118,4	39,7	19	M8-6H	39,7	19	M8-6H
20A(C)25X073H	25	36,00	60,00	160	2500	63,9	123,3						
20A(C)28X073H	28	40,32	67,20	130	2500	66,4	128,1						
20A(C)32X073H	32	46,08	61,44	120	2000	69,6	134,4	39,7	19	M8-6H	39,7	19	M8-6H
20A(C)36X073H	36	51,84	69,12	100	2000	72,8	141						



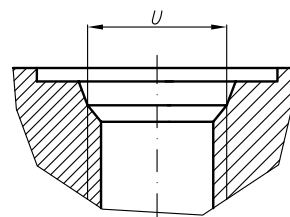
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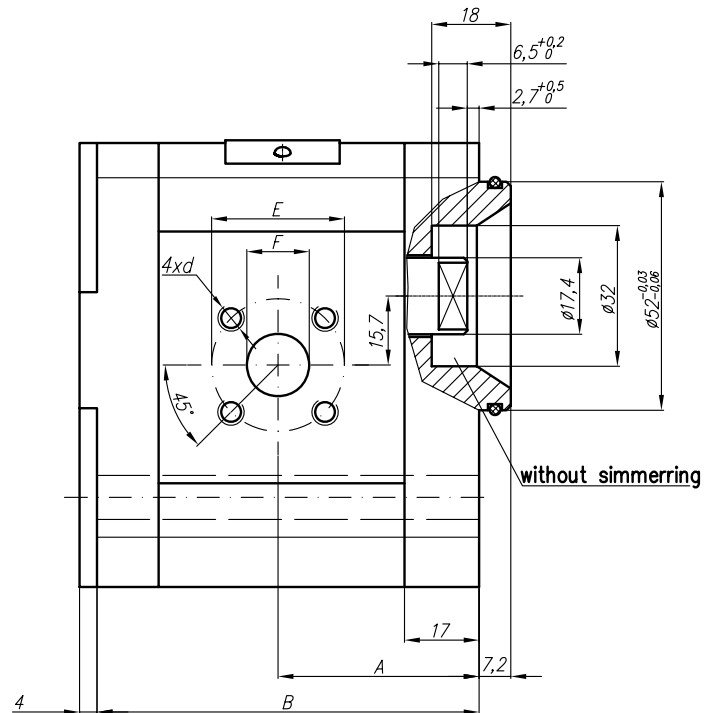
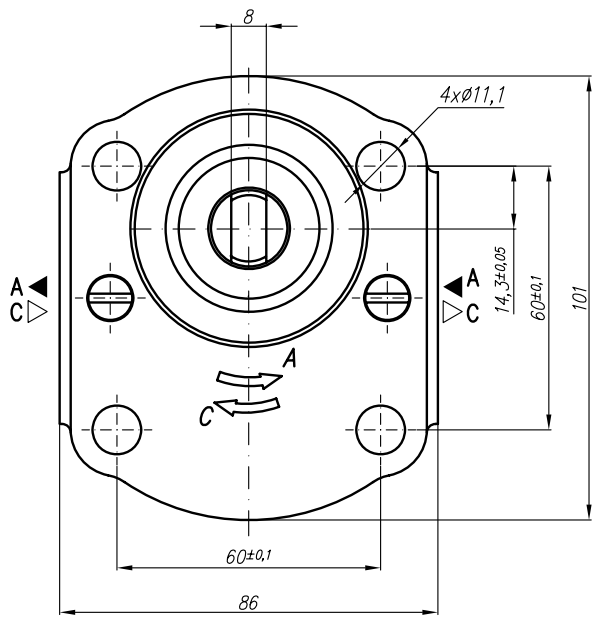
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
20A(C)4,5X074...	4,5	6,14	14,33	250	3500	37,3	75,1	M20x1,5	G1/2	1 1/16"-12UNF	M16x1,5	G1/2	7/8"-14UNF
20A(C)6,3X074...	6,3	8,69	20,29	250	3500	38,6	78						
20A(C)8,2X074...	8,2	11,32	26,40	250	3500	40,6	78						
20A(C)10X074...	10	13,95	32,55	250	3500	45	87						
20A(C)11X074...	11,3	15,76	36,78	250	3500	45	89,1						
20A(C)12X074...	12	16,92	39,48	250	3500	45	90,3						
20A(C)14X074...	14	19,95	46,55	250	3500	45	93,4						
20A(C)15X074...	15	21,60	36,00	250	2500	45	94,9						
20A(C)16X074...	16	23,04	38,40	250	2500	45	96,5						
20A(C)19X074...	19	27,36	45,60	200	2500	45	101,5						
20A(C)22X074...	22	31,68	42,24	180	2000	52,5	106,5						
20A(C)25X074...	25	36,00	48,00	160	2000	57,2	111,4						



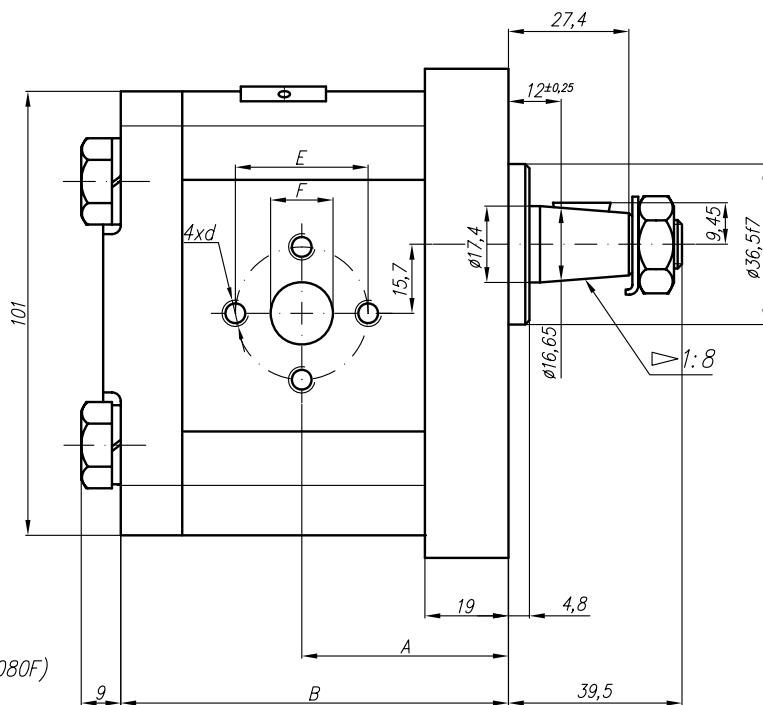
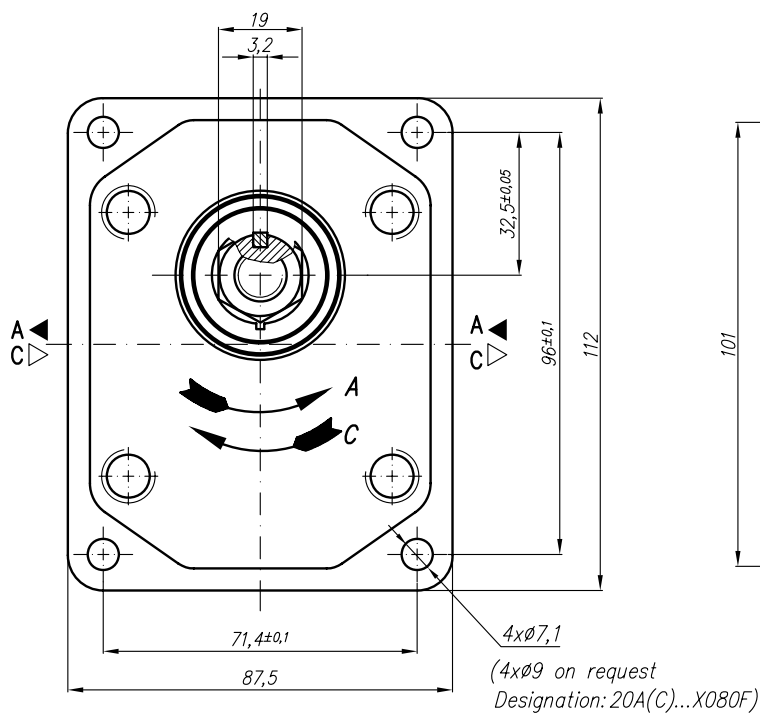
SAE J475 (ISO R725)



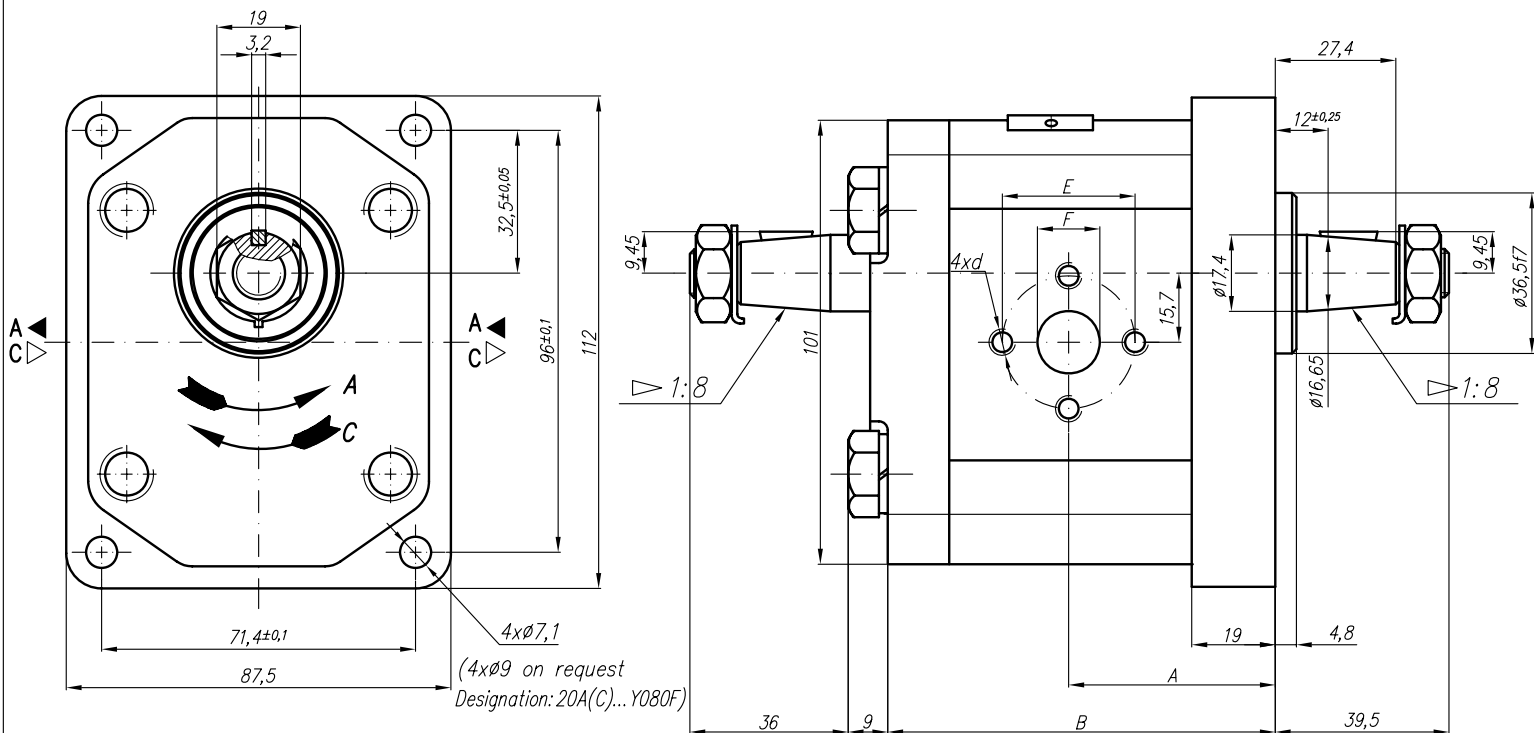
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension												
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet							
								M	G	U	M	G	U					
20A(C)4,5Y075...	4,5	6,14	14,33	250	3500	42	79,6	M20x1,5	G1/2	1 1/16"-12UNF	M16x1,5	G1/2	7/8"-14UNF					
20A(C)6,3Y075...	6,3	8,69	20,29	250	3500	43,6	82,6											
20A(C)8,2Y075...	8,2	11,32	26,40	250	3500	45	85,6											
20A(C)10Y075...	10	13,95	32,55	250	3500	46,6	88,7		G3/4									
20A(C)11Y075...	11,3	15,76	36,78	250	3500	47,6	90,7											
20A(C)12Y075...	12	16,92	39,48	250	3500	48,2	91,9		M20X1,5									
20A(C)14Y075...	14	19,95	46,55	250	3500	49,6	95											
20A(C)15Y075...	15	21,60	36,00	250	2500	50,6	96,5		G1/2									
20A(C)16Y075...	16	23,04	38,40	250	2500	51,6	98,2											
20A(C)19Y075...	19	27,36	45,60	200	2500	53,6	103,1		G1/2									
20A(C)22Y075...	22	31,68	42,24	180	2000	56,6	108,1											
20A(C)25Y075...	25	36,00	48,00	160	2000	58,8	113											



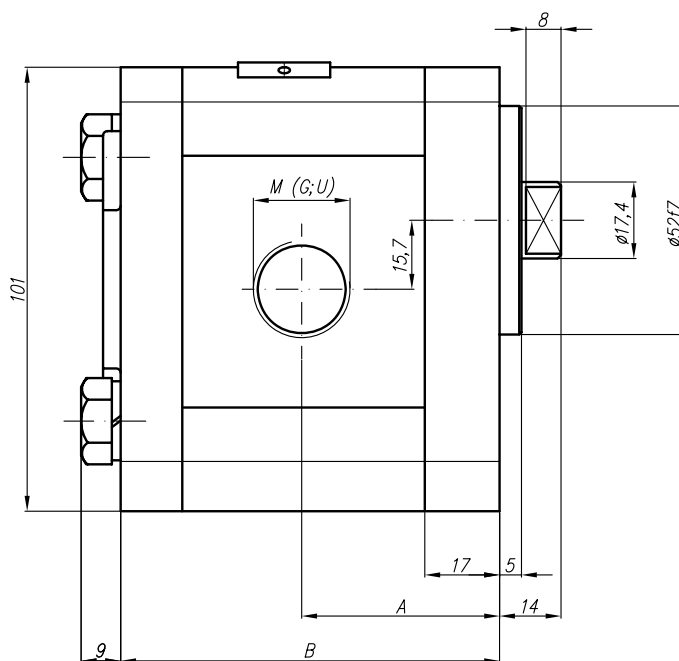
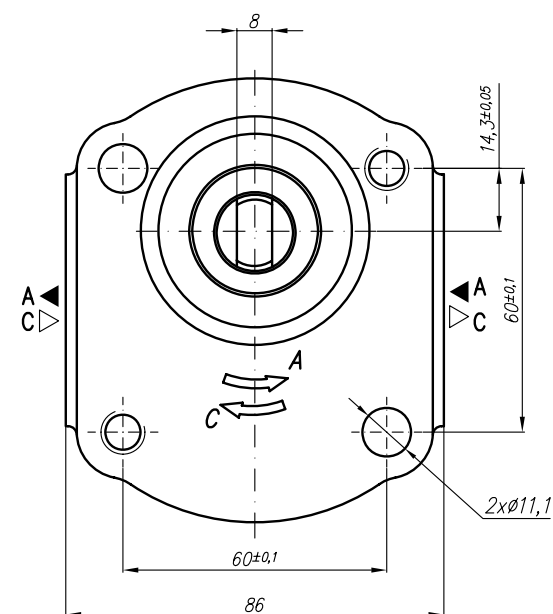
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	E	F	d
20A(C)4,5X077	4,5	6,14	14,33	250	3500	37,3	78	40	15	M6-6H	35	15	M6-6H
20A(C)6,3X077	6,3	8,69	20,29	250	3500	38,6	81						
20A(C)8,2X077	8,2	11,32	26,40	250	3500	40,6	83,9						
20A(C)10X077	10	13,95	32,55	250	3500	45	87						
20A(C)11X077	11,3	15,76	36,78	250	3500	45	89						
20A(C)12X077	12	16,92	39,48	250	3500	45	90,3						
20A(C)14X077	14	19,95	46,55	250	3500	45	93,4						
20A(C)15X077	15	21,60	36,00	250	2500	45	95						
20A(C)16X077	16	23,04	38,40	250	2500	45	96,5						
20A(C)19X077	19	27,36	45,60	200	2500	45	101,5						
20A(C)22X077	22	31,68	42,24	180	2000	52,5	106,5						
20A(C)25X077	25	36,00	48,00	160	2000	57,2	111,4						
20A(C)14X077H	14	20,16	47,04	250	3500	50	103,7						
20A(C)4,5X077H	15	21,60	43,20	250	3000	54	105,2						
20A(C)6,3X077H	16	23,04	46,08	250	3000	54,9	106,8						
20A(C)8,2X077H	17,3	24,91	49,82	230	3000	56	108,9						
20A(C)10X077H	18,2	26,21	52,42	210	3000	56,8	110,5						
20A(C)11X077H	19	27,36	54,72	200	3000	57,4	111,8						
20A(C)12X077H	22	31,68	52,80	180	2500	59,9	116,8						
20A(C)14X077H	25	36,00	60,00	160	2500	62,3	121,7						
20A(C)15X077H	28	40,32	67,20	130	2500	64,8	126,5						
20A(C)16X077H	32	46,08	61,44	120	2000	68	132,8						
20A(C)19X077H	36	51,84	69,12	100	2000	71,2	139,4						



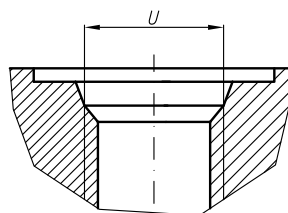
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	E	F	d
20A(C)4,5X080	4,5	6,14	14,33	250	3500	42,5	80	30,2	13,1	1/4-20UNC	30,2	13,1	1/4"-20UNC
20A(C)6,3X080	6,3	8,69	20,29	250	3500	42,5	80						
20A(C)8,2X080	8,2	11,32	26,40	250	3500	42,5	80						
20A(C)10X080	10	13,95	32,55	250	3500	47	89	39,7	19	5/16"-18UNC	30,2	14,2	1/4"-20UNC
20A(C)11X080	11,3	15,76	36,78	250	3500	48	91,1						
20A(C)12X080	12	16,92	39,48	250	3500	48,6	92,3						
20A(C)14X080	14	19,95	46,55	250	3500	50	95,4	39,7	19	5/16"-18UNC	30,2	14,2	1/4"-20UNC
20A(C)15X080	15	21,60	36,00	250	2500	51	96,9						
20A(C)16X080	16	23,04	38,40	250	2500	52	98,6						
20A(C)19X080	19	27,36	45,60	200	2500	54	103,5	39,7	19	5/16"-18UNC	30,2	19	5/16"
20A(C)22X080	22	31,68	42,24	180	2000	57	108,5						
20A(C)25X080	25	36,00	48,00	160	2000	59,2	113,4						
20A(C)14X080H	14	20,16	47,04	250	3500	55,3	105,7	39,7	19	5/16"-18UNC	30,2	14,2	1/4"-20UNC
20A(C)15X080H	15	21,60	43,20	250	3000	56	107,2						
20A(C)16X080H	16	23,04	46,08	250	3000	56,9	108,8						
20A(C)17,3X080H	17,3	24,91	49,82	230	3000	58	110,9	39,7	19	5/16"-18UNC	30,2	14,2	1/4"-20UNC
20A(C)18,2X080H	18,2	26,21	52,42	210	3000	58,8	112,5						
20A(C)19X080H	19	27,36	54,72	200	3000	59,4	113,8						
20A(C)22X080H	22	31,68	52,80	180	2500	61,9	118,8	39,7	19	5/16"-18UNC	30,2	19	5/16"-18UNC
20A(C)25X080H	25	36,00	60,00	160	2500	64,3	123,7						
20A(C)28X080H	28	40,32	67,20	130	2500	66,8	128,5						
20A(C)32X080H	32	46,08	61,44	120	2000	70	134,8	39,7	19	5/16"-18UNC	30,2	19	5/16"-18UNC
20A(C)36X080H	36	51,84	69,12	100	2000	73,2	141,4						



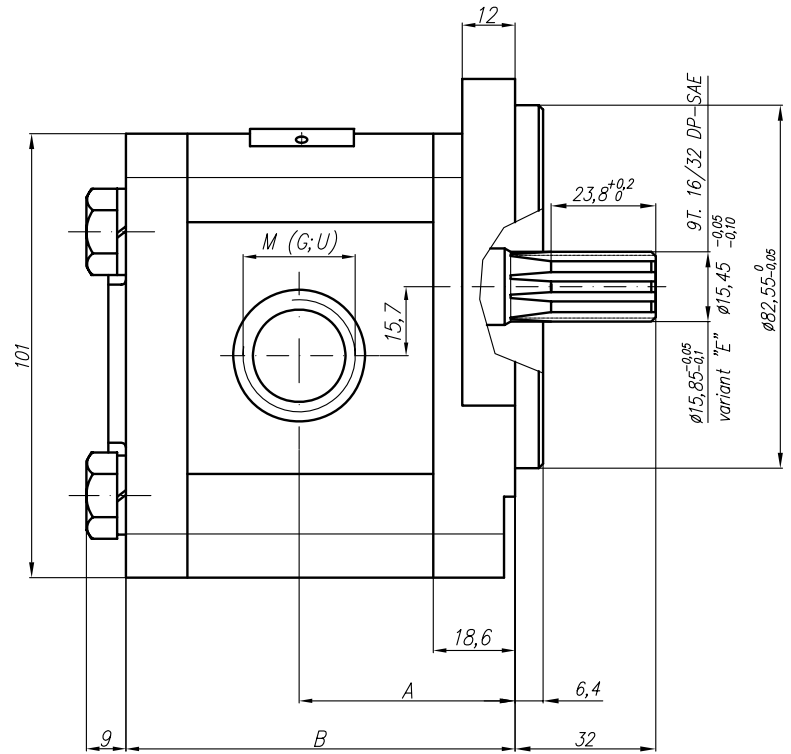
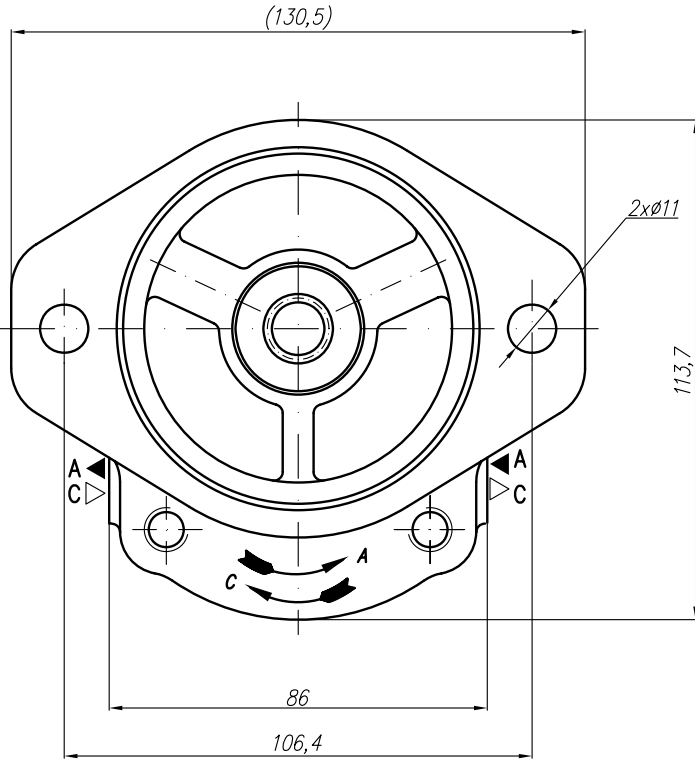
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	E	F	d
20A(C)4,5Y080	4,5	6,14	14,33	250	3500	42,5	80	30,2	13,1	1/4-20UNC	30,2	13,1	1/4"-20UNC
20A(C)6,3Y080	6,3	8,69	20,29	250	3500	42,5	80						
20A(C)8,2Y080	8,2	11,32	26,40	250	3500	42,5	80						
20A(C)10Y080	10	13,95	32,55	250	3500	47	89	39,7	19	5/16"-18UNC	30,2	14,2	1/4"-20UNC
20A(C)11Y080	11,3	15,76	36,78	250	3500	48	91,1						
20A(C)12Y080	12	16,92	39,48	250	3500	48,6	92,3						
20A(C)14Y080	14	19,95	46,55	250	3500	50	95,4	39,7	19	5/16"-18UNC	30,2	14,2	1/4"-20UNC
20A(C)15Y080	15	21,60	36,00	250	2500	51	96,9						
20A(C)16Y080	16	23,04	38,40	250	2500	52	98,6						
20A(C)19Y080	19	27,36	45,60	200	2500	54	103,5	39,7	19	5/16"-18UNC	30,2	14,2	1/4"-20UNC
20A(C)22Y080	22	31,68	42,24	180	2000	57	108,5						
20A(C)25Y080	25	36,00	48,00	160	2000	59,2	113,4						



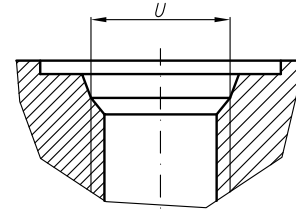
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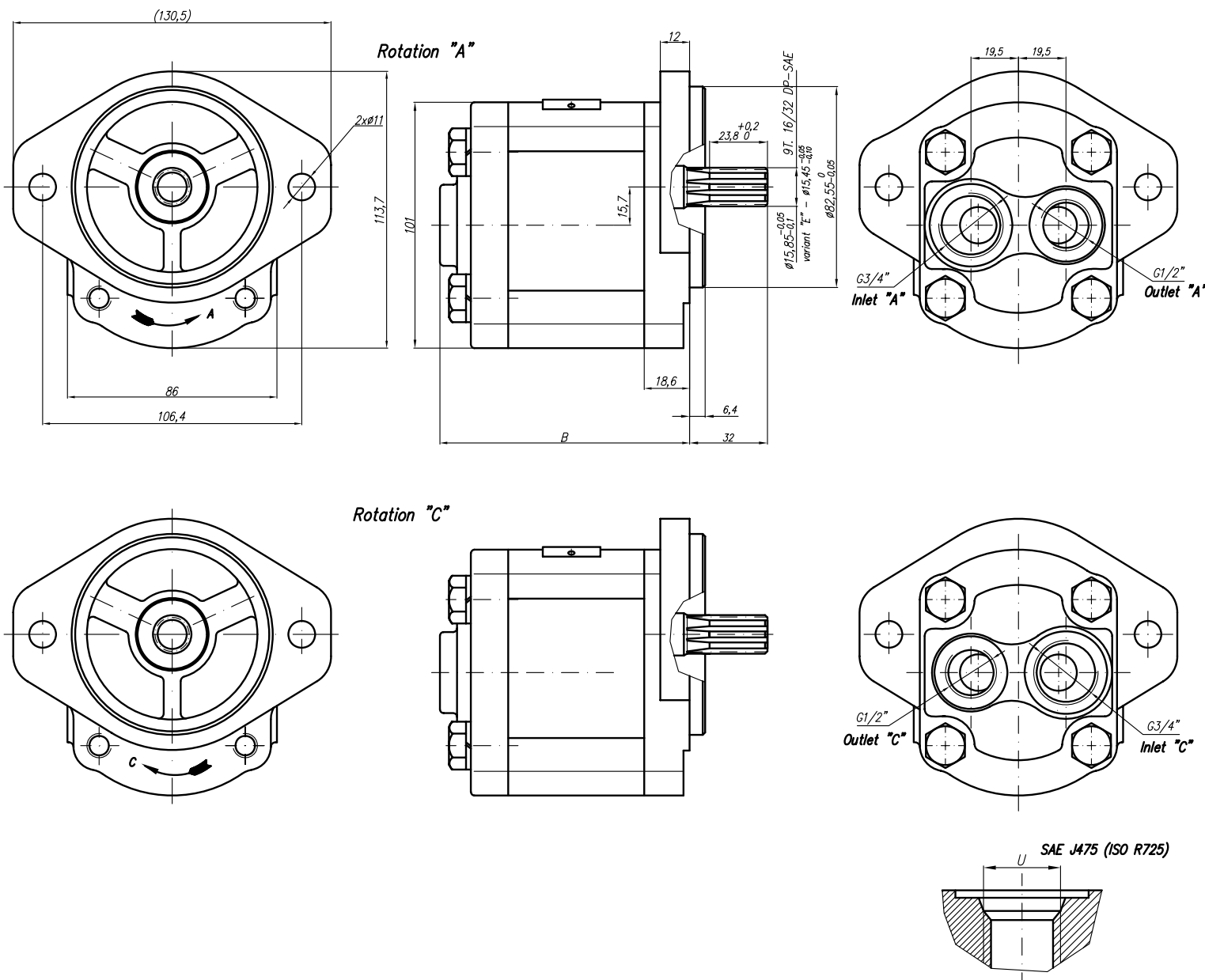
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	M	G	U	M	G	U
20A(C)4,5X083...	4,5	6,14	14,33	250	3500	37,3	75,1	M20x1,5	G1/2	1 1/16"-12UNF	M16x1,5	G1/2	7/8"-14UNF
20A(C)6,3X083...	6,3	8,69	20,29	250	3500	38,6	78						
20A(C)8,2X083...	8,2	11,32	26,40	250	3500	40,6	78						
20A(C)10X083...	10	13,95	32,55	250	3500	45	87						
20A(C)11X083...	11,3	15,76	36,78	250	3500	45	89,1						
20A(C)12X083...	12	16,92	39,48	250	3500	45	90,3						
20A(C)14X083...	14	19,95	46,55	250	3500	45	93,4						
20A(C)15X083...	15	21,60	36,00	250	2500	45	94,9						
20A(C)16X083...	16	23,04	38,40	250	2500	45	96,5						
20A(C)19X083...	19	27,36	45,60	200	2500	45	101,5						
20A(C)22X083...	22	31,68	42,24	180	2000	52,5	106,5						
20A(C)25X083...	25	36,00	48,00	160	2000	57,2	111,4						



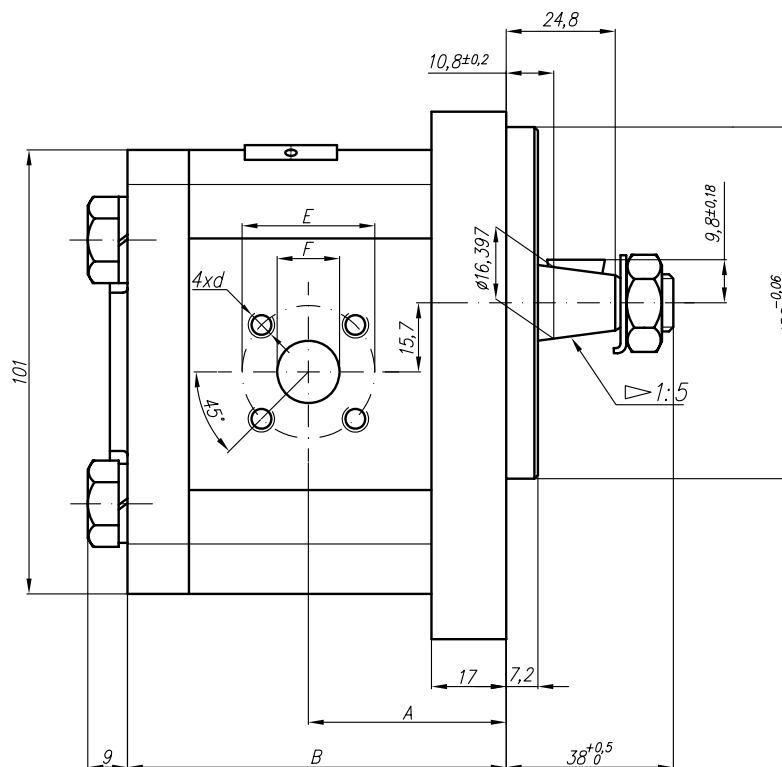
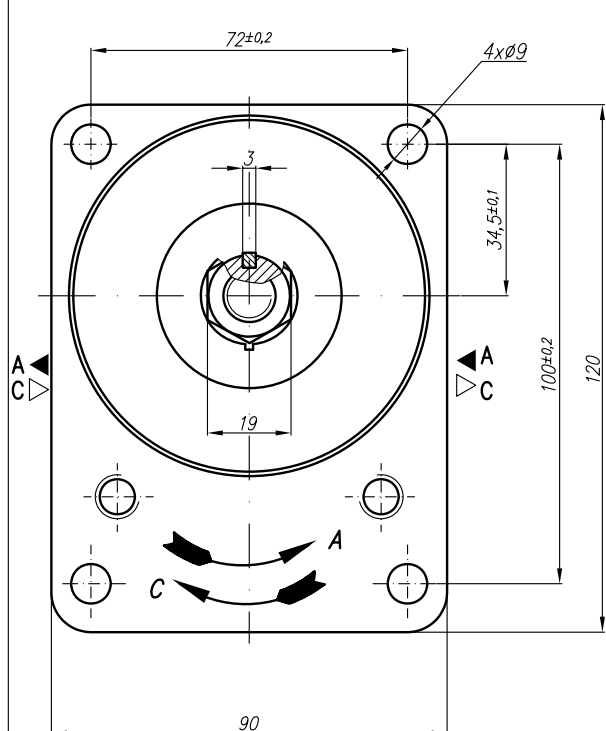
SAE J475 (ISO R725)



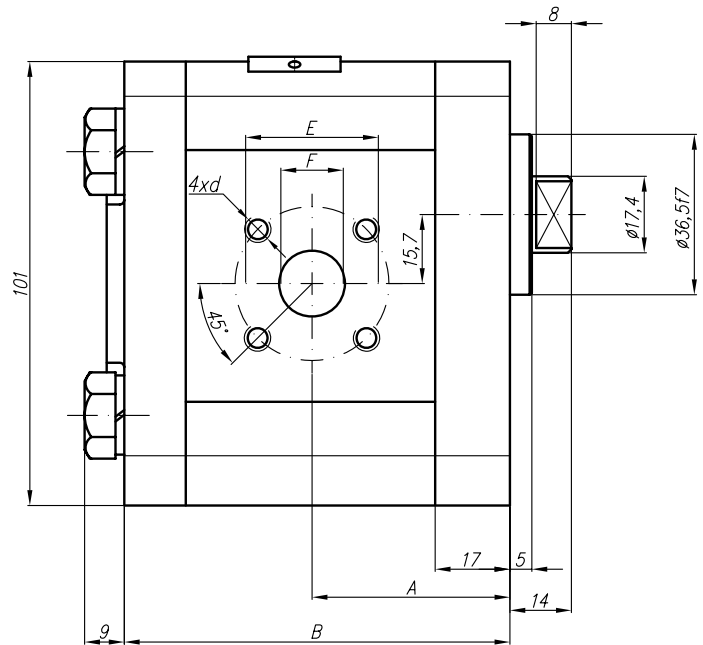
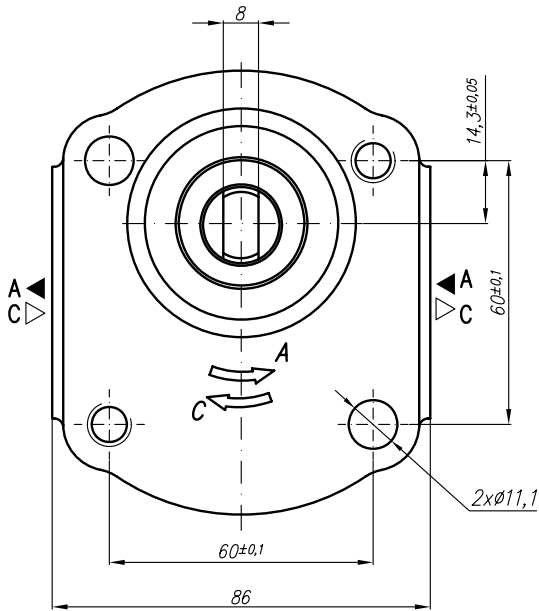
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension													
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet										
						A mm	B mm	M	G	U	M	G	U						
20A(C)4,5X085...	4,5	6,14	14,33	250	3500	42	79,6	M20x1,5	G1/2	1 1/16"-12UNF	M16x1,5	G1/2	7/8"-14UNF						
20A(C)6,3X085...	6,3	8,69	20,29	250	3500	43,6	82,6												
20A(C)8,2X085...	8,2	11,32	26,40	250	3500	45	85,6												
20A(C)10X085...	10	13,95	32,55	250	3500	46,6	88,7												
20A(C)11X085...	11,3	15,76	36,78	250	3500	47,6	90,7												
20A(C)12X085...	12	16,92	39,48	250	3500	48,2	91,9												
20A(C)14X085...	14	19,95	46,55	250	3500	49,6	95												
20A(C)15X085...	15	21,60	36,00	250	2500	50,6	96,5												
20A(C)16X085...	16	23,04	38,40	250	2500	51,6	98,2												
20A(C)19X085...	19	27,36	45,60	200	2500	53,6	103,1												
20A(C)22X085...	22	31,68	42,24	180	2000	56,6	108,1	M20x1,5	G3/4	1 1/16"-12	M16x1,5	G1/2	7/8"-12						
20A(C)25X085...	25	36,00	48,00	160	2000	58,8	113												
20A(C)14X085H...	14	20,16	47,04	250	3500	54,8	105,7	M20x1,5	G3/4	1 1/16"-12UNF	M16x1,5	G1/2	7/8"-14UNF						
20A(C)15X085H...	15	21,60	43,20	250	3000	55,6	106,8												
20A(C)16X085H...	16	23,04	46,08	250	3000	56,5	108,4												
20A(C)17,3X085H...	17,3	24,91	49,82	230	3000	57,6	110,5												
20A(C)18,2X085H...	18,2	26,21	52,42	210	3000	58,4	112,1												
20A(C)19X085H...	19	27,36	54,72	200	3000	59	113,4												
20A(C)22X085H...	22	31,68	52,80	180	2500	61,5	118,4												
20A(C)25X085H...	25	36,00	60,00	160	2500	63,9	123,3												
20A(C)28X085H...	28	40,32	67,20	130	2500	66,4	128,1							M27x2	G1	1 5/16"-12	M20x1,5	G3/4	1 1/16"-12
20A(C)32X085H...	32	46,08	61,44	120	2000	69,6	134,4												
20A(C)36X085H...	36	51,84	69,12	100	2000	72,8	141												



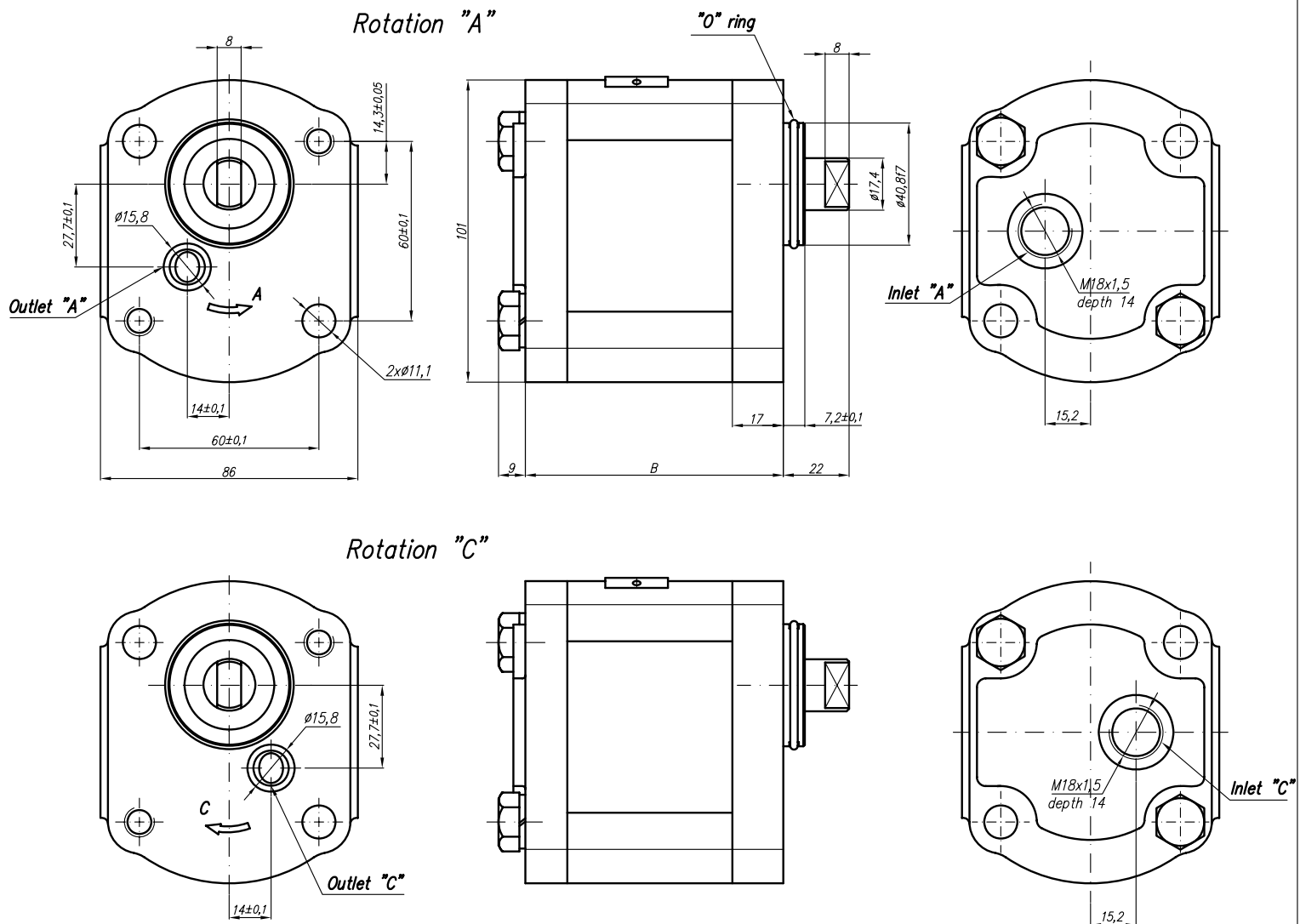
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	M	G	U	M	G	U
20A(C)4,5X085W	4,5	6,14	14,33	250	3500		93,6						
20A(C)6,3X085W	6,3	8,69	20,29	250	3500		96,6						
20A(C)8,2X085W	8,2	11,32	26,40	250	3500		99,5						
20A(C)10X085W	10	13,95	32,55	250	3500		102,5						
20A(C)11X085W	11,3	15,76	36,78	250	3500		104,6						
20A(C)12X085W	12	16,92	39,48	250	3500		105,9						
20A(C)14X085W	14	19,95	46,55	250	3500		108,9						
20A(C)15X085W	15	21,60	36,00	250	2500		110,5						
20A(C)16X085W	16	23,04	38,40	250	2500		112,1						
20A(C)19X085W	19	27,36	45,60	200	2500		117,1						
20A(C)22X085W	22	31,68	42,24	180	2000		122,1						
20A(C)25X085W	25	36,00	48,00	160	2000		127						



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	E	F	d
20A(C)4,5X086	4,5	6,14	14,33	250	3500	39,8	78	40	15	M6-6H	35	15	M6-6H
20A(C)6,3X086	6,3	8,69	20,29	250	3500	41	81						
20A(C)8,2X086	8,2	11,32	26,40	250	3500	43,1	83,9						
20A(C)10X086	10	13,95	32,55	250	3500	47,5	87						
20A(C)11X086	11,3	15,76	36,78	250	3500	47,5	89						
20A(C)12X086	12	16,92	39,48	250	3500	47,5	90,3						
20A(C)14X086	14	19,95	46,55	250	3500	47,5	93,4						
20A(C)15X086	15	21,60	36,00	250	2500	47,5	95						
20A(C)16X086	16	23,04	38,40	250	2500	47,5	96,5						
20A(C)19X086	19	27,36	45,60	200	2500	47,5	101,5						
20A(C)22X086	22	31,68	42,24	180	2000	55	106,5						
20A(C)25X086	25	36,00	48,00	160	2000	57,2	111,4						
20A(C)14X086H	14	20,16	47,04	250	3500	47,5	103,7	40	20	M6-6H	35	15	M6-6H
20A(C)15X086H	15	21,60	43,20	250	3000	47,5	105,2						
20A(C)16X086H	16	23,04	46,08	250	3000	47,5	106,8						
20A(C)17,3X086H	17,3	24,91	49,82	230	3000	47,5	108,9						
20A(C)18,2X086H	18,2	26,21	52,42	210	3000	47,5	110,5						
20A(C)19X086H	19	27,36	54,72	200	3000	47,5	111,8						
20A(C)22X086H	22	31,68	52,80	180	2500	55	116,8						
20A(C)25X086H	25	36,00	60,00	160	2500	57,2	121,7						
20A(C)28X086H	28	40,32	67,20	130	2500	64,8	126,5						
20A(C)32X086H	32	46,08	61,44	120	2000	68	132,8						
20A(C)36X086H	36	51,84	69,12	100	2000	71,2	139,4						

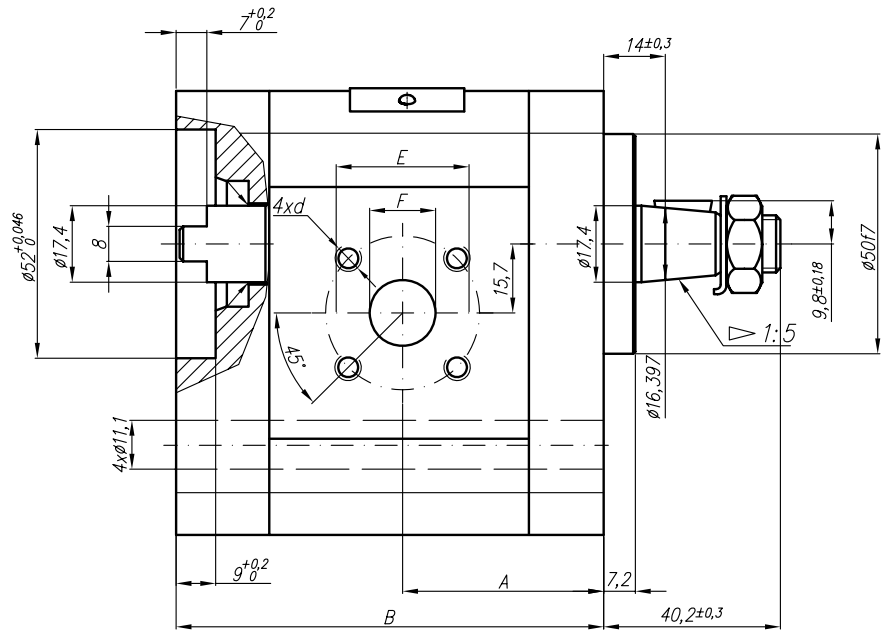
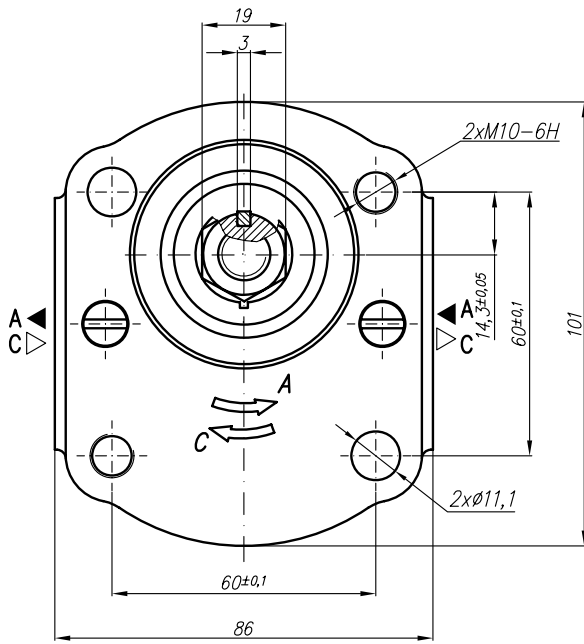


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet			
						E	F	d	E	F	d			
20A(C)4,5X087	4,5	6,14	14,33	250	3500	37,3	75,1	40	15	M6-6H	35	15	M6-6H	
20A(C)6,3X087	6,3	8,69	20,29	250	3500	38,6	78							
20A(C)8,2X087	8,2	11,32	26,40	250	3500	40,6	78							
20A(C)10X087	10	13,95	32,55	250	3500	45	87							
20A(C)11X087	11,3	15,76	36,78	250	3500	45	89,1							
20A(C)12X087	12	16,92	39,48	250	3500	45	90,3							
20A(C)14X087	14	19,95	46,55	250	3500	45	93,4							
20A(C)15X087	15	21,60	36,00	250	2500	45	94,9							
20A(C)16X087	16	23,04	38,40	250	2500	45	96,5							
20A(C)19X087	19	27,36	45,60	200	2500	45	101,5							
20A(C)22X087	22	31,68	42,24	180	2000	52,5	106,5							
20A(C)25X087	25	36,00	48,00	160	2000	57,2	111,4							

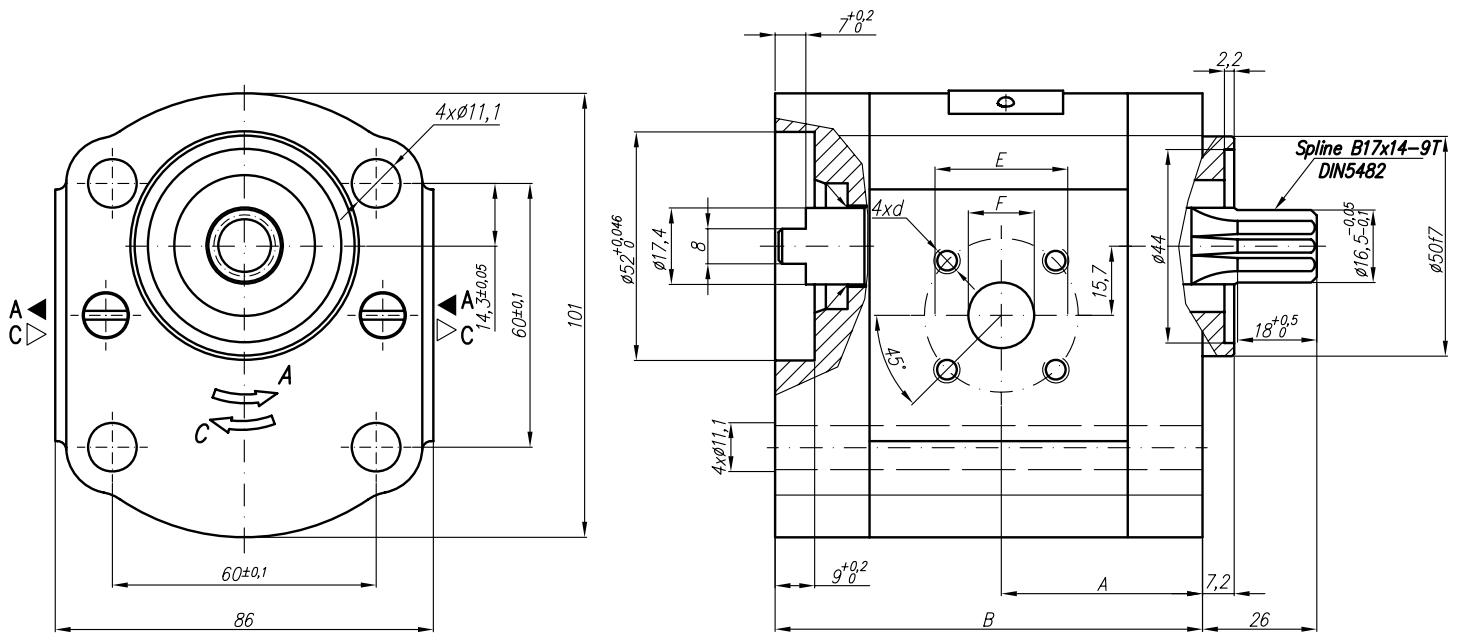


* It's required inlet overpressure 0,2...0,3 bar.

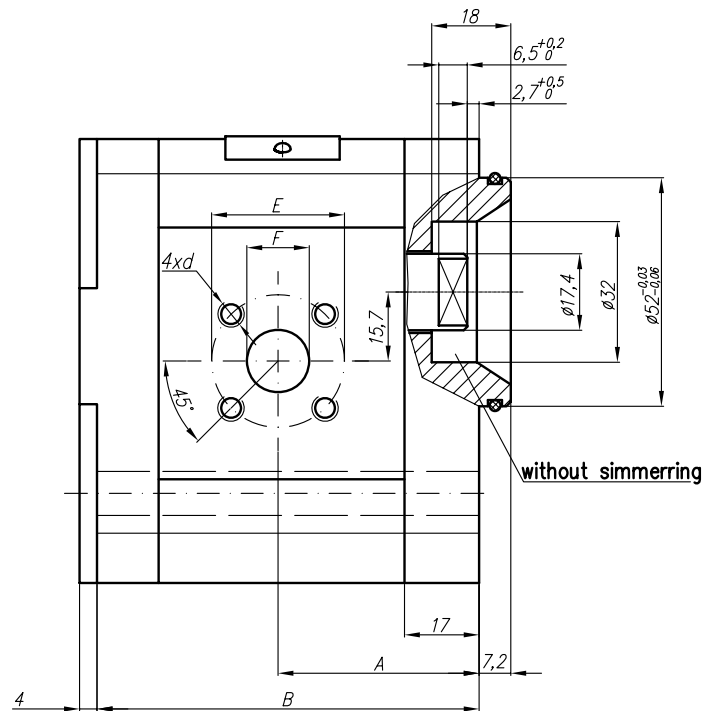
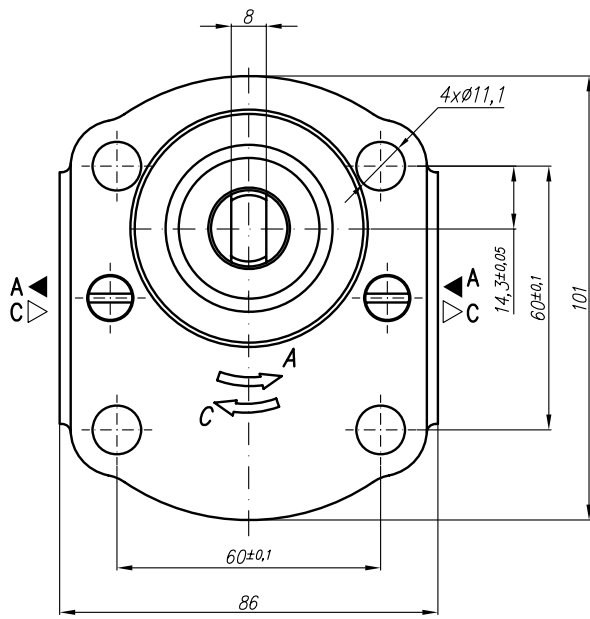
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n* rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U			
20A(C)4,5X091	4,5	6,14	14,33	250	3500		75,1	M18x1,5					
20A(C)6,3X091	6,3	8,69	20,29	250	3500		78						
20A(C)8,2X091	8,2	11,32	26,40	250	3500		78						
20A(C)10X091	10	13,95	32,55	250	3500		87						
20A(C)11X091	11,3	15,76	36,78	250	3500		89,1						
20A(C)12X091	12	16,92	39,48	250	3500		90,3						
20A(C)14X091	14	19,95	46,55	250	3500		93,4						
20A(C)15X091	15	21,60	36,00	250	2500		94,9						
20A(C)16X091	16	23,04	38,40	250	2500		96,5						
20A(C)19X091	19	27,36	45,60	200	2500		101,5						
20A(C)22X091	22	31,68	42,24	180	2000		106,5						
20A(C)25X091	25	36,00	48,00	160	2000		111,4						



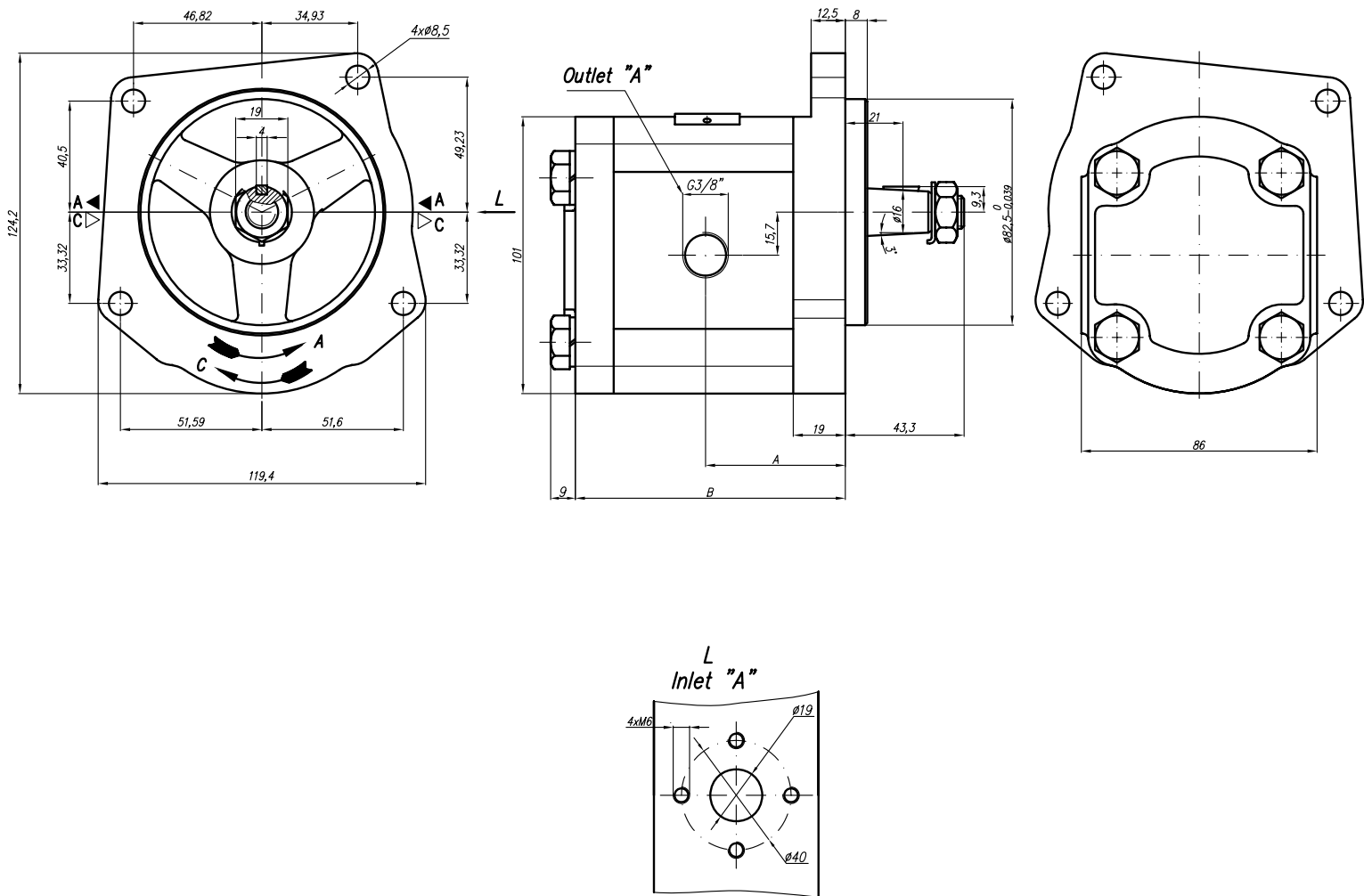
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	E	F	d
20A(C)4,5X095	4,5	6,14	14,33	250	3500	40,5	85,2	40	15	M6-6H	35	15	M6-6H
20A(C)6,3X095	6,3	8,69	20,29	250	3500	42	88,2						
20A(C)8,2X095	8,2	11,32	26,40	250	3500	43,5	91,1						
20A(C)10X095	10	13,95	32,55	250	3500	45	94,1						
20A(C)11X095	11,3	15,76	36,78	250	3500	46	96,2						
20A(C)12X095	12	16,92	39,48	250	3500	46,5	97,5						
20A(C)14X095	14	19,95	46,55	250	3500	48	100,6						
20A(C)15X095	15	21,60	36,00	250	2500	49	102,1						
20A(C)16X095	16	23,04	38,40	250	2500	50	103,8						
20A(C)19X095	19	27,36	45,60	200	2500	52	108,7						
20A(C)22X095	22	31,68	42,24	180	2000	55	113,7						
20A(C)25X095	25	36,00	48,00	160	2000	57,2	118,5						
20A(C)14X095H	14	20,16	47,04	250	3500	53,3	110,9		40				
20A(C)15X095H	15	21,60	43,20	250	3000	54	112,4						
20A(C)16X095H	16	23,04	46,08	250	3000	54,9	114						
20A(C)17,3X095H	17,3	24,91	49,82	230	3000	56	116,1						
20A(C)18,2X095H	18,2	26,21	52,42	210	3000	56,8	117,7						
20A(C)19X095H	19	27,36	54,72	200	3000	57,4	119						
20A(C)22X095H	22	31,68	52,80	180	2500	59,9	124						
20A(C)25X095H	25	36,00	60,00	160	2500	62,3	128,9						
20A(C)28X095H	28	40,32	67,20	130	2500	64,8	133,7						
20A(C)32X095H	32	46,08	61,44	120	2000	68	140						
20A(C)36X095H	36	51,84	69,12	100	2000	71,2	146,6						



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	E	F	d
20A(C)4,5X096	4,5	6,14	14,33	250	3500	40,5	85,2	40	15	M6-6H	35	15	M6-6H
20A(C)6,3X096	6,3	8,69	20,29	250	3500	42	88,2						
20A(C)8,2X096	8,2	11,32	26,40	250	3500	43,5	91,1						
20A(C)10X096	10	13,95	32,55	250	3500	45	94,1						
20A(C)11X096	11,3	15,76	36,78	250	3500	46	96,2						
20A(C)12X096	12	16,92	39,48	250	3500	46,5	97,5						
20A(C)14X096	14	19,95	46,55	250	3500	48	100,6						
20A(C)15X096	15	21,60	36,00	250	2500	49	102,1						
20A(C)16X096	16	23,04	38,40	250	2500	50	103,8						
20A(C)19X096	19	27,36	45,60	200	2500	52	108,7						
20A(C)22X096	22	31,68	42,24	180	2000	55	113,7						
20A(C)25X096	25	36,00	48,00	160	2000	57,2	118,5						
20A(C)14X096H	14	20,16	47,04	250	3500	53,1	110,9		40				
20A(C)15X096H	15	21,60	43,20	250	3000	54	112,4						
20A(C)16X096H	16	23,04	46,08	250	3000	54,9	114						
20A(C)17,3X096H	17,3	24,91	49,82	230	3000	56	116,1						
20A(C)18,2X096H	18,2	26,21	52,42	210	3000	56,8	117,7						
20A(C)19X096H	19	27,36	54,72	200	3000	57,4	119						
20A(C)22X096H	22	31,68	52,80	180	2500	59,9	124						
20A(C)25X096H	25	36,00	60,00	160	2500	62,3	128,9						
20A(C)28X096H	28	40,32	67,20	130	2500	64,8	133,7						
20A(C)32X096H	32	46,08	61,44	120	2000	68	140						
20A(C)36X096H	36	51,84	69,12	100	2000	71,2	146,6						

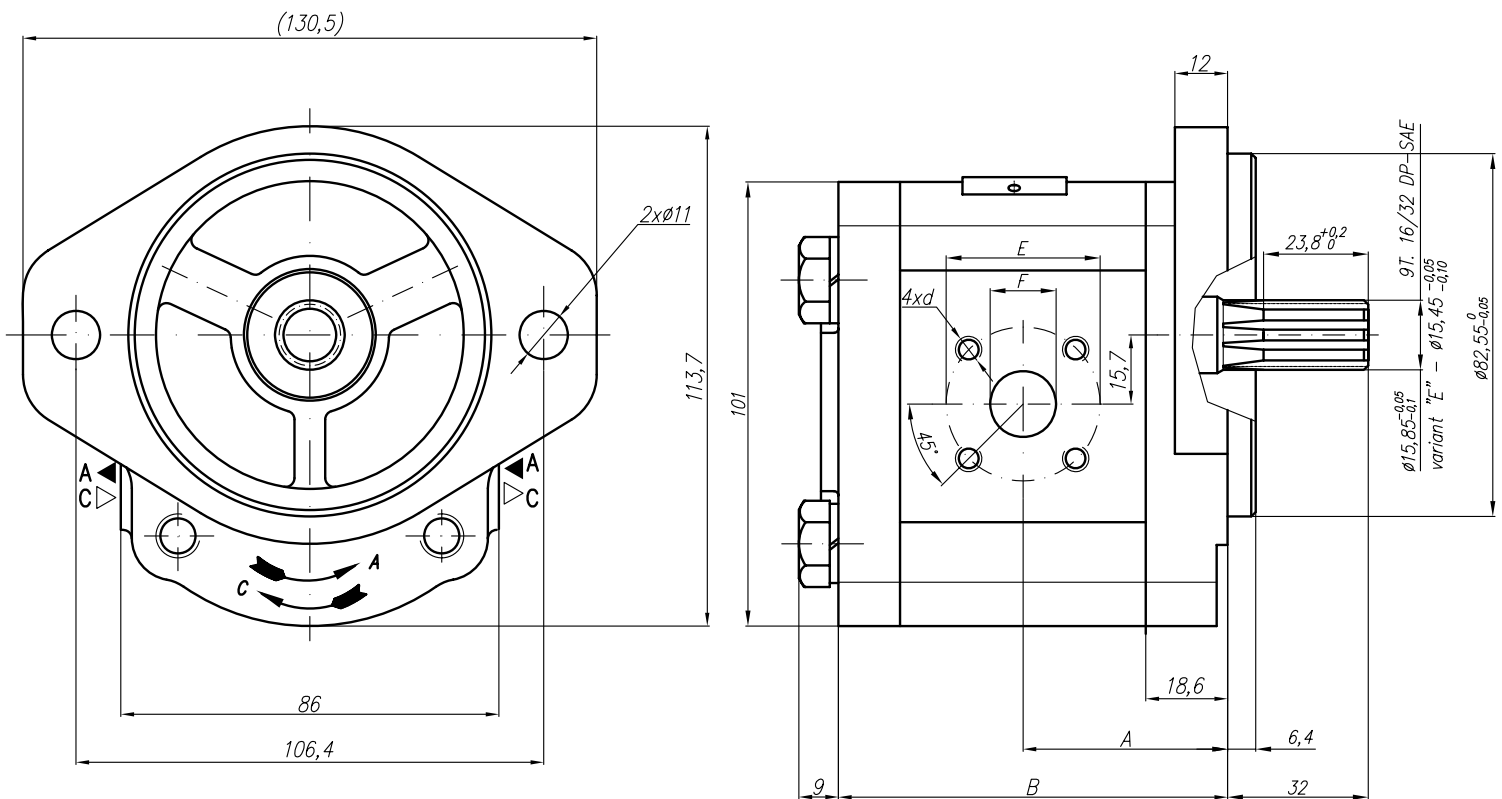


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension									
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet				
								E	F	d	E	F	d		
20A(C)4,5X097	4,5	6,14	14,33	250	3500	40,5	78	40	15	M6-6H	35	15	M6-6H		
20A(C)6,3X097	6,3	8,69	20,29	250	3500	42	81								
20A(C)8,2X097	8,2	11,32	26,40	250	3500	43,5	83,9								
20A(C)10X097	10	13,95	32,55	250	3500	45	87		20						
20A(C)11X097	11,3	15,76	36,78	250	3500	46	89								
20A(C)12X097	12	16,92	39,48	250	3500	46,5	90,3		M6-6H						
20A(C)14X097	14	19,95	46,55	250	3500	48	93,4								
20A(C)15X097	15	21,60	36,00	250	2500	49	95								
20A(C)16X097	16	23,04	38,40	250	2500	50	96,5								
20A(C)19X097	19	27,36	45,60	200	2500	52	101,5								
20A(C)22X097	22	31,68	42,24	180	2000	55	106,5								
20A(C)25X097	25	36,00	48,00	160	2000	57,2	111,4								
20A(C)14X097H	14	20,16	47,04	250	3500	53	110,9							40	20
20A(C)15X097H	15	21,60	43,20	250	3000	54	105,2								
20A(C)16X097H	16	23,04	46,08	250	3000	54,9	106,8								
20A(C)17,3X097H	17,3	24,91	49,82	230	3000	56	108,9								
20A(C)18,2X097H	18,2	26,21	52,42	210	3000	56,8	110,5								
20A(C)19X097H	19	27,36	54,72	200	3000	57,4	111,8								
20A(C)22X097H	22	31,68	52,80	180	2500	59,9	116,8								
20A(C)25X097H	25	36,00	60,00	160	2500	62,3	121,7								
20A(C)28X097H	28	40,32	67,20	130	2500	64,8	126,5								
20A(C)32X097H	32	46,08	61,44	120	2000	68	132,8								
20A(C)36X097H	36	51,84	69,12	100	2000	71,2	139,4	40	20						

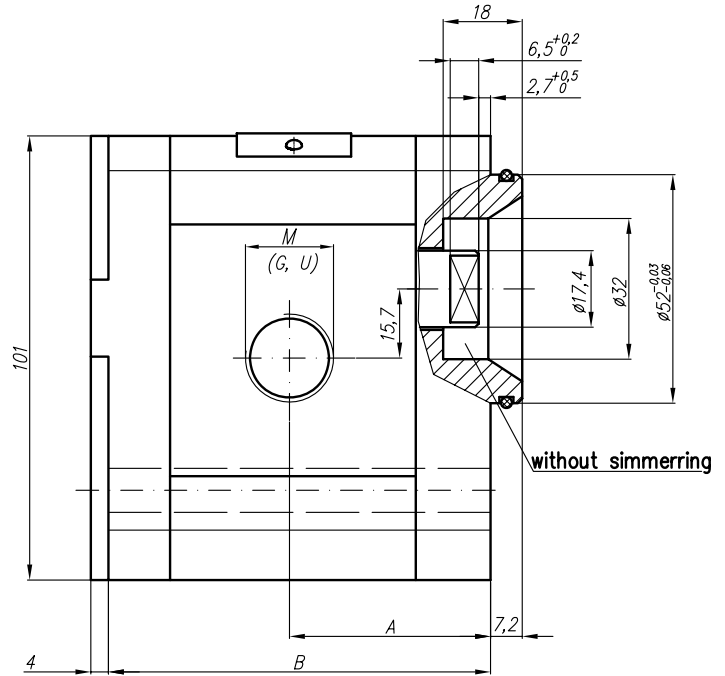
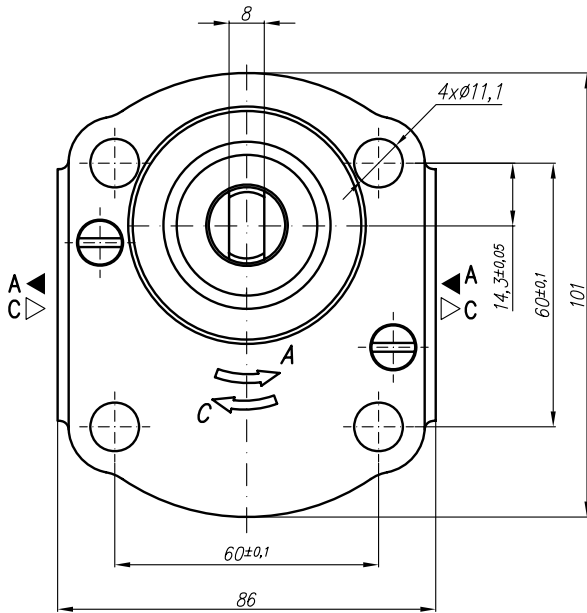


* These pressures recommended for direct drives with gear.

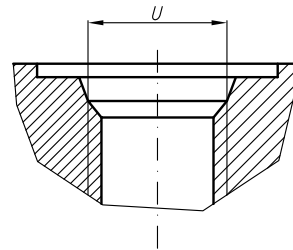
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	M	G	U
20A(C)15X102	15	21,60	36,00	250(175*)	2500	51	96,9	40	19	M6-6H		G3/8	
20A(C)16X102	16	23,04	38,40	250(175*)	2500	51	98,5						
20A(C)25X102	25	36,00	48,00	160(100*)	2000	59,2	113,4						



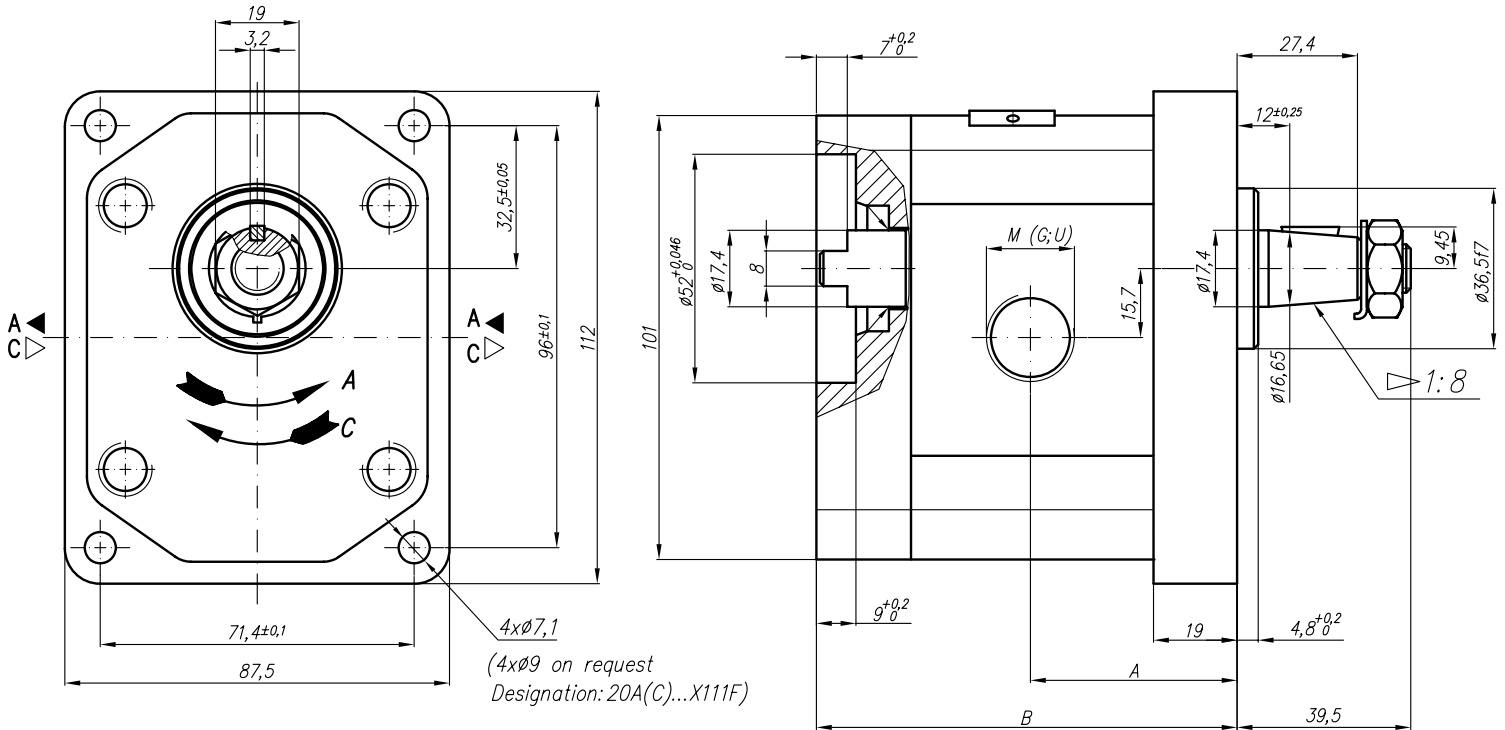
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	E	F	d
20A(C)4,5X104	4,5	6,14	14,33	250	3500	42	79,6	40	15	M6-6H	35	15	M6-6H
20A(C)6,3X104	6,3	8,69	20,29	250	3500	43,6	82,6						
20A(C)8,2X104	8,2	11,32	26,40	250	3500	45	85,6						
20A(C)10X104	10	13,95	32,55	250	3500	46,6	88,7						
20A(C)11X104	11,3	15,76	36,78	250	3500	47,6	90,7						
20A(C)12X104	12	16,92	39,48	250	3500	48,2	91,9						
20A(C)14X104	14	19,95	46,55	250	3500	49,6	95						
20A(C)15X104	15	21,60	36,00	250	2500	50,6	96,5						
20A(C)16X104	16	23,04	38,40	250	2500	51,6	98,2						
20A(C)19X104	19	27,36	45,60	200	2500	53,6	103,1						
20A(C)22X104	22	31,68	42,24	180	2000	56,6	108,1						
20A(C)25X104	25	36,00	48,00	160	2000	58,8	113						



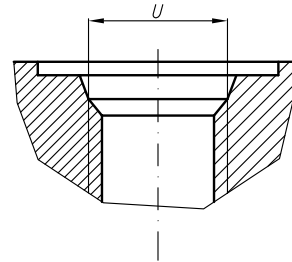
SAE J475 (ISO R725)



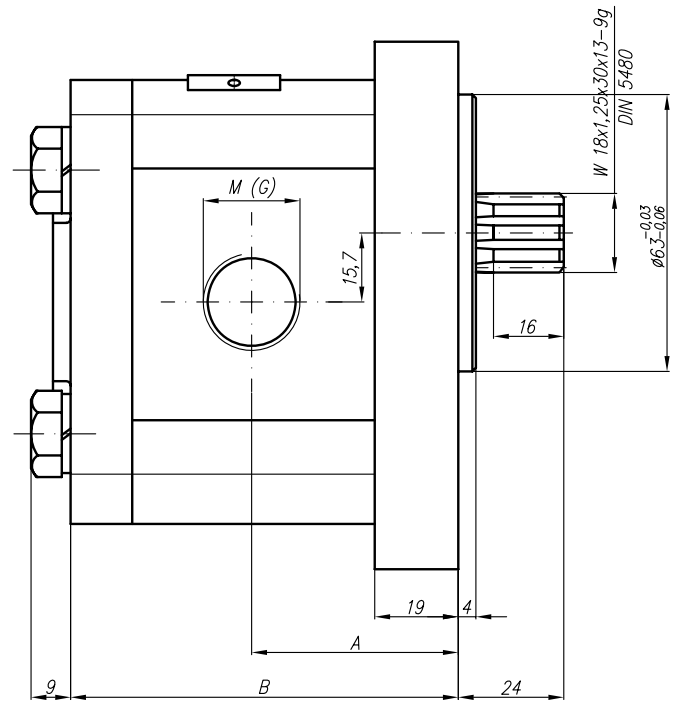
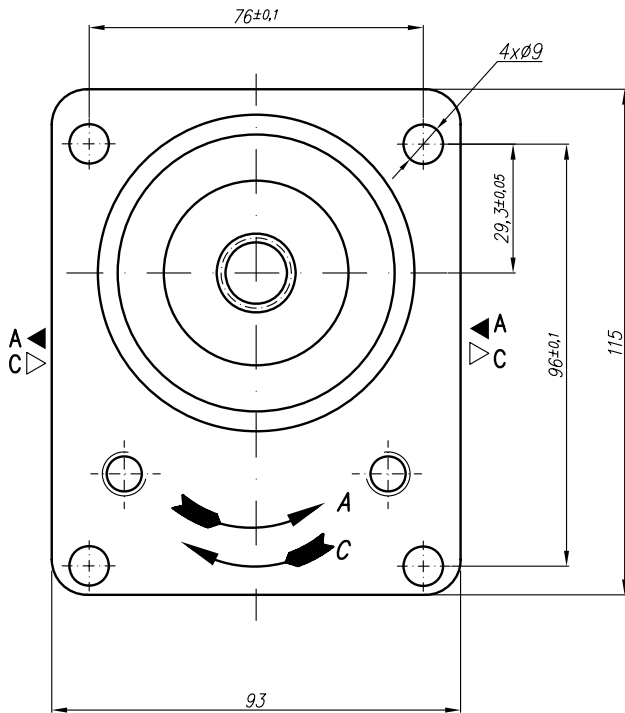
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension											
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet						
								M	G	U	M	G	U				
20A(C)4,5X110...	4,5	6,14	14,33	250	3500	40,5	78	M20x1,5	G1/2	1 1/16"-12UNF	M16x1,5	G1/2	7/8"-14UNF				
20A(C)6,3X110...	6,3	8,69	20,29	250	3500	42	81										
20A(C)8,2X110...	8,2	11,32	26,40	250	3500	43,5	83,9										
20A(C)10X110...	10	13,95	32,55	250	3500	45	87		G3/4								
20A(C)11X110...	11,3	15,76	36,78	250	3500	46	89										
20A(C)12X110...	12	16,92	39,48	250	3500	46,5	90,3		G1/2								
20A(C)14X110...	14	19,95	46,55	250	3500	48	93,4										
20A(C)15X110...	15	21,60	36,00	250	2500	49	95		M20x1,5								
20A(C)16X110...	16	23,04	38,40	250	2500	50	96,5										
20A(C)19X110...	19	27,36	45,60	200	2500	52	101,5		G1/2								
20A(C)22X110...	22	31,68	42,24	180	2000	55	106,5										
20A(C)25X110...	25	36,00	48,00	160	2000	57,2	111,4										



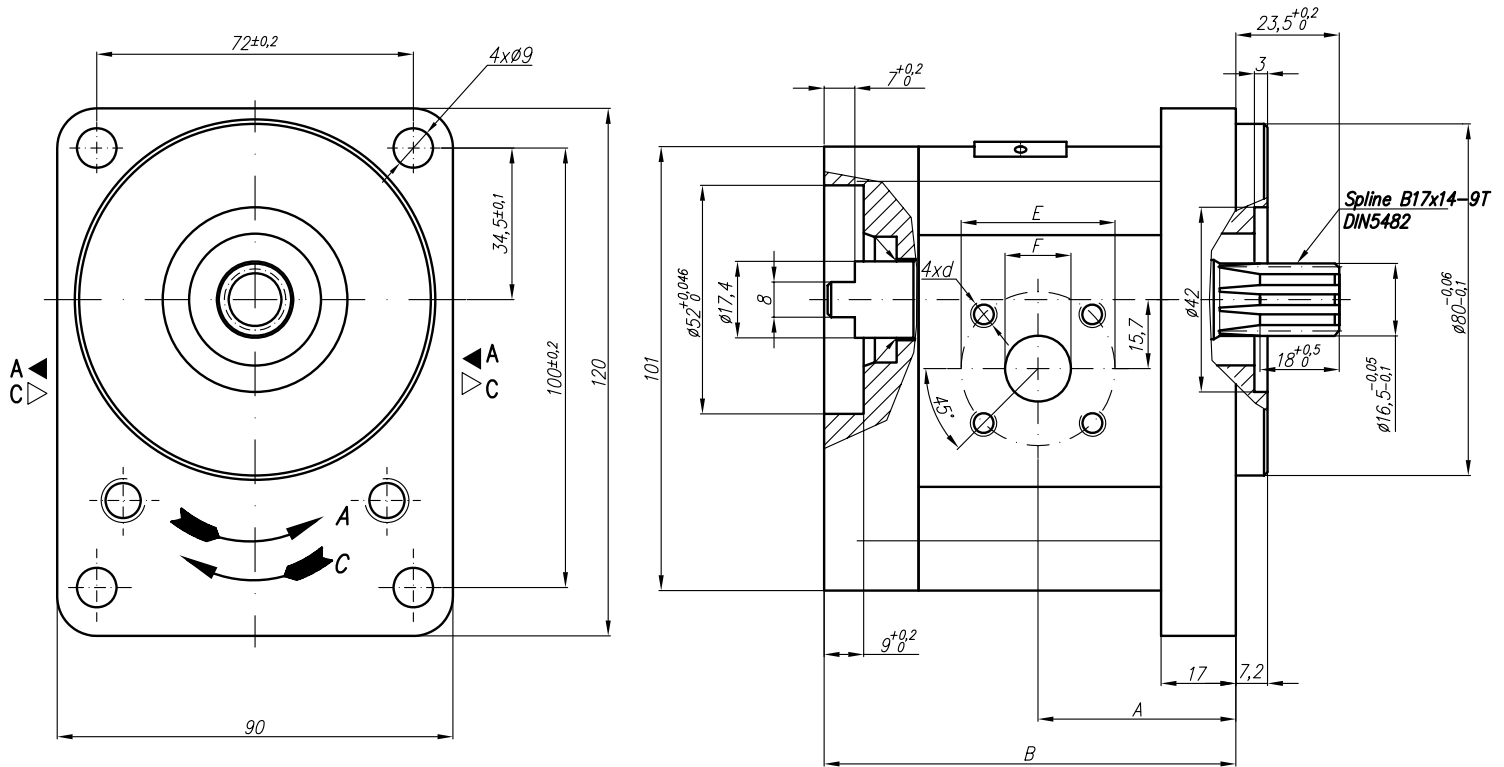
SAE J475 (ISO R725)



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
20A(C)4,5X111...	4,5	6,14	14,33	250	3500	42,5	87,2	M20x1,5	G1/2	1 1/16"-12UNF	M16x1,5	G1/2	7/8"-14UNF
20A(C)6,3X111...	6,3	8,69	20,29	250	3500	44	90,2						
20A(C)8,2X111...	8,2	11,32	26,40	250	3500	45,5	93,1						
20A(C)10X111...	10	13,95	32,55	250	3500	47	96,2						
20A(C)11X111...	11,3	15,76	36,78	250	3500	48	98,2						
20A(C)12X111...	12	16,92	39,48	250	3500	48,6	99,5						
20A(C)14X111...	14	19,95	46,55	250	3500	50	102,6						
20A(C)15X111...	15	21,60	36,00	250	2500	51	104,1						
20A(C)16X111...	16	23,04	38,40	250	2500	52	105,8						
20A(C)19X111...	19	27,36	45,60	200	2500	54	110,7						
20A(C)22X111...	22	31,68	42,24	180	2000	57	115,7						
20A(C)25X111...	25	36,00	48,00	160	2000	59,2	120,6						

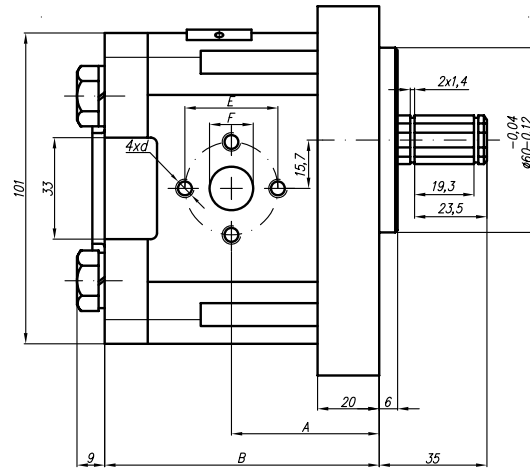
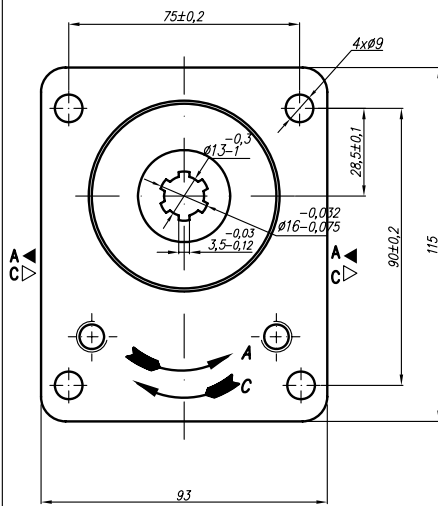


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
20A(C)4,5X114...	4,5	6,14	14,33	250	3500	42,5	80	M18x1,5	G1/2		M14x1,5		
20A(C)6,3X114...	6,3	8,69	20,29	250	3500	42,5	80	M18x1,5	G1/2		M14x1,5		
20A(C)8,2X114...	8,2	11,32	26,40	250	3500	42,5	80	M18x1,5	G1/2		M14x1,5		
20A(C)10X114...	10	13,95	32,55	250	3500	47	89	M22x1,5	G3/4		M18x1,5	G1/2	
20A(C)11X114...	11,3	15,76	36,78	250	3500	48,6	91,1	M22x1,5	G3/4		M18x1,5	G1/2	
20A(C)12X114...	12	16,92	39,48	250	3500	49	92,3	M22x1,5	G3/4		M18x1,5	G1/2	
20A(C)14X114...	14	19,95	46,55	250	3500	49	95,4	M27x2	G3/4		M18x1,5	G1/2	
20A(C)15X114...	15	21,60	36,00	250	2500	49,5	96,9	M27x2	G3/4		M18x1,5	G1/2	
20A(C)16X114...	16	23,04	38,40	250	2500	52	98,6	M27x2	G3/4		M18x1,5	G1/2	
20A(C)19X114...	19	27,36	45,60	200	2500	53	103,5	M27x2	G3/4		M18x1,5	G1/2	
20A(C)22X114...	22	31,68	42,24	180	2000	57	108,5	M27x2	G3/4		M18x1,5	G1/2	
20A(C)25X114...	25	36,00	48,00	160	2000	59,2	113,4	M27x2	G3/4		M18x1,5	G1/2	

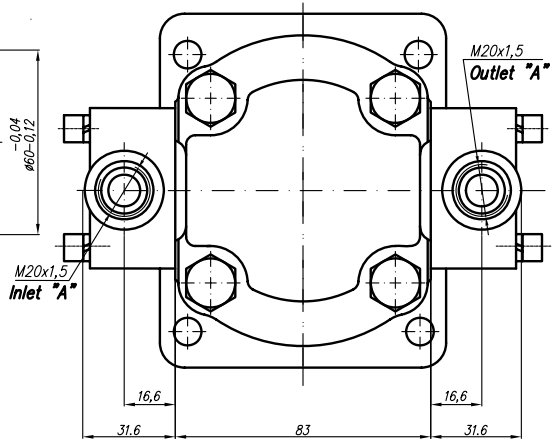
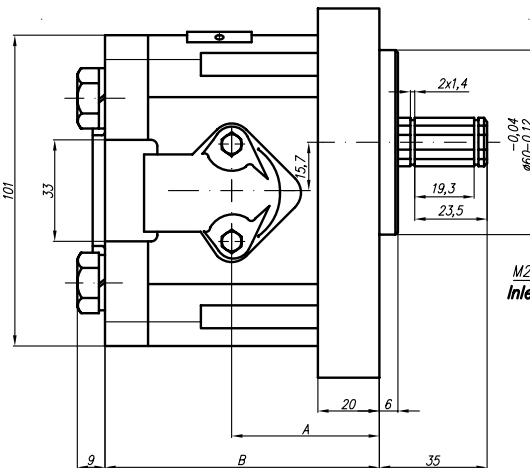
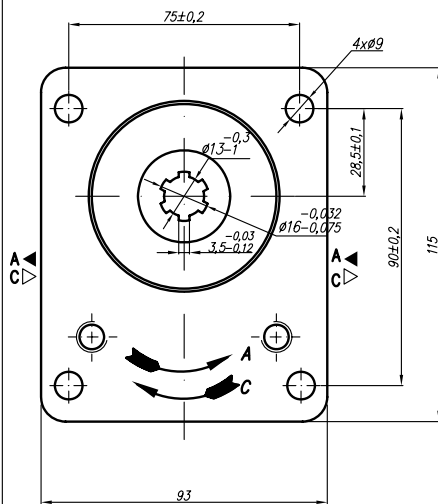


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet			
						E	F	d	E	F	d			
20A(C)4,5X124	4,5	6,14	14,33	250	3500	39,8	85,2	40	20	M6-6H	35	15	M6-6H	
20A(C)6,3X124	6,3	8,69	20,29	250	3500	41	88,2							
20A(C)8,2X124	8,2	11,32	26,40	250	3500	43,1	91,1							
20A(C)10X124	10	13,95	32,55	250	3500	47,5	94,1							
20A(C)11X124	11,3	15,76	36,78	250	3500	47,5	96,2							
20A(C)12X124	12	16,92	39,48	250	3500	47,5	97,5							
20A(C)14X124	14	19,95	46,55	250	3500	47,5	100,6							
20A(C)15X124	15	21,60	36,00	250	2500	47,5	102,1							
20A(C)16X124	16	23,04	38,40	250	2500	47,5	103,8							
20A(C)19X124	19	27,36	45,60	200	2500	47,5	108,7							
20A(C)22X124	22	31,68	42,24	180	2000	55	113,7							
20A(C)25X124	25	36,00	48,00	160	2000	57,2	118,5							

20A(C)...X126

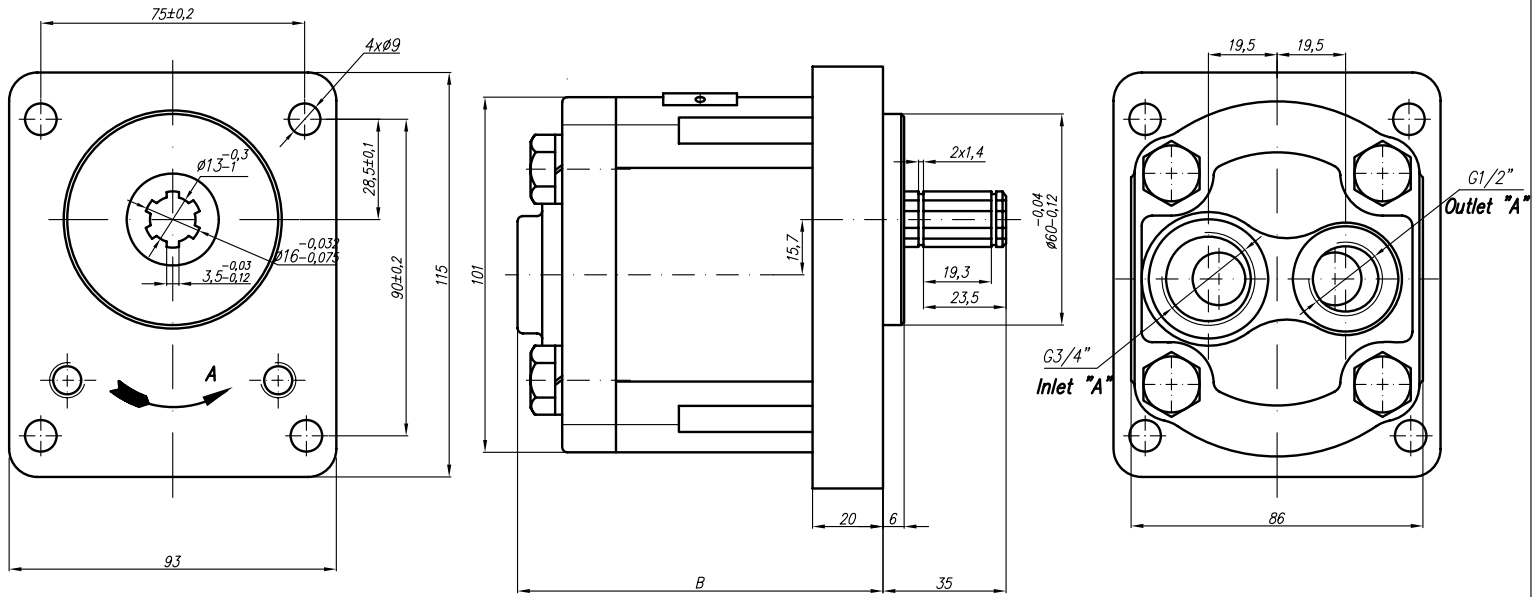


20A(C)...X126K

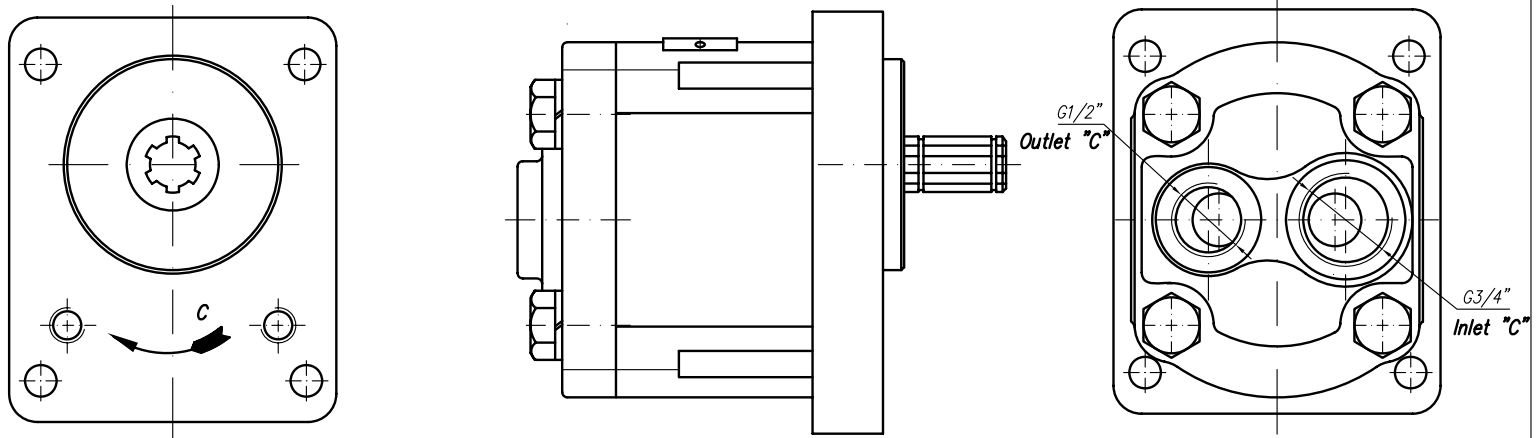


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension									
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet				
						E	F	d	E	F	d				
20A(C)6,3X126	6,3	8,69	20,29	250	3500	48	84	30,2	13	M6	30,2	13	M6		
20A(C)8,2X126	8,2	11,32	26,40	250	3500	48	87	30,2	13	M6	30,2	13	M6		
20A(C)10X126	10	13,95	32,55	250	3500	48	90	30,2	13	M6	30,2	13	M6		
20A(C)11X126	11,3	15,76	36,78	250	3500	48	92	30,2	13	M6	30,2	13	M6		
20A(C)14X126	14	19,95	46,55	250	3500	48	96,5	38	15	M8-6H	38	15	M8-6H		
20A(C)16X126	16	23,04	38,40	250	2500	48	99,5	38	15	M8-6H	38	15	M8-6H		
20A(C)19X126	19	27,36	45,60	200	2500	55,3	104,5	38	15	M8-6H	38	15	M8-6H		
20A(C)22X126	22	31,68	42,24	180	2000	57,8	109,5	38	15	M8-6H	38	15	M8-6H		
20A(C)6,3X126K	6,3	8,69	20,29	250	3500	48	84								
20A(C)8,2X126K	8,2	11,32	26,40	250	3500	48	87								
20A(C)10X126K	10	13,95	32,55	250	3500	48	90								
20A(C)11X126K	11,3	15,76	36,78	250	3500	48	92								
20A(C)14X126K	14	19,95	46,55	250	3500	48	96,5		M20x1,5						
20A(C)16X126K	16	23,04	38,40	250	2500	48	99,5		M20x1,5						
20A(C)19X126K	19	27,36	45,60	200	2500	55,3	104,5		M20x1,5						
20A(C)22X126K	22	31,68	42,24	180	2000	57,8	109,5		M20x1,5						

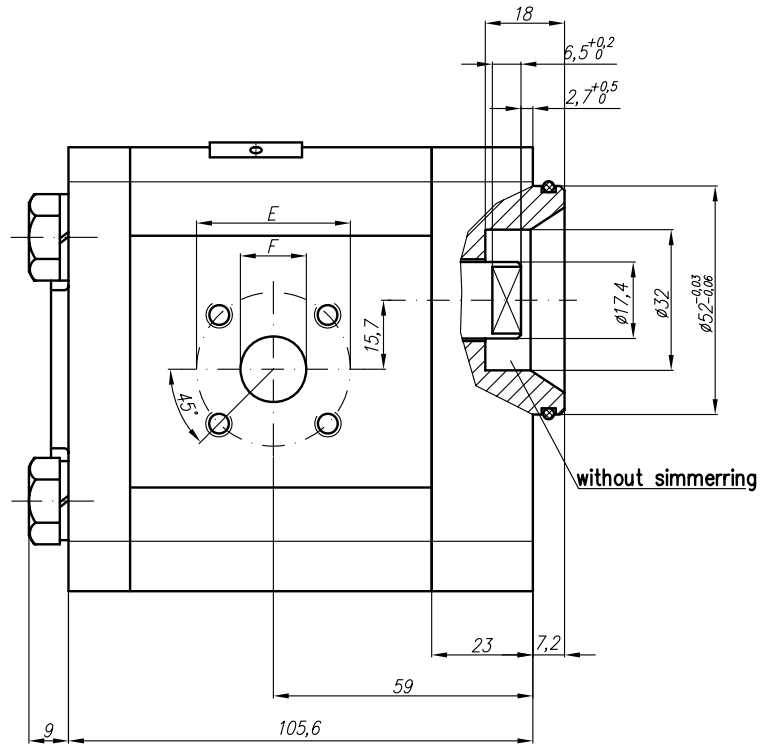
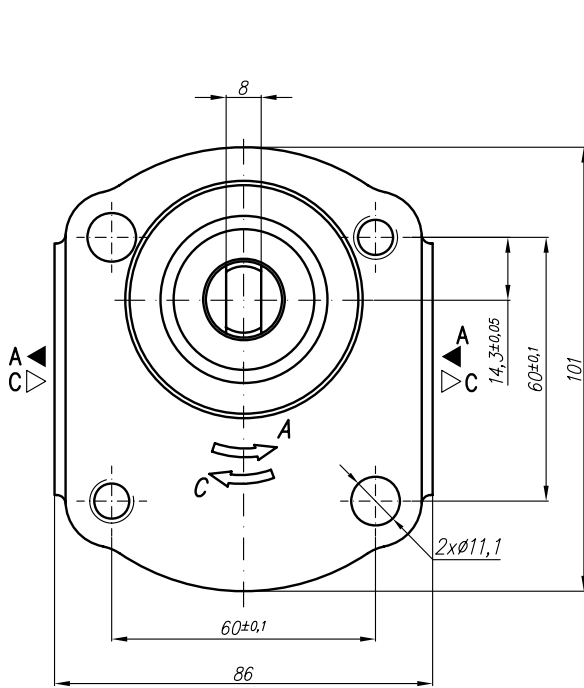
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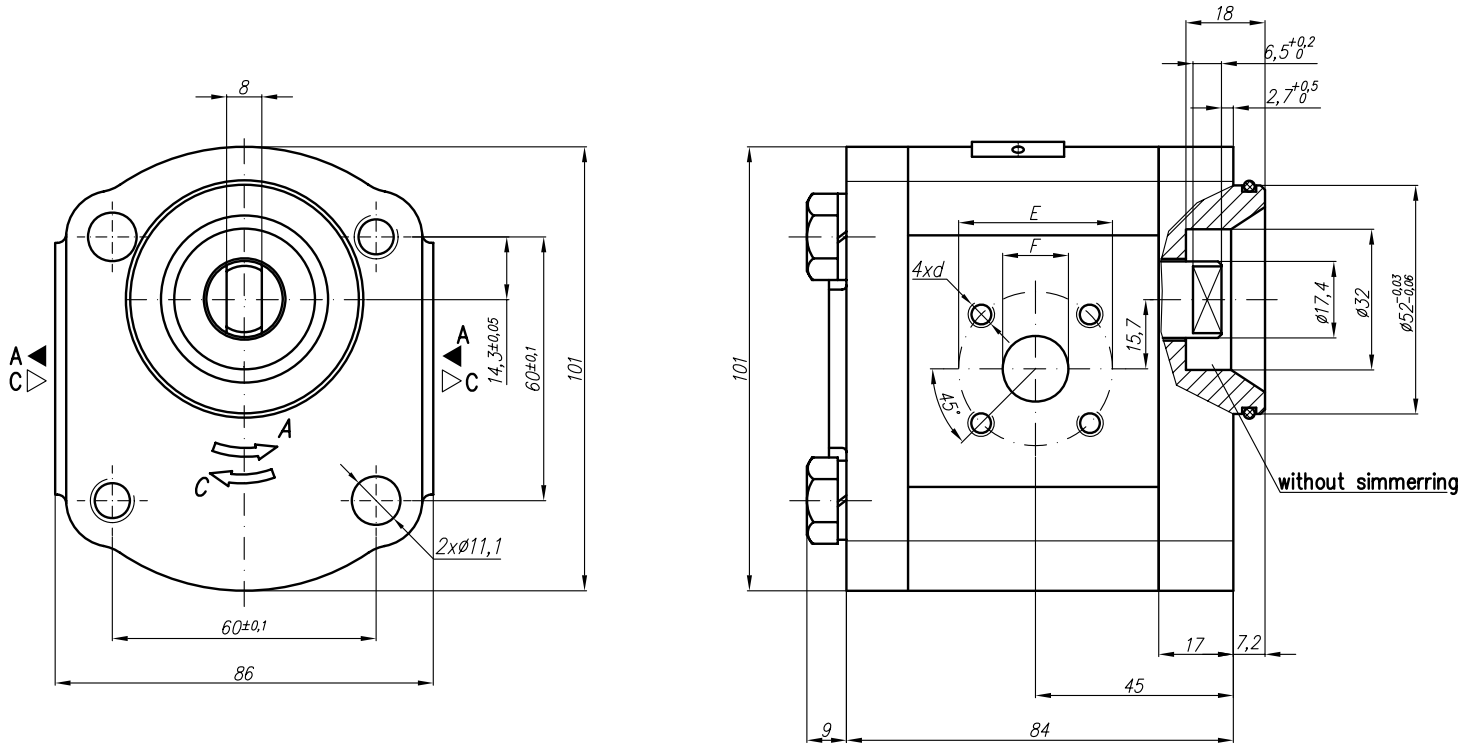
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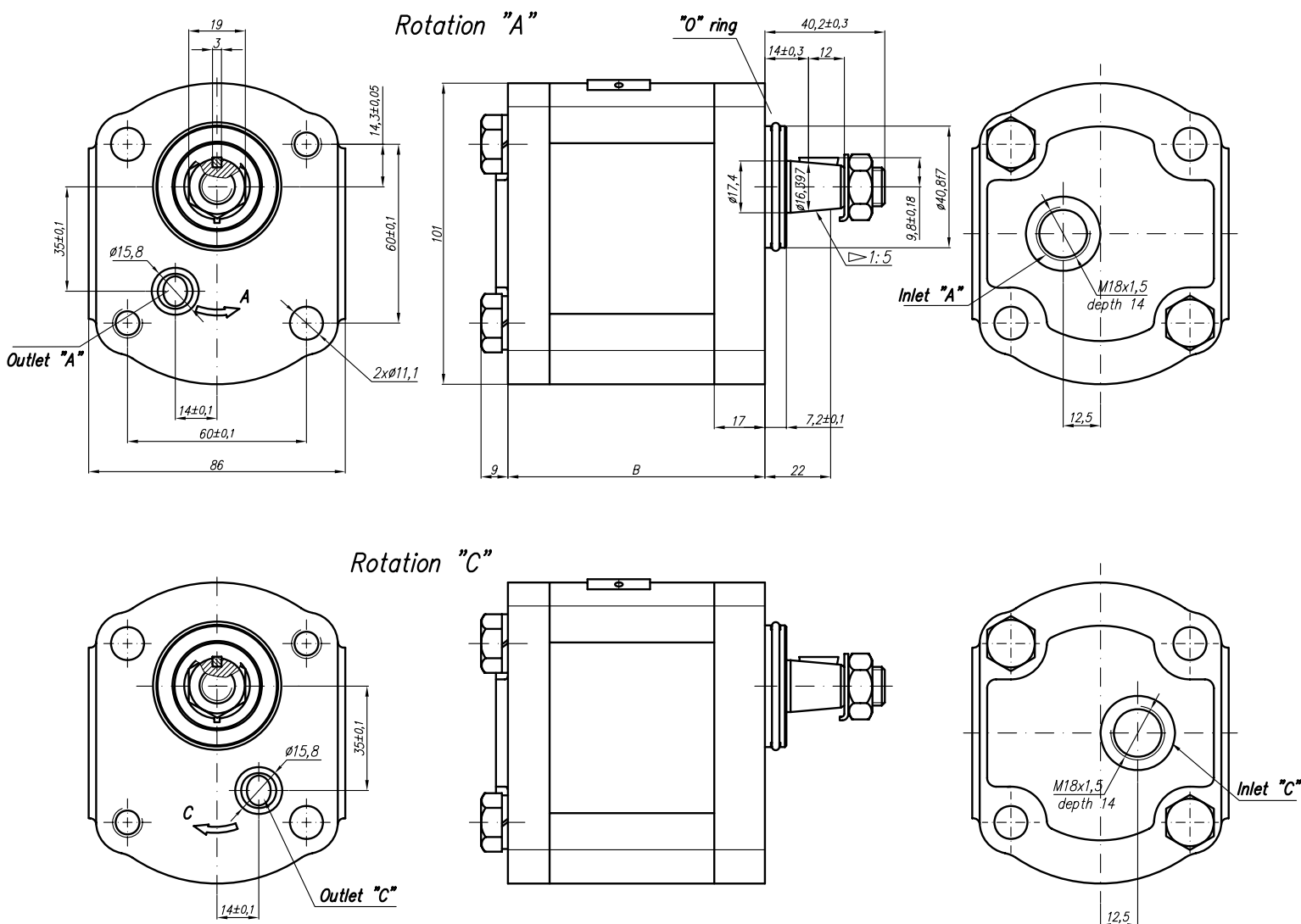
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension						
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet G		Outlet G		
20A(C)6,3X126W	6,3	8,69	20,29	250	3500		98					
20A(C)8,2X126W	8,2	11,32	26,40	250	3500		100,9					
20A(C)10X126W	10	13,95	32,55	250	3500		103,9					
20A(C)11X126W	11,3	15,76	36,78	250	3500		106					
20A(C)14X126W	14	19,95	46,55	250	3500		110,4					
20A(C)16X126W	16	23,04	38,40	250	2500		113,5					
20A(C)19X126W	19	27,36	45,60	200	2500		118,5					
20A(C)22X126W	22	31,68	42,24	180	2000		123,5					



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet		Outlet			
						E	F	d	E	F	d		
20A(C)11X127	16	23,04	53,76	250	3500	59	105,6	40	20	M6	35	15	M6

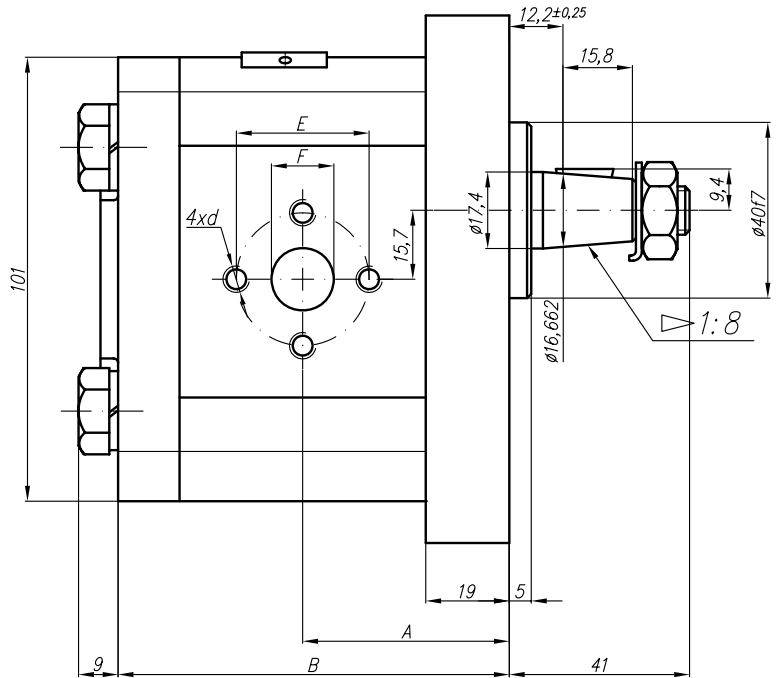
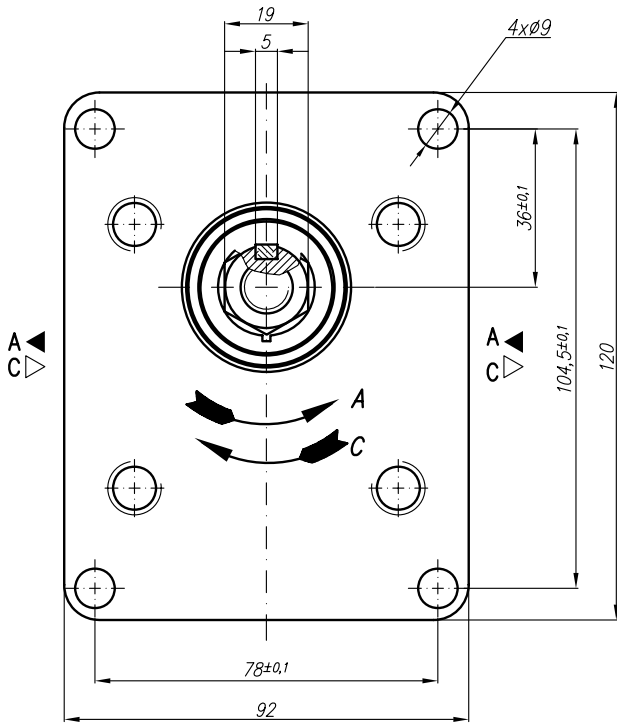


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
20A(C)11X128	11,3	15,76	36,78	250	3500	45	84	40	20	M6	35	15	M6

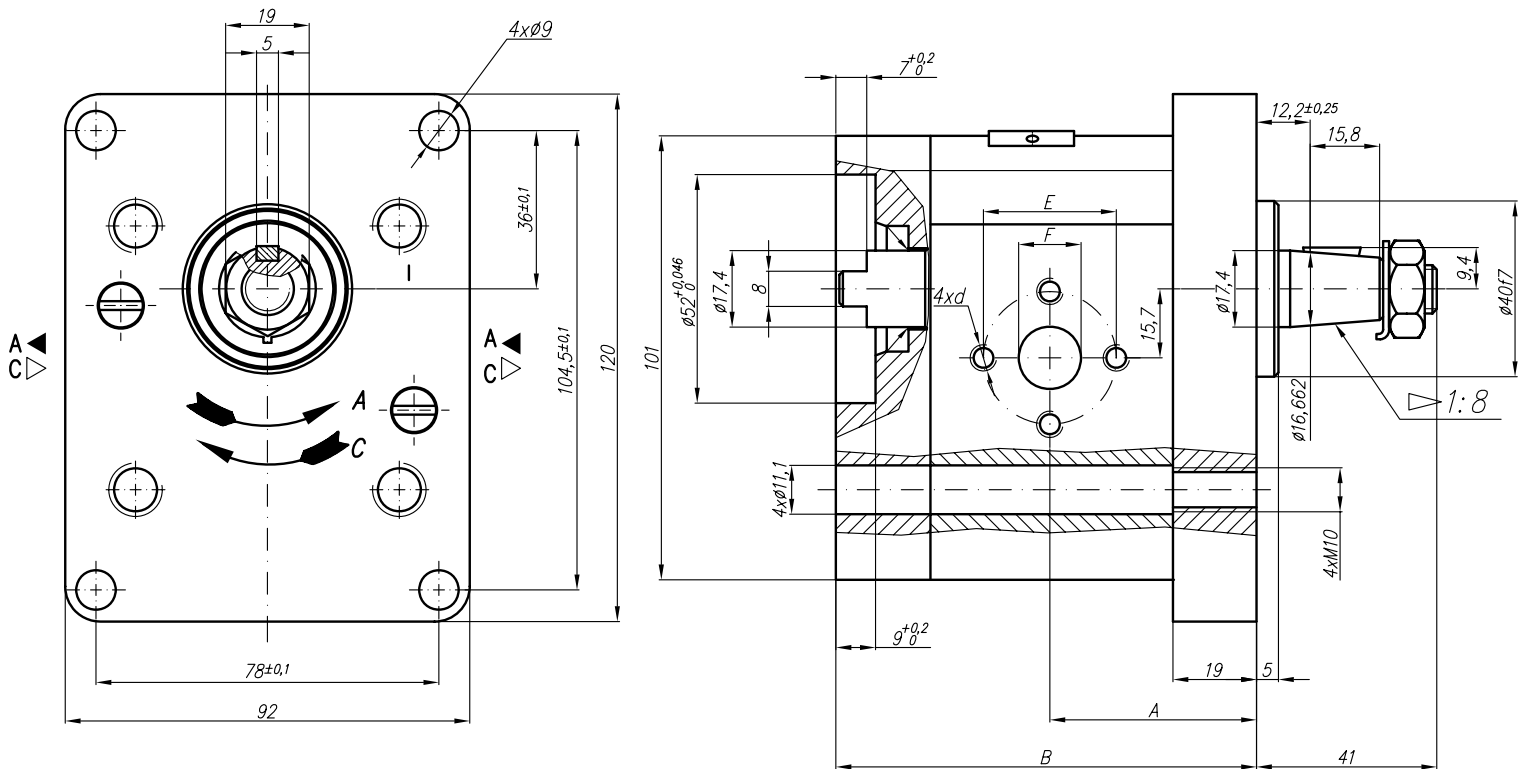


* It's required inlet overpressure 0,2...0,3 bar at max speed.

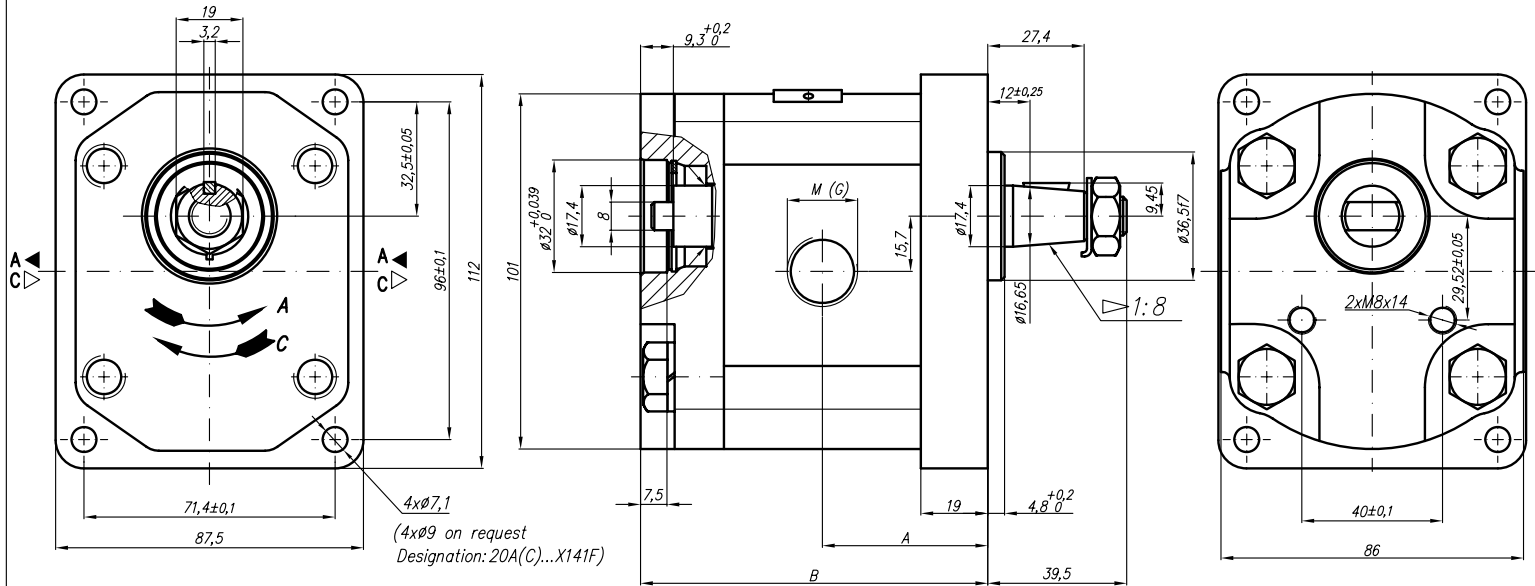
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n* rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U			
20A(C)4,5X132	4,5	6,14	14,33	250	3500	75,1							
20A(C)6,3X132	6,3	8,69	20,29	250	3500	78							
20A(C)8,2X132	8,2	11,32	26,40	250	3500	78							
20A(C)10X132	10	13,95	32,55	250	3500	87							
20A(C)11X132	11,3	15,76	36,78	250	3500	89,1							
20A(C)12X132	12	16,92	39,48	250	3500	90,3							
20A(C)14X132	14	19,95	46,55	250	3500	93,4							
20A(C)15X132	15	21,60	36,00	250	2500	94,9							
20A(C)16X132	16	23,04	38,40	250	2500	96,5							
20A(C)19X132	19	27,36	45,60	200	2500	101,5							
20A(C)22X132	22	31,68	42,24	180	2000	106,5							
20A(C)25X132	25	36,00	48,00	160	2000	111,4							



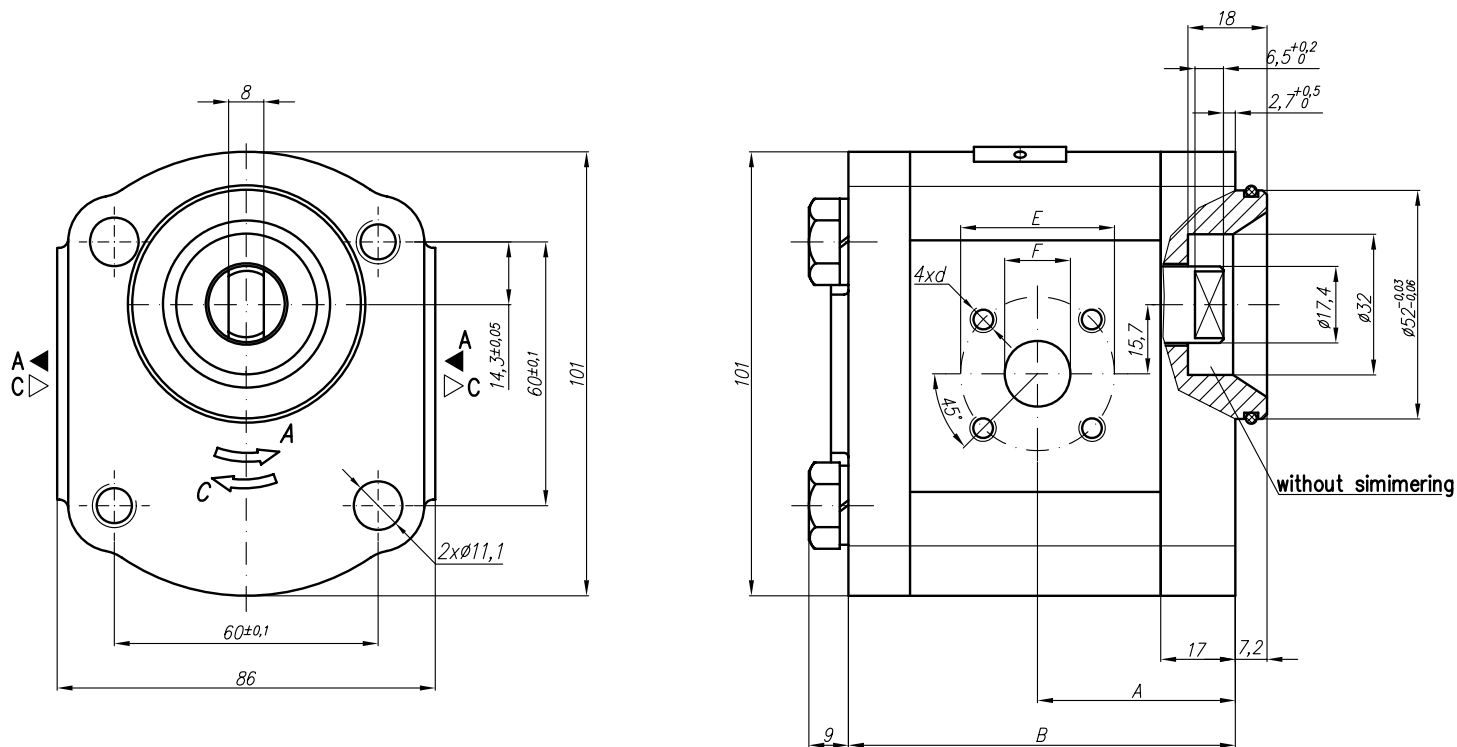
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	E	F	d
20A(C)4,5X139	4,5	6,14	14,33	250	3500	42,5	80						
20A(C)6,3X139	6,3	8,69	20,29	250	3500	44	83	30,2	13,1	M6-6H		13,1	
20A(C)8,2X139	8,2	11,32	26,40	250	3500	45,5	86						
20A(C)10X139	10	13,95	32,55	250	3500	47	89						
20A(C)11X139	11,3	15,76	36,78	250	3500	48	91,1						
20A(C)12X139	12	16,92	39,48	250	3500	48,6	92,3						
20A(C)14X139	14	19,95	46,55	250	3500	50	95,4						
20A(C)15X139	15	21,60	36,00	250	2500	51	96,9	39,7	19	M8-6H		14,2	
20A(C)16X139	16	23,04	38,40	250	2500	52	98,6						
20A(C)19X139	19	27,36	45,60	200	2500	54	103,5						
20A(C)22X139	22	31,68	42,24	180	2000	57	108,5						
20A(C)25X139	25	36,00	48,00	160	2000	59,2	113,4				39,7	19	M8



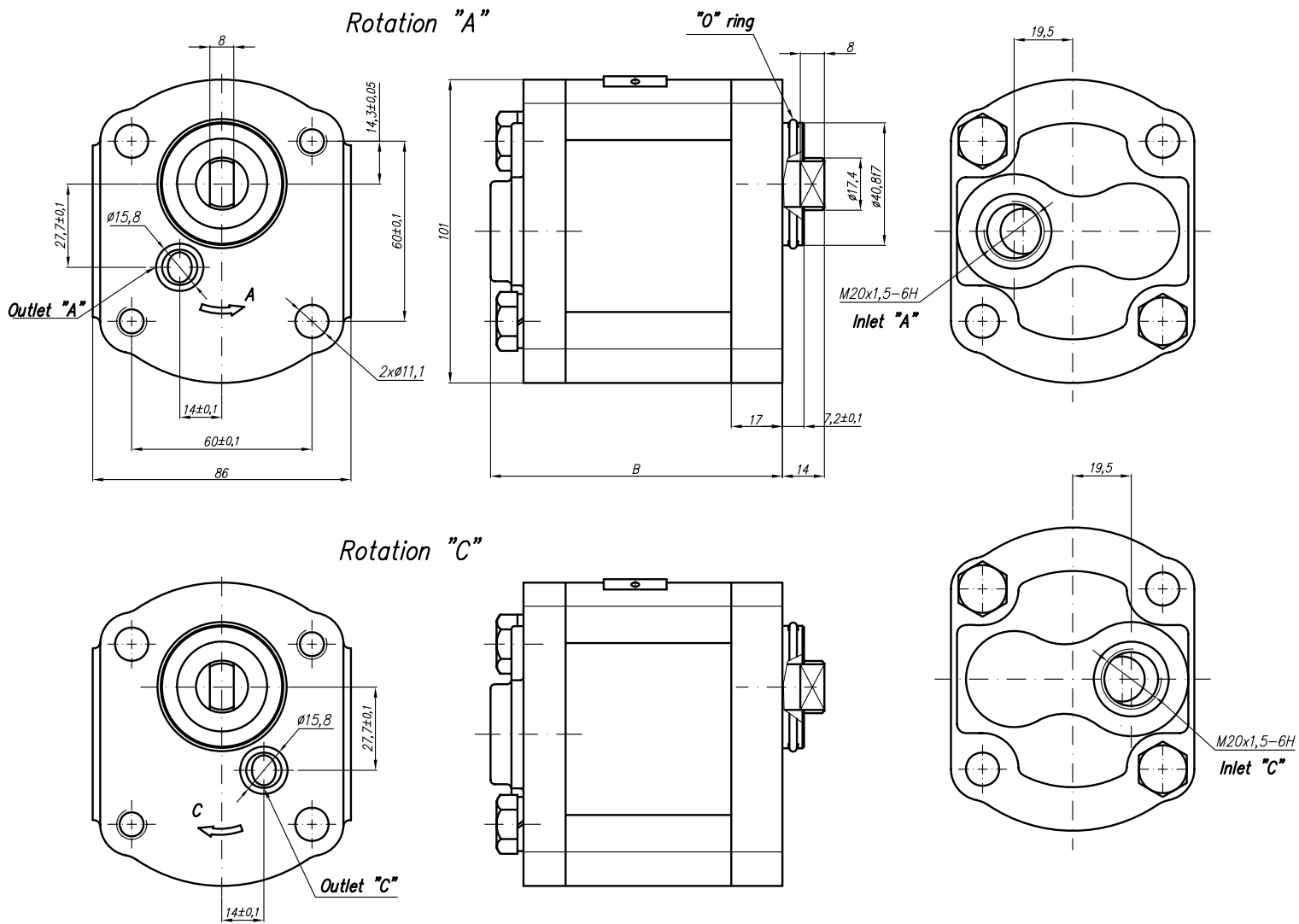
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	E	F	d
20A(C)4,5X140	4,5	6,14	14,33	250	3500	42,5	87,2	30,2	13,1	M6-6H	30,2	13,1	
20A(C)6,3X140	6,3	8,69	20,29	250	3500	44	90,2						
20A(C)8,2X140	8,2	11,32	26,40	250	3500	45,5	93,1						
20A(C)10X140	10	13,95	32,55	250	3500	47	96,2						
20A(C)11X140	11,3	15,76	36,78	250	3500	48	98,2						
20A(C)12X140	12	16,92	39,48	250	3500	48,6	99,5	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)14X140	14	19,95	46,55	250	3500	50	102,6						
20A(C)15X140	15	21,60	36,00	250	2500	51	104,1						
20A(C)16X140	16	23,04	38,40	250	2500	52	105,8						
20A(C)19X140	19	27,36	45,60	200	2500	54	110,7						
20A(C)22X140	22	31,68	42,24	180	2000	57	115,7	39,7	19	M8	39,7	19	M8
20A(C)25X140	25	36,00	48,00	160	2000	59,2	120,6						



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	M	G	U	M	G	U
20A(C)4,5X141...	4,5	6,14	14,33	250	3500	42,5	89,7	M20x1,5	G1/2				
20A(C)6,3X141...	6,3	8,69	20,29	250	3500	44	92,7						
20A(C)8,2X141...	8,2	11,32	26,40	250	3500	45,5	95,6						
20A(C)10X141...	10	13,95	32,55	250	3500	47	98,7						
20A(C)11X141...	11,3	15,76	36,78	250	3500	48	100,7						
20A(C)12X141...	12	16,92	39,48	250	3500	48,6	102		G3/4				
20A(C)14X141...	14	19,95	46,55	250	3500	50	105,1						
20A(C)15X141...	15	21,60	36,00	250	2500	51	106,6						
20A(C)16X141...	16	23,04	38,40	250	2500	52	108,3						
20A(C)19X141...	19	27,36	45,60	200	2500	54	113,2						
20A(C)22X141...	22	31,68	42,24	180	2000	57	118,2						
20A(C)25X141...	25	36,00	48,00	160	2000	59,2	123,1						

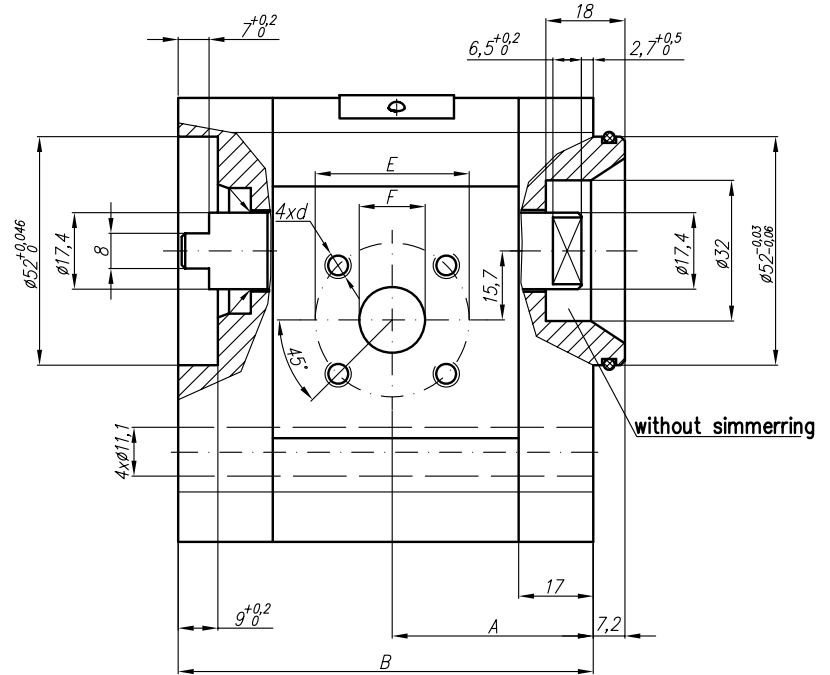
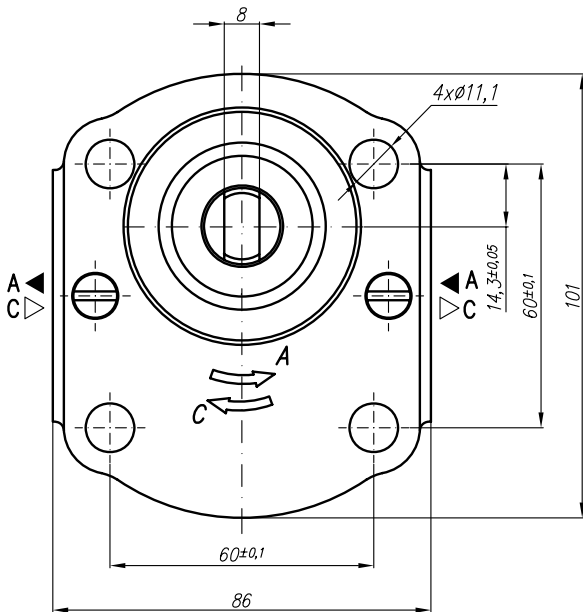


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet			
						E	F	d	E	F	d			
20A(C)4,5X147	4,5	6,14	14,33	250	3500	37,3	78	40	15	M6-6H	35	15	M6-6H	
20A(C)6,3X147	6,3	8,69	20,29	250	3500	38,6	81							
20A(C)8,2X147	8,2	11,32	26,40	250	3500	40,6	83,9							
20A(C)10X147	10	13,95	32,55	250	3500	45	87		20					
20A(C)11X147	11,3	15,76	36,78	250	3500	45	89,1							
20A(C)12X147	12	16,92	39,48	250	3500	45	90,3							
20A(C)14X147	14	19,95	46,55	250	3500	45	93,4		20					
20A(C)15X147	15	21,60	36,00	250	2500	45	94,9							
20A(C)16X147	16	23,04	38,40	250	2500	45	96,5							
20A(C)19X147	19	27,36	45,60	200	2500	45	101,5		20					
20A(C)22X147	22	31,68	42,24	180	2000	52,5	106,5							
20A(C)25X147	25	36,00	48,00	160	2000	57,2	111,4							

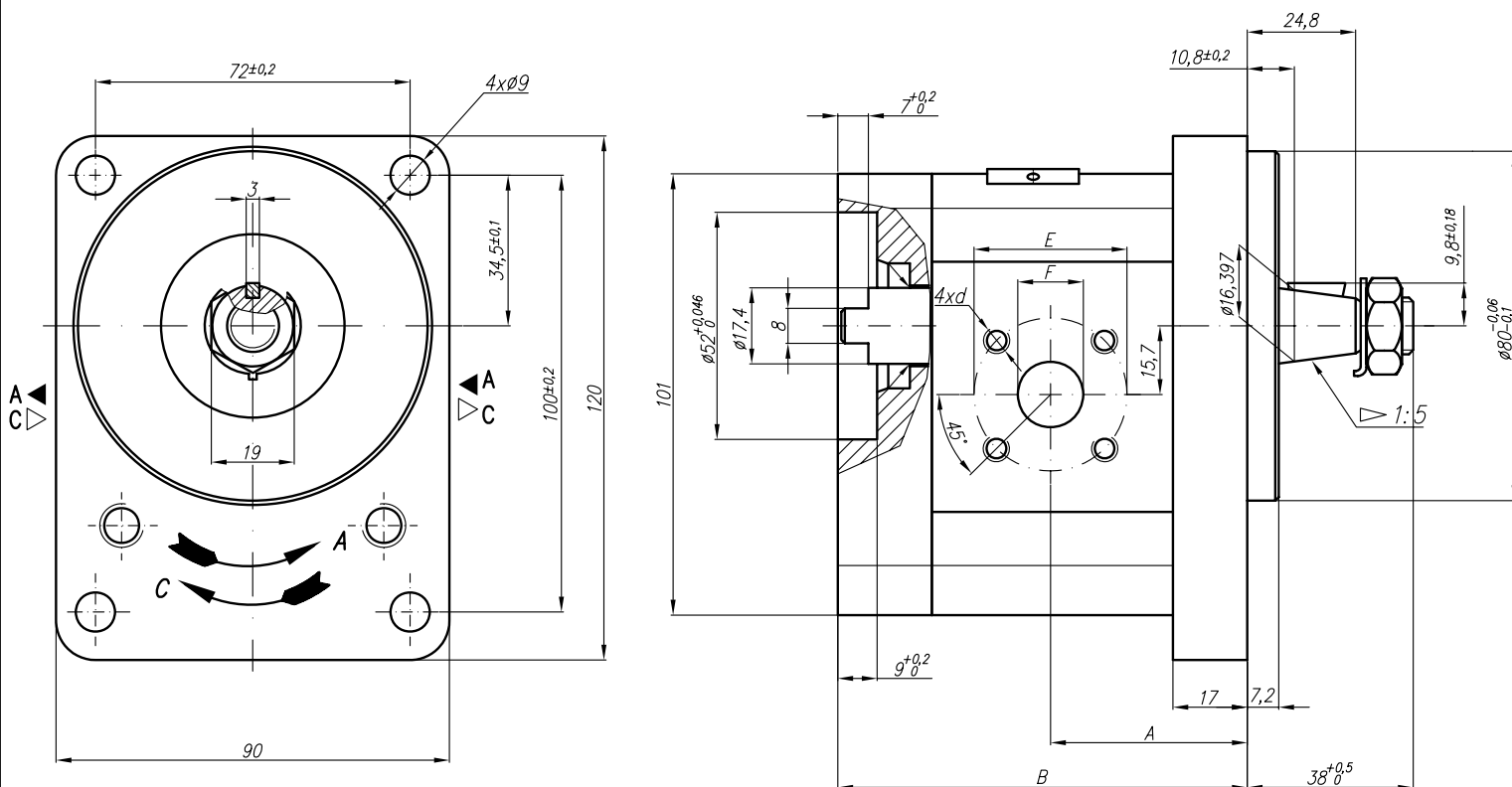


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n* rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U			
20A(C)4,5X153	4,5	6,14	14,33	250	3500		89,1	M20x1,5					
20A(C)6,3X153	6,3	8,69	20,29	250	3500		92						
20A(C)8,2X153	8,2	11,32	26,40	250	3500		92						
20A(C)10X153	10	13,95	32,55	250	3500		101						
20A(C)11X153	11,3	15,76	36,78	250	3500		103						
20A(C)12X153	12	16,92	39,48	250	3500		104,3						
20A(C)14X153	14	19,95	46,55	250	3500		107,4						
20A(C)15X153	15	21,60	36,00	250	2500		108,9						
20A(C)16X153	16	23,04	38,40	250	2500		110,5						
20A(C)19X153	19	27,36	45,60	200	2500		115,5						
20A(C)22X153	22	31,68	42,24	180	2000		120,5						
20A(C)25X153	25	36,00	48,00	160	2000		125,4						

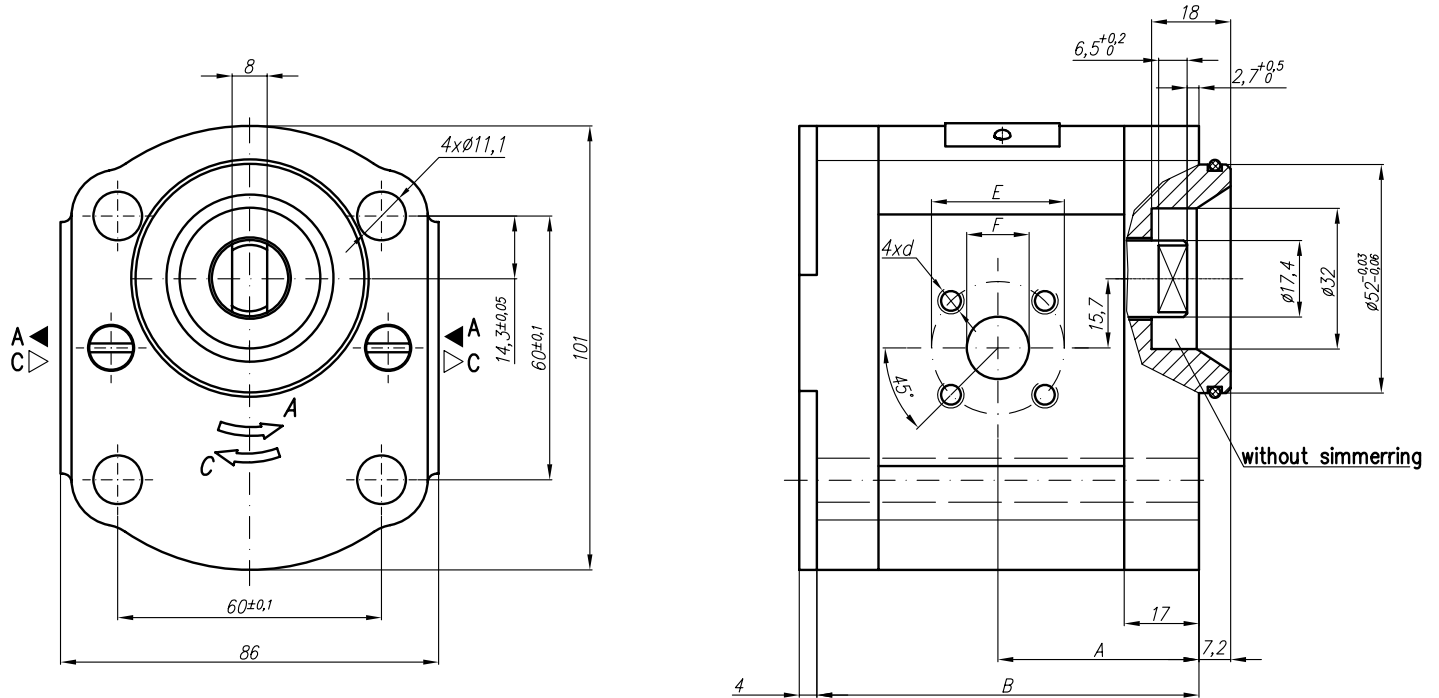
Designed as a middle section of multiple pumps group 222A(C).../...X156B/...



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet			
						E	F	d	E	F	d			
20A(C)4,5X156B	4,5	6,14	14,33	250	3500	40,5	85,2							
20A(C)6,3X156B	6,3	8,69	20,29	250	3500	42	88,2		15					
20A(C)8,2X156B	8,2	11,32	26,40	250	3500	43,5	91,1							
20A(C)10X156B	10	13,95	32,55	250	3500	45	94,1							
20A(C)11X156B	11,3	15,76	36,78	250	3500	46	96,2							
20A(C)12X156B	12	16,92	39,48	250	3500	46,6	97,5							
20A(C)14X156B	14	19,95	46,55	250	3500	48	100,6							
20A(C)15X156B	15	21,60	36,00	250	2500	49	102,1							
20A(C)16X156B	16	23,04	38,40	250	2500	50	103,8							
20A(C)19X156B	19	27,36	45,60	200	2500	52	108,7							
20A(C)22X156B	22	31,68	42,24	180	2000	55	113,7							
20A(C)25X156B	25	36,00	48,00	160	2000	57,2	118,5							

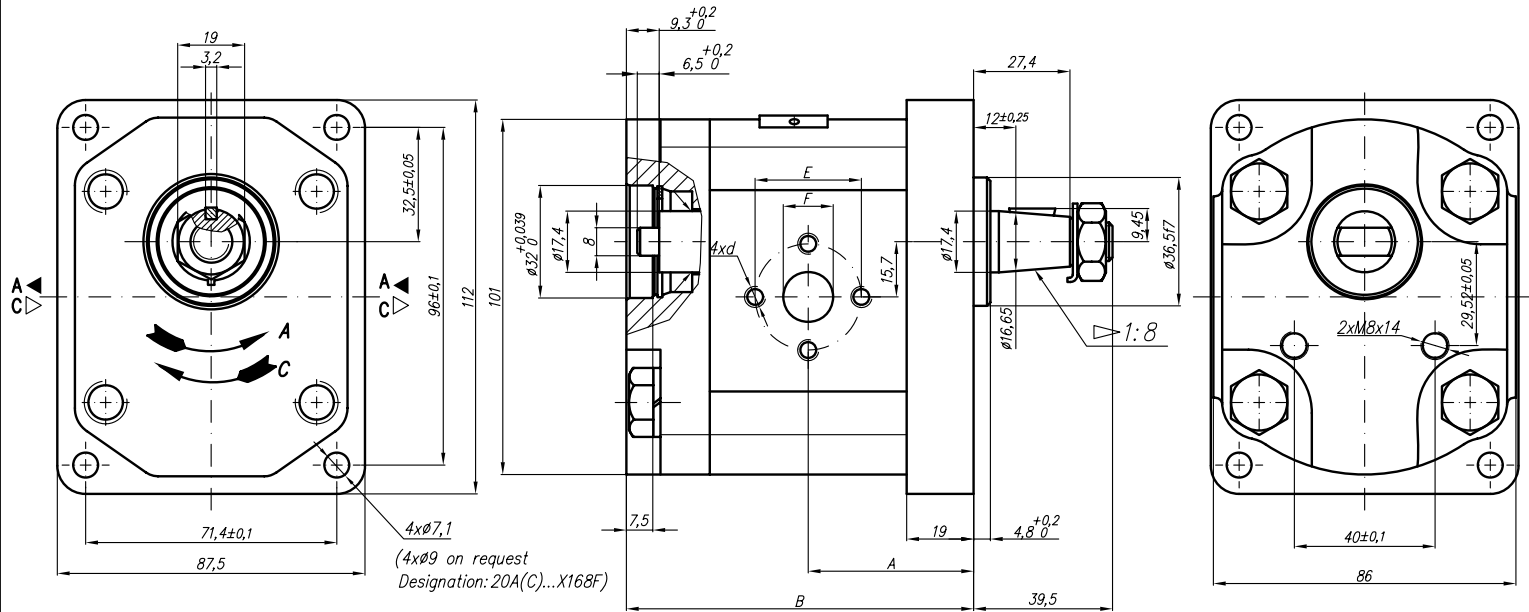


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet			
						E	F	d	E	F	d			
20A(C)4,5X158	4,5	6,14	14,33	250	3500	39,8	85,2	40	15	M6-6H	35	15	M6-6H	
20A(C)6,3X158	6,3	8,69	20,29	250	3500	41	88,2							
20A(C)8,2X158	8,2	11,32	26,40	250	3500	43,1	91,1							
20A(C)10X158	10	13,95	32,55	250	3500	47,5	94,1							
20A(C)11X158	11,3	15,76	36,78	250	3500	47,5	96,2							
20A(C)12X158	12	16,92	39,48	250	3500	47,5	97,5							
20A(C)14X158	14	19,95	46,55	250	3500	47,5	100,6							
20A(C)15X158	15	21,60	36,00	250	2500	47,5	102,1							
20A(C)16X158	16	23,04	38,40	250	2500	47,5	103,8							
20A(C)19X158	19	27,36	45,60	200	2500	47,5	108,7							
20A(C)22X158	22	31,68	42,24	180	2000	55	113,7							
20A(C)25X158	25	36,00	48,00	160	2000	57,2	118,5							

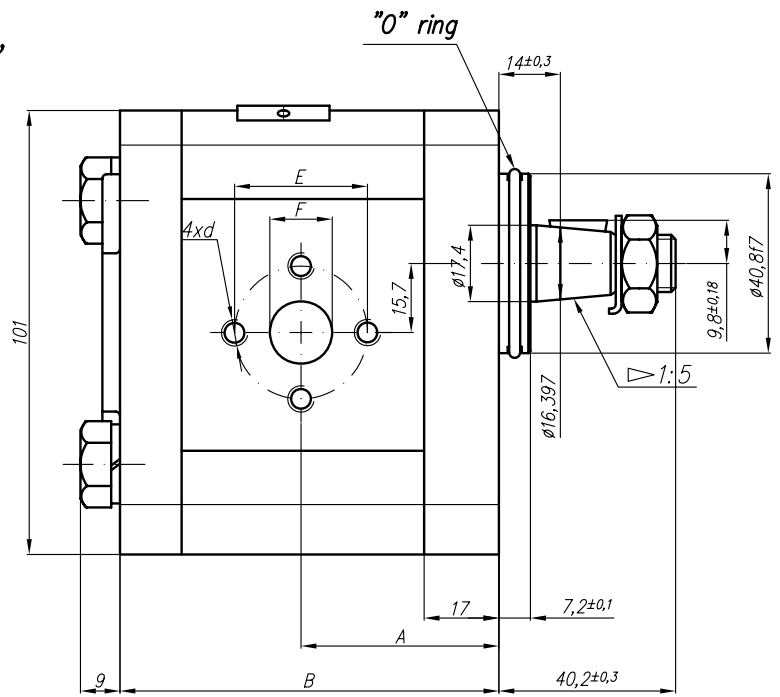
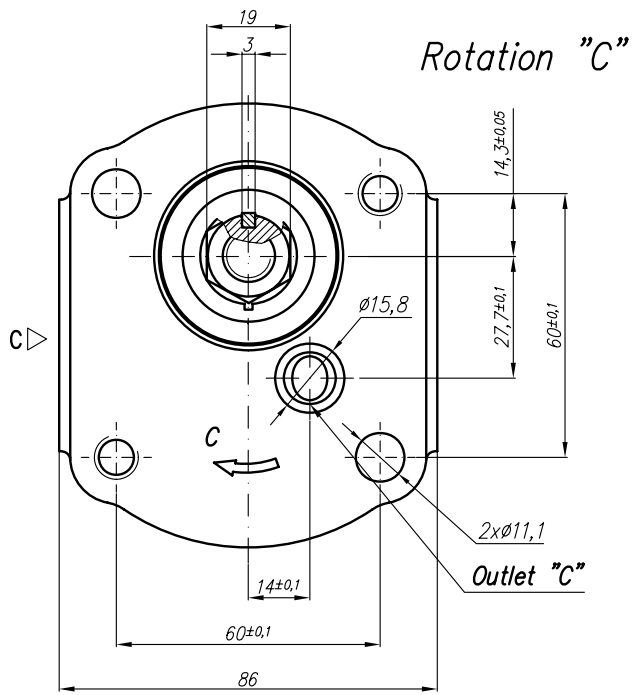


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet			
						E	F	d	E	F	d			
20A(C)4,5X161	4,5	6,14	14,33	250	3500	39,8	78	40	15	M6-6H	35	15	M6-6H	
20A(C)6,3X161	6,3	8,69	20,29	250	3500	41	81							
20A(C)8,2X161	8,2	11,32	26,40	250	3500	43,1	83,9							
20A(C)10X161	10	13,95	32,55	250	3500	47,5	87							
20A(C)11X161	11,3	15,76	36,78	250	3500	47,5	89,1							
20A(C)12X161	12	16,92	39,48	250	3500	47,5	90,3							
20A(C)14X161	14	19,95	46,55	250	3500	47,5	93,4							
20A(C)15X161	15	21,60	36,00	250	2500	47,5	94,9							
20A(C)16X161	16	23,04	38,40	250	2500	47,5	96,5							
20A(C)19X161	19	27,36	45,60	200	2500	47,5	101,5							
20A(C)22X161	22	31,68	42,24	180	2000	55	106,5							
20A(C)25X161	25	36,00	48,00	160	2000	57,2	111,4							

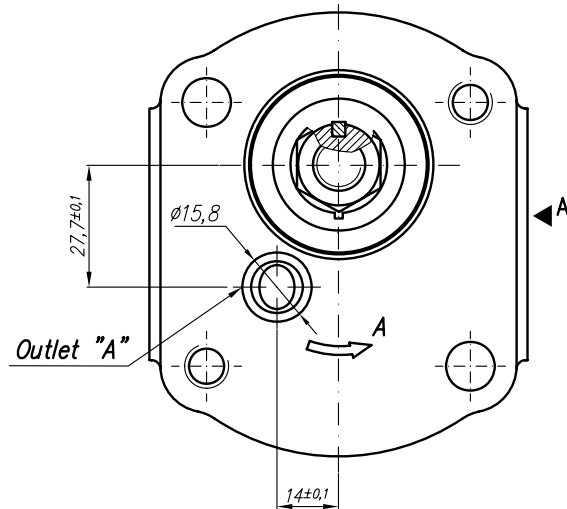
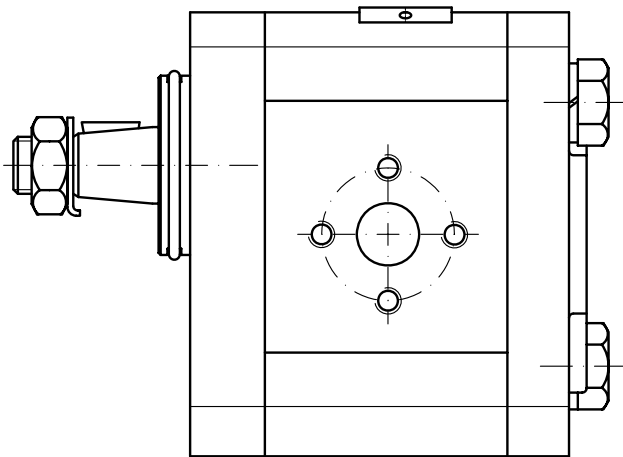
Designed as a first section of tandem gear pumps group 21A(C)...X168/... (llgroup/lgroup).



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	E mm	F mm	d mm	E mm	F mm	d mm
20A(C)4,5X168	4,5	6,14	14,33	250	3500	42,5	89,7	30,2	13,1	M6-6H	30,2	13,1	
20A(C)6,3X168	6,3	8,69	20,29	250	3500	44	92,7						
20A(C)8,2X168	8,2	11,32	26,40	250	3500	45,5	95,6	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)10X168	10	13,95	32,55	250	3500	47	98,7						
20A(C)11X168	11,3	15,76	36,78	250	3500	48	100,7	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)12X168	12	16,92	39,48	250	3500	48,6	102						
20A(C)14X168	14	19,95	46,55	250	3500	50	105,1	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)15X168	15	21,60	36,00	250	2500	51	106,6						
20A(C)16X168	16	23,04	38,40	250	2500	52	108,3	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)19X168	19	27,36	45,60	200	2500	54	113,2						
20A(C)22X168	22	31,68	42,24	180	2000	57	118,2	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)25X168	25	36,00	48,00	160	2000	59,2	123,1						

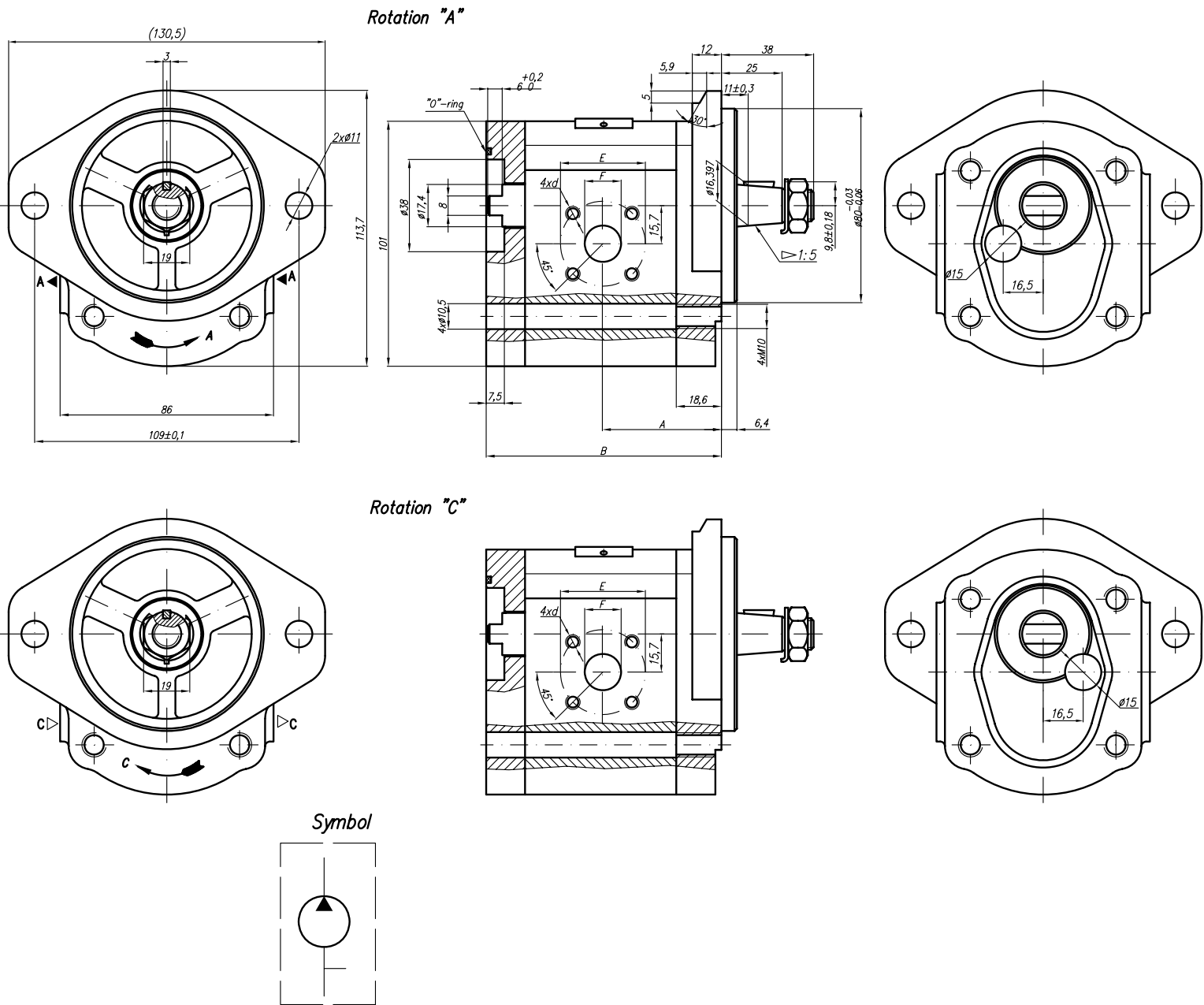


Rotation "A"



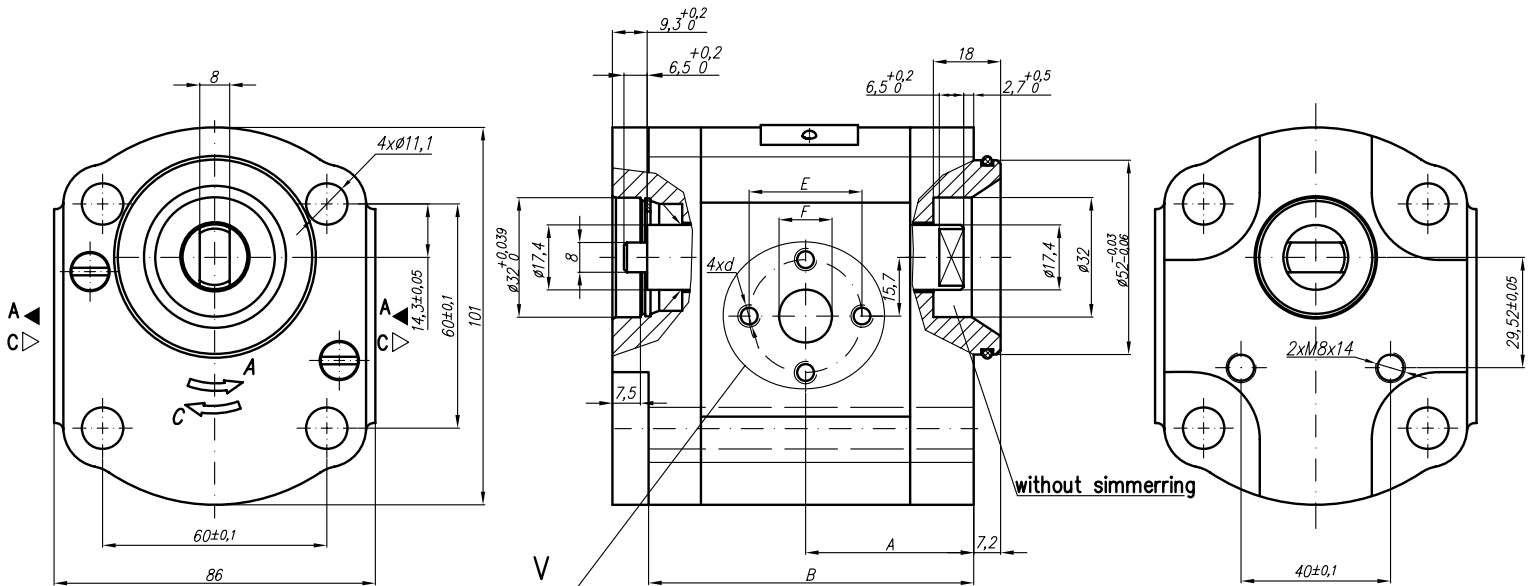
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d			
20A(C)4,5X170	4,5	6,14	14,33	250	3500	40,5	78	30,2	13,1	M6-6H	Ø15,8		
20A(C)6,3X170	6,3	8,69	20,29	250	3500	42	81						
20A(C)8,2X170	8,2	11,32	26,40	250	3500	43,5	83,9						
20A(C)10X170	10	13,95	32,55	250	3500	45	87						
20A(C)11X170	11,3	15,76	36,78	250	3500	46	89,1						
20A(C)12X170	12	16,92	39,48	250	3500	46,6	90,3	39,7	19	M8-6H			
20A(C)14X170	14	19,95	46,55	250	3500	48	93,4						
20A(C)15X170	15	21,60	36,00	250	2500	49	94,9						
20A(C)16X170	16	23,04	38,40	250	2500	50	96,6						
20A(C)19X170	19	27,36	45,60	200	2500	52	101,5						
20A(C)22X170	22	31,68	42,24	180	2000	55	106,5						
20A(C)25X170	25	36,00	48,00	160	2000	57,2	111,4						

Designed as a 1 section of tandem pump 22A(C)...X172/...X173.



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	E	F	d	E	F	d
20A(C)4,5X172	4,5	6,14	14,33	250	3500			40	20	M6-6H	35	15	M6-6H
20A(C)6,3X172	6,3	8,69	20,29	250	3500								
20A(C)8,2X172	8,2	11,32	26,40	250	3500								
20A(C)10X172	10	13,95	32,55	250	3500								
20A(C)11X172	11,3	15,76	36,78	250	3500								
20A(C)12X172	12	16,92	39,48	250	3500								
20A(C)14X172	14	19,95	46,55	250	3500	49,8	97						
20A(C)15X172	15	21,60	36,00	250	2500	50,6	98,5						
20A(C)16X172	16	23,04	38,40	250	2500	49,8	100,1						
20A(C)19X172	19	27,36	45,60	200	2500	53,6	105,1						
20A(C)22X172	22	31,68	42,24	180	2000								

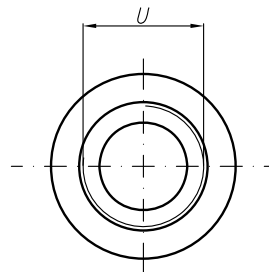
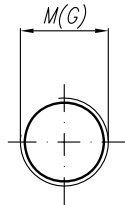
Designed as a middle section of multiple pumps group 221A(C).../...X178/...



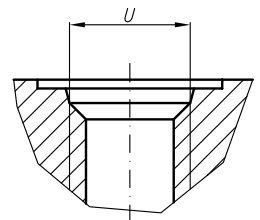
V
Variants for ports – M;G;U

Designations:

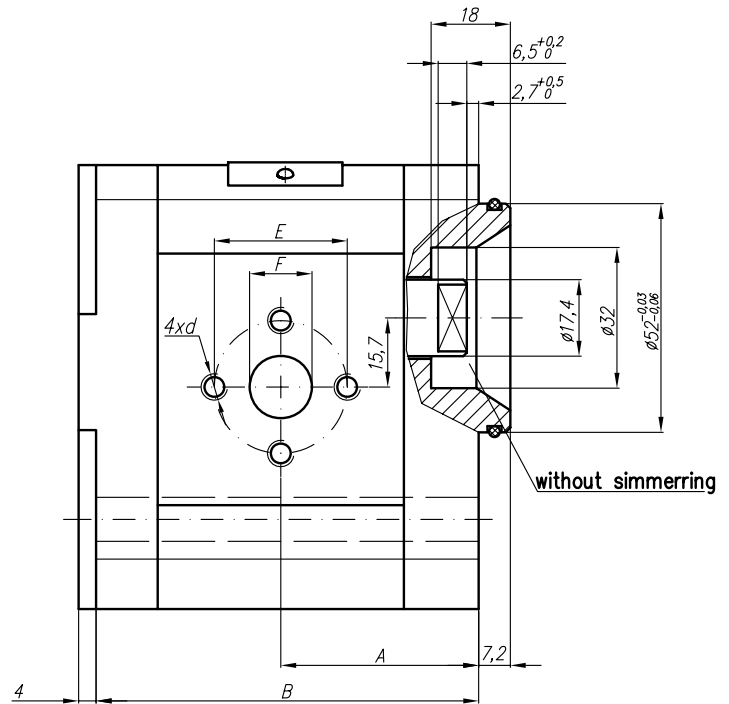
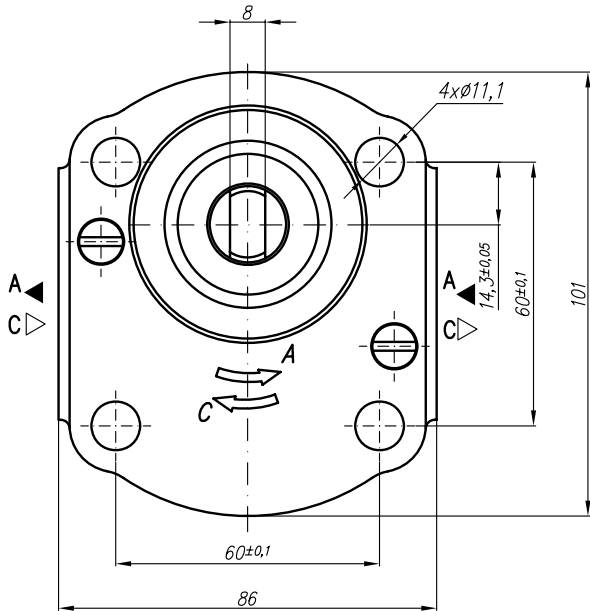
- ...X178 – Normal version (flanges);
- ...X178M – Metric threads;
- ...X178G – GAS threads;
- ...X178U – SAE threads;



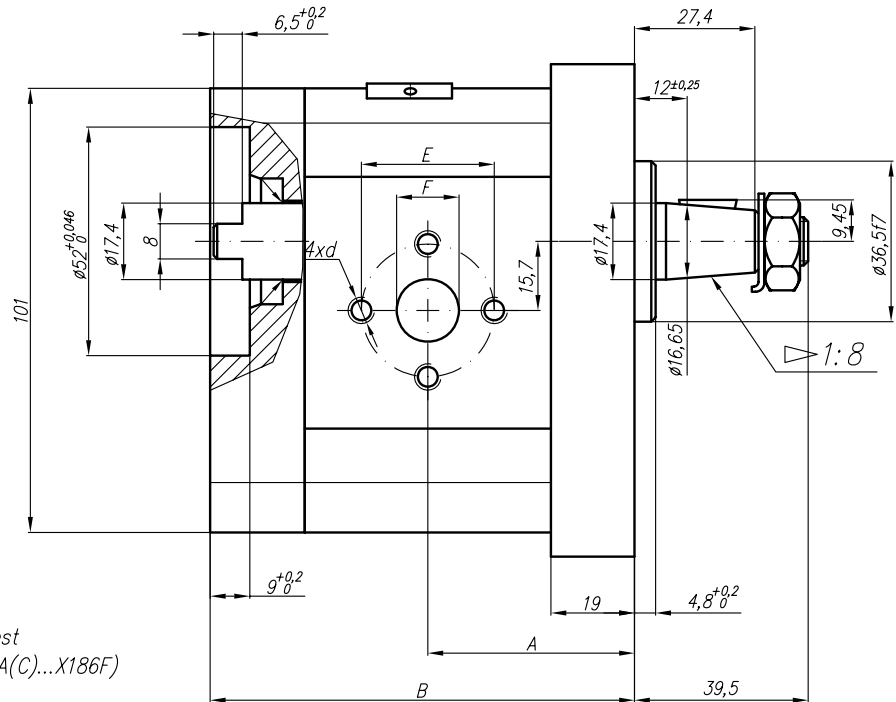
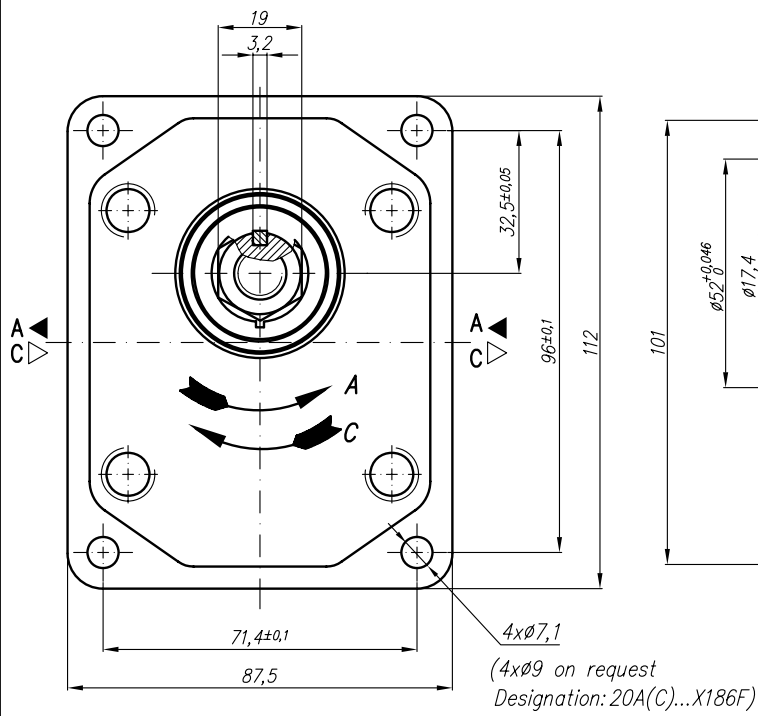
SAE J475 (ISO R725)



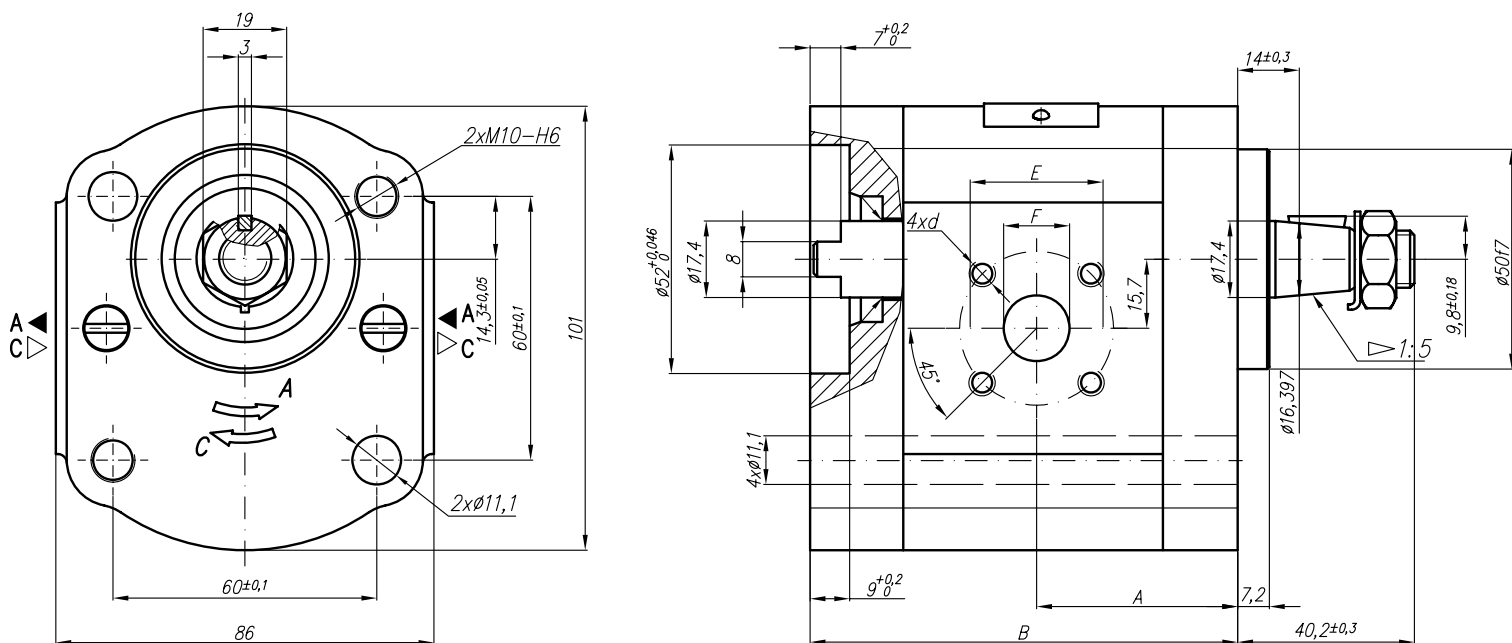
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension											
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet					Outlet				
						E	F	d	M	G	U	E	F	d	M	G	U
20A(C)4,5X178...	4,5	6,14	14,33	250	3500	40,5	78										
20A(C)6,3X178...	6,3	8,69	20,29	250	3500	42	81	30,2	13,1	M6-6H		G1/2					
20A(C)8,2X178...	8,2	11,32	26,40	250	3500	43,5	83,9										
20A(C)10X178...	10	13,95	32,55	250	3500	45	87										
20A(C)11X178...	11,3	15,76	36,78	250	3500	46	89,1										
20A(C)12X178...	12	16,92	39,48	250	3500	46,6	90,3										
20A(C)14X178...	14	19,95	46,55	250	3500	48	93,4										
20A(C)15X178...	15	21,60	36,00	250	2500	49	95										
20A(C)16X178...	16	23,04	38,40	250	2500	50	96,6	39,7	19	M8-6H	M20x1,5	G3/4	1	1/16"-12UNF			
20A(C)19X178...	19	27,36	45,60	200	2500	52	101,5						39,7	19	M6-6H		
20A(C)22X178...	22	31,68	42,24	180	2000	55	106,5							14,2	M6-6H	M16x1,5	
20A(C)25X178...	25	36,00	48,00	160	2000	57,2	111,4							M8	M20x1,5		



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	E mm	F mm	d mm	E mm	F mm	d mm
20A(C)4,5X185	4,5	6,14	14,33	200	3500	40,5	78	30,2	13,1	M6-6H	30,2	13,1	M6-6H
20A(C)6,3X185	6,3	8,69	20,29	200	3500	40,5	78						
20A(C)8,2X185	8,2	11,32	26,40	200	3500	40,5	78	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)10X185	10	13,95	32,55	200	3500	45	87						
20A(C)11X185	11,3	15,76	36,78	200	3500	46	89,1	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)12X185	12	16,92	39,48	200	3500	46,6	90,3						
20A(C)14X185	14	19,95	46,55	200	3500	48	93,4	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)15X185	15	21,60	36,00	200	2500	49	94,9						
20A(C)16X185	16	23,04	38,40	200	2500	50	96,6	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)19X185	19	27,36	45,60	200	2500	52	101,5						
20A(C)22X185	22	31,68	42,24	180	2000	55	106,5	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)25X185	25	36,00	48,00	160	2000	57,2	111,4						

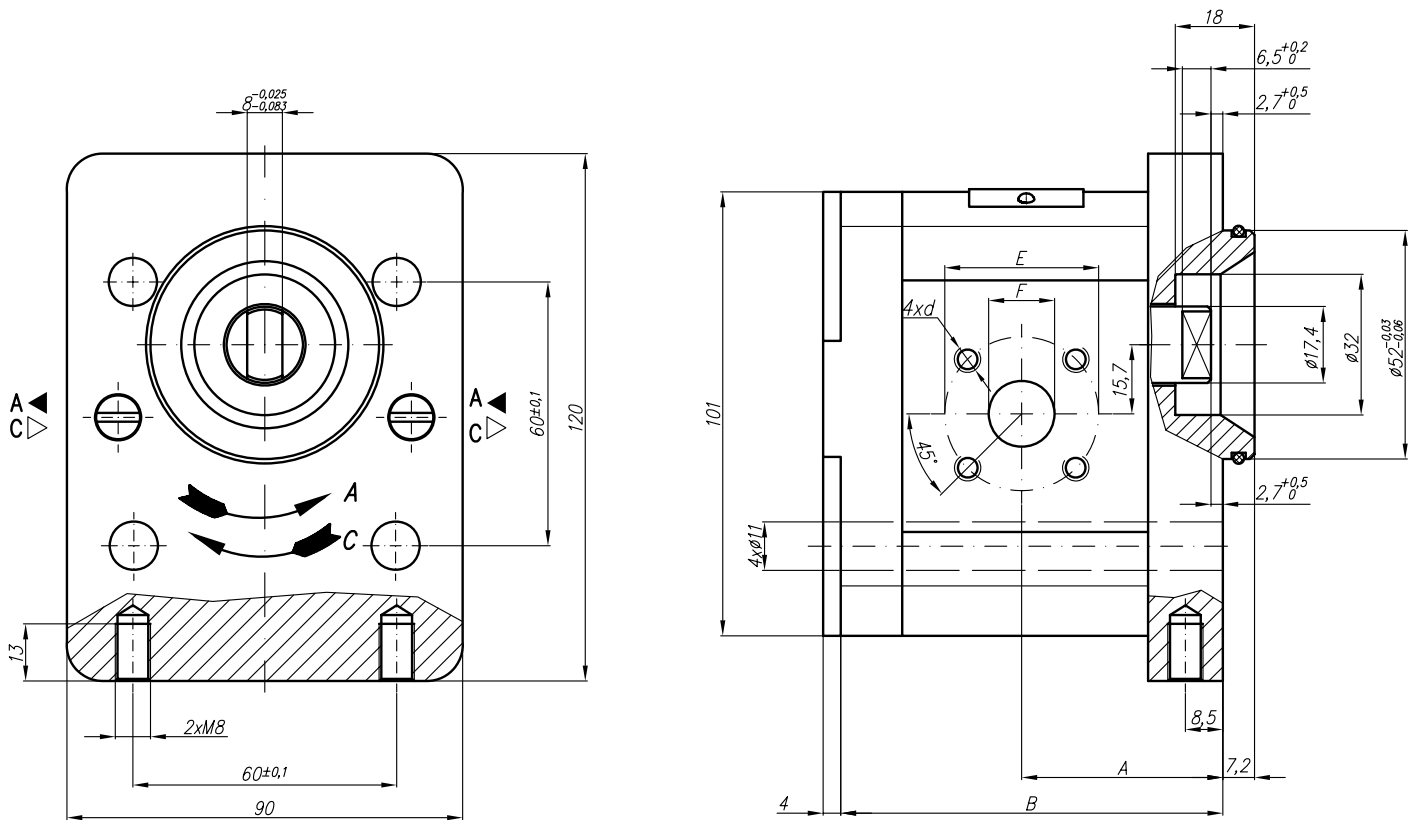


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	E mm	F mm	d mm	E mm	F mm	d mm
20A(C)4,5X186	4,5	6,14	14,33	200	3500	42,5	87,2	30,2	13,1	M6-6H	30,2	13,1	M6-6H
20A(C)6,3X186	6,3	8,69	20,29	200	3500	42,5	87,2						
20A(C)8,2X186	8,2	11,32	26,40	200	3500	42,5	87,2						
20A(C)10X186	10	13,95	32,55	200	3500	47	96,2						
20A(C)11X186	11,3	15,76	36,78	200	3500	48	98,2						
20A(C)12X186	12	16,92	39,48	200	3500	48,6	99,5	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)14X186	14	19,95	46,55	200	3500	50	102,6						
20A(C)15X186	15	21,60	36,00	200	2500	51	104,1						
20A(C)16X186	16	23,04	38,40	200	2500	52	105,8						
20A(C)19X186	19	27,36	45,60	200	2500	54	110,7						
20A(C)22X186	22	31,68	42,24	180	2000	57	115,7	39,7	19	M8	39,7	19	M8
20A(C)25X186	25	36,00	48,00	160	2000	59,2	120,6						

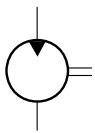


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	E	F	d
20A(C)4,5X187	4,5	6,14	14,33	250	3500	37,3	82,3	40	15	M6-6H	35	15	M6-6H
20A(C)6,3X187	6,3	8,69	20,29	250	3500	38,6	85,2						
20A(C)8,2X187	8,2	11,32	26,40	250	3500	40,6	85,2						
20A(C)10X187	10	13,95	32,55	250	3500	45	94,1						
20A(C)11X187	11,3	15,76	36,78	250	3500	45	96,2						
20A(C)12X187	12	16,92	39,48	250	3500	45	97,5						
20A(C)14X187	14	19,95	46,55	250	3500	45	100,6						
20A(C)15X187	15	21,60	36,00	250	2500	45	102,1						
20A(C)16X187	16	23,04	38,40	250	2500	45	103,8						
20A(C)19X187	19	27,36	45,60	200	2500	45	108,7						
20A(C)22X187	22	31,68	42,24	180	2000	52,5	113,7						
20A(C)25X187	25	36,00	48,00	160	2000	57,2	118,6						

Designed as a special version motor-pump 22A(C)...X194/...X195.

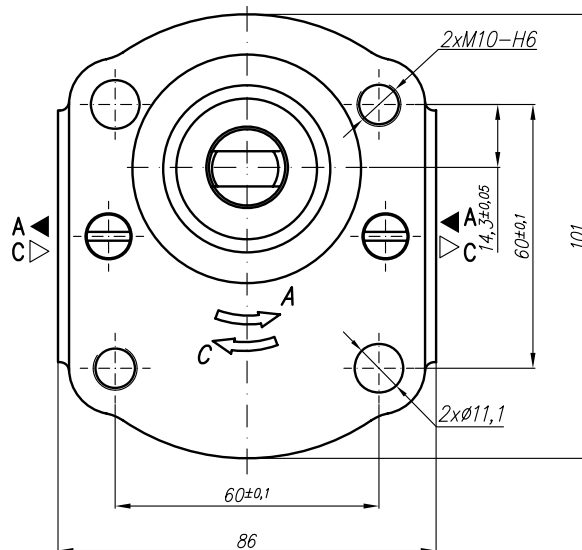
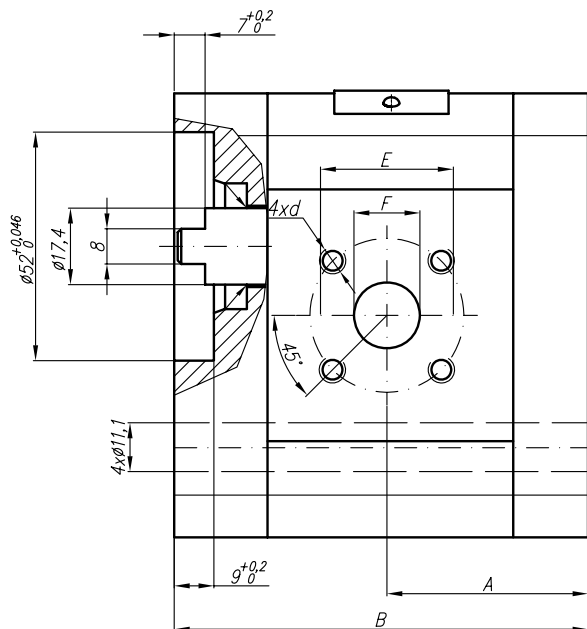


Symbol

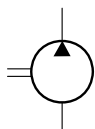


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet			
						E	F	d	E	F	d			
20A(C)4,5X194	4,5	6,14	14,33	250	3500	37,3	78	40	20	M6-6H	35	15	M6-6H	
20A(C)6,3X194	6,3	8,69	20,29	250	3500	38,6	81							
20A(C)8,2X194	8,2	11,32	26,40	250	3500	40,6	83,9							
20A(C)10X194	10	13,95	32,55	250	3500	45	87							
20A(C)11X194	11,3	15,76	36,78	250	3500	45	89,1							
20A(C)12X194	12	16,92	39,48	250	3500	45	90,3							
20A(C)14X194	14	19,95	46,55	250	3500	45	93,4							
20A(C)15X194	15	21,60	36,00	250	2500	45	94,9							
20A(C)16X194	16	23,04	38,40	250	2500	45	96,5							
20A(C)19X194	19	27,36	45,60	200	2500	45	101,5							
20A(C)22X194	22	31,68	42,24	180	2000	52,5	106,5							
20A(C)25X194	25	36,00	48,00	160	2000	54,7	111,4							

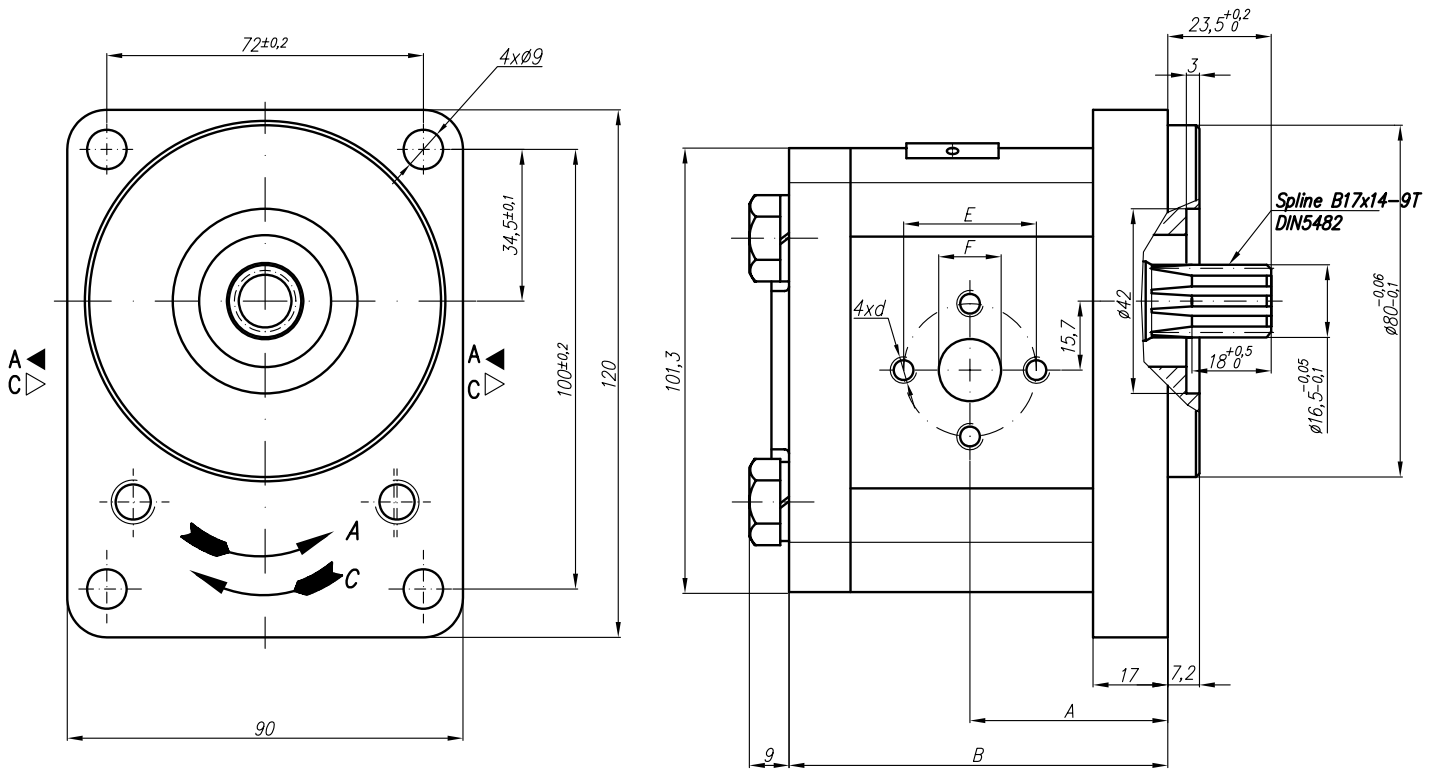
Designed as a special version motor-pump 22A(C)...X194/...X195.



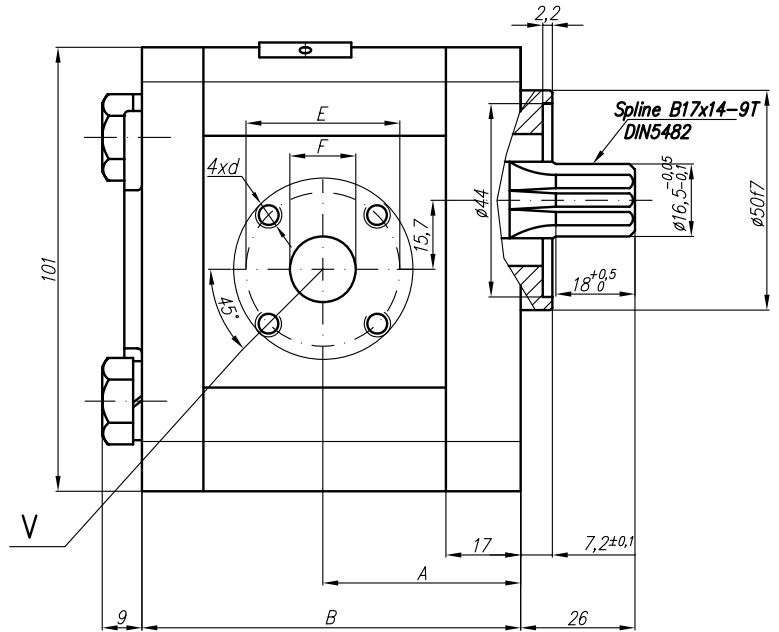
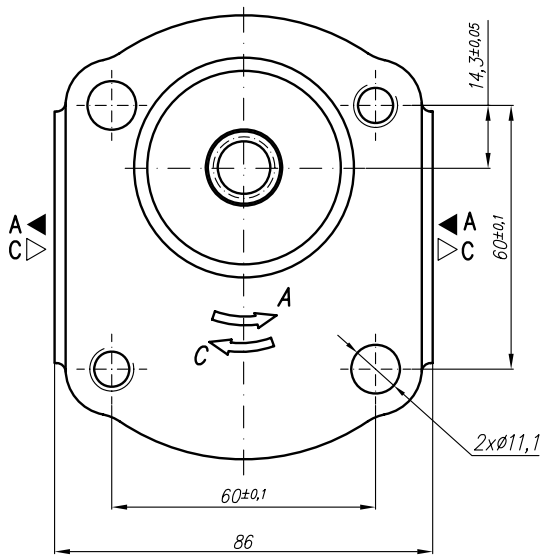
Symbol



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet			
						E	F	d	E	F	d			
20A(C)4,5X195	4,5	6,14	14,33	250	3500	37,3	85,2	40	15	M6-6H	35	15	M6-6H	
20A(C)6,3X195	6,3	8,69	20,29	250	3500	38,6	88,2							
20A(C)8,2X195	8,2	11,32	26,40	250	3500	40,6	91,1							
20A(C)10X195	10	13,95	32,55	250	3500	45	94,1							
20A(C)11X195	11,3	15,76	36,78	250	3500	45	96,2							
20A(C)12X195	12	16,92	39,48	250	3500	45	97,5							
20A(C)14X195	14	19,95	46,55	250	3500	45	100,6							
20A(C)15X195	15	21,60	36,00	250	2500	45	102,1							
20A(C)16X195	16	23,04	38,40	250	2500	45	103,8							
20A(C)19X195	19	27,36	45,60	200	2500	45	108,7							
20A(C)22X195	22	31,68	42,24	180	2000	52,5	113,7							
20A(C)25X195	25	36,00	48,00	160	2000	54,7	118,5							



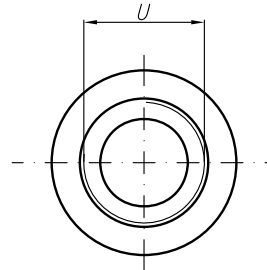
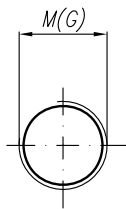
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	E mm	F mm	d mm	E mm	F mm	d mm
20A(C)4,5X196	4,5	6,14	14,33	250	3500	39,8	78	30,2	13,1	M6-6H			
20A(C)6,3X196	6,3	8,69	20,29	250	3500	41	81					13,1	
20A(C)8,2X196	8,2	11,32	26,40	250	3500	43,1	83,9						
20A(C)10X196	10	13,95	32,55	250	3500	47,5	87						
20A(C)11X196	11,3	15,76	36,78	250	3500	47,5	89,1						
20A(C)12X196	12	16,92	39,48	250	3500	47,5	90,3						
20A(C)14X196	14	19,95	46,55	250	3500	47,5	93,4						
20A(C)15X196	15	21,60	36,00	250	2500	47,5	94,9	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)16X196	16	23,04	38,40	250	2500	47,5	96,6						
20A(C)19X196	19	27,36	45,60	200	2500	47,5	101,5						
20A(C)22X196	22	31,68	42,24	180	2000	55	106,5						
20A(C)25X196	25	36,00	48,00	160	2000	57,2	111,4				39,7	19	M8



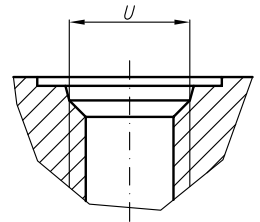
V
Variants for ports – M;G;U

Designations:

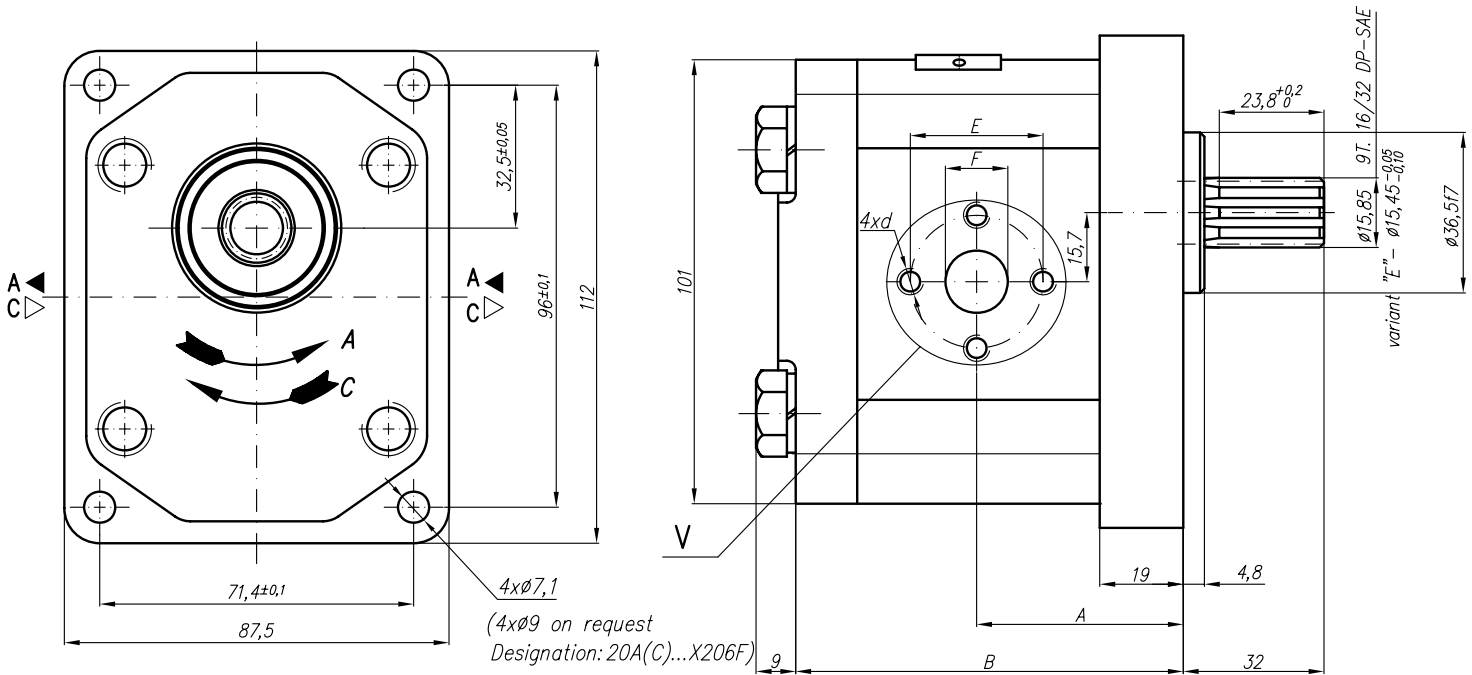
- ...X205 – Normal version (flanges);
- ...X205M – Metric threads;
- ...X205G – GAS threads;
- ...X205U – SAE threads;



SAE J475 (ISO R725)



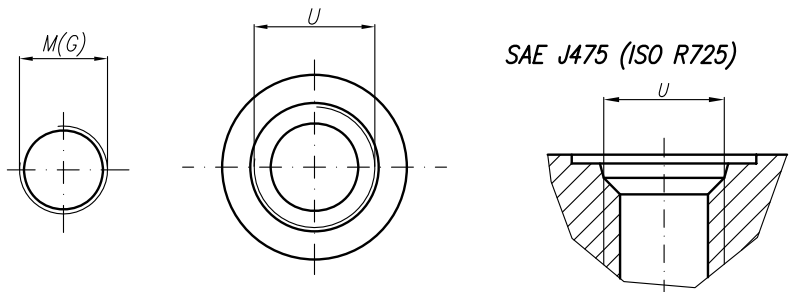
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension														
		at 1500 rpm l/min	at max rpm l/min			Inlet						Outlet								
						A mm	B mm	E	F	d	M	G	U	E	F	d	M	G	U	
20A(C)4,5X205...	4,5	6,14	14,33	250	3500	37,3	75,1	40	15	M6-6H	M20x1,5	G1/2	1	1/16"-12UNF	35	15	M6-6H	M16x1,5	G1/2	7/8"-14UNF
20A(C)6,3X205...	6,3	8,69	20,29	250	3500	38,6	78													
20A(C)8,2X205...	8,2	11,32	26,40	250	3500	40,6	78													
20A(C)10X205...	10	13,95	32,55	250	3500	45	87													
20A(C)11X205...	11,3	15,76	36,78	250	3500	45	89,1													
20A(C)12X205...	12	16,92	39,48	250	3500	45	90,3													
20A(C)14X205...	14	19,95	46,55	250	3500	45	93,4													
20A(C)15X205...	15	21,60	36,00	250	2500	45	94,9													
20A(C)16X205...	16	23,04	38,40	250	2500	45	96,5													
20A(C)19X205...	19	27,36	45,60	200	2500	45	101,5													
20A(C)22X205...	22	31,68	42,24	180	2000	52,5	106,5													
20A(C)25X205...	25	36,00	48,00	160	2000	57,2	111,4													



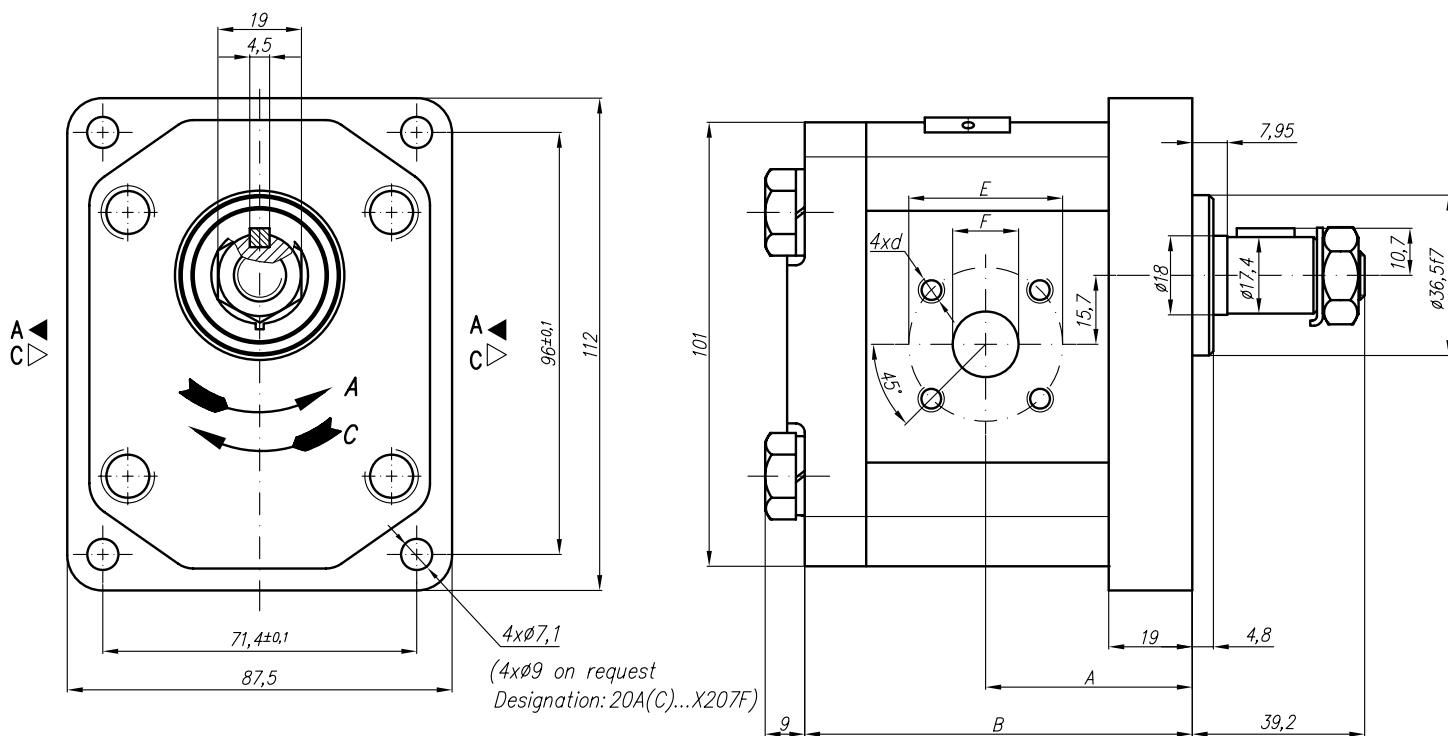
V
Variants for ports – M;G;U

Designations:

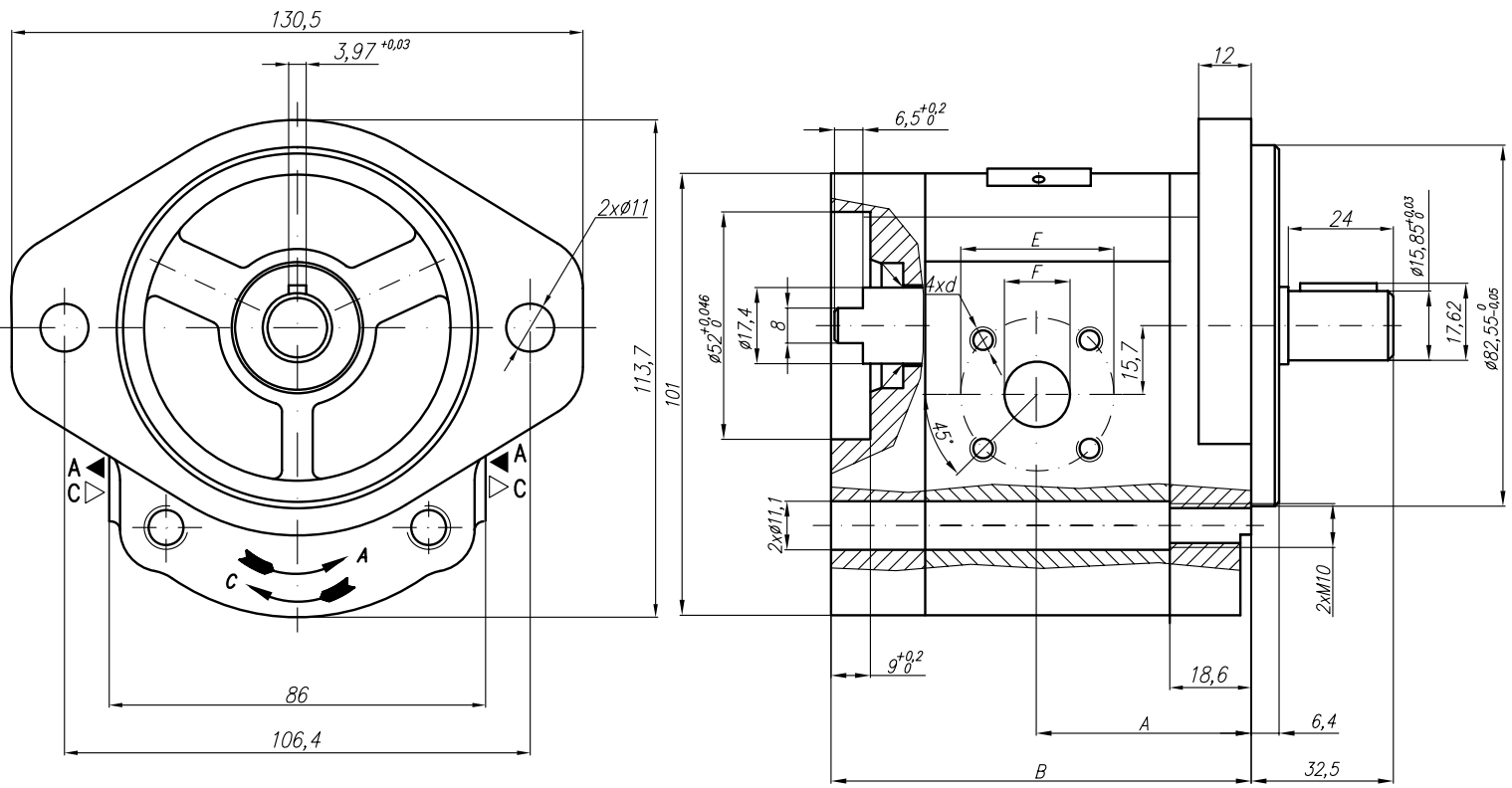
- ...X206 – Normal version (flanges);
- ...X206M – Metric threads;
- ...X206G – GAS threads;
- ...X206U – SAE threads;



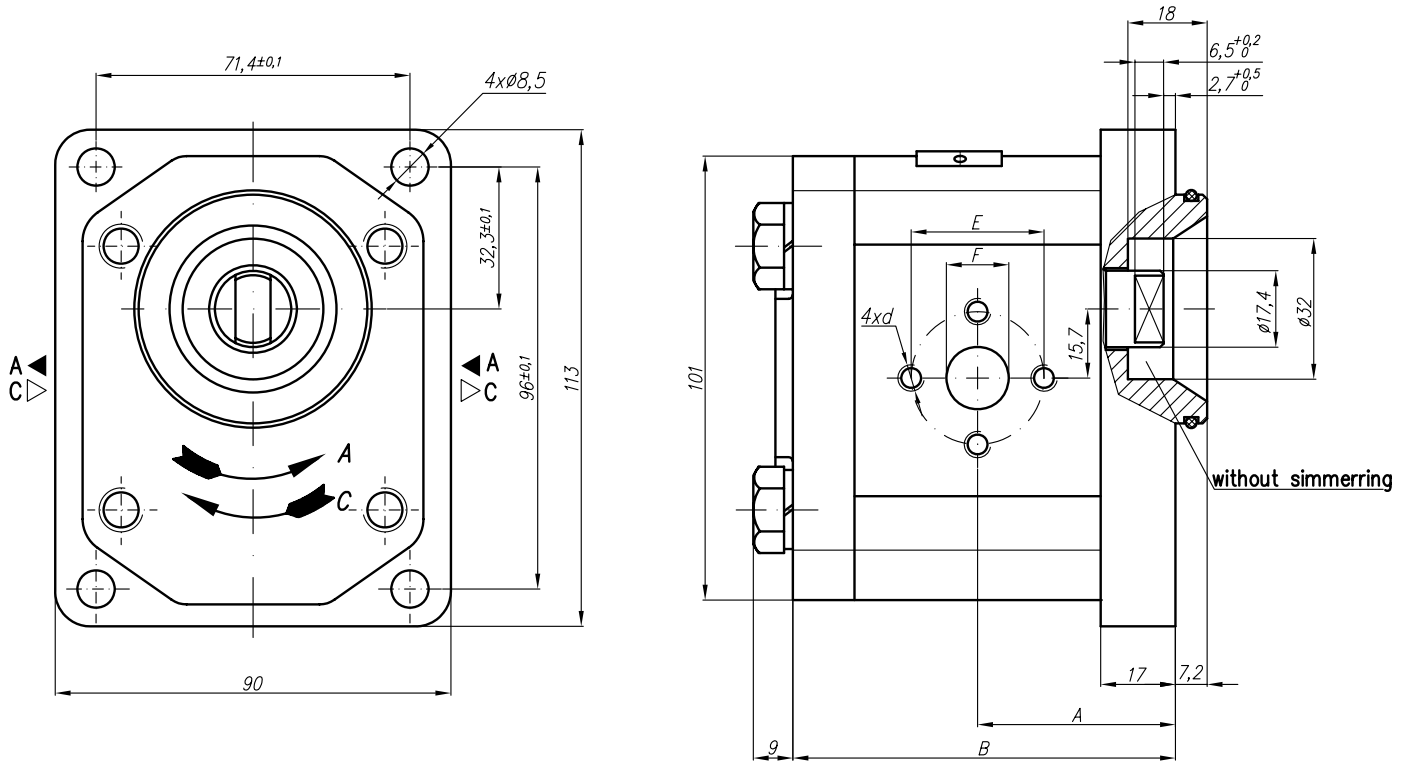
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension											
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet					Outlet				
						E	F	d	M	G	U	E	F	d	M	G	U
20A(C)4,5X206...	4,5	6,14	14,33	250	3500	42,5	80										
20A(C)6,3X206...	6,3	8,69	20,29	250	3500	42,5	80	30,2	13,1	M6-6H	G1/2						
20A(C)8,2X206...	8,2	11,32	26,40	250	3500	42,5	80										
20A(C)10X206...	10	13,95	32,55	250	3500	47	89										
20A(C)11X206...	11,3	15,76	36,78	250	3500	48	91,1										
20A(C)12X206...	12	16,92	39,48	250	3500	48,6	92,3										
20A(C)14X206...	14	19,95	46,55	250	3500	50	95,4										
20A(C)15X206...	15	21,60	36,00	250	2500	51	96,9	39,7	19	M8-6H	G3/4						
20A(C)16X206...	16	23,04	38,40	250	2500	52	98,6										
20A(C)19X206...	19	27,36	45,60	200	2500	54	103,5										
20A(C)22X206...	22	31,68	42,24	180	2000	57	108,5										
20A(C)25X206...	25	36,00	48,00	160	2000	59,2	113,4					39,7	19	M8	M20x1,5	G1/2	7/8" -14UNF



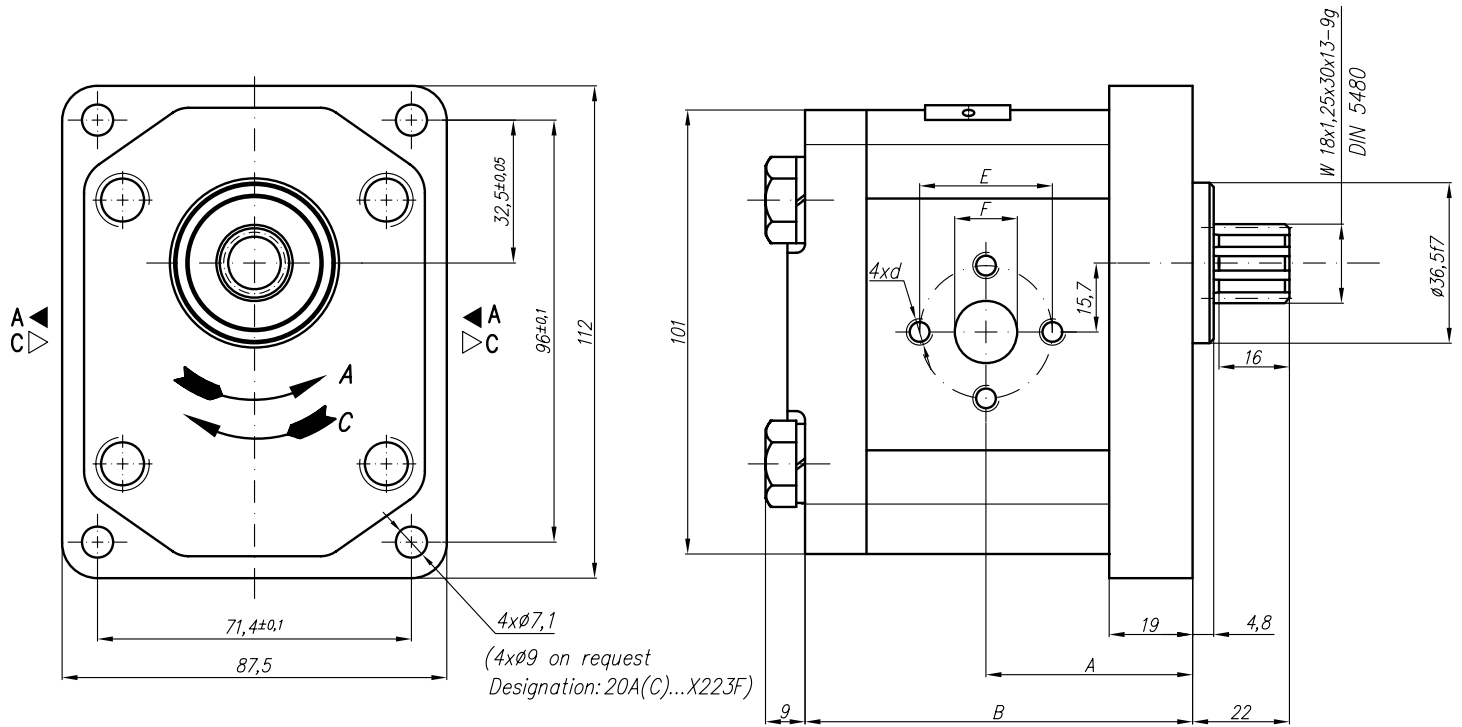
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	E	F	d
20A(C)4,5X207	4,5	6,14	14,33	250	3500	42,5	80						
20A(C)6,3X207	6,3	8,69	20,29	250	3500	42,5	80	30,2	13,1	1/4-20UNC		13,1	
20A(C)8,2X207	8,2	11,32	26,40	250	3500	42,5	80						
20A(C)10X207	10	13,95	32,55	250	3500	47	89						
20A(C)11X207	11,3	15,76	36,78	250	3500	48	91,1						
20A(C)12X207	12	16,92	39,48	250	3500	48,6	92,3						
20A(C)14X207	14	19,95	46,55	250	3500	50	95,4						
20A(C)15X207	15	21,60	36,00	250	2500	51	96,9	39,7					
20A(C)16X207	16	23,04	38,40	250	2500	52	98,6		19				
20A(C)19X207	19	27,36	45,60	200	2500	54	103,5						
20A(C)22X207	22	31,68	42,24	180	2000	57	108,5						
20A(C)25X207	25	36,00	48,00	160	2000	59,2	113,4				39,7	19	5/16"



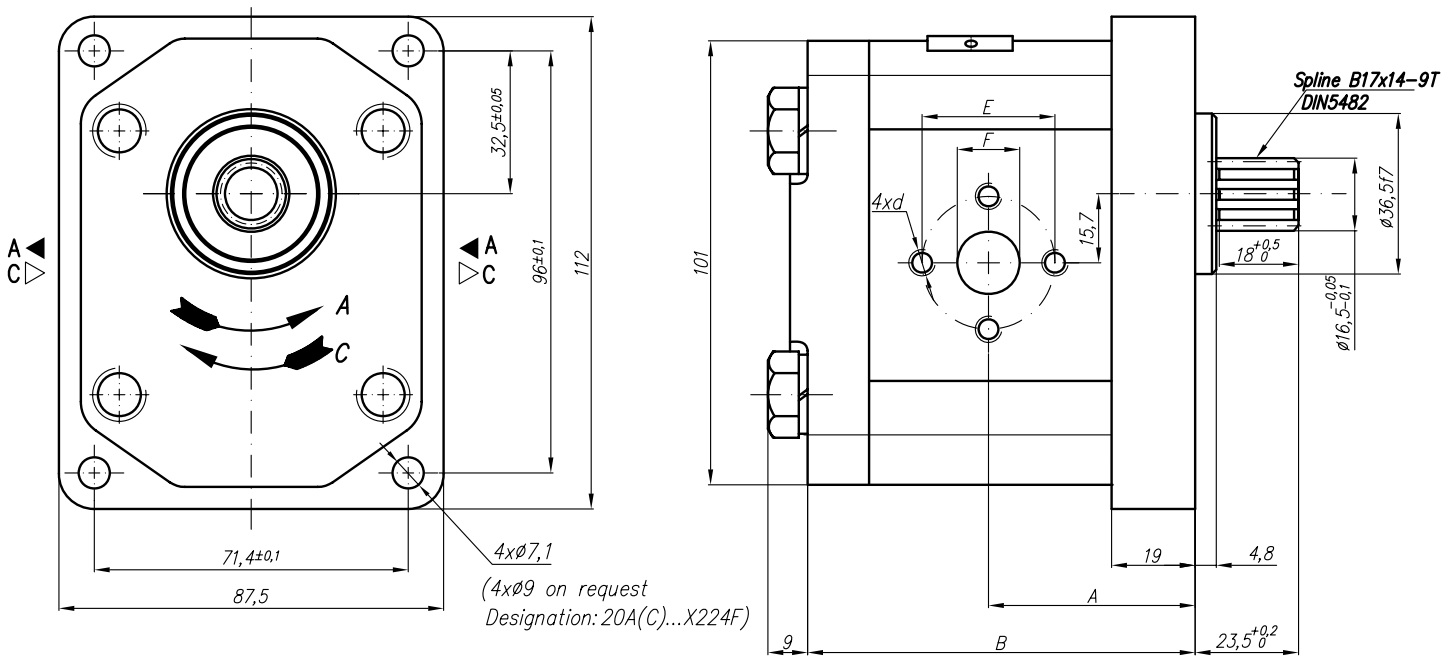
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet			
						E	F	d	E	F	d			
20A(C)4,5X210	4,5	6,14	14,33	250	3500	41,4	86,8	40	15	M6-6H	35	15	M6-6H	
20A(C)6,3X210	6,3	8,69	20,29	250	3500	42,6	89,8							
20A(C)8,2X210	8,2	11,32	26,40	250	3500	44,7	92,7							
20A(C)10X210	10	13,95	32,55	250	3500	49,1	95,7							
20A(C)11X210	11,3	15,76	36,78	250	3500	49,1	97,8							
20A(C)12X210	12	16,92	39,48	250	3500	49,1	99,1							
20A(C)14X210	14	19,95	46,55	250	3500	49,1	102,2							
20A(C)15X210	15	21,60	36,00	250	2500	49,1	103,7							
20A(C)16X210	16	23,04	38,40	250	2500	49,1	105,3							
20A(C)19X210	19	27,36	45,60	200	2500	49,1	110,3							
20A(C)22X210	22	31,68	42,24	180	2000	56,6	115,3							
20A(C)25X210	25	36,00	48,00	160	2000	58,8	120,2							



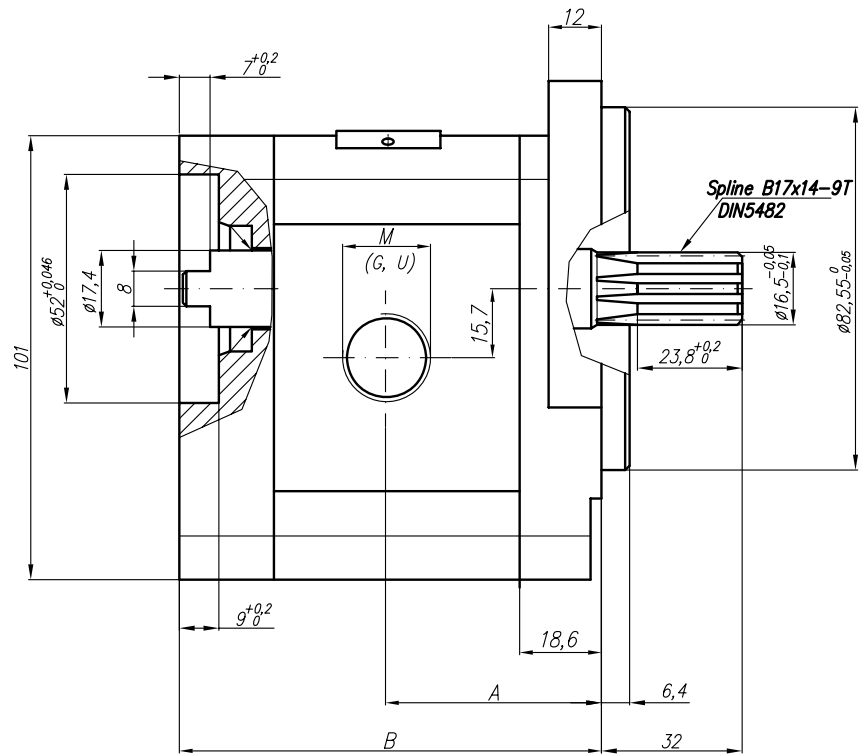
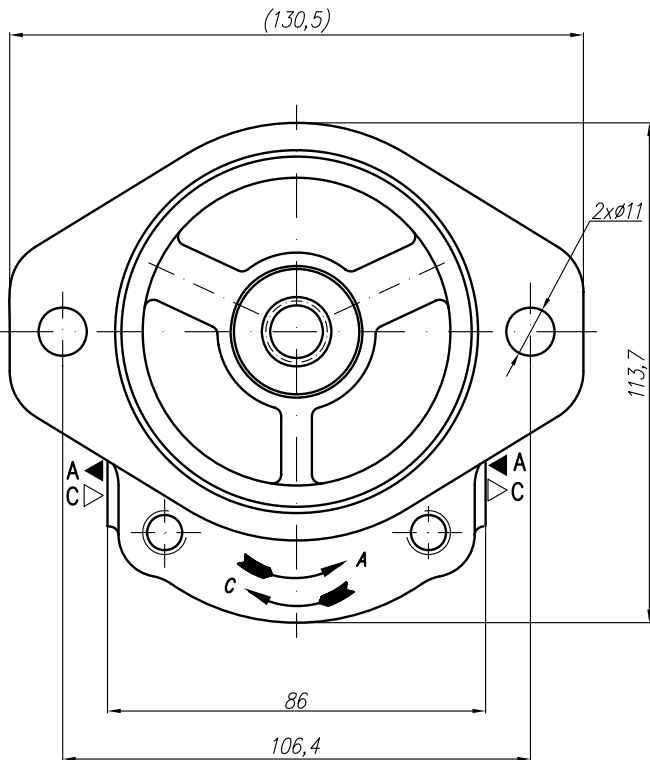
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet			
						E	F	d	E	F	d			
20A(C)4,5X218	4,5	6,14	14,33	250	3500	40,5	78							
20A(C)6,3X218	6,3	8,69	20,29	250	3500	42	81	30,2	13,1	1/4-20UNC			13,1	
20A(C)8,2X218	8,2	11,32	26,40	250	3500	43,5	83,9							
20A(C)10X218	10	13,95	32,55	250	3500	45	87							
20A(C)11X218	11,3	15,76	36,78	250	3500	46	89,1							
20A(C)12X218	12	16,92	39,48	250	3500	46,6	90,3							
20A(C)14X218	14	19,95	46,55	250	3500	48	93,4							
20A(C)15X218	15	21,60	36,00	250	2500	49	95	39,7	19	5/16"-18UNC	30,2	14,2	1/4"-20UNC	
20A(C)16X218	16	23,04	38,40	250	2500	50	96,6							
20A(C)19X218	19	27,36	45,60	200	2500	52	101,5							
20A(C)22X218	22	31,68	42,24	180	2000	55	106,5							
20A(C)25X218	25	36,00	48,00	160	2000	57,2	111,4				39,7	19	5/16"	



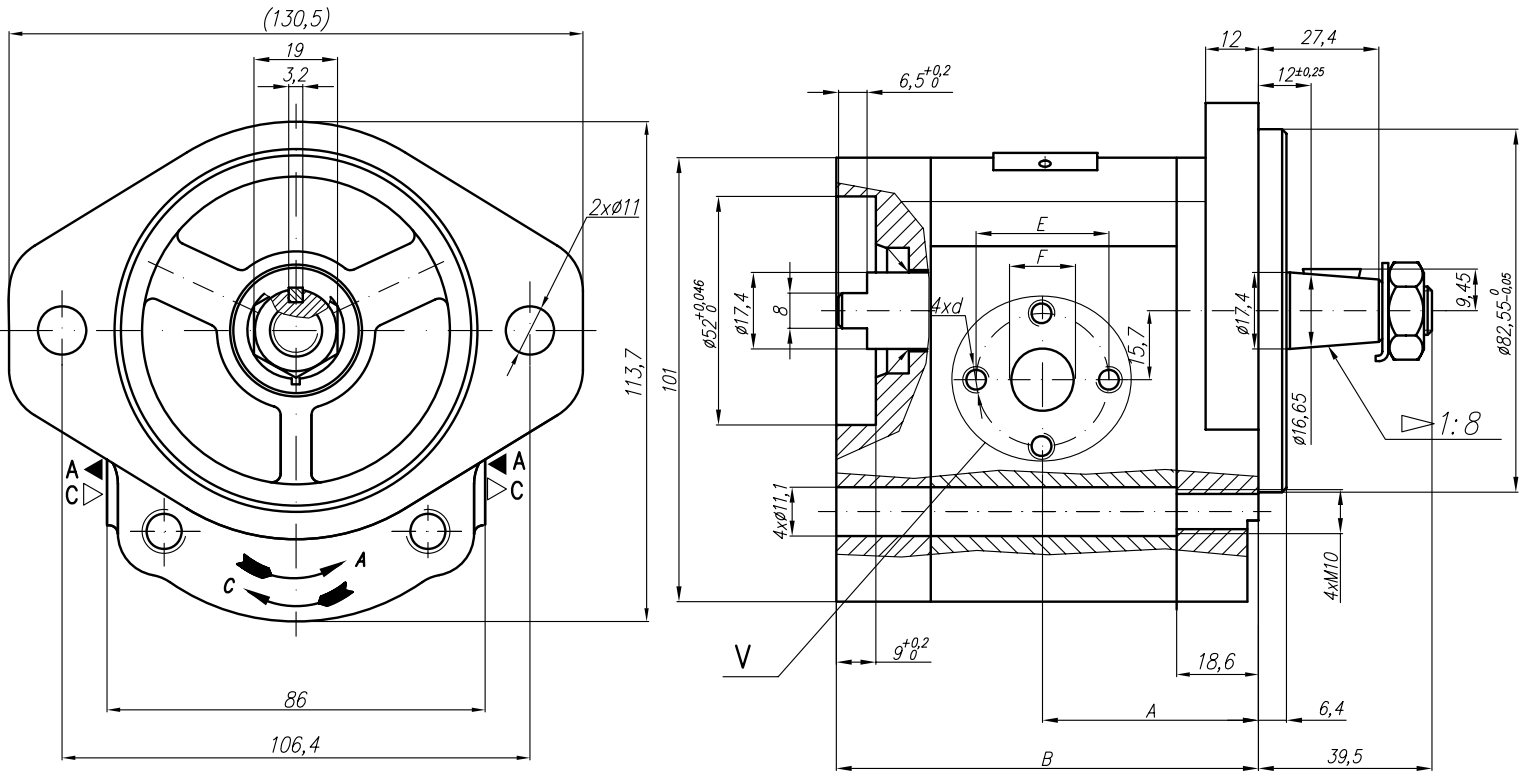
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	E mm	F mm	d mm	E mm	F mm	d mm
20A(C)4,5X223	4,5	6,14	14,33	250	3500	42,5	80	30,2	13,1	M6-6H	30,2	13,1	M6-6H
20A(C)6,3X223	6,3	8,69	20,29	250	3500	42,5	80						
20A(C)8,2X223	8,2	11,32	26,40	250	3500	42,5	80						
20A(C)10X223	10	13,95	32,55	250	3500	47	89						
20A(C)11X223	11,3	15,76	36,78	250	3500	48	91,1	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)12X223	12	16,92	39,48	250	3500	48,6	92,3						
20A(C)14X223	14	19,95	46,55	250	3500	50	95,4						
20A(C)15X223	15	21,60	36,00	250	2500	51	96,9						
20A(C)16X223	16	23,04	38,40	250	2500	52	98,6	39,7	19	M8-6H	39,7	19	M8
20A(C)19X223	19	27,36	45,60	200	2500	54	103,5						
20A(C)22X223	22	31,68	42,24	180	2000	57	108,5						
20A(C)25X223	25	36,00	48,00	160	2000	59,2	113,4						



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension													
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet								
20A(C)4,5X224	4,5	6,14	14,33	250	3500	42,5	80	30,2	13,1	M6-6H	30,2	13,1	M6-6H						
20A(C)6,3X224	6,3	8,69	20,29	250	3500	42,5	80												
20A(C)8,2X224	8,2	11,32	26,40	250	3500	42,5	80												
20A(C)10X224	10	13,95	32,55	250	3500	47	89	39,7	19	M8-6H	30,2	14,2	M6-6H						
20A(C)11X224	11,3	15,76	36,78	250	3500	48	91,1												
20A(C)12X224	12	16,92	39,48	250	3500	48,6	92,3												
20A(C)14X224	14	19,95	46,55	250	3500	50	95,4												
20A(C)15X224	15	21,60	36,00	250	2500	51	96,9												
20A(C)16X224	16	23,04	38,40	250	2500	52	98,6												
20A(C)19X224	19	27,36	45,60	200	2500	54	103,5												
20A(C)22X224	22	31,68	42,24	180	2000	57	108,5	39,7	19	M8	39,7	19	M8						
20A(C)25X224	25	36,00	48,00	160	2000	59,2	113,4												
20A(C)14X224H	14	20,16	47,04	250	3500	53,1	110,9	39,7	19	M8-6H	30,2	14,2	M6-6H						
20A(C)15X224H	15	21,60	36,00	250	2500	56	107,2												
20A(C)16X224H	16	23,04	38,40	250	2500	56,9	108,8												
20A(C)17,3X224H	17,3	24,91	41,52	230	2500	58	110,9												
20A(C)18,2X224H	18,2	26,21	43,68	200	2500	58,8	112,5												
20A(C)19X224H	19	27,36	45,60	200	2500	59,4	113,8												
20A(C)22X224H	22	31,68	42,24	180	2000	61,9	118,8												
20A(C)25X224H	25	36,00	48,00	160	2000	64,3	123,7												
20A(C)28X224H	28	40,32	53,76	120	2000	66,8	128,5							39,7	19	M8-6H	39,7	19	M8-6H
20A(C)32X224H	32	46,08	46,08	100	1500	70	134,8												
20A(C)36X224H	36	51,84	51,84	80	1500	73,2	141,4												



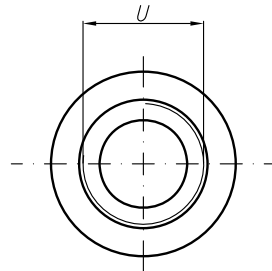
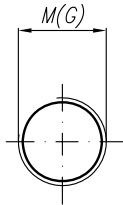
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
20A(C)4,5X227...	4,5	6,14	14,33	250	3500	42,1	87,2	M20x1,5	G1/2		M16x1,5	G1/2	
20A(C)6,3X227...	6,3	8,69	20,29	250	3500	42,1	87,2						
20A(C)8,2X227...	8,2	11,32	26,40	250	3500	42,1	87,2						
20A(C)10X227...	10	13,95	32,55	250	3500	46,6	96,2	M20x1,5	G3/4		M16x1,5	G1/2	
20A(C)11X227...	11,3	15,76	36,78	250	3500	47,6	98,3						
20A(C)12X227...	12	16,92	39,48	250	3500	48,2	99,5						
20A(C)14X227...	14	19,95	46,55	250	3500	49,8	102,5	M20x1,5	G3/4		M16x1,5	G1/2	
20A(C)15X227...	15	21,60	36,00	250	2500	50,6	104,1						
20A(C)16X227...	16	23,04	38,40	250	2500	51,4	105,8						
20A(C)19X227...	19	27,36	45,60	200	2500	54	110,7	M20x1,5	G3/4		M16x1,5	G1/2	
20A(C)22X227...	22	31,68	42,24	180	2000	56,5	115,7						
20A(C)25X227...	25	36,00	48,00	160	2000	58,8	120,6						



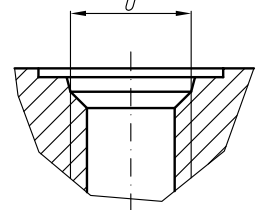
V
Variants for ports – M;G;U

Designations:

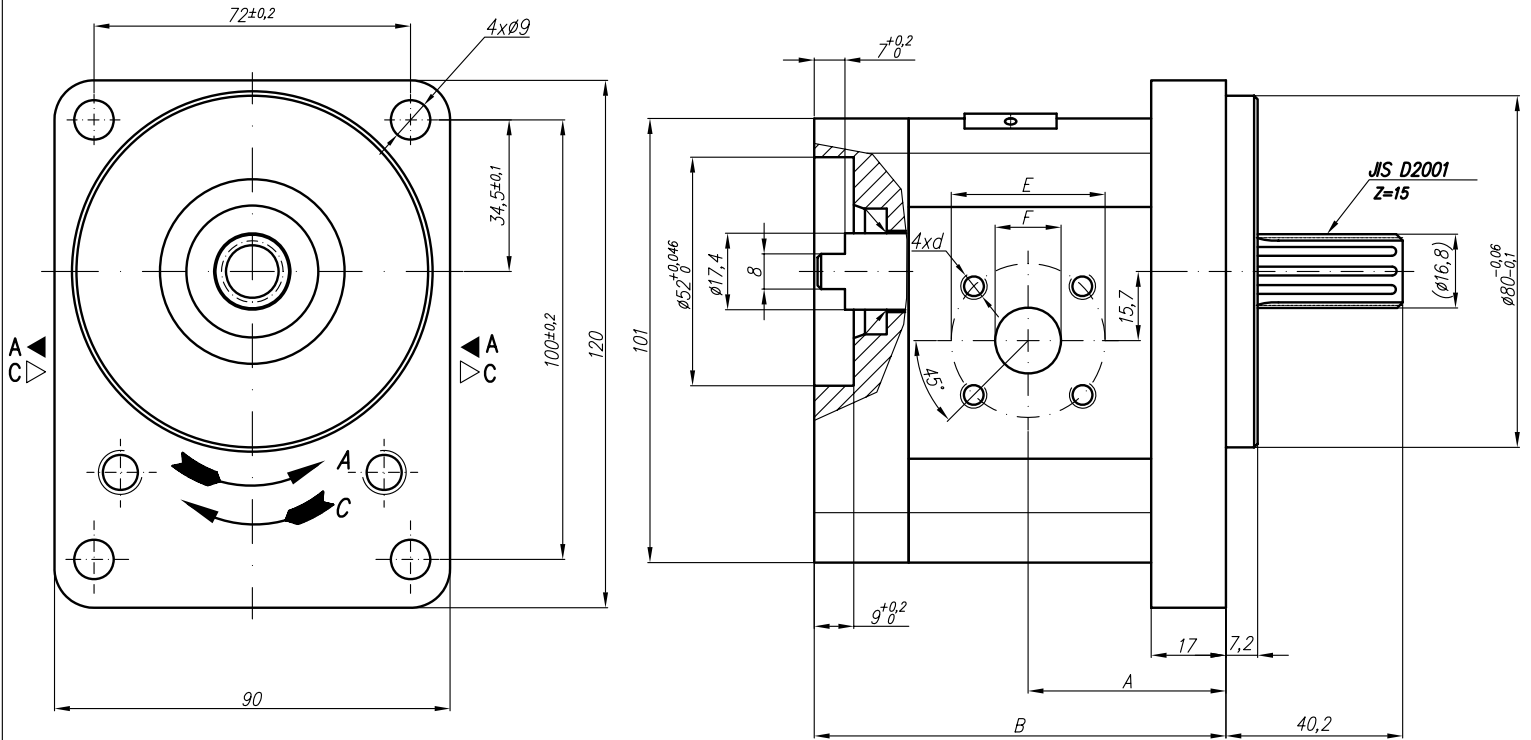
- ...X234 – Normal version (flanges);
- ...X234M – Metric threads;
- ...X234G – GAS threads;
- ...X234U – SAE threads;



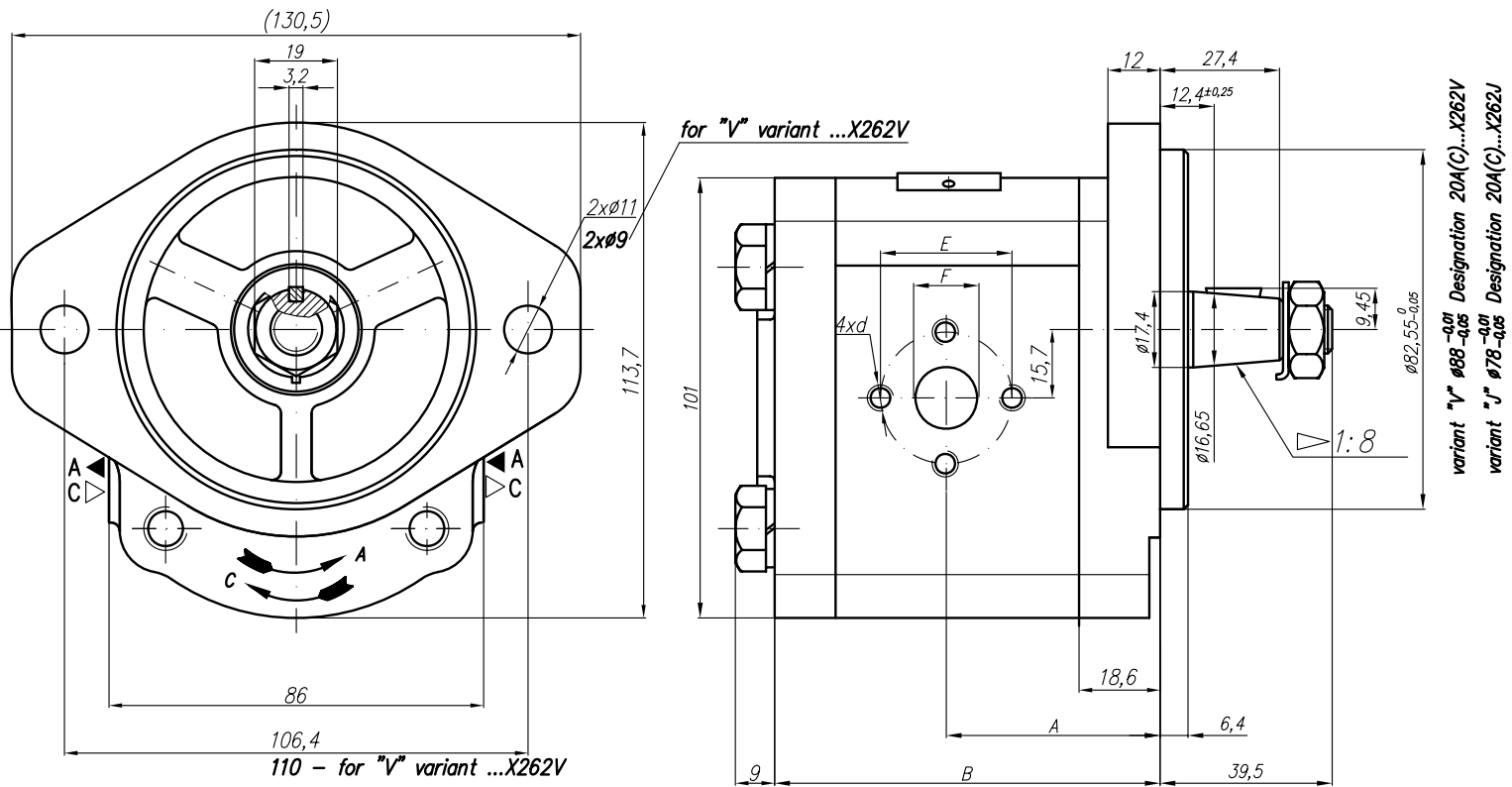
SAE J475 (ISO R725)



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension														
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet					Outlet							
								E mm	F mm	d mm	M	G	U	E mm	F mm	d mm	M	G	U	
20A(C)4,5X234...	4,5	6,14	14,33	250	3500	42,5	87,2													
20A(C)6,3X234...	6,3	8,69	20,29	250	3500	42,5	87,2	30,2	13,1	M6-6H		G1/2			13,1					
20A(C)8,2X234...	8,2	11,32	26,40	250	3500	42,5	87,2													
20A(C)10X234...	10	13,95	32,55	250	3500	47	96,2													
20A(C)11X234...	11,3	15,76	36,78	250	3500	48	98,3													
20A(C)12X234...	12	16,92	39,48	250	3500	48,6	99,5													
20A(C)14X234...	14	19,95	46,55	250	3500	50	102,5													
20A(C)15X234...	15	21,60	36,00	250	2500	51	104,1	39,7	19	M8-6H	M20x1,5	G3/4	1 1/16"-12UNF	30,2	14,2	M6-6H	M16x1,5	G1/2		
20A(C)16X234...	16	23,04	38,40	250	2500	52	105,8													
20A(C)19X234...	19	27,36	45,60	200	2500	54	110,7													
20A(C)22X234...	22	31,68	42,24	180	2000	57	115,7													
20A(C)25X234...	25	36,00	48,00	160	2000	59,2	120,6							39,7	19	M8	M20x1,5	G1/2		7/8"-14UNF

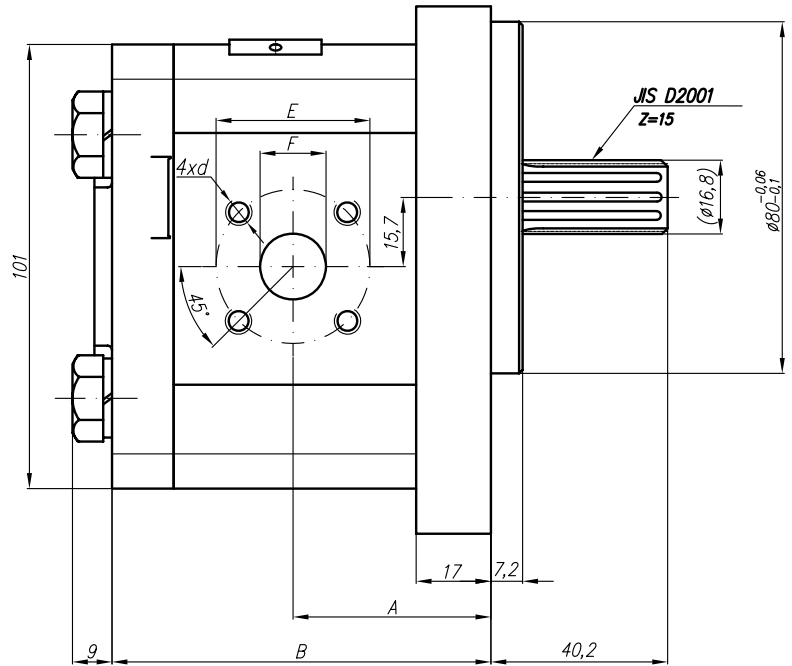
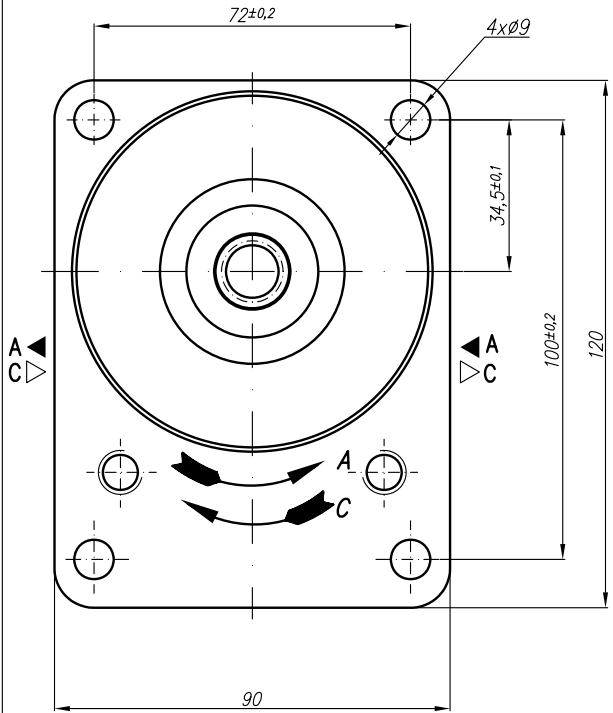


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet			
						E	F	d	E	F	d			
20A(C)4,5X259	4,5	6,14	14,33	250	3500	39,8	85,2	40	15	M6-6H	35	15	M6-6H	
20A(C)6,3X259	6,3	8,69	20,29	250	3500	41	88,2							
20A(C)8,2X259	8,2	11,32	26,40	250	3500	43,1	91,1							
20A(C)10X259	10	13,95	32,55	250	3500	47,5	94,1							
20A(C)11X259	11,3	15,76	36,78	250	3500	47,5	96,2							
20A(C)12X259	12	16,92	39,48	250	3500	47,5	97,5							
20A(C)14X259	14	19,95	46,55	250	3500	47,5	100,6							
20A(C)15X259	15	21,60	36,00	250	2500	47,5	102,1							
20A(C)16X259	16	23,04	38,40	250	2500	47,5	103,8							
20A(C)19X259	19	27,36	45,60	200	2500	47,5	108,7							
20A(C)22X259	22	31,68	42,24	180	2000	55	113,7							
20A(C)25X259	25	36,00	48,00	160	2000	57,2	118,5							

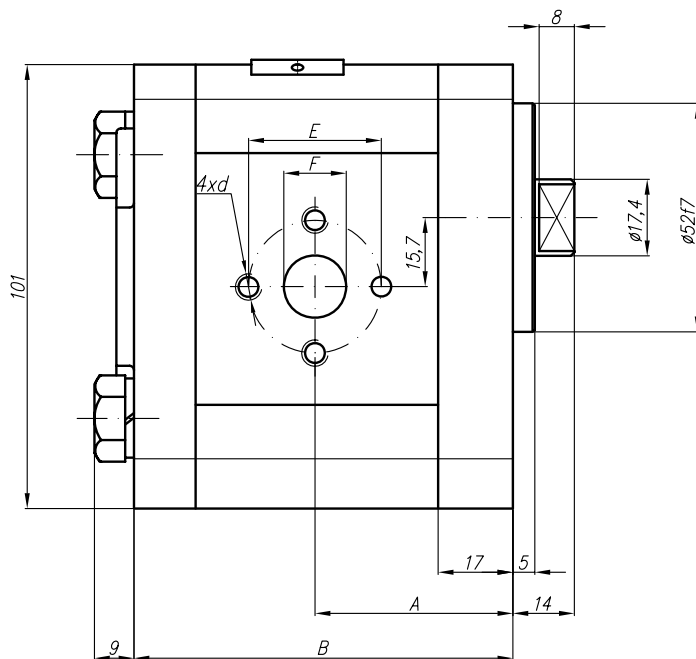
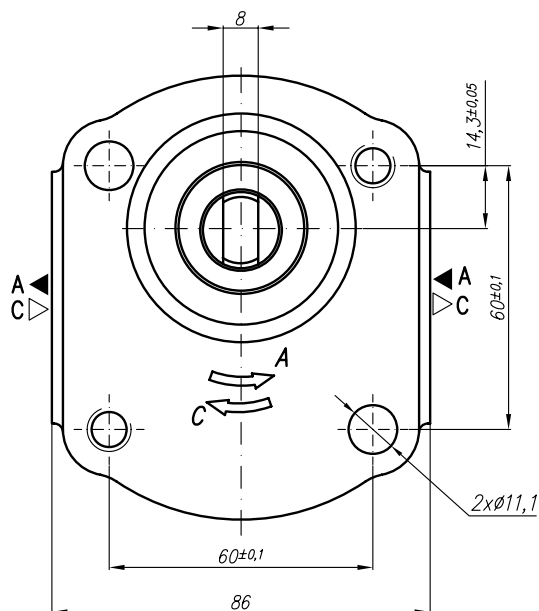


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	E	F	d
20A(C)4,5X262...	4,5	6,14	14,33	250	3500	42,5	80	30,2	13,1	M6-6H	30,2	13,1	
20A(C)6,3X262...	6,3	8,69	20,29	250	3500	42,5	80						
20A(C)8,2X262...	8,2	11,32	26,40	250	3500	42,5	80						
20A(C)10X262...	10	13,95	32,55	250	3500	47	89						
20A(C)11X262...	11,3	15,76	36,78	250	3500	48	91,1						
20A(C)12X262...	12	16,92	39,48	250	3500	48,6	92,3						
20A(C)14X262...	14	19,95	46,55	250	3500	50	95,4						
20A(C)15X262...	15	21,60	36,00	250	2500	51	96,9						
20A(C)16X262...	16	23,04	38,40	250	2500	52	98,6						
20A(C)19X262...	19	27,36	45,60	200	2500	54	103,5						
20A(C)22X262...	22	31,68	42,24	180	2000	57	108,5						
20A(C)25X262...	25	36,00	48,00	160	2000	59,2	113,4	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)14X262...H	14	20,16	47,04	250	3500	55,6	106,8						
20A(C)15X262...H	15	21,60	43,20	250	3000	55,6	106,8						
20A(C)16X262...H	16	23,04	46,08	250	3000	56,5	108,4						
20A(C)17,3X262...H	17,3	24,91	49,82	230	3000	57,6	110,5						
20A(C)18,2X262...H	18,2	26,21	52,42	210	3000	58,4	112,1						
20A(C)19X262...H	19	27,36	54,72	200	3000	59	113,4						
20A(C)22X262...H	22	31,68	52,80	180	2500	61,5	118,4						
20A(C)25X262...H	25	36,00	60,00	160	2500	63,9	123,3						
20A(C)28X262...H	28	40,32	67,20	130	2500	66,4	128,1						
20A(C)32X262...H	32	46,08	61,44	120	2000	69,6	134,4						
20A(C)36X262...H	36	51,84	69,12	100	2000	72,8	141	39,7	19	M8-6H	30,2	14,2	M6-6H

variant "V" ø88-ø105 Designation 20A(C)...X262V
variant "J" ø78-ø105 Designation 20A(C)...X262J

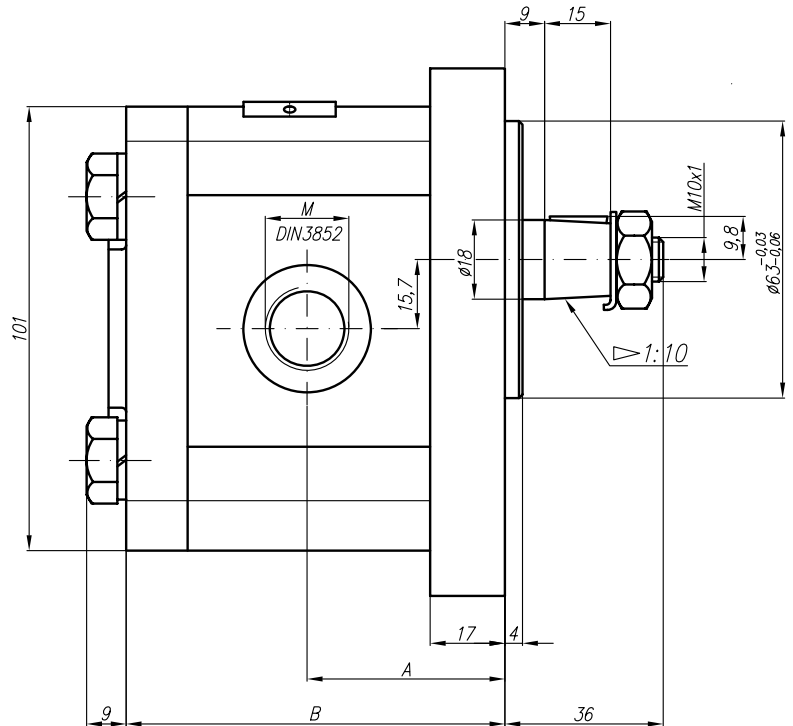
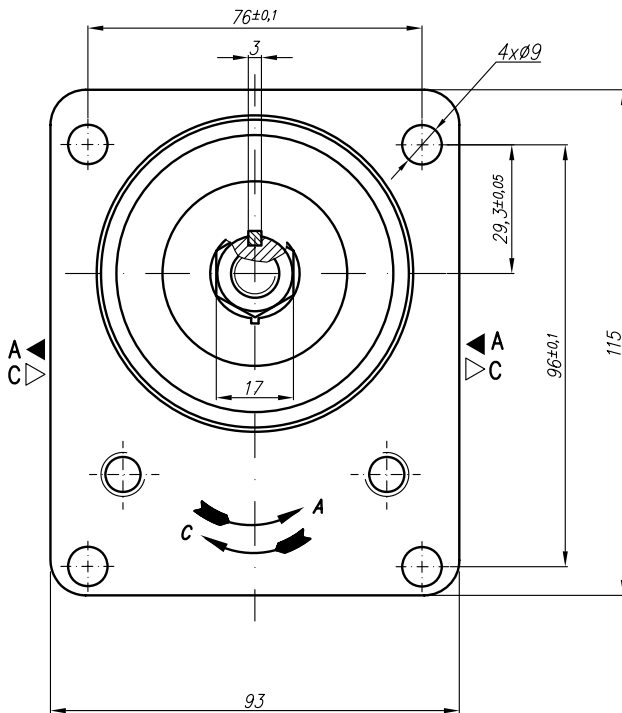


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	E	F	d	E	F	d
20A(C)4,5X269	4,5	6,14	14,33	250	3500	39,8	78	40	15	M6-6H	35	15	M6-6H
20A(C)6,3X269	6,3	8,69	20,29	250	3500	41	81						
20A(C)8,2X269	8,2	11,32	26,40	250	3500	43,1	83,9						
20A(C)10X269	10	13,95	32,55	250	3500	47,5	87						
20A(C)11X269	11,3	15,76	36,78	250	3500	47,5	89,1						
20A(C)12X269	12	16,92	39,48	250	3500	47,5	90,3						
20A(C)14X269	14	19,95	46,55	250	3500	47,5	93,4						
20A(C)15X269	15	21,60	36,00	250	2500	47,5	95						
20A(C)16X269	16	23,04	38,40	250	2500	47,5	96,6						
20A(C)19X269	19	27,36	45,60	200	2500	47,5	101,5						
20A(C)22X269	22	31,68	42,24	180	2000	55	106,5						
20A(C)25X269	25	36,00	48,00	160	2000	57,2	111,4						



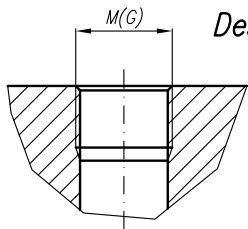
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	E	F	d
20A(C)4,5X295	4,5	6,14	14,33	250	3500	40,5	78	30,2	13,1	M6-6H	30,2	13,1	
20A(C)6,3X295	6,3	8,69	20,29	250	3500	42	81						
20A(C)8,2X295	8,2	11,32	26,40	250	3500	43,5	83,9	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)10X295	10	13,95	32,55	250	3500	45	87						
20A(C)11X295	11,3	15,76	36,78	250	3500	46	89,1	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)12X295	12	16,92	39,48	250	3500	46,6	90,3						
20A(C)14X295	14	19,95	46,55	250	3500	48	93,4	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)15X295	15	21,60	36,00	250	2500	49	95						
20A(C)16X295	16	23,04	38,40	250	2500	50	96,6	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)19X295	19	27,36	45,60	200	2500	52	101,5						
20A(C)22X295	22	31,68	42,24	180	2000	55	106,5	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)25X295	25	36,00	48,00	160	2000	57,2	111,4						

& 20A(C)...X145... – with standard threads M;G (see below)

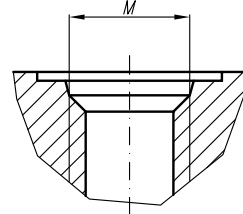


Possible variants with standard threads—M;G

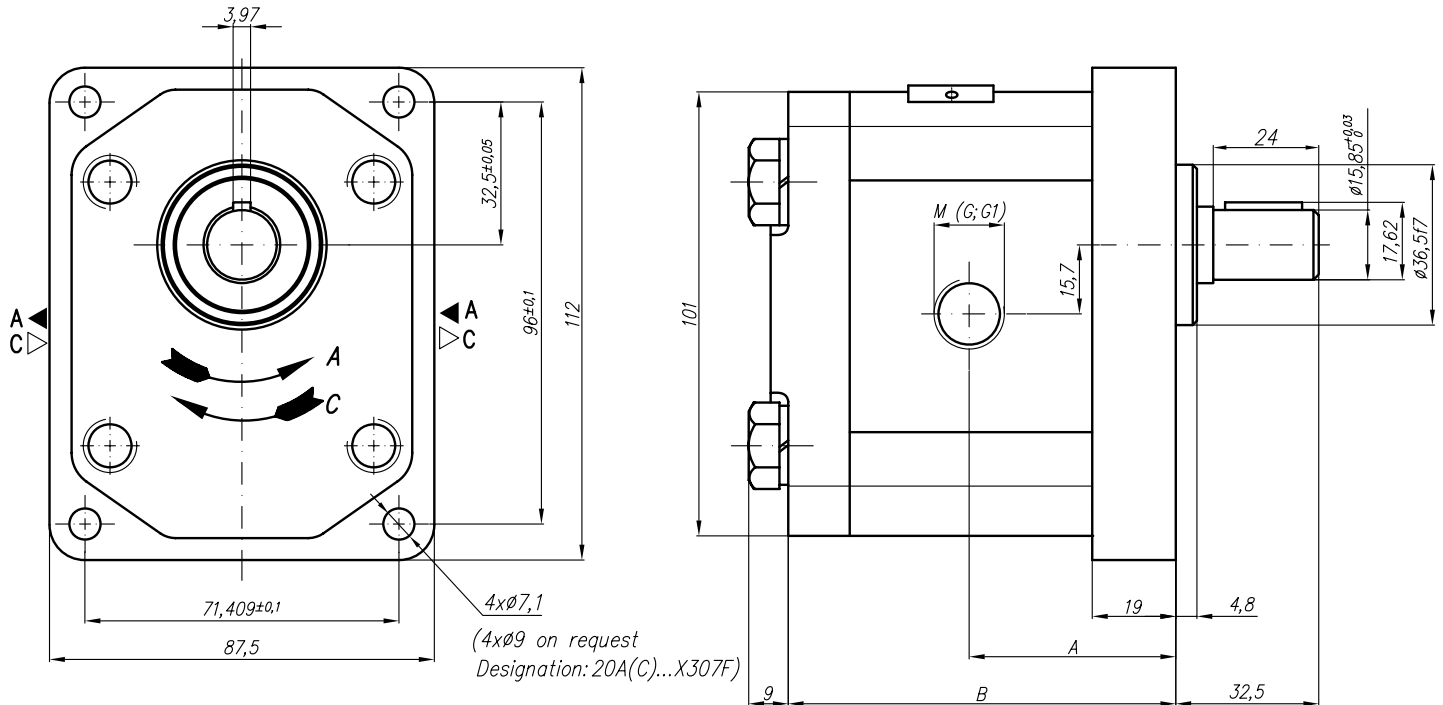
Normal version ports – M (DIN 3852)
(with "O"-ring)



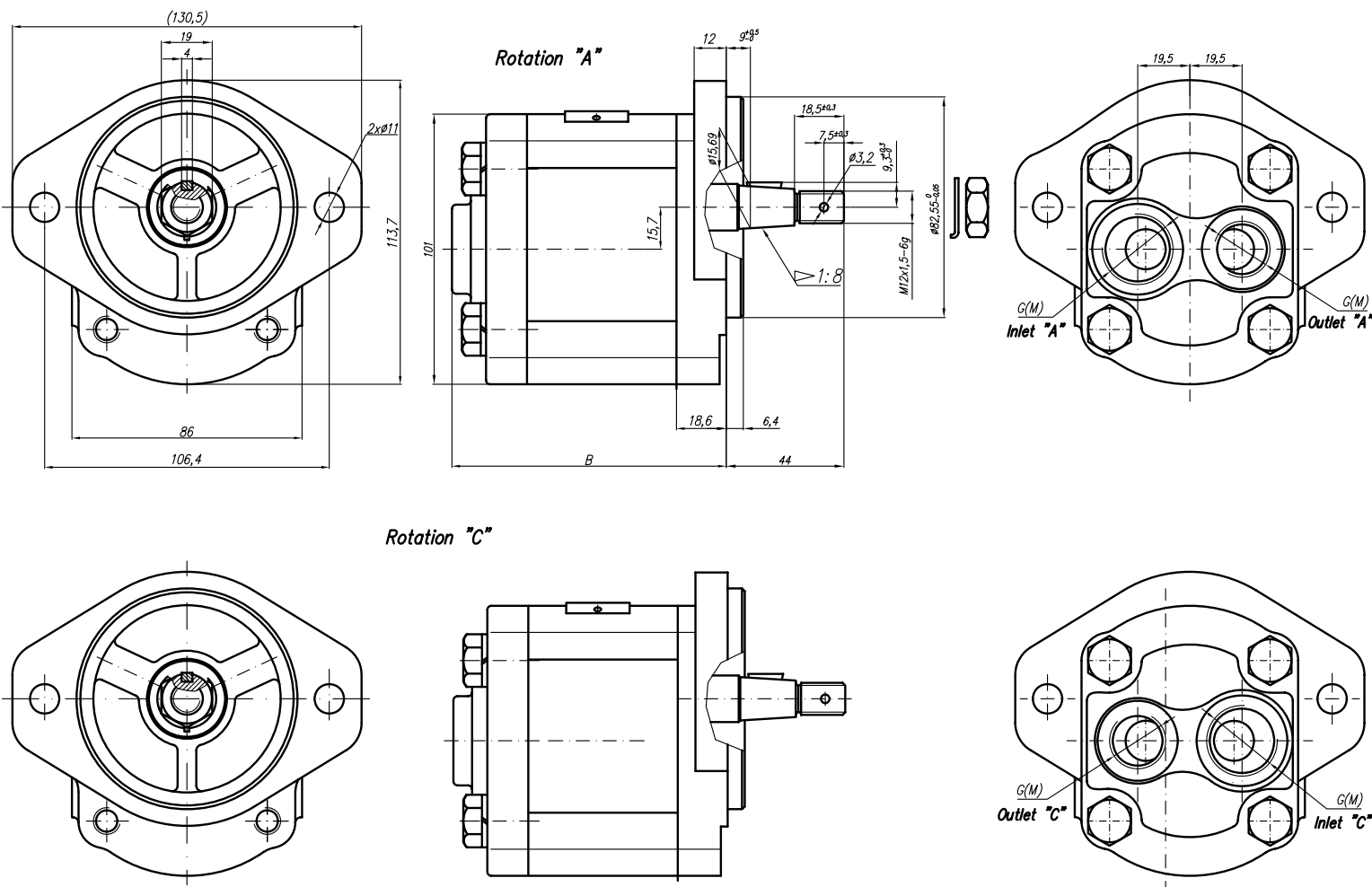
Designation 20A(C)...X145...



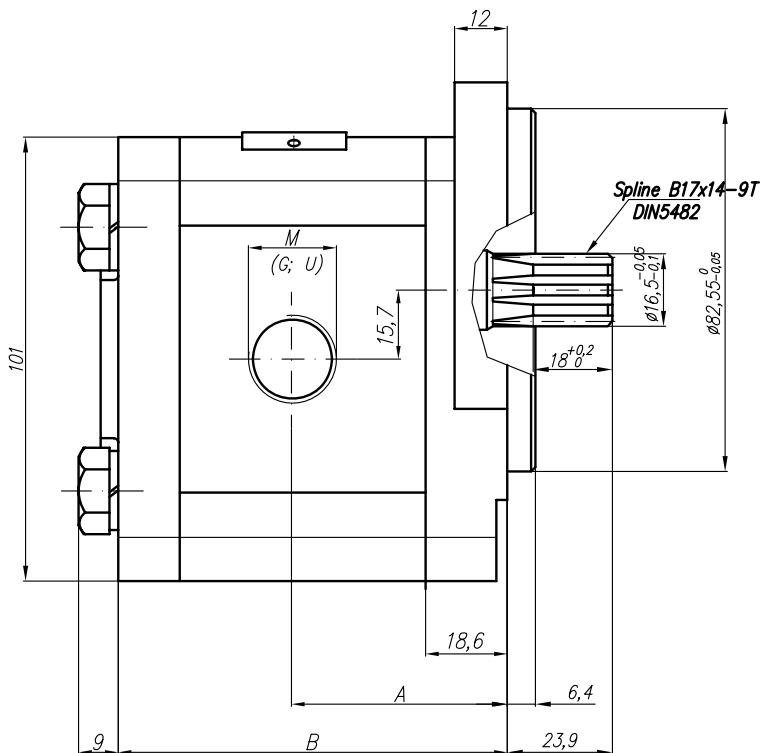
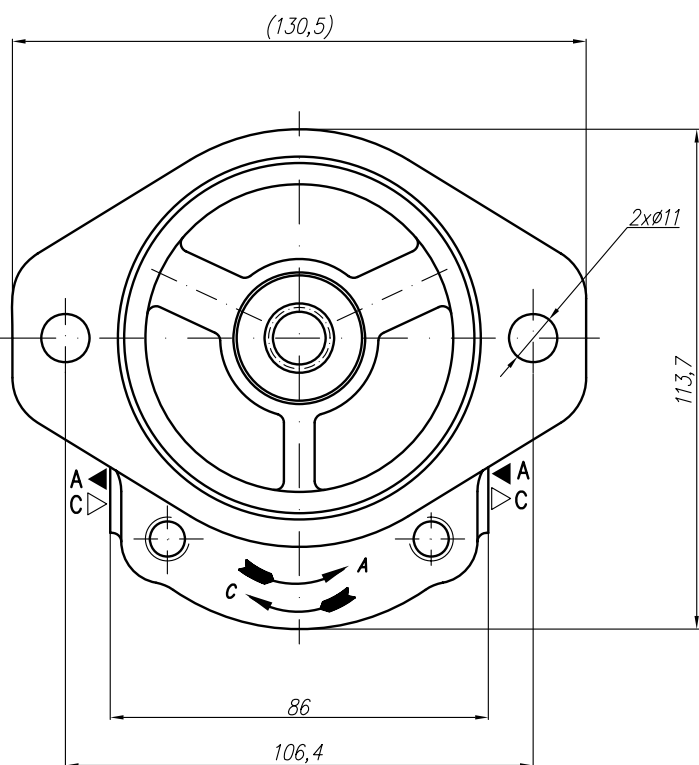
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
20A(C)4,5X306	4,5	6,14	14,33	250	3500	42,5	80	M18x1,5	G1/2		M14x1,5		
20A(C)6,3X306	6,3	8,69	20,29	250	3500	42,5	80	M18x1,5	G1/2		M14x1,5		
20A(C)8,2X306	8,2	11,32	26,40	250	3500	42,5	80	M18x1,5	G1/2		M14x1,5		
20A(C)10X306	10	13,95	32,55	250	3500	47	89	M22x1,5	G1/2		M18x1,5		
20A(C)11X306	11,3	15,76	36,78	250	3500	48,6	91,1	M22x1,5	G1/2		M18x1,5		
20A(C)12X306	12	16,92	39,48	250	3500	49	92,3	M22x1,5	G1/2		M18x1,5		
20A(C)14X306	14	19,95	46,55	250	3500	49	95,4	M27x2	G3/4		M18x1,5		G1/2
20A(C)15X306	15	21,60	36,00	250	2500	49,5	96,9	M27x2	G3/4		M18x1,5		G1/2
20A(C)16X306	16	23,04	38,40	250	2500	52	98,6	M27x2	G3/4		M18x1,5		G1/2
20A(C)19X306	19	27,36	45,60	200	2500	53	103,5	M27x2	G3/4		M18x1,5		G1/2
20A(C)22X306	22	31,68	42,24	180	2000	57	108,5	M27x2	G3/4		M18x1,5		G1/2
20A(C)25X306	25	36,00	48,00	160	2000	59,2	113,4	M27x2	G3/4		M18x1,5		G1/2



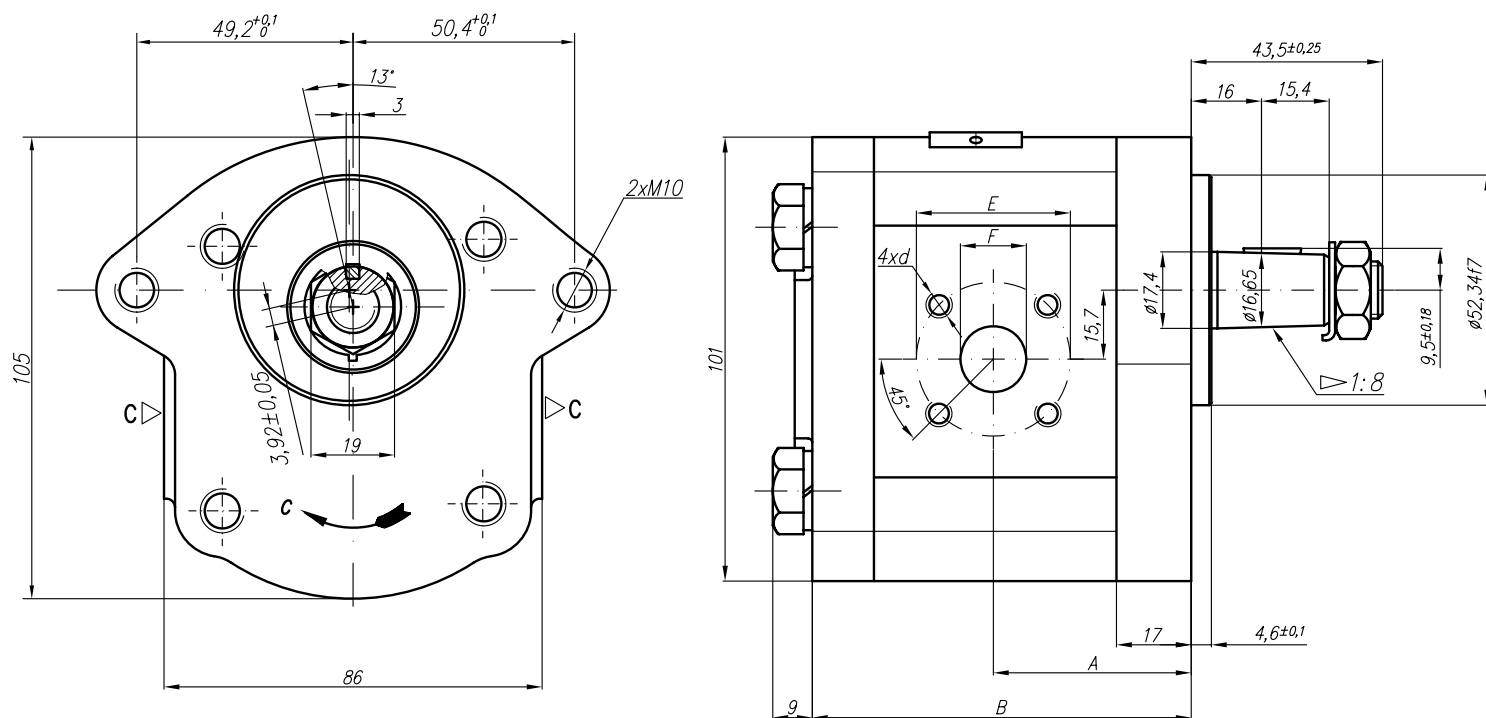
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	G1	M	G	G1
20A(C)4,5X307...	4,5	6,14	14,33	250	3500								
20A(C)6,3X307...	6,3	8,69	20,29	250	3500				G1/2				
20A(C)8,2X307...	8,2	11,32	26,40	250	3500								
20A(C)10X307...	10	13,95	32,55	250	3500	47	89						
20A(C)11X307...	11,3	15,76	36,78	250	3500	48	91,1						
20A(C)12X307...	12	16,92	39,48	250	3500	48,6	92,3						
20A(C)14X307...	14	19,95	46,55	250	3500	50	95,4						
20A(C)15X307...	15	21,60	36,00	250	2500	51	96,9						
20A(C)16X307...	16	23,04	38,40	250	2500	52	98,6						
20A(C)19X307...	19	27,36	45,60	200	2500	54	103,5						
20A(C)22X307...	22	31,68	42,24	180	2000	57	108,5						
20A(C)25X307...	25	36,00	48,00	160	2000	59,2	113,4			G1	M20X1,5		G3/4



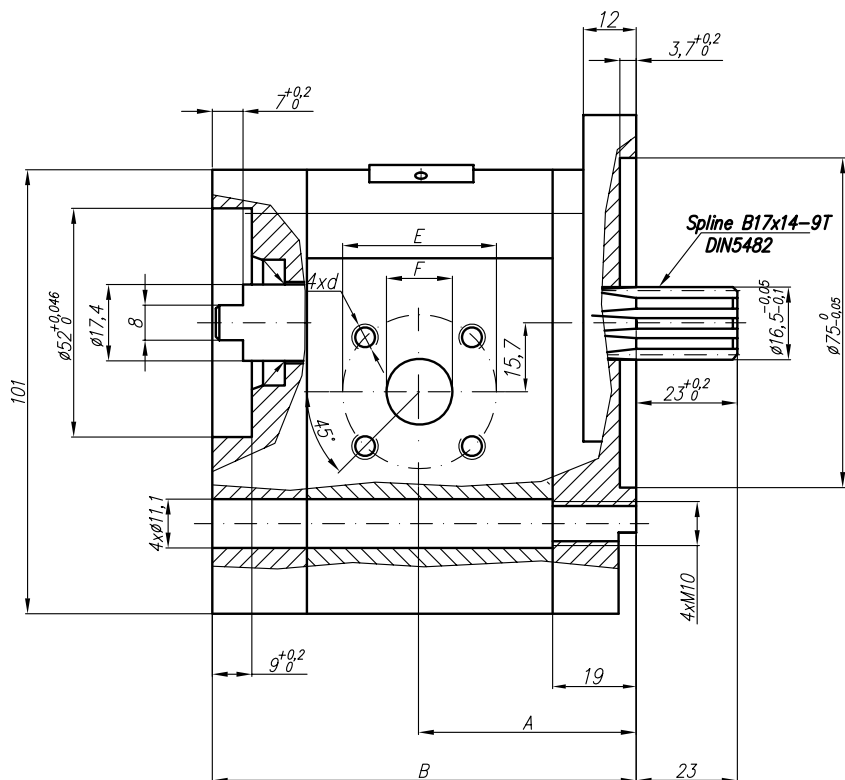
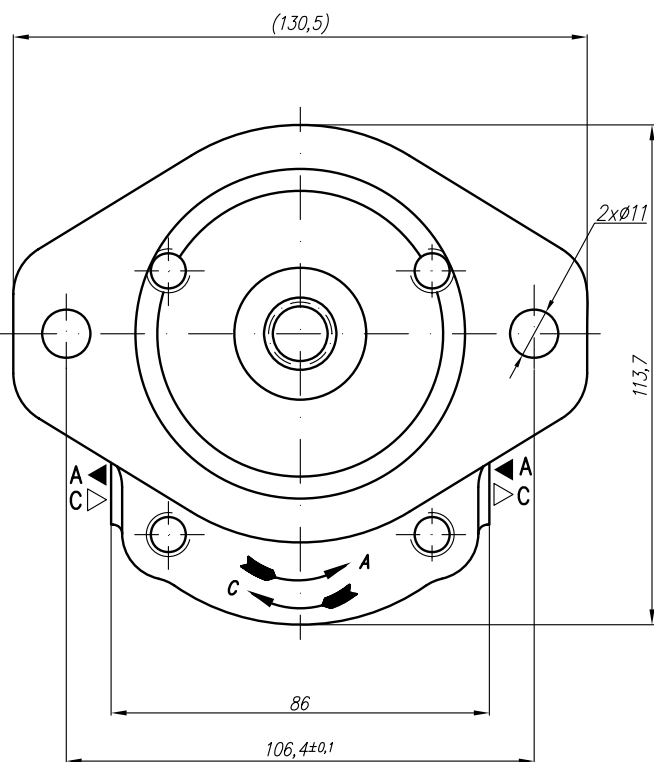
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	G1	M	G	G1
20A(C)4,5X318W	4,5	6,14	14,33	250	3500		93,6	M27x1,5	G3/4				
20A(C)6,3X318W	6,3	8,69	20,29	250	3500		96,6						
20A(C)8,2X318W	8,2	11,32	26,40	250	3500		99,5						
20A(C)10X318W	10	13,95	32,55	250	3500		102,5						
20A(C)11X318W	11,3	15,76	36,78	250	3500		104,6						
20A(C)12X318W	12	16,92	39,48	250	3500		105,9						
20A(C)14X318W	14	19,95	46,55	250	3500		108,9						
20A(C)15X318W	15	21,60	36,00	250	2500		110,5						
20A(C)16X318W	16	23,04	38,40	250	2500		112,1						
20A(C)19X318W	19	27,36	45,60	200	2500		117,1						
20A(C)22X318W	22	31,68	42,24	180	2000		122,1						
20A(C)25X318W	25	36,00	48,00	160	2000		127						



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
20A(C)4,5X320...	4,5	6,14	14,33	250	3500	42	79,6	M20x1,5	G1/2	1 1/16"-12UNF	M16x1,5	G1/2	7/8"-14UNF
20A(C)6,3X320...	6,3	8,69	20,29	250	3500	43,6	82,6						
20A(C)8,2X320...	8,2	11,32	26,40	250	3500	45	85,6						
20A(C)10X320...	10	13,95	32,55	250	3500	46,6	88,7						
20A(C)11X320...	11,3	15,76	36,78	250	3500	47,6	90,7						
20A(C)12X320...	12	16,92	39,48	250	3500	48,2	91,9						
20A(C)14X320...	14	19,95	46,55	250	3500	49,6	95						
20A(C)15X320...	15	21,60	36,00	250	2500	50,6	96,5						
20A(C)16X320...	16	23,04	38,40	250	2500	51,6	98,2						
20A(C)19X320...	19	27,36	45,60	200	2500	53,6	103,1						
20A(C)22X320...	22	31,68	42,24	180	2000	56,6	108,1						
20A(C)25X320...	25	36,00	48,00	160	2000	58,8	113						

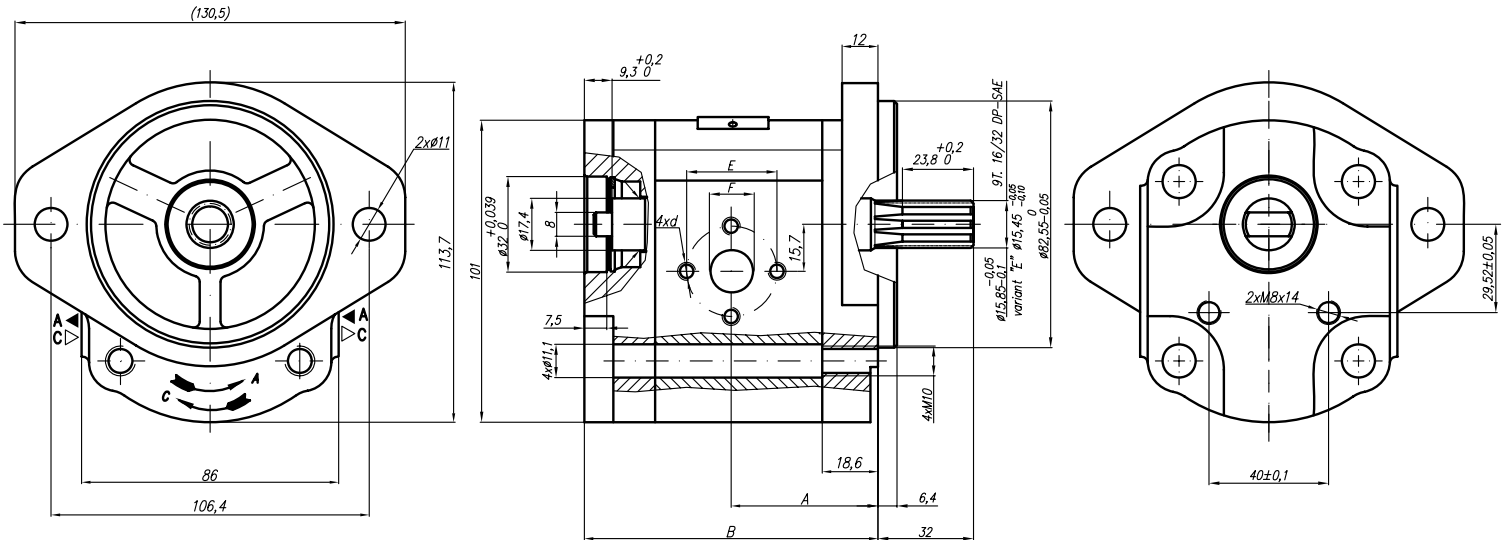


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet			
						E	F	d	E	F	d			
20C4,5X328	4,5	6,14	14,33	250	3500									
20C6,3X328	6,3	8,69	20,29	250	3500	42	81		15					
20C8,2X328	8,2	11,32	26,40	250	3500	43,5	83,9							
20C10X328	10	13,95	32,55	250	3500	45	87							
20C11X328	11,3	15,76	36,78	250	3500	46	89,1							
20C12X328	12	16,92	39,48	250	3500	46,6	90,3							
20C14X328	14	19,95	46,55	250	3500	48	93,4							
20C15X328	15	21,60	36,00	250	2500	49	95							
20C16X328	16	23,04	38,40	250	2500	50	96,6							
20C19X328	19	27,36	45,60	200	2500	52	101,5							
20C22X328	22	31,68	42,24	180	2000	55	106,5							
20C25X328	25	36,00	48,00	160	2000	57,2	111,4							



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet			
						E	F	d	E	F	d			
20A(C)4,5X341	4,5	6,14	14,33	250	3500	41,8	87,2	40	20	M6-6H	35	15	M6-6H	
20A(C)6,3X341	6,3	8,69	20,29	250	3500	43	90,2							
20A(C)8,2X341	8,2	11,32	26,40	250	3500	45,1	93,1							
20A(C)10X341	10	13,95	32,55	250	3500	49,5	96,2							
20A(C)11X341	11,3	15,76	36,78	250	3500	49,5	98,2							
20A(C)12X341	12	16,92	39,48	250	3500	49,5	99,5							
20A(C)14X341	14	19,95	46,55	250	3500	49,5	102,6							
20A(C)15X341	15	21,60	36,00	250	2500	49,5	104,1							
20A(C)16X341	16	23,04	38,40	250	2500	49,5	105,8							
20A(C)19X341	19	27,36	45,60	200	2500	49,5	110,7							
20A(C)22X341	22	31,68	42,24	180	2000	57	115,7							
20A(C)25X341	25	36,00	48,00	160	2000	59,2	120,6							

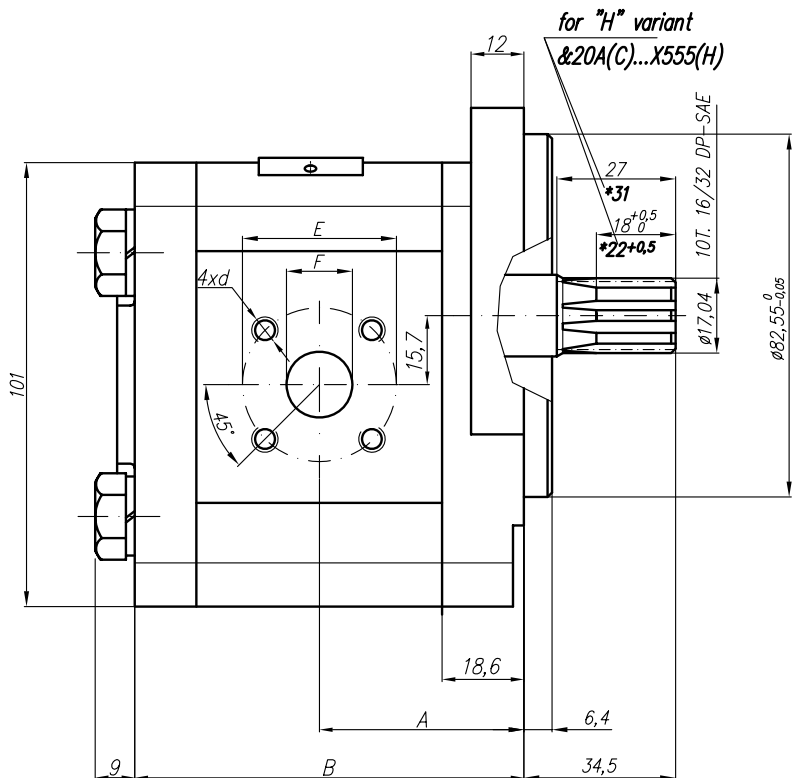
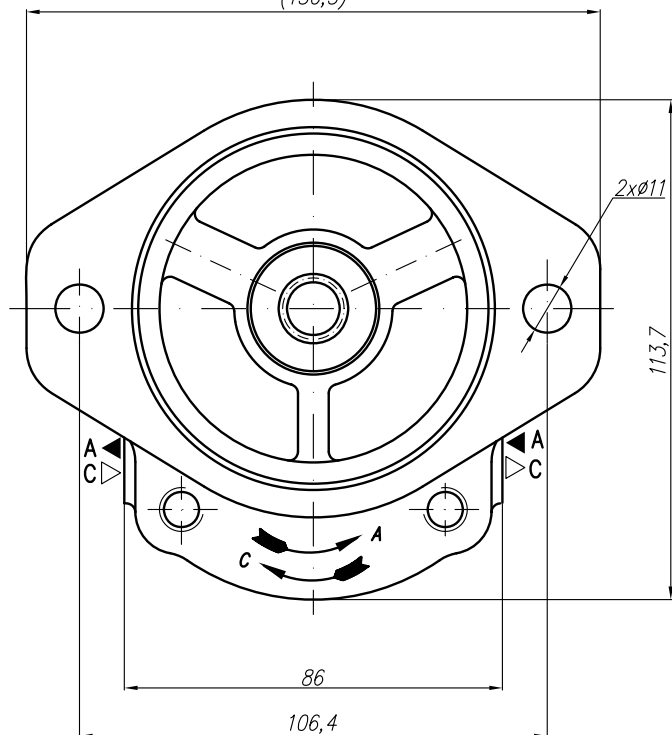
Designed as a first section of tandem pumps group 21A(C)...X347/... (llgroup/lgroup).



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	E	F	d
20A(C)4,5X347	4,5	6,14	14,33	250	3500	42,5	89,3	30,2	13,1	M6-6H	30,2	13,1	M6-6H
20A(C)6,3X347	6,3	8,69	20,29	250	3500	42,5	89,3						
20A(C)8,2X347	8,2	11,32	26,40	250	3500	42,5	89,3						
20A(C)10X347	10	13,95	32,55	250	3500	47	98,2	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)11X347	11,3	15,76	36,78	250	3500	48	100,3						
20A(C)12X347	12	16,92	39,48	250	3500	48,7	101,6						
20A(C)14X347	14	19,95	46,55	250	3500	50,2	104,7						
20A(C)15X347	15	21,60	36,00	250	2500	51	106,2						
20A(C)16X347	16	23,04	38,40	250	2500	51,8	107,8						
20A(C)19X347	19	27,36	45,60	200	2500	54	112,8	39,7	19	M8	39,7	19	M8
20A(C)22X347	22	31,68	42,24	180	2000	56,5	117,8						
20A(C)25X347	25	36,00	48,00	160	2000	58,8	122,7						

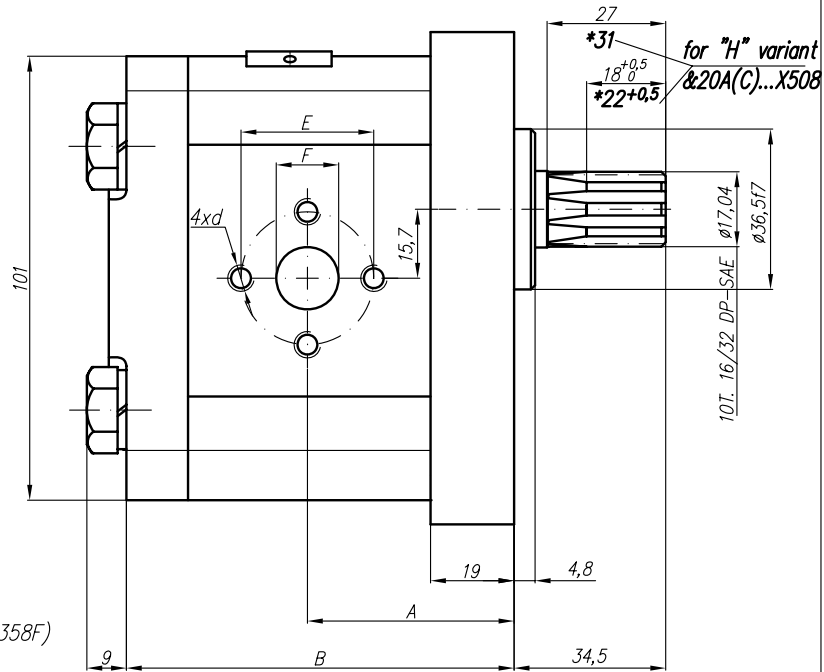
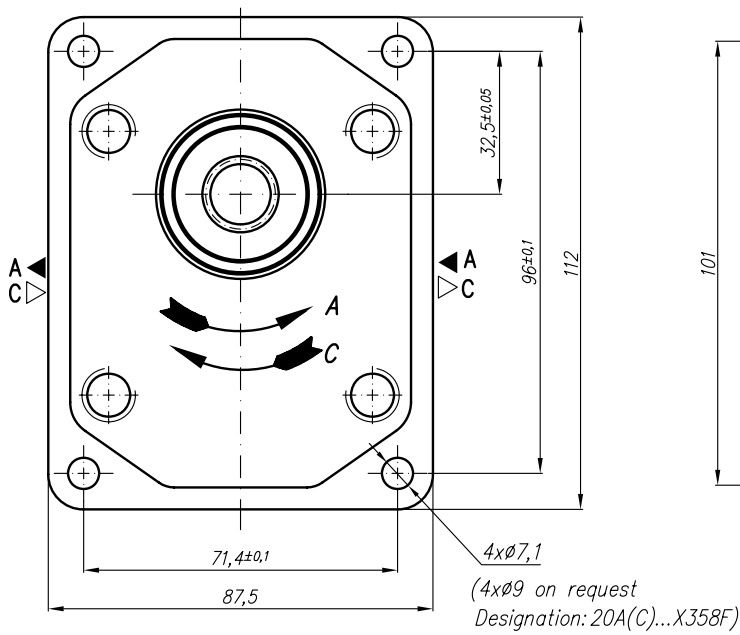
* 20A(C)...X555(H) – variant with spline lengths 22mm and 31mm.

(130,5)

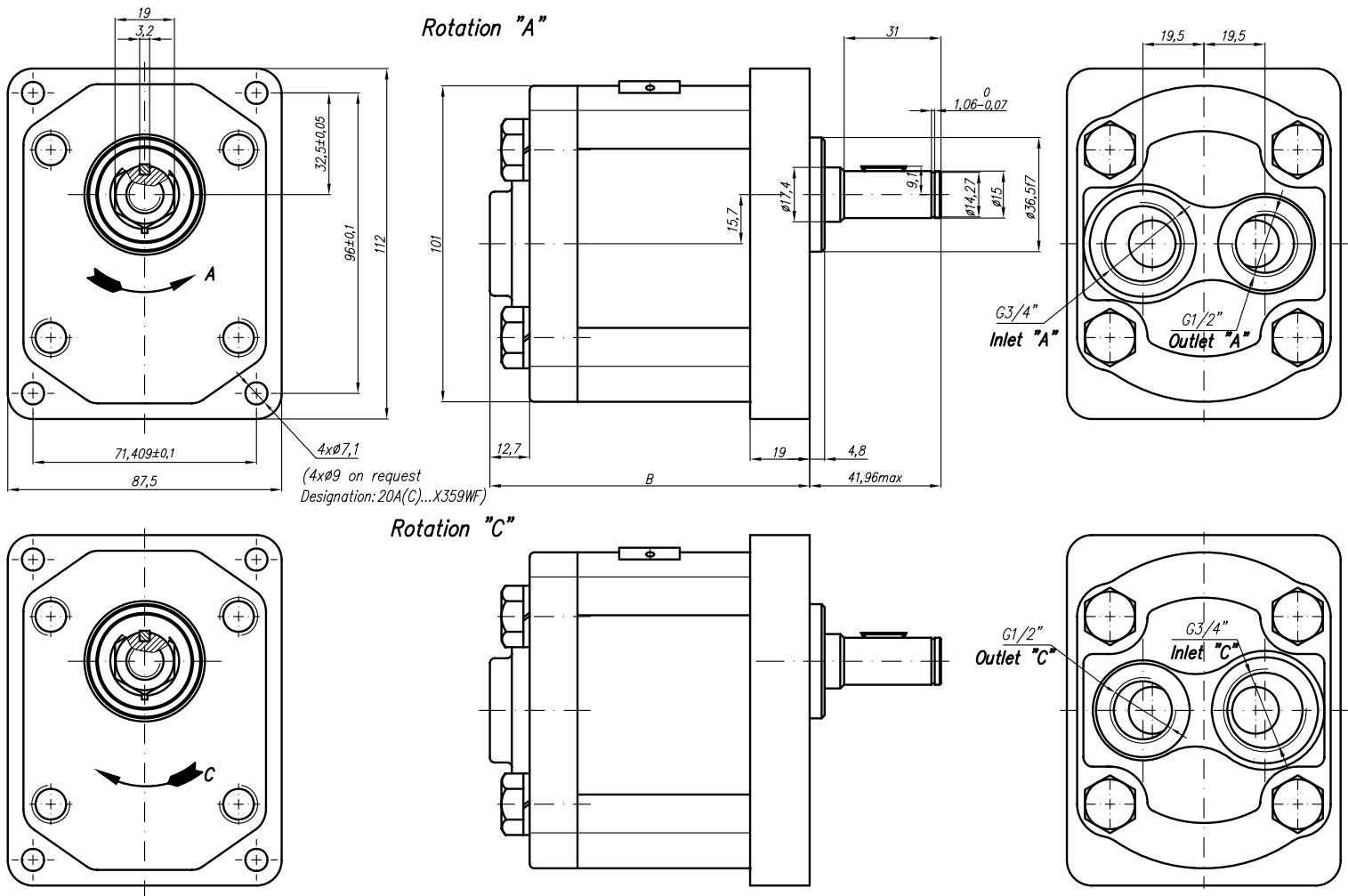


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension												
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet							
								E	F	d	E	F	d					
20A(C)4,5X355	4,5	6,14	14,33	250	3500	42	79,6	40	15	M6-6H	35	15	M6-6H					
20A(C)6,3X355	6,3	8,69	20,29	250	3500	43,6	82,6											
20A(C)8,2X355	8,2	11,32	26,40	250	3500	45	85,6											
20A(C)10X355	10	13,95	32,55	250	3500	46,6	88,7											
20A(C)11X355	11,3	15,76	36,78	250	3500	47,6	90,7											
20A(C)12X355	12	16,92	39,48	250	3500	48,2	91,9											
20A(C)14X355	14	19,95	46,55	250	3500	49,6	95											
20A(C)15X355	15	21,60	36,00	250	2500	50,6	96,5											
20A(C)16X355	16	23,04	38,40	250	2500	51,6	98,2											
20A(C)19X355	19	27,36	45,60	200	2500	53,6	103,1											
20A(C)22X355	22	31,68	42,24	180	2000	56,6	108,1											
20A(C)25X355	25	36,00	48,00	160	2000	58,8	113											
20A(C)14X355H	14	20,16	47,04	250	3500	54,6	105,3		40					20	M6-6H	35	15	M6-6H
20A(C)4,5X355H	15	21,60	43,20	250	3000	55,6	106,8											
20A(C)6,3X355H	16	23,04	46,08	250	3000	56,6	108,4											
20A(C)8,2X355H	17,3	24,91	49,82	230	3000	57,6	110,5											
20A(C)10X355H	18,2	26,21	52,42	210	3000	58,4	112,1											
20A(C)11X355H	19	27,36	54,72	200	3000	59	113,4											
20A(C)12X355H	22	31,68	52,80	180	2500	61,5	118,4											
20A(C)14X355H	25	36,00	60,00	160	2500	63,9	123,3											
20A(C)15X355H	28	40,32	67,20	130	2500	66,4	128,1											
20A(C)16X355H	32	46,08	61,44	120	2000	69,6	134,4											
20A(C)19X355H	36	51,84	69,12	100	2000	72,8	141											

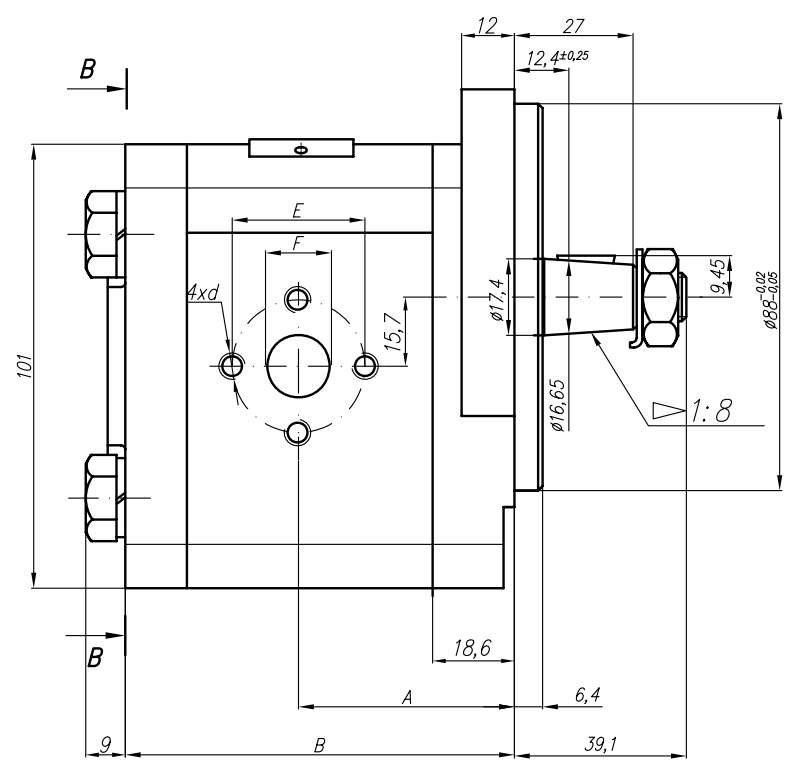
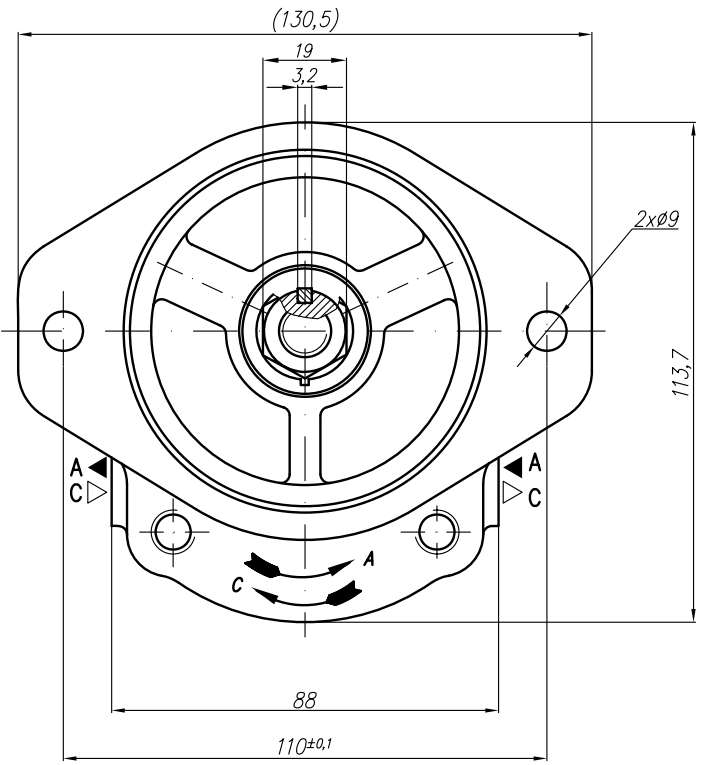
* 20A(C)...X508(HF) – variant with spline lengths 22mm and 31mm.



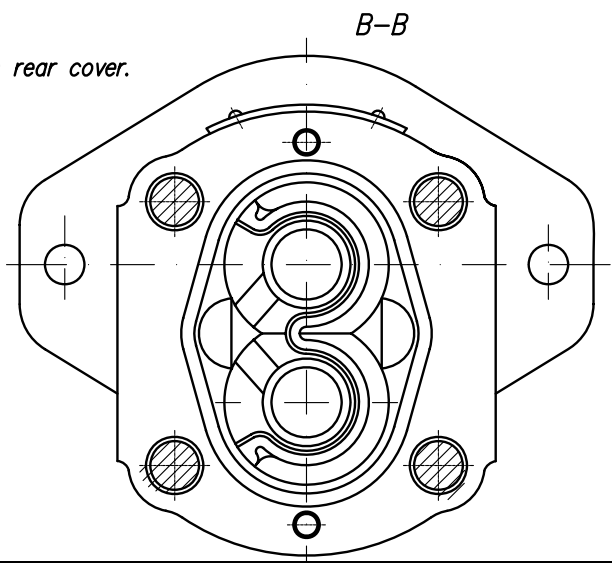
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension										
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet					
								E	F	d	E	F	d			
20A(C)4,5X358	4,5	6,14	14,33	250	3500	42,5	80	30,2	13,1	1/4-20UNC	30,2	13,1	1/4"-20UNC			
20A(C)6,3X358	6,3	8,69	20,29	250	3500	42,5	80									
20A(C)8,2X358	8,2	11,32	26,40	250	3500	42,5	80									
20A(C)10X358	10	13,95	32,55	250	3500	47	89	39,7	19	5/16"-18UNC	30,2	14,2	1/4"-20UNC			
20A(C)11X358	11,3	15,76	36,78	250	3500	48	91,1									
20A(C)12X358	12	16,92	39,48	250	3500	48,6	92,3									
20A(C)14X358	14	19,95	46,55	250	3500	50	95,4									
20A(C)15X358	15	21,60	36,00	250	2500	51	96,9									
20A(C)16X358	16	23,04	38,40	250	2500	52	98,6									
20A(C)19X358	19	27,36	45,60	200	2500	54	103,5									
20A(C)22X358	22	31,68	42,24	180	2000	57	108,5									
20A(C)25X358	25	36,00	48,00	160	2000	59,2	113,4							39,7	19	5/16"
20A(C)14X358H	14	20,16	47,04	250	3500	55,3	105,7							39,7	19	5/16"-18UNC
20A(C)15X358H	15	21,60	43,20	250	3000	56	107,2									
20A(C)16X358H	16	23,04	46,08	250	3000	56,9	108,8									
20A(C)17,3X358H	17,3	24,91	49,82	230	3000	58	110,9									
20A(C)18,2X358H	18,2	26,21	52,42	210	3000	58,8	112,5									
20A(C)19X358H	19	27,36	54,72	200	3000	59,4	113,8									
20A(C)22X358H	22	31,68	52,80	180	2500	61,9	118,8									
20A(C)25X358H	25	36,00	60,00	160	2500	64,3	123,7									
20A(C)28X358H	28	40,32	67,20	130	2500	66,8	128,5									
20A(C)32X358H	32	46,08	61,44	120	2000	70	134,8	39,7	19	5/16"-18UNC						
20A(C)36X358H	36	51,84	69,12	100	2000	73,2	141,4									



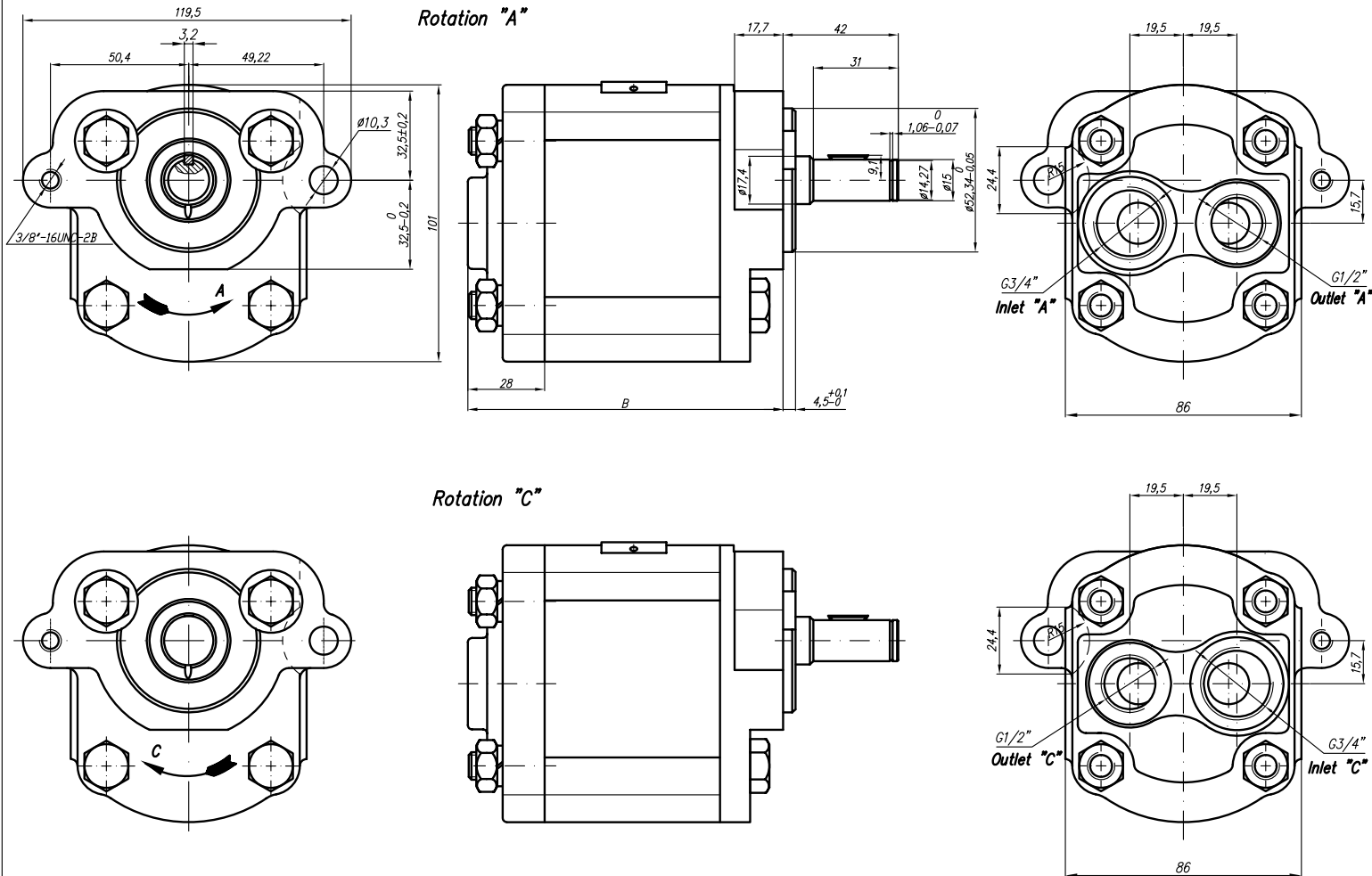
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	M	G	U	M	G	U
20A(C)4,5X359W	4,5	6,14	14,33	250	3500		94	G3/4				G1/2	
20A(C)6,3X359W	6,3	8,69	20,29	250	3500		97						
20A(C)8,2X359W	8,2	11,32	26,40	250	3500		99,9						
20A(C)10X359W	10	13,95	32,55	250	3500		102,9						
20A(C)11X359W	11,3	15,76	36,78	250	3500		105						
20A(C)12X359W	12	16,92	39,48	250	3500		106,3						
20A(C)14X359W	14	19,95	46,55	250	3500		109,4						
20A(C)15X359W	15	21,60	36,00	250	2500		110,9						
20A(C)16X359W	16	23,04	38,40	250	2500		112,5						
20A(C)19X359W	19	27,36	45,60	200	2500		117,5						
20A(C)22X359W	22	31,68	42,24	180	2000		122,5						
20A(C)25X359W	25	36,00	48,00	160	2000		127,5						



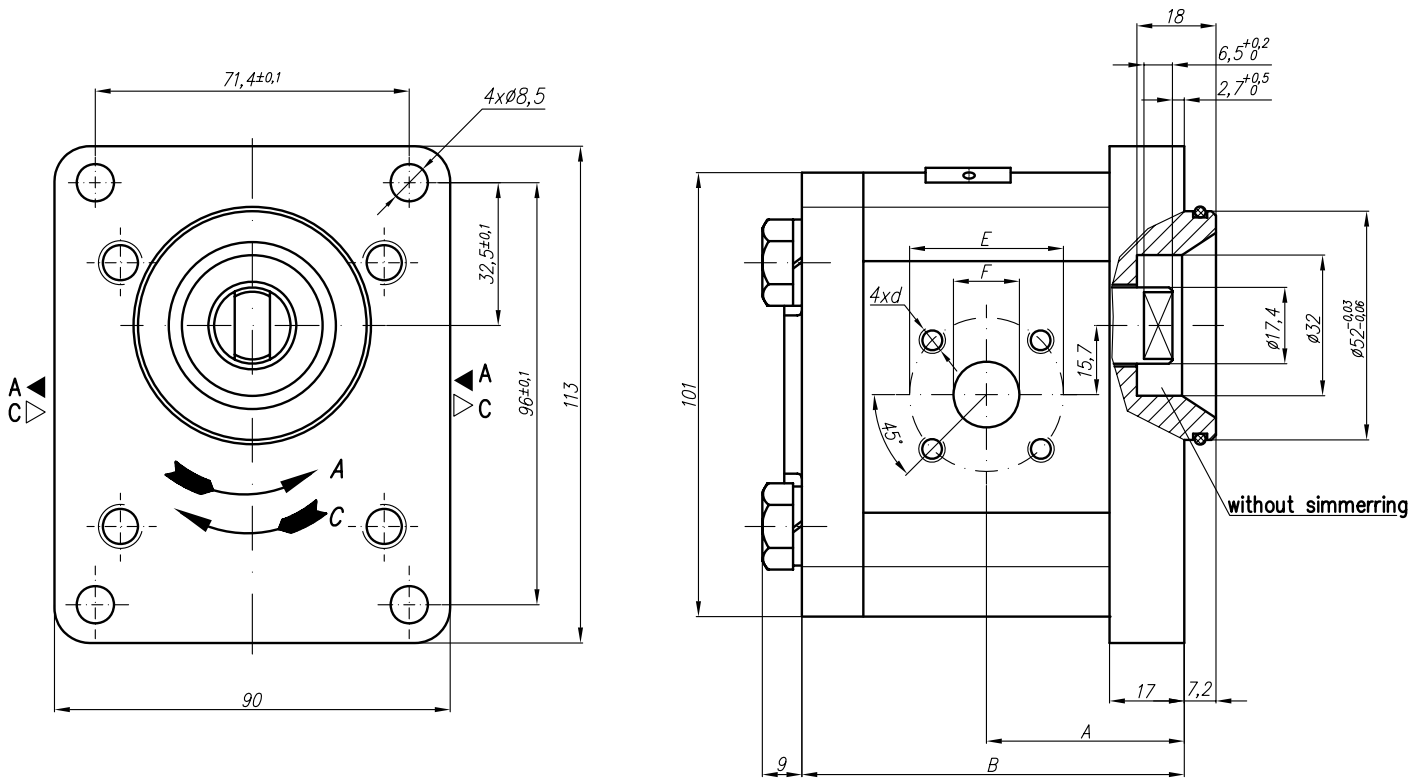
There are possible variants with integrated valves in rear cover.



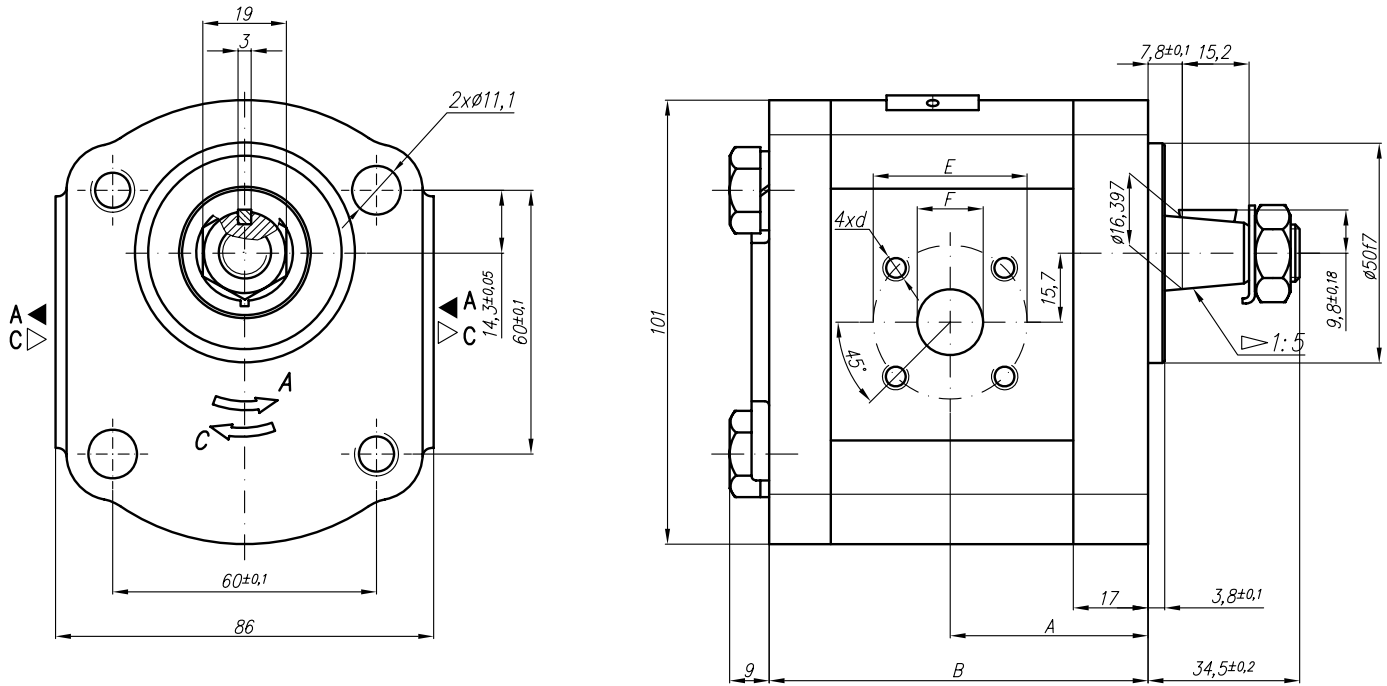
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet			
						E	F	d	E	F	d			
20A(C)4,5X364VW1	4,5	6,14	14,33	250	3500	42,5	80	30,2	13,1	M6-6H	30,2	13,1	M6-6H	
20A(C)6,3X364VW1	6,3	8,69	20,29	250	3500	42,5	80							
20A(C)8,2X364VW1	8,2	11,32	26,40	250	3500	42,5	80							
20A(C)10X364VW1	10	13,95	32,55	250	3500	47	89	39,7	19	M8-6H	30,2	14,2	M6-6H	
20A(C)11X364VW1	11,3	15,76	36,78	250	3500	48	91,1							
20A(C)12X364VW1	12	16,92	39,48	250	3500	48,6	92,3							
20A(C)14X364VW1	14	19,95	46,55	250	3500	50	95,4							
20A(C)15X364VW1	15	21,60	36,00	250	2500	51	96,9							
20A(C)16X364VW1	16	23,04	38,40	250	2500	52	98,6	39,7	19	M8	39,7	19	M8	
20A(C)19X364VW1	19	27,36	45,60	200	2500	54	103,5							
20A(C)22X364VW1	22	31,68	42,24	180	2000	57	108,5							
20A(C)25X364VW1	25	36,00	48,00	160	2000	59,2	113,4							



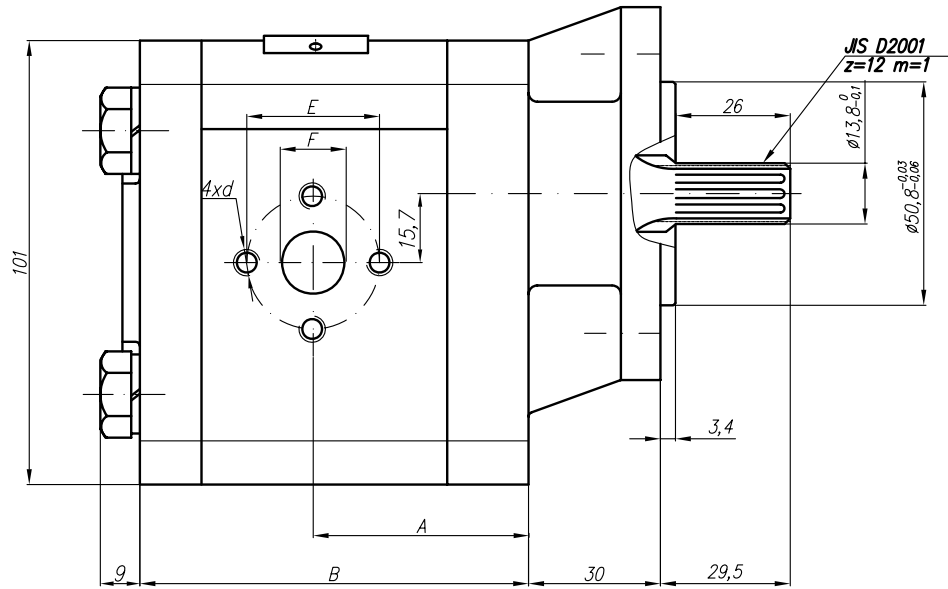
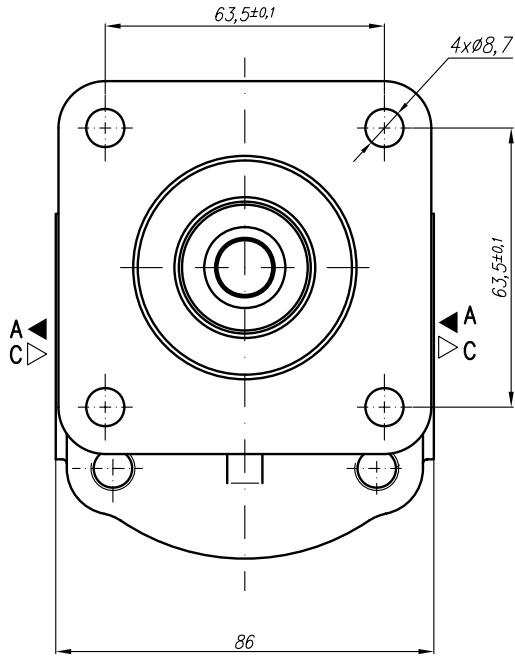
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	G1	M	G	G1
20A(C)4,5X369	4,5	6,14	14,33	250	3500		70						
20A(C)6,3X369	6,3	8,69	20,29	250	3500		73						
20A(C)8,2X369	8,2	11,32	26,40	250	3500		76						
20A(C)10X369	10	13,95	32,55	250	3500		79						
20A(C)11X369	11,3	15,76	36,78	250	3500		81						
20A(C)12X369	12	16,92	39,48	250	3500		82,3		G3/4				
20A(C)14X369	14	19,95	46,55	250	3500		85,4						
20A(C)15X369	15	21,60	36,00	250	2500		87						
20A(C)16X369	16	23,04	38,40	250	2500		88,4						
20A(C)19X369	19	27,36	45,60	200	2500		93,5						
20A(C)22X369	22	31,68	42,24	180	2000		98,5						
20A(C)25X369	25	36,00	48,00	160	2000		103,4						



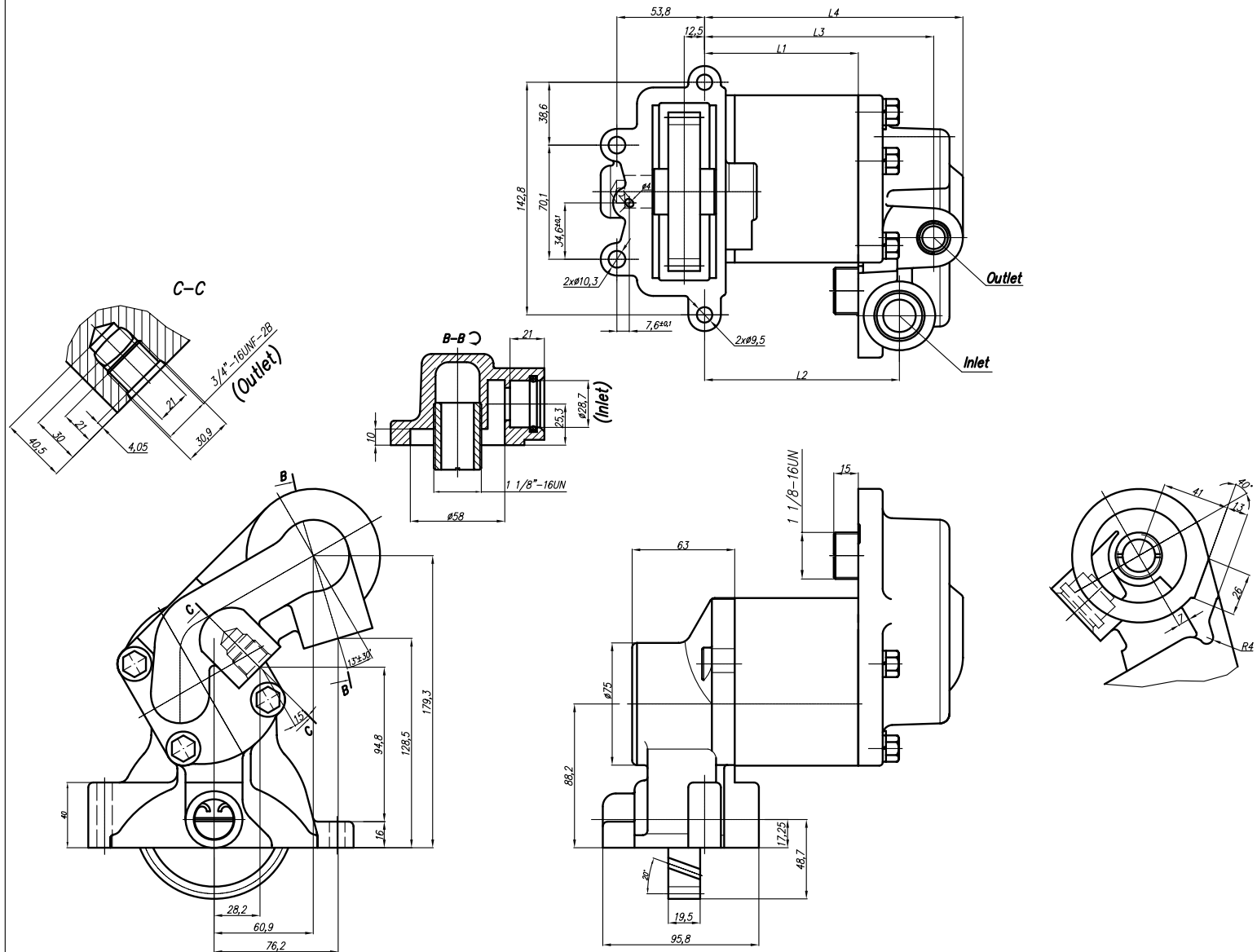
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet			
						E	F	d	E	F	d			
20A(C)4,5X398	4,5	6,14	14,33	250	3500	37,3	75,1	40	20	M6-6H	35	15	M6-6H	
20A(C)6,3X398	6,3	8,69	20,29	250	3500	38,6	78							
20A(C)8,2X398	8,2	11,32	26,40	250	3500	40,6	78							
20A(C)10X398	10	13,95	32,55	250	3500	45	87							
20A(C)11X398	11,3	15,76	36,78	250	3500	45	89,1							
20A(C)12X398	12	16,92	39,48	250	3500	45	90,3							
20A(C)14X398	14	19,95	46,55	250	3500	45	93,4							
20A(C)15X398	15	21,60	36,00	250	2500	45	94,9							
20A(C)16X398	16	23,04	38,40	250	2500	45	96,5							
20A(C)19X398	19	27,36	45,60	200	2500	45	101,5							
20A(C)22X398	22	31,68	42,24	180	2000	52,5	106,5							
20A(C)25X398	25	36,00	48,00	160	2000	57,2	111,4							



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	E	F	d
20A(C)4,5X402	4,5	6,14	14,33	250	3500			40	15	M6-6H	35	15	M6-6H
20A(C)6,3X402	6,3	8,69	20,29	250	3500								
20A(C)8,2X402	8,2	11,32	26,40	250	3500	43	83,9						
20A(C)10X402	10	13,95	32,55	250	3500								
20A(C)11X402	11,3	15,76	36,78	250	3500	43	89,1						
20A(C)12X402	12	16,92	39,48	250	3500								
20A(C)14X402	14	19,95	46,55	250	3500								
20A(C)15X402	15	21,60	36,00	250	2500								
20A(C)16X402	16	23,04	38,40	250	2500	43	96,5						
20A(C)19X402	19	27,36	45,60	200	2500								
20A(C)22X402	22	31,68	42,24	180	2000								
20A(C)25X402	25	36,00	48,00	160	2000								

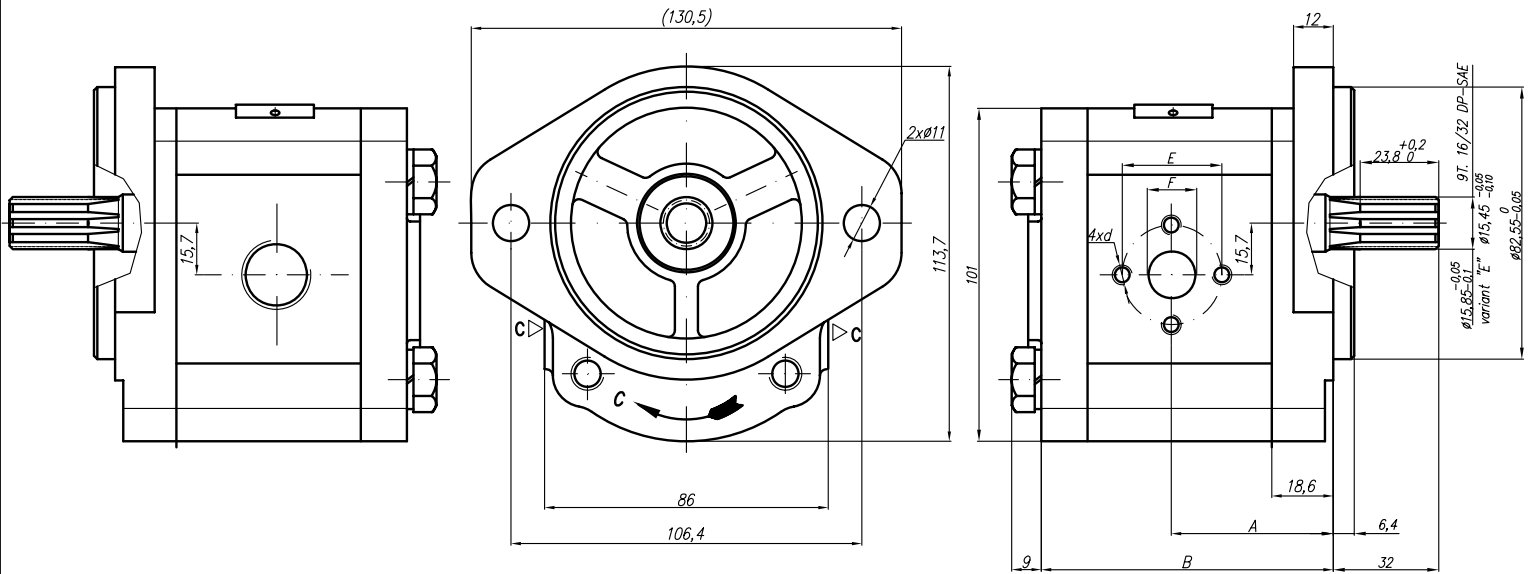


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension						
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet	
						E	F	d	E	F	d	
20A(C)4,5X404	4,5	6,14	14,33	250	3500							
20A(C)6,3X404	6,3	8,69	20,29	250	3500							
20A(C)8,2X404	8,2	11,32	26,40	250	3500							
20A(C)10X404	10	13,95	32,55	250	3500							
20A(C)11X404	11,3	15,76	36,78	250	3500	75,5	120,5					
20A(C)12X404	12	16,92	39,48	250	3500			35,6	15	M6-6H	35,6	
20A(C)14X404	14	19,95	46,55	250	3500						15,0	M6-6H
20A(C)15X404	15	21,60	36,00	250	2500							
20A(C)16X404	16	23,04	38,40	250	2500							
20A(C)19X404	19	27,36	45,60	200	2500							
20A(C)22X404	22	31,68	42,24	180	2000							
20A(C)25X404	25	36,00	48,00	160	2000							

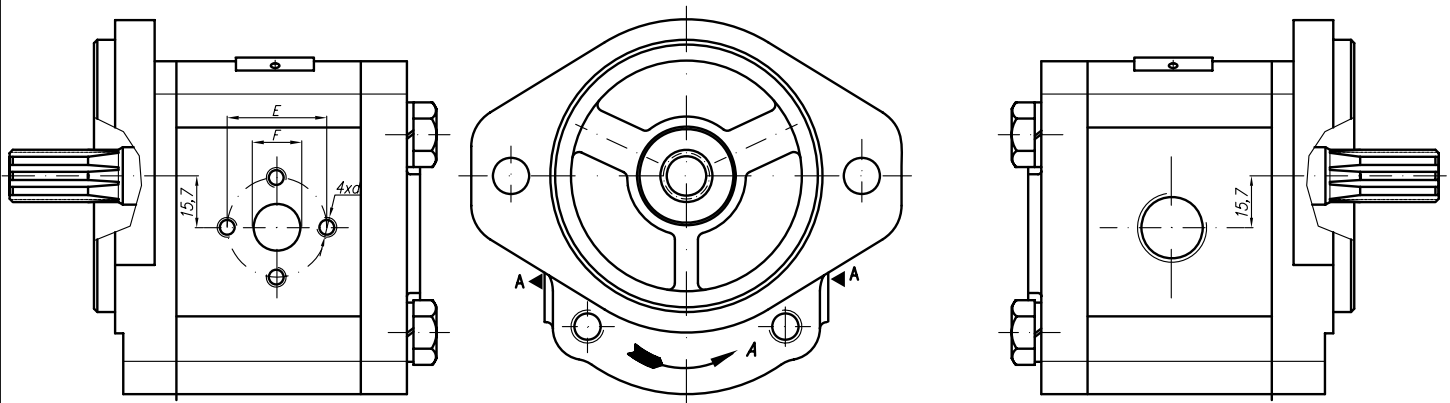


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension					
		at 1500 rpm l/min	at max rpm l/min			L1 mm	L2 mm	L3 mm	L4 mm	Inlet d	Outlet U
20C15X409HF	15	20,48	34,13	250	2500	92,7	118	139	157	28,7	3/4" - 16UNF-2B
20C16X409HF	16	22,08	36,80	250	2500	94,3	119,6	141	159		
20C17,3X409HF	17,3	23,87	39,79	230	2500	96,4	121,7	143	161		
20C18,2X409HF	18,2	25,39	42,32	200	2500	98	123,3	144	162		
20C19X409HF	19	26,51	44,18	200	2500	99,3	124,6	146	164		
20C22X409HF	22	31,02	41,36	180	2000						
20C25X409HF	25	35,63	47,50	160	2000						
20C28X409HF	28	40,32	53,76	120	2000						
20C32X409HF	32	46,08	46,08	100	1500						
20C36X409HF	36	51,84	51,84	80	1500						

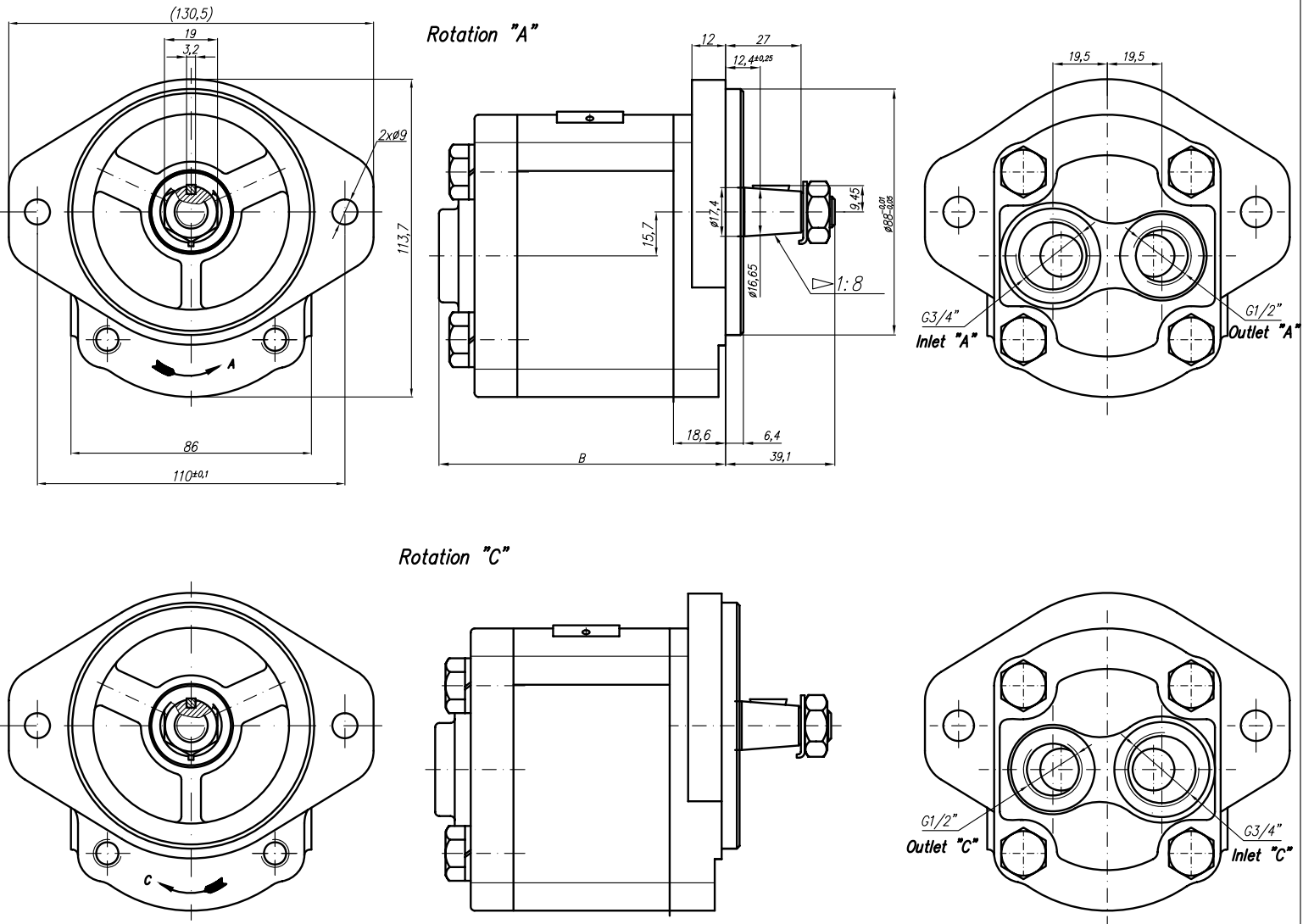
Rotation "C"



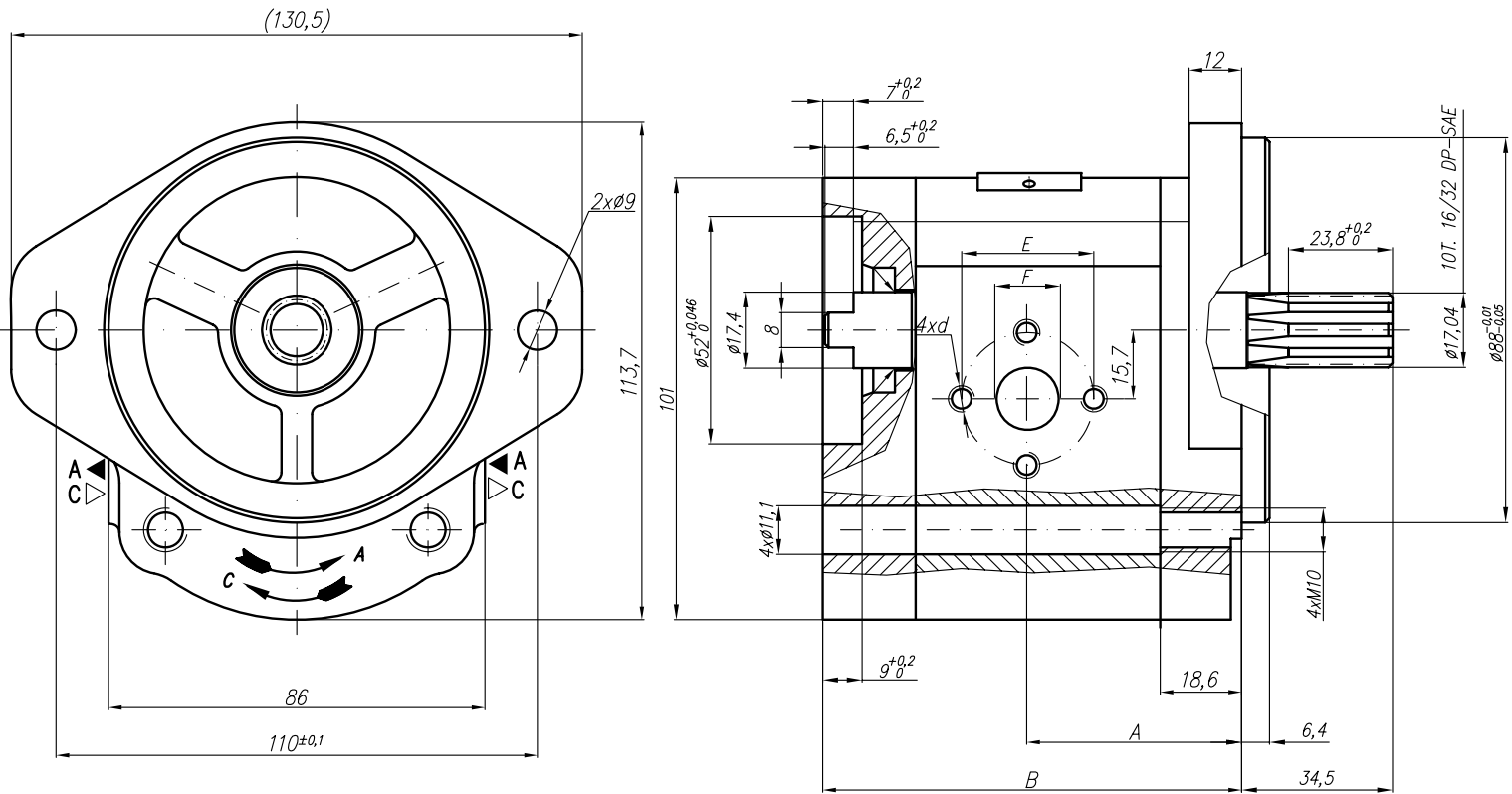
Rotation "A"



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension						
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet	
						E	F	d	M	G	U	
20A(C)4,5X419	4,5	6,14	14,33	250	3500	42,1	79,6					
20A(C)6,3X419	6,3	8,69	20,29	250	3500	42,1	79,6	30,2	13,1	M6-6H		
20A(C)8,2X419	8,2	11,32	26,40	250	3500	42,1	79,6					
20A(C)10X419	10	13,95	32,55	250	3500	46,6	88,7					
20A(C)11X419	11,3	15,76	36,78	250	3500	47,6	90,7					
20A(C)12X419	12	16,92	39,48	250	3500	48,2	91,9					
20A(C)14X419	14	19,95	46,55	250	3500	49,6	95					
20A(C)15X419	15	21,60	36,00	250	2500	50,6	96,5	39,7	19	M8-6H		G1/2
20A(C)16X419	16	23,04	38,40	250	2500	51,6	98,2					
20A(C)19X419	19	27,36	45,60	200	2500	53,6	103,1					
20A(C)22X419	22	31,68	42,24	180	2000	56,6	108,1					
20A(C)25X419	25	36,00	48,00	160	2000	58,8	113					

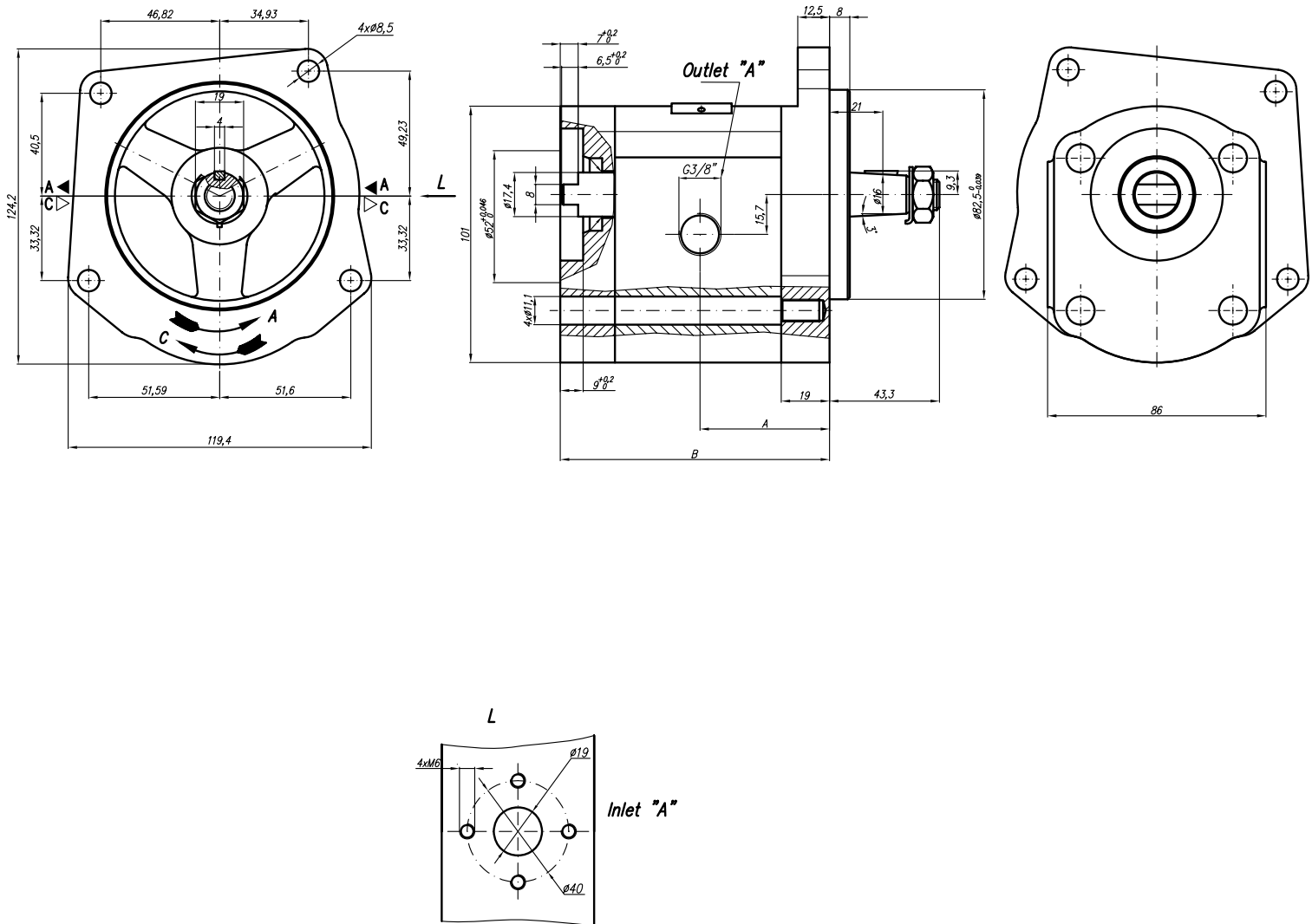


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	M	G	G1	M	G	G1
20A(C)4,5X423VW	4,5	6,14	14,33	250	3500		93,6						
20A(C)6,3X423VW	6,3	8,69	20,29	250	3500		96,6						
20A(C)8,2X423VW	8,2	11,32	26,40	250	3500		99,5						
20A(C)10X423VW	10	13,95	32,55	250	3500		102,5						
20A(C)11X423VW	11,3	15,76	36,78	250	3500		104,6						
20A(C)12X423VW	12	16,92	39,48	250	3500		105,9						
20A(C)14X423VW	14	19,95	46,55	250	3500		108,9						
20A(C)15X423VW	15	21,60	36,00	250	2500		110,5						
20A(C)16X423VW	16	23,04	38,40	250	2500		112,1						
20A(C)19X423VW	19	27,36	45,60	200	2500		117,1						
20A(C)22X423VW	22	31,68	42,24	180	2000		122,1						
20A(C)25X423VW	25	36,00	48,00	160	2000		127						



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	E mm	F mm	d mm	E mm	F mm	d mm
20A(C)4,5X429V	4,5	6,14	14,33	250	3500	42,5	87,2	30,2	13,1	M6-6H	30,2	13,1	
20A(C)6,3X429V	6,3	8,69	20,29	250	3500	42,5	87,2						
20A(C)8,2X429V	8,2	11,32	26,40	250	3500	42,5	87,2	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)10X429V	10	13,95	32,55	250	3500	47	96,2						
20A(C)11X429V	11,3	15,76	36,78	250	3500	48	98,3	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)12X429V	12	16,92	39,48	250	3500	48,7	99,5						
20A(C)14X429V	14	19,95	46,55	250	3500	50,2	102,5	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)15X429V	15	21,60	36,00	250	2500	51	104,1						
20A(C)16X429V	16	23,04	38,40	250	2500	51,8	105,8	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)19X429V	19	27,36	45,60	200	2500	54	110,7						
20A(C)22X429V	22	31,68	42,24	180	2000	56,5	115,7	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)25X429V	25	36,00	48,00	160	2000	58,8	120,6						

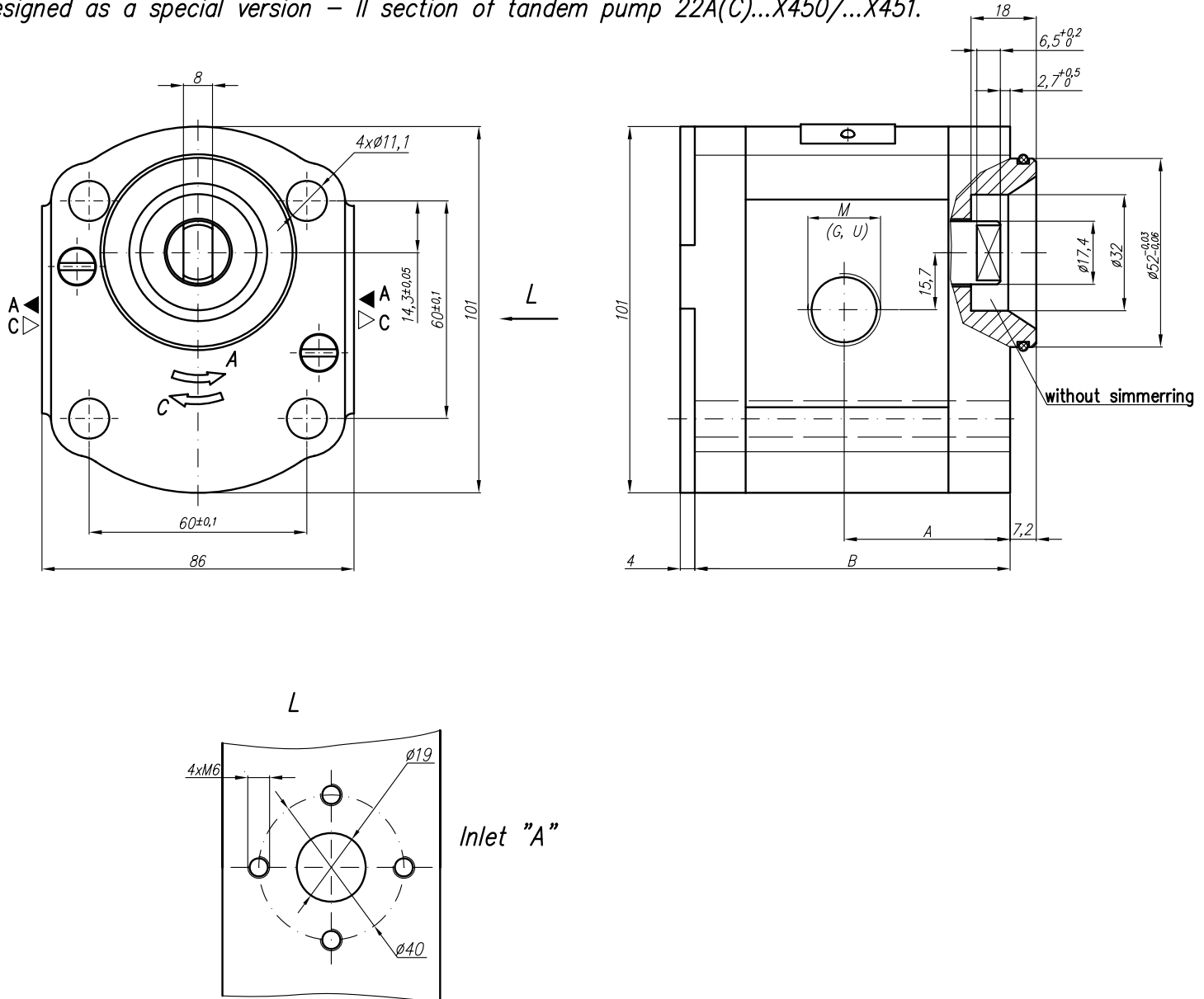
Designed as a special version – 1 section of tandem pump 22A(C)...X450/...X451.



* These pressures recommended for direct drive with gear.

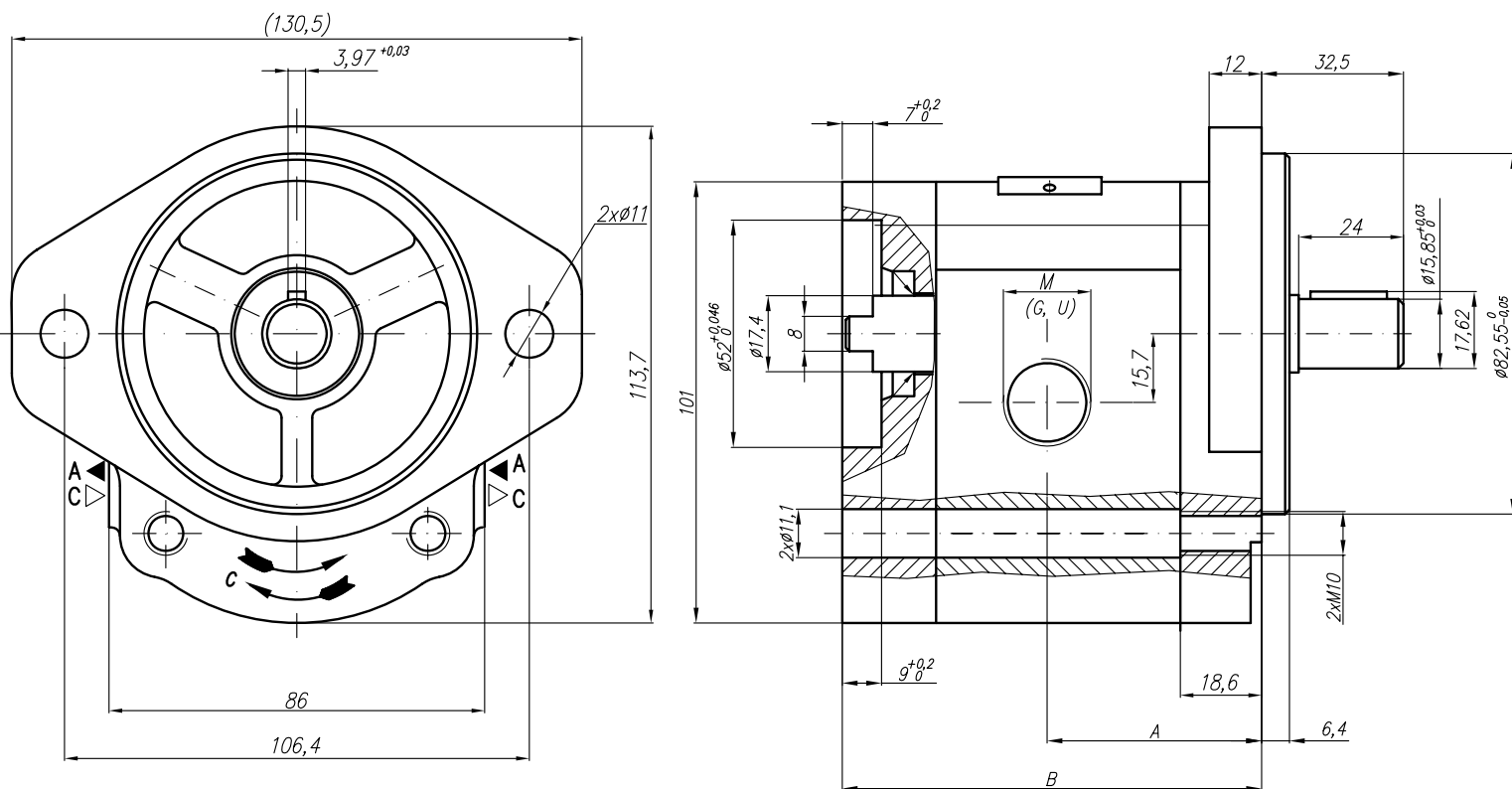
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	M	G	U
20A(C)15X450	15	21,60	36,00	250(175*)	2500	51	104,1	40	19	M6-6H		G3/8	
20A(C)16X450	16	23,04	38,40	250(175*)	2500	51	105,7						
20A(C)25X450	25	36,00	48,00	160(100*)	2000	59,2	120,6						

Designed as a special version – II section of tandem pump 22A(C)...X450/...X451.

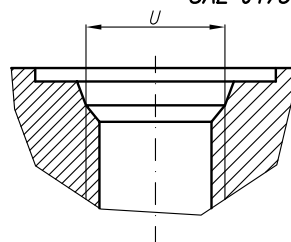


* These pressures recommended for direct drive with gear.

Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
						E	F	d	M	G	U		
20A(C)11X451	11,3	15,76	26,27	250(175*)	2500	46	89						
20A(C)15X451	15	21,60	36,00	250(175*)	2500	49	94,9	40	19	M6-6H		G3/8	
20A(C)16X451	16	23,04	38,40	250(175*)	2500	49	96,5						
20A(C)25X451	25	36,00	48,00	160(100*)	2000	57,2	111,4						

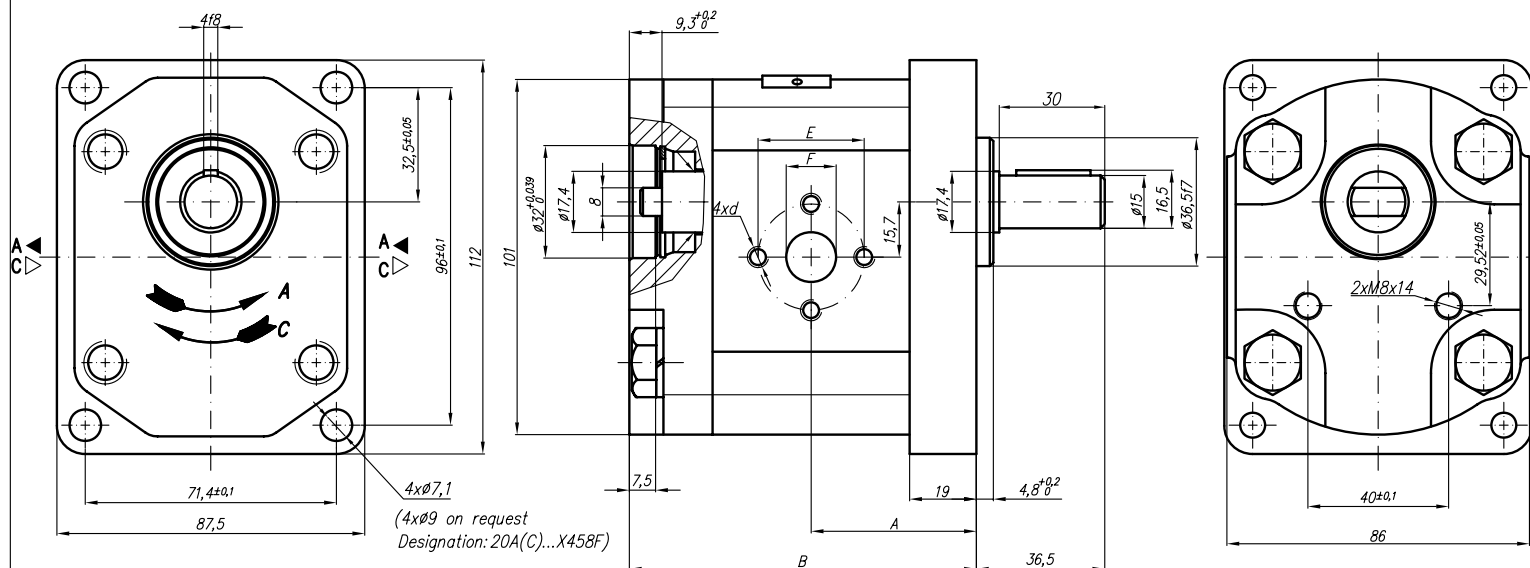


SAE J475 (ISO R725)

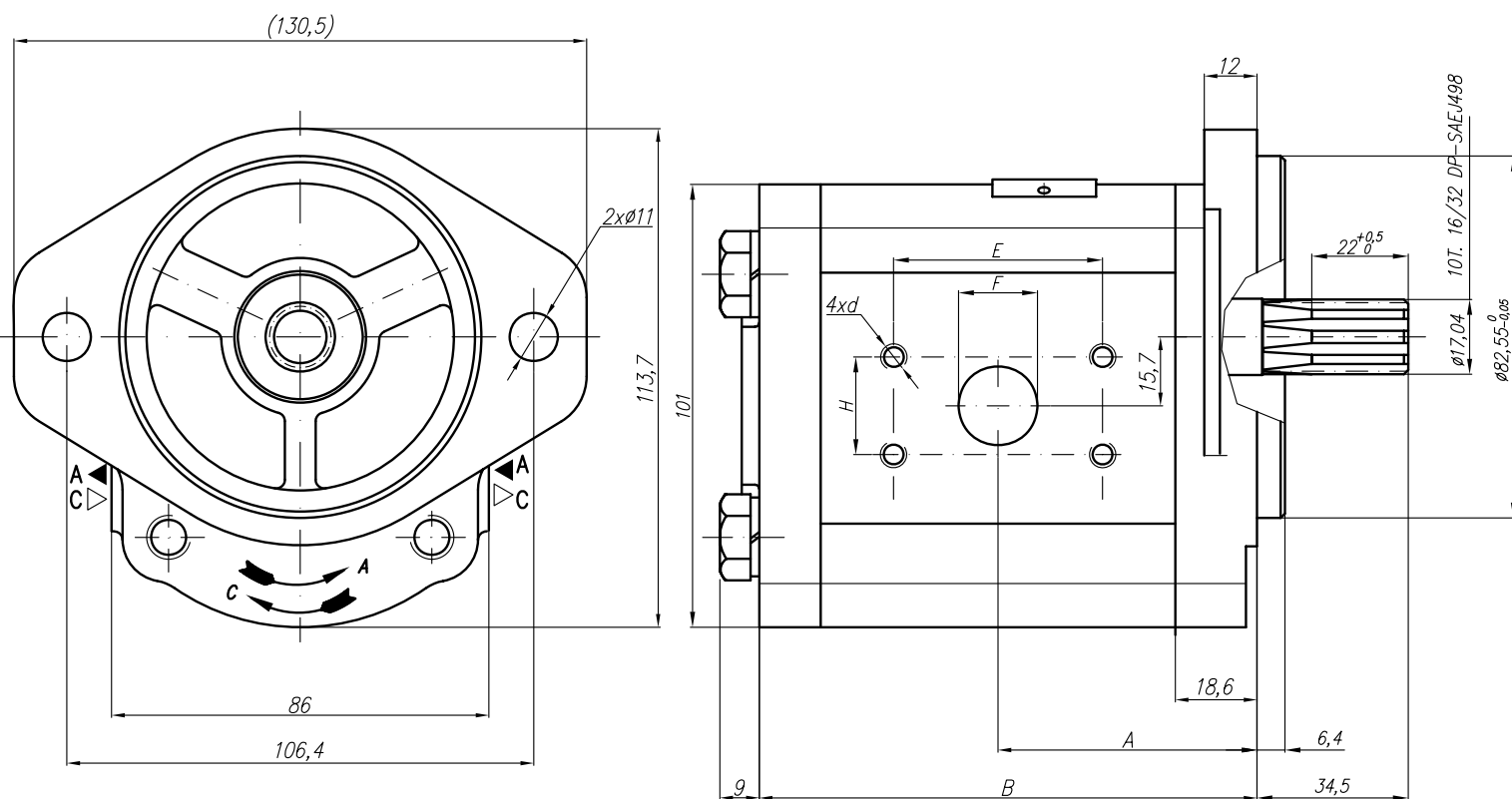


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
20A(C)4,5X457...	4,5	6,14	14,33	250	3500	41,4	86,8	M20x1,5	G1/2	1 1/16"-12UNF	M16x1,5	G1/2	7/8"-14UNF
20A(C)6,3X457...	6,3	8,69	20,29	250	3500	42,6	86,8						
20A(C)8,2X457...	8,2	11,32	26,40	250	3500	44,7	86,8						
20A(C)10X457...	10	13,95	32,55	250	3500	49,1	95,8						
20A(C)11X457...	11,3	15,76	36,78	250	3500	49,1	97,9						
20A(C)12X457...	12	16,92	39,48	250	3500	49,1	99,1						
20A(C)14X457...	14	19,95	46,55	250	3500	49,1	102,1						
20A(C)15X457...	15	21,60	36,00	250	2500	49,1	103,7						
20A(C)16X457...	16	23,04	38,40	250	2500	49,1	105,3						
20A(C)19X457...	19	27,36	45,60	200	2500	49,1	110,3						
20A(C)22X457...	22	31,68	42,24	180	2000	56,6	115,3						
20A(C)25X457...	25	36,00	48,00	160	2000	58,8	120,2						

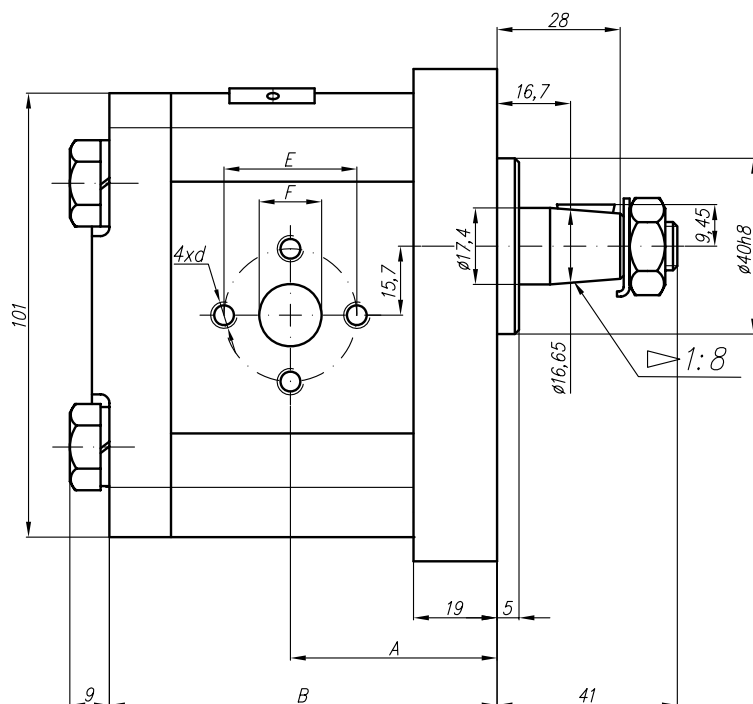
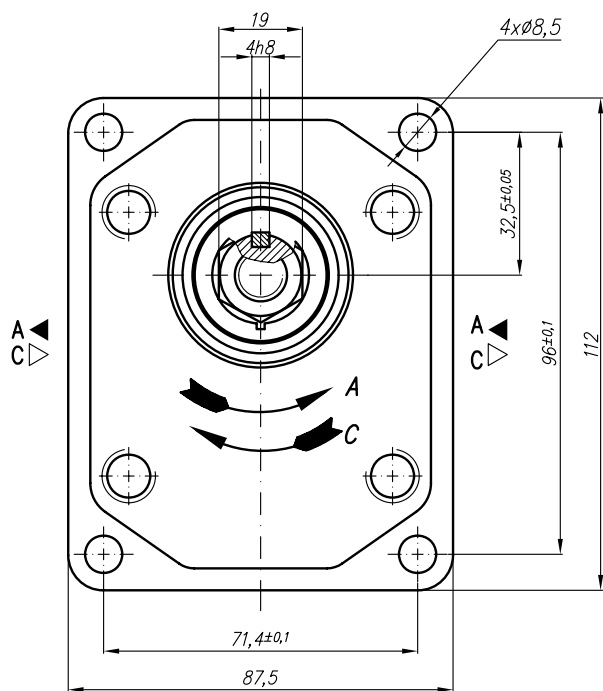
Designed as a first section of tandem pumps group 21A(C)...X458/... (lgroup/lgroup).



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	E mm	F mm	d mm	E mm	F mm	d mm
20A(C)4,5X458	4,5	6,14	14,33	250	3500	42,5	89,7	30,2	13,1	M6-6H	30,2	13,1	M6-6H
20A(C)6,3X458	6,3	8,69	20,29	250	3500	42,5	89,7						
20A(C)8,2X458	8,2	11,32	26,40	250	3500	42,5	89,7						
20A(C)10X458	10	13,95	32,55	250	3500	47	98,7						
20A(C)11X458	11,3	15,76	36,78	250	3500	48	100,7	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)12X458	12	16,92	39,48	250	3500	48,6	102						
20A(C)14X458	14	19,95	46,55	250	3500	50	105,1						
20A(C)15X458	15	21,60	36,00	250	2500	51	106,6						
20A(C)16X458	16	23,04	38,40	250	2500	52	108,3	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)19X458	19	27,36	45,60	200	2500	54	113,2						
20A(C)22X458	22	31,68	42,24	180	2000	57	118,2						
20A(C)25X458	25	36,00	48,00	160	2000	59,2	123,1						

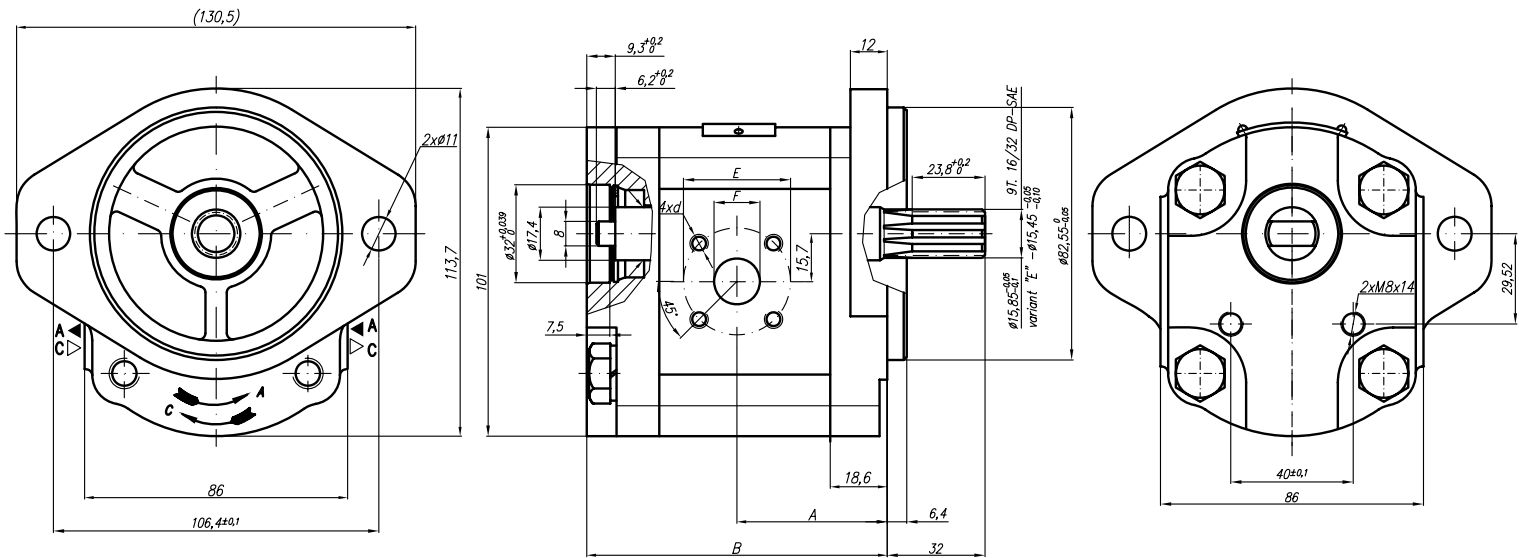


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension									
		at 1500 rpm l/min	at max rpm l/min			Inlet		Outlet							
						A mm	B mm	E	H	d	F	E	H	d	F
20A(C)15X464H	15	20,48	47,78	250	3500	55,6	106,8	52,7	26	3/8" - 14UNC-2B	25	47,6	22	3/8" - 14UNC-2B	18
20A(C)16X464H	16	22,08	51,52	250	3500	56,6	108,4								
20A(C)17,3X464H	17,3	23,87	55,71	250	3500	57,6	110,5								
20A(C)18,2X464H	18,2	25,39	59,24	250	3500	58,4	112,1								
20A(C)19X464H	19	26,51	61,85	250	3500	59	113,4								
20A(C)22X464H	22	31,02	72,38	250	3500	61,5	118,4								
20A(C)25X464H	25	35,63	83,13	250	3500	63,9	123,3								
20A(C)28X464H	28	40,32	67,20	250	2500	66,4	128,1								
20A(C)32X464H	32	46,08	76,80	250	2500	69,6	134,4								
20A(C)36X464H	36	51,84	86,40	200	2500	72,8	141								

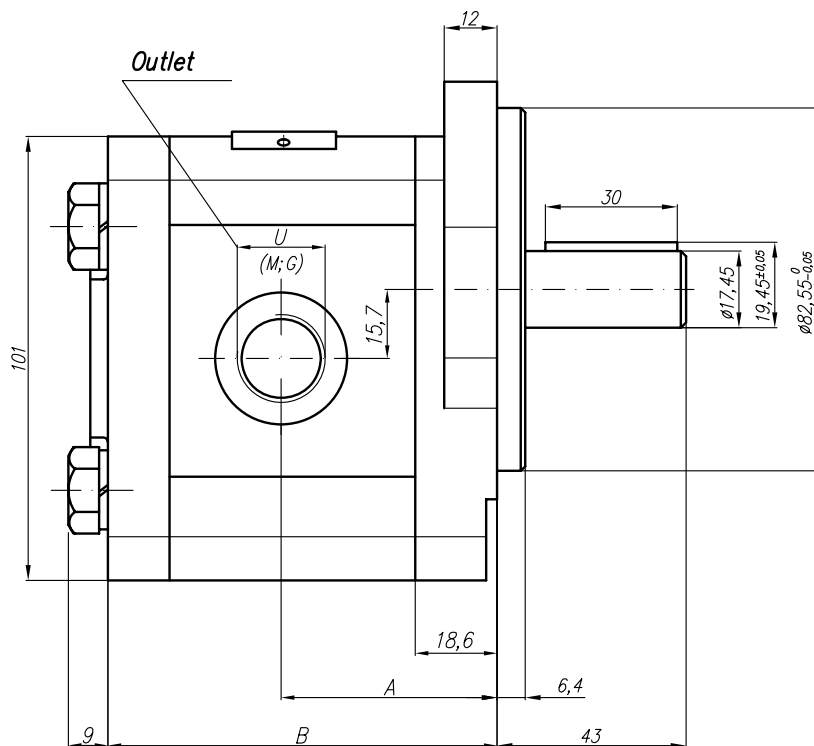
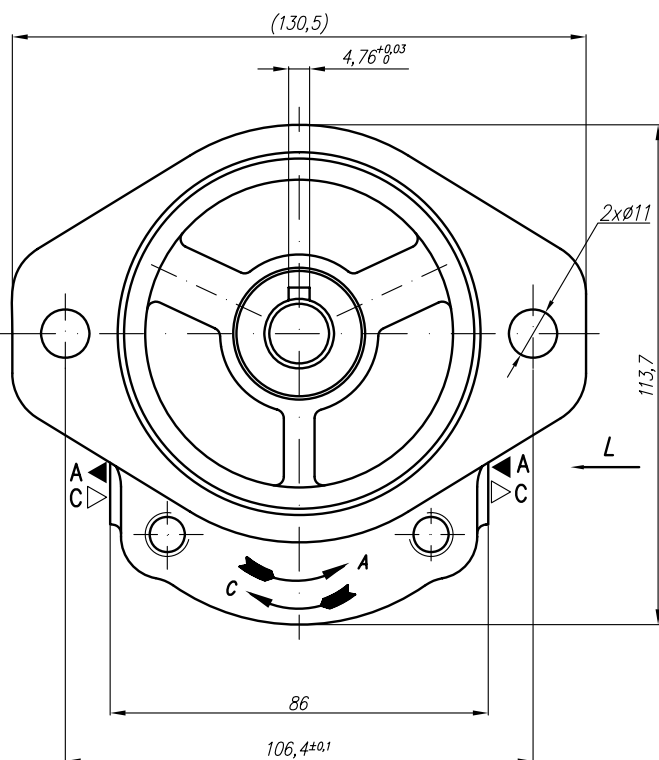


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension						
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet	
						E	F	d	E	F	d	
20A(C)4,5X466	4,5	6,14	14,33	250	3500							
20A(C)6,3X466	6,3	8,69	20,29	250	3500							
20A(C)8,2X466	8,2	11,32	26,40	250	3500							
20A(C)10X466	10	13,95	32,55	250	3500							
20A(C)11X466	11,3	15,76	36,78	250	3500							
20A(C)12X466	12	16,92	39,48	250	3500							
20A(C)14X466	14	19,95	46,55	250	3500	52,5	95,4					
20A(C)15X466	15	21,60	36,00	250	2500			40	20	M8-6H	40	12
20A(C)16X466	16	23,04	38,40	250	2500	52,5	98,5					
20A(C)19X466	19	27,36	45,60	200	2500							
20A(C)22X466	22	31,68	42,24	180	2000							
20A(C)25X466	25	36,00	48,00	160	2000							
20A(C)14X466HS	14	20,16	47,04	250	3500							
20A(C)15X466HS	15	21,60	36,00	250	2500							
20A(C)16X466HS	16	23,04	38,40	250	2500	62	108,8	40	20	M8-6H	40	12
20A(C)17,3X466HS	17,3	24,91	41,52	230	2500	62	111					
20A/C17,3X466HS2	17,3	24,91	41,52	200	2500	58	111					
	19	27,36	45,60	200	2500						15	M8-6H

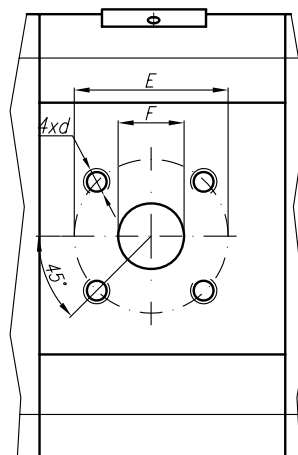
Designed as a first section of tandem pumps group 21A(C)...X478/... (II group/I group).



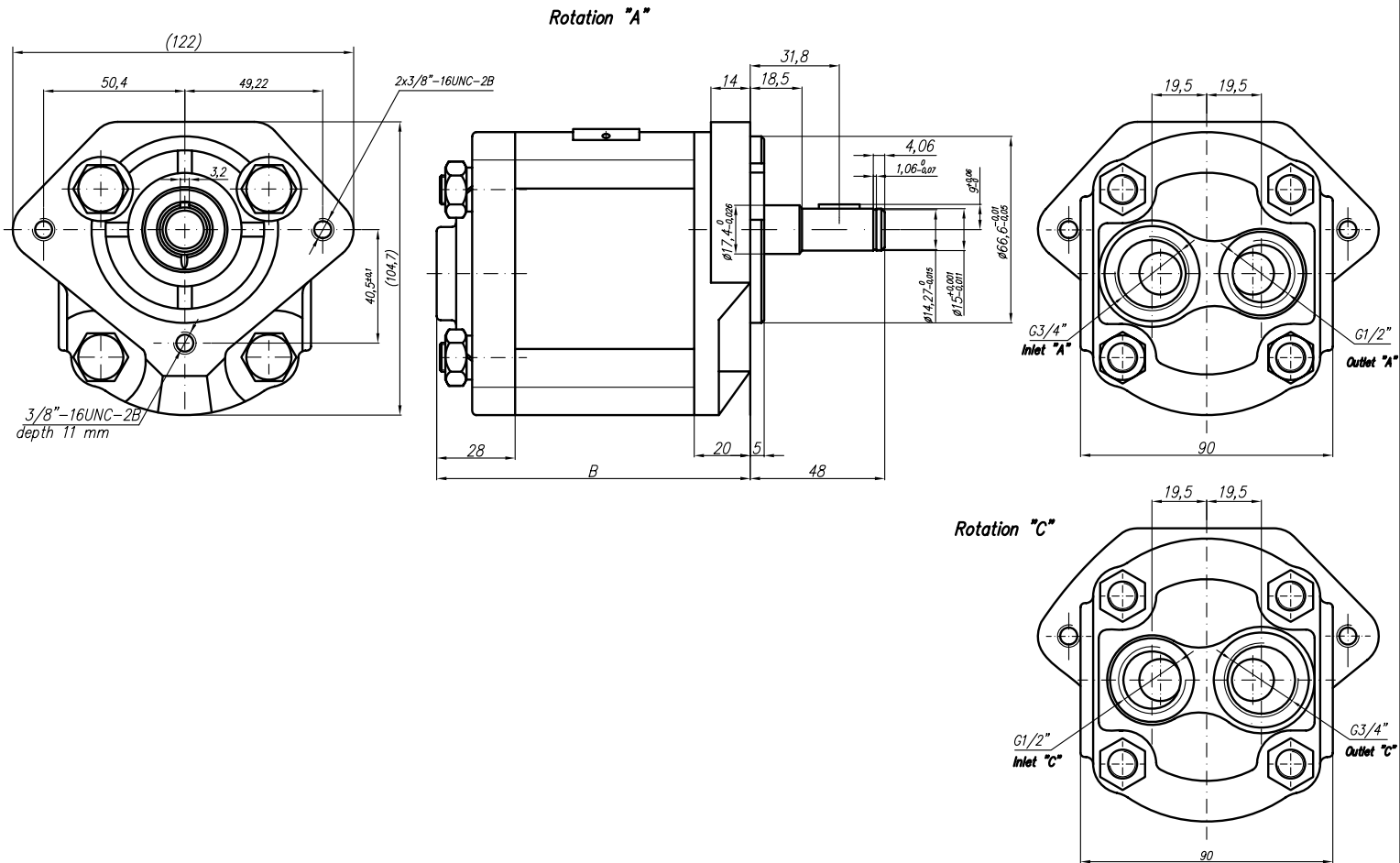
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	E	F	d
20A(C)4,5X478	4,5	6,14	14,33	250	3500	42,1	89,3	40	15	M6-6H	35	15	M6-6H
20A(C)6,3X478	6,3	8,69	20,29	250	3500	43,6	92,3						
20A(C)8,2X478	8,2	11,32	26,40	250	3500	45,1	95,2						
20A(C)10X478	10	13,95	32,55	250	3500	46,6	98,2						
20A(C)11X478	11,3	15,76	36,78	250	3500	47,6	100,3						
20A(C)12X478	12	16,92	39,48	250	3500	48,2	101,6						
20A(C)14X478	14	19,95	46,55	250	3500	49,6	104,7						
20A(C)15X478	15	21,60	36,00	250	2500	50,6	106,2						
20A(C)16X478	16	23,04	38,40	250	2500	51,6	107,8						
20A(C)19X478	19	27,36	45,60	200	2500	53,6	112,8						
20A(C)22X478	22	31,68	42,24	180	2000	56,6	117,8						
20A(C)25X478	25	36,00	48,00	160	2000	58,8	122,7						



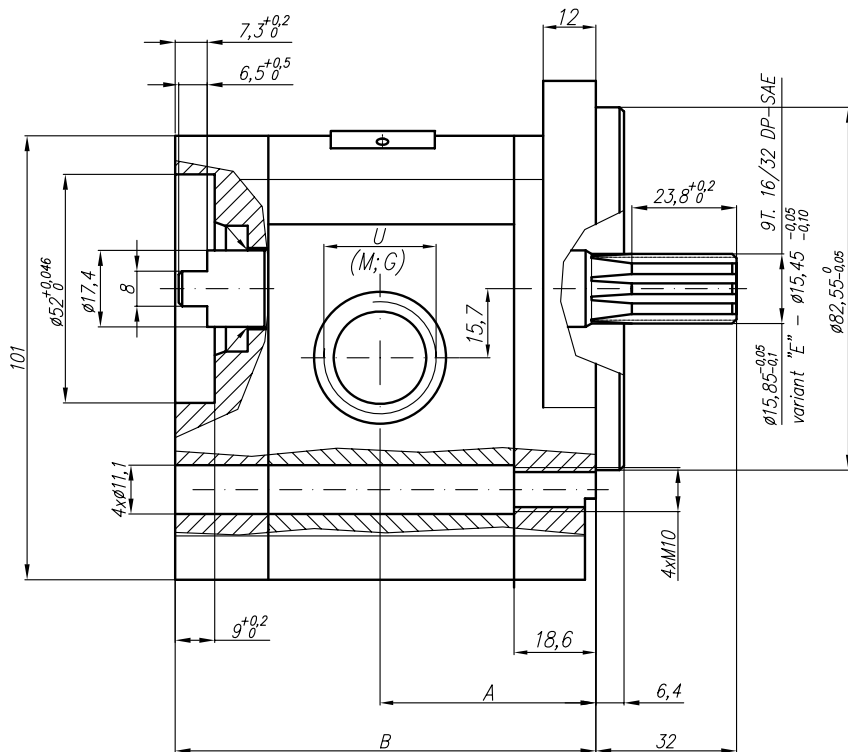
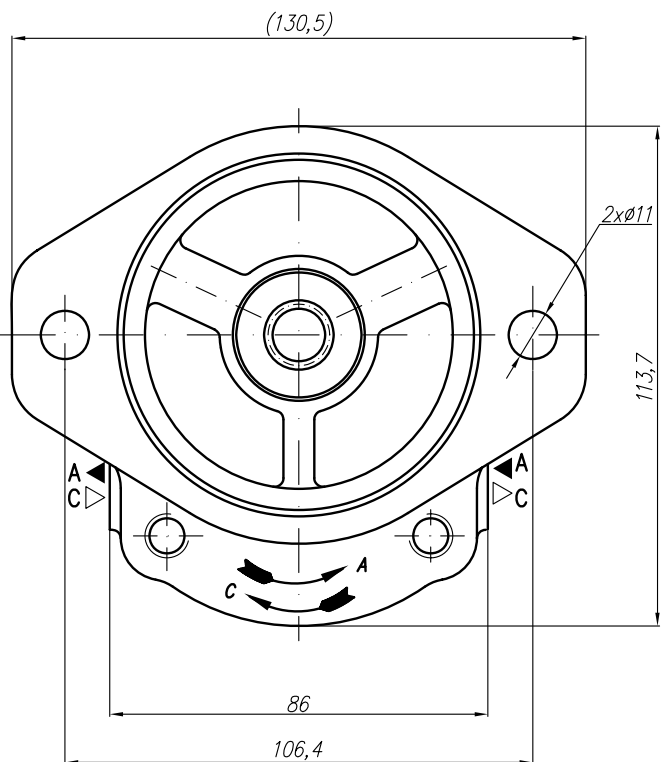
L
Inlet



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	M	G	U
20A(C)4,5X497...	4,5	6,14	14,33	250	3500	41,4	79,6	40	15	M6-6H			3/4" - 16UNF
20A(C)6,3X497...	6,3	8,69	20,29	250	3500	42,6	82,6						
20A(C)8,2X497...	8,2	11,32	26,40	250	3500	44,7	85,5						
20A(C)10X497...	10	13,95	32,55	250	3500	49,1	88,6		20				
20A(C)11X497...	11,3	15,76	36,78	250	3500	49,1	90,7						
20A(C)12X497...	12	16,92	39,48	250	3500	49,1	91,9						
20A(C)14X497...	14	19,95	46,55	250	3500	49,1	95						
20A(C)15X497...	15	21,60	36,00	250	2500	49,1	96,5						
20A(C)16X497...	16	23,04	38,40	250	2500	49,1	98,2						
20A(C)19X497...	19	27,36	45,60	200	2500	49,1	103,1						
20A(C)22X497...	22	31,68	42,24	180	2000	56,6	108,1						
20A(C)25X497...	25	36,00	48,00	160	2000	58,8	113						



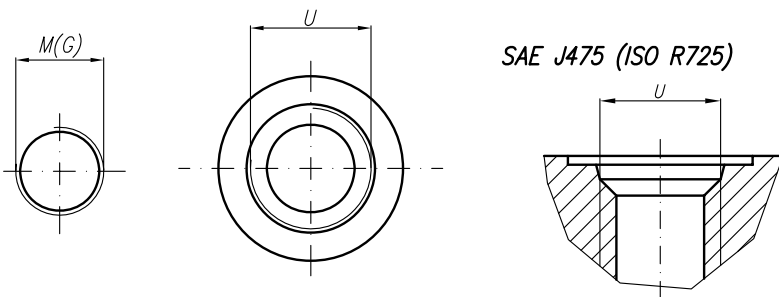
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
20A(C)4,5X500W	4,5	6,14	14,33	250	3500		96						
20A(C)6,3X500W	6,3	8,69	20,29	250	3500		99						
20A(C)8,2X500W	8,2	11,32	26,40	250	3500		102						
20A(C)10X500W	10	13,95	32,55	250	3500		105						
20A(C)11X500W	11,3	15,76	36,78	250	3500		107						
20A(C)12X500W	12	16,92	39,48	250	3500		108,3						
20A(C)14X500W	14	19,95	46,55	250	3500		111,4						
20A(C)15X500W	15	21,60	36,00	250	2500		113						
20A(C)16X500W	16	23,04	38,40	250	2500		114,5						
20A(C)19X500W	19	27,36	45,60	200	2500		119,5						
20A(C)22X500W	22	31,68	42,24	180	2000		124,5						
20A(C)25X500W	25	36,00	48,00	160	2000		129,4						



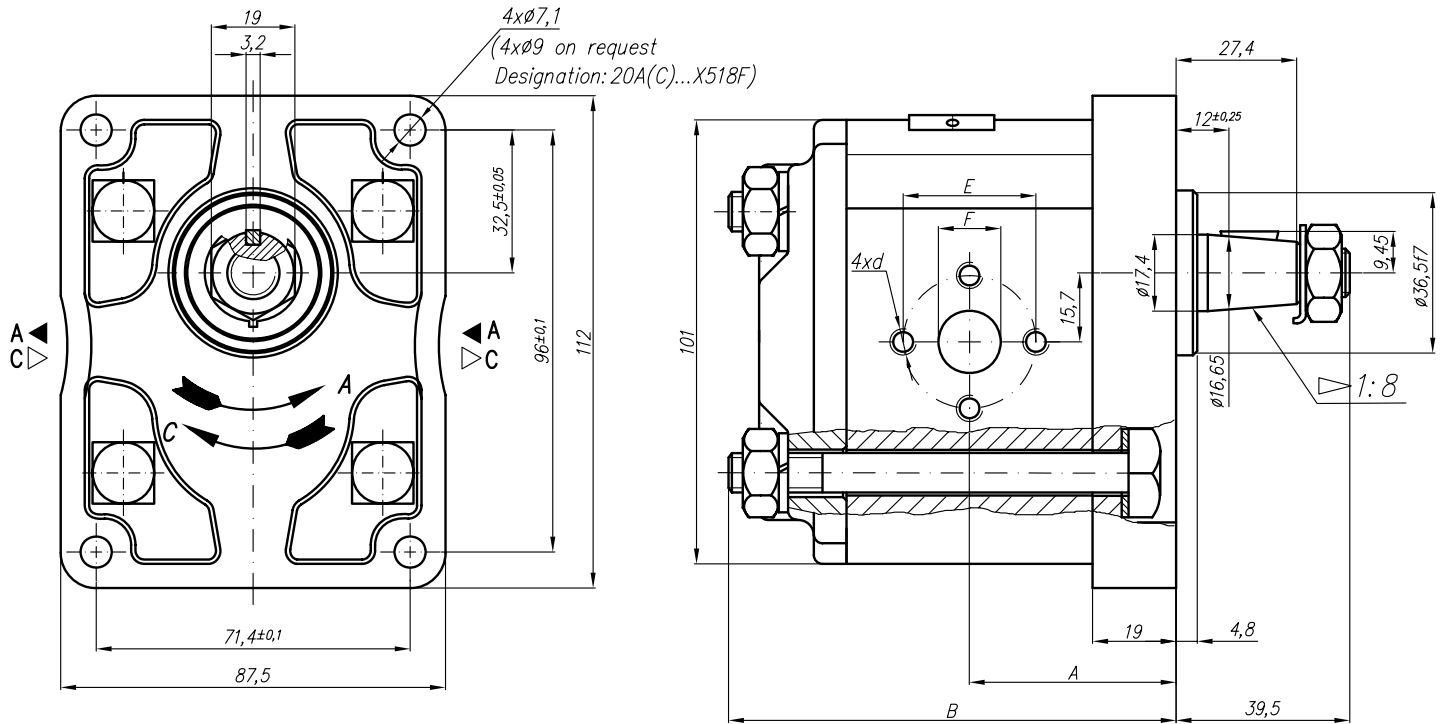
V
Variants for ports – M;G;U

Designations:

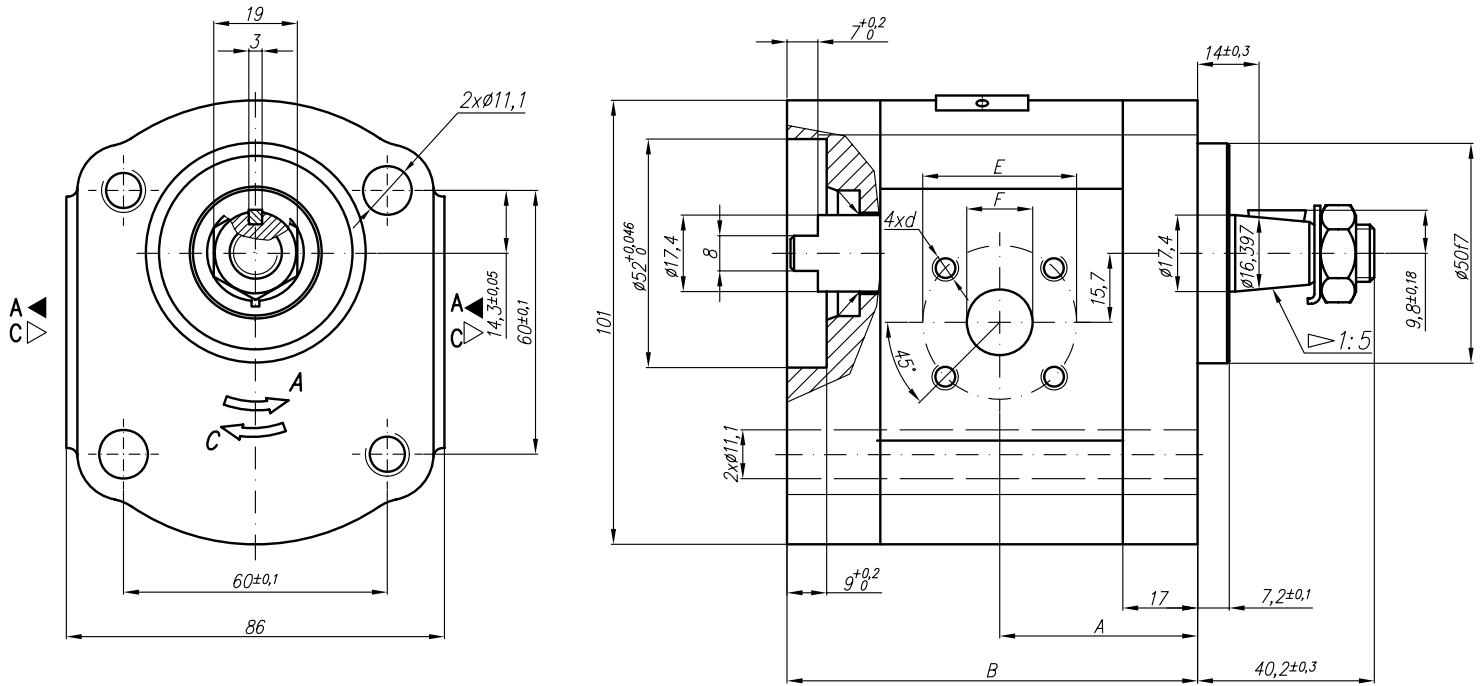
- ...X514M – Metric threads;
- ...X514G – GAS threads;
- ...X514U – SAE UNF threads;



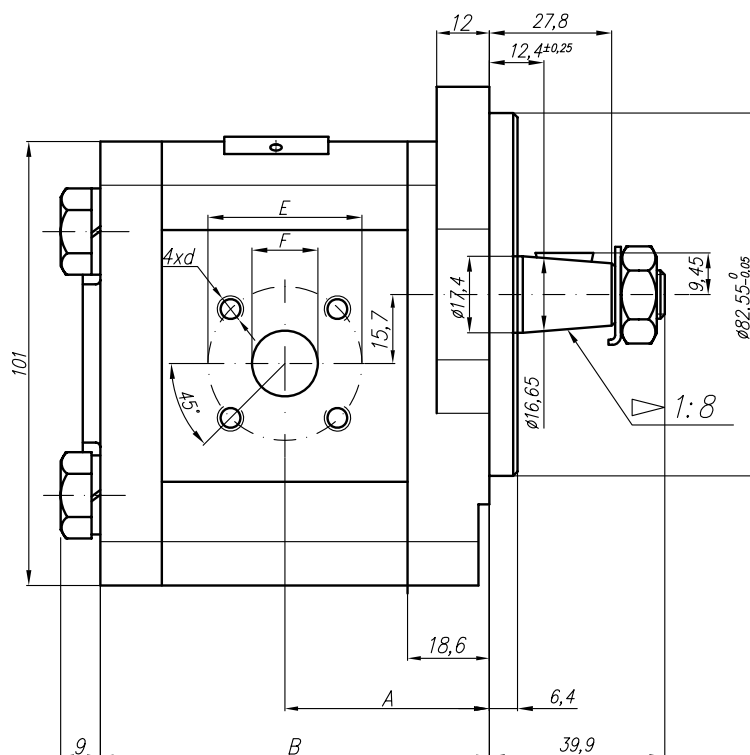
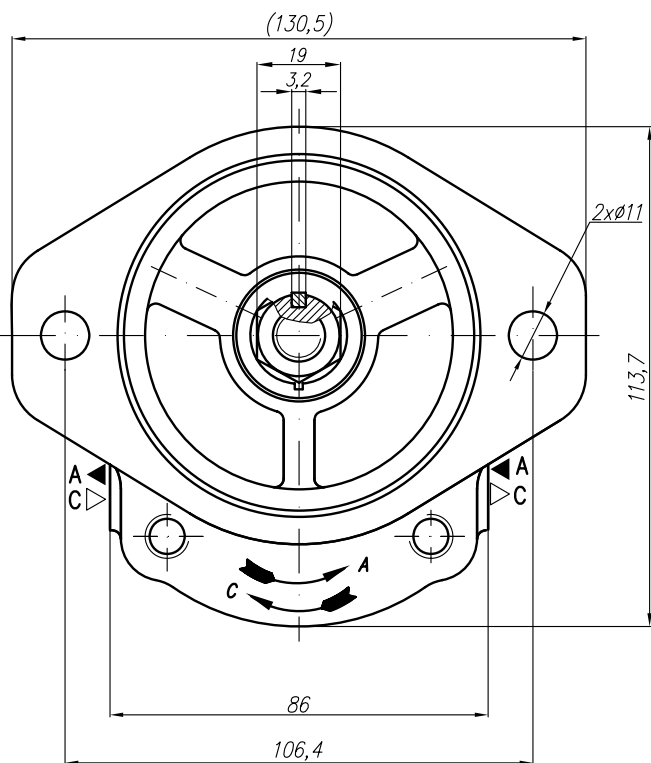
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
20A(C)4,5X514...	4,5	6,14	14,33	250	3500	42	86,8	M20x1,5	G1/2	1 1/16"-12UNF	M16x1,5	G1/2	7/8"-14UNF
20A(C)6,3X514...	6,3	8,69	20,29	250	3500	43,6	86,8						
20A(C)8,2X514...	8,2	11,32	26,40	250	3500	45	86,8						
20A(C)10X514...	10	13,95	32,55	250	3500	46,6	95,8						
20A(C)11X514...	11,3	15,76	36,78	250	3500	47,6	97,9						
20A(C)12X514...	12	16,92	39,48	250	3500	48,2	99,1						
20A(C)14X514...	14	19,95	46,55	250	3500	49,6	102,1		G3/4				
20A(C)15X514...	15	21,60	36,00	250	2500	50,6	103,7						
20A(C)16X514...	16	23,04	38,40	250	2500	51,6	105,3						
20A(C)19X514...	19	27,36	45,60	200	2500	53,6	110,3						
20A(C)22X514...	22	31,68	42,24	180	2000	56,6	115,3						
20A(C)25X514...	25	36,00	48,00	160	2000	58,8	120,2		M20X1,5				



Type		Displacement	Flow		Pressure P _{nom}	max Speed n	Dimension										
			at 1500 rpm	at max rpm			A	B	Inlet				Outlet				
"Caproni"	"Plessey"	cm ³ /rev	l/min	l/min	bar	rpm	mm	mm	E	F	d	d	E	F	d	d	
20A(C)4,5X518	A(C)10XP4...S	4,5	6,14	14,33	175	3500	42,5	92,8									
20A(C)6,3X518	A(C)14XP4...S	6,3	8,69	20,29	175	3500	42,5	92,8	30,2	13,1	1/4"-20UNC			13,1			
20A(C)8,2X518	A(C)18XP4...S	8,2	11,32	26,40	175	3500	42,5	92,8									
20A(C)10X518	A(C)22XP4...S	10	13,95	32,55	175	3500	47	101,8									
20A(C)11X518	A(C)25XP4...S	11,3	15,76	36,78	175	3500	48	103,9									
20A(C)12X518	A(C)26XP4...S	12	16,92	39,48	175	3500	48,6	105,1									
20A(C)14X518	A(C)31XP4...S	14	19,95	46,55	175	3500	50	108,2									
20A(C)15X518	A(C)33XP4...S	15	21,60	36,00	175	2500	51	109,7									
20A(C)15X518SS	A(C)33XP4...SS	15	21,60	36,00	140	2500	48	103,8									
20A(C)16X518	A(C)35XP4...S	16	23,04	38,40	175	2500	52	111,4	39,7								
20A(C)17,3X518	A(C)38XP4...S	17,3	24,91	41,52	175	2500	52,8	113,4	19								
20A(C)19X518	A(C)42XP4...S	19	27,36	45,60	175	2500	54	116,3									
20A(C)19X518SS	A(C)42XP4...SS	19	27,36	45,60	105	2500	51,4	110									
20A(C)22X518	A(C)48XP4...S	22	31,68	42,24	175	2000	57	121,3									
20A(C)25X518	A(C)55XP4...S	25	36,00	48,00	160	2000	59,2	126,2					39,7	19	5/16		

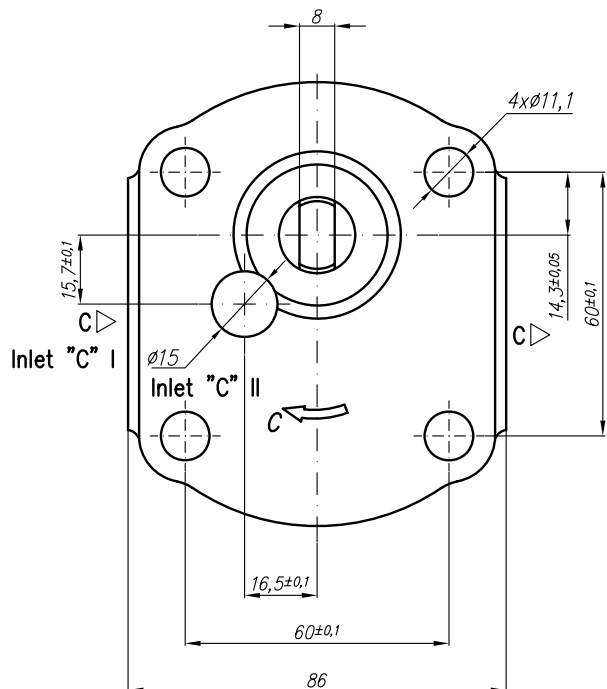


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	E	F	d
20A(C)4,5X528	4,5	6,14	14,33	250	3500	40,5	85,2	40	15	M6-6H	35	15	M6-6H
20A(C)6,3X528	6,3	8,69	20,29	250	3500	42	88,2						
20A(C)8,2X528	8,2	11,32	26,40	250	3500	43,5	91,1						
20A(C)10X528	10	13,95	32,55	250	3500	45	94,1						
20A(C)11X528	11,3	15,76	36,78	250	3500	46	96,2						
20A(C)12X528	12	16,92	39,48	250	3500	46,5	97,5						
20A(C)14X528	14	19,95	46,55	250	3500	48	100,6						
20A(C)15X528	15	21,60	36,00	250	2500	49	102,1						
20A(C)16X528	16	23,04	38,40	250	2500	50	103,8						
20A(C)19X528	19	27,36	45,60	200	2500	52	108,7						
20A(C)22X528	22	31,68	42,24	180	2000	55	113,7						
20A(C)25X528	25	36,00	48,00	160	2000	57,2	118,5						

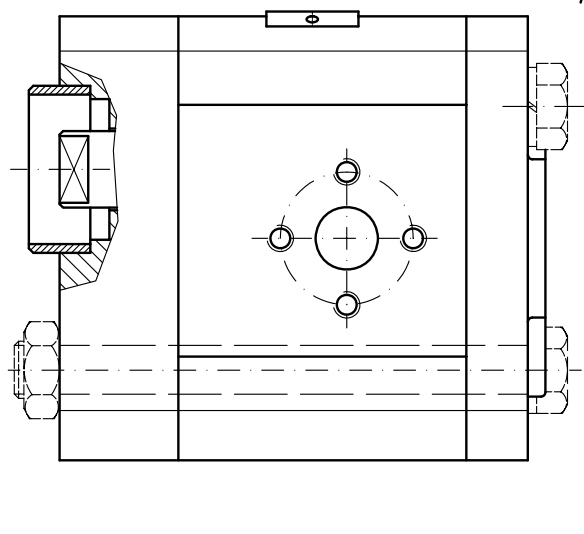
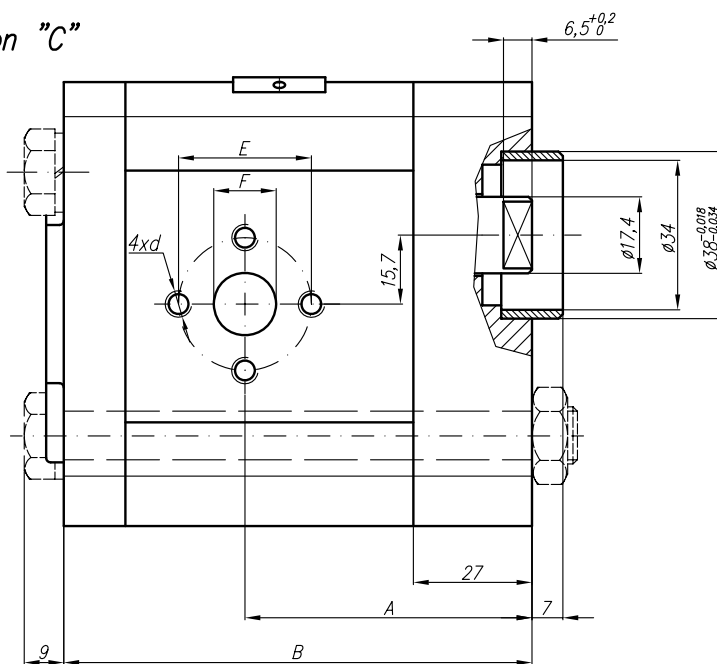


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet			
						E	F	d	E	F	d			
20A(C)4,5X529	4,5	6,14	14,33	250	3500	42	79,6	40	15	M6-6H	35	15	M6-6H	
20A(C)6,3X529	6,3	8,69	20,29	250	3500	43,6	82,6							
20A(C)8,2X529	8,2	11,32	26,40	250	3500	45	85,6							
20A(C)10X529	10	13,95	32,55	250	3500	46,6	88,7							
20A(C)11X529	11,3	15,76	36,78	250	3500	47,6	90,7							
20A(C)12X529	12	16,92	39,48	250	3500	48,2	91,9							
20A(C)14X529	14	19,95	46,55	250	3500	49,6	95							
20A(C)15X529	15	21,60	36,00	250	2500	50,6	96,5							
20A(C)16X529	16	23,04	38,40	250	2500	51,6	98,2							
20A(C)19X529	19	27,36	45,60	200	2500	53,6	103,1							
20A(C)22X529	22	31,68	42,24	180	2000	56,6	108,1							
20A(C)25X529	25	36,00	48,00	160	2000	58,8	113							

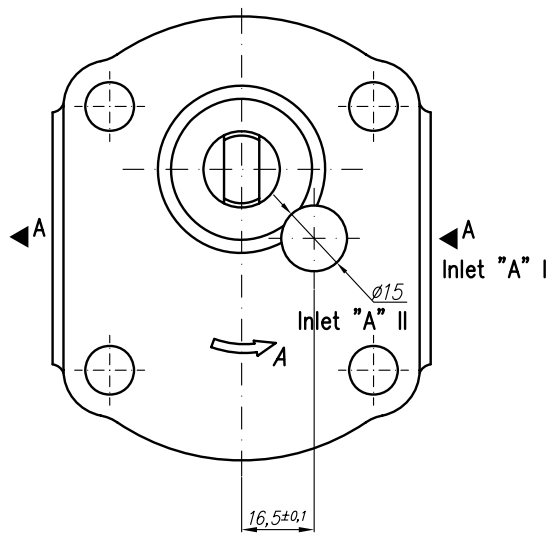
Designed as a II section of tandem pump 22A(C)...X539/...X538.



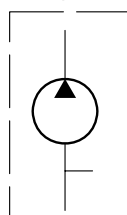
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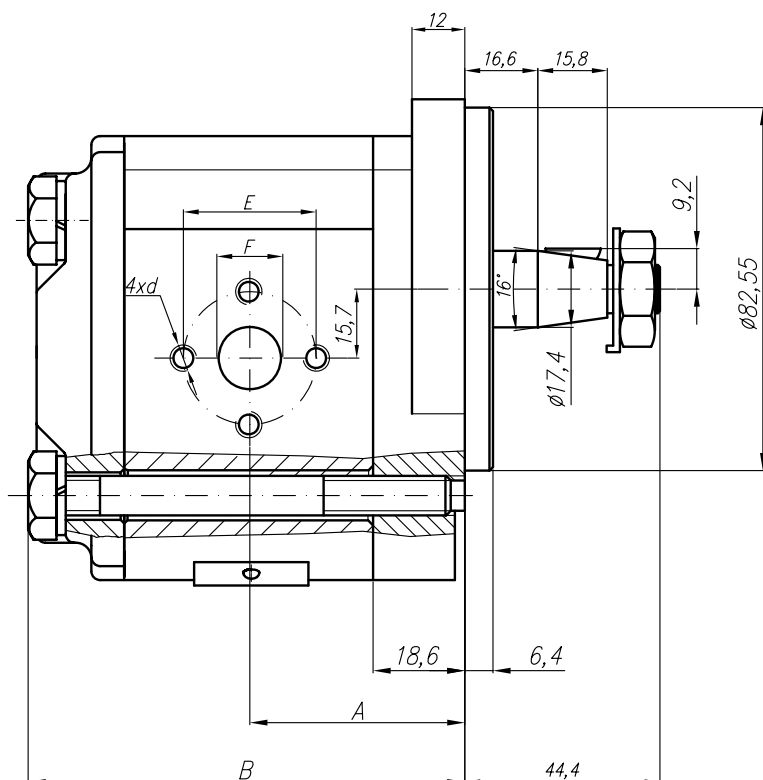
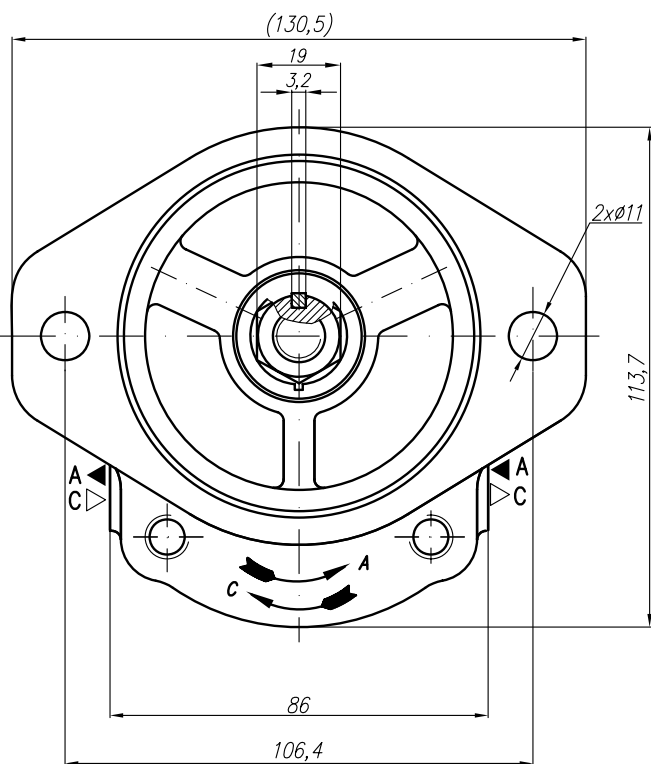
Rotation "A"



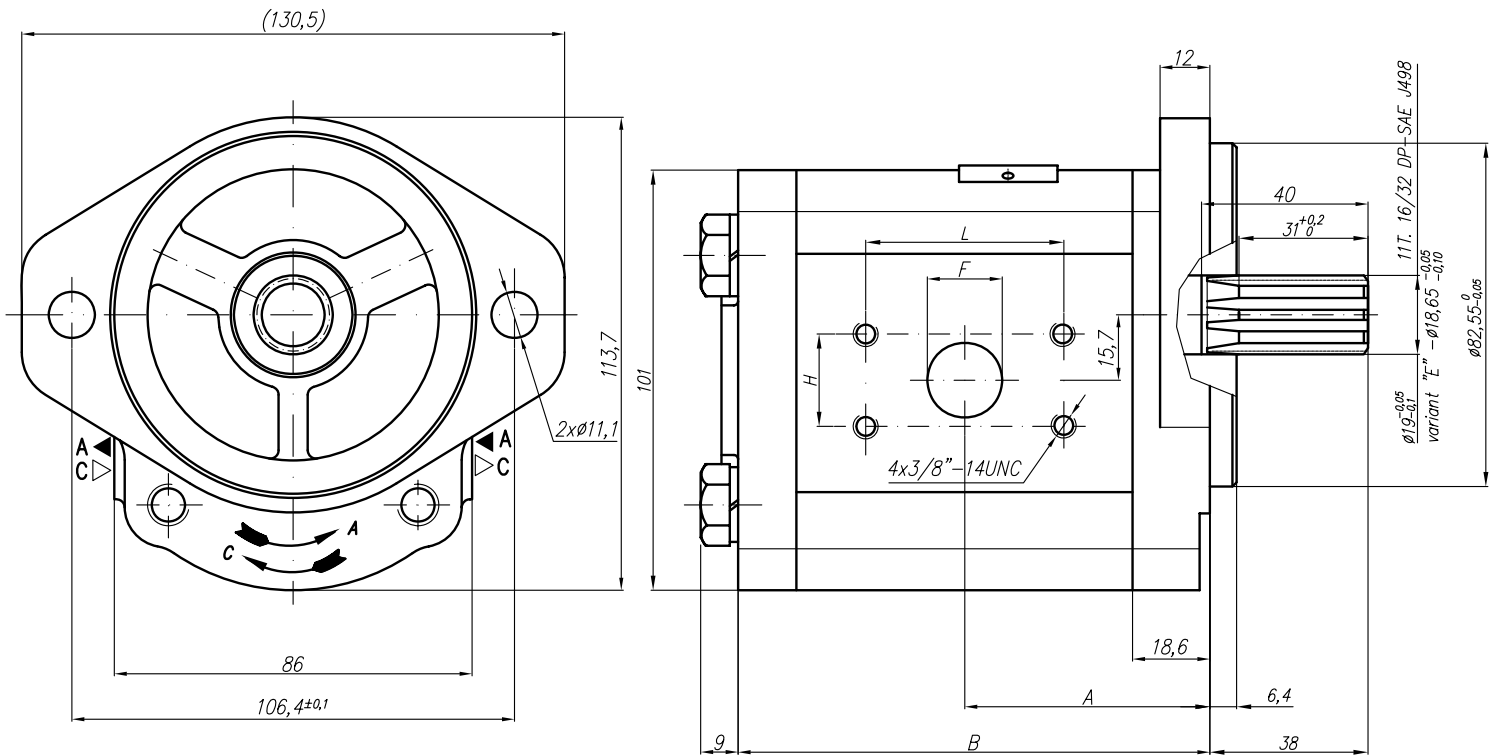
Symbol



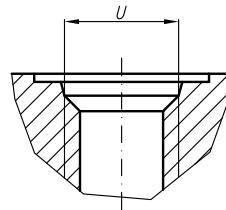
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	E	F	d
20A(C)4,5X538	4,5	6,14	14,33	200	3500								
20A(C)6,3X538	6,3	8,69	20,29	200	3500								
20A(C)8,2X538	8,2	11,32	26,40	200	3500								
20A(C)10X538	10	13,95	32,55	200	3500								
20A(C)11X538	11,3	15,76	36,78	200	3500								
20A(C)12X538	12	16,92	39,48	200	3500								
20A(C)14X538	14	19,95	46,55	200	3500								
20A(C)15X538	15	21,60	36,00	200	2500								
20A(C)16X538	16	23,04	38,40	200	2500	65,3	106,5						
20A(C)19X538	19	27,36	45,60	200	2500			39,7	19				
20A(C)22X538	22	31,68	42,24	180	2000					5/16"-18UNC			
20A(C)25X538	25	36,00	48,00	160	2000						30,2	14,2	1/4"-20UNC



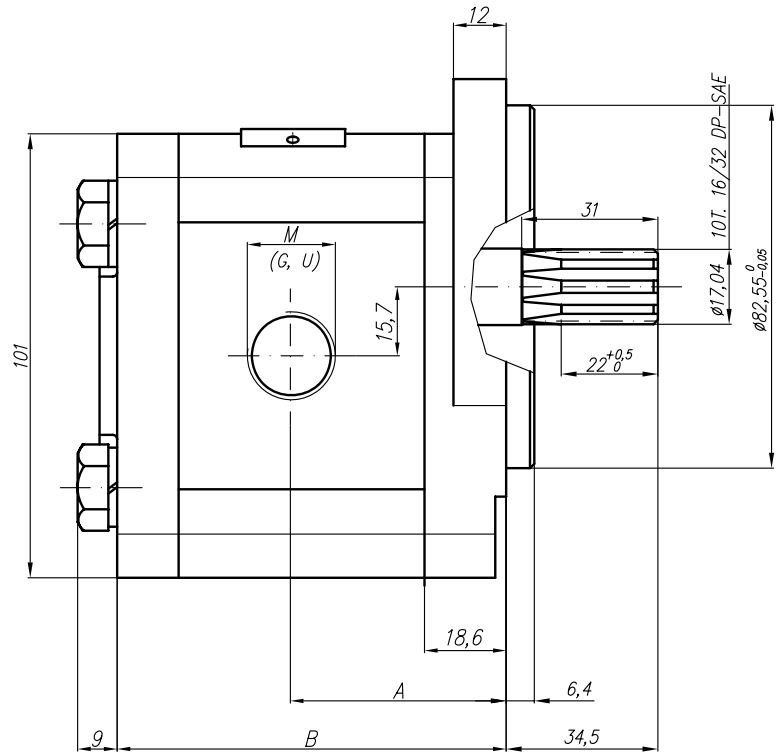
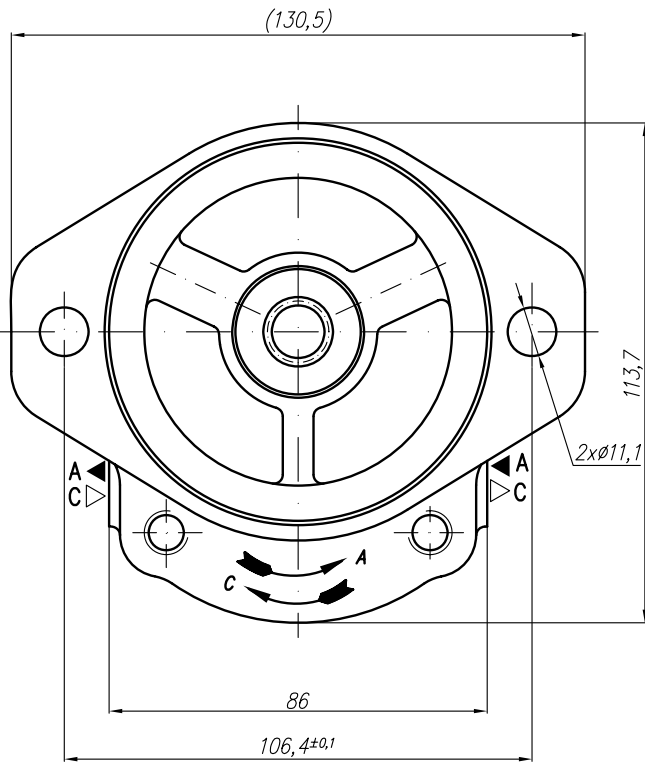
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	E	F	d
20A(C)4,5X541	4,5	6,14	14,33	250	3500								
20A(C)6,3X541	6,3	8,69	20,29	250	3500			30,2	13,1	M6-6H		13,1	
20A(C)8,2X541	8,2	11,32	26,40	250	3500								
20A(C)10X541	10	13,95	32,55	250	3500								
20A(C)11X541	11,3	15,76	36,78	250	3500	48	106						
20A(C)12X541	12	16,92	39,48	250	3500						30,2		
20A(C)14X541	14	19,95	46,55	250	3500							14,2	M6-6H
20A(C)15X541	15	21,60	36,00	250	2500			39,7	19	M8-6H			
20A(C)16X541	16	23,04	38,40	250	2500								
20A(C)19X541	19	27,36	45,60	200	2500								
20A(C)22X541	22	31,68	42,24	180	2000								
20A(C)25X541	25	36,00	48,00	160	2000						39,7	19	M8



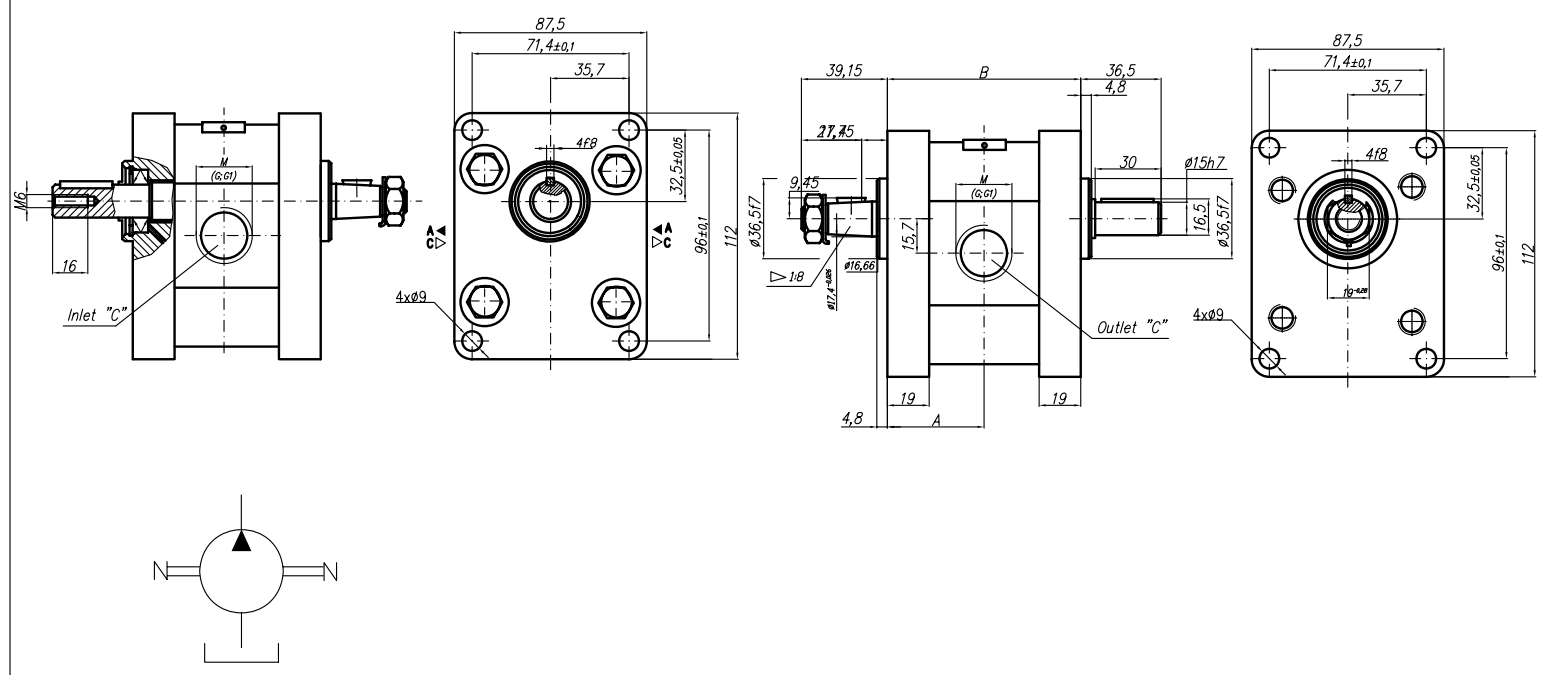
Variant "U"
SAE J475 (ISO R725)



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension											
		at 1500 rpm l/min	at max rpm l/min			Inlet		Outlet									
						A mm	B mm	E	H	d	F	U	E	H	d	F	U
20A(C)15X550HD...	15	20,48	47,78	250	3500	55,6	106,8	52,7	26	3/8"-14UNC-2B	24	1 1/16"-12UNF	47,6	22	3/8"-14UNC-2B	17	7/8"-14UNF
20A(C)16X550HD...	16	22,08	51,52	250	3500	56,6	108,4										
20A(C)17,3X550HD...	17,3	23,87	55,71	250	3500	57,6	110,5										
20A(C)18,2X550HD...	18,2	25,39	59,24	250	3500	58,4	112,1										
20A(C)19X550HD...	19	26,51	61,85	250	3500	59	113,4										
20A(C)22X550HD...	22	31,02	72,38	250	3500	61,5	118,4										
20A(C)25X550HD...	25	35,63	83,13	250	3500	63,9	123,3										
20A(C)28X550HD...	28	40,32	67,20	250	2500	66,4	128,1										
20A(C)32X550HD...	32	46,08	76,80	250	2500	69,6	134,4										
20A(C)36X550HD...	36	51,84	86,40	200	2500	72,8	141										



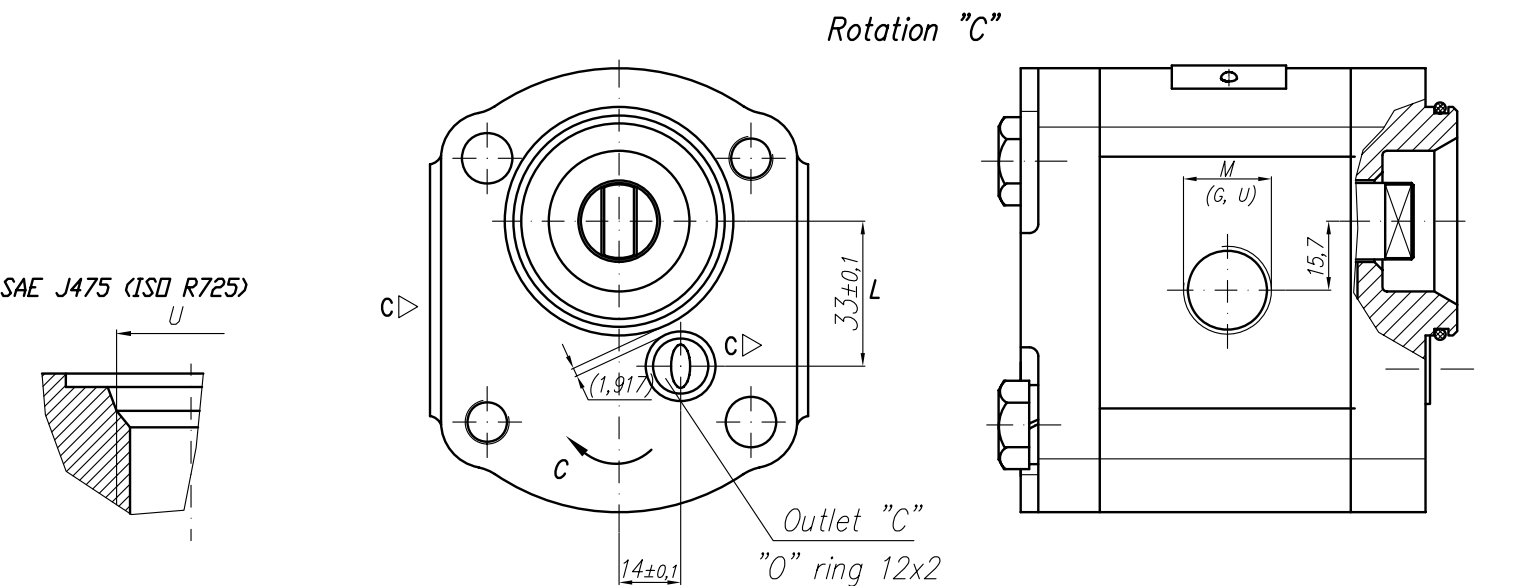
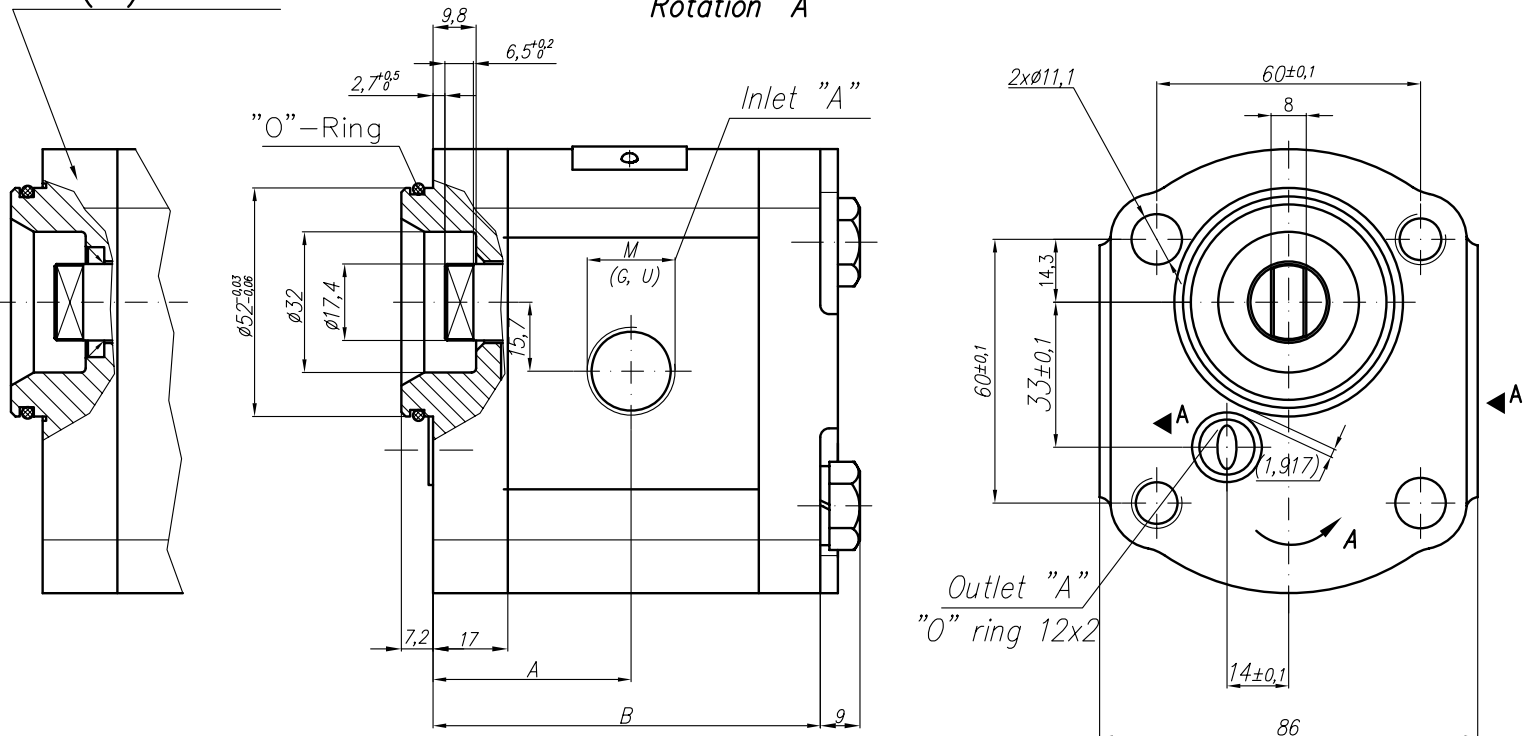
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
20A(C)4,5X554...	4,5	6,14	14,33	250	3500	41,4	79,6	M20x1,5	G1/2	1 1/16"-12UNF	M16x1,5	G1/2	7/8"-14UNF
20A(C)6,3X554...	6,3	8,69	20,29	250	3500	42,6	82,6						
20A(C)8,2X554...	8,2	11,32	26,40	250	3500	44,7	85,5						
20A(C)10X554...	10	13,95	32,55	250	3500	49,1	88,6						
20A(C)11X554...	11,3	15,76	36,78	250	3500	49,1	90,7						
20A(C)12X554...	12	16,92	39,48	250	3500	49,1	91,9						
20A(C)14X554...	14	19,95	46,55	250	3500	49,1	95						
20A(C)15X554...	15	21,60	36,00	250	2500	49,1	96,5						
20A(C)16X554...	16	23,04	38,40	250	2500	49,1	98,2						
20A(C)19X554...	19	27,36	45,60	200	2500	49,1	103,1						
20A(C)22X554...	22	31,68	42,24	180	2000	56,6	108,1						
20A(C)25X554...	25	36,00	48,00	160	2000	58,8	113						
20A(C)14X554H...	14	20,16	47,04	250	3500	55,3	105,7	M20x1,5	G3/4	1 1/16"-12UNF	M16x1,5	G1/2	7/8"-14UNF
20A(C)15X554H...	15	21,60	43,20	250	3000	55,6	106,8						
20A(C)16X554H...	16	23,04	46,08	250	3000	56,5	108,4						
20A(C)17,3X554H...	17,3	24,91	49,82	230	3000	57,6	110,5						
20A(C)18,2X554H...	18,2	26,21	52,42	210	3000	58,4	112,1						
20A(C)19X554H...	19	27,36	54,72	200	3000	59	113,4						
20A(C)22X554H...	22	31,68	52,80	180	2500	61,5	118,4						
20A(C)25X554H...	25	36,00	60,00	160	2500	63,9	123,3						
20A(C)28X554H...	28	40,32	67,20	130	2500	66,4	128,1						
20A(C)32X554H...	32	46,08	61,44	120	2000	69,6	134,4						
20A(C)36X554H...	36	51,84	69,12	100	2000	72,8	141						



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet		Outlet					
						A mm	B mm	M	G	U	M	G	U
20A(C)4,5Y566D...	4,5	6,14	14,33	250	3500	41,8	85	M20x1,5	G1/2	1 1/16"-12UNF	M16x1,5	G1/2	7/8"-14UNF
20A(C)6,3Y566D...	6,3	8,69	20,29	250	3500	43	88						
20A(C)8,2Y566D...	8,2	11,32	26,40	250	3500	45,1	90,9						
20A(C)10Y566D...	10	13,95	32,55	250	3500	49,5	94						
20A(C)11Y566D...	11,3	15,76	36,78	250	3500	49,5	96						
20A(C)12Y566D...	12	16,92	39,48	250	3500	49,5	97,3						
20A(C)14Y566D...	14	19,95	46,55	250	3500	49,5	100,4						
20A(C)15Y566D...	15	21,60	36,00	250	2500	49,5	102						
20A(C)16Y566D...	16	23,04	38,40	250	2500	49,5	103,5						
20A(C)19Y566D...	19	27,36	45,60	200	2500	49,5	108,5						
20A(C)22Y566D...	22	31,68	42,24	180	2000	57	113,5						
20A(C)25Y566D...	25	36,00	48,00	160	2000	59,2	118,4						

Variant with *simmerring* in front cover designation:

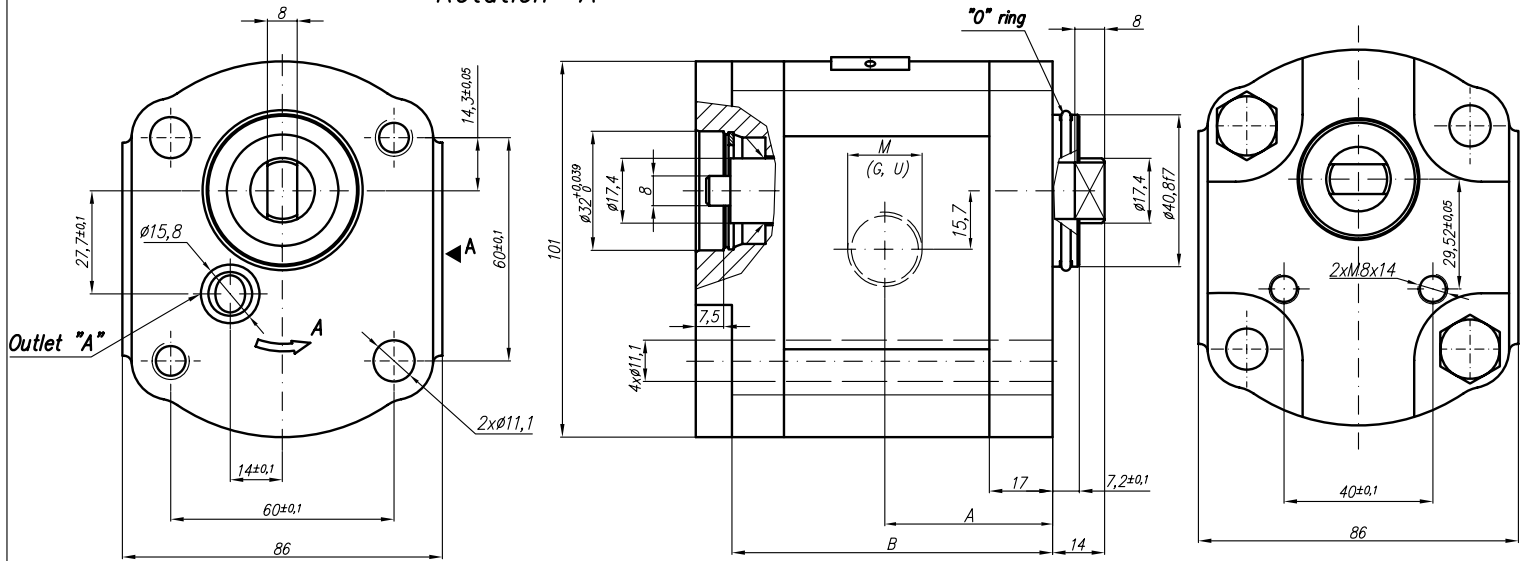
20A(C)...X567...AS



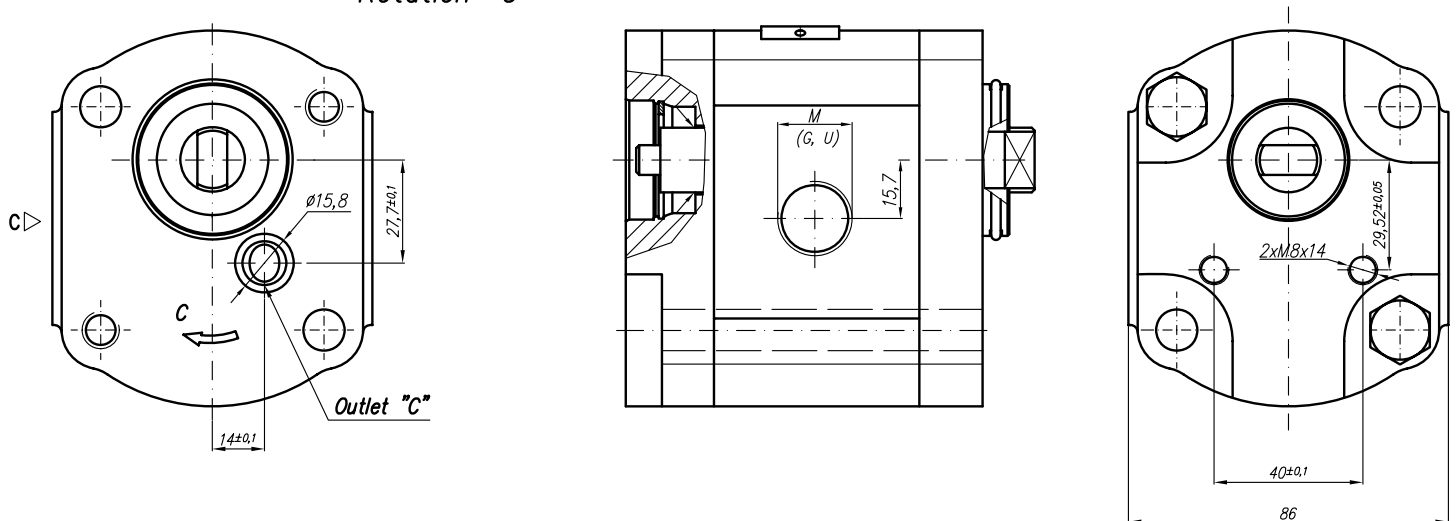
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension									
		at 1500 rpm l/min	at max rpm l/min			A	B	Inlet				Outlet			
						mm	mm	M	M1	G	U				
20A(C)4,5X567...	4,5	6,14	14,33	250	3500	40,5	78	M20x1,5	M18x1,5	G1/2"	1 1/16"-12 UNF				
20A(C)6,3X567...	6,3	8,69	20,29	250	3500	42	81								
20A(C)8,2X567...	8,2	11,32	26,40	250	3500	43,5	83,9								
20A(C)10X567...	10	13,95	32,55	250	3500	45	87			G3/4"					
20A(C)11X567...	11,3	15,76	36,78	250	3500	46	89,1								
20A(C)12X567...	12	16,92	39,48	250	3500	46,6	90,3								
20A(C)14X567...	14	19,95	46,55	250	3500	48	93,4								
20A(C)15X567...	15	21,60	36,00	250	2500	49	95								
20A(C)16X567...	16	23,04	38,40	250	2500	50	96,6								
20A(C)19X567...	19	27,36	45,60	200	2500	52	101,5								
20A(C)22X567...	22	31,68	42,24	180	2000	55	106,5								
20A(C)25X567...	25	36,00	48,00	160	2000	57,2	112,1								

Designed as a first section of tandem pumps group 21A(C)...X573.../...

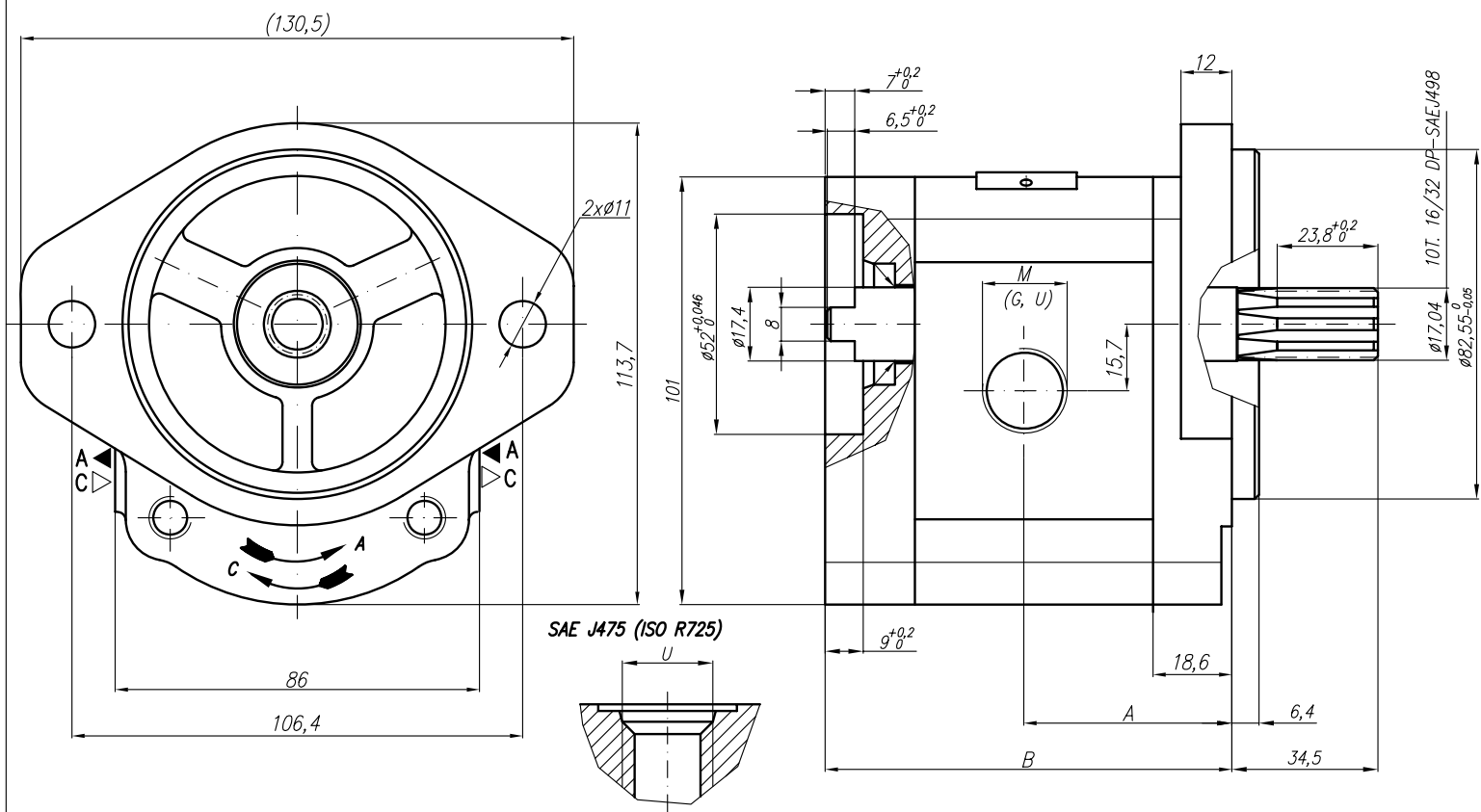
Rotation "A"



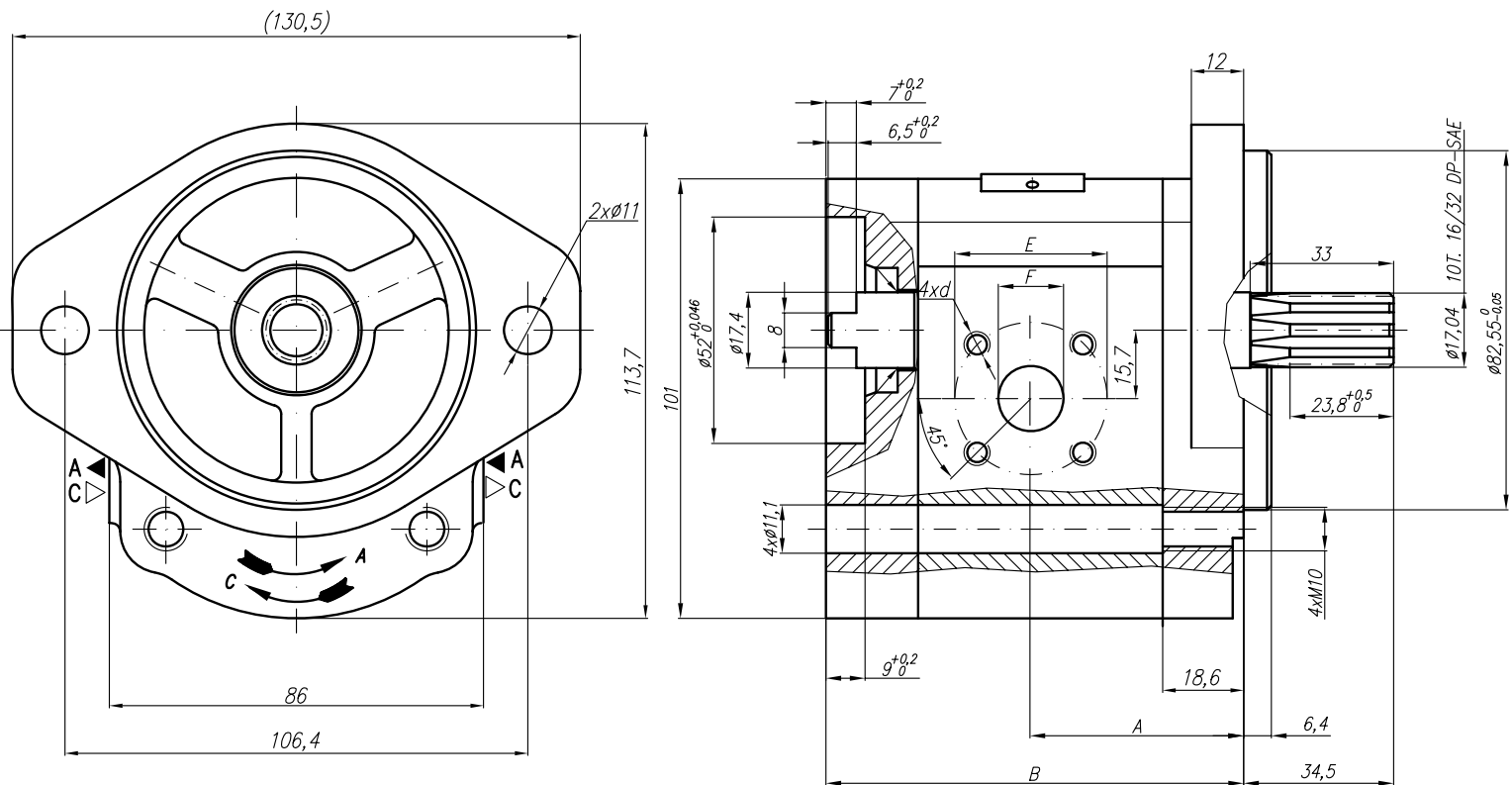
Rotation "C"



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet			
								M	G	U	M	G	U	
20A(C)4,5X573...	4,5	6,14	14,33	250	3500	39,8	87,7	M20x1,5	G1/2	1 1/16"-12UNF				
20A(C)6,3X573...	6,3	8,69	20,29	250	3500	41	90,7							
20A(C)8,2X573...	8,2	11,32	26,40	250	3500	43,1	93,6							
20A(C)10X573...	10	13,95	32,55	250	3500	47,5	95,6		G3/4					
20A(C)11X573...	11,3	15,76	36,78	250	3500	47,5	98,7							
20A(C)12X573...	12	16,92	39,48	250	3500	47,5	100							
20A(C)14X573...	14	19,95	46,55	250	3500	47,5	103,1							
20A(C)15X573...	15	21,60	36,00	250	2500	47,5	104,6							
20A(C)16X573...	16	23,04	38,40	250	2500	47,5	106,2							
20A(C)19X573...	19	27,36	45,60	200	2500	47,5	112,2							
20A(C)22X573...	22	31,68	42,24	180	2000	55	116,2							
20A(C)25X573...	25	36,00	48,00	160	2000	57,2	121,1							

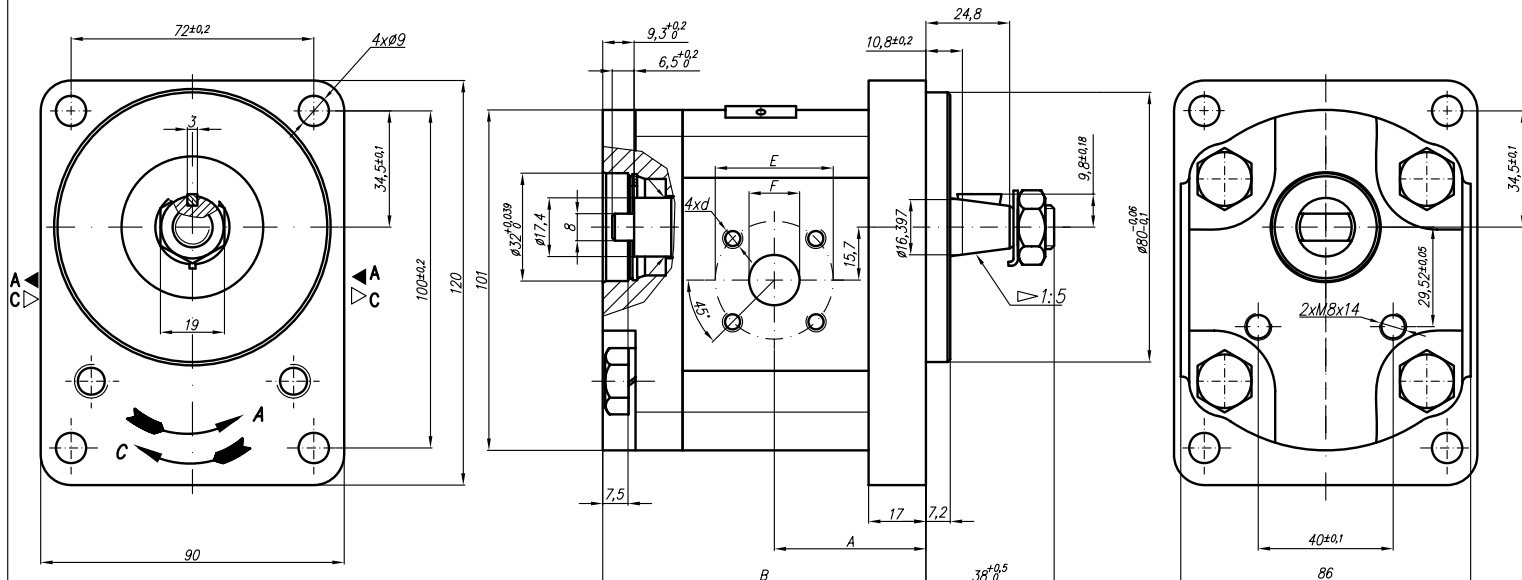


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
20A(C)4,5X574...	4,5	6,14	14,33	250	3500	41,4	86,8	M20x1,5	G1/2	1 1/16"-12UNF	M16x1,5	G1/2	7/8"-14UNF
20A(C)6,3X574...	6,3	8,69	20,29	250	3500	42,6	89,8						
20A(C)8,2X574...	8,2	11,32	26,40	250	3500	44,7	92,7						
20A(C)10X574...	10	13,95	32,55	250	3500	49,1	95,7						
20A(C)11X574...	11,3	15,76	36,78	250	3500	49,1	97,8						
20A(C)12X574...	12	16,92	39,48	250	3500	49,1	99,1						
20A(C)14X574...	14	19,95	46,55	250	3500	49,1	102,2						
20A(C)15X574...	15	21,60	36,00	250	2500	49,1	103,7						
20A(C)16X574...	16	23,04	38,40	250	2500	49,1	105,3						
20A(C)19X574...	19	27,36	45,60	200	2500	49,1	110,3						
20A(C)22X574...	22	31,68	42,24	180	2000	56,6	115,3						
20A(C)25X574...	25	36,00	48,00	160	2000	58,8	120,2						
20A(C)14X574H...	14	20,16	47,04	250	3500	54,3	112,5	M20x1,5	G3/4	1 1/16"-12UNF	M16x1,5	G1/2	7/8"-14UNF
20A(C)15X574H...	15	21,60	43,20	250	3000	55,6	114						
20A(C)16X574H...	16	23,04	46,08	250	3000	56,5	115,6						
20A(C)17,3X574H...	17,3	24,91	49,82	230	3000	57,6	117,7						
20A(C)18,2X574H...	18,2	26,21	52,42	210	3000	58,4	119,3						
20A(C)19X574H...	19	27,36	54,72	200	3000	59	120,6						
20A(C)22X574H...	22	31,68	52,80	180	2500	61,5	125,6						
20A(C)25X574H...	25	36,00	60,00	160	2500	63,9	130,5						
20A(C)28X574H...	28	40,32	67,20	130	2500	66,4	135,5						
20A(C)32X574H...	32	46,08	61,44	120	2000	69,6	141,6						
20A(C)36X574H...	36	51,84	69,12	100	2000	72,8	148,2						

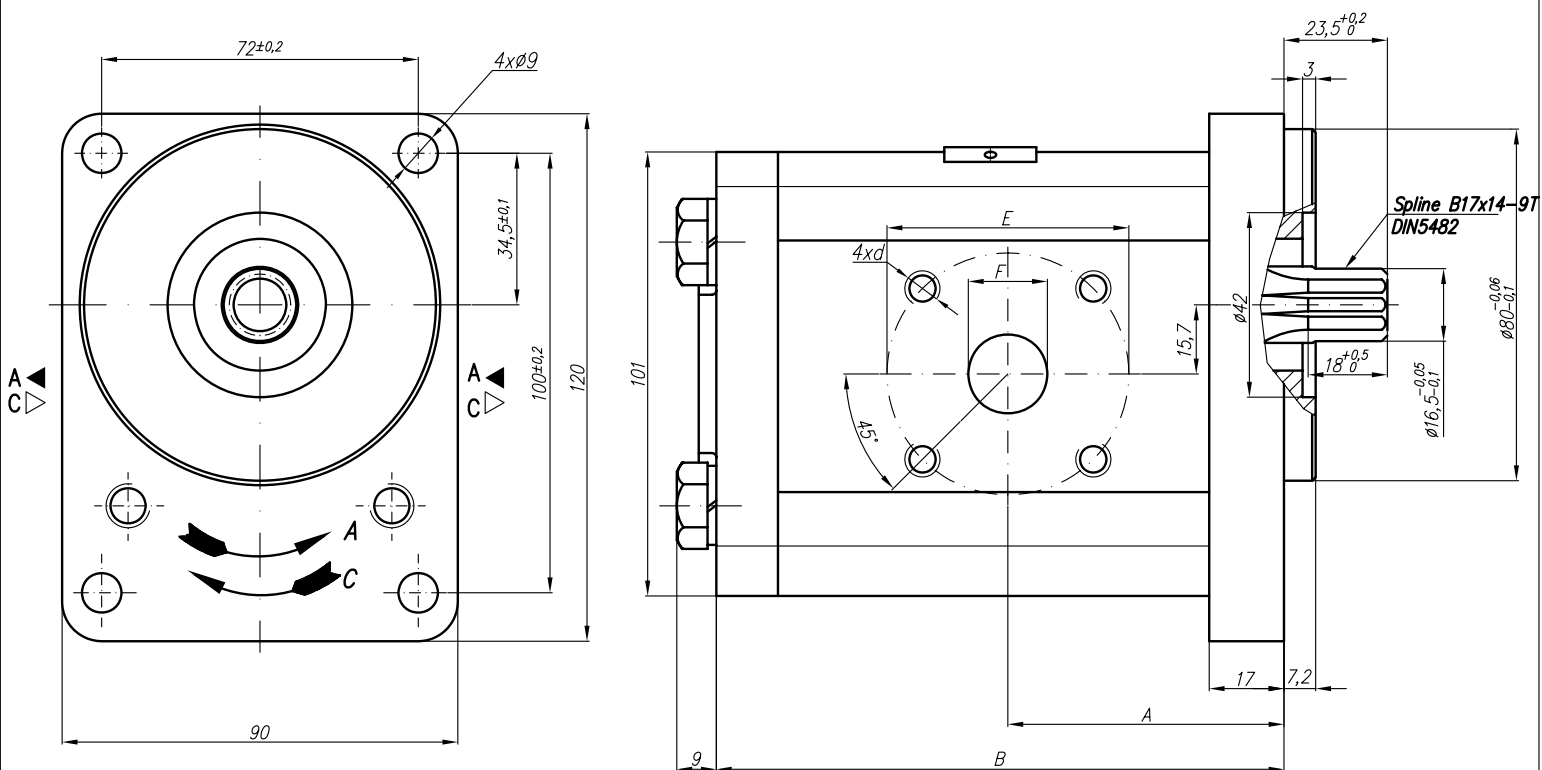


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension													
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet								
20A(C)4,5X577	4,5	6,14	14,33	250	3500	41,4	86,8	40	20	M6-6H	35	15	M6-6H						
20A(C)6,3X577	6,3	8,69	20,29	250	3500	42,6	89,8												
20A(C)8,2X577	8,2	11,32	26,40	250	3500	44,7	92,7												
20A(C)10X577	10	13,95	32,55	250	3500	49,1	95,7												
20A(C)11X577	11,3	15,76	36,78	250	3500	49,1	97,8												
20A(C)12X577	12	16,92	39,48	250	3500	49,1	99,1												
20A(C)14X577	14	19,95	46,55	250	3500	49,1	102,2												
20A(C)15X577	15	21,60	36,00	250	2500	49,1	103,7												
20A(C)16X577	16	23,04	38,40	250	2500	49,1	105,3												
20A(C)19X577	19	27,36	45,60	200	2500	49,1	110,3												
20A(C)22X577	22	31,68	42,24	180	2000	56,6	115,3												
20A(C)25X577	25	36,00	48,00	160	2000	58,8	120,2												
20A(C)14X577H	14	20,16	47,04	250	3500	54,3	112,5							40	20	M6-6H	35	15	M6-6H
20A(C)15X577H	15	21,60	43,20	250	3000	55,6	114												
20A(C)16X577H	16	23,04	46,08	250	3000	56,5	115,6												
20A(C)17,3X577H	17,3	24,91	49,82	230	3000	57,6	117,7												
20A(C)18,2X577H	18,2	26,21	52,42	210	3000	58,4	119,3												
20A(C)19X577H	19	27,36	54,72	200	3000	59	120,6												
20A(C)22X577H	22	31,68	52,80	180	2500	61,5	125,6												
20A(C)25X577H	25	36,00	60,00	160	2500	63,9	130,5												
20A(C)28X577H	28	40,32	67,20	130	2500	66,4	135,5												
20A(C)32X577H	32	46,08	61,44	120	2000	69,6	141,6												
20A(C)36X577H	36	51,84	69,12	100	2000	72,8	148,2												

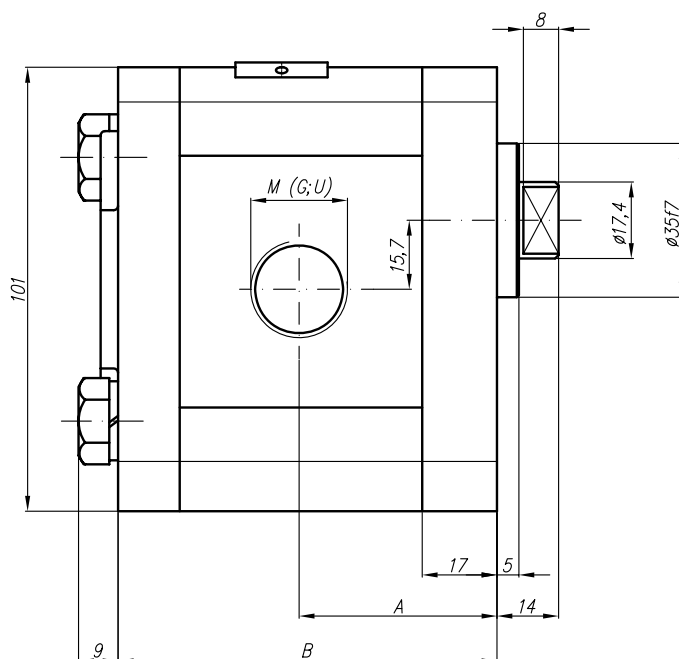
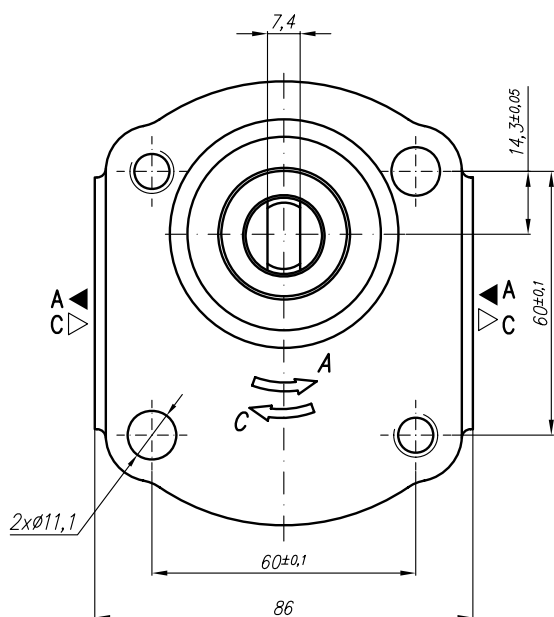
Designed as a first section of tandem gear pumps group 21A(C)...X578/... (lgroup/lgroup).



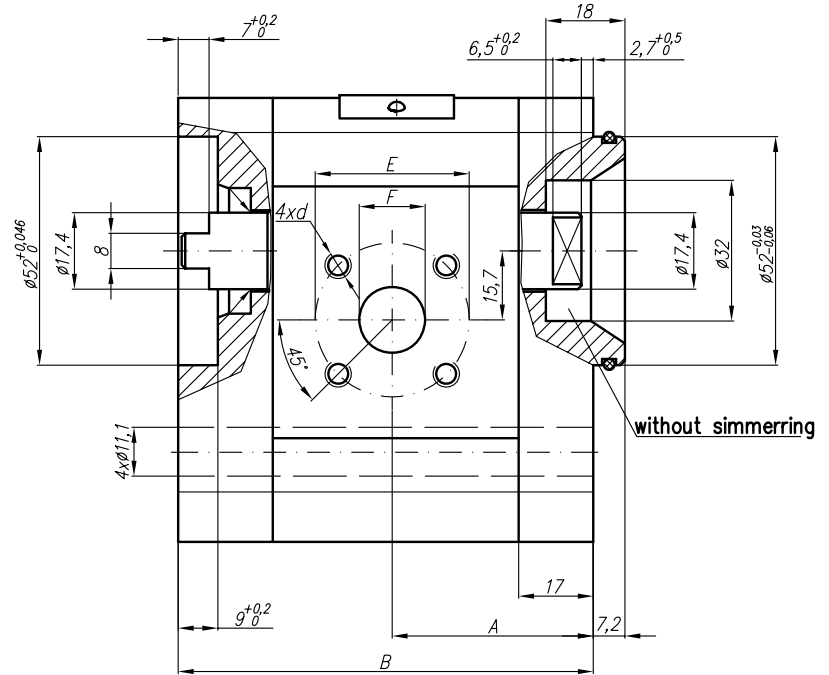
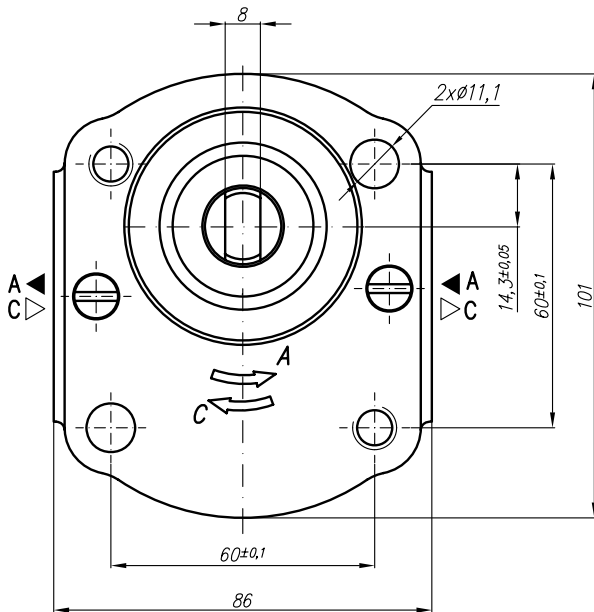
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	E	F	d
20A(C)4,5X578	4,5	6,14	14,33	250	3500	39,8	87,6	40	15	M6-6H	35	15	M6-6H
20A(C)6,3X578	6,3	8,69	20,29	250	3500	41	90,6						
20A(C)8,2X578	8,2	11,32	26,40	250	3500	43,1	93,5						
20A(C)10X578	10	13,95	32,55	250	3500	47,5	96,6						
20A(C)11X578	11,3	15,76	36,78	250	3500	47,5	98,7						
20A(C)12X578	12	16,92	39,48	250	3500	47,5	99,9						
20A(C)14X578	14	19,95	46,55	250	3500	47,5	103						
20A(C)15X578	15	21,60	36,00	250	2500	47,5	104,5						
20A(C)16X578	16	23,04	38,40	250	2500	47,5	106,2						
20A(C)19X578	19	27,36	45,60	200	2500	47,5	111,1						
20A(C)22X578	22	31,68	42,24	180	2000	55	116,1						
20A(C)25X578	25	36,00	48,00	160	2000	57,2	121,1						



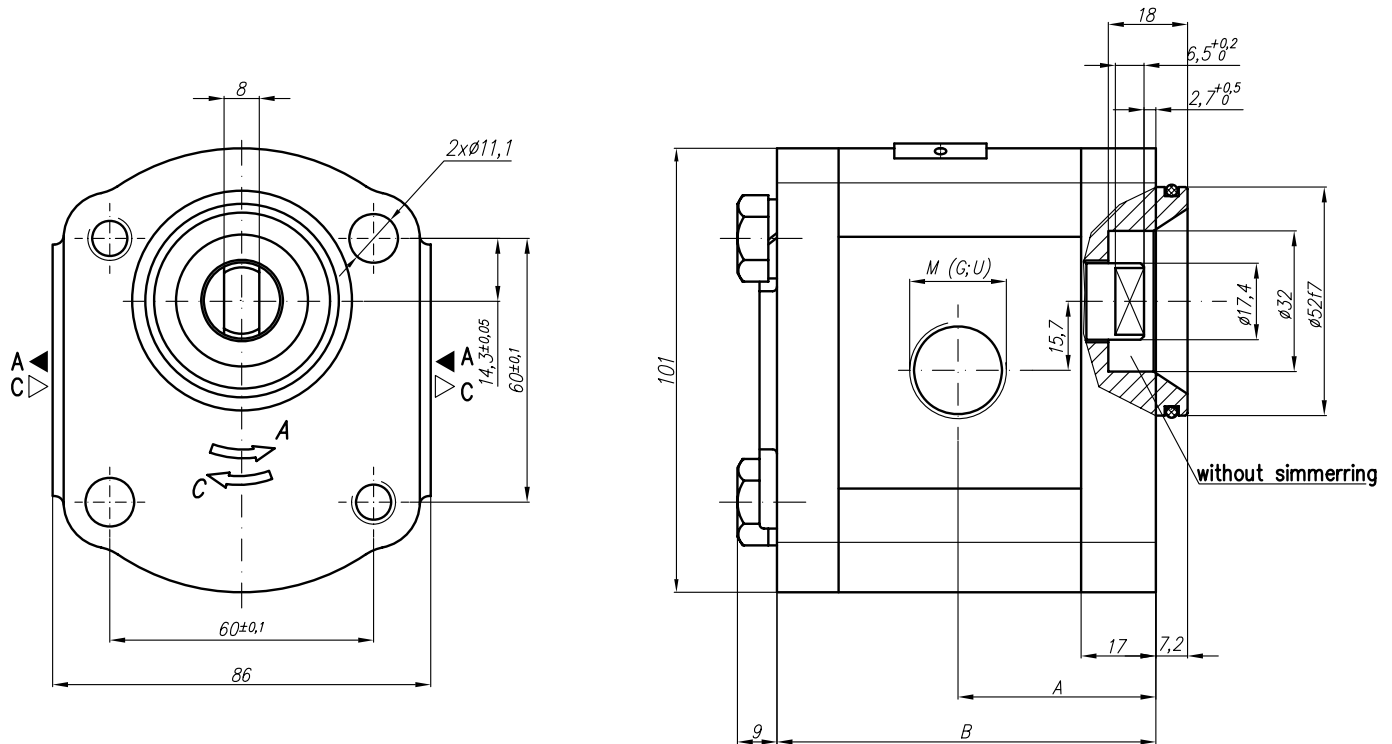
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	E	F	d
20A(C)14X581	14	20,16											
20A(C)15X581	15	21,60											
20A(C)16X581	16	23,04											
20A(C)17,3X581	17,3	24,91											
20A(C)18,2X581	18,2	26,21											
20A(C)19X581	19	27,36											
20A(C)22X581	22	31,68											
20A(C)25X581	25	36,00											
20A(C)28X581	28	40,32	67,20	50	2500			55	29	M8-6H	55	18	M8-6H
20A(C)32X581	32	46,08	61,44	50	2000								
20A(C)36X581	36	51,84	69,12	50	2000	62,8	129,1						



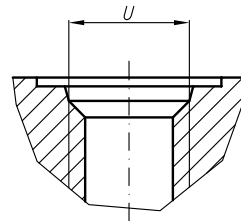
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	U	M	G	U
20A(C)4,5X583...	4,5	6,14	14,33	250	3500	37,3	75,1	M18x1,5			M18x1,5		
20A(C)6,3X583...	6,3	8,69	20,29	250	3500	38,6	78						
20A(C)8,2X583...	8,2	11,32	26,40	250	3500	40,6	78						
20A(C)10X583...	10	13,95	32,55	250	3500	45	87						
20A(C)11X583...	11,3	15,76	36,78	250	3500	45	89,1						
20A(C)12X583...	12	16,92	39,48	250	3500	45	90,3						
20A(C)14X583...	14	19,95	46,55	250	3500								
20A(C)15X583...	15	21,60	36,00	250	2500								
20A(C)16X583...	16	23,04	38,40	250	2500								
20A(C)19X583...	19	27,36	45,60	200	2500								
20A(C)22X583...	22	31,68	42,24	180	2000								
20A(C)25X583...	25	36,00	48,00	160	2000								



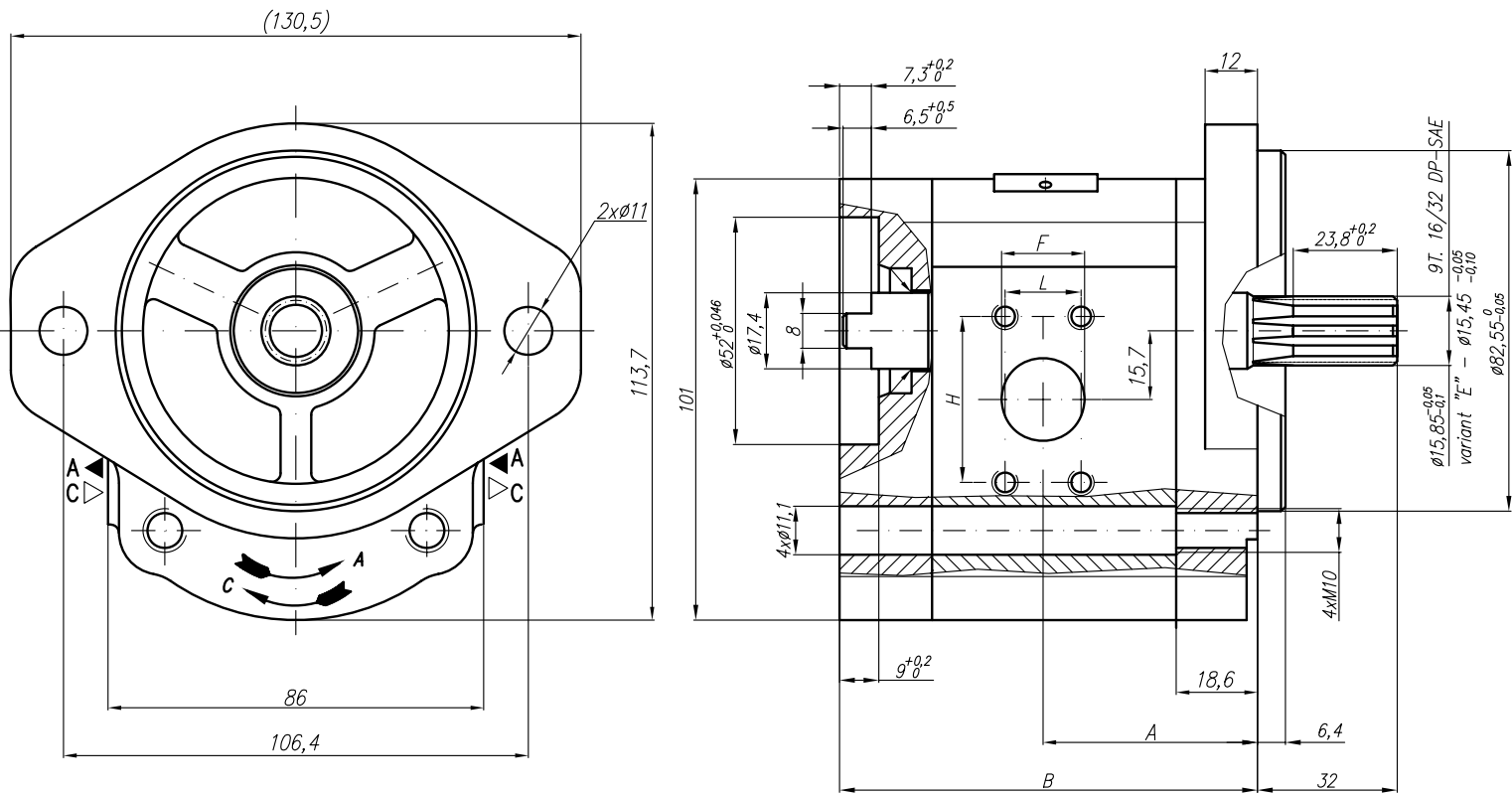
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	E	F	d
20A(C)4,5X586B	4,5	6,14	14,33	250	3500	40,5	85,2	40	15	M6-6H	35	15	M6-6H
20A(C)6,3X586B	6,3	8,69	20,29	250	3500	42	88,2						
20A(C)7X586B	7	9,66	22,54	250	3500	42,5	89,3						
20A(C)8,2X586B	8,2	11,32	26,40	250	3500	43,5	91,1						
20A(C)10X586B	10	13,95	32,55	250	3500	45	94,1						
20A(C)11X586B	11,3	15,76	36,78	250	3500	46	96,2						
20A(C)12X586B	12	16,92	39,48	250	3500	46,6	97,5						
20A(C)14X586B	14	19,95	46,55	250	3500	48	100,6						
20A(C)15X586B	15	21,60	36,00	250	2500	49	102,1						
20A(C)16X586B	16	23,04	38,40	250	2500	50	103,8						
20A(C)17,3X586B	17,3	24,91	41,52	230	2500	50,8	105,8						
20A(C)19X586B	19	27,36	45,60	200	2500	52	108,7						
20A(C)22X586B	22	31,68	42,24	180	2000	55	113,7						
20A(C)25X586B	25	36,00	48,00	160	2000	57,2	118,5						



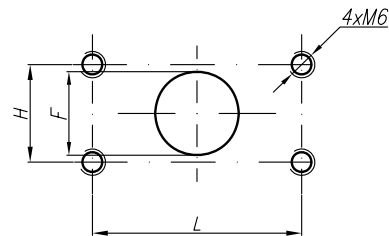
SAE J475 (ISO R725)



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet		Outlet					
						A mm	B mm	M	G	U	M	G	U
20A(C)4,5X588...	4,5	6,14	14,33	250	3500	39,8	78	M20x1,5	G1/2	1 1/16"-12UNF	M16x1,5	G1/2	7/8"-14UNF
20A(C)6,3X588...	6,3	8,69	20,29	250	3500	41	81						
20A(C)8,2X588...	8,2	11,32	26,40	250	3500	43,1	83,9						
20A(C)10X588...	10	13,95	32,55	250	3500	47,5	87						
20A(C)11X588...	11,3	15,76	36,78	250	3500	47,5	89,1						
20A(C)12X588...	12	16,92	39,48	250	3500	47,5	90,3						
20A(C)14X588...	14	19,95	46,55	250	3500	47,5	93,4						
20A(C)15X588...	15	21,60	36,00	250	2500	47,5	95						
20A(C)16X588...	16	23,04	38,40	250	2500	47,5	96,6						
20A(C)19X588...	19	27,36	45,60	200	2500	47,5	101,5						
20A(C)22X588...	22	31,68	42,24	180	2000	55	106,5						
20A(C)25X588...	25	36,00	48,00	160	2000	57,2	111,4						

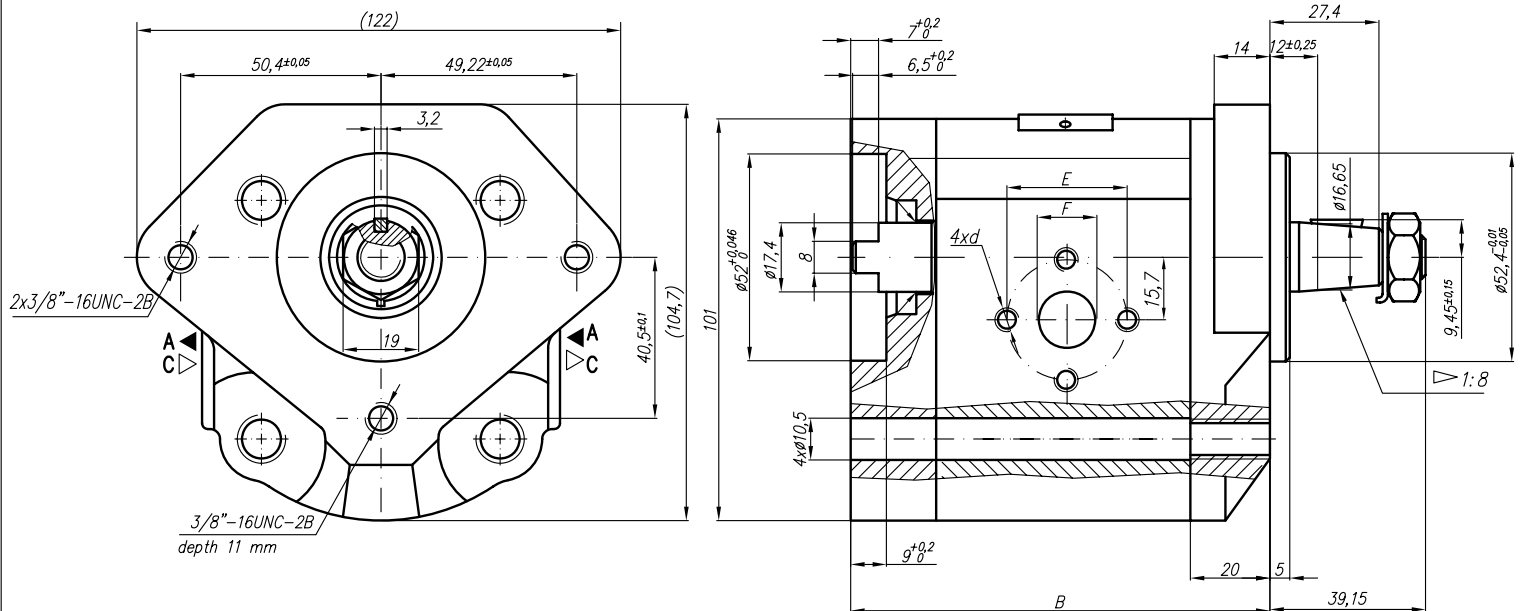


At pump displacement above 10ccm the Inlet port is rotated:



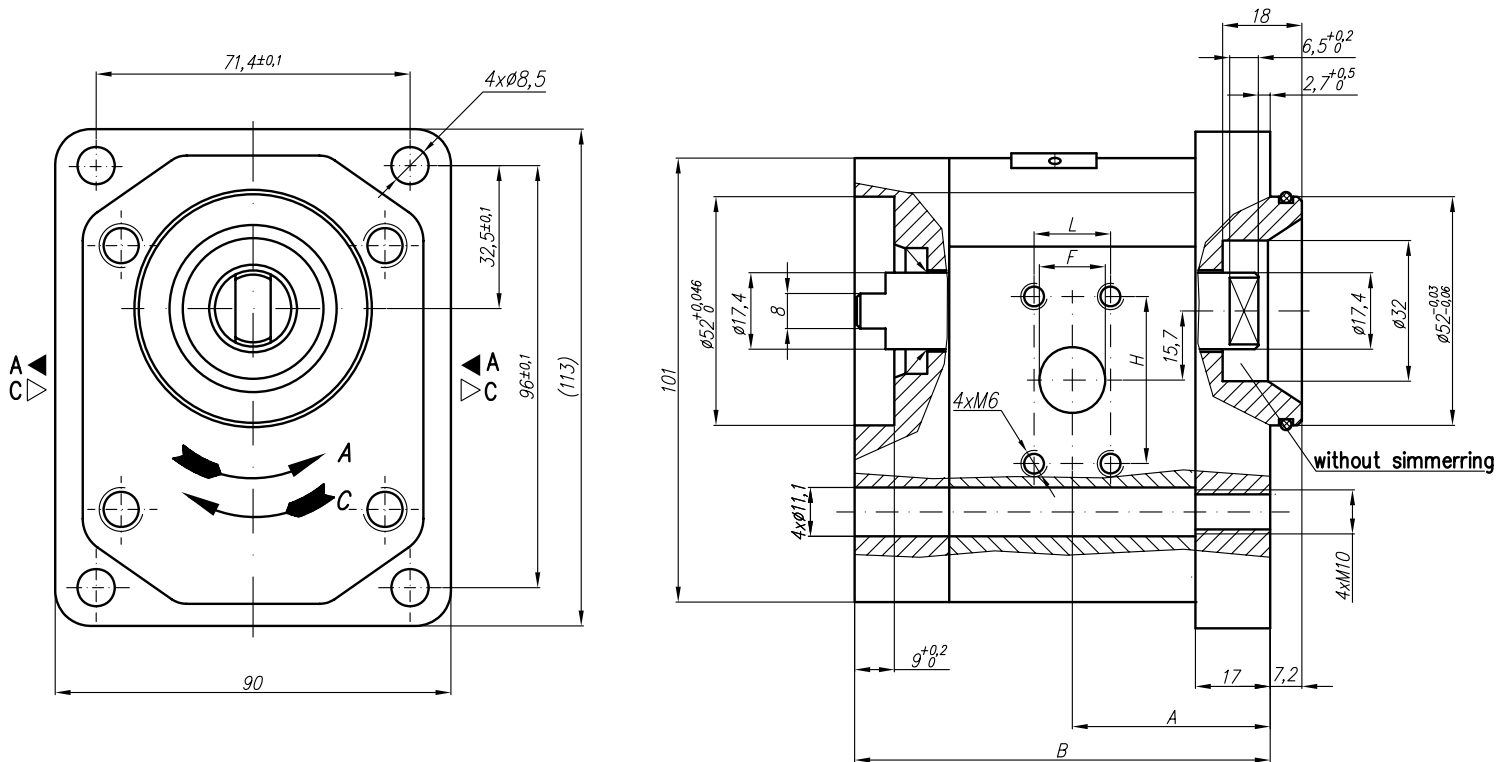
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	H mm	L mm	F mm	H mm	L mm	F mm
20A(C)4,5X590	4,5	6,14	14,33	250	3500								
20A(C)6,3X590	6,3	8,69	20,29	250	3500			38,1	17,4	15			
20A(C)8,2X590	8,2	11,32	26,40	250	3500								
20A(C)10X590	10	13,95	32,55	250	3500	43,5	95,7						
20A(C)11X590	11,3	15,76	36,78	250	3500								
20A(C)12X590	12	16,92	39,48	250	3500								
20A(C)14X590	14	19,95	46,55	250	3500								
20A(C)15X590	15	21,60	36,00	250	2500								
20A(C)16X590	16	23,04	38,40	250	2500			22,2	47,6	19			
20A(C)19X590	19	27,36	45,60	200	2500								
20A(C)22X590	22	31,68	42,24	180	2000								
20A(C)25X590	25	36,00	48,00	160	2000					25	38,1	17,4	15

Designed as 1 section of tandem pump 22A(C)...X596/...X597

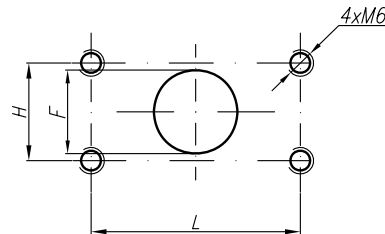


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	E	F	d
20A(C)4,5X596	4,5	6,14	14,33	250	3500	43,5	88,2	30,2	13,1	M6-6H	30,2	13,1	
20A(C)6,3X596	6,3	8,69	20,29	250	3500	45	91,2						
20A(C)8,2X596	8,2	11,32	26,40	250	3500	46,5	94,1						
20A(C)10X596	10	13,95	32,55	250	3500	48	97,2	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)11X596	11,3	15,76	36,78	250	3500	49	99,2						
20A(C)12X596	12	16,92	39,48	250	3500	49,6	100,5						
20A(C)14X596	14	19,95	46,55	250	3500	51	103,6	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)15X596	15	21,60	36,00	250	2500	52	105,1						
20A(C)16X596	16	23,04	38,40	250	2500	53	106,8						
20A(C)19X596	19	27,36	45,60	200	2500	55	111,7	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)22X596	22	31,68	42,24	180	2000	58	116,7						
20A(C)25X596	25	36,00	48,00	160	2000	60,2	121,6						

Designed as 1 section of tandem gear pump 22A(C)...X601/...X602

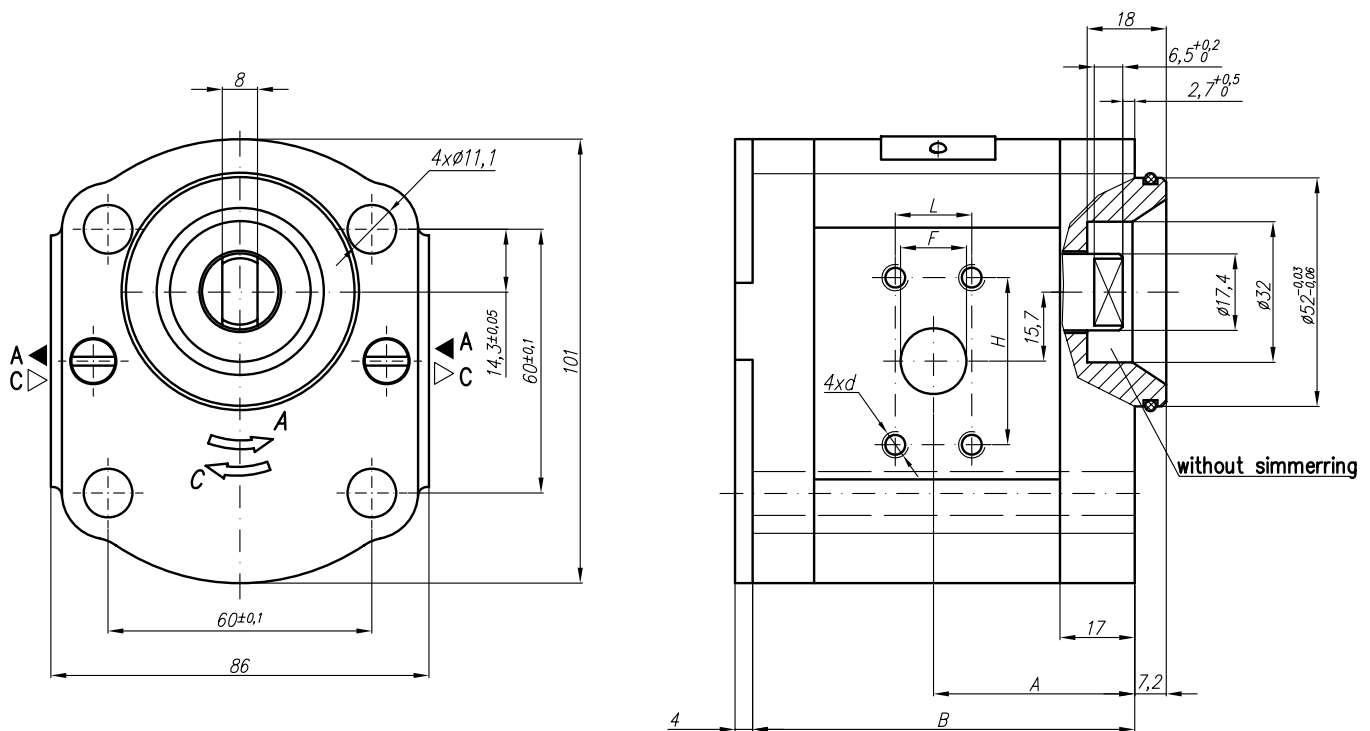


At pump displacement above 10ccm the Inlet port is rotated:

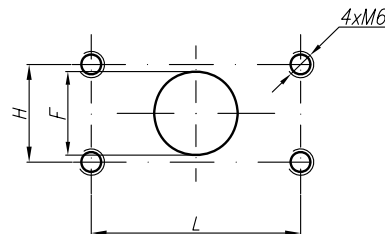


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	H mm	L mm	F mm	H mm	L mm	F mm
20A(C)4,5X601	4,5	6,14	14,33	250	3500	40,5	85,2	38,1	17,4	15	38,1	17,4	15
20A(C)6,3X601	6,3	8,69	20,29	250	3500	42	88,2						
20A(C)8,2X601	8,2	11,32	26,40	250	3500	43,5	91,1						
20A(C)10X601	10	13,95	32,55	250	3500	45	94,1						
20A(C)11X601	11,3	15,76	36,78	250	3500	46	96,2	22,2	47,6	19			
20A(C)12X601	12	16,92	39,48	250	3500	46,5	97,5						
20A(C)14X601	14	19,95	46,55	250	3500	48	100,6						
20A(C)15X601	15	21,60	36,00	250	2500	49	102,1						
20A(C)16X601	16	23,04	38,40	250	2500	50	103,8						
20A(C)19X601	19	27,36	45,60	200	2500	52	108,7	25					
20A(C)22X601	22	31,68	42,24	180	2000	55	113,7						
20A(C)25X601	25	36,00	48,00	160	2000	57,2	118,5						

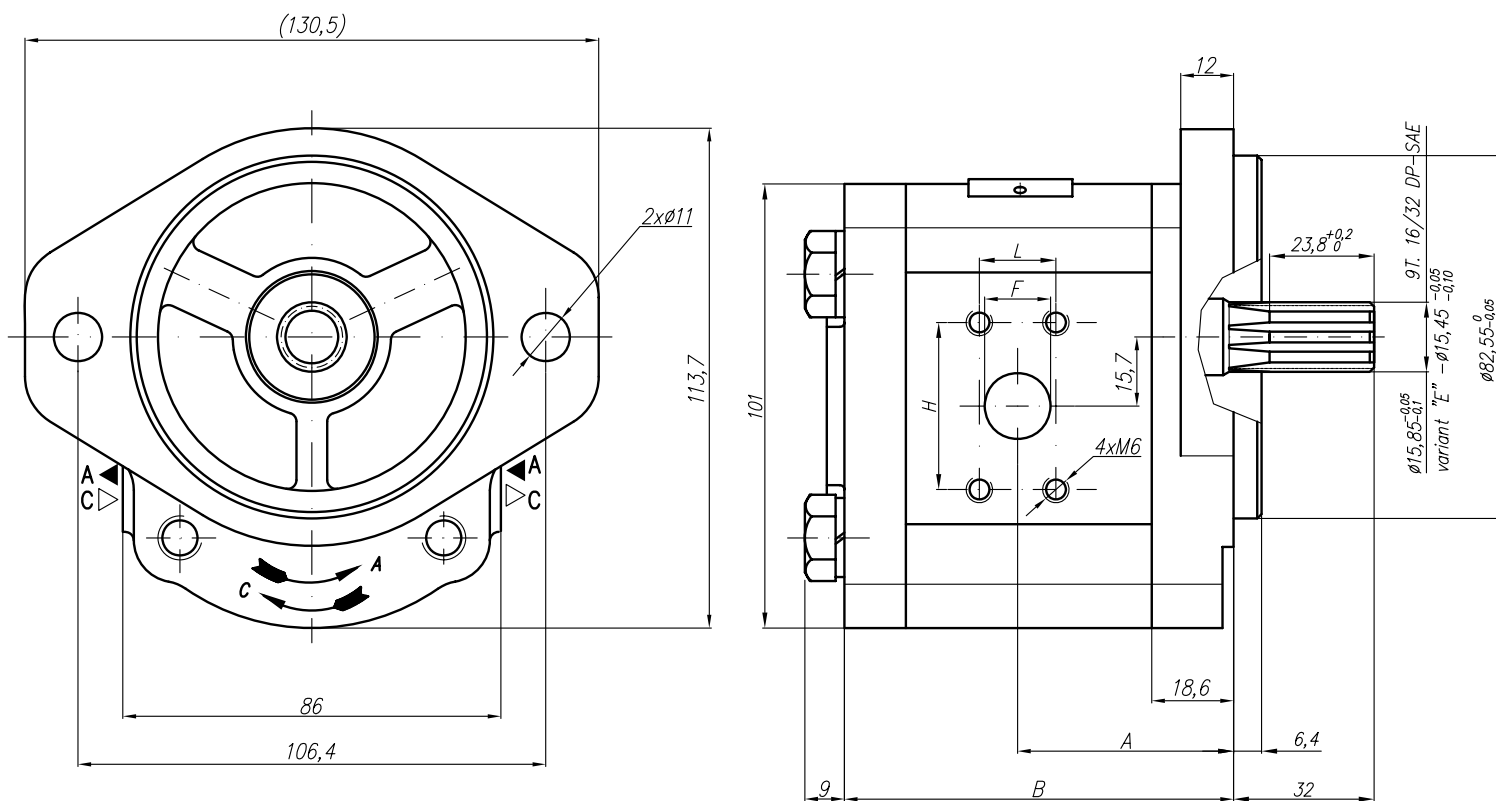
Designed as II section of tandem gear pump 22A(C)...X601/...X602



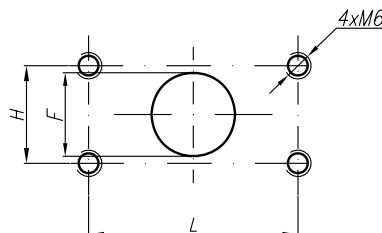
At pump displacement above 10ccm the Inlet port is rotated:



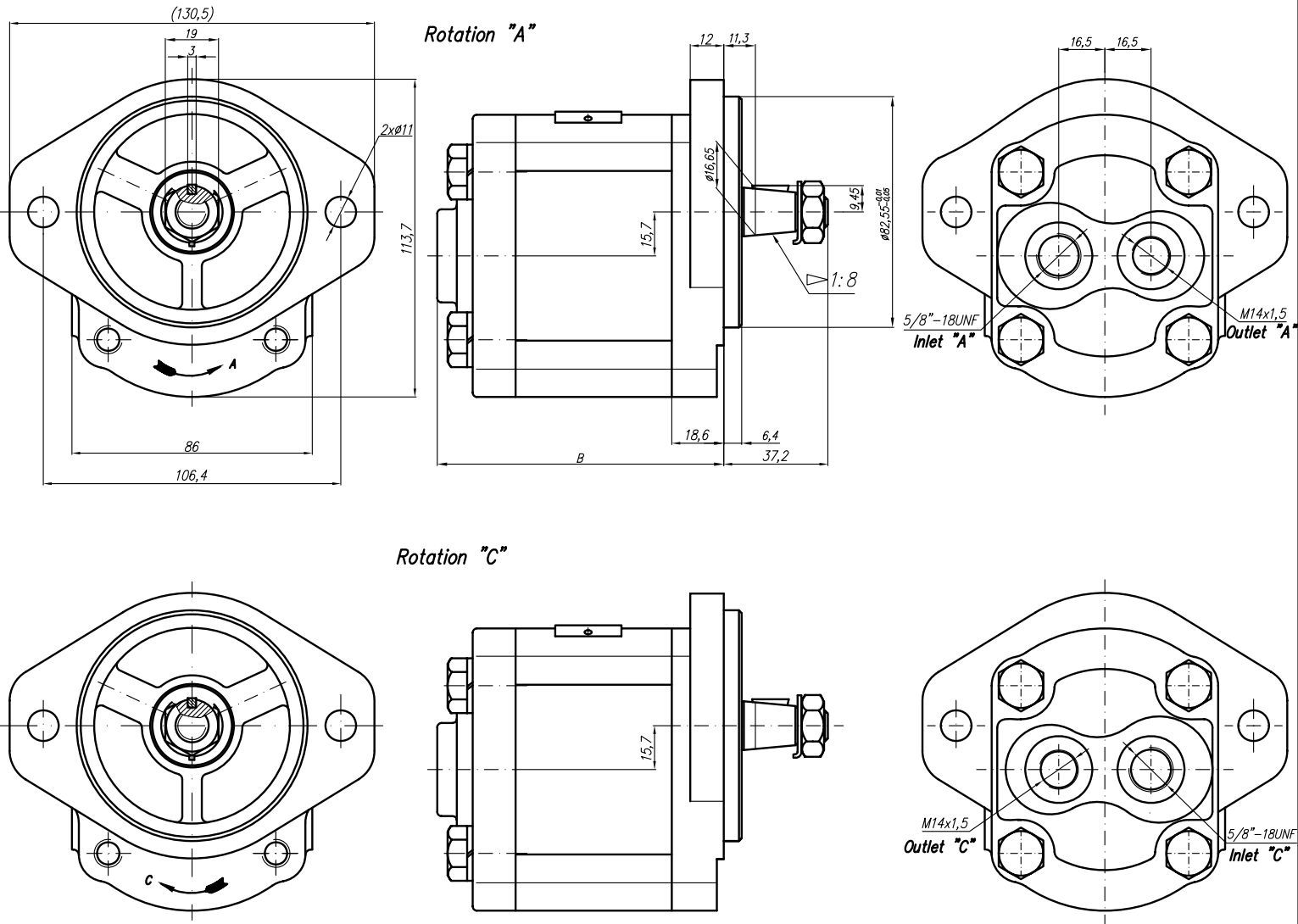
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	H mm	L mm	F mm	H mm	L mm	F mm
20A(C)4,5X602	4,5	6,14	14,33	250	3500	40,5	78	38,1	17,4	15	38,1	17,4	15
20A(C)6,3X602	6,3	8,69	20,29	250	3500	42	81						
20A(C)8,2X602	8,2	11,32	26,40	250	3500	43,5	83,9						
20A(C)10X602	10	13,95	32,55	250	3500	45	87						
20A(C)11X602	11,3	15,76	36,78	250	3500	46	89,1	22,2	47,6	19			
20A(C)12X602	12	16,92	39,48	250	3500	46,5	90,3						
20A(C)14X602	14	19,95	46,55	250	3500	48	93,4	25					
20A(C)15X602	15	21,60	36,00	250	2500	49	95						
20A(C)16X602	16	23,04	38,40	250	2500	50	96,6						
20A(C)19X602	19	27,36	45,60	200	2500	52	101,5						
20A(C)22X602	22	31,68	42,24	180	2000	55	106,5						
20A(C)25X602	25	36,00	48,00	160	2000	57,2	111,4						



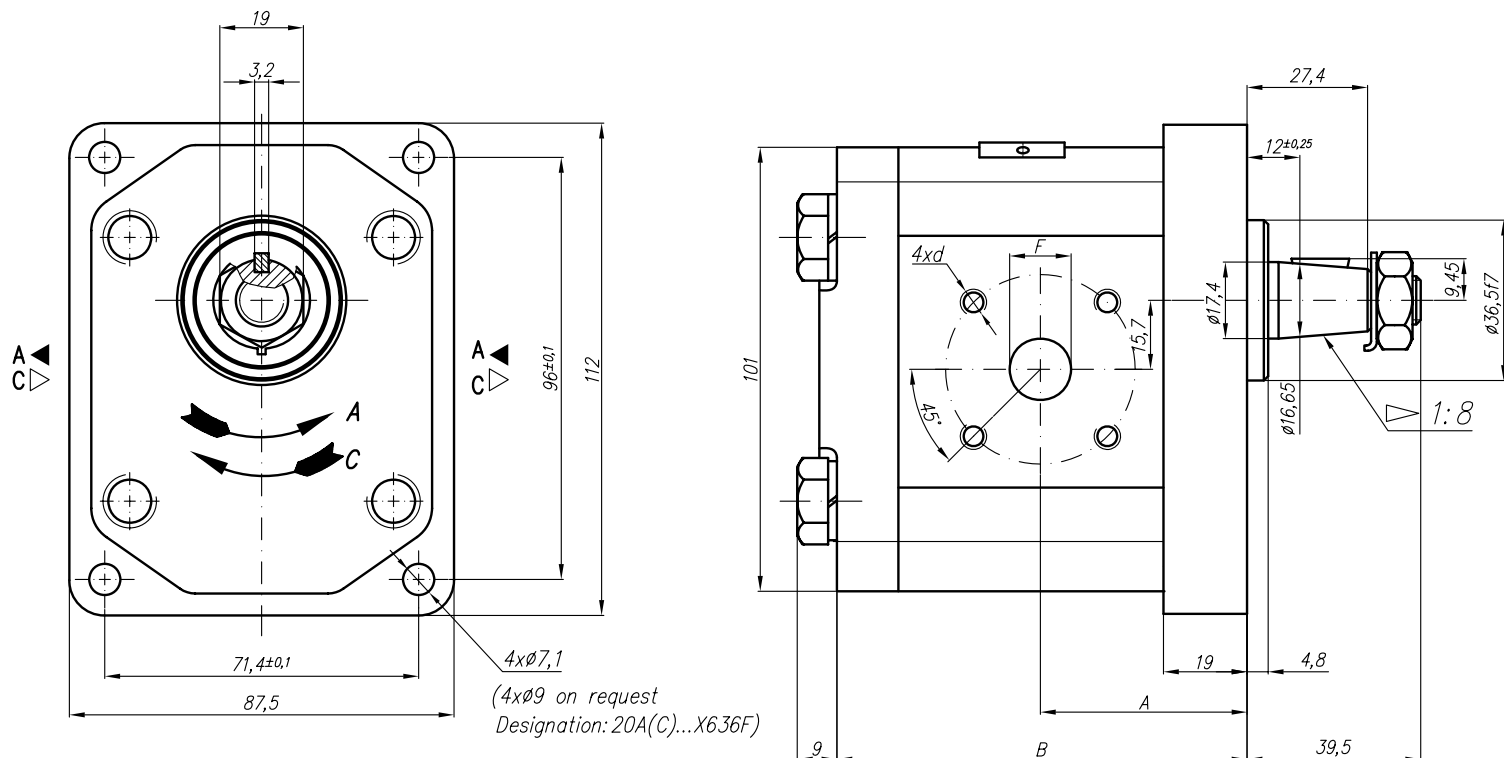
At pump displacement above 10ccm the Inlet port is rotated:



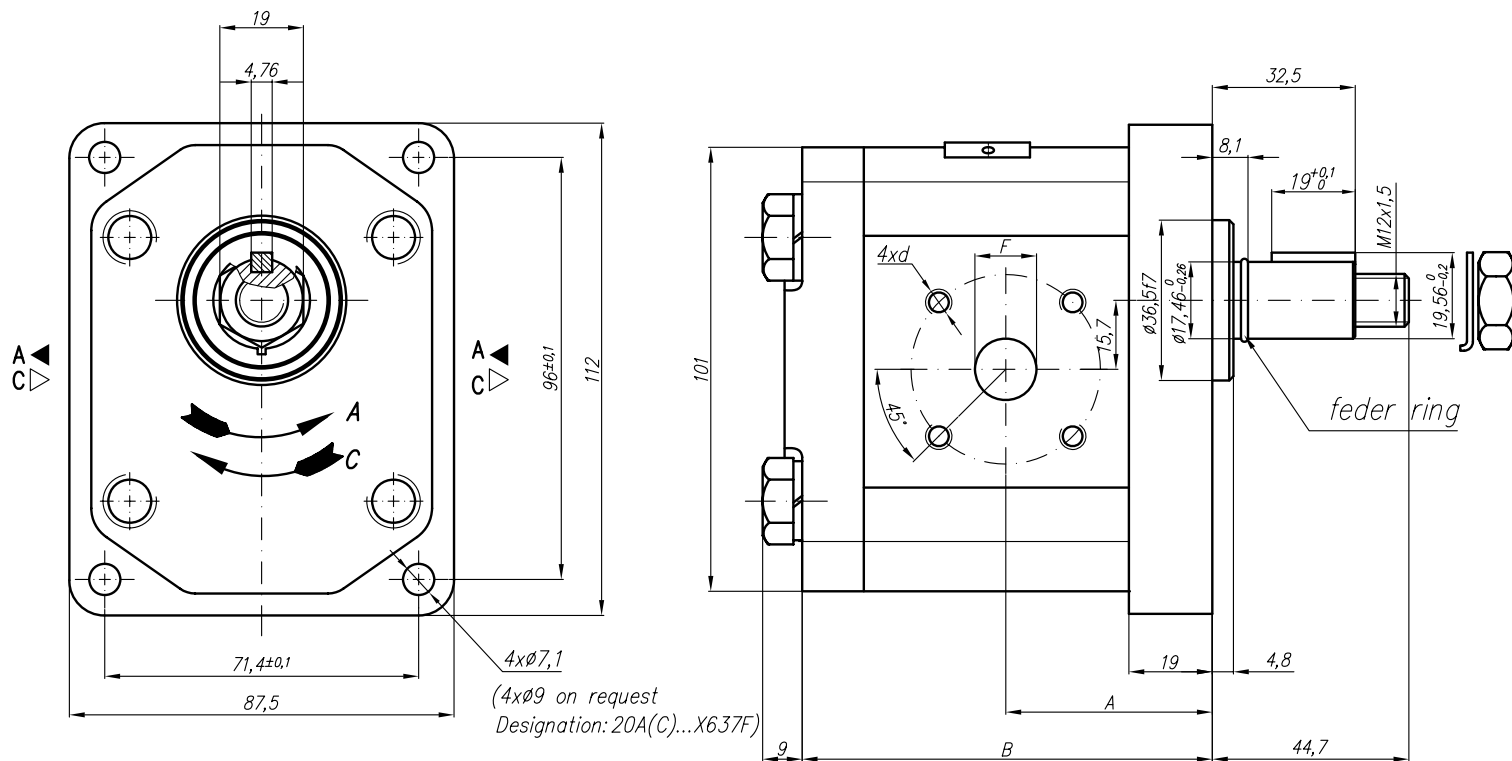
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	H	L	F	H	L	F
20A(C)4,5X604	4,5	6,14	14,33	250	3500	40,5	78	38,1	17,4	15	38,1	17,4	15
20A(C)6,3X604	6,3	8,69	20,29	250	3500	42	81						
20A(C)8,2X604	8,2	11,32	26,40	250	3500	43,5	83,9						
20A(C)10X604	10	13,95	32,55	250	3500	45	87						
20A(C)11X604	11,3	15,76	36,78	250	3500	46	89,1	22,2	47,6	19			
20A(C)12X604	12	16,92	39,48	250	3500	46,5	90,3						
20A(C)14X604	14	19,95	46,55	250	3500	48	93,4						
20A(C)15X604	15	21,60	36,00	250	2500	49	95						
20A(C)16X604	16	23,04	38,40	250	2500	50	96,6						
20A(C)19X604	19	27,36	45,60	200	2500	52	101,5						
20A(C)22X604	22	31,68	42,24	180	2000	55	106,5						
20A(C)25X604	25	36,00	48,00	160	2000	57,2	111,4	25					



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	M	G	U	M	G	U
20A(C)4,5X627WUM	4,5	6,14	14,33	250	3500		93,6						
20A(C)6,3X627WUM	6,3	8,69	20,29	250	3500		96,6						
20A(C)8,2X627WUM	8,2	11,32	26,40	250	3500		99,5						
20A(C)10X627WUM	10	13,95	32,55	250	3500		102,5						
20A(C)11X627WUM	11,3	15,76	36,78	250	3500		104,6						
20A(C)12X627WUM	12	16,92	39,48	250	3500		105,9						
20A(C)14X627WUM	14	19,95	46,55	250	3500		108,9						
20A(C)15X627WUM	15	21,60	36,00	250	2500		110,5						
20A(C)16X627WUM	16	23,04	38,40	250	2500		112,1						
20A(C)19X627WUM	19	27,36	45,60	200	2500		117,1						
20A(C)22X627WUM	22	31,68	42,24	180	2000		122,1						
20A(C)25X627WUM	25	36,00	48,00	160	2000		127						

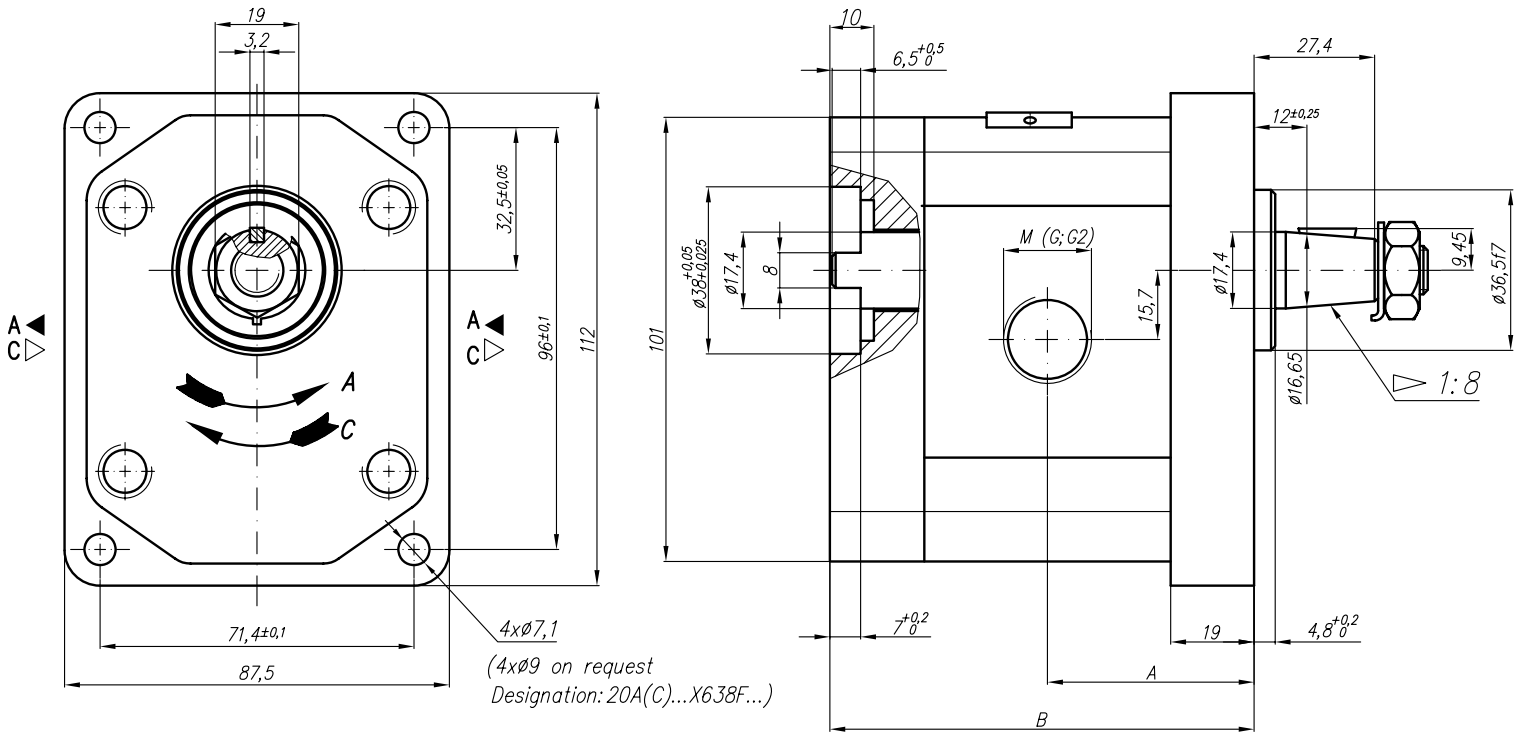


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet			
								E	F	d	E	F	d	
20A(C)4,5X636	4,5							43,1						
20A(C)6,3X636	6,3	8,69	20,29	250	3500	42,5	80			14				
20A(C)8,2X636	8,2	11,32	26,40	250	3500	42,5	80							
20A(C)10X636	10	13,95	32,55	250	3500	47	89							
20A(C)11X636	11,3	15,76	36,78	250	3500	48	91,1							
20A(C)12X636	12	16,92	39,48	250	3500	48,6	92,3							
20A(C)14X636	14	19,95	46,55	250	3500	50	95,4							
20A(C)15X636	15	21,60	36,00	250	2500	51	96,9							
20A(C)16X636	16	23,04	38,40	250	2500	52	98,6							
20A(C)19X636	19	27,36	45,60	200	2500	54	103,5							
20A(C)22X636	22	31,68	42,24	180	2000	57	108,5							
20A(C)25X636	25	36,00	48,00	160	2000	59,2	113,4			19			19	

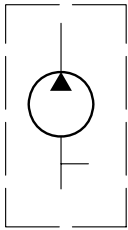


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	E	F	d	E	F	d
20A(C)4,5X637	4,5												
20A(C)6,3X637	6,3	8,69	20,29	250	3500	42,5	80		14				
20A(C)8,2X637	8,2	11,32	26,40	250	3500	42,5	80						
20A(C)10X637	10	13,95	32,55	250	3500	47	89						
20A(C)11X637	11,3	15,76	36,78	250	3500	48	91,1						
20A(C)12X637	12	16,92	39,48	250	3500	48,6	92,3	43,1					
20A(C)14X637	14	19,95	46,55	250	3500	50	95,4						
20A(C)15X637	15	21,60	36,00	250	2500	51	96,9		19				
20A(C)16X637	16	23,04	38,40	250	2500	52	98,6			5/16"-18UNC			
20A(C)19X637	19	27,36	45,60	200	2500	54	103,5				43,1	14	
20A(C)22X637	22	31,68	42,24	180	2000	57	108,5						
20A(C)25X637	25	36,00	48,00	160	2000	59,2	113,4					19	5/16"-18UNC

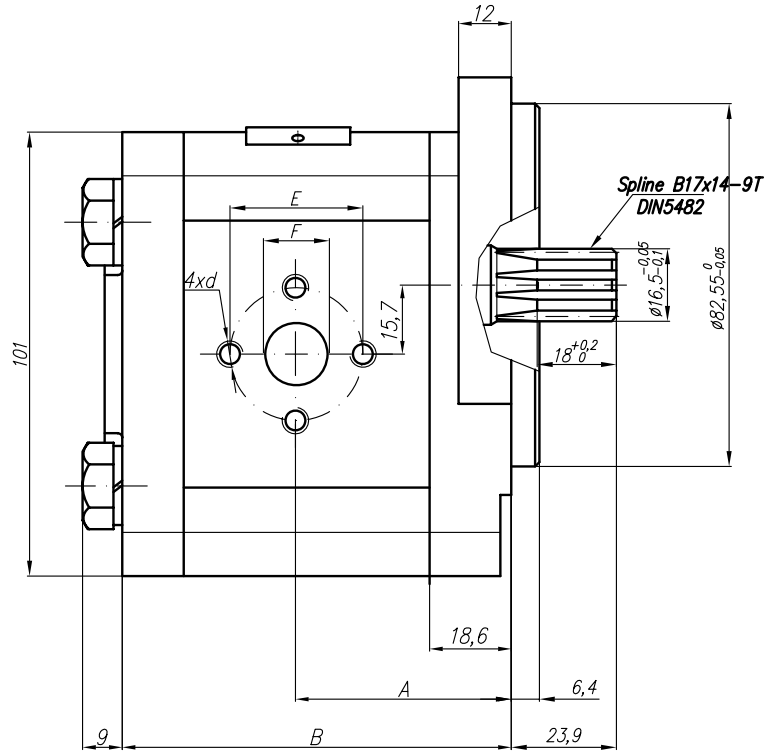
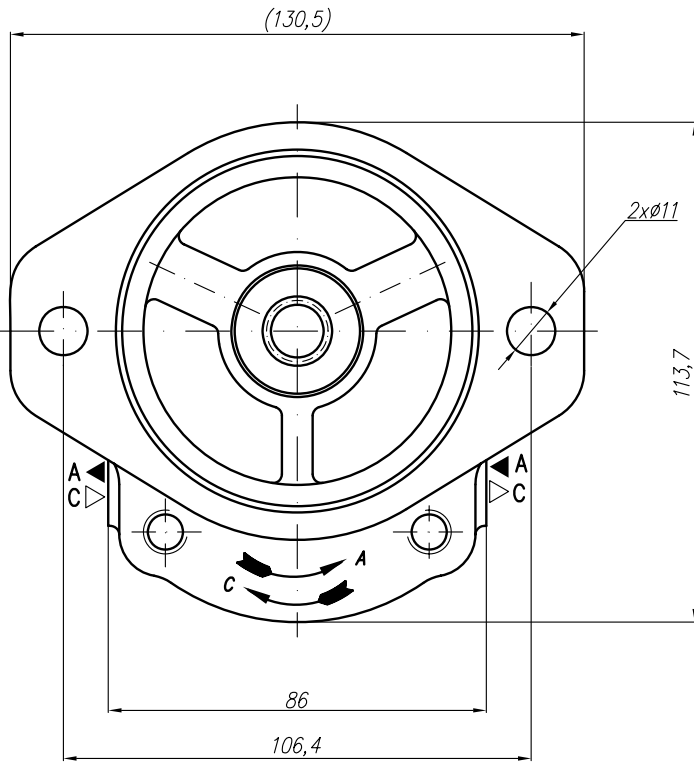
Designed as a 1 section of tandem pump 22A(C)...X638.../...X622...



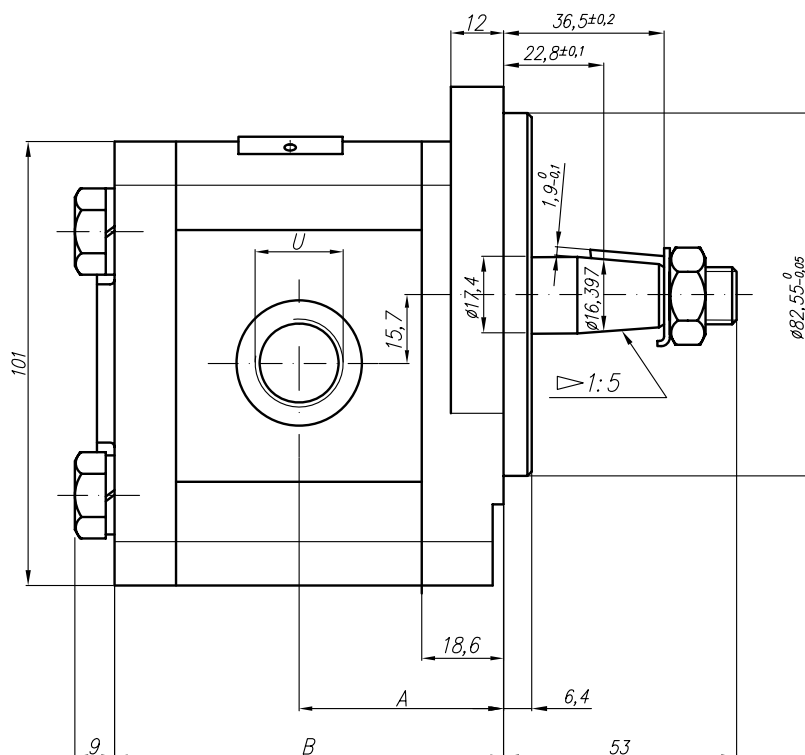
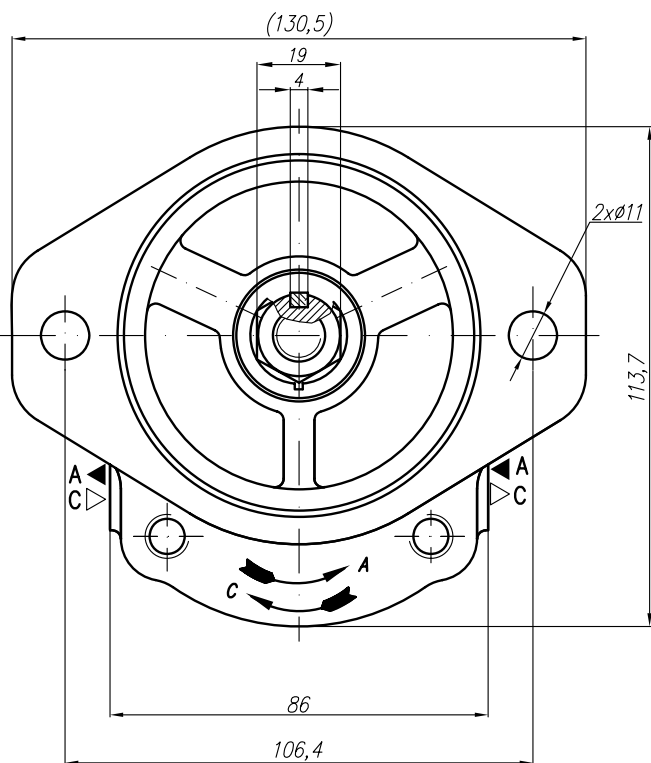
Symbol



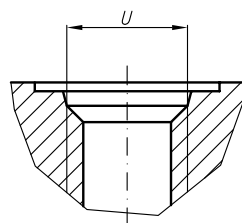
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	G2	M	G	G2
20A(C)4,5X638...	4,5	6,14	14,33	250	3500								
20A(C)6,3X638...	6,3	8,69	20,29	250	3500					G3/4"			
20A(C)8,2X638...	8,2	11,32	26,40	250	3500	45,5	93,1						
20A(C)10X638...	10	13,95	32,55	250	3500								
20A(C)11X638...	11,3	15,76	36,78	250	3500								
20A(C)12X638...	12	16,92	39,48	250	3500							G1/2"	G1/2"
20A(C)14X638...	14	19,95	46,55	250	3500								
20A(C)15X638...	15	21,60	36,00	250	2500								
20A(C)16X638...	16	23,04	38,40	250	2500								
20A(C)19X638...	19	27,36	45,60	200	2500								
20A(C)22X638...	22	31,68	42,24	180	2000								
20A(C)25X638...	25	36,00	48,00	160	2000	59,2	120,6						



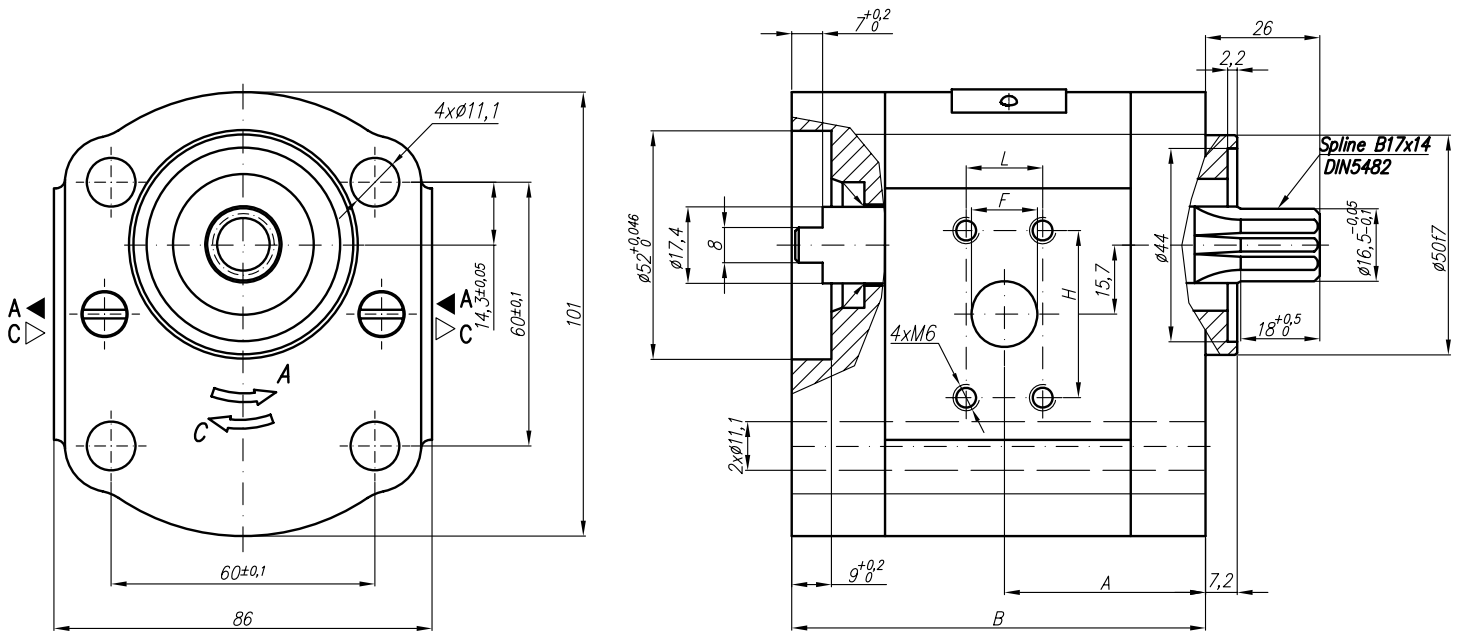
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	F	d	E	F	d
20A(C)4,5X647	4,5	6,14	14,33	250	3500	42	79,6	30,2	13,1	M6-6H	30,2	13,1	
20A(C)6,3X647	6,3	8,69	20,29	250	3500	43,6	82,6						
20A(C)8,2X647	8,2	11,32	26,40	250	3500	45	85,6						
20A(C)10X647	10	13,95	32,55	250	3500	46,6	88,7						
20A(C)11X647	11,3	15,76	36,78	250	3500	47,6	90,7						
20A(C)12X647	12	16,92	39,48	250	3500	48,2	91,9	39,7	19	M8-6H	30,2	14,2	M6-6H
20A(C)14X647	14	19,95	46,55	250	3500	49,6	95						
20A(C)15X647	15	21,60	36,00	250	2500	50,6	96,5						
20A(C)16X647	16	23,04	38,40	250	2500	51,6	98,2						
20A(C)19X647	19	27,36	45,60	200	2500	53,6	103,1						
20A(C)22X647	22	31,68	42,24	180	2000	56,6	108,1	39,7	19	M8	39,7	19	M8
20A(C)25X647	25	36,00	48,00	160	2000	58,8	113						



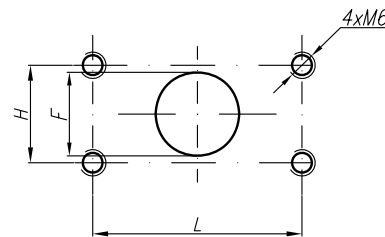
SAE J475 (ISO R725)



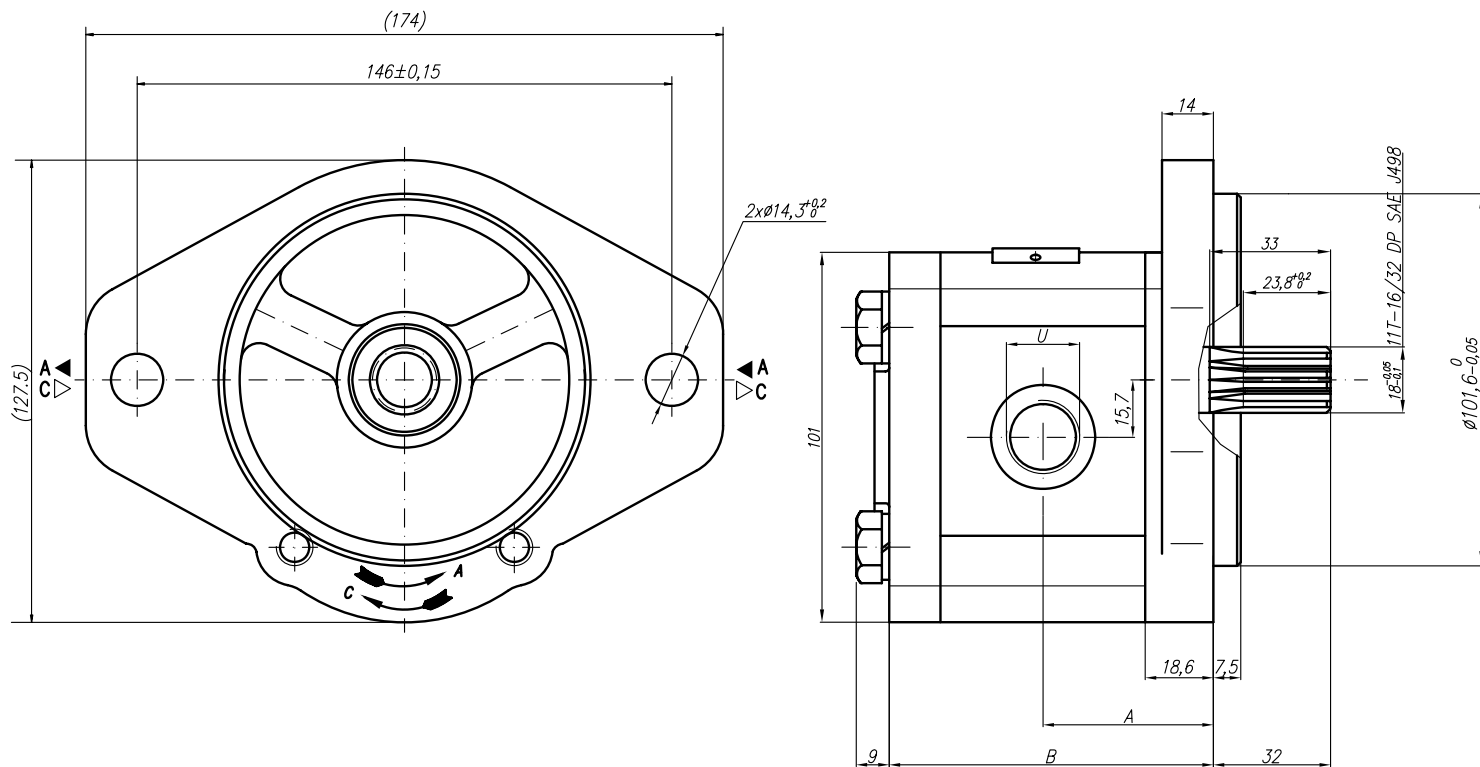
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	M	G	U	M	G	U
20A(C)4,5X650U	4,5	6,14	14,33	250	3500	42	79,6						
20A(C)6,3X650U	6,3	8,69	20,29	250	3500	43,6	82,6						
20A(C)8,2X650U	8,2	11,32	26,40	250	3500	45	85,6						
20A(C)10X650U	10	13,95	32,55	250	3500	46,6	88,7						
20A(C)11X650U	11,3	15,76	36,78	250	3500	47,6	90,7						
20A(C)12X650U	12	16,92	39,48	250	3500	48,2	91,9						
20A(C)14X650U	14	19,95	46,55	250	3500	49,6	95						
20A(C)15X650U	15	21,60	36,00	250	2500	50,6	96,5						
20A(C)16X650U	16	23,04	38,40	250	2500	51,6	98,2						
20A(C)19X650U	19	27,36	45,60	200	2500	53,6	103,1						
20A(C)22X650U	22	31,68	42,24	180	2000	56,6	108,1						
20A(C)25X650U	25	36,00	48,00	160	2000	58,8	113						



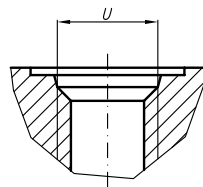
At pump displacement above 10ccm the Inlet port is rotated:



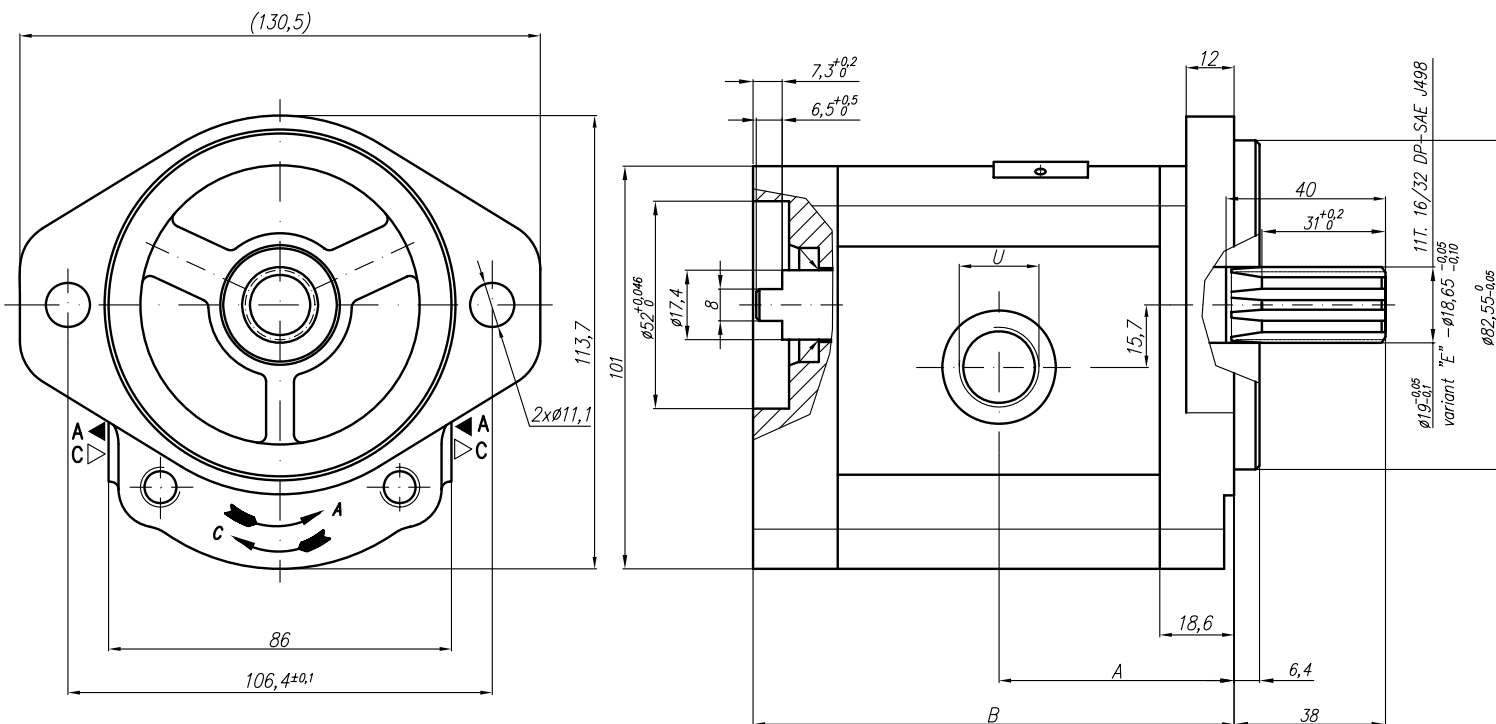
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	H mm	L mm	F mm	H mm	L mm	F mm
20A(C)4,5X654	4,5	6,14	14,33	250	3500	40,5	85,2	38,1	17,4	15	38,1	17,4	15
20A(C)6,3X654	6,3	8,69	20,29	250	3500	42	88,2						
20A(C)8,2X654	8,2	11,32	26,40	250	3500	43,5	91,1						
20A(C)10X654	10	13,95	32,55	250	3500	45	94,1						
20A(C)11X654	11,3	15,76	36,78	250	3500	46	96,2						
20A(C)12X654	12	16,92	39,48	250	3500	46,5	97,5	22,2	47,6	19			
20A(C)14X654	14	19,95	46,55	250	3500	48	100,6						
20A(C)15X654	15	21,60	36,00	250	2500	49	102,1						
20A(C)16X654	16	23,04	38,40	250	2500	50	103,8						
20A(C)19X654	19	27,36	45,60	200	2500	52	108,7						
20A(C)22X654	22	31,68	42,24	180	2000	55	113,7	25					
20A(C)25X654	25	36,00	48,00	160	2000	57,2	118,5						



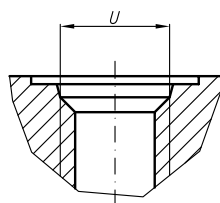
SAE J475 (ISO R725)



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	M	G	U	M	G	U
20A(C)4,5X655U	4,5	6,14	14,33	250	3500	42	79,6	1/16" -12UNF					7/8" -14UNF
20A(C)6,3X655U	6,3	8,69	20,29	250	3500	43,6	82,6						
20A(C)8,2X655U	8,2	11,32	26,40	250	3500	45	85,6						
20A(C)10X655U	10	13,95	32,55	250	3500	46,6	88,7						
20A(C)11X655U	11,3	15,76	36,78	250	3500	47,6	90,7						
20A(C)12X655U	12	16,92	39,48	250	3500	48,2	91,9						
20A(C)14X655U	14	19,95	46,55	250	3500	49,6	95						
20A(C)15X655U	15	21,60	36,00	250	2500	50,6	96,5						
20A(C)16X655U	16	23,04	38,40	250	2500	51,6	98,2						
20A(C)19X655U	19	27,36	45,60	200	2500	53,6	103,1						
20A(C)22X655U	22	31,68	42,24	180	2000	56,6	108,1						
20A(C)25X655U	25	36,00	48,00	160	2000	58,8	113						

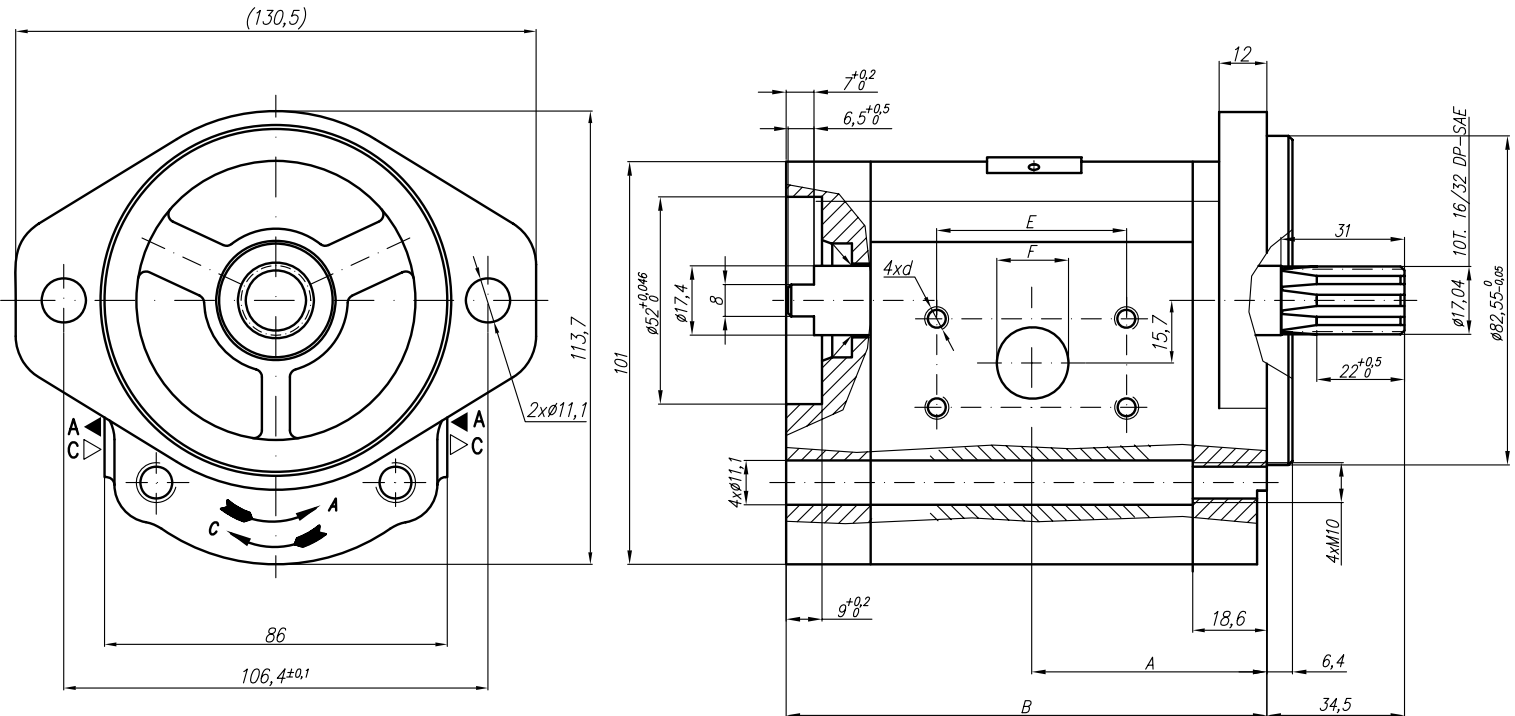


Variant "U"
SAE J475 (ISO R725)



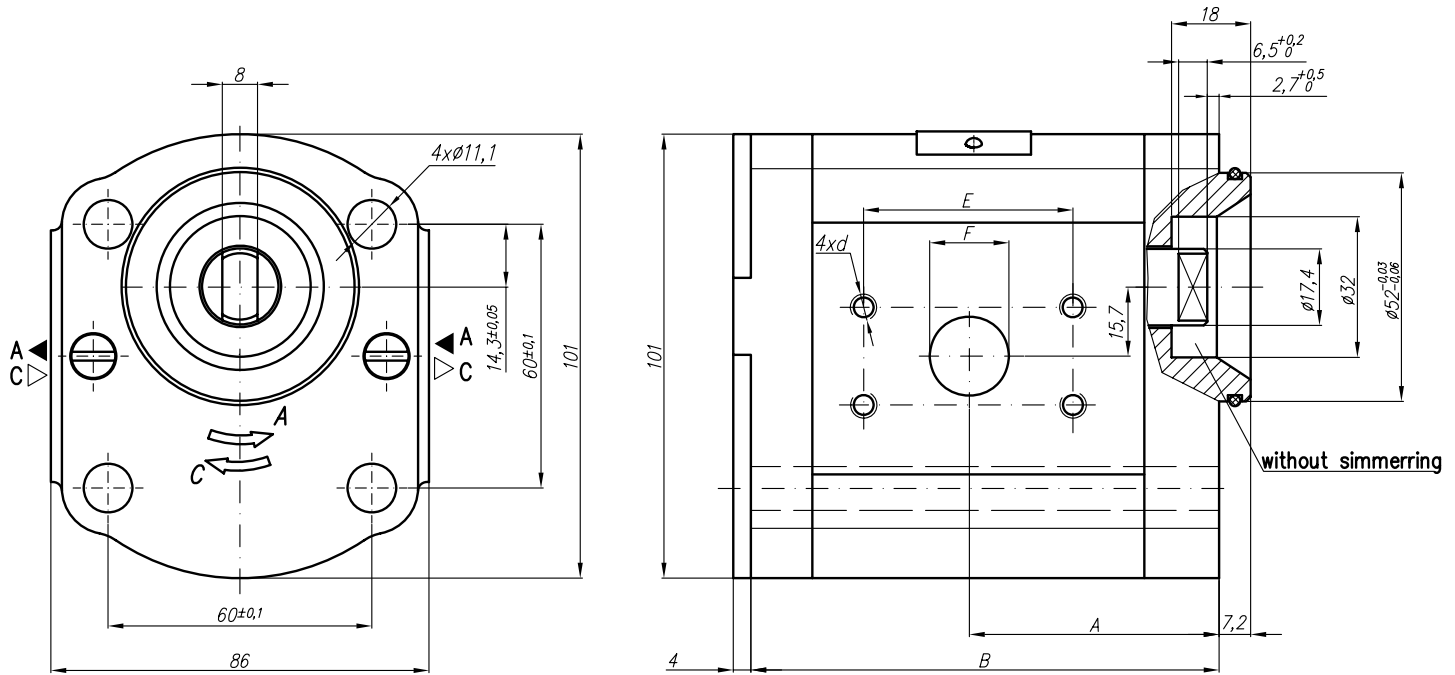
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	M	G	U	M	G	U
20A(C)14X656HD	14	20,16	47,04	250	3500	54,9	112,5						
20A(C)15X656HD	15	21,60	43,20	250	3000	55,6	114			1 1/16" - 12UNF			7/8" - 14UNF
20A(C)16X656HD	16	23,04	46,08	250	3000	56,5	115,6						
20A(C)17,3X656HD	17,3	24,91	49,82	230	3000	57,6	117,7						
20A(C)18,2X656HD	18,2	26,21	52,42	210	3000	58,4	119,3						
20A(C)19X656HD	19	27,36	54,72	200	3000	59	120,6						
20A(C)22X656HD	22	31,68	52,80	180	2500	61,5	125,6						
20A(C)25X656HD	25	36,00	60,00	160	2500	63,9	130,5						
20A(C)28X656HD	28	40,32	67,20	130	2500	66,4	135,3						
20A(C)32X656HD	32	46,08	61,44	120	2000	69,6	141,6						
20A(C)36X656HD	36	51,84	69,12	100	2000	72,8	148,2						

Designed as 1 section of tandem gear pump 22A(C)...X664H/...X665H

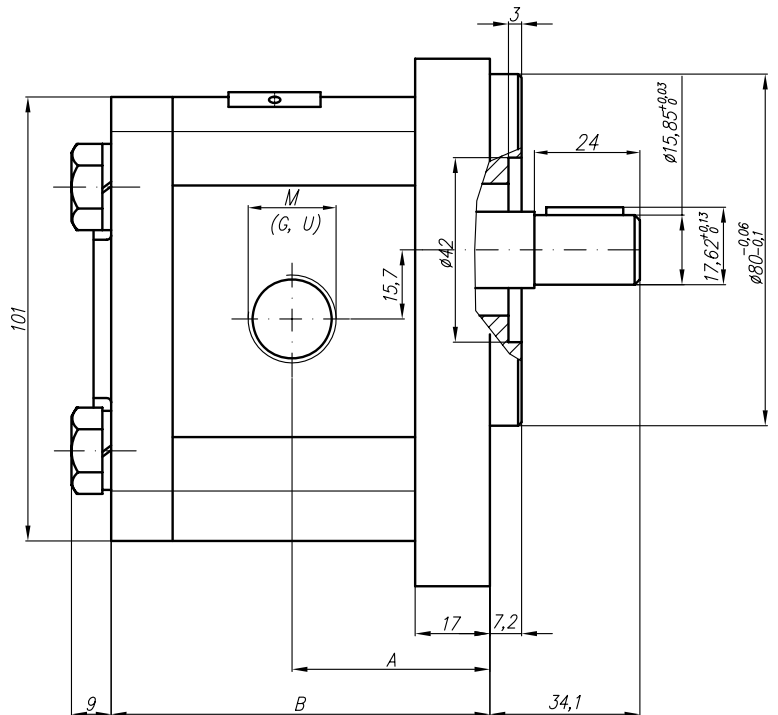
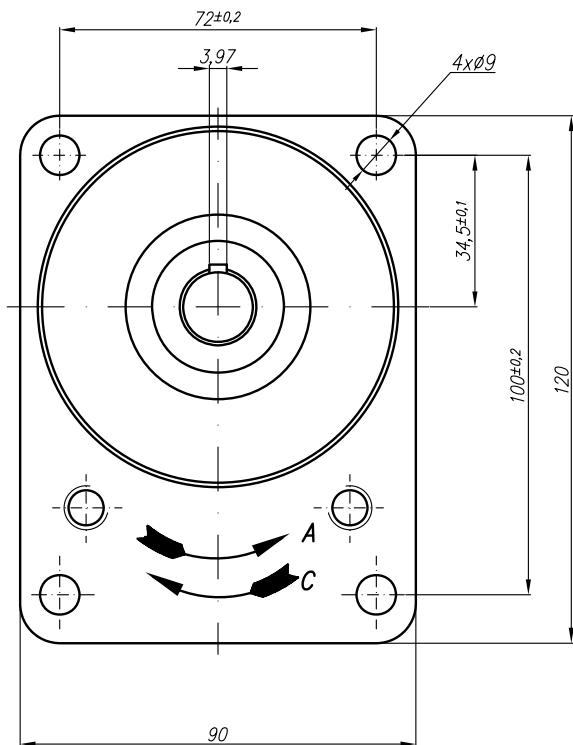


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension											
		at 1500 rpm l/min	at max rpm l/min			Inlet		Outlet									
						A mm	B mm	E	H	d	F	U	E	H	d	F	U
20A(C)15X664H	15	20,48	47,78	250	3500	55,6	114	52,7	26,2	3/8"-14UNC-2B	25	47,6	22,2	3/8"-14UNC-2B	17		
20A(C)16X664H	16	22,08	51,52	250	3500	56,6	115,6										
20A(C)17,3X664H	17,3	23,87	55,71	250	3500	57,6	117,7										
20A(C)18,2X664H	18,2	25,39	59,24	250	3500	58,4	119,3										
20A(C)19X664H	19	26,51	61,85	250	3500	59	120,6										
20A(C)22X664H	22	31,02	72,38	250	3500	61,5	125,2										
20A(C)25X664H	25	35,63	83,13	250	3500	63,9	130,5										
20A(C)28X664H	28	40,32	67,20	250	2500	66,4	135,3										
20A(C)32X664H	32	46,08	76,80	250	2500	69,6	141,6										
20A(C)36X664H	36	51,84	86,40	200	2500	72,8	148,2										

Designed as II section of tandem gear pump 22A(C)...X664H/...X665H

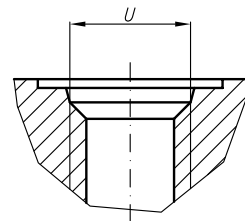


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension											
		at 1500 rpm l/min	at max rpm l/min			Inlet					Outlet						
						A mm	B mm	E	H	d	F	U	E	H	d	F	U
20A(C)15X665H	15	20,48	47,78	250	3500	54	105,2	52,7	26,2	3/8"-14UNC-2B	25	47,6	22,2	3/8"-14UNC-2B	18		
20A(C)16X665H	16	22,08	51,52	250	3500	54,9	106,8										
20A(C)17,3X665H	17,3	23,87	55,71	250	3500	56	108,9										
20A(C)18,2X665H	18,2	25,39	59,24	250	3500	56,8	110,5										
20A(C)19X665H	19	26,51	61,85	250	3500	57,4	111,8										
20A(C)22X665H	22	31,02	72,38	250	3500	59,9	116,8										
20A(C)25X665H	25	35,63	83,13	250	3500	62,3	121,7										
20A(C)28X665H	28	40,32	67,20	250	2500	64,8	126,5										
20A(C)32X665H	32	46,08	76,80	250	2500	68	132,8										
20A(C)36X665H	36	51,84	86,40	200	2500	71,2	139,4										

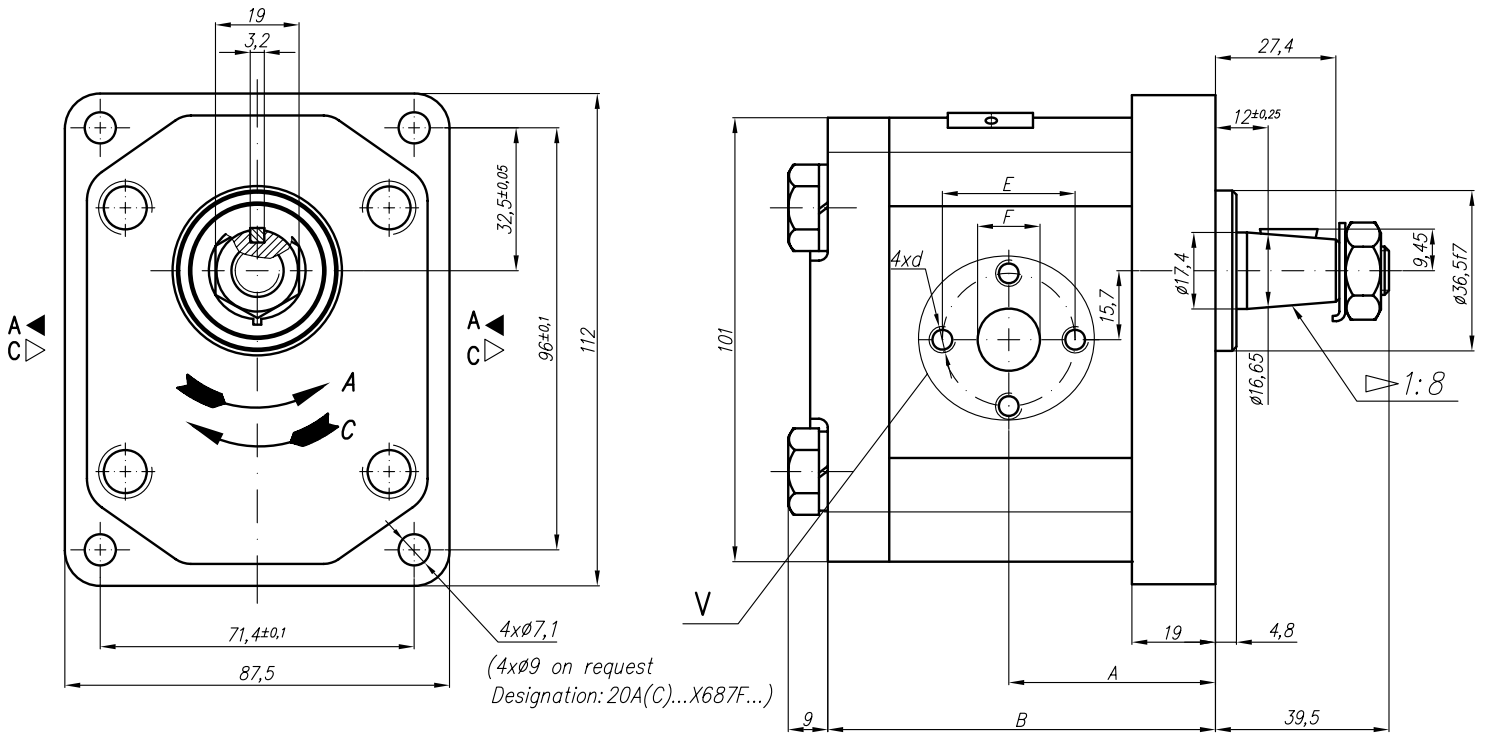


Variant "U"

SAE J475 (ISO R725)



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
						M	G	U	M	G	U		
20A(C)4,5X670...	4,5	6,14	14,33	250	3500	39,8	78	M20x1,5	G1/2	1 1/16"-12UNF	M16x1,5	G1/2	7/8"-14UNF
20A(C)6,3X670...	6,3	8,69	20,29	250	3500	41	81						
20A(C)8,2X670...	8,2	11,32	26,40	250	3500	43,1	83,9						
20A(C)10X670...	10	13,95	32,55	250	3500	47,5	87						
20A(C)11X670...	11,3	15,76	36,78	250	3500	47,5	89,1						
20A(C)12X670...	12	16,92	39,48	250	3500	47,5	90,3						
20A(C)14X670...	14	19,95	46,55	250	3500	47,5	93,4						
20A(C)15X670...	15	21,60	36,00	250	2500	47,5	94,9						
20A(C)16X670...	16	23,04	38,40	250	2500	47,5	96,6						
20A(C)19X670...	19	27,36	45,60	200	2500	47,5	101,5						
20A(C)22X670...	22	31,68	42,24	180	2000	55	106,5						
20A(C)25X670...	25	36,00	48,00	160	2000	57,2	111,4						

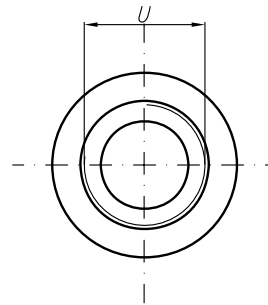
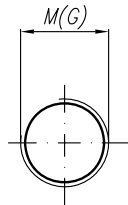


(4xØ9 on request
Designation: 20A(C)...X687F...)

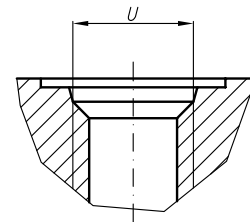
V
Variants for ports – M;G;U

Designations:

- ...X687 – Normal version (flanges);
- ...X687M – Metric threads;
- ...X687G – GAS threads;
- ...X687U – SAE UNF threads;



SAE J475 (ISO R725)



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension											
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet					Outlet				
						E	F	d	M	G	U	E	F	d	M	G	U
20A(C)4,5X687...	4,5	6,14	14,33	250	3500	42,5	80										
20A(C)6,3X687...	6,3	8,69	20,29	250	3500	44	83										
20A(C)8,2X687...	8,2	11,32	26,40	250	3500	45,5	85,9										
20A(C)10X687...	10	13,95	32,55	250	3500	Equivalent to 20A(C)...X006 and 20A(C)...X016	39,7	19	M8-6H	M20x1,5	G3/4	1 1/16"-12UNF	30,2	14,2	M6-6H	M16x1,5	G1/2
20A(C)11X687...	11,3	15,76	36,78	250	3500												
20A(C)12X687...	12	16,92	39,48	250	3500												
20A(C)14X687...	14	19,95	46,55	250	3500												
20A(C)15X687...	15	21,60	36,00	250	2500												
20A(C)16X687...	16	23,04	38,40	250	2500												
20A(C)19X687...	19	27,36	45,60	200	2500												
20A(C)22X687...	22	31,68	42,24	180	2000												
20A(C)25X687...	25	36,00	48,00	160	2000												

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Pump type	Page	Pump type	Page	Pump type	Page
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General description

The gear pumps are designed for transforming the mechanical energy as energy of the working liquid (pressure and flow rate). They are simplified in construction and they have a relatively low cost. All these benefits ensure their wide application in the hydraulic systems.

Drive arrangements

The pump drive may be direct or indirect (by gear, chains, or belt transmissions). Both drives should not impose axial or radial forces on the pump shaft. Oldham coupling serrated drive adapters are used with direct drive. For indirect drive refer to the manufacturer.

The gear pumps are designed to work at the conditions mentioned below:

- Working liquid:	hydraulic oils with viscosity 16 ... 200 mm ² /s;
- Degree of filtration:	15 ... 25 ì m;
- Ambient temperature range:	- 22 ... 55 °C;
- Fluid temperature range:	- 25 ... 80 °C;
- Inlet pressure, absolute:	0.8 ... 2.2 bar;
- Fluid velocity (suction line)	0,5 ... 1 m/s
- Outlet pressure	up to 250 bar.

The gear pumps made by "Caproni" are produced in 5 different groups: 00, 10, 20 and 20H, 30 and 40. The displacements of the pumps are in the range from 0.25 to 60 cm³.

Group 00	q = 0.25 ... 2 cm ³ ;
Group 10	q = 1 ... 9.8 cm ³ ;
Group 20	q = 4.5 ... 25 cm ³ ;
Group 20H	q = 15 ... 36 cm ³ ;
Group 30	q = 20 ... 60 cm ³ ;
Group 40	q = 46 ... 60 cm ³ .

There are different variants of flanges, shafts and ports for each pump group (standard; Germany; USA ...).

We offer the next variants too:

- tandem pumps;
- pumps with build-in valves;
- reversible pumps;
- reversible gear motors.

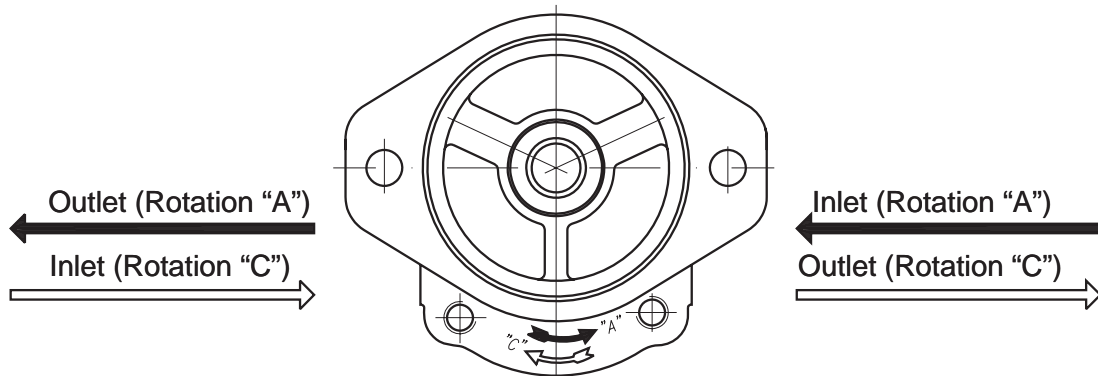
Used symbols:

n - speed of rotation	[min ⁻¹];
p - pressure	[bar];
q - displacement	[cm ³];
η - total efficiency $\eta = \eta_q \cdot \eta_{hm}$	[-];
η_{hm} - hydromechanical efficiency	[-];
η_q - volumetric efficiency	[-].

Commonly used formulas:

Flow:	$Q = \frac{q \cdot n \cdot \eta}{1000}$	[l/min]
Torque:	$M \cong \frac{q \cdot p}{20 \cdot \pi}$	[N.m]
Drive power:	$P = \frac{Q \cdot p}{600}$	[kW]

A relationship between the direction of rotation and the place of the inlet and outlet ports of the pumps



How to order:

Group	Rotation	Displacement code	Drive shaft	Pump code	Ports
00 10 20 30 40	A ↻ C ↻ R ↻		X - Through the front cover Y - Through the both covers	***(*)	- A flange with metric threads P4- A flange with UNC threads M - Metric G - GAS U - SAE J475

Group 00	
Code	cm ³
0,25	0,25
0,3	0,3
0,5	0,5
0,75	0,75
1	1
1,25	1,25
1,5	1,5
1,75	1,75
2	2

Group 10	
Code	cm ³
1	1
1,25	1,25
1,6	1,6
2	2
2,5	2,5
2,65*	2,65
3,15	3,15
3,65	3,65
4,2	4,2
4,7*	4,7
5	5
5,7	5,7
6,1	6,1
7,4	7,4
8*	8
8,5	8,5
9,8	9,8

Group 20	
Code	cm ³
4,5	4,5
6,3	6,3
7*	7
8,2	8,2
10	10
11	11,3
12	12
14	14
15	15
16	16
17*	17,3
19	19
22	22
25	25
28	28
32	32
36	36

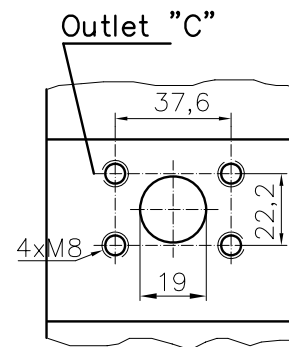
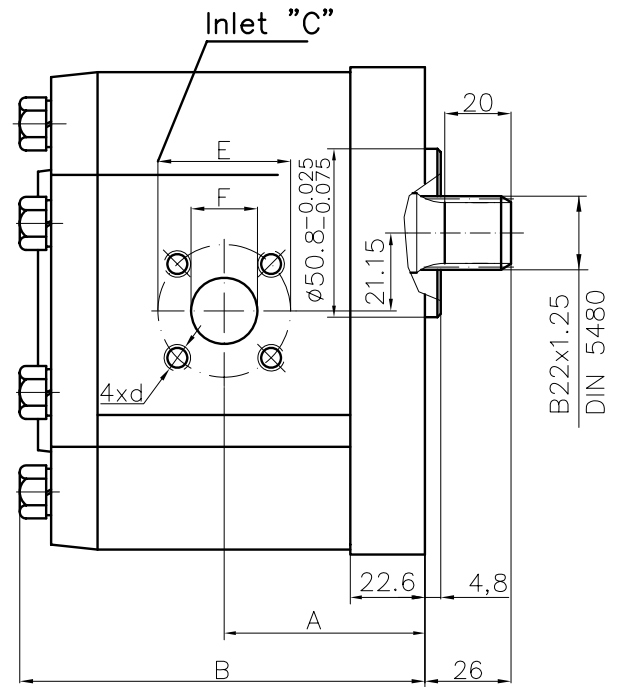
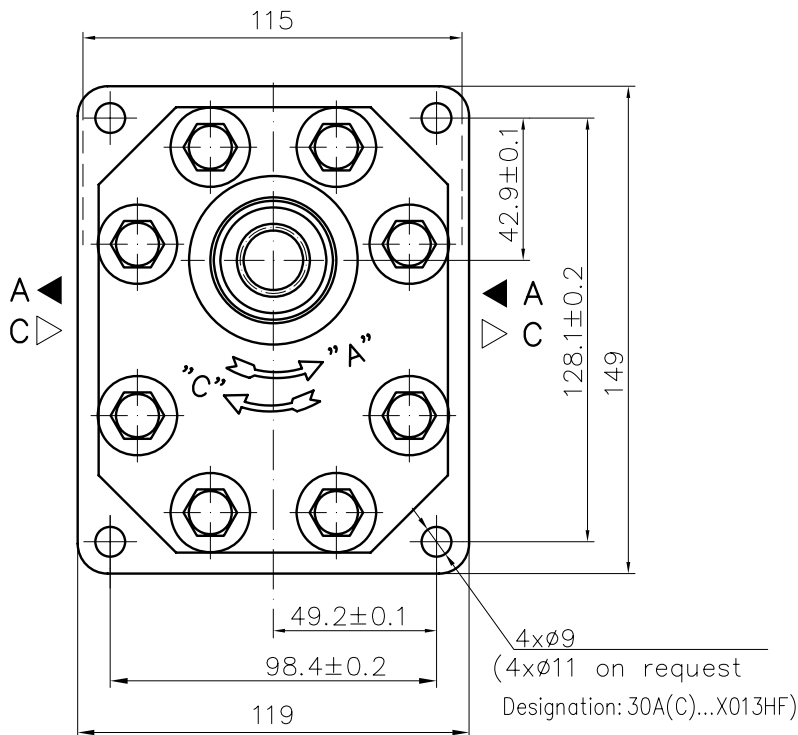
Group 20H	
Code	cm ³
15	15
16	16
19	19
22	22
25	25
28	28
32	32
36	36

Group 30	
Code	cm ³
20	20
22,5	22,5
25	25
28	28
32	32
36	36
42	42
46	46
50	50
55	55
60	60

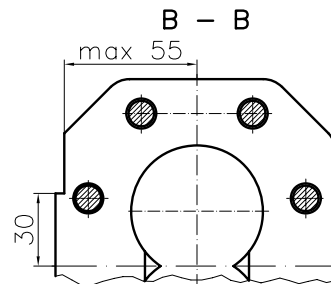
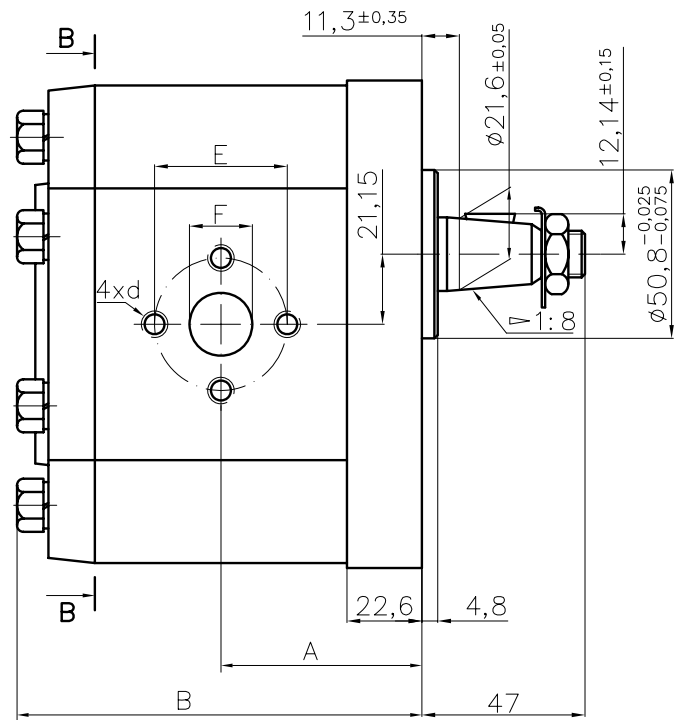
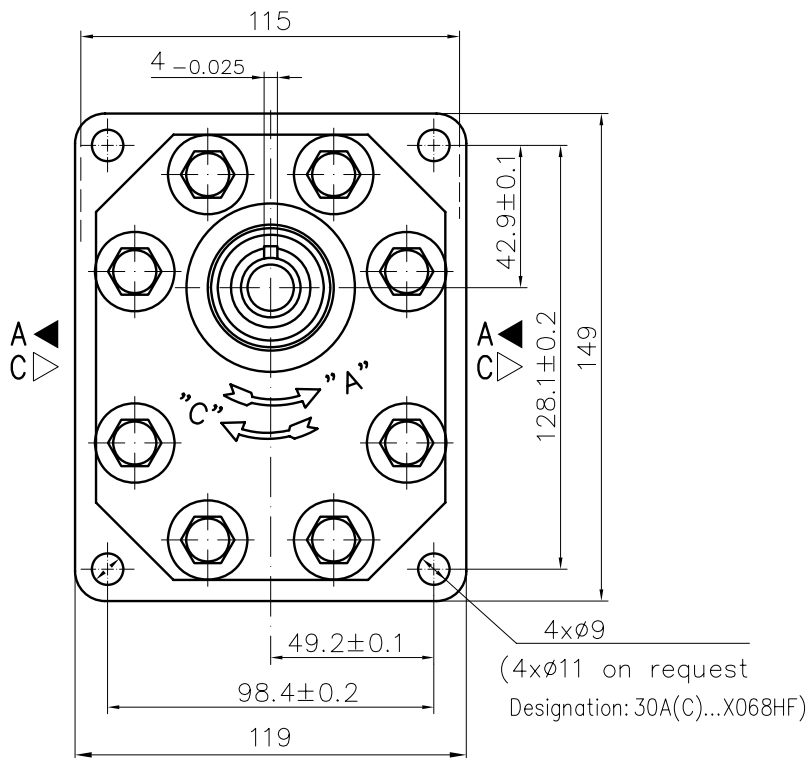
Group 40	
Code	cm ³
36	36
42	42
46	46
50	50
55	55
60	60

Example: 30A32X146 - Hydraulic gear pump, 30 group, direction of rotation - counter clockwise, displacement 32 cm³, modification 146.

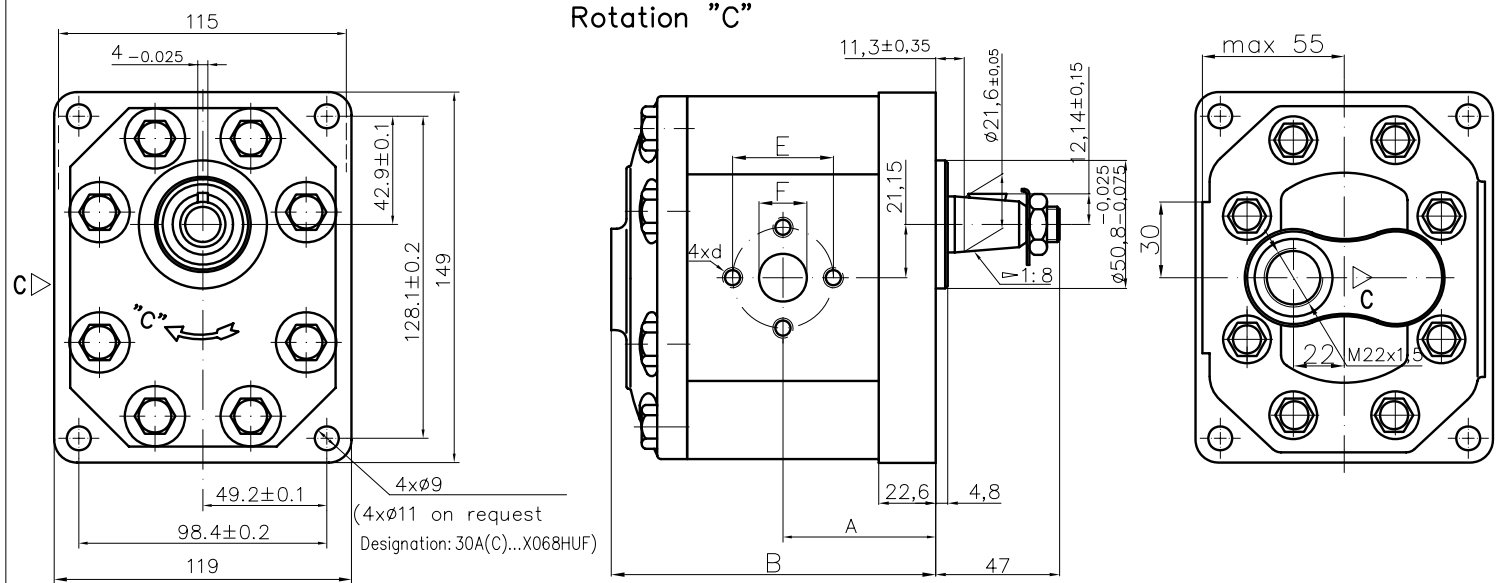
* - These pumps - only under a special order



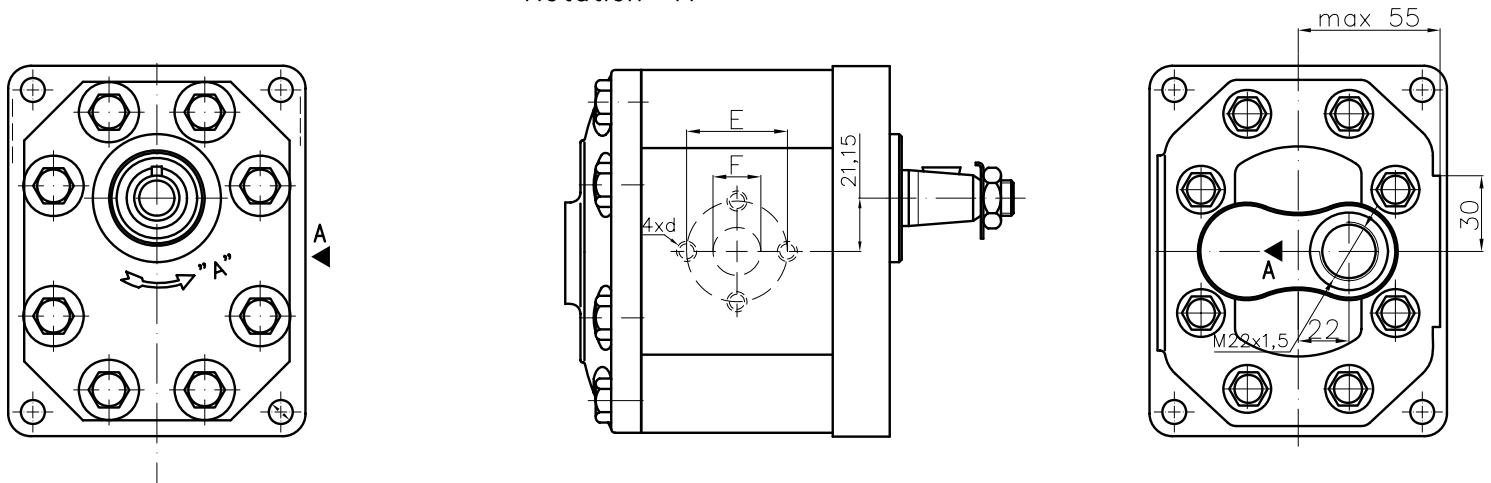
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension											
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet				Outlet					
								E	d	F1		F2	d	H2	L2		
30A(C)20X013H	20	28,2	56,4	250	3000	56,1	116,7	40	M8	19							
30A(C)22,2X013H	22,5	31,7	63,5	250	3000	57,6	119,7										
30A(C)25X013H	25	35,3	70,5	250	3000	58,3	121,1										
30A(C)28X013H	28	39,5	79,0	250	3000	60,2	124,7										
30A(C)32X013	32	45,1	75,2	250	2500	62,0	128,3										
30A(C)32X013H	32	45,1	90,2	250	3000	66,5	137,3										
30A(C)36X013	36	50,8	84,6	250	2500	63,5	131,4	51	M10	27							
30A(C)36X013H	36	51,3	95,8	250	2800	68,0	140,5							19	M8	37,6	22,2
30A(C)42X013	42	59,9	91,8	230	2300	66,3	137,0										
30A(C)42X013H	42	59,9	99,8	230	2500	70,8	146,1										
30A(C)46X013H	46	65,6	100,5	230	2300	72,7	149,8										
30A(C)50X013H	50	71,3	99,8	200	2100	74,5	153,4										
30A(C)55X013H	55	78,4	91,4	200	1750	76,7	157,9										
30A(C)60X013H	60	85,5	99,8	180	1750	78,7	162,4										



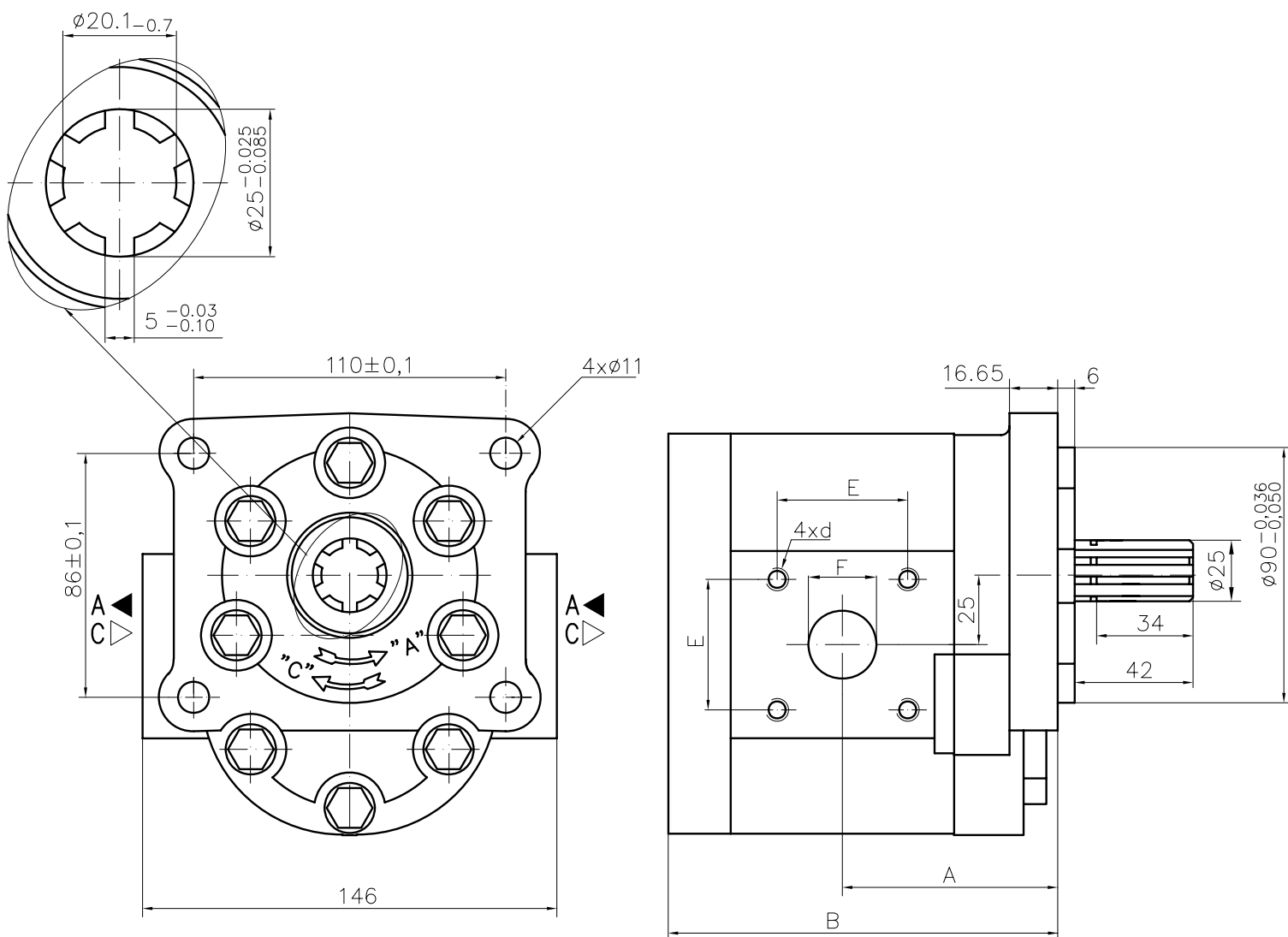
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	d	F	E	d	F
30A(C)20X068H	20	28,2	56,4	250	3000	56,1	116,7	ø40	M8	ø19			
30A(C)22,2X068H	22,5	31,7	63,5	250	3000	57,6	119,7						
30A(C)25X068H	25	35,3	70,5	250	3000	58,3	121,1						
30A(C)28X068H	28	39,5	79,0	250	3000	60,2	124,7						
30A(C)32X068	32	45,1	75,2	250	2500	62,0	128,3	ø51	M10	ø27			
30A(C)32X068H	32	45,1	90,2	250	3000	66,5	137,3						
30A(C)36X068	36	50,8	84,6	250	2500	63,5	131,4						
30A(C)36X068H	36	51,3	95,8	250	2800	68,0	140,5						
30A(C)42X068	42	59,9	91,8	230	2300	66,3	137,0	ø51	M10	ø27			
30A(C)42X068H	42	59,9	99,8	230	2500	70,8	146,1						
30A(C)46X068H	46	65,6	100,5	230	2300	72,7	149,8						
30A(C)50X068H	50	71,3	99,8	200	2100	74,5	153,4						
30A(C)55X068H	55	78,4	91,4	200	1750	76,7	157,9	ø51	M10	ø27			
30A(C)60X068H	60	85,5	99,8	180	1750	78,7	162,4						



Rotation "A"

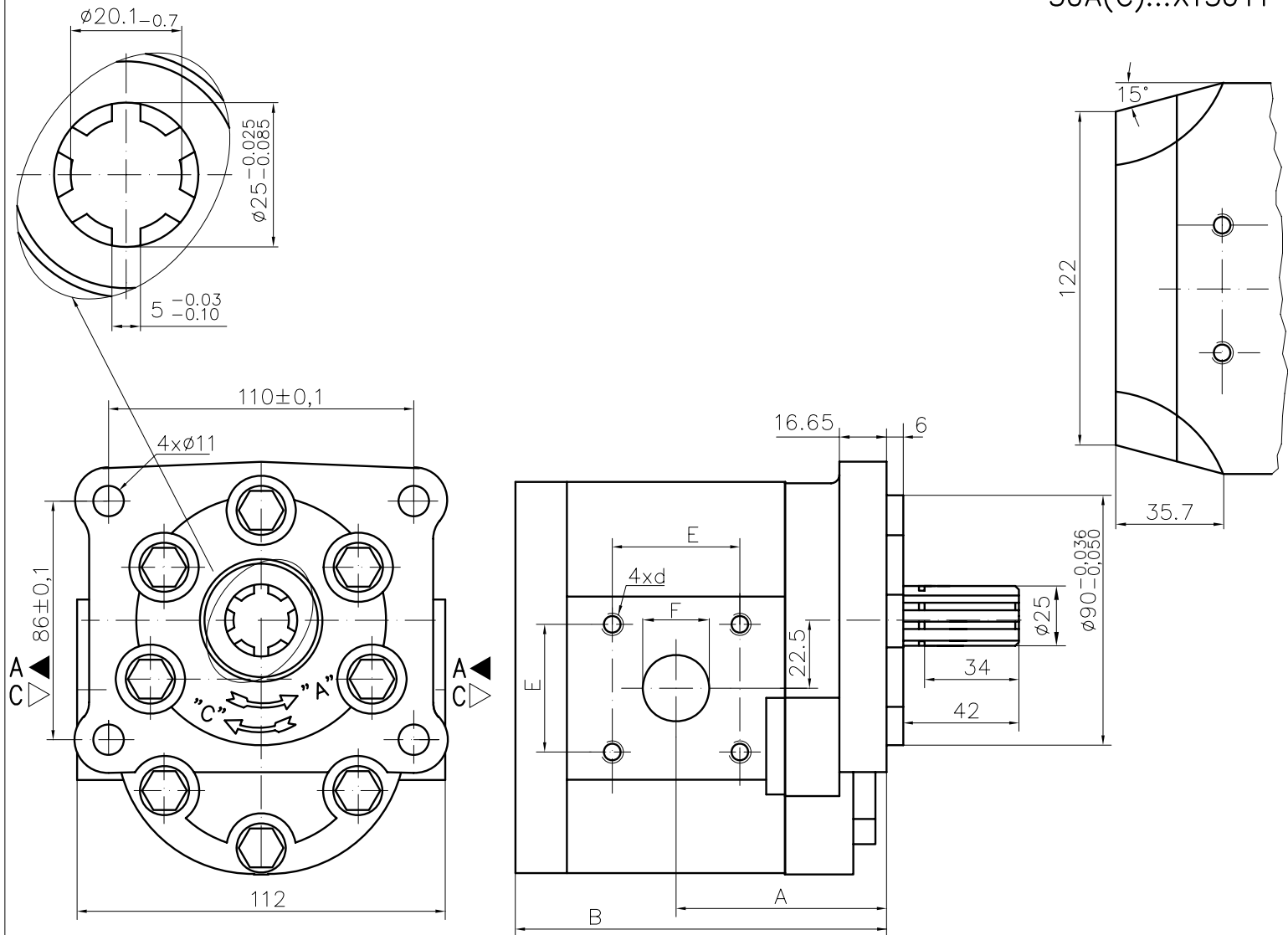


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet					
						A mm	B mm	E	d	F	E	d	F	
30A(C)20X068HU	20	28,2	56,4	250	3000	56,1	118,7	Ø40	M8	Ø19	Ø40	M8	Ø19	
30A(C)22,2X068HU	22,5	31,7	63,5	250	3000	57,6	121,7							
30A(C)25X068HU	25	35,3	70,5	250	3000	58,3	123,1							
30A(C)28X068HU	28	39,5	79,0	250	3000	60,2	126,7							
30A(C)32X068HU	32	45,1	75,2	250	2500	62,0	130,3							
30A(C)32X068HU	32	45,1	90,2	250	3000	66,5	139,3	Ø51	M10	Ø27	Ø40	M8	Ø19	
30A(C)36X068HU	36	50,8	84,6	250	2500	63,5	133,4							
30A(C)36X068HU	36	51,3	95,8	250	2800	68,0	142,5							
30A(C)42X068HU	42	59,9	91,8	230	2300	66,3	139,0							
30A(C)42X068HU	42	59,9	99,8	230	2500	70,8	148,1							
30A(C)46X068HU	46	65,6	100,5	230	2300	72,7	151,8	Ø51	M10	Ø27	Ø40	M8	Ø19	
30A(C)50X068HU	50	71,3	99,8	200	2100	74,5	155,4							
30A(C)55X068HU	55	78,4	91,4	200	1750	76,7	159,9							
30A(C)60X068HU	60	85,5	99,8	180	1750	78,7	164,4							

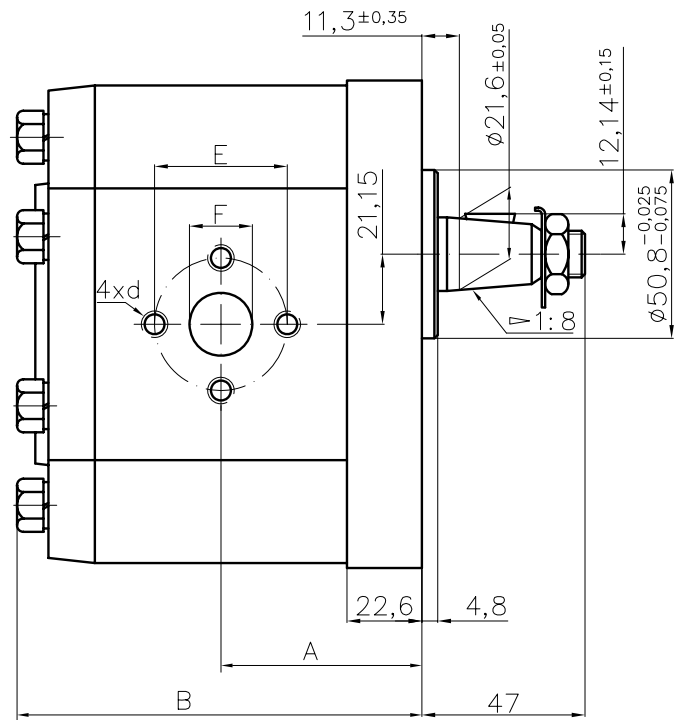
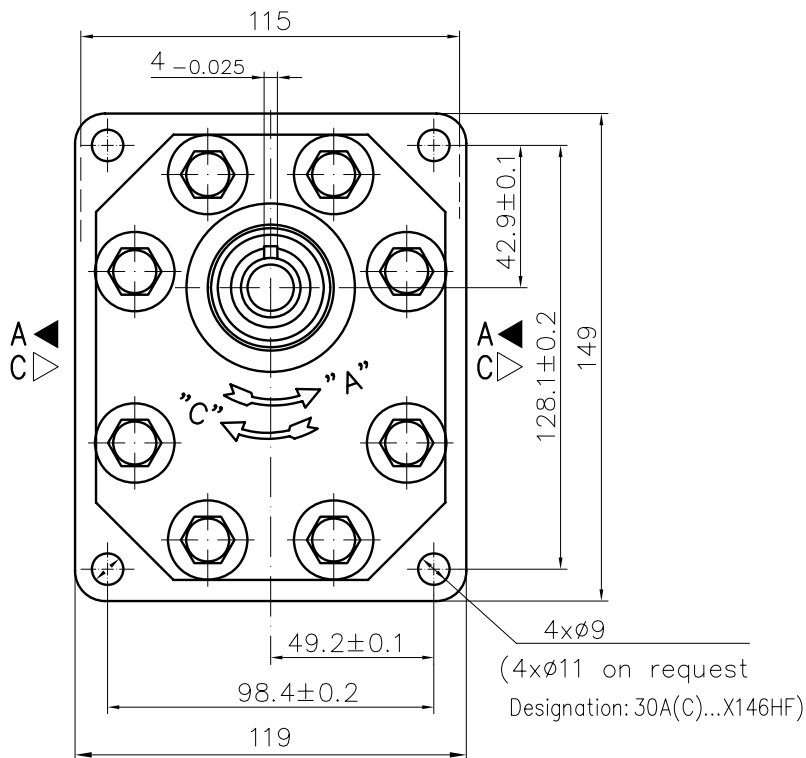


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet		Outlet			
								E	d	F	E	d	F
30A(C)25X136	24,5	34,5	69,1	200	3000	72,5	130,1	46	M8	20	46	M8	20
30A(C)32X136	32	45,1	75,2	200	2500	76,0	137,4	46	M8	22	46	M8	22
30A(C)32X136H	32	45,1	75,2	200	2500	76,0	137,9						
30A(C)46X136	46	65,6	100,5	190	2300	72,5	141,4	54	M10	27	54	M10	27
30A(C)46X136H	46	65,6	100,5	190	2300	72,5	150,4						
30A(C)50X136	50	71,3	99,8	175	2100	72,5	145,0						
30A(C)50X136H	50	71,3	99,8	175	2100	72,5	154,0						

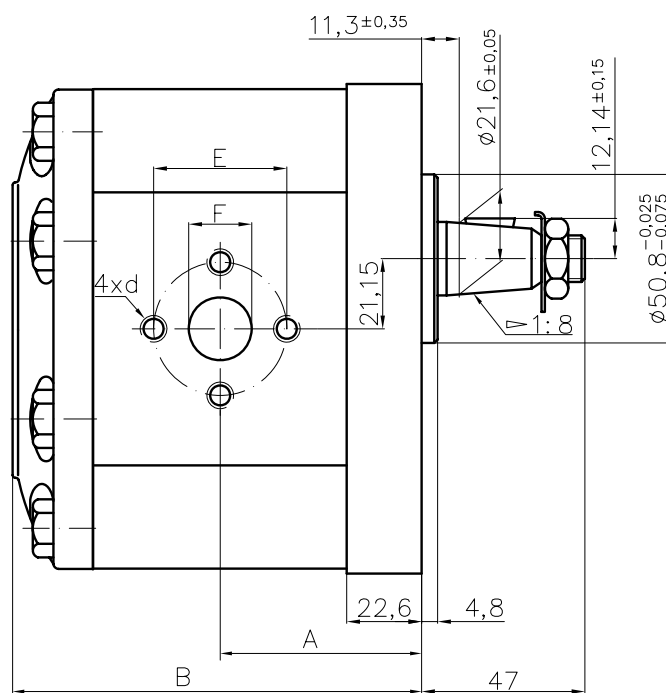
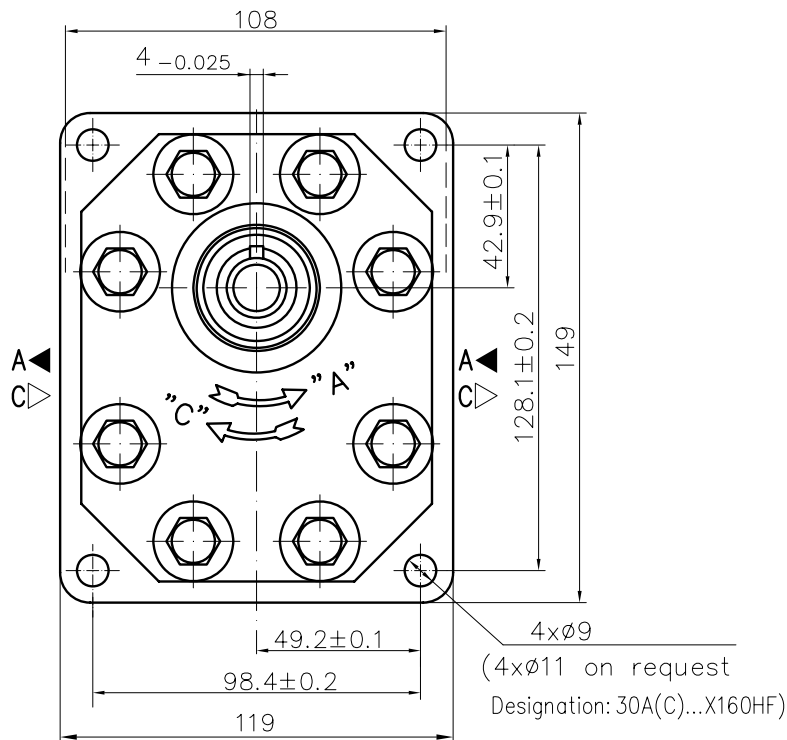
Variant
30A(C)...X136Y1



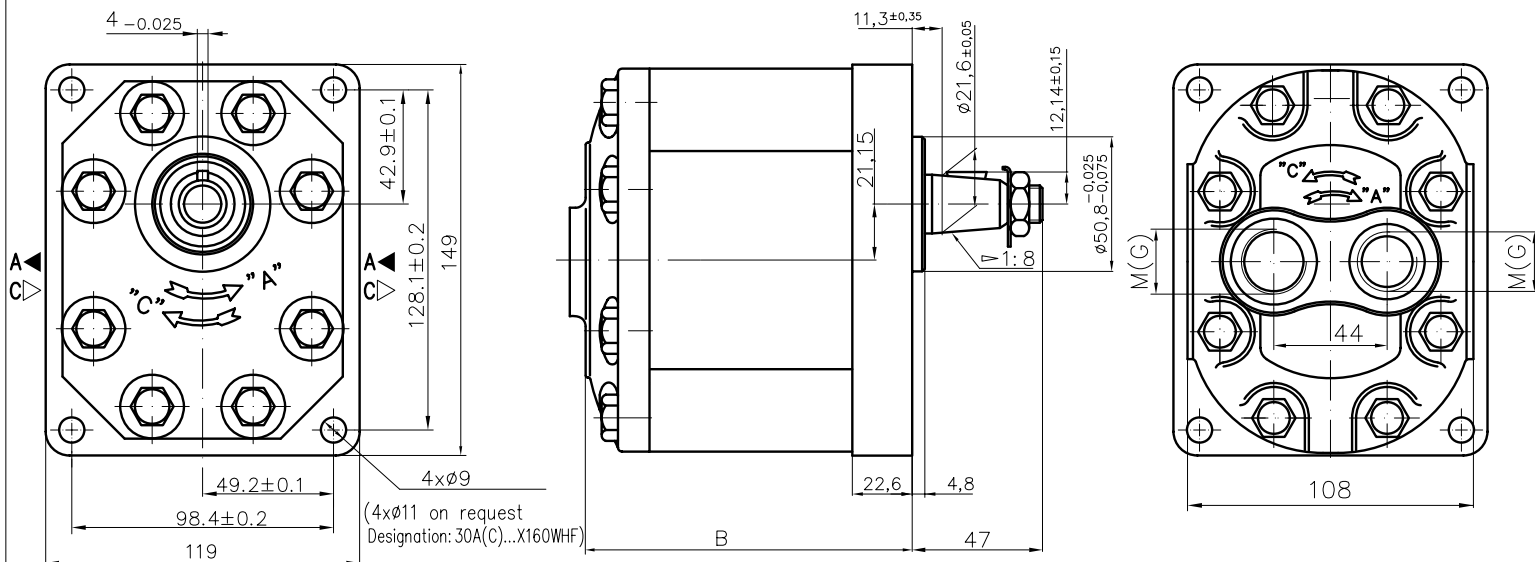
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet		Outlet			
								E	d	F	E	d	F
30A(C)25X136Y	24,5	34,5	69,1	200	3000	64,0	121,7	46	M8	20	46	M8	20
30A(C)32X136Y	32	45,1	75,2	200	2500	67,6	128,9			22			22
30A(C)46X136Y	46	65,6	100,5	190	2300	72,5	141,4	54	M10	27	54	M10	27
30A(C)50X136Y	50	71,3	99,8	175	2100	72,5	145,0						
30A(C)20X136Y1	19,5	27,5	55,0	200	3000	61,8	117,2			19			19
30A(C)25X136Y1	24,5	34,5	57,6	200	2500	64,0	121,6	46	M8	20	46	M8	20
30A(C)32X136Y1	32	45,1	75,2	200	2500	67,6	128,9			22			22
30A(C)46X136Y1	46	65,6	100,5	190	2300	72,5	141,4	54	M10	27	54	M10	27
30A(C)50X136Y1	50	71,3	99,8	175	2100	72,5	145,0						



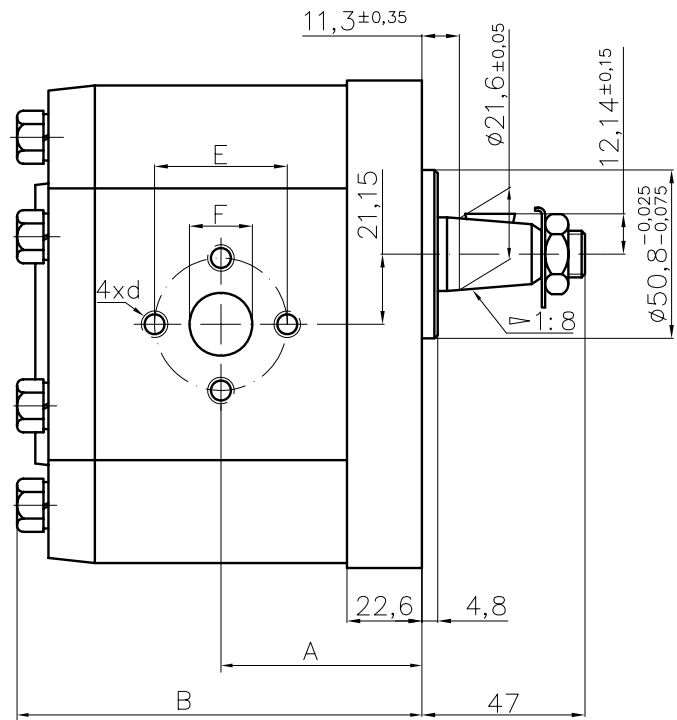
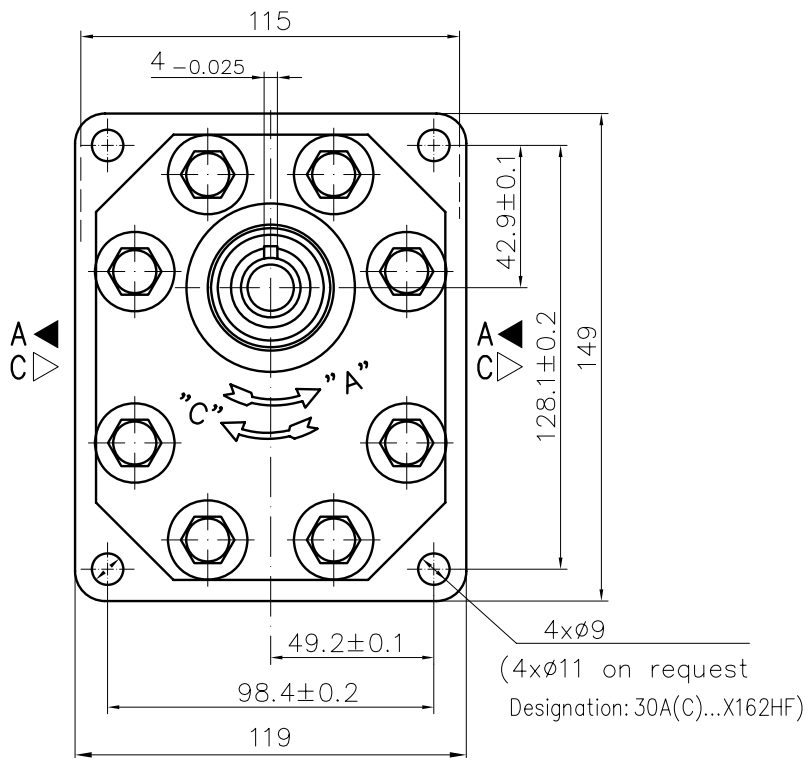
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	d	F	E	d	F
30A(C)20X146H	20	28,2	56,4	250	3000	56,1	116,7	40	M8	19			
30A(C)22,2X146H	22,5	31,7	63,5	250	3000	57,6	119,7						
30A(C)25X146H	25	35,3	70,5	250	3000	58,3	121,1						
30A(C)28X146H	28	39,5	79,0	250	3000	60,2	124,7						
30A(C)32X146	32	45,1	75,2	250	2500	62,0	128,3						
30A(C)32X146H	32	45,1	90,2	250	3000	66,5	137,3	51	M10	27	40	M8	19
30A(C)36X146	36	50,8	84,6	250	2500	63,5	131,4						
30A(C)36X146H	36	51,3	95,8	250	2800	68,0	140,5						
30A(C)42X146	42	59,9	91,8	230	2300	66,3	137,0						
30A(C)42X146H	42	59,9	99,8	230	2500	70,8	146,1						
30A(C)46X146H	46	65,6	100,5	230	2300	72,7	149,8						
30A(C)50X146H	50	71,3	99,8	200	2100	74,5	153,4						
30A(C)55X146H	55	78,4	91,4	200	1750	76,7	157,9						
30A(C)60X146H	60	85,5	99,8	180	1750	78,7	162,4						



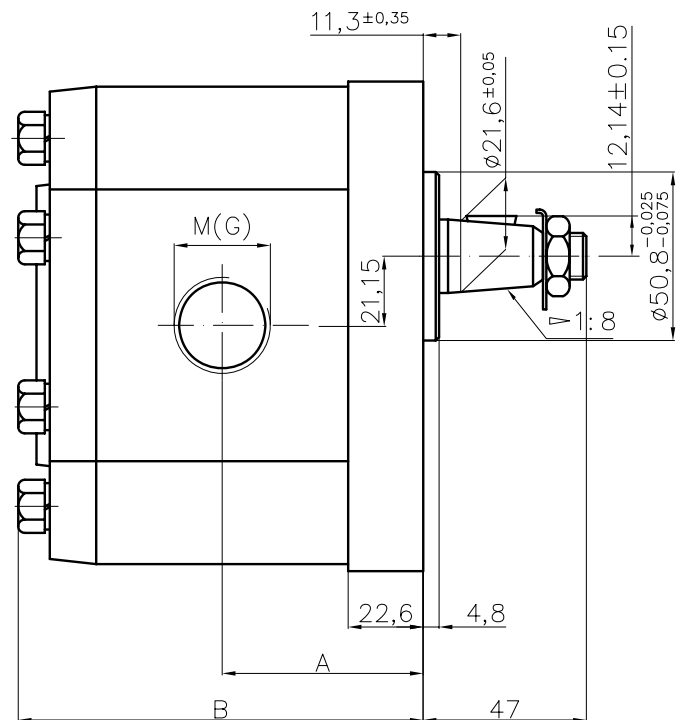
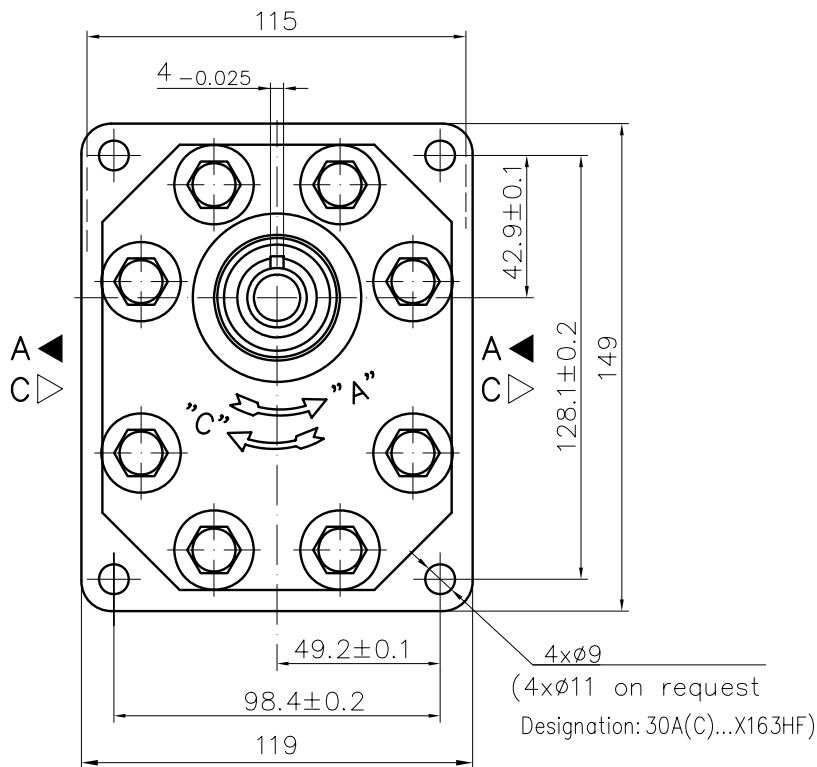
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet		Outlet					
						A mm	B mm	E	d	F	E	d	F
30A(C)20X160H	20	28,2	56,4	200	3000	56,1	116,7	40	M8	19	40	M8	19
30A(C)22,2X160H	22,5	31,7	63,5	200	3000	57,6	119,7						
30A(C)25X160H	25	35,3	70,5	200	3000	58,3	121,1						
30A(C)28X160H	28	39,5	79,0	200	3000	60,2	124,7						
30A(C)32X160	32	45,1	75,2	200	2500	62,0	128,3						
30A(C)32X160H	32	45,1	90,2	200	3000	66,5	137,3	51	M10	27	40	M8	19
30A(C)36X160	36	50,8	84,6	190	2500	63,5	131,4						
30A(C)36X160H	36	51,3	95,8	190	2800	68,0	140,5						
30A(C)42X160	42	59,9	91,8	190	2300	66,3	137,0						
30A(C)42X160H	42	59,9	99,8	190	2500	70,8	146,1						
30A(C)46X160H	46	65,6	100,5	175	2300	72,7	149,8	74,5	153,4				
30A(C)50X160H	50	71,3	99,8	175	2100	74,5	153,4						
30A(C)55X160H	55	78,4	91,4	175	1750	76,7	157,9						
30A(C)60X160H	60	85,5	99,8	160	1750	78,7	162,4						



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension						
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet		Outlet		
								M	G		M	G
30A(C)20X160WH	20	28,2	56,4	200	3000		118,7	M33x1,5	G1"-A		M27x1,5	G3/4"-A
30A(C)22,2X160WH	22,5	31,7	63,5	200	3000		121,7					
30A(C)25X160WH	25	35,3	70,5	200	3000		123,1					
30A(C)28X160WH	28	39,5	79,0	200	3000		126,7					
30A(C)32X160W	32	45,1	75,2	200	2500		130,3					
30A(C)32X160WH	32	45,1	90,2	200	3000		139,3					
30A(C)36X160W	36	50,8	84,6	190	2500		133,4					
30A(C)36X160WH	36	51,3	95,8	190	2800		142,5					
30A(C)42X160W	42	59,9	91,8	190	2300		139,0					
30A(C)42X160WH	42	59,9	99,8	190	2500		148,1					
30A(C)46X160WH	46	65,6	100,5	175	2300		151,8					
30A(C)50X160WH	50	71,3	99,8	175	2100		155,4					
30A(C)55X160WH	55	78,4	91,4	175	1750		159,9					
30A(C)60X160WH	60	85,5	99,8	160	1750		164,4					

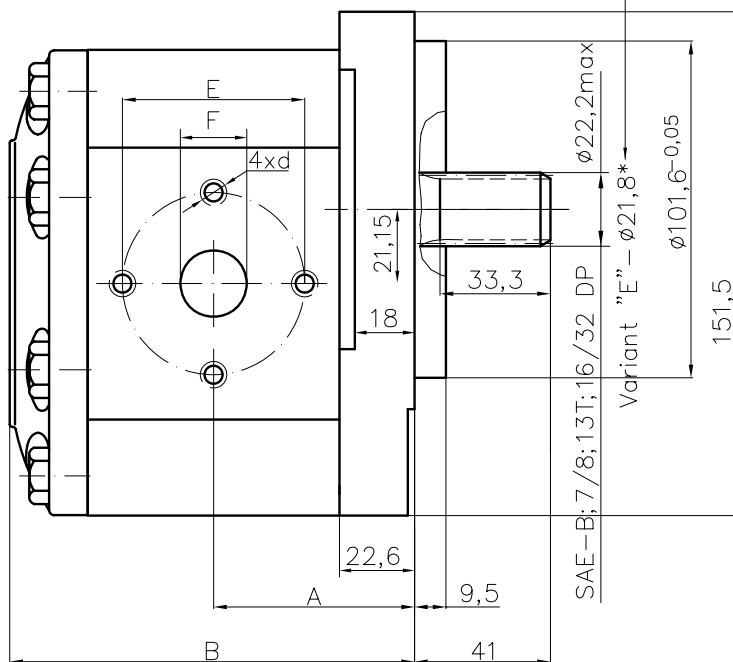
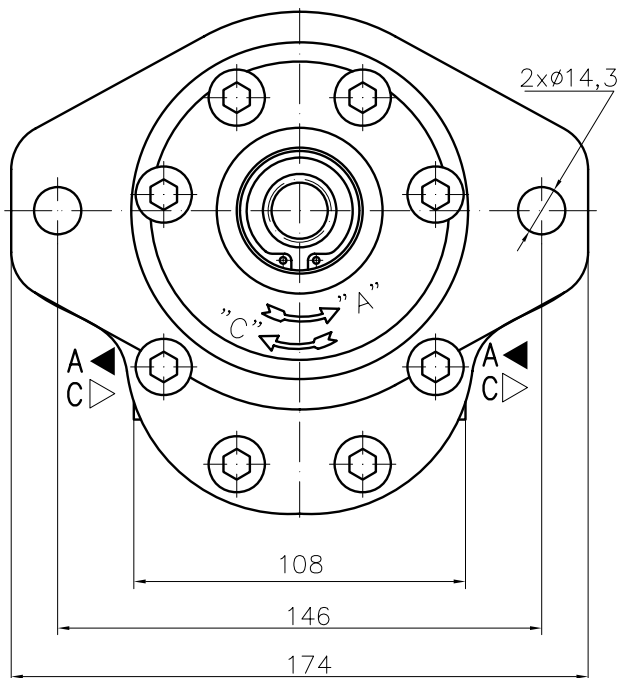


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	d	F	E	d	F
30A(C)20X162H	20	28,2	56,4	250	3000	56,1	116,7	40	5/16-18UNC	19	40	5/16-18UNC-2B	19
30A(C)22,2X162H	22,5	31,7	63,5	250	3000	57,6	119,7						
30A(C)25X162H	25	35,3	70,5	250	3000	58,3	121,1						
30A(C)28X162H	28	39,5	79,0	250	3000	60,2	124,7						
30A(C)32X162	32	45,1	75,2	250	2500	62,0	128,3	51	3/8-16UNC-2B	27	40	5/16-18UNC-2B	19
30A(C)32X162H	32	45,1	90,2	250	3000	66,5	137,3						
30A(C)36X162	36	50,8	84,6	250	2500	63,5	131,4						
30A(C)36X162H	36	51,3	95,8	250	2800	68,0	140,5						
30A(C)42X162	42	59,9	91,8	230	2300	66,3	137,0	51	3/8-16UNC-2B	27	40	5/16-18UNC-2B	19
30A(C)42X162H	42	59,9	99,8	230	2500	70,8	146,1						
30A(C)46X162H	46	65,6	100,5	230	2300	72,7	149,8						
30A(C)50X162H	50	71,3	99,8	200	2100	74,5	153,4						
30A(C)55X162H	55	78,4	91,4	200	1750	76,7	157,9	51	3/8-16UNC-2B	27	40	5/16-18UNC-2B	19
30A(C)60X162H	60	85,5	99,8	180	1750	78,7	162,4						



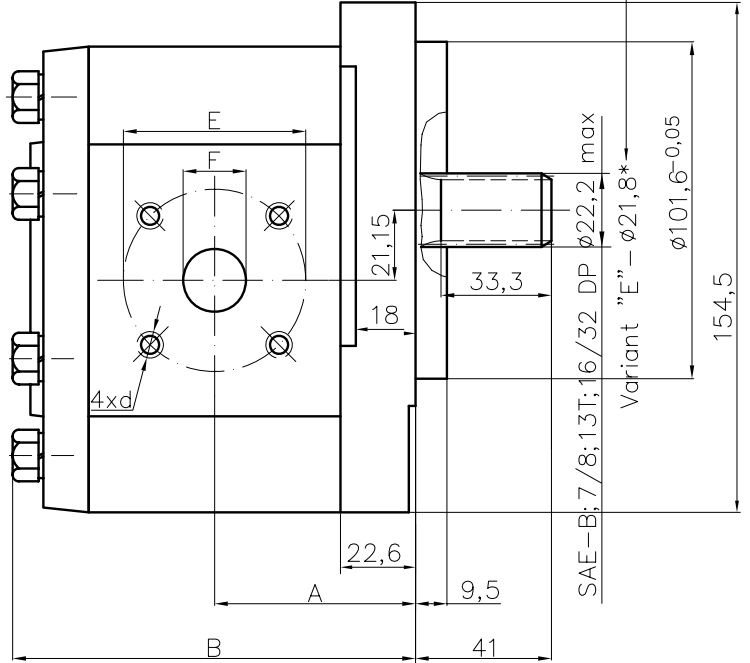
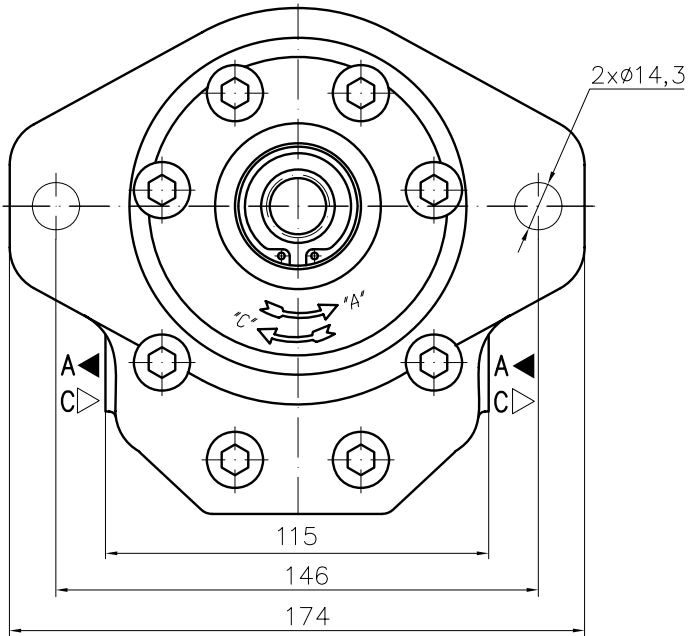
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								M	G	G3	M	G	G3
30A(C)20X163H	20	28,2	56,4	250	3000	56,1	116,7	M27x1,5	G3/4"-A	G3/4"-A	M27x1,5	G3/4"-A	G1/2"-A
30A(C)22,2X163H	22,5	31,7	63,5	250	3000	57,6	119,7						
30A(C)25X163H	25	35,3	70,5	250	3000	58,3	121,1						
30A(C)28X163H	28	39,5	79,0	250	3000	60,2	124,7	M33x1,5	G1"-A	G1"-A	M27x1,5	G3/4"-A	G3/4"-A
30A(C)32X163	32	45,1	75,2	250	2500	62,0	128,3						
30A(C)32X163H	32	45,1	90,2	250	3000	66,5	137,3						
30A(C)36X163	36	50,8	84,6	250	2500	63,5	131,4	M33x1,5	G1"-A	G1"-A	M27x1,5	G3/4"-A	G3/4"-A
30A(C)36X163H	36	51,3	95,8	250	2800	68,0	140,5						
30A(C)42X163	42	59,9	91,8	230	2300	66,3	137,0						
30A(C)42X163H	42	59,9	99,8	230	2500	70,8	146,1	M33x1,5	G1"-A	G1"-A	M27x1,5	G3/4"-A	G3/4"-A
30A(C)46X163H	46	65,6	100,5	230	2300	72,7	149,8						
30A(C)50X163H	50	71,3	99,8	200	2100	74,5	153,4						
30A(C)55X163H	55	78,4	91,4	200	1750	76,7	157,9	M33x1,5	G1"-A	G1"-A	M27x1,5	G3/4"-A	G3/4"-A
30A(C)60X163H	60	85,5	99,8	180	1750	78,7	162,4						

*designation: 30A(C)...X166HE

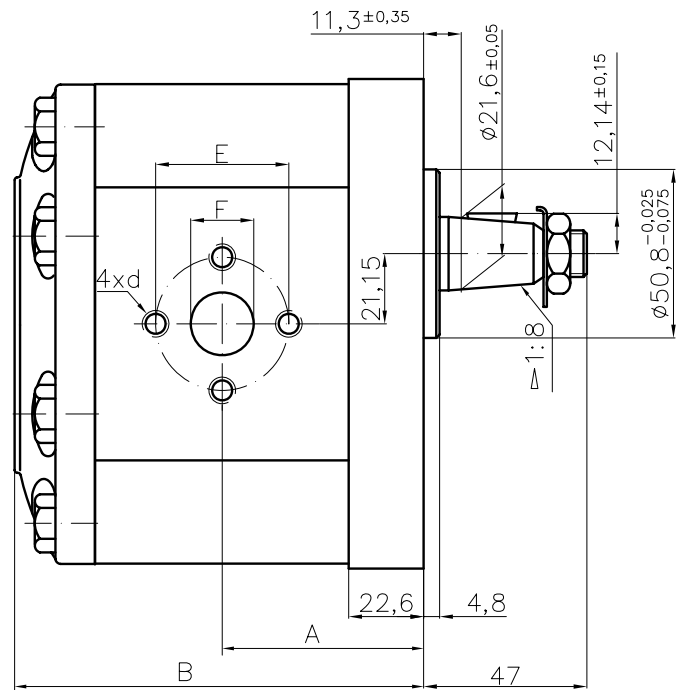
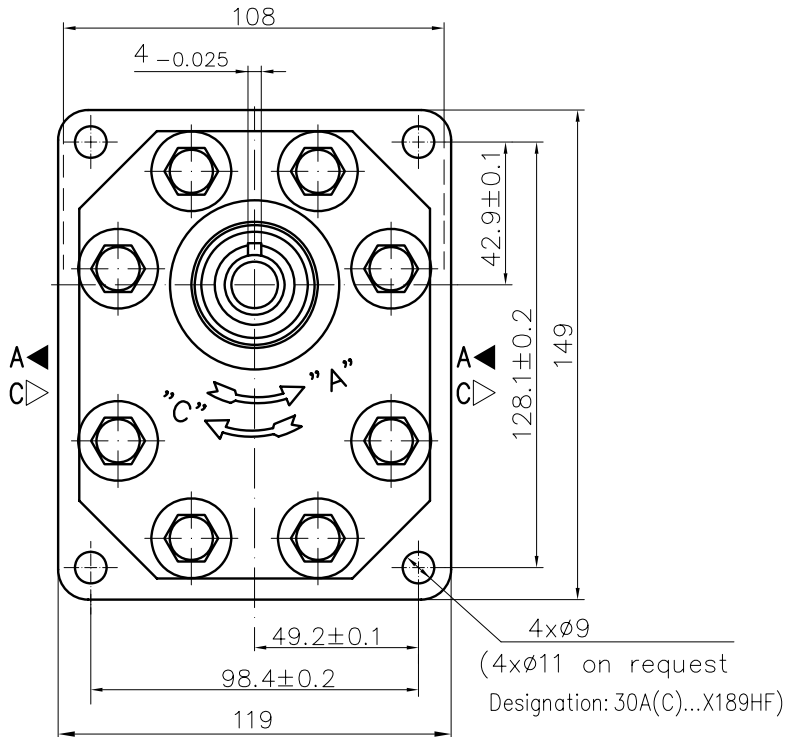


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	E	d	F	E	d	F
30A(C)20X166H	20	28,2	56,4	200	3000	56,1	116,7	40	M8	19	40	M8	19
30A(C)22,2X166H	22,5	31,7	63,5	200	3000	57,6	119,7						
30A(C)25X166H	25	35,3	70,5	200	3000	58,3	121,1						
30A(C)28X166H	28	39,5	79,0	200	3000	60,2	124,7						
30A(C)32X166	32	45,1	75,2	200	2500	62,0	128,3	51	M10	27	40	M8	19
30A(C)32X166H	32	45,1	90,2	200	3000	66,5	137,3						
30A(C)36X166	36	50,8	84,6	190	2500	63,5	131,4						
30A(C)36X166H	36	51,3	95,8	190	2800	68,0	140,5						
30A(C)42X166	42	59,9	91,8	190	2300	66,3	137,0						
30A(C)42X166H	42	59,9	99,8	190	2500	70,8	146,1						
30A(C)46X166H	46	65,6	100,5	190	2300	72,7	149,8						
30A(C)50X166H	50	71,3	99,8	175	2100	74,5	153,4						
30A(C)55X166H	55	78,4	91,4	175	1750	76,7	157,9						
30A(C)60X166H	60	85,5	99,8	160	1750	78,7	162,4						

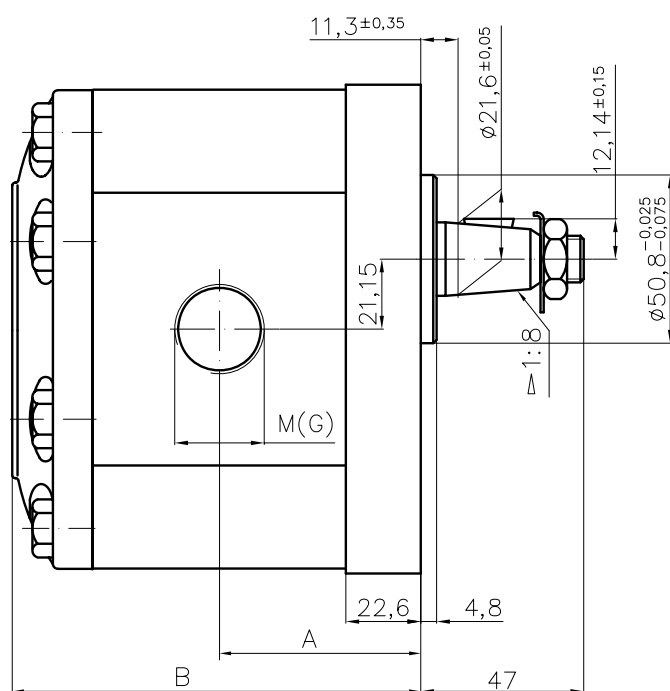
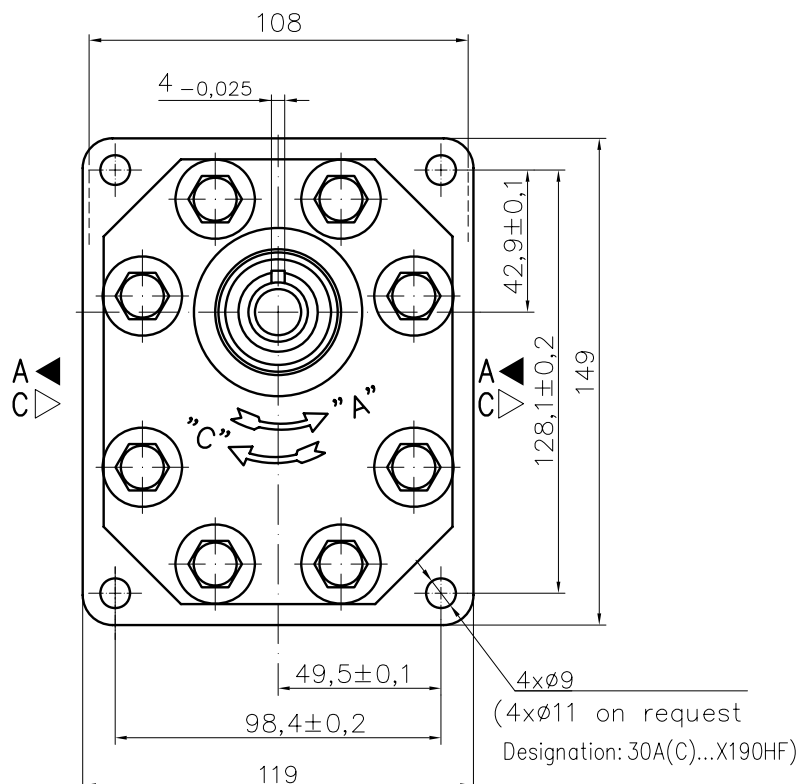
*designation: 30A(C)...X169HE



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	d	F	E	d	F
30A(C)20X169H	20	28,2	56,4	250	3000	56,1	116,7	40	M8	19	40	M8	19
30A(C)22,2X169H	22,5	31,7	63,5	250	3000	57,6	119,7						
30A(C)25X169H	25	35,3	70,5	250	3000	58,3	121,1						
30A(C)28X169H	28	39,5	79,0	250	3000	60,2	124,7						
30A(C)32X169	32	45,1	75,2	250	2500	62,0	128,3	55	M8	27	55	M8	19
30A(C)32X169H	32	45,1	90,2	250	3000	66,5	137,3						
30A(C)36X169	36	50,8	84,6	250	2500	63,5	131,4						
30A(C)36X169H	36	51,3	95,8	250	2800	68,0	140,5						
30A(C)42X169	42	59,9	91,8	230	2300	66,3	137,0	55	M8	27	55	M8	19
30A(C)42X169H	42	59,9	99,8	230	2500	70,8	146,1						
30A(C)46X169H	46	65,6	100,5	230	2300	72,7	149,8						
30A(C)50X169H	50	71,3	99,8	200	2100	74,5	153,4						
30A(C)55X169H	55	78,4	91,4	200	1750	76,7	157,9	55	M8	27	55	M8	19
30A(C)60X169H	60	85,5	99,8	180	1750	78,7	162,4						



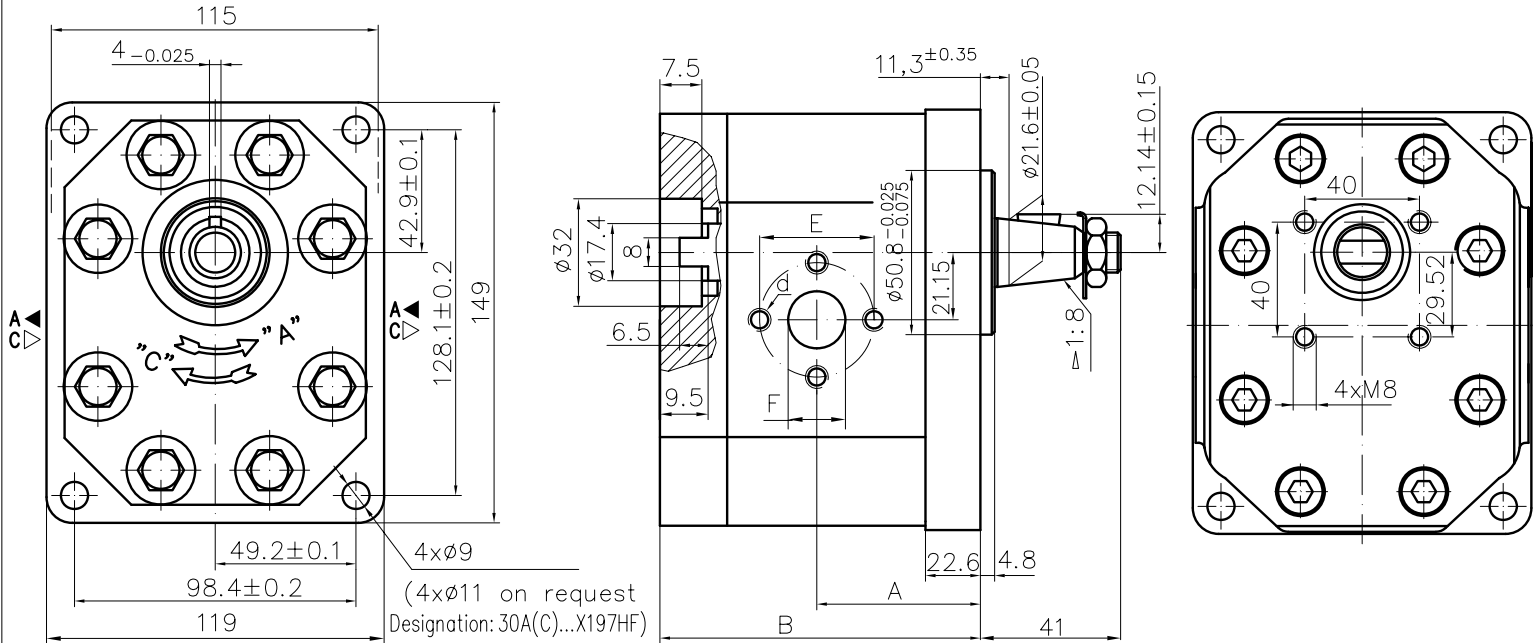
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	d	F	E	d	F
30A(C)20X189H	20	28,2	56,4	200	3000	56,1	116,7	40	3/8-16UNC	19	40	5/16-18UNC-2B	19
30A(C)22,2X189H	22,5	31,7	63,5	200	3000	57,6	119,7						
30A(C)25X189H	25	35,3	70,5	200	3000	58,3	121,1						
30A(C)28X189H	28	39,5	79,0	200	3000	60,2	124,7						
30A(C)32X189	32	45,1	75,2	200	2500	62,0	128,3	51	5/16-18UNC-2B	27	40	5/16-18UNC-2B	19
30A(C)32X189H	32	45,1	90,2	200	3000	66,5	137,3						
30A(C)36X189	36	50,8	84,6	190	2500	63,5	131,4						
30A(C)36X189H	36	51,3	95,8	190	2800	68,0	140,5						
30A(C)42X189	42	59,9	91,8	190	2300	66,3	137,0	51	5/16-18UNC-2B	27	40	5/16-18UNC-2B	19
30A(C)42X189H	42	59,9	99,8	190	2500	70,8	146,1						
30A(C)46X189H	46	65,6	100,5	175	2300	72,7	149,8						
30A(C)50X189H	50	71,3	99,8	175	2100	74,5	153,4						
30A(C)55X189H	55	78,4	91,4	175	1750	76,7	157,9	51	5/16-18UNC-2B	27	40	5/16-18UNC-2B	19
30A(C)60X189H	60	85,5	99,8	160	1750	78,7	162,4						



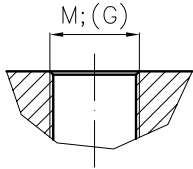
- metric thread
G - GAS thread

Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet		Outlet					
						A mm	B mm	M	G	G3	M	G	G3
30A(C)20X190H	20	28,2	56,4	200	3000	56,1	116,7	M27x1,5	G3/4"-A	G3/4"-A			
30A(C)22,2X190H	22,5	31,7	63,5	200	3000	57,6	119,7						
30A(C)25X190H	25	35,3	70,5	200	3000	58,3	121,1						
30A(C)28X190H	28	39,5	79,0	200	3000	60,2	124,7						
30A(C)32X190	32	45,1	75,2	200	2500	62,0	128,3	M33x1,5	G1"-A	G1"-A	M27x1,5	G3/4"-A	G1/2"-A
30A(C)32X190H	32	45,1	90,2	200	3000	66,5	137,3						
30A(C)36X190	36	50,8	84,6	190	2500	63,5	131,4						
30A(C)36X190H	36	51,3	95,8	190	2800	68,0	140,5						
30A(C)42X190	42	59,9	91,8	190	2300	66,3	137,0	G1"-A	G1"-A	G1"-A	M27x1,5	G3/4"-A	G3/4"-A
30A(C)42X190H	42	59,9	99,8	190	2500	70,8	146,1						
30A(C)46X190H	46	65,6	100,5	175	2300	72,7	149,8						
30A(C)50X190H	50	71,3	99,8	175	2100	74,5	153,4						
30A(C)55X190H	55	78,4	91,4	175	1750	76,7	157,9	G1"-A	G1"-A	G1"-A	M27x1,5	G3/4"-A	G3/4"-A
30A(C)60X190H	60	85,5	99,8	160	1750	78,7	162,4						

Designed as first section of multiple gear pumps group 31.



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Variants: "M"; "G" threads

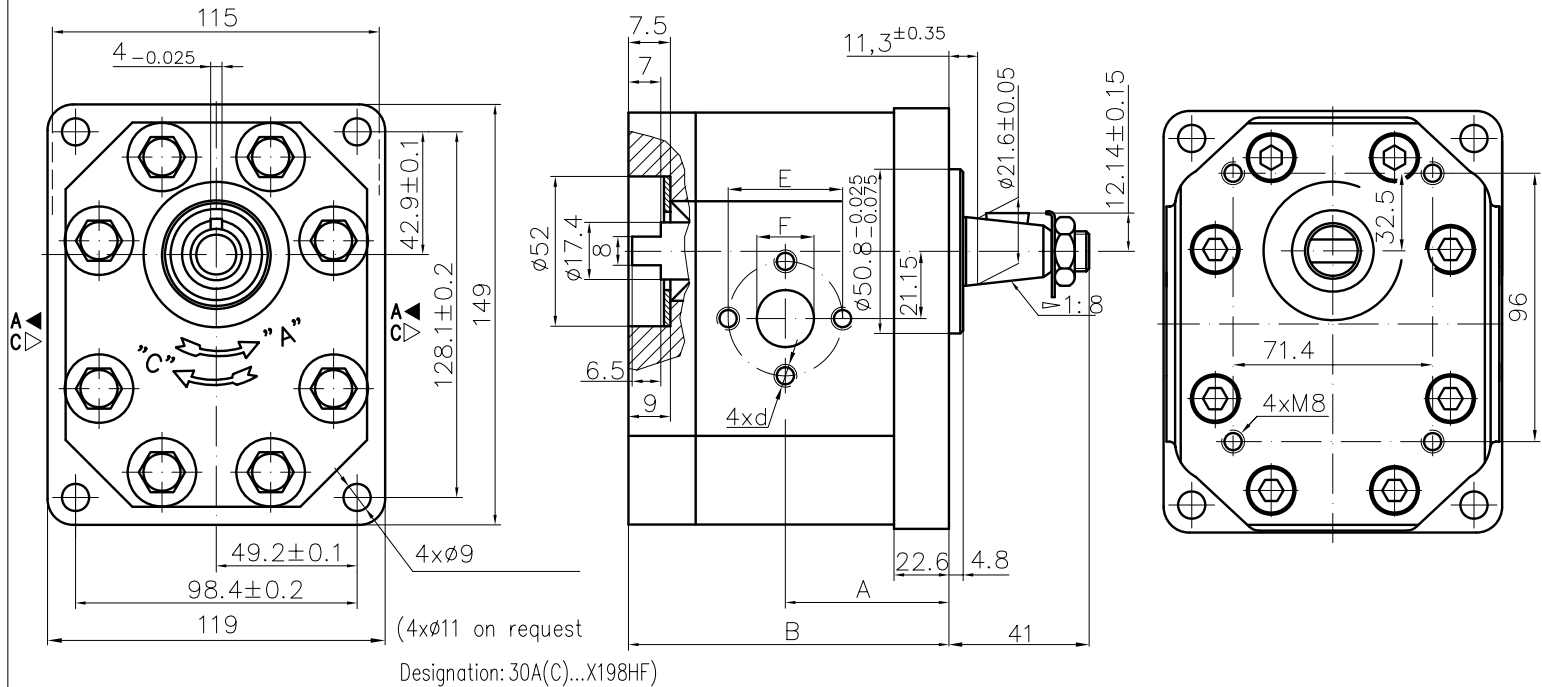


Designation: 30A(C)...X197HM(G)

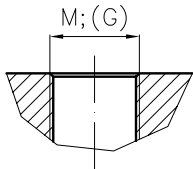
For ports measures see table at 30A(C)...X163H

Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	d	F	E	d	F
30A(C)20X197H	20	28,2	56,4	250	3000	56,1	117,2	40	M8	19	40	M8	19
30A(C)22,2X197H	22,5	31,7	63,5	250	3000	57,6	120,2						
30A(C)25X197H	25	35,3	70,5	250	3000	58,3	121,6						
30A(C)28X197H	28	39,5	79,0	250	3000	60,2	125,2						
30A(C)32X197	32	45,1	75,2	250	2500	62,0	128,8						
30A(C)32X197H	32	45,1	90,2	250	3000	66,5	137,8	51	M10	27	40	M8	19
30A(C)36X197	36	50,8	84,6	250	2500	63,5	131,9						
30A(C)36X197H	36	51,3	95,8	250	2800	68,0	141,0						
30A(C)42X197	42	59,9	91,8	230	2300	66,3	137,5						
30A(C)42X197H	42	59,9	99,8	230	2500	70,8	146,5						
30A(C)46X197H	46	65,6	100,5	230	2300	72,7	150,3						
30A(C)50X197H	50	71,3	99,8	200	2100	74,5	153,9						
30A(C)55X197H	55	78,4	91,4	200	1750	76,7	158,4	78,7	162,9				
30A(C)60X197H	60	85,5	99,8	180	1750								

Designed as a first section of multiple gear pumps group 32.



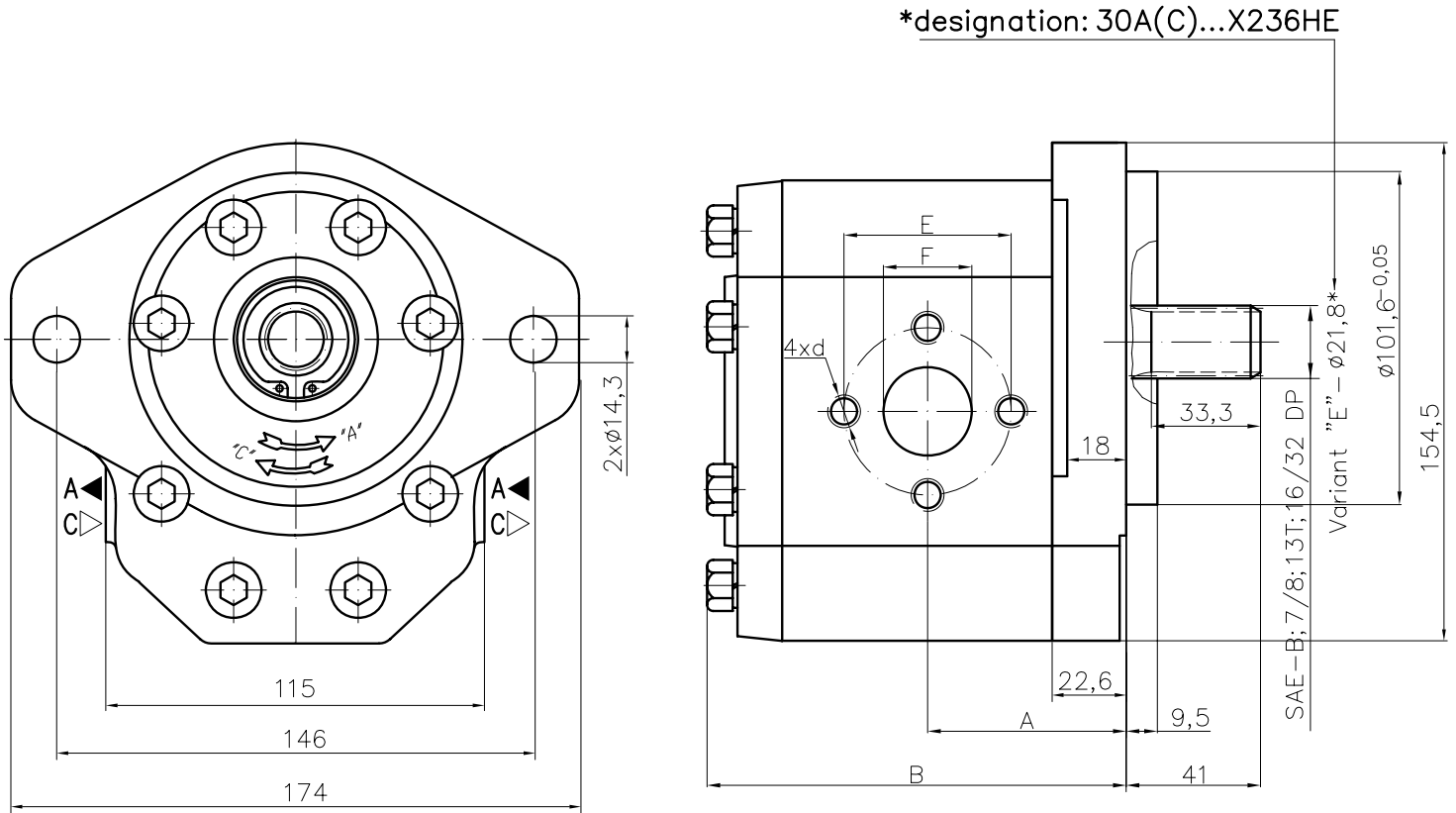
Variants: "M"; "G" threads



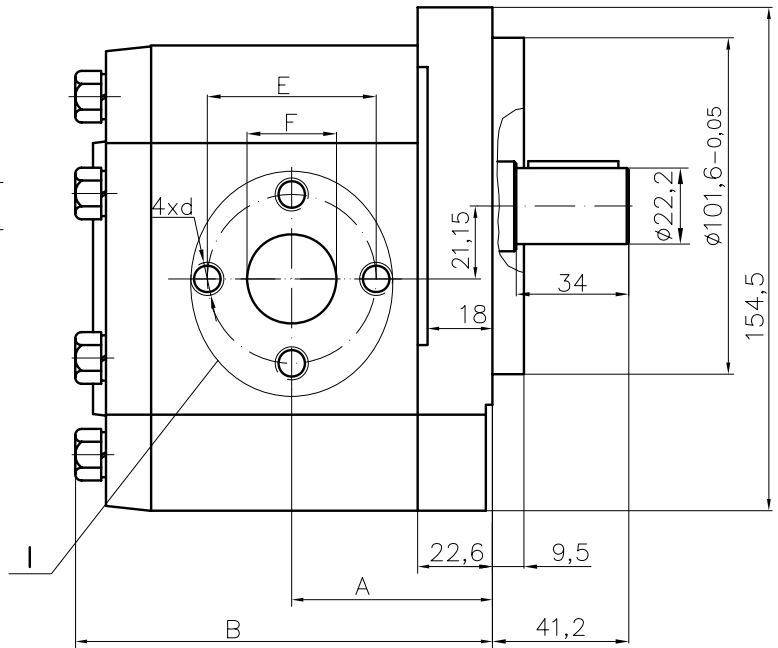
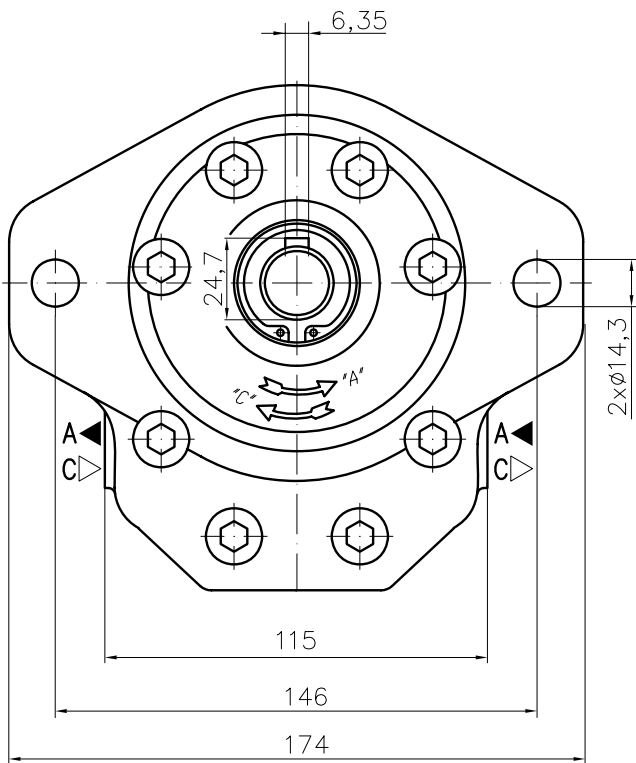
Designation: 30A(C)...X198HM(G)

For ports measures see table at 30A(C)...X163H

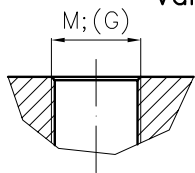
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			Inlet		Outlet						
						A mm	B mm	E	d	F	E	d	F	
30A(C)20X198H	20	28,2	56,4	250	3000	56,1	114,7	40	M8	19	40	M8	19	
30A(C)22,2X198H	22,5	31,7	63,5	250	3000	57,6	117,7							
30A(C)25X198H	25	35,3	70,5	250	3000	58,3	119,1							
30A(C)28X198H	28	39,5	79,0	250	3000	60,2	122,7							
30A(C)32X198	32	45,1	75,2	250	2500	62,0	126,3							
30A(C)32X198H	32	45,1	90,2	250	3000	66,5	135,3	51	M10	27	40	M8	19	
30A(C)36X198	36	50,8	84,6	250	2500	63,5	129,4							
30A(C)36X198H	36	51,3	95,8	250	2800	68,0	138,5							
30A(C)42X198	42	59,9	91,8	230	2300	66,3	135,0							
30A(C)42X198H	42	59,9	99,8	230	2500	70,8	144,0							
30A(C)46X198H	46	65,6	100,5	230	2300	72,7	147,8	51	M10	27	40	M8	19	
30A(C)50X198H	50	71,3	99,8	200	2100	74,5	151,4							
30A(C)55X198H	55	78,4	91,4	200	1750	76,7	155,9							
30A(C)60X198H	60	85,5	99,8	180	1750	78,7	160,4							



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	E	d	F	E	d	F
30A(C)20X236H	20	28,2	56,4	250	3000	56,1	116,7	40	M8	19	40	M8	19
30A(C)22,2X236H	22,5	31,7	63,5	250	3000	57,6	119,7						
30A(C)25X236H	25	35,3	70,5	250	3000	58,3	121,1						
30A(C)28X236H	28	39,5	79,0	250	3000	60,2	124,7						
30A(C)32X236	32	45,1	75,2	250	2500	62,0	128,3	51	M10	27			
30A(C)32X236H	32	45,1	90,2	250	3000	66,5	137,3						
30A(C)36X236	36	50,8	84,6	250	2500	63,5	131,4						
30A(C)36X236H	36	51,3	95,8	250	2800	68,0	140,5						
30A(C)42X236	42	59,9	91,8	230	2300	66,3	137,0						
30A(C)42X236H	42	59,9	99,8	230	2500	70,8	146,1						
30A(C)46X236H	46	65,6	100,5	230	2300	72,7	149,8						
30A(C)50X236H	50	71,3	99,8	200	2100	74,5	153,4						
30A(C)55X236H	55	78,4	91,4	200	1750	76,7	157,9						
30A(C)60X236H	60	85,5	99,8	180	1750	78,7	162,4						



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Variants: "M"; "G" threads

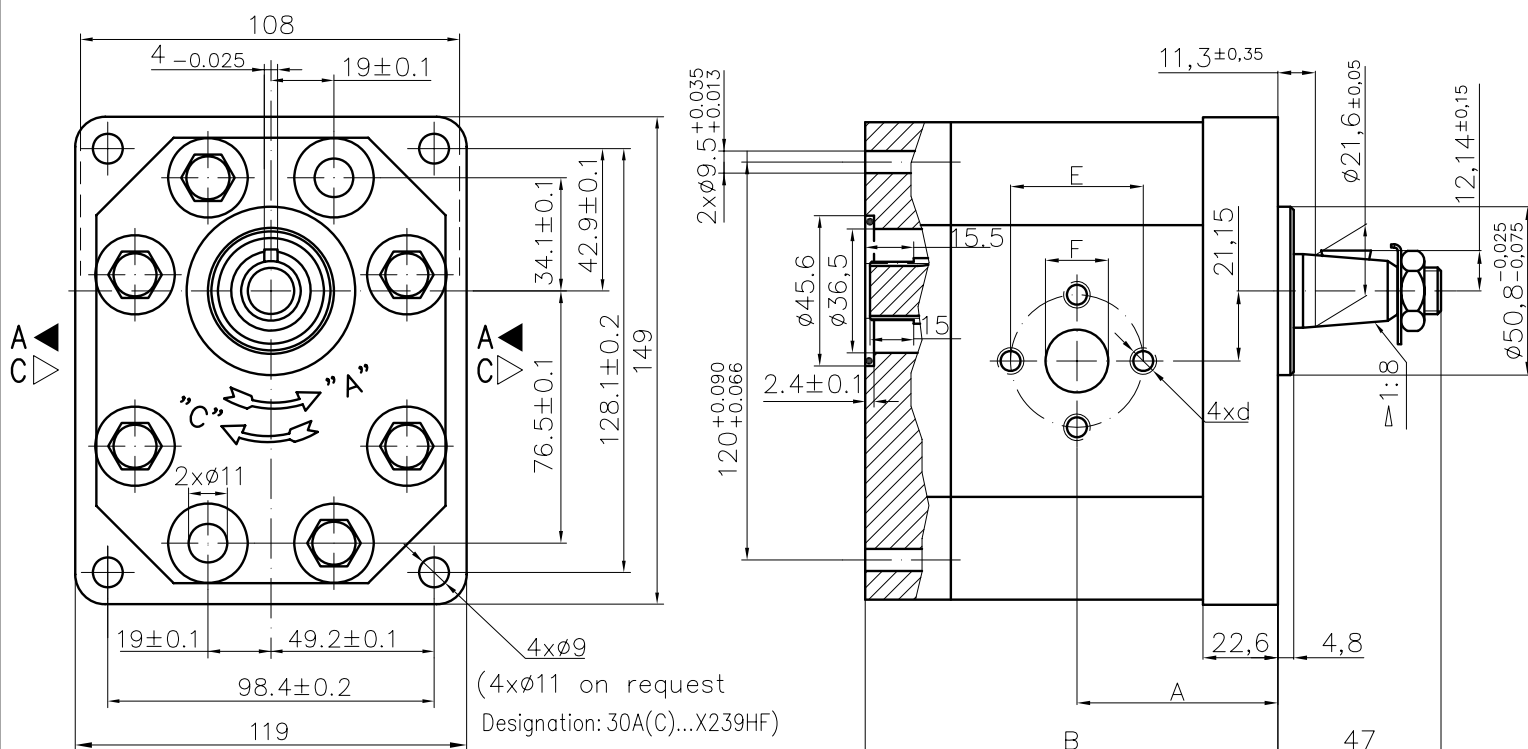


Designation: 30A(C)...X237HM(G)

For ports measures see table at 30A(C)...X163H

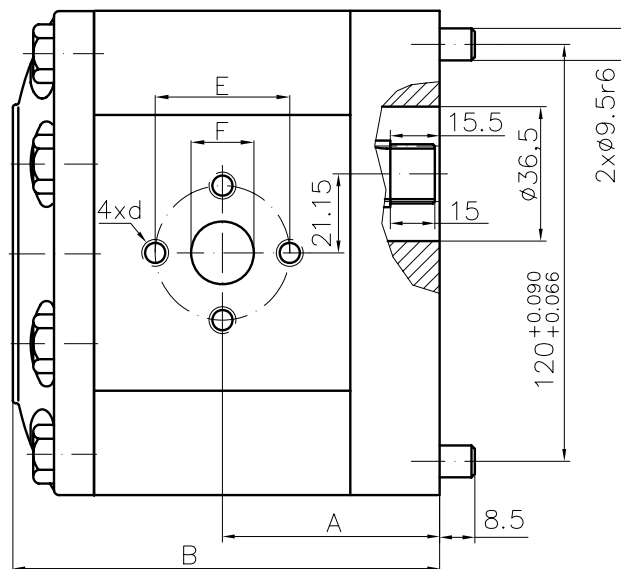
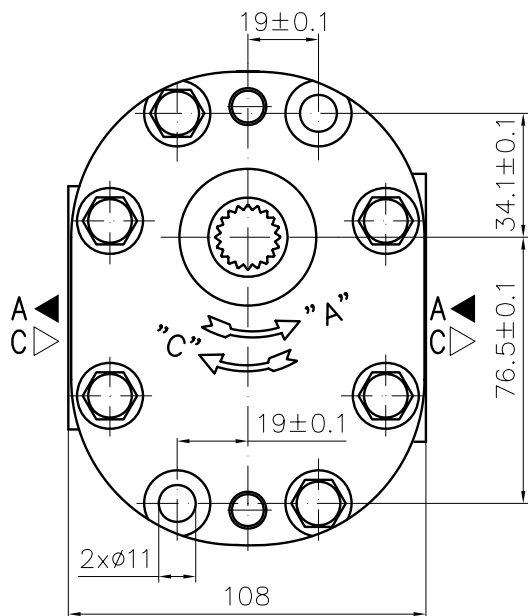
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	d	F	E	d	F
30A(C)20X237H	20	28,2	56,4	250	3000	56,1	116,7	40	M8	19	40	M8	19
30A(C)22,2X237H	22,5	31,7	63,5	250	3000	57,6	119,7						
30A(C)25X237H	25	35,3	70,5	250	3000	58,3	121,1						
30A(C)28X237H	28	39,5	79,0	250	3000	60,2	124,7						
30A(C)32X237	32	45,1	75,2	250	2500	62,0	128,3	51	M10	27	40	M8	19
30A(C)32X237H	32	45,1	90,2	250	3000	66,5	137,3						
30A(C)36X237	36	50,8	84,6	250	2500	63,5	131,4						
30A(C)36X237H	36	51,3	95,8	250	2800	68,0	140,5						
30A(C)42X237	42	59,9	91,8	230	2300	66,3	137,0	51	M10	27	40	M8	19
30A(C)42X237H	42	59,9	99,8	230	2500	70,8	146,1						
30A(C)46X237H	46	65,6	100,5	230	2300	72,7	149,8						
30A(C)50X237H	50	71,3	99,8	200	2100	74,5	153,4						
30A(C)55X237H	55	78,4	91,4	200	1750	76,7	157,9	51	M10	27	40	M8	19
30A(C)60X237H	60	85,5	99,8	180	1750	78,7	162,4						

Designed as a first section of multiple gear pumps group 33.



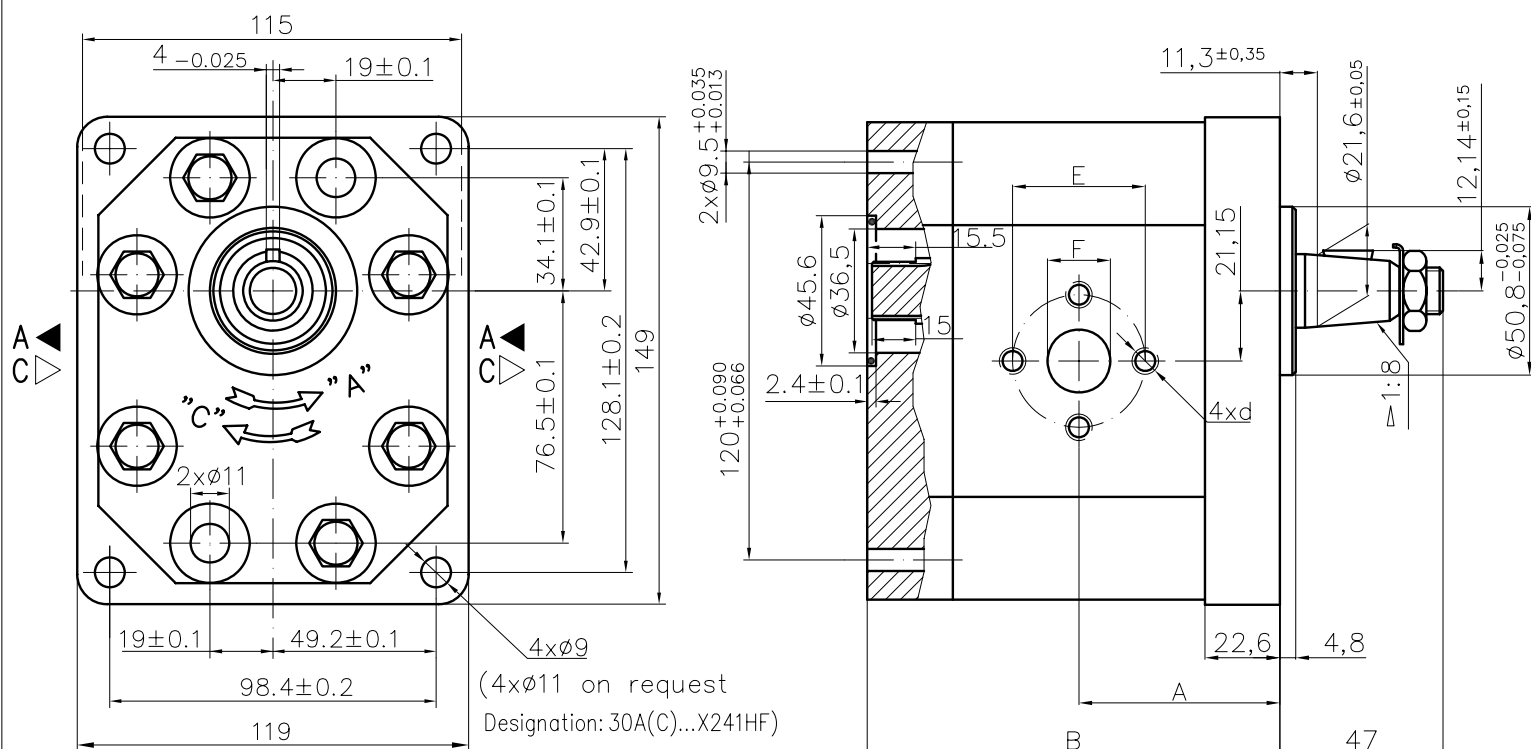
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	d	F	E	d	F
30A(C)20X239H	20	28,2	56,4	200	3000	56,1	114,7	40	M8	19	40	M8	19
30A(C)22,2X239H	22,5	31,7	63,5	200	3000	57,6	117,7						
30A(C)25X239H	25	35,3	70,5	200	3000	58,3	119,1						
30A(C)28X239H	28	39,5	79,0	200	3000	60,2	122,7						
30A(C)32X239	32	45,1	75,2	200	2500	62,0	126,3	51	M10	27	40	M8	19
30A(C)32X239H	32	45,1	90,2	200	3000	66,5	135,3						
30A(C)36X239	36	50,8	84,6	190	2500	63,5	129,4						
30A(C)36X239H	36	51,3	95,8	190	2800	68,0	138,5						
30A(C)42X239	42	59,9	91,8	190	2300	66,3	135,0	51	M10	27	40	M8	19
30A(C)42X239H	42	59,9	99,8	190	2500	70,8	144,0						
30A(C)46X239H	46	65,6	100,5	175	2300	72,7	147,8						
30A(C)50X239H	50	71,3	99,8	175	2100	74,5	151,4						
30A(C)55X239H	55	78,4	91,4	175	1750	76,7	155,9	51	M10	27	40	M8	19
30A(C)60X239H	60	85,5	99,8	160	1750	78,7	160,4						

Designed as a second section of multiple gear pumps group 33.



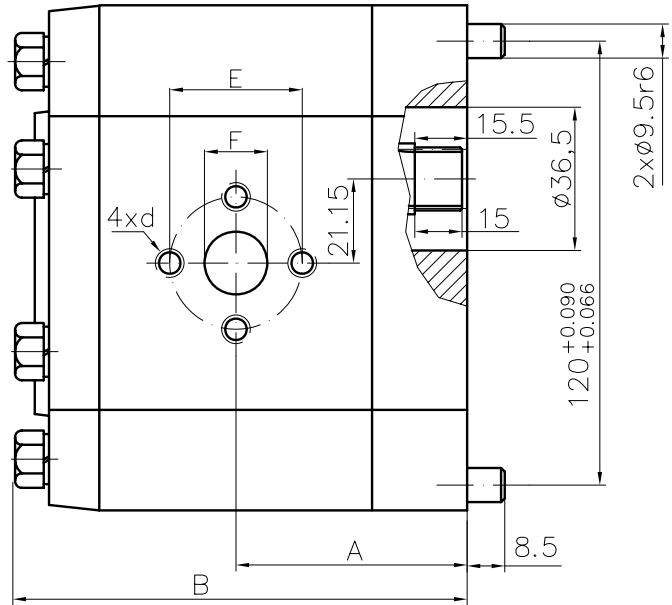
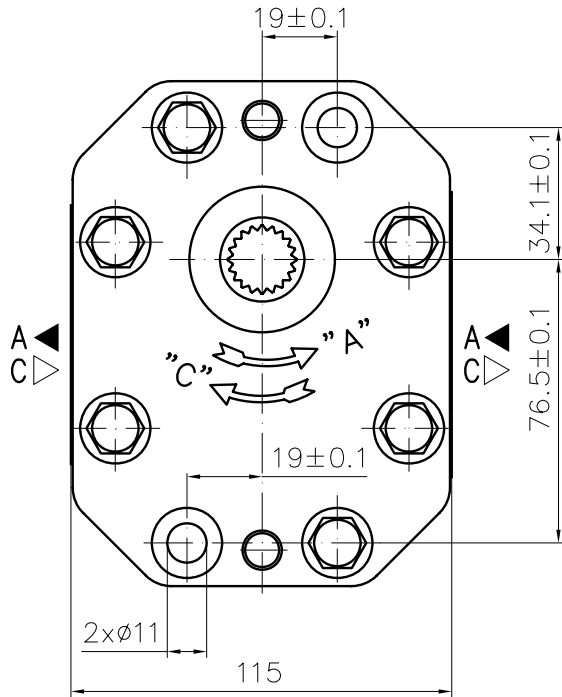
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet			
								E	d	F	E	d	F	
30A(C)20X240H	20	28,2	56,4	200	3000	58,3	118,9	40	M8	19	40	M8	19	
30A(C)22,2X240H	22,5	31,7	63,5	200	3000	59,7	121,9							
30A(C)25X240H	25	35,3	70,5	200	3000	60,5	123,3							
30A(C)28X240H	28	39,5	79,0	200	3000	62,4	126,9							
30A(C)32X240	32	45,1	75,2	200	2500	64,2	130,5							
30A(C)32X240H	32	45,1	90,2	200	3000	68,7	139,5	51	M10	27	40	M8	19	
30A(C)36X240	36	50,8	84,6	190	2500	65,7	133,6							
30A(C)36X240H	36	51,3	95,8	190	2800	70,2	142,7							
30A(C)42X240	42	59,9	91,8	190	2300	68,5	139,2							
30A(C)42X240H	42	59,9	99,8	190	2500	73,0	148,3							
30A(C)46X240H	46	65,6	100,5	175	2300	74,9	152,0	51	M10	27	40	M8	19	
30A(C)50X240H	50	71,3	99,8	175	2100	76,7	155,6							
30A(C)55X240H	55	78,4	91,4	175	1750	78,9	160,1							
30A(C)60X240H	60	85,5	99,8	160	1750	80,9	164,6							

Designed as a first section of multiple gear pumps group 33.



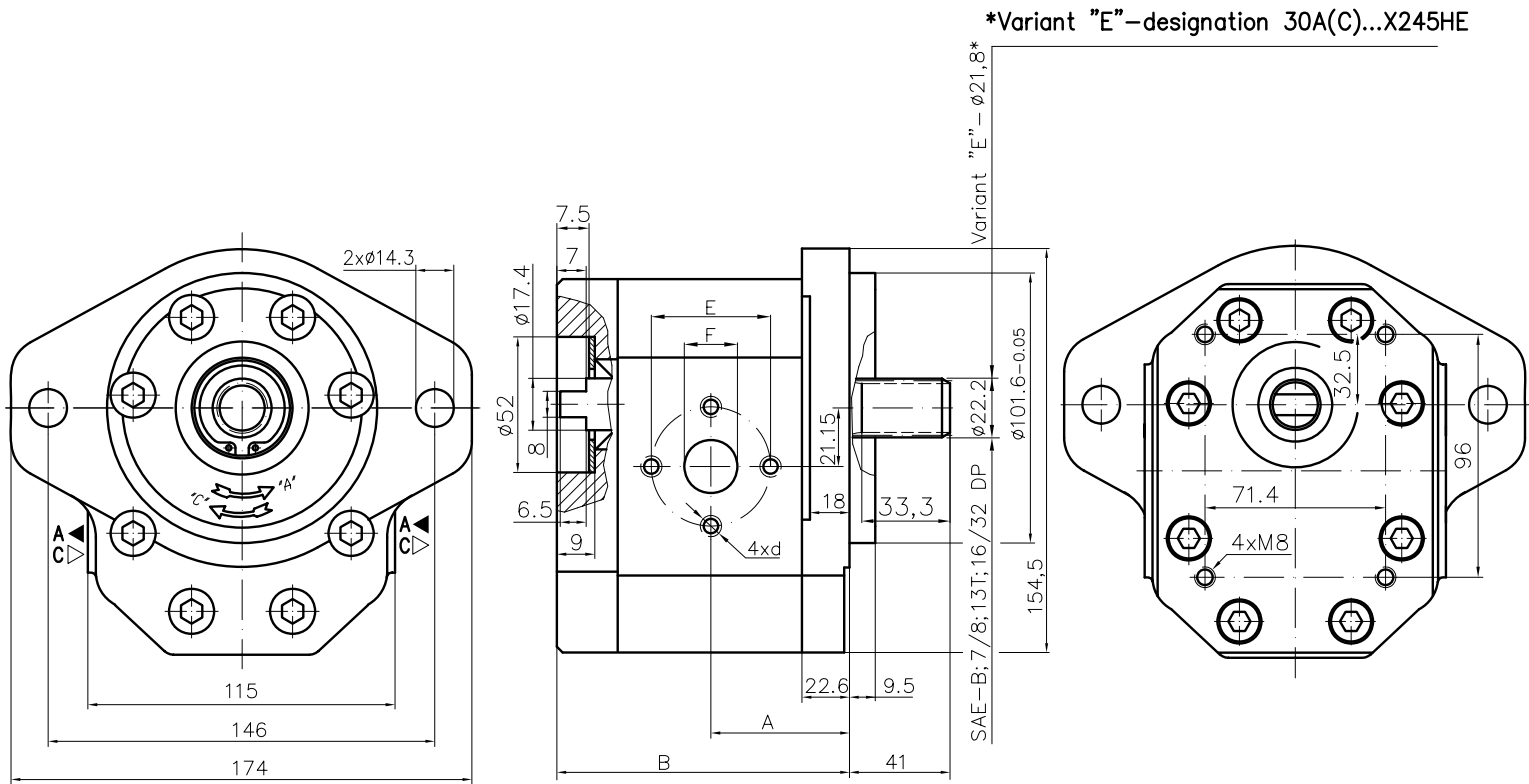
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	d	F	E	d	F
30A(C)20X241H	20	28,2	56,4	250	3000	56,1	114,7	40	M8	19	40	M8	19
30A(C)22,2X241H	22,5	31,7	63,5	250	3000	57,6	117,7						
30A(C)25X241H	25	35,3	70,5	250	3000	58,3	119,1						
30A(C)28X241H	28	39,5	79,0	250	3000	60,2	122,7						
30A(C)32X241	32	45,1	75,2	250	2500	62,0	126,3						
30A(C)32X241H	32	45,1	90,2	250	3000	66,5	135,3	51	M10	27	40	M8	19
30A(C)36X241	36	50,8	84,6	250	2500	63,5	129,4						
30A(C)36X241H	36	51,3	95,8	250	2800	68,0	138,5						
30A(C)42X241	42	59,9	91,8	230	2300	66,3	135,0						
30A(C)42X241H	42	59,9	99,8	230	2500	70,8	144,0						
30A(C)46X241H	46	65,6	100,5	230	2300	72,7	147,8						
30A(C)50X241H	50	71,3	99,8	200	2100	74,5	151,4						
30A(C)55X241H	55	78,4	91,4	200	1750	76,7	155,9						
30A(C)60X241H	60	85,5	99,8	180	1750	78,7	160,4						

Designed as a second section of multiple gear pumps group 33.



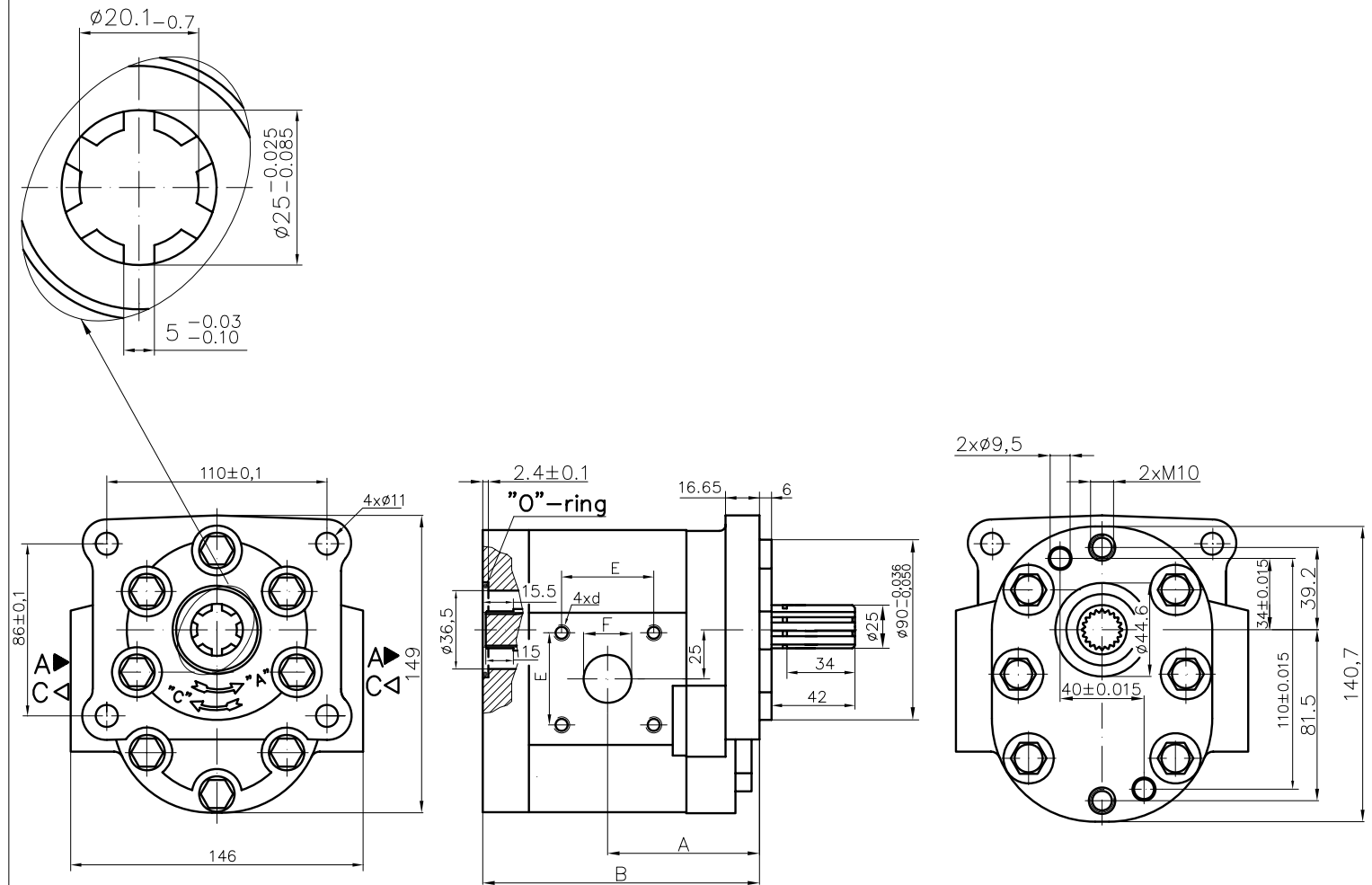
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet			
								E	d	F	E	d	F	
30A(C)20X242H	20	28,2	56,4	250	3000	58,3	118,9	40	M8	19	40	M8	19	
30A(C)22,2X242H	22,5	31,7	63,5	250	3000	59,7	121,9							
30A(C)25X242H	25	35,3	70,5	250	3000	60,5	123,3							
30A(C)28X242H	28	39,5	79,0	250	3000	62,4	126,9							
30A(C)32X242	32	45,1	75,2	250	2500	64,2	130,5							
30A(C)32X242H	32	45,1	90,2	250	3000	68,7	139,5	51	M10	27	40	M8	19	
30A(C)36X242	36	50,8	84,6	250	2500	65,7	133,6							
30A(C)36X242H	36	51,3	95,8	250	2800	70,2	142,7							
30A(C)42X242	42	59,9	91,8	230	2300	68,5	139,2							
30A(C)42X242H	42	59,9	99,8	230	2500	73,0	148,3							
30A(C)46X242H	46	65,6	100,5	230	2300	74,9	152,0	51	M10	27	40	M8	19	
30A(C)50X242H	50	71,3	99,8	200	2100	76,7	155,6							
30A(C)55X242H	55	78,4	91,4	200	1750	78,9	160,1							
30A(C)60X242H	60	85,5	99,8	180	1750	80,9	164,6							

Designed as a first section of multiple gear pumps group 32.
Usually connected with second section pumps type 20A(C)...X201.



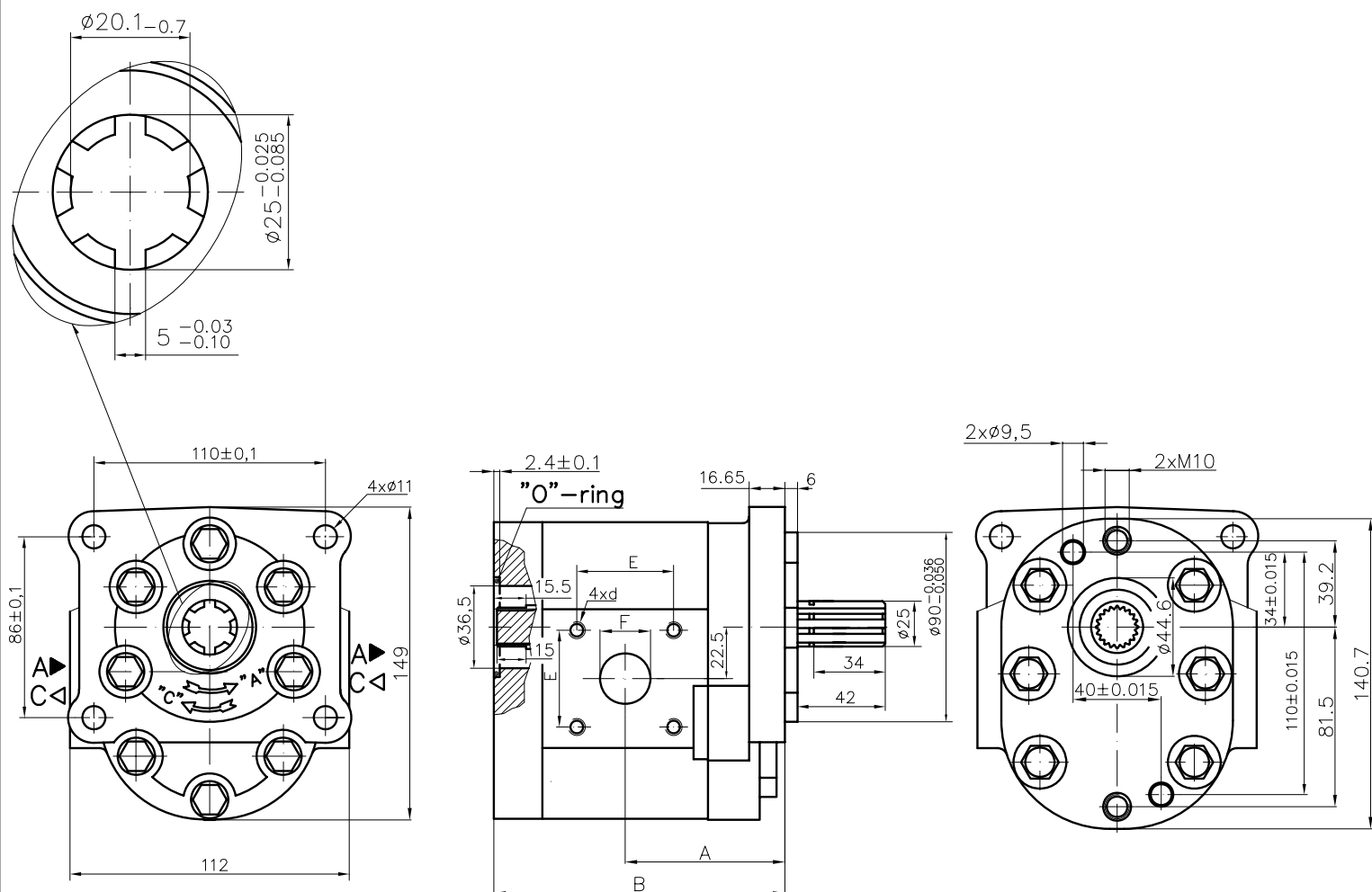
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	E	d	F	E	d	F
30A(C)20X245H	20	28,2	56,4	250	3000	56,1	114,7	40	M8	19	40	M8	19
30A(C)22,2X245H	22,5	31,7	63,5	250	3000	57,6	117,7						
30A(C)25X245H	25	35,3	70,5	250	3000	58,3	119,1						
30A(C)28X245H	28	39,5	79,0	250	3000	60,2	122,7						
30A(C)32X245	32	45,1	75,2	250	2500	62,0	126,3	51	M10	27	40	M8	19
30A(C)32X245H	32	45,1	90,2	250	3000	66,5	135,3						
30A(C)36X245	36	50,8	84,6	250	2500	63,5	129,4						
30A(C)36X245H	36	51,3	95,8	250	2800	68,0	138,5						
30A(C)42X245	42	59,9	91,8	230	2300	66,3	135,0						
30A(C)42X245H	42	59,9	99,8	230	2500	70,8	144,0						
30A(C)46X245H	46	65,6	100,5	230	2300	72,7	147,8						
30A(C)50X245H	50	71,3	99,8	200	2100	74,5	151,4						
30A(C)55X245H	55	78,4	91,4	200	1750	76,7	155,9						
30A(C)60X245H	60	85,5	99,8	180	1750	78,7	160,4						

Designed as a first section of multiple gear pumps group 33.



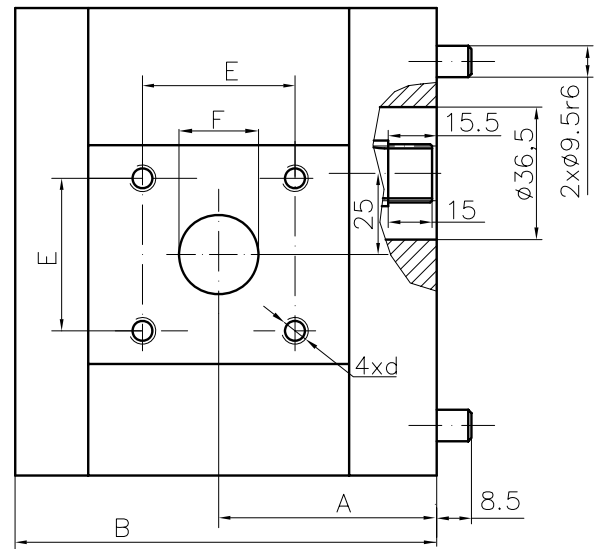
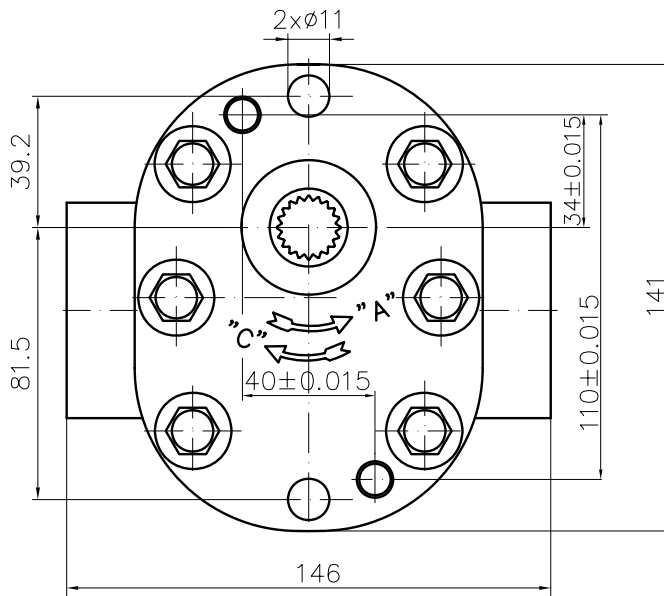
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet		Outlet			
								E	d	F	E	d	F
30A(C)25X247	24,5	34,5	69,1	200	3000	72,5	133,0	46	M8	20	46	M8	20
30A(C)32X247	32	45,1	75,2	200	2500	76,0	140,3	46	M8	22	46	M8	22
30A(C)32X247H	32	45,1	75,2	200	2500	76,0	140,7						
30A(C)46X247	46	65,6	100,5	190	2300	72,5	144,2	54	M10	27	54	M10	27
30A(C)46X247H	46	65,6	100,5	190	2300	72,5	153,2						
30A(C)50X247	50	71,3	99,8	175	2100	72,5	147,8						
30A(C)50X247H	50	71,3	99,8	175	2100	72,5	156,8						

Designed as a first section of multiple gear pumps group 33.



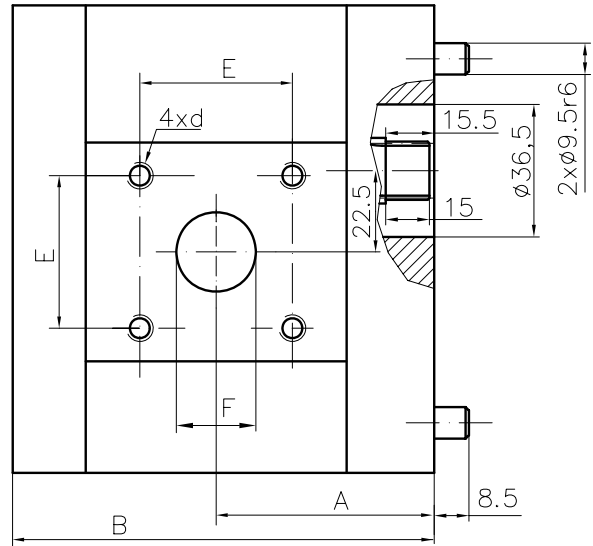
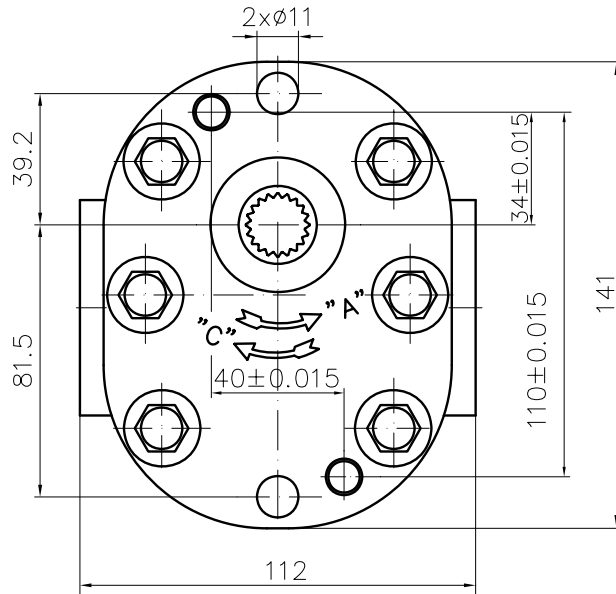
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet		Outlet					
						A mm	B mm	E mm	d mm	F mm	E mm	d mm	F mm
30A(C)25X247Y	24,5	34,5	69,1	200	3000	64,0	124,5	46	M8	20	46	M8	20
30A(C)32X247Y	32	45,1	75,2	200	2500	67,6	131,8	46	M8	22	46	M8	22
30A(C)46X247Y	46	65,6	100,5	190	2300	72,5	144,2						
30A(C)50X247Y	50	71,3	99,8	175	2100	72,5	147,8	54	M10	27	54	M10	27

Designed as a second section of multiple gear pumps group 33.

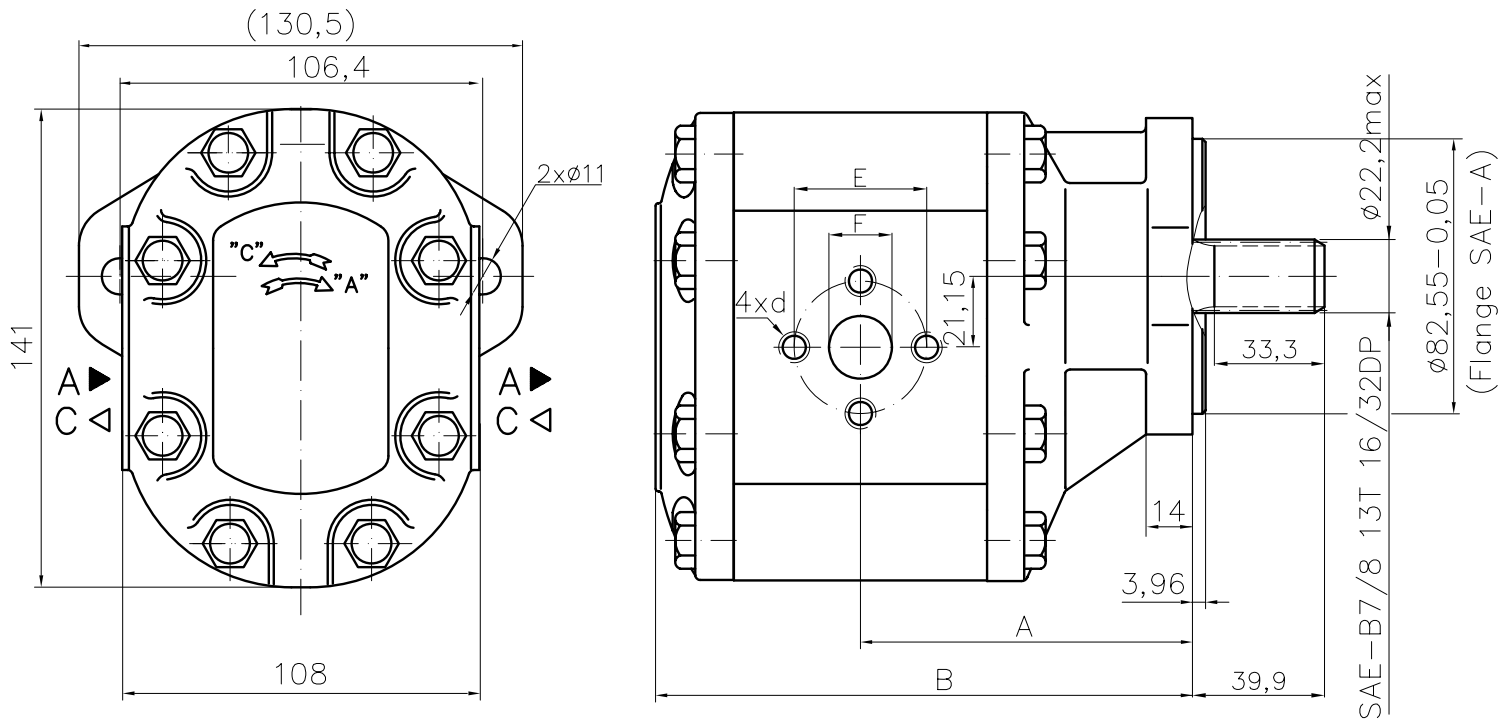


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet		Outlet					
						A mm	B mm	E	d	F	E	d	F
30A(C)25X248	24,5	34,5	69,1	200	3000	60,6	118,3	46	M8	19	46	M8	19
30A(C)32X248	32	45,1	75,2	200	2500	64,2	125,5	46	M8	22	46	M8	22
30A(C)32X248H	32	45,1	75,2	200	2500	68,6	134,5						
30A(C)46X248	46	65,6	100,5	190	2300	70,4	138,0	54	M10	27	54	M10	27
30A(C)46X248H	46	65,6	100,5	190	2300	74,9	147,0						
30A(C)50X248	50	71,3	99,8	175	2100	72,2	141,6						
30A(C)50X248H	50	71,3	99,8	175	2100	76,7	150,6						

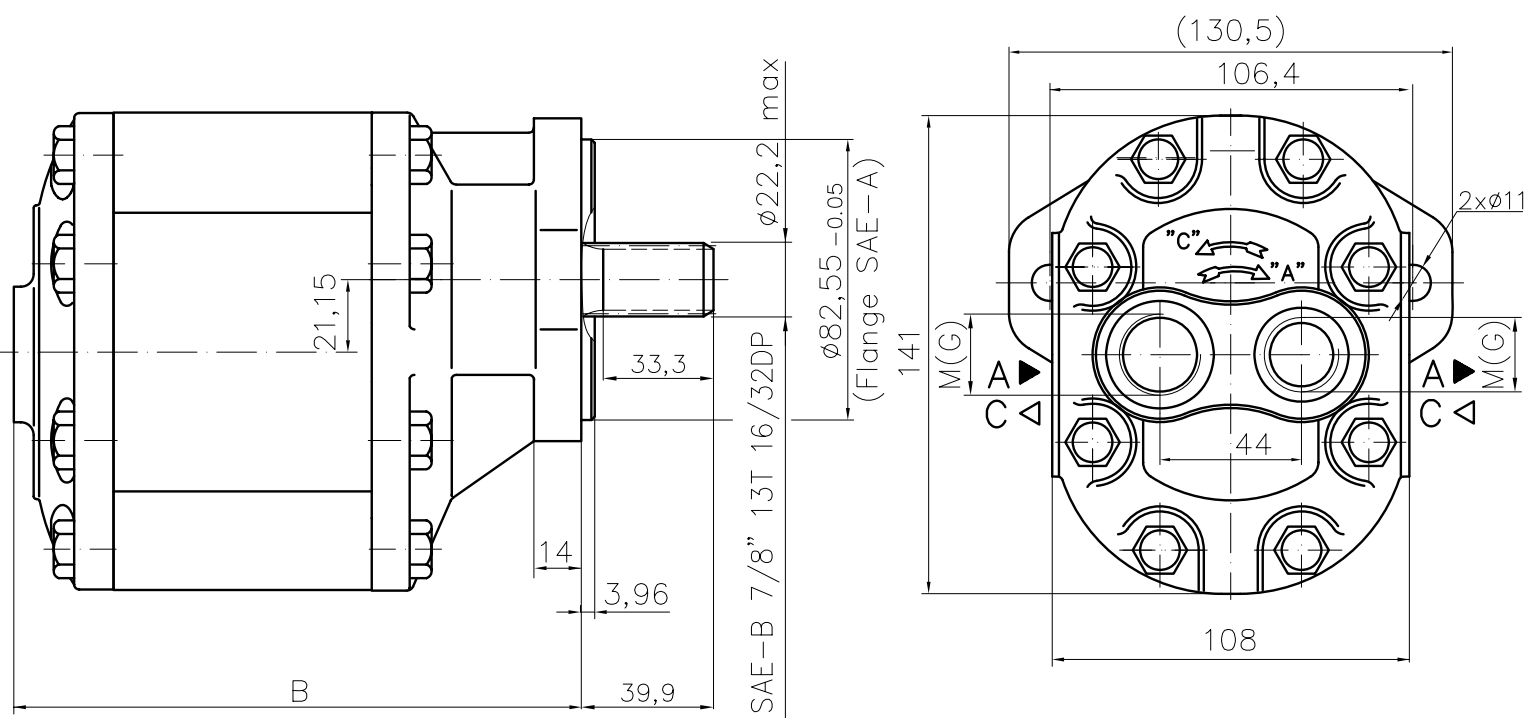
Designed as a second section of multiple gear pumps group 33.



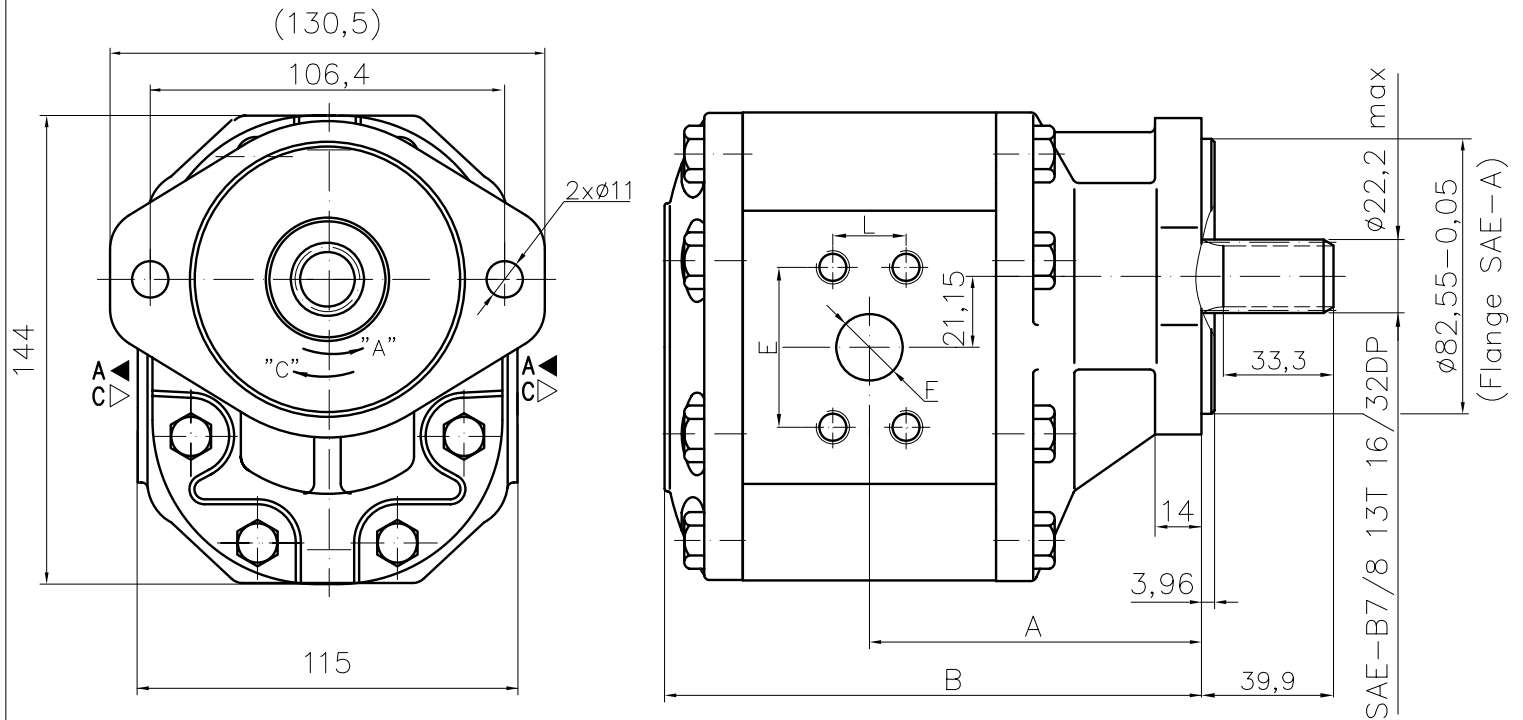
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet		Outlet					
						A mm	B mm	E mm	d	F mm	E mm	d	F mm
30A(C)25X248Y	24,5	34,5	69,1	200	3000	60,6	118,3	46	M8	20	46	M8	20
30A(C)32X248Y	32	45,1	75,2	200	2500	64,2	125,5	46	M8	22	46	M8	22
30A(C)46X248Y	46	65,6	100,5	190	2300	70,4	138,0	54	M10	27	54	M10	27
30A(C)50X248Y	50	71,3	99,8	175	2100	72,2	141,6	54	M10	27	54	M10	27



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet			
								E	d	F	E	d	F	
30A(C)20X263H	20	28,2	56,4	200	3000	95,1	152,3	40	M8	19	40	M8	19	
30A(C)22,2X263H	22,5	31,7	63,5	200	3000	96,8	155,4							
30A(C)25X263H	25	35,3	70,5	200	3000	97,4	156,8							
30A(C)28X263H	28	39,5	79,0	200	3000	99,1	160,2							
30A(C)32X263	32	45,1	75,2	200	2500	101,0	163,8							
30A(C)32X263H	32	45,1	90,2	200	3000	105,5	172,8	51	M10	27	40	M8	19	
30A(C)36X263	36	50,8	84,6	190	2500	102,7	166,9							
30A(C)36X263H	36	51,3	95,8	190	2800	107,2	175,9							
30A(C)42X263	42	59,9	91,8	190	2300	105,3	172,5							
30A(C)42X263H	42	59,9	99,8	190	2500	109,8	181,5							
30A(C)46X263H	46	65,6	100,5	175	2300	111,7	186,3	51	M10	27	40	M8	19	
30A(C)50X263H	50	71,3	99,8	175	2100	113,5	188,9							
30A(C)55X263H	55	78,4	91,4	175	1750	115,7	193,4							
30A(C)60X263H	60	85,5	99,8	160	1750	118,0	197,9							

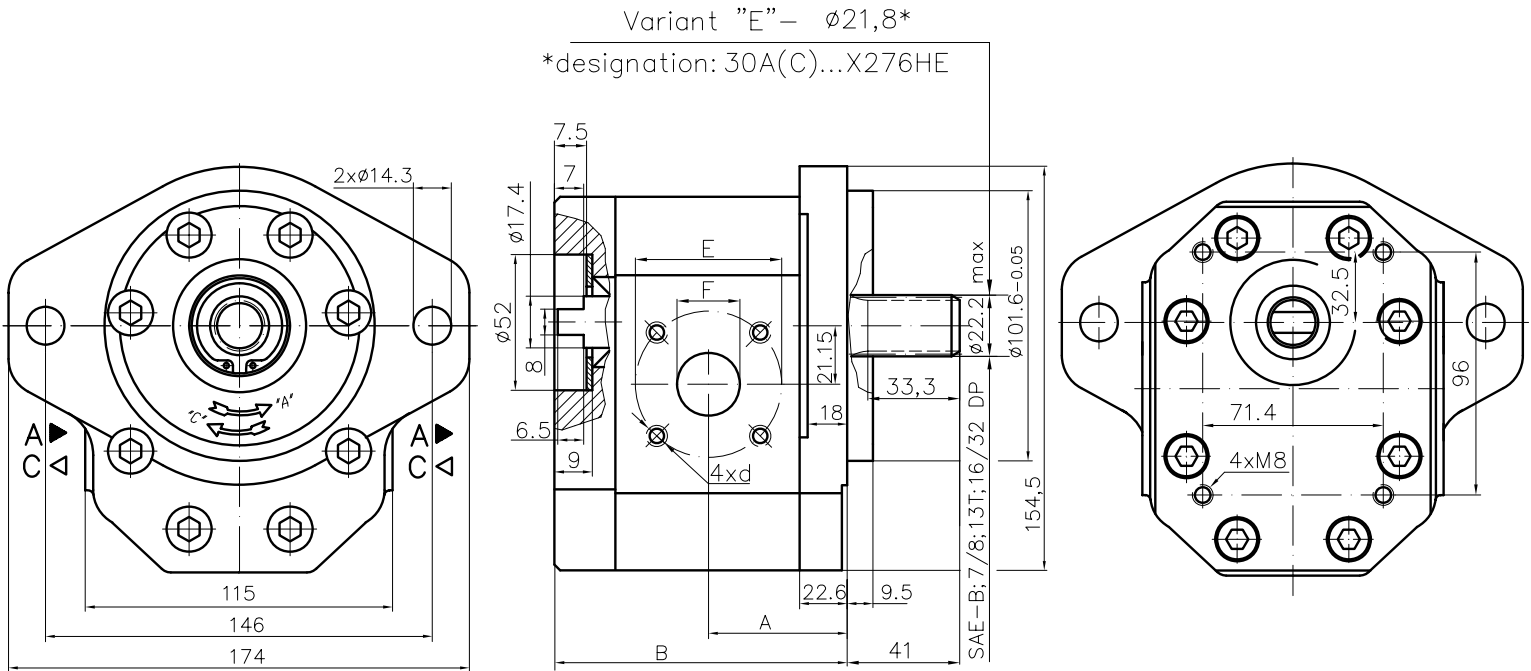


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension						
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet		Outlet		
								M	G		M	G
30A(C)20X263WH	20	28,2	56,4	200	3000		157,8	M33x2	G1"-A		M27x1,5	G3/4"-A
30A(C)22,2X263WH	22,5	31,7	63,5	200	3000		160,9					
30A(C)25X263WH	25	35,3	70,5	200	3000		162,3					
30A(C)28X263WH	28	39,5	79,0	200	3000		165,7					
30A(C)32X263W	32	45,1	75,2	200	2500		169,3					
30A(C)32X263WH	32	45,1	90,2	200	3000		178,3					
30A(C)36X263W	36	50,8	84,6	190	2500		172,4					
30A(C)36X263WH	36	51,3	95,8	190	2800		181,4					
30A(C)42X263W	42	59,9	91,8	190	2300		178,0					
30A(C)42X263WH	42	59,9	99,8	190	2500		187,0					
30A(C)46X263WH	46	65,6	100,5	175	2300		191,8					
30A(C)50X263WH	50	71,3	99,8	175	2100		194,4					
30A(C)55X263WH	55	78,4	91,4	175	1750		198,9					
30A(C)60X263WH	60	85,5	99,8	160	1750		203,4					



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension									
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet				Outlet			
						E	d	F	L	E	d	F	L		
30A(C)32X274	32	45,1	75,2	220	2500	101,0	163,8	52,4	M8	27	26,2	52,4	M8	18	26,2
30A(C)32X274H	32	45,1	90,2	220	3000	105,5	172,8	52,4	M8	27	26,2	52,4	M8	18	26,2
30A(C)55X274	55	78,4	91,4	200	1750	111,2	184,4	35,6	M8	32	69,8	52,4	M8	22	26,2
30A(C)55X274H	55	78,4	91,4	200	1750	115,7	193,4	35,6	M8	32	69,8	52,4	M8	22	26,2

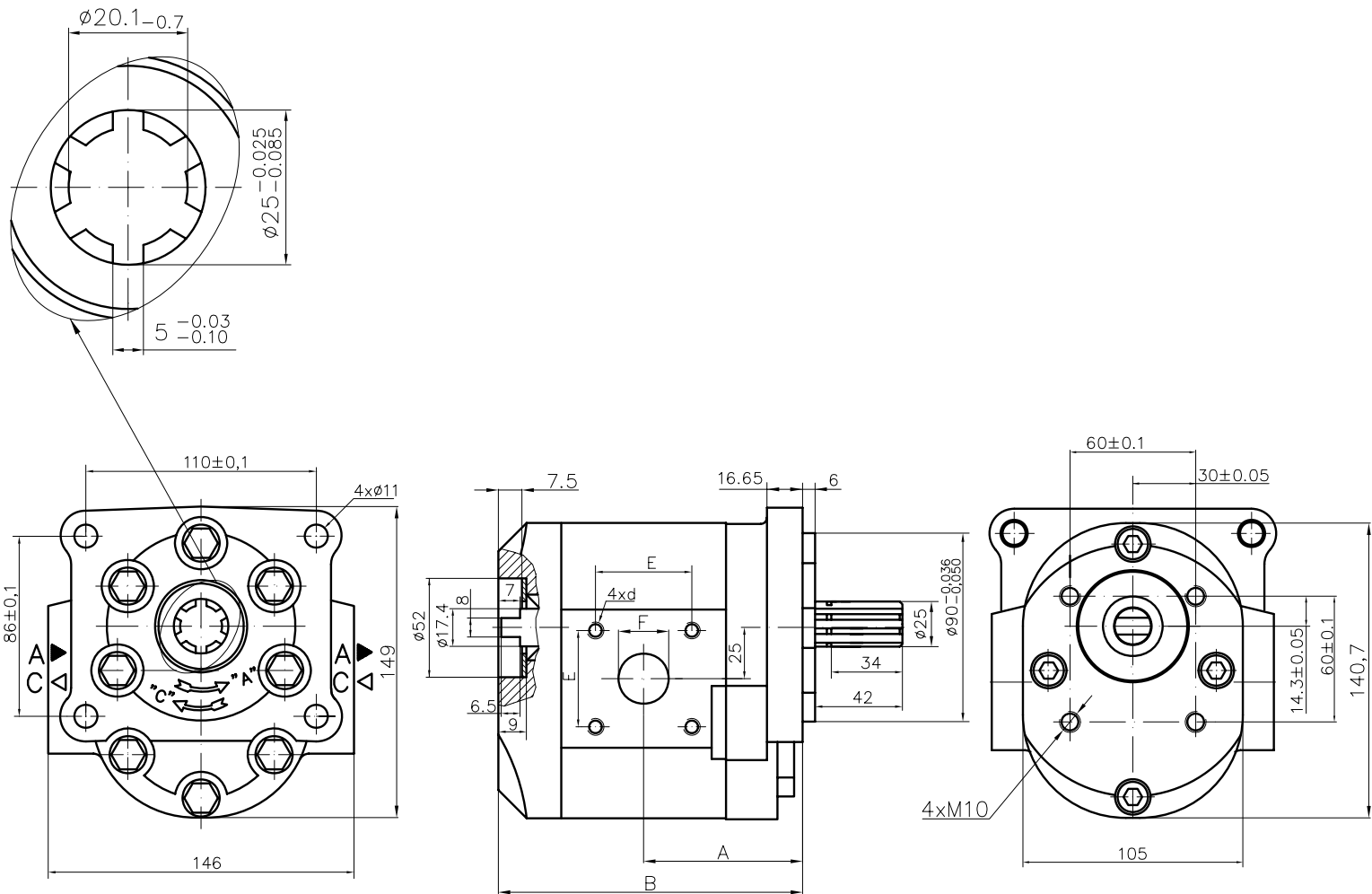
Designed as a first section of multiple gear pumps group 32.



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet			
								E	d	F	E	d	F	
30A(C)20X276H	20	28,2	56,4	250	3000	56,1	114,7	40	M8	19	40	M8	19	
30A(C)22,2X276H	22,5	31,7	63,5	250	3000	57,6	117,7							
30A(C)25X276H	25	35,3	70,5	250	3000	58,3	119,1							
30A(C)28X276H	28	39,5	79,0	250	3000	60,2	122,7							
30A(C)32X276	32	45,1	75,2	250	2500	62,0	126,3	55	M8	27	55	M8	19	
30A(C)32X276H	32	45,1	90,2	250	3000	66,5	135,3							
30A(C)36X276	36	50,8	84,6	250	2500	63,5	129,4							
30A(C)36X276H	36	51,3	95,8	250	2800	68,0	138,5							
30A(C)42X276	42	59,9	91,8	230	2300	66,3	135,0							
30A(C)42X276H	42	59,9	99,8	230	2500	70,8	144,0							
30A(C)46X276H	46	65,6	100,5	230	2300	72,7	147,8							
30A(C)50X276H	50	71,3	99,8	200	2100	74,5	151,4							
30A(C)55X276H	55	78,4	91,4	200	1750	76,7	155,9							
30A(C)60X276H	60	85,5	99,8	180	1750	78,7	160,4							

Designed as a first section of multiple gear pumps group 32.

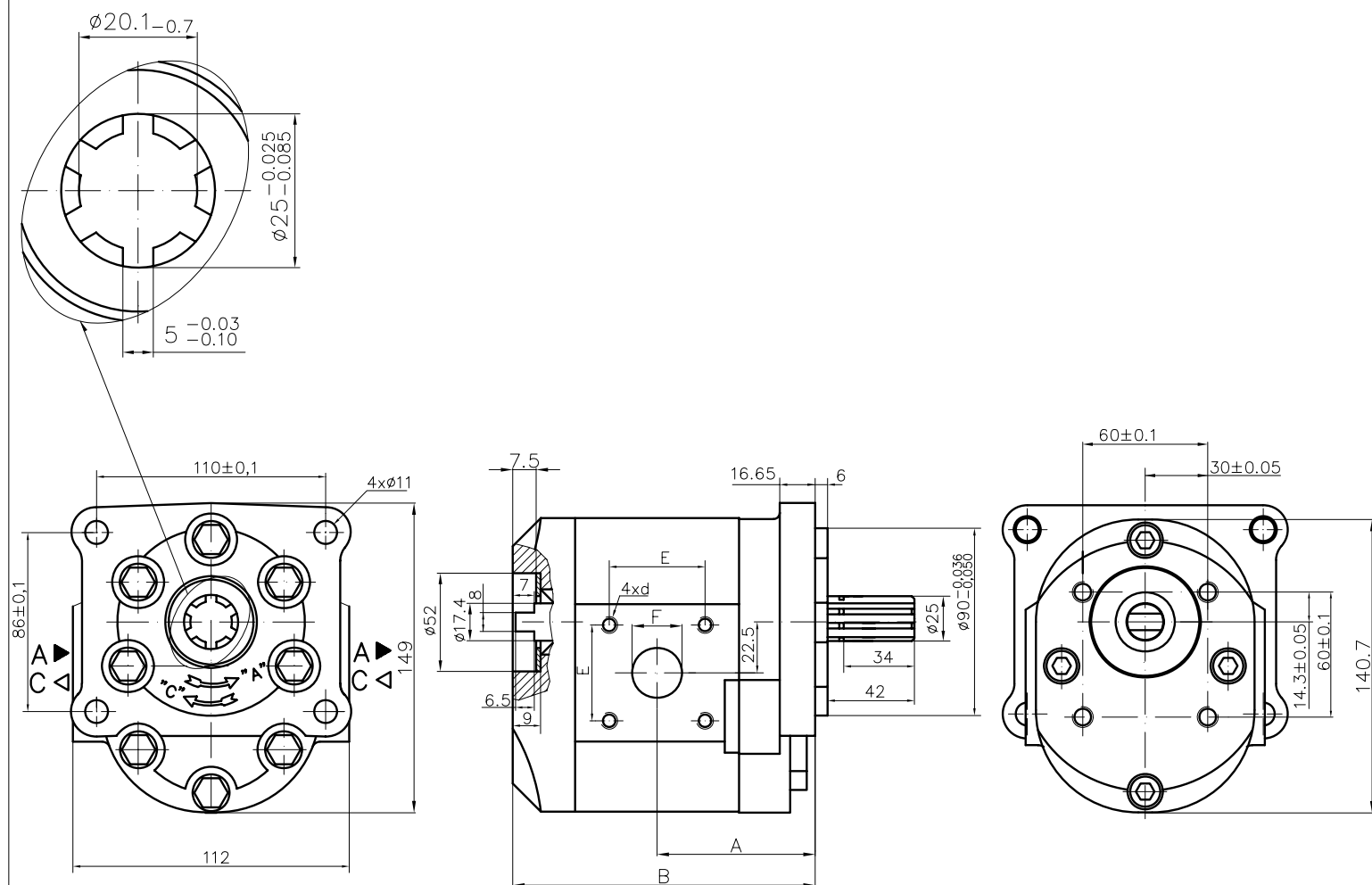
Usually connected with second section pumps type 20A(C)...X066; 20A(C)...X077 and others with central diameter $\phi 52$.



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet		Outlet			
								E	d	F	E	d	F
30A(C)25X277	24,5	34,5	69,1	200	3000	72,5	138,2	46	M8	20	46	M8	20
30A(C)32X277	32	45,1	75,2	200	2500	76,0	145,4	46	M8	22	46	M8	22
30A(C)32X277H	32	45,1	75,2	200	2500	76,0	154,4						
30A(C)46X277	46	65,6	100,5	190	2300	72,5	149,4	54	M10	27	54	M10	27
30A(C)46X277H	46	65,6	100,5	190	2300	72,5	158,4						
30A(C)50X277	50	71,3	99,8	175	2100	72,5	153,0						
30A(C)50X277H	50	71,3	99,8	175	2100	72,5	162,0						

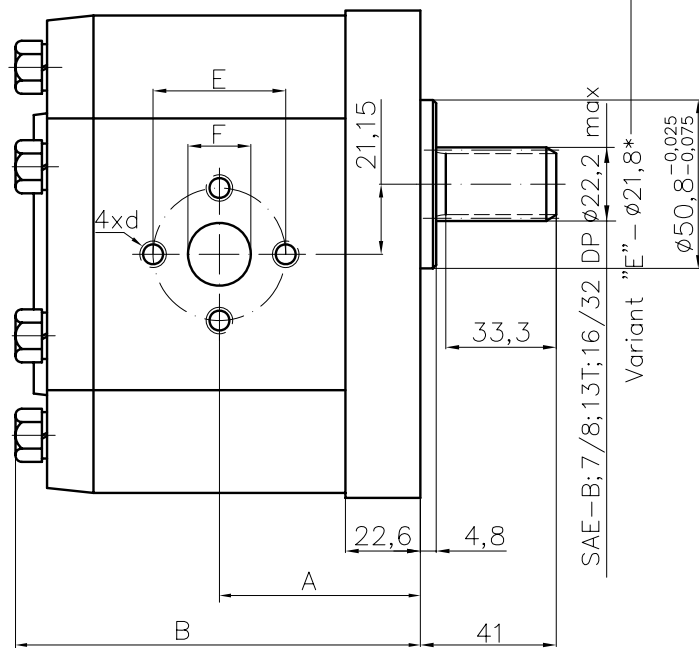
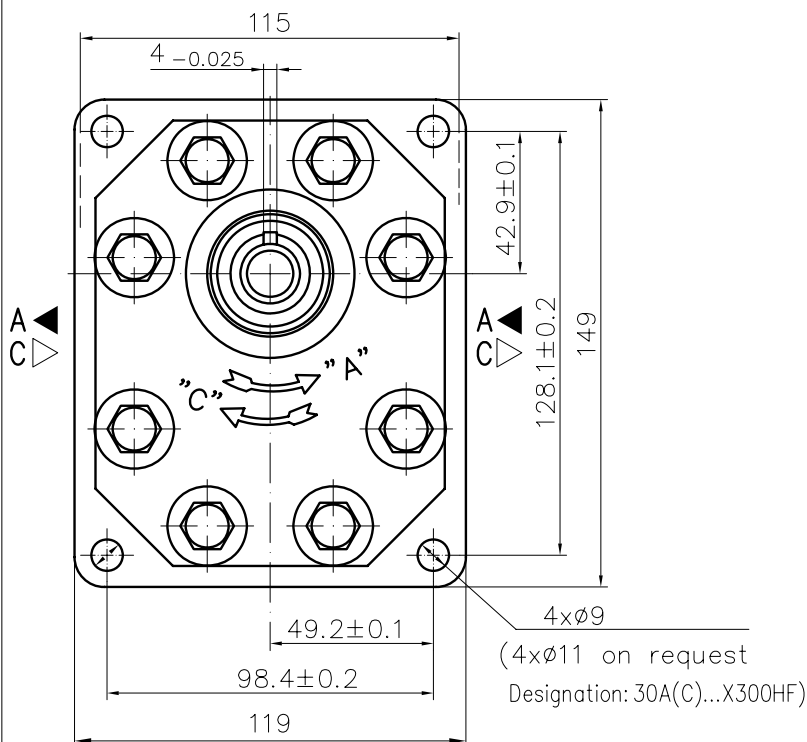
Designed as a first section of multiple pumps group 32.

Connected with second section pumps type 20A(C)...X066; 20A(C)...X077 and others with central diameter $\phi 52$.



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet		Outlet					
						A mm	B mm	E	d	F	E	d	F
30A(C)25X277Y	24,5	34,5	69,1	200	3000	64,0	129,7	46	M8	20	46	M8	20
30A(C)32X277Y	32	45,1	75,2	200	2500	67,6	136,9	46	M8	22	46	M8	22
30A(C)46X277Y	46	65,6	100,5	190	2300	72,5	149,4						
30A(C)50X277Y	50	71,3	99,8	175	2100	72,5	153,0	54	M10	27	54	M10	27

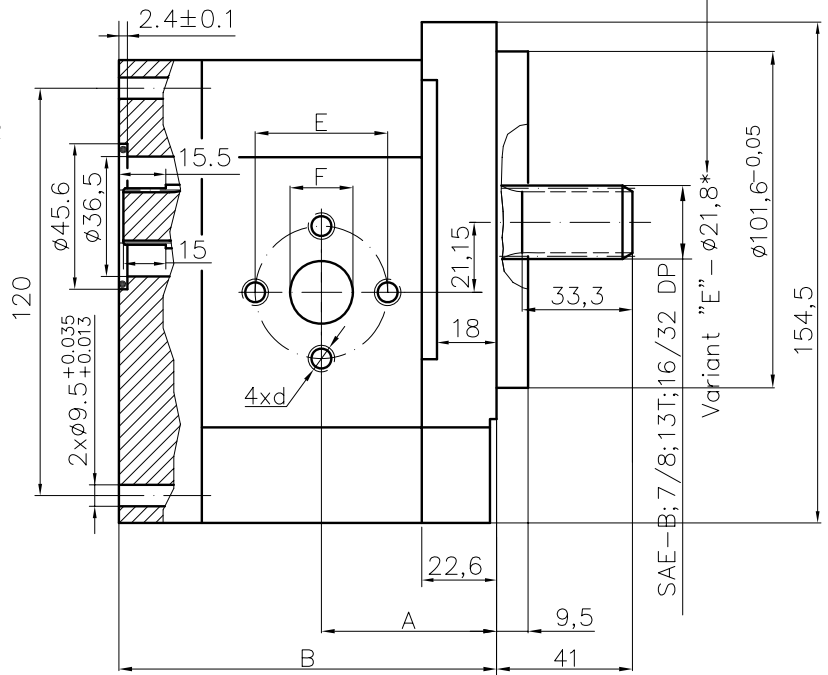
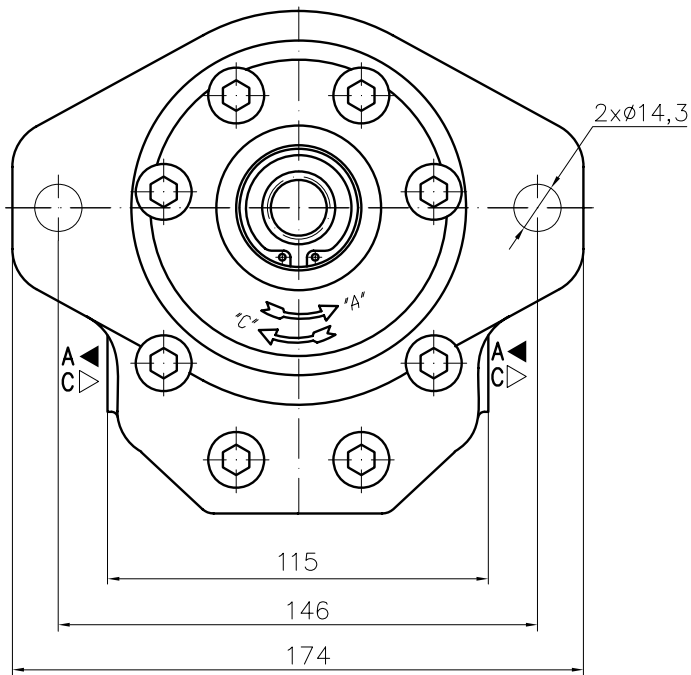
*designation: 30A(C)...X300HE



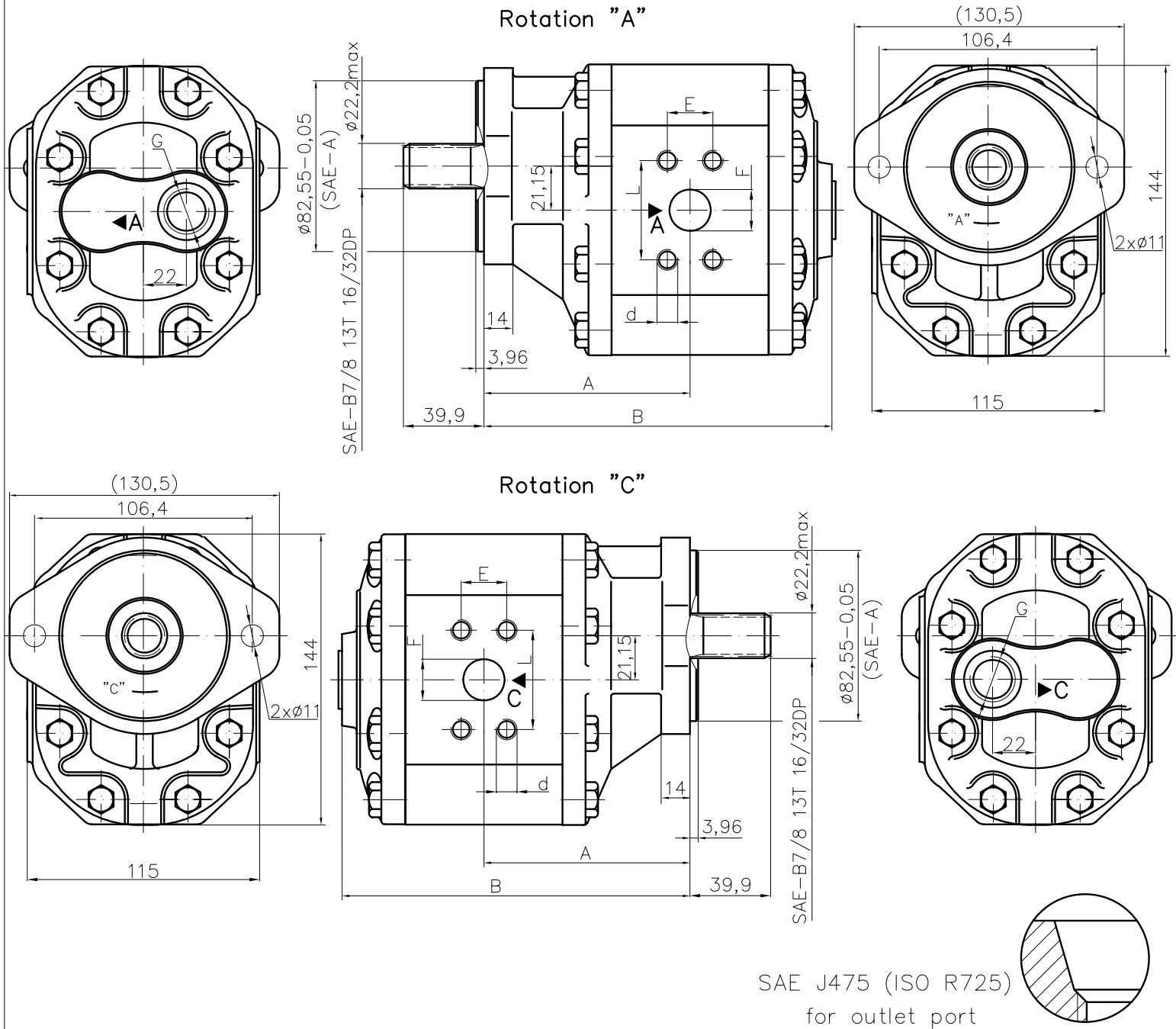
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	d	F	E	d	F
30A(C)20X300H	20	28,2	56,4	250	3000	56,1	116,7	40	M8	19	40	M8	19
30A(C)22,2X300H	22,5	31,7	63,5	250	3000	57,6	119,7						
30A(C)25X300H	25	35,3	70,5	250	3000	58,3	121,1						
30A(C)28X300H	28	39,5	79,0	250	3000	60,2	124,7						
30A(C)32X300	32	45,1	75,2	250	2500	62,0	128,3	51	M10	27	40	M8	19
30A(C)32X300H	32	45,1	90,2	250	3000	66,5	137,3						
30A(C)36X300	36	50,8	84,6	250	2500	63,5	131,4						
30A(C)36X300H	36	51,3	95,8	250	2800	68,0	140,5						
30A(C)42X300	42	59,9	91,8	230	2300	66,3	137,0	51	M10	27	40	M8	19
30A(C)42X300H	42	59,9	99,8	230	2500	70,8	146,1						
30A(C)46X300H	46	65,6	100,5	230	2300	72,7	149,8						
30A(C)50X300H	50	71,3	99,8	200	2100	74,5	153,4						
30A(C)55X300H	55	78,4	91,4	200	1750	76,7	157,9	51	M10	27	40	M8	19
30A(C)60X300H	60	85,5	99,8	180	1750	78,7	162,4						

Designed as a first section of multiple gear pumps group 33.

*designation: 30A(C)...X309HE

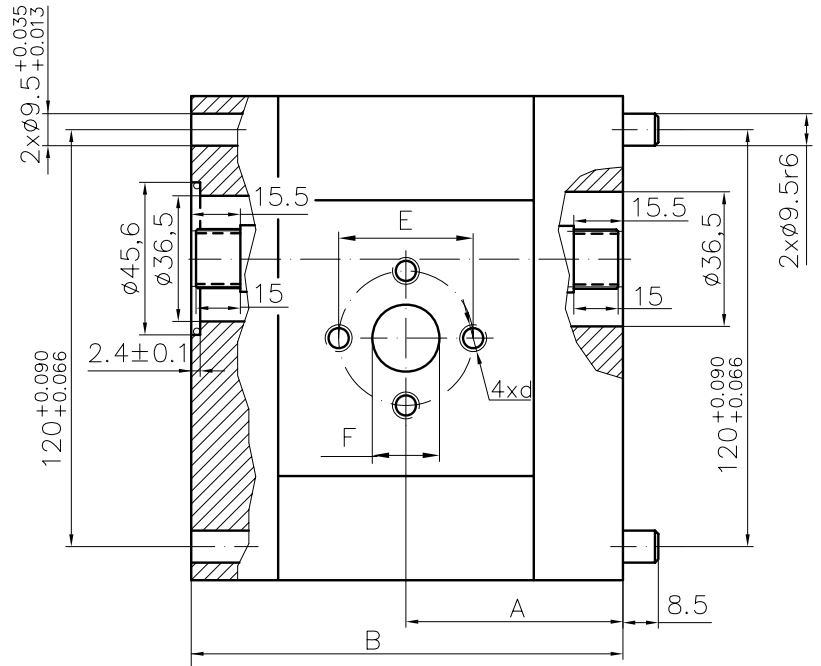
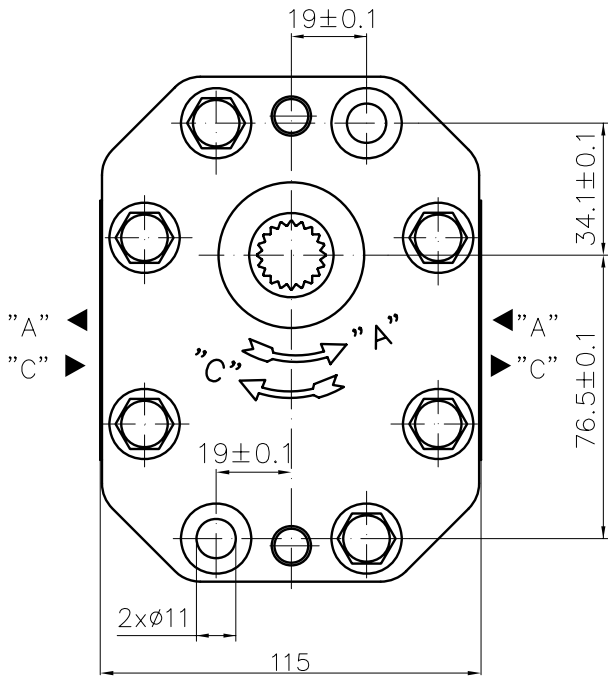


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	d	F	E	d	F
30A(C)20X309H	20	28,2	56,4	250	3000	56,1	114,7	40	M8	19	40	M8	19
30A(C)22,2X309H	22,5	31,7	63,5	250	3000	57,6	117,7						
30A(C)25X309H	25	35,3	70,5	250	3000	58,3	119,1						
30A(C)28X309H	28	39,5	79,0	250	3000	60,2	122,7						
30A(C)32X309	32	45,1	75,2	250	2500	62,0	126,3	51	M10	27	40	M8	19
30A(C)32X309H	32	45,1	90,2	250	3000	66,5	135,3						
30A(C)36X309	36	50,8	84,6	250	2500	63,5	129,4						
30A(C)36X309H	36	51,3	95,8	250	2800	68,0	138,5						
30A(C)42X309	42	59,9	91,8	230	2300	66,3	135,0	51	M10	27	40	M8	19
30A(C)42X309H	42	59,9	99,8	230	2500	70,8	144,0						
30A(C)46X309H	46	65,6	100,5	230	2300	72,7	147,8						
30A(C)50X309H	50	71,3	99,8	200	2100	74,5	151,4						
30A(C)55X309H	55	78,4	91,4	200	1750	76,7	155,9	51	M10	27	40	M8	19
30A(C)60X309H	60	85,5	99,8	180	1750	78,7	160,4						



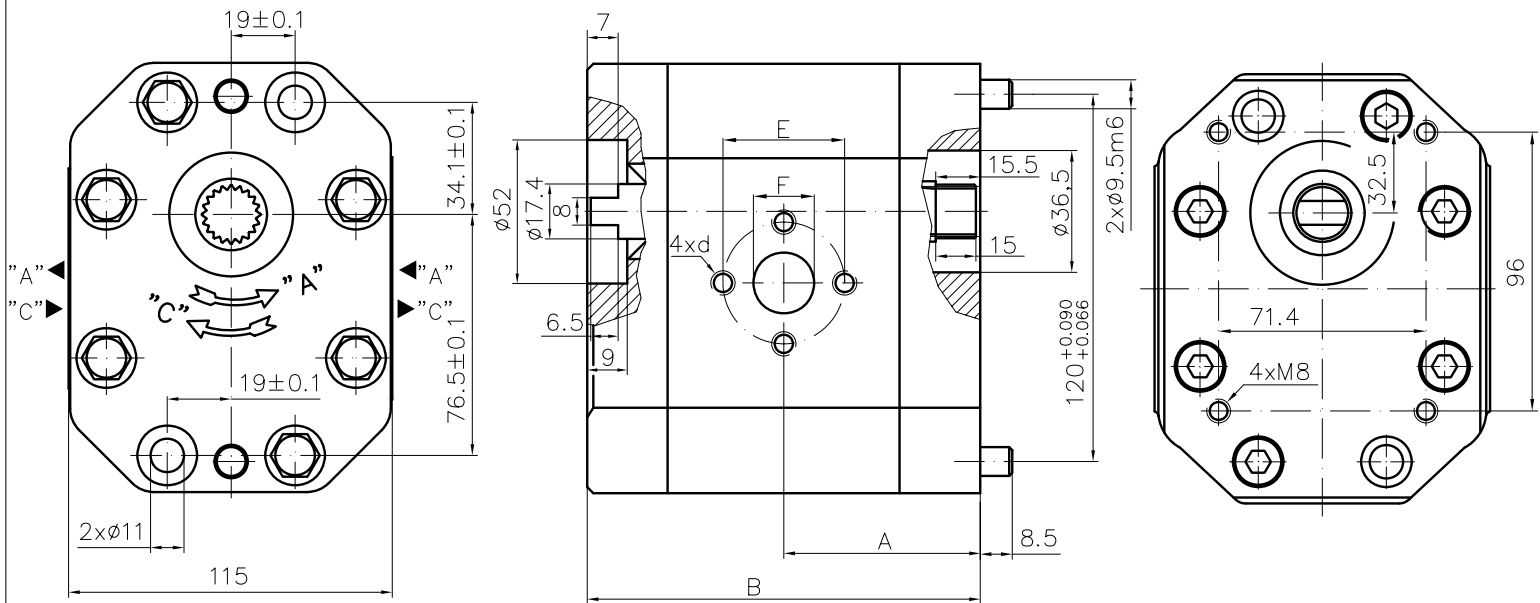
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet				Outlet		
						E	d	F	L					
30A(C)20X323H	20	28,2	56,4	250	3000	95,1	152,3							
30A(C)22,2X323H	22,5	31,7	63,5	250	3000	96,8	155,4							
30A(C)25X323H	25	35,3	70,5	250	3000	97,4	156,8							
30A(C)28X323H	28	39,5	79,0	250	3000	99,1	160,2							
30A(C)32X323	32	45,1	75,2	250	2500	101,0	163,8	52,4	M8	27	26,2			
30A(C)32X323H	32	45,1	90,2	250	3000	105,5	172,8	52,4	M8	27	26,2			
30A(C)36X323	36	50,8	84,6	250	2500	102,7	166,9							
30A(C)36X323H	36	51,3	95,8	250	2800	107,2	175,9							
30A(C)42X323	42	59,9	91,8	230	2300	105,3	172,5							
30A(C)42X323H	42	59,9	99,8	230	2500	109,8	181,5							
30A(C)46X323H	46	65,6	100,5	230	2300	111,7	186,3							
30A(C)50X323H	50	71,3	99,8	200	2100	113,5	188,9	35,6	M8	32	69,8			
30A(C)55X323H	55	78,4	91,4	200	1750	115,7	193,4	35,6	M8	32	69,8			
30A(C)60X323H	60	85,5	99,8	180	1750	118,0	197,9							

Designed as a middle section of multiple gear pumps group 333.

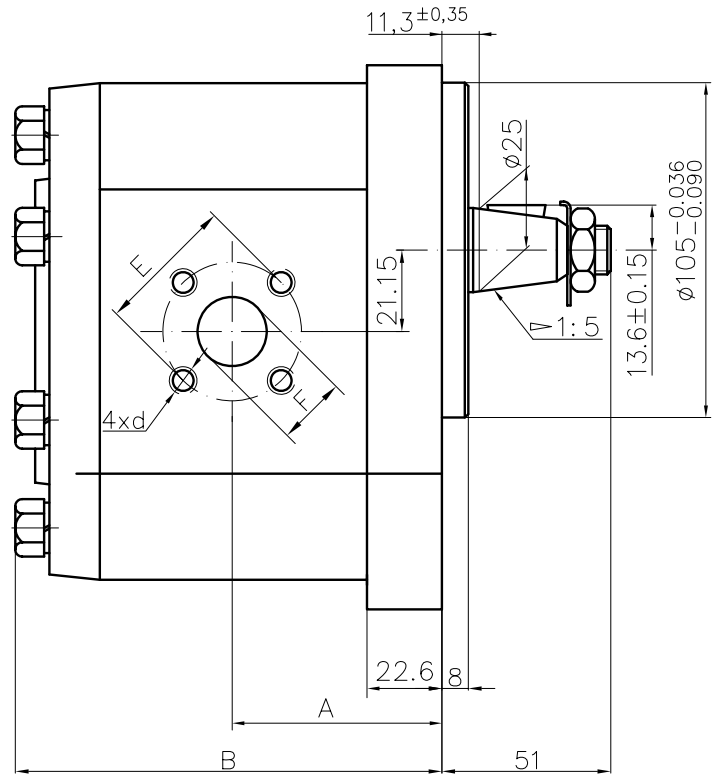
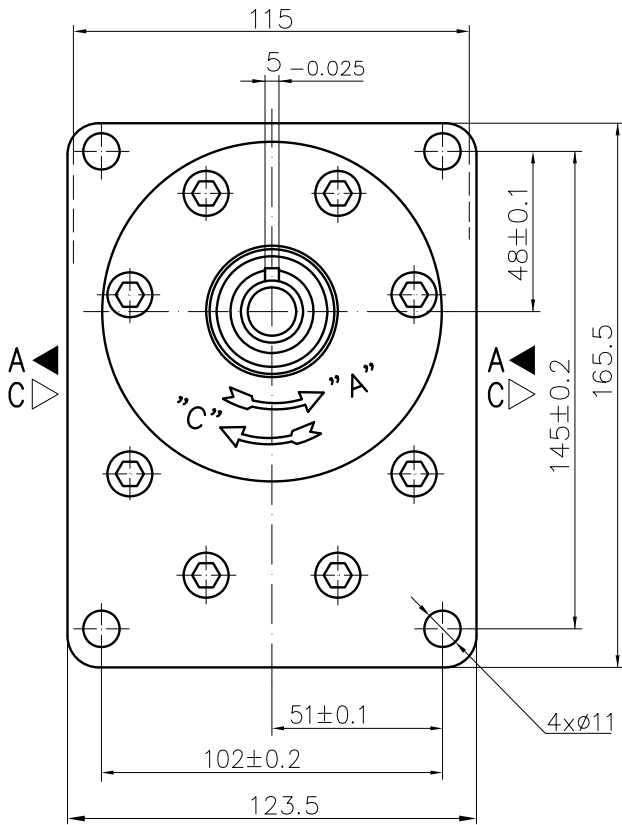


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	d	F	E	d	F
30A(C)20X324H	20	28,2	56,4	250	3000	58,5	117,1	40	M8	19	40	M8	19
30A(C)22,2X324H	22,5	31,7	63,5	250	3000	60,0	120,1						
30A(C)25X324H	25	35,3	70,5	250	3000	60,8	121,5						
30A(C)28X324H	28	39,5	79,0	250	3000	62,5	125,1						
30A(C)32X324H	32	45,1	90,2	250	3000	68,8	137,7	51	M10	27	40	M8	19
30A(C)36X324H	36	51,3	95,8	250	2800	70,5	140,9						
30A(C)42X324H	42	59,9	99,8	230	2500	73,2	146,5						
30A(C)46X324H	46	65,6	100,5	230	2300	75,1	150,2						
30A(C)50X324H	50	71,3	99,8	200	2100	76,9	153,8	51	M10	27	40	M8	19
30A(C)55X324H	55	78,4	91,4	200	1750	79,1	158,3						
30A(C)60X324H	60	85,5	99,8	180	1750	81,4	162,8						

Designed as a middle section of multiple gear pumps group 332.

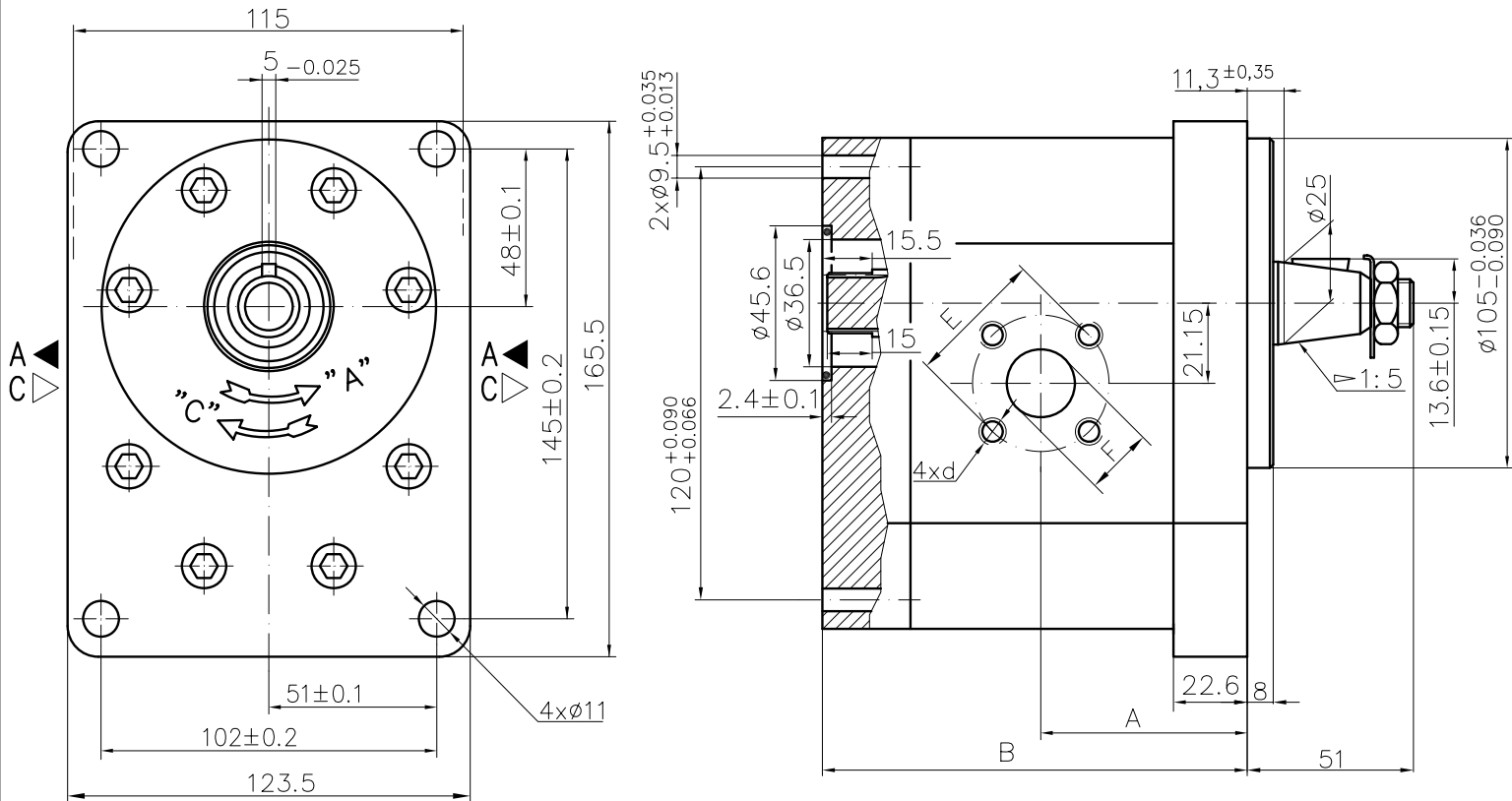


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			Inlet		Outlet						
						A mm	B mm	E	d	F	E	d	F	
30A(C)20X325H	20	28,2	56,4	250	3000	58,5	117,1	40	M8	19	40	M8	19	
30A(C)22,2X325H	22,5	31,7	63,5	250	3000	60,0	120,1							
30A(C)25X325H	25	35,3	70,5	250	3000	60,8	121,5							
30A(C)28X325H	28	39,5	79,0	250	3000	62,5	125,1							
30A(C)32X325	32	45,1	75,2	250	2500	64,2	128,5							
30A(C)32X325H	32	45,1	90,2	250	3000	68,8	137,7	51	M10	27	40	M8	19	
30A(C)36X325	36	50,8	84,6	250	2500	65,7	131,6							
30A(C)36X325H	36	51,3	95,8	250	2800	70,5	140,9							
30A(C)42X325	42	59,9	91,8	230	2300	68,5	137,2							
30A(C)42X325H	42	59,9	99,8	230	2500	73,2	146,5							
30A(C)46X325H	46	65,6	100,5	230	2300	75,1	150,2	51	M10	27	40	M8	19	
30A(C)50X325H	50	71,3	99,8	200	2100	76,9	153,8							
30A(C)55X325H	55	78,4	91,4	200	1750	79,1	158,3							
30A(C)60X325H	60	85,5	99,8	180	1750	81,4	162,8							



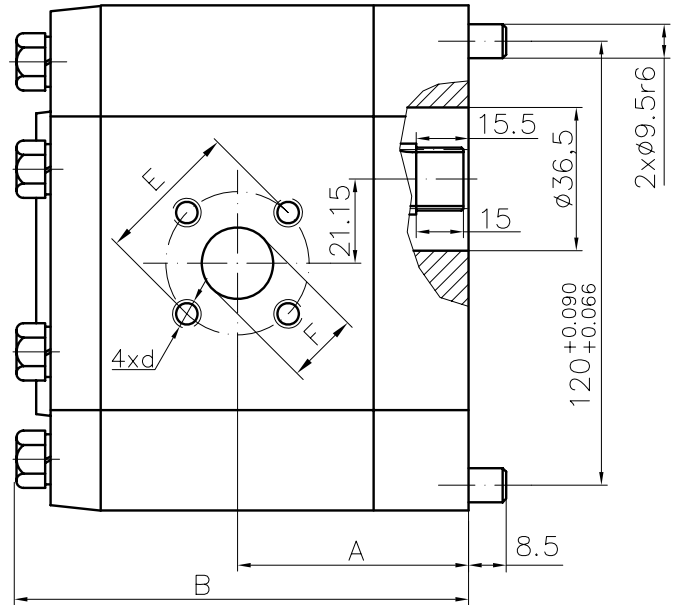
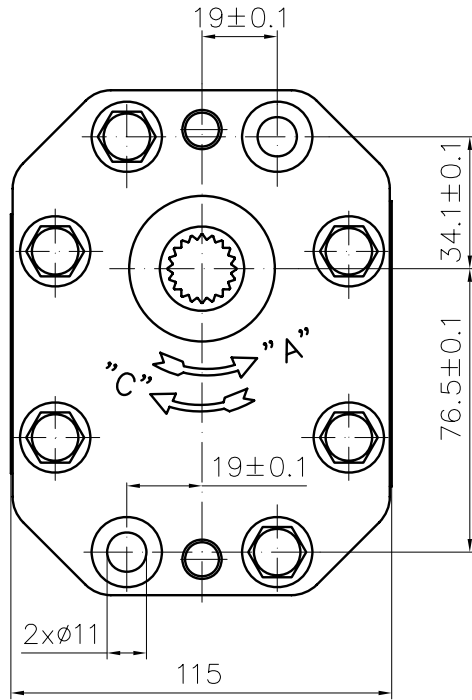
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet			
								E	d	F	E	d	F	
30A(C)20X337H	20	28,2	56,4	250	3000	56,1	116,7	40	M8	19	40	M8	19	
30A(C)22,2X337H	22,5	31,7	63,5	250	3000	57,6	119,7							
30A(C)25X337H	25	35,3	70,5	250	3000	58,3	121,1							
30A(C)28X337H	28	39,5	79,0	250	3000	60,2	124,7							
30A(C)32X337	32	45,1	75,2	250	2500	62,0	128,3							
30A(C)32X337H	32	45,1	90,2	250	3000	66,5	137,3	55	M8	27	55	M8	19	
30A(C)36X337	36	50,8	84,6	250	2500	63,5	131,4							
30A(C)36X337H	36	51,3	95,8	250	2800	68,0	140,5							
30A(C)42X337	42	59,9	91,8	230	2300	66,3	137,0							
30A(C)42X337H	42	59,9	99,8	230	2500	70,8	146,1							
30A(C)46X337H	46	65,6	100,5	230	2300	72,7	149,8	55	M8	27	55	M8	19	
30A(C)50X337H	50	71,3	99,8	200	2100	74,5	153,4							
30A(C)55X337H	55	78,4	91,4	200	1750	76,7	157,9							
30A(C)60X337H	60	85,5	99,8	180	1750	78,7	162,4							

Designed as a first section of multiple pumps group 33.

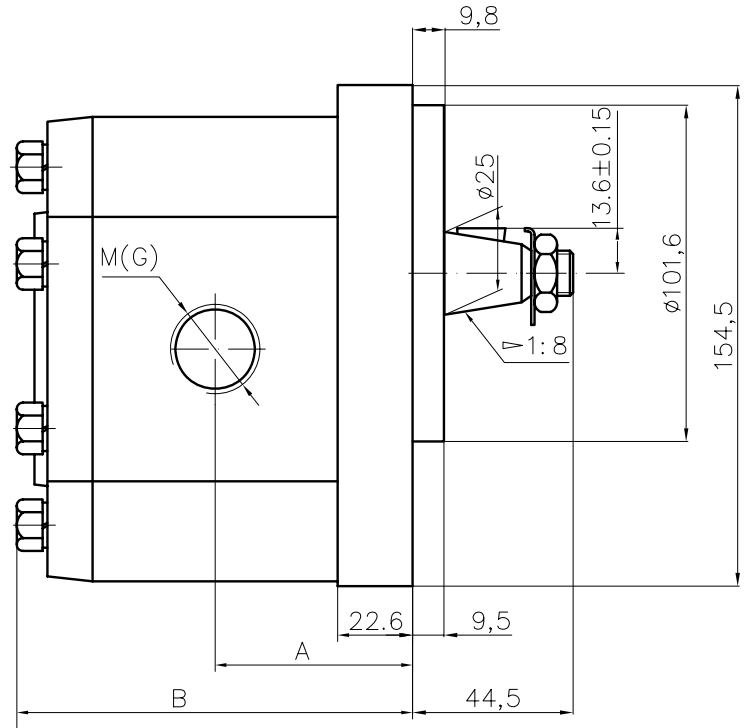
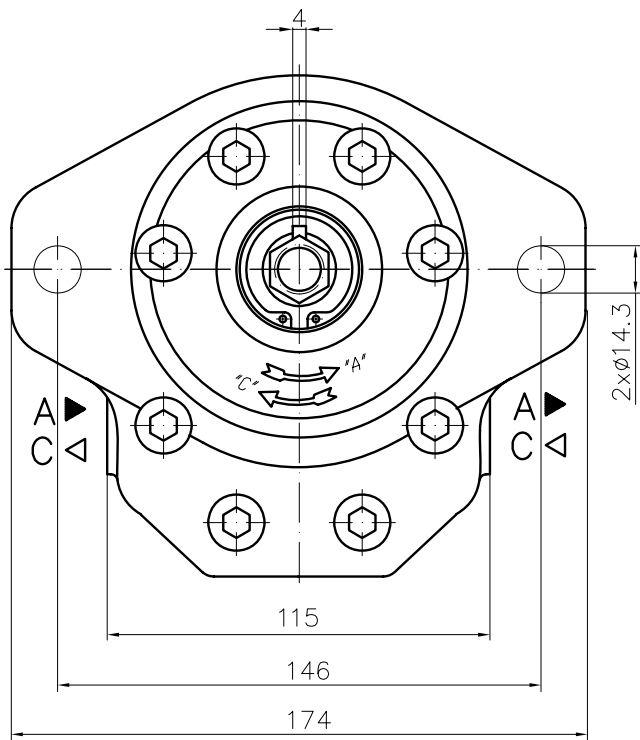


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet			
								E	d	F	E	d	F	
30A(C)20X338H	20	28,2	56,4	250	3000	56,1	114,7	40	M8	19	40	M8	19	
30A(C)22,2X338H	22,5	31,7	63,5	250	3000	57,6	117,7							
30A(C)25X338H	25	35,3	70,5	250	3000	58,3	119,1							
30A(C)28X338H	28	39,5	79,0	250	3000	60,2	122,7							
30A(C)32X338	32	45,1	75,2	250	2500	62,0	126,3							
30A(C)32X338H	32	45,1	90,2	250	3000	66,5	135,3	55	M8	27	55	M8	19	
30A(C)36X338	36	50,8	84,6	250	2500	63,5	129,4							
30A(C)36X338H	36	51,3	95,8	250	2800	68,0	138,5							
30A(C)42X338	42	59,9	91,8	230	2300	66,3	135,0							
30A(C)42X338H	42	59,9	99,8	230	2500	70,8	144,0							
30A(C)46X338H	46	65,6	100,5	230	2300	72,7	147,8							
30A(C)50X338H	50	71,3	99,8	200	2100	74,5	151,4							
30A(C)55X338H	55	78,4	91,4	200	1750	76,7	155,9							
30A(C)60X338H	60	85,5	99,8	180	1750	78,7	160,4							

Designed as a second section of multiple gear pumps group 33.

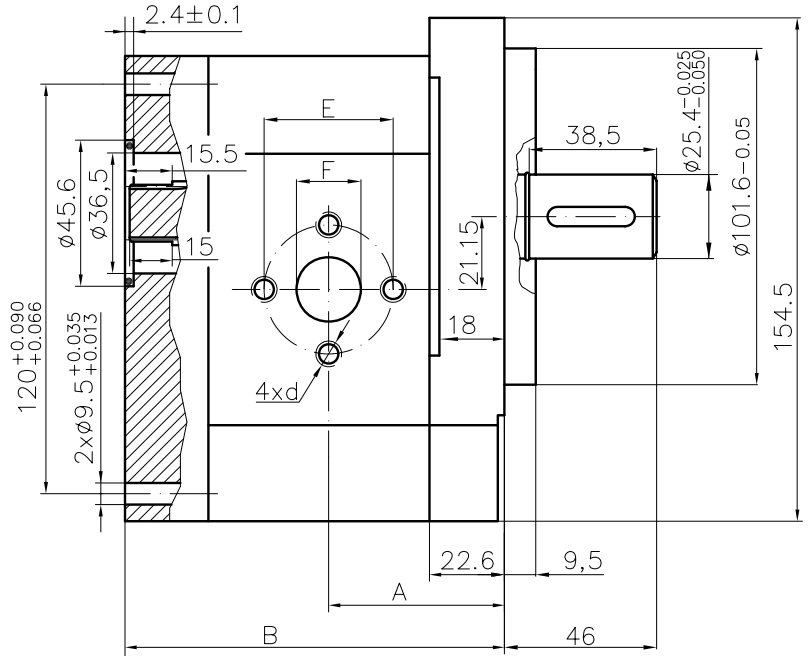
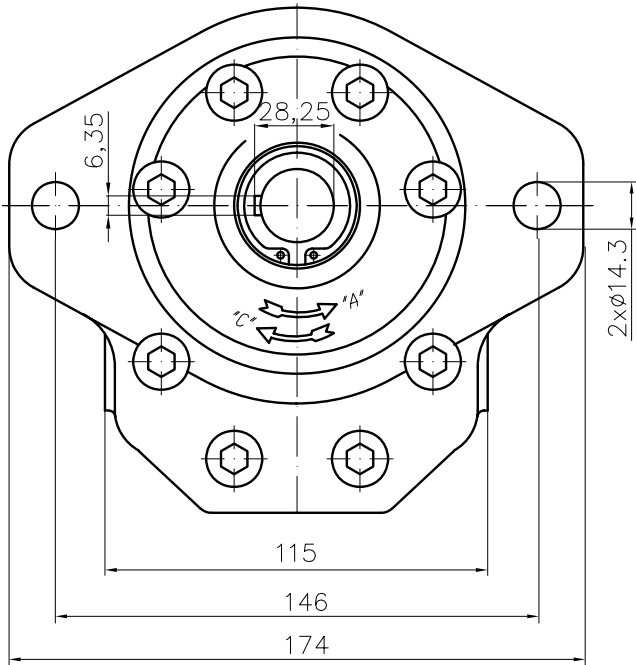


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	d	F	E	d	F
30A(C)20X339H	20	28,2	56,4	250	3000	58,3	118,9	40	M8	19	40	M8	19
30A(C)22,2X339H	22,5	31,7	63,5	250	3000	59,7	121,9						
30A(C)25X339H	25	35,3	70,5	250	3000	60,5	123,3						
30A(C)28X339H	28	39,5	79,0	250	3000	62,4	126,9						
30A(C)32X339	32	45,1	75,2	250	2500	64,2	130,5	55	M8	27	55	M8	19
30A(C)32X339H	32	45,1	90,2	250	3000	68,7	139,5						
30A(C)36X339	36	50,8	84,6	250	2500	65,7	133,6						
30A(C)36X339H	36	51,3	95,8	250	2800	70,2	142,7						
30A(C)42X339	42	59,9	91,8	230	2300	68,5	139,2	55	M8	27	55	M8	19
30A(C)42X339H	42	59,9	99,8	230	2500	73,0	148,3						
30A(C)46X339H	46	65,6	100,5	230	2300	74,9	152,0						
30A(C)50X339H	50	71,3	99,8	200	2100	76,7	155,6						
30A(C)55X339H	55	78,4	91,4	200	1750	78,9	160,1	55	M8	27	55	M8	19
30A(C)60X339H	60	85,5	99,8	180	1750	80,9	164,6						

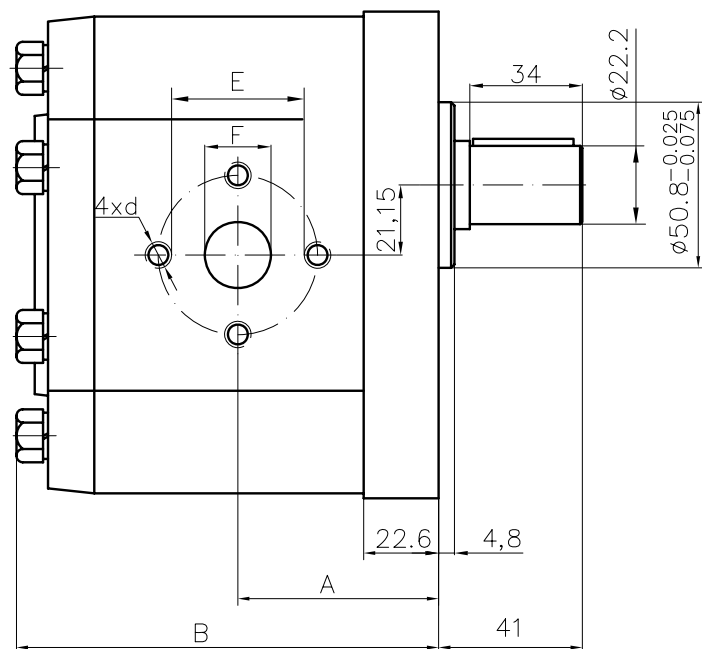
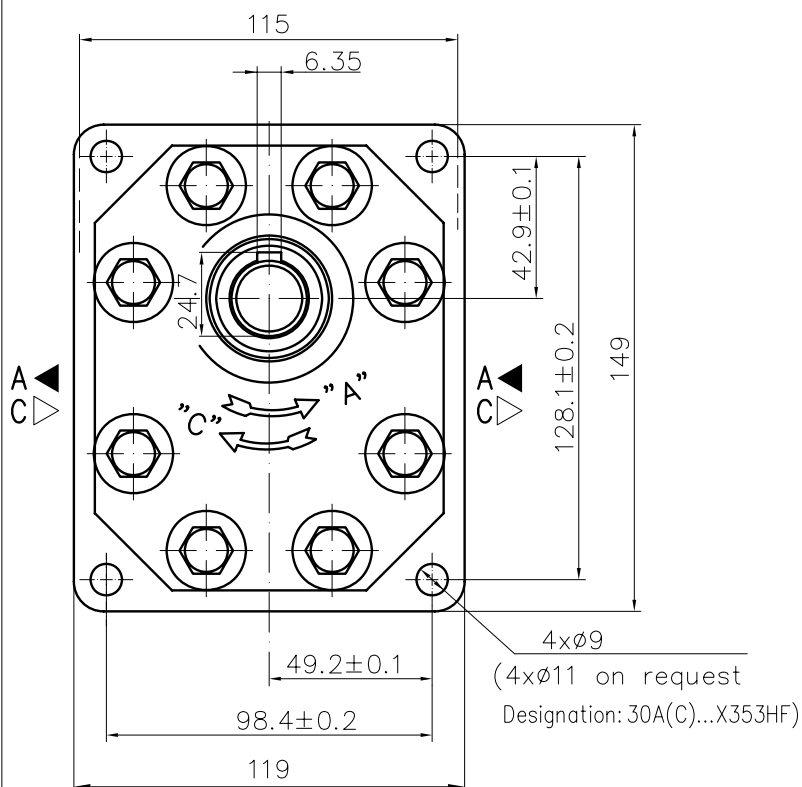


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension						
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet		Outlet		
								M	G		M	G
30A(C)20X344H	20	28,2	56,4	250	3000	56,1	116,7	M27x1,5	G3/4"-A			
30A(C)22,2X344H	22,5	31,7	63,5	250	3000	57,6	119,7					
30A(C)25X344H	25	35,3	70,5	250	3000	58,3	121,1					
30A(C)28X344H	28	39,5	79,0	250	3000	60,2	124,7					
30A(C)32X344	32	45,1	75,2	250	2500	62,0	128,3					
30A(C)32X344H	32	45,1	90,2	250	3000	66,5	137,3	M33x1,5	G1"-A	M27x1,5	G3/4"-A	
30A(C)36X344	36	50,8	84,6	250	2500	63,5	131,4					
30A(C)36X344H	36	51,3	95,8	250	2800	68,0	140,5					
30A(C)42X344	42	59,9	91,8	230	2300	66,3	137,0					
30A(C)42X344H	42	59,9	99,8	230	2500	70,8	146,1					
30A(C)46X344H	46	65,6	100,5	230	2300	72,7	149,8					
30A(C)50X344H	50	71,3	99,8	200	2100	74,5	153,4					
30A(C)55X344H	55	78,4	91,4	200	1750	76,7	157,9					
30A(C)60X344H	60	85,5	99,8	180	1750	78,7	162,4					

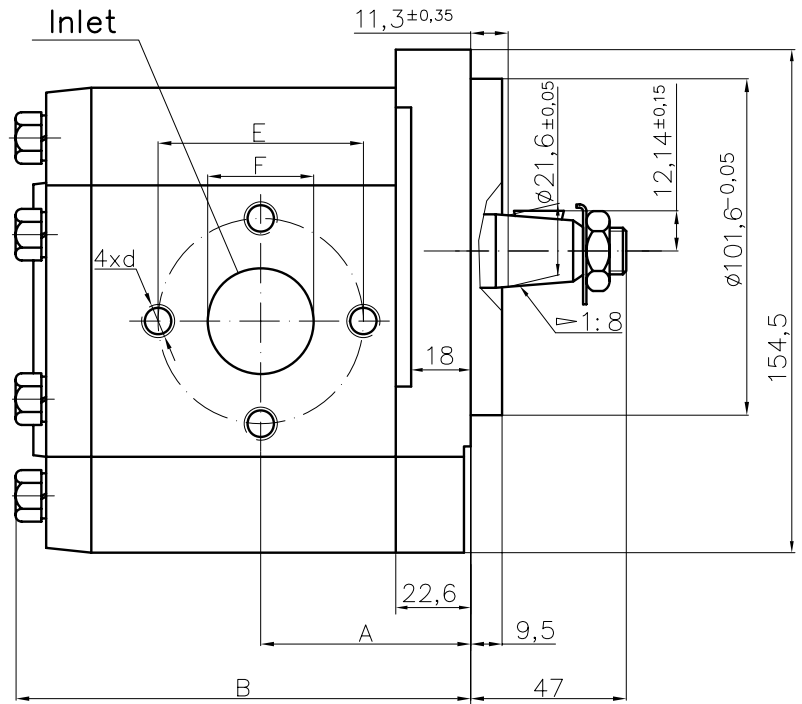
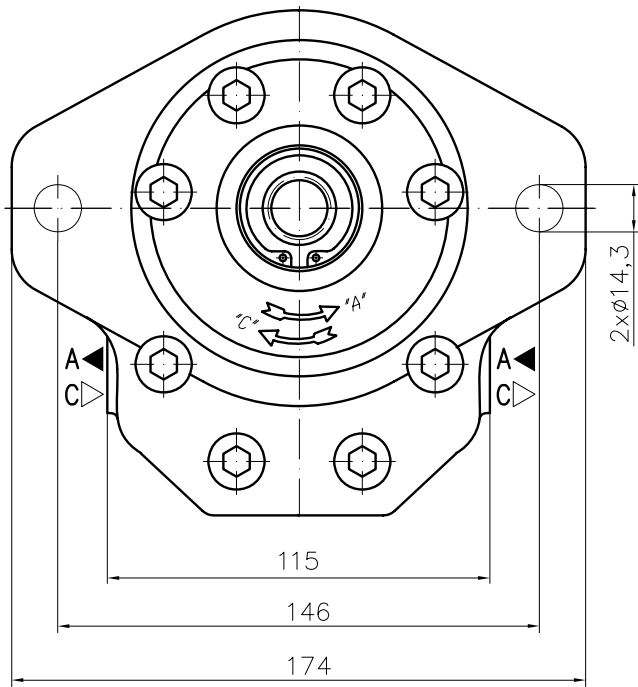
Designed as a first section of multiple gear pumps group 33.



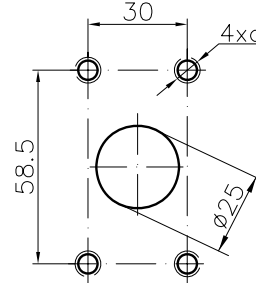
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet			
								E	d	F	E	d	F	
30A(C)20X345H	20	28,2	56,4	250	3000	56,1	114,7	40	M8	19	40	M8	19	
30A(C)22,2X345H	22,5	31,7	63,5	250	3000	57,6	117,7							
30A(C)25X345H	25	35,3	70,5	250	3000	58,3	119,1							
30A(C)28X345H	28	39,5	79,0	250	3000	60,2	122,7							
30A(C)32X345	32	45,1	75,2	250	2500	62,0	126,3							
30A(C)32X345H	32	45,1	90,2	250	3000	66,5	135,3	51	M10	27	40	M8	19	
30A(C)36X345	36	50,8	84,6	250	2500	63,5	129,4							
30A(C)36X345H	36	51,3	95,8	250	2800	68,0	138,5							
30A(C)42X345	42	59,9	91,8	230	2300	66,3	135,0							
30A(C)42X345H	42	59,9	99,8	230	2500	70,8	144,0							
30A(C)46X345H	46	65,6	100,5	230	2300	72,7	147,8	51	M10	27	40	M8	19	
30A(C)50X345H	50	71,3	99,8	200	2100	74,5	151,4							
30A(C)55X345H	55	78,4	91,4	200	1750	76,7	155,9							
30A(C)60X345H	60	85,5	99,8	180	1750	78,7	160,4							



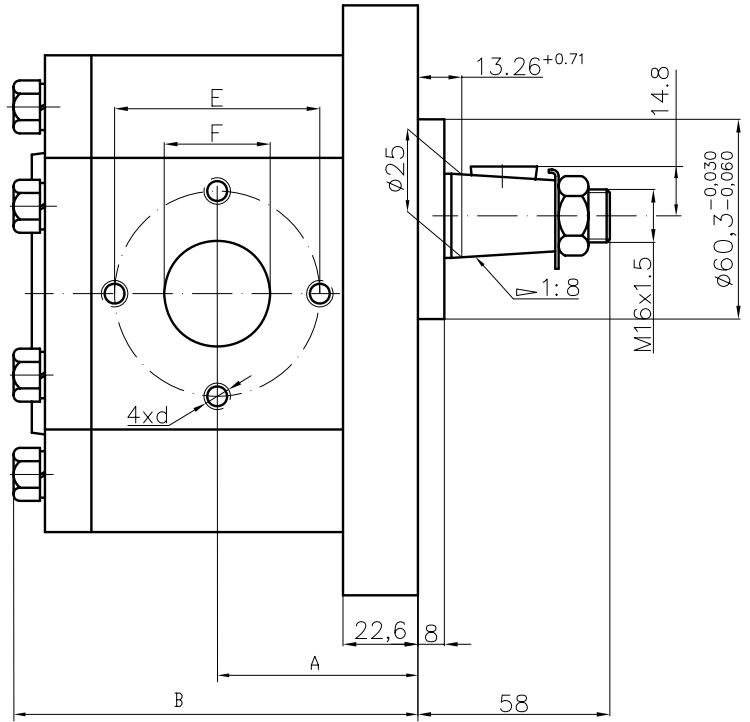
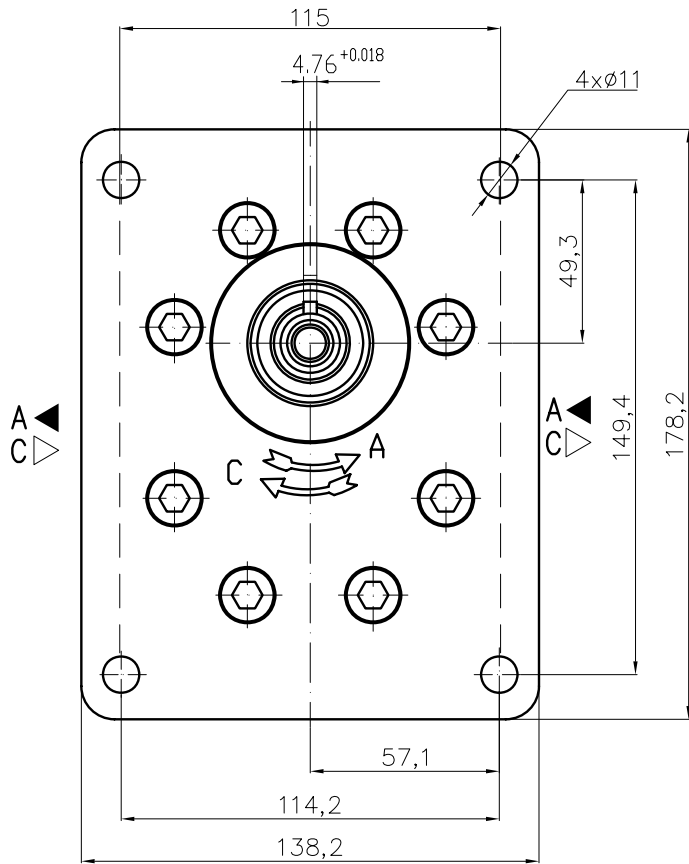
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	d	F	E	d	F
30A(C)20X353H	20	28,2	56,4	250	3000	56,1	116,7	40	M8	19			
30A(C)22,2X353H	22,5	31,7	63,5	250	3000	57,6	119,7						
30A(C)25X353H	25	35,3	70,5	250	3000	58,3	121,1						
30A(C)28X353H	28	39,5	79,0	250	3000	60,2	124,7						
30A(C)32X353	32	45,1	75,2	250	2500	62,0	128,3						
30A(C)32X353H	32	45,1	90,2	250	3000	66,5	137,3	51	M10	27	40	M8	19
30A(C)36X353	36	50,8	84,6	250	2500	63,5	131,4						
30A(C)36X353H	36	51,3	95,8	250	2800	68,0	140,5						
30A(C)42X353	42	59,9	91,8	230	2300	66,3	137,0						
30A(C)42X353H	42	59,9	99,8	230	2500	70,8	146,1						
30A(C)46X353H	46	65,6	100,5	230	2300	72,7	149,8						
30A(C)50X353H	50	71,3	99,8	200	2100	74,5	153,4						
30A(C)55X353H	55	78,4	91,4	200	1750	76,7	157,9						
30A(C)60X353H	60	85,5	99,8	180	1750	78,7	162,4						



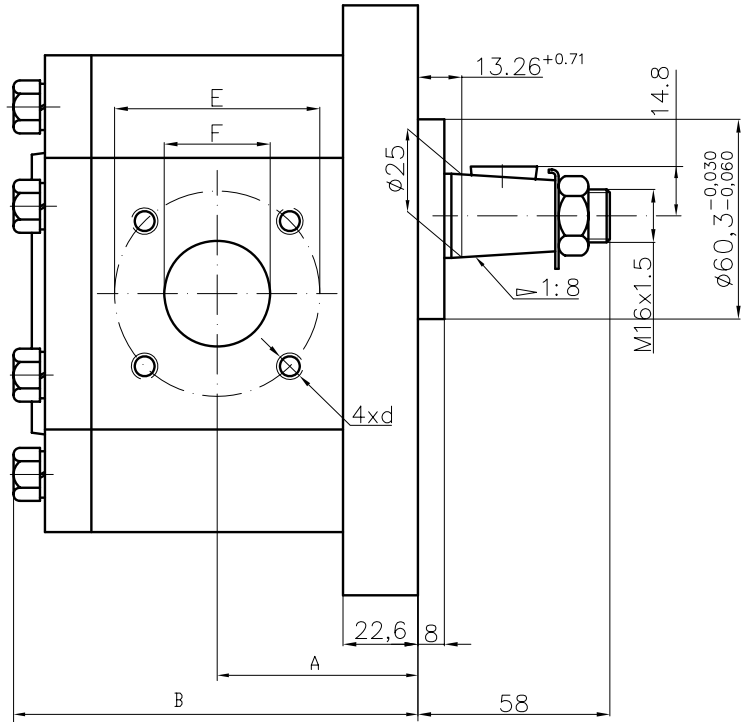
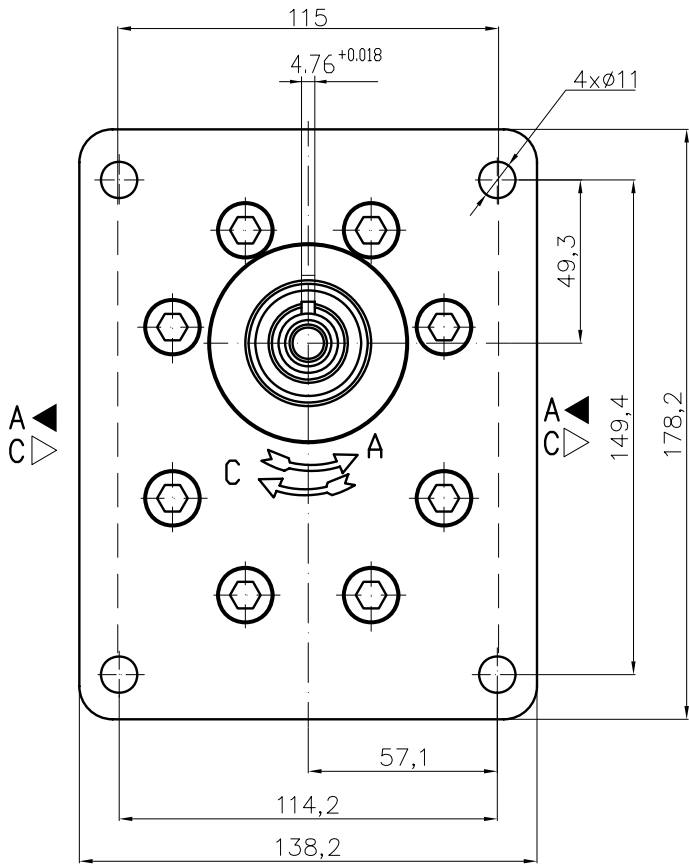
Outlet



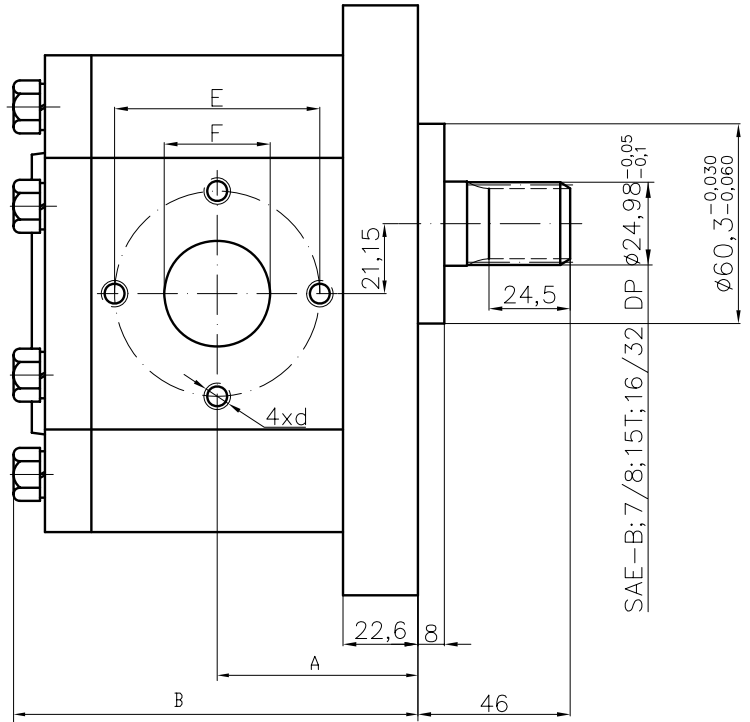
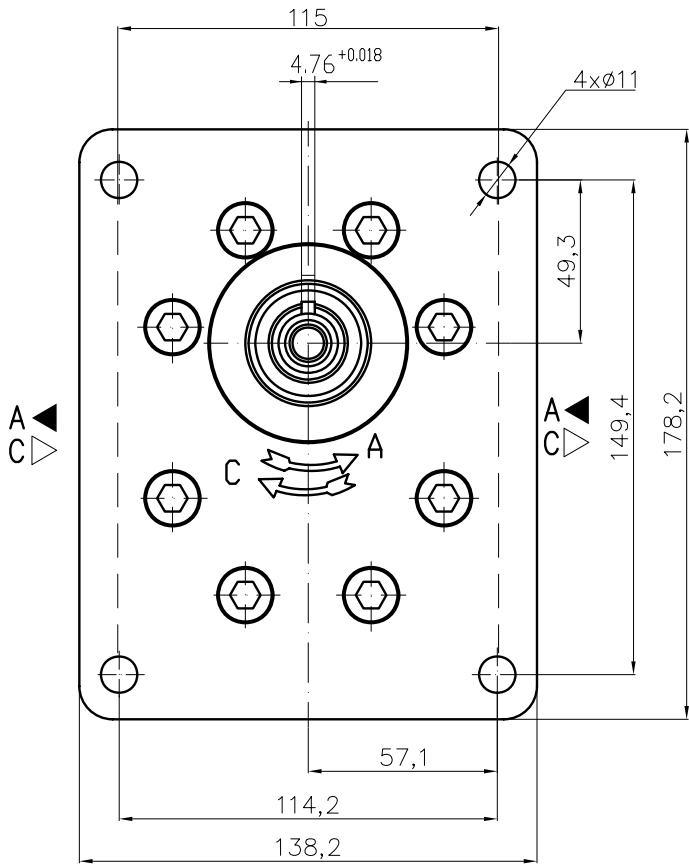
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension									
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet				
						E	d	F1		F2	d	H2	L2		
30A(C)20X356H	20	28,2	56,4	250	3000	56,1	116,7								
30A(C)22,2X356H	22,5	31,7	63,5	250	3000	57,6	119,7								
30A(C)25X356H	25	35,3	70,5	250	3000	58,3	121,1								
30A(C)28X356H	28	39,5	79,0	250	3000	60,2	124,7								
30A(C)32X356	32	45,1	75,2	250	2500	62,0	128,3								
30A(C)32X356H	32	45,1	90,2	250	3000	66,5	137,3								
30A(C)36X356	36	50,8	84,6	250	2500	63,5	131,4								
30A(C)36X356H	36	51,3	95,8	250	2800	68,0	140,5				25				
30A(C)42X356	42	59,9	91,8	230	2300	66,3	137,0								
30A(C)42X356H	42	59,9	99,8	230	2500	70,8	146,1								
30A(C)46X356H	46	65,6	100,5	230	2300	72,7	149,8								
30A(C)50X356H	50	71,3	99,8	200	2100	74,5	153,4								
30A(C)55X356H	55	78,4	91,4	200	1750	76,7	157,9								
30A(C)60X356H	60	85,5	99,8	180	1750	78,7	162,4								



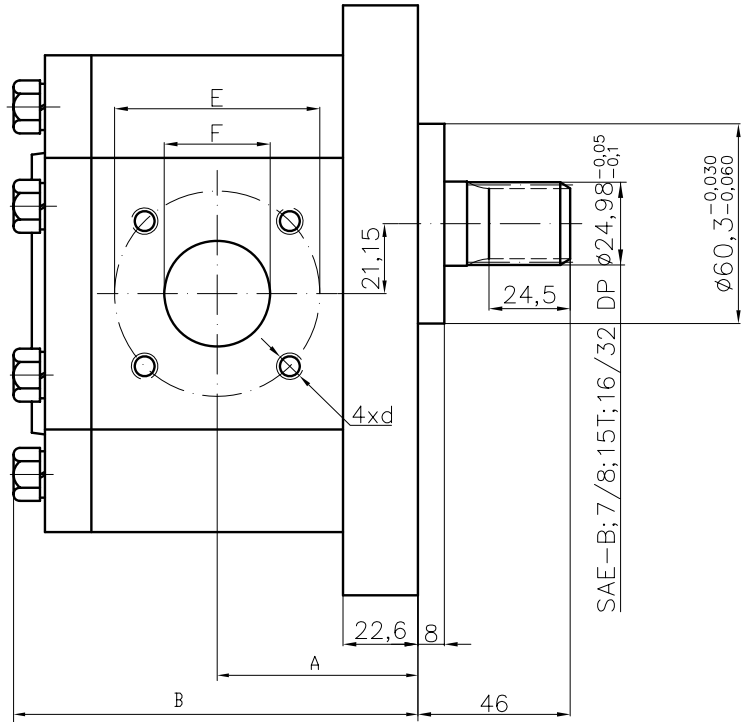
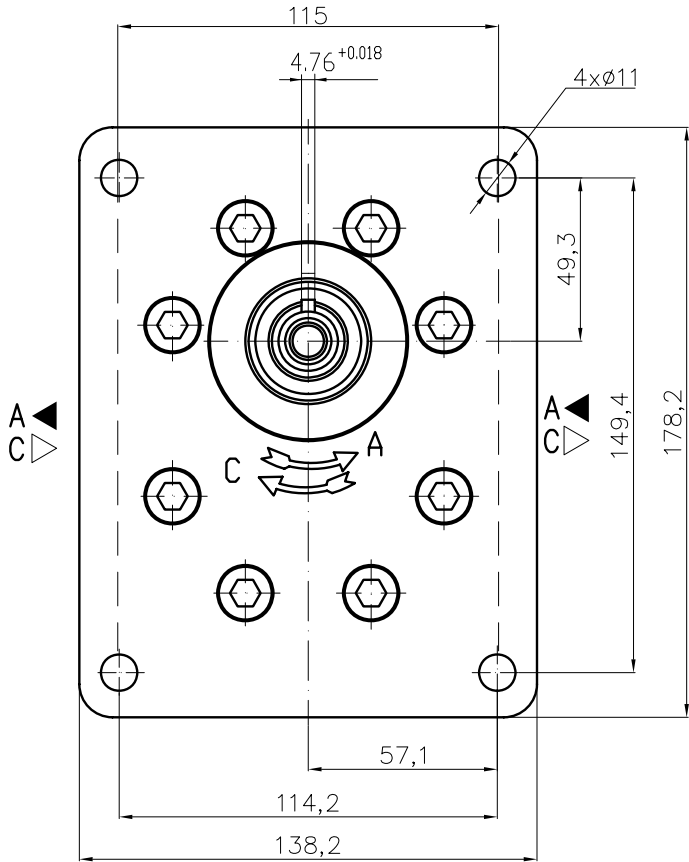
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
						E	d	F	E	d	F		
40A(C)36X371H	36	51,3	95,8	250	2800	68,0	140,5	62	3/8"-16UNC-2B	32	51	3/8"-16UNC-2B	27
40A(C)42X371H	42	59,9	99,8	230	2500	70,8	146,1						
40A(C)46X371H	46	65,6	100,5	230	2300	72,7	149,8						
40A(C)50X371H	50	71,3	99,8	200	2100	74,5	153,4						
40A(C)55X371H	55	78,4	91,4	200	1750	76,7	159,7						
40A(C)60X371H	60	85,5	99,8	180	1750	78,7	164,5						



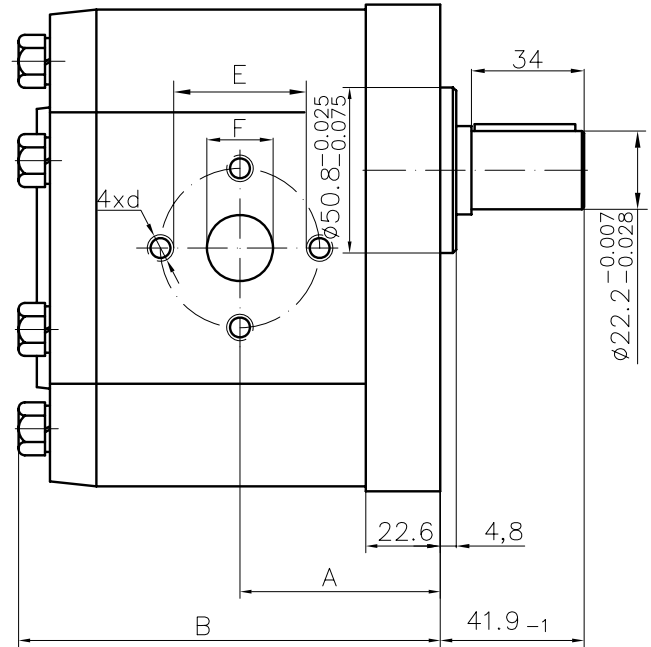
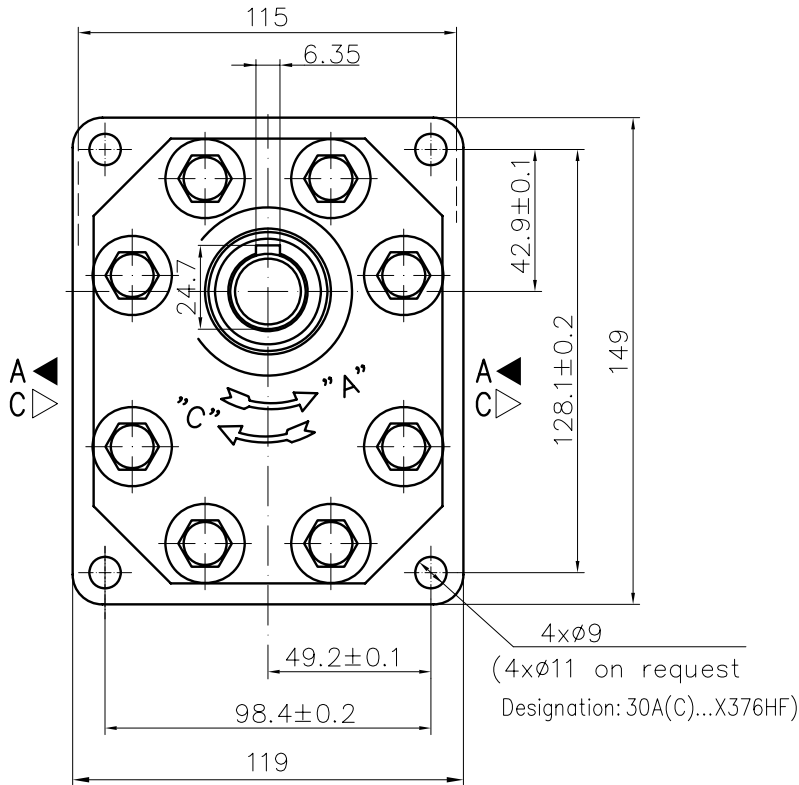
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	d	F	E	d	F
40A(C)36X372H	36	51,3	95,8	250	2800	68,0	140,5	62	3/8"-16UNC-2B	32	51	3/8"-16UNC-2B	27
40A(C)42X372H	42	59,9	99,8	230	2500	70,8	146,1						
40A(C)46X372H	46	65,6	100,5	230	2300	72,7	149,8						
40A(C)50X372H	50	71,3	99,8	200	2100	74,5	153,4						
40A(C)55X372H	55	78,4	91,4	200	1750	76,7	159,7						
40A(C)60X372H	60	85,5	99,8	180	1750	78,7	164,5						



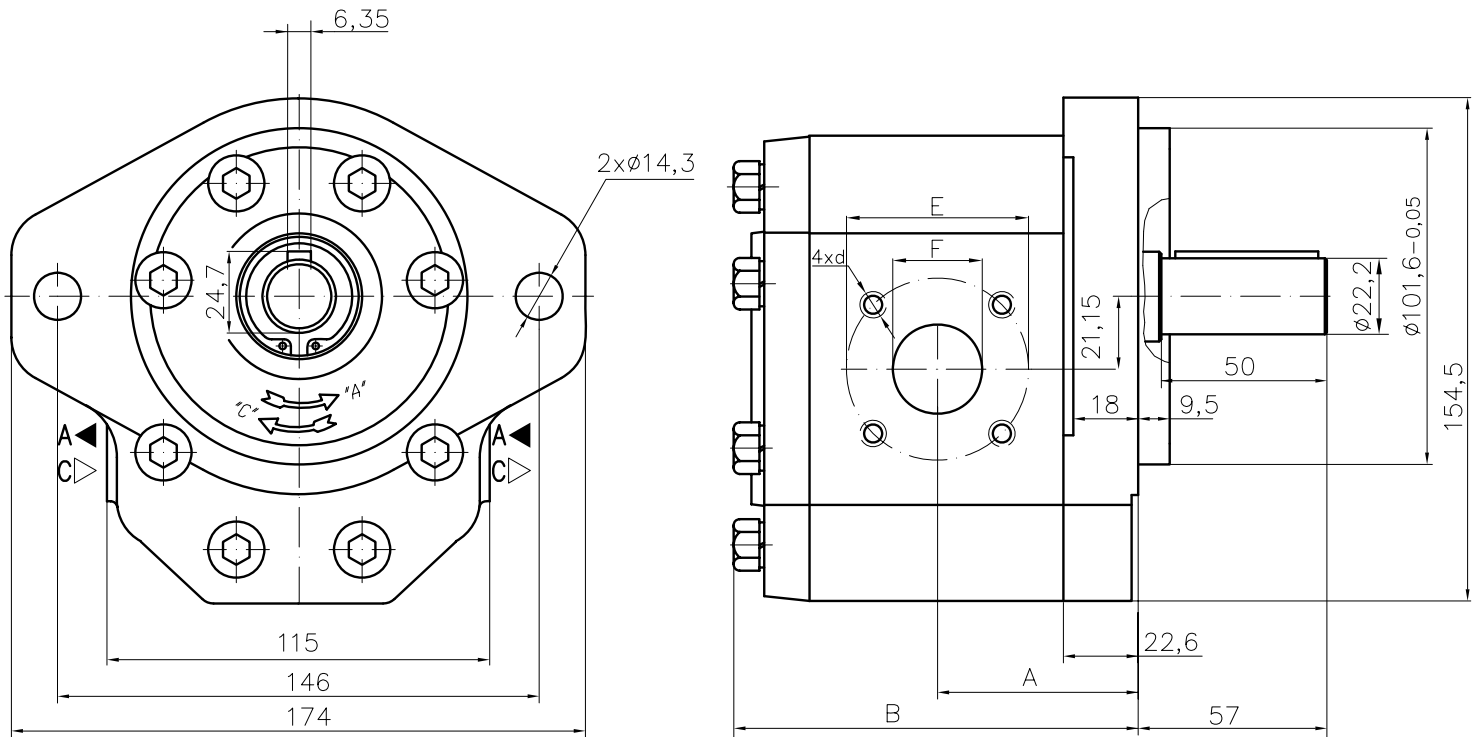
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	d	F	E	d	F
40A(C)36X373H	36	51,3	95,8	250	2800	68,0	140,5	62	3/8"-16UNC-2B	32	51	3/8"-16UNC-2B	27
40A(C)42X373H	42	59,9	99,8	230	2500	70,8	146,1						
40A(C)46X373H	46	65,6	100,5	230	2300	72,7	149,8						
40A(C)50X373H	50	71,3	99,8	200	2100	74,5	153,4						
40A(C)55X373H	55	78,4	91,4	200	1750	76,7	159,7						
40A(C)60X373H	60	85,5	99,8	180	1750	78,7	164,5						



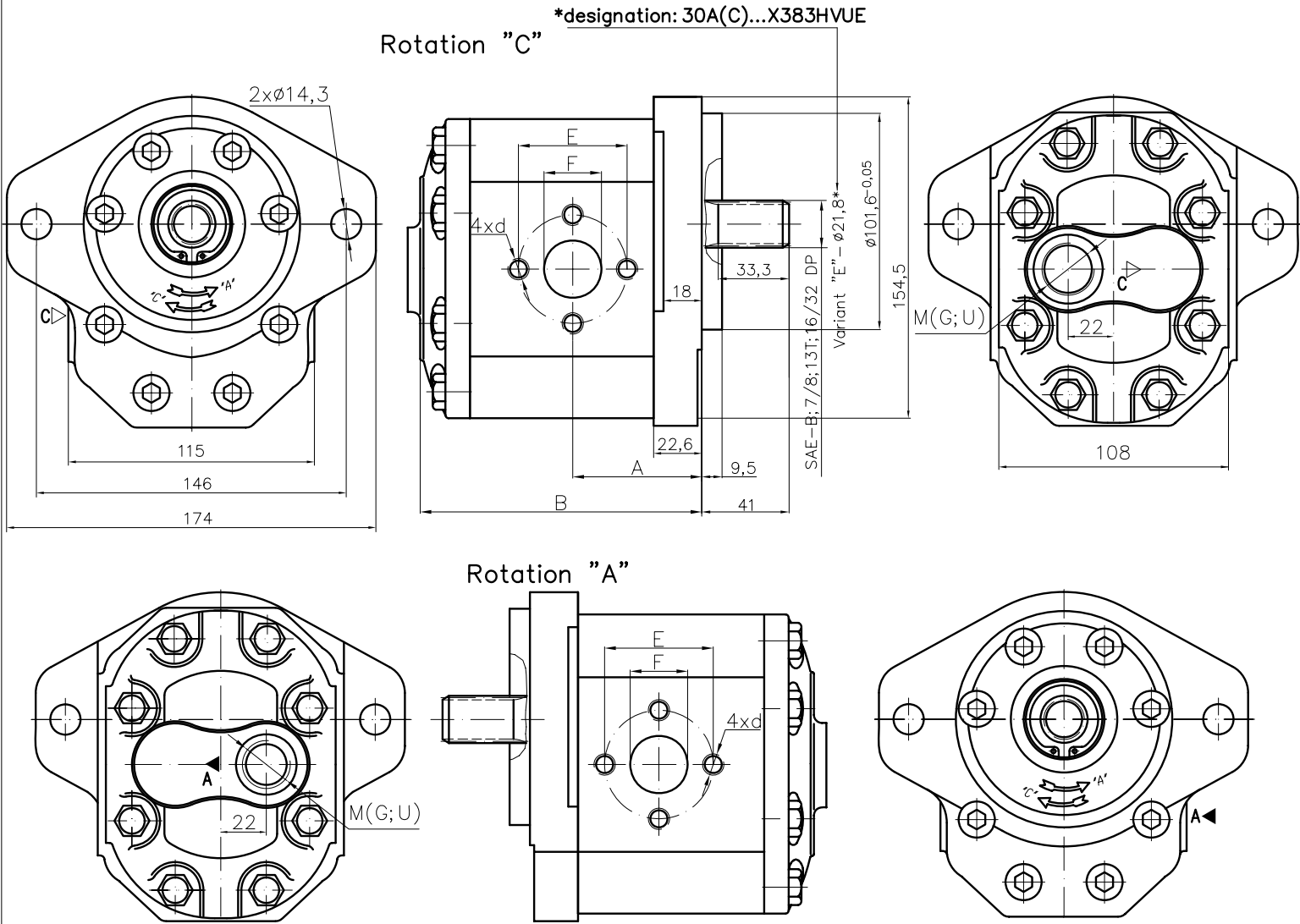
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	d	F	E	d	F
40A(C)36X374H	36	51,3	95,8	250	2800	68,0	140,5	62	3/8"-16UNC-2B	32	51	3/8"-16UNC-2B	27
40A(C)42X374H	42	59,9	99,8	230	2500	70,8	146,1						
40A(C)46X374H	46	65,6	100,5	230	2300	72,7	149,8						
40A(C)50X374H	50	71,3	99,8	200	2100	74,5	153,4						
40A(C)55X374H	55	78,4	91,4	200	1750	76,7	159,7						
40A(C)60X374H	60	85,5	99,8	180	1750	78,7	164,5						



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	d	F	E	d	F
30A(C)20X376H	20	28,2	56,4	250	3000	56,1	116,7	48,12	5/16-18UNC-2B	22	48,12	5/16-18UNC-2B	20
30A(C)22,2X376H	22,5	31,7	63,5	250	3000	57,6	119,7						
30A(C)25X376H	25	35,3	70,5	250	3000	58,3	121,1						
30A(C)28X376H	28	39,5	79,0	250	3000	60,2	124,7			25			
30A(C)32X376	32	45,1	75,2	250	2500	62,0	128,3						
30A(C)32X376H	32	45,1	90,2	250	3000	66,5	137,3						
30A(C)36X376	36	50,8	84,6	250	2500	63,5	131,4						
30A(C)36X376H	36	51,3	95,8	250	2800	68,0	140,5						
30A(C)42X376	42	59,9	91,8	230	2300	66,3	137,0			28			
30A(C)42X376H	42	59,9	99,8	230	2500	70,8	146,1						
30A(C)46X376H	46	65,6	100,5	230	2300	72,7	149,8						
30A(C)50X376H	50	71,3	99,8	200	2100	74,5	153,4						
30A(C)55X376H	55	78,4	91,4	200	1750	76,7	157,9						
30A(C)60X376H	60	85,5	99,8	180	1750	78,7	162,4						

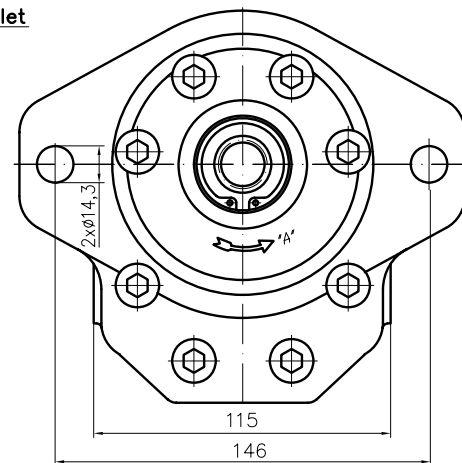
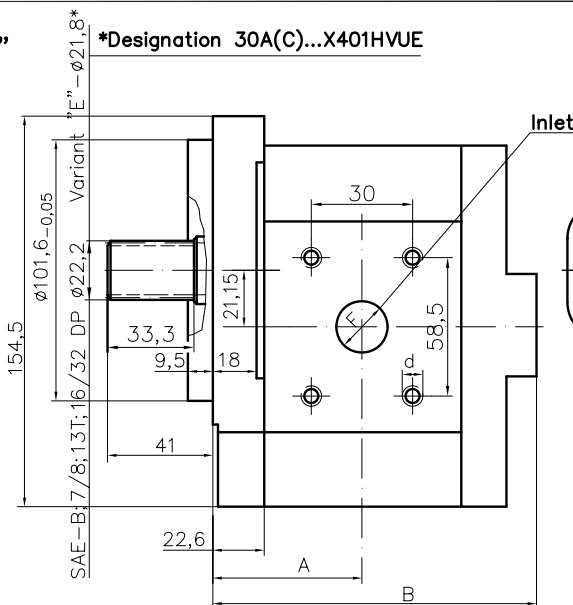
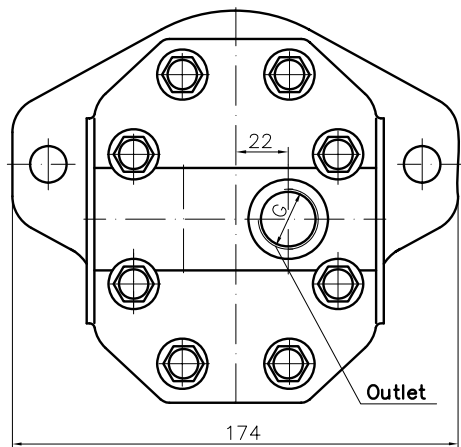


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	d	F	E	d	F
30A(C)20X379H	20	28,2	56,4	250	3000	56,1	114,7	40	M8	19	40	M8	19
30A(C)22,2X379H	22,5	31,7	63,5	250	3000	57,6	117,7						
30A(C)25X379H	25	35,3	70,5	250	3000	58,3	119,1						
30A(C)28X379H	28	39,5	79,0	250	3000	60,2	122,7						
30A(C)32X379	32	45,1	75,2	250	2500	62,0	126,3	55	M8	27	55	M8	19
30A(C)32X379H	32	45,1	90,2	250	3000	66,5	135,3						
30A(C)36X379	36	50,8	84,6	250	2500	63,5	129,4						
30A(C)36X379H	36	51,3	95,8	250	2800	68,0	138,5						
30A(C)42X379	42	59,9	91,8	230	2300	66,3	135,0	55	M8	27	55	M8	19
30A(C)42X379H	42	59,9	99,8	230	2500	70,8	144,0						
30A(C)46X379H	46	65,6	100,5	230	2300	72,7	147,8						
30A(C)50X379H	50	71,3	99,8	200	2100	74,5	151,4						
30A(C)55X379H	55	78,4	91,4	200	1750	76,7	155,9	55	M8	27	55	M8	19
30A(C)60X379H	60	85,5	99,8	180	1750	78,7	160,4						

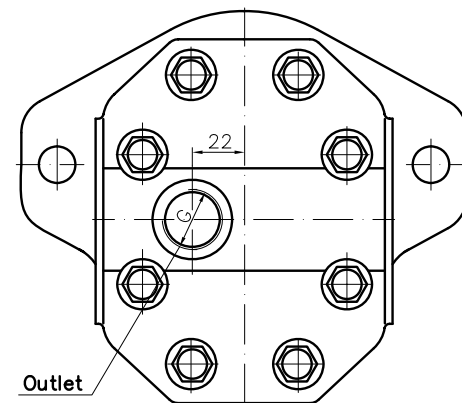
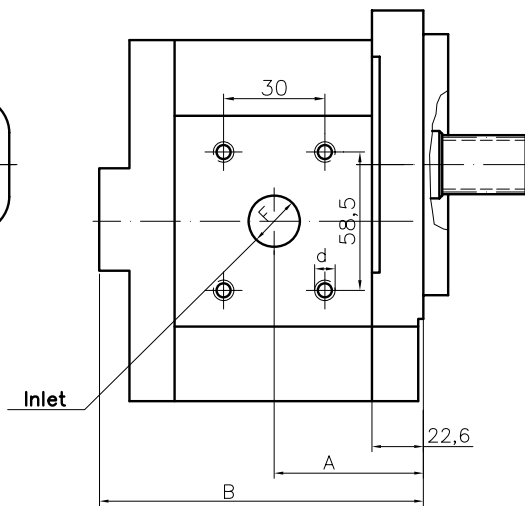
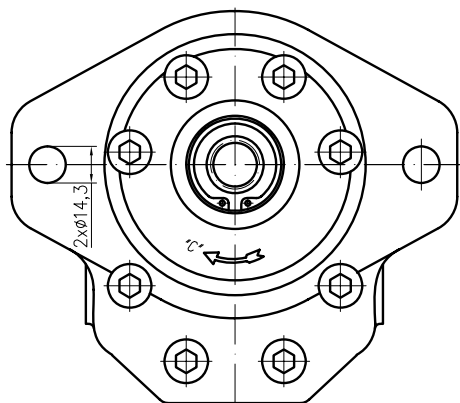


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	d	F	M	G	U
30A(C)20X383HVU	20	28,2	56,4	200	3000	56,1	114,7	40	5/16-18UNC	19			
30A(C)22,2X383HVU	22,5	31,7	63,5	200	3000	57,6	117,7						
30A(C)25X383HVU	25	35,3	70,5	200	3000	58,3	119,1						
30A(C)28X383HVU	28	39,5	79,0	200	3000	60,2	122,7						
30A(C)32X383VU	32	45,1	75,2	200	2500	62,0	126,3	51	3/8-16UNC-2B	27			1 1/16" -12UNF-2B
30A(C)32X383HVU	32	45,1	90,2	200	3000	66,5	135,3						
30A(C)36X383VU	36	50,8	84,6	190	2500	63,5	129,4						
30A(C)36X383HVU	36	51,3	95,8	190	2800	68,0	138,5						
30A(C)42X383VU	42	59,9	91,8	190	2300	66,3	135,0						
30A(C)42X383HVU	42	59,9	99,8	190	2500	70,8	144,0						
30A(C)46X383HVU	46	65,6	100,5	175	2300	72,7	147,8						
30A(C)50X383HVU	50	71,3	99,8	175	2100	74,5	151,4						
30A(C)55X383HVU	55	78,4	91,4	175	1750	76,7	155,9						
30A(C)60X383HVU	60	85,5	99,8	160	1750	78,7	160,4						

Rotation "A"

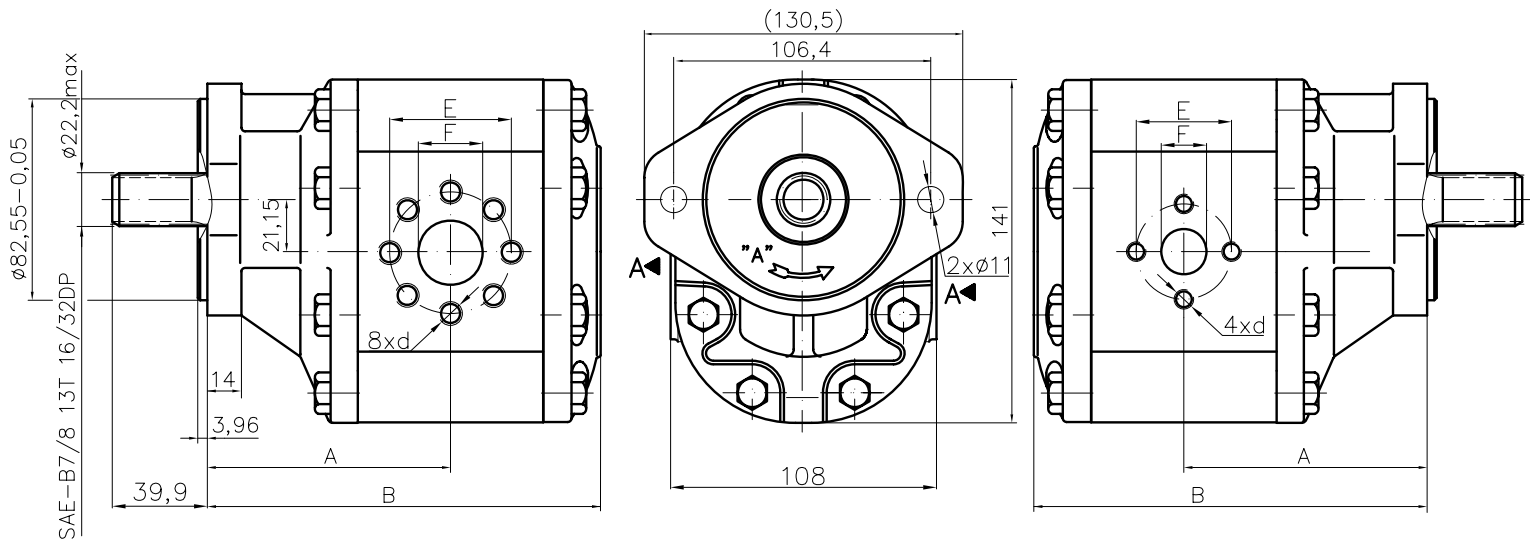


Rotation "C"

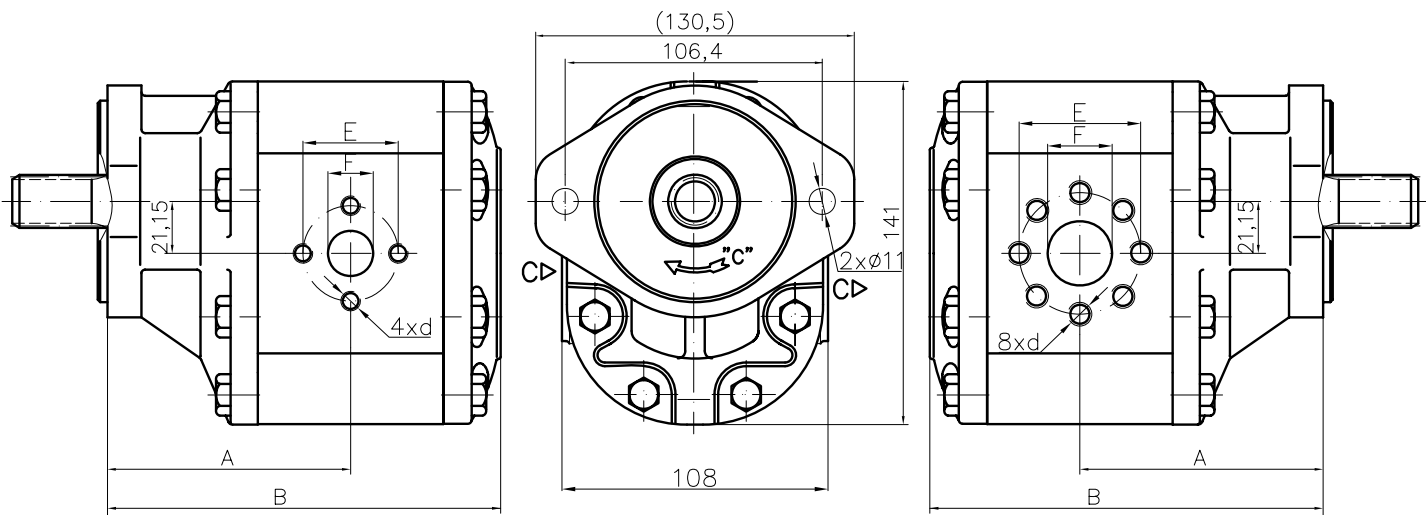


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet				Outlet		
						F	d	F1	L2	G				
30A(C)32X401HVU	32	45,1	90,2	250	3000	66,5	139,3							
30A(C)36X401VU	36	50,8	84,6	250	2500	63,5	133,4	27						
30A(C)36X401HVU	36	51,3	95,8	250	2800	68,0	142,5							
30A(C)42X401VU	42	59,9	91,8	230	2300	66,3	139,0							
30A(C)42X401HVU	42	59,9	99,8	230	2500	70,8	148,1							
30A(C)46X401HVU	46	65,6	100,5	230	2300	72,7	151,8							
30A(C)50X401HVU	50	71,3	99,8	200	2100	74,5	155,4							
30A(C)55X401HVU	55	78,4	91,4	200	1750	76,7	159,9							
30A(C)60X401HVU	60	85,5	99,8	180	1750	78,7	164,4							

Rotation "A"

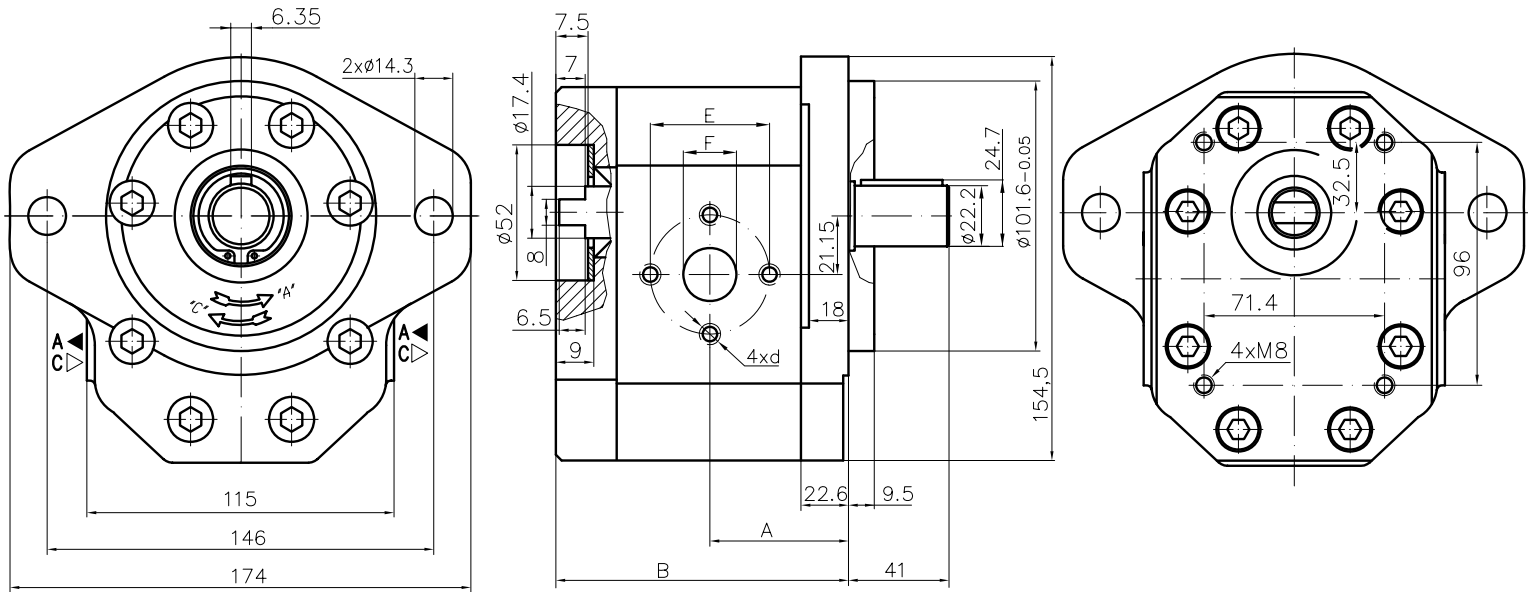


Rotation "C"



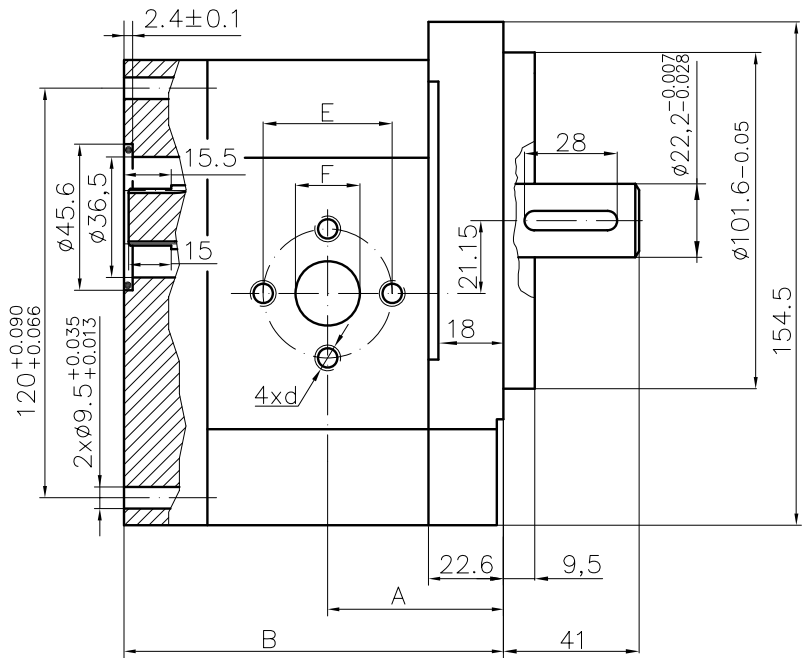
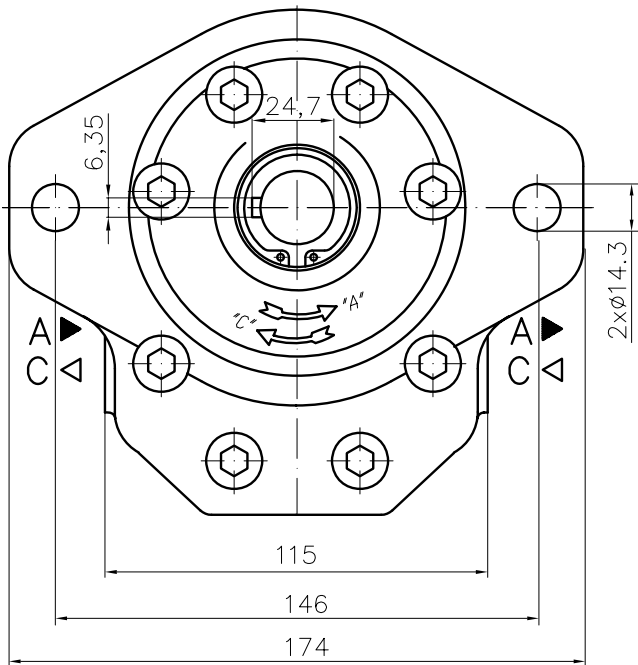
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	d	F	E	d	F
30A(C)32X415	32	45,1	90,2	200	3000	101,0	163,8				40	M8	19
								51	M10	27			

Designed as a first section of multiple gear pumps group 32.



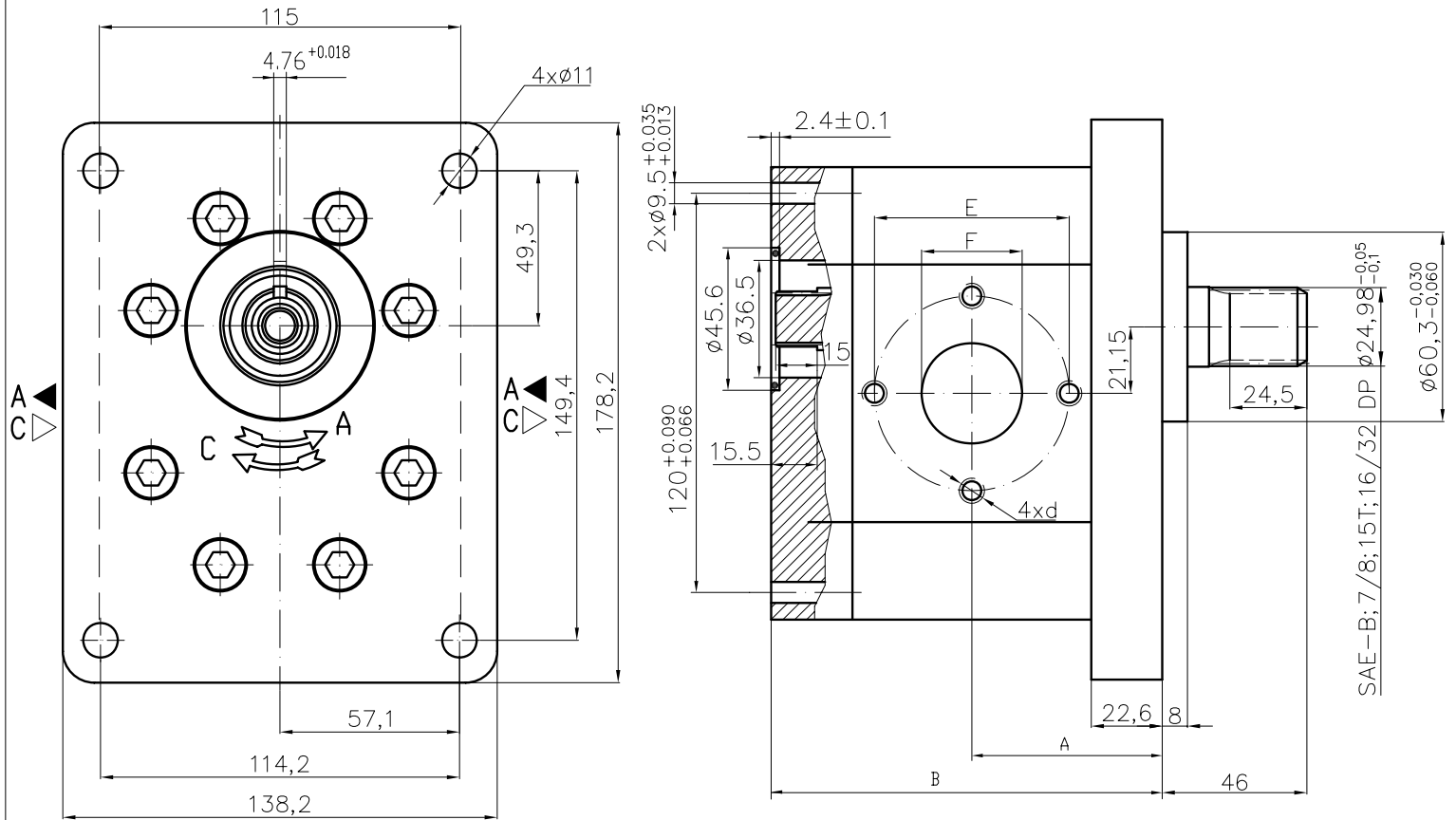
Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet		Outlet					
						A mm	B mm	E	d	F	E	d	F
30A(C)20X454H	20	28,2	56,4	250	3000	56,1	114,7	40	M8	19			
30A(C)22,2X454H	22,5	31,7	63,5	250	3000	57,6	117,7						
30A(C)25X454H	25	35,3	70,5	250	3000	58,3	119,1						
30A(C)28X454H	28	39,5	79,0	250	3000	60,2	122,7						
30A(C)32X454	32	45,1	75,2	250	2500	62,0	126,3						
30A(C)32X454H	32	45,1	90,2	250	3000	66,5	135,3	51	M10	27	40	M8	19
30A(C)36X454	36	50,8	84,6	250	2500	63,5	129,4						
30A(C)36X454H	36	51,3	95,8	250	2800	68,0	138,5						
30A(C)42X454	42	59,9	91,8	230	2300	66,3	135,0						
30A(C)42X454H	42	59,9	99,8	230	2500	70,8	144,0						
30A(C)46X454H	46	65,6	100,5	230	2300	72,7	147,8						
30A(C)50X454H	50	71,3	99,8	200	2100	74,5	151,4						
30A(C)55X454H	55	78,4	91,4	200	1750	76,7	155,9						
30A(C)60X454H	60	85,5	99,8	180	1750	78,7	160,4						

Designed as a first section of multiple gear pumps group 33.



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension								
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet			
								E	d	F	E	d	F	
30A(C)20X455H	20	28,2	56,4	250	3000	56,1	114,7	40	M8	19	40	M8	19	
30A(C)22,2X455H	22,5	31,7	63,5	250	3000	57,6	117,7							
30A(C)25X455H	25	35,3	70,5	250	3000	58,3	119,1							
30A(C)28X455H	28	39,5	79,0	250	3000	60,2	122,7							
30A(C)32X455	32	45,1	75,2	250	2500	62,0	126,3							
30A(C)32X455H	32	45,1	90,2	250	3000	66,5	135,3	51	M10	27	40	M8	19	
30A(C)36X455	36	50,8	84,6	250	2500	63,5	129,4							
30A(C)36X455H	36	51,3	95,8	250	2800	68,0	138,5							
30A(C)42X455	42	59,9	91,8	230	2300	66,3	135,0							
30A(C)42X455H	42	59,9	99,8	230	2500	70,8	144,0							
30A(C)46X455H	46	65,6	100,5	230	2300	72,7	147,8	51	M10	27	40	M8	19	
30A(C)50X455H	50	71,3	99,8	200	2100	74,5	151,4							
30A(C)55X455H	55	78,4	91,4	200	1750	76,7	155,9							
30A(C)60X455H	60	85,5	99,8	180	1750	78,7	160,4							

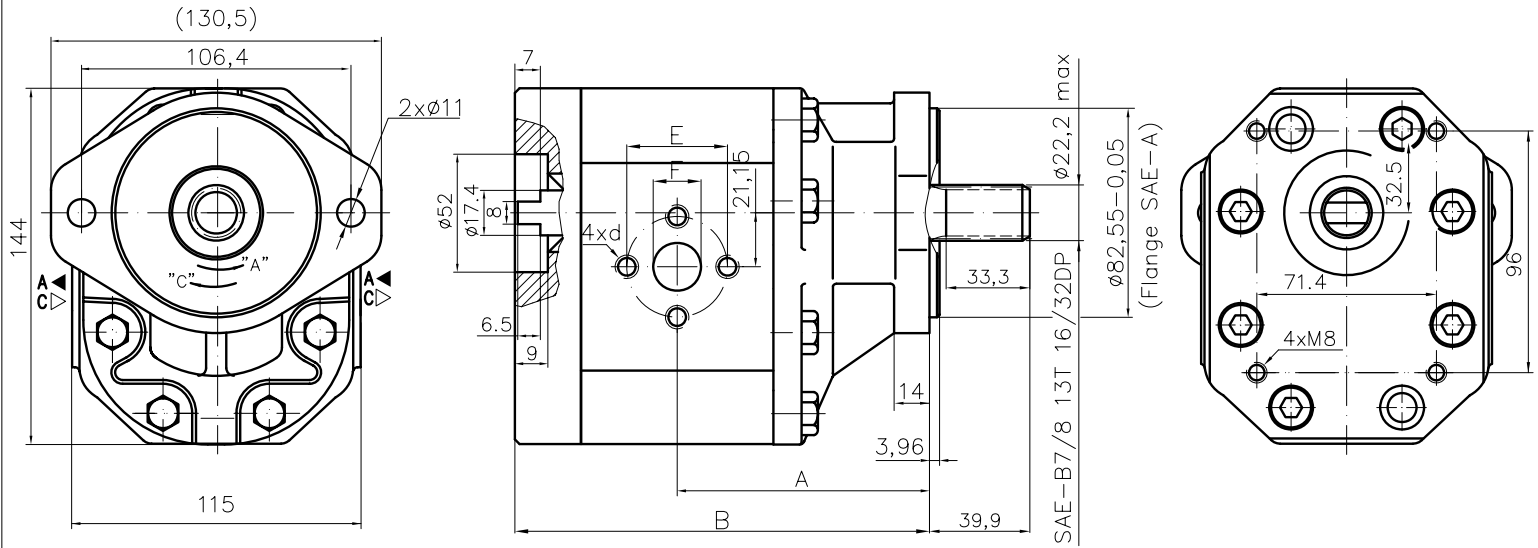
Designed as a first section of multiple gear pumps group 43.



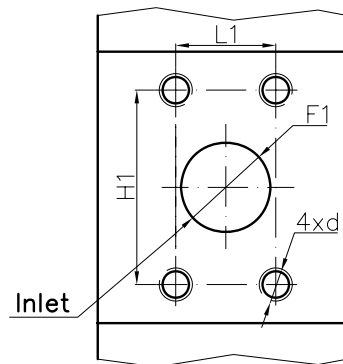
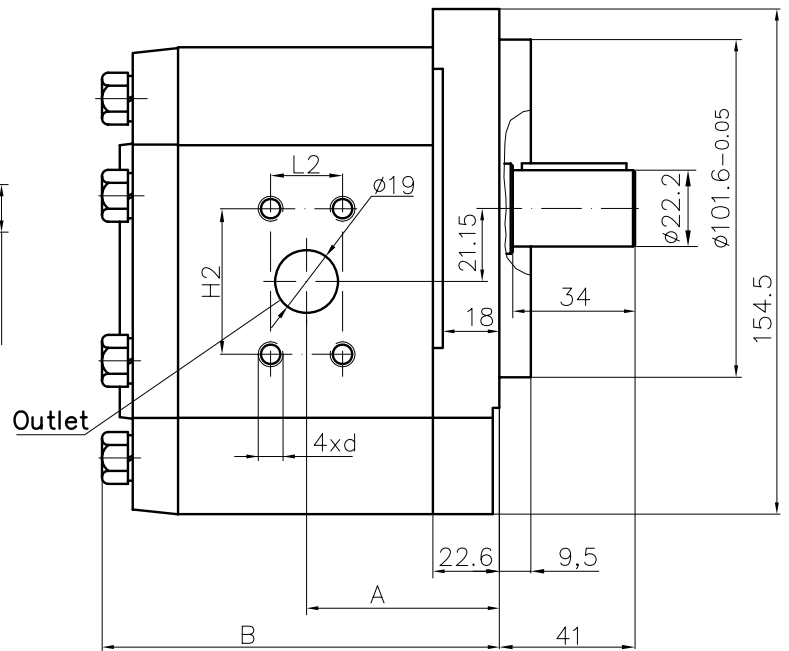
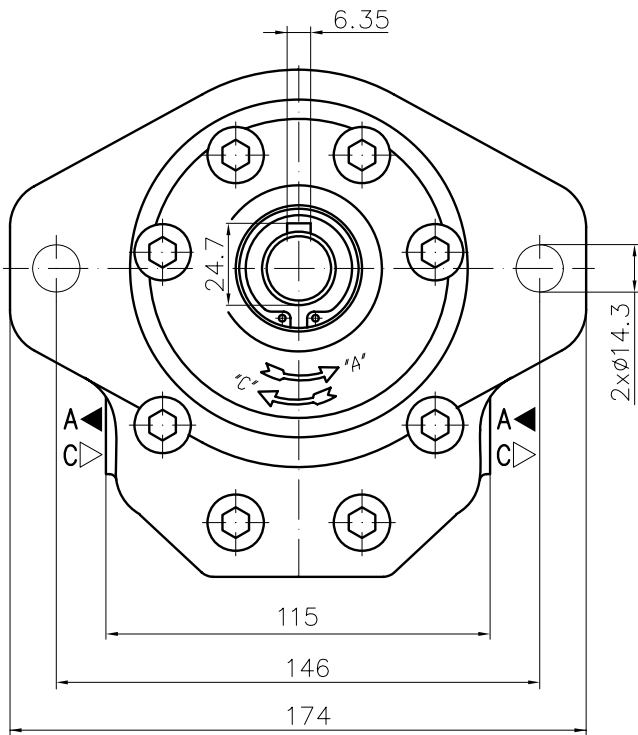
SAE-B; 7/8; 15T; 16/32 DP $\varnothing 24,98^{+0,05}_{-0,1}$
 $\varnothing 60,3^{+0,030}_{-0,060}$

Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet		Outlet					
						A mm	B mm	E mm	d mm	F mm	E mm	d mm	F mm
40A(C)36X473H	36	51,3	95,8	250	2800	68,0	138,5	62					
40A(C)42X473H	42	59,9	99,8	230	2500	70,8	144,0	3/8"-16UNC-2B	32	51	3/8"-16UNC-2B	27	
40A(C)46X473H	46	65,6	100,5	230	2300	72,7	147,8						
40A(C)50X473H	50	71,3	99,8	200	2100	74,5	151,4						
40A(C)55X473H	55	78,4	91,4	200	1750	76,7	155,9						
40A(C)60X473H	60	85,5	99,8	180	1750	78,7	160,4						

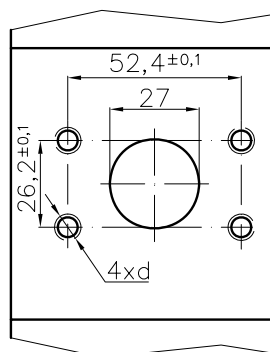
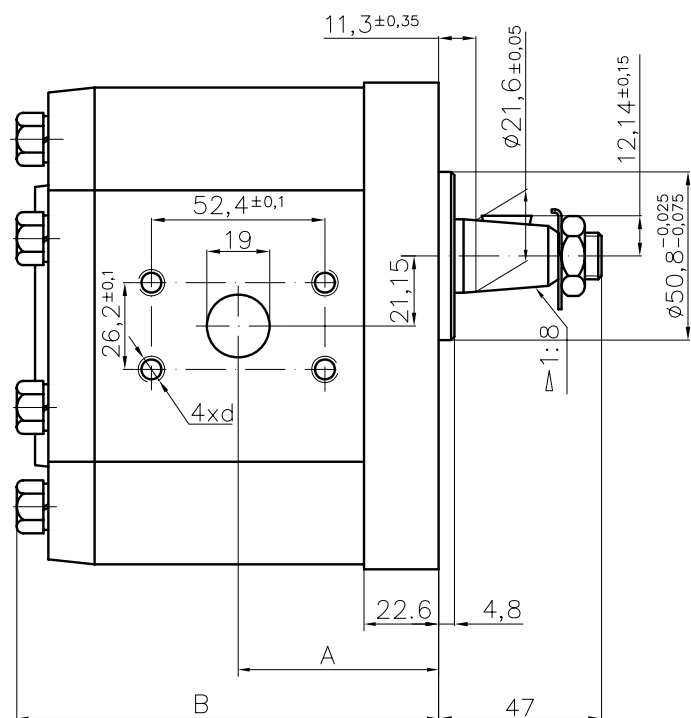
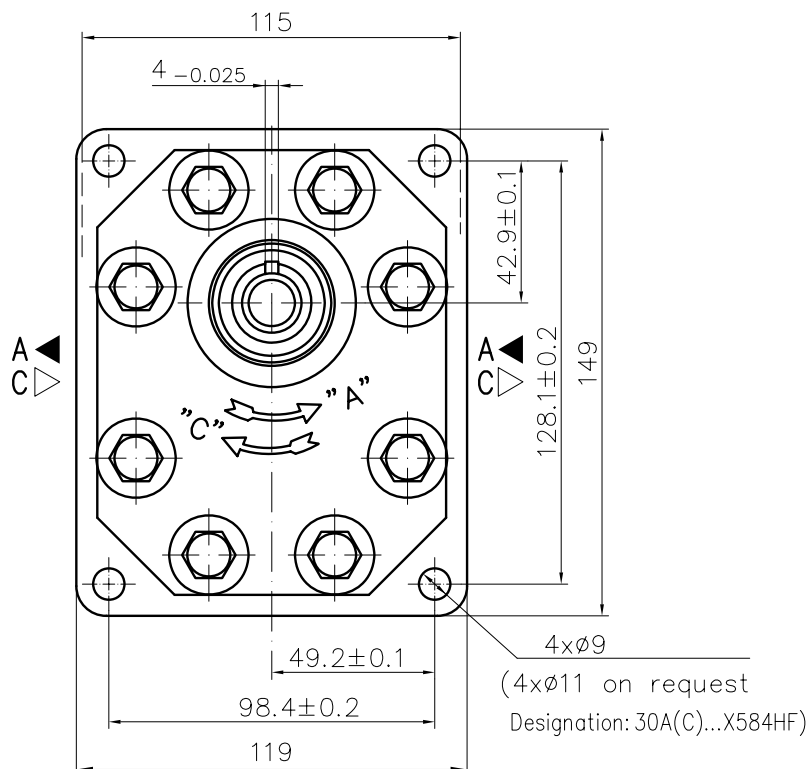
Designed as a first section of multiple gear pumps group 32.



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet			Outlet				
						A mm	B mm	E mm	d mm	F mm	E mm	d mm	F mm
30A(C)32X505H	32	45,1	90,2	220	3000	105,5	174,3				40	M8	19
								51	M10	27			

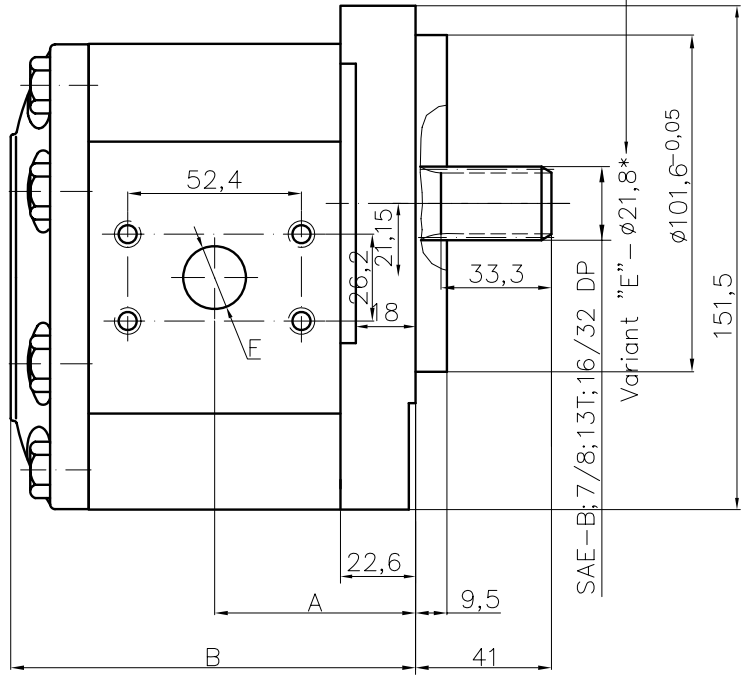
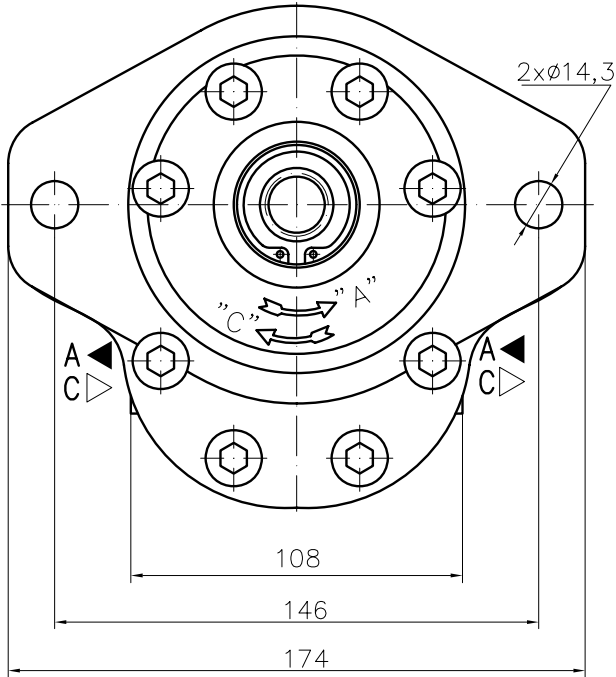


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension									
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet				Outlet			
								F1	d	H1	L1	F2	d	H2	L2
30A(C)20X547H	20	28,2	56,4	250	3000	56,1	116,7	19	3/8"-16UNC-2B	47,6	22,2	19	3/8"-16UNC-2B	47,6	22,2
30A(C)22,2X547H	22,5	31,7	63,5	250	3000	57,6	119,7								
30A(C)25X547H	25	35,3	58,8	250	2500	58,3	121,1								
30A(C)28X547H	28	39,5	79,0	250	3000	60,2	124,7								
30A(C)32X547	32	45,1	75,2	250	2500	62,0	128,3	27	3/8"-16UNC-2B	52,4	26,2	19	3/8"-16UNC-2B	47,6	22,2
30A(C)32X547H	32	45,1	84,2	250	2800	66,5	137,3								
30A(C)36X547	36	50,8	77,8	250	2300	63,5	131,4								
30A(C)36X547H	36	51,3	85,5	250	2500	68,0	140,5								
30A(C)42X547	42	59,9	91,8	230	2300	66,3	137,0	27	3/8"-16UNC-2B	52,4	26,2	19	3/8"-16UNC-2B	47,6	22,2
30A(C)42X547H	42	59,9	83,8	230	2100	70,8	146,1								
30A(C)46X547H	46	65,6	76,5	230	1750	72,7	149,8								
30A(C)50X547H	50	71,3	83,1	200	1750	74,5	153,4								
30A(C)55X547H	55	78,4	91,4	200	1750	76,7	157,9	27	3/8"-16UNC-2B	52,4	26,2	19	3/8"-16UNC-2B	47,6	22,2
30A(C)60X547H	60	85,5	99,8	180	1750	78,7	162,4								

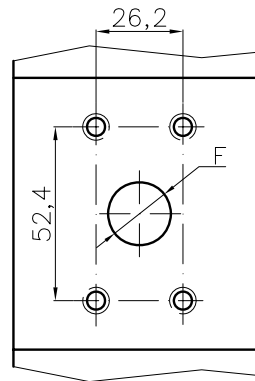


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension									
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet				Outlet			
						F1	d	H1	L1	F2	d	H2	L2		
30A(C)25X584H	25	35,3	70,5	250	3000	58,3	121,1								
30A(C)28X584H	28	39,5	79,0	250	3000	60,2	124,7								
30A(C)32X584	32	45,1	75,2	250	2500	62,0	128,3								
30A(C)32X584H	32	45,1	90,2	250	3000	66,5	137,3								
30A(C)36X584	36	50,8	84,6	250	2500	63,5	131,4								
30A(C)36X584H	36	51,3	95,8	250	2800	68,0	140,5								
30A(C)42X584	42	59,9	91,8	230	2300	66,3	137,0	27	M8	52,4	26,2	19	M8	52,4	26,2
30A(C)42X584H	42	59,9	99,8	230	2500	70,8	146,1								
30A(C)46X584H	46	65,6	100,5	230	2300	72,7	149,8								
30A(C)50X584H	50	71,3	99,8	200	2100	74,5	153,4								
30A(C)55X584H	55	78,4	91,4	200	1750	76,7	157,9								
30A(C)60X584H	60	85,5	99,8	180	1750	78,7	162,4								

*designation: 30A(C)...X610HE-V

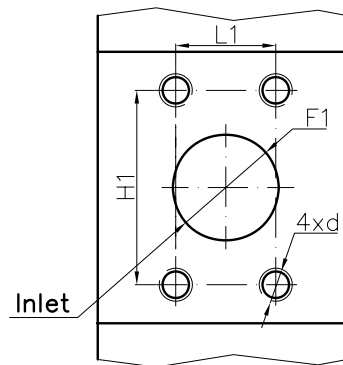
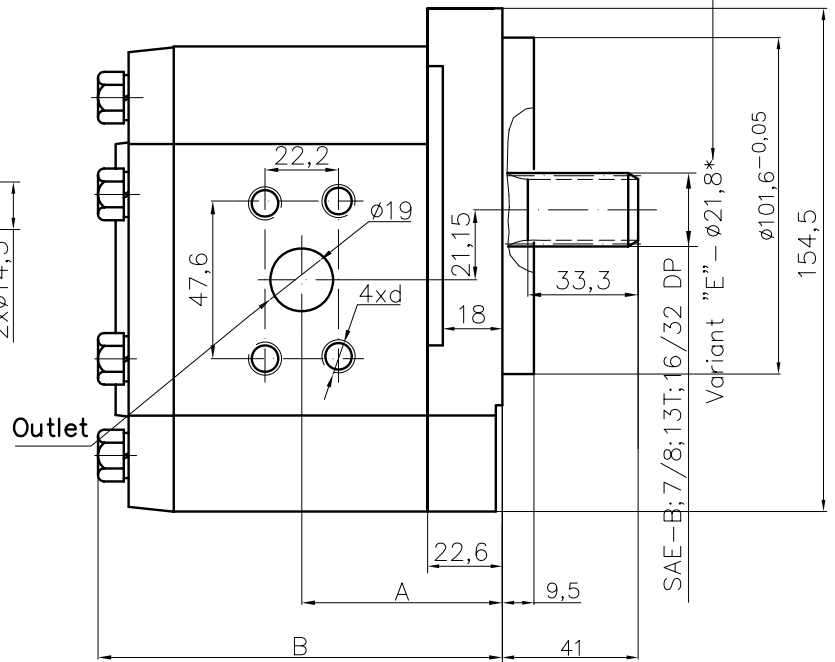
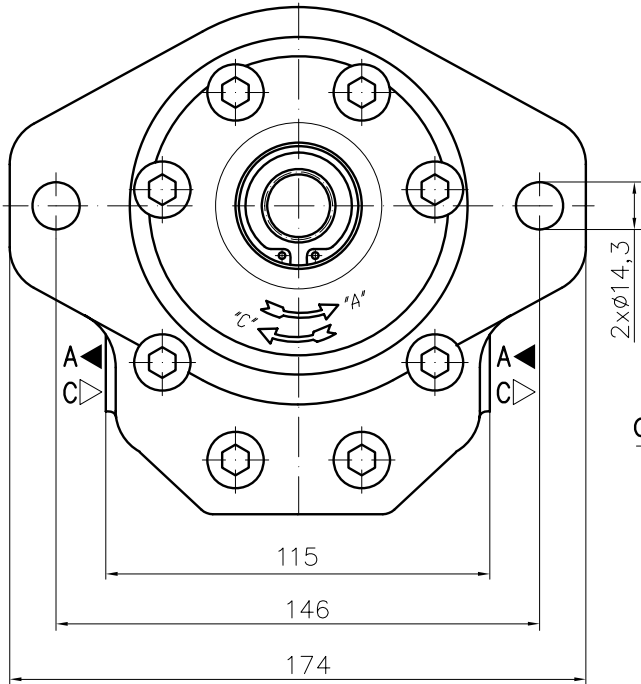


Ports measure for 30A(C)22,5X610H-V
30A(C)25X610H-V
30A(C)28X610H-V

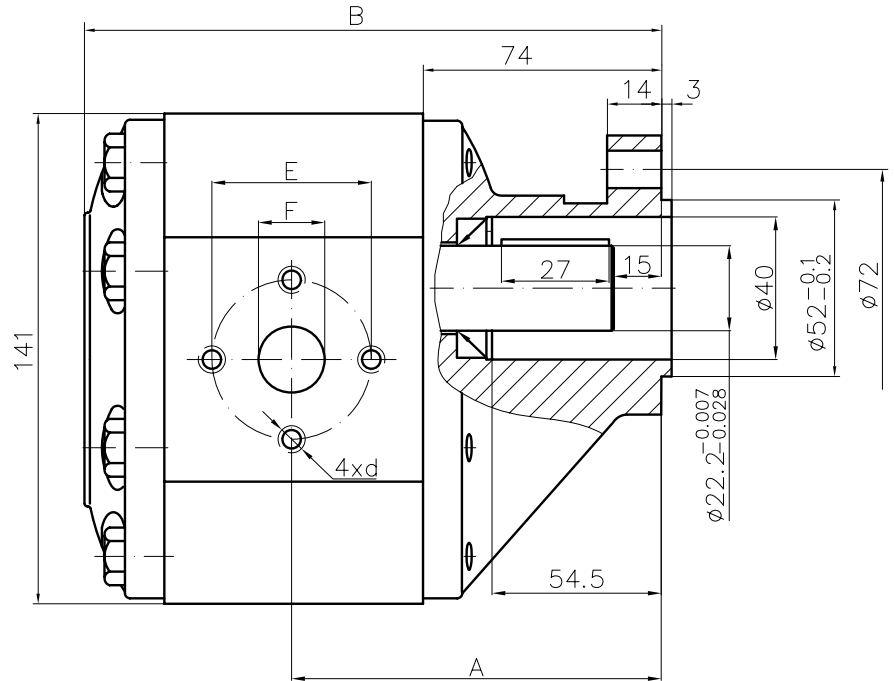
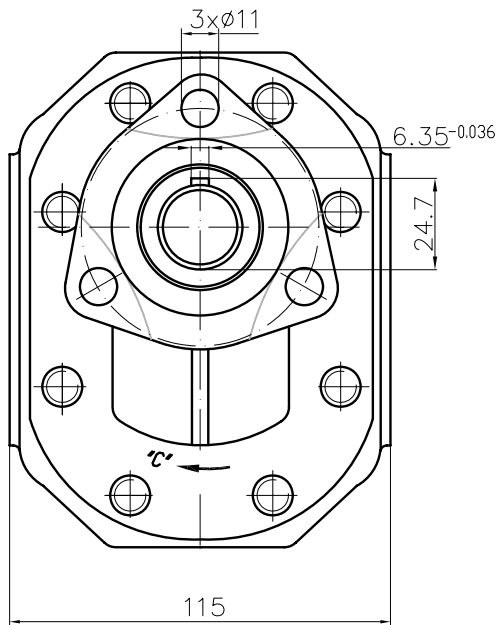


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension																
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet				Outlet										
								F1	d	H1	L1	F2	d	H2	L2							
30A(C)22,2X610H-V	22,5	31,7	63,5	250	3000	57,6	116,2	25	M10	52,4	26,2	19	M10	52,4	26,2							
30A(C)25X610H-V	25	35,3	70,5	250	3000	58,3	117,6															
30A(C)28X610H-V	28	39,5	79,0	250	3000	60,2	121,2															
30A(C)32X610H-V	32	45,1	90,2	250	3000	66,5	133,8															
30A(C)36X610H-V	36	50,8	94,8	250	2800	68,0	137,0															
30A(C)42X610H-V	42	59,2	98,7	230	2500	70,8	142,6															
30A(C)46X610H-V	46	65,6	100,5	230	2300	72,7	146,3															
30A(C)50X610H-V	50	71,3	99,8	200	2100	74,5	149,9															
30A(C)55X610H-V	55	78,4	91,4	200	1750	76,7	154,4															
30A(C)60X610H-V	60	85,5	99,8	180	1750	78,7	158,9															
30A(C)22,2X610HH-V	22,5	31,7	63,5	250	3000	62,1	125,2									25						
30A(C)25X610HH-V	25	35,3	70,5	250	3000	62,8	126,6															
30A(C)28X610HH-V	28	39,5	79,0	250	3000	64,7	130,2															

*designation: 30A(C)...X613HE

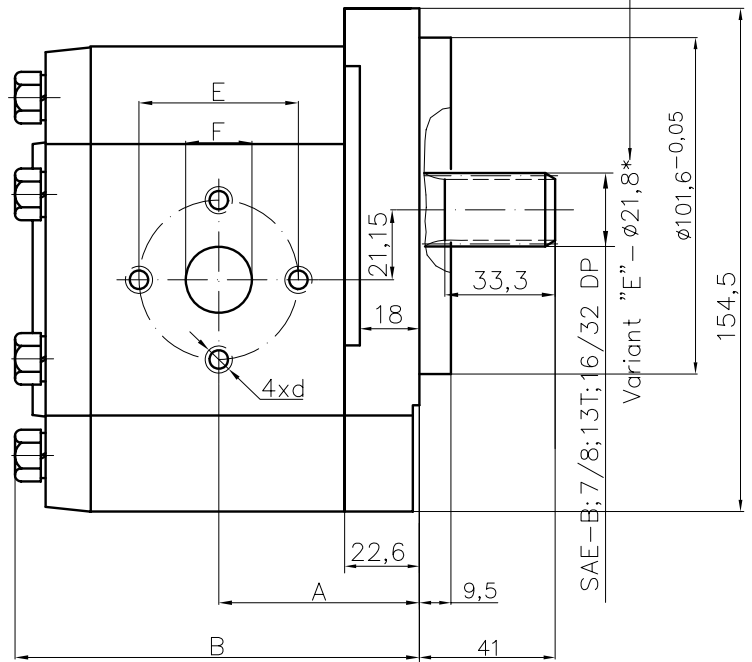
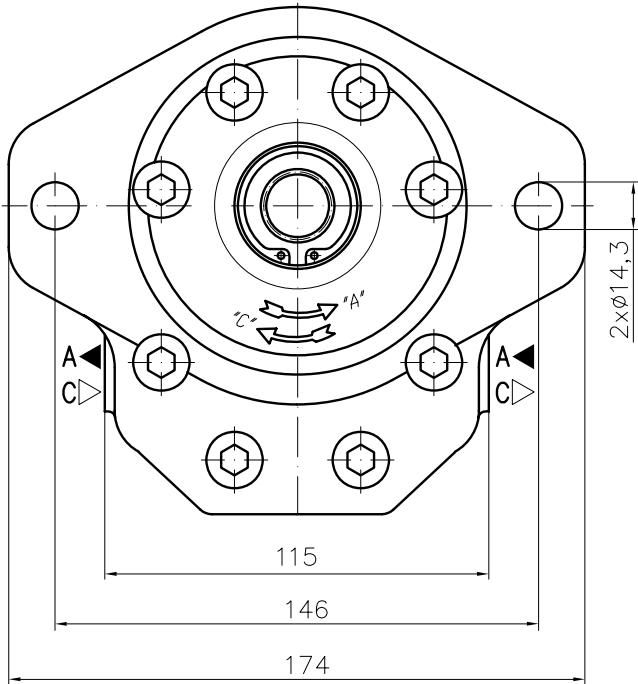


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension									
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet				Outlet			
								F1	d	H1	L1	F2	d	H2	L2
30A(C)20X613H	20	28,2	56,4	250	3000	56,1	116,7	19	3/8"-16UNC-2B	47,6	22,2	19	3/8"-16UNC-2B	47,6	22,2
30A(C)22,2X613H	22,5	31,7	63,5	250	3000	57,6	119,7								
30A(C)25X613H	25	35,3	70,5	250	3000	58,3	121,1								
30A(C)28X613H	28	39,5	79,0	250	3000	60,2	124,7								
30A(C)32X613	32	45,1	75,2	250	2500	62,0	128,3								
30A(C)32X613H	32	45,1	90,2	250	3000	66,5	137,3	27	3/8"-16UNC-2B	52,4	26,2	19	3/8"-16UNC-2B	47,6	22,2
30A(C)36X613	36	50,8	84,6	250	2500	63,5	131,4								
30A(C)36X613H	36	51,3	95,8	250	2800	68,0	140,5								
30A(C)42X613	42	59,9	91,8	230	2300	66,3	137,0								
30A(C)42X613H	42	59,9	99,8	230	2500	70,8	146,1								
30A(C)46X613H	46	65,6	100,5	230	2300	72,7	149,8								
30A(C)50X613H	50	71,3	99,8	200	2100	74,5	153,4								
30A(C)55X613H	55	78,4	91,4	200	1750	76,7	157,9								
30A(C)60X613H	60	85,5	99,8	180	1750	78,7	162,4								

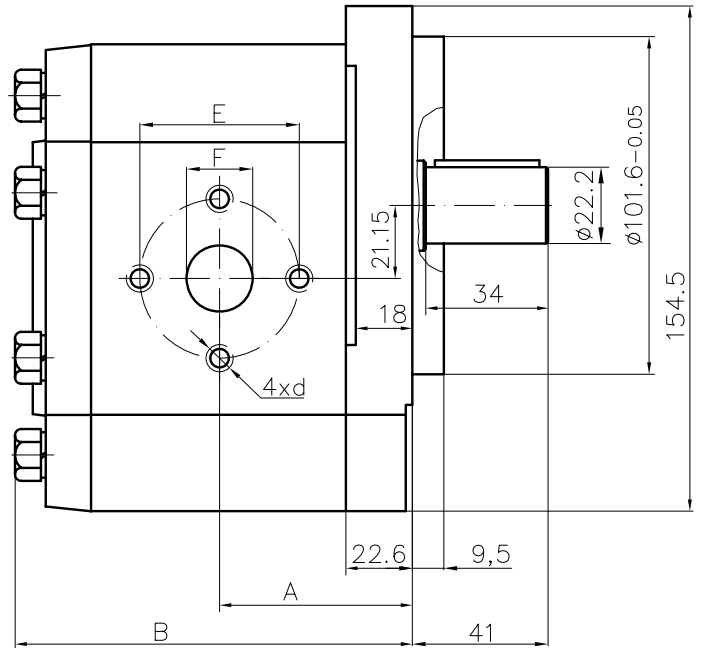
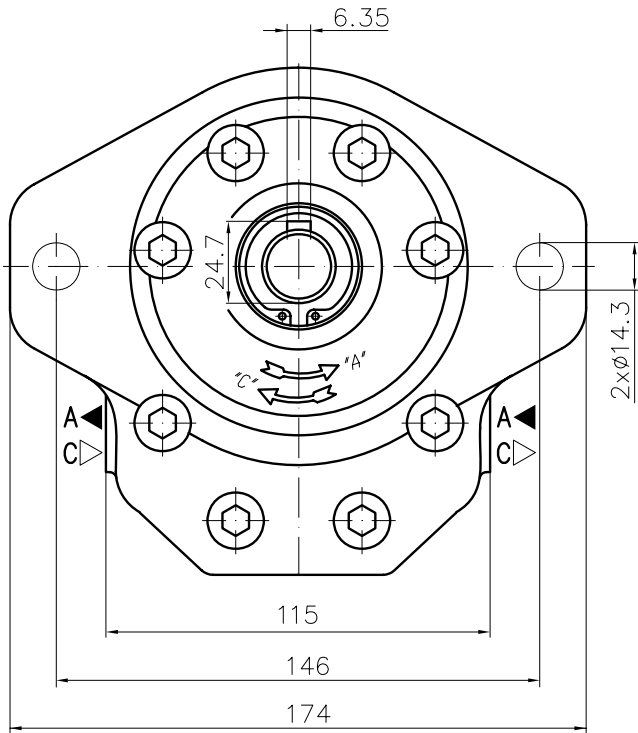


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			Inlet		Outlet					
						A mm	B mm	E	d	F	E	d	F
30A(C)32X615H	32	45,1	90,2	250	3000	117,8	188,2	48,12	M8-6H	28	48,12	M8-6H	20
30A(C)36X615H	36	51,3	95,8	250	2800	119,5	191,4						
30A(C)42X615H	42	59,9	99,8	230	2500	122,2	197,0						
30A(C)46X615H	46	65,6	100,5	230	2300	124,1	200,7						
30A(C)50X615H	50	71,3	99,8	200	2100	125,9	204,3						
30A(C)55X615H	55	78,4	91,4	200	1750	128,1	208,8						
30A(C)60X615H	60	85,5	99,8	180	1750	130,4	213,3						

*designation: 30A(C)...X616HE

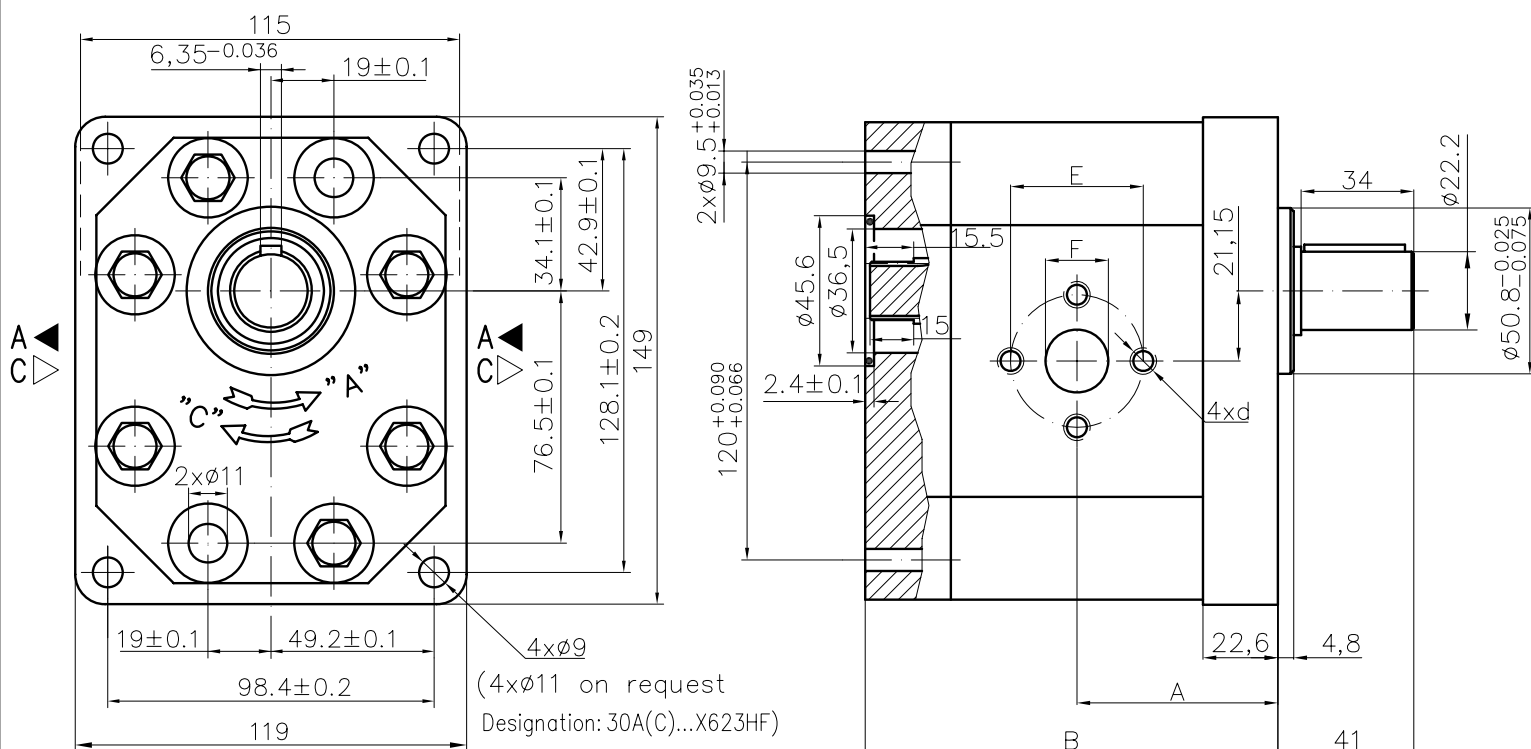


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	d	F	E	d	F
30A(C)20X616H	20	28,2	56,4	250	3000	56,1	114,7	48,12	5/16" -18UNC-2B	27	48,12	5/16" -18UNC-2B	19
30A(C)22,2X616H	22,5	31,7	63,5	250	3000	57,6	117,7						
30A(C)25X616H	25	35,3	70,5	250	3000	58,3	119,1						
30A(C)28X616H	28	39,5	79,0	250	3000	60,2	122,7						
30A(C)32X616	32	45,1	75,2	250	2500	62,0	126,3						
30A(C)32X616H	32	45,1	90,2	250	3000	66,5	135,3						
30A(C)36X616	36	50,8	84,6	250	2500	63,5	129,4						
30A(C)36X616H	36	51,3	95,8	250	2800	68,0	138,5						
30A(C)42X616	42	59,9	91,8	230	2300	66,3	135,0						
30A(C)42X616H	42	59,9	99,8	230	2500	70,8	144,0						
30A(C)46X616H	46	65,6	100,5	230	2300	72,7	147,8						
30A(C)50X616H	50	71,3	99,8	200	2100	74,5	151,4						
30A(C)55X616H	55	78,4	91,4	200	1750	76,7	155,9						
30A(C)60X616H	60	85,5	99,8	180	1750	78,7	160,4						

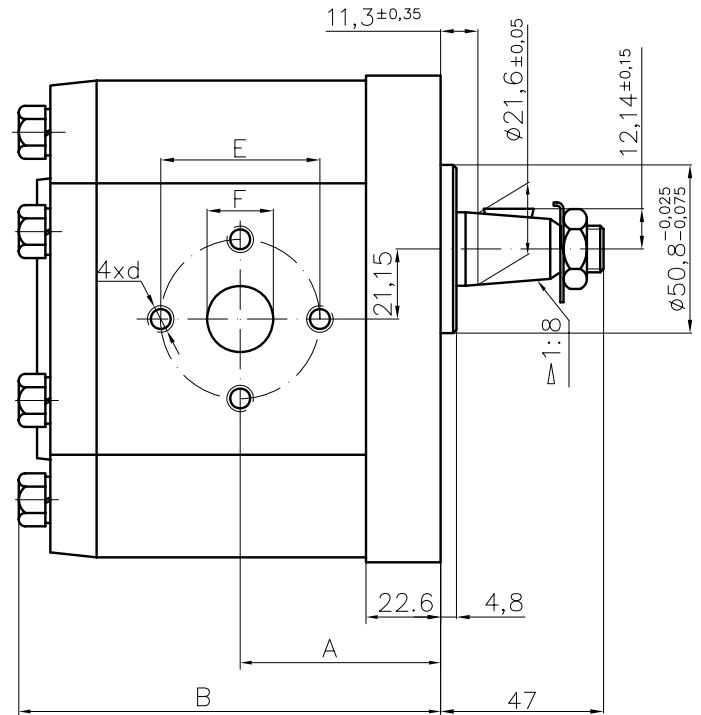
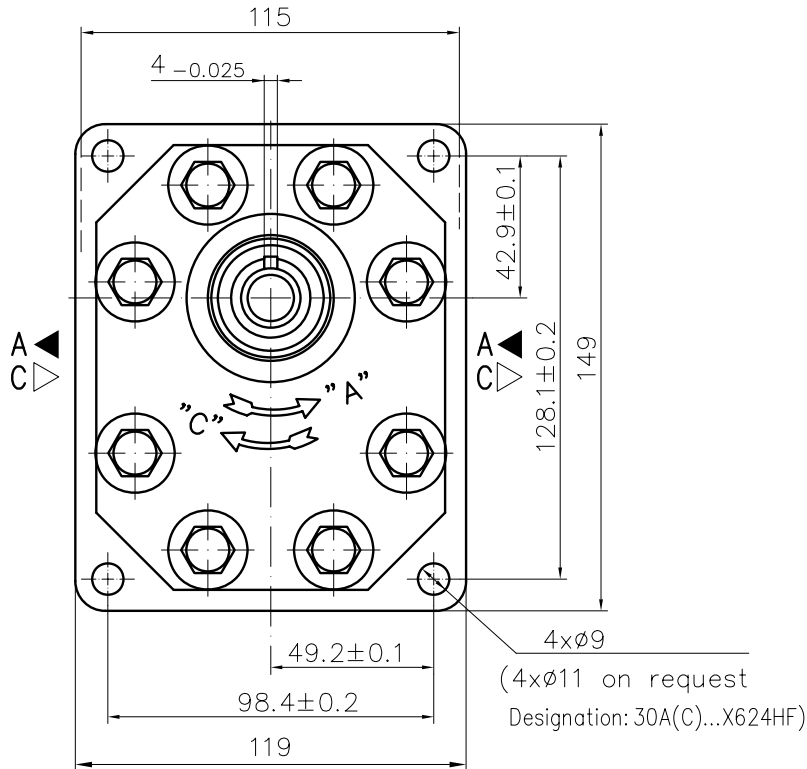


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	d	F	E	d	F
30A(C)20X617H	20	28,2	56,4	250	3000	56,1	114,7	48,12	5/16" -18UNC-2B	27	48,12	5/16" -18UNC-2B	19
30A(C)22,2X617H	22,5	31,7	63,5	250	3000	57,6	117,7						
30A(C)25X617H	25	35,3	70,5	250	3000	58,3	119,1						
30A(C)28X617H	28	39,5	79,0	250	3000	60,2	122,7						
30A(C)32X617	32	45,1	75,2	250	2500	62,0	126,3						
30A(C)32X617H	32	45,1	90,2	250	3000	66,5	135,3						
30A(C)36X617	36	50,8	84,6	250	2500	63,5	129,4						
30A(C)36X617H	36	51,3	95,8	250	2800	68,0	138,5						
30A(C)42X617	42	59,9	91,8	230	2300	66,3	135,0						
30A(C)42X617H	42	59,9	99,8	230	2500	70,8	144,0						
30A(C)46X617H	46	65,6	100,5	230	2300	72,7	147,8						
30A(C)50X617H	50	71,3	99,8	200	2100	74,5	151,4						
30A(C)55X617H	55	78,4	91,4	200	1750	76,7	155,9						
30A(C)60X617H	60	85,5	99,8	180	1750	78,7	160,4						

Designed as a first section of multiple gear pumps group 33.



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	d	F	E	d	F
30A(C)20X623H	20	28,2	56,4	250	3000	56,1	114,7	40	M8	19	40	M8	19
30A(C)22,2X623H	22,5	31,7	63,5	250	3000	57,6	117,7						
30A(C)25X623H	25	35,3	70,5	250	3000	58,3	119,1						
30A(C)28X623H	28	39,5	79,0	250	3000	60,2	122,7						
30A(C)32X623H	32	45,1	90,2	250	3000	66,5	135,3						
30A(C)36X623H	36	51,3	95,8	250	2800	68,0	138,5	51	M10	27	40	M8	19
30A(C)42X623H	42	59,9	99,8	230	2500	70,8	144,0						
30A(C)46X623H	46	65,6	100,5	230	2300	72,7	147,8						
30A(C)50X623H	50	71,3	99,8	200	2100	74,5	151,4						
30A(C)55X623H	55	78,4	91,4	200	1750	76,7	155,9						
30A(C)60X623H	60	85,5	99,8	180	1750	78,7	160,4						

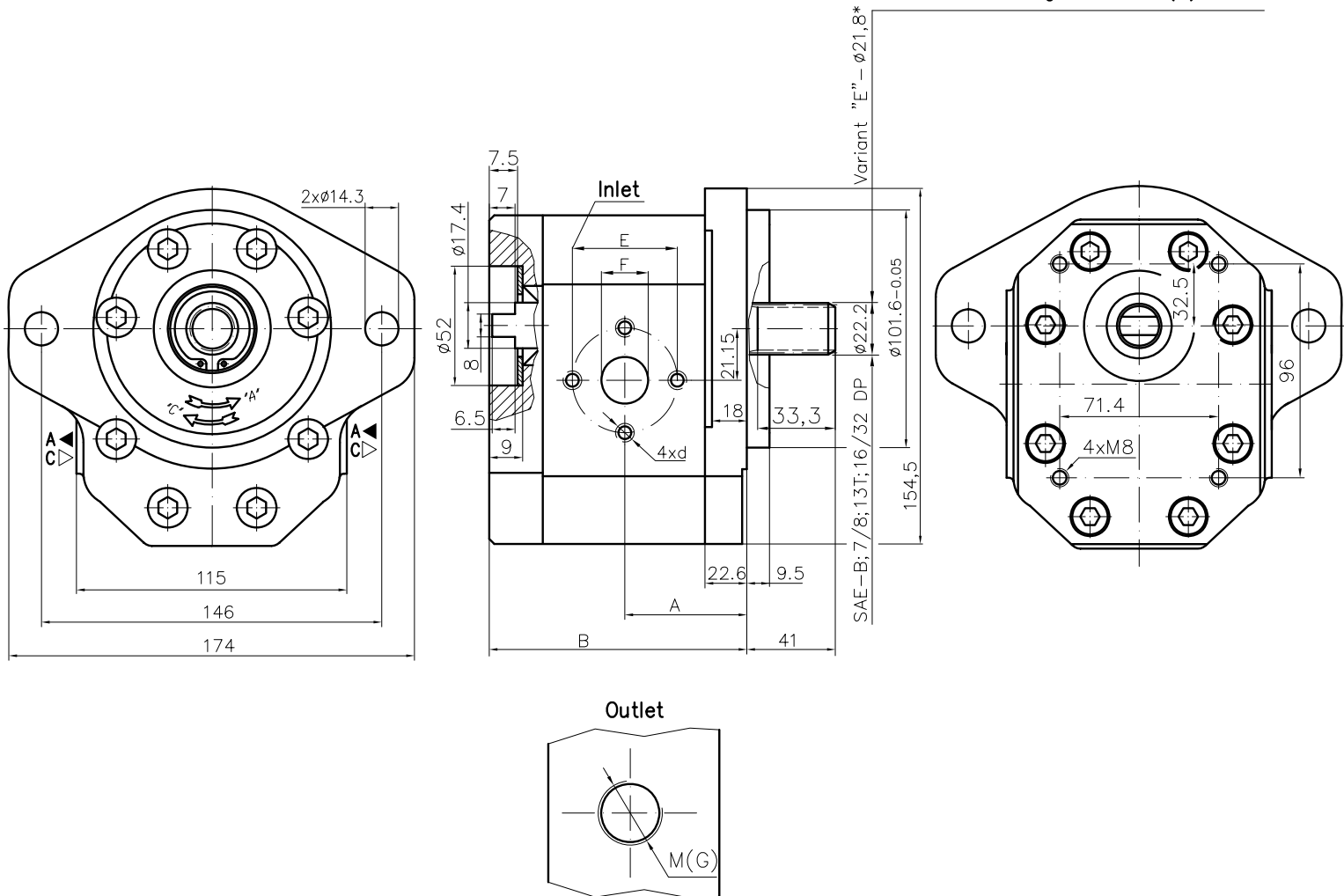


Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension							
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet		
								E	d	F	E	d	F
30A(C)20X624H	20	28,2	56,4	250	3000	56,1	116,7	48,12	5/16-18UNC-2B	22	48,12	5/16-18UNC-2B	20
30A(C)22,2X624H	22,5	31,7	63,5	250	3000	57,6	119,7						
30A(C)25X624H	25	35,3	70,5	250	3000	58,3	121,1						
30A(C)28X624H	28	39,5	79,0	250	3000	60,2	124,7						
30A(C)32X624	32	45,1	75,2	250	2500	62,0	128,3						
30A(C)32X624H	32	45,1	90,2	250	3000	66,5	137,3						
30A(C)36X624	36	50,8	84,6	250	2500	63,5	131,4						
30A(C)36X624H	36	51,3	95,8	250	2800	68,0	140,5						
30A(C)42X624	42	59,9	91,8	230	2300	66,3	137,0						
30A(C)42X624H	42	59,9	99,8	230	2500	70,8	146,1						
30A(C)46X624H	46	65,6	100,5	230	2300	72,7	149,8						
30A(C)50X624H	50	71,3	99,8	200	2100	74,5	153,4						
30A(C)55X624H	55	78,4	91,4	200	1750	76,7	157,9						
30A(C)60X624H	60	85,5	99,8	180	1750	78,7	162,4						

Designed as a first section of multiple gear pumps group 32.

Usually connected with second section pumps type 20A(C)...X201 and others with central diameter $\phi 52$.

*Variant "E" – designation 30A(C)...X675HE



Type	Displacement cm ³ /rev	Flow		Pressure P _{nom} bar	max Speed n rpm	Dimension						
		at 1500 rpm l/min	at max rpm l/min			A mm	B mm	Inlet			Outlet	
								E	d	F	M	G
30A(C)20X675H	20	28,2	56,4	250	3000	56,1	114,7	40	M8	19	M27x1,5	G3/4"-A
30A(C)22,2X675H	22,5	31,7	63,5	250	3000	57,6	117,7					
30A(C)25X675H	25	35,3	70,5	250	3000	58,3	119,1					
30A(C)28X675H	28	39,5	79,0	250	3000	60,2	122,7					
30A(C)32X675	32	45,1	75,2	250	2500	62,0	126,3					
30A(C)32X675H	32	45,1	90,2	250	3000	66,5	135,3	51	M10	27		
30A(C)36X675	36	50,8	84,6	250	2500	63,5	129,4					
30A(C)36X675H	36	51,3	95,8	250	2800	68,0	138,5					
30A(C)42X675	42	59,9	91,8	230	2300	66,3	135,0					
30A(C)42X675H	42	59,9	99,8	230	2500	70,8	144,0					
30A(C)46X675H	46	65,6	100,5	230	2300	72,7	147,8					
30A(C)50X675H	50	71,3	99,8	200	2100	74,5	151,4					
30A(C)55X675H	55	78,4	91,4	200	1750	76,7	155,9					
30A(C)60X675H	60	85,5	99,8	180	1750	78,7	160,4					



Hydraulic Gear Pumps Hydraulische Zahnradpumpen Шестеренные насосы



GENERAL DESCRIPTION

The gear pumps are designed for transforming the mechanical energy as energy of the working liquid (pressure and flow rate). They are simplified in construction and they have a relatively low cost. All these benefits ensure their wide application in the hydraulic systems.

BASIC DESIGN

The pump consists essentially of a pair of gears supported in bush bearing, inserted in one body. It is closed between two covers (front and rear). The drive shaft is radially sealed. A high volumetric efficiency is ensured by specially designed bush bearing clearance

FUNCTIONAL SYMBOL

DRIVE ARRANGEMENTS

The pump drive can be direct or indirect (by gear, chains, or belt transmissions). Both drives should not impose axial or radial forces on the pump shaft. Oldham coupling serrated drive adapters are used with direct drive. For indirect drive refer to the manufacturer.

ALLGEMEINES

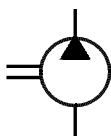
Die hydraulische Zahnradpumpen wandeln die mechanische Energie des Motors in Stroemungsenergie der Betriebsflüssigkeit (Druck und Foerderstrom) um. Ihre einfache Konstruktion und die verhaelt-nismaessig niedrige Preise erlauben ihre weite Anwendung in Hydroantrieben und -anlagen.

AUFBAU

Die Zahnradpumpe besteht im Wesentlichen aus einem in Lagerbuchsen gelagerten Zahnradpaar und einem Gehäuse mit Vorder und Hinterdeckel.

Die Antriebswelle ist mit Wellendichtring abgedichtet. Um einem hohen volumetrischen Wirkungsgrad der Pumpe zu gewährleisten, sind die Lager so ausgelegt, dass sie einen Axialausgleich des Lagerspieles ermöglichen.

SYMBOL



ANTRIEB

Direkter Antrieb ueber Oldham-Kupplungshuelse mit Schlitten. Axiale und radiale Kraefte auf Antriebswelle nicht zulaessig.

Indirekter Antrieb (Zahnrad-, Ketten- und Keilriemengetriebe) -bitte Ruecksprache mit dem Herstellerwerk.

ОБЩЕЕ ОПИСАНИЕ

Гидравлические шестеренные насосы предназначены для преобразования механической Энергии двигателя в энергию рабочей жидкости (давление и расход).

КОНСТРУКЦИЯ

Гидравлические шестеренные насосы имеют аксиальную компенсацию подшипникового зазора, в результате чего объемный КПД достыгает высокого значения.

УСЛОВНОЕ ОЗНАЧЕНИЕ

ПРИВОД

Привод может быть непосредственным или через зубчатую, цепную или ременную передачу. В каждом из этих случаев ведущий вал должен быть освобожден от осевых и радиальных нагрузок. При непосредственном приводе рекомендуется применять крестовую муфту или втулочно-шлицевую муфту.

В случаях, когда привод насоса осуществляется индиректной передачей, обращайтесь за консультацией к заводу изготовителю.



Hydraulic Gear Pumps Hydraulische Zahnradpumpen Шестеренные насосы



TECHNICAL DATA

Inlet pressure, absolute:

0.8...2.2bar

Working liquid: hydraulic oils
with viscosity 20...200 mm²/s

Degree of filtration:

0.025 mm

Fluid temperature range:

normal version:

-25 ... 80 °C

arctic version:

-40 ... 80 °C

Ambient temperature range:

normal version:

-22 ... 55 °C

arctic version:

-40 ... 55 °C

ORDERING CODES

GROUP, GRUPPE, ГРУППА

10 - tenth group

20 - twentieth group

30 - thirtieth group

10 - zehnte Gruppe

20 - zwanzigste Gruppe

30 - dreizigste Gruppe

10 - Десятая группа

20 - Двадцатая группа

30 - Тридцатая группа

DIRECTION OF ROTATION

DREERICHTUNG

НАПРАВЛЕНИЕ ВРАЩЕНИЯ



A (S)



C (D)



R

DISPLACEMENT in cm³

FOERDERVOLUMEN im cm³

РАБОЧИЙ ОБЪЕМ в см³

TECHNISCHE DATEN

Eingangsdruck, absolut:

0.8...2.2Bar

Working liquid: Hydraulikoel
mit Viskositaet 20...200 mm²/s

Filterfeinheit:

0.025 mm

Temperaturbereich:

normale Ausfuerung:

-25 ... 80 °C

Arktische Ausfuerung:

-40 ... 80 °C

Umgebungstemperaturbereich:

normale Ausfuerung:

-22 ... 55 °C

Arktische Ausfuerung:

-40 ... 55 °C

BESTELLANGABEN

**** * *** * *** (* *)**

ТЕХНИЧЕСКИЕ ДАННЫЕ

Давление на входе,
абсолютное

0.8...2.2bar

Рабочая жидкость:
гидравлические масла с
вязкостью 20 ... 200 mm²/s

Тонкость фильтрации:

0.025 mm

Температура масла:

нормальное исполнение:

-25 ... 80 °C

арктическое исполнение:

-40 ... 80 °C

Температура
окружающей среды:

нормальное исполнение:

-22 ... 55 °C

арктическое исполнение:

-40 ... 55 °C

СПОСОБ ЗАЯВЛЕНИЯ

- Normal version

G - GAS thread (BSP)

M - Metric thread

U - UNF thread

- Normal version

H - Heavy-duty version

(only for Gr. 30)

NUMBER of the MODIFICATION

MODIFIKATIONS - Nr

НОМЕР МОДИФИКАЦИИ

OUTLET of the DRIVE SHAFT

X - Throug the front cover

Y - Trough the both covers

WELLENENDE

X - am Vorderdeckel

Y - beiderseitig

ВЫХОД ВЕДУЩЕГО ВАЛА

X - через переднюю крышку

Y - через обе крышки



Hydraulic Gear Pumps Hydraulische Zahnradpumpen Шестеренные насосы



Example:

30A32X146H - hydraulic gear pump, thirtieth group, direction of rotation - counter clockwise, displacement 32 cm³, modification 146H.

Beispiel:

30A32X146H - hydraulische Zahnradpumpe, dreißigste Gruppe, Dreerichtung - links, Foerdervolumen 32 cm³, Wellenende am Voerderdeckel, Ausfuerung 146H.

Пример:

30A32X146H - шестеренный насос, тридцатая группа, направление вращения против часовой стрелки, рабочий объем 32 см³, выход вала через переднюю крышку, модификация 146H.

DESIGN CALCULATIONS

BERECHNUNG VON PUMPEN

ВЫЧИСЛЕНИЕ НАСОСОВ

Flow:

$$Q = \frac{q \cdot n \cdot \eta_q}{1000} \quad [l/min]$$

Foerderstom:

$$Q = \frac{q \cdot n \cdot \eta_q}{1000} \quad [l/min]$$

Расход:

$$Q = \frac{q \cdot n \cdot \eta_q}{1000} \quad [l/min]$$

Theoretical drive torque:

$$M = \frac{q \cdot p}{20 \cdot \pi} \quad [N.m]$$

Antriebsmoment, theoretisch:

$$M = \frac{q \cdot p}{20 \cdot \pi} \quad [N.m]$$

Теоретический крутящий момент:

$$M = \frac{q \cdot p}{20 \cdot \pi} \quad [N.m]$$

Theoretical drive power:

$$P_t = \frac{Q \cdot p}{600} \quad [kW]$$

Leistung, theoretisch:

$$P_t = \frac{Q \cdot p}{600} \quad [kW]$$

Теоретическая мощность:

$$P_t = \frac{Q \cdot p}{600} \quad [kW]$$

Drive power:

$$P = \frac{P_t}{\eta} \quad [kW]$$

Antriebsleistung:

$$P = \frac{P_t}{\eta} \quad [kW]$$

Мощность:

$$P = \frac{P_t}{\eta} \quad [kW]$$

q [cm³]
p [bar]
n [min⁻¹]
 η_q [-]
 η [-]

DISPACEMENT:

10 group - q = 1 ... 6.1 cm³
20 group - q = 4.5 ... 25 cm³
30 group - q = 20 ... 60 cm³

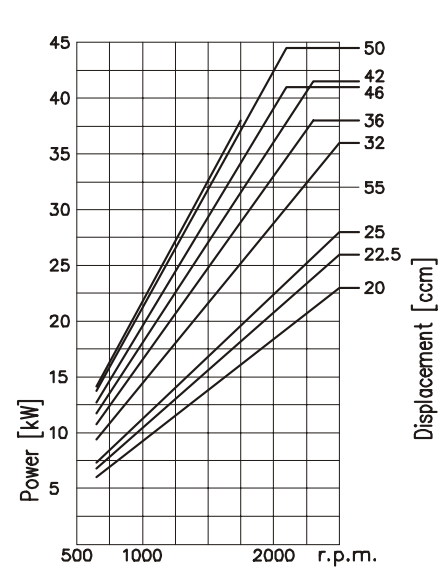
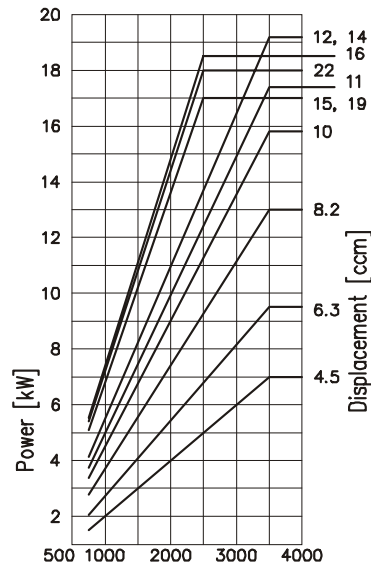
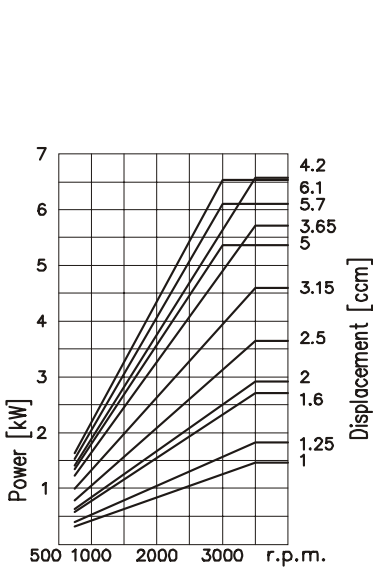
FOERDERVOLUMEN:

10Gruppe - q = 1 ... 6.1 cm³
20 Gruppe - q = 4.5 ... 25 cm³
30 Gruppe - q = 20 ... 60 cm³

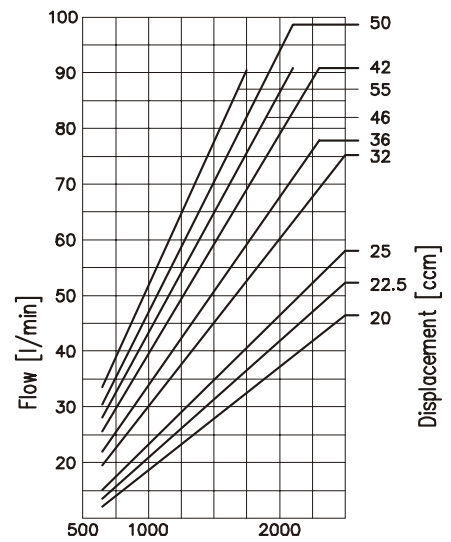
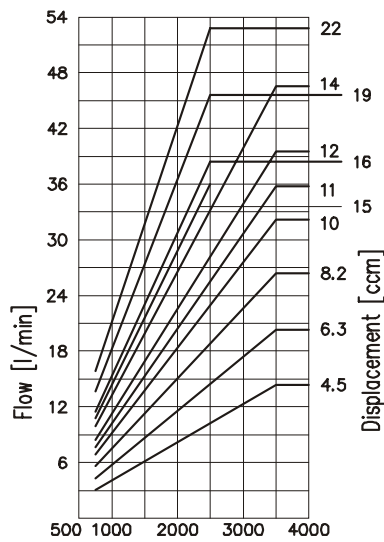
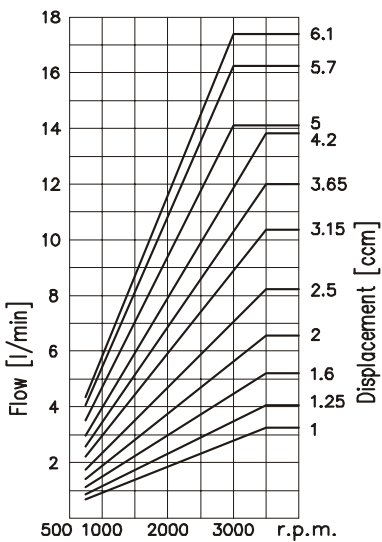
РАБОЧИЙ ОБЪЕМ:

10 группа - q = 1 ... 6.1 cm³
20 группа - q = 4.5 ... 25 cm³
30 группа - q = 20 ... 60 cm³

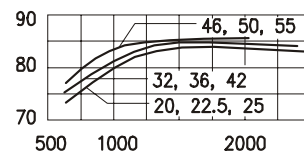
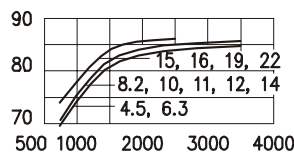
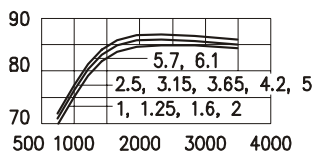
Power consumption at p_{max}



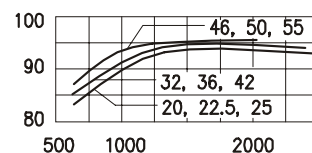
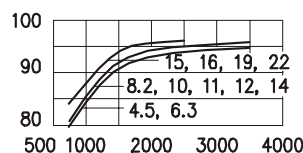
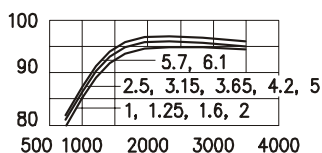
Flow at p_{max}



Total efficiency



Volumetric efficiency





Hydraulic Gear Pumps Hydraulische Zahnradpumpen Шестеренные насосы Gr 00 200 bar



Used symbols:

- q - displacement;
 p_{nom} - nominal pressure;
 n_{min} - minimal speed;
 n_{nom} - nominal speed;
 n_{max} - maximal speed;
 P_{nom} - power at p_{nom}
 and n_{nom}
 P_{max} - power at p_{nom}
 and n_{max}

Bezeichnungen

- Foerdervolumen;
 nominal Druck;
 minimal Geschwindigkeit;
 nominal Geschwindigkeit;
 maximal Geschwindigkeit;
 Leistung bei p_{nom} und
 n_{nom}
 Leistung bei p_{nom} und
 n_{max}

Обозначения:

- рабочий объем
 номинальное давление
 минимальная скорость
 номинальная скорость
 максимальная скорость
 мощность при p_{nom}
 и n_{nom}
 мощность при p_{nom}
 и n_{max}

volumetric efficiencies;

- η_{qmin} - at min. speed;
 η_{qnom} - at nom. speed;
 η_{qmax} - at max. speed;

volumetrischer Wirkungsgrad;

- bei min. Geschwindigkeit;
 bei nom. Geschwindigkeit;
 bei max. Geschwindigkeit;

объемный КПД.

- при мин. скорость
 при ном. скорость
 при макс. скорость

efficiencies;

- η_{min} - at min. speed;
 η_{nom} - at nom. speed;
 η_{max} - at max. speed;

Wirkungsgrad gesamt;

- bei min. Geschwindigkeit;
 bei nom. Geschwindigkeit;
 bei max. Geschwindigkeit;

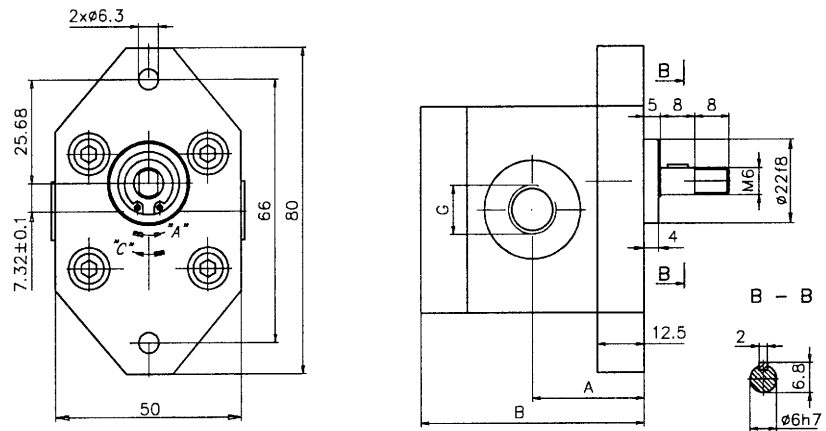
общий КПД.

- при мин. скорость
 при ном. скорость
 при макс. скорость

q	cm ³	0.25*	0.5	0.75	1.0	1.25	1.5	1.75*	2.0*	0.30*
p_{nom}	bar	200	200	200	200	200	175	160	160	200
n_{min}	min ⁻¹	750	750	750	750	750	750	750	750	750
n_{nom}	min ⁻¹	1500	1500	1500	1500	1500	1500	1500	1500	1500
n_{max}	min ⁻¹	3500	3500	3500	3000	2500	2000	1500	1500	3500
η_{qmin}	%	75	75	75	78	78	78	78	78	75
η_{min}	%	68	68	68	70	70	70	70	70	68
η_{qnom}	%	89	89	89	91	91	93	93	93	89
η_{nom}	%	80	80	80	83	83	85	85	85	80
η_{qmax}	%	92	92	91	91	91	91	91	91	92
η_{max}	%	82	82	82	82	83	83	83	83	82
P_{nom}	kW	0.14	0.28	0.42	0.55	0.69	0.72	0.85	0.80	0.17
P_{max}	kW	0.54	1.08	1.63	1.43	1.72	1.35	1.18	1.09	0.65

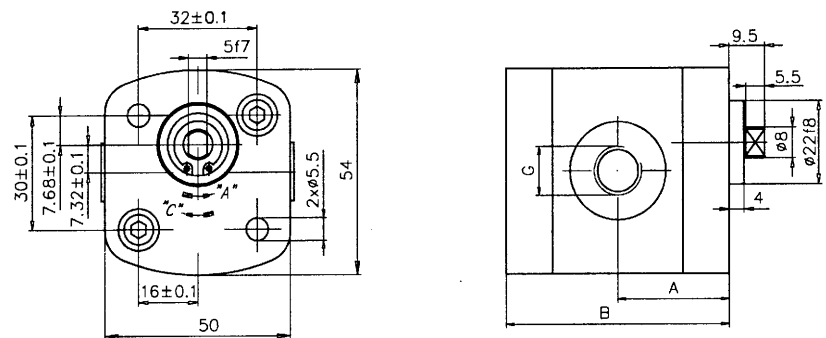
* Under special order

00^A_C...X032



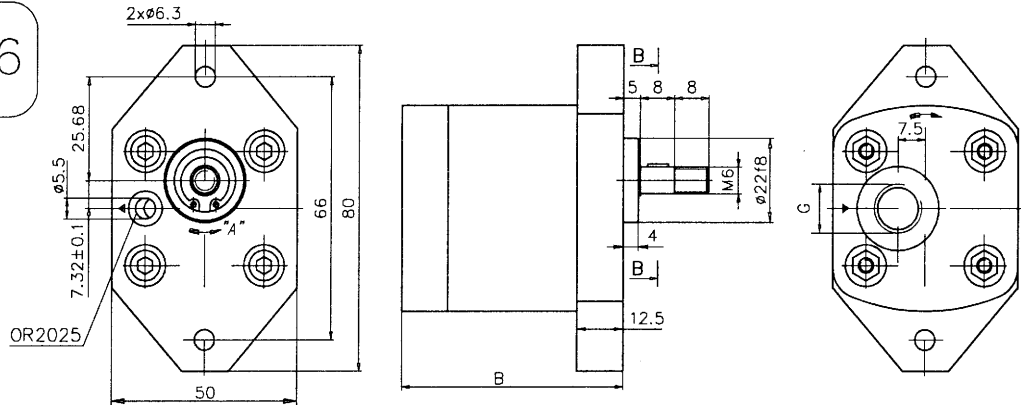
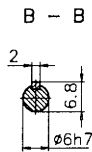
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры																				
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог													
				E	d	F	M	G	E	d	F	M	G									
	cm ³	mm																				
00A(C)0.25X032	0.25	27.6	57.2								G 1/4											G 1/4
00A(C)0.5X032	0.50	28.7	59.4								G 1/4											G 1/4
00A(C)0.75X032	0.75	29.9	61.8								G 1/4											G 1/4
00A(C)1X032	1.00	31	64								G 1/4											G 1/4
00A(C)1.25X032	1.25	32.1	66.2								G 1/4											G 1/4
00A(C)1.5X032	1.50	33.2	68.4								G 1/4											G 1/4
00A(C)1.75X032	1.75	34.3	70.6								G 1/4											G 1/4
00A(C)2X032	2.00	35.5	73								G 1/4											G 1/4
00A(C)0.30X032	0.30	27.9	57.9								G 1/4											G 1/4

00^A_C...X033



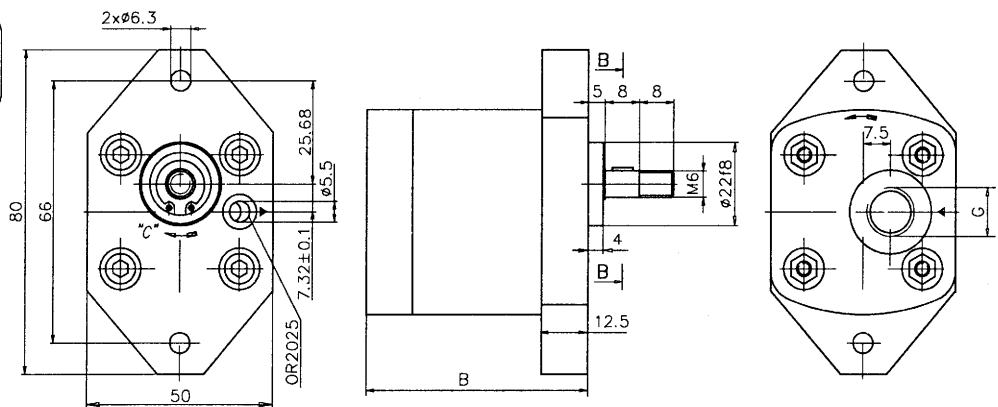
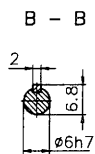
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры																				
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог													
				E	d	F	M	G	E	d	F	M	G									
	cm ³	mm																				
00A(C)0.25X033	0.25	27.6	57.2								G 1/4											G 1/4
00A(C)0.5X033	0.50	28.7	59.4								G 1/4											G 1/4
00A(C)0.75X033	0.75	29.9	61.8								G 1/4											G 1/4
00A(C)1X033	1.00	31	64								G 1/4											G 1/4
00A(C)1.25X033	1.25	32.1	66.2								G 1/4											G 1/4
00A(C)1.5X033	1.50	33.2	68.4								G 1/4											G 1/4
00A(C)1.75X033	1.75	34.3	70.6								G 1/4											G 1/4
00A(C)2X033	2.00	35.5	73								G 1/4											G 1/4
00A(C)0.30X033	0.30	27.9	57.9								G 1/4											G 1/4

00A...X046



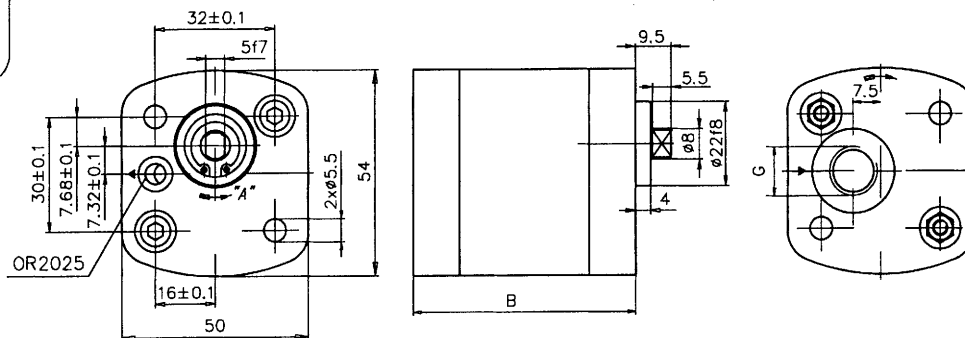
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A	B	Inlet Saugseite Вхог				Outlet Druckseite Выхог					
				E	d	F	M	G	E	d	F	M	G
	cm ³	mm		mm				"					
00A0.25X046	0.25		60.7					G 1/4					G 1/4
00A0.5X046	0.50		63					G 1/4					G 1/4
00A0.75X046	0.75		65.3					G 1/4					G 1/4
00A1X046	1.00		67.5					G 1/4					G 1/4
00A1.25X046	1.25		69.7					G 1/4					G 1/4
00A1.5X046	1.50		71.9					G 1/4					G 1/4
00A1.75X046	1.75		74.1					G 1/4					G 1/4
00A2X046	2.00		76.5					G 1/4					G 1/4
00A0.30X046	0.30		61.1					G 1/4					G 1/4

00C...X046



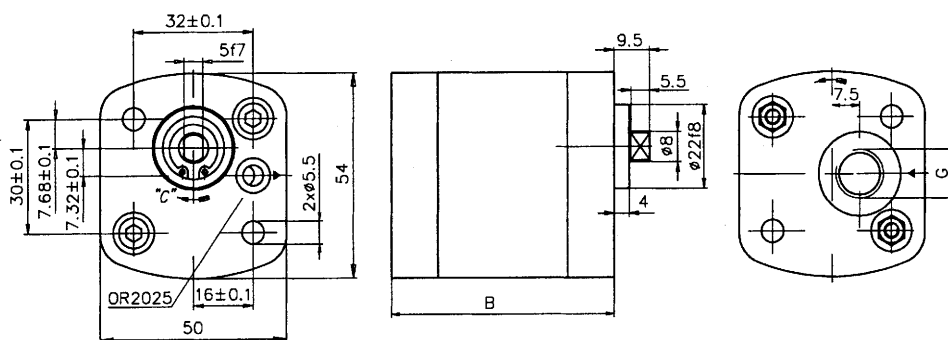
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A	B	Inlet Saugseite Вхог				Outlet Druckseite Выхог					
				E	d	F	M	G	E	d	F	M	G
	cm ³	mm		mm				"					
00C0.25X046	0.25		60.7					G 1/4					G 1/4
00C0.5X046	0.50		63					G 1/4					G 1/4
00C0.75X046	0.75		65.3					G 1/4					G 1/4
00C1X046	1.00		67.5					G 1/4					G 1/4
00C1.25X046	1.25		69.7					G 1/4					G 1/4
00C1.5X046	1.50		71.9					G 1/4					G 1/4
00C1.75X046	1.75		74.1					G 1/4					G 1/4
00C2X046	2.00		76.5					G 1/4					G 1/4
00C0.30X046	0.30		61.1					G 1/4					G 1/4

00A...X047



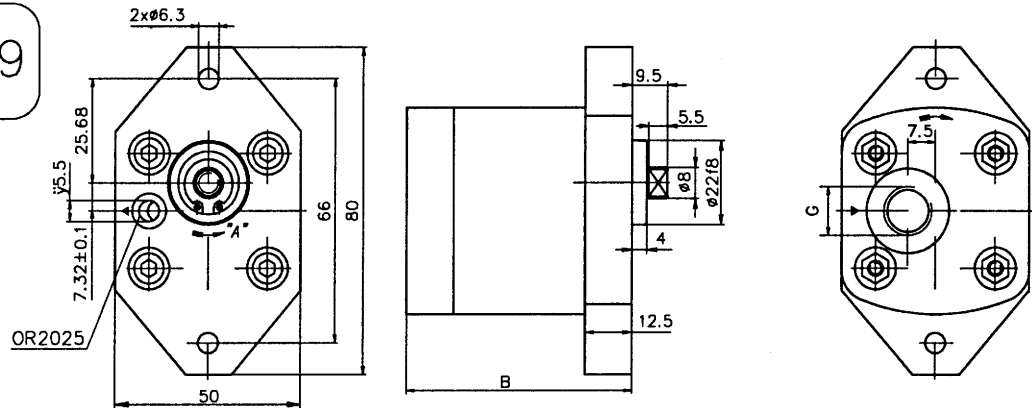
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры														
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог							
				E	d	F	M	G	E	d	F	M	G			
	cm ³	mm		mm					"							
00A0.25X047	0.25		62.2							G 1/4						G 1/4
00A0.5X047	0.50		64.4							G 1/4						G 1/4
00A0.75X047	0.75		66.8							G 1/4						G 1/4
00A1X047	1.00		69							G 1/4						G 1/4
00A1.25X047	1.25		71.2							G 1/4						G 1/4
00A1.5X047	1.50		73.4							G 1/4						G 1/4
00A1.75X047	1.75		75.6							G 1/4						G 1/4
00A2X047	2.00		78							G 1/4						G 1/4
00A0.30X047	0.30		62.7							G 1/4						G 1/4

00C...X047



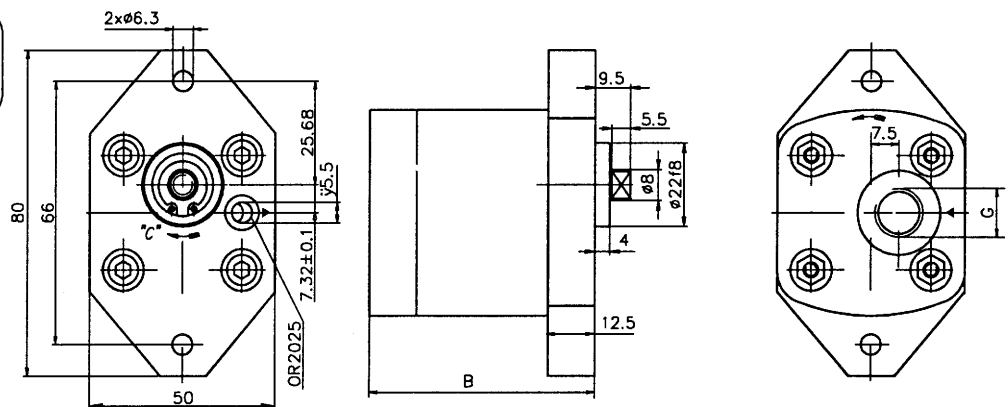
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры														
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог							
				E	d	F	M	G	E	d	F	M	G			
	cm ³	mm		mm					"							
00C0.25X047	0.25		62.2							G 1/4						G 1/4
00C0.5X047	0.50		64.4							G 1/4						G 1/4
00C0.75X047	0.75		66.8							G 1/4						G 1/4
00C1X047	1.00		69							G 1/4						G 1/4
00C1.25X047	1.25		71.2							G 1/4						G 1/4
00C1.5X047	1.50		73.4							G 1/4						G 1/4
00C1.75X047	1.75		75.6							G 1/4						G 1/4
00C2X047	2.00		78							G 1/4						G 1/4
00C0.30X047	0.30		62.7							G 1/4						G 1/4

00A...X049



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог					
				E	d	F	M	G	E	d	F	M	G	
	cm ³	mm		mm					"					
00A0.25X049	0.25		60.7						G 1/4					
00A0.5X049	0.50		63						G 1/4					
00A0.75X049	0.75		65.3						G 1/4					
00A1X049	1.00		67.5						G 1/4					
00A1.25X049	1.25		69.7						G 1/4					
00A1.5X049	1.50		71.9						G 1/4					
00A1.75X049	1.75		74.1						G 1/4					
00A2X049	2.00		76.5						G 1/4					
00A0.30X049	0.30		61.1						G 1/4					

00C...X049



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог					
				E	d	F	M	G	E	d	F	M	G	
	cm ³	mm		mm					"					
00C0.25X049	0.25		60.7						G 1/4					
00C0.5X049	0.50		63						G 1/4					
00C0.75X049	0.75		65.3						G 1/4					
00C1X049	1.00		67.5						G 1/4					
00C1.25X049	1.25		69.7						G 1/4					
00C1.5X049	1.50		71.9						G 1/4					
00C1.75X049	1.75		74.1						G 1/4					
00C2X049	2.00		76.5						G 1/4					
00C0.30X049	0.30		61.1						G 1/4					



Hydraulic Gear Pumps Hydraulische Zahnradpumpen Шестеренные насосы Gr 10 250 bar



Used symbols:

- q - displacement;
- p_{nom} - nominal pressure;
- n_{min} - minimal speed;
- n_{nom} - nominal speed;
- n_{max} - maximal speed;
- P_{nom} - power at p_{nom} and n_{nom}
- P_{max} - power at p_{nom} and n_{max}

volumetric efficiencies;

- η_{qmin} - at min. speed;
- η_{qnom} - at nom. speed;
- η_{qmax} - at max. speed;

efficiencies;

- η_{min} - at min. speed;
- η_{nom} - at nom. speed;
- η_{max} - at max. speed;

Bezeichnungen:

- Foerdervolumen;
nominal Druck;
- minimal Geschwindigkeit;
nominal Geschwindigkeit;
- maximal Geschwindigkeit;
- Leistung bei p_{nom} und n_{nom}
- Leistung bei p_{nom} und n_{max}

volumetrischer Wirkungsgrad;

- bei min. Geschwindigkeit;
- bei nom. Geschwindigkeit;
- bei max. Geschwindigkeit;

Wirkungsgrad gesamt;

- bei min. Geschwindigkeit;
- bei nom. Geschwindigkeit;
- bei max. Geschwindigkeit;

Обозначения:

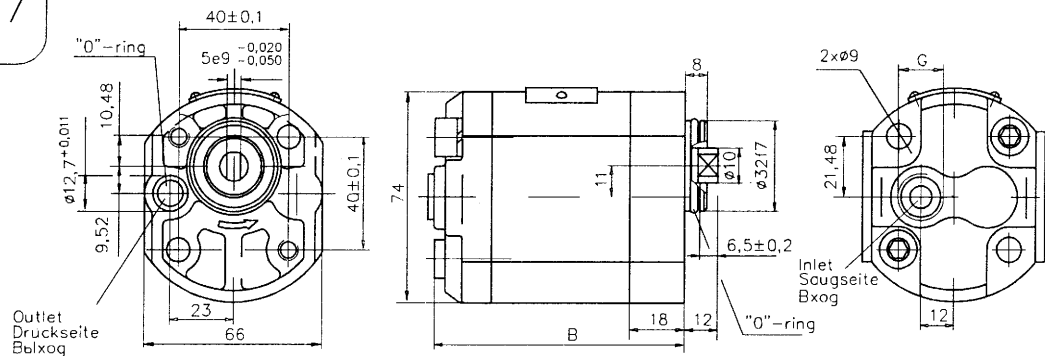
- рабочий объем
номинальное давление
минимальная скорость
номинальная скорость
максимальная скорость
мощность при p_{nom} и n_{nom}
- мощность при p_{nom} и n_{max}

- объемный КПД
при мин. скорость
при ном. скорость
при макс. скорость

- общий КПД.
при мин. скорость
при ном. скорость
при ном. скорость

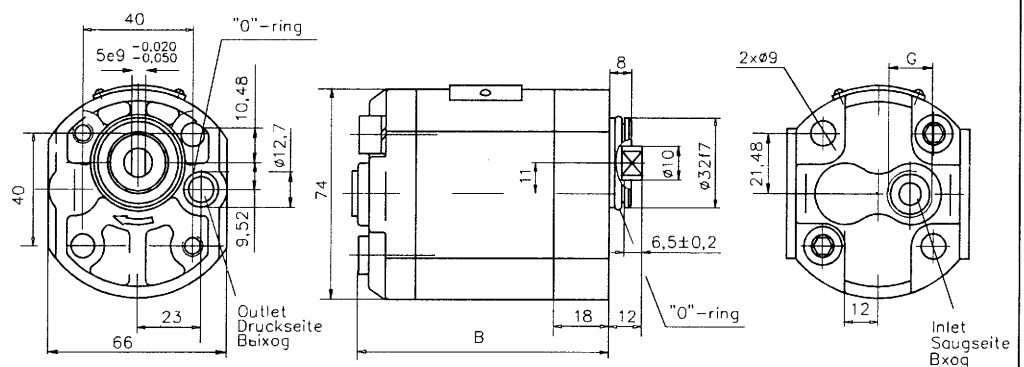
q	cm ³	1	1.25	1.6	2	2.5	3.15	3.65	4.2	5	5.7	6.1
p_{nom}	bar	250	250	250	250	250	250	250	250	250	200	200
n_{min}	min ⁻¹	750	750	750	750	750	750	750	750	750	750	750
n_{nom}	min ⁻¹	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
n_{max}	min ⁻¹	3500	3500	3500	3500	3500	3500	3500	3000	2500	2000	2000
η_{qmin}	%	78	78	78	78	79	79	79	79	79	80	80
η_{min}	%	70	70	70	70	71	71	71	71	71	72	72
η_{qnom}	%	91	91	91	92	92	92	92	92	92	93	93
η_{nom}	%	83	83	83	84	84	84	84	84	84	85	85
η_{qmax}	%	93	93	93	94	94	94	94	94	94	95	95
η_{max}	%	84	84	84	85	85	85	85	85	85	86	86
P_{nom}	kW	0.63	0.78	1	1.25	1.56	2	2.45	2.82	3.36	3.06	3.27
P_{max}	kW	1.46	1.82	2.71	2.92	3.65	4.6	5.71	5.63	4.47	4.07	4.35

10A...X027



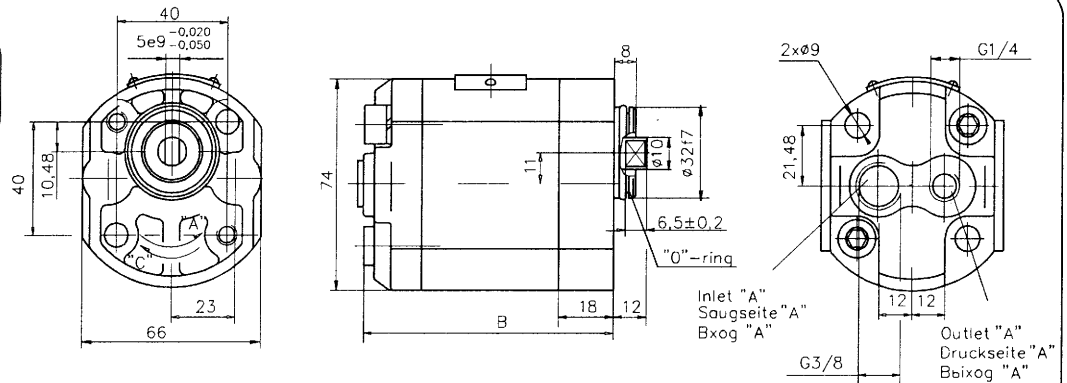
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		A	B	Inlet Saugseite Вхог				Outlet Druckseite Выхог							
				E	d	F	M	G	E	d	F	M	G		
	cm ³	mm													
10A1X027	1		81,0							G3/8					
10A1,25X027	1,25		82,0							G3/8					
10A1,6X027	1,60		83,6							G3/8					
10A2X027	2		85,2							G3/8					
10A2,5X027	2,5		87,2							G3/8					
10A3,15X027	3,15		89,8							G3/8					
10A3,65X027	3,65		91,9							G3/8					
10A4,2X027	4,2		94,1							G3/8					
10A5X027	5		97,1							G3/8					
10A5,7X027	5,7		100,1							G3/8					
10A6,1X027	6,1		101,7							G3/8					

10C...X027



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		A	B	Inlet Saugseite Вхог				Outlet Druckseite Выхог							
				E	d	F1	M	G	E	d	F1	M	G		
	cm ³	mm													
10C1X027	1		81,0							G3/8					
10C1,25X027	1,25		82,0							G3/8					
10C1,6X027	1,6		83,6							G3/8					
10C2X027	2		85,2							G3/8					
10C2,50X027	2,50		87,2							G3/8					
10C3,15X027	3,15		89,8							G3/8					
10C3,65X027	3,65		91,9							G3/8					
10C4,2X027	4,2		94,1							G3/8					
10C5X027	5		97,1							G3/8					
10C5,7X027	5,7		100,0							G3/8					
10C6,1X027	6,1		101,7							G3/8					

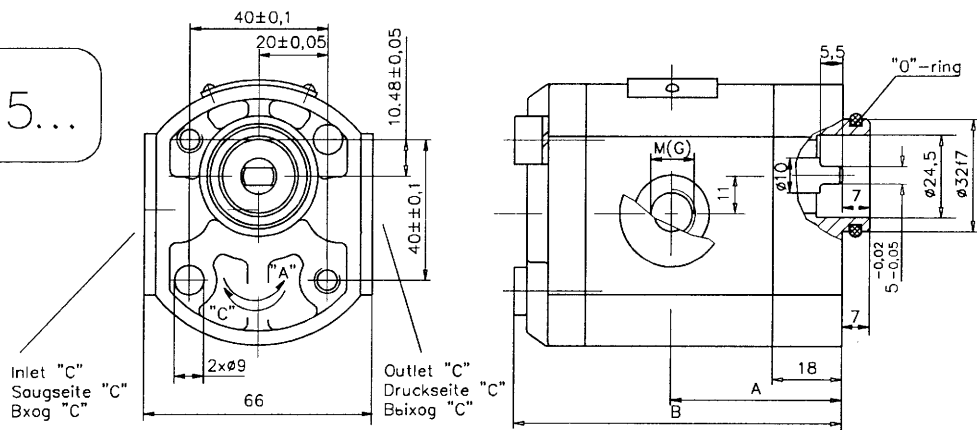
10^A_C...X054



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог						
				E	d	F	M	G	E	d	F	M	G		
	cm ³	mm													
10A(C)1X054	1		81,1					G3/8							G1/4
10A(C)1,25X054	1,25		82,0					G3/8							G1/4
10A(C)1,6X054	1,6		83,6					G3/8							G1/4
10A(C)2X054	2		85,2					G3/8							G1/4
10A(C)2,5X054	2,5		87,2					G3/8							G1/4
10A(C)3,15X054	3,15		89,8					G3/8							G1/4
10A(C)3,65X054	3,65		91,85					G3/8							G1/4
10A(C)4,2X054	4,2		94,1					G3/8							G1/4
10A(C)5X054	5		97,2					G3/8							G1/4
10A(C)5,7X054	5,7		100,1					G3/8							G1/4
10A(C)6,1X054	6,1		101,8					G3/8							G1/4

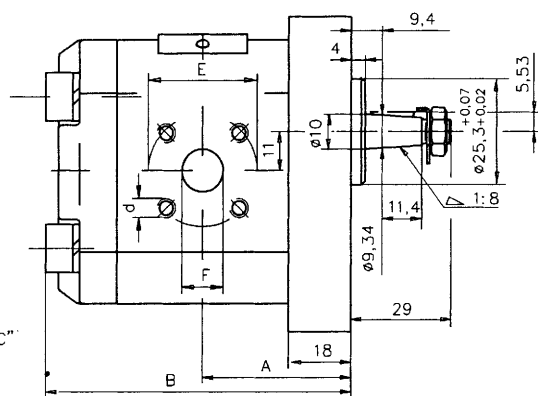
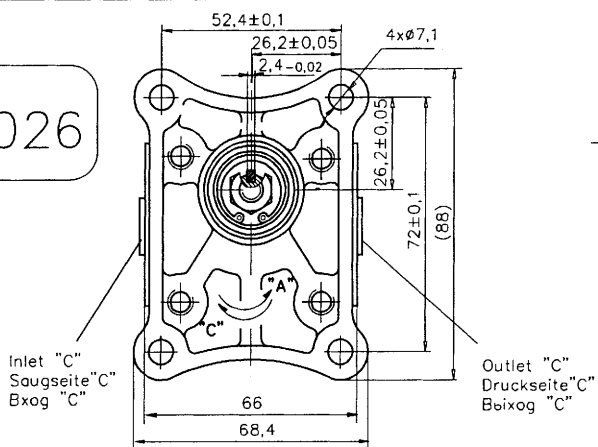
10^A_C...X135...

-metric thread
G -GAS thread



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог						
				E	d	F	M	G	E	d	F	M	G		
	cm ³	mm													
10A(C)1X135	1	39,1	81,0					M16x1,5	3/8"					M16x1,5	3/8"
10A(C)1,25X135	1,25	39,5	82,0					M16x1,5	3/8"					M16x1,5	3/8"
10A(C)1,6X135	1,6	40,3	83,6					M16x1,5	3/8"					M16x1,5	3/8"
10A(C)2X135	2	41,1	85,2					M16x1,5	3/8"					M16x1,5	3/8"
10A(C)2,5X135	2,5	42,1	87,2					M16x1,5	3/8"					M16x1,5	3/8"
10A(C)3,15X135	3,15	43,5	89,8					M20x1,5	1/2"					M16x1,5	3/8"
10A(C)3,65X135	3,65	44,4	91,85					M20x1,5	1/2"					M16x1,5	3/8"
10A(C)4,2X135	4,2	45,5	94,1					M20x1,5	1/2"					M16x1,5	3/8"
10A(C)5X135	5	47,1	97,2					M20x1,5	1/2"					M16x1,5	3/8"
10A(C)5,7X135	5,7	48,5	100,1					M20x1,5	1/2"					M16x1,5	3/8"
10A(C)6,1X135	6,1	49,4	101,8					M20x1,5	1/2"					M16x1,5	3/8"

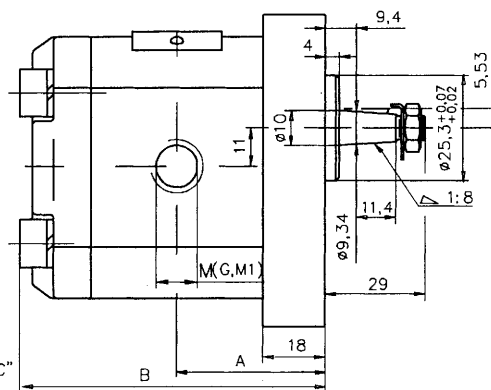
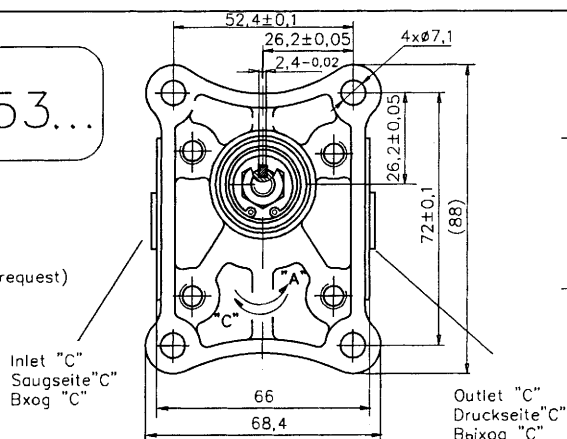
10^A
C...X026



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A		Inlet Saugseite Вхог					Outlet Druckseite Выхог					
		E	d	F	M	G	E	d	F	M	G			
10A(C)1X026	1	39,1	81,0	30	M6	12	M16x1,5	3/8"	30	M6	12	M16x1,5	3/8"	
10A(C)1,25X026	1,25	39,5	82,0	30	M6	12	M16x1,5	3/8"	30	M6	12	M16x1,5	3/8"	
10A(C)1,6X026	1,6	40,3	83,6	30	M6	12	M16x1,5	3/8"	30	M6	12	M16x1,5	3/8"	
10A(C)2X026	2	41,1	85,2	30	M6	12	M16x1,5	3/8"	30	M6	12	M16x1,5	3/8"	
10A(C)2,5X026	2,5	42,1	87,2	30	M6	12	M16x1,5	3/8"	30	M6	12	M16x1,5	3/8"	
10A(C)3,15X026	3,15	43,5	89,8	30	M6	12	M20x1,5	1/2"	30	M6	12	M16x1,5	3/8"	
10A(C)3,65X026	3,65	44,4	91,9	30	M6	12	M20x1,5	1/2"	30	M6	12	M16x1,5	3/8"	
10A(C)4,2X026	4,2	45,5	94,1	30	M6	12	M20x1,5	1/2"	30	M6	12	M16x1,5	3/8"	
10A(C)5X026	5	47,1	97,2	30	M6	12	M20x1,5	1/2"	30	M6	12	M16x1,5	3/8"	
10A(C)5,7X026	5,7	48,5	100,1	30	M6	12	M20x1,5	1/2"	30	M6	12	M16x1,5	3/8"	
10A(C)6,1X026	6,1	49,4	101,8	30	M6	12	M20x1,5	1/2"	30	M6	12	M16x1,5	3/8"	

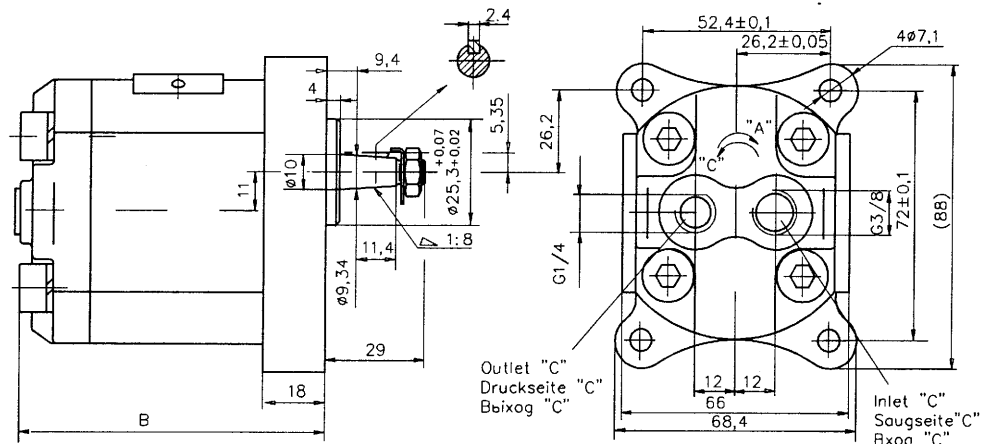
10^A
C...X053...

- metric thread
G - GAS thread
M1 - metric thread (on request)



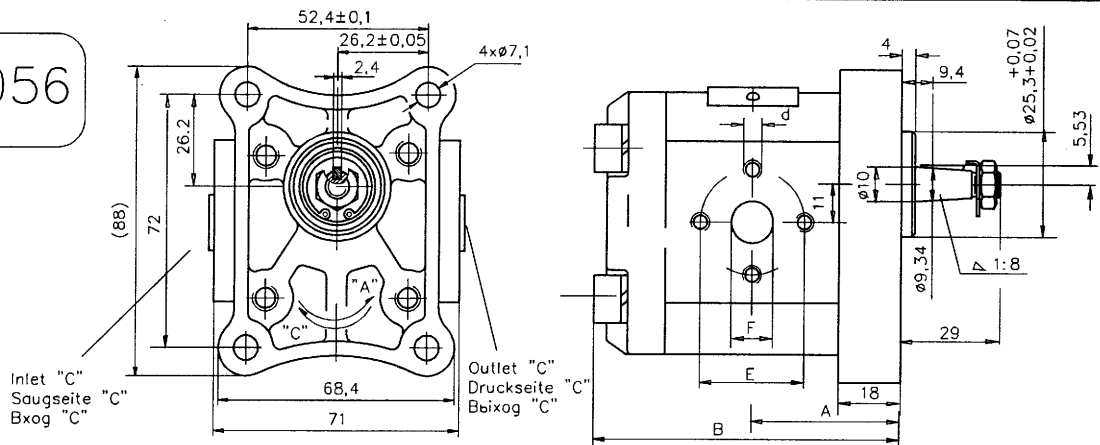
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A		Inlet Saugseite Вхог					Outlet Druckseite Выхог					
		E	d	M1	M	G	E	d	M1	M	G			
10A(C)1X053...	1	39,1	81,0				M16x1,5	3/8"				M16x1,5	3/8"	
10A(C)1,25X053...	1,25	39,5	82,0				M16x1,5	3/8"				M16x1,5	3/8"	
10A(C)1,6X053...	1,6	40,3	83,6				M16x1,5	3/8"				M16x1,5	3/8"	
10A(C)2X053...	2	41,1	85,2				M16x1,5	3/8"				M16x1,5	3/8"	
10A(C)2,5X053...	2,5	42,1	87,2				M16x1,5	3/8"				M16x1,5	3/8"	
10A(X)3,15X053...	3,15	43,5	89,8				M20x1,5	1/2"				M16x1,5	3/8"	
10A(C)3,65X053...	3,65	44,4	91,9				M20x1,5	1/2"				M16x1,5	3/8"	
10A(C)4,2X053...	4,2	45,5	94,1				M20x1,5	1/2"				M16x1,5	3/8"	
10A(C)5X053...	5	47,1	97,2				M20x1,5	1/2"				M16x1,5	3/8"	
10A(C)5,7X053...	5,7	48,5	100,1				M20x1,5	1/2"				M16x1,5	3/8"	
10A(C)6,1X053...	6,1	49,4	101,8				M22x1,5	M20x1,5 1/2"				M18x1,5	M16x1,5 3/8"	

10^A_C...X055



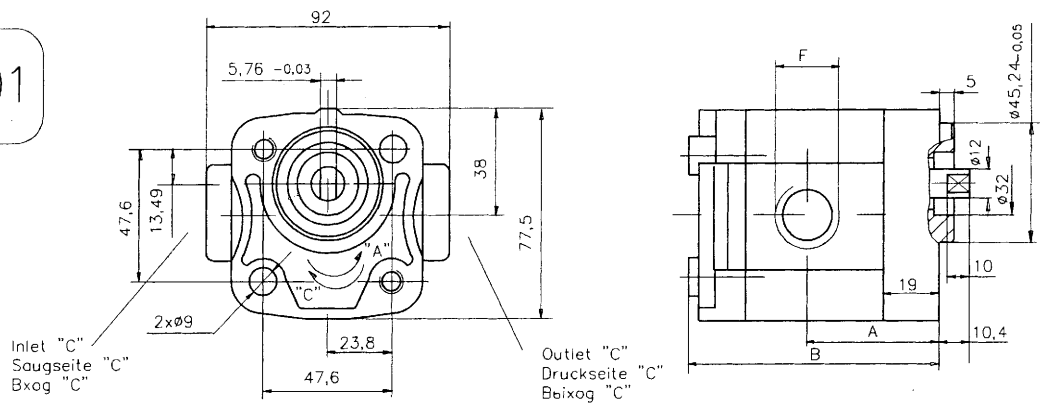
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры														
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог							
				E	d	F	M	G	E	d	F	M	G			
	cm ³	mm														
10A(C)1X055	1		81,1							G3/8						G1/4
10A(C)1.25X055	1,25		82,0							G3/8						G1/4
10A(C)1.6X055	1,6		83,6							G3/8						G1/4
10A(C)2X055	2		85,2							G3/8						G1/4
10A(C)2.5X055	2,5		87,2							G3/8						G1/4
10A(C)3.15X055	3,15		89,8							G3/8						G1/4
10A(C)3.65X055	3,65		91,8							G3/8						G1/4
10A(C)4.2X055	4,2		94,1							G3/8						G1/4
10A(C)5X055	5		97,2							G3/8						G1/4
10A(C)5.7X055	5,7		100,1							G3/8						G1/4
10A(C)6.1X055	6,1		101,8							G3/8						G1/4

10^A_C...X056



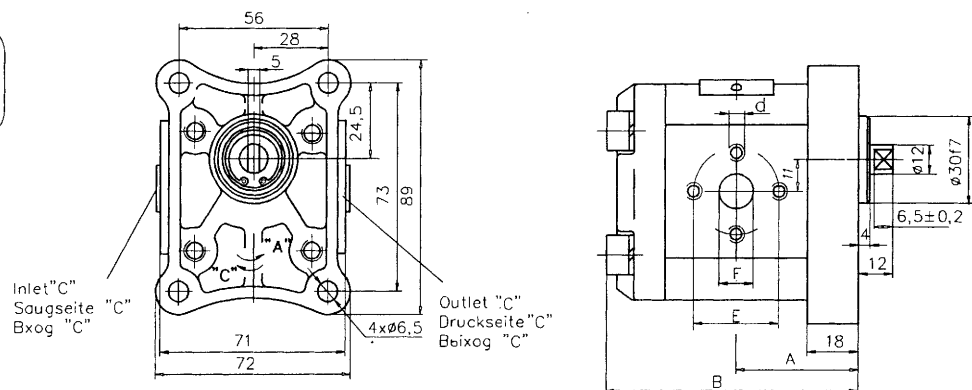
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог				
				E	d	F	M	G	E	d	F	M	G
	cm ³	mm											
10A(C)1X056	1	39,1	81,0	30	M6	12	M16x1,5	G3/8	30	M6	12	M16x1,5	G3/8
10A(C)1.2X056	1,25	39,5	82,0	30	M6	12	M16x1,5	G3/8	30	M6	12	M16x1,5	G3/8
10A(C)1.6X056	1,6	40,3	83,6	30	M6	12	M16x1,5	G3/8	30	M6	12	M16x1,5	G3/8
10A(C)2X056	2	41,1	85,2	30	M6	12	M16x1,5	G3/8	30	M6	12	M16x1,5	G3/8
10A(C)2.5X056	2,5	42,1	87,2	30	M6	12	M16x1,5	G3/8	30	M6	12	M16x1,5	G3/8
10A(C)3.15X056	3,15	43,5	89,8	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8
10A(C)3.65X056	3,65	44,4	91,8	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8
10A(C)4.2X056	4,2	45,5	94,1	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8
10A(C)5X056	5	47,1	97,2	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8
10A(C)5.7X056	5,7	48,5	100,1	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8
10A(C)6.1X056	6,1	49,4	101,8	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8

10^A_C...X001



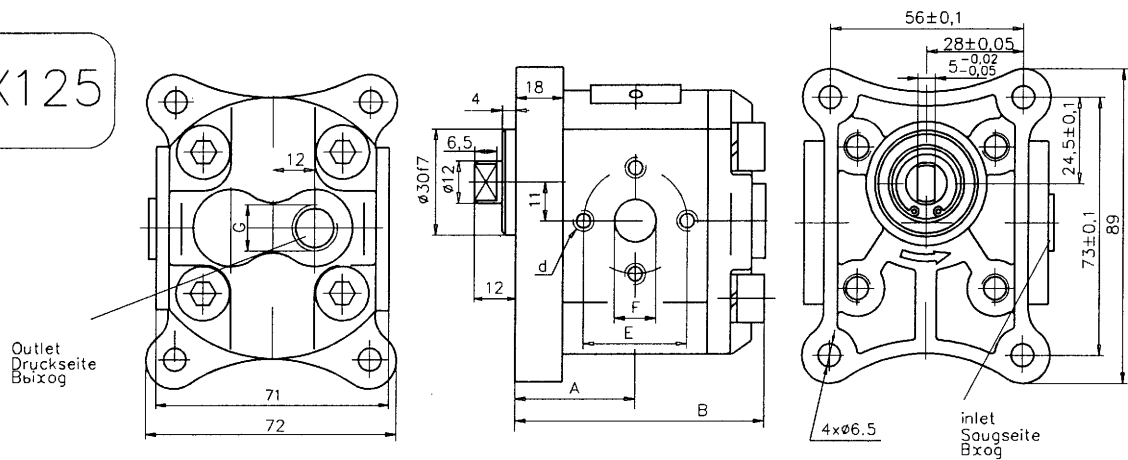
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		A		B		Inlet Saugseite Вхог					Outlet Druckseite Выхог				
		E	d	F	M	G	E	d	F	M	G				
	cm ³	mm													
10A(C)1X001	1	40,1	76,2												
10A(C)1,25X001	1,25	40,6	77,2												
10A(C)1,6X001	1,6	41,3	78,6												
10A(C)2X001	2	42,1	80,2												
10A(C)2,5X001	2,5	43,1	82,2												
10A(C)3,15X001	3,15	44,5	85												
10A(C)3,65X001	3,65	45,4	87,55												
10A(C)4,2X001	4,2	46,15	88,3												
10A(C)5X001	5	48,1	92,9												
10A(C)5,7X001	5,7	49,5	95,8												
10A(C)6,1X001	6,1	50,30	98,8												

10^A_C...X115



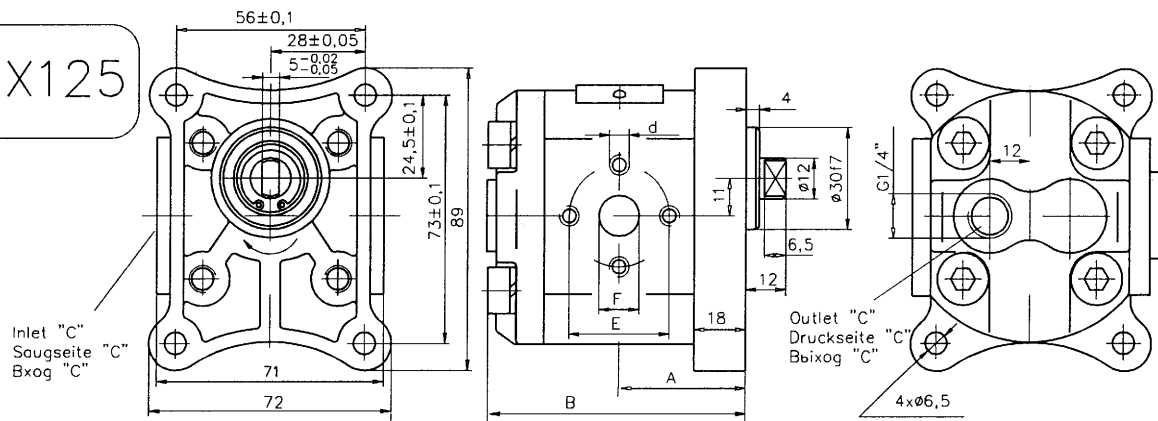
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		A		B		Inlet Saugseite Вхог					Outlet Druckseite Выхог				
		E	d	F	M	G	E	d	F	M	G				
	cm ³	mm													
10A(C)1X115	1	39,1	81,0	30	M6	12	M16x1,5	3/8"	30	M6	12	M16x1,5	3/8"		
10A(C)1,2X115	1,25	39,5	82,0	30	M6	12	M16x1,5	3/8"	30	M6	12	M16x1,5	3/8"		
10A(C)1,6X115	1,6	40,3	83,6	30	M6	12	M16x1,5	3/8"	30	M6	12	M16x1,5	3/8"		
10A(C)2X115	2	41,1	85,2	30	M6	12	M16x1,5	3/8"	30	M6	12	M16x1,5	3/8"		
10A(C)2,5X115	2,5	42,1	87,2	30	M6	12	M16x1,5	3/8"	30	M6	12	M16x1,5	3/8"		
10A(C)3,15X115	3,15	43,5	89,8	30	M6	12	M20x1,5	1/2"	30	M6	12	M16x1,5	3/8"		
10A(C)3,65X115	3,65	44,6	91,85	30	M6	12	M20x1,5	1/2"	30	M6	12	M16x1,5	3/8"		
10A(C)4,2X115	4,2	45,5	94,1	30	M6	12	M20x1,5	1/2"	30	M6	12	M16x1,5	3/8"		
10A(C)5X115	5	47,1	97,2	30	M6	12	M20x1,5	1/2"	30	M6	12	M16x1,5	3/8"		
10A(C)5,7X115	5,7	48,5	100,1	30	M6	12	M20x1,5	1/2"	30	M6	12	M16x1,5	3/8"		
10A(C)6,1X115	6,1	49,4	101,8	30	M6	12	M20x1,5	1/2"	30	M6	12	M16x1,5	3/8"		

10A...X125



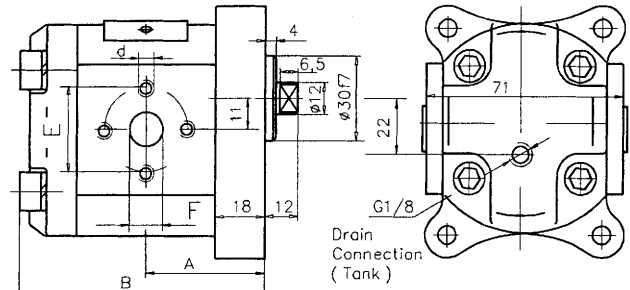
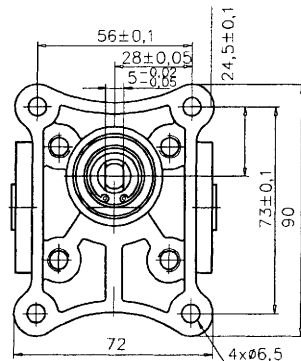
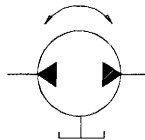
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Вход					Outlet Druckseite Выход					
				E	d	F	M	G	E	d	F	M	G	
	cm ³	mm		mm					mm					
10A1X125	1	39,1	81,0	30	M6	12								G1/4
10A1,2X125	1,25	39,5	82,0	30	M6	12								G1/4
10A1,6X125	1,6	40,3	83,6	30	M6	12								G1/4
10A2X125	2	41,1	85,2	30	M6	12								G1/4
10A2,5X125	2,5	42,1	87,2	30	M6	12								G1/4
10A3,15X125	3,15	43,5	89,8	30	M6	12								G1/4
10A3,65X125	3,65	44,6	91,8	30	M6	12								G1/4
10A4,2X125	4,2	45,5	94,1	30	M6	12								G1/4
10A5X125	5	47,1	97,2	30	M6	12								G1/4
10A5,7X125	5,7	48,5	100,1	30	M6	12								G1/4
10A6,1X125	6,1	49,4	101,8	30	M6	12								G1/4

10C...X125



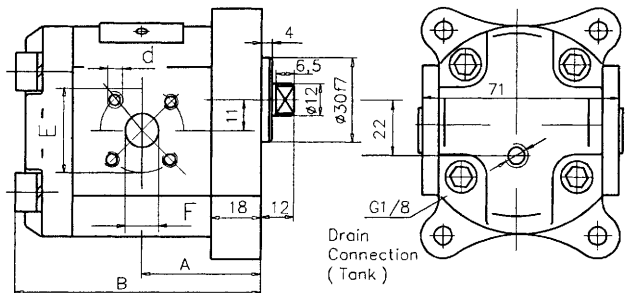
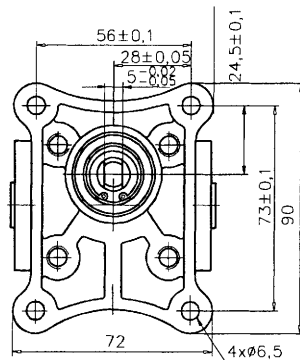
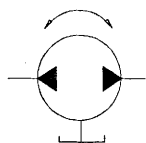
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Вход					Outlet Druckseite Выход					
				E	d	F	M	G	E	d	F	M	G	
	cm ³	mm		mm					mm					
10C1X125	1	39,1	81,0	30	M6	12								G1/4
10C1,2X125	1,25	39,5	82,0	30	M6	12								G1/4
10C1,6X125	1,6	40,3	83,6	30	M6	12								G1/4
10C2X125	2	41,1	85,2	30	M6	12								G1/4
10C2,5X125	2,5	42,1	87,2	30	M6	12								G1/4
10C3,15X125	3,15	43,5	89,8	30	M6	12								G1/4
10C3,65X125	3,65	44,6	91,85	30	M6	12								G1/4
10C4,2X125	4,2	45,5	94,1	30	M6	12								G1/4
10C5X125	5	47,1	97,2	30	M6	12								G1/4
10C5,7X125	5,7	48,5	100,1	30	M6	12								G1/4
10C6,1X125	6,1	49,4	101,8	30	M6	12								G1/4

10R...X003



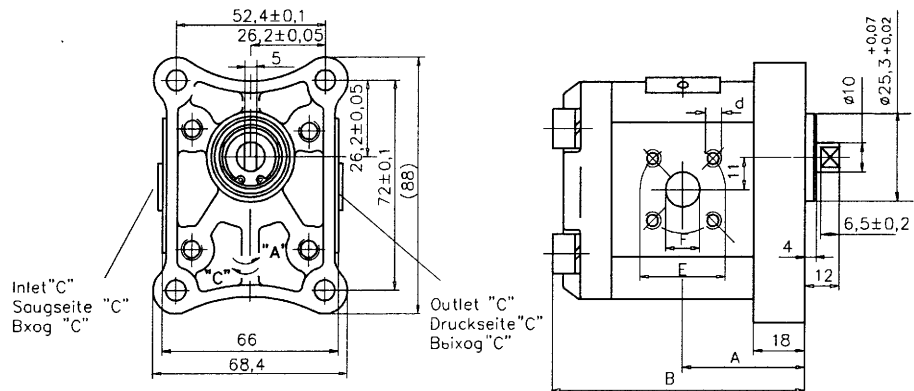
Type Typ Typ	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Визог				
				E	d	F	M	G	E	d	F	M	G
	cm ³	mm		mm					mm				
10XR1X003	1	39,1	81,0	30	M6	12			30	M6	12		
10R1,25X003	1,25	39,5	82,0	30	M6	12			30	M6	12		
10R1,6X003	1,6	40,3	83,6	30	M6	12			30	M6	12		
10R2X003	2	41,1	85,2	30	M6	12			30	M6	12		
10R2,5X003	2,5	42,1	87,2	30	M6	12			30	M6	12		
10R3,15X003	3,15	43,5	89,8	30	M6	12			30	M6	12		
10R3,65X003	3,65	44,4	91,9	30	M6	12			30	M6	12		
10R4,2X003	4,2	45,5	94,1	30	M6	12			30	M6	12		
10R5X003	5	47,1	97,2	30	M6	12			30	M6	12		
10R5,7X003	5,7	48,5	100,1	30	M6	12			30	M6	12		
10R6,1X003	6,1	49,4	101,8	30	M6	12			30	M6	12		

10R...X089



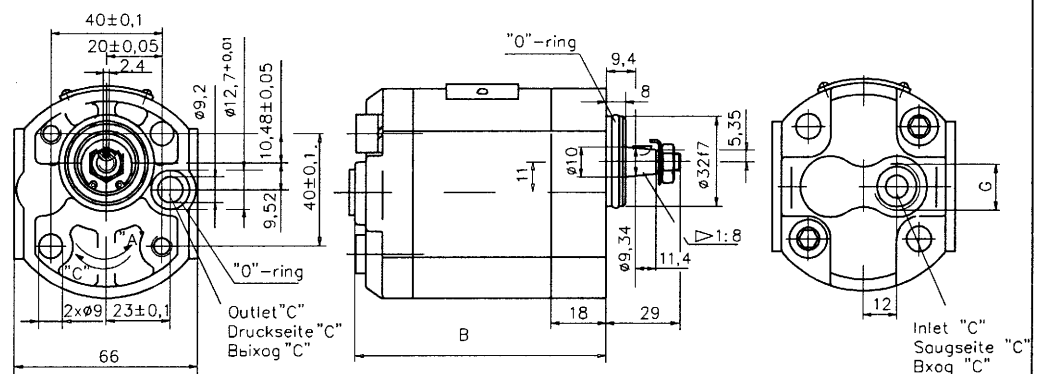
Type Typ Typ	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Визог				
				E	d	F	M	G	E	d	F	M	G
	cm ³	mm		mm					mm				
10R1X089	1	39,1	81,0	30	M6	12			30	M6	12		
10R1,25X089	1,25	39,5	82,0	30	M6	12			30	M6	12		
10R1,6X089	1,6	40,3	83,6	30	M6	12			30	M6	12		
10R2X089	2	41,1	85,2	30	M6	12			30	M6	12		
10R2,5X089	2,5	42,1	87,2	30	M6	12			30	M6	12		
10R3,15X089	3,15	43,5	89,8	30	M6	12			30	M6	12		
10R3,65X089	3,65	44,4	91,9	30	M6	12			30	M6	12		
10R4,2X089	4,2	45,5	94,1	30	M6	12			30	M6	12		
10R5X089	5	47,1	97,2	30	M6	12			30	M6	12		
10R5,7X089	5,7	48,5	100,1	30	M6	12			30	M6	12		
10R6,1X089	6,1	49,4	101,8	30	M6	12			30	M6	12		

10^A_C...X057



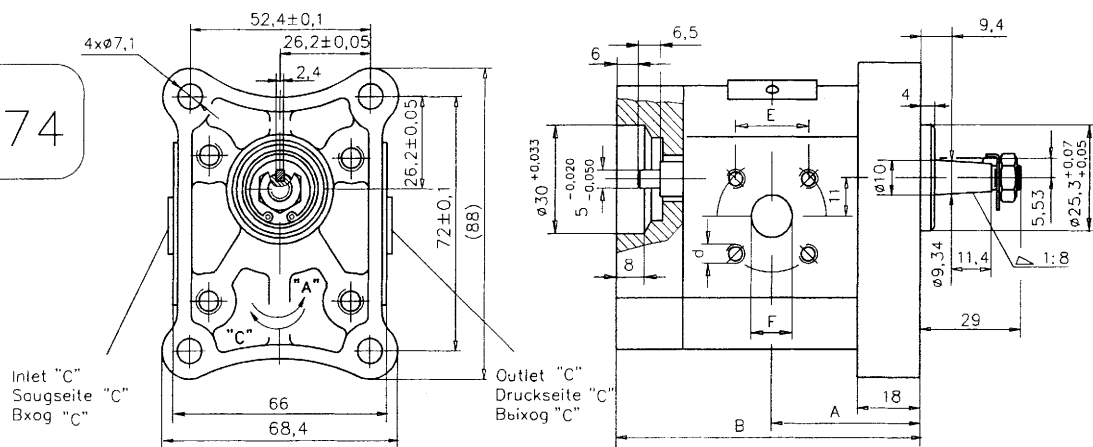
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A		Inlet Saugseite Вхог					Outlet Druckseite Выхог					
		E	d	F	M	G	E	d	F	M	G			
	cm ³	mm												
10A(C)1X057	1	39,1	81,0	30	M6	12	M16x1,5	G3/8	30	M6	13	M16x1,5	G3/8	
10A(C)1,2X057	1,25	39,5	82,0	30	M6	12	M16x1,5	G3/8	30	M6	13	M16x1,5	G3/8	
10A(C)1,6X057	1,6	40,3	83,6	30	M6	12	M16x1,5	G3/8	30	M6	13	M16x1,5	G3/8	
10A(C)2X057	2	41,1	85,2	30	M6	12	M16x1,5	G3/8	30	M6	13	M16x1,5	G3/8	
10A(C)2,5X057	2,5	42,1	87,2	30	M6	12	M16x1,5	G3/8	30	M6	13	M16x1,5	G3/8	
10A(C)3,15X057	3,15	43,5	89,8	30	M6	12	M20x1,5	G1/2	30	M6	13	M16x1,5	G3/8	
10A(C)3,65X057	3,65	44,4	91,8	30	M6	12	M20x1,5	G1/2	30	M6	13	M16x1,5	G3/8	
10A(C)4,2X057	4,2	45,5	94,1	30	M6	12	M20x1,5	G1/2	30	M6	13	M16x1,5	G3/8	
10A(C)5X057	5	47,1	97,2	30	M6	12	M20x1,5	G1/2	30	M6	13	M16x1,5	G3/8	
10A(C)5,7X057	5,7	48,5	100,1	30	M6	12	M20x1,5	G1/2	30	M6	13	M16x1,5	G3/8	
10A(C)6,1X057	6,1	49,4	101,8	30	M6	12	M20x1,5	G1/2	30	M6	13	M16x1,5	G3/8	

10^A_C...X131



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A		Inlet Saugseite Вхог					Outlet Druckseite Выхог					
		E	d	F	M	G	E	d	F	M	G			
	cm ³	mm												
10A(C)1X131	1		81,0					G3/8						
10A(C)1,25X131	1,25		82,0					G3/8						
10A(C)1,6X131	1,6		83,6					G3/8						
10A(C)2X131	2		85,2					G3/8						
10A(C)2,5X131	2,5		87,2					G3/8						
10A(C)3,15X131	3,15		89,8					G3/8						
10A(C)3,65X131	3,65		91,7					G3/8						
10A(C)4,2X131	4,2		94,1					G3/8						
10A(C)5X131	5		97,1					G3/8						
10A(C)5,7X131	5,7		100,0					G3/8						
10A(C)6,1X131	6,1		101,7					G3/8						

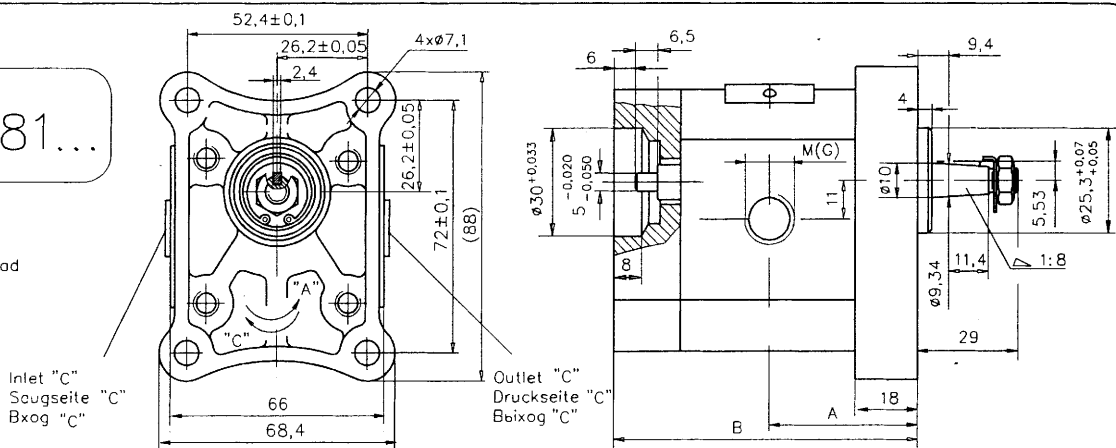
10^A_C...X174



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		A		Inlet Saugseite Вхог					Outlet Druckseite Выхог						
		E	d	F	M	G	E	d	F	M	G				
	cm ³	mm													
10A(C)1,00X174	1	39,1	79	30	6	12					30	6	12		
10A(C)1,25X174	1,25	39,5	80	30	6	12					30	6	12		
10A(C)1,6X174	1,6	40,3	81,6	30	6	12					30	6	12		
10A(C)2X174	2	41,1	83,2	30	6	12					30	6	12		
10A(C)2,5X174	2,5	42,1	85,2	30	6	12					30	6	12		
10A(C)3,15X174	3,15	43,5	87,8	30	6	12					30	6	12		
10A(C)3,65X174	3,65	44,4	89,9	30	6	12					30	6	12		
10A(C)4,2X174	4,2	45,5	92,1	30	6	12					30	6	12		
10A(C)5X174	5	47,1	95,2	30	6	12					30	6	12		
10A(C)5,7X174	5,7	48,5	98,1	30	6	12					30	6	12		
10A(C)6,1X174	6,1	49,4	99,8	30	6	12					30	6	12		

10^A_C...X181...

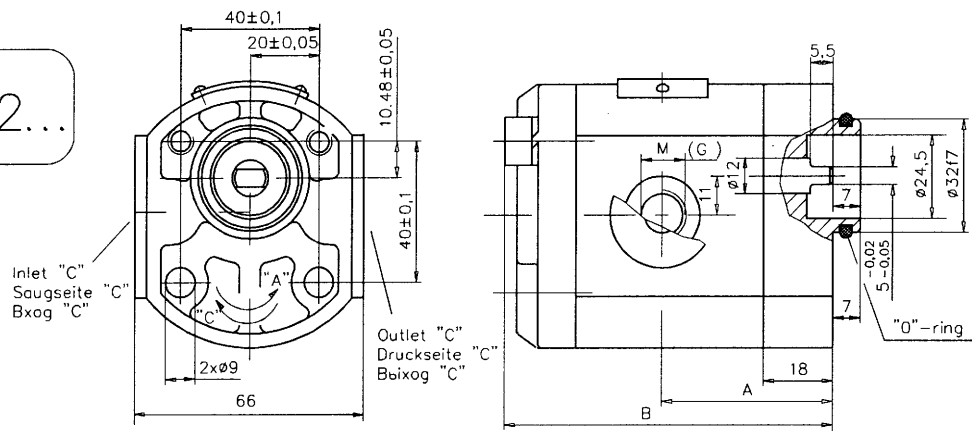
- metric thread
G - GAS thread



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A		Inlet Saugseite Вхог					Outlet Druckseite Выхог					
		E	d	F	M	G	E	d	F	M	G			
	cm ³	mm												
10A(C)1,X181	1	39,1	79				M16x1,5	3/8					M16x1,5	3/8
10A(C)1,25X181	1,25	39,5	80				M16x1,5	3/8					M16x1,5	3/8
10A(C)1,6X181	1,6	40,3	81,6				M16x1,5	3/8					M16x1,5	3/8
10A(C)2X181	2	41,1	83,2				M16x1,5	3/8					M16x1,5	3/8
10A(C)2,5X181	2,5	42,1	85,2				M16x1,5	3/8					M16x1,5	3/8
10A(C)3,15X181	3,15	43,5	87,8				M20x1,5	1/2					M16x1,5	3/8
10A(C)3,65X181	3,65	44,4	89,9				M20x1,5	1/2					M16x1,5	3/8
10A(C)4,2X181	4,2	45,5	92,1				M20x1,5	1/2					M16x1,5	3/8
10A(C)5X181	5	47,1	95,2				M20x1,5	1/2					M16x1,5	3/8
10A(C)5,7X181	5,7	48,5	98,1				M20x1,5	1/2					M16x1,5	3/8
10A(C)6,1X181	6,1	49,4	99,8				M20x1,5	1/2					M16x1,5	3/8

10^A_C...X142...

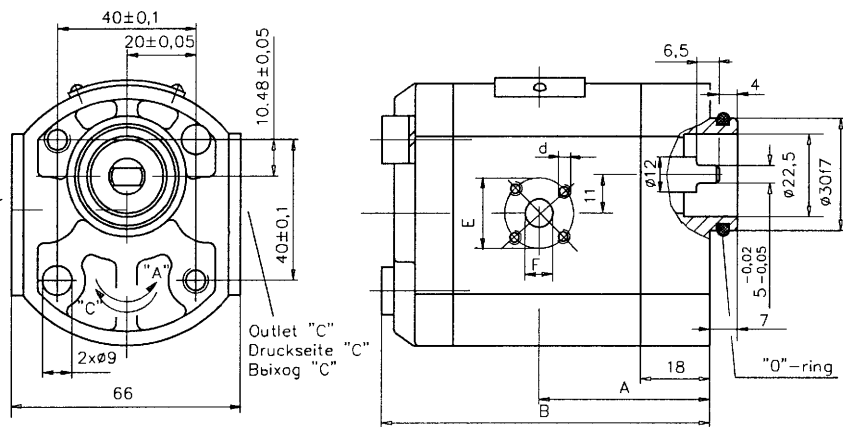
- metric thread
G - GAS thread



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог				
				E	d	F	M	G	E	d	F	M	G
	cm ³	mm		mm									
10A(C)1X142	1	39,1	81,0				M16x1,5	G3/8				M16x1,5	G3/8
10A(C)1,25X142	1,25	39,5	82,0				M16x1,5	G3/8				M16x1,5	G3/8
10A(C)1,6X142	1,6	40,3	83,6				M16x1,5	G3/8				M16x1,5	G3/8
10A(C)2X142	2	41,1	85,2				M16x1,5	G3/8				M16x1,5	G3/8
10A(C)2,5X142	2,5	42,1	87,2				M16x1,5	G3/8				M16x1,5	G3/8
10A(C)3,15X142	3,15	43,5	89,8				M20x1,5	G1/2				M16x1,5	G3/8
10A(C)3,65X142	3,65	44,4	91,8				M20x1,5	G1/2				M16x1,5	G3/8
10A(C)4,2X142	4,2	45,5	94,1				M20x1,5	G1/2				M16x1,5	G3/8
10A(C)5X142	5	47,1	97,2				M20x1,5	G1/2				M16x1,5	G3/8
10A(C)5,7X142	5,7	48,5	100,1				M20x1,5	G1/2				M16x1,5	G3/8
10A(C)6,1X142	6,1	49,4	101,8				M20x1,5	G1/2				M16x1,5	G3/8

10^A_C...X175

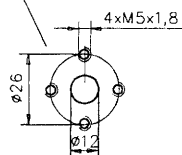
Inlet "C"
Saugseite "C"
Вхог "C"



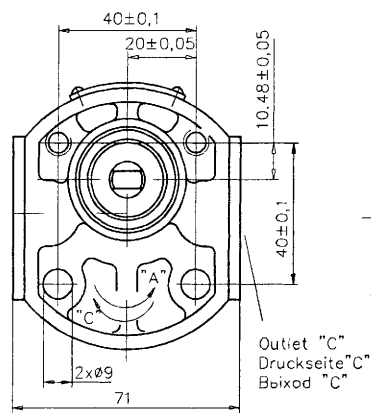
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог				
				E	d	F	M	G	E	d	F	M	G
	cm ³	mm		mm									
10A(C)1X175	1	39,1	81,0	30	M6	12	M16x1,5	G3/8	30	M6	12	M16x1,5	G3/8
10A(C)1,25X175	1,25	39,5	82,0	30	M6	12	M16x1,5	G3/8	30	M6	12	M16x1,5	G3/8
10A(C)1,6X175	1,6	40,3	83,6	30	M6	12	M16x1,5	G3/8	30	M6	12	M16x1,5	G3/8
10A(C)2X175	2	41,1	85,2	30	M6	12	M16x1,5	G3/8	30	M6	12	M16x1,5	G3/8
10A(C)2,5X175	2,5	42,1	87,2	30	M6	12	M16x1,5	G3/8	30	M6	12	M16x1,5	G3/8
10A(C)3,15X175	3,15	43,5	89,8	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8
10A(C)3,65X175	3,65	44,4	91,85	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8
10A(C)4,2X175	4,2	45,5	94,1	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8
10A(C)5X175	5	47,1	97,2	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8
10A(C)5,7X175	5,7	48,5	100,1	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8
10A(C)6,1X175	6,1	49,4	101,8	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8

10^A_C...X179...

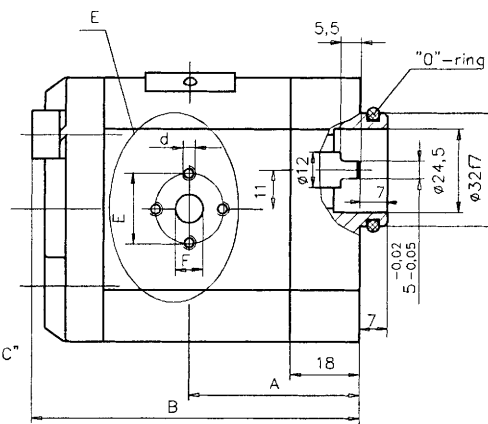
parts
E - variant



Inlet "C"
Saugseite "C"
Вход "C"



Outlet "C"
Druckseite "C"
Выход "C"



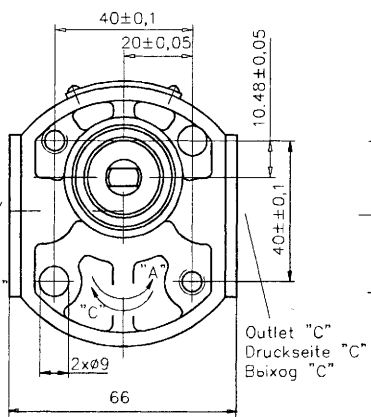
Example: 10A3,15X179E

Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог				
				E	d	F	M	G	E	d	F	M	G
	cm ³	mm										mm	
		mm										mm	
10A(C)1X179...	1	39,1	81,0	30	M6	12	M16x1,5	G3/8	30	M6	12	M16x1,5	G3/8
10A(C)1,25X179...	1,25	39,5	82,0	30	M6	12	M16x1,5	G3/8	30	M6	12	M16x1,5	G3/8
10A(C)1,6X179...	1,6	40,3	83,6	30	M6	12	M16x1,5	G3/8	30	M6	12	M16x1,5	G3/8
10A(C)2X179...	2	41,1	85,2	30	M6	12	M16x1,5	G3/8	30	M6	12	M16x1,5	G3/8
10A(C)2,5X179...	2,5	42,1	87,2	30	M6	12	M16x1,5	G3/8	30	M6	12	M16x1,5	G3/8
10A(C)3,15X179...	3,15	43,5	89,8	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8
10A(C)3,65X179...	3,65	44,4	91,85	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8
10A(C)4,2X179...	4,2	45,5	94,1	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8
10A(C)5X179...	5	47,1	97,2	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8
10A(C)5,7X179...	5,7	48,5	100,1	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8
10A(C)6,1X179...	6,1	49,4	101,8	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8

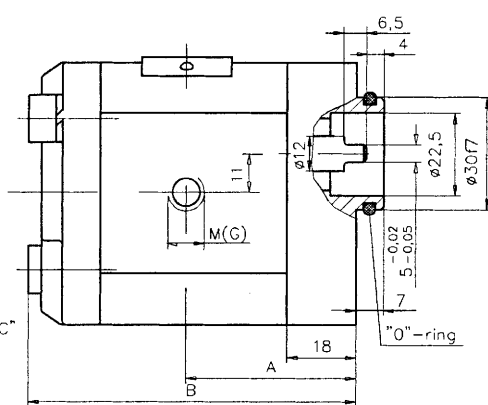
10^A_C...X182...

-metric thread
G - GAS thread

Inlet "C"
Saugseite "C"
Вхог "C"

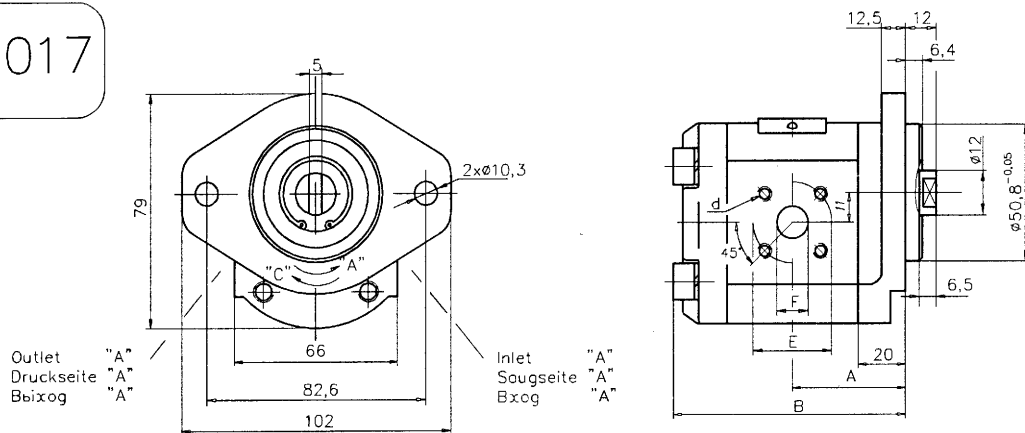


Outlet "C"
Druckseite "C"
Выход "C"



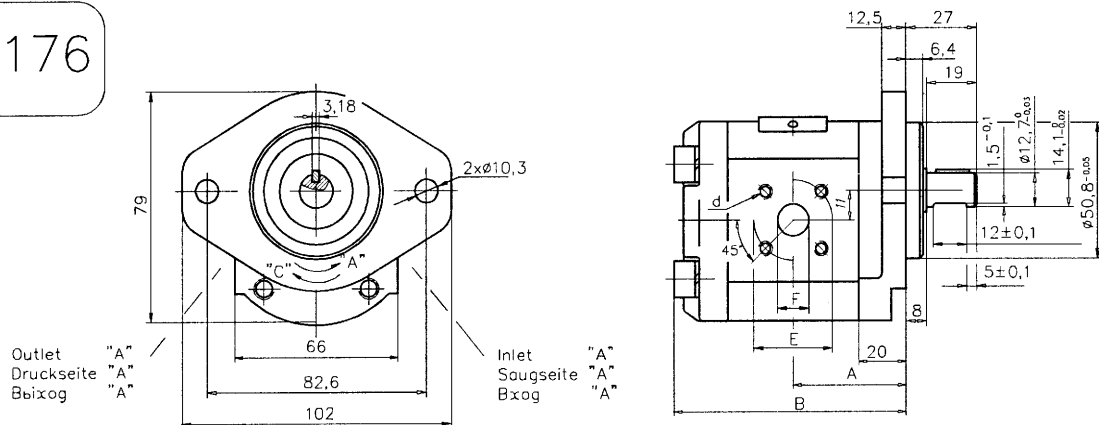
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог				
				E	d	F	M	G	E	d	F	M	G
	cm ³	mm										mm	
		mm										mm	
10A(C)1X182...	1	39,1	81,0				M16x1,5	3/8				M16x1,5	3/8
10A(C)1,25X182...	1,25	39,5	82,0				M16x1,5	3/8				M16x1,5	3/8
10A(C)1,6X182...	1,6	40,3	83,6				M16x1,5	3/8				M16x1,5	3/8
10A(C)2X182...	2	41,1	85,2				M16x1,5	3/8				M16x1,5	3/8
10A(C)2,5X182...	2,5	42,1	87,2				M16x1,5	3/8				M16x1,5	3/8
10A(C)3,15X182...	3,15	43,5	89,8				M20x1,5	1/2				M16x1,5	3/8
10A(C)3,65X182...	3,65	44,4	91,85				M20x1,5	1/2				M16x1,5	3/8
10A(C)4,2X182...	4,2	45,5	94,1				M20x1,5	1/2				M16x1,5	3/8
10A(C)5X182...	5	47,1	97,2				M20x1,5	1/2				M16x1,5	3/8
10A(C)5,7X182...	5,7	48,5	100,1				M20x1,5	1/2				M16x1,5	3/8
10A(C)6,1X182...	6,1	49,4	101,8				M20x1,5	1/2				M16x1,5	3/8

10^A_C...X017



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог					
				E	d	F	M	G	E	d	F	M	G	
	cm ³	mm		mm					mm					
10A(C)1X017	1	41,1	83	30	M6	12	M16x1,5	3/8"	30	M6	12	M16x1,5	3/8"	
10A(C)1,25X017	1,25	41,5	84	30	M6	12	M16x1,5	3/8"	30	M6	12	M16x1,5	3/8"	
10A(C)1,6X017	1,6	42,3	85,6	30	M6	12	M16x1,5	3/8"	30	M6	12	M16x1,5	3/8"	
10A(C)2X017	2	43,1	87,2	30	M6	12	M16x1,5	3/8"	30	M6	12	M16x1,5	3/8"	
10A(C)2,5X017	2,5	44,1	89,2	30	M6	12	M16x1,5	3/8"	30	M6	12	M16x1,5	3/8"	
10A(C)3,15X017	3,15	45,5	91,8	30	M6	12	M20x1,5	1/2"	30	M6	12	M16x1,5	3/8"	
10A(C)3,65X017	3,65	46,6	93,7	30	M6	12	M20x1,5	1/2"	30	M6	12	M16x1,5	3/8"	
10A(C)4,2X017	4,2	47,5	96,1	30	M6	12	M20x1,5	1/2"	30	M6	12	M16x1,5	3/8"	
10A(C)5X017	5	49,1	99,7	30	M6	12	M20x1,5	1/2"	30	M6	12	M16x1,5	3/8"	
10A(C)5,7X017	5,7	50,5	102	30	M6	12	M20x1,5	1/2"	30	M6	12	M16x1,5	3/8"	
10A(C)6,1X017	6,1	51,3	103,7	30	M6	12	M20x1,5	1/2"	30	M6	12	M16x1,5	3/8"	

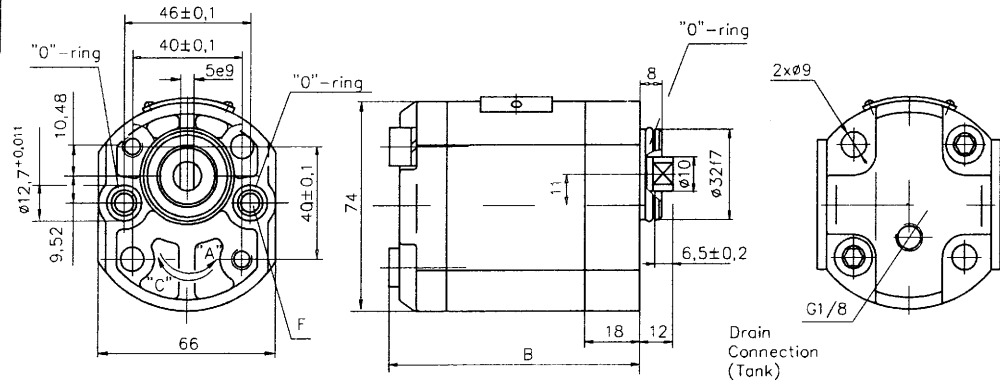
10^A_C...X176



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог					
				E	d	F	M	G	E	d	F	M	G	
	cm ³	mm		mm					mm					
10A(C)1X176	1	41,1	83	30	M6	12	M16x1,5	3/8"	30	M6	12	M16x1,5	3/8"	
10A(C)1,25X176	1,25	41,5	84	30	M6	12	M16x1,5	3/8"	30	M6	12	M16x1,5	3/8"	
10A(C)1,6X176	1,6	42,3	85,6	30	M6	12	M16x1,5	3/8"	30	M6	12	M16x1,5	3/8"	
10A(C)2X176	2	43,1	87,2	30	M6	12	M16x1,5	3/8"	30	M6	12	M16x1,5	3/8"	
10A(C)2,5X176	2,5	44,1	89,2	30	M6	12	M16x1,5	3/8"	30	M6	12	M16x1,5	3/8"	
10A(C)3,15X176	3,15	45,5	91,8	30	M6	12	M20x1,5	1/2"	30	M6	12	M16x1,5	3/8"	
10A(C)3,65X176	3,65	46,6	93,7	30	M6	12	M20x1,5	1/2"	30	M6	12	M16x1,5	3/8"	
10A(C)4,2X176	4,2	47,5	96,1	30	M6	12	M20x1,5	1/2"	30	M6	12	M16x1,5	3/8"	
10A(C)5X176	5	49,1	99,7	30	M6	12	M20x1,5	1/2"	30	M6	12	M16x1,5	3/8"	
10A(C)5,7X176	5,7	50,5	102	30	M6	12	M20x1,5	1/2"	30	M6	12	M16x1,5	3/8"	
10A(C)6,1X176	6,1	51,3	103,7	30	M6	12	M20x1,5	1/2"	30	M6	12	M16x1,5	3/8"	

10R...X243

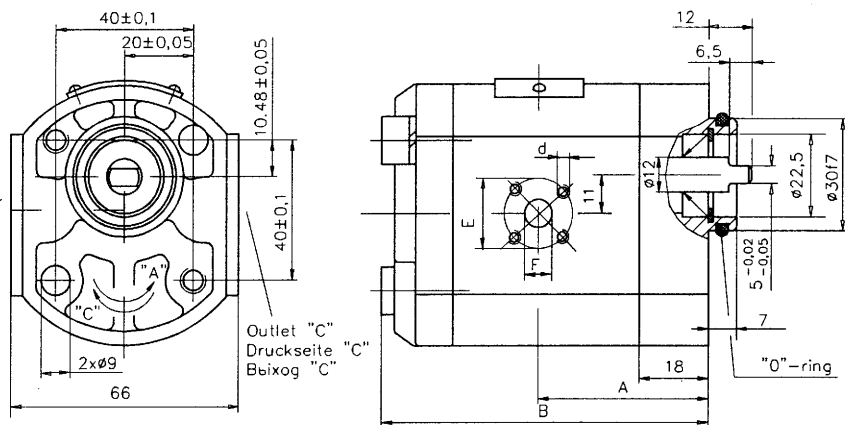
R max = 230 bar



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A B		Inlet Saugseite Вхог					Outlet Druckseite Выхог					
		mm		E	d	F	M	G	E	d	F	M	G	
	cm ³	mm												
10R1X243	1		81,0				9,2					9,2		
10R1,25X243	1,25		82,0				9,2					9,2		
10R1,6X243	1,6		83,6				9,2					9,2		
10R2X243	2		85,2				9,2					9,2		
10R2,5X243	2,5		87,2				9,2					9,2		
10R3,15X243	3,15		89,8				9,2					9,2		
10R3,65X243	3,65		91,9				9,2					9,2		
10R4,2X243	4,2		94,1				9,2					9,2		
10R5X243	5		97,1				9,2					9,2		
10R5,7X243	5,7		100,1				9,2					9,2		
10R6,1X243	6,1		101,7				9,2					9,2		

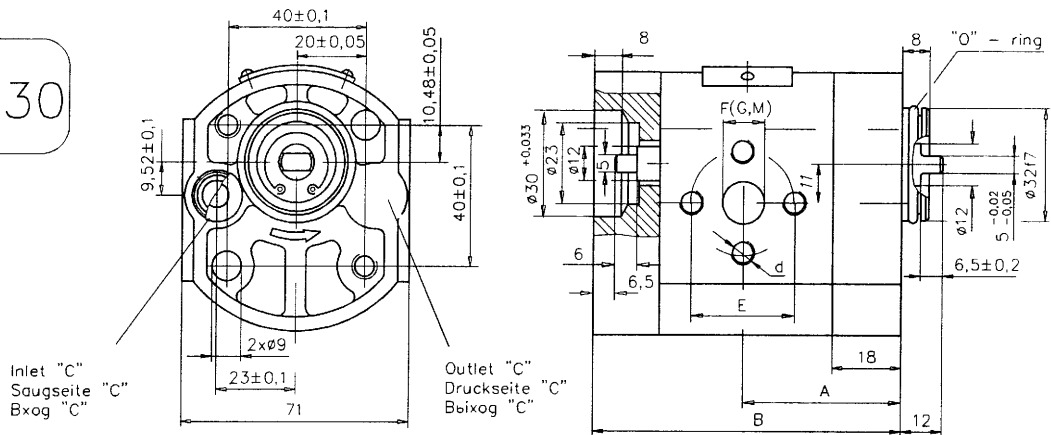
10^A_C...X238

Inlet "C"
Saugseite "C"
Вхог "C"



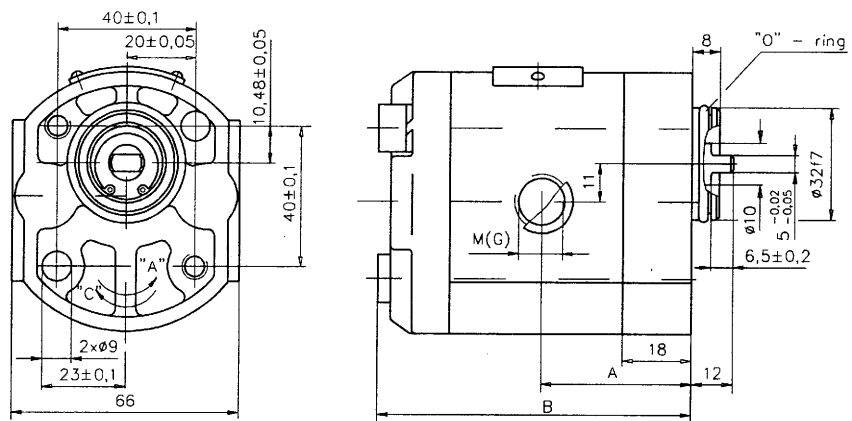
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A B		Inlet Saugseite Вхог					Outlet Druckseite Выхог				
		mm		E	d	F	M	G	E	d	F	M	G
	cm ³	mm											
10A(C)1X238	1	39,1	81,0	30	M6	12	M16x1,5	G3/8	30	M6	12	M16x1,5	G3/8
10A(C)1,25X238	1,25	39,5	82,0	30	M6	12	M16x1,5	G3/8	30	M6	12	M16x1,5	G3/8
10A(C)1,6X238	1,6	40,3	83,6	30	M6	12	M16x1,5	G3/8	30	M6	12	M16x1,5	G3/8
10A(C)2X238	2	41,1	85,2	30	M6	12	M16x1,5	G3/8	30	M6	12	M16x1,5	G3/8
10A(C)2,5X238	2,5	42,1	87,2	30	M6	12	M16x1,5	G3/8	30	M6	12	M16x1,5	G3/8
10A(C)3,15X238	3,15	43,5	89,8	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8
10A(C)3,65X238	3,65	44,4	91,85	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8
10A(C)4,2X238	4,2	45,5	94,1	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8
10A(C)5X238	5	47,1	97,2	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8
10A(C)5,7X238	5,7	48,5	100,1	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8
10A(C)6,1X238	6,1	49,4	101,8	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8

10A...X230



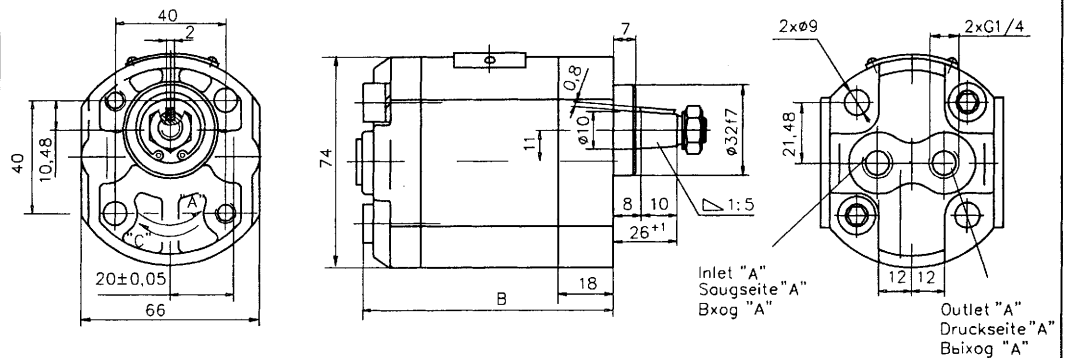
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A		Inlet Saugseite Выход					Outlet Druckseite Выход				
		E	d	F	M	G	E	d	F	M	G		
	cm ³	mm											
10A(C)1X230	1	39,1	79	30	M6	12	M16x1,5	G3/8	30	M6	12	M16x1,5	G3/8
10A(C)1,25X230	1,25	39,5	80	30	M6	12	M16x1,5	G3/8	30	M6	12	M16x1,5	G3/8
10A(C)1,6X230	1,6	40,3	81,6	30	M6	12	M16x1,5	G3/8	30	M6	12	M16x1,5	G3/8
10A(C)2X230	2	41,1	83,2	30	M6	12	M16x1,5	G3/8	30	M6	12	M16x1,5	G3/8
10A(C)2,5X230	2,5	42,1	85,2	30	M6	12	M16x1,5	G3/8	30	M6	12	M16x1,5	G3/8
10A(C)3,15X230	3,15	43,5	87,8	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8
10A(C)3,65X230	3,65	44,4	89,9	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8
10A(C)4,2X230	4,2	45,5	92,1	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8
10A(C)5X230	5	47,1	95,2	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8
10A(C)5,7X230	5,7	48,5	98,1	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8
10A(C)6,1X230	6,1	49,8	99,8	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8

10A
C...X244



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A		Inlet Saugseite Выход					Outlet Druckseite Выход				
		E	d	F	M	G	E	d	F	M	G		
	cm ³	mm											
10A(C)1X244	1	39,1	81,0				M16x1,5	G3/8				M16x1,5	G3/8
10A(C)1,25X244	1,25	39,5	82,0				M16x1,5	G3/8				M16x1,5	G3/8
10A(C)1,6X244	1,6	40,3	83,6				M16x1,5	G3/8				M16x1,5	G3/8
10A(C)2X244	2	41,1	85,2				M16x1,5	G3/8				M16x1,5	G3/8
10A(C)2,5X244	2,5	42,1	87,2				M16x1,5	G3/8				M16x1,5	G3/8
10A(C)3,15X244	3,15	43,5	89,8				M20x1,5	G1/2				M16x1,5	G3/8
10A(C)3,65X244	3,65	44,4	91,85				M20x1,5	G1/2				M16x1,5	G3/8
10A(C)4,2X244	4,2	45,5	94,1				M20x1,5	G1/2				M16x1,5	G3/8
10A(C)5X244	5	47,1	97,2				M20x1,5	G1/2				M16x1,5	G3/8
10A(C)5,7X244	5,7	48,5	100,1				M20x1,5	G1/2				M16x1,5	G3/8
10A(C)6,1X244	6,1	49,4	101,8				M20x1,5	G1/2				M16x1,5	G3/8

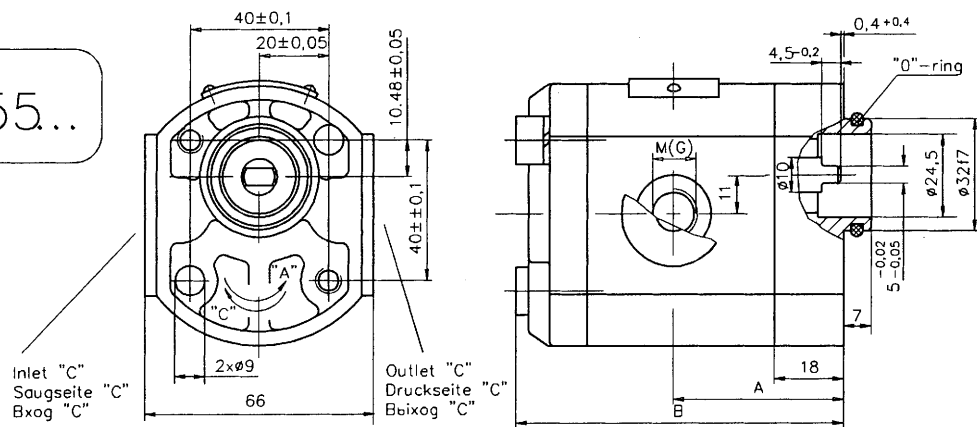
10^A_C...X254



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог					
				E	d	F	M	G	E	d	F	M	G	
	cm ³	mm		mm					mm					
10A(C)1X254	1		81,1						G1/4					G1/4
10A(C)1,25X254	1,25		82,0						G1/4					G1/4
10A(C)1,6X254	1,6		83,6						G1/4					G1/4
10A(C)2X254	2		85,2						G1/4					G1/4
10A(C)2,5X254	2,5		87,2						G1/4					G1/4
10A(C)3,15X254	3,15		89,8						G1/4					G1/4
10A(C)3,65X254	3,65		91,85						G1/4					G1/4
10A(C)4,2X254	4,2		94,1						G1/4					G1/4
10A(C)5X254	5		97,2						G1/4					G1/4
10A(C)5,7X254	5,7		100,1						G1/4					G1/4
10A(C)6,1X254	6,1		101,8						G1/4					G1/4

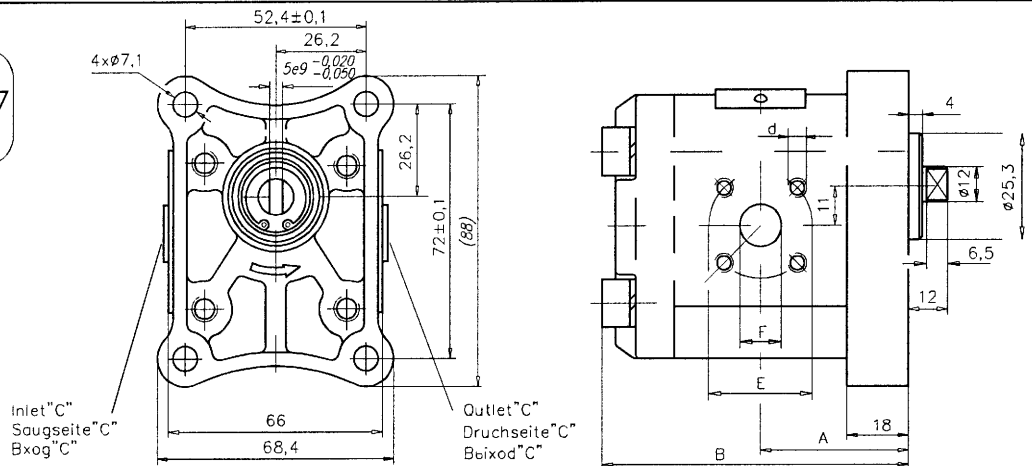
10^A_C...X255..

- metric thread
G - GAS thread



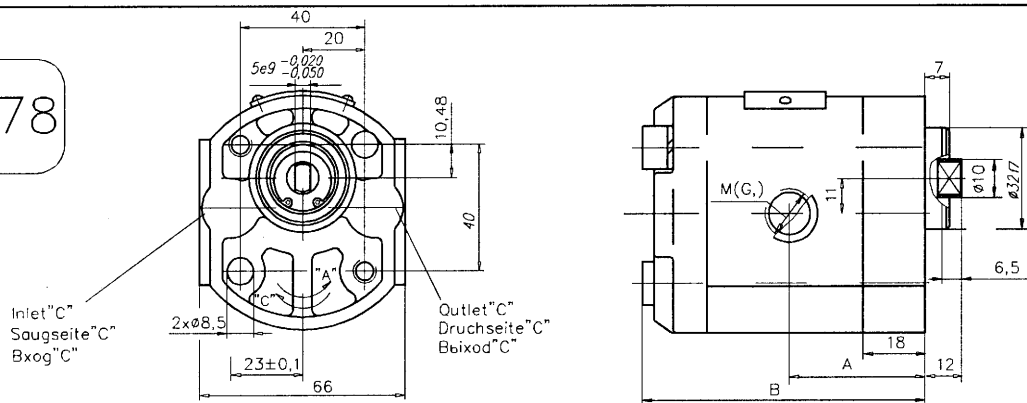
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог				
				E	d	F	M	G	E	d	F	M	G
	cm ³	mm		mm					mm				
10A(C)1X255	1	39,1	81,0				M18x1,5	3/8"				M14x1,5	3/8"
10A(C)1,25X255	1,25	39,5	82,0				M18x1,5	3/8"				M14x1,5	3/8"
10A(C)1,6X255	1,6	40,3	83,6				M18x1,5	3/8"				M14x1,5	3/8"
10A(C)2X255	2	41,1	85,2				M18x1,5	3/8"				M14x1,5	3/8"
10A(C)2,5X255	2,5	42,1	87,2				M18x1,5	3/8"				M14x1,5	3/8"
10A(C)3,15X255	3,15	43,5	89,8				M18x1,5	1/2"				M14x1,5	3/8"
10A(C)3,65X255	3,65	44,4	91,8				M18x1,5	1/2"				M14x1,5	3/8"
10A(C)4,2X255	4,2	45,5	94,1				M18x1,5	1/2"				M14x1,5	3/8"
10A(C)5X255	5	47,1	97,2				M18x1,5	1/2"				M14x1,5	3/8"
10A(C)5,7X255	5,7	48,5	100,1				M18x1,5	1/2"				M14x1,5	3/8"
10A(C)6,1X255	6,1	49,4	101,8				M18x1,5	1/2"				M14x1,5	3/8"

10^A_C...X257



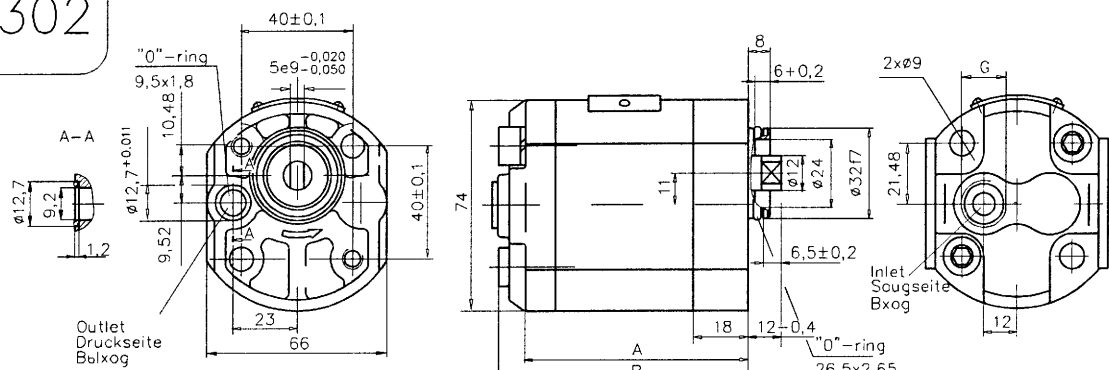
Type Typ Tun	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A B		Inlet Saugseite Вхoг					Outlet Druckseite Выхoд				
		E	d	F	M	G	E	d	F	M	G		
	cm ³	mm											
		mm											
10A(C)1X257	1	39,1	81,0	30	M6	12	M16x1,5	3/8"	30	M6	12	M16x1,5	3/8"
10A(C)1,25X257	1,25	39,5	82,0	30	M6	12	M16x1,5	3/8"	30	M6	12	M16x1,5	3/8"
10A(C)1,6X257	1,6	40,3	83,6	30	M6	12	M16x1,5	3/8"	30	M6	12	M16x1,5	3/8"
10A(C)2X257	2	41,1	85,2	30	M6	12	M16x1,5	3/8"	30	M6	12	M16x1,5	3/8"
10A(C)2,5X257	2,5	42,1	87,2	30	M6	12	M16x1,5	3/8"	30	M6	12	M16x1,5	3/8"
10A(C)3,15X257	3,15	43,5	89,8	30	M6	12	M20x1,5	1/2"	30	M6	12	M16x1,5	3/8"
10A(C)3,65X257	3,65	44,4	91,9	30	M6	12	M20x1,5	1/2"	30	M6	12	M16x1,5	3/8"
10A(C)4,2X257	4,2	45,5	94,1	30	M6	12	M20x1,5	1/2"	30	M6	12	M16x1,5	3/8"
10A(C)5X257	5	47,1	97,2	30	M6	12	M20x1,5	1/2"	30	M6	12	M16x1,5	3/8"
10A(C)5,7X257	5,7	48,5	100,1	30	M6	12	M20x1,5	1/2"	30	M6	12	M16x1,5	3/8"
1A(C)6,1X257	6,1	49,4	101,8	30	M6	12	M20x1,5	1/2"	30	M6	12	M16x1,5	3/8"

10^A_C...X278



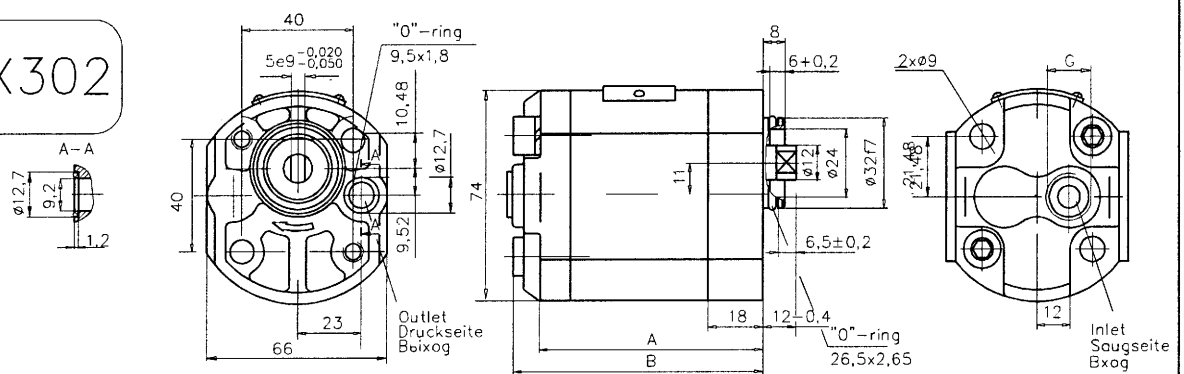
Type Typ Tun	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A B		Inlet Saugseite Вхoг					Outlet Druckseite Выхoд				
		E	d	F1	M	G	E	d	F1	M	G		
	cm ³	mm											
		mm											
10A(C)1X278	1	39,1	81,0				M16x1,5	G3/8				M16x1,5	3/8"
10A(C)1,25X278	1,25	39,5	82,0				M16x1,5	G3/8				M16x1,5	3/8"
10A(C)1,6X278	1,6	40,3	83,6				M16x1,5	G3/8				M16x1,5	3/8"
10A(C)2X278	2	41,1	85,2				M16x1,5	G3/8				M16x1,5	3/8"
10A(C)2,5X278	2,50	42,1	87,2				M16x1,5	G3/8				M16x1,5	3/8"
10A(C)3,15X278	3,15	43,5	89,8				M20x1,5	G3/8				M16x1,5	3/8"
10A(C)3,65X278	3,65	44,4	91,9				M20x1,5	G3/8				M16x1,5	3/8"
10A(C)4,2X278	4,2	45,5	94,1				M20x1,5	G3/8				M16x1,5	3/8"
10A(C)5X278	5	47,1	97,2				M20x1,5	G3/8				M16x1,5	3/8"
10A(C)5,7X278	5,7	48,5	100,1				M20x1,5	G3/8				M16x1,5	3/8"
10A(C)6,1X278	6,1	49,4	101,8				M20x1,5	G3/8				M16x1,5	3/8"

10A...X302



Type Typ Тип	Displacement Fördervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A		B		Inlet Saugseite Вход				Outlet Druckseite Выход				
		E	d	F	M	G	E	d	F	M	G			
	cm ³	mm												
10A1X302	1	71,0	81,0							G3/8				
10A1,25X302	1,25	72,0	82,0							G3/8				
10A1,6X302	1,60	73,6	83,6							G3/8				
10A2X302	2	75,2	85,2							G3/8				
10A2,5X302	2,5	77,2	87,2							G3/8				
10A3,15X302	3,15	79,8	89,8							G3/8				
10A3,65X302	3,65	81,9	91,9							G3/8				
10A4,2X302	4,2	84,1	94,1							G3/8				
10A5X302	5	87,1	97,1							G3/8				
10A5,7X302	5,7	90,1	100,1							G3/8				
10A6,1X302	6,1	91,7	101,7							G3/8				

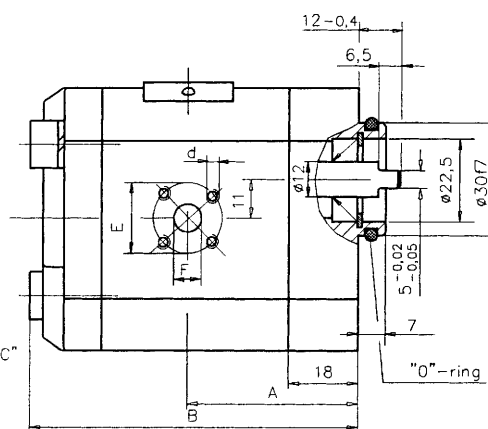
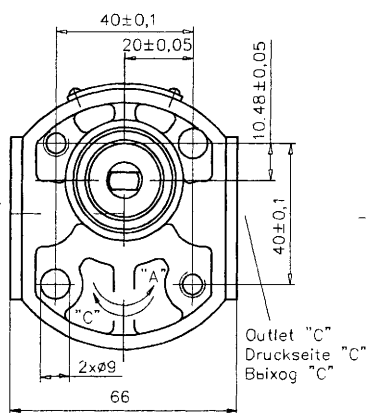
10C...X302



Type Typ Тип	Displacement Fördervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A		B		Inlet Saugseite Вход				Outlet Druckseite Выход				
		E	d	F1	M	G	E	d	F1	M	G			
	cm ³	mm												
10C1X302	1	71,0	81,0							G3/8				
10C1,25X302	1,25	72,0	82,0							G3/8				
10C1,6X302	1,6	73,6	83,6							G3/8				
10C2X302	2	75,2	85,2							G3/8				
10C2,50X302	2,50	77,2	87,2							G3/8				
10C3,15X302	3,15	79,8	89,8							G3/8				
10C3,65X302	3,65	81,9	91,9							G3/8				
10C4,2X302	4,2	84,1	94,1							G3/8				
10C5X302	5	87,1	97,1							G3/8				
10C5,7X302	5,7	90,1	100,0							G3/8				
10C6,1X302	6,1	91,7	101,7							G3/8				

10^A_C...X238

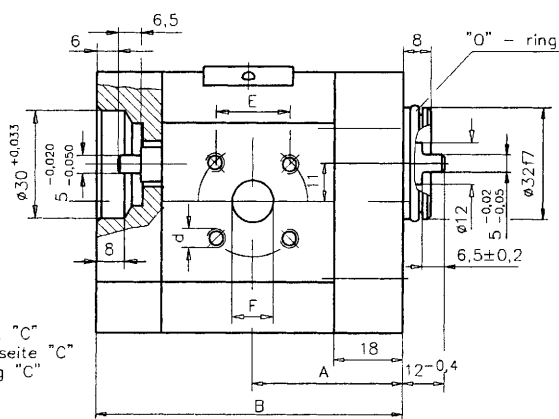
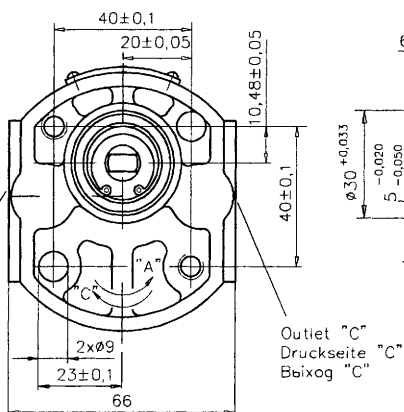
Inlet "C"
Saugseite "C"
Вход "C"



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Вход					Outlet Druckseite Выход					
				E	d	F	M	G	E	d	F	M	G	
	cm ³	mm												
		mm												
10A(C)1X238	1	39,1	81,0	30	M6	12	M16x1,5	G3/8	30	M6	12	M16x1,5	G3/8	
10A(C)1,25X238	1,25	39,5	82,0	30	M6	12	M16x1,5	G3/8	30	M6	12	M16x1,5	G3/8	
10A(C)1,6X238	1,6	40,3	83,6	30	M6	12	M16x1,5	G3/8	30	M6	12	M16x1,5	G3/8	
10A(C)2X238	2	41,1	85,2	30	M6	12	M16x1,5	G3/8	30	M6	12	M16x1,5	G3/8	
10A(C)2,5X238	2,5	42,1	87,2	30	M6	12	M16x1,5	G3/8	30	M6	12	M16x1,5	G3/8	
10A(C)3,15X238	3,15	43,5	89,8	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8	
10A(C)3,65X238	3,65	44,4	91,85	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8	
10A(C)4,2X238	4,2	45,5	94,1	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8	
10A(C)5X238	5	47,1	97,2	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8	
10A(C)5,7X238	5,7	48,5	100,1	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8	
10A(C)6,1X238	6,1	49,4	101,8	30	M6	12	M20x1,5	G1/2	30	M6	12	M16x1,5	G3/8	

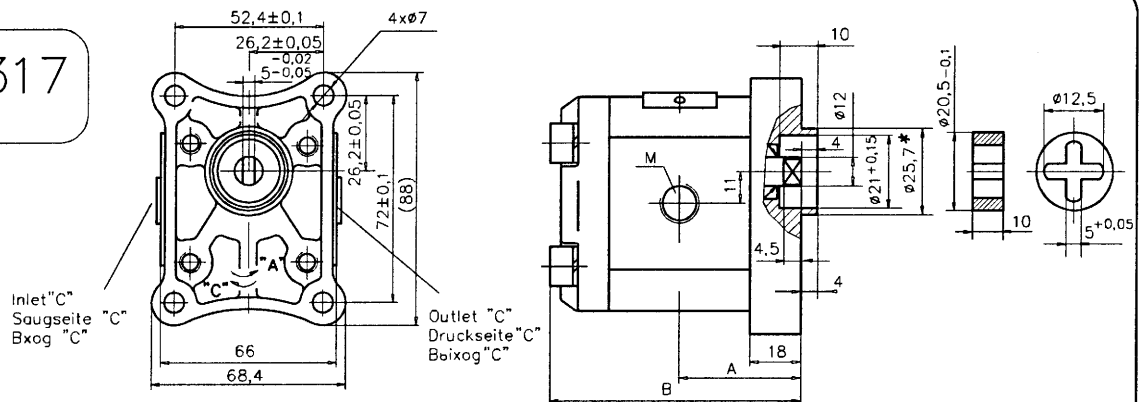
10^A_C...X303

Inlet "C"
Saugseite "C"
Вход "C"



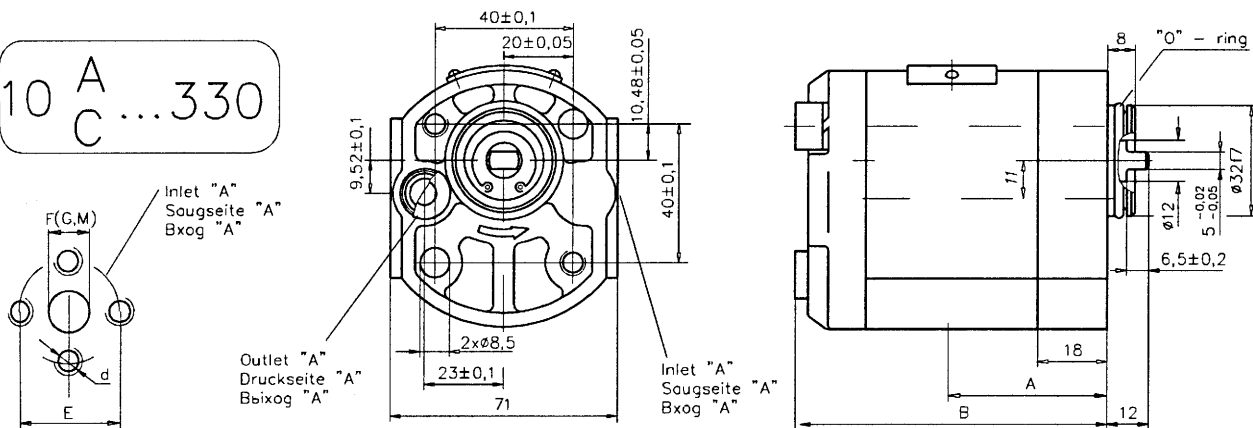
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Вход					Outlet Druckseite Выход					
				E	d	F	M	G	E	d	F	M	G	
	cm ³	mm												
		mm												
10A(C)1X303	1	39,1	79	30	6	12				30	6	12		
10A(C)1,25X303	1,25	39,5	80	30	6	12				30	6	12		
10A(C)1,6X303	1,6	40,3	81,6	30	6	12				30	6	12		
10A(C)2X303	2	41,1	83,2	30	6	12				30	6	12		
10A(C)2,5X303	2,5	42,1	85,2	30	6	12				30	6	12		
10A(C)3,15X303	3,15	43,5	87,8	30	6	12				30	6	12		
10A(C)3,65X303	3,65	44,4	89,9	30	6	12				30	6	12		
10A(C)4,2X303	4,2	45,5	92,1	30	6	12				30	6	12		
10A(C)5X303	5	47,1	95,2	30	6	12				30	6	12		
10A(C)5,7X303	5,7	48,5	98,1	30	6	12				30	6	12		
10A(C)6,1X303	6,1	49,4	99,8	30	6	12				30	6	12		

10A
C...X317



Type Typ Тун	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A B		Inlet Saugseite Вхог					Outlet Druckseite Выхог				
		E	d	F	M	G	E	d	F	M	G		
	cm ³	mm										mm	
10A(C)1X317	1	39,1	81,0				M16x1,5						M16x1,5
10A(C)1,2X317	1,25	39,5	82,0				M16x1,5						M16x1,5
10A(C)1,6X317	1,6	40,3	83,6				M16x1,5						M16x1,5
10A(C)2X317	2	41,1	85,2				M16x1,5						M16x1,5
10A(C)2,5X317	2,5	42,1	87,2				M16x1,5						M16x1,5
10A(C)3,15X317	3,15	43,5	89,8				M20x1,5						M16x1,5
10A(C)3,65X317	3,65	44,4	91,8				M20x1,5						M16x1,5
10A(C)4,2X317	4,2	45,5	94,1				M20x1,5						M16x1,5
10A(C)5X317	5	47,1	97,2				M20x1,5						M16x1,5
10A(C)5,7X317	5,7	48,5	100,1				M20x1,5						M16x1,5
10A(C)6,1X317	6,1	49,4	101,8				M20x1,5						M16x1,5

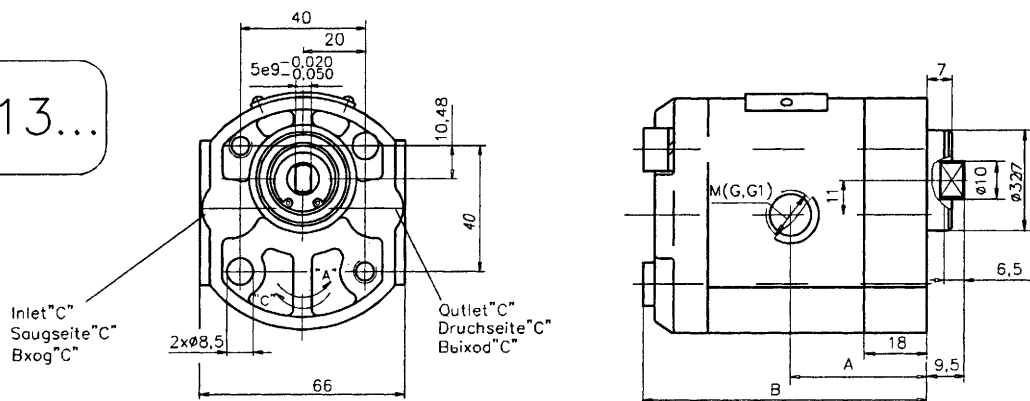
10A
C...330



Type Typ Тун	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A B		Inlet Saugseite Вхог					Outlet Druckseite Выхог				
		E	d	F	M	G	E	d	F	M	G		
	cm ³	mm										mm	
10A(C)1X330	1	39,1	79	30	M6	12	M16x1,5	G3/8					
10A(C)1,25X330	1,25	39,5	80	30	M6	12	M16x1,5	G3/8					
10A(C)1,6X330	1,6	40,3	81,6	30	M6	12	M16x1,5	G3/8					
10A(C)2X330	2	41,1	83,2	30	M6	12	M16x1,5	G3/8					
10A(C)2,5X330	2,5	42,1	85,2	30	M6	12	M16x1,5	G3/8					
10A(C)3,15X330	3,15	43,5	87,8	30	M6	12	M20x1,5	G1/2					
10A(C)3,65X330	3,65	44,4	89,9	30	M6	12	M20x1,5	G1/2					
10A(C)4,2X330	4,2	45,5	92,1	30	M6	12	M20x1,5	G1/2					
10A(C)5X330	5	47,1	95,2	30	M6	12	M20x1,5	G1/2					
10A(C)5,7X330	5,7	48,5	98,1	30	M6	12	M20x1,5	G1/2					
10A(C)6,1X330	6,1	49,8	99,8	30	M6	12	M20x1,5	G1/2					

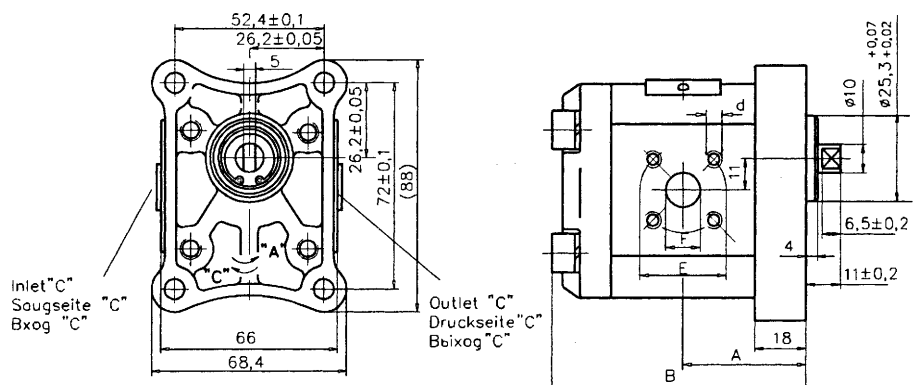
10^A_C...X313...

M-metric thread
G-GAS thread



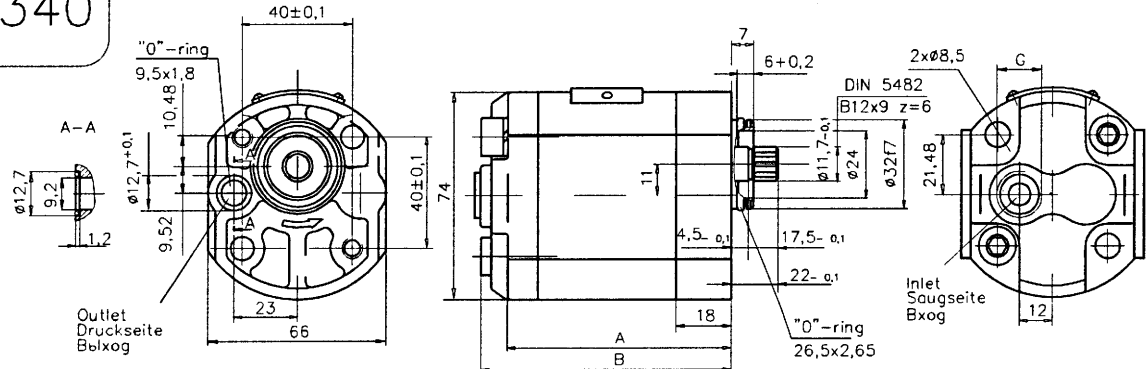
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Вход					Outlet Druckseite Выход					
				E	d	G1	M	G	E	d	G1	M	G	
	cm ³	mm		mm										
10A(C)1X313...	1	39,1	81,0				M16x1,5	G3/8				M16x1,5	G3/8	
10A(C)1,25X313...	1,25	39,5	82,0				M16x1,5	G3/8				M16x1,5	G3/8	
10A(C)1,6X313...	1,6	40,3	83,6				M16x1,5	G3/8				M16x1,5	G3/8	
10A(C)2X313...	2	41,1	85,2				M16x1,5	G3/8				M16x1,5	G3/8	
10A(C)2,5X313...	2,50	42,1	87,2				M16x1,5	G3/8				M16x1,5	G3/8	
10A(C)3,15X313...	3,15	43,5	89,8				M20x1,5	G1/2		G3/8		M16x1,5	G3/8	
10A(C)3,65X313...	3,65	44,4	91,9				M20x1,5	G1/2				M16x1,5	G3/8	
10A(C)4,2X313...	4,2	45,5	94,1				M20x1,5	G1/2				M16x1,5	G3/8	
10A(C)5X313...	5	47,1	97,2				M20x1,5	G1/2				M16x1,5	G3/8	
10A(C)5,7X313...	5,7	48,5	100,1				M20x1,5	G1/2				M16x1,5	G3/8	
10A(C)6,1X313...	6,1	49,4	101,8				M20x1,5	G1/2				M16x1,5	G3/8	

10^A_C...X310



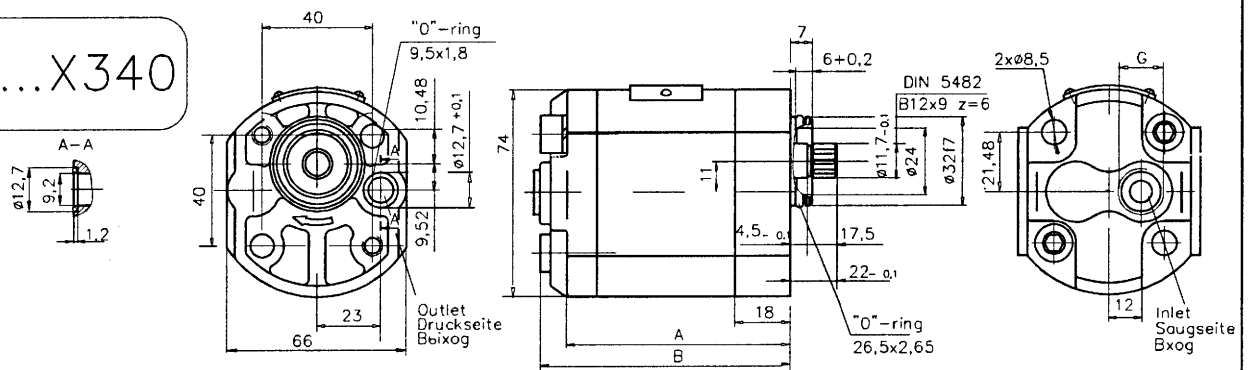
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Вход					Outlet Druckseite Выход					
				E	d	F	M	G	E	d	F	M	G	
	cm ³	mm		mm										
10A(C)1X310	1	39,1	81,0	30	M6	12	M16x1,5	G3/8	30	M6	13	M16x1,5	G3/8	
10A(C)1,25X310	1,25	39,5	82,0	30	M6	12	M16x1,5	G3/8	30	M6	13	M16x1,5	G3/8	
10A(C)1,6X310	1,6	40,3	83,6	30	M6	12	M16x1,5	G3/8	30	M6	13	M16x1,5	G3/8	
10A(C)2X310	2	41,1	85,2	30	M6	12	M16x1,5	G3/8	30	M6	13	M16x1,5	G3/8	
10A(C)2,5X310	2,5	42,1	87,2	30	M6	12	M16x1,5	G3/8	30	M6	13	M16x1,5	G3/8	
10A(C)3,15X310	3,15	43,5	89,8	30	M6	12	M20x1,5	G1/2	30	M6	13	M16x1,5	G3/8	
10A(C)3,65X310	3,65	44,4	91,8	30	M6	12	M20x1,5	G1/2	30	M6	13	M16x1,5	G3/8	
10A(C)4,2X310	4,2	45,5	94,1	30	M6	12	M20x1,5	G1/2	30	M6	13	M16x1,5	G3/8	
10A(C)5X310	5	47,1	97,2	30	M6	12	M20x1,5	G1/2	30	M6	13	M16x1,5	G3/8	
10A(C)5,7X310	5,7	48,5	100,1	30	M6	12	M20x1,5	G1/2	30	M6	13	M16x1,5	G3/8	
10A(C)6,1X310	6,1	49,4	101,8	30	M6	12	M20x1,5	G1/2	30	M6	13	M16x1,5	G3/8	

10A...X340



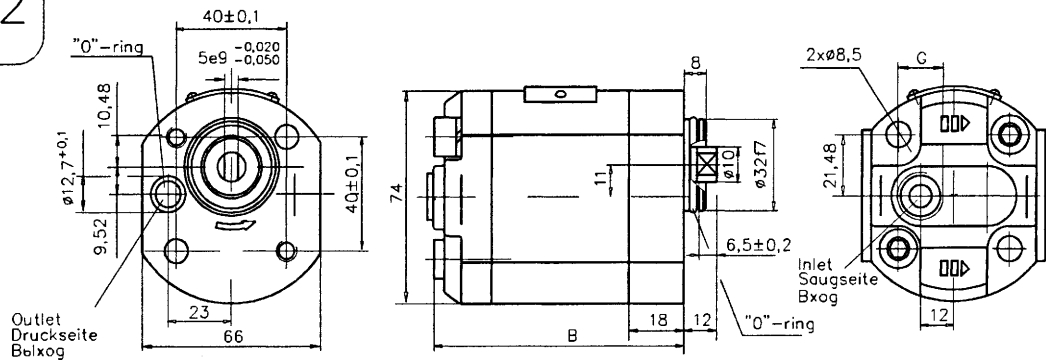
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры																		
		A		Inlet Saugseite Вход					Outlet Druckseite Выход											
		mm	mm	E	d	F	M	G	E	d	F	M	G							
10A1X340	1	71,0	81,0																	
10A1,25X340	1,25	72,0	82,0																	
10A1,6X340	1,60	73,6	83,6																	
10A2X340	2	75,2	85,2																	
10A2,5X340	2,5	77,2	87,2																	
10A3,15X340	3,15	79,8	89,8																	
10A3,65X340	3,65	81,9	91,9																	
10A4,2X340	4,2	84,1	94,1																	
10A5X340	5	87,1	97,1																	
10A5,7X340	5,7	90,1	100,1																	
10A6,1X340	6,1	91,7	101,7																	

10C...X340



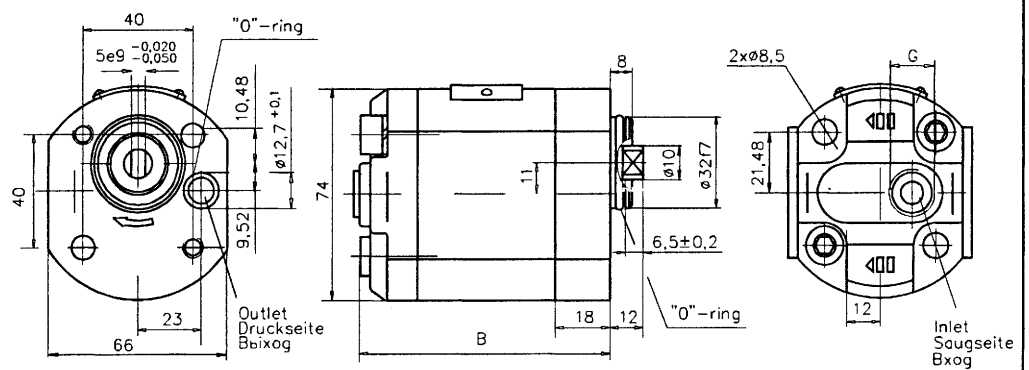
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры																		
		A		Inlet Saugseite Вход					Outlet Druckseite Выход											
		mm	mm	E	d	F1	M	G	E	d	F1	M	G							
10C1X340	1	71,0	81,0																	
10C1,25X340	1,25	72,0	82,0																	
10C1,6X340	1,6	73,6	83,6																	
10C2X340	2	75,2	85,2																	
10C2,50X340	2,50	77,2	87,2																	
10C3,15X340	3,15	79,8	89,8																	
10C3,65X340	3,65	81,9	91,9																	
10C4,2X340	4,2	84,1	94,1																	
10C5X340	5	87,1	97,1																	
10C5,7X340	5,7	90,1	100,0																	
10C6,1X340	6,1	91,7	101,7																	

10A...X342



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A		Inlet Saugseite Вход					Outlet Druckseite Выход					
		E	d	F	M	G	E	d	F	M	G			
	cm ³	mm												
10A1X342	1		81,0					G3/8						
10A1,25X342	1,25		82,0					G3/8						
10A1,6X342	1,60		83,6					G3/8						
10A2X342	2		85,2					G3/8						
10A2,5X342	2,5		87,2					G3/8						
10A3,15X342	3,15		89,8					G3/8						
10A3,65X342	3,65		91,9					G3/8						
10A4,2X342	4,2		94,1					G3/8						
10A5X342	5		97,1					G3/8						
10A5,7X342	5,7		100,1					G3/8						
10A6,1X342	6,1		101,7					G3/8						

10C...X342



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A		Inlet Saugseite Вход					Outlet Druckseite Выход				
		E	d	F1	M	G	E	d	F1	M	G		
	cm ³	mm											
10C1X342	1		81,0					G3/8					
10C1,25X342	1,25		82,0					G3/8					
10C1,6X342	1,6		83,6					G3/8					
10C2X342	2		85,2					G3/8					
10C2,50X342	2,50		87,2					G3/8					
10C3,15X342	3,15		89,8					G3/8					
10C3,65X342	3,65		91,9					G3/8					
10C4,2X342	4,2		94,1					G3/8					
10C5X342	5		97,1					G3/8					
10C5,7X342	5,7		100,0					G3/8					
10C6,1X342	6,1		101,7					G3/8					



Hydraulic Gear Pumps Hydraulische Zahnradpumpen Шестеренные насосы Gr 20 250 bar



Used symbols:

- q - displacement;
 p_{nom} - nominal pressure;
 n_{min} - minimal speed;
 n_{nom} - nominal speed;
 n_{max} - maximal speed;
 P_{nom} - power at p_{nom}
 and n_{nom}
 P_{max} - power at p_{nom}
 and n_{max}

volumetric efficiencies;

- η_{qmin} - at min. speed;
 η_{qnom} - at nom. speed;
 η_{qmax} - at max. speed;

efficiencies;

- η_{min} - at min. speed;
 η_{nom} - at nom. speed;
 η_{max} - at max. speed;

Bezeichnungen:

- Foerdervolumen;
 nominal Druck;
 minimal Geschwindigkeit;
 nominal Geschwindigkeit;
 maximal Geschwindigkeit;
 Leistung bei p_{nom} und
 n_{nom}
 Leistung bei p_{nom} und
 n_{max}

volumetrischer Wirkungsgrad;

- bei min. Geschwindigkeit;
 bei nom. Geschwindigkeit;
 bei max. Geschwindigkeit;

Wirkungsgrad gesamt;

- bei min. Geschwindigkeit;
 bei nom. Geschwindigkeit;
 bei max. Geschwindigkeit;

Обозначения:

- рабочий объем
 номинальное давление
 минимальная скорость
 номинальная скорость
 максимальная скорость
 мощность при p_{nom}
 и n_{nom}
 мощность при p_{nom}
 и n_{max}

объемный кпд

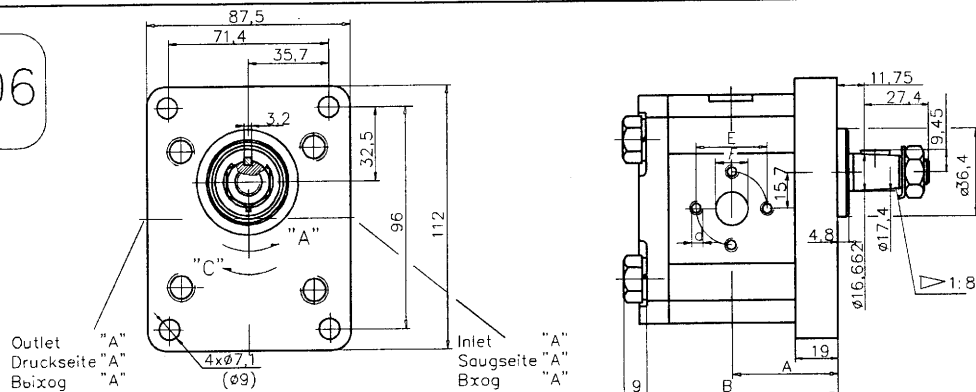
- при мин. скорость
 при ном. скорость
 при макс. скорость

общий КПД.

- при мин. скорость
 при ном. скорость
 при ном. скорость

q	cm ³	4.5	6.3	8.2	10	11	12	14	15	16	19	22	25
p_{nom}	bar	250	250	250	250	250	250	250	250	250	200	200	160
n_{min}	min ⁻¹	650	650	650	650	650	650	650	650	650	650	650	650
n_{nom}	min ⁻¹	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
n_{max}	min ⁻¹	3500	3500	3500	3500	3500	3500	3500	2500	2500	2500	2000	2000
η_{qmin}	%	75	76	77	77	78	78	78	80	80	82	82	82
η_{min}	%	67	68	69	70	71	71	71	74	74	74	74	74
η_{qnom}	%	90	91	91	92	92.5	92.5	92.5	93.5	93.5	94	94	94
η_{nom}	%	80	82	83	83.5	84	84	84	85	85	85	85	85
η_{qmax}	%	91	92	92	93	93	94	95	96	96	96	96	96
η_{max}	%	81	83	84	84	85	85	85	86	86	86	86	86
P_{nom}	kW	3.1	4.1	5.6	6.8	7.4	8.3	9.7	10.1	11	10.2	12	11
P_{max}	kW	7	9.5	13	15.8	17.4	19	19.2	17	18.5	17	18	18.5

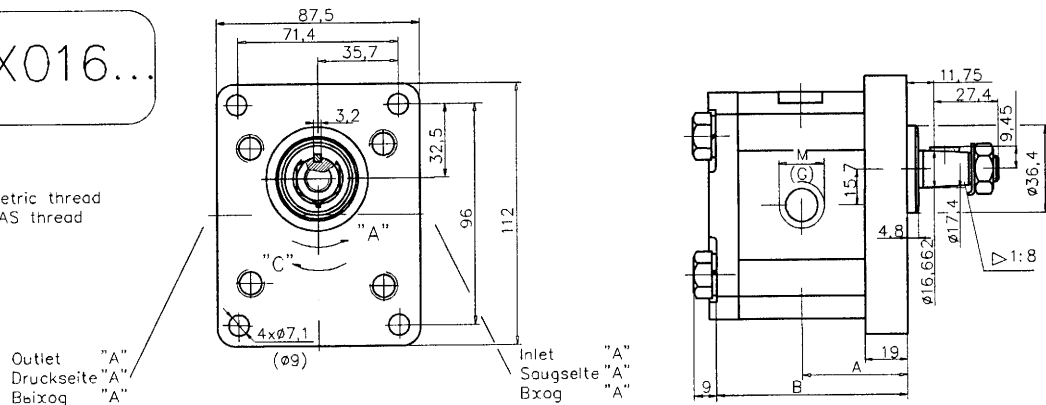
20^A_C...X006



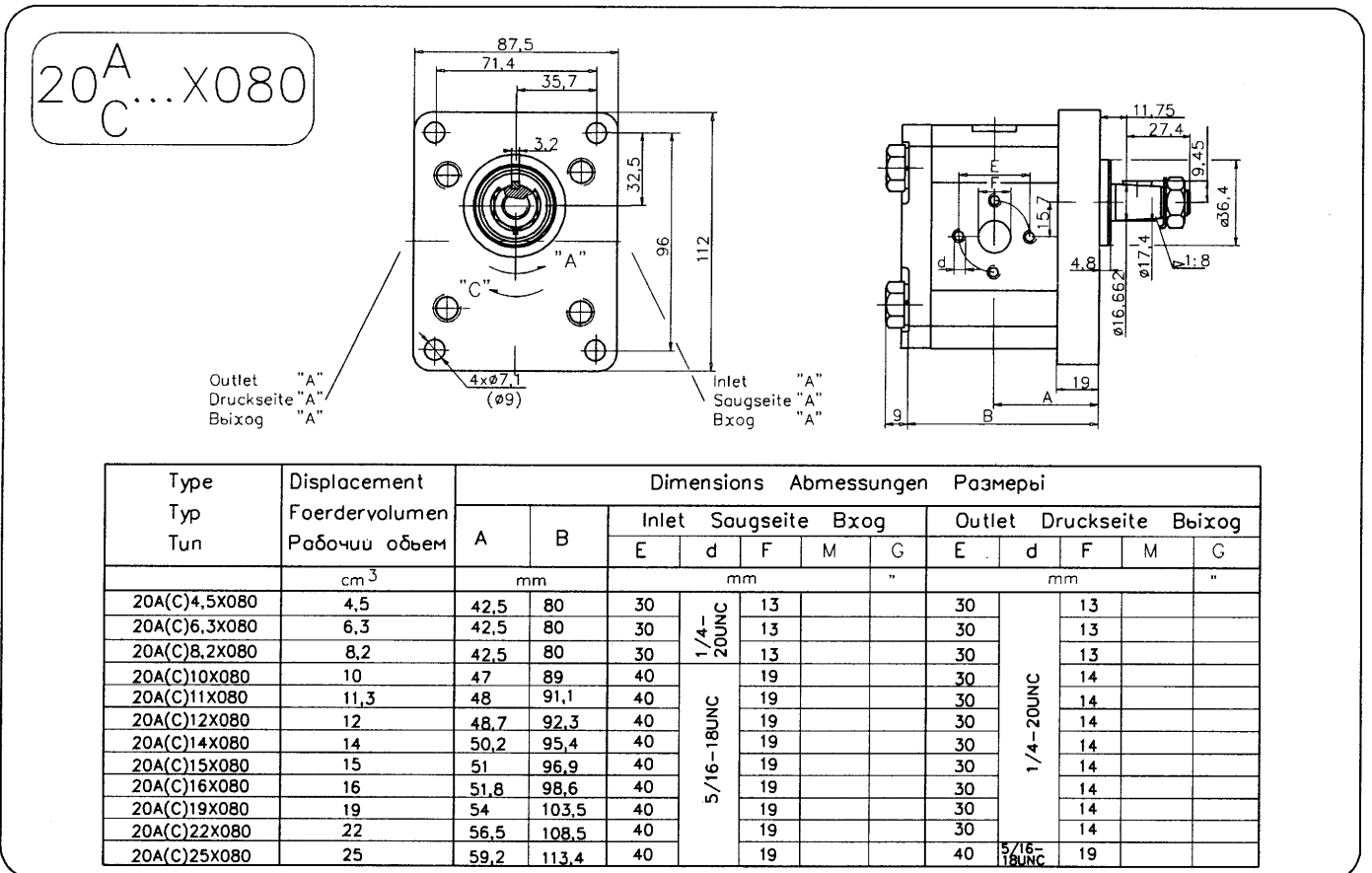
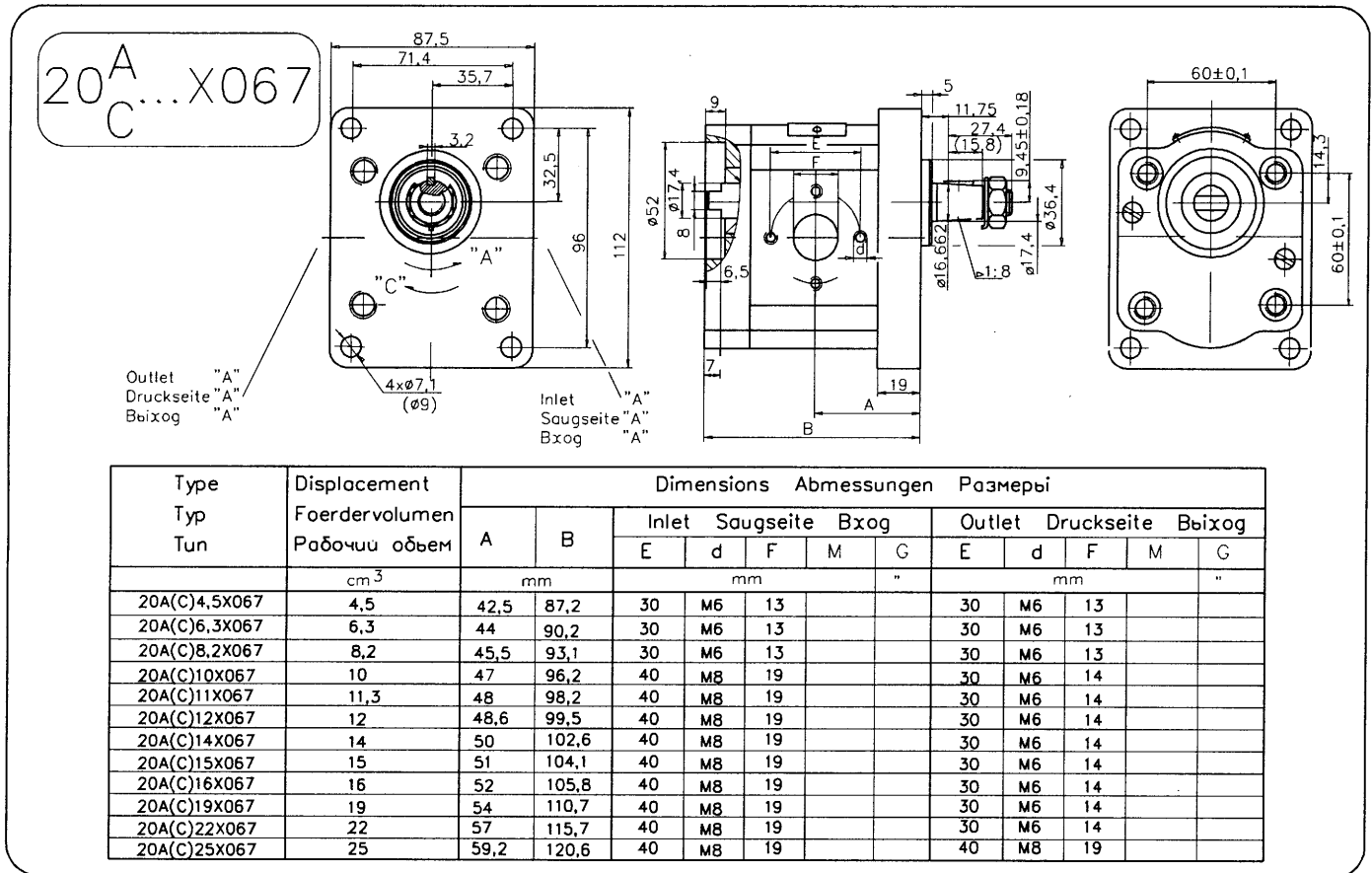
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A		Inlet Saugseite Вхог					Outlet Druckseite Выхог					
		E	d	F	M	G	E	d	F	M	G			
	cm ³	mm												
20A(C)4,5X006	4,5	42,5	80	30	M6	13	M20x1,5	G1/2	30	M6	13	M16x1,5	G1/2	
20A(C)6,3X006	6,3	42,5	80	30	M6	13	M20x1,5	G1/2	30	M6	13	M16x1,5	G1/2	
20A(C)8,2X006	8,2	42,5	80	30	M6	13	M20x1,5	G1/2	30	M6	13	M16x1,5	G1/2	
20A(C)10X006	10	47	89	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)11X006	11,3	48	91,1	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)12X006	12	48,7	92,3	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)14X006	14	50,2	95,4	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)15X006	15	51	96,9	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)16X006	16	51,8	98,6	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)19X006	19	54	103,5	40	M8	19	M20x1,5	G3/4	30	M6	14	M20x1,5	G1/2	
20A(C)22X006	22	56,5	108,5	40	M8	19	M20x1,5	G3/4	30	M6	14	M20x1,5	G1/2	
20A(C)25X006	25	59,2	113,4	40	M8	19	M20x1,5	G3/4	40	M8	19	M20x1,5	G1/2	
20A(C)14X006A	14	55,5	95,4	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)15X006A	15	55,5	96,9	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)19X006A	19	59	103,5	40	M8	19	M20x1,5	G3/4	30	M6	14	M20x1,5	G1/2	

20^A_C...X016...

- metric thread
G - GAS thread

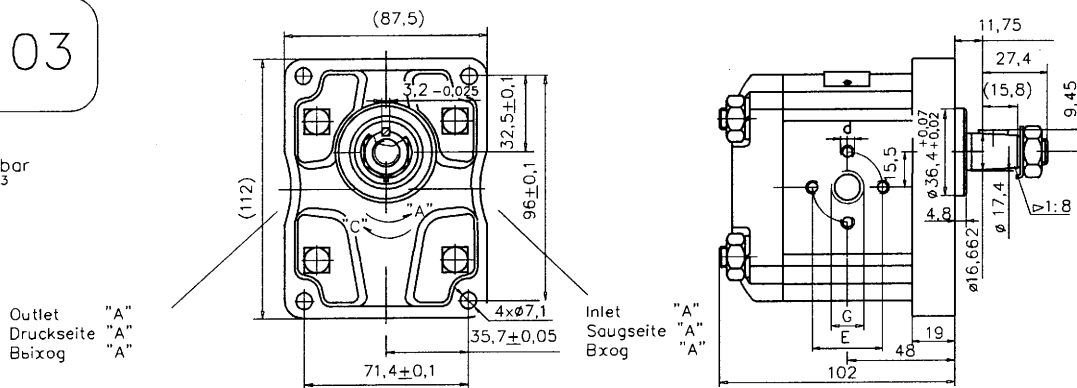


Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A		Inlet Saugseite Вхог					Outlet Druckseite Выхог					
		E	d	F	M	G	E	d	F	M	G			
	cm ³	mm												
20A(C)4,5X016...	4,5	42,5	80				M20x1,5	G1/2				M16x1,5	G1/2	
20A(C)6,3X016...	6,3	42,5	80				M20x1,5	G1/2				M16x1,5	G1/2	
20A(C)8,2X016...	8,2	42,5	80				M20x1,5	G1/2				M16x1,5	G1/2	
20A(C)10X016...	10	47	89				M20x1,5	G3/4				M16x1,5	G1/2	
20A(C)11X016...	11,3	48	91,1				M20x1,5	G3/4				M16x1,5	G1/2	
20A(C)12X016...	12	48,7	92,3				M20x1,5	G3/4				M16x1,5	G1/2	
20A(C)14X016...	14	50,2	95,4				M20x1,5	G3/4				M16x1,5	G1/2	
20A(C)15X016...	15	51	96,9				M20x1,5	G3/4				M16x1,5	G1/2	
20A(C)16X016...	16	51,8	98,6				M20x1,5	G3/4				M16x1,5	G1/2	
20A(C)19X016...	19	54	103,5				M20x1,5	G3/4				M20x1,5	G1/2	
20A(C)22X016...	22	56,5	108,5				M20x1,5	G3/4				M20x1,5	G1/2	
20A(C)25X016...	25	59,2	113,4				M20x1,5	G3/4				M20x1,5	G1/2	



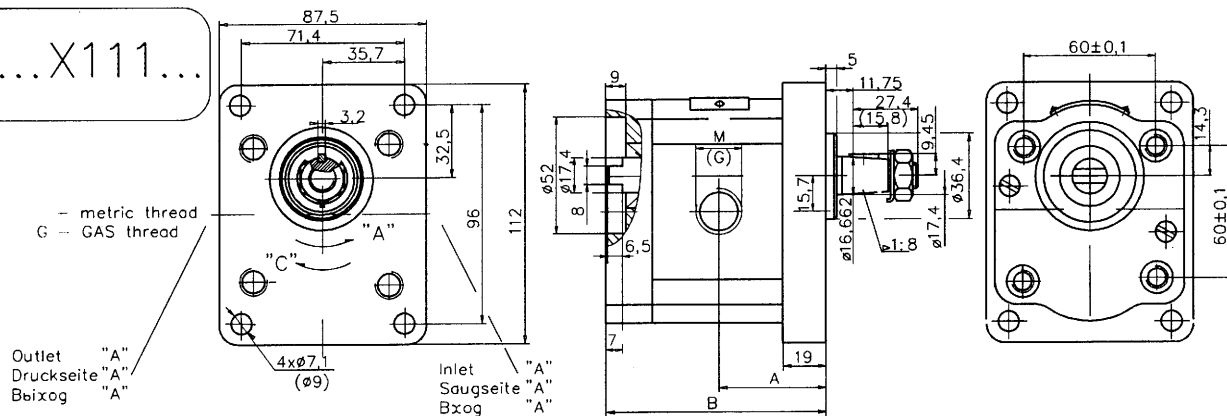
A
C 25X103

$P_{nom} = 175 \text{ bar}$
 $q = 11,3 \text{ cm}^3$

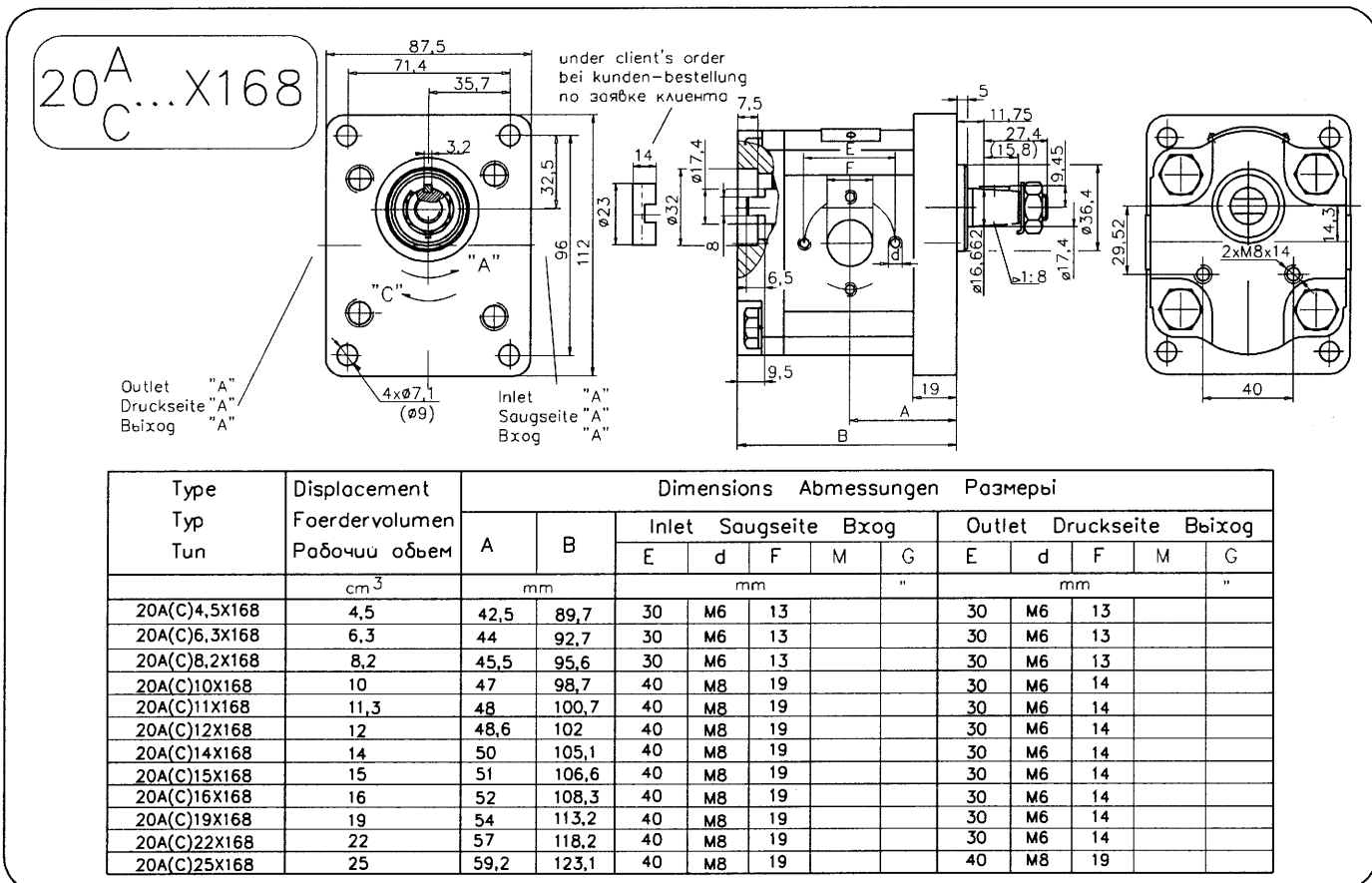
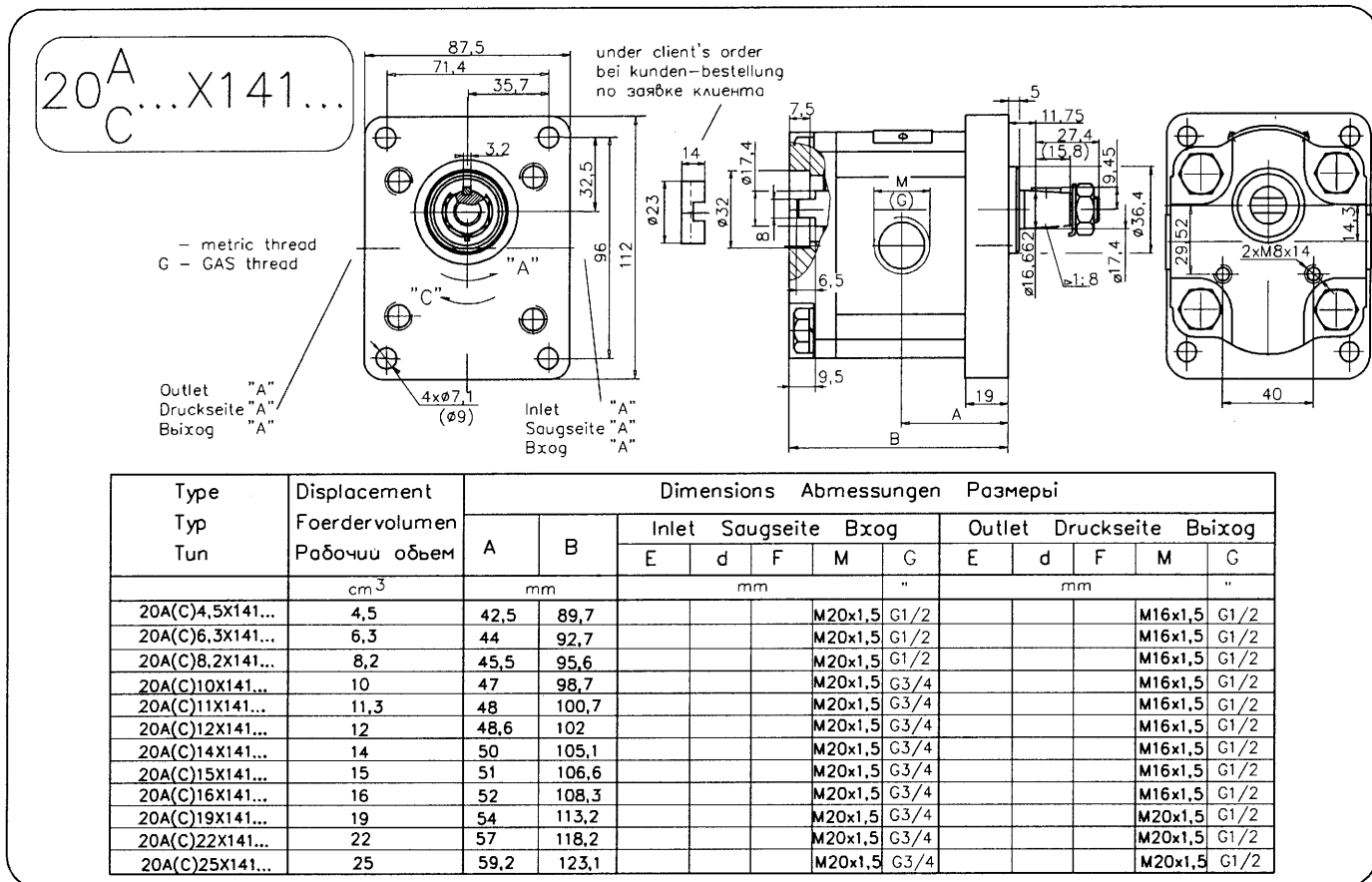


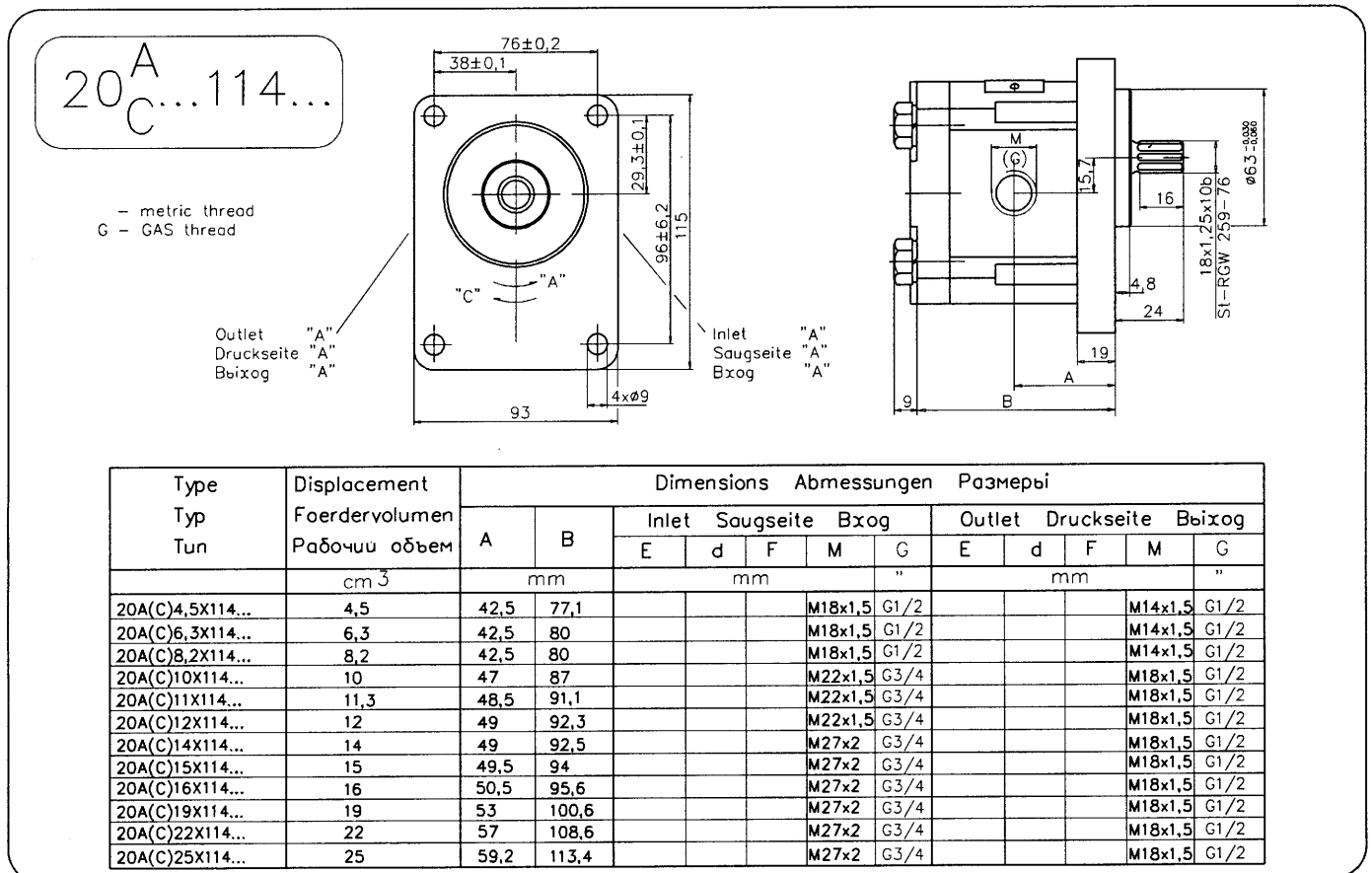
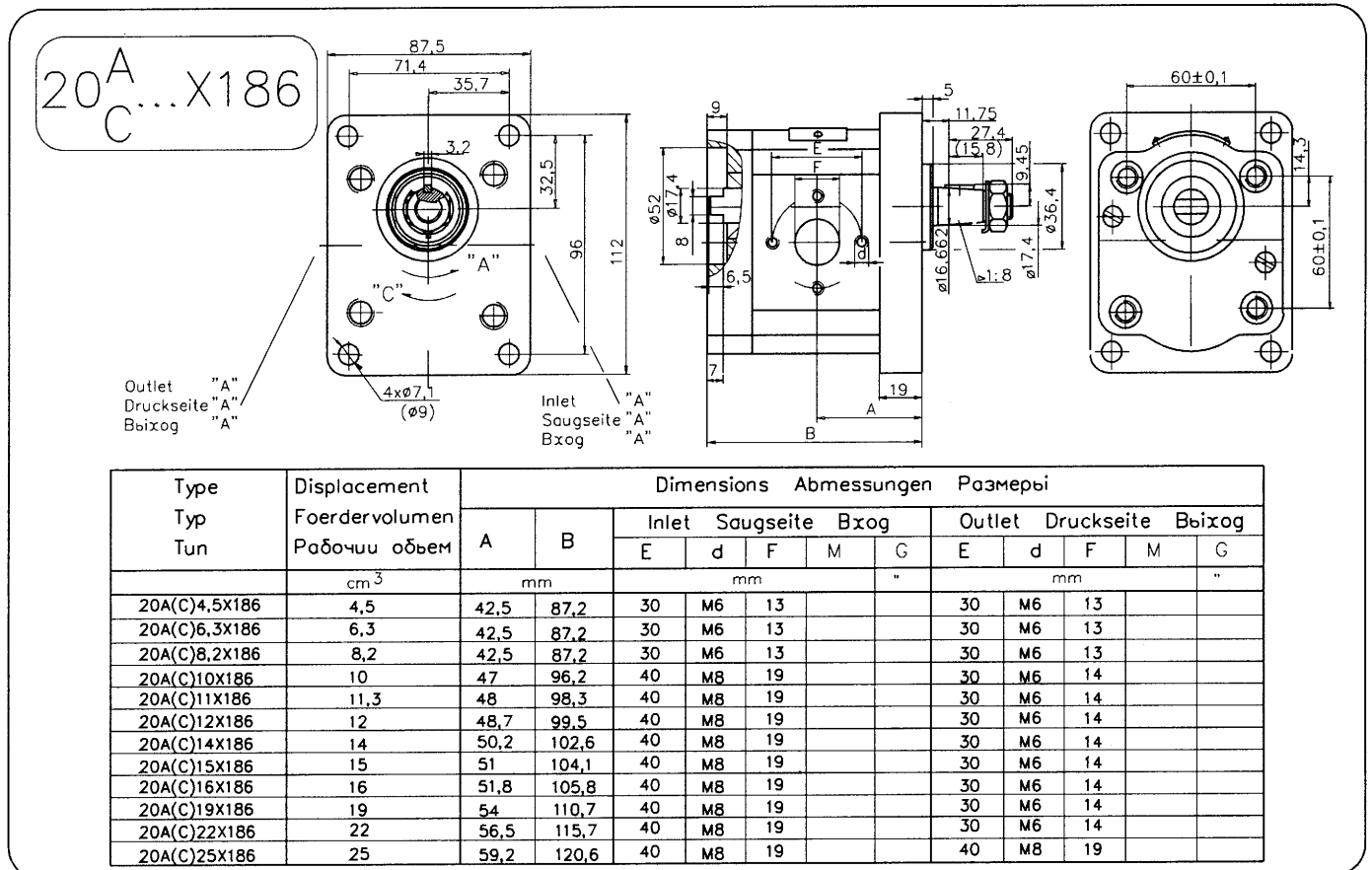
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры							
		A B		Inlet Saugseite Вхог			Outlet Druckseite Выход		
		E	d	G	E	d	G		
	cm^3	mm		mm			mm		
A(C)25X103	11,3	48	102	39,7±0,1	5/16-18UNC	G1/2	30,2±0,1	1/4-20UNC	G3/8

20^A
C ...X111...



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A B		Inlet Saugseite Вхог					Outlet Druckseite Выход				
		E	d	F	M	G	E	d	F	M	G		
	cm^3	mm		mm					mm				
20A(C)4,5X111...	4,5	42,5	87,2				M20x1,5	G1/2				M16x1,5	G1/2
20A(C)6,3X111...	6,3	44	90,2				M20x1,5	G1/2				M16x1,5	G1/2
20A(C)8,2X111...	8,2	45,5	93,1				M20x1,5	G1/2				M16x1,5	G1/2
20A(C)10X111...	10	47	96,2				M20x1,5	G3/4				M16x1,5	G1/2
20A(C)11X111...	11,3	48	98,2				M20x1,5	G3/4				M16x1,5	G1/2
20A(C)12X111...	12	48,6	99,5				M20x1,5	G3/4				M16x1,5	G1/2
20A(C)14X111...	14	50	102,6				M20x1,5	G3/4				M16x1,5	G1/2
20A(C)15X111...	15	51	104,1				M20x1,5	G3/4				M16x1,5	G1/2
20A(C)16X111...	16	52	105,8				M20x1,5	G3/4				M16x1,5	G1/2
20A(C)19X111...	19	54	110,7				M20x1,5	G3/4				M20x1,5	G1/2
20A(C)22X111...	22	57	115,7				M20x1,5	G3/4				M20x1,5	G1/2
20A(C)25X111...	25	59,2	120,6				M20x1,5	G3/4				M20x1,5	G1/2

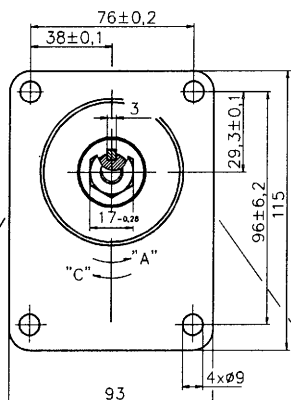




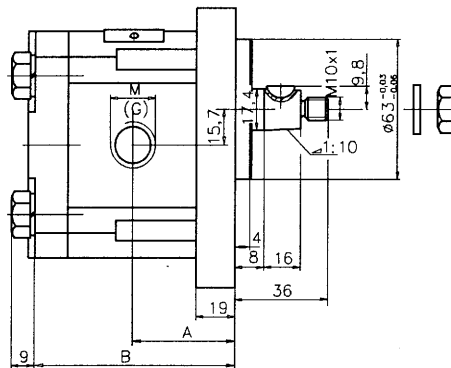
20^A_C...145...

- metric thread
G - GAS thread

Outlet "A"
Druckseite "A"
Выход "A"



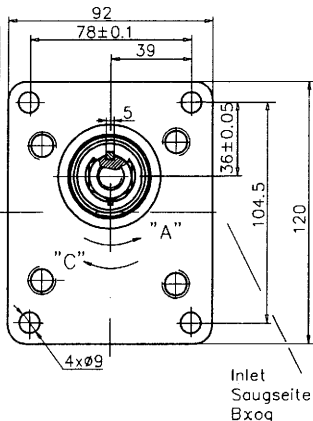
Inlet Saugseite "A"
Вход "A"



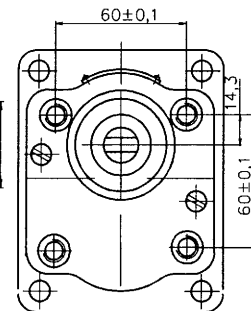
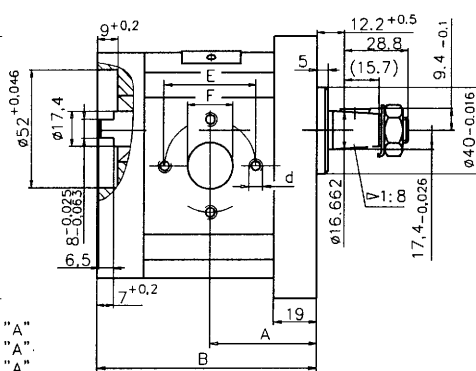
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A	B	Inlet Saugseite Вход					Outlet Druckseite Выход				
				E	d	F	M	G	E	d	F	M	G
	cm ³	mm		mm					mm				
20A(C)4,5X145...	4,5	42,5	77,1				M18x1,5	G1/2				M14x1,5	G1/2
20A(C)6,3X145...	6,3	42,5	80				M18x1,5	G1/2				M14x1,5	G1/2
20A(C)8,2X145...	8,2	42,5	80				M18x1,5	G1/2				M14x1,5	G1/2
20A(C)10X145...	10	47	87				M22x1,5	G3/4				M18x1,5	G1/2
20A(C)11X145...	11,3	48,5	91,1				M22x1,5	G3/4				M18x1,5	G1/2
20A(C)12X145...	12	49	92,3				M22x1,5	G3/4				M18x1,5	G1/2
20A(C)14X145...	14	49	92,5				M27x2	G3/4				M18x1,5	G1/2
20A(C)15X145...	15	49,5	94				M27x2	G3/4				M18x1,5	G1/2
20A(C)16X145...	16	50,5	95,6				M27x2	G3/4				M18x1,5	G1/2
20A(C)19X145...	19	53	100,6				M27x2	G3/4				M18x1,5	G1/2
20A(C)22X145...	22	57	108,6				M27x2	G3/4				M18x1,5	G1/2
20A(C)25X145...	25	59,2	113,4				M27x2	G3/4				M18x1,5	G1/2

20^A_C...X140

Outlet "A"
Druckseite "A"
Выход "A"

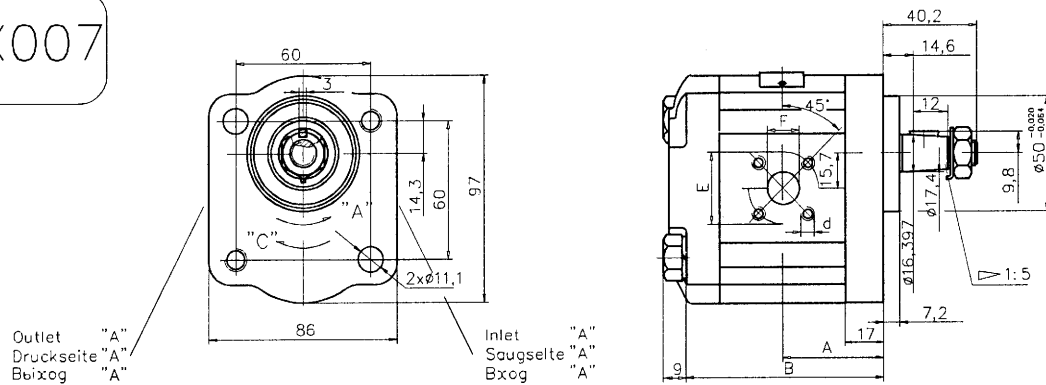


Inlet Saugseite "A"
Вход "A"



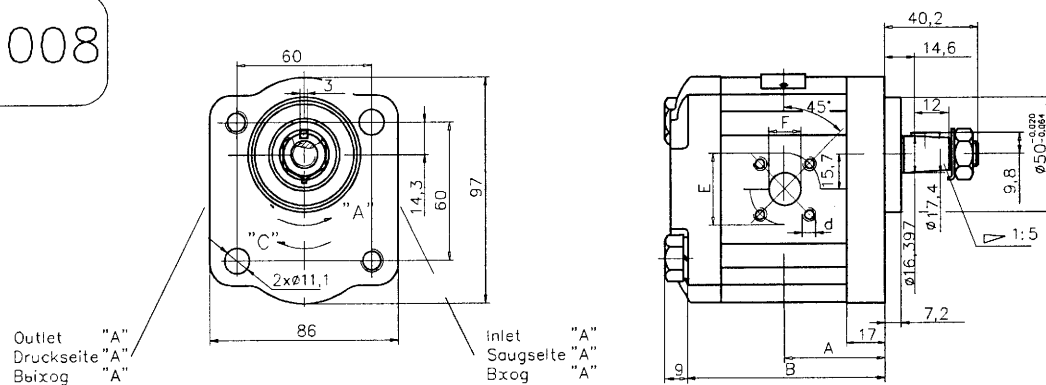
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A	B	Inlet Saugseite Вход					Outlet Druckseite Выход				
				E	d	F	M	G	E	d	F	M	G
	cm ³	mm		mm					mm				
20A(C)4,5X140	4,5	42,5	87,2	30	M6	13				30	M6	13	
20A(C)6,3X140	6,3	44	90,2	30	M6	13				30	M6	13	
20A(C)8,2X140	8,2	45,5	93,1	30	M6	13				30	M6	13	
20A(C)10X140	10	47	96,2	40	M8	19				30	M6	14	
20A(C)11X140	11,3	48	98,2	40	M8	19				30	M6	14	
20A(C)12X140	12	48,6	99,5	40	M8	19				30	M6	14	
20A(C)14X140	14	50	102,6	40	M8	19				30	M6	14	
20A(C)15X140	15	51	104,1	40	M8	19				30	M6	14	
20A(C)16X140	16	52	105,8	40	M8	19				30	M6	14	
20A(C)19X140	19	54	110,7	40	M8	19				30	M6	14	
20A(C)22X140	22	57	115,7	40	M8	19				30	M6	14	
20A(C)25X140	25	59,2	120,6	40	M8	19				40	M8	19	

20^A_C...X007



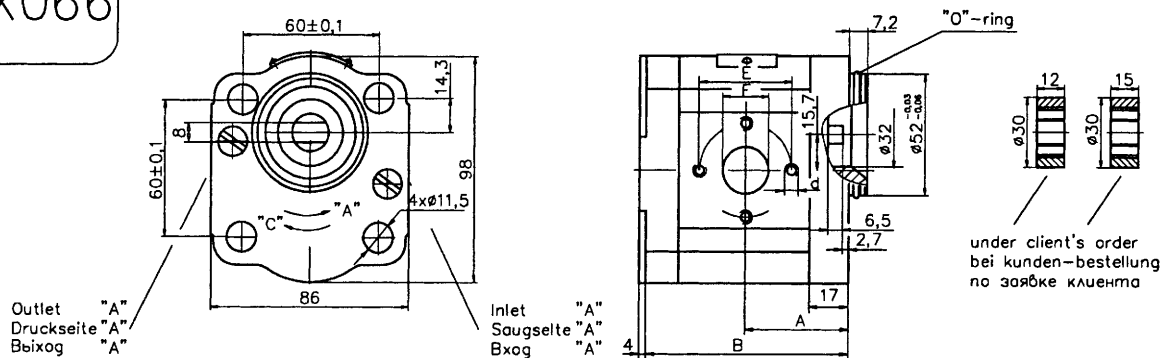
Type Typ Тип	Displacement Fördervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A		Inlet Saugseite Вход					Outlet Druckseite Выход				
		E	d	F	M	G	E	d	F	M	G		
	cm ³	mm		mm					mm				
20A(C)4,5X007	4,5	37,3	75,8	40	M6	15	M20x1,5	G1/2	35	M6	15	M16x1,5	G1/2
20A(C)6,3X007	6,3	38,6	78,7	40	M6	15	M20x1,5	G1/2	35	M6	15	M16x1,5	G1/2
20A(C)8,2X007	8,2	40,6	78,7	40	M6	20	M20x1,5	G1/2	35	M6	15	M16x1,5	G1/2
20A(C)10X007	10	45	87,7	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2
20A(C)11X007	11,3	45	89,8	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2
20A(C)12X007	12	45	91	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2
20A(C)14X007	14	45	94,1	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2
20A(C)15X007	15	45	95,5	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2
20A(C)16X007	16	45	97,2	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2
20A(C)19X007	19	45	102,7	40	M6	20	M20x1,5	G3/4	35	M6	15	M20x1,5	G1/2
20A(C)22X007	22	52,5	107,2	40	M6	20	M20x1,5	G3/4	35	M6	15	M20x1,5	G1/2
20A(C)25X007	25	57,2	112,1	40	M6	20	M20x1,5	G3/4	35	M6	15	M20x1,5	G1/2

20^A_C...X008



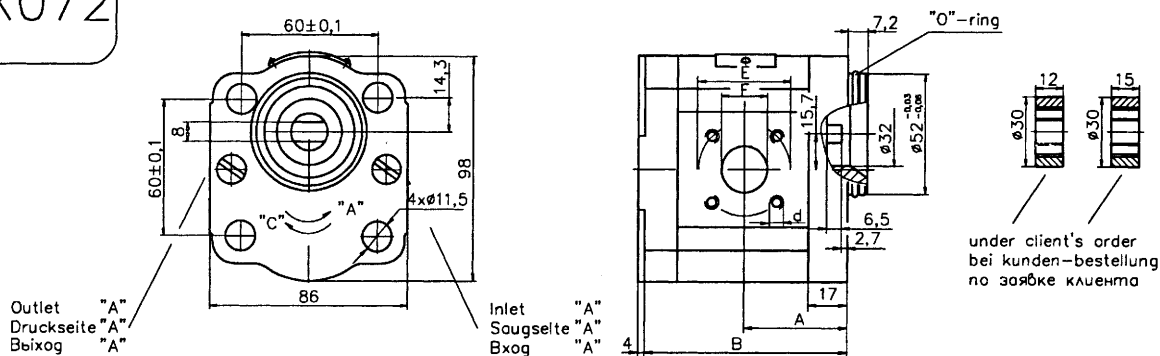
Type Typ Тип	Displacement Fördervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A		Inlet Saugseite Вход					Outlet Druckseite Выход				
		E	d	F	M	G	E	d	F	M	G		
	cm ³	mm		mm					mm				
20A(C)4,5X008	4,5	37,3	75,8	40	M6	15	M20x1,5	G1/2	35	M6	15	M16x1,5	G1/2
20A(C)6,3X008	6,3	38,6	78,7	40	M6	15	M20x1,5	G1/2	35	M6	15	M16x1,5	G1/2
20A(C)8,2X008	8,2	40,6	78,7	40	M6	20	M20x1,5	G1/2	35	M6	15	M16x1,5	G1/2
20A(C)10X008	10	45	87,7	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2
20A(C)11X008	11,3	45	89,8	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2
20A(C)12X008	12	45	91	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2
20A(C)14X008	14	45	94,1	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2
20A(C)15X008	15	45	95,5	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2
20A(C)16X008	16	45	97,2	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2
20A(C)19X008	19	45	102,7	40	M6	20	M20x1,5	G3/4	35	M6	15	M20x1,5	G1/2
20A(C)22X008	22	52,5	107,2	40	M6	20	M20x1,5	G3/4	35	M6	15	M20x1,5	G1/2
20A(C)25X008	25	57,2	112,1	40	M6	20	M20x1,5	G3/4	35	M6	15	M20x1,5	G1/2

20^A_C...X066



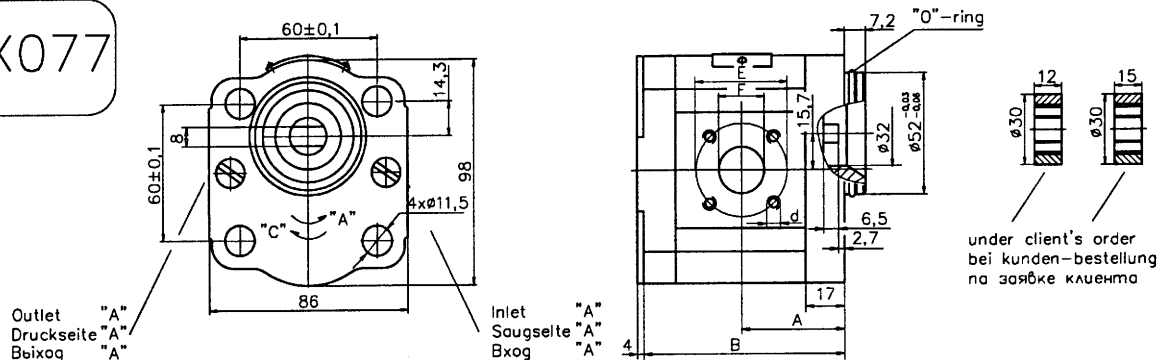
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог					
				E	d	F	M	G	E	d	F	M	G	
	cm ³	mm		mm					mm					
20A(C)4,5X066	4,5	40,5	78	30	M6	13			30	M6	13			
20A(C)6,3X066	6,3	42	81	30	M6	13			30	M6	13			
20A(C)8,2X066	8,2	43,5	83,9	30	M6	13			30	M6	13			
20A(C)10X066	10	45	87	40	M8	19			30	M6	14			
20A(C)11X066	11,3	46	89	40	M8	19			30	M6	14			
20A(C)12X066	12	46,6	90,3	40	M8	19			30	M6	14			
20A(C)14X066	14	48	93,4	40	M8	19			30	M6	14			
20A(C)15X066	15	49	94,9	40	M8	19			30	M6	14			
20A(C)16X066	16	50	96,5	40	M8	19			30	M6	14			
20A(C)19X066	19	52	101,5	40	M8	19			30	M6	14			
20A(C)22X066	22	55	106,5	40	M8	19			30	M6	14			
20A(C)25X066	25	57,2	111,4	40	M8	19			40	M8	19			

20^A_C...X072



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог					
				E	d	F	M	G	E	d	F	M	G	
	cm ³	mm		mm					mm					
20A(C)4,5X072	4,5	37,3	75,1	40	M6	15			35	M6	15			
20A(C)6,3X072	6,3	38,6	78	40	M6	15			35	M6	15			
20A(C)8,2X072	8,2	40,6	78	40	M6	20			35	M6	15			
20A(C)10X072	10	45	87	40	M6	20			35	M6	15			
20A(C)11X072	11,3	45	89,1	40	M6	20			35	M6	15			
20A(C)12X072	12	45	90,3	40	M6	20			35	M6	15			
20A(C)14X072	14	45	93,4	40	M6	20			35	M6	15			
20A(C)15X072	15	45	94,9	40	M6	20			35	M6	15			
20A(C)16X072	16	45	96,5	40	M6	20			35	M6	15			
20A(C)19X072	19	45	101,5	40	M6	20			35	M6	15			
20A(C)22X072	22	52,5	106,5	40	M6	20			35	M6	15			
20A(C)25X072	25	57,2	111,4	40	M6	20			35	M6	15			

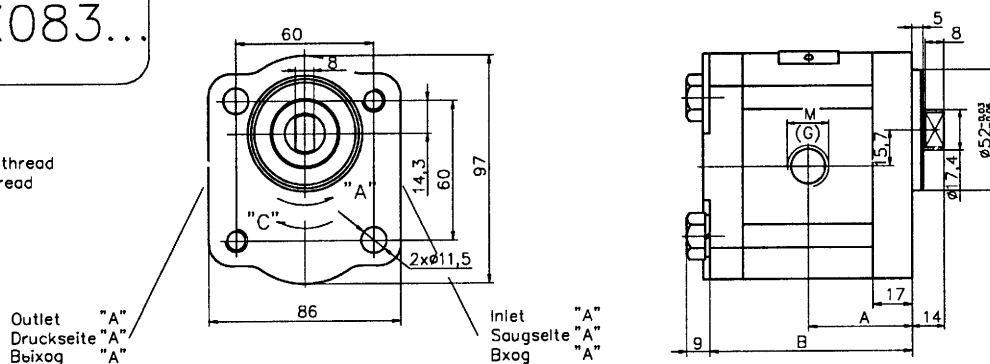
20^A_C...X077



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A		Inlet Saugseite Вхог					Outlet Druckseite Выхог					
		E	d	F	M	G	E	d	F	M	G			
	cm ³	mm		mm					mm					
20A(C)4,5X077	4,5	37,3	78	40	M6	15				35	M6	15		
20A(C)6,3X077	6,3	38,6	81	40	M6	15				35	M6	15		
20A(C)8,2X077	8,2	40,6	83,9	40	M6	20				35	M6	15		
20A(C)10X077	10	45	87	40	M6	20				35	M6	15		
20A(C)11X077	11,3	45	89	40	M6	20				35	M6	15		
20A(C)12X077	12	45	90,3	40	M6	20				35	M6	15		
20A(C)14X077	14	45	93,4	40	M6	20				35	M6	15		
20A(C)15X077	15	45	94,9	40	M6	20				35	M6	15		
20A(C)16X077	16	45	96,5	40	M6	20				35	M6	15		
20A(C)19X077	19	45	101,5	40	M6	20				35	M6	15		
20A(C)22X077	22	52,5	106,5	40	M6	20				35	M6	15		
20A(C)25X077	25	57,2	111,4	40	M6	20				35	M6	15		
20A(C)12X077A	12	46	90,3	40	M6	20				35	M6	15		

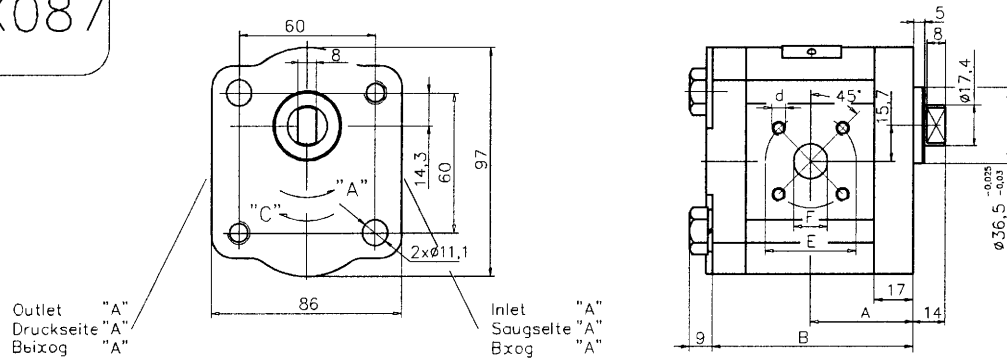
20^A_C...X083...

M - metric thread
G - GAS thread



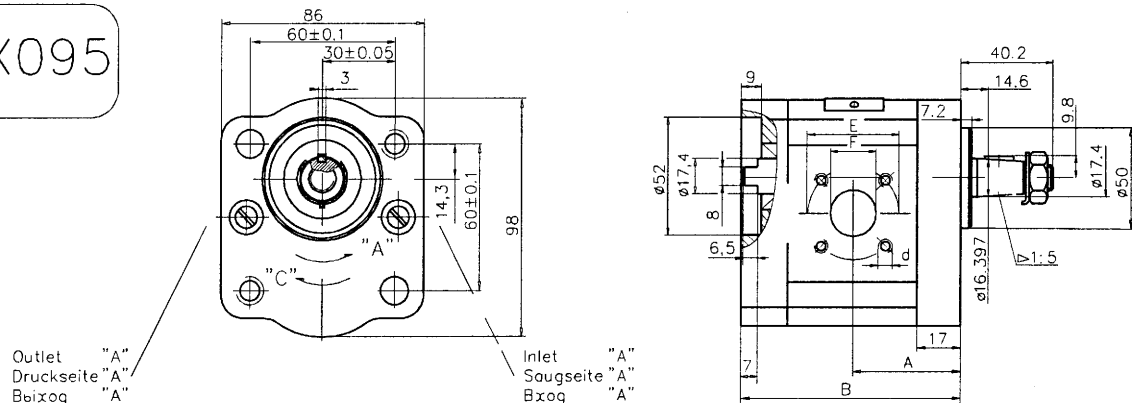
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A		Inlet Saugseite Вхог					Outlet Druckseite Выхог				
		E	d	F	M	G	E	d	F	M	G		
	cm ³	mm		mm					mm				
20A(C)4,5X083...	4,5	37,3	75,1				M20x1,5	G1/2				M16x1,5	G1/2
20A(C)6,3X083...	6,3	38,6	78				M20x1,5	G1/2				M16x1,5	G1/2
20A(C)8,2X083...	8,2	40,6	78				M20x1,5	G1/2				M16x1,5	G1/2
20A(C)10X083...	10	45	87				M20x1,5	G3/4				M16x1,5	G1/2
20A(C)11X083...	11,3	45	89				M20x1,5	G3/4				M16x1,5	G1/2
20A(C)12X083...	12	45	90,3				M20x1,5	G3/4				M16x1,5	G1/2
20A(C)14X083...	14	45	93,4				M20x1,5	G3/4				M16x1,5	G1/2
20A(C)15X083...	15	45	94,9				M20x1,5	G3/4				M16x1,5	G1/2
20A(C)16X083...	16	45	96,5				M20x1,5	G3/4				M16x1,5	G1/2
20A(C)19X083...	19	45	101,5				M20x1,5	G3/4				M20x1,5	G1/2
20A(C)22X083...	22	52,5	106,5				M20x1,5	G3/4				M20x1,5	G1/2
20A(C)25X083...	25	57,2	111,4				M20x1,5	G3/4				M20x1,5	G1/2

20^A_C...X087



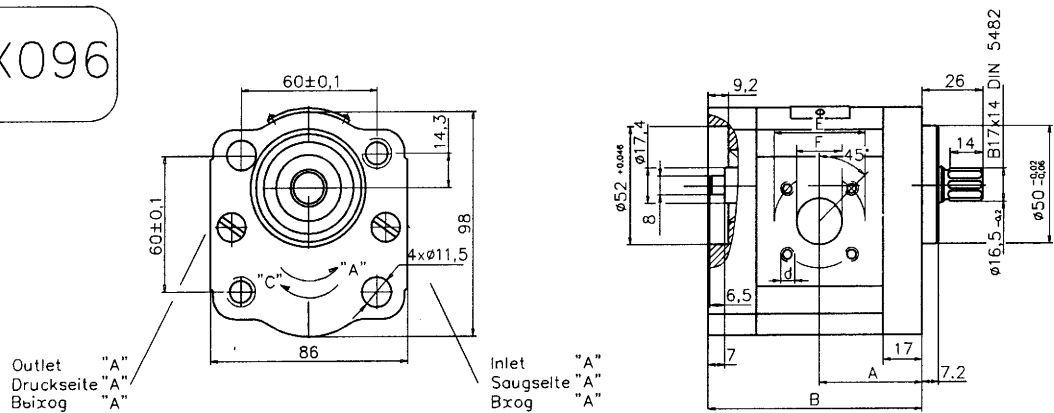
Type Typ Тун	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A		Inlet Saugseite Вхог					Outlet Druckseite Выхог					
	cm ³	mm		mm					mm					
				E	d	F	M	G	E	d	F	M	G	
20A(C)4,5X087	4,5	37,3	75,8	40	M6	15	M20x1,5	G1/2	35	M6	15	M16x1,5	G1/2	
20A(C)6,3X087	6,3	38,6	78,7	40	M6	15	M20x1,5	G1/2	35	M6	15	M16x1,5	G1/2	
20A(C)8,2X087	8,2	40,6	78,7	40	M6	20	M20x1,5	G1/2	35	M6	15	M16x1,5	G1/2	
20A(C)10X087	10	45	87	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2	
20A(C)11X087	11,3	45	89,1	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2	
20A(C)12X087	12	45	90,3	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2	
20A(C)14X087	14	45	93,4	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2	
20A(C)15X087	15	45	95	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2	
20A(C)16X087	16	45	96,6	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2	
20A(C)19X087	19	45	101,5	40	M6	20	M20x1,5	G3/4	35	M6	15	M20x1,5	G1/2	
20A(C)22X087	22	52,5	106,5	40	M6	20	M20x1,5	G3/4	35	M6	15	M20x1,5	G1/2	
20A(C)25X087	25	57,2	112,1	40	M6	20	M20x1,5	G3/4	35	M6	15	M20x1,5	G1/2	

20^A_C...X095



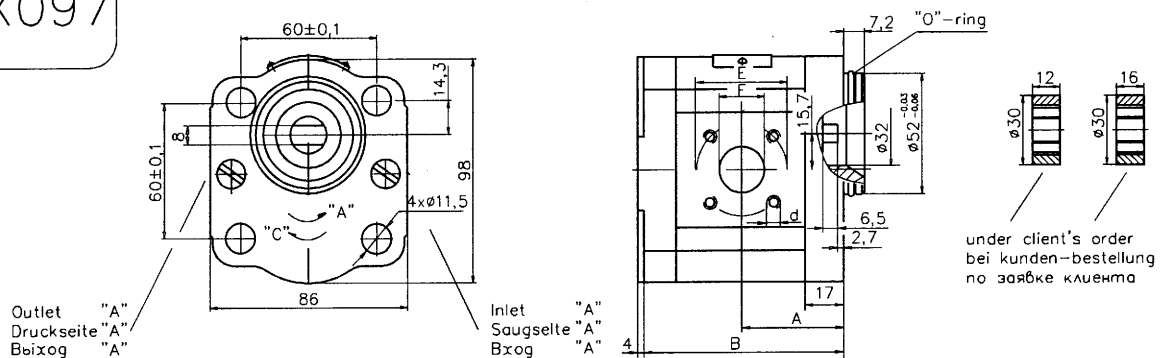
Type Typ Тун	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A		Inlet Saugseite Вхог					Outlet Druckseite Выхог					
	cm ³	mm		mm					mm					
				E	d	F	M	G	E	d	F	M	G	
20A(C)4,5X095	4,5	40,5	85,2	40	M6	15			35	M6	15			
20A(C)6,3X095	6,3	42	88,2	40	M6	15			35	M6	15			
20A(C)8,2X095	8,2	43,5	91,1	40	M6	20			35	M6	15			
20A(C)10X095	10	45	94,2	40	M6	20			35	M6	15			
20A(C)11X095	11,3	46	96,2	40	M6	20			35	M6	15			
20A(C)12X095	12	46,6	97,5	40	M6	20			35	M6	15			
20A(C)14X095	14	48	100,6	40	M6	20			35	M6	15			
20A(C)15X095	15	49	102,1	40	M6	20			35	M6	15			
20A(C)16X095	16	50	103,8	40	M6	20			35	M6	15			
20A(C)19X095	19	52	108,7	40	M6	20			35	M6	15			
20A(C)22X095	22	55	113,7	40	M6	20			35	M6	15			
20A(C)25X095	25	57,2	118,6	40	M6	20			35	M6	15			

20^A_C...X096



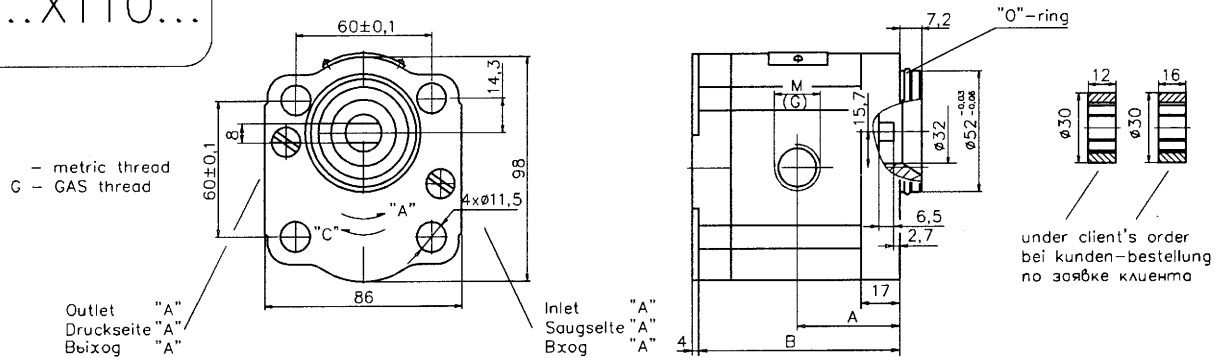
Type Typ Typ	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		A		Inlet Saugseite Вход					Outlet Druckseite Выход						
		E	d	F	M	G	E	d	F	M	G				
	cm ³	mm													
20A(C)4,5X096	4,5	40,5	85	40	M6	15					35	M6	15		
20A(C)6,3X096	6,3	42	88	40	M6	15					35	M6	15		
20A(C)8,2X096	8,2	43,5	91	40	M6	20					35	M6	15		
20A(C)10X096	10	45	94	40	M6	20					35	M6	15		
20A(C)11X096	11,3	46	96	40	M6	20					35	M6	15		
20A(C)12X096	12	46,6	97,3	40	M6	20					35	M6	15		
20A(C)14X096	14	48	100,4	40	M6	20					35	M6	15		
20A(C)15X096	15	49	102	40	M6	20					35	M6	15		
20A(C)16X096	16	50	103,6	40	M6	20					35	M6	15		
20A(C)19X096	19	52	108,5	40	M6	20					35	M6	15		
20A(C)22X096	22	55	113,5	40	M6	20					35	M6	15		
20A(C)25X096	25	57,2	118,4	40	M6	20					35	M6	15		

20^A_C...X097



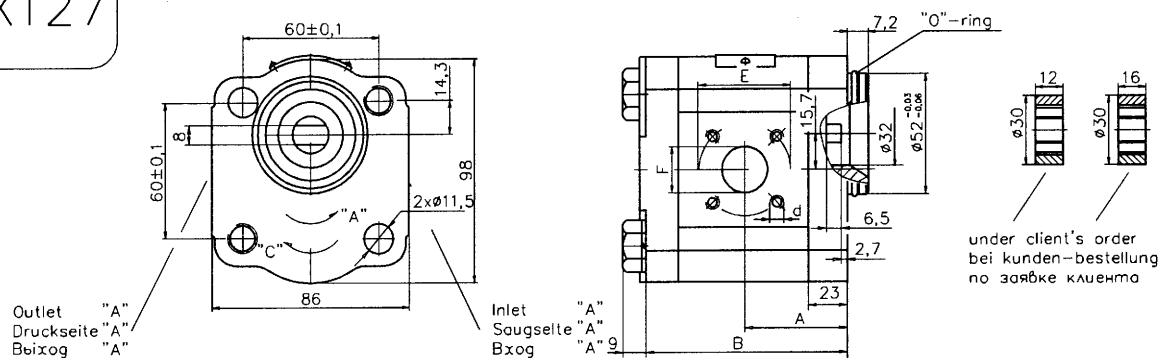
Type Typ Typ	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		A		Inlet Saugseite Вход					Outlet Druckseite Выход						
		E	d	F	M	G	E	d	F	M	G				
	cm ³	mm													
20A(C)4,5X097	4,5	40,5	78	40	M6	15					35	M6	15		
20A(C)6,3X097	6,3	42	81	40	M6	15					35	M6	15		
20A(C)8,2X097	8,2	43,5	83,9	40	M6	20					35	M6	15		
20A(C)10X097	10	45	87	40	M6	20					35	M6	15		
20A(C)11X097	11,3	46	89,1	40	M6	20					35	M6	15		
20A(C)12X097	12	46,6	90,3	40	M6	20					35	M6	15		
20A(C)14X097	14	48	93,4	40	M6	20					35	M6	15		
20A(C)15X097	15	49	95	40	M6	20					35	M6	15		
20A(C)16X097	16	50	96,6	40	M6	20					35	M6	15		
20A(C)19X097	19	52	101,5	40	M6	20					35	M6	15		
20A(C)22X097	22	55	106,5	40	M6	20					35	M6	15		
20A(C)25X097	25	57,2	112,1	40	M6	20					35	M6	15		

20^A_C...X110...



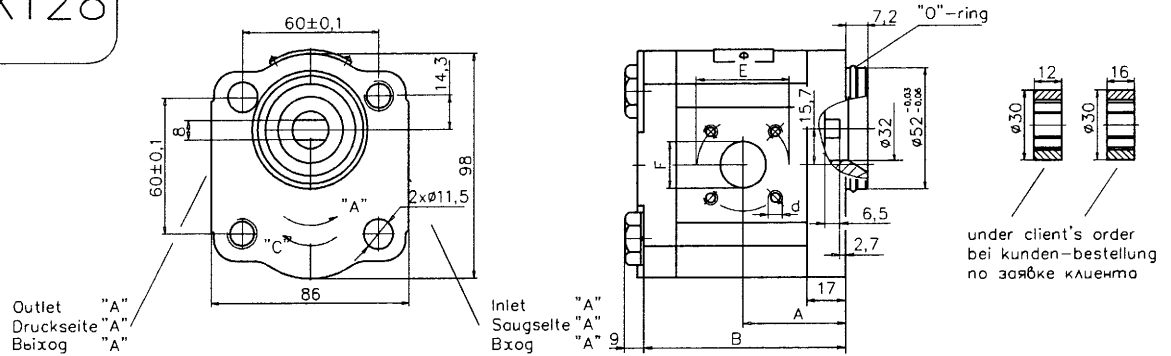
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A	B	Inlet Saugseite Вход					Outlet Druckseite Выход				
				E	d	F	M	G	E	d	F	M	G
	cm ³	mm		mm					mm				
20A(C)4,5X110...	4,5	40,5	78				M20x1,5	G1/2				M16x1,5	G1/2
20A(C)6,3X110...	6,3	42	81				M20x1,5	G1/2				M16x1,5	G1/2
20A(C)8,2X110...	8,2	43,5	83,9				M20x1,5	G1/2				M16x1,5	G1/2
20A(C)10X110...	10	45	87				M20x1,5	G3/4				M16x1,5	G1/2
20A(C)11X110...	11,3	46	89,1				M20x1,5	G3/4				M16x1,5	G1/2
20A(C)12X110...	12	46,6	90,3				M20x1,5	G3/4				M16x1,5	G1/2
20A(C)14X110...	14	48	93,4				M20x1,5	G3/4				M16x1,5	G1/2
20A(C)15X110...	15	49	95				M20x1,5	G3/4				M16x1,5	G1/2
20A(C)16X110...	16	50	96,6				M20x1,5	G3/4				M16x1,5	G1/2
20A(C)19X110...	19	52	101,5				M20x1,5	G3/4				M20x1,5	G1/2
20A(C)22X110...	22	55	106,5				M20x1,5	G3/4				M20x1,5	G1/2
20A(C)25X110...	25	57,2	112,1				M20x1,5	G3/4				M20x1,5	G1/2

20^A_C...X127



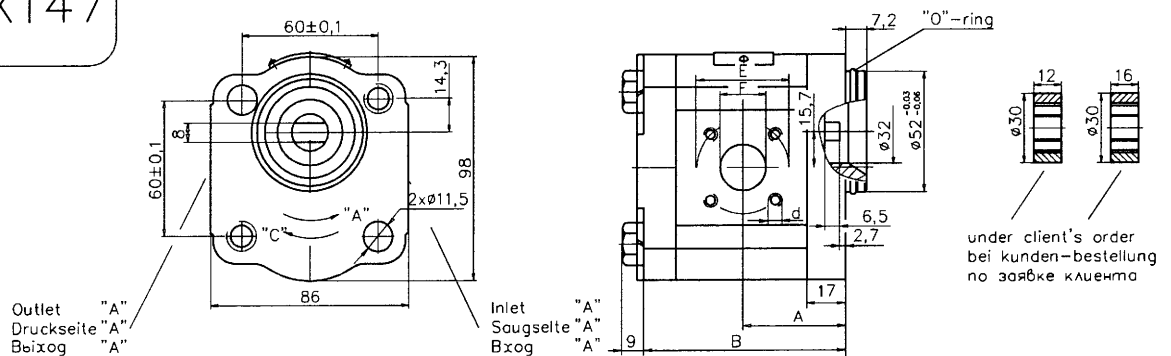
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A	B	Inlet Saugseite Вход					Outlet Druckseite Выход				
				E	d	F	M	G	E	d	F	M	G
	cm ³	mm		mm					mm				
20A(C)16X127	16	59	105,8	40	M6	20					35	M6	15

20^A_C...X128



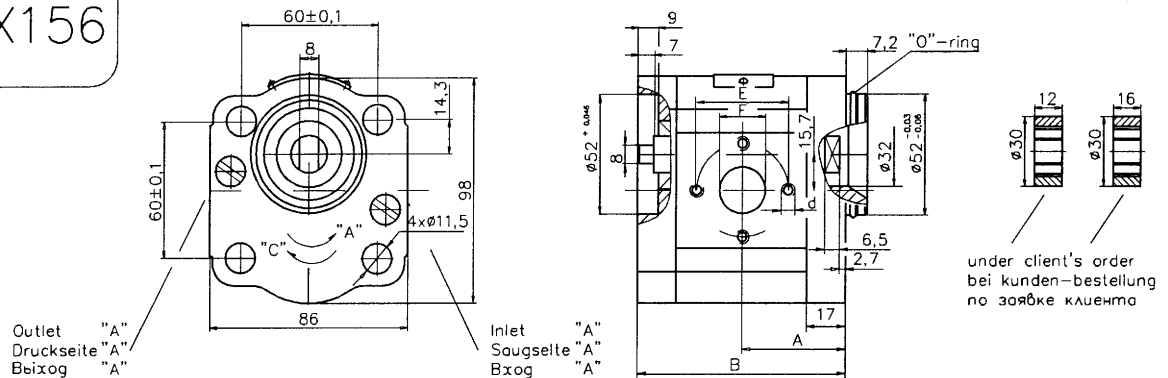
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог						
				E	d	F	M	G	E	d	F	M	G		
	cm ³	mm		mm					mm						
20A(C)11X128	11,3	45	84	40	M6	20					35	M6	15		

20^A_C...X147



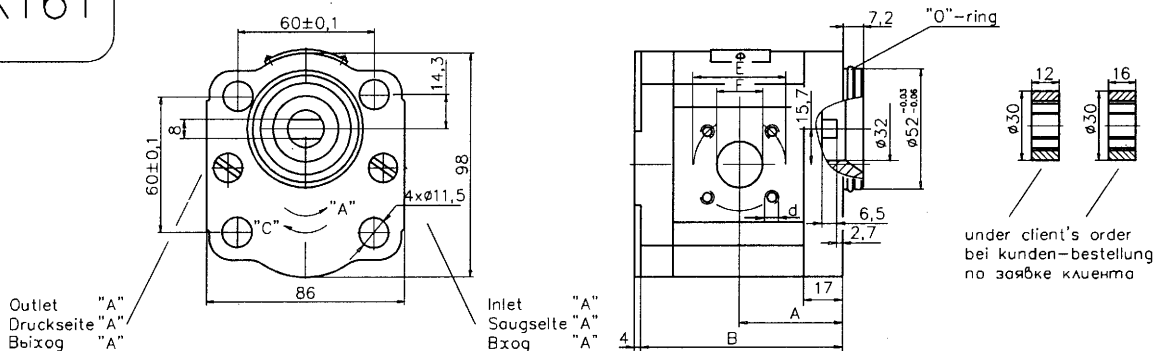
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог						
				E	d	F	M	G	E	d	F	M	G		
	cm ³	mm		mm					mm						
20A(C)4,5X147	4,5	37,3	78	40	M6	15					35	M6	15		
20A(C)6,3X147	6,3	38,6	81	40	M6	15					35	M6	15		
20A(C)8,2X147	8,2	40,6	83,9	40	M6	20					35	M6	15		
20A(C)10X147	10	45	87	40	M6	20					35	M6	15		
20A(C)11X147	11,3	45	89,1	40	M6	20					35	M6	15		
20A(C)12X147	12	45	90,3	40	M6	20					35	M6	15		
20A(C)14X147	14	45	93,4	40	M6	20					35	M6	15		
20A(C)15X147	15	45	95	40	M6	20					35	M6	15		
20A(C)16X147	16	45	96,6	40	M6	20					35	M6	15		
20A(C)19X147	19	45	101,5	40	M6	20					35	M6	15		
20A(C)22X147	22	52,5	106,5	40	M6	20					35	M6	15		
20A(C)25X147	25	57,2	112,1	40	M6	20					35	M6	15		

20^A_C...X156



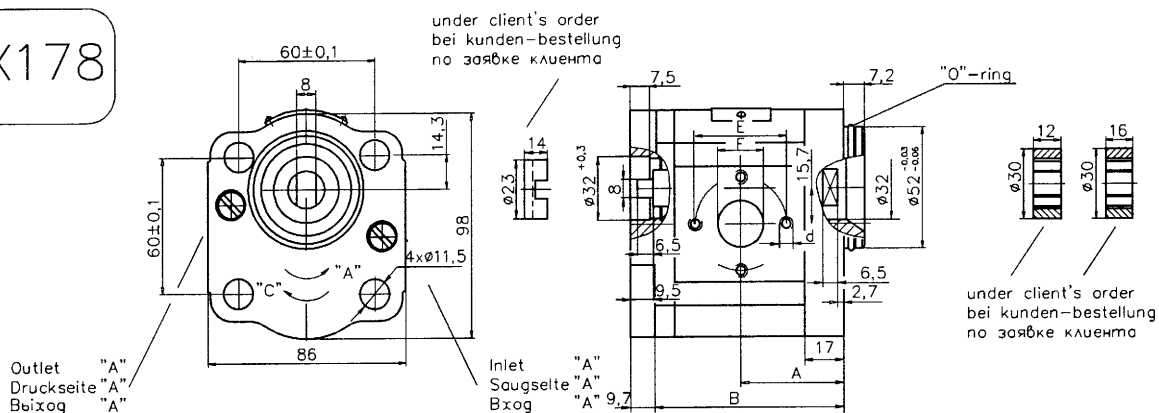
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог					
				E	d	F	M	G	E	d	F	M	G	
	cm ³	mm		mm					mm					
20A(C)4,5X156	4,5	40,5	85,2	30	M6	13	M20x1,5	G1/2	30	M6	13	M16x1,5	G1/2	
20A(C)6,3X156	6,3	42	88,2	30	M6	13	M20x1,5	G1/2	30	M6	13	M16x1,5	G1/2	
20A(C)8,2X156	8,2	43,5	91,1	30	M6	13	M20x1,5	G1/2	30	M6	13	M16x1,5	G1/2	
20A(C)10X156	10	45	94,2	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)11X156	11,3	46	96,3	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)12X156	12	46,6	97,5	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)14X156	14	48	100,6	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)15X156	15	49	102,1	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)16X156	16	50	103,8	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)19X156	19	52	108,7	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)22X156	22	55	113,7	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)25X156	25	57,2	118,6	40	M8	19	M20x1,5	G3/4	40	M8	19	M20x1,5	G1/2	

20^A_C...X161



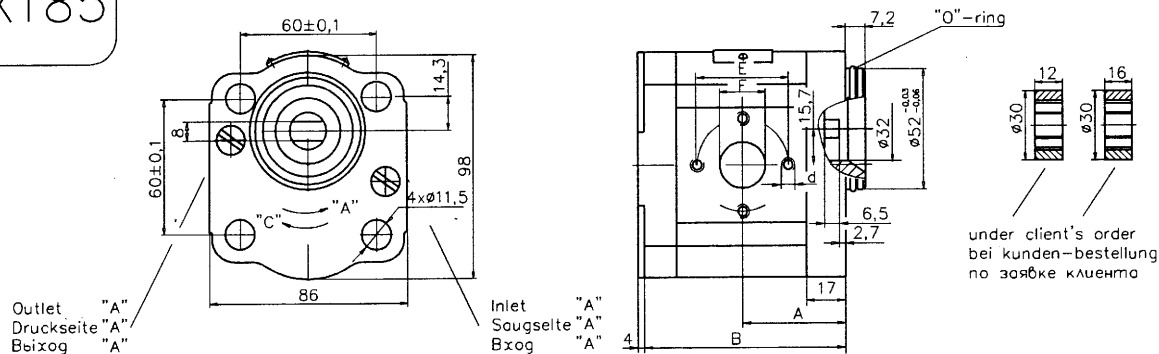
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог					
				E	d	F	M	G	E	d	F	M	G	
	cm ³	mm		mm					mm					
20A(C)4,5X161	4,5	39,8	78	40	M6	15			35	M6	15			
20A(C)6,3X161	6,3	41	81	40	M6	15			35	M6	15			
20A(C)8,2X161	8,2	43,1	83,9	40	M6	20			35	M6	15			
20A(C)10X161	10	47,5	87	40	M6	20			35	M6	15			
20A(C)11X161	11,3	47,5	89,1	40	M6	20			35	M6	15			
20A(C)12X161	12	47,5	90,3	40	M6	20			35	M6	15			
20A(C)14X161	14	47,5	93,4	40	M6	20			35	M6	15			
20A(C)15X161	15	47,5	95	40	M6	20			35	M6	15			
20A(C)16X161	16	47,5	96,6	40	M6	20			35	M6	15			
20A(C)19X161	19	47,5	101,5	40	M6	20			35	M6	15			
20A(C)22X161	22	55	106,5	40	M6	20			35	M6	15			
20A(C)25X161	25	57,2	112,1	40	M6	20			35	M6	15			

20^A_C...X178



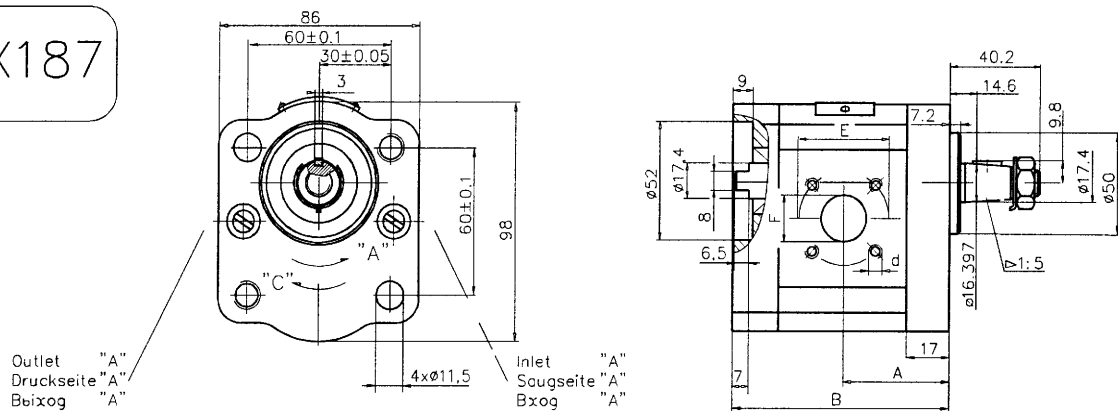
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог				
				E	d	F	M	G	E	d	F	M	G
	cm ³	mm		mm					mm				
20A(C)4,5X178	4,5	40,5	78	30	M6	13			30	M6	13		
20A(C)6,3X178	6,3	42	81	30	M6	13			30	M6	13		
20A(C)8,2X178	8,2	43,5	83,9	30	M6	13			30	M6	13		
20A(C)10X178	10	45	87	40	M8	19			30	M6	14		
20A(C)11X178	11,3	46	89,1	40	M8	19			30	M6	14		
20A(C)12X178	12	46,6	90,3	40	M8	19			30	M6	14		
20A(C)14X178	14	48	93,4	40	M8	19			30	M6	14		
20A(C)15X178	15	49	95	40	M8	19			30	M6	14		
20A(C)16X178	16	50	96,6	40	M8	19			30	M6	14		
20A(C)19X178	19	52	101,5	40	M8	19			30	M6	14		
20A(C)22X178	22	55	106,5	40	M8	19			30	M6	14		
20A(C)25X178	25	57,2	112,1	40	M8	19			40	M8	19		

20^A_C...X185



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог				
				E	d	F	M	G	E	d	F	M	G
	cm ³	mm		mm					mm				
20A(C)4,5X185	4,5	40,5	78	30	M6	13			30	M6	13		
20A(C)6,3X185	6,3	40,5	78	30	M6	13			30	M6	13		
20A(C)8,2X185	8,2	40,5	78	30	M6	13			30	M6	13		
20A(C)10X185	10	45	87	40	M8	19			30	M6	14		
20A(C)11X185	11,3	46	89,1	40	M8	19			30	M6	14		
20A(C)12X185	12	46,7	90,3	40	M8	19			30	M6	14		
20A(C)14X185	14	48,2	93,4	40	M8	19			30	M6	14		
20A(C)15X185	15	49	94,9	40	M8	19			30	M6	14		
20A(C)16X185	16	49,8	96,6	40	M8	19			30	M6	14		
20A(C)19X185	19	52	101,5	40	M8	19			30	M6	14		
20A(C)25X185	25	54,5	106,5	40	M8	19			30	M6	14		
20A(C)25X182	25	57,2	112,1	40	M8	19			40	M8	19		

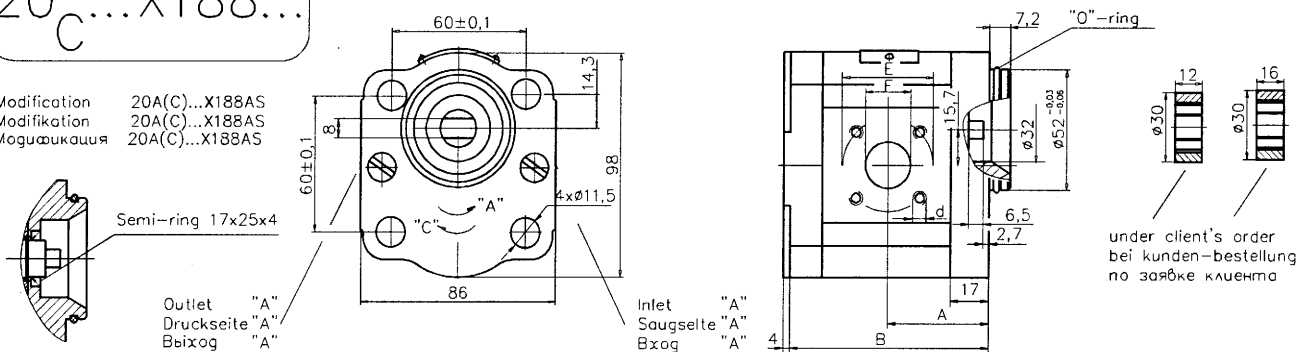
20^A_C...X187



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		A		Inlet Saugseite Вхог					Outlet Druckseite Выхог						
		E	d	F	M	G	E	d	F	M	G				
	cm ³	mm		mm					mm						
20A(C)4,5X187	4,5	37,3	82,3	40	M6	15					35	M6	15		
20A(C)6,3X187	6,3	38,6	85,1	40	M6	15					35	M6	15		
20A(C)8,2X187	8,2	40,6	85,1	40	M6	20					35	M6	15		
20A(C)10X187	10	45	94,1	40	M6	20					35	M6	15		
20A(C)11X187	11,3	45	96,2	40	M6	20					35	M6	15		
20A(C)12X187	12	45	97,4	40	M6	20					35	M6	15		
20A(C)14X187	14	45	100,5	40	M6	20					35	M6	15		
20A(C)15X187	15	45	102	40	M6	20					35	M6	15		
20A(C)16X187	16	45	104,6	40	M6	20					35	M6	15		
20A(C)19X187	19	45	108,6	40	M6	20					35	M6	15		
20A(C)22X187	22	52,5	113,7	40	M6	20					35	M6	15		
20A(C)25X187	25	57,2	118,6	40	M6	20					35	M6	15		

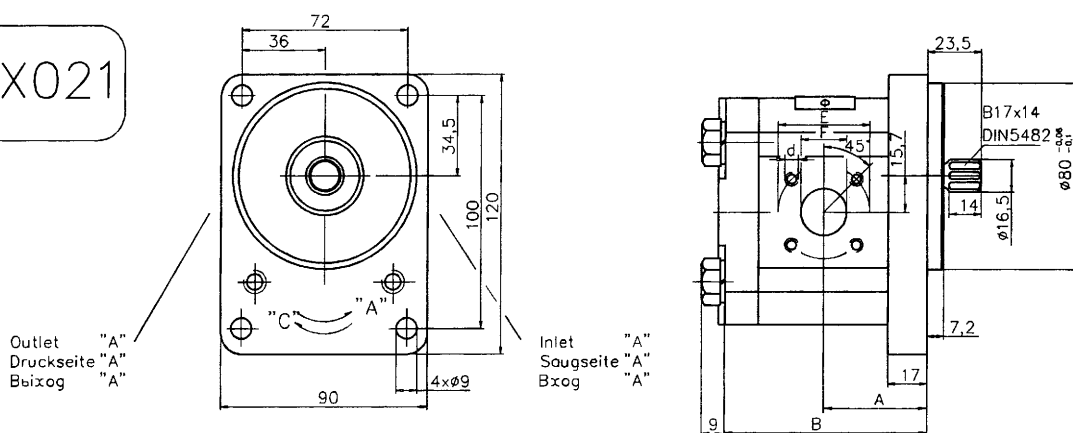
20^A_C...X188...

Modification 20A(C)...X188AS
Modifikation 20A(C)...X188AS
Модификация 20A(C)...X188AS



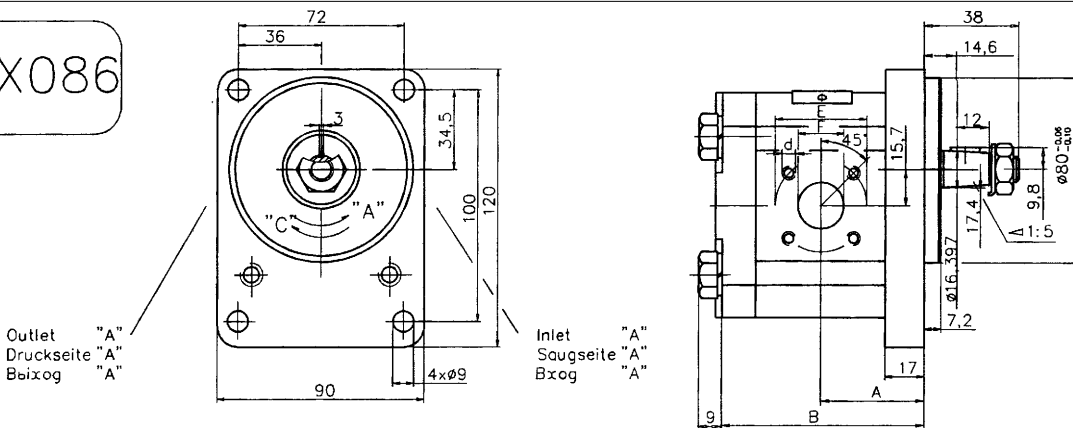
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		A		Inlet Saugseite Вхог					Outlet Druckseite Выхог						
		E	d	F	M	G	E	d	F	M	G				
	cm ³	mm		mm					mm						
20A(C)4,5X188...	4,5	37,3	75,8	40	M6	15					35	M6	15		
20A(C)6,3X188...	6,3	38,6	78,7	40	M6	15					35	M6	15		
20A(C)8,2X188...	8,2	40,6	78,7	40	M6	20					35	M6	15		
20A(C)10X188...	10	45	87	40	M6	20					35	M6	15		
20A(C)11X188...	11,3	45	89,1	40	M6	20					35	M6	15		
20A(C)12X188...	12	45	90,3	40	M6	20					35	M6	15		
20A(C)14X188...	14	45	93,5	40	M6	20					35	M6	15		
20A(C)15X188...	15	45	94,9	40	M6	20					35	M6	15		
20A(C)16X188...	16	45	96,6	40	M6	20					35	M6	15		
20A(C)19X188...	19	45	101,5	40	M6	20					35	M6	15		
20A(C)22X188...	22	52,5	106,5	40	M6	20					35	M6	15		
20A(C)25X188...	25	57,2	112,1	40	M6	20					35	M6	15		

20^A_C...X021



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог					
				E	d	F1	M	G	E	d	F1	M	G	
	cm ³	mm		mm					"					
20A(C)4,5X021	4,5	39,8	78	40	M6	15	M20x1,5	G1/2	35	M6	15	M16x1,5	G1/2	
20A(C)6,3X021	6,3	41	81	40	M6	15	M20x1,5	G1/2	35	M6	15	M16x1,5	G1/2	
20A(C)8,2X021	8,2	43,1	83,9	40	M6	20	M20x1,5	G1/2	35	M6	15	M16x1,5	G1/2	
20A(C)10X021	10	47,5	87	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2	
20A(C)11X021	11,3	47,5	89,1	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2	
20A(C)12X021	12	47,5	90,3	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2	
20A(C)14X021	14	47,5	93,4	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2	
20A(C)15X021	15	47,5	94,9	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2	
20A(C)16X021	16	47,5	96,6	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2	
20A(C)19X021	19	47,5	101,5	40	M6	20	M20x1,5	G3/4	35	M6	15	M20x1,5	G1/2	
20A(C)22X021	22	55	106,5	40	M6	20	M20x1,5	G3/4	35	M6	15	M20x1,5	G1/2	
20A(C)25X021	25	57,2	112,1	40	M6	20	M20x1,5	G3/4	35	M6	15	M20x1,5	G1/2	

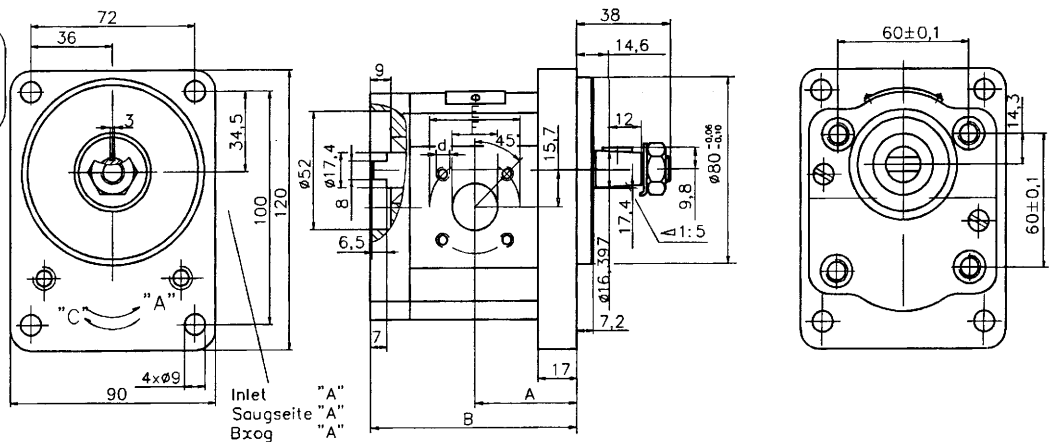
20^A_C...X086



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог					
				E	d	F	M	G	E	d	F	M	G	
	cm ³	mm		mm					"					
20A(C)4,5X086	4,5	39,8	78	40	M6	15			35	M6	15			
20A(C)6,3X086	6,3	41	81	40	M6	15			35	M6	15			
20A(C)8,2X086	8,2	43,1	83,9	40	M6	20			35	M6	15			
20A(C)10X086	10	47,5	87	40	M6	20			35	M6	15			
20A(C)11X086	11,3	47,5	89,1	40	M6	20			35	M6	15			
20A(C)12X086	12	47,5	90,3	40	M6	20			35	M6	15			
20A(C)14X086	14	47,5	93,4	40	M6	20			35	M6	15			
20A(C)15X086	15	47,5	94,9	40	M6	20			35	M6	15			
20A(C)16X086	16	47,5	96,6	40	M6	20			35	M6	15			
20A(C)19X086	19	47,5	101,5	40	M6	20			35	M6	15			
20A(C)22X086	22	55	106,5	40	M6	20			35	M6	15			
20A(C)25X086	25	57,2	112,1	40	M6	20			35	M6	15			

20^A_C...X158

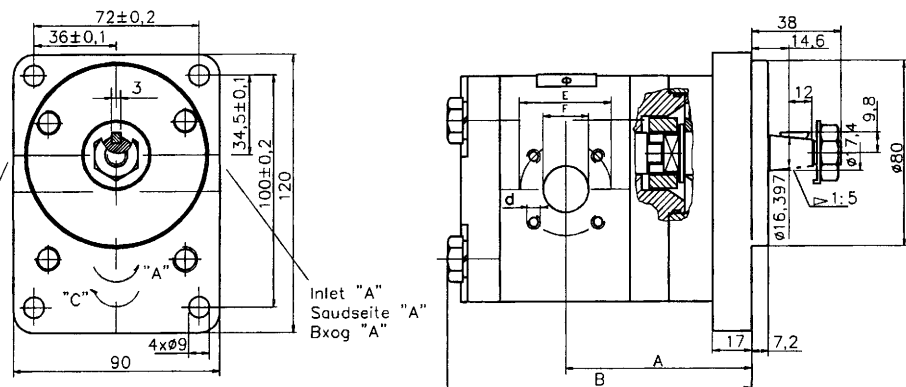
Outlet "A"
Druckseite "A"
Выход "A"



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры														
		A		Inlet Saugseite Вхог					Outlet Druckseite Выог							
		E	d	F	M	G	E	d	F	M	G					
	cm ³	mm														
20A(C)4,5X158	4,5	39,8	85,2	40	M6	15					35	M6	15			
20A(C)6,3X158	6,3	41	88,2	40	M6	15					35	M6	15			
20A(C)8,2X158	8,2	43,1	91,1	40	M6	20					35	M6	15			
20A(C)10X158	10	47,5	94,2	40	M6	20					35	M6	15			
20A(C)11X158	11,3	47,5	96,2	40	M6	20					35	M6	15			
20A(C)12X158	12	47,5	97,5	40	M6	20					35	M6	15			
20A(C)14X158	14	47,5	100,6	40	M6	20					35	M6	15			
20A(C)15X158	15	47,5	102,1	40	M6	20					35	M6	15			
20A(C)16X158	16	47,5	103,8	40	M6	20					35	M6	15			
20A(C)19X158	19	47,5	108,7	40	M6	20					35	M6	15			
20A(C)22X158	22	55	113,7	40	M6	20					35	M6	15			
20A(C)25X158	25	57,2	118,6	40	M6	20					35	M6	15			

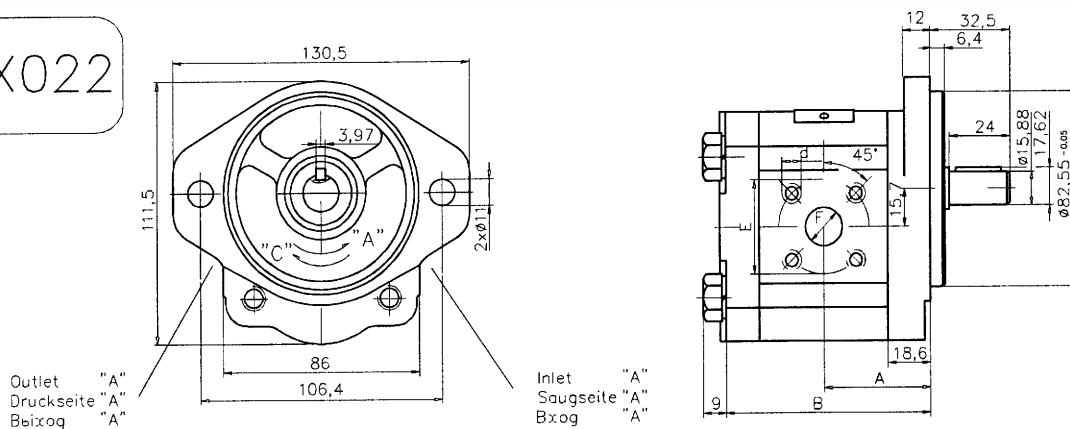
20^A_C...X155

Outlet "A"
Druckseite "A"
Выог "A"



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры														
		A		Inlet Saugseite Вхог					Outlet Druckseite Выог							
		E	d	F	M	G	E	d	F	M	G					
	cm ³	mm														
20A(C)4,5X155	4,5	71,3	121	40	M6	15					35	M6	15			
20A(C)6,3X155	6,3	72,6	124	40	M6	15					35	M6	15			
20A(C)8,2X155	8,2	74,6	126,9	40	M6	20					35	M6	15			
20A(C)10X155	10	79	130	40	M6	20					35	M6	15			
20A(C)11X155	11,3	79	132,1	40	M6	20					35	M6	15			
20A(C)12X155	12	79	133,3	40	M6	20					35	M6	15			
20A(C)14X155	14	79	136,4	40	M6	20					35	M6	15			
20A(C)15X155	15	79	138	40	M6	20					35	M6	15			
20A(C)16X155	16	79	139,6	40	M6	20					35	M6	15			
20A(C)19X155	19	79	144,5	40	M6	20					35	M6	15			
20A(C)22X155	22	86,5	149,5	40	M6	20					35	M6	15			
20A(C)25X155	25	90,9	154,4	40	M6	20					35	M6	15			

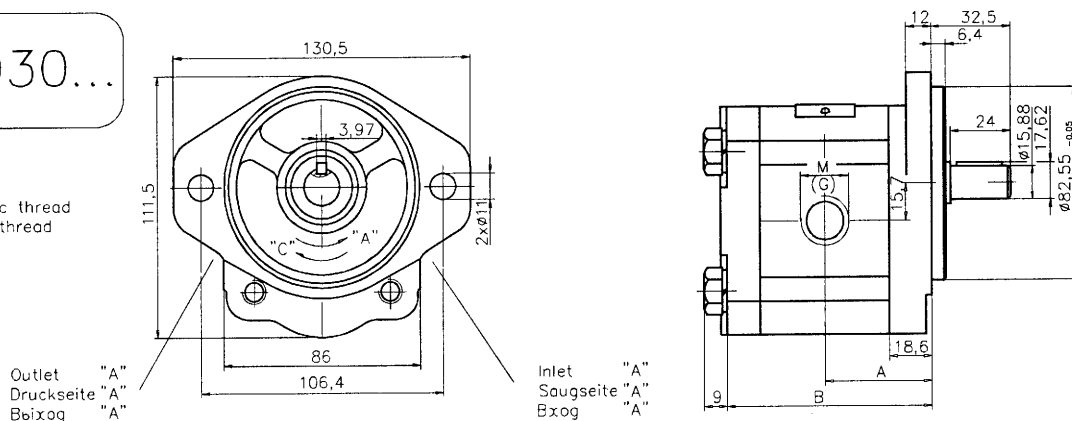
20^A_C...X022



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		A	B	Inlet Saugseite Вход					Outlet Druckseite Выход						
				E	d	F	M	G	E	d	F	M	G		
	cm ³	mm		mm					mm						
20A(C)4,5X022	4,5	41,4	79,6	40	M6	15					35	M6	15		
20A(C)6,3X022	6,3	42,6	82,6	40	M6	15					35	M6	15		
20A(C)8,2X022	8,2	44,7	85,5	40	M6	20					35	M6	15		
20A(C)10X022	10	49,1	88,6	40	M6	20					35	M6	15		
20A(C)11X022	11,3	49,1	90,7	40	M6	20					35	M6	15		
20A(C)12X022	12	49,1	91,9	40	M6	20					35	M6	15		
20A(C)14X022	14	49,1	95	40	M6	20					35	M6	15		
20A(C)15X022	15	49,1	96,5	40	M6	20					35	M6	15		
20A(C)16X022	16	49,1	98,2	40	M6	20					35	M6	15		
20A(C)19X022	19	49,1	103,1	40	M6	20					35	M6	15		
20A(C)22X022	22	56,6	108,1	40	M6	20					35	M6	15		
20A(C)25X025	25	58,8	113	40	M6	20					35	M6	15		

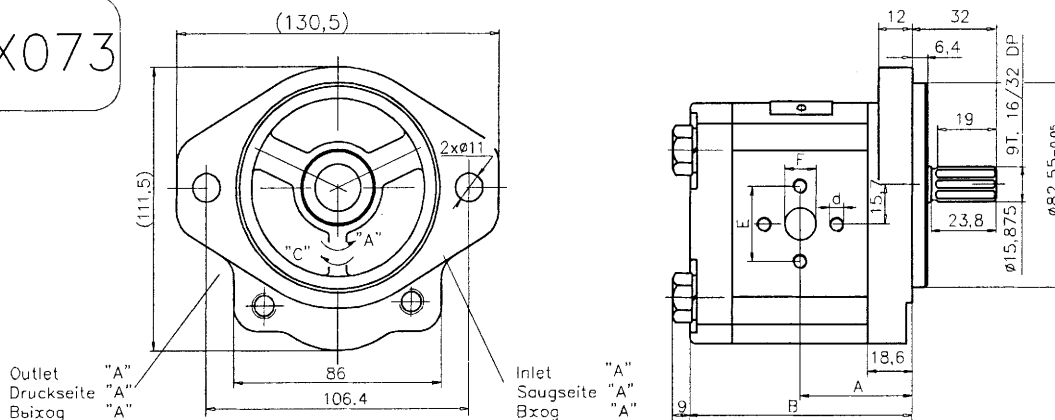
20^A_C...X030...

- metric thread
G - GAS thread



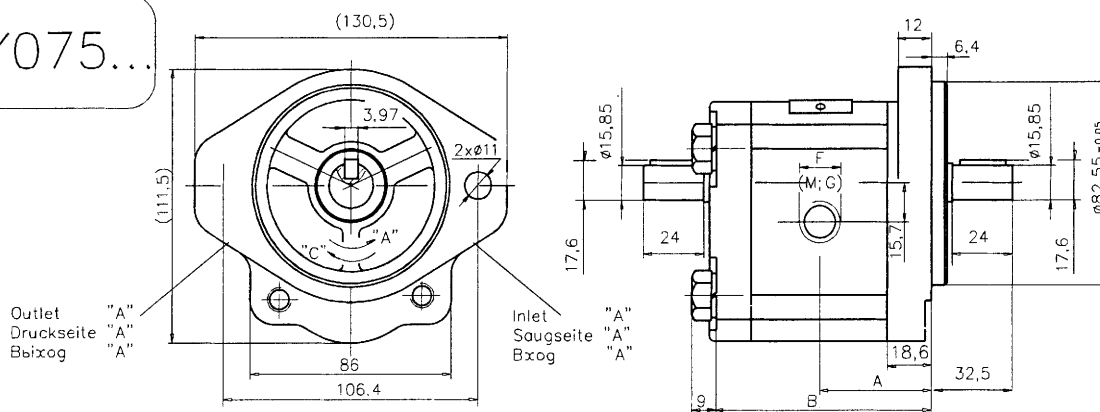
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Вход					Outlet Druckseite Выход					
				E	d	F	M	G	E	d	F	M	G	
	cm ³	mm		mm					mm					
20A(C)4,5X030	4,5	41,4	79,6				M20x1,5	G1/2				M16x1,5	G1/2	
20A(C)6,3X030	6,3	42,6	82,6				M20x1,5	G1/2				M16x1,5	G1/2	
20A(C)8,2X030	8,2	44,7	85,5				M20x1,5	G1/2				M16x1,5	G1/2	
20A(C)10X030	10	49,1	88,6				M20x1,5	G3/4				M16x1,5	G1/2	
20A(C)11X030	11,3	49,1	90,7				M20x1,5	G3/4				M16x1,5	G1/2	
20A(C)12X030	12	49,1	91,9				M20x1,5	G3/4				M16x1,5	G1/2	
20A(C)14X030	14	49,1	95				M20x1,5	G3/4				M16x1,5	G1/2	
20A(C)15X030	15	49,1	96,5				M20x1,5	G3/4				M16x1,5	G1/2	
20A(C)16X030	16	49,1	98,2				M20x1,5	G3/4				M16x1,5	G1/2	
20A(C)19X030	19	49,1	103,1				M20x1,5	G3/4				M20x1,5	G1/2	
20A(C)22X030	22	56,6	108,1				M20x1,5	G3/4				M20x1,5	G1/2	
20A(C)25X030	25	58,8	113				M20x1,5	G3/4				M20x1,5	G1/2	

20^A_C...X073



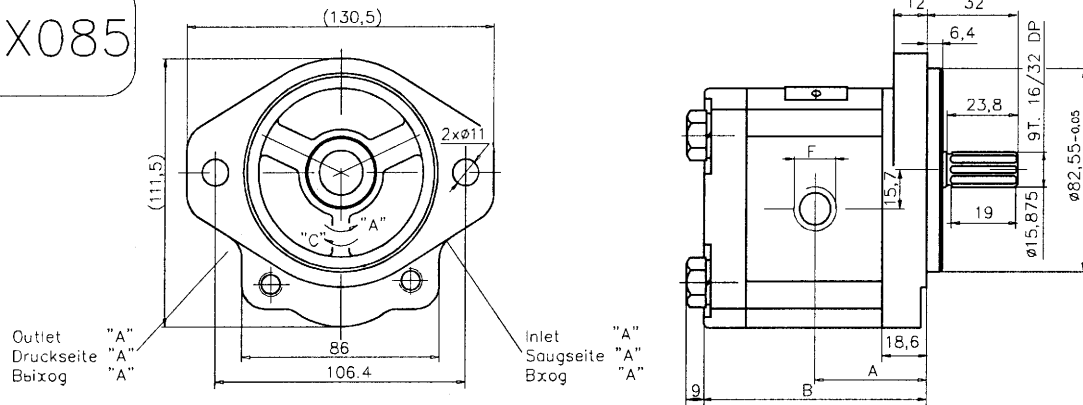
Type Typ Тип	Displacement Foerdervolumen	Dimensions Abmessungen Размеры													
		A		B		Inlet Saugseite Вхог					Outlet Druckseite Выхог				
		E	d	F	M	G	E	d	F	M	G				
	cm ³	mm										mm			
20A(C)4,5X073	4,5	42,5	79,6	30	M6	13				30	M6	13			
20A(C)6,3X073	6,3	42,5	79,6	30	M6	13				30	M6	13			
20A(C)8,2X073	8,2	42,5	79,6	30	M6	13				30	M6	13			
20A(C)10X073	10	47	88,6	40	M8	19				30	M6	14			
20A(C)11X073	11,3	48	90,7	40	M8	19				30	M6	14			
20A(C)12X073	12	48,6	91,7	40	M8	19				30	M6	14			
20A(C)14X073	14	50	95	40	M8	19				30	M6	14			
20A(C)15X073	15	51	96,5	40	M8	19				30	M6	14			
20A(C)16X073	16	52	98,2	40	M8	19				30	M6	14			
20A(C)19X073	19	54	103,1	40	M8	19				30	M6	14			
20A(C)22X073	22	57	108,1	40	M8	19				30	M6	14			
20A(C)25X073	25	58,8	113	40	M8	19				40	M8	19			

20^A_C...Y075...



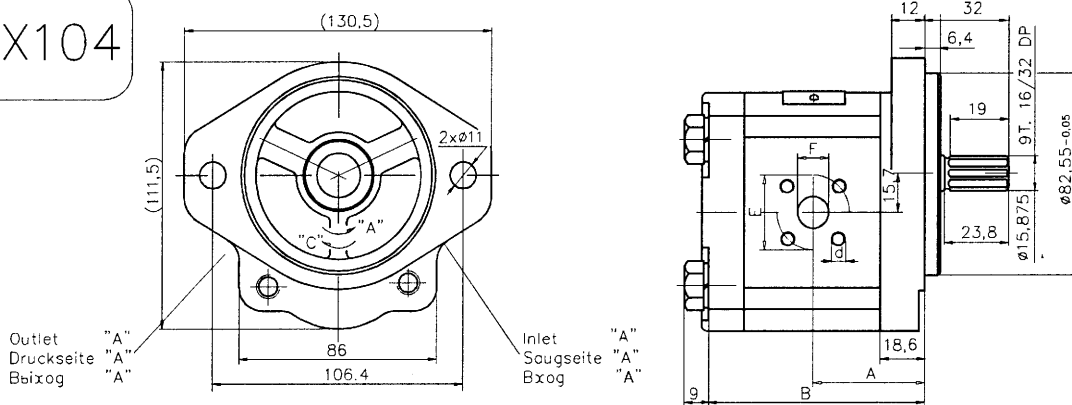
Type Typ Тип	Displacement Foerdervolumen	Dimensions Abmessungen Размеры													
		A		B		Inlet Saugseite Вхог					Outlet Druckseite Выхог				
		E	d	F	M	G	E	d	F	M	G				
	cm ³	mm										mm			
20A(C)4,5Y075...	4,5	42,5	79,6												
20A(C)6,3Y075...	6,3	43,6	79,6												
20A(C)8,2Y075...	8,2	45	79,6												
20A(C)10Y075...	10	46,5	88,6												
20A(C)11Y075...	11,3	47,5	90,7												
20A(C)12Y075...	12	48,2	91,9												
20A(C)14Y075...	14	49,6	95												
20A(C)15Y075...	15	50,5	96,5												
20A(C)16Y075...	16	51,6	98,2												
20A(C)19Y075...	19	53,5	103,1												
20A(C)22Y075...	22	56,6	108,1												
20A(C)25Y075...	25	58,8	113												

20^A_C...X085



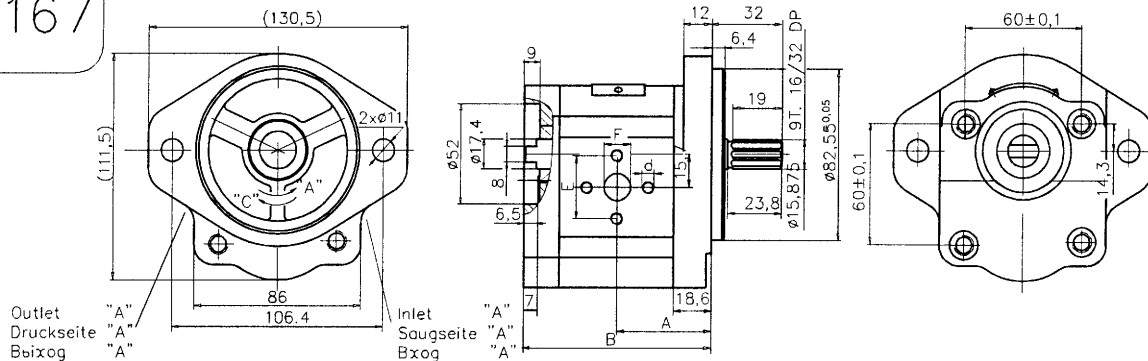
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Bxog					Outlet Druckseite Bыхог					
				E	d	F	M	G	E	d	F	M	G	
	cm ³	mm		mm										
20A(C)4,5X085	4,5	42	79,6											
20A(C)6,3X085	6,3	43,5	82,6											
20A(C)8,2X085	8,2	45	85,5											
20A(C)10X085	10	46,5	88,6											
20A(C)11X085	11,3	47,5	90,7											
20A(C)12X085	12	48,2	91,7											
20A(C)14X085	14	49,6	95											
20A(C)15X085	15	50,5	96,5											
20A(C)16X085	16	51,6	98,2											
20A(C)19X085	19	53,5	103,1											
20A(C)22X085	22	56,6	108,1											
20A(C)25X085	25	58,8	113											

20^A_C...X104



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Bxog					Outlet Druckseite Bыхог					
				E	d	F	M	G	E	d	F	M	G	
	cm ³	mm		mm										
20A(C)4,5X104	4,5	42	79,6	40	M6	15					35	M6	15	
20A(C)6,3X104	6,3	43,6	82,6	40	M6	15					35	M6	15	
20A(C)8,2X104	8,2	45	85,5	40	M6	20					35	M6	15	
20A(C)10X104	10	46,5	88,6	40	M6	20					35	M6	15	
20A(C)11X104	11,3	47,5	90,7	40	M6	20					35	M6	15	
20A(C)12X104	12	48,2	91,7	40	M6	20					35	M6	15	
20A(C)14X104	14	49,6	95	40	M6	20					35	M6	15	
20A(C)15X104	15	50,5	96,5	40	M6	20					35	M6	15	
20A(C)16X104	16	51,6	98,2	40	M6	20					35	M6	15	
20A(C)19X104	19	53,5	103,1	40	M6	20					35	M6	15	
20A(C)22X104	22	56,6	108,1	40	M6	20					35	M6	15	
20A(C)25X104	25	58,8	113	40	M6	20					35	M6	15	

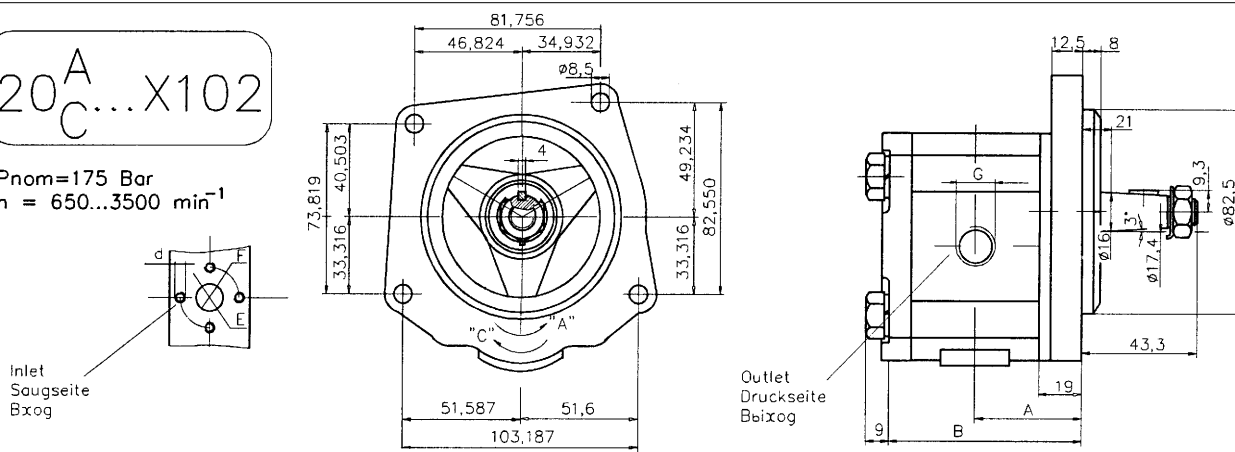
20^A_C...X167



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры																					
		A		Inlet Saugseite Вхог					Outlet Druckseite Выхог														
		mm		E	d	F	M	G	E	d	F	M	G										
	cm ³	mm											mm										
20A(C)4,5X167	4,5	42,5	87,2	30	M6	13						30	M6	13									
20A(C)6,3X167	6,3	42,5	87,2	30	M6	13						30	M6	13									
20A(C)8,2X167	8,2	42,5	87,2	30	M6	13						30	M6	13									
20A(C)10X167	10	47	96,2	40	M8	19						30	M6	14									
20A(C)11X167	11,3	48	98,3	40	M8	19						30	M6	14									
20A(C)12X167	12	48,6	99,5	40	M8	19						30	M6	14									
20A(C)14X167	14	50,2	102,7	40	M8	19						30	M6	14									
20A(C)15X167	15	51	104,1	40	M8	19						30	M6	14									
20A(C)16X167	16	52	105,8	40	M8	19						30	M6	14									
20A(C)19X167	19	54	110,7	40	M8	19						30	M6	14									
20A(C)22X167	22	56,5	115,7	40	M8	19						30	M6	14									
20A(C)25X167	25	58,8	120,6	40	M8	19						40	M8	19									

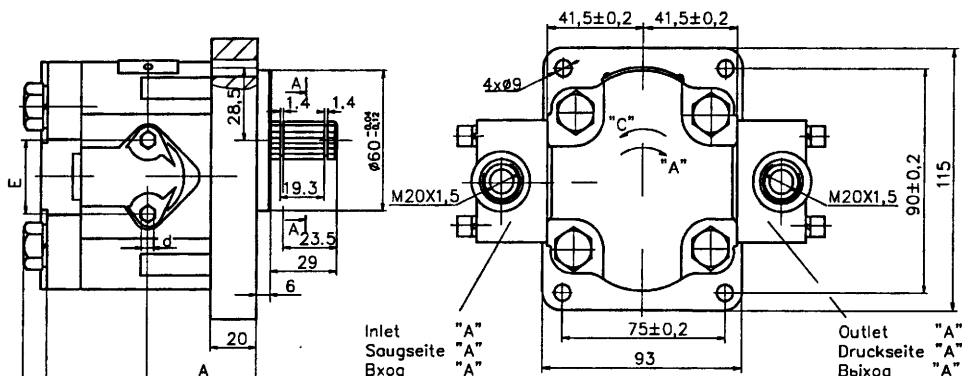
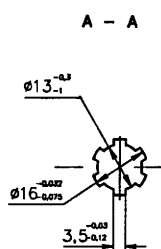
20^A_C...X102

P_{nom}=175 Bar
n = 650...3500 min⁻¹



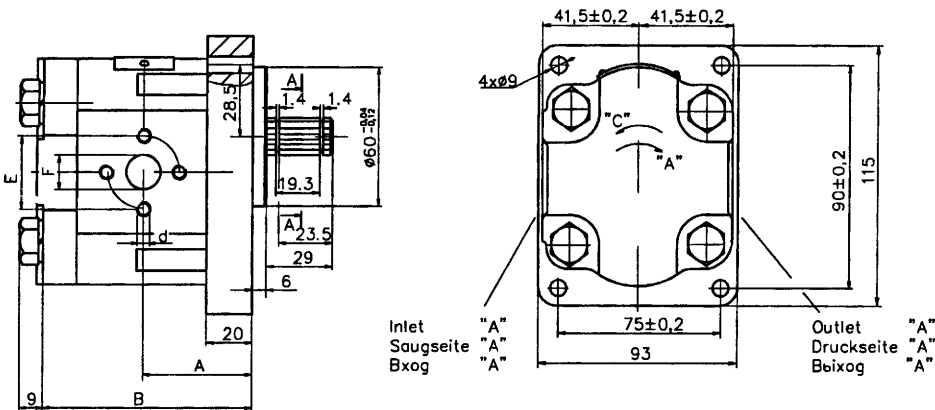
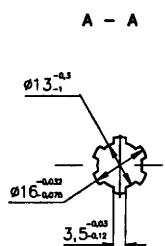
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры																					
		A		Inlet Saugseite Вхог					Outlet Druckseite Выхог														
		mm		E	d	F	M	G	E	d	F	M	G										
	cm ³	mm											mm										
20A(C)15X102	15	51	96	40	M6	19																	G3/8
20A(C)16X102	16	51	99	40	M6	19																	G3/8

20^A_C...X126K



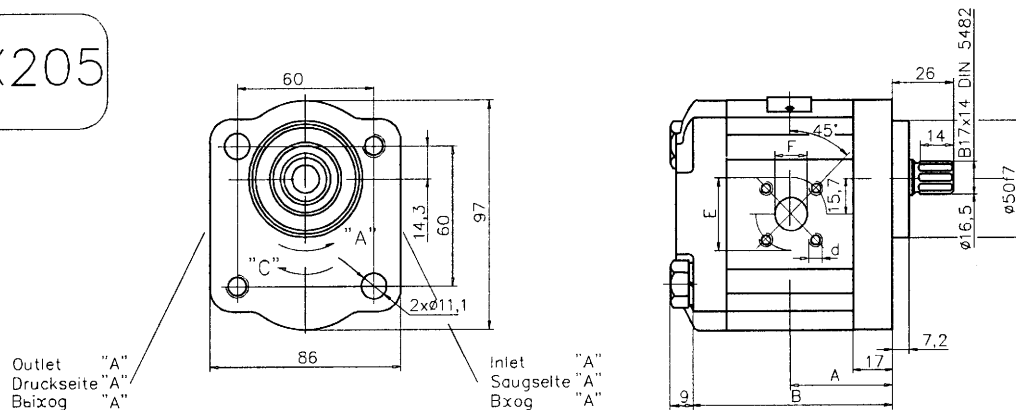
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог				
				E	d	F	M	G	E	d	F	M	G
	cm ³	mm		mm					mm				
20A(C)6,3X126K	6,3	48	86	30	M6				30	M6			
20A(C)8,2X126K	8,2	48	87	30	M6				30	M6			
20A(C)10X126K	10	48	89	38	M8				38	M8			
20A(C)14X126K	14	48	96,9	38	M8				38	M8			
20A(C)16X126K	16	48	98,6	38	M8				38	M8			
20A(C)19X126K	19	55,3	103,6	38	M8				38	M8			

20^A_C...X126



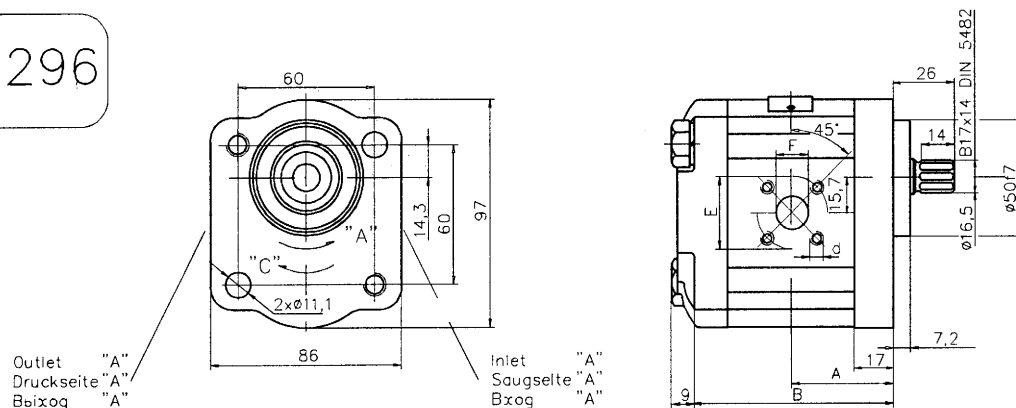
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог				
				E	d	F	M	G	E	d	F	M	G
	cm ³	mm		mm					mm				
20A(C)6,3X126	6,3	48	86	30	M6	13			30	M6	13		
20A(C)8,2X126	8,2	48	87	30	M6	13			30	M6	13		
20A(C)10X126	10	48	89	38	M8	15			38	M8	15		
20A(C)14X126	14	48	96,9	38	M8	15			38	M8	15		
20A(C)16X126	16	48	98,6	38	M8	15			38	M8	15		
20A(C)19X126	19	55,3	103,6	38	M8	15			38	M8	15		

20^A_C...X205



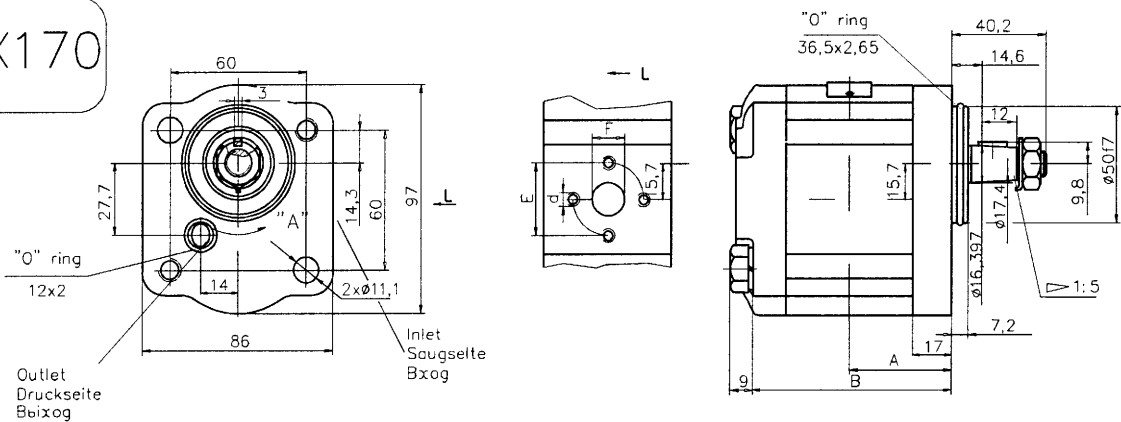
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог					
				E	d	F	M	G	E	d	F	M	G	
	cm ³	mm		mm					mm					
20A(C)4,5X205	4,5	37,3	75,8	40	M6	15	M20x1,5	G1/2	35	M6	15	M16x1,5	G1/2	
20A(C)6,3X205	6,3	38,6	78,7	40	M6	15	M20x1,5	G1/2	35	M6	15	M16x1,5	G1/2	
20A(C)8,2X205	8,2	40,6	78,7	40	M6	20	M20x1,5	G1/2	35	M6	15	M16x1,5	G1/2	
20A(C)10X205	10	45	87,7	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2	
20A(C)11X205	11,3	45	89,8	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2	
20A(C)12X205	12	45	91	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2	
20A(C)14X205	14	45	94,4	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2	
20A(C)15X205	15	45	95,6	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2	
20A(C)16X205	16	45	97,2	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2	
20A(C)19X205	19	45	102,2	40	M6	20	M20x1,5	G3/4	35	M6	15	M20x1,5	G1/2	
20A(C)22X205	22	52,5	107,2	40	M6	20	M20x1,5	G3/4	35	M6	15	M20x1,5	G1/2	
20A(C)25X205	25	57,2	112,1	40	M6	20	M20x1,5	G3/4	35	M6	15	M20x1,5	G1/2	

20^A_C...X296



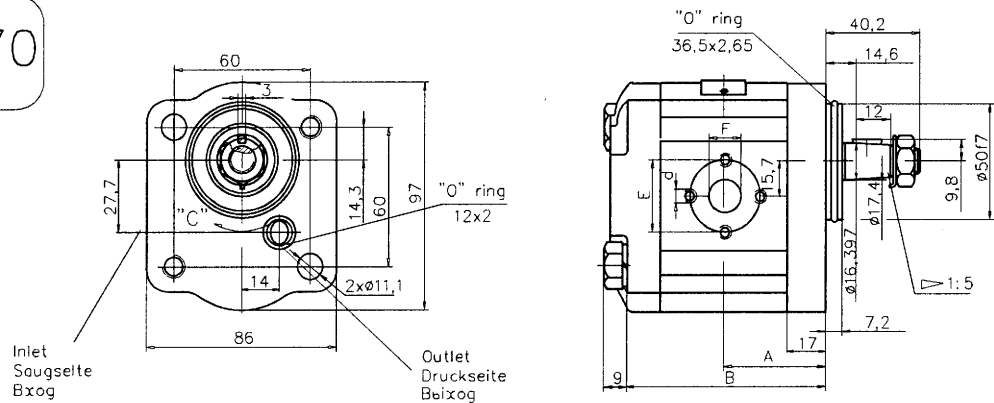
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог					
				E	d	F	M	G	E	d	F	M	G	
	cm ³	mm		mm					mm					
20A(C)4,5X296	4,5	37,3	75,8	40	M6	15	M20x1,5	G1/2	35	M6	15	M16x1,5	G1/2	
20A(C)6,3X296	6,3	38,6	78,7	40	M6	15	M20x1,5	G1/2	35	M6	15	M16x1,5	G1/2	
20A(C)8,2X296	8,2	40,6	78,7	40	M6	20	M20x1,5	G1/2	35	M6	15	M16x1,5	G1/2	
20A(C)10X296	10	45	87,7	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2	
20A(C)11X296	11,3	45	89,8	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2	
20A(C)12X296	12	45	91	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2	
20A(C)14X296	14	45	94,4	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2	
20A(C)15X296	15	45	95,6	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2	
20A(C)16X296	16	45	97,2	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2	
20A(C)19X296	19	45	102,2	40	M6	20	M20x1,5	G3/4	35	M6	15	M20x1,5	G1/2	
20A(C)22X296	22	52,5	107,2	40	M6	20	M20x1,5	G3/4	35	M6	15	M20x1,5	G1/2	
20A(C)25X296	25	57,2	112,1	40	M6	20	M20x1,5	G3/4	35	M6	15	M20x1,5	G1/2	

20A...X170

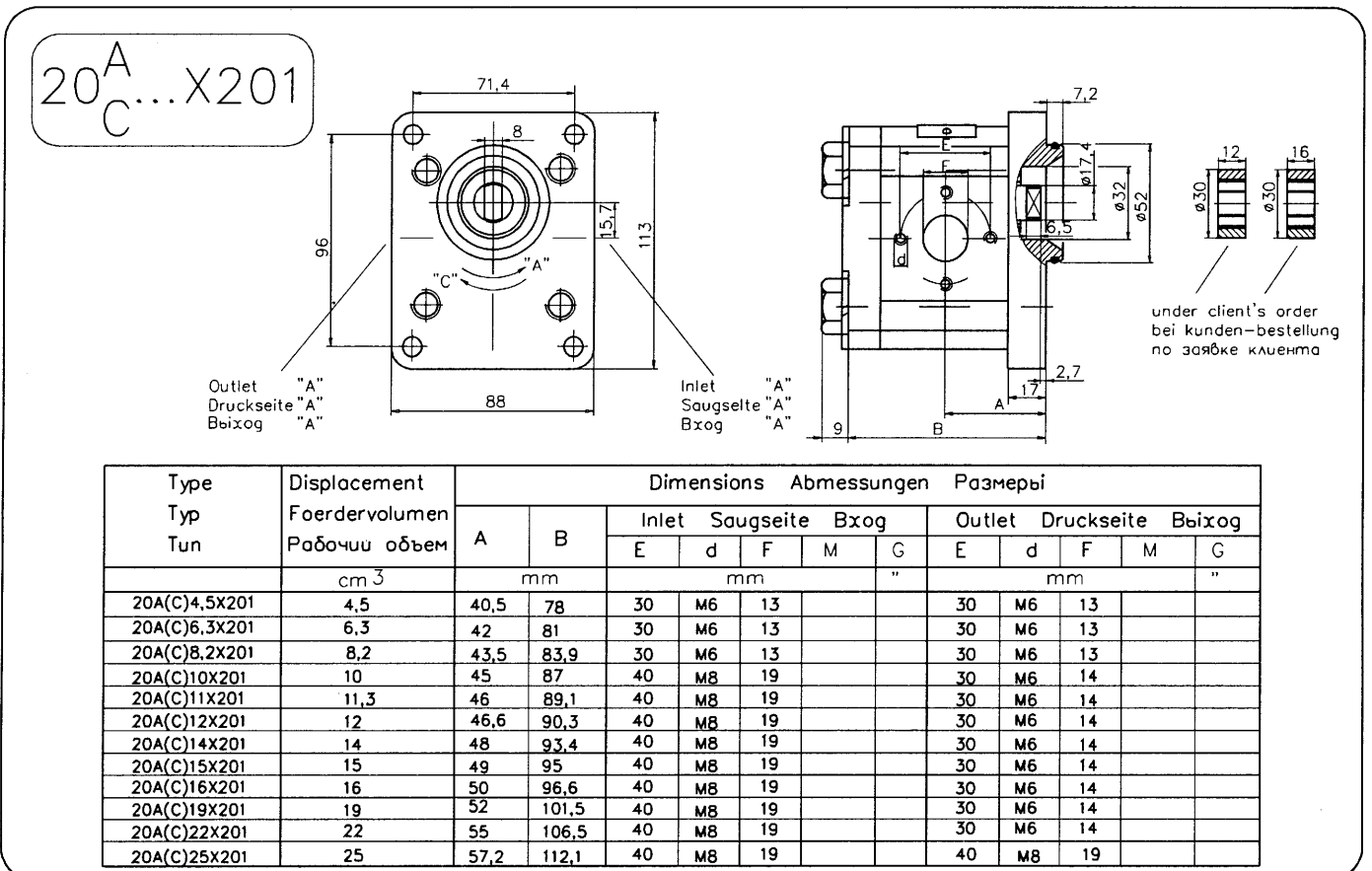
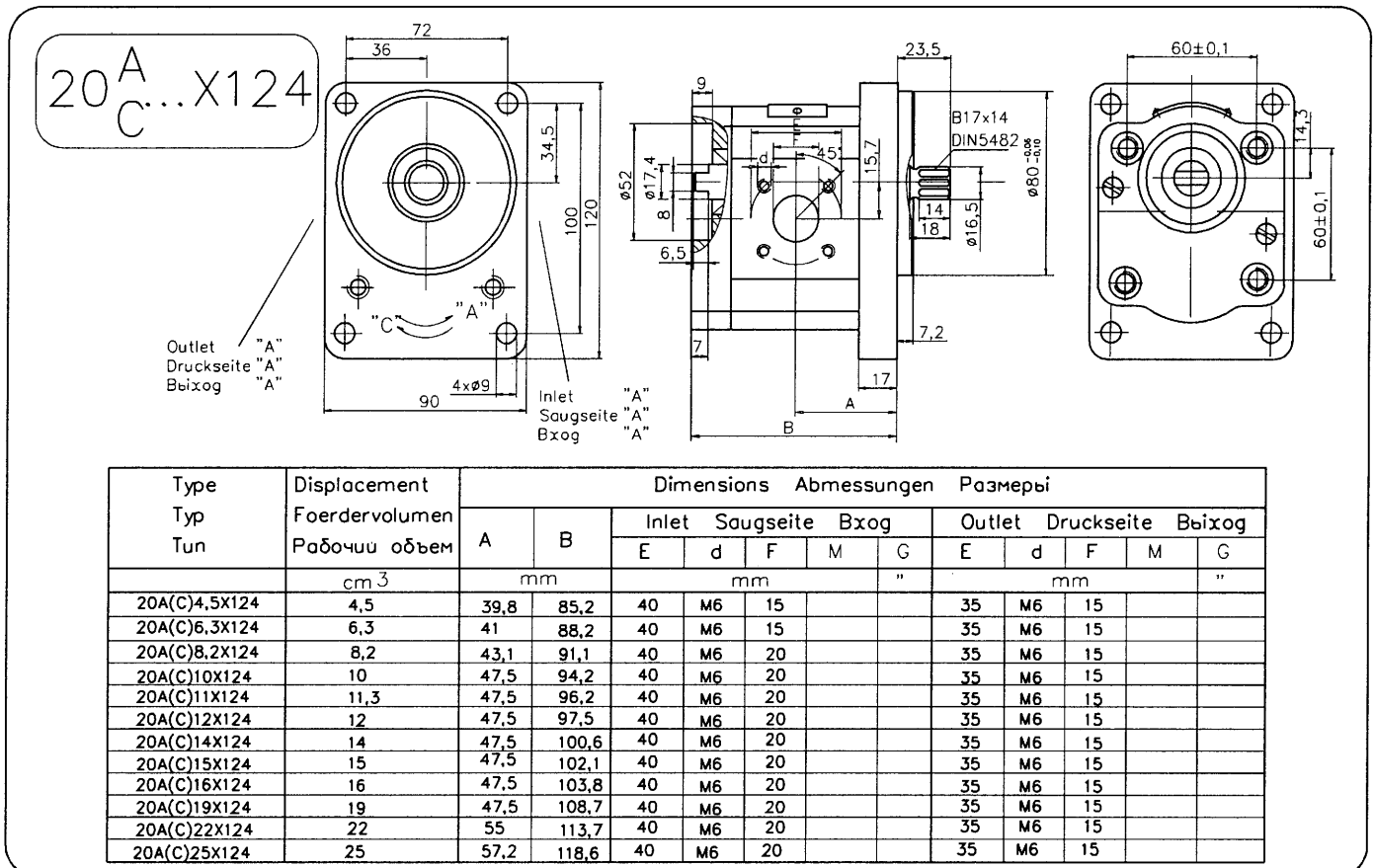


Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		A		B		Inlet Saugseite Вход					Outlet Druckseite Выход				
		E	d	F	M	G	E	d	F	M	G				
	cm ³	mm		mm					mm						
20A4,5X170	4,5	37,3	75,8	30	M6	13									
20A6,3X170	6,3	38,6	78,7	30	M6	13									
20A8,2X170	8,2	40,6	78,7	30	M6	13									
20A10X170	10	45	87,7	40	M8	19									
20A11X170	11,3	45	89,8	40	M8	19									
20A12X170	12	45	91	40	M8	19									
20A14X170	14	45	91,5	40	M8	19									
20A15X170	15	45	92,7	40	M8	19									
20A16X170	16	45	94,3	40	M8	19									
20A19X170	19	45	99,3	40	M8	19									
20A22X170	22	52,5	107,2	40	M8	19									
20A25X170	25	57,2	112,1	40	M8	19									

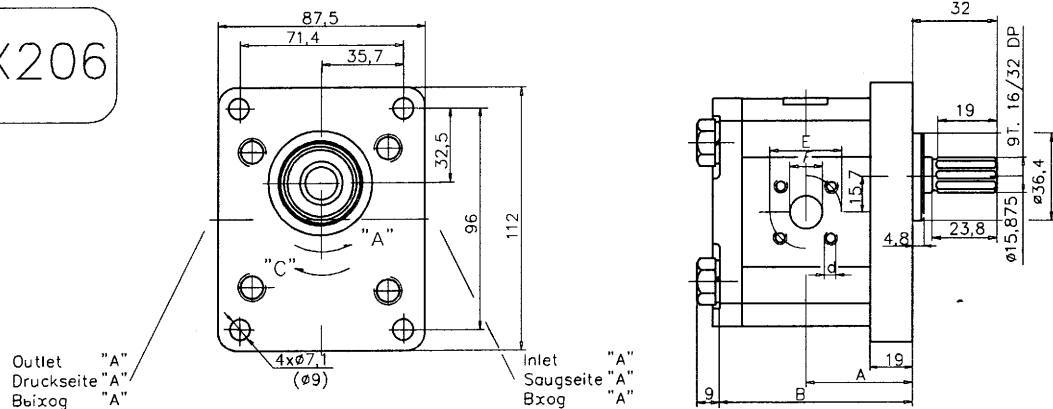
20C...X170



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		A		B		Inlet Saugseite Вход					Outlet Druckseite Выход				
		E	d	F	M	G	E	d	F	M	G				
	cm ³	mm		mm					mm						
20C4,5X170	4,5	37,3	75,8	30	M6	13									
20C6,3X170	6,3	38,6	78,7	30	M6	13									
20C8,2X170	8,2	40,6	78,7	30	M6	13									
20C10X170	10	45	87,7	40	M8	19									
20C11X170	11,3	45	89,8	40	M8	19									
20C12X170	12	45	91	40	M8	19									
20C14X170	14	45	91,5	40	M8	19									
20C15X170	15	45	92,7	40	M8	19									
20C16X170	16	45	94,3	40	M8	19									
20C19X170	19	45	99,3	40	M8	19									
20C22X170	22	52,5	107,2	40	M8	19									
20C25X170	25	57,2	112,1	40	M8	19									

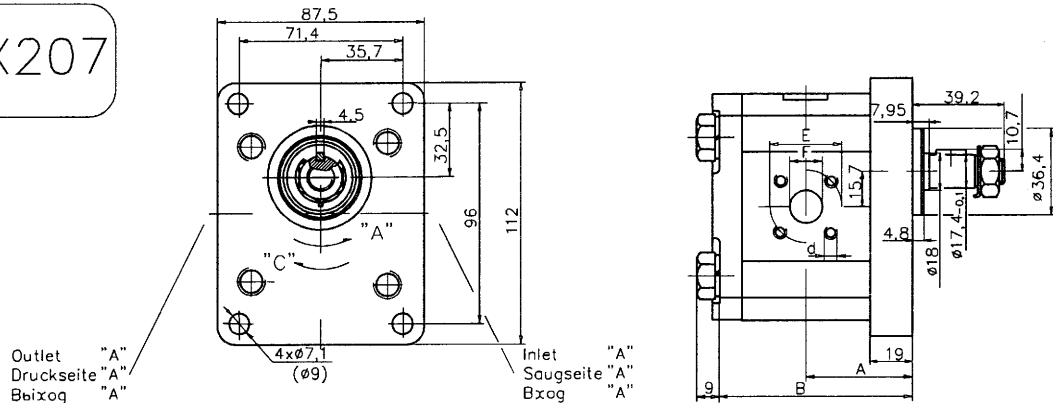


20^A_C...X206



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог					
				E	d	F	M	G	E	d	F	M	G	
	cm ³	mm		mm					mm					
20A(C)4,5X206	4,5	42,5	80	40	M6	13	M20x1,5	G1/2	35	M6	15	M16x1,5	G1/2	
20A(C)6,3X206	6,3	42,5	80	40	M6	13	M20x1,5	G1/2	35	M6	15	M16x1,5	G1/2	
20A(C)8,2X206	8,2	42,5	80	40	M6	13	M20x1,5	G1/2	35	M6	15	M16x1,5	G1/2	
20A(C)10X206	10	47	89	40	M6	19	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2	
20A(C)11X206	11,3	48	91,1	40	M6	19	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2	
20A(C)12X206	12	48,7	92,3	40	M6	19	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2	
20A(C)14X206	14	50,2	95,4	40	M6	19	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2	
20A(C)15X206	15	51	96,9	40	M6	19	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2	
20A(C)16X206	16	51,8	98,6	40	M6	19	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2	
20A(C)19X206	19	54	103,5	40	M6	19	M20x1,5	G3/4	35	M6	15	M20x1,5	G1/2	
20A(C)22X206	22	56,5	108,5	40	M6	19	M20x1,5	G3/4	35	M6	15	M20x1,5	G1/2	
20A(C)24X206	24	59,2	113	40	M6	19	M20x1,5	G3/4	35	M6	15	M20x1,5	G1/2	

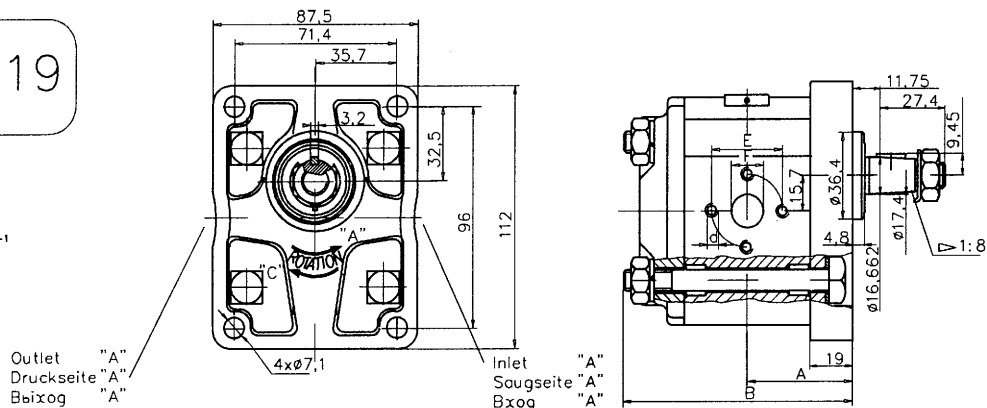
20^A_C...X207



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог					
				E	d	F	M	G	E	d	F	M	G	
	cm ³	mm		mm					mm					
20A(C)4,5X207	4,5	42,5	80	30		13				30		13		
20A(C)6,3X207	6,3	42,5	80	30		13				30		13		
20A(C)8,2X207	8,2	42,5	80	30		13				30		13		
20A(C)10X207	10	47	89	40		19				30		14		
20A(C)11X207	11,3	48	91,1	40		19				30		14		
20A(C)12X207	12	48,7	92,3	40		19				30		14		
20A(C)14X207	14	50,2	95,4	40		19				30		14		
20A(C)15X207	15	51	96,9	40		19				30		14		
20A(C)16X207	16	51,8	98,6	40		19				30		14		
20A(C)19X207	19	54	103,5	40		19				30		14		
20A(C)22X207	22	56,5	108,5	40		19				30		14		
20A(C)25X207	25	59,2	113,4	40		19				40	5/16-18UNC	19		

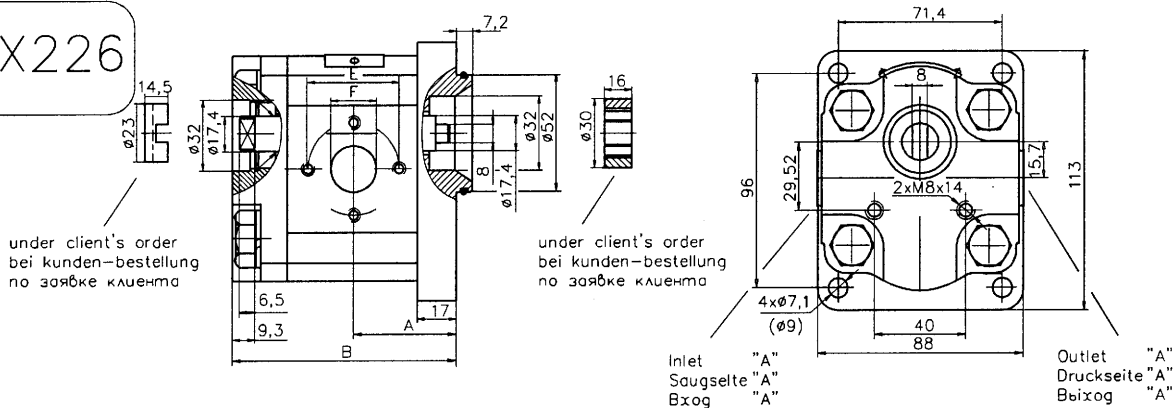
20^A_C...X219

P_{nom}=175 Bar
n=650...3500 min⁻¹



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выход						
				E	d	F	M	G	E	d	F	M	G		
	cm ³	mm		mm					mm						
20A(C)4,5X219	4,5	42,5	92,8	30	1/4 - 20UNC	13					30	1/4 - 20UNC	13		
20A(C)6,3X219	6,3	42,5	92,8	30		13					30		13		
20A(C)8,2X219	8,2	42,5	92,8	30		13					30		13		
20A(C)10X219	10	47	101,8	40		19					30		14		
20A(C)11X219	11,3	48	103,9	40		19					30		14		
20A(C)12X219	12	48,7	105,1	40		19					30		14		
20A(C)14X219	14	50,2	108,2	40		19					30		14		
20A(C)15X219	15	51	109,7	40		19					30		14		
20A(C)16X219	16	51,8	111,4	40		19					30		14		
20A(C)19X219	19	54	116,3	40		19					30		14		
20A(C)22X219	22	56,5	121,3	40	19					30	14				
20A(C)25X219	25	59,2	126,2	40	19					40	19	5/16-18 UNC			

20^A_C...X226

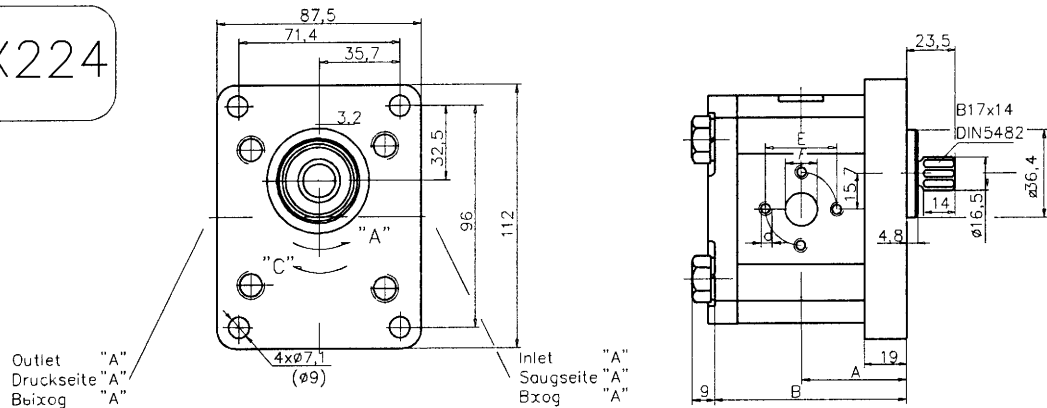


under client's order
bei kundenbestellung
по заявке клиента

under client's order
bei kundenbestellung
по заявке клиента

Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выход					
				E	d	F	M	G	E	d	F	M	G	
	cm ³	mm		mm					mm					
20A(C)4,5X226	4,5	40,5	87,6	30	M6	13				30	M6	13		
20A(C)6,3X226	6,3	42	90,6	30	M6	13				30	M6	13		
20A(C)8,2X226	8,2	43,5	93,5	30	M6	13				30	M6	13		
20A(C)10X226	10	45	96,6	40	M8	19				30	M6	14		
20A(C)11X226	11,3	46	98,7	40	M8	19				30	M6	14		
20A(C)12X226	12	46,6	99,9	40	M8	19				30	M6	14		
20A(C)14X226	14	48	103	40	M8	19				30	M6	14		
20A(C)15X226	15	49	104,5	40	M8	19				30	M6	14		
20A(C)16X226	16	50	106,2	40	M8	19				40	M6	14		
20A(C)19X226	19	52	111,1	40	M8	19				30	M6	14		
20A(C)22X226	22	55	116,1	40	M8	19				30	M6	14		
20A(C)25X226	25	57,2	121,1	40	M8	19				40	M8	19		

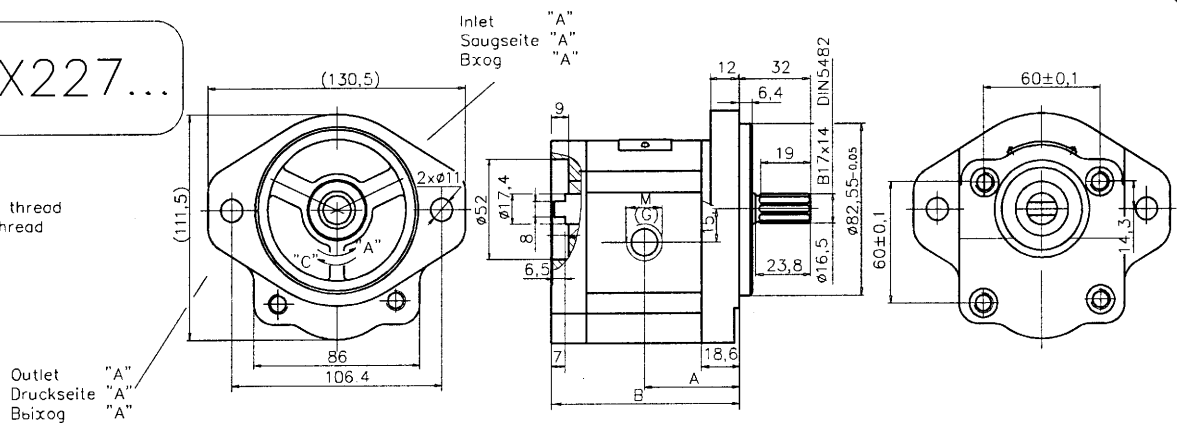
20^A_C...X224



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		A		Inlet Saugseite Выход					Outlet Druckseite Выход						
		E	d	F	M	G	E	d	F	M	G				
	cm ³	mm		mm					mm						
20A(C)4,5X224	4,5	42,5	80	30	M6	13	M20x1,5	G1/2	30	M6	13	M16x1,5	G1/2		
20A(C)6,3X224	6,3	42,5	80	30	M6	13	M20x1,5	G1/2	30	M6	13	M16x1,5	G1/2		
20A(C)8,2X224	8,2	42,5	80	30	M6	13	M20x1,5	G1/2	30	M6	13	M16x1,5	G1/2		
20A(C)10X224	10	47	89	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2		
20A(C)11X224	11,3	48	91,1	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2		
20A(C)12X224	12	48,7	92,3	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2		
20A(C)14X224	14	50,2	95,4	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2		
20A(C)15X224	15	51	96,9	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2		
20A(C)16X224	16	51,8	98,6	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2		
20A(C)19X224	19	54	103,5	40	M8	19	M20x1,5	G3/4	30	M6	14	M20x1,5	G1/2		
20A(C)22X224	22	56,5	108,5	40	M8	19	M20x1,5	G3/4	30	M6	14	M20x1,5	G1/2		
20A(C)25X224	25	59,2	113	40	M8	19	M20x1,5	G3/4	40	M8	19	M20x1,5	G1/2		

20^A_C...X227...

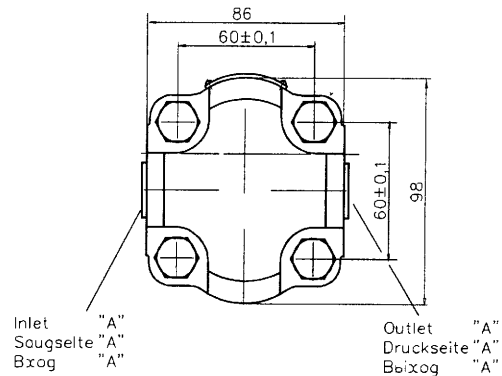
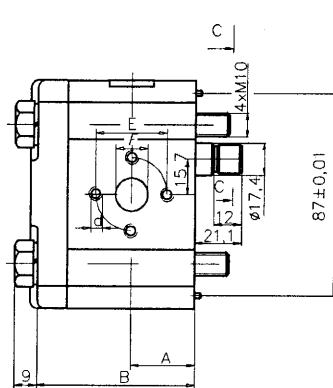
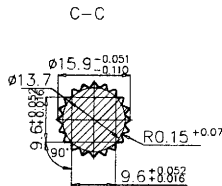
- metric thread
G - GAS thread



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		A		Inlet Saugseite Выход					Outlet Druckseite Выход						
		E	d	F	M	G	E	d	F	M	G				
	cm ³	mm		mm					mm						
20A(C)4,5X227...	4,5	42,5	87,2				M20x1,5	G1/2				M16x1,5	G1/2		
20A(C)6,3X227...	6,3	42,5	87,2				M20x1,5	G1/2				M16x1,5	G1/2		
20A(C)8,2X227...	8,2	42,5	87,2				M20x1,5	G1/2				M16x1,5	G1/2		
20A(C)10X227...	10	47	96,2				M20x1,5	G3/4				M16x1,5	G1/2		
20A(C)11X227...	11,3	48	98,3				M20x1,5	G3/4				M16x1,5	G1/2		
20A(C)12X227...	12	48,6	99,5				M20x1,5	G3/4				M16x1,5	G1/2		
20A(C)14X227...	14	50	102,7				M20x1,5	G3/4				M16x1,5	G1/2		
20A(C)15X227...	15	51	104,1				M20x1,5	G3/4				M16x1,5	G1/2		
20A(C)22X227...	16	52	105,8				M20x1,5	G3/4				M16x1,5	G1/2		
20A(C)19X227...	19	54	110,7				M20x1,5	G3/4				M20x1,5	G1/2		
20A(C)22X227...	22	57	115,7				M20x1,5	G3/4				M20x1,5	G1/2		
20A(C)25X227...	25	58,8	120,1				M20x1,5	G3/4				M20x1,5	G1/2		

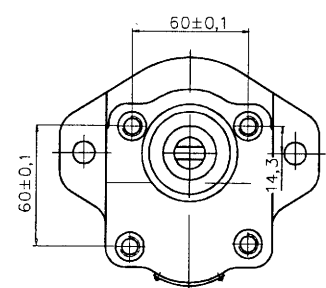
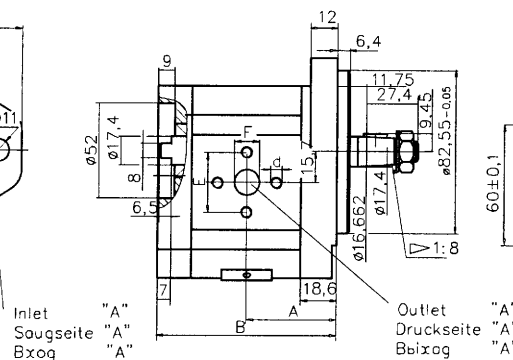
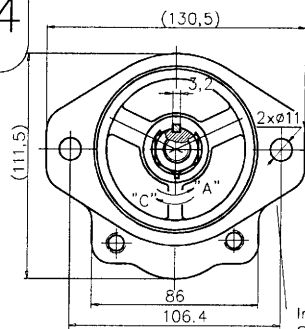
20^A...X220
C

P_{nom} = 175 bar



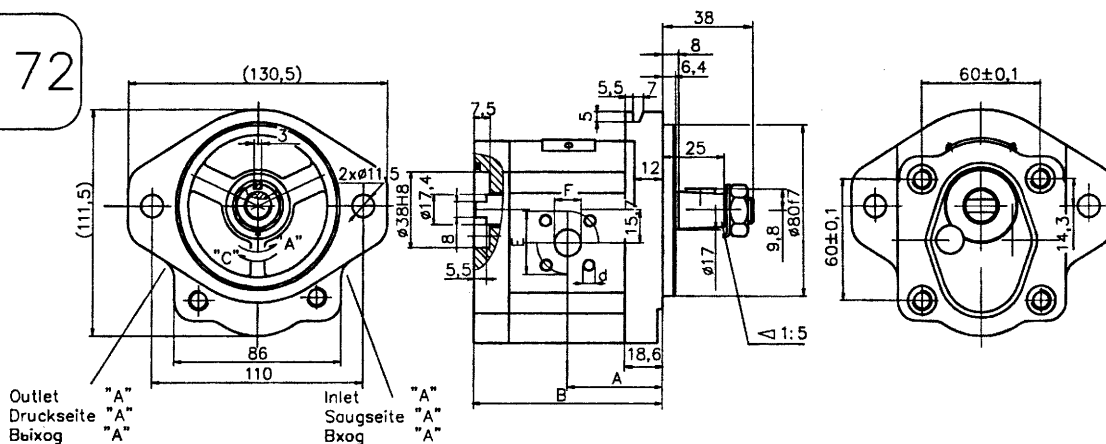
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A B		Inlet Saugseite Вхог					Outlet Druckseite Выхог					
		mm		E	d	F	M	G	E	d	F	M	G	
20A(C)4,5X220	4,5	23,5	61,7	30	M6	13	M20x1,5	G1/2	30	M6	13	M16x1,5	G1/2	
20A(C)6,3X220	6,3	23,5	61,7	30	M6	13	M20x1,5	G1/2	30	M6	13	M16x1,5	G1/2	
20A(C)8,2X220	8,2	23,5	61,7	30	M6	13	M20x1,5	G1/2	30	M6	13	M16x1,5	G1/2	
20A(C)10X220	10	28	70,7	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)11X220	11,3	29	72,8	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)12X220	12	29,7	74	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)14X220	14	31,2	77,1	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)15X220	15	32	78,6	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)16X220	16	32,8	80,3	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)19X220	19	35	85,2	40	M8	19	M20x1,5	G3/4	30	M6	14	M20x1,5	G1/2	
20A(C)22X220	22	37,5	90,2	40	M8	19	M20x1,5	G3/4	30	M6	14	M20x1,5	G1/2	
20A(C)25X220	25	40,2	95,1	40	M8	19	M20x1,5	G3/4	40	M8	19	M20x1,5	G1/2	

20^A...X234
C



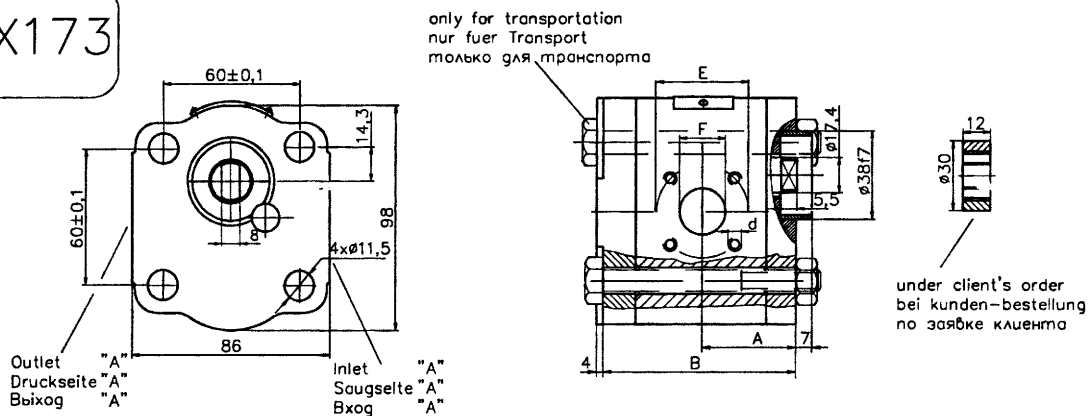
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A B		Inlet Saugseite Вхог					Outlet Druckseite Выхог					
		mm		E	d	F	M	G	E	d	F	M	G	
20A(C)4,5X234	4,5	42,5	87,2	30	M6	13			30	M6	13			
20A(C)6,3X234	6,3	42,5	87,2	30	M6	13			30	M6	13			
20A(C)8,2X234	8,2	42,5	87,2	30	M6	13			30	M6	13			
20A(C)10X234	10	47	96,2	40	M8	19			30	M6	14			
20A(C)11X234	11,3	48	98,3	40	M8	19			30	M6	14			
20A(C)12X234	12	48,6	99,5	40	M8	19			30	M6	14			
20A(C)14X234	14	50,2	102,7	40	M8	19			30	M6	14			
20A(C)15X234	15	51	104,1	40	M8	19			30	M6	14			
20A(C)16X234	16	52	105,8	40	M8	19			30	M6	14			
20A(C)19X234	19	54	110,7	40	M8	19			30	M6	14			
20A(C)22X234	22	56,5	115,7	40	M8	19			30	M6	14			
20A(C)25X234	25	58,8	120,6	40	M8	19			40	M8	19			

20A...X172



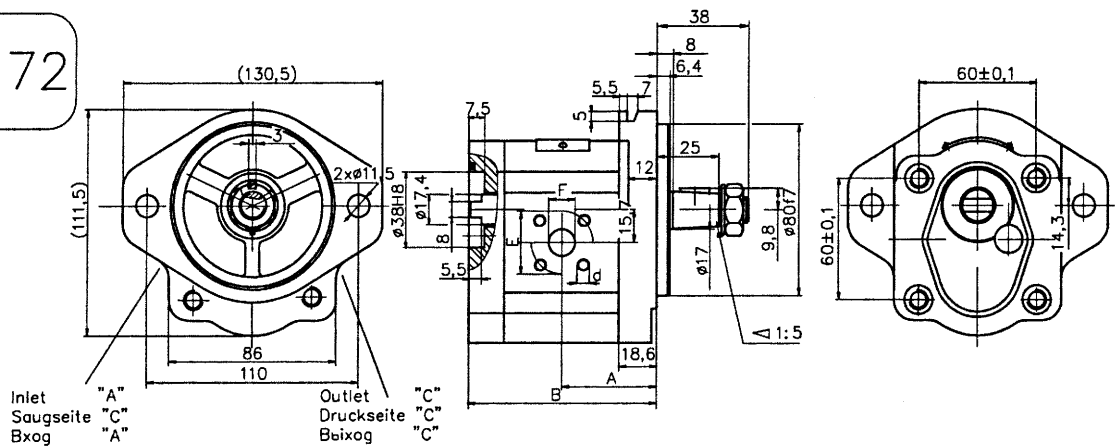
Type Typ Тип	Displacement Fördervolumen Рабочий объем	Dimensions Abmessungen Размеры														
		A	B	Inlet Saugseite Вход					Outlet Druckseite Выход							
				E	d	F	M	G	E	d	F	M	G			
cm ³	mm	mm					mm									
20A14X172	14	49,8	97	40	M6	20					35	M6	15			

20A...X173



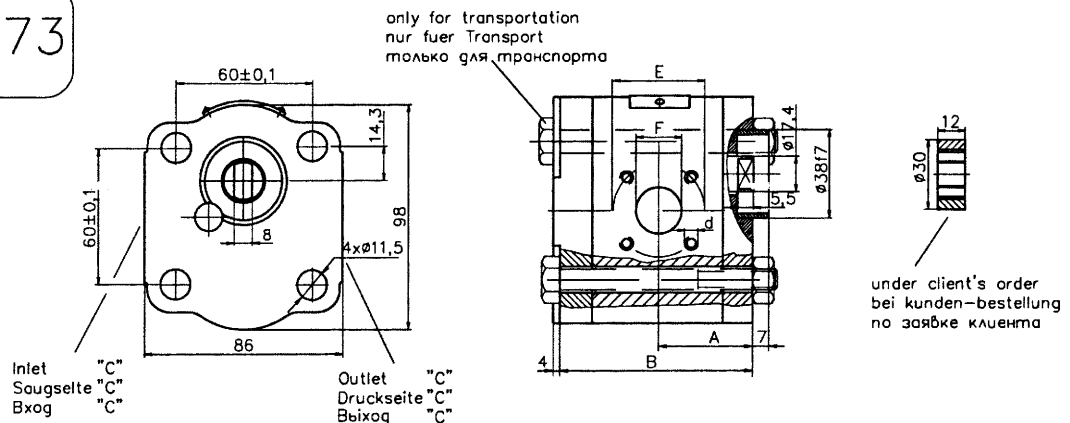
Type Typ Тип	Displacement Fördervolumen Рабочий объем	Dimensions Abmessungen Размеры														
		A	B	Inlet Saugseite Вход					Outlet Druckseite Выход							
				E	d	F	M	G	E	d	F	M	G			
cm ³	mm	mm					mm									
20A8,2X173	8,2	36,6	74	40	M6	20					35	M6	15			

20C...X172



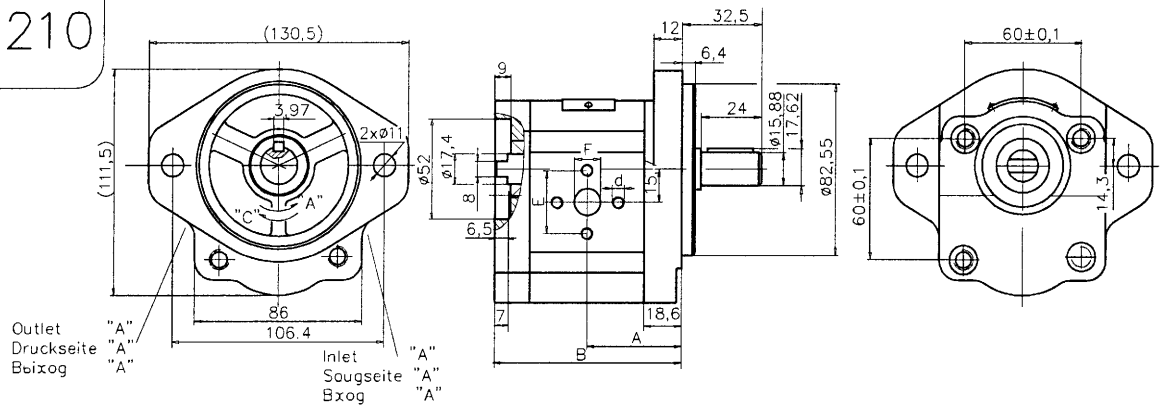
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры																			
		Inlet Saugseite Bxog		Outlet Druckseite Bxog					Inlet Saugseite Bxog			Outlet Druckseite Bxog									
		A	B	E	d	F	M	G	E	d	F	M	G								
	cm ³	mm		mm					"			mm			"						
20C14X172	14	49,8	97	40	M6	20							35	M6	15						

20C...X173



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры																			
		Inlet Saugseite Bxog		Outlet Druckseite Bxog					Inlet Saugseite Bxog			Outlet Druckseite Bxog									
		A	B	E	d	F	M	G	E	d	F	M	G								
	cm ³	mm		mm					"			mm			"						
20C8,2X173	8,2	36,6	74	40	M6	20							35	M6	15						

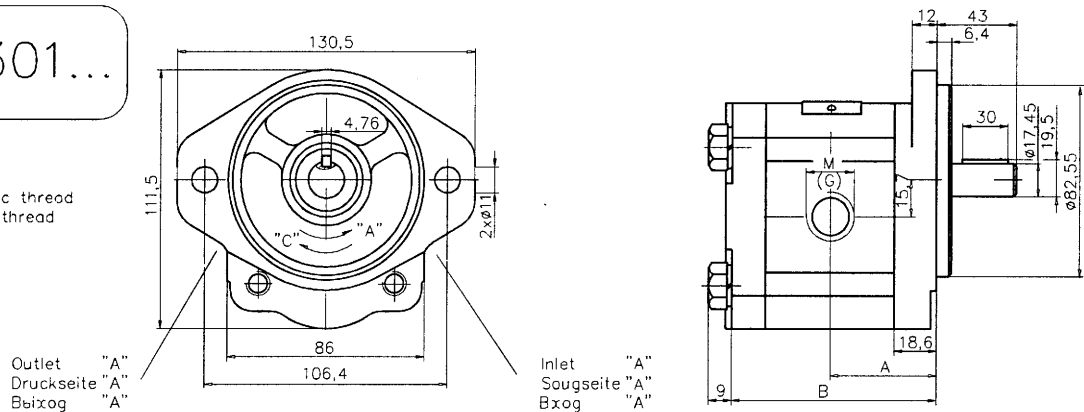
20^A_C...X210



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A	B	Inlet Saugseite Вход					Outlet Druckseite Выход				
				E	d	F	M	G	E	d	F	M	G
	cm ³	mm		mm					mm				
20A(C)4,5X210	4,5	41,4	87,2	40	M6	15			35	M6	15		
20A(C)6,3X210	6,3	42,6	90,2	40	M6	15			35	M6	15		
20A(C)8,2X210	8,2	44,7	93,1	40	M6	20			35	M6	15		
20A(C)10X210	10	49,1	96,2	40	M6	20			35	M6	15		
20A(C)11X210	11,3	49,1	98,2	40	M6	20			35	M6	15		
20A(C)12X210	12	49,1	99,5	40	M6	20			35	M6	15		
20A(C)14X210	14	49,1	102,6	40	M6	20			35	M6	15		
20A(C)15X210	15	49,1	104,1	40	M6	20			35	M6	15		
20A(C)16X210	16	49,1	105,8	40	M6	20			35	M6	15		
20A(C)19X210	19	49,1	110,7	40	M6	20			35	M6	15		
20A(C)22X210	22	56,6	115,7	40	M6	20			35	M6	15		
20A(C)25X210	25	58,8	120,6	40	M6	20			35	M6	15		

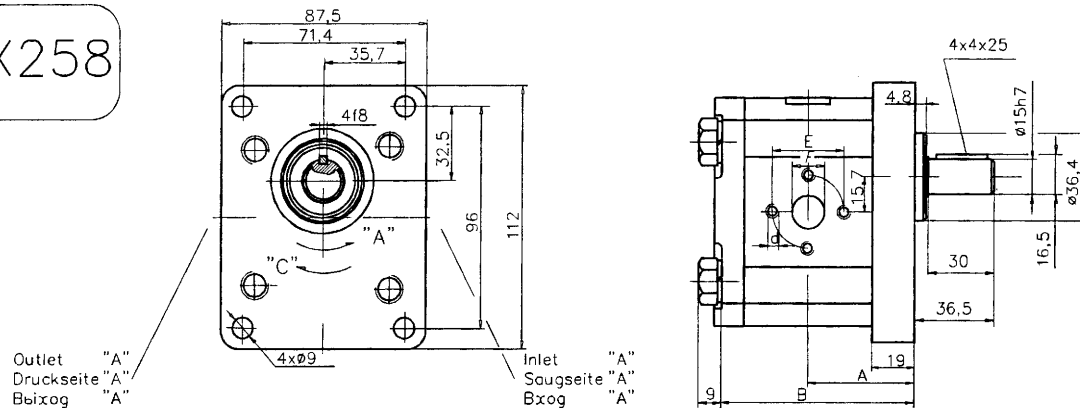
20^A_C...X301...

- metric thread
G - GAS thread



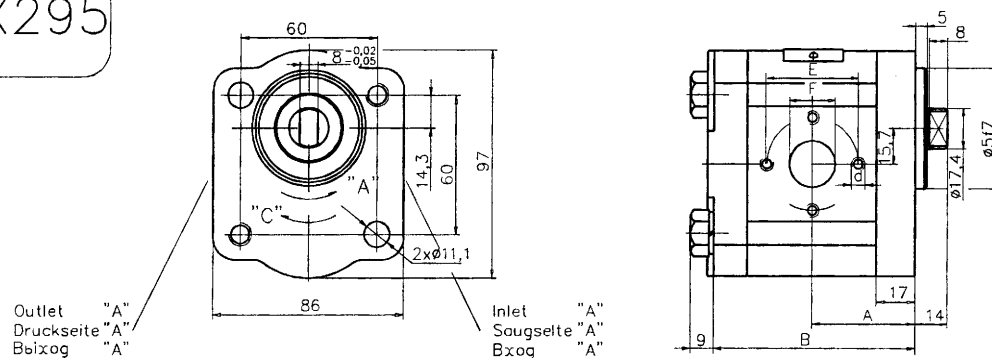
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A	B	Inlet Saugseite Вход					Outlet Druckseite Выход				
				E	d	F	M	G	E	d	F	M	G
	cm ³	mm		mm					mm				
20A(C)4,5X301	4,5	41,4	79,6				M20x1,5	G1/2			M16x1,5	G1/2	
20A(C)6,3X301	6,3	42,6	82,6				M20x1,5	G1/2			M16x1,5	G1/2	
20A(C)8,2X301	8,2	44,7	85,5				M20x1,5	G1/2			M16x1,5	G1/2	
20A(C)10X301	10	49,1	88,6				M20x1,5	G3/4			M16x1,5	G1/2	
20A(C)11X301	11,3	49,1	90,7				M20x1,5	G3/4			M16x1,5	G1/2	
20A(C)12X301	12	49,1	91,9				M20x1,5	G3/4			M16x1,5	G1/2	
20A(C)14X301	14	49,1	95				M20x1,5	G3/4			M16x1,5	G1/2	
20A(C)15X301	15	49,1	96,5				M20x1,5	G3/4			M16x1,5	G1/2	
20A(C)16X301	16	49,1	98,2				M20x1,5	G3/4			M16x1,5	G1/2	
20A(C)19X301	19	49,1	103,1				M20x1,5	G3/4			M20x1,5	G1/2	
20A(C)22X301	22	56,6	108,1				M20x1,5	G3/4			M20x1,5	G1/2	
20A(C)25X301	25	58,8	113				M20x1,5	G3/4			M20x1,5	G1/2	

20^A_C...X258

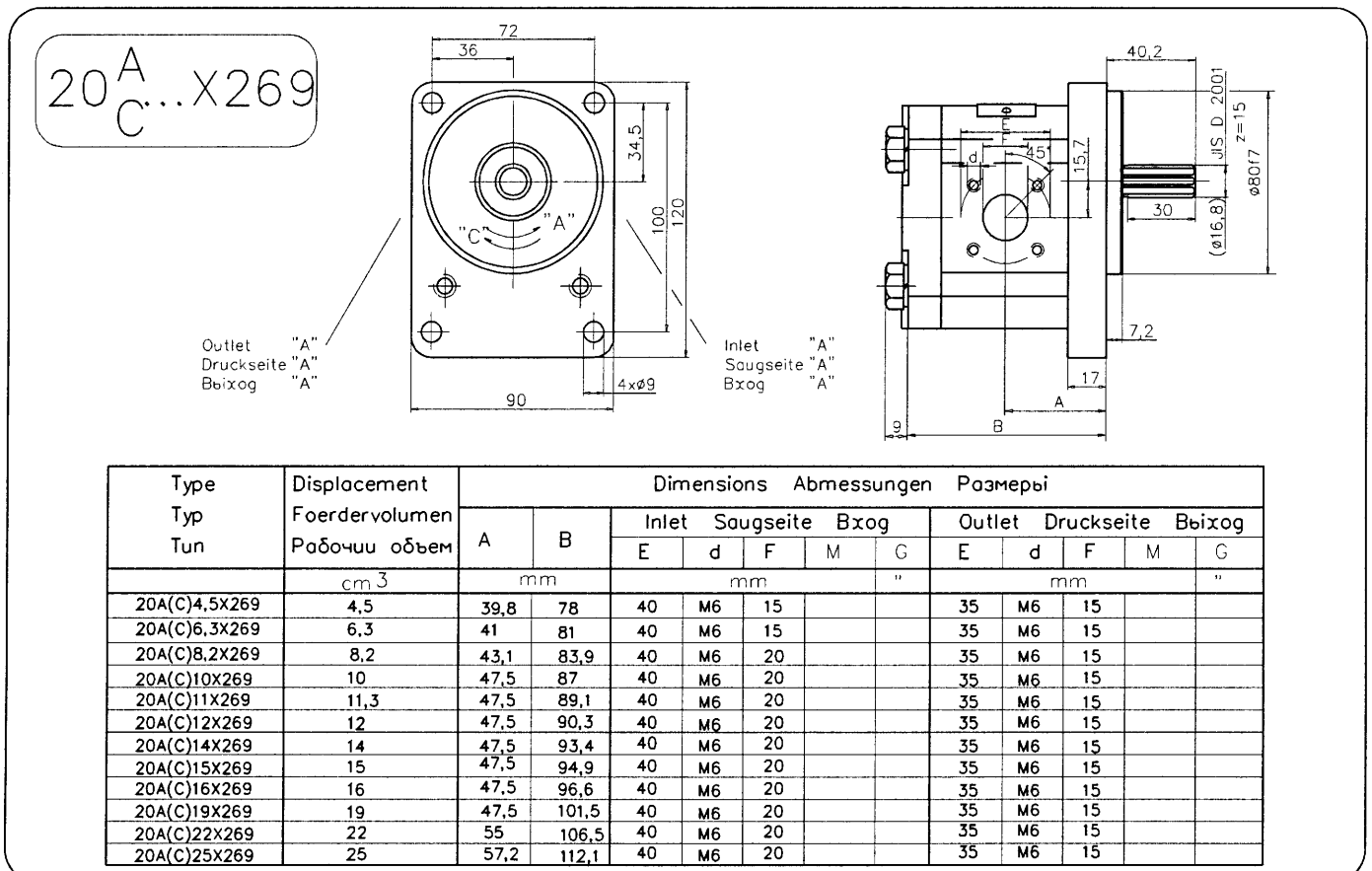
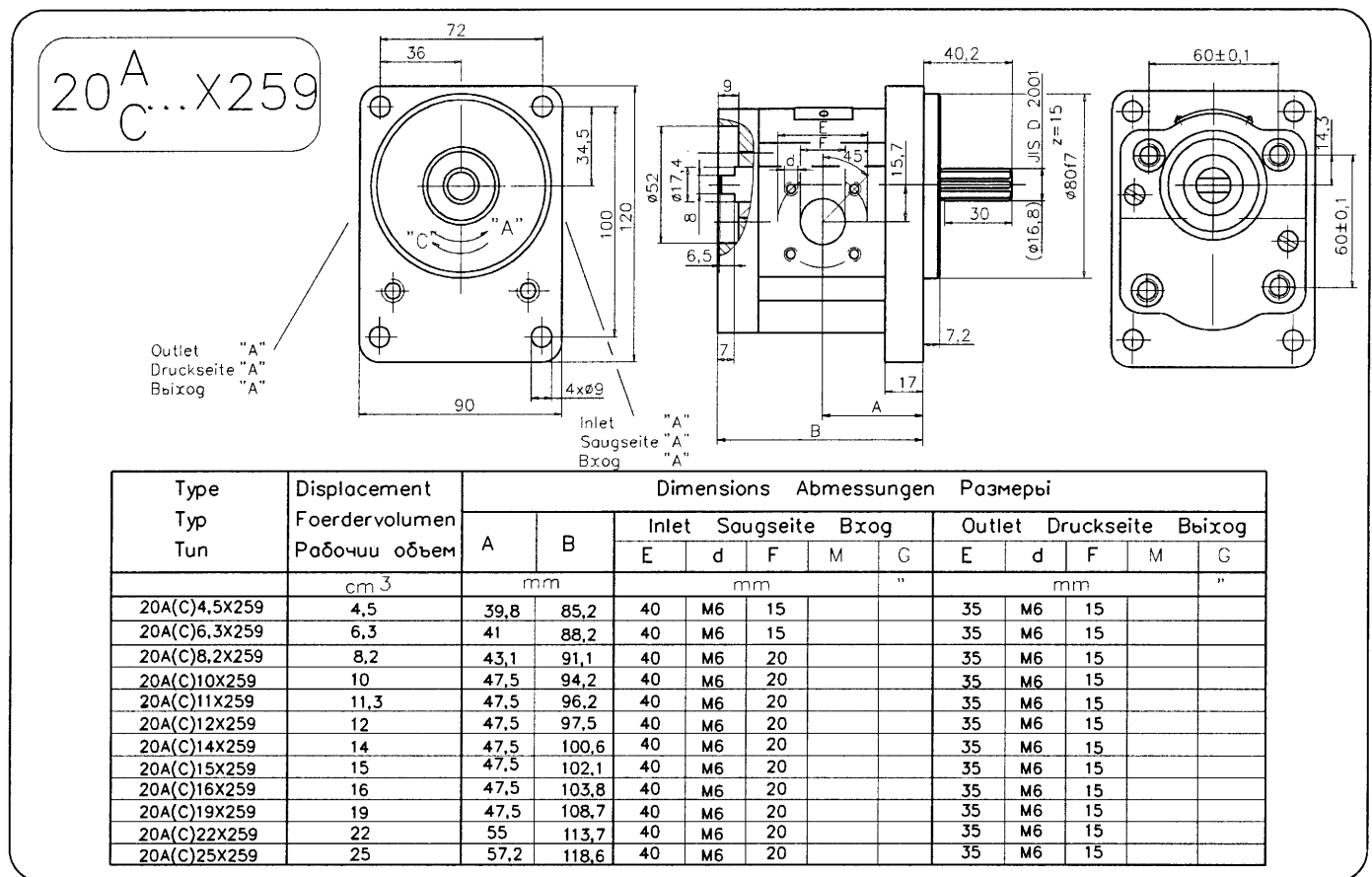


Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A		Inlet Saugseite Вхог					Outlet Druckseite Выход					
		E	d	F	M	G	E	d	F	M	G			
	cm ³	mm												
20A(C)4,5X258	4,5	42,5	80	30	M6	13	M20x1,5	G1/2	30	M6	13	M16x1,5	G1/2	
20A(C)6,3X258	6,3	42,5	80	30	M6	13	M20x1,5	G1/2	30	M6	13	M16x1,5	G1/2	
20A(C)8,2X258	8,2	42,5	80	30	M6	13	M20x1,5	G1/2	30	M6	13	M16x1,5	G1/2	
20A(C)10X258	10	47	89	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)11X258	11,3	48	91,1	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)12X258	12	48,7	92,3	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)14X258	14	50,2	95,4	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)15X258	15	51	96,9	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)16X258	16	51,8	98,6	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)19X258	19	54	103,5	40	M8	19	M20x1,5	G3/4	30	M6	14	M20x1,5	G1/2	
20A(C)22X258	22	56,5	108,5	40	M8	19	M20x1,5	G3/4	30	M6	14	M20x1,5	G1/2	
20A(C)25X258	25	59,2	113,4	40	M8	19	M20x1,5	G3/4	40	M8	19	M20x1,5	G1/2	

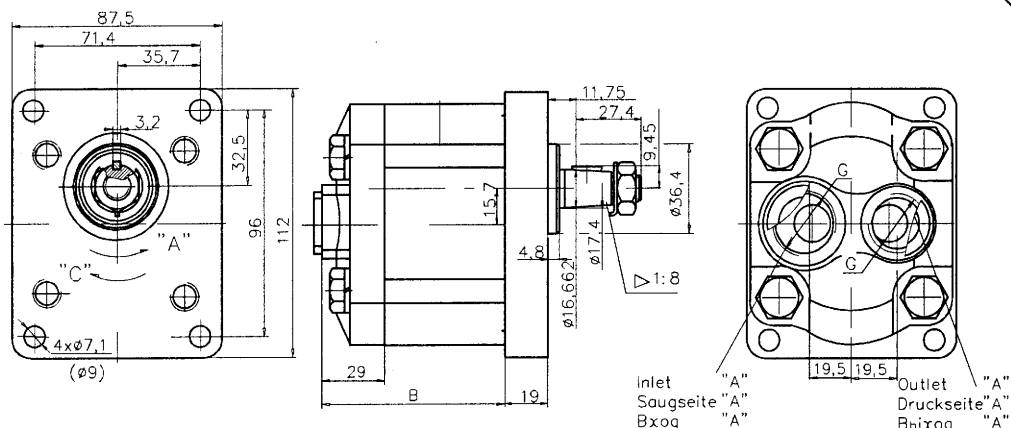
20^A_C...X295



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A		Inlet Saugseite Вхог					Outlet Druckseite Выход					
		E	d	F	M	G	E	d	F	M	G			
	cm ³	mm												
20A(C)4,5X295	4,5	37,3	78	30	M6	13			30	M6	13			
20A(C)6,3X295	6,3	38,6	81	30	M6	13			30	M6	13			
20A(C)8,2X295	8,2	40,6	83,9	30	M6	13			30	M6	13			
20A(C)10X295	10	45	87	40	M8	19			30	M6	14			
20A(C)11X295	11,3	45	89,1	40	M8	19			30	M6	14			
20A(C)12X295	12	45	90,3	40	M8	19			30	M6	14			
20A(C)14X295	14	45	93,4	40	M8	19			30	M6	14			
20A(C)15X295	15	45	95	40	M8	19			30	M6	14			
20A(C)16X295	16	45	96,6	40	M8	19			30	M6	14			
20A(C)19X295	19	45	101,5	40	M8	19			30	M6	14			
20A(C)22X295	22	52,5	106,5	40	M8	19			30	M6	14			
20A(C)25X295	25	57,2	112,1	40	M8	19			40	M8	19			

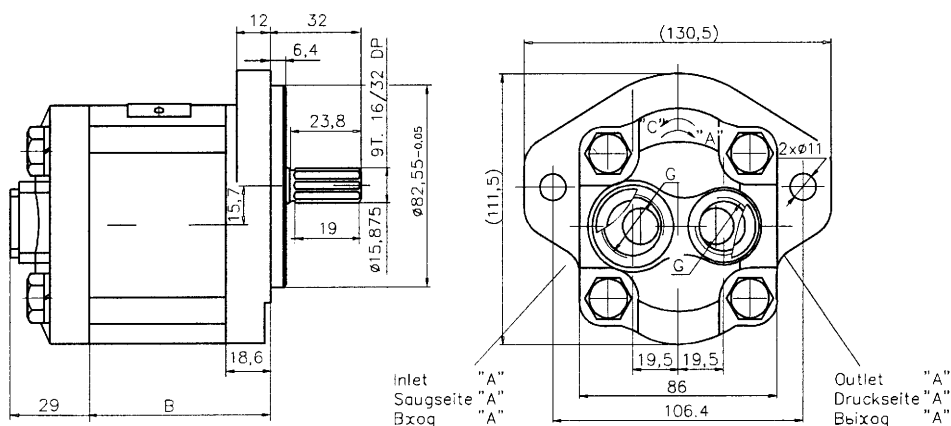


20^A_C...X016W



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		n_{max}	A	B	Inlet Saugseite Bxog					Outlet Druckseite Bыхog					
					E	d	F	M	G	E	d	F	M	G	
	cm ³	min ⁻¹	mm		mm					mm					
20A(C)4,5X016W	4,5	3000		76						G3/4					G1/2
20A(C)6,3X016W	6,3	3000		79						G3/4					G1/2
20A(C)8,2X016W	8,2	3000		81,9						G3/4					G1/2
20A(C)10X016W	10	3000		85						G3/4					G1/2
20A(C)11X016W	11,3	3000		87						G3/4					G1/2
20A(C)12X016W	12	2500		88,3						G3/4					G1/2
20A(C)14X016W	14	2500		91,4						G3/4					G1/2
20A(C)15X016W	15	2500		92,9						G3/4					G1/2
20A(C)16X016W	16	2500		94,6						G3/4					G1/2
20A(C)19X016W	19	2000		99,5						G3/4					G1/2
20A(C)22X016W	22	2000		104,5						G3/4					G1/2
20A(C)25X016W	25	1500		104,5						G3/4					G1/2

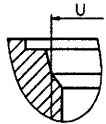
20^A_C...X085W



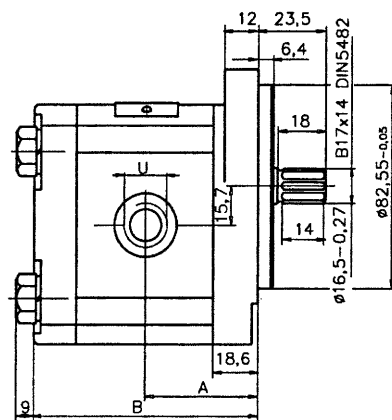
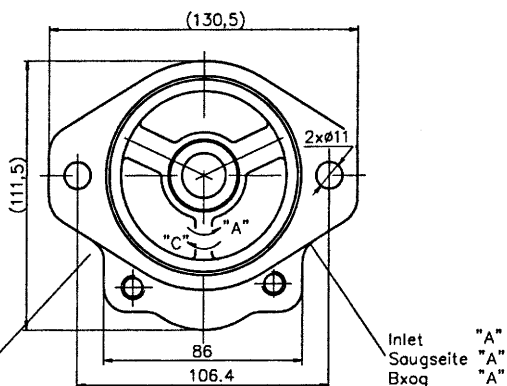
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		n_{max}	A	B	Inlet Saugseite Bxog					Outlet Druckseite Bыхog					
					E	d	F	M	G	E	d	F	M	G	
	cm ³	min ⁻¹	mm		mm					mm					
20A(C)4,5X085W	4,5	3000		66						G3/4"					G1/2"
20A(C)6,3X085W	6,3	3000		68,9						G3/4"					G1/2"
20A(C)8,2X085W	8,2	3000		71,8						G3/4"					G1/2"
20A(C)10X085W	10	3000		75						G3/4"					G1/2"
20A(C)11X085W	11,3	3000		77,1						G3/4"					G1/2"
20A(C)12X085W	12	2500		78,3						G3/4"					G1/2"
20A(C)14X085W	14	2500		81,4						G3/4"					G1/2"
20A(C)15X085W	15	2500		82,9						G3/4"					G1/2"
20A(C)16X085W	16	2500		84,4						G3/4"					G1/2"
20A(C)19X085W	19	2000		89,5						G3/4"					G1/2"
20A(C)22X085W	22	2000		94,5						G3/4"					G1/2"
20A(C)25X085W	25	1800		98,9						G3/4"					G1/2"

20^A_C...X320

SAE J475
(ISO R725)



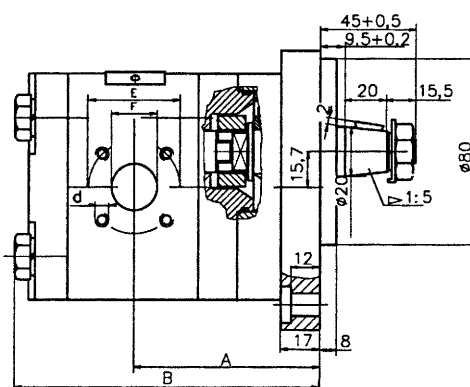
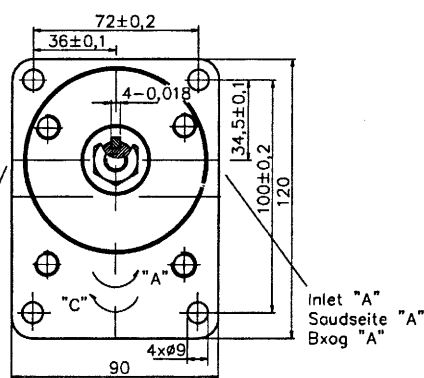
Outlet "A"
Druckseite "A"
Выход "A"



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		Inlet Saugseite Вхог		Outlet Druckseite Выход											
		A	B	E	d	U	M	G	E	d	U	M	G		
	cm ³	mm		mm					mm						
20A(C)4,5X320															
20A(C)6,3X320															
20A(C)8,2X320															
20A(C)10X320	10	46,5	88,6												
20A(C)11X320	11,3	47,5	90,7												
20A(C)12X320	12	48,2	91,7												
20A(C)14X320	14	49,6	95												
20A(C)15X320	15	50,5	96,5												
20A(C)16X320	16	51,6	98,2												
20A(C)19X320	19	53,5	103,1												
20A(C)22X320	22	56,6	108,1												
20A(C)25X320	25	58,8	113												

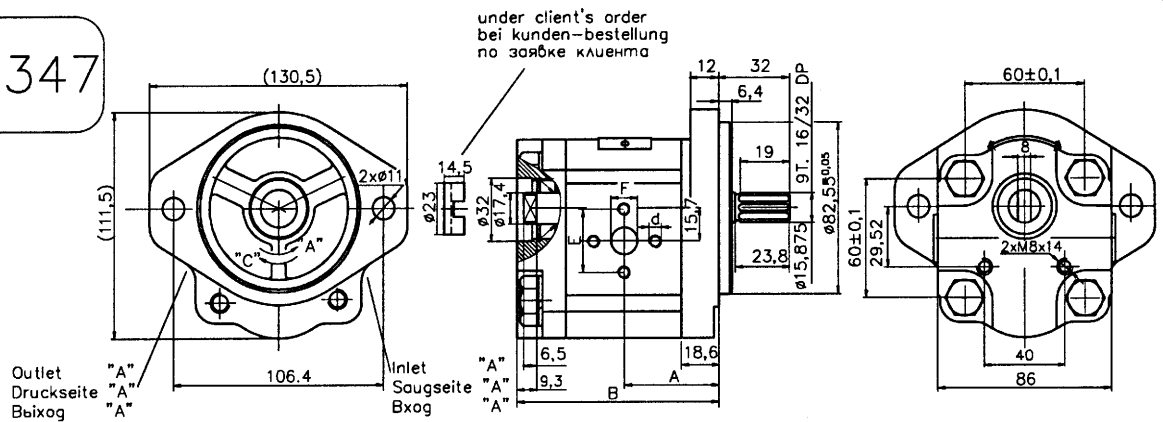
20^A_C...X329

Outlet "A"
Druckseite "A"
Выход "A"



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		Inlet Saugseite Вхог		Outlet Druckseite Выход									
		A	B	E	d	F	M	G	E	d	F	M	G
	cm ³	mm		mm					mm				
20A(C)4,5X329	4,5	71,3	121	40	M6	15			35	M6	15		
20A(C)6,3X329	6,3	72,6	124	40	M6	15			35	M6	15		
20A(C)8,2X329	8,2	74,6	126,9	40	M6	20			35	M6	15		
20A(C)10X329	10	79	130	40	M6	20			35	M6	15		
20A(C)11X329	11,3	79	132,1	40	M6	20			35	M6	15		
20A(C)12X329	12	79	133,3	40	M6	20			35	M6	15		
20A(C)14X329	14	79	136,4	40	M6	20			35	M6	15		
20A(C)15X329	15	79	138	40	M6	20			35	M6	15		
20A(C)16X329	16	79	139,6	40	M6	20			35	M6	15		
20A(C)19X329	19	79	144,5	40	M6	20			35	M6	15		
20A(C)22X329	22	86,5	149,5	40	M6	20			35	M6	15		
20A(C)25X329	25	90,9	154,4	40	M6	20			35	M6	15		

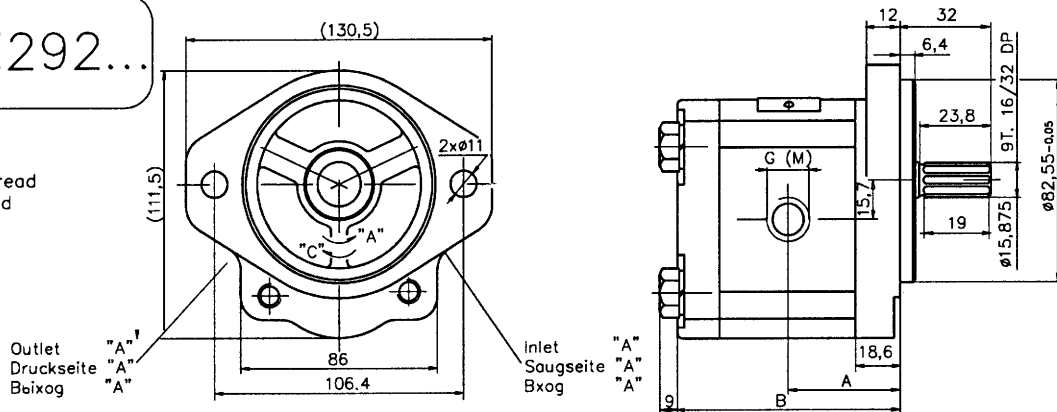
20^A_C...X347



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A		Inlet Saugseite Вхог					Outlet Druckseite Выхог				
		E	d	F	M	G	E	d	F	M	G		
	cm ³	mm											
		mm											
20A(C)4,5X347	4,5	42,1	89,3	30	M6	13			30	M6	13		
20A(C)6,3X347	6,3	42,1	89,3	30	M6	13			30	M6	13		
20A(C)8,2X347	8,2	42,1	89,3	30	M6	13			30	M6	13		
20A(C)10X347	10	46,6	98,2	40	M8	19			30	M6	14		
20A(C)11X347	11,3	47,6	100,3	40	M8	19			30	M6	14		
20A(C)12X347	12	48,2	101,6	40	M8	19			30	M6	14		
20A(C)14X347	14	49,6	104,7	40	M8	19			30	M6	14		
20A(C)15X347	15	50,6	106,2	40	M8	19			30	M6	14		
20A(C)16X347	16	51,6	107,8	40	M8	19			30	M6	14		
20A(C)19X347	19	53,6	112,8	40	M8	19			30	M6	14		
20A(C)22X347	22	56,6	117,8	40	M8	19			30	M6	14		
20A(C)25X347	25	58,8	122,7	40	M8	19			40	M8	19		

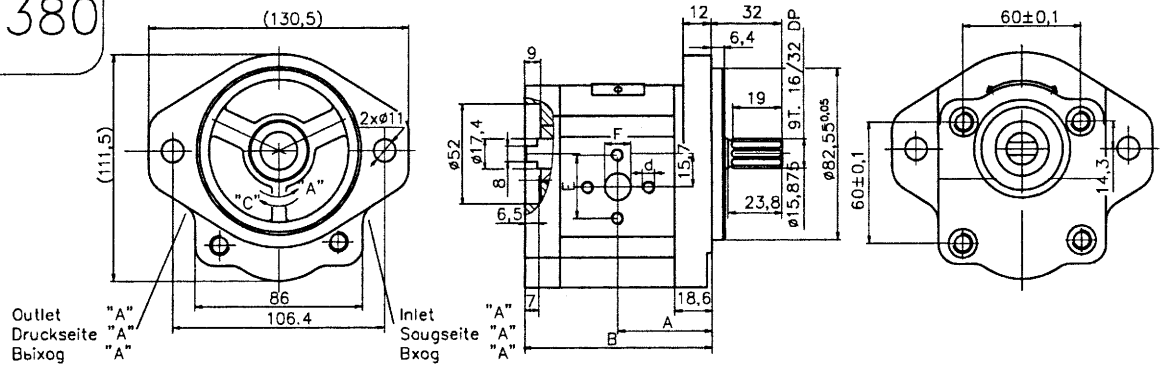
20^A_C...X292...

M - metric thread
G - GAS thread



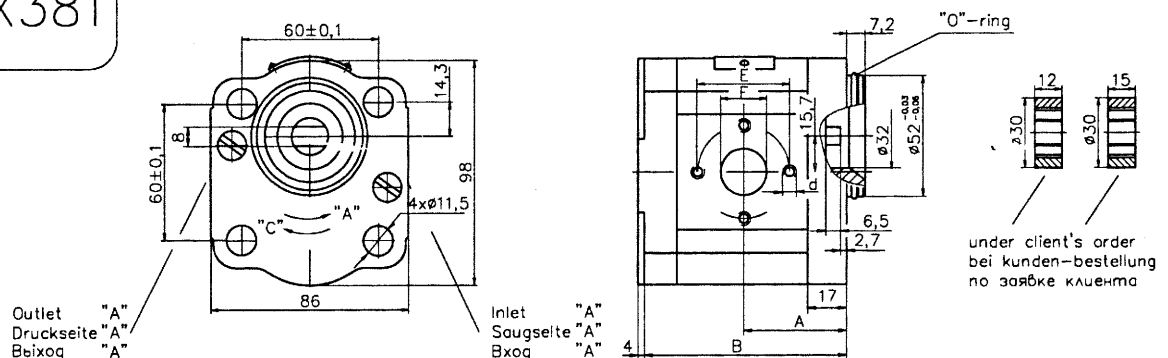
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A		Inlet Saugseite Вхог					Outlet Druckseite Выхог				
		E	d	F	M	G	E	d	F	M	G		
	cm ³	mm											
		mm											
		"											
		mm											
		"											
20A(C)4,5X292...	4,5	42,1	79,6				M20x1,5	G1/2			M16x1,5	G1/2	
20A(C)6,3X292...	6,3	43,6	82,6				M20x1,5	G1/2			M16x1,5	G1/2	
20A(C)8,2X292...	8,2	45,1	85,5				M20x1,5	G1/2			M16x1,5	G1/2	
20A(C)10X292...	10	46,6	88,5				M20x1,5	G3/4			M16x1,5	G1/2	
20A(C)11X292...	11,3	47,6	90,6				M20x1,5	G3/4			M16x1,5	G1/2	
20A(C)12X292...	12	48,2	91,9				M20x1,5	G3/4			M16x1,5	G1/2	
20A(C)14X292...	14	49,6	95				M20x1,5	G3/4			M16x1,5	G1/2	
20A(C)15X292...	15	50,6	96,5				M20x1,5	G3/4			M16x1,5	G1/2	
20A(C)16X292...	16	51,6	98,1				M20x1,5	G3/4			M16x1,5	G1/2	
20A(C)19X292...	19	53,6	103,1				M20x1,5	G3/4			M20x1,5	G1/2	
20A(C)22X292...	22	56,6	108,1				M20x1,5	G3/4			M20x1,5	G1/2	
20A(C)25X292...	25	58,8	113				M20x1,5	G3/4			M20x1,5	G1/2	

20^A_C...X380



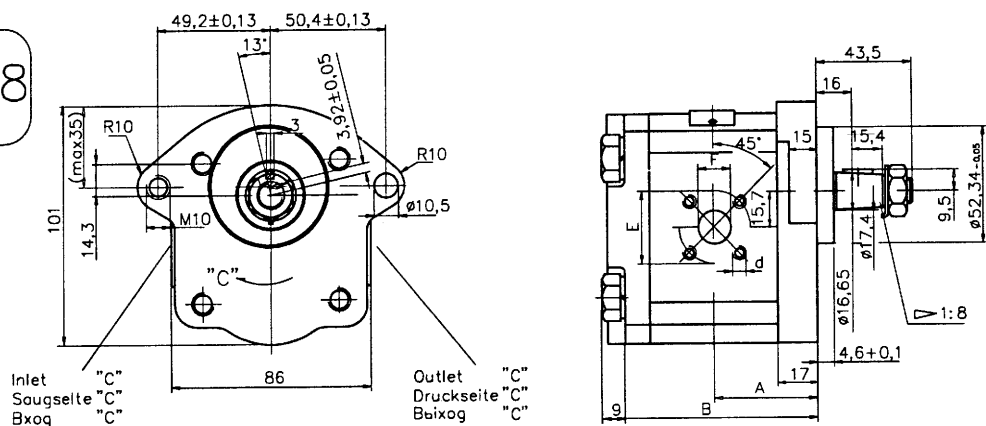
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог						
				E	d	F	M	G	E	d	F	M	G		
	cm ³	mm		mm					mm						
20A(C)4,5X380	4,5														
20A(C)6,3X380	6,3														
20A(C)8,2X380	8,2														
20A(C)10X380	10														
20A(C)11X380	11,3	47,6	97,8	40	M6	20				35	M6	15			
20A(C)12X380	12														
20A(C)14X380	14														
20A(C)15X380	15														
20A(C)16X380	16														
20A(C)19X380	19														
20A(C)22X380	22														
20A(C)25X380	25														

20^A_C...X381



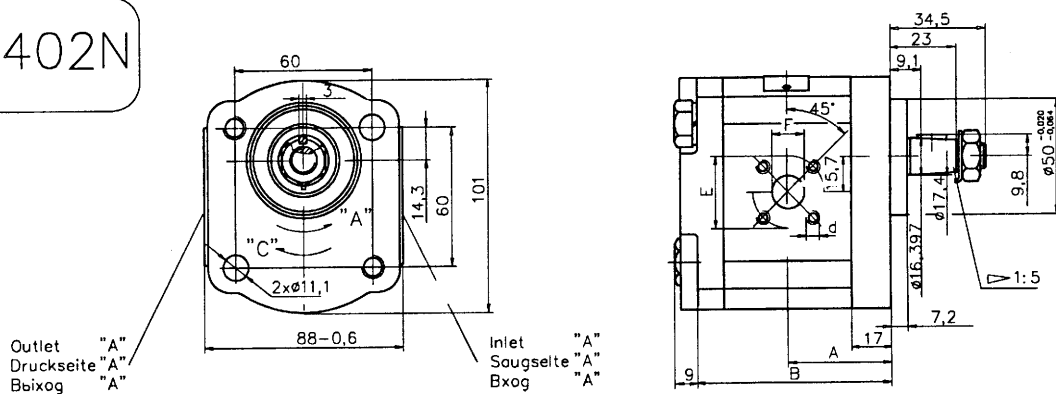
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог						
				E	d	F	M	G	E	d	F	M	G		
	cm ³	mm		mm					mm						
20A(C)4,5X381	4,5	40,5	78	40	M6	15				35	M6	15			
20A(C)6,3X381	6,3														
20A(C)8,2X381	8,2														
20A(C)10X381	10	45	87	40	M6	20				35	M6	15			
20A(C)11X381	11,3														
20A(C)12X381	12														
20A(C)14X381	14														
20A(C)15X381	15														
20A(C)16X381	16														
20A(C)19X381	19														
20A(C)22X381	22														
20A(C)25X381	25														

20C...X328



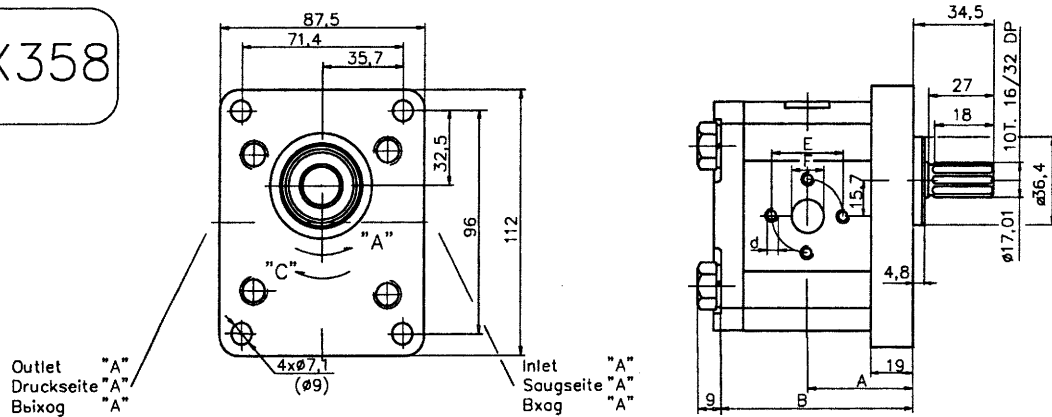
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		A		Inlet Saugseite Bxog					Outlet Druckseite Bixog						
		E	d	F	M	G	E	d	F	M	G				
	cm ³	mm													
20C4,5X328	4,5	42	81	40	M6	15	M20x1,5	G1/2	35	M6	15	M16x1,5	G1/2		
20C6,3X328	6,3	43,5	83,9	40	M6	20	M20x1,5	G1/2	35	M6	15	M16x1,5	G1/2		
20C8,2X328	8,2	45	87	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2		
20C10X328	10	46	89	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2		
20C11X328	11,3	46,6	90,3	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2		
20C12X328	12	48	93,4	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2		
20C14X328	14	49	94,9	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2		
20C15X328	15	50	96,5	40	M6	20	M20x1,5	G3/4	35	M6	15	M16x1,5	G1/2		
20C16X328	16	52	101,5	40	M6	20	M20x1,5	G3/4	35	M6	15	M20x1,5	G1/2		
20C19X328	19	55	106,5	40	M6	20	M20x1,5	G3/4	35	M6	15	M20x1,5	G1/2		
20C22X328	22	57,2	111,4	40	M6	20	M20x1,5	G3/4	35	M6	15	M20x1,5	G1/2		
20C25X328	25														

20^A/_C...X402N



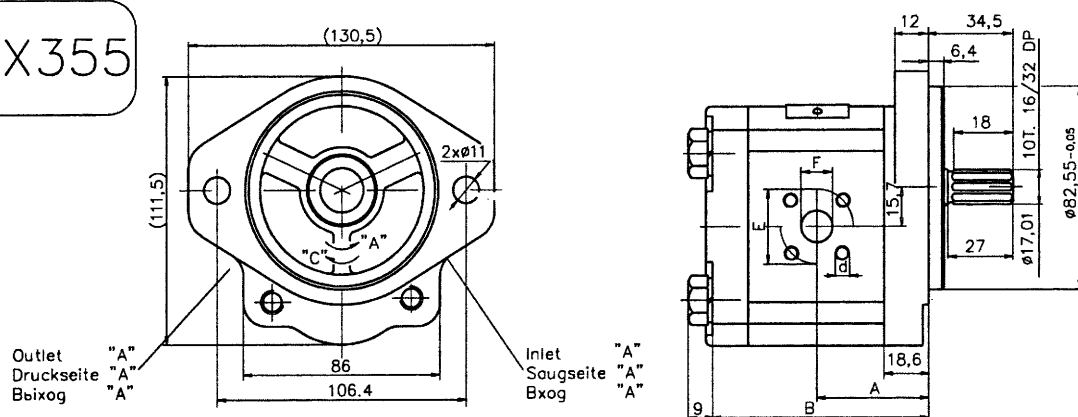
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		A		Inlet Saugseite Bxog					Outlet Druckseite Bixog						
		E	d	F	M	G	E	d	F	M	G				
	cm ³	mm													
20A(C)4,5X402N	4,5														
20A(C)6,3X402N	6,3														
20A(C)8,2X402N	8,2	43	83,9	40	M6	20	M20x1,5	G1/2	35	M6	15	M16x1,5	G1/2		
20A(C)10X402N	10														
20A(C)11X402N	11,3														
20A(C)12X402N	12														
20A(C)14X402N	14														
20A(C)15X402N	15														
20A(C)16X402N	16														
20A(C)19X402N	19														
20A(C)22X402N	22														
20A(C)25X402N	25														

20^A_C...X358



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог						
				E	d	F	M	G	E	d	F	M	G		
	cm ³	mm		mm					mm						
20A(C)4,5X358	4,5	42,5	80	30	1/4-20UNC	13					30	1/4-20UNC	13		
20A(C)6,3X358	6,3	42,5	80	30		13					30		13		
20A(C)8,2X358	8,2	42,5	80	30		13					30		13		
20A(C)10X358	10	47	89	40		19					30		14		
20A(C)11X358	11,3	48	91,1	40		19					30		14		
20A(C)12X358	12	48,7	92,3	40		19					30		14		
20A(C)14X358	14	50,2	95,4	40		19					30		14		
20A(C)15X358	15	51	96,9	40		19					30		14		
20A(C)16X358	16	51,8	98,6	40		19					30		14		
20A(C)19X358	19	54,3	103,5	40		19					30		14		
20A(C)22X358	22	56,8	108,5	40	19					30	14				
20A(C)25X358	25	59,2	113,4	40	19					40	19				

20^A_C...X355



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог					
				E	d	F	M	G	E	d	F	M	G	
	cm ³	mm		mm					mm					
20A(C)4,5X355	4,5	42	79,6	40	M6	15				35	M6	15		
20A(C)6,3X355	6,3	43,6	82,6	40	M6	15				35	M6	15		
20A(C)8,2X355	8,2	45	85,5	40	M6	20				35	M6	15		
20A(C)10X355	10	46,5	88,6	40	M6	20				35	M6	15		
20A(C)11X355	11,3	47,5	90,7	40	M6	20				35	M6	15		
20A(C)12X355	12	48,2	91,7	40	M6	20				35	M6	15		
20A(C)14X355	14	49,6	95	40	M6	20				35	M6	15		
20A(C)15X355	15	50,5	96,5	40	M6	20				35	M6	15		
20A(C)16X355	16	51,6	98,2	40	M6	20				35	M6	15		
20A(C)19X355	19	53,5	103,1	40	M6	20				35	M6	15		
20A(C)22X355	22	56,6	108,1	40	M6	20				35	M6	15		
20A(C)25X355	25	58,8	113	40	M6	20				35	M6	15		



Hydraulic Gear Pumps Hydraulische Zahnradpumpen Шестеренные насосы Gr 30 250 bar



Used symbols:

- q - displacement;
 p_{nom} - nominal pressure;
 n_{min} - minimal speed;
 n_{nom} - nominal speed;
 n_{max} - maximal speed;
 P_{nom} - power at p_{nom}
 and n_{nom}
 P_{max} - power at p_{nom}
 and n_{max}

volumetric efficiencies;

- η_{qmin} - at min. speed;
 η_{qnom} - at nom. speed;
 η_{qmax} - at max. speed;

efficiencies;

- η_{min} - at min. speed;
 η_{nom} - at nom. speed;
 η_{max} - at max. speed;

Bezeichnungen:

- Foerdervolumen;
 nominal Druck;
 minimal Geschwindigkeit;
 nominal Geschwindigkeit;
 maximal Geschwindigkeit;
 Leistung bei p_{nom} und
 n_{nom}
 Leistung bei p_{nom} und
 n_{max}

volumetrischer Wirkungsgrad;

- bei min. Geschwindigkeit;
 bei nom. Geschwindigkeit;
 bei max. Geschwindigkeit;

Wirkungsgrad gesamt;

- bei min. Geschwindigkeit;
 bei nom. Geschwindigkeit;
 bei max. Geschwindigkeit;

Обозначения:

- рабочий объем
 номинальное давление
 минимальная скорость
 номинальная скорость
 максимальная скорость
 мощность при p_{nom}
 и n_{nom}
 мощность при p_{nom}
 и n_{max}

объемный кпд

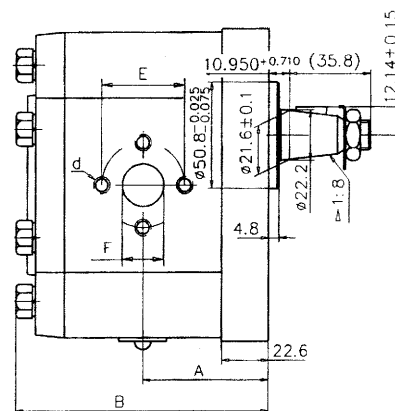
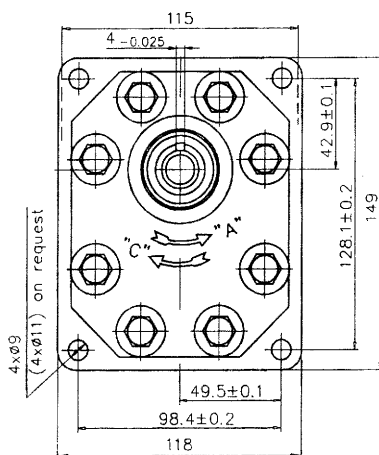
- при мин. скорость
 при ном. скорость
 при макс. скорость

общий КПД.

- при мин. скорость
 при ном. скорость
 при ном. скорость

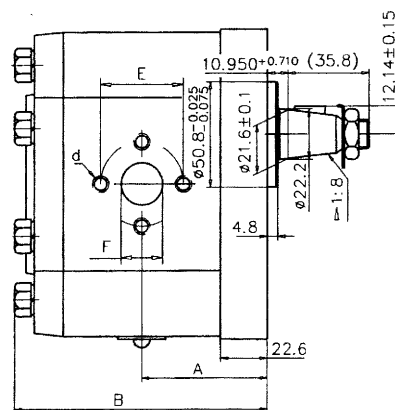
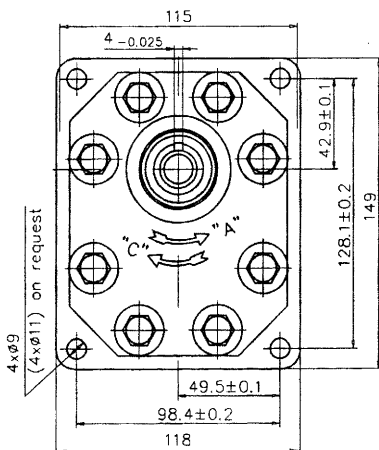
q	cm ³	20H	22.5H	25H	28H	32 32H	36 36H	42 42H	46H	50H	55H	60H
p_{nom}	bar	250	250	250	250	250	250	230	230	200	200	180
n_{min}	min ⁻¹	650	650	650	650	650	650	650	650	650	650	650
n_{nom}	min ⁻¹	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
n_{max}	min ⁻¹	2500	2500	2500	2500	2500	2300	2300	2100	2100	1750	1750
η_{qmin}	%	80	80	82	83	83	83	84	84	85	85	85
η_{min}	%	73	73	74	75	75	76	76	77	78	78	78
η_{qnom}	%	94	94	94	94	94	94	95	95	95	95	95
η_{nom}	%	85	85	86	86	86	86	85	85	85	85	85
η_{qmax}	%	93	93	93	94	94	94	94	94	94	94	94
η_{max}	%	83	83	84	84	84	84	84	83	83	83	83
P_{nom}	kW	13.5	15.3	16.8	18.8	22.5	25	27.5	30	28	33	36
P_{max}	kW	23	26	28	31.5	36	38	41.5	41	44.5	38	37.5

30^A_C...X146

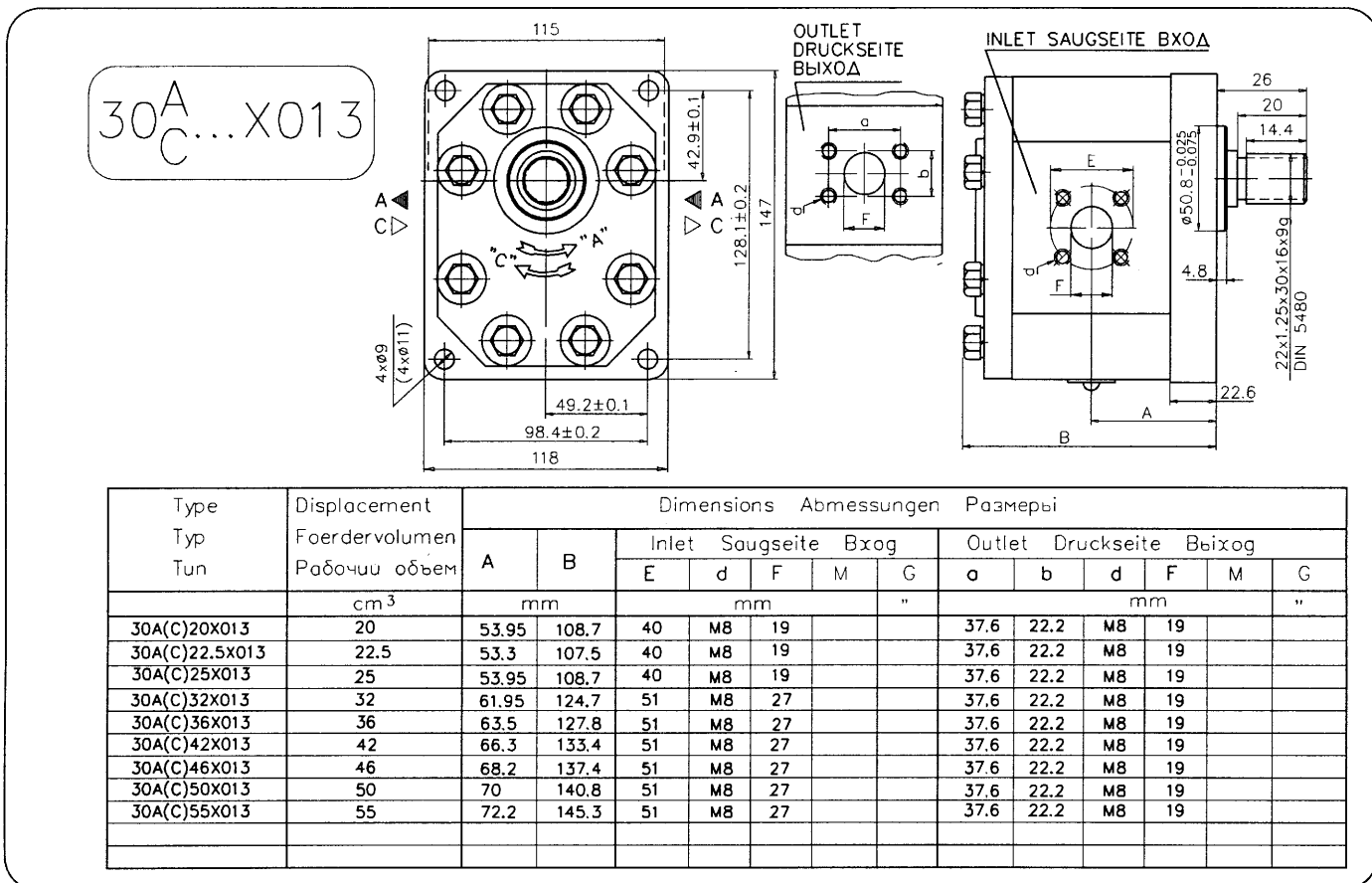
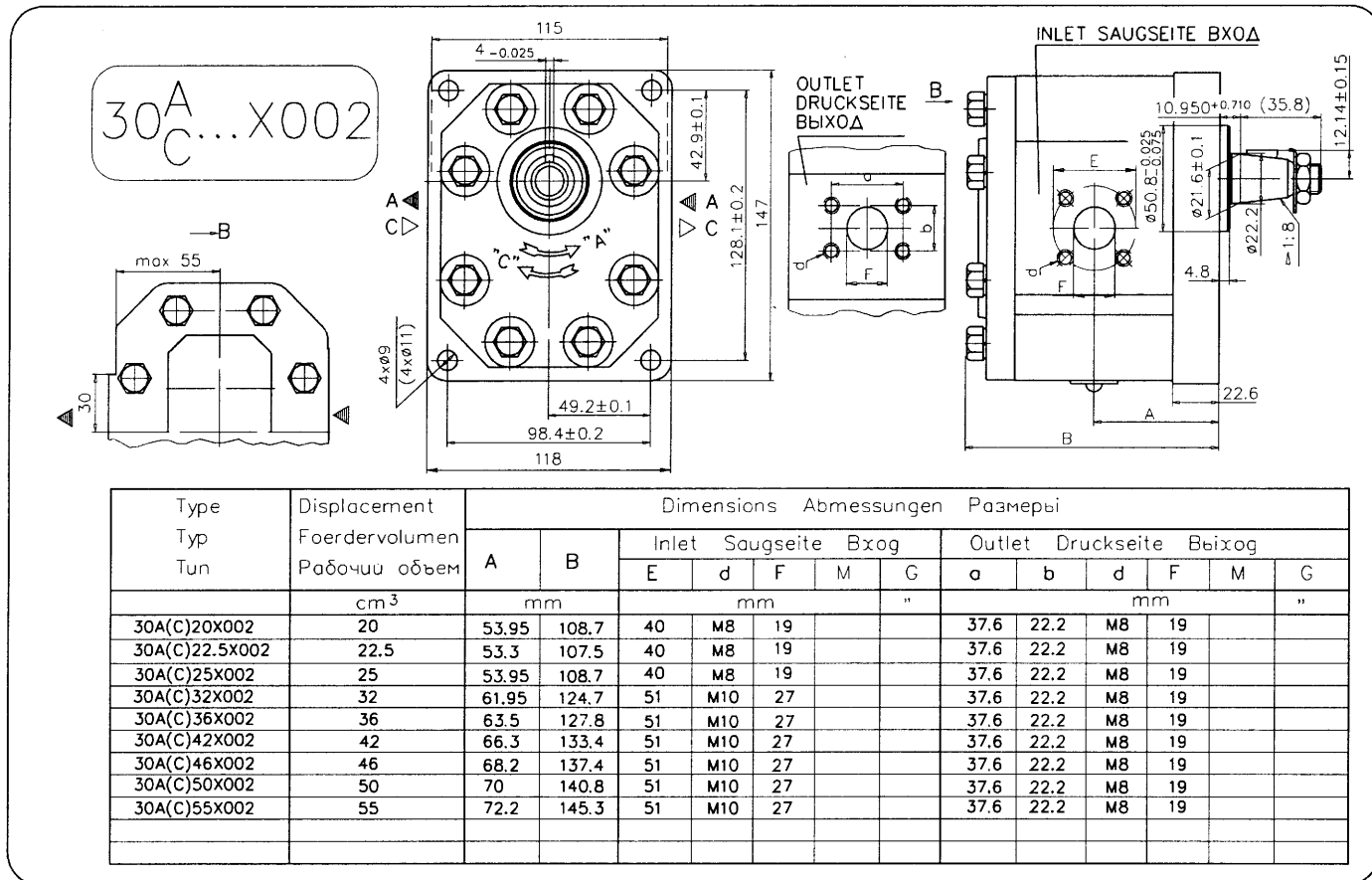


Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A B		Inlet Saugseite Вхог					Outlet Druckseite Выхог				
		mm	mm	E	d	F	M	G	E	d	F	M	G
	cm ³	mm											
30A(C)20X146	20	54	112.3	40	M8	19			40	M8	19		
30A(C)22.5X146	22.5	53.3	110.9	40	M8	19			40	M8	19		
30A(C)25X146	25	54	112.3	40	M8	19			40	M8	19		
30A(C)32X146	32	62	128.3	51	M10	27			40	M8	19		
30A(C)36X146	36	63.5	131.4	51	M10	27			40	M8	19		
30A(C)42X146	42	66.3	137	51	M10	27			40	M8	19		
30A(C)46X146	46	68.2	140.8	51	M10	27			40	M8	19		
30A(C)50X146	50	70	144.4	51	M10	27			40	M8	19		
30A(C)55X146	55	72.2	148.9	51	M10	27			40	M8	19		

30^A_C...X162

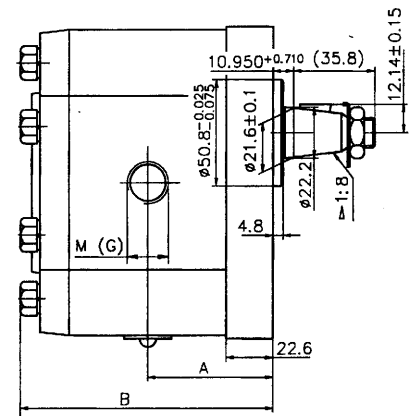
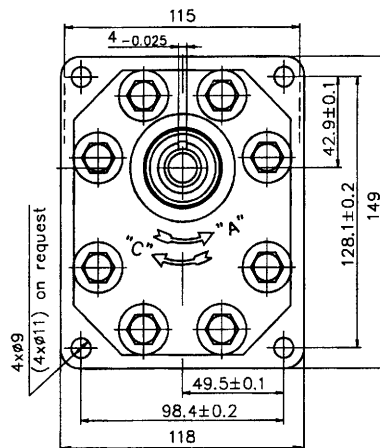


Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры								
		A B		Inlet Saugseite Вхог			Outlet Druckseite Выхог			
		mm	mm	E	d	F	E	d	F	
	cm ³	mm								
30A(C)20X162	20	54	112.3	40	5/16"-18UNC-2B	19	40	5/16"-18UNC-2B	19	
30A(C)22.5X162	22.5	53.3	110.9	40	5/16"-18UNC-2B	19	40	5/16"-18UNC-2B	19	
30A(C)25X162	25	54	112.3	40	5/16"-18UNC-2B	19	40	5/16"-18UNC-2B	19	
30A(C)32X162	32	62	128.3	51	3/8"-16UNC-2B	27	40	5/16"-18UNC-2B	19	
30A(C)36X162	36	63.5	131.4	51	3/8"-16UNC-2B	27	40	5/16"-18UNC-2B	19	
30A(C)42X162	42	66.3	137	51	3/8"-16UNC-2B	27	40	5/16"-18UNC-2B	19	
30A(C)46X162	46	68.2	140.8	51	3/8"-16UNC-2B	27	40	5/16"-18UNC-2B	19	
30A(C)50X162	50	70	144.4	51	3/8"-16UNC-2B	27	40	5/16"-18UNC-2B	19	
30A(C)55X162	55	72.2	148.9	51	3/8"-16UNC-2B	27	40	5/16"-18UNC-2B	19	



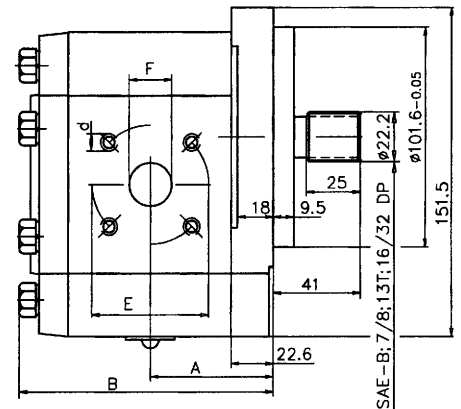
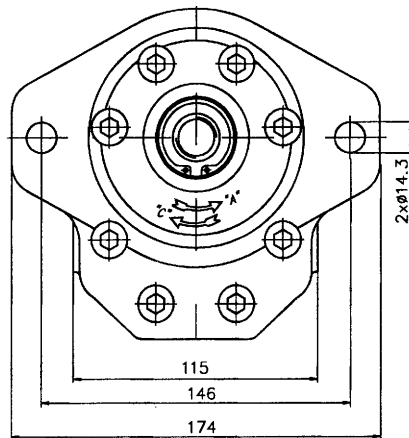
30^A_C...X163

- metric thread
G - GAS thread



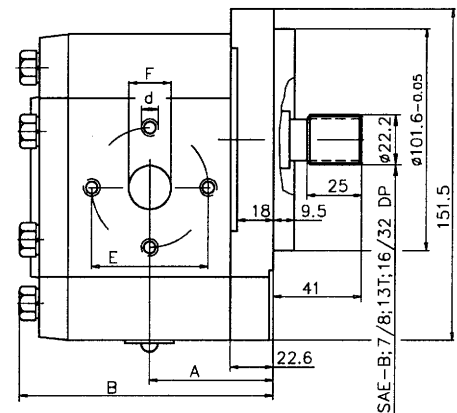
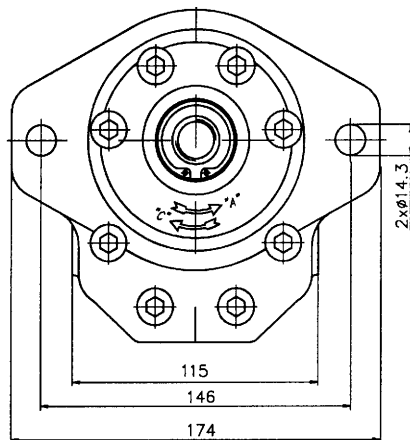
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог				
				E	d	F	M	G	E	d	F	M	G
	cm ³	mm		mm					"				
30A(C)20X163	20	54	112.3				M27x1.5	G3/4				M27x1.5	G3/4
30A(C)22.5X163	22.5	53.3	110.9				M27x1.5	G3/4				M27x1.5	G3/4
30A(C)25X163	25	54	112.3				M27x1.5	G3/4				M27x1.5	G3/4
30A(C)32X163	32	62	128.3				M33x1.5	G 1				M27x1.5	G3/4
30A(C)36X163	36	63.5	131.4				M33x1.5	G 1				M27x1.5	G3/4
30A(C)42X163	42	66.3	137				M33x1.5	G 1				M27x1.5	G3/4
30A(C)46X163	46	68.2	140.8				M33x1.5	G 1				M27x1.5	G3/4
30A(C)50X163	50	70	144.4				M33x1.5	G 1				M27x1.5	G3/4
30A(C)55X163	55	72.2	148.9				M33x1.5	G 1				M27x1.5	G3/4

30^A_C...X169



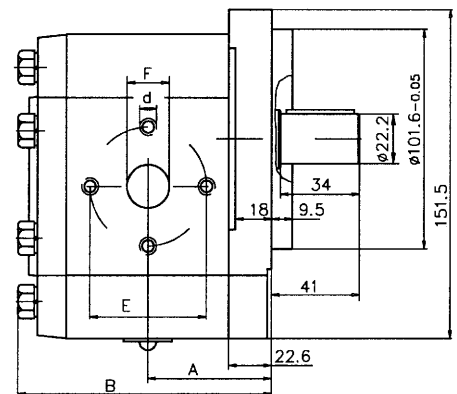
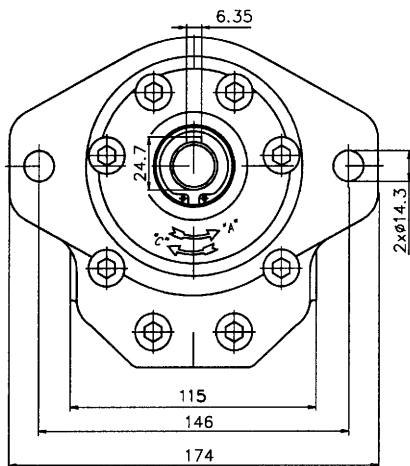
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог				
				E	d	F	M	G	E	d	F	M	G
	cm ³	mm		mm					"				
30A(C)20X169	20	54	112.3	40	M8	19			40	M8	19		
30A(C)22.5X169	22.5	53.3	110.9	40	M8	19			40	M8	19		
30A(C)25X169	25	54	112.3	40	M8	19			40	M8	19		
30A(C)32X169	32	62	128.3	55	M8	27			55	M8	19		
30A(C)36X169	36	63.5	131.4	55	M8	27			55	M8	19		
30A(C)42X169	42	66.3	137	55	M8	27			55	M8	19		
30A(C)46X169	46	68.2	140.8	55	M8	27			55	M8	19		
30A(C)50X169	50	70	144.4	55	M8	27			55	M8	19		
30A(C)55X169	55	72.2	148.9	55	M8	27			55	M8	19		

30^A_C...X236



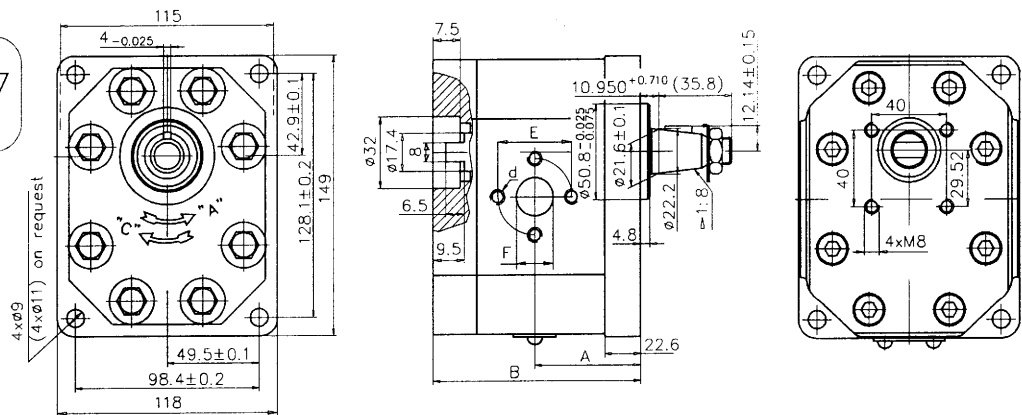
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A		Inlet Saugseite Вхог					Outlet Druckseite Выхог					
		E	d	F	M	G	E	d	F	M	G			
	cm ³	mm											"	
30A(C)20X236	20	54	112.3	40	M8	19					40	M8	19	
30A(C)22.5X236	22.5	53.3	110.9	40	M8	19					40	M8	19	
30A(C)25X236	25	54	112.3	40	M8	19					40	M8	19	
30A(C)32X236	32	62	128.3	51	M10	27					40	M8	19	
30A(C)36X236	36	63.5	131.4	51	M10	27					40	M8	19	
30A(C)42X236	42	66.3	137	51	M10	27					40	M8	19	
30A(C)46X236	46	68.2	140.8	51	M10	27					40	M8	19	
30A(C)50X236	50	70	144.4	51	M10	27					40	M8	19	
30A(C)55X236	55	72.2	148.9	51	M10	27					40	M8	19	

30^A_C...X237



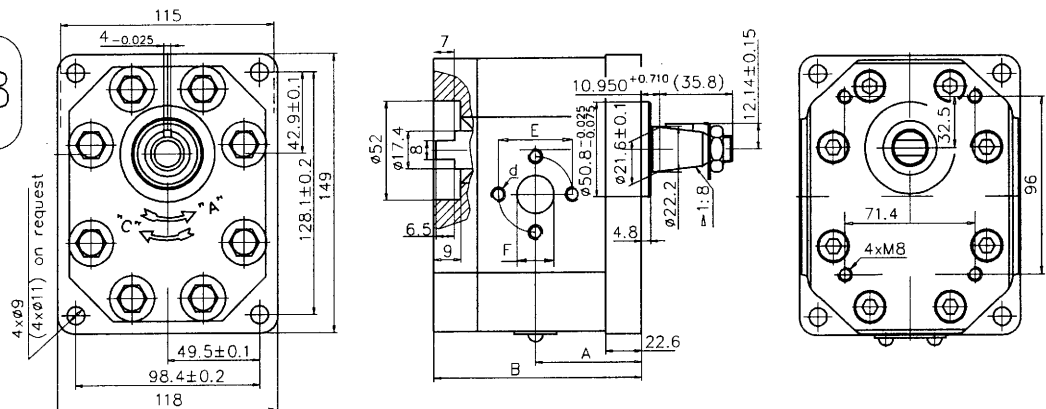
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A		Inlet Saugseite Вхог					Outlet Druckseite Выхог					
		E	d	F	M	G	E	d	F	M	G			
	cm ³	mm											"	
30A(C)20X237	20	54	112.3	40	M8	19					40	M8	19	
30A(C)22.5X237	22.5	53.3	110.9	40	M8	19					40	M8	19	
30A(C)25X237	25	54	112.3	40	M8	19					40	M8	19	
30A(C)32X237	32	62	128.3	51	M10	27					40	M8	19	
30A(C)36X237	36	63.5	131.4	51	M10	27					40	M8	19	
30A(C)42X237	42	66.3	137	51	M10	27					40	M8	19	
30A(C)46X237	46	68.2	140.8	51	M10	27					40	M8	19	
30A(C)50X237	50	70	144.4	51	M10	27					40	M8	19	
30A(C)55X237	55	72.2	148.9	51	M10	27					40	M8	19	

30^A_C...X197



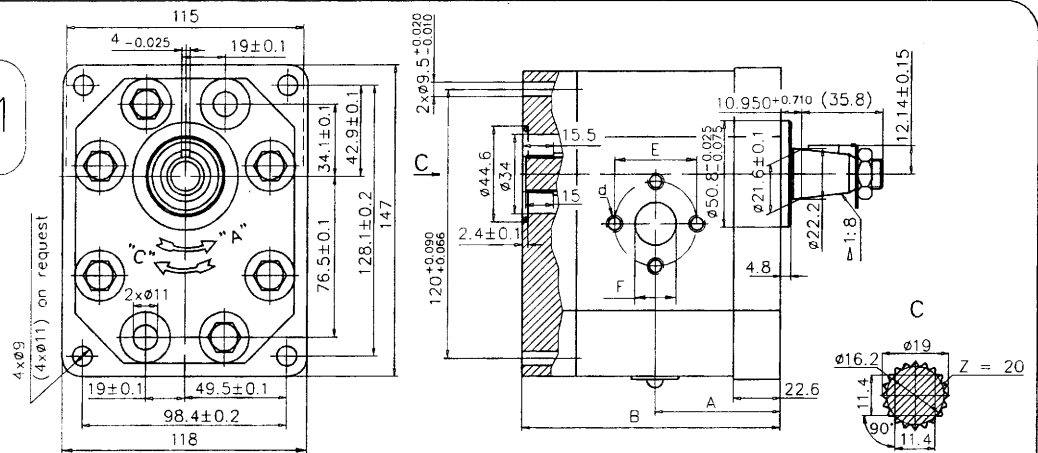
Type Typ Тип	Displacement Förder volumen Рабочий объем	Dimensions Abmessungen Размеры											
		Inlet Saugseite Вхог		Outlet Druckseite Выхог									
		A	B	E	d	F	M	G	E	d	F	M	G
	cm ³	mm		mm					mm				
30A(C)20X197	20	54	112.8	40	M8	19			40	M8	19		
30A(C)22.5X197	22.5	53.3	111.4	40	M8	19			40	M8	19		
30A(C)25X197	25	54	112.8	40	M8	19			40	M8	19		
30A(C)32X197	32	62	128.8	51	M10	27			40	M8	19		
30A(C)36X197	36	63.5	131.9	51	M10	27			40	M8	19		
30A(C)42X197	42	66.3	137.5	51	M10	27			40	M8	19		
30A(C)46X197	46	68.2	141.3	51	M10	27			40	M8	19		
30A(C)50X197	50	70	144.9	51	M10	27			40	M8	19		
30A(C)55X197	55	72.2	149.4	51	M10	27			40	M8	19		

30^A_C...X198



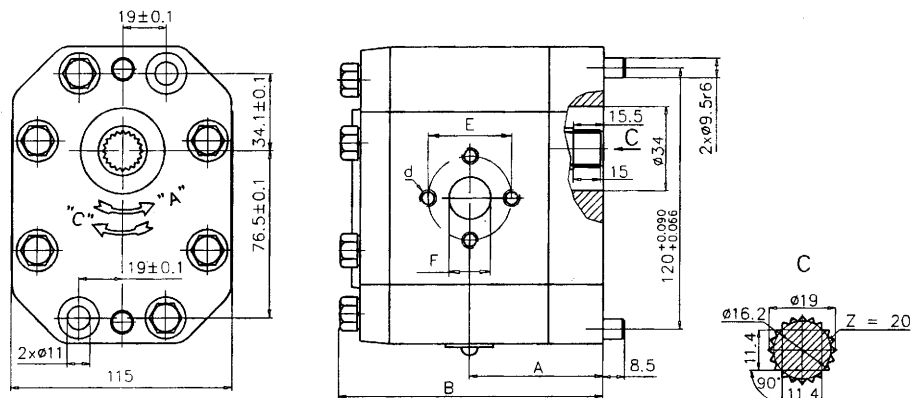
Type Typ Тип	Displacement Förder volumen Рабочий объем	Dimensions Abmessungen Размеры											
		Inlet Saugseite Вхог		Outlet Druckseite Выхог									
		A	B	E	d	F	M	G	E	d	F	M	G
	cm ³	mm		mm					mm				
30A(C)20X198	20	54	110.3	40	M8	19			40	M8	19		
30A(C)22.5X198	22.5	53.3	108.9	40	M8	19			40	M8	19		
30A(C)25X198	25	54	110.3	40	M8	19			40	M8	19		
30A(C)32X198	32	62	126.3	51	M10	27			40	M8	19		
30A(C)36X198	36	63.5	129.4	51	M10	27			40	M8	19		
30A(C)42X198	42	66.3	135	51	M10	27			40	M8	19		
30A(C)46X198	46	68.2	138.8	51	M10	27			40	M8	19		
30A(C)50X198	50	70	142.4	51	M10	27			40	M8	19		
30A(C)55X198	55	72.2	146.9	51	M10	27			40	M8	19		

30^A_C...X241



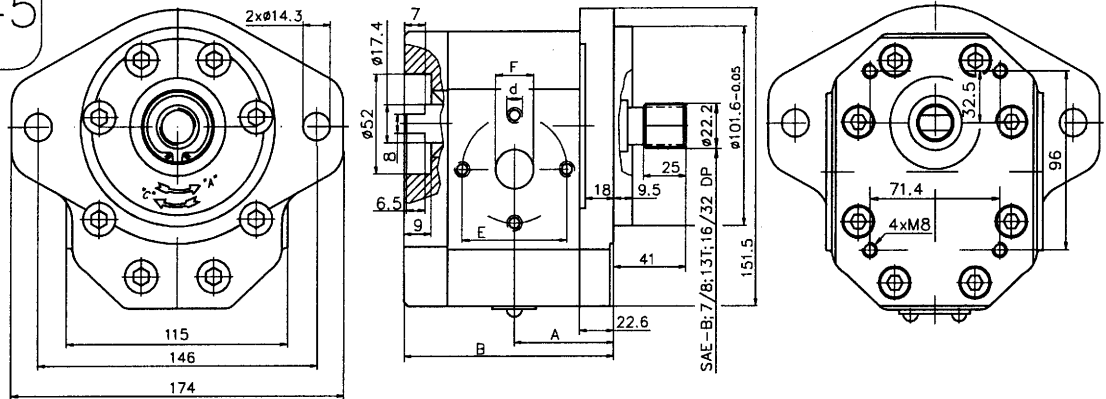
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог				
				E	d	F	M	G	E	d	F	M	G
	cm ³	mm											
30A(C)20X241	20	54	110.1	40	M8	19	M27x1.5	G3/4	40	M8	19	M27x1.5	G3/4
30A(C)22.5X241	22.5	53.3	108.7	40	M8	19	M27x1.5	G3/4	40	M8	19	M27x1.5	G3/4
30A(C)25X241	25	54	110.1	40	M8	19	M27x1.5	G3/4	40	M8	19	M27x1.5	G3/4
30A(C)32X241	32	62	126.1	51	M10	27	M33x1.5	G1	40	M8	19	M27x1.5	G3/4
30A(C)36X241	36	63.5	129.2	51	M10	27	M33x1.5	G1	40	M8	19	M27x1.5	G3/4
30A(C)42X241	42	66.3	134.8	51	M10	27	M33x1.5	G1	40	M8	19	M27x1.5	G3/4
30A(C)46X241	46	68.2	138.6	51	M10	27	M33x1.5	G1	40	M8	19	M27x1.5	G3/4
30A(C)50X241	50	70	142.4	51	M10	27	M33x1.5	G1	40	M8	19	M27x1.5	G3/4
30A(C)55X241	55	72.2	146.7	51	M10	27	M33x1.5	G1	40	M8	19	M27x1.5	G3/4

30^A_C...X242



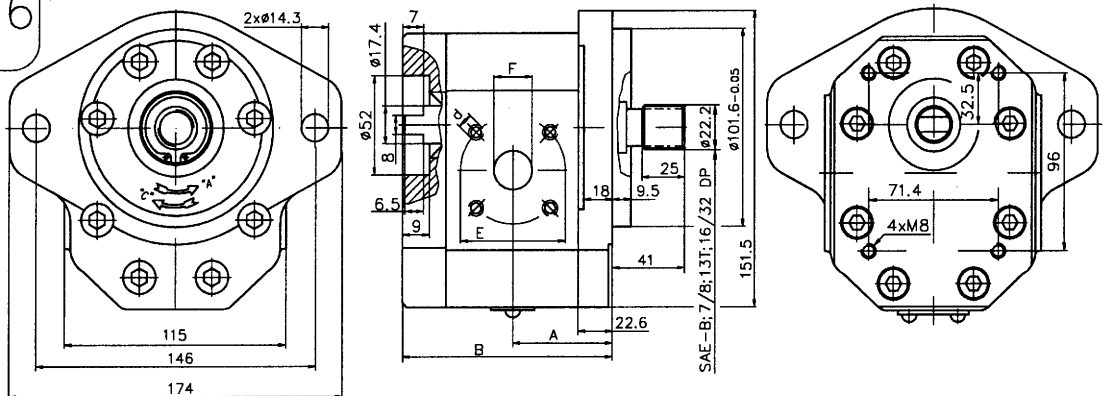
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог				
				E	d	F	M	G	E	d	F	M	G
	cm ³	mm											
30A(C)20X242	20	56.2	111	40	M8	19	M27x1.5	G3/4	40	M8	19	M27x1.5	G3/4
30A(C)22.5X242	22.5	55.5	109.6	40	M8	19	M27x1.5	G3/4	40	M8	19	M27x1.5	G3/4
30A(C)25X242	25	56.2	111	40	M8	19	M27x1.5	G3/4	40	M8	19	M27x1.5	G3/4
30A(C)32X242	32	64.2	127	51	M10	27	M33x1.5	G1	40	M8	19	M27x1.5	G3/4
30A(C)36X242	36	65.7	130.1	51	M10	27	M33x1.5	G1	40	M8	19	M27x1.5	G3/4
30A(C)42X242	42	68.5	135.7	51	M10	27	M33x1.5	G1	40	M8	19	M27x1.5	G3/4
30A(C)46X242	46	70.4	139.5	51	M10	27	M33x1.5	G1	40	M8	19	M27x1.5	G3/4
30A(C)50X242	50	72.2	143.1	51	M10	27	M33x1.5	G1	40	M8	19	M27x1.5	G3/4
30A(C)55X242	55	74.4	147.6	51	M10	27	M33x1.5	G1	40	M8	19	M27x1.5	G3/4

30^A_C...X245



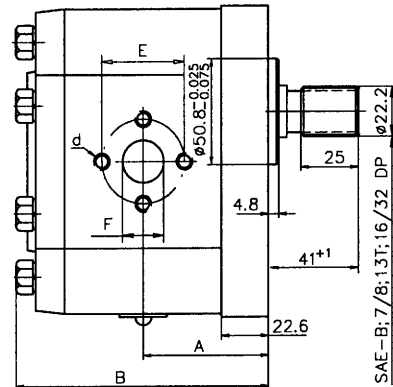
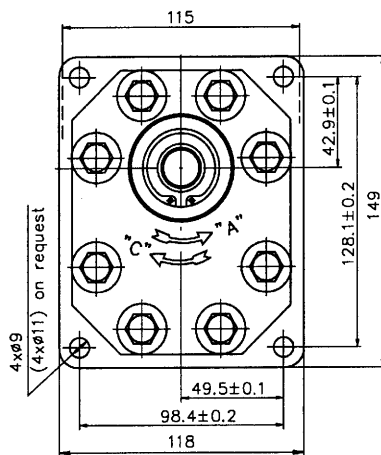
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог				
				E	d	F	M	G	E	d	F	M	G
	cm ³	mm		mm					mm				
30A(C)20X245	20	54	110.3	40	M8	19			40	M8	19		
30A(C)22.5X245	22.5	53.3	108.9	40	M8	19			40	M8	19		
30A(C)25X245	25	54	110.3	40	M8	19			40	M8	19		
30A(C)32X245	32	62	126.3	51	M10	27			40	M8	19		
30A(C)36X245	36	63.5	129.4	51	M10	27			40	M8	19		
30A(C)42X245	42	66.3	135	51	M10	27			40	M8	19		
30A(C)46X245	46	68.2	138.8	51	M10	27			40	M8	19		
30A(C)50X245	50	70	142.4	51	M10	27			40	M8	19		
30A(C)55X245	55	72.2	146.9	51	M10	27			40	M8	19		

30^A_C...X276



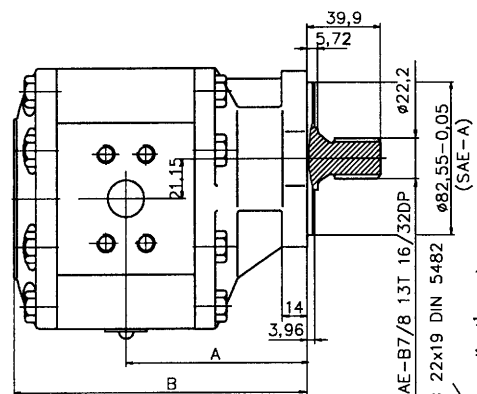
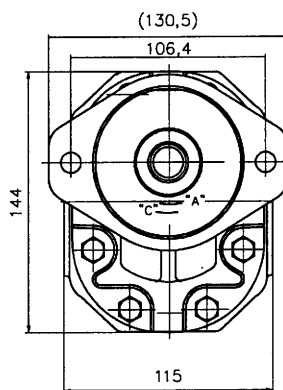
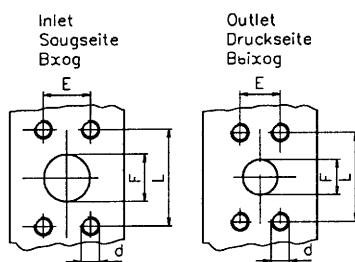
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог				
				E	d	F	M	G	E	d	F	M	G
	cm ³	mm		mm					mm				
30A(C)20X276	20	54	110.3	40	M8	19			40	M8	19		
30A(C)22.5X276	22.5	53.3	108.9	40	M8	19			40	M8	19		
30A(C)25X276	25	54	110.3	40	M8	19			40	M8	19		
30A(C)32X276	32	62	126.3	55	M8	27			55	M8	19		
30A(C)36X276	36	63.5	129.4	55	M8	27			55	M8	19		
30A(C)42X276	42	66.3	135	55	M8	27			55	M8	19		
30A(C)46X276	46	68.2	138.8	55	M8	27			55	M8	19		
30A(C)50X276	50	70	142.4	55	M8	27			55	M8	19		
30A(C)55X276	55	72.2	146.9	55	M8	27			55	M8	19		

30^A...X300
C



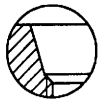
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		Inlet Saugseite Вхог		Outlet Druckseite Выхог									
		A	B	E	d	F	M	G	E	d	F	M	G
	cm ³	mm		mm					mm				
30A(C)20X300	20	54	112.3	40	M8	19			40	M8	19		
30A(C)22.5X300	22.5	53.3	110.9	40	M8	19			40	M8	19		
30A(C)25X300	25	54	112.3	40	M8	19			40	M8	19		
30A(C)32X300	32	62	128.3	51	M10	27			40	M8	19		
30A(C)36X300	36	63.5	131.4	51	M10	27			40	M8	19		
30A(C)42X300	42	66.3	137	51	M10	27			40	M8	19		
30A(C)46X300	46	68.2	140.8	51	M10	27			40	M8	19		
30A(C)50X300	50	70	144.4	51	M10	27			40	M8	19		
30A(C)55X300	55	72.2	148.9	51	M10	27			40	M8	19		

30C...X274

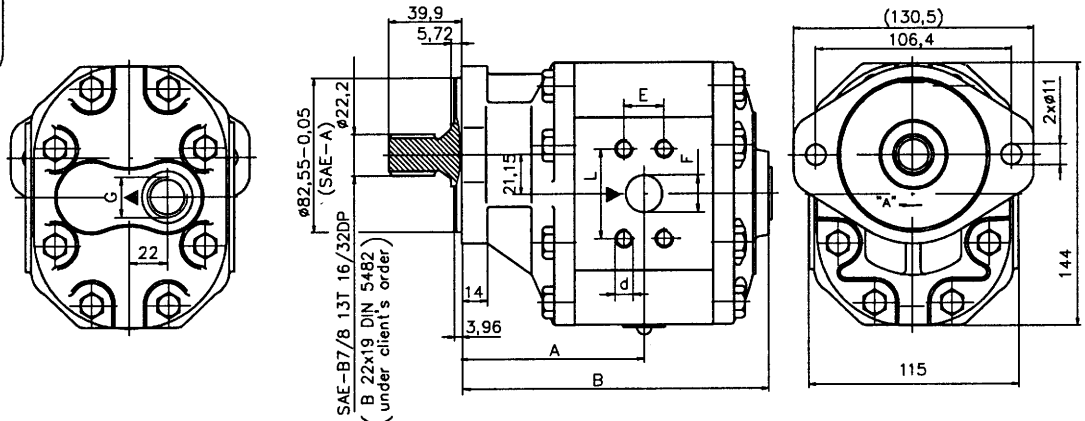


Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		Inlet Saugseite Вхог		Outlet Druckseite Выхог									
		A	B	E	L	F	M	G	E	L	F	M	G
	cm ³	mm		mm					mm				
30C32X274	32	101	163.8	52.4	26.2	$\phi 27$			52.4	26.2	$\phi 18$		
30C55X274	55	111.2	184.4	35.6	69.8	$\phi 32$			52.4	26.2	$\phi 22$		

30A...X323...

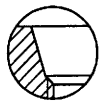


SAE J475 (ISO R725)
for outlet port

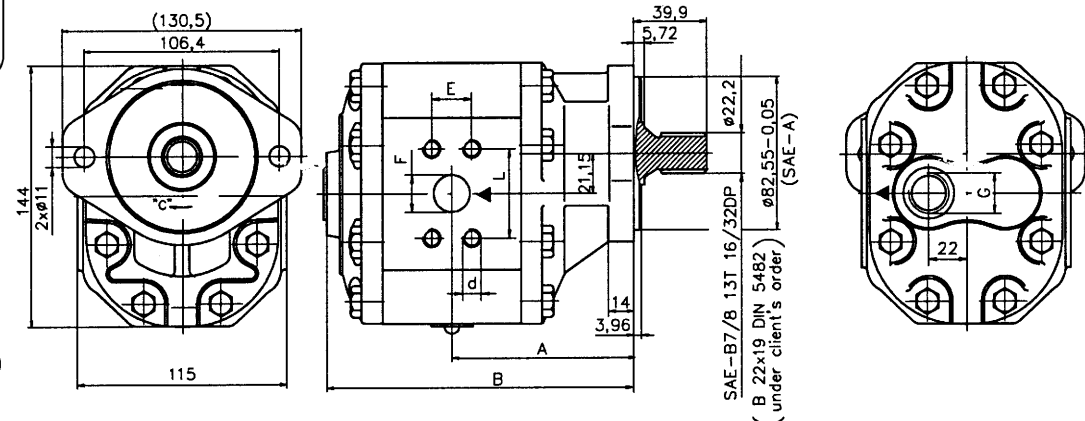


Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры																
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Изхог									
				E	L	F	M	G	E	L	F	G						
	cm ³	mm		mm					"				mm					
30A32X323	32	101	169.3	52.4	26.2	27												1 1/16" 12 UNF
30A32X323H	32	105.5	178.3	52.4	26.2	27												1 1/16" 12 UNF
30A55X323H	55	115.7	198.9	35.6	69.8	32												1 1/16" 12 UNF

30C...X323...

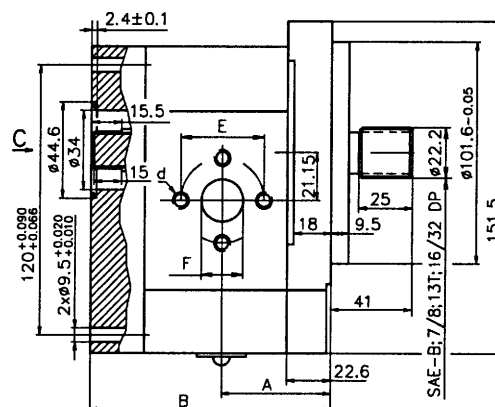
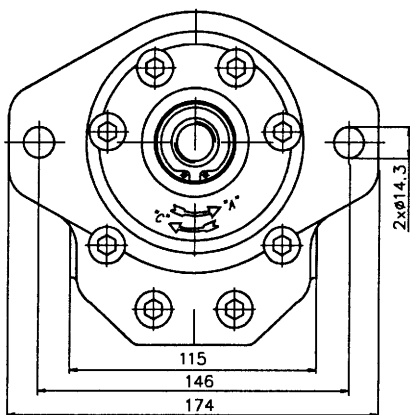
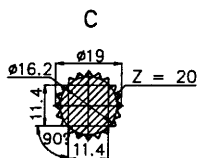


SAE J475 (ISO R725)
for outlet port



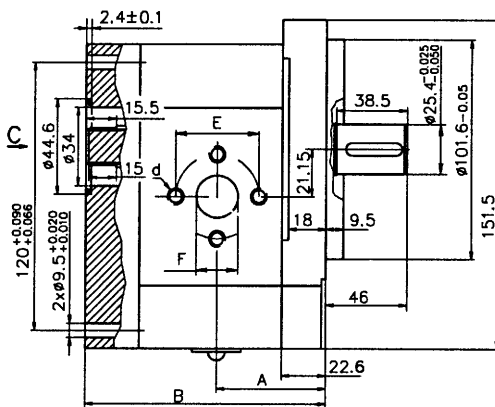
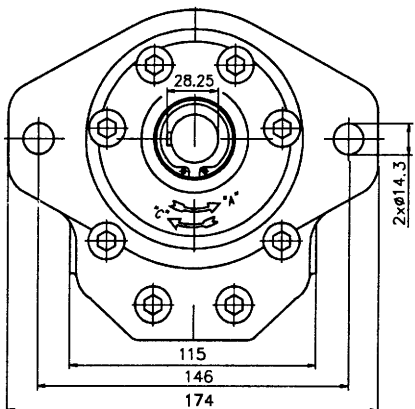
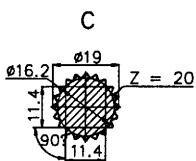
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры																
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Изхог									
				E	L	F	M	G	E	L	F	G						
	cm ³	mm		mm					"				mm					
30C32X323	32	101	169.3	52.4	26.2	27												1 1/16" 12 UNF
30C32X323H	32	105.5	178.3	52.4	26.2	27												1 1/16" 12 UNF
30C55X323H	55	115.7	198.9	35.6	69.8	32												1 1/16" 12 UNF

30^A_C...X309...



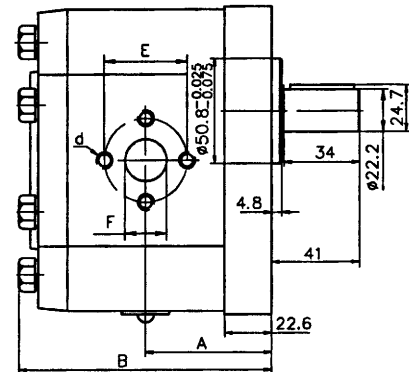
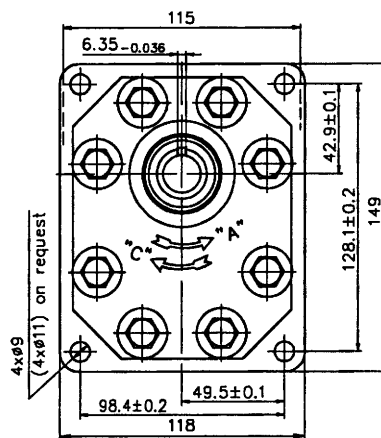
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A		Inlet Saugseite Вхог					Outlet Druckseite Выхог				
		mm	mm	E	d	F	M	G	E	d	F	M	G
	cm ³	mm											
30A(C)20X309H	20	56.1	114.5	40	M8	19			40	M8	19		
30A(C)22.5X309H	22.5	57.6	117.5	40	M8	19			40	M8	19		
30A(C)25X309H	25	58.3	118.9	40	M8	19			40	M8	19		
30A(C)28X309H	28	60.2	122.5	40	M8	19			40	M8	19		
30A(C)32X309	32	62	126.1	51	M10	27			40	M8	19		
30A(C)32X309H	32	66.5	135.1	51	M10	27			40	M8	19		
30A(C)36X309	36	63.5	129.2	51	M10	27			40	M8	19		
30A(C)36X309H	36	68	138.3	51	M10	27			40	M8	19		
30A(C)42X309	42	66.3	134.8	51	M10	27			40	M8	19		
30A(C)42X309H	42	70.8	143.9	51	M10	27			40	M8	19		
30A(C)46X309H	46	72.7	147.6	51	M10	27			40	M8	19		
30A(C)50X309H	50	74.5	151.2	51	M10	27			40	M8	19		
30A(C)55X309H	55	76.7	155.7	51	M10	27			40	M8	19		
30A(C)60X309H	60	78.7	160.2	51	M10	27			40	M8	19		

30^A_C...X345...



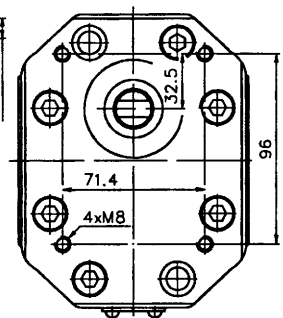
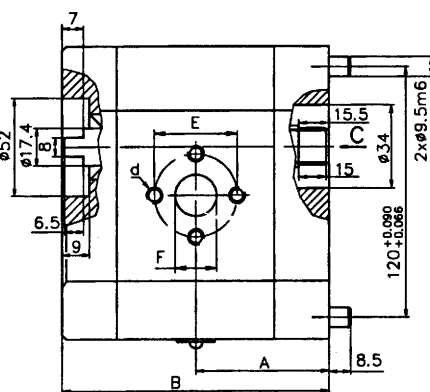
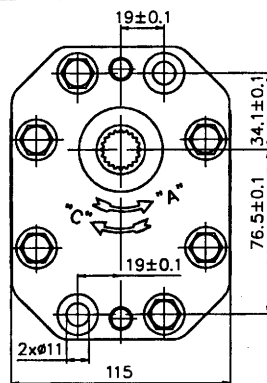
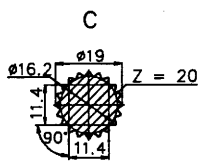
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A		Inlet Saugseite Вхог					Outlet Druckseite Выхог				
		mm	mm	E	d	F	M	G	E	d	F	M	G
	cm ³	mm											
30A(C)20X345H	20	56.1	114.5	40	M8	19			40	M8	19		
30A(C)22.5X345H	22.5	57.6	117.5	40	M8	19			40	M8	19		
30A(C)25X345H	25	58.3	118.9	40	M8	19			40	M8	19		
30A(C)28X345H	28	60.2	122.5	40	M8	19			40	M8	19		
30A(C)32X345	32	62	126.1	51	M10	27			40	M8	19		
30A(C)32X345H	32	66.5	135.1	51	M10	27			40	M8	19		
30A(C)36X345	36	63.5	129.2	51	M10	27			40	M8	19		
30A(C)36X345H	36	68	138.3	51	M10	27			40	M8	19		
30A(C)42X345	42	66.3	134.8	51	M10	27			40	M8	19		
30A(C)42X345H	42	70.8	143.9	51	M10	27			40	M8	19		
30A(C)46X345H	46	72.7	147.6	51	M10	27			40	M8	19		
30A(C)50X345H	50	74.5	151.2	51	M10	27			40	M8	19		
30A(C)55X345H	55	76.7	155.7	51	M10	27			40	M8	19		
30A(C)60X345H	60	78.7	160.2	51	M10	27			40	M8	19		

30^A_C...X353...



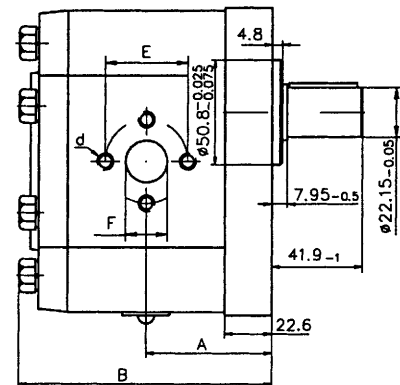
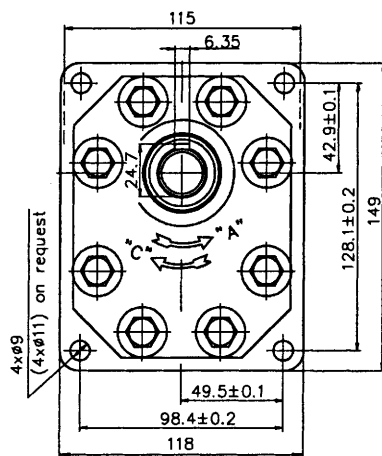
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		Inlet Saugseite Вхог		Outlet Druckseite Выхог									
		A	B	E	d	F	M	G	E	d	F	M	G
	cm ³	mm		mm					mm				
30A(C)20X353H	20	56.1	116.7	40	M8	19			40	M8	19		
30A(C)22.5X353H	22.5	57.6	119.7	40	M8	19			40	M8	19		
30A(C)25X353H	25	58.3	121.1	40	M8	19			40	M8	19		
30A(C)28X353H	28	60.2	124.7	40	M8	19			40	M8	19		
30A(C)32X353	32	62	128.3	51	M10	27			40	M8	19		
30A(C)32X353H	32	66.5	137.3	51	M10	27			40	M8	19		
30A(C)36X353	36	63.5	131.4	51	M10	27			40	M8	19		
30A(C)36X353H	36	68	140.5	51	M10	27			40	M8	19		
30A(C)42X353	42	66.3	137	51	M10	27			40	M8	19		
30A(C)42X353H	42	70.8	146.1	51	M10	27			40	M8	19		
30A(C)46X353H	46	72.7	149.8	51	M10	27			40	M8	19		
30A(C)50X353H	50	74.5	153.4	51	M10	27			40	M8	19		
30A(C)55X353H	55	76.7	157.9	51	M10	27			40	M8	19		
30A(C)60X353H	60	78.7	162.4	51	M10	27			40	M8	19		

30^A_C...X325...



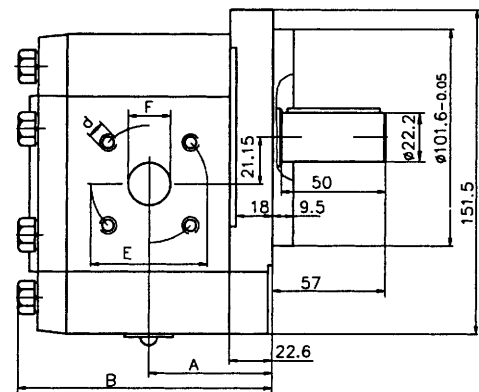
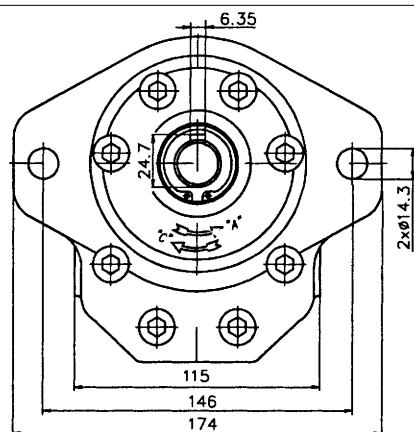
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		Inlet Saugseite Вхог		Outlet Druckseite Выхог									
		A	B	E	d	F	M	G	E	d	F	M	G
	cm ³	mm		mm					mm				
30A(C)20X325H	20	58.4	116.9	40	M8	19			40	M8	19		
30A(C)22.5X325H	22.5	59.9	119.9	40	M8	19			40	M8	19		
30A(C)25X325H	25	60.6	121.3	40	M8	19			40	M8	19		
30A(C)28X325H	28	62.4	124.9	40	M8	19			40	M8	19		
30A(C)32X325	32	64.2	128.5	51	M10	27			40	M8	19		
30A(C)32X325H	32	68.7	137.5	51	M10	27			40	M8	19		
30A(C)36X325	36	65.7	131.6	51	M10	27			40	M8	19		
30A(C)36X325H	36	70.3	140.6	51	M10	27			40	M8	19		
30A(C)42X325	42	68.5	137.2	51	M10	27			40	M8	19		
30A(C)42X325H	42	73	146.2	51	M10	27			40	M8	19		
30A(C)46X325H	46	74.9	150	51	M10	27			40	M8	19		
30A(C)50X325H	50	76.7	153.6	51	M10	27			40	M8	19		
30A(C)55X325H	55	79	158.1	51	M10	27			40	M8	19		
30A(C)60X325H	60	81.2	162.6	51	M10	27			40	M8	19		

30^A_C...X376



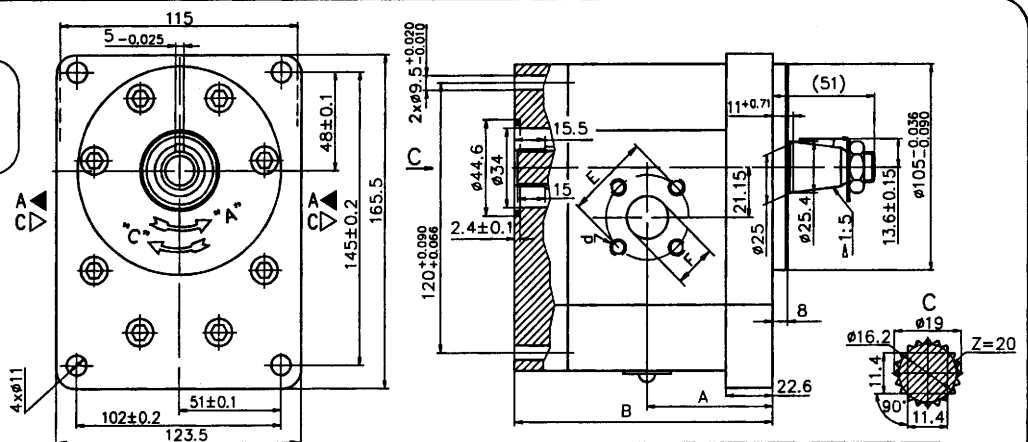
Type Typ	Displacement Foerdervolumen	n _{max}	p _{max}	Dimensions Abmessungen							
				Inlet Saugseite		Outlet Druckseite					
				A	B	E	d	F	E	d	F
	cm ³	min ⁻¹	bar	mm							
30A(C)32X376H	32	2500	25	66.5	137.3	ø48.12	5/16"-18UNC-2B	ø28	ø48.12	5/16"-18UNC-2B	ø20
30A(C)36X376H	36	2500	25	68	140.5	ø48.12	5/16"-18UNC-2B	ø28	ø48.12	5/16"-18UNC-2B	ø20
30A(C)42X376H	42	2500	23	70.8	146.1	ø48.12	5/16"-18UNC-2B	ø28	ø48.12	5/16"-18UNC-2B	ø20
30A(C)46X376H	46	2200	23	72.7	149.8	ø48.12	5/16"-18UNC-2B	ø28	ø48.12	5/16"-18UNC-2B	ø20
30A(C)50X376H	50	2000	20	74.5	153.4	ø48.12	5/16"-18UNC-2B	ø28	ø48.12	5/16"-18UNC-2B	ø20
30A(C)55X376H	55	2000	20	76.5	157.9	ø48.12	5/16"-18UNC-2B	ø28	ø48.12	5/16"-18UNC-2B	ø20

30^A_C...X379...



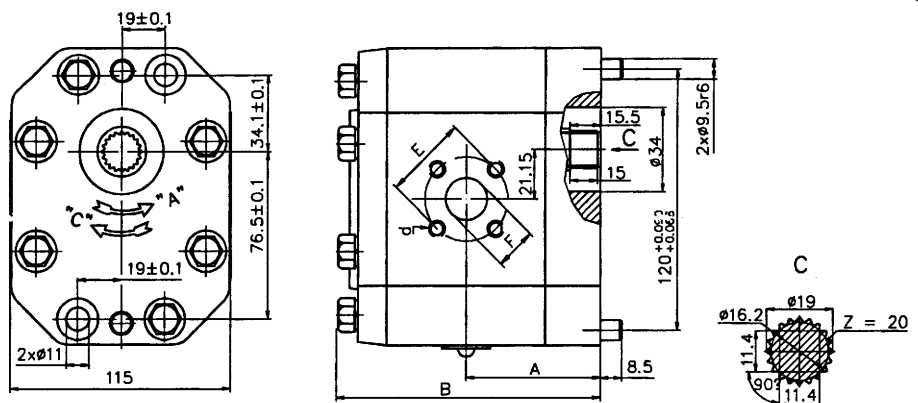
Type Typ Typ	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		Inlet Saugseite Вхог		Outlet Druckseite Выхог											
		A	B	E	d	F	M	G	E	d	F	M	G		
	cm ³	mm		mm						mm					
30A(C)20X379H	20	56.1	116.7	40	M8	19			40	M8	19				
30A(C)22.5X379H	22.5	57.6	119.7	40	M8	19			40	M8	19				
30A(C)25X379H	25	58.3	121.1	40	M8	19			40	M8	19				
30A(C)28X379H	28	60.2	124.7	40	M8	19			40	M8	19				
30A(C)32X379	32	62	128.3	55	M8	27			55	M8	19				
30A(C)32X379H	32	66.5	137.3	55	M8	27			55	M8	19				
30A(C)36X379	36	63.5	131.4	55	M8	27			55	M8	19				
30A(C)36X379H	36	68	140.5	55	M8	27			55	M8	19				
30A(C)42X379	42	66.3	137	55	M8	27			55	M8	19				
30A(C)42X379H	42	70.8	146.1	55	M8	27			55	M8	19				
30A(C)46X379H	46	72.7	149.8	55	M8	27			55	M8	19				
30A(C)50X379H	50	74.5	153.4	55	M8	27			55	M8	19				
30A(C)55X379H	55	76.7	157.9	55	M8	27			55	M8	19				
30A(C)60X379H	60	78.7	162.4	55	M8	27			55	M8	19				

30^A_C...X338...



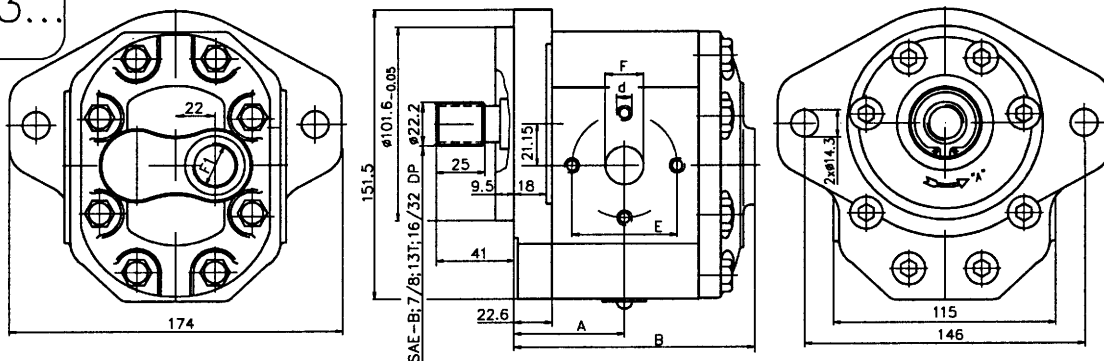
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог					
				E	d	F	M	G	E	d	F	M	G	
	cm ³	mm		mm					mm					
30A(C)20X338H	20	56.1	114.5	40	M8	19			40	M8	19			
30A(C)22.5X338H	22.5	57.6	117.5	40	M8	19			40	M8	19			
30A(C)25X338H	25	58.3	118.9	40	M8	19			40	M8	19			
30A(C)28X338H	28	60.2	122.5	40	M8	19			40	M8	19			
30A(C)32X338	32	62	126.1	55	M8	27			40	M8	19			
30A(C)32X338H	32	66.5	135.1	55	M8	27			40	M8	19			
30A(C)36X338	36	63.5	129.2	55	M8	27			40	M8	19			
30A(C)36X338H	36	68	138.3	55	M8	27			40	M8	19			
30A(C)42X338	42	66.3	134.8	55	M8	27			40	M8	19			
30A(C)42X338H	42	70.8	143.9	55	M8	27			40	M8	19			
30A(C)46X338H	46	72.7	147.6	55	M8	27			40	M8	19			
30A(C)50X338H	50	74.5	151.2	55	M8	27			40	M8	19			
30A(C)55X338H	55	76.7	155.7	55	M8	27			40	M8	19			
30A(C)60X338H	60	78.7	160.2	55	M8	27			40	M8	19			

30^A_C...X339...



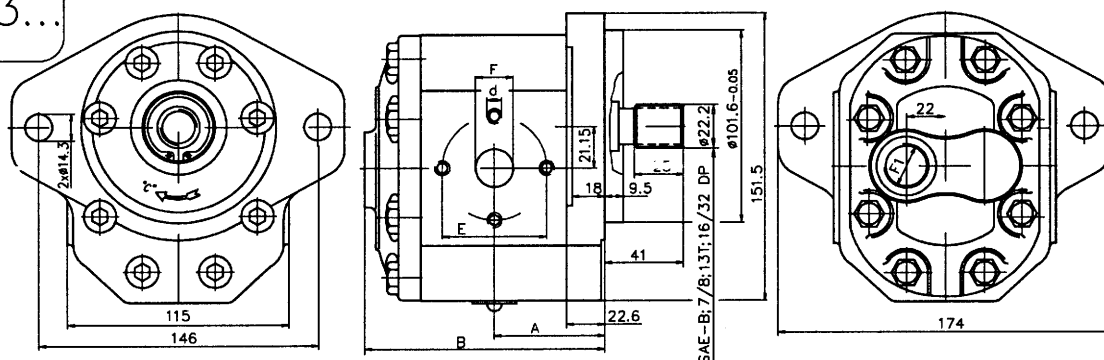
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог					
				E	d	F	M	G	E	d	F	M	G	
	cm ³	mm		mm					mm					
30A(C)20X339H	20	58.3	118.9	40	M8	19			40	M8	19			
30A(C)22.5X339H	22.5	59.7	121.9	40	M8	19			40	M8	19			
30A(C)25X339H	25	60.5	123.3	40	M8	19			40	M8	19			
30A(C)28X339H	28	62.4	126.9	40	M8	19			40	M8	19			
30A(C)32X339	32	64.2	130.5	55	M8	27			40	M8	19			
30A(C)32X339H	32	68.7	139.5	55	M8	27			40	M8	19			
30A(C)36X339	36	65.7	133.6	55	M8	27			40	M8	19			
30A(C)36X339H	36	70.2	142.7	55	M8	27			40	M8	19			
30A(C)42X339	42	68.5	139.2	55	M8	27			40	M8	19			
30A(C)42X339H	42	73	148.3	55	M8	27			40	M8	19			
30A(C)46X339H	46	74.9	152	55	M8	27			40	M8	19			
30A(C)50X339H	50	76.7	155.6	55	M8	27			40	M8	19			
30A(C)55X339H	55	78.9	160.1	55	M8	27			40	M8	19			
30A(C)60X339H	60	80.9	164.6	55	M8	27			40	M8	19			

30A...X383...



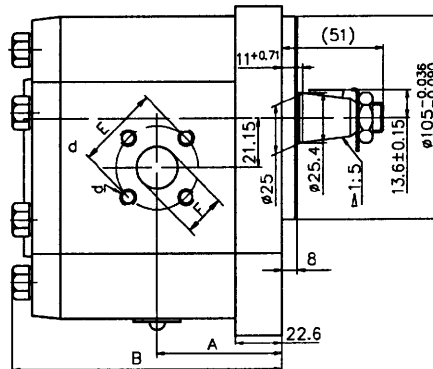
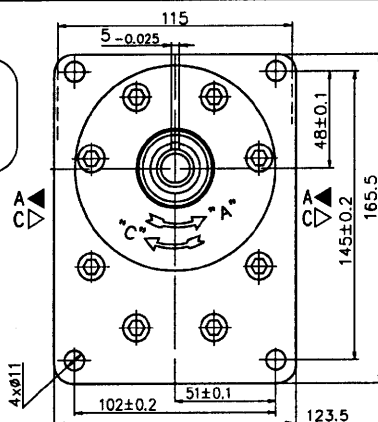
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры								
		A	B	Inlet Saugseite Вхог			Outlet Druckseite Выхог			
				E	d	F	E	d	F1	
	cm ³	mm		mm						
30A20X383H	20	56.1	122.2	40	5/16"-18UNC-2B	19			1 1/16"-12UNF-2B	
30A22.5X383H	22.5	57.6	125.2	40	5/16"-18UNC-2B	19			1 1/16"-12UNF-2B	
30A25X383H	25	58.3	126.6	40	5/16"-18UNC-2B	19			1 1/16"-12UNF-2B	
30A28X383H	28	60.2	130.2	40	5/16"-18UNC-2B	19			1 1/16"-12UNF-2B	
30A32X383	32	62	133.8	51	3/8"-16UNC-2B	27			1 1/16"-12UNF-2B	
30A32X383H	32	66.5	142.8	51	3/8"-16UNC-2B	27			1 1/16"-12UNF-2B	
30A36X383	36	63.5	136.9	51	3/8"-16UNC-2B	27			1 1/16"-12UNF-2B	
30A36X383H	36	68	146	51	3/8"-16UNC-2B	27			1 1/16"-12UNF-2B	
30A42X383	42	66.3	142.5	51	3/8"-16UNC-2B	27			1 1/16"-12UNF-2B	
30A42X383H	42	70.8	151.6	51	3/8"-16UNC-2B	27			1 1/16"-12UNF-2B	
30A46X383H	46	72.7	155.3	51	3/8"-16UNC-2B	27			1 1/16"-12UNF-2B	
30A50X383H	50	74.5	158.9	51	3/8"-16UNC-2B	27			1 1/16"-12UNF-2B	
30A55X383H	55	76.7	163.4	51	3/8"-16UNC-2B	27			1 1/16"-12UNF-2B	
30A60X383H	60	78.7	167.9	51	3/8"-16UNC-2B	27			1 1/16"-12UNF-2B	

30C...X383...



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры								
		A	B	Inlet Saugseite Вхог			Outlet Druckseite Выхог			
				E	d	F	E	d	F1	
	cm ³	mm		mm						
30C20X383H	20	56.1	122.2	40	5/16"-18UNC-2B	19			1 1/16"-12UNF-2B	
30C22.5X383H	22.5	57.6	125.2	40	5/16"-18UNC-2B	19			1 1/16"-12UNF-2B	
30C25X383H	25	58.3	126.6	40	5/16"-18UNC-2B	19			1 1/16"-12UNF-2B	
30C28X383H	28	60.2	130.2	40	5/16"-18UNC-2B	19			1 1/16"-12UNF-2B	
30C32X383	32	62	133.8	51	3/8"-16UNC-2B	27			1 1/16"-12UNF-2B	
30C32X383H	32	66.5	142.8	51	3/8"-16UNC-2B	27			1 1/16"-12UNF-2B	
30C36X383	36	63.5	136.9	51	3/8"-16UNC-2B	27			1 1/16"-12UNF-2B	
30C36X383H	36	68	146	51	3/8"-16UNC-2B	27			1 1/16"-12UNF-2B	
30C42X383	42	66.3	142.5	51	3/8"-16UNC-2B	27			1 1/16"-12UNF-2B	
30C42X383H	42	70.8	151.6	51	3/8"-16UNC-2B	27			1 1/16"-12UNF-2B	
30C46X383H	46	72.7	155.3	51	3/8"-16UNC-2B	27			1 1/16"-12UNF-2B	
30C50X383H	50	74.5	158.9	51	3/8"-16UNC-2B	27			1 1/16"-12UNF-2B	
30C55X383H	55	76.7	163.4	51	3/8"-16UNC-2B	27			1 1/16"-12UNF-2B	
30C60X383H	60	78.7	167.9	51	3/8"-16UNC-2B	27			1 1/16"-12UNF-2B	

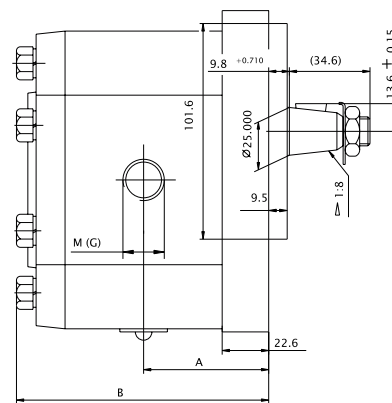
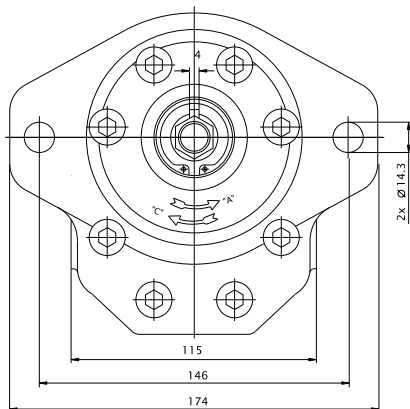
30^A_C...X337...



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог					
				E	d	F	M	G	E	d	F	M	G	
	cm ³	mm		mm					mm					
30A(C)20X337H	20	56.1	116.7	40	M8	19				40	M8	19		
30A(C)22.5X337H	22.5	57.6	119.7	40	M8	19				40	M8	19		
30A(C)25X337H	25	58.3	121.1	40	M8	19				40	M8	19		
30A(C)28X337H	28	60.2	124.7	40	M8	19				40	M8	19		
30A(C)32X337	32	62	128.3	55	M8	27				40	M8	19		
30A(C)32X337H	32	66.5	137.3	55	M8	27				40	M8	19		
30A(C)36X337	36	63.5	131.4	55	M8	27				40	M8	19		
30A(C)36X337H	36	68	140.5	55	M8	27				40	M8	19		
30A(C)42X337	42	66.3	137	55	M8	27				40	M8	19		
30A(C)42X337H	42	70.8	146.1	55	M8	27				40	M8	19		
30A(C)46X337H	46	72.7	149.8	55	M8	27				40	M8	19		
30A(C)50X337H	50	74.5	153.4	55	M8	27				40	M8	19		
30A(C)55X337H	55	76.7	157.9	55	M8	27				40	M8	19		
30A(C)60X337H	60	78.7	162.4	55	M8	27				40	M8	19		

30^A_C...X344...

- metric thread
G - GAS thread



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Вход					Outlet Druckseite Выход					
				E	d	F	M	G	E	d	F	M	G	
	cm ³	mm		mm					mm					
30A(C)20X344H	20	56.1	116.7				M27x1.5	G3/4				M27x1.5	G3/4	
30A(C)22.5X344H	22.5	57.6	119.7				M27x1.5	G3/4				M27x1.5	G3/4	
30A(C)25X344H	25	58.3	121.1				M27x1.5	G3/4				M27x1.5	G3/4	
30A(C)28X344H	28	60.2	124.7				M27x1.5	G3/4				M27x1.5	G3/4	
30A(C)32X344	32	62	128.3				M33x1.5	G1				M27x1.5	G3/4	
30A(C)32X344H	32	66.5	137.3				M33x1.5	G1				M27x1.5	G3/4	
30A(C)36X344	36	63.5	131.4				M33x1.5	G1				M27x1.5	G3/4	
30A(C)36X344H	36	68	140.5				M33x1.5	G1				M27x1.5	G3/4	
30A(C)42X344	42	66.3	137				M33x1.5	G1				M27x1.5	G3/4	
30A(C)42X344H	42	70.8	146.1				M33x1.5	G1				M27x1.5	G3/4	
30A(C)46X344H	46	72.7	149.8				M33x1.5	G1				M27x1.5	G3/4	
30A(C)50X344H	50	74.5	153.4				M33x1.5	G1				M27x1.5	G3/4	
30A(C)55X344H	55	76.7	157.9				M33x1.5	G1				M27x1.5	G3/4	
30A(C)60X344H	60	78.7	162.4				M33x1.5	G1				M27x1.5	G3/4	



Hydraulic Gear Pumps Hydraulische Zahnradpumpen Шестеренные насосы Gr 30 200 bar



Used symbols:

- q - displacement;
- p_{nom} - nominal pressure;
- n_{min} - minimal speed;
- n_{nom} - nominal speed;
- n_{max} - maximal speed;
- P_{nom} - power at p_{nom} and n_{nom}
- P_{max} - power at p_{nom} and n_{max}

volumetric efficiencies;

- η_{qmin} - at min. speed;
- η_{qnom} - at nom. speed;
- η_{qmax} - at max. speed;

efficiencies;

- η_{min} - at min. speed;
- η_{nom} - at nom. speed;
- η_{max} - at max. speed;

Bezeichnungen:

- Foerdervolumen;
- nominal Druck;
- minimal Geschwindigkeit;
- nominal Geschwindigkeit;
- maximal Geschwindigkeit;
- Leistung bei p_{nom} und n_{nom}
- Leistung bei p_{nom} und n_{max}

volumetrischer Wirkungsgrad;

- bei min. Geschwindigkeit;
- bei nom. Geschwindigkeit;
- bei max. Geschwindigkeit;

Wirkungsgrad gesamt;

- bei min. Geschwindigkeit;
- bei nom. Geschwindigkeit;
- bei max. Geschwindigkeit;

Обозначения:

- рабочий объем
- номинальное давление
- минимальная скорость
- номинальная скорость
- максимальная скорость
- мощность при p_{nom} и n_{nom}
- мощность при p_{nom} и n_{max}

объемный кпд

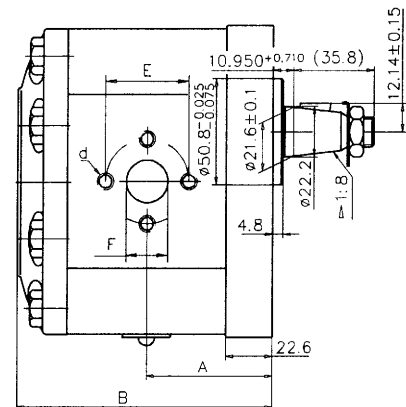
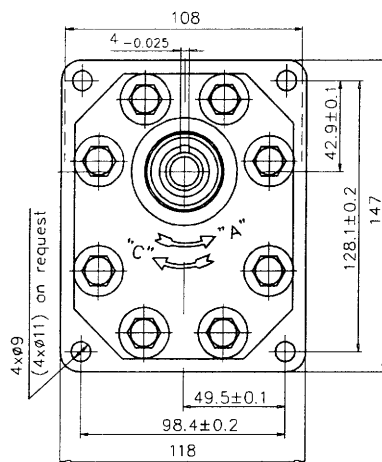
- при мин. скорость
- при ном. скорость
- при макс. скорость

общий КПД.

- при мин. скорость
- при ном. скорость
- при ном. скорость

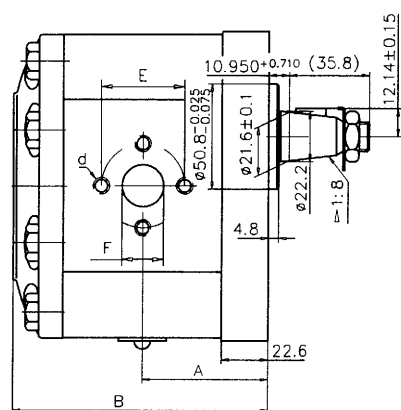
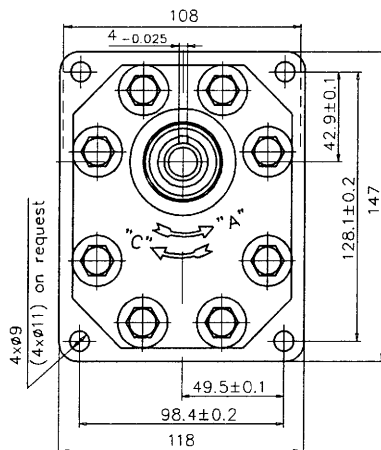
q	cm ³	20H	22.5H	25H	28H	32 32H	36 36H	42 42H	46H	50H	55H	60H
p_{nom}	bar	200	200	200	200	200	190	190	190	175	175	175
n_{min}	min ⁻¹	650	650	650	650	650	650	650	650	650	650	650
n_{nom}	min ⁻¹	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
n_{max}	min ⁻¹	2500	2500	2500	2500	2500	2300	2300	2100	2100	1750	1750
η_{qmin}	%	80	80	82	83	83	83	84	84	85	85	85
η_{min}	%	73	73	74	75	75	76	76	77	78	78	78
η_{qnom}	%	94	94	94	94	94	94	95	95	95	95	95
η_{nom}	%	85	85	86	86	86	86	85	85	85	85	85
η_{qmax}	%	93	93	93	94	94	94	94	94	94	94	94
η_{max}	%	83	83	84	84	84	84	84	83	83	83	83
P_{nom}	kW	10.8	12.3	13.5	15.1	18	20	22	26	24.5	29	31.7
P_{max}	kW	18.5	21	22.5	31.5	28.8	30	34	34	39	33	36

30^A_C...X160



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		A	B	Inlet Saugseite Вхог				Outlet Druckseite Выхог							
				E	d	F	M	G	E	d	F	M	G		
	cm ³	mm		mm						mm					
30A(C)20X160	20	54	108.7	40	M8	19					40	M8	19		
30A(C)22.5X160	22.5	53.3	107.5	40	M8	19					40	M8	19		
30A(C)25X160	25	54	108.7	40	M8	19					40	M8	19		
30A(C)32X160	32	62	124.7	51	M10	27					40	M8	19		
30A(C)36X160	36	63.5	127.8	51	M10	27					40	M8	19		
30A(C)42X160	42	66.3	133.4	51	M10	27					40	M8	19		
30A(C)46X160	46	68.2	137.4	51	M10	27					40	M8	19		
30A(C)50X160	50	70	140.8	51	M10	27					40	M8	19		
30A(C)55X160	55	72.2	145.3	51	M10	27					40	M8	19		

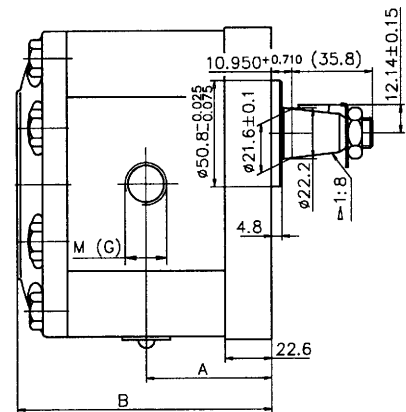
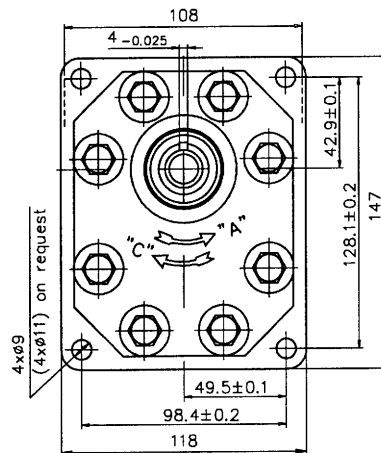
30^A_C...X189



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры								
		A	B	Inlet Saugseite Вхог			Outlet Druckseite Выхог			
				E	d	F	E	d	F	
	cm ³	mm		mm			mm			
30A(C)20X189	20	54	108.7	40	5/16"-18UNC-2B	19	40	5/16"-18UNC-2B	19	
30A(C)22.5X189	22.5	53.3	107.5	40	5/16"-18UNC-2B	19	40	5/16"-18UNC-2B	19	
30A(C)25X189	25	54	108.7	40	5/16"-18UNC-2B	19	40	5/16"-18UNC-2B	19	
30A(C)32X189	32	62	124.7	51	3/8"-16UNC-2B	27	40	5/16"-18UNC-2B	19	
30A(C)36X189	36	63.5	127.8	51	3/8"-16UNC-2B	27	40	5/16"-18UNC-2B	19	
30A(C)42X189	42	66.3	133.4	51	3/8"-16UNC-2B	27	40	5/16"-18UNC-2B	19	
30A(C)46X189	46	68.2	137.4	51	3/8"-16UNC-2B	27	40	5/16"-18UNC-2B	19	
30A(C)50X189	50	70	140.8	51	3/8"-16UNC-2B	27	40	5/16"-18UNC-2B	19	
30A(C)55X189	55	72.2	145.3	51	3/8"-16UNC-2B	27	40	5/16"-18UNC-2B	19	

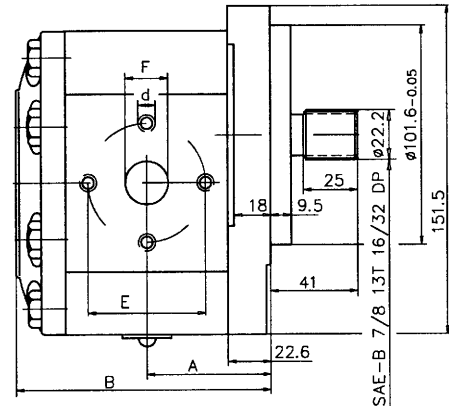
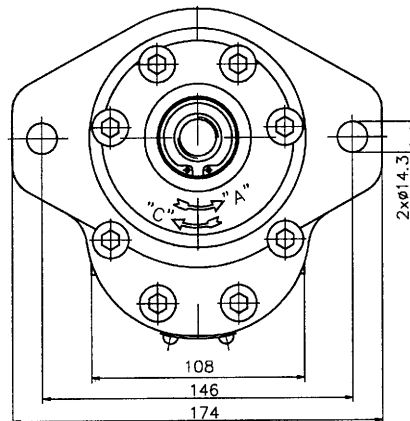
30^A_C...X190

- metric thread
G - GAS thread



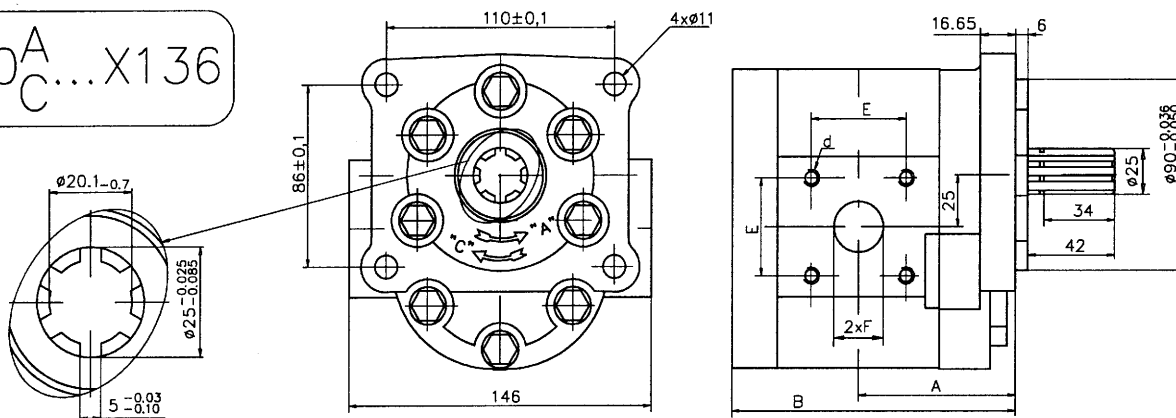
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		Inlet Saugseite Вхог		Outlet Druckseite Выхог									
		A	B	E	d	F	M	G	E	d	F	M	G
	cm ³	mm											
30A(C)20X190	20	54	108.7				M27x1.5	G3/4				M27x1.5	G3/4
30A(C)22.5X190	22.5	53.3	107.5				M27x1.5	G3/4				M27x1.5	G3/4
30A(C)25X190	25	54	108.7				M27x1.5	G3/4				M27x1.5	G3/4
30A(C)32X190	32	62	124.7				M33x1.5	G 1				M27x1.5	G3/4
30A(C)36X190	36	63.5	127.8				M33x1.5	G 1				M27x1.5	G3/4
30A(C)42X190	42	66.3	133.4				M33x1.5	G 1				M27x1.5	G3/4
30A(C)46X190	46	68.2	137.4				M33x1.5	G 1				M27x1.5	G3/4
30A(C)50X190	50	70	140.8				M33x1.5	G 1				M27x1.5	G3/4
30A(C)55X190	55	72.2	145.3				M33x1.5	G 1				M27x1.5	G3/4

30^A_C...X166



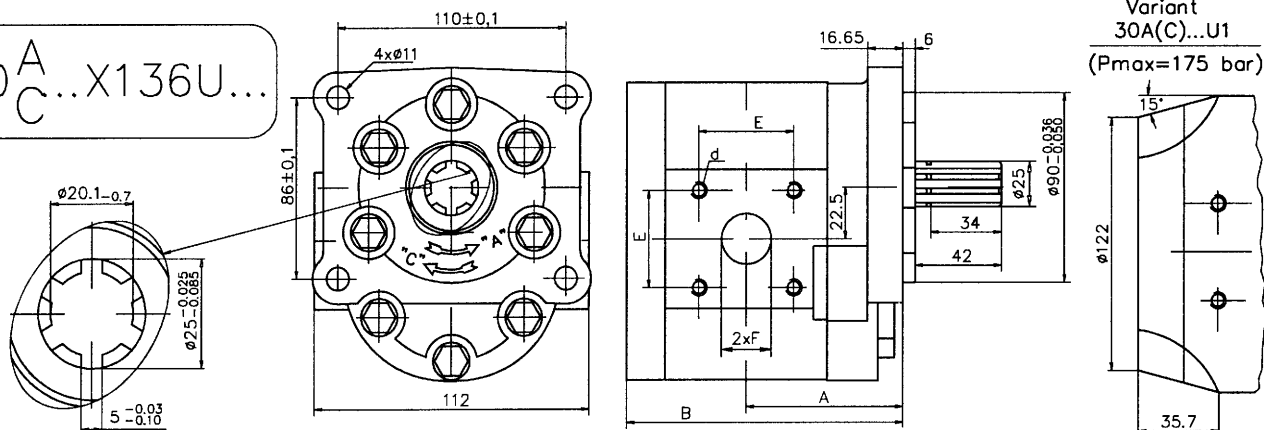
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		Inlet Saugseite Вхог		Outlet Druckseite Выхог									
		A	B	E	d	F	M	G	E	d	F	M	G
	cm ³	mm											
30A(C)20X166	20	54	108.7	40	M8	19			40	M8	19		
30A(C)22.5X166	22.5	53.3	107.5	40	M8	19			40	M8	19		
30A(C)25X166	25	54	108.7	40	M8	19			40	M8	19		
30A(C)32X166	32	62	124.7	51	M10	27			40	M8	19		
30A(C)36X166	36	63.5	127.8	51	M10	27			40	M8	19		
30A(C)42X166	42	66.3	133.4	51	M10	27			40	M8	19		
30A(C)46X166	46	68.2	137.4	51	M10	27			40	M8	19		
30A(C)50X166	50	70	140.8	51	M10	27			40	M8	19		
30A(C)55X166	55	72.2	145.3	51	M10	27			40	M8	19		

30^A_C...X136



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры															
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог								
				E	d	F	M	G	E	d	F	M	G				
	cm ³	mm		mm					mm								
30A(C)25X136	25	72.5	130.2	46	M8	19					46	M8	19				
30A(C)32X136	32	76	137.4	46	M8	22					46	M8	22				
30A(C)46X136	46	72.5	141.4	54	M10	27					54	M10	27				
30A(C)50X136	50	72.5	145	54	M10	27					54	M10	27				

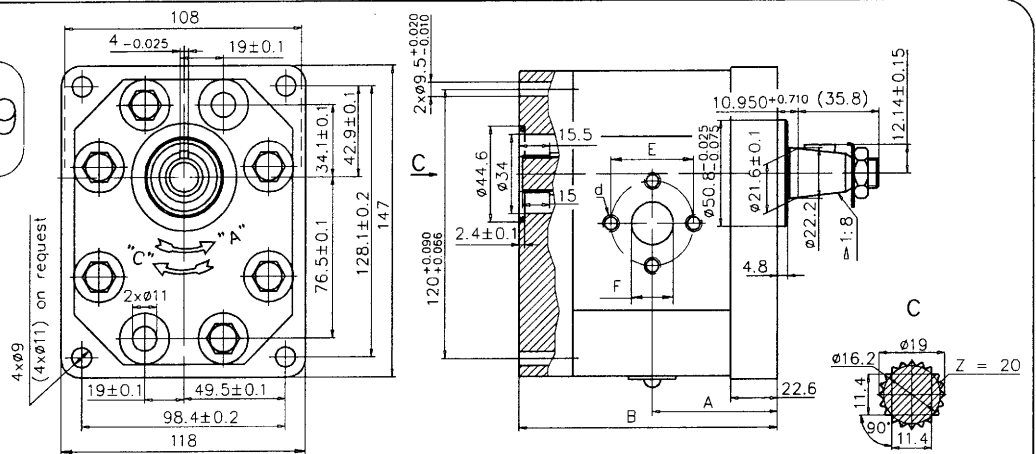
30^A_C...X136U...



Variant
30A(C)...U1
(P_{max}=175 bar)

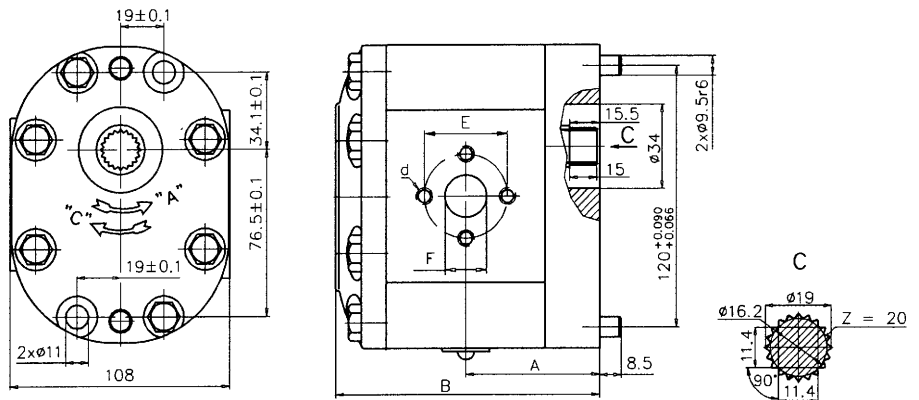
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры															
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог								
				E	d	F	M	G	E	d	F	M	G				
	cm ³	mm		mm					mm								
30A(C)25X136U...	25	64	121.7	46	M8	19					46	M8	19				
30A(C)32X136U...	32	67.6	128.9	46	M8	22					46	M8	22				
30A(C)46X136U...	46	72.5	141.4	54	M10	27					54	M10	27				
30A(C)50X136U...	50	72.5	145	54	M10	27					54	M10	27				

30^A_C...X239

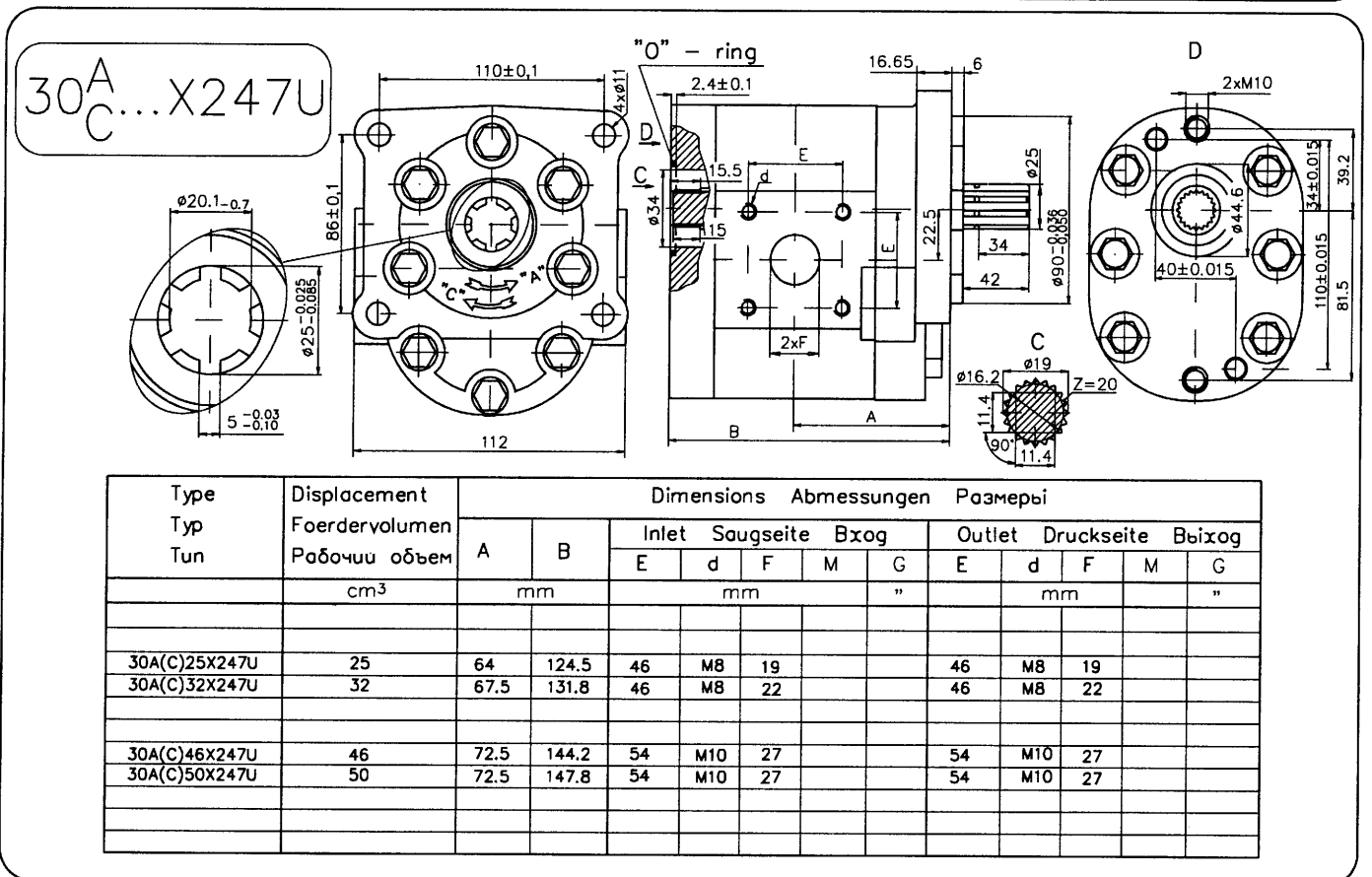
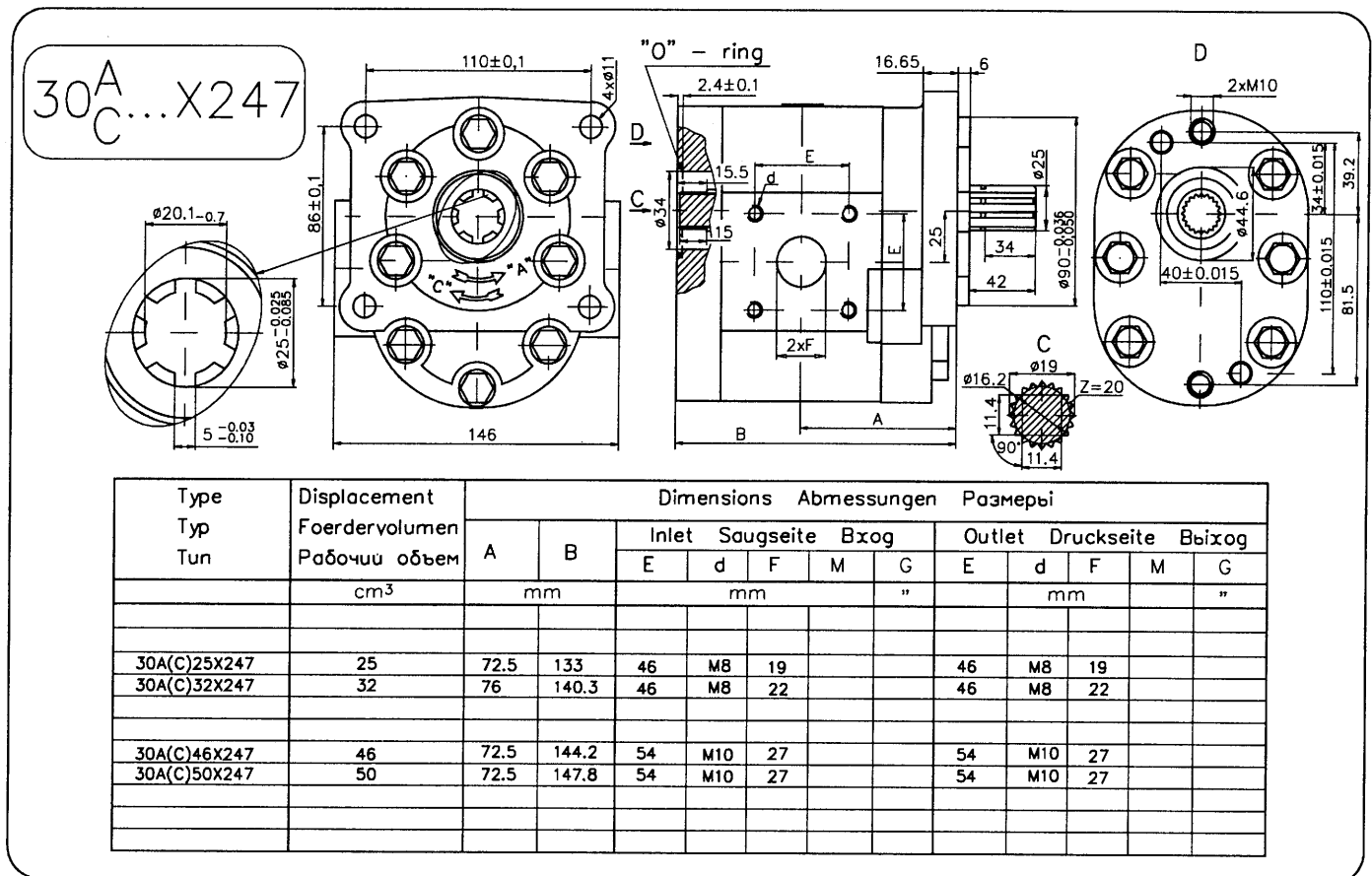


Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		Inlet Saugseite Вхог		Outlet Druckseite Выхог									
		A	B	E	d	F	M	G	E	d	F	M	G
	cm ³	mm		mm					mm				
30A(C)20X239	20	54	110.1	40	M8	19	M27x1.5	G3/4	40	M8	19	M27x1.5	G3/4
30A(C)22.5X239	22.5	53.3	108.7	40	M8	19	M27x1.5	G3/4	40	M8	19	M27x1.5	G3/4
30A(C)25X239	25	54	110.1	40	M8	19	M27x1.5	G3/4	40	M8	19	M27x1.5	G3/4
30A(C)32X239	32	62	126.1	51	M10	27	M33x1.5	G1	40	M8	19	M27x1.5	G3/4
30A(C)36X239	36	63.5	129.2	51	M10	27	M33x1.5	G1	40	M8	19	M27x1.5	G3/4
30A(C)42X239	42	66.3	134.8	51	M10	27	M33x1.5	G1	40	M8	19	M27x1.5	G3/4
30A(C)46X239	46	68.2	138.6	51	M10	27	M33x1.5	G1	40	M8	19	M27x1.5	G3/4
30A(C)50X239	50	70	142.4	51	M10	27	M33x1.5	G1	40	M8	19	M27x1.5	G3/4
30A(C)55X239	55	72.2	146.7	51	M10	27	M33x1.5	G1	40	M8	19	M27x1.5	G3/4

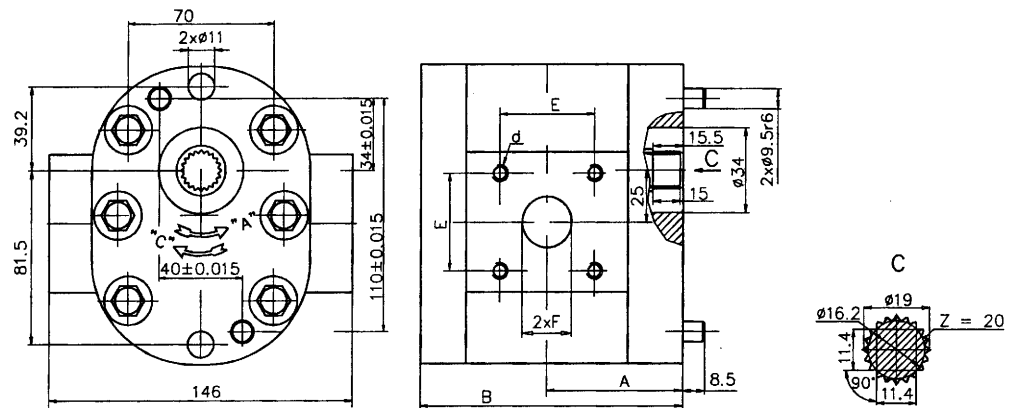
30^A_C...X240



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		Inlet Saugseite Вхог		Outlet Druckseite Выхог									
		A	B	E	d	F	M	G	E	d	F	M	G
	cm ³	mm		mm					mm				
30A(C)20X240	20	56.2	111	40	M8	19	M27x1.5	G3/4	40	M8	19	M27x1.5	G3/4
30A(C)22.5X240	22.5	55.5	109.6	40	M8	19	M27x1.5	G3/4	40	M8	19	M27x1.5	G3/4
30A(C)25X240	25	56.2	111	40	M8	19	M27x1.5	G3/4	40	M8	19	M27x1.5	G3/4
30A(C)32X240	32	64.2	127	51	M10	27	M33x1.5	G1	40	M8	19	M27x1.5	G3/4
30A(C)36X240	36	65.7	130.1	51	M10	27	M33x1.5	G1	40	M8	19	M27x1.5	G3/4
30A(C)42X240	42	68.5	135.7	51	M10	27	M33x1.5	G1	40	M8	19	M27x1.5	G3/4
30A(C)46X240	46	70.4	139.5	51	M10	27	M33x1.5	G1	40	M8	19	M27x1.5	G3/4
30A(C)50X240	50	72.2	143.1	51	M10	27	M33x1.5	G1	40	M8	19	M27x1.5	G3/4
30A(C)55X240	55	74.4	147.6	51	M10	27	M33x1.5	G1	40	M8	19	M27x1.5	G3/4

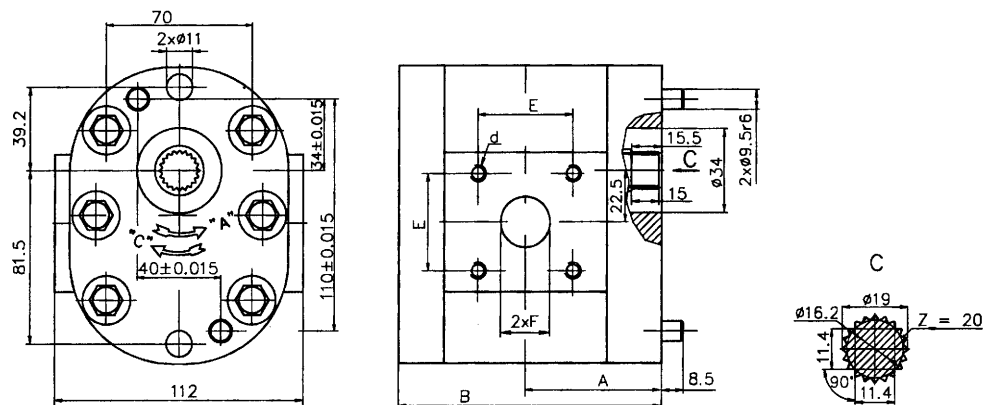


30^A_C...X248



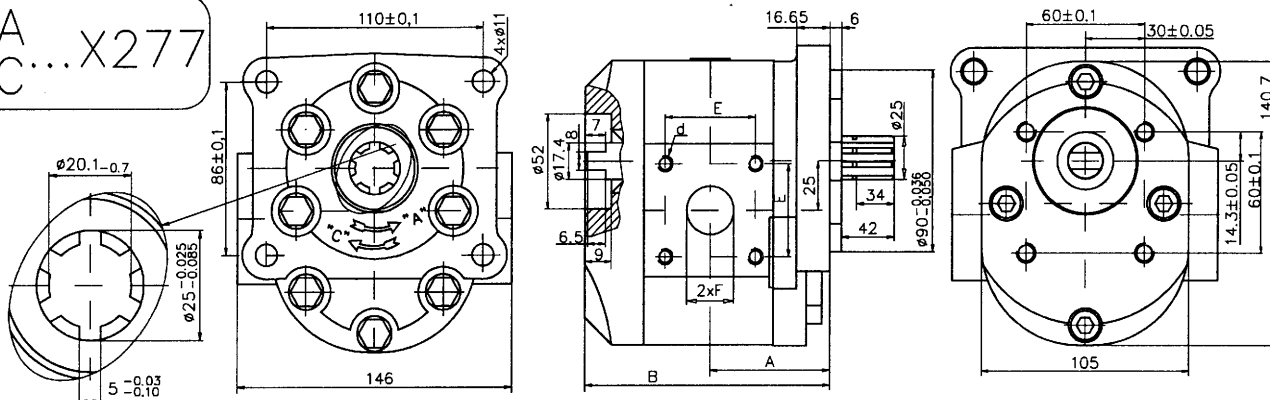
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог						
				E	d	F	M	G	E	d	F	M	G		
	cm ³	mm		mm					mm					"	
30A(C)25X248	25	60.6	118.3	46	M8	19				46	M8	19			
30A(C)32X248	32	64.2	125.5	46	M8	22				46	M8	22			
30A(C)46X248	46	70.4	138	54	M10	27				54	M10	27			
30A(C)50X248	50	72.2	141.6	54	M10	27				54	M10	27			

30^A_C...X248U



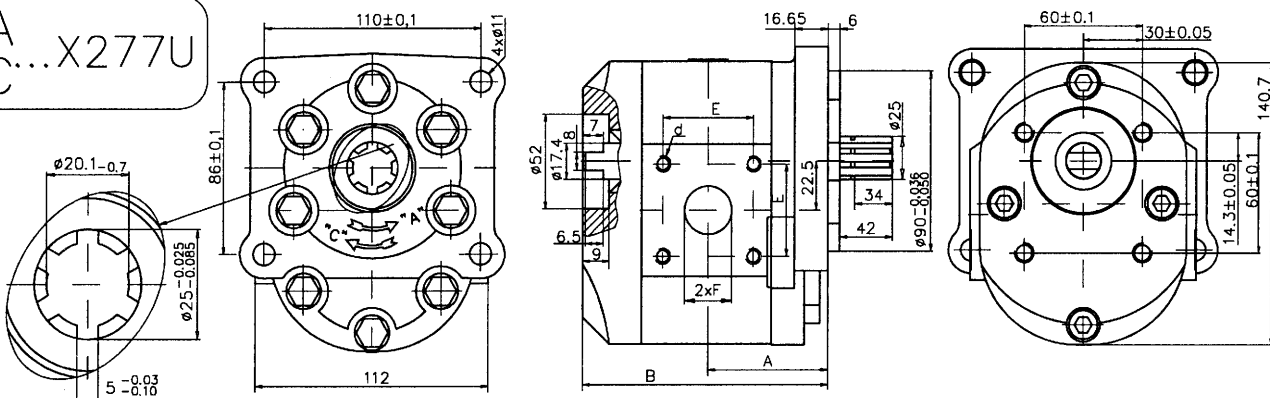
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог						
				E	d	F	M	G	E	d	F	M	G		
	cm ³	mm		mm					mm					"	
30A(C)25X248U	25	60.6	118.3	46	M8	19				46	M8	19			
30A(C)32X248U	32	64.2	125.5	46	M8	22				46	M8	22			
30A(C)46X248U	46	70.4	138	54	M10	27				54	M10	27			
30A(C)50X248U	50	72.2	141.6	54	M10	27				54	M10	27			

30^A_C...X277



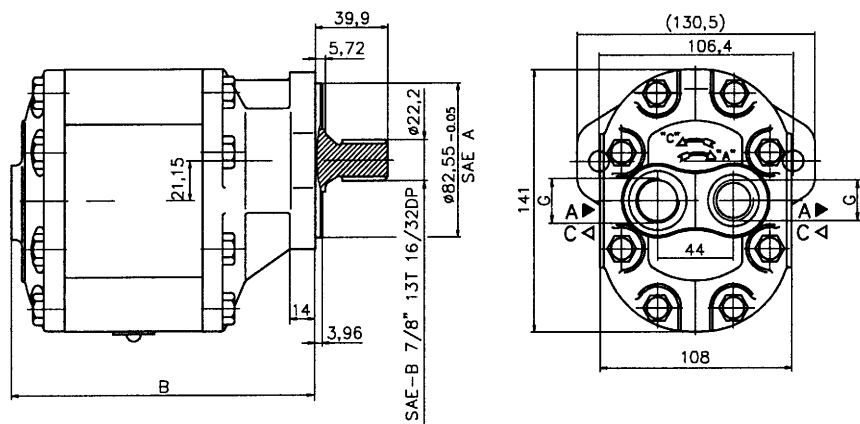
Type Typ Typ	Displacement Foendvolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог					
				E	d	F	M	G	E	d	F	M	G	
	cm ³	mm		mm					"					
30A(C)25X277	25	72.5	138.1	46	M8	19		46	M8	19				
30A(C)32X277	32	76	145.4	46	M8	22		46	M8	22				
30A(C)46X277	46	72.5	149.4	54	M10	27		54	M10	27				
30A(C)50X277	50	72.5	153	54	M10	27		54	M10	27				

30^A_C...X277U



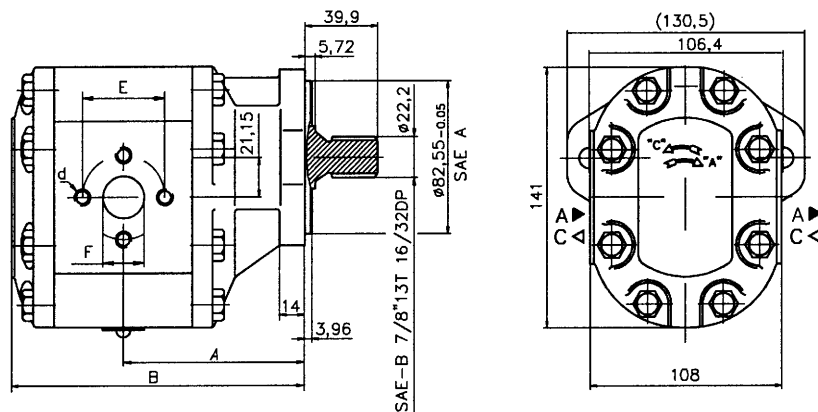
Type Typ Typ	Displacement Foendvolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог					
				E	d	F	M	G	E	d	F	M	G	
	cm ³	mm		mm					"					
30A(C)25X277U	25	64	129.6	46	M8	19		46	M8	19				
30A(C)32X277U	32	67.5	136.9	46	M8	22		46	M8	22				
30A(C)46X277U	46	72.5	149.4	54	M10	27		54	M10	27				
30A(C)50X277U	50	72.5	153	54	M10	27		54	M10	27				

30^A_C ...X263W



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог						
				E	d	F	M	G	E	d	F	M	G		
	cm ³	mm		mm					"						
30A(C)20X263W	20		153.3							G1					G3/4
30A(C)22.5X263W	22.5		151.9							G1					G3/4
30A(C)25X263W	25		153.3							G1					G3/4
30A(C)32X263W	32		169.3							G1					G3/4
30A(C)36X263W	36		172.4							G1					G3/4
30A(C)42X263W	42		178							G1					G3/4
30A(C)46X263W	46		182.8							G1					G3/4
30A(C)50X263W	50		185.4							G1					G3/4
30A(C)55X263W	55		189.9							G1					G3/4

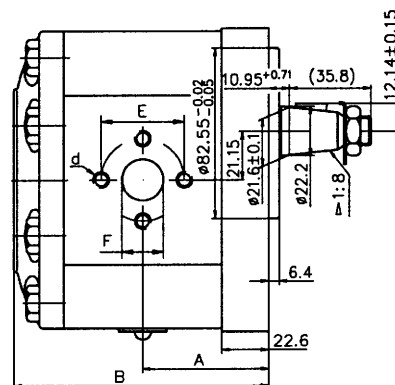
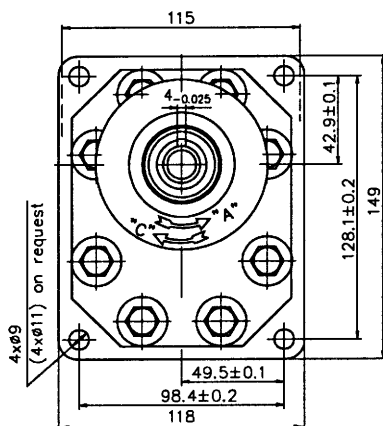
30^A_C ...X263



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог					
				E	d	F	M	G	E	d	F	M	G	
	cm ³	mm		mm					"					
30C20X263W	20	92.9	147.8	40	M8	19				40	M8	19		
30C22.5X263W	22.5	92.3	146.4	40	M8	19				40	M8	19		
30C25X263W	25	92.9	147.8	40	M8	19				40	M8	19		
30C32X263W	32	101	163.8	51	M10	27				40	M8	19		
30C36X263W	36	102.5	166.9	51	M10	27				40	M8	19		
30C42X263W	42	105.3	172.5	51	M10	27				40	M8	19		
30C46X263W	46	107.2	176.3	51	M10	27				40	M8	19		
30C50X263W	50	109	179.9	51	M10	27				40	M8	19		
30C55X263W	55	111.2	184.4	51	M10	27				40	M8	19		

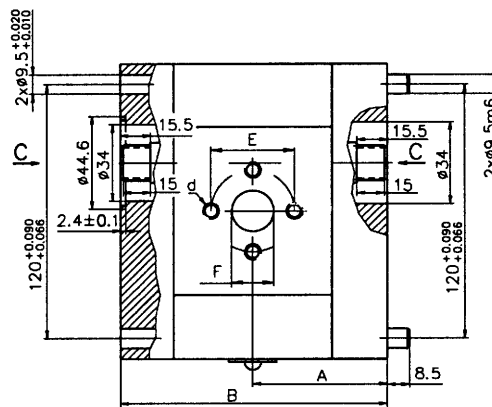
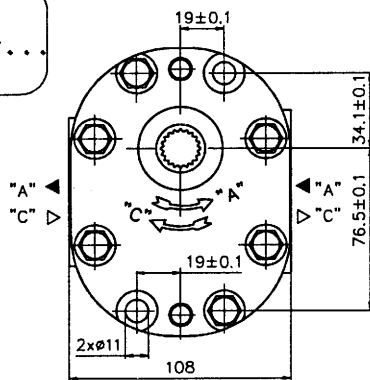
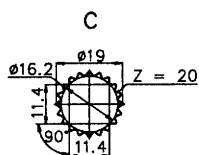
30^A_C...X378...

$p_{max} = 175 \text{ bar}$



Type Typ Typ	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		Inlet Saugseite Вхог		Outlet Druckseite Выог										
		A	B	E	d	F	M	G	E	d	F	M	G	
	cm ³	mm		mm					mm					
30A(C)28X378H	28	60.2	124.7	40	M8	19	M27x1.5	G3/4	40	M8	19	M27x1.5	G3/4	
30A(C)32X378	32	62	128.3	51	M10	27	M33x1.5	G 1	40	M8	19	M27x1.5	G3/4	
30A(C)32X378H	32	66.5	137.3	51	M10	27	M33x1.5	G 1	40	M8	19	M27x1.5	G3/4	
30A(C)36X378	36	63.5	131.4	51	M10	27	M33x1.5	G 1	40	M8	19	M27x1.5	G3/4	
30A(C)36X378H	36	68	140.5	51	M10	27	M33x1.5	G 1	40	M8	19	M27x1.5	G3/4	

30^A_C...X324...



Type Typ Typ	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры												
		Inlet Saugseite Вхог		Outlet Druckseite Выог										
		A	B	E	d	F	M	G	E	d	F	M	G	
	cm ³	mm		mm					mm					
30A(C)20X324H	20	58.4	116.7	40	M8	19			40	M8	19			
30A(C)22.5X324H	22.5	59.9	119.7	40	M8	19			40	M8	19			
30A(C)25X324H	25	60.6	121.1	40	M8	19			40	M8	19			
30A(C)28X324H	28	62.4	124.7	40	M8	19			40	M8	19			
30A(C)32X324	32	64.2	128.3	51	M10	27			40	M8	19			
30A(C)32X324H	32	68.7	137.3	51	M10	27			40	M8	19			
30A(C)36X324	36	65.7	131.4	51	M10	27			40	M8	19			
30A(C)36X324H	36	70.3	140.5	51	M10	27			40	M8	19			
30A(C)42X324	42	68.5	137	51	M10	27			40	M8	19			
30A(C)42X324H	42	73	146.1	51	M10	27			40	M8	19			
30A(C)46X324H	46	74.9	149.8	51	M10	27			40	M8	19			
30A(C)50X324H	50	76.7	153.4	51	M10	27			40	M8	19			
30A(C)55X324H	55	79	157.9	51	M10	27			40	M8	19			
30A(C)60X324H	60	81.2	162.4	51	M10	27			40	M8	19			

GENERAL CONDITIONS

The maximal revolutions of the tandem (triple) pumps are determined by the pump which has the lowest speed of rotation (as a single pump)

It is recommended an additional fixing against console hanging of the tandem (triple) pumps that are exposed to vibrations.

The maximal working pressure of each section should not exceed 200 bar.

In case when the driven pump (IInd section) has greater displacement than the driving pump (Ist section) the working pressure of the IInd section should not exceed the indicated pressure in the table.

ALLGEMEINE BEDINGUNGEN

Die maximale Drehzahl der Doppel- (Drei-) Zahnradpumpen wird nach der Pumpe mit der niedrigen Drehfrequenz (als Einzelpumpe) bestimmt.

Bei Vibrationen sollen die Doppelzahnradpumpen, bzw. Dreistrompumpen, zusaetzlich gegen Konsoledurchbiegung befestigt sein.

Die maximale Betriebsdruck jeder Einheit soll 200 bar nicht uebersteigen.

Falls die angetriebene Pumpe (II Einheit) ein grosswertiges Geometrievolumen als die antriebende (I Einheit) hat, soll der Betriebsdruck der II Einheit nicht den in der Tabelle gegebenen Wert uebersteigen.

ОБЩИЕ ТРЕБОВАНИЯ

Максимальные обороты сдвоенных (строенных) насосов определяются насосом наименьшей частоты вращения данной комбинации (как одинарный насос).

При сдвоенных (строенных) насосах подложенных вибрациям, надо предусмотреть дополнительное крепление против провисания (конзольное крепление).

Максимальное рабочее давление каждой секции не надо превышать 200 bar.

В случае когда водимый насос (II секция) имеет больший рабочий объем чем ведущий насос (I секции), рабочее давление II секции не должно превышать указанного давления в таблице:

Group Gruppe [bar] Группа	q [cm ³]	p _{max}
I	3.15 (3.65)	230
	4.2 (5)	190
	5.7 (6.1)	160
II	16	230
	19	190
	22	160
	25	130



Tandem Gear Pumps Doppelzahnradpumpen Сдвоенные насосы

250 Bar



ORDERING CODE BESTELLANGABEN СПОСОБ ЗАЯВЛЕНИЯ

*** ***** / ***** (/*****)

GROUP COMBINATION:
GRUPPENKOMBINATION:
КОМБИНАЦИЯ ГРУППЫ:

11 - 10/10 Gr.
21 - 20/10 Gr.
22 - 20/20 Gr.
221 - 20/20/10 Gr.
222 - 20/20/20 Gr

THE FIRST SECTION DESIGNATION

See page II (single pump)
BEZEICHNUNG DER I. PUMPE
Einheit laut S. II (Einzeilpumpe)
ОБОЗНАЧЕНИЕ ПЕРВОЙ
СТЕПЕНИ
См. стр. II

THE THIRD SECTION DESIGNATION

See page II (single pump)
BEZEICHNUNG DER III. PUMPE
Einheit laut S. II (Einzeilpumpe)
ОБОЗНАЧЕНИЕ ТРЕТОЙ
СТЕПЕНИ
См. стр. II

THE SECOND SECTION DESIGNATION

Acc. to page II (single pump)
BEZEICHNUNG DER II. PUMPE
Einheit laut S. II (Einzeilpumpe)
ОБОЗНАЧЕНИЕ ВТОРОЙ СТЕПЕНИ
См. стр. II

Example:

222 A 19 X 167 / A 11 X 156 /
A8.2X066

- triple gear pump 20/20/20
group; anticlockwise rotation;
shaft output through the front
cover and displacement respec-
tively 19 cm³, 11 cm³ and 8.2 cm³.

Beispiel:

222 A 19 X 167 / A 11 X 156 /
A8.2X066

Dreistromzahnradpumpe 20/20/20
Gruppe; Dreherichtung gegen das
Uhrzeigersinn; Wellenausgang
durch Bohrungen an Vorderdeckel
und Voerdervolumen - 19 cm³, 11
cm³ u. 8.2 cm³.

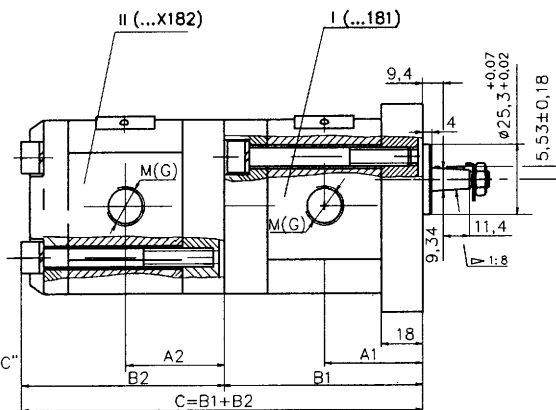
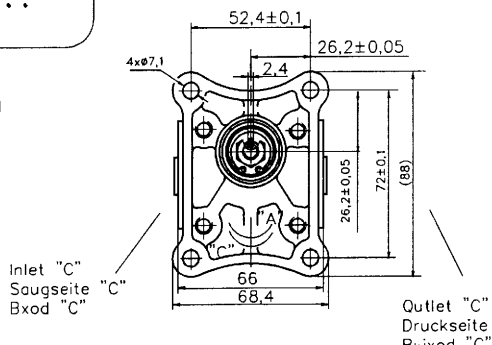
Пример:

222 A 19 X 167 / A 11 X 156 /
A8.2X066 - Трехступенный

шестеренный насос 20/20/20
группа; направление вращения
против часовой стрелки, вал
выходит через переднюю
крышку ра-бочие объемы 19 см³,
11 см³ и 8.2 см³.

11A
C ... / ...

-metric thread
G-GAS thread



Note: For the supply ports' sizes (input-output) see the schemes of the relevant single pump-type. For other pumps' combinations contact with the manufacturer.

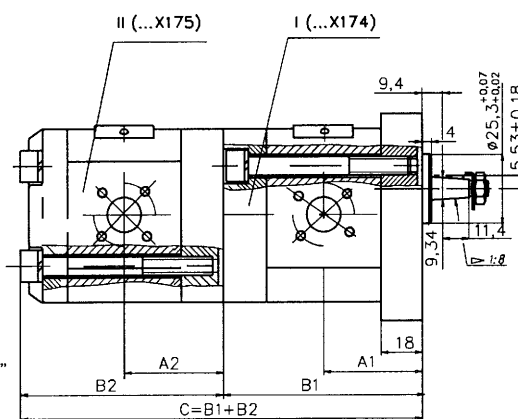
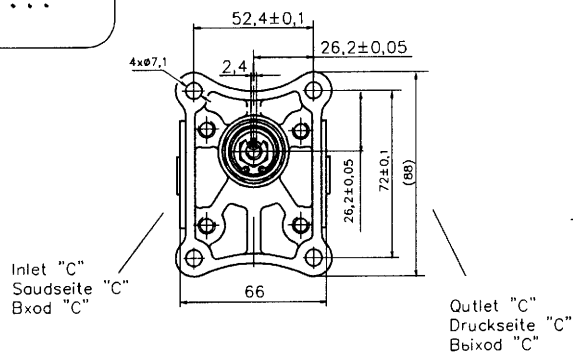
Bemerkung: Fuer die Abmessungen der Speisebohrungen (Druck- und Saugseite)-sieh Schema des entsprechenden Einzelpumpentypes. Fuer andere Pumpencombination-bitte Rücksprache mit dem Hersteller.

Размеры питательных отверстий (вход-выход) выполняются в соответствии с чертежами однарных насосов составляющие комбинацию.

Type, Typ, Tun	A1	B1
10A(C)1X181...	39,1	79
10A(C)1,25X181...	39,5	80
10A(C)1,6X181...	40,3	81,6
10A(C)2X181...	41,1	83,2
10A(C)2,5X181...	42,1	85,2
10A(C)3,15X181...	43,5	87,8
10A(C)3,65X181...	44,4	89,8
10A(C)4,2X181...	45,5	92,1
10A(C)5X181...	47,1	95,2
10A(C)5,7X181...	48,5	98,1
10A(C)6,1X181...	49,4	99,8

Type, Typ, Tun	A2	B2
10A(C)1X182...	39,1	81,0
10A(C)1,25X182...	39,5	82,0
10A(C)1,6X182...	40,3	83,6
10A(C)2X182...	41,1	85,2
10A(C)2,5X182...	42,1	87,2
10A(C)3,15X182...	43,5	89,8
10A(C)3,65X182...	44,4	91,8
10A(C)4,2X182...	45,5	94,1
10A(C)5X182...	47,1	97,2
10A(C)5,7X182...	48,5	100,1
10A(C)6,1X182...	49,4	101,8

11A
C ... / ...



Note: For the supply ports' sizes (input-output) see the schemes of the relevant single pump-type. For other pumps' combinations contact with the manufacturer.

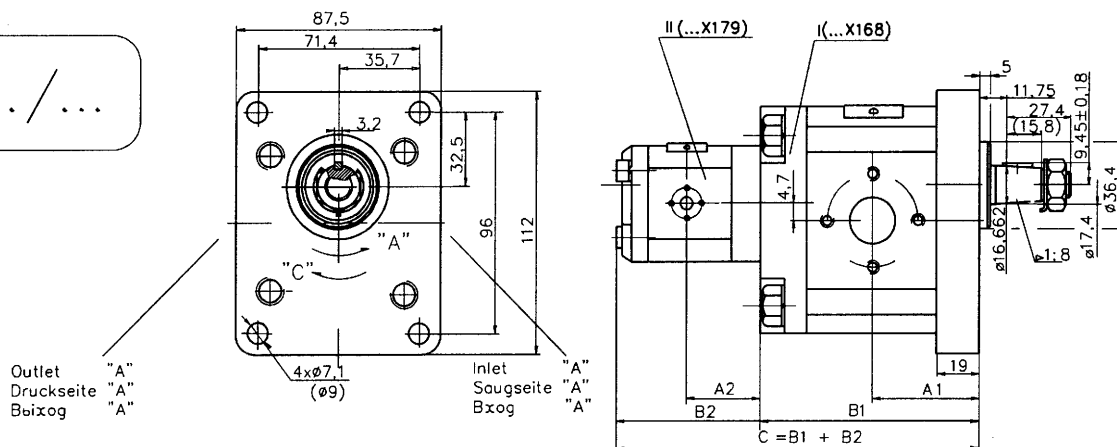
Bemerkung: Fuer die Abmessungen der Speisebohrungen (Druck- und Saugseite)-sieh Schema des entsprechenden Einzelpumpentypes. Fuer andere Pumpencombination-bitte Rücksprache mit dem Hersteller.

Размеры питательных отверстий (вход-выход) выполняются в соответствии с чертежами однарных насосов составляющие комбинацию.

Type, Typ, Tun	A1	B1
10A(C)1X174	39,1	79
10A(C)1,25X174	39,5	80
10A(C)1,6X174	40,3	81,6
10A(C)2X174	41,1	83,2
10A(C)2,5X174	42,1	85,2
10A(C)3,15X174	43,5	87,8
10A(C)3,65X174	44,4	89,9
10A(C)4,2X174	45,5	92,1
10A(C)5X174	47,1	95,2
10A(C)5,7X174	48,5	98,1
10A(C)6,1X174	49,4	99,8

Type, Typ, Tun	A2	B2
10A(C)1X175	39,1	81,0
10A(C)1,25X175	39,5	82,0
10A(C)1,6X175	40,3	83,6
10A(C)2X175	41,1	85,2
10A(C)2,5X175	42,1	87,2
10A(C)3,15X175	43,5	89,8
10A(C)3,65X175	44,4	91,8
10A(C)4,2X175	45,5	94,1
10A(C)5X175	47,1	97,2
10A(C)5,7X175	48,5	100,1
10A(C)6,1X175	49,4	101,8

21^A
C.../...



Outlet "A"
Druckseite "A"
Выход "A"

Inlet "A"
Saugseite "A"
Вход "A"

Note: For the supply ports' sizes (input-output) see the schemes of the relevant single pump-type.
For other pumps' combinations contact with the manufacturer.

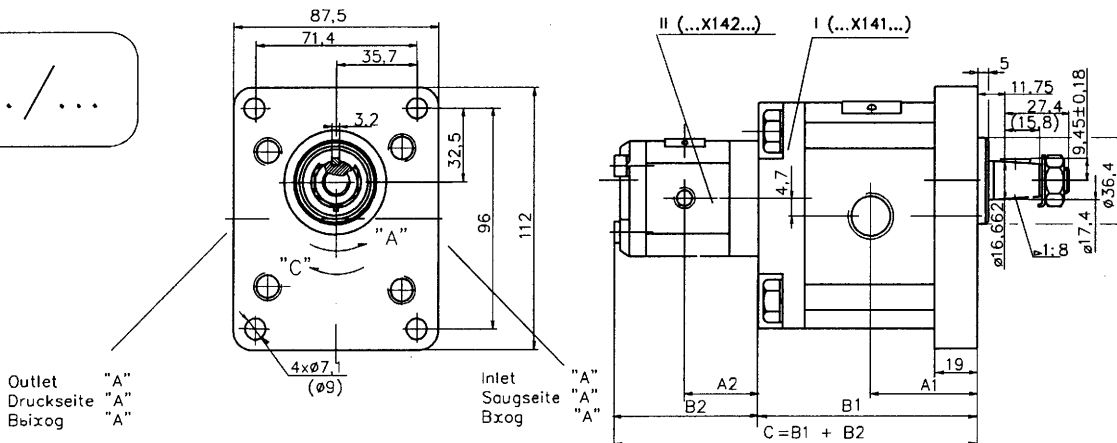
Bemerkung: Für die Abmessungen der Speisebohrungen (Druck- und Saugseite)-siehe Schema des entsprechenden Einzelpumpentypes.
Für andere Pumpenkombination-bitte Rücksprache mit dem Hersteller.

Размеры питаемых отверстий (вход-выход) выполняются в соответствии с чертежами отдельных насосов составляющие комбинацию.

Type Typ Tun	A1	B1
20A(C)4,5X168	42,5	89,7
20A(C)6,3X168	44	92,7
20A(C)8,2X168	45,5	95,6
20A(C)10X168	47	98,7
20A(C)11X168	48	100,7
20A(C)12X168	48,6	102
20A(C)14X168	50	105,1
20A(C)15X168	51	106,6
20A(C)16X168	52	108,3
20A(C)19X168	54	113,2
20A(C)22X168	57	118,2
20A(C)25X168	59,2	123,1

Type Typ Tun	A2	B2
10A(C)1X179	39,1	81
10A(C)1,25X179	39,5	82
10A(C)1,6X179	40,3	83,6
10A(C)2X179	41,1	85,2
10A(C)2,5X179	42,10	87,2
10A(C)3,15X179	43,5	89,8
10A(C)3,65X179	44,4	91,85
10A(C)4,2X179	45,5	94,1
10A(C)5X179	47,1	97,2
10A(C)5,7X179	48,5	100,1
10A(C)6,1X179	49,4	101,8

21^A
C.../...



Outlet "A"
Druckseite "A"
Выход "A"

Inlet "A"
Saugseite "A"
Вход "A"

Note: For the supply ports' sizes (input-output) see the schemes of the relevant single pump-type.
For other pumps' combinations contact with the manufacturer.

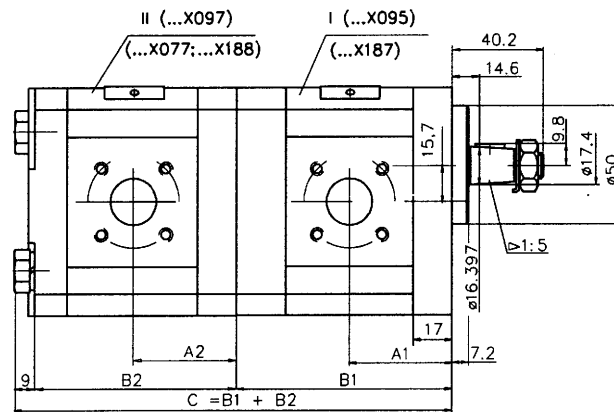
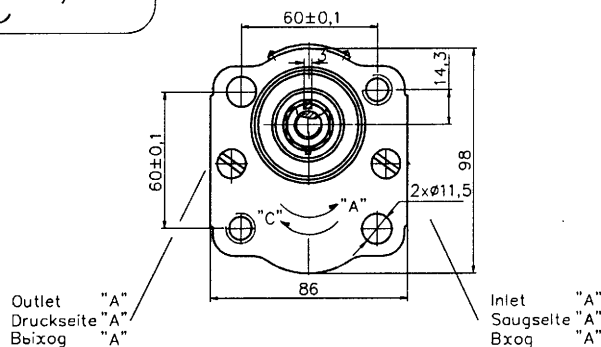
Bemerkung: Für die Abmessungen der Speisebohrungen (Druck- und Saugseite)-siehe Schema des entsprechenden Einzelpumpentypes.
Für andere Pumpenkombination-bitte Rücksprache mit dem Hersteller.

Размеры питаемых отверстий (вход-выход) выполняются в соответствии с чертежами отдельных насосов составляющие комбинацию.

Type Typ Tun	A1	B1
20A(C)4,5X141...	42,5	89,7
20A(C)6,3X141...	44	92,7
20A(C)8,2X141...	45,5	95,6
20A(C)10X141...	47	98,7
20A(C)11X141...	48	100,7
20A(C)12X141...	48,6	102
20A(C)14X141...	50	105,1
20A(C)15X141...	51	106,6
20A(C)16X141...	52	108,3
20A(C)19X141...	54	113,2
20A(C)22X141...	57	118,2
20A(C)25X141...	59,2	123,1

Type Typ Tun	A2	B2
10A(C)1X142...	39,1	81
10A(C)1,25X142...	39,5	82
10A(C)1,6X142...	40,3	83,6
10A(C)2X142...	41,1	85,2
10A(C)2,5X142...	42,10	87,2
10A(C)3,15X142...	43,5	89,8
10A(C)3,65X142...	44,4	91,85
10A(C)4,2X142...	45,5	94,1
10A(C)5X142...	47,1	97,2
10A(C)5,7X142...	48,5	100,1
10A(C)6,1X142...	49,4	101,8

22^A
C.../...



Note: For the supply ports' sizes (input-output) see the schemes of the relevant single pump-type. For other pumps' combinations contact with the manufacturer.

Bemerkung: Für die Abmessungen der Speisebohrungen (Druck- und Saugseite)-siehe Schema des entsprechenden Einzelpumpentypes.

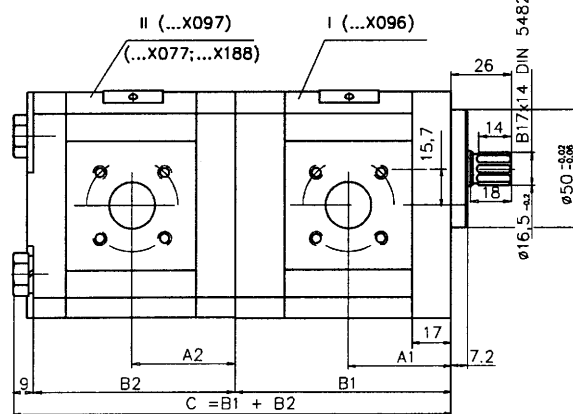
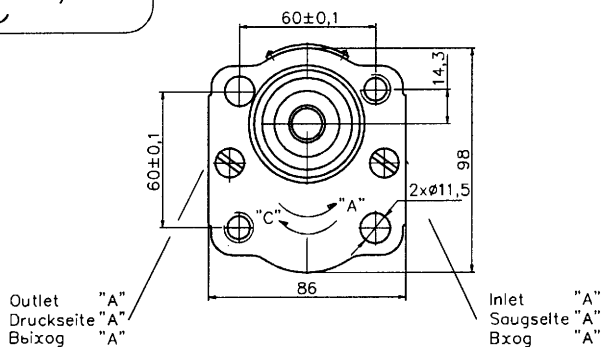
Für andere Pumpencombination-bitte Rücksprache mit dem Hersteller.

Размеры питаемых отверстий (вход-выход) выполняются в соответствии с чертежами одиных насосов составляющие комбинацию.

Type	Typ	Tun	A1	B1
20A(C)4,5	X095		40,5	87,2
20A(C)6,3	X095		42	90,2
20A(C)8,2	X095		43,5	93,1
20A(C)10	X095		45	96,2
20A(C)11	X095		46	98,2
20A(C)12	X095		46,6	99,5
20A(C)14	X095		48	102,6
20A(C)15	X095		49	104,1
20A(C)16	X095		50	105,8
20A(C)19	X095		52	110,7
20A(C)22	X095		53	113,5
20A(C)25	X095		57,2	118,4

Type	Typ	Tun	A2	B2
20A(C)4,5	X097		40,5	78
20A(C)6,3	X097		42	81
20A(C)8,2	X097		43,5	83,9
20A(C)10	X097		45	87
20A(C)11	X097		46	89,1
20A(C)12	X097		46,6	90,3
20A(C)14	X097		48	93,4
20A(C)17	X097		49	95
20A(C)16	X097		50	96,6
20A(C)19	X097		52	101,5
20A(C)22	X097		55	106,5
20A(C)25	X097		57,2	112,1

22^A
C.../...



Note: For the supply ports' sizes (input-output) see the schemes of the relevant single pump-type. For other pumps' combinations contact with the manufacturer.

Bemerkung: Für die Abmessungen der Speisebohrungen (Druck- und Saugseite)-siehe Schema des entsprechenden Einzelpumpentypes.

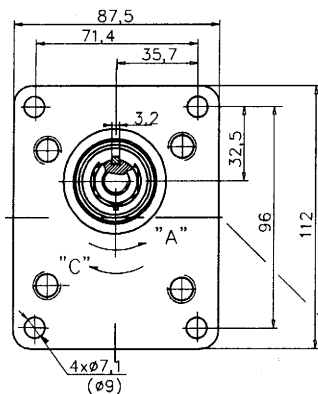
Für andere Pumpencombination-bitte Rücksprache mit dem Hersteller.

Размеры питаемых отверстий (вход-выход) выполняются в соответствии с чертежами одиных насосов составляющие комбинацию.

Type	Typ	Tun	A1	B1
20A(C)4,5	X096		40,5	85
20A(C)6,3	X096		42	88
20A(C)8,2	X096		43,5	91
20A(C)10	X096		45	94
20A(C)11	X096		46	96
20A(C)12	X096		46,6	97,3
20A(C)14	X096		48	100,4
20A(C)15	X096		49	102
20A(C)16	X096		50	103,6
20A(C)19	X096		52	108,5
20A(C)22	X096		55	113,5
20A(C)25	X096		57,2	118,4

Type	Typ	Tun	A2	B2
20A(C)4,5	X097		40,5	78
20A(C)6,3	X097		42	81
20A(C)8,2	X097		43,5	83,9
20A(C)10	X097		45	87
20A(C)11	X097		46	89,1
20A(C)12	X097		46,6	90,3
20A(C)14	X097		48	93,4
20A(C)17	X097		49	95
20A(C)16	X097		50	96,6
20A(C)19	X097		52	101,5
20A(C)22	X097		55	106,5
20A(C)25	X097		57,2	112,1

22^A_C... / ...



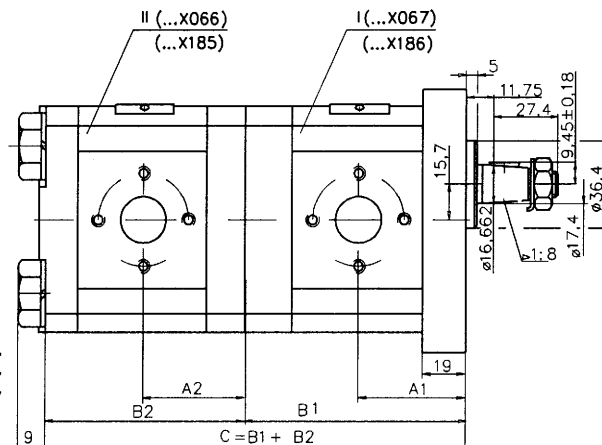
Outlet "A"
Druckseite "A"
Выход "A"

Inlet "A"
Saugseite "A"
Вход "A"

Note: For the supply ports' sizes (input-output) see the schemes of the relevant single pump-type. For other pumps' combinations contact with the manufacturer.

Bemerkung: Für die Abmessungen der Speisebohrungen (Druck- und Saugseite) - siehe Schema des entsprechenden Einzelpumpentypes. Für andere Pumpencombination - bitte Rücksprache mit dem Hersteller.

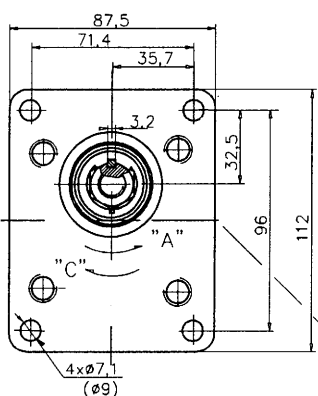
Размеры питательных отверстий (вход-выход) выполняются в соответствии с чертежами одинарных насосов составляющие комбинацию.



		I	
Type	Typ Tun	A1	B1
20A(C)	4,5X067	42,5	87,2
20A(C)	6,3X067	44	90,2
20A(C)	8,2X067	45,5	93,1
20A(C)	10X067	47	96,2
20A(C)	11X067	48	98,2
20A(C)	12X067	48,6	99,5
20A(C)	14X067	50	102,6
20A(C)	15X067	51	104,1
20A(C)	16X067	52	105,8
20A(C)	19X067	54	110,7
20A(C)	22X067	57	115,7
20A(C)	25X067	59,2	120,6

		II	
Type	Typ Tun	A2	B2
20A(C)	4,5X066	40,5	78
20A(C)	6,3X066	42	81
20A(C)	8,2X066	43,5	83,9
20A(C)	10X066	45	87
20A(C)	11X066	46	89,1
20A(C)	12X066	46,6	90,3
20A(C)	14X066	48	93,4
20A(C)	15X066	49	95
20A(C)	16X066	50	96,6
20A(C)	19X066	52	101,5
20A(C)	22X066	55	106,5
20A(C)	25X066	57,2	112,1

22^A_C... / ...



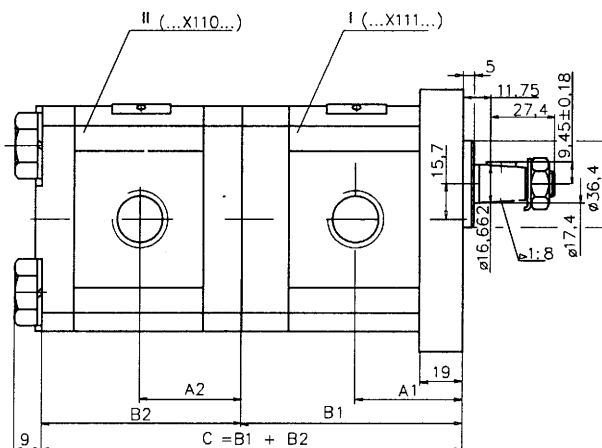
Outlet "A"
Druckseite "A"
Выход "A"

Inlet "A"
Saugseite "A"
Вход "A"

Note: For the supply ports' sizes (input-output) see the schemes of the relevant single pump-type. For other pumps' combinations contact with the manufacturer.

Bemerkung: Für die Abmessungen der Speisebohrungen (Druck- und Saugseite) - siehe Schema des entsprechenden Einzelpumpentypes. Für andere Pumpencombination - bitte Rücksprache mit dem Hersteller.

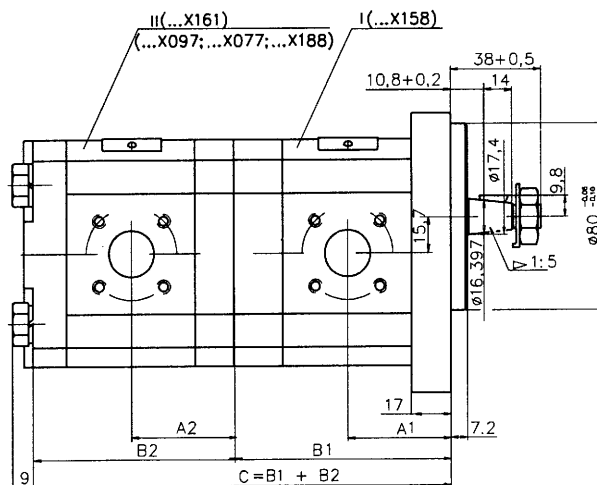
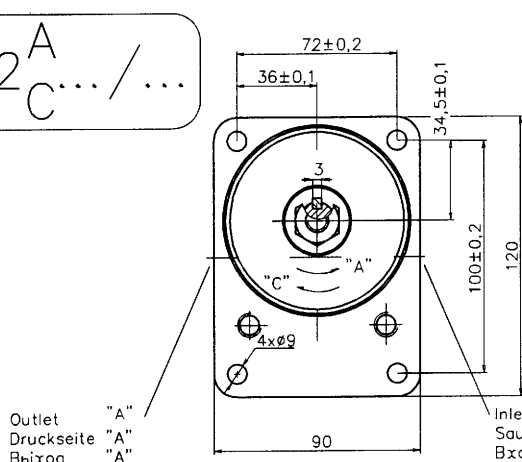
Размеры питательных отверстий (вход-выход) выполняются в соответствии с чертежами одинарных насосов составляющие комбинацию.



		I	
Type	Typ Tun	A1	B1
20A(C)	4,5X111...	42,5	87,2
20A(C)	6,3X111...	44	90,2
20A(C)	8,2X111...	45,5	93,1
20A(C)	10X111...	47	96,2
20A(C)	11X111...	48	98,2
20A(C)	12X111...	48,6	99,5
20A(C)	14X111...	50	102,6
20A(C)	15X111...	51	104,1
20A(C)	16X111...	52	105,8
20A(C)	19X111...	54	110,7
20A(C)	22X111...	57	115,7
20A(C)	25X111...	59,2	120,6

		II	
Type	Typ Tun	A2	B2
20A(C)	4,5X110...	40,5	78
20A(C)	6,3X110...	42	81
20A(C)	8,2X110...	43,5	83,9
20A(C)	10X110...	45	87
20A(C)	11X110...	46	89,1
20A(C)	12X110...	46,6	90,3
20A(C)	14X110...	48	93,4
20A(C)	15X110...	49	95
20A(C)	16X110...	50	96,6
20A(C)	19X110...	52	101,5
20A(C)	22X110...	55	106,5
20A(C)	25X110...	57,2	112,1

22^A_C.../...



Note: For the supply ports' sizes (input-output) see the schemes of the relevant single pump-type. For other pumps' combinations contact with the manufacturer.

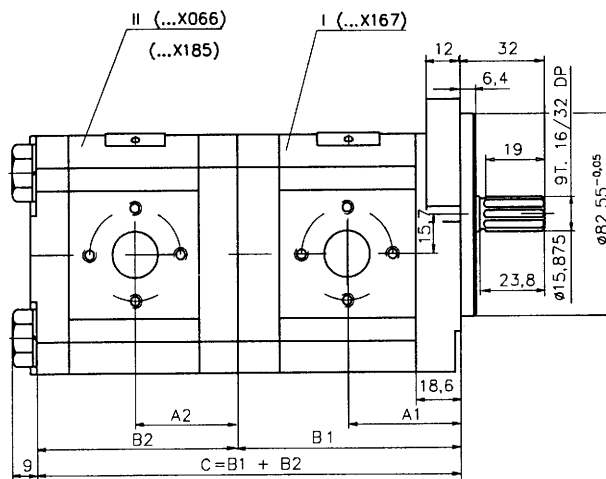
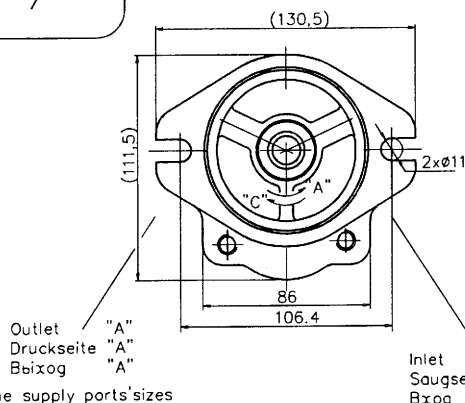
Bemerkung: Für die Abmessungen der Speisebohrungen (Druck- und Saugseite)-sieh Schema des entsprechenden Einzelpumpentypes. Für andere Pumpencombination-bitte Rücksprache mit dem Hersteller.

Размеры питаемых отверстий (вход-выход) выполняются в соответствии с чертежи отдельных насосов составляющие комбинацию.

I				
Type	Typ	Tun	A1	B1
20A(C)4,5	X158		39,8	85,2
20A(C)6,3	X158		41	88,2
20A(C)8,2	X158		43,1	91,1
20A(C)10	X158		47,5	94,2
20A(C)11	X158		47,5	96,2
20A(C)12	X158		47,5	97,5
20A(C)14	X158		47,5	100,6
20A(C)15	X158		47,5	102,1
20A(C)16	X158		47,5	103,8
20A(C)19	X158		47,5	108,7
20A(C)22	X158		55	113,7
20A(C)25	X158		57,2	118,6

II				
Type	Typ	Tun	A2	B2
20A(C)4,5	X161		39,8	78
20A(C)6,3	X161		41	81
20A(C)8,2	X161		43,1	83,9
20A(C)10	X161		47,5	87
20A(C)11	X161		47,5	89,1
20A(C)12	X161		47,5	90,3
20A(C)14	X161		47,5	93,4
20A(C)17	X161		47,5	95
20A(C)16	X161		47,5	96,6
20A(C)19	X161		47,5	101,5
20A(C)22	X161		55	106,5
20A(C)25	X161		57,2	112,1

22^A_C.../...



Note: For the supply ports' sizes (input-output) see the schemes of the relevant single pump-type. For other pumps' combinations contact with the manufacturer.

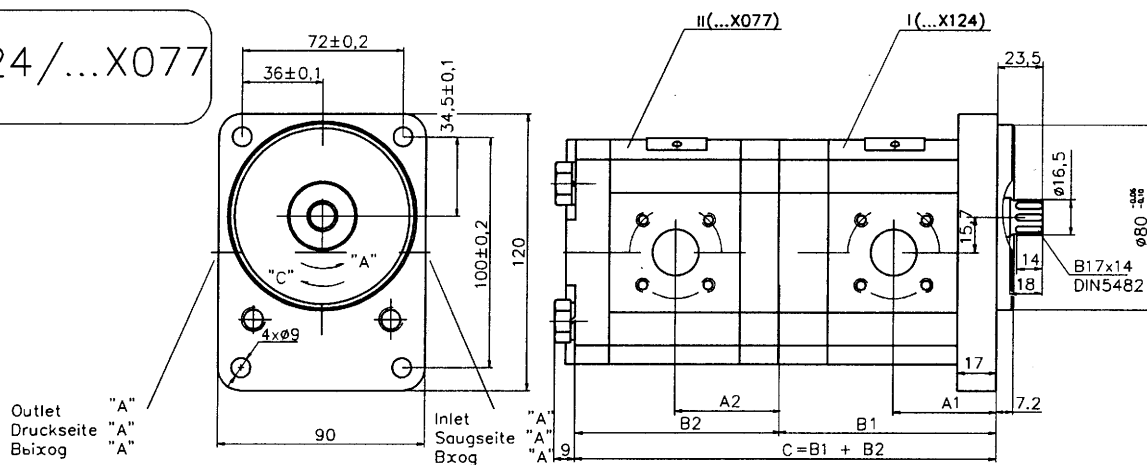
Bemerkung: Für die Abmessungen der Speisebohrungen (Druck- und Saugseite)-sieh Schema des entsprechenden Einzelpumpentypes. Für andere Pumpencombination-bitte Rücksprache mit dem Hersteller.

Размеры питаемых отверстий (вход-выход) выполняются в соответствии с чертежи отдельных насосов составляющие комбинацию.

I				
Type	Typ	Tun	A1	B1
20A(C)4,5	X167		42,5	87,2
20A(C)6,3	X167		42,5	87,2
20A(C)8,2	X167		42,5	87,2
20A(C)10	X167		47	96,2
20A(C)11	X167		48	98,3
20A(C)12	X167		48,6	99,5
20A(C)14	X167		50	102,7
20A(C)15	X167		51	104,1
20A(C)16	X167		52	105,8
20A(C)19	X167		54	110,7
20A(C)22	X167		57	115,7
20A(C)25	X167		58,8	120,6

II				
Type	Typ	Tun	A2	B2
20A(C)4,5	X066		40,5	78
20A(C)6,3	X066		42	81
20A(C)8,2	X066		43,5	83,9
20A(C)10	X066		45	87
20A(C)11	X066		46	89,1
20A(C)12	X066		46,6	90,3
20A(C)14	X066		48	93,4
20A(C)17	X066		49	95
20A(C)16	X066		50	96,6
20A(C)19	X066		52	101,5
20A(C)22	X066		55	106,5
20A(C)25	X066		57,2	112,1

22^A/_C...X124/...X077



Note: For the supply ports' sizes (input-output) see the schemes of the relevant single pump-type.
For other pumps' combinations contact with the manufacturer.

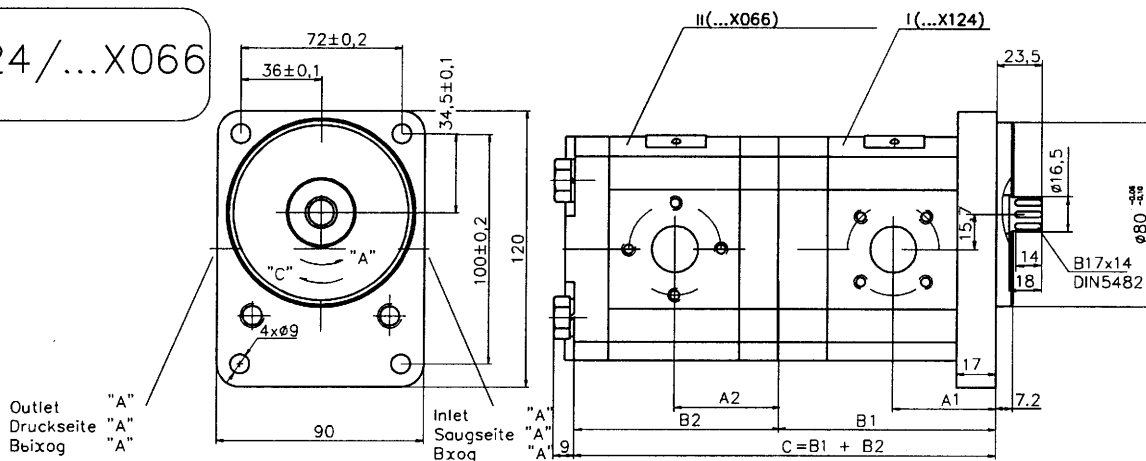
Bemerkung: Für die Abmessungen der Speisebohrungen (Druck- und Saugseite)-sieh Schema des entsprechenden Einzelpumpentypes.
Für andere Pumpencombination-bitte Rücksprache mit dem Hersteller.

Размеры питательных отверстий (вход-выход) выполняются в соответствии с чертежами отдельных насосов составляющие комбинацию.

I				
Type	Typ	Tun	A1	B1
20A(C)4,5	X124		39,8	85,2
20A(C)6,3	X124		41	88,2
20A(C)8,2	X124		43,1	91,1
20A(C)10	X124		47,5	94,2
20A(C)11	X124		47,5	96,2
20A(C)12	X124		47,5	97,5
20A(C)14	X124		47,5	100,6
20A(C)15	X124		47,5	102,1
20A(C)16	X124		47,5	103,8
20A(C)19	X124		47,5	108,7
20A(C)22	X124		55	113,7
20A(C)25	X124		57,2	118,8

II				
Type	Typ	Tun	A2	B2
20A(C)4,5	X077		37,3	78
20A(C)6,3	X077		38,6	81
20A(C)8,2	X077		40,6	83,9
20A(C)10	X077		45	87
20A(C)11	X077		45	89,1
20A(C)12	X077		45	90,3
20A(C)14	X077		45	93,4
20A(C)15	X077		45	95
20A(C)16	X077		45	96,6
20A(C)19	X077		45	101,5
20A(C)22	X077		52,5	106,5
20A(C)25	X077		57,2	112,1

22^A/_C...X124/...X066



Note: For the supply ports' sizes (input-output) see the schemes of the relevant single pump-type.
For other pumps' combinations contact with the manufacturer.

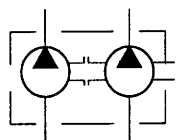
Bemerkung: Für die Abmessungen der Speisebohrungen (Druck- und Saugseite)-sieh Schema des entsprechenden Einzelpumpentypes.
Für andere Pumpencombination-bitte Rücksprache mit dem Hersteller.

Размеры питательных отверстий (вход-выход) выполняются в соответствии с чертежами отдельных насосов составляющие комбинацию.

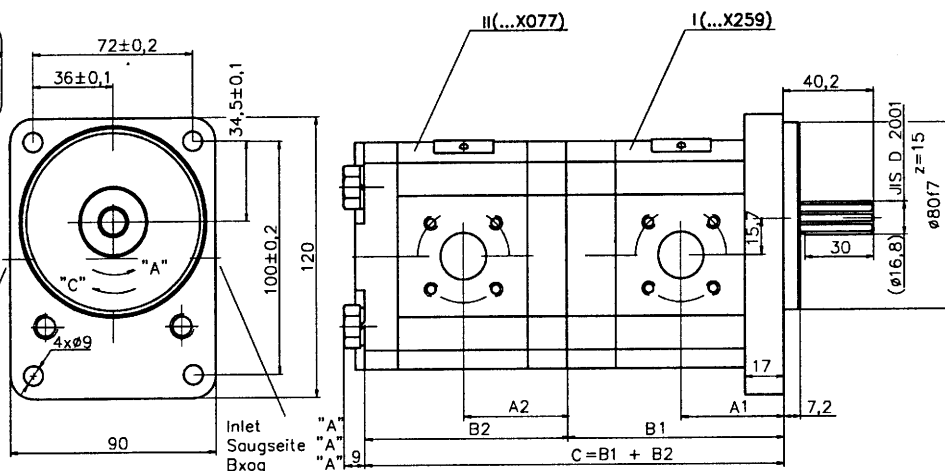
I				
Type	Typ	Tun	A1	B1
20A(C)4,5	X124		39,8	85,2
20A(C)6,3	X124		41	88,2
20A(C)8,2	X124		43,1	91,1
20A(C)10	X124		47,5	94,2
20A(C)11	X124		47,5	96,2
20A(C)12	X124		47,5	97,5
20A(C)14	X124		47,5	100,6
20A(C)15	X124		47,5	102,1
20A(C)16	X124		47,5	103,8
20A(C)19	X124		47,5	108,7
20A(C)22	X124		55	113,7
20A(C)25	X124		57,2	118,8

II				
Type	Typ	Tun	A2	B2
20A(C)4,5	X066		40,5	78
20A(C)6,3	X066		42	81
20A(C)8,2	X066		43,5	83,9
20A(C)10	X066		45	87
20A(C)11	X066		46	89,1
20A(C)12	X066		46,6	90,3
20A(C)14	X066		48	93,4
20A(C)15	X066		49	95
20A(C)16	X066		50	96,6
20A(C)19	X066		52	101,5
20A(C)22	X066		55	106,5
20A(C)25	X066		57,2	112,1

22^A_C...X259/...X077



Outlet "A"
Druckseite "A"
Выход "A"



Note: For the supply ports' sizes (input-output) see the schemes of the relevant single pump-type. For other pumps' combinations contact with the manufacturer.

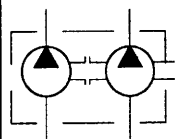
Bemerkung: Für die Abmessungen der Speisebohrungen (Druck- und Saugseite)-sieh Schema des entsprechenden Einzelpumpentypes. Für andere Pumpencombination-bitte Rücksprache mit dem Hersteller.

Размеры питаельных отверстий (вход-выход) выполняются в соответствии с чертежи одианрных насосов составляющие комбинацию.

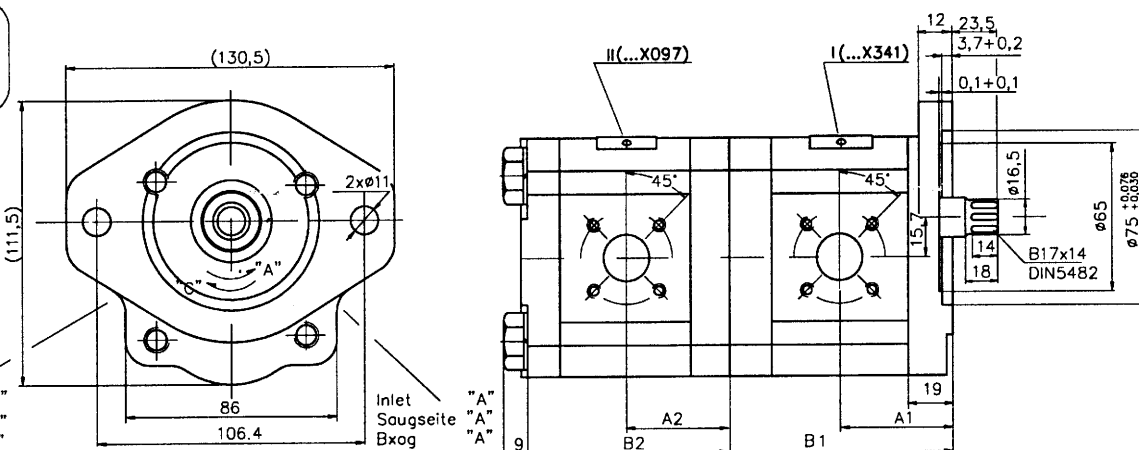
Type	Typ	Tun	A1	B1
20A(C)	4,5	X259	39,8	85,2
20A(C)	6,3	X259	41	88,2
20A(C)	8,2	X259	43,1	91,1
20A(C)	10	X259	47,5	94,2
20A(C)	11	X259	47,5	96,2
20A(C)	12	X259	47,5	97,5
20A(C)	14	X259	47,5	100,6
20A(C)	15	X259	47,5	102,1
20A(C)	16	X259	47,5	103,8
20A(C)	19	X259	47,5	108,7
20A(C)	22	X259	55	113,7
20A(C)	25	X259	57,2	118,8

Type	Typ	Tun	A2	B2
20A(C)	4,5	X077	37,3	78
20A(C)	6,3	X077	38,6	81
20A(C)	8,2	X077	40,6	83,9
20A(C)	10	X077	45	87
20A(C)	11	X077	45	89
20A(C)	12	X077	45	90,3
20A(C)	14	X077	45	93,4
20A(C)	15	X077	45	94,9
20A(C)	16	X077	45	96,5
20A(C)	19	X077	45	101,5
20A(C)	22	X077	52,5	106,5
20A(C)	25	X077	57,2	111,4

22^A_C.../...



Outlet "A"
Druckseite "A"
Выход "A"



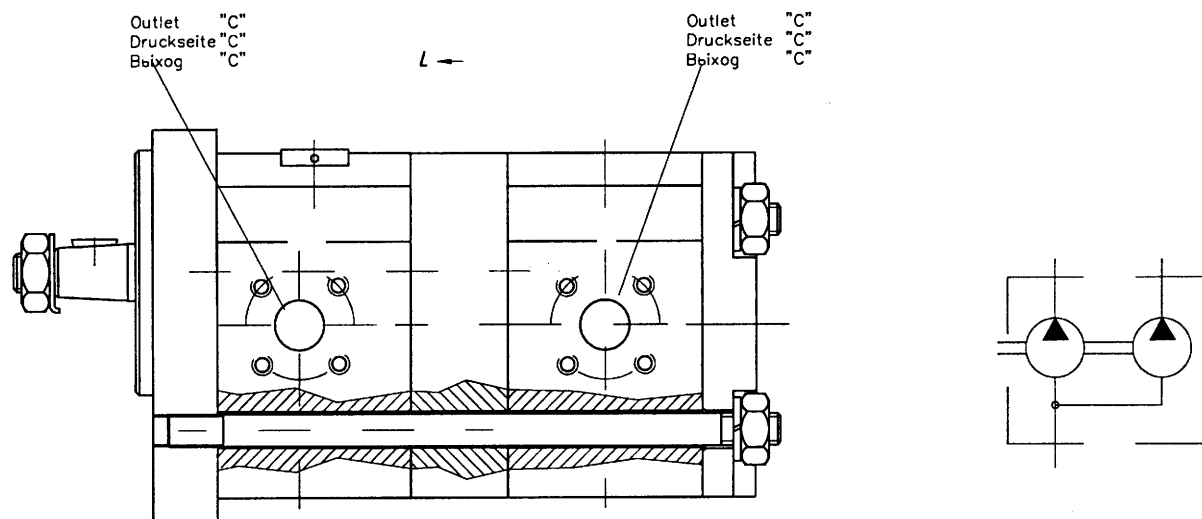
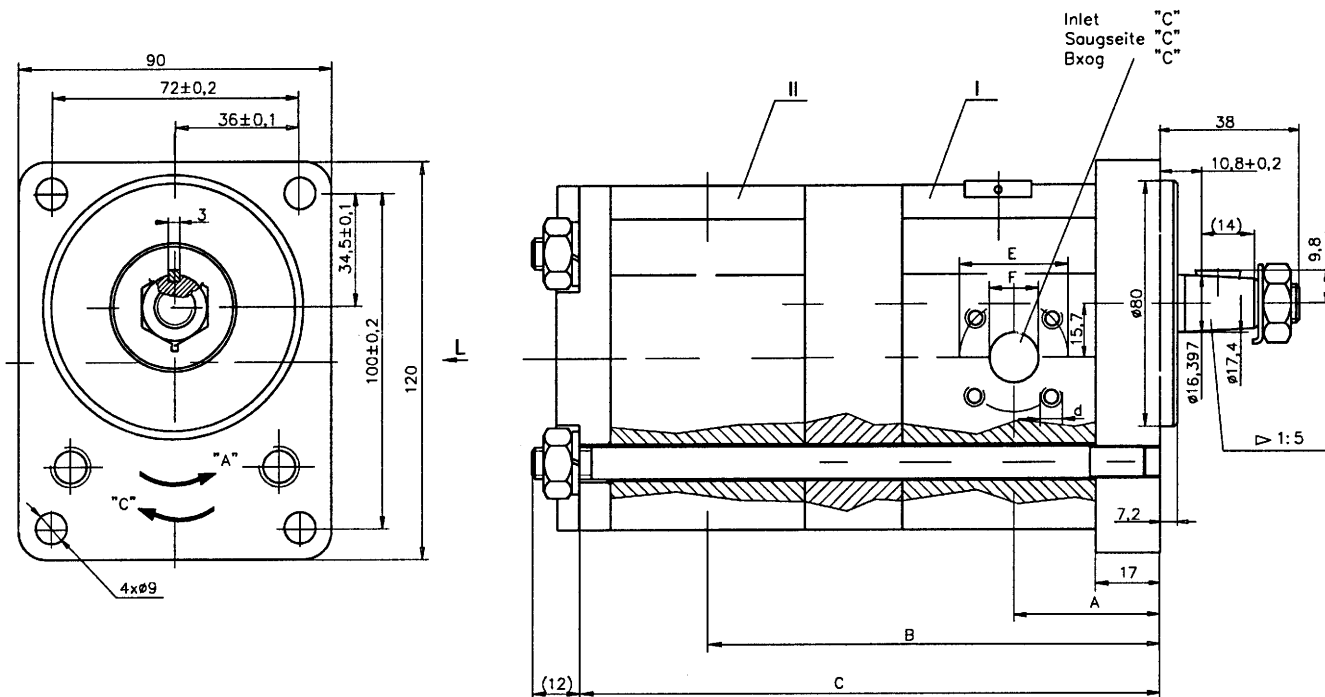
Note: For the supply ports' sizes (input-output) see the schemes of the relevant single pump-type. For other pumps' combinations contact with the manufacturer.

Bemerkung: Für die Abmessungen der Speisebohrungen (Druck- und Saugseite)-sieh Schema des entsprechenden Einzelpumpentypes. Für andere Pumpencombination-bitte Rücksprache mit dem Hersteller.

Размеры питаельных отверстий (вход-выход) выполняются в соответствии с чертежи одианрных насосов составляющие комбинацию.

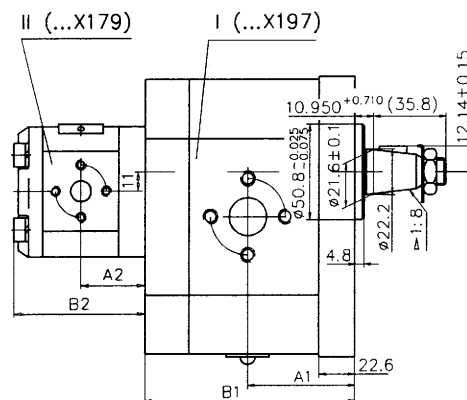
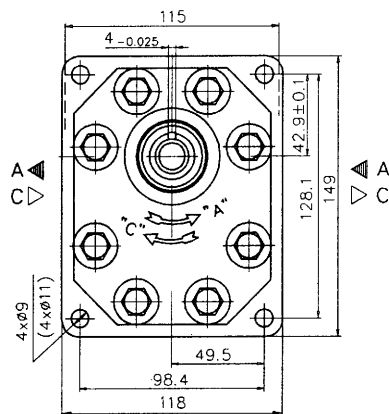
Type	Typ	Tun	A1	B1
20A(C)	4,5	X341	41,8	87,2
20A(C)	6,3	X341	43	90,2
20A(C)	8,2	X341	45,1	93,1
20A(C)	10	X341	49,5	96,2
20A(C)	11	X341	49,5	98,2
20A(C)	12	X341	49,5	99,5
20A(C)	14	X341	49,5	102,6
20A(C)	15	X341	49,5	104,1
20A(C)	16	X341	49,5	105,8
20A(C)	19	X341	49,5	110,7
20A(C)	22	X341	57	115,7
20A(C)	25	X341	59,2	120,6

Type	Typ	Tun	A2	B2
20A(C)	4,5	X097	40,5	78
20A(C)	6,3	X097	42	81
20A(C)	8,2	X097	43,5	83,9
20A(C)	10	X097	45	87
20A(C)	11	X097	46	89
20A(C)	12	X097	46,6	90,3
20A(C)	14	X097	48	93,4
20A(C)	15	X097	49	94,9
20A(C)	16	X097	52	96,5
20A(C)	19	X097	52	101,5
20A(C)	22	X097	55	106,5
20A(C)	25	X097	57,2	111,4



Type Typ Тип	Displacement Foerdervolumen Рабочий объем		Dimensions Abmessungen Размеры											
			Inlet Saugseite Выход			Outlet Druckseite Выход			II					
	I	II	E	F	d	E	F	d	E	F	d	A	B	C
	cm ³		mm			mm			mm			mm		
22C16/11X280	16	11,3	40	20	M6	35	15	M6	35	15	M6	47,5	141,9	183,3
22C14/11X280	14	11,3	40	20	M6	35	15	M6	35	15	M6	47,5	138,7	180,2
22C16/8,2X280	16	8,2	40	20	M6	35	15	M6	35	15	M6	47,5	137,4	178,2

31A
C... / ...



Note: For the supply ports' sizes (input-output) see the schemes of the relevant single pump-type. For other pumps' combinations contact with the manufacturer.

Bemerkung: Für die Abmessungen der Speisebohrungen (Druck- und Saugseite) - siehe Schema des entsprechenden Einzelpumpentypes. Für andere Pumpenkombination bitte Rücksprache mit der Hersteller.

Примечание: Размеры питающих отверстий (вход-выход) выполняется в соответствии с чертёжом одинарных насосов составляющие комбинацию.

Type Typ Tun	I	
	A1	B1
	mm	
30A(C)20X197	54	112.8
30A(C)22.5X197	53.3	111.4
30A(C)25X197	54	112.8
30A(C)32X197	62	128.8
30A(C)36X197	63.5	131.9
30A(C)42X197	66.3	137.5
30A(C)46X197	68.2	141.3
30A(C)50X197	70	144.9
30A(C)55X197	72.2	149.4

Type Typ Tun	II	
	A2	B2
	mm	
10A(C)1X179	39.1	81
10A(C)1.25X179	39.5	82
10A(C)1.6X179	40.3	83.6
10A(C)2X179	41.1	85.2
10A(C)2.5X179	42.1	87.2
10A(C)3.15X179	43.5	89.8
10A(C)3.65X179	44.4	91.85
10A(C)4.2X179	45.5	94.1
10A(C)5X179	47.1	97.2
10A(C)5.7X179	48.5	100.1
10A(C)6.1X179	49.4	101.8

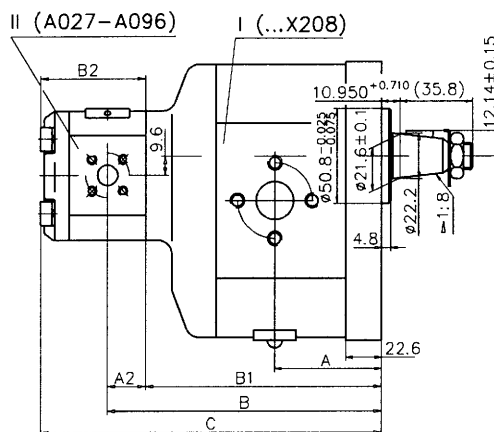
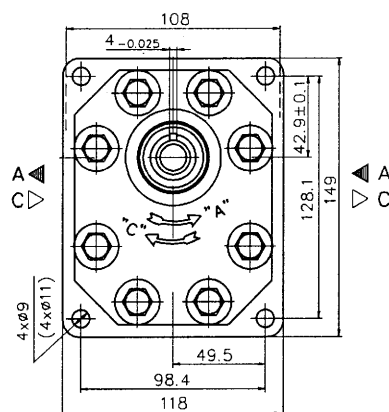
31A
C... / ...

P_{max} 175 bar

Note: For the supply ports' sizes (input-output) see the schemes of the relevant single pump-type. For other pumps' combinations contact with the manufacturer.

Bemerkung: Für die Abmessungen der Speisebohrungen (Druck- und Saugseite) - siehe Schema des entsprechenden Einzelpumpentypes. Für andere Pumpenkombination bitte Rücksprache mit der Hersteller.

Примечание: Размеры питающих отверстий (вход-выход) выполняется в соответствии с чертёжом одинарных насосов составляющие комбинацию.



$$B = B1 + A2$$

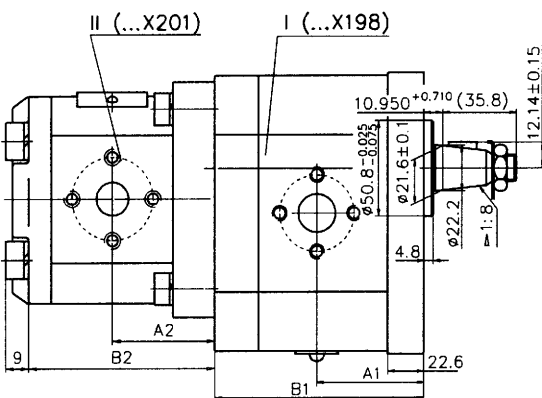
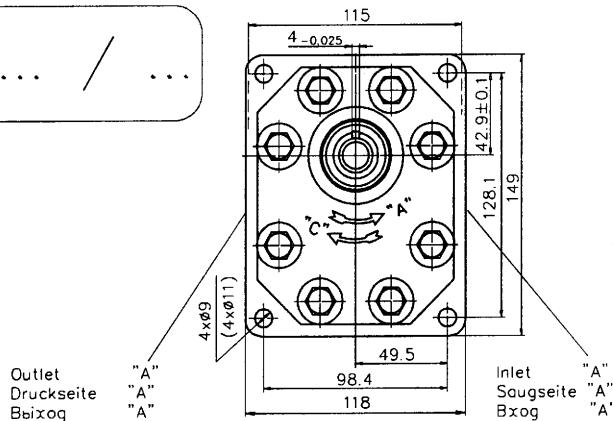
$$C = B1 + B2$$

Type Typ Tun	Displacement Foerdervolumen Рабочий объем	I		In. Saug. Bx.			Out. Druck. Bx.			
		A	B1	E	d	F	E	d	F	
	cm ³	mm								
30A(C)20X208	20	54	122.3	40	M8	19	40	M8	19	
30A(C)22.5X208	22.5	53.3	120.9	40	M8	19	40	M8	19	
30A(C)25X208	25	54	122.3	40	M8	19	40	M8	19	
30A(C)32X208	32	62	138.3	51	M10	27	40	M8	19	
30A(C)36X208	36	63.5	141.4	51	M10	27	40	M8	19	
30A(C)42X208	42	66.3	147	51	M10	27	40	M8	19	
30A(C)46X208	46	68.2	150.8	51	M10	27	40	M8	19	
30A(C)50X208	50	70	154.4	51	M10	27	40	M8	19	
30A(C)55X208	55	72.2	158.9	51	M10	27	40	M8	19	

Note
Equivalent Plessey
43X
50X
54X
72X
80X
94X
101X
111X
121X

Type Typ Tun	II	
	A2	B2
	mm	
A(C)027X	17.5	54.5
A(C)036X	18.5	56.5
A(C)048X	18.5	56.5
A(C)060X	18.5	56.5
10A(C)072X	22.5	63.5
A(C)084X	22.5	63.5
A(C)096X	22.5	63.5

32A
C... / ...



Note: For the supply ports' sizes (input-output) see the schemes of the relevant single pump-type. For other pumps' combinations contact with the manufacturer.

Bemerkung: Für die Abmessungen der Speisebohrungen (Druck- und Saugseite) - siehe Schema des entsprechenden Einzelpumpentypes. Für andere Pumpenkombination bitte Rücksprache mit der Hersteller.
Примечание: Размеры питающих отверстий (вход-выход) выполняются в соответствии с чертежами одинарных насосов составляющие комбинацию.

Type Typ Tun	I	
	A1	B1
	mm	
30A(C)20x198	54	110.3
30A(C)22.5x198	53.3	108.9
30A(C)25x198	54	110.3
30A(C)32x198	62	126.3
30A(C)36x198	63.5	129.4
30A(C)42x198	66.3	135
30A(C)46x198	68.2	138.8
30A(C)50x198	70	142.4
30A(C)55x198	72.2	146.9

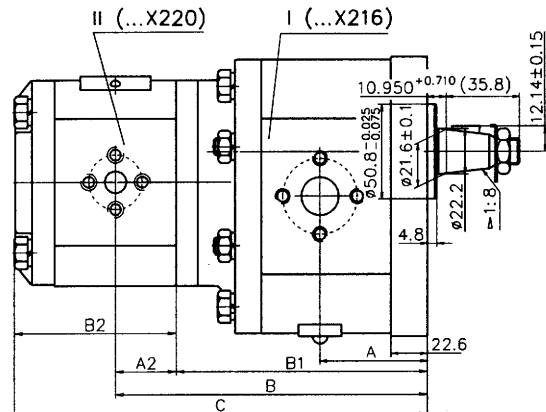
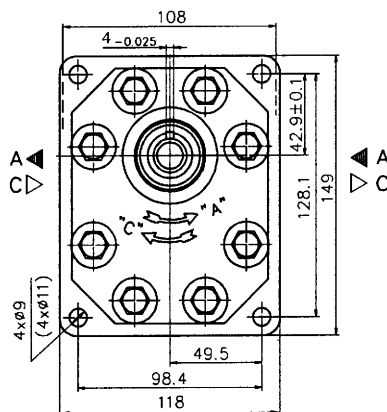
Type Typ Tun	II	
	A2	B2
	mm	
20A(C)4.5X201	40.5	78
20A(C)6.3X201	42	81
20A(C)8.2X201	43.5	83.9
20A(C)10X201	45	87
20A(C)11X201	46	89.1
20A(C)12X201	46.6	90.3
20A(C)14X201	48	93.4
20A(C)15X201	49	95
20A(C)16X201	50	96.6
20A(C)19X201	52	101.5
20A(C)22X201	55	101.5
20A(C)25X201	57.7	104.5

32A
C... / ...

P_{max} 175 bar

Note: For the supply ports' sizes (input-output) see the schemes of the relevant single pump-type. For other pumps' combinations contact with the manufacturer.

Bemerkung: Für die Abmessungen der Speisebohrungen (Druck- und Saugseite) - siehe Schema des entsprechenden Einzelpumpentypes. Für andere Pumpenkombination bitte Rücksprache mit der Hersteller.
Примечание: Размеры питающих отверстий (вход-выход) выполняются в соответствии с чертежами одинарных насосов составляющие комбинацию.

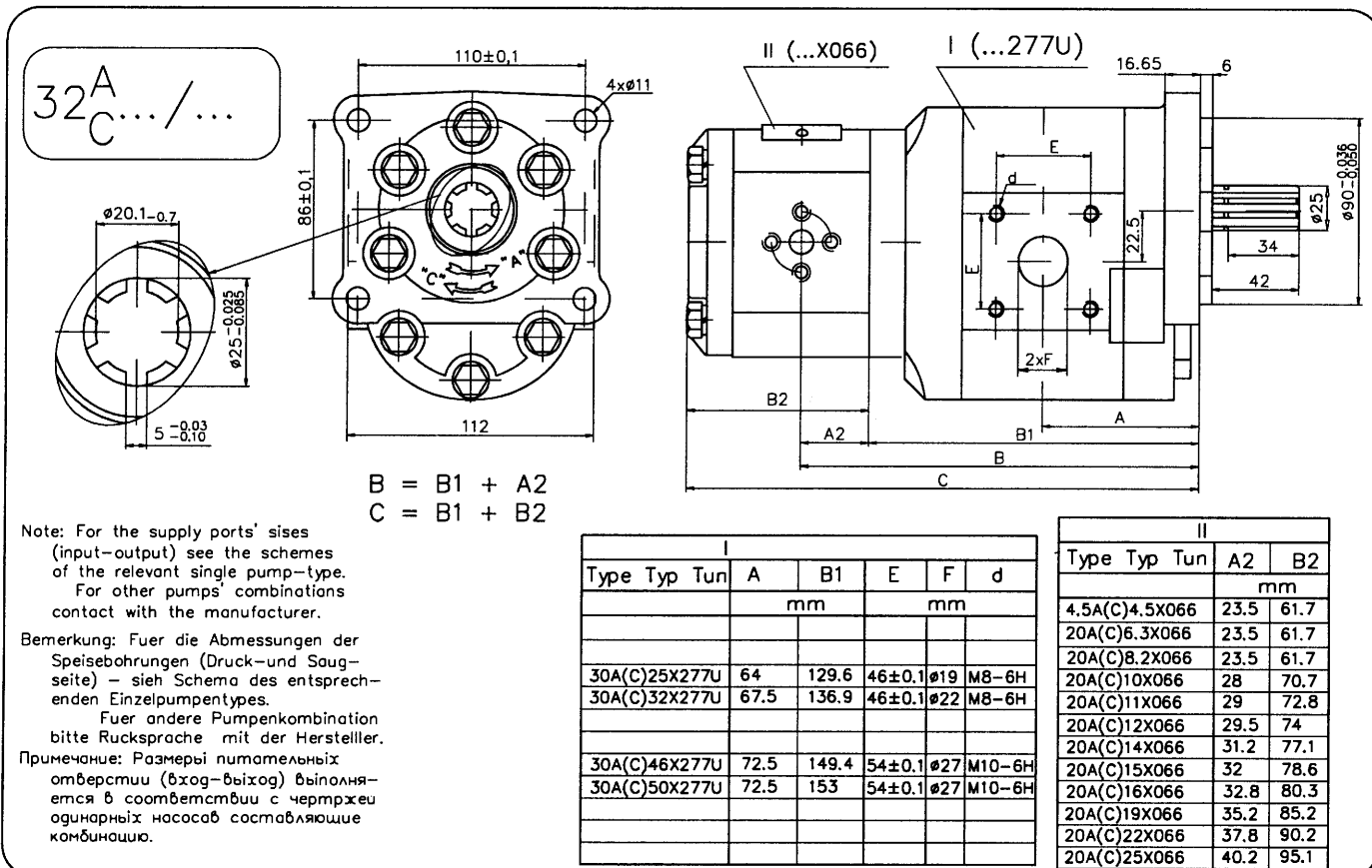
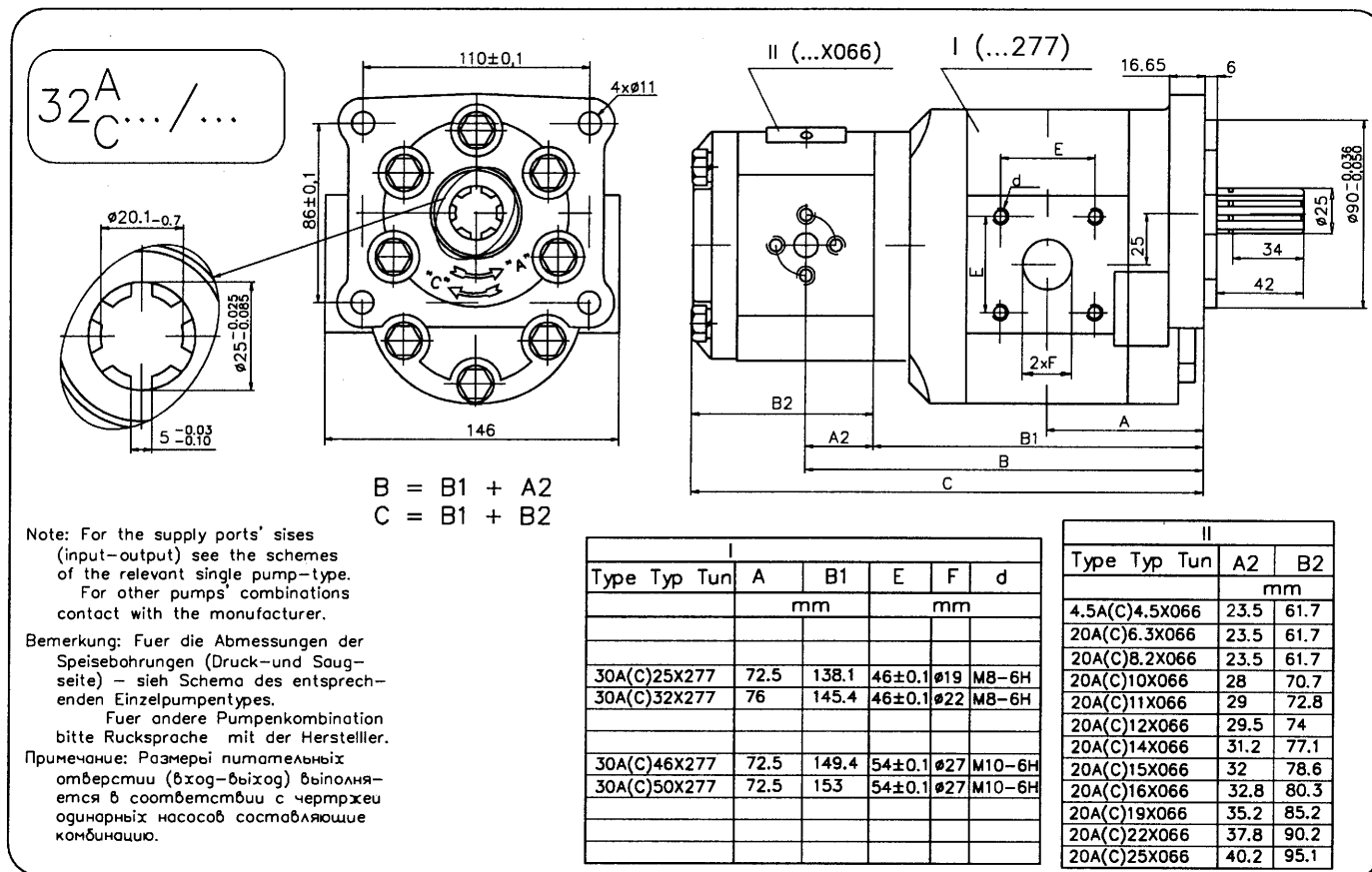


$$B = B1 + A2$$

$$C = B1 + B2$$

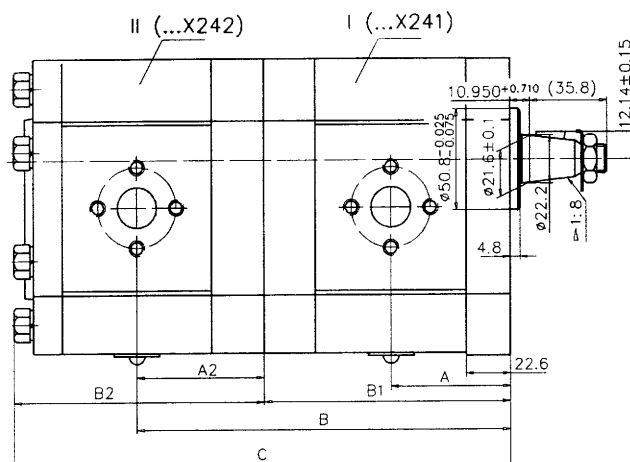
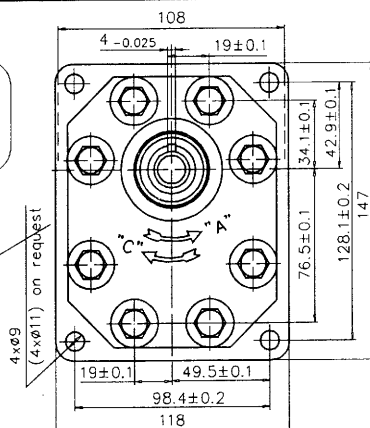
Type Typ Tun	Displacement Foerdervolumen Рабочий объем	I		In. Saug. Bx.			Out. Druck. Вых.			Note Equivalent Plessey
		A	B1	E	d	F	E	d	F	
30A(C)20X216	20	54	135.3	40	M8	19	40	M8	19	43X
30A(C)22.5X216	22.5	53.3	133.9	40	M8	19	40	M8	19	50X
30A(C)25X216	25	54	135.3	40	M8	19	40	M8	19	54X
30A(C)32X216	32	62	151.3	51	M10	27	40	M8	19	72X
30A(C)36X216	36	63.5	154.4	51	M10	27	40	M8	19	80X
30A(C)42X216	42	66.3	160	51	M10	27	40	M8	19	94X
30A(C)46X216	46	68.2	163.8	51	M10	27	40	M8	19	101X
30A(C)50X216	50	70	167.4	51	M10	27	40	M8	19	111X
30A(C)55X216	55	72.2	171.9	51	M10	27	40	M8	19	121X

Type Typ Tun	II		Note Equivalent Plessey
	A2	B2	
	mm		
4.5A(C)4.5X220	23.5	61.7	10X
20A(C)6.3X220	23.5	61.7	14X
20A(C)8.2X220	23.5	61.7	18X
20A(C)10X220	28	70.7	22X
20A(C)11X220	29	72.8	25X
20A(C)12X220	29.5	74	26X
20A(C)14X220	31.2	77.1	31X
20A(C)15X220	32	78.6	33X
20A(C)16X220	32.8	80.3	35X
20A(C)19X220	35.2	85.2	42X
20A(C)22X220	37.8	90.2	48X
20A(C)25X220	40.2	95.1	55X



33A
C... / ...

Outlet
Druckseite
Выход



$$B = B1 + A2$$

$$C = B1 + B2$$

Note: For the supply ports' sizes (input-output) see the schemes of the relevant single pump-type. For other pumps' combinations contact with the manufacturer.

Bemerkung: Für die Abmessungen der Speisebohrungen (Druck- und Saugseite) - siehe Schema des entsprechenden Einzelpumpentypes.

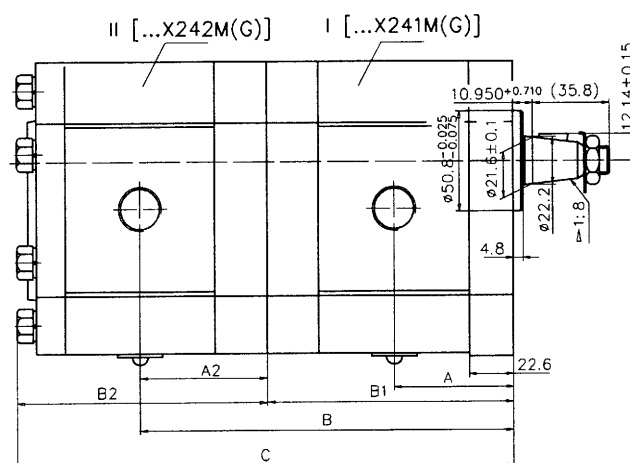
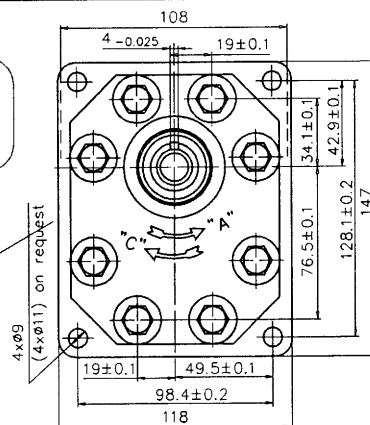
Für andere Pumpenkombination bitte Rücksprache mit der Hersteller.
Примечание: Размеры питательных отверстий (вход-выход) выполняются в соответствии с чертежами отдельных насосов составляющие комбинацию.

I			Note Equivalent Plessey
Type	Typ	Tun	
mm			
30A(C)20X241	54	110.1	43X
30A(C)22.5X241	53.3	108.7	50X
30A(C)25X241	54	110.1	54X
30A(C)32X241	62	126.1	72X
30A(C)36X241	63.5	129.2	80X
30A(C)42X241	66.3	134.8	94X
30A(C)46X241	68.2	138.6	101X
30A(C)50X241	70	142.4	111X
30A(C)55X241	72.2	146.7	121X

II			Note Equivalent Plessey
Type	Typ	Tun	
mm			
30A(C)20X242	56.2	111	43X
30A(C)22.5X242	55.5	109.6	50X
30A(C)25X242	56.2	111	54X
30A(C)32X242	64.2	127	72X
30A(C)36X242	65.7	130.1	80X
30A(C)42X242	68.5	135.7	94X
30A(C)46X242	70.4	139.5	101X
30A(C)50X242	72.2	143.1	111X
30A(C)55X242	74.4	147.6	121X

33A
C... / ...

Outlet
Druckseite
Выход



$$B = B1 + A2$$

$$C = B1 + B2$$

Note: For the supply ports' sizes (input-output) see the schemes of the relevant single pump-type. For other pumps' combinations contact with the manufacturer.

Bemerkung: Für die Abmessungen der Speisebohrungen (Druck- und Saugseite) - siehe Schema des entsprechenden Einzelpumpentypes.

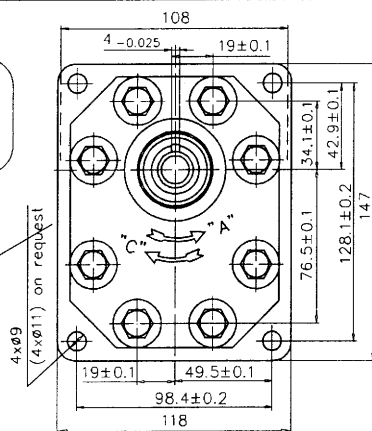
Für andere Pumpenkombination bitte Rücksprache mit der Hersteller.
Примечание: Размеры питательных отверстий (вход-выход) выполняются в соответствии с чертежами отдельных насосов составляющие комбинацию.

I			Note Equivalent Plessey
Type	Typ	Tun	
mm			
30A(C)20X241M(G)	54	110.1	43X
30A(C)22.5X241M(G)	53.3	108.7	50X
30A(C)25X241M(G)	54	110.1	54X
30A(C)32X241M(G)	62	126.1	72X
30A(C)36X241M(G)	63.5	129.2	80X
30A(C)42X241M(G)	66.3	134.8	94X
30A(C)46X241M(G)	68.2	138.6	101X
30A(C)50X241M(G)	70	142.4	111X
30A(C)55X241M(G)	72.2	146.7	121X

II			Note Equivalent Plessey
Type	Typ	Tun	
mm			
30A(C)20X242M(G)	56.2	111	43X
30A(C)22.5X242M(G)	55.5	109.6	50X
30A(C)25X242M(G)	56.2	111	54X
30A(C)32X242M(G)	64.2	127	72X
30A(C)36X242M(G)	65.7	130.1	80X
30A(C)42X242M(G)	68.5	135.7	94X
30A(C)46X242M(G)	70.4	139.5	101X
30A(C)50X242M(G)	72.2	143.1	111X
30A(C)55X242M(G)	74.4	147.6	121X

33A
C... / ...

Outlet
Druckseite
Выход
"A"
"A"
"A"



$$B = B1 + A2$$

$$C = B1 + B2$$

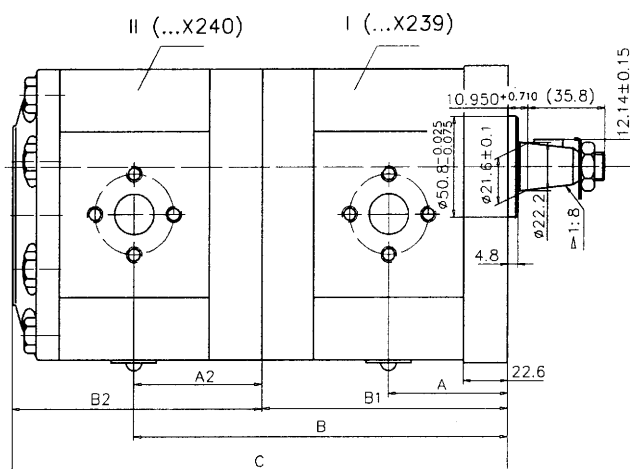
Note: For the supply ports' sizes (input-output) see the schemes of the relevant single pump-type. For other pumps' combinations contact with the manufacturer.

Bemerkung: Für die Abmessungen der Speisebohrungen (Druck- und Saugseite) - siehe Schema des entsprechenden Einzelpumpentypes.

Für andere Pumpenkombination bitte Rücksprache mit der Hersteller.

Примечание: Размеры питательных отверстий (вход-выход) выполняются в соответствии с чертежами одинарных насосов составляющие комбинацию.

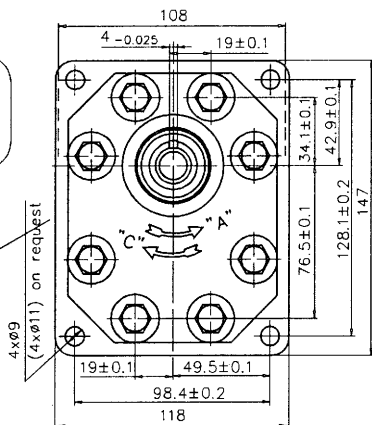
I			Note Equivalent Plessey
Type	Typ Tun	A B1 mm	
30A(C)20X239	54	110.1	43X
30A(C)22.5X239	53.3	108.7	50X
30A(C)25X239	54	110.1	54X
30A(C)32X239	62	126.1	72X
30A(C)36X239	63.5	129.2	80X
30A(C)42X239	66.3	134.8	94X
30A(C)46X239	68.2	138.6	101X
30A(C)50X239	70	142.4	111X
30A(C)55X239	72.2	146.7	121X



II			Note Equivalent Plessey
Type	Typ Tun	A B1 mm	
30A(C)20X240	56.2	111	43X
30A(C)22.5X240	55.5	109.6	50X
30A(C)25X240	56.2	111	54X
30A(C)32X240	64.2	127	72X
30A(C)36X240	65.7	130.1	80X
30A(C)42X240	68.5	135.7	94X
30A(C)46X240	70.4	139.5	101X
30A(C)50X240	72.2	143.1	111X
30A(C)55X240	74.4	147.6	121X

33A
C... / ...

Outlet
Druckseite
Выход
"A"
"A"
"A"



$$B = B1 + A2$$

$$C = B1 + B2$$

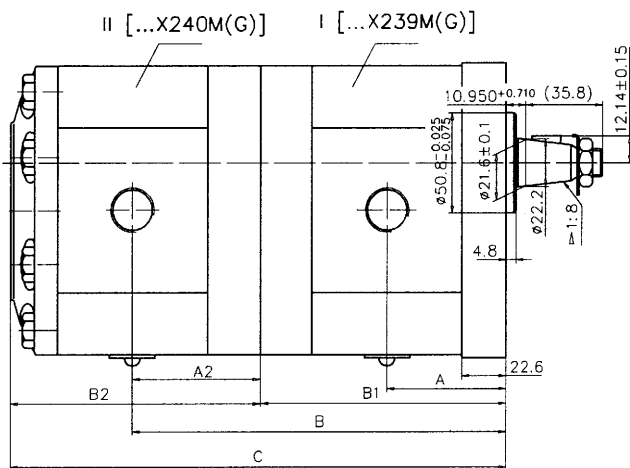
Note: For the supply ports' sizes (input-output) see the schemes of the relevant single pump-type. For other pumps' combinations contact with the manufacturer.

Bemerkung: Für die Abmessungen der Speisebohrungen (Druck- und Saugseite) - siehe Schema des entsprechenden Einzelpumpentypes.

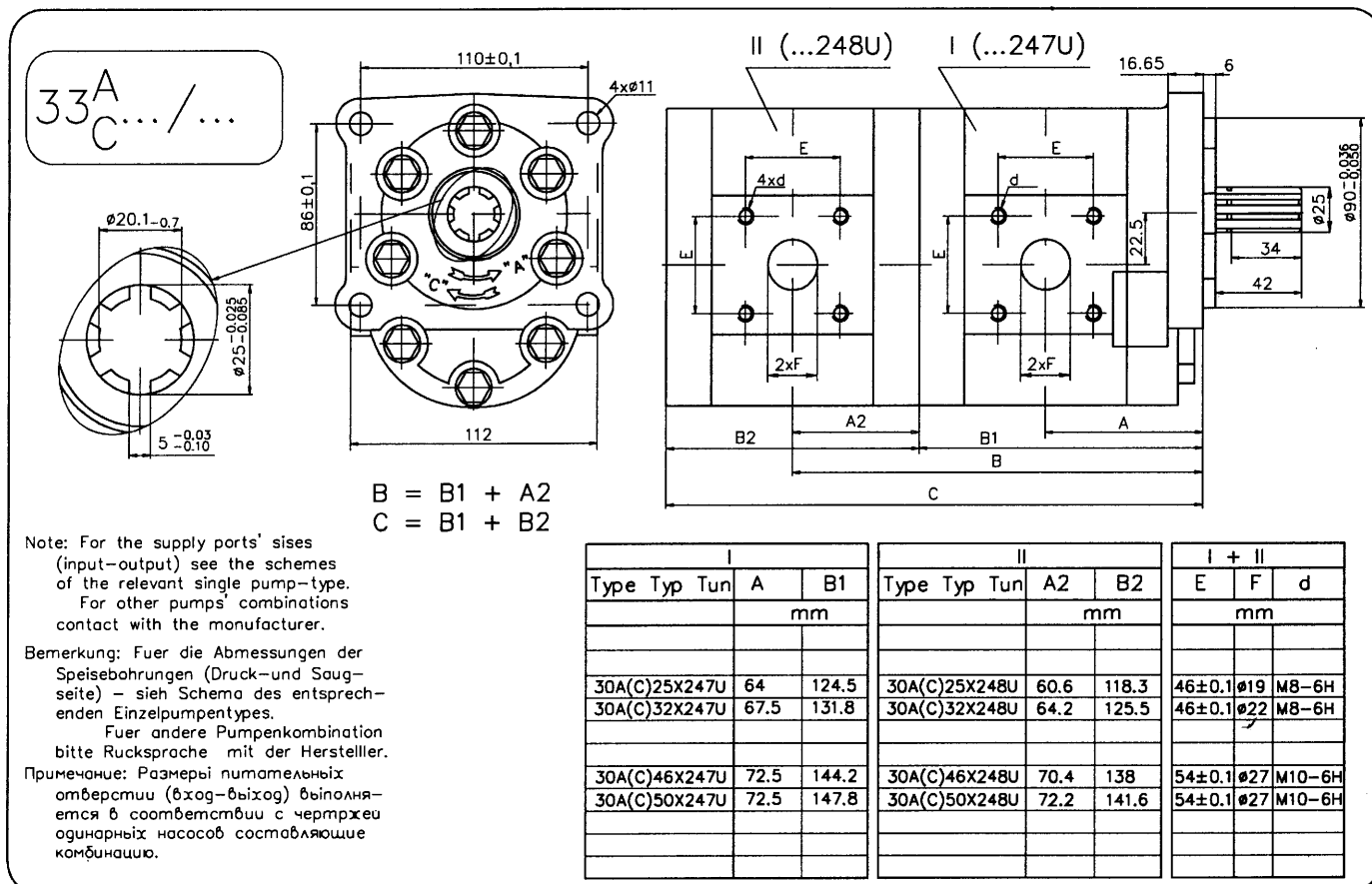
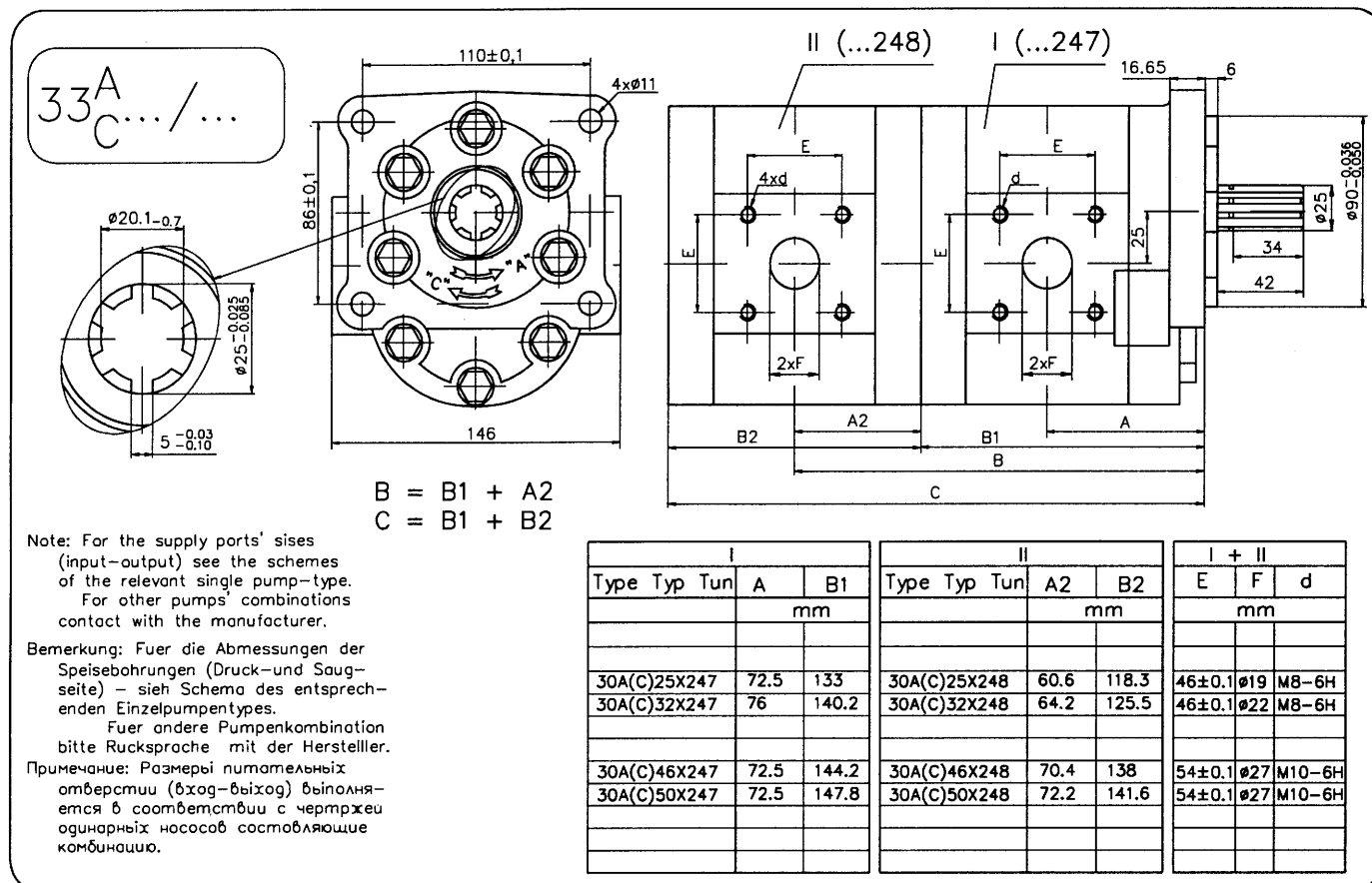
Für andere Pumpenkombination bitte Rücksprache mit der Hersteller.

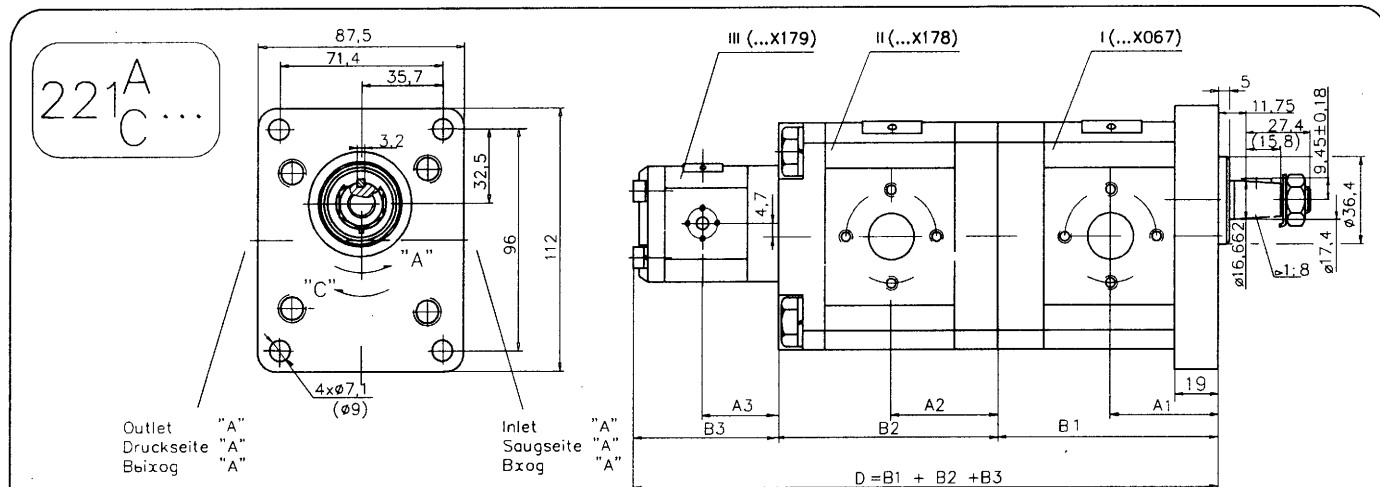
Примечание: Размеры питательных отверстий (вход-выход) выполняются в соответствии с чертежами одинарных насосов составляющие комбинацию.

I			Note Equivalent Plessey
Type	Typ Tun	A B1 mm	
30A(C)20X239M(G)	54	110.1	43X
30A(C)22.5X239M(G)	53.3	108.7	50X
30A(C)25X239M(G)	54	110.1	54X
30A(C)32X239M(G)	62	126.1	72X
30A(C)36X239M(G)	63.5	129.2	80X
30A(C)42X239M(G)	66.3	134.8	94X
30A(C)46X239M(G)	68.2	138.6	101X
30A(C)50X239M(G)	70	142.4	111X
30A(C)55X239M(G)	72.2	146.7	121X



II			Note Equivalent Plessey
Type	Typ Tun	A B1 mm	
30A(C)20X240M(G)	56.2	111	43X
30A(C)22.5X240M(G)	55.5	109.6	50X
30A(C)25X240M(G)	56.2	111	54X
30A(C)32X240M(G)	64.2	127	72X
30A(C)36X240M(G)	65.7	130.1	80X
30A(C)42X240M(G)	68.5	135.7	94X
30A(C)46X240M(G)	70.4	139.5	101X
30A(C)50X240M(G)	72.2	143.1	111X
30A(C)55X240M(G)	74.4	147.6	121X





Note: For the supply ports sizes (input-output) see the schemes of the relevant single pump-type. For other pumps combinations contact with the manufacturer.

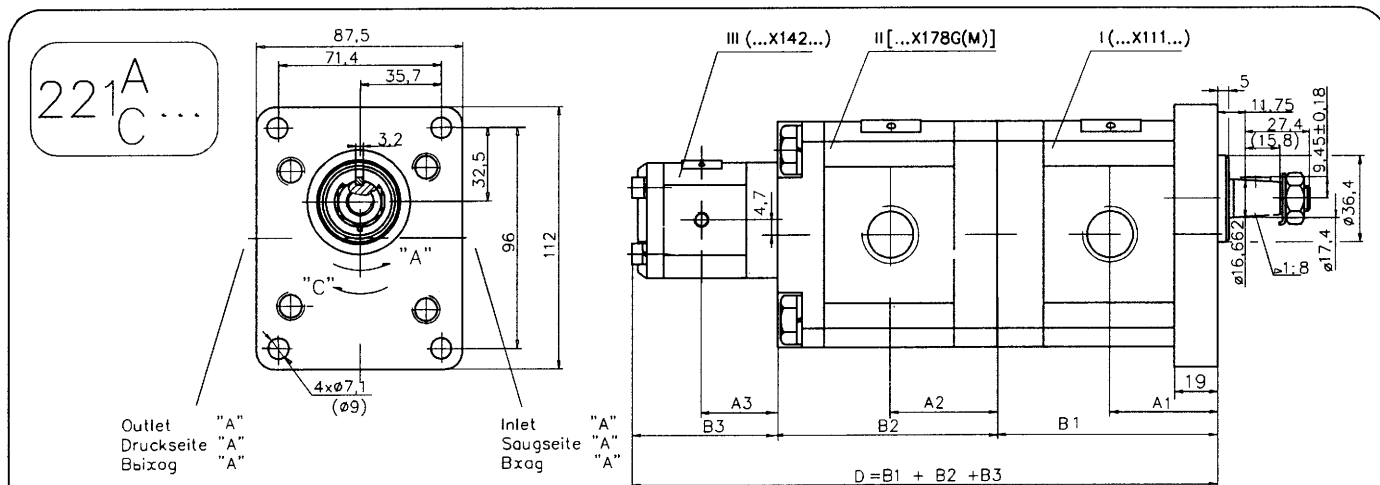
Bemerkung: Für die Abmessungen der Speisebohrungen (Druck- und Saugseite)-siehe Schema des entsprechenden Einzelpumpentypes. Für andere Pumpencombination-bitte Rücksprache mit dem Hersteller.

Размеры питательных отверстий (вход-выход) выполняются в соответствии с чертежами одианных насосов составляющие комбинацию.

Type	Typ	Tun	A1	B1
20A(C)4,5	X067		42,5	87,2
20A(C)6,3	X067		44	90,2
20A(C)8,2	X067		45,5	93,1
20A(C)10	X067		47	96,2
20A(C)11	X067		48	98,2
20A(C)12	X067		48,6	99,5
20A(C)14	X067		50	102,6
20A(C)15	X067		51	104,1
20A(C)16	X067		52	105,8
20A(C)19	X067		54	110,7
20A(C)22	X067		57	115,7
20A(C)25	X067		59,2	120,6

Type	Typ	Tun	A2	B2
20A(C)4,5	X178		40,5	78
20A(C)6,3	X178		42	81
20A(C)8,2	X178		43,5	83,9
20A(C)10	X178		45	87
20A(C)11	X178		46	89,1
20A(C)12	X178		46,6	90,3
20A(C)14	X178		48	93,4
20A(C)17	X178		49	95
20A(C)16	X178		50	96,6
20A(C)19	X178		52	101,5
20A(C)22	X178		55	106,5
20A(C)25	X178		57,2	112,1

Type	Typ	Tun	A3	B3
10A(C)1	X179		39,1	81,0
10A(C)1,25	X179		39,5	82,0
10A(C)1,6	X179		40,3	83,6
2A(C)2	X179		41,1	85,2
10A(C)2,5	X179		42,1	87,2
10A(C)3,15	X179		43,5	89,8
10A(C)3,65	X179		44,4	91,85
10A(C)4,2	X179		45,5	94,1
10A(C)5	X179		47,1	97,2
10A(C)5,7	X179		48,5	100,1
10A(C)6,1	X179		49,4	101,8



Note: For the supply ports sizes (input-output) see the schemes of the relevant single pump-type. For other pumps combinations contact with the manufacturer.

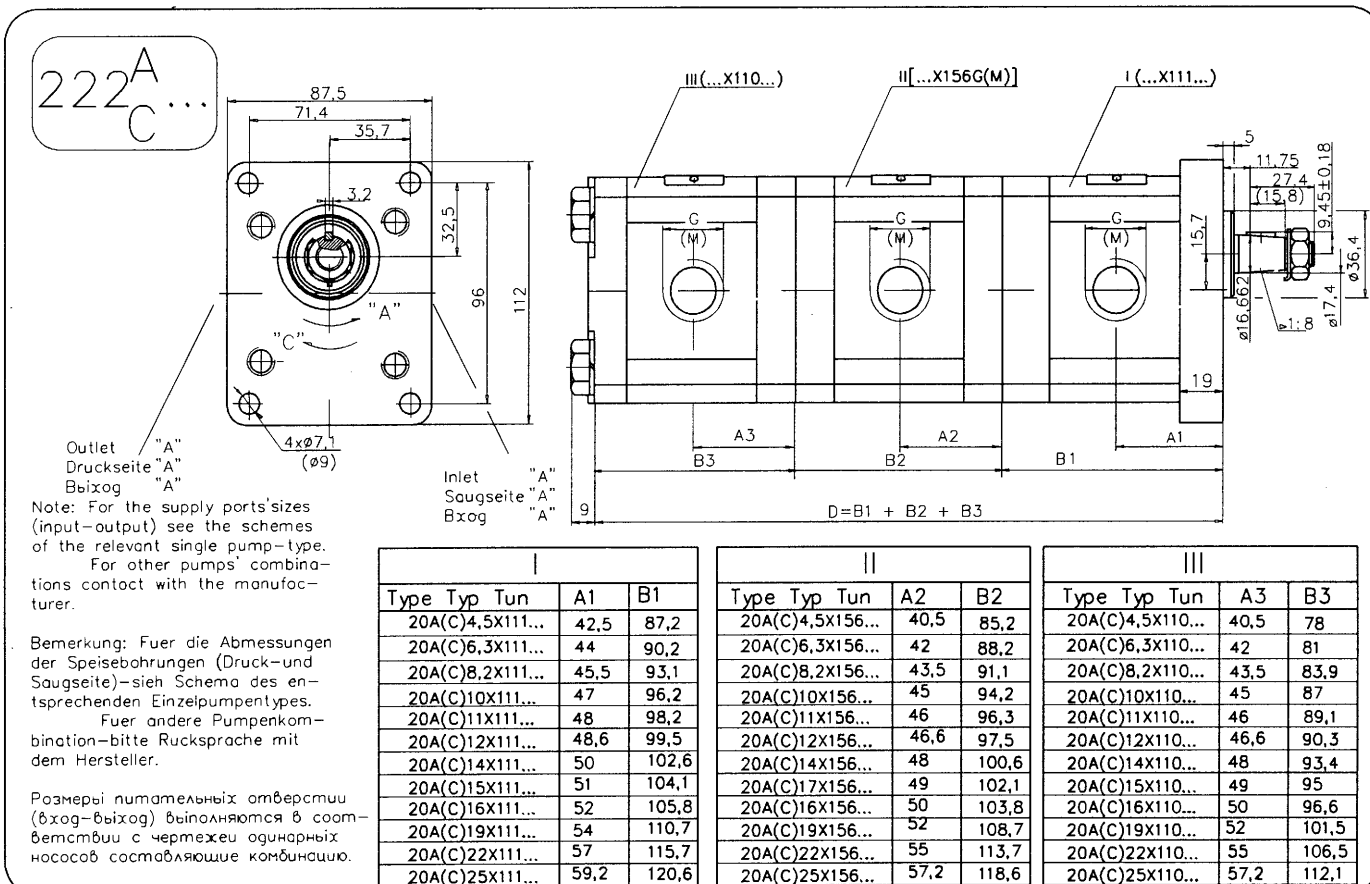
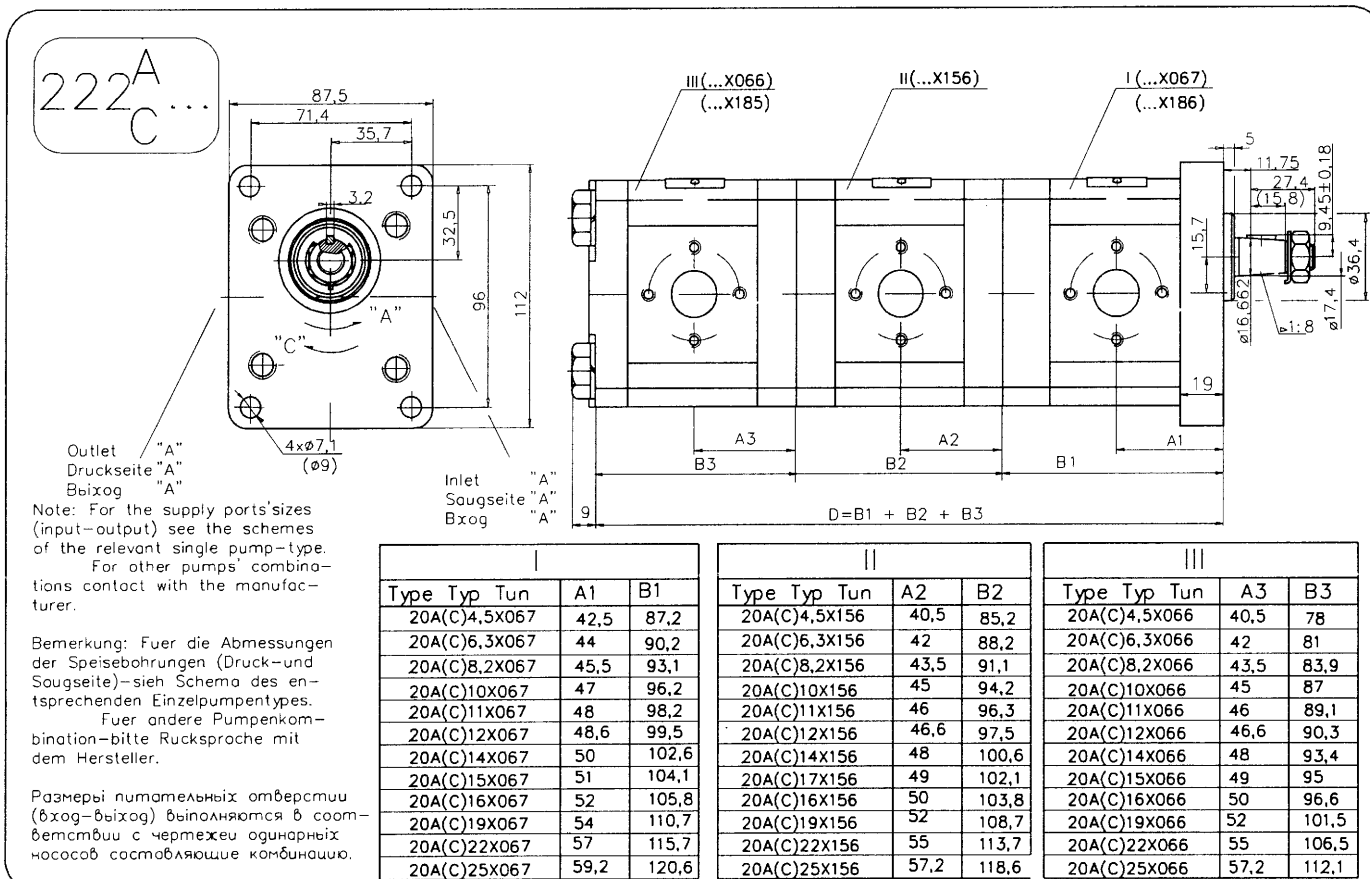
Bemerkung: Für die Abmessungen der Speisebohrungen (Druck- und Saugseite)-siehe Schema des entsprechenden Einzelpumpentypes. Für andere Pumpencombination-bitte Rücksprache mit dem Hersteller.

Размеры питательных отверстий (вход-выход) выполняются в соответствии с чертежами одианных насосов составляющие комбинацию.

Type	Typ	Tun	A1	B1
20A(C)4,5	X111...		42,5	87,2
20A(C)6,3	X111...		44	90,2
20A(C)8,2	X111...		45,5	93,1
20A(C)10	X111...		47	96,2
20A(C)11	X111...		48	98,2
20A(C)12	X111...		48,6	99,5
20A(C)14	X111...		50	102,6
20A(C)15	X111...		51	104,1
20A(C)16	X111...		52	105,8
20A(C)19	X111...		54	110,7
20A(C)22	X111...		57	115,7
20A(C)25	X111...		59,2	120,6

Type	Typ	Tun	A2	B2
20A(C)4,5	X178G(M)		40,5	78
20A(C)6,3	X178G(M)		42	81
20A(C)8,2	X178G(M)		43,5	83,9
20A(C)10	X178G(M)		45	87
20A(C)11	X178G(M)		46	89,1
20A(C)12	X178G(M)		46,6	90,3
20A(C)14	X178G(M)		48	93,4
20A(C)17	X178G(M)		49	95
20A(C)16	X178G(M)		50	96,6
20A(C)19	X178G(M)		52	101,5
20A(C)22	X178G(M)		55	106,5
20A(C)25	X178G(M)		57,2	112,1

Type	Typ	Tun	A3	B3
10A(C)1	X142...		39,1	81,0
10A(C)1,25	X142...		39,5	82,0
10A(C)1,6	X142...		40,3	83,6
2A(C)2	X142...		41,1	85,2
10A(C)2,5	X142...		42,1	87,2
10A(C)3,15	X142...		43,5	89,8
10A(C)3,65	X142...		44,4	91,85
10A(C)4,2	X142...		45,5	94,1
10A(C)5	X142...		47,1	97,2
10A(C)5,7	X142...		48,5	100,1
10A(C)6,1	X142...		49,4	101,8





Hydraulic Gear Pumps Hydraulische Zahnradpumpen Шестеренные насосы 175 bar

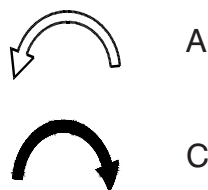


ORDERING CODES

BESTELLANGABEN

СПОСОБ ЗАЯВЛЕНИЯ

*DIRECTION OF ROTATION
DREHERICHTUNG
НАПРАВЛЕНИЕ ВРАЩЕНИЯ*



*TYPE SIZE
NENNGROESSE
ТИПОРАЗМЕР*

* * * * *

PIPELINES CONNECTION:
blank - by flanges
T - by inch thread (GAS, BSP)
TM - by metric thread

LEISTUNGANSCHLUSS:
ohne Bez. - Flanschanschluss
T - Zollgewinde (GAS, BSP)
TM - metrisches Gewinde

ПРИСОЕДИНЕНИЕ:
без обозн. - фланцами
T - трубной резьбой (GAS, BSP)
TM - метрической резьбой

OUTLET OF THE DRIVE SCHAFT:
X - Through the front cover
Y - Trough both covers
Z - Through the back kover

WELLENENDE:
X - am Vorderdeckel
Y - beiderseitig
Z - am Hinterdeckel

ВЫХОД ВЕДУЩЕГО ВАЛА:
X - через переднюю крышку
Y - через обе крышки
Z - через заднюю крышку

Example: A10X - hydraulic gear pump, direction of rotation - counterclockwise, type size 10, shaft outlet through the front cover

Beispiel: A10X - hydraulische Zahnradpumpe, Dreherichtung - links, Nenngroesse 10, Wellenende am Vorderdeckel.

Пример: A10X - шестеренный насос с направлением вращения против часовой стрелки, типоразмер 10, вал выходит через переднюю крышку

I group - displacement:
1.22 ... 4.36 cm³

II group - displacement:
4.5 ... 25 cm³

III group* - displacement:
19.5 ... 55 cm³

1 Gruppe - Foerdervolume:
1.22 ... 4.36 cm³

2 Gruppe - Foerdervolume:
4.5 ... 25 cm³

3 Gruppe* - Foerdervolume:
19.5 ... 55 cm³

I группа - рабочий объем:
1.22 ... 4.36 cm³

II группа - рабочий объем:
4.5 ... 25 cm³

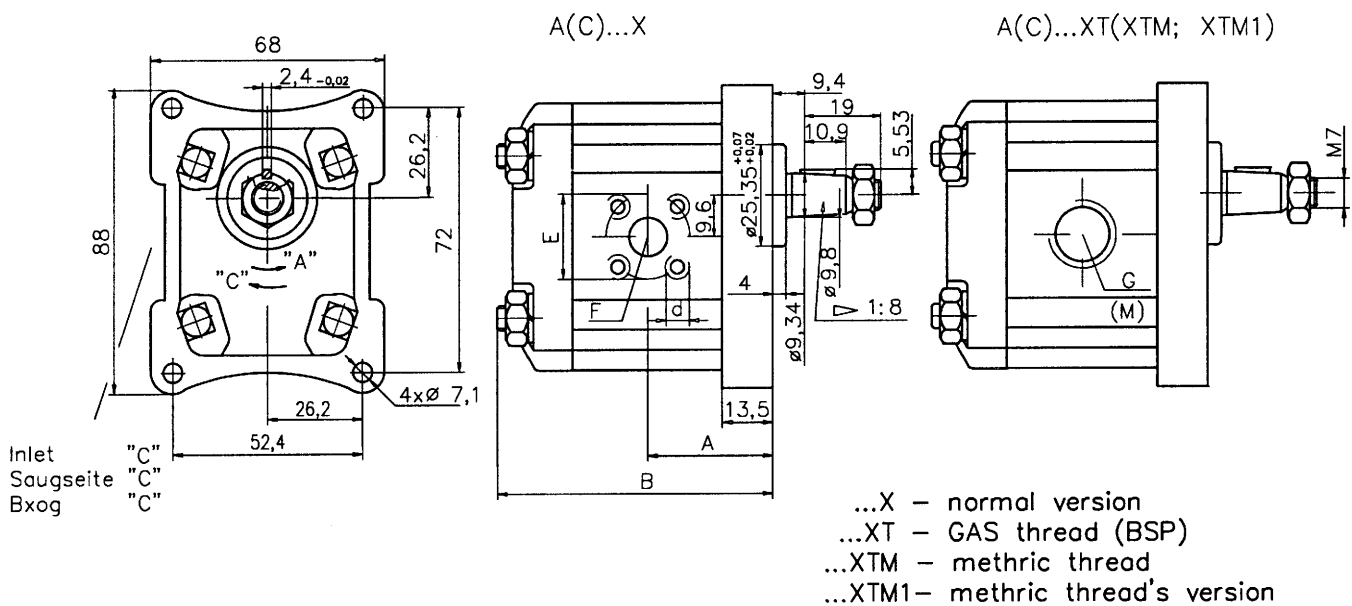
III группа* - рабочий объем:
19.5 ... 55 cm³

* - see page 4.2

* - siehe 4.2

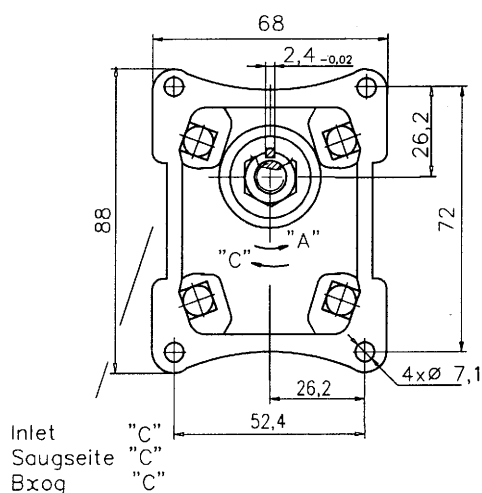
* - см. стр. 4.2

Type Typ Тип		027	036	048	060	072	084	096	12
Working volume Foerdervolumen Рабочий объем	cm ³	1,22	1,63	2,18	2,72	3,27	3,81	4,36	5,7
Rated pressure Nenndruck Номинальное давление	bar	175	175	175	175	175	140	125	125
Max. pressure Maximaldruck Максимальное давление	bar	200	200	200	200	200	170	150	150
Min. speed Min. Drehzahl Мин. частота вращения	min ⁻¹	650	650	650	650	650	650	650	650
Max. speed Max. Drehzahl Макс. частота вращения	min ⁻¹	3500	3500	3500	3500	3500	3500	3500	3500

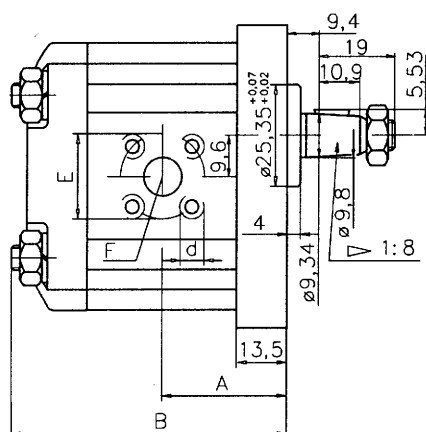


Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог						
				E	d	F	M1	M	G	E	d	F	M1	M	G
	cm ³	mm		mm					"						
A(C)027X...	1.22	31	69	30,2	M6	13		M16x1,5	G3/8	30,2	M6	13		M16x1,5	G3/8
A(C)036X...	1.63	32	71	30,2	M6	13		M16x1,5	G3/8	30,2	M6	13		M16x1,5	G3/8
A(C)048X...	2.18	32	71	30,2	M6	13		M16x1,5	G3/8	30,2	M6	13		M16x1,5	G3/8
A(C)060X...	2.72	32	71	30,2	M6	13		M16x1,5	G3/8	30,2	M6	13		M16x1,5	G3/8
A(C)072X...	3.27	36	78	30,2	M6	13		M20x1,5	G3/8	30,2	M6	13		M16x1,5	G3/8
A(C)084X...	3.81	36	78	30,2	M6	13		M20x1,5	G3/8	30,2	M6	13		M16x1,5	G3/8
A(C)096X...	4.36	36	78	30,2	M6	13		M20x1,5	G3/8	30,2	M6	13		M16x1,5	G3/8
A(C)12X...	5.7	40,8	87,8	30,2	M6	13	M22x1,5	M20x1,5	G3/8	30,2	M6	13	M18x1,5	M16x1,5	G3/8

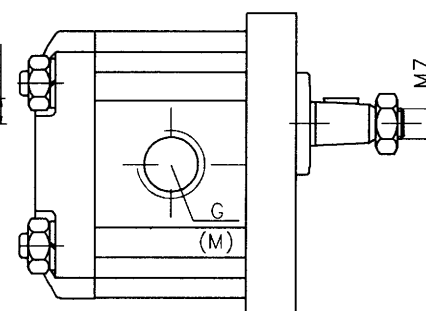
Type Typ Тип		027	036	048	060	072	084	096	12
Working volume Foerdervolumen Рабочий объем	cm ³	1,22	1,63	2,18	2,72	3,27	3,81	4,36	5,7
Rated pressure Nenndruck Номинальное давление	bar	175	175	175	175	175	140	125	125
Max. pressure Maximaldruck Максимальное давление	bar	200	200	200	200	200	170	150	150
Min. speed Min. Drehzahl Мин. частота вращения	min ⁻¹	650	650	650	650	650	650	650	650
Max. speed Max. Drehzahl Макс. частота вращения	min ⁻¹	3500	3500	3500	3500	3500	3500	3500	3500



A(C)...X



A(C)...XT(XTM)

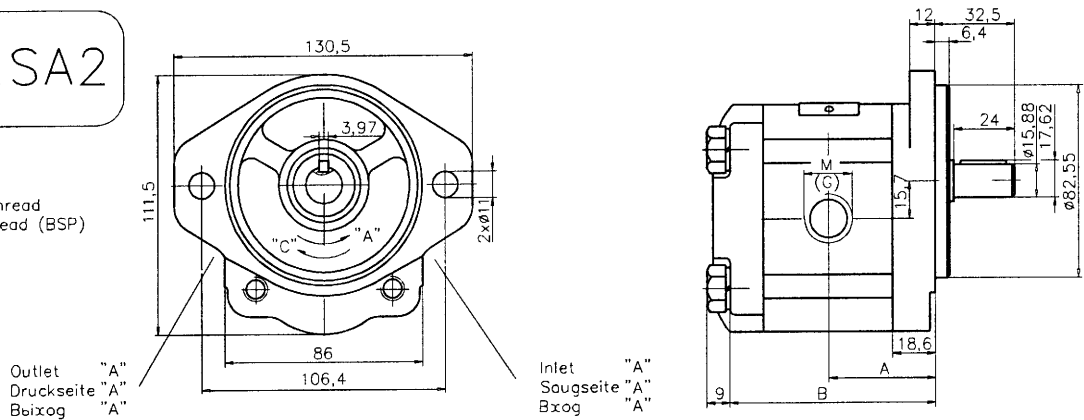


...X - normal version
...XT - GAS thread (BSP)
...XTM - metric thread

Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A		Inlet Saugseite Вход					Outlet Druckseite Выход				
		E	d	F	M	G	E	d	F	M	G		
	cm ³	mm											
A(C)027X...	1.22	31	69	30,2	M6	13	M16x1,5	G3/8	30,2	M6	13	M16x1,5	G3/8
A(C)036X...	1.63	32	71	30,2	M6	13	M16x1,5	G3/8	30,2	M6	13	M16x1,5	G3/8
A(C)048X...	2.18	32	71	30,2	M6	13	M16x1,5	G3/8	30,2	M6	13	M16x1,5	G3/8
A(C)060X...	2.72	32	71	30,2	M6	13	M16x1,5	G3/8	30,2	M6	13	M16x1,5	G3/8
A(C)072X...	3.27	36	78	30,2	M6	13	M20x1,5	G3/8	30,2	M6	13	M16x1,5	G3/8
A(C)084X...	3.81	36	78	30,2	M6	13	M20x1,5	G3/8	30,2	M6	13	M16x1,5	G3/8
A(C)096X...	4.36	36	78	30,2	M6	13	M20x1,5	G3/8	30,2	M6	13	M16x1,5	G3/8
A(C)12X...	5.7	40,8	87,8	30,2	M6	13	M20x1,5	G3/8	30,2	M6	13	M16x1,5	G3/8

A
C ...X...SA2

...XTMSA2—metric thread
...XTSA2 – GAS thread (BSP)



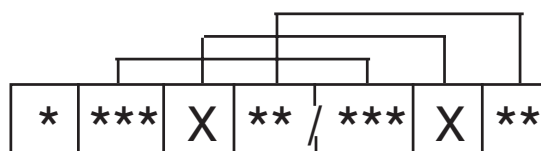
Type Typ Тип	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры											
		A		Inlet Saugseite Вход					Outlet Druckseite Выход				
		E	d	F	M	G	E	d	F	M	G		
	cm ³	mm		mm					mm				
A(C)10X...SA2	4,5	42	80,3				M20X1,5	G1/2				M16X1,5	G1/2
A(C)14X...SA2	6,3	42	80,3				M20X1,5	G1/2				M16X1,5	G1/2
A(C)18X...SA2	8,2	42	80,3				M20X1,5	G1/2				M16X1,5	G1/2
A(C)25X...SA2	11,3	48	91,3				M20X1,5	G3/4				M16X1,5	G1/2
A(C)33X...SA2	15	48	91,3				M20X1,5	G3/4				M16X1,5	G1/2
A(C)42X...SA2	19	51	97,9				M20X1,5	G3/4				M20X1,5	G1/2

The parameters of the single pumps are valid but with the following limitation - the maximal rotation speed is defined by the pump with a lower rotation speed

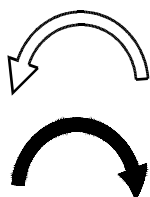
Guelting sind die Parameter der einzelnen Pumpen mit der folgenden Begrenzung - die maximale Drehfrequenz wird nach der Pumpe mit der niedrigen maximalen Frequenz bestimmt.

При сдвоенных насосах валидно следующее ограничение - максимальная частота вращения определяется насосом меньшей частоты.

ORDERING CODES BESTELLANGABEN СПОСОБ ЗАЯВЛЕНИЯ



DIRECTION OF ROTATION
(viewed from the shaft)
DREHERICHTUNG
(von Wellenseite gesehen)
НАПРАВЛЕНИЕ ВРАЩЕНИЯ
(смотря со стороны вала)



A

C

TYPE SIZE
NENNGROESSE
ТИПОРАЗМЕР

X - drive shaft outlet through the front cover.

X - Wellenende am Vorderdeckel.

X - Выход ведущего вала через переднюю крышку

PIPELINES CONECTION TO THE PUMP:

- without designation - by flanges

T - by inch thread to inlet and outlet

T M - by metric thread to inlet and outlet

LEISTUNGANSCHLUSS AN PUMPE:

- ohne Bez. - Flanschanschluss

T - Zollgewinde am Ein- und Ausgang

T M - metrisches Gewinde am Ein- und Ausgang

ПРИСОЕДИНЕНИЕ ТРУБОПРОВОДОВ

- без обозначения - фланцами

T - трубной резбой

T M - метрической резбой



Hydraulic Gear Pumps Hydraulische Zahnradpumpen Шестеренные насосы



Example:

A42X/096XT - designates a tandem gear pump, driving pump of size 42 with counter-clockwise rotation and flange connection. The driven pump is of size 096 and connection ports with inch thread.

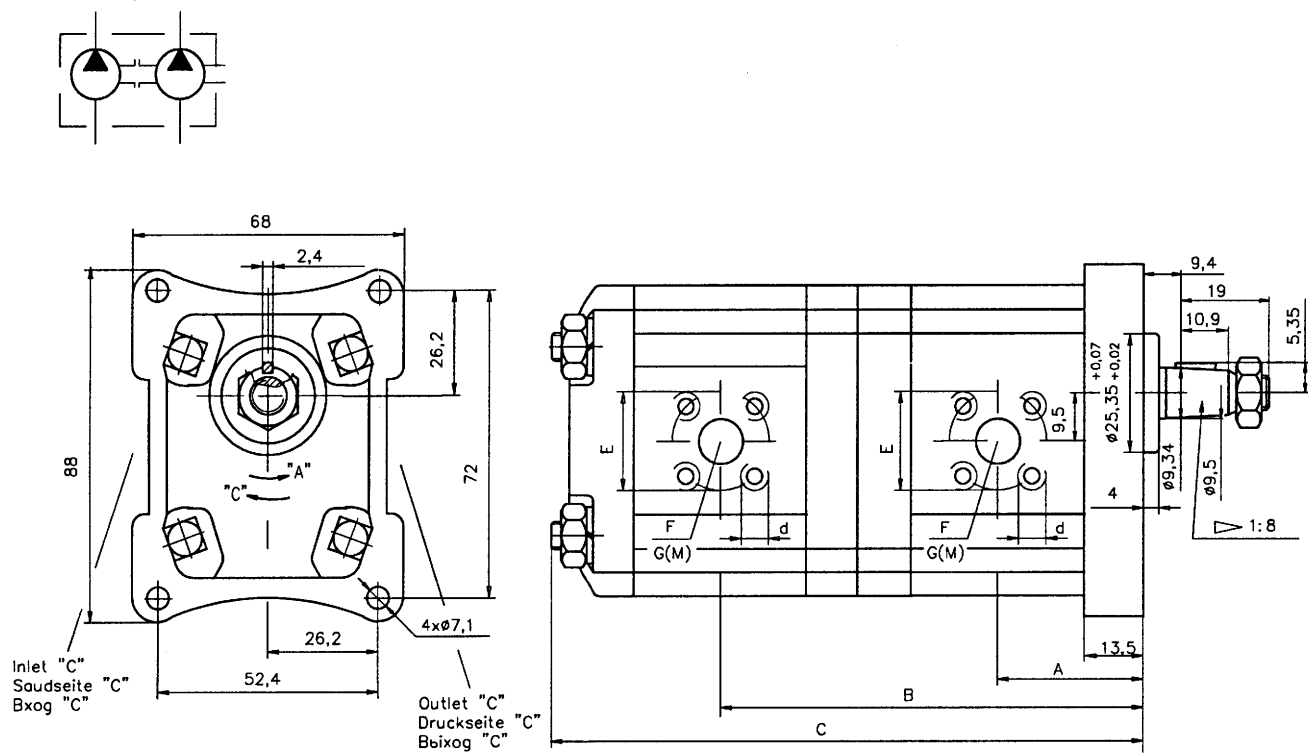
Beispiel:

A42X/096XT - Doppelzahnrad-pumpe, bestehend aus einer Hauptpumpe (erste) 42 mit Drehe-richtung gegen das Uhrzeigersinn und Flanshanschluss, zweiter Zahnradpumpe 096, Anschluss durch Zollgewinder-bohrungen am Gehäuse.

Пример:

A42X/096XT - обозначение сдвоенного шестеренного насоса, причем основным насосом использован типоразмер 42 с вращением против часовой стрелки и присоединением на фланцах, а вторым насосом типоразмер 096 и присоединением на резьбовых отверстиях в корпусе насоса.

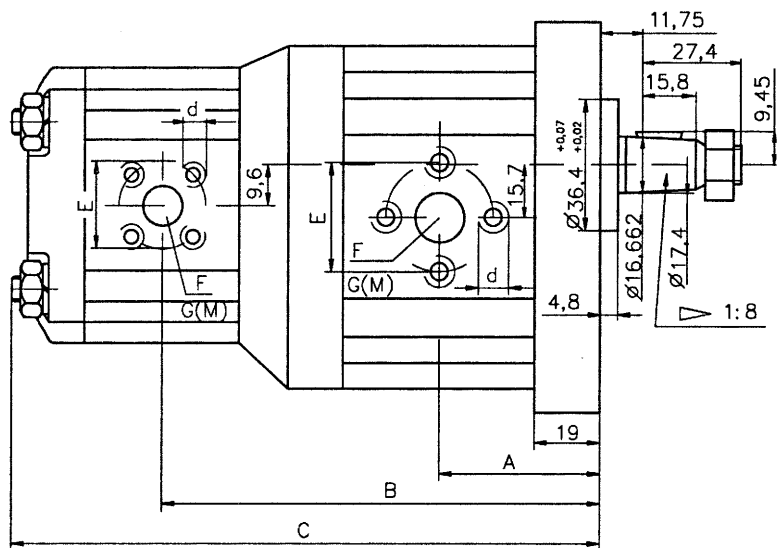
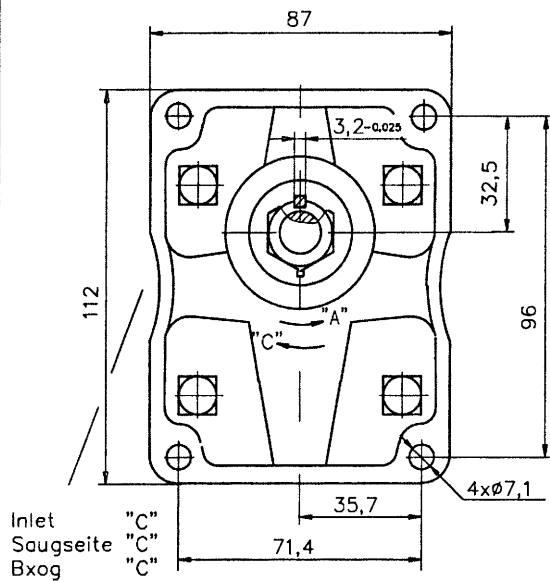
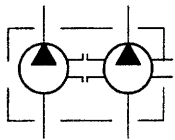
Group Type	Inlet						Outlet				
	X			XT	XTM		X			XT	XTM
	F	d	E	F	F	F	d	E	F	F	
I	A(C)027X...	13	M6	30.2	G3/8	M16x1.5	13	M6	30.2	G3/8	M16x1.5
	A(C)036X...	13	M6	30.2	G3/8	M16x1.5	13	M6	30.2	G3/8	M16x1.5
	A(C)048X...	13	M6	30.2	G3/8	M16x1.5	13	M6	30.2	G3/8	M16x1.5
	A(C)060X...	13	M6	30.2	G3/8	M16x1.5	13	M6	30.2	G3/8	M16x1.5
	A(C)072X...	13	M6	30.2	G3/8	M20x1.5	13	M6	30.2	G3/8	M16x1.5
	A(C)084X...	13	M6	30.2	G3/8	M20x1.5	13	M6	30.2	G3/8	M16x1.5
	A(C)096X...	13	M6	30.2	G3/8	M20x1.5	13	M6	30.2	G3/8	M16x1.5
II	A(C)10X...	13	M6	30.2	G1/2	M20x1.5	13	M6	30.2	G1/2	M16x1.5
	A(C)14X...	13	M6	30.2	G1/2	M20x1.5	13	M6	30.2	G1/2	M16x1.5
	A(C)18X...	13	M6	30.2	G1/2	M20x1.5	13	M6	30.2	G1/2	M16x1.5
	A(C)25X...	19	M8	39.7	G3/4	M20x1.5	14.2	M6	30.2	G1/2	M16x1.5
	A(C)33X...	19	M8	39.7	G3/4	M20x1.5	14.2	M6	30.2	G1/2	M16x1.5
	A(C)42X...	19	M8	39.7	G3/4	M20x1.5	14.2	M6	30.2	G1/2	M20x1.5



...X - normal version
 ...XT - GAS thread (BSP)
 ...XTM - metric thread

Type Typ Tun	A	B	C
	mm		
A(C)027.../A(C)027...	31,5	107,5	145
A(C)036.../A(C)027...	32,4	109,3	147
A(C)036.../A(C)036...	32,4	110,2	149
A(C)048.../A(C)027...	32,4	109,3	147
A(C)048.../A(C)036...	32,4	110,2	149
A(C)048.../A(C)048...	32,4	110,2	149
A(C)060.../A(C)027...	32,4	109,3	147
A(C)060.../A(C)036...	32,4	110,2	149
A(C)060.../A(C)048...	32,4	110,2	149
A(C)060.../A(C)060...	32,4	110,2	149
A(C)072.../A(C)027...	35,8	116,1	152
A(C)072.../A(C)036...	35,8	117,1	155
A(C)072.../A(C)048...	35,8	117,1	155
A(C)072.../A(C)060...	35,8	117,1	155
A(C)072.../A(C)072...	35,8	120,5	162

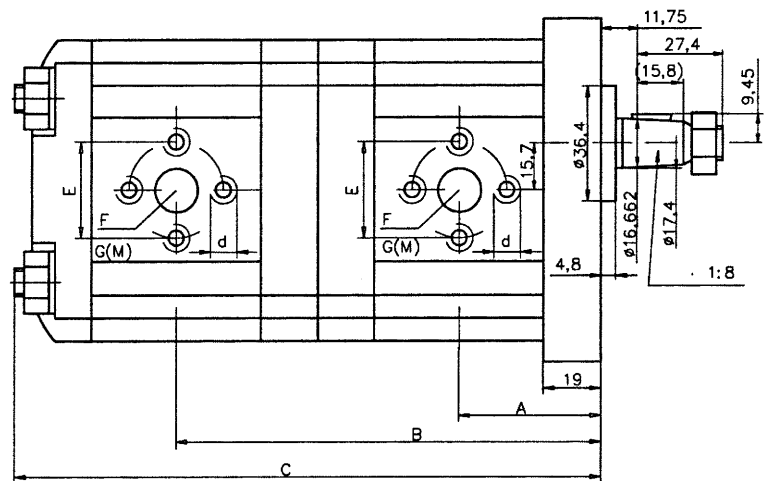
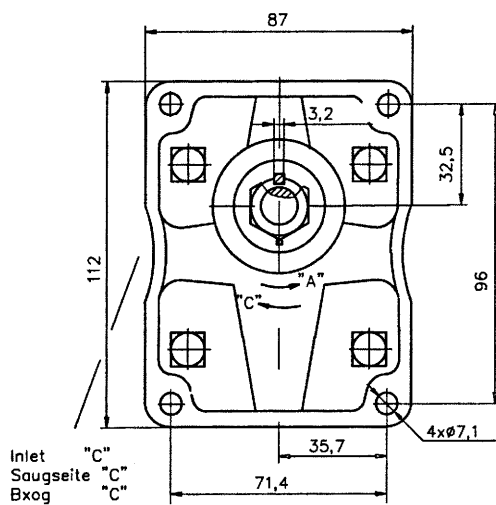
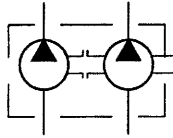
Type Typ Tun	A	B	C
	mm		
A(C)084.../A(C)027...	35,8	116,1	152
A(C)084.../A(C)036...	35,8	117,1	155
A(C)084.../A(C)048...	35,8	117,1	155
A(C)084.../A(C)060...	35,8	117,1	155
A(C)084.../A(C)072...	35,8	120,5	162
A(C)084.../A(C)084...	35,8	120,5	162
A(C)096.../A(C)027...	35,8	116,1	152
A(C)096.../A(C)036...	35,8	117,1	155
A(C)096.../A(C)048...	35,8	117,1	155
A(C)096.../A(C)060...	35,8	117,1	155
A(C)096.../A(C)072...	35,8	120,5	162
A(C)096.../A(C)084...	35,8	120,5	162
A(C)096.../A(C)096...	35,8	120,5	162



... X - normal version
... XT - GAS thread (BSP)
... XTM - metric thread

Type Typ Тун	A	B	C
	mm		
A(C)10... / A(C)027...	42.5	134	167.7
A(C)10... / A(C)036...	42.5	134.9	169.5
A(C)10... / A(C)048...	42.5	134.9	169.5
A(C)10... / A(C)060...	42.5	134.9	169.5
A(C)10... / A(C)072...	42.5	138.3	176.3
A(C)10... / A(C)084...	42.5	138.3	176.3
A(C)10... / A(C)096...	42.5	138.3	176.3
A(C)14... / A(C)027...	42.5	134	167.7
A(C)14... / A(C)036...	42.5	134.9	169.5
A(C)14... / A(C)048...	42.5	134.9	169.5
A(C)14... / A(C)060...	42.5	134.9	169.5
A(C)14... / A(C)072...	42.5	138.3	176.3
A(C)14... / A(C)084...	42.5	138.3	176.3
A(C)14... / A(C)096...	42.5	138.3	176.3
A(C)18... / A(C)027...	42.5	134	167.7
A(C)18... / A(C)036...	42.5	134.9	169.5
A(C)18... / A(C)048...	42.5	134.9	169.5
A(C)18... / A(C)060...	42.5	134.9	169.5
A(C)18... / A(C)072...	42.5	138.3	176.3
A(C)18... / A(C)084...	42.5	138.3	176.3
A(C)18... / A(C)096...	42.5	138.3	176.3

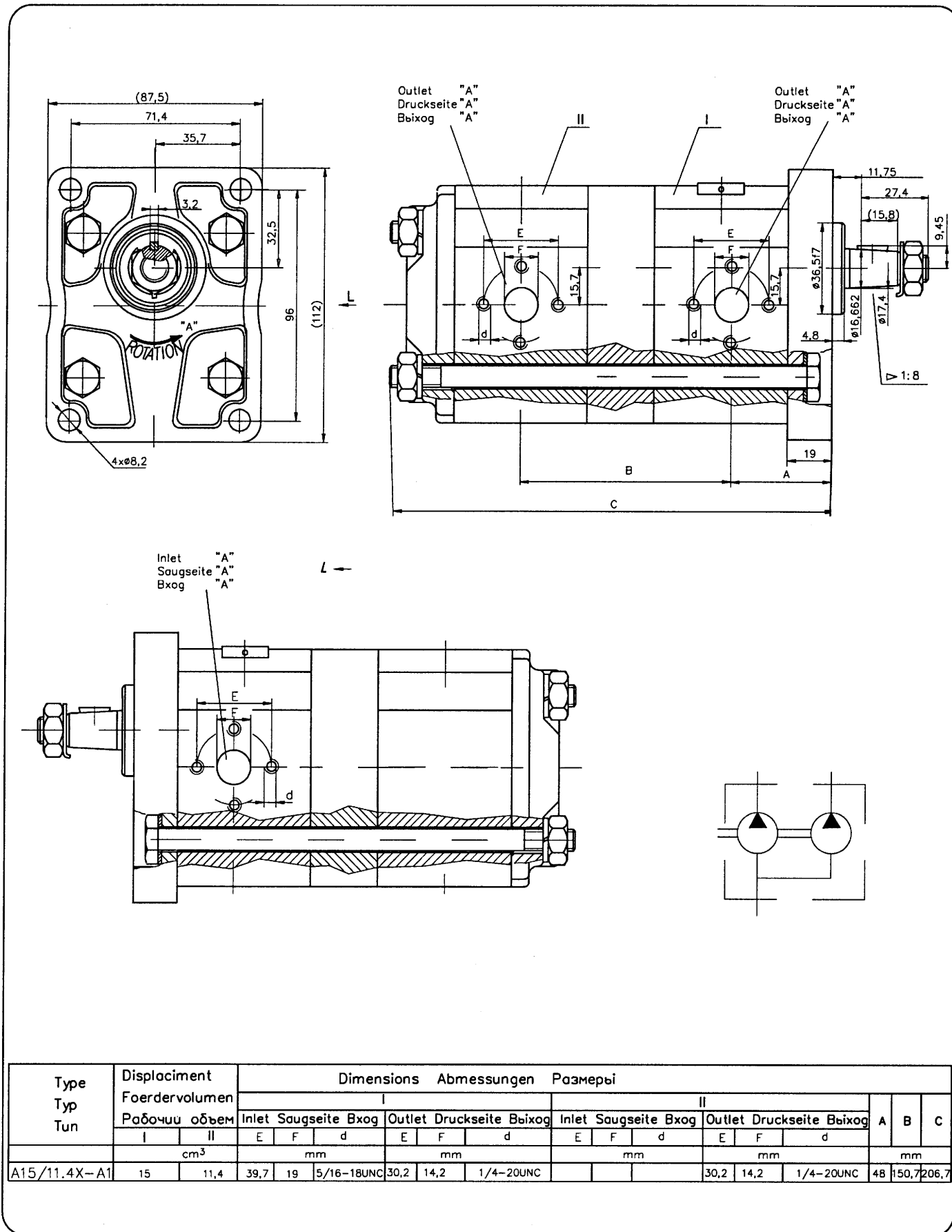
Type Typ Тун	A	B	C
	mm		
A(C)25... / A(C)027...	48	145	178.7
A(C)25... / A(C)036...	48	145.9	180.5
A(C)25... / A(C)048...	48	145.9	180.5
A(C)25... / A(C)060...	48	145.9	180.5
A(C)25... / A(C)072...	48	149.4	187.4
A(C)25... / A(C)084...	48	149.4	187.4
A(C)25... / A(C)096...	48	149.4	187.4
A(C)33... / A(C)027...	48	145	178.7
A(C)33... / A(C)036...	48	145.9	180.5
A(C)33... / A(C)048...	48	145.9	180.5
A(C)33... / A(C)060...	48	145.9	180.5
A(C)33... / A(C)072...	48	149.4	187.4
A(C)33... / A(C)084...	48	149.4	187.4
A(C)33... / A(C)096...	48	149.4	187.4
A(C)42... / A(C)027...	51.4	151.8	185.5
A(C)42... / A(C)036...	51.4	152.7	187.3
A(C)42... / A(C)048...	51.4	152.7	187.3
A(C)42... / A(C)060...	51.4	152.7	187.3
A(C)42... / A(C)072...	51.4	156.1	194.1
A(C)42... / A(C)084...	51.4	156.1	194.1
A(C)42... / A(C)096...	51.4	156.1	194.1



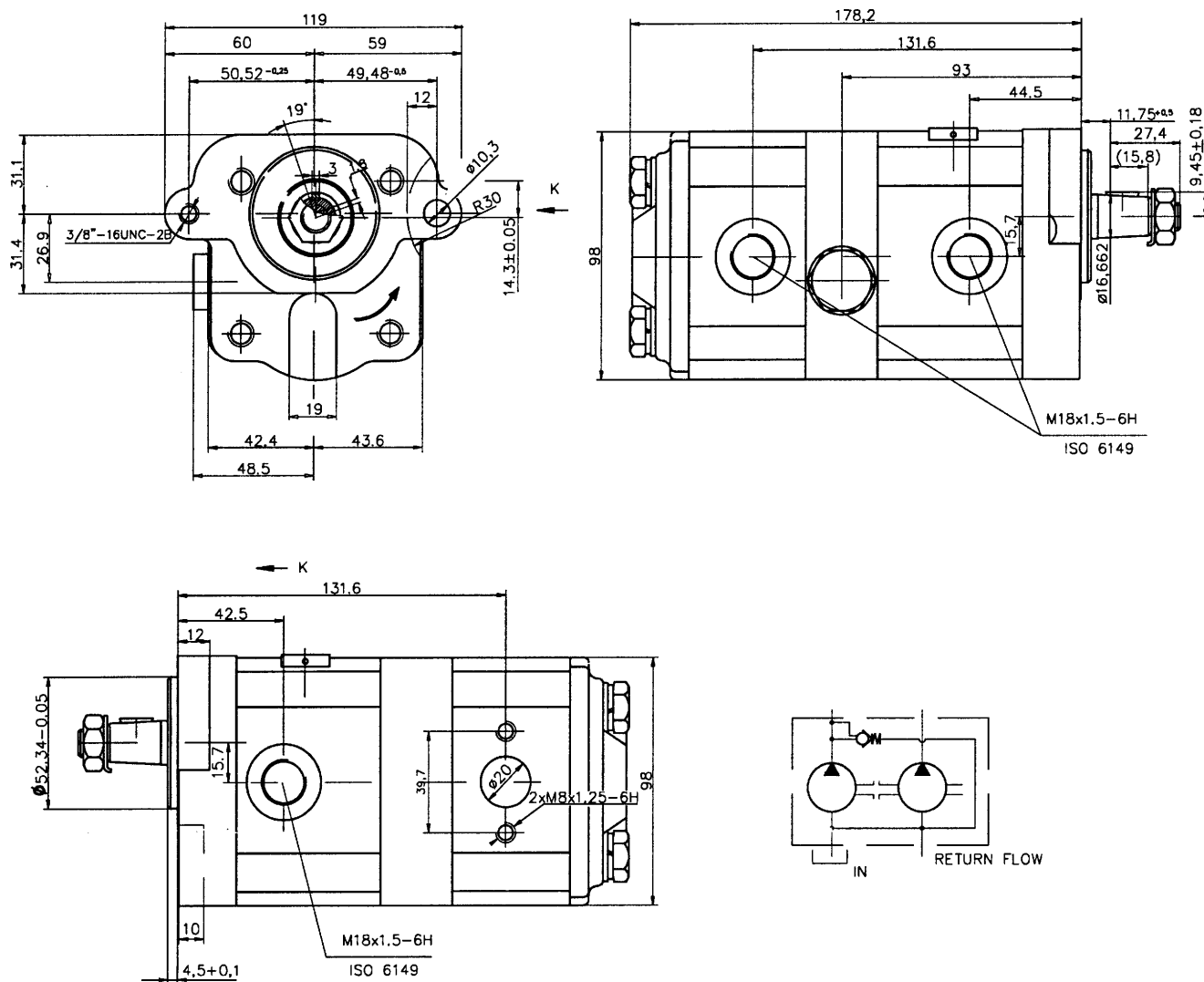
...X - normal version
 ...XT - GAS thread (BSP)
 ...XTM - metric thread

Type Typ Tun	A	B	C
	mm		
A(C)10... / A(C)10...	42.5	134.5	183.5
A(C)14... / A(C)10...	42.5	134.5	183.5
A(C)14... / A(C)14...	42.5	134.5	183.5
A(C)18... / A(C)10...	42.5	134.5	183.5
A(C)18... / A(C)14...	42.5	134.5	183.5
A(C)18... / A(C)18...	42.5	134.5	183.5
A(C)25... / A(C)10...	48	145.5	195
A(C)25... / A(C)14...	48	145.5	195
A(C)25... / A(C)18...	48	145.5	195
A(C)25... / A(C)25...	48	151	206

Type Typ Tun	A	B	C
	mm		
A(C)33... / A(C)10...	48	145.5	195
A(C)33... / A(C)14...	48	145.5	195
A(C)33... / A(C)18...	48	145.5	195
A(C)33... / A(C)25...	48	151	206
A(C)33... / A(C)33...	48	151	206
A(C)42... / A(C)10...	51.4	152.3	201.8
A(C)42... / A(C)14...	51.4	152.3	201.8
A(C)42... / A(C)18...	51.4	152.3	201.8
A(C)42... / A(C)25...	51.4	157.8	212.8
A(C)42... / A(C)33...	51.4	157.8	212.8
A(C)42... / A(C)42...	51.4	161.2	219.6



22A11/8.2X349



Displacement – Front pump 11cm³
Rear pump 8.2 cm³

$n_{max} = 4000$ rpm

$p_{max} = 200$ bar



Hydraulic Gear Pumps with integrated valves Hydraulische Zahnradpumpen mit eingebauten Ventilen Шестеренные насосы с вделанными клапанами



The hydraulic gear pumps with integrated valves supply a constant flow and a definite pressure of a working liquid at the pumps' outlet independently of the revolutions.

Die hydraulischen Zahnradpumpen sichern einen konstanten Foerderstrom und einen bestimmen Druck der hydraulischen Fluessigkeit an der Saugseite unabhængig von der Drehzal.

Шестеренные насосы с вделанными клапанами назначены для нагнетания потока рабочей жидкости с постоянными показателями независимо от оборотов.

Hydraulic gear pumps with integrated relief-prefil valve and flowdivider

Hydraulische Zahnradpumpen mit eingebauten Druckbegrenzungs-ueberstroemventil und stromteiler.

Шестеренные насосы с вделанными предохранительно-переливными клапанами и отделителями расхода.

ORDERING CODES

BESTELLANGABEN

СПОСОБ ЗАЯВЛЕНИЯ

** * *** * *** - ** / ***** * * (*)

Pump type
Pumpentype
Тип насоса

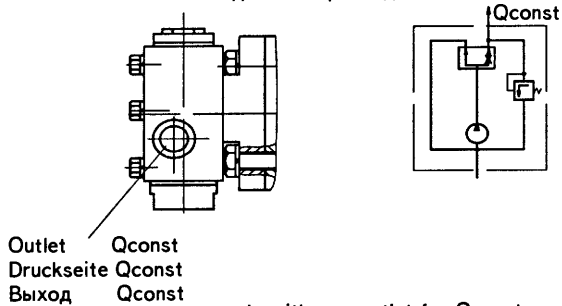
Constant flow
Konst. Foerderstrom
Постоянный расход
12 - 12 l/min } +15%
15 - 15 l/min } -10%
25 - 25 l/min }

pressure at which the valve is ajusted
Ventileinstelldruck
давление, на котором настроен клапан
5 - 50 Bar } +5 bar
7 - 70 Bar }
10 - 100 Bar }
12,5 - 125 Bar }
14 - 140 Bar }

variant
Variante
вариант

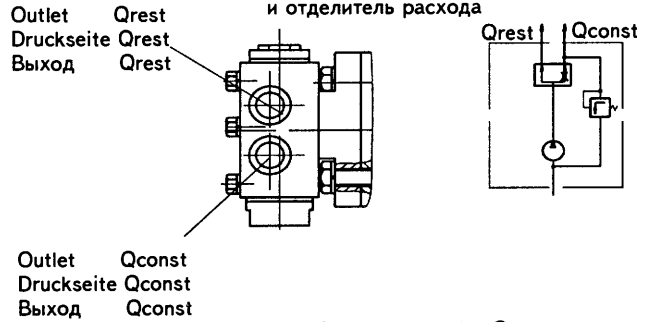
- implementation I (fig. fig 1, 2)
- Ausfuehrung I (Fig. Fig 1, 2)
- исполнение I (фиг. фиг. 1, 2)
- H - implementation II (fig. 3)
- H - Ausfuehrung II (Fig. 3)
- H - исполнение II (фиг. 3)
- VR1 - fig.4; Fig. 4; фиг.4
- two passages (fig. 2)
- mit 2 Durchfluskanalen (Fig. 2)
- с двумя потоками (фиг. 2)
- A - one passage (fig. fig. 1, 3,)
- A - mit 1 Durchfluskanale (Fig. Fig. 1, 3,)
- A - с двумя потоками (фиг. фиг. 1, 3)

- .../... A
 Relief-overflow valve and flow divider
 Druckbegrenzungs-Ueberstromventil
 und Stromteiler
 Предохранительно-переливный клапан
 и отделитель расхода



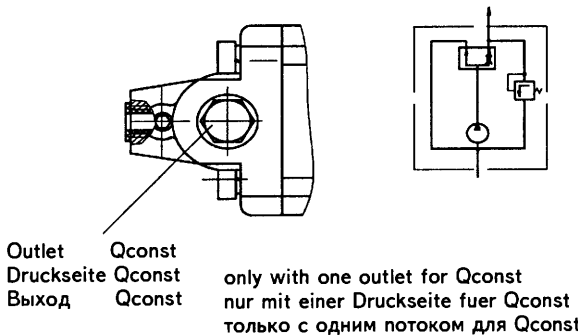
only with one outlet for Qconst
 nur mit einer Druckseite fuer Qconst
 только с одним потоком для Qconst

- .../...
 Relief-overflow valve and flow divider
 Druckbegrenzungs-Ueberstromventil
 und Stromteiler
 Предохранительно-переливный клапан
 и отделитель расхода



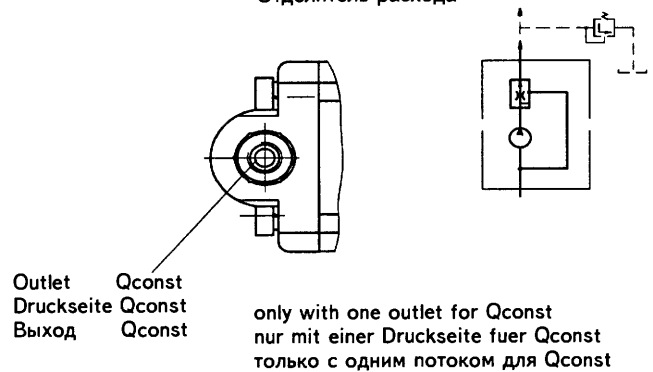
only with one outlet for Qconst
 nur mit einer Druckseite fuer Qconst
 только с одним потоком для Qconst

.../...AH
 Relief-overflow valve and flow divider
 Druckbegrenzungs-Ueberstromventil
 und Stromteiler
 Предохранительно-переливный клапан
 и отделитель расхода



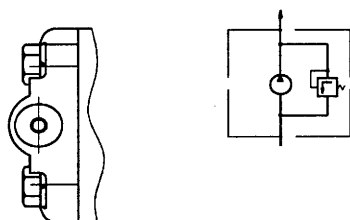
only with one outlet for Qconst
 nur mit einer Druckseite fuer Qconst
 только с одним потоком для Qconst

.../...VR1
 Flow divider
 Stromteiler
 Отделитель расхода



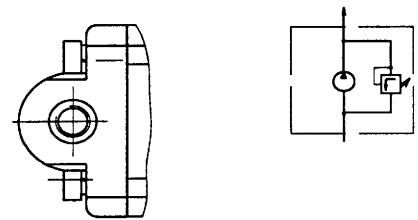
only with one outlet for Qconst
 nur mit einer Druckseite fuer Qconst
 только с одним потоком для Qconst

/A...A...
 Relief-overflow valve
 Druckbegrenzungs-Ueberstromventil
 Предохранительно-переливный клапан



Example:
 20A11X250-12/5A
 Pump type 20A11X250 with
 relief-overflow valve and flow divider
 - constant flow 12 l/min and
 outlet pressure 50 bar with output
 for constant flow only.

/A...A...N
 Relief-overflow valve
 Druckbegrenzungs-Ueberstromventil
 Предохранительно-переливный клапан



Beispiel:
 20A11X250-12/5A
 Pumpe typ 20A11X250 mit
 Druckbegrenzungs-
 Ueberstromventil und Stromteiler
 - konstanten Durchflussstrom 12
 l/min und Ausgangsdruck 50 bar;
 Ausgang nur fur konstanten
 Durchflussstrom.

Пример:
 20A11X250-12/5A
 Насос типа 20A11X250 с
 предохранительно-
 переливным клапаном и
 отделителям расхода -
 постоянный расход 12 l/min и
 давление на выходе 50 bar с
 выходом только для
 постоянного расхода.



Hydraulic Gear Pumps with integrated valves Hydraulische Zahnradpumpen mit eingebauten Ventilen Шестеренные насосы с интегрированными предохранительными клапанами



Hydraulic gear pumps with integrated relief-prefill valve H y d r a u l i s c h e n Шестеренные насосы с
Zahnradpumpen mit v d e l a n n y m i
e i n g e b a u t e n предохранительными
Druckbegrenzungsventil - преливными клапанами

ORDERING CODES:

BESTELLANGABEN:

СПОСОБ ЗАЯВЛЕНИЯ:

**** * *** * *** / ** *** * (*)**

Pump type
Pumpentype
Тип насоса

Valve kind; Ventilart; Вид клапана

- A 1 - without pressure control
- unregulierbar
- нерегулируемый
- A 2 - pressure - controlled
- regulierbar
- регулируемый

variant
Variante
вариант

valve implementation
Ventilausfuehrung
Исполнение клапана

pressure at which the valve is adjusted (see below)
(range of pressure adjustment (see below))

Ventileinstelldruck (see unten)
(Druckeinstellbereich (see unten))

давление, на котором настроен клапан (см. внизу)
(диапазон регулирования давления (см. внизу))

Pressure at which the valve is
adjusted

Ventileinstelldruck

Давление, на котором
настроен клапан

A 18 - 15 Bar	A 32 - 60 Bar	A 17 - 120 Bar	A 36 - 180 Bar
A 26 - 20 Bar	A 19 - 70 Bar	A 29 - 130 Bar	A 35 - 190 Bar
A 25 - 25 Bar	A 20 - 80 Bar	A 22 - 140 Bar	A 37 - 200 Bar
A 28 - 30 Bar	A 40 - 90 Bar	A 23 - 150 Bar	A 27 - 210 Bar
A 41 - 40 Bar	A 21 - 100 Bar	A 39 - 160 Bar	A 33 - 230 Bar
A 34 - 50 Bar	A 38 - 110 Bar	A 43 - 170 Bar	

Range of pressure adjustment

Druckeinstellbereich

Диапазон регулирования
давления

A 4 - 15 ... 50 Bar	A 1 - 70 ... 180 Bar
A 2 - 40 ... 100 Bar	A 3 - 100 ... 250 Bar

Example:

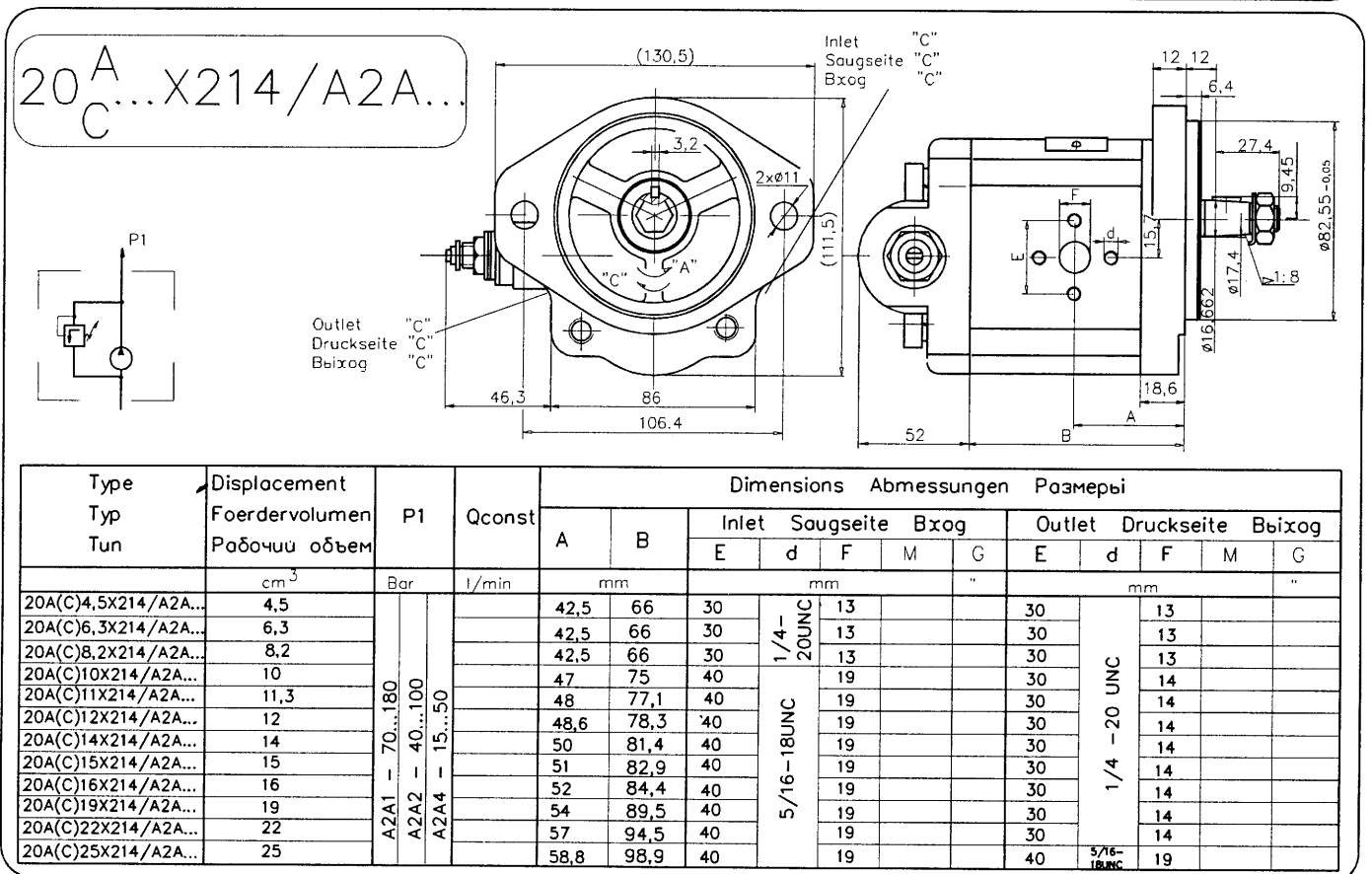
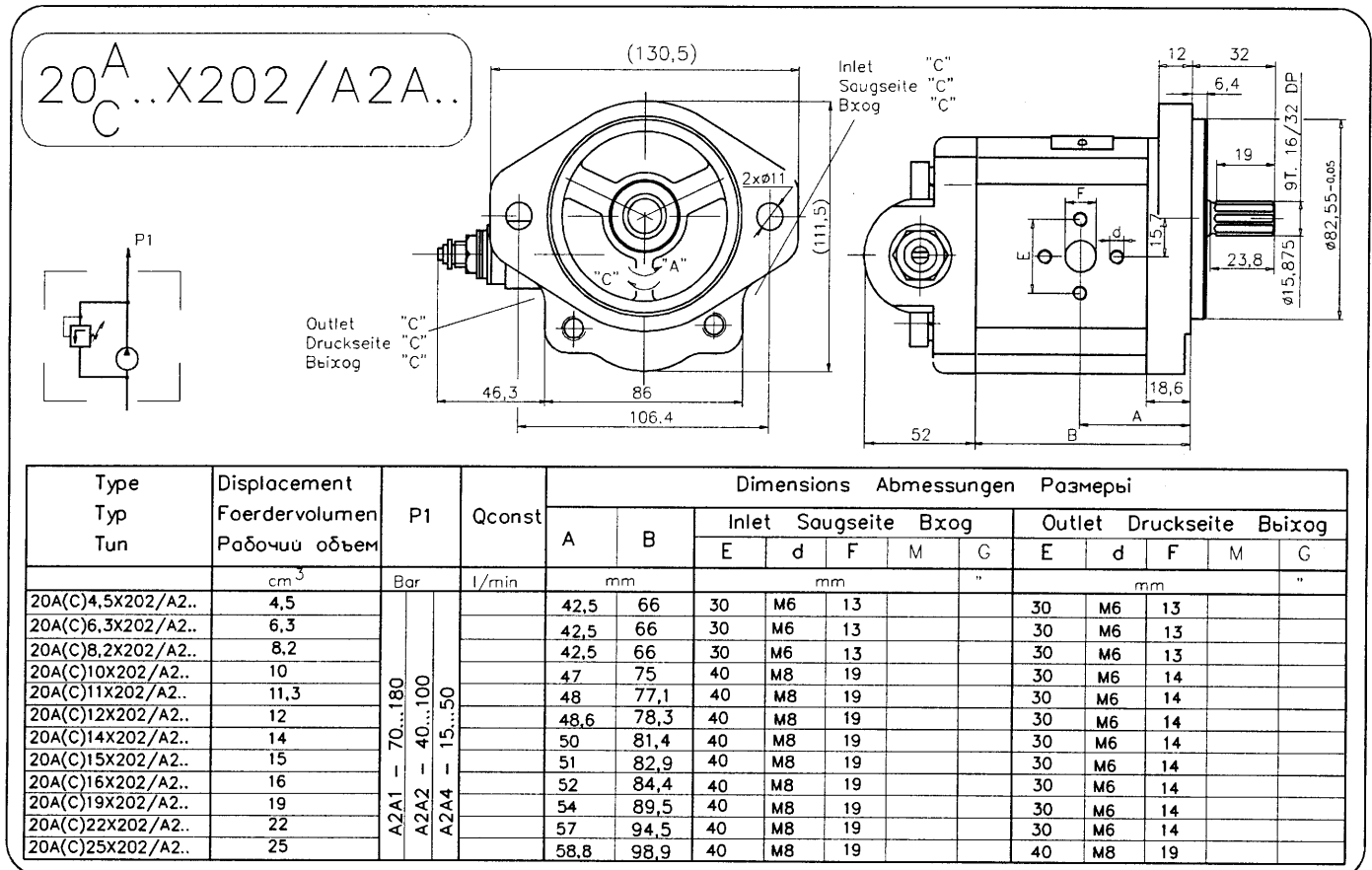
20A8.2X271/A2A1N
hydraulic gear pump
20A8.2X271 with relief-prefill
valve (A2) with range of
adjustment 70 ... 180 bar (A1)
with decreased overall sizes (N).

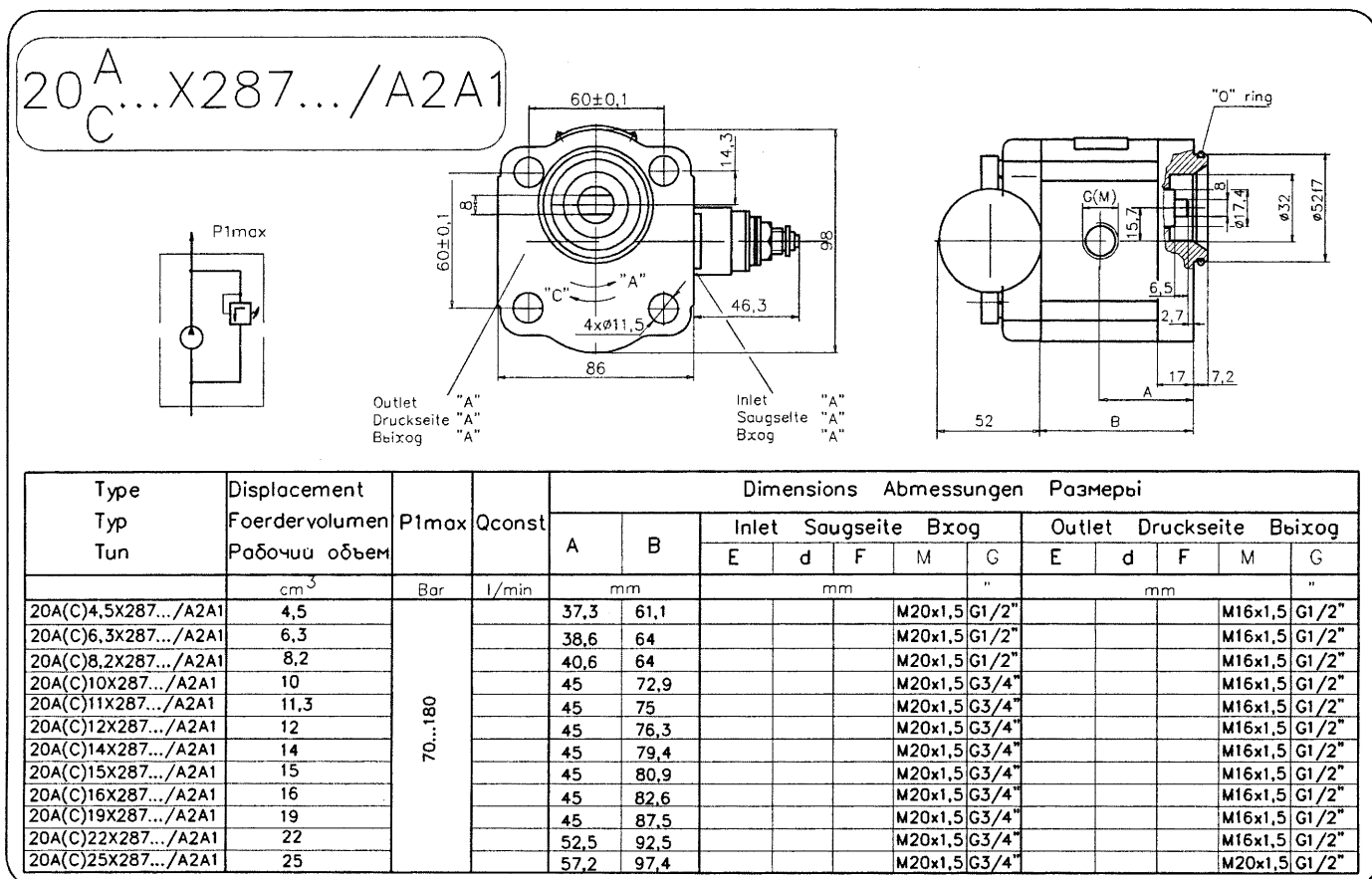
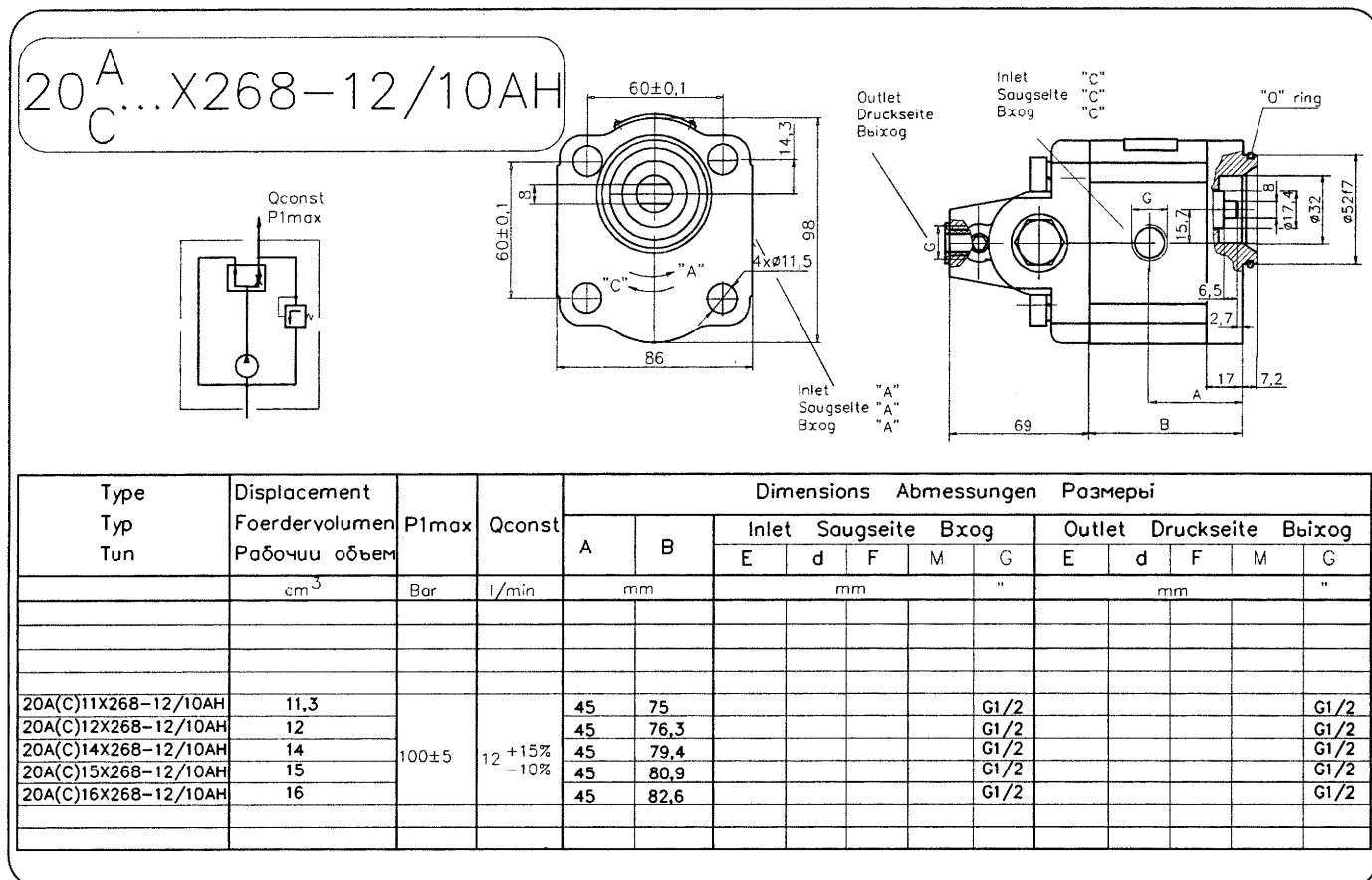
Beispiel:

20A8.2X271/A2A1N
hydraulische Zahnradpumpe
mit einstellbarem
Druckbegrenzungsventil (A2)
mit Einstellbereich von 70 ...
180 Bar (A1) mit reduzierten
Abmessungen (N).

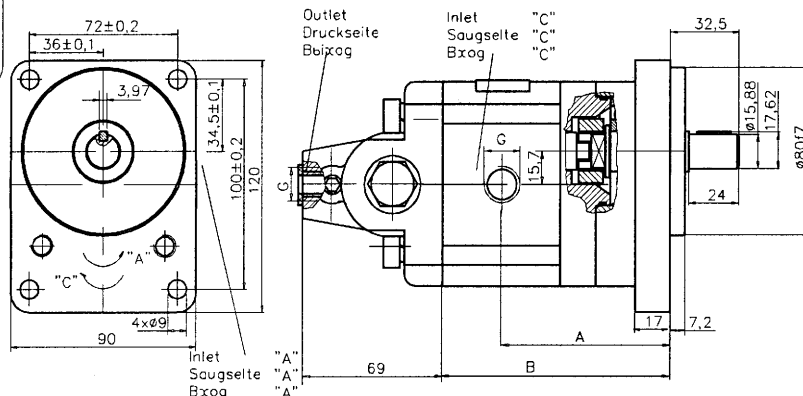
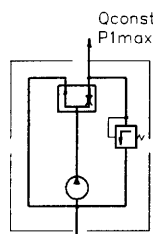
Пример:

20A8.2X271/A2A1N
гидравлический шестерен-
ный насос 20A8.2X271 с
клапаном передохранитель-
норегулируемым (A2)
диапазон регулирования 70
... 180 bar (A1) с уменьшенным
габаритом (N).



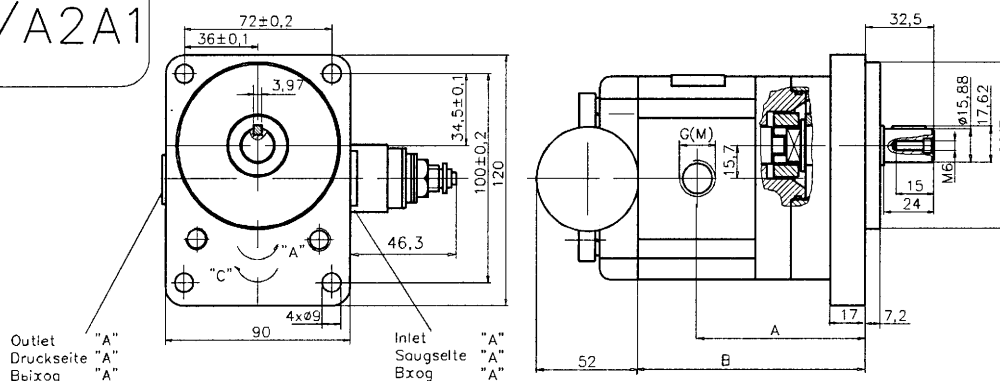
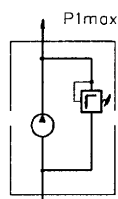


20^A_C...X272-12/10AH

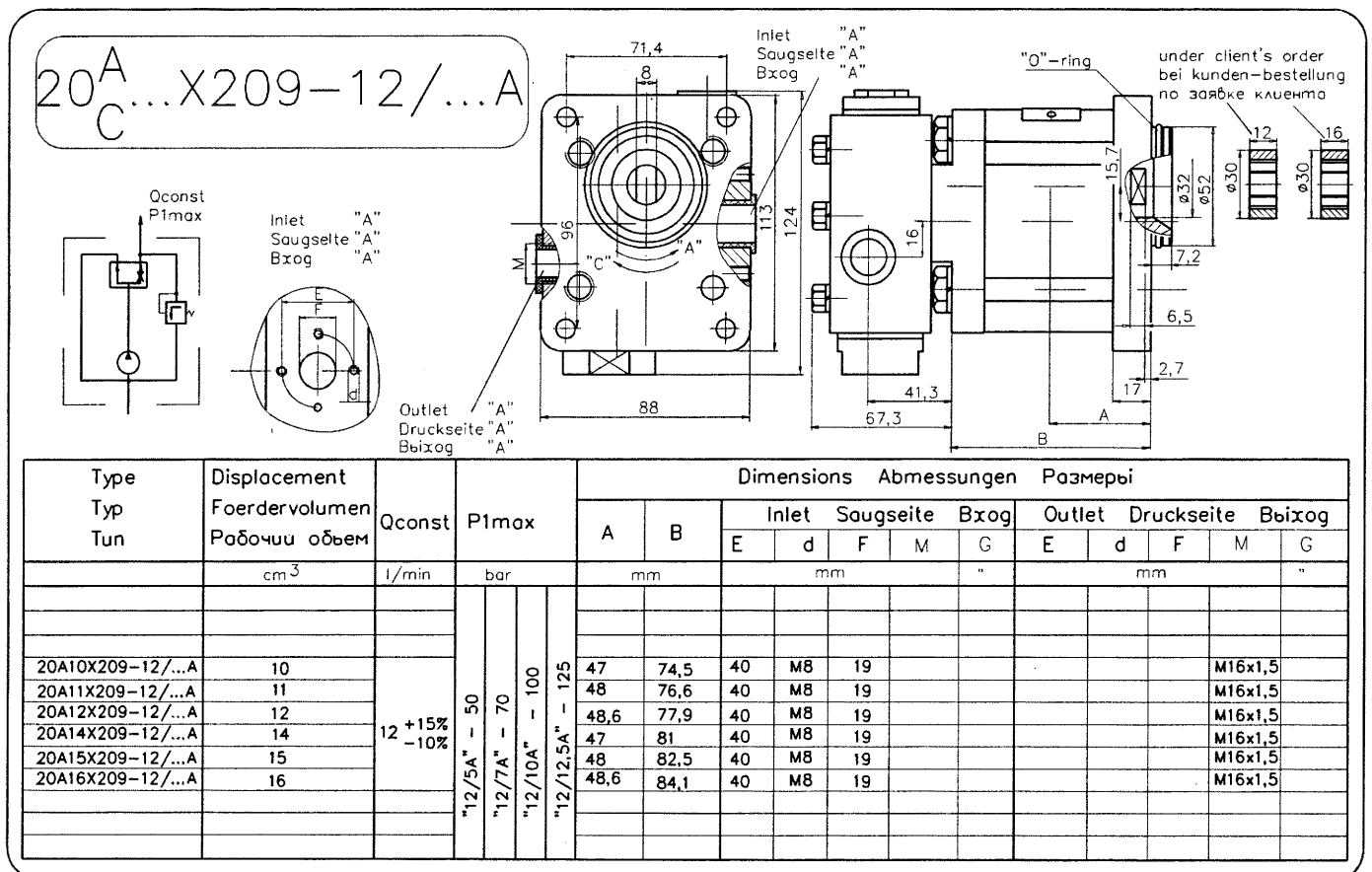
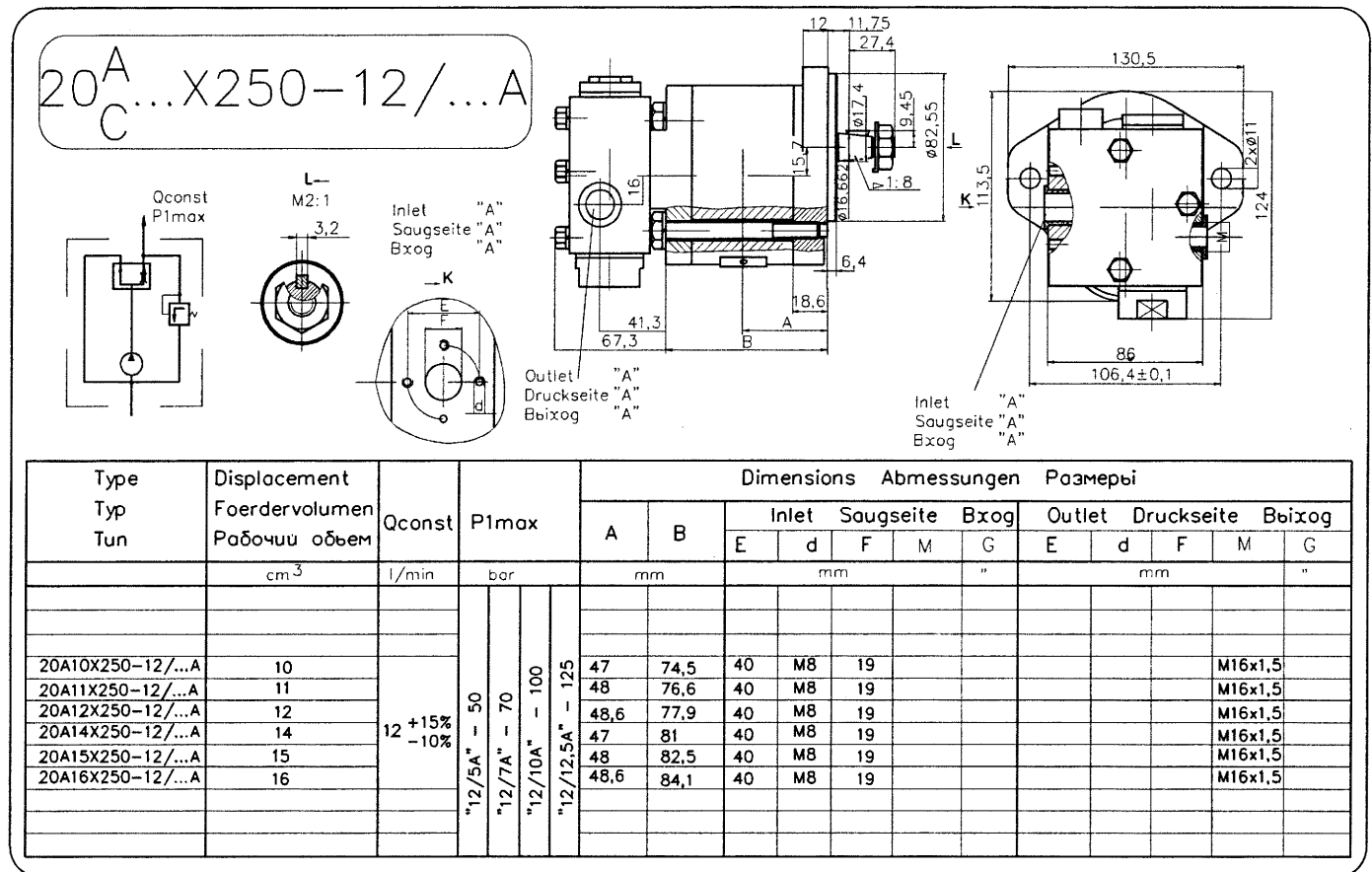


Type Typ Тип	Displacement Foerdervolumen Рабочий объем	P1max Bar	Qconst l/min	Dimensions Abmessungen Размеры																			
				A		Inlet Saugseite Вхог					Outlet Druckseite Выхог												
				E	d	F	M	G	E	d	F	M	G										
	cm ³			mm																			
20A(C)10X272-12/10AH	11,3	100±5	12 +15% -10%	79	109,1																		
20A(C)11X272-12/10AH				79	110,3																		
20A(C)12X272-12/10AH				79	113,4																		
20A(C)14X272-12/10AH				79	115																		
20A(C)15X272-12/10AH				79	116,6																		
20A(C)16X272-12/10AH																							

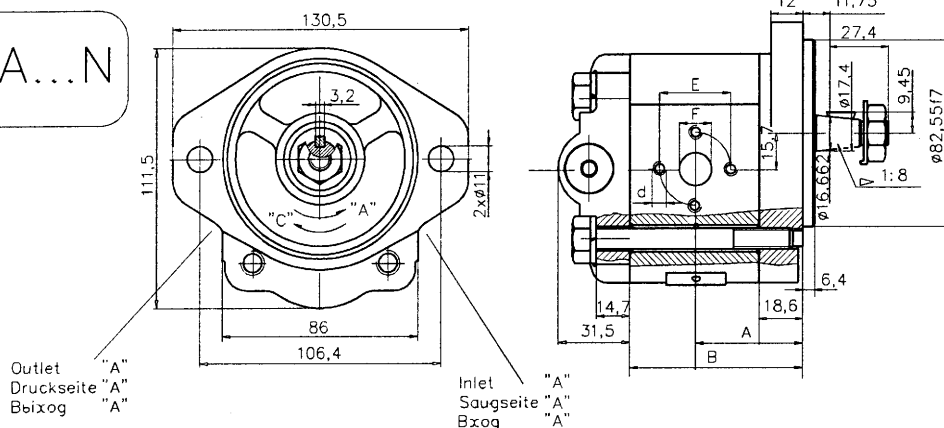
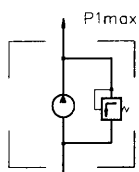
20^A_C...X286.../A2A1



Type Typ Тип	Displacement Foerdervolumen Рабочий объем	P1max Bar	Qconst l/min	Dimensions Abmessungen Размеры																			
				A		Inlet Saugseite Вхог					Outlet Druckseite Выхог												
				E	d	F	M	G	E	d	F	M	G										
	cm ³			mm																			
20A(C)4,5X286.../A2A1	4,5	70...180		71,3	95,1																		
20A(C)6,3X286.../A2A1	6,3			72,6	98																		
20A(C)8,2X286.../A2A1	8,2			74,6	98																		
20A(C)10X286.../A2A1	10			79	106,9																		
20A(C)11X286.../A2A1	11,3			79	109																		
20A(C)12X286.../A2A1	12			79	110,3																		
20A(C)14X286.../A2A1	14			79	113,4																		
20A(C)15X286.../A2A1	15			79	115																		
20A(C)16X286.../A2A1	16			79	116,6																		
20A(C)19X286.../A2A1	19			79	121,5																		
20A(C)22X286.../A2A1	22			86,5	126,5																		
20A(C)25X286.../A2A1	25			91,2	131,4																		

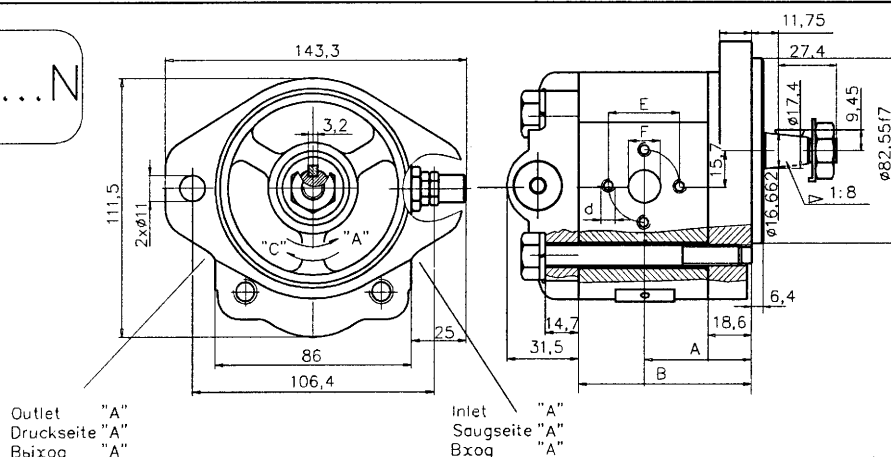
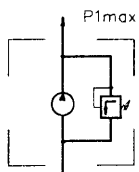


20^A_C...X271/A1A...N



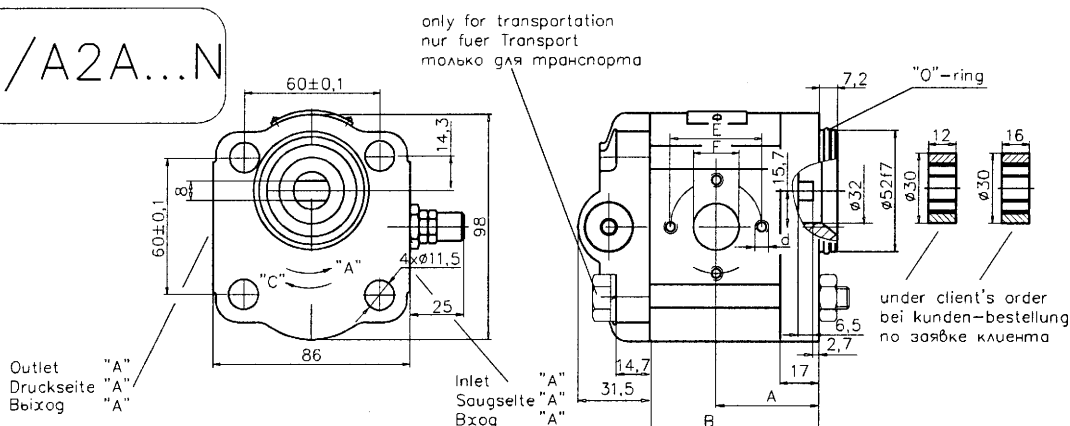
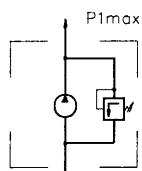
Type Typ Tun	Displacement Foerdervolumen Рабочий объем	P1max	Dimensions Abmessungen Размеры												
			A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог					
					E	d	F	M	G	E	d	F	M	G	
	cm ³	bar	mm												
20A(C)4,5X271/A1A...N	4,5	100 120 140	42,5	66	30	M6	13					30	M6	13	
20A(C)6,3X271/A1A...N	6,3		42,5	66	30	M6	13						30	M6	13
20A(C)8,2X271/A1A...N	8,2		42,5	66	30	M6	13						30	M6	13
20A(C)10X271/A1A...N	10		47	74,5	40	M8	19						30	M6	14
20A(C)11X271/A1A...N	11		48	76,6	40	M8	19						30	M6	14
20A(C)12X271/A1A...N	12		48,6	77,9	40	M8	19						30	M6	14
20A(C)14X271/A1A...N	14		50	81	40	M8	19						30	M6	14
20A(C)15X271/A1A...N	15		51	82,5	40	M8	19						30	M6	14
20A(C)16X271/A1A...N	16		52	84,1	40	M8	19						30	M6	14

20^A_C...X284/A2A...N



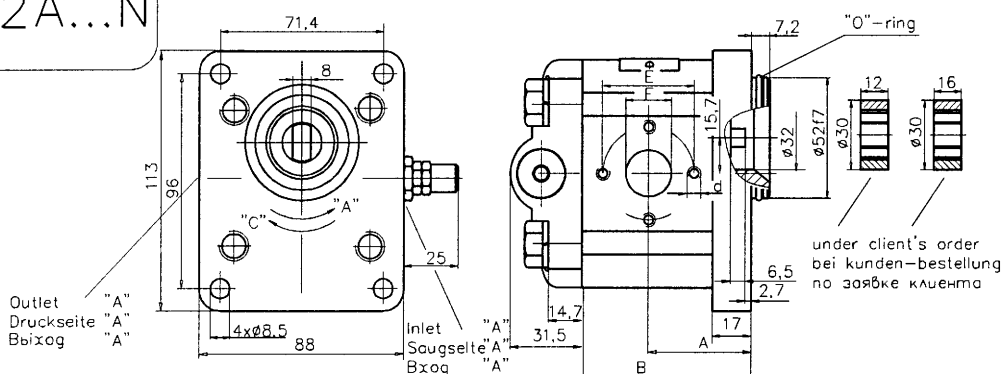
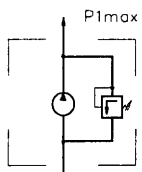
Type Typ Tun	Displacement Foerdervolumen Рабочий объем	P1max	Dimensions Abmessungen Размеры												
			A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог					
					E	d	F	M	G	E	d	F	M	G	
	cm ³	bar	mm												
20A(C)4,5X284/A2A...N	4,5	4...100 70...180 100...250	42,5	66	30	M6	13					30	M6	13	
20A(C)6,3X284/A2A...N	6,3		42,5	66	30	M6	13						30	M6	13
20A(C)8,2X284/A2A...N	8,2		42,5	66	30	M6	13						30	M6	13
20A(C)10X284/A2A...N	10		47	74,5	40	M8	19						30	M6	14
20A(C)11X284/A2A...N	11		48	76,6	40	M8	19						30	M6	14
20A(C)12X284/A2A...N	12		48,6	77,9	40	M8	19						30	M6	14
20A(C)14X284/A2A...N	14		50	81	40	M8	19						30	M6	14
20A(C)15X284/A2A...N	15		51	82,5	40	M8	19						30	M6	14
20A(C)16X284/A2A...N	16		52	84,1	40	M8	19						30	M6	14

20^A/_C...X066/A2A...N



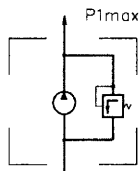
Type Typ Tun	Displacement Foerdervolumen Рабочий объем	P1max	Dimensions Abmessungen Размеры												
			A B		Inlet Saugseite Вхог					Outlet Druckseite Выхог					
			E	d	F	M	G	E	d	F	M	G			
	cm ³	bar	mm												
20A(C)4.5X066/A2A...N	4,5	40...100 A2A2N - 40...100 A2A1N - 70...180 A2A3N - 100...250	40,5	64	30	M6	13				30	M6	13		
20A(C)6.3X066/A2A...N	6,3		42	67	30	M6	13				30	M6	13		
20A(C)8.2X066/A2A...N	8,2		43,5	70	30	M6	13				30	M6	13		
20A(C)10X066/A2A...N	10		45	73	40	M8	19				30	M6	14		
20A(C)11X066/A2A...N	11		46	75	40	M8	19				30	M6	14		
20A(C)12X066/A2A...N	12		46,6	76,3	40	M8	19				30	M6	14		
20A(C)14X066/A2A...N	14		48	79,4	40	M8	19				30	M6	14		
20A(C)15X066/A2A...N	15		49	81	40	M8	19				30	M6	14		
20A(C)16X066/A2A...N	16		50	82,5	40	M8	19				30	M6	14		

20^A/_C...X201/A2A...N



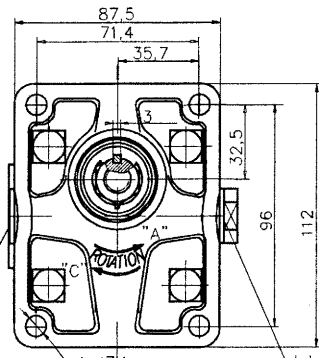
Type Typ Tun	Displacement Foerdervolumen Рабочий объем	P1max	Dimensions Abmessungen Размеры												
			A B		Inlet Saugseite Вхог					Outlet Druckseite Выхог					
			E	d	F	M	G	E	d	F	M	G			
	cm ³	bar	mm												
20A(C)4.5X201/A2A...N	4,5	40...100 A2A2N - 40...100 A2A1N - 70...180 A2A3N - 100...250	40,5	64	30	M6	13				30	M6	13		
20A(C)6.3X201/A2A...N	6,3		42	67	30	M6	13				30	M6	13		
20A(C)8.2X201/A2A...N	8,2		43,5	70	30	M6	13				30	M6	13		
20A(C)10X201/A2A...N	10		45	73	40	M8	19				30	M6	14		
20A(C)11X201/A2A...N	11		46	75	40	M8	19				30	M6	14		
20A(C)12X201/A2A...N	12		46,6	76,3	40	M8	19				30	M6	14		
20A(C)14X201/A2A...N	14		48	79,4	40	M8	19				30	M6	14		
20A(C)15X201/A2A...N	15		49	81	40	M8	19				30	M6	14		
20A(C)16X201/A2A...N	16		50	82,5	40	M8	19				30	M6	14		

20^A_C...X249/A1A...

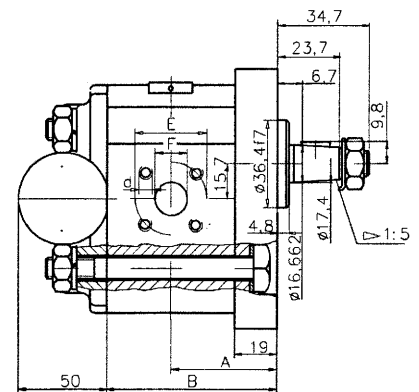


$P_{1max} = 175 \text{ Bar}$
 $n = 650 \dots 3500 \text{ min}^{-1}$

Outlet "A"
Druckseite "A"
Выход "A"

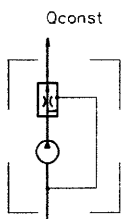


Inlet "A"
Saugseite "A"
Вход "A"

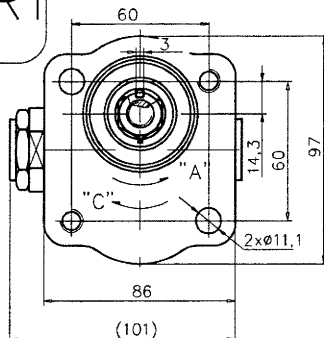


Type Typ Тип	Displacement Fördervolumen Рабочий объем	P1max	Dimensions Abmessungen Размеры												
			A		Inlet Saugseite Вхог					Outlet Druckseite Выхог					
			E	d	F	M	G	E	d	F	M	G			
	cm ³	Bar	mm												
20A(C)4.5X249/A1A...	4,5	120	42,5	63,1	35	M6	15				35	M6	15		
20A(C)6.3X249/A1A...	6,3	140	42,5	66	35	M6	15				35	M6	15		
20A(C)8.2X249/A1A...	8,2	170	42,5	69	35	M6	15				35	M6	15		
		A1A17													
		A1A22													
		A1A39													
		A1A43													

20^A_C...X290/12VR1

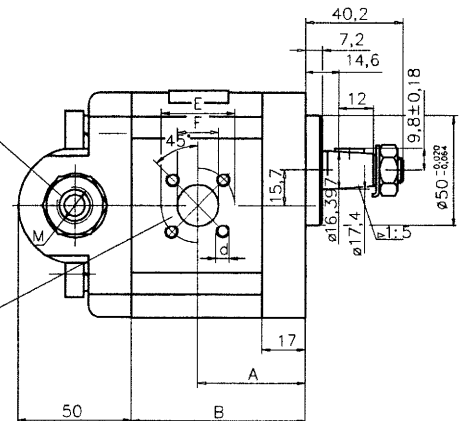


$P_{max} = 210 \text{ Bar}$

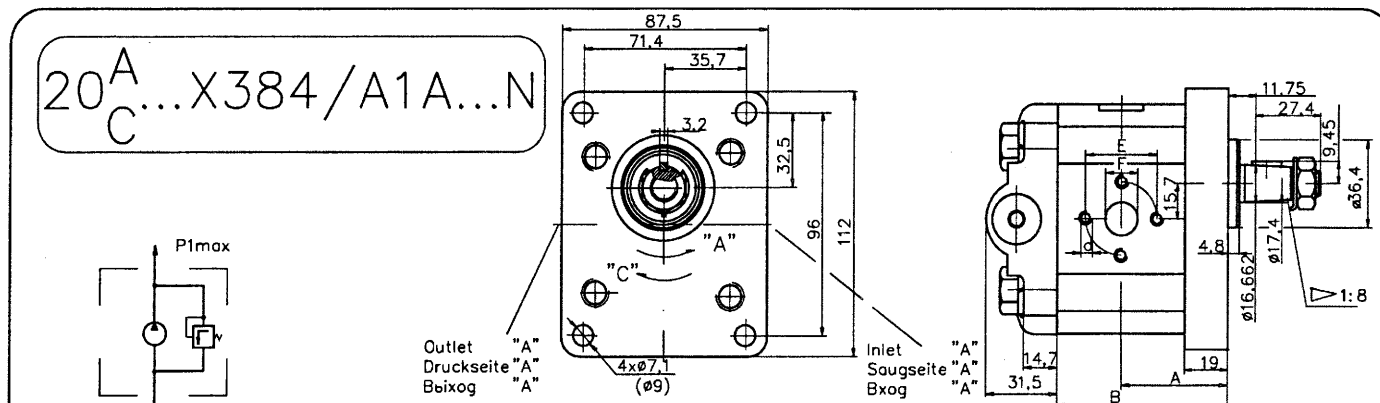


Outlet "C"
Druckseite "C"
Выход "C"

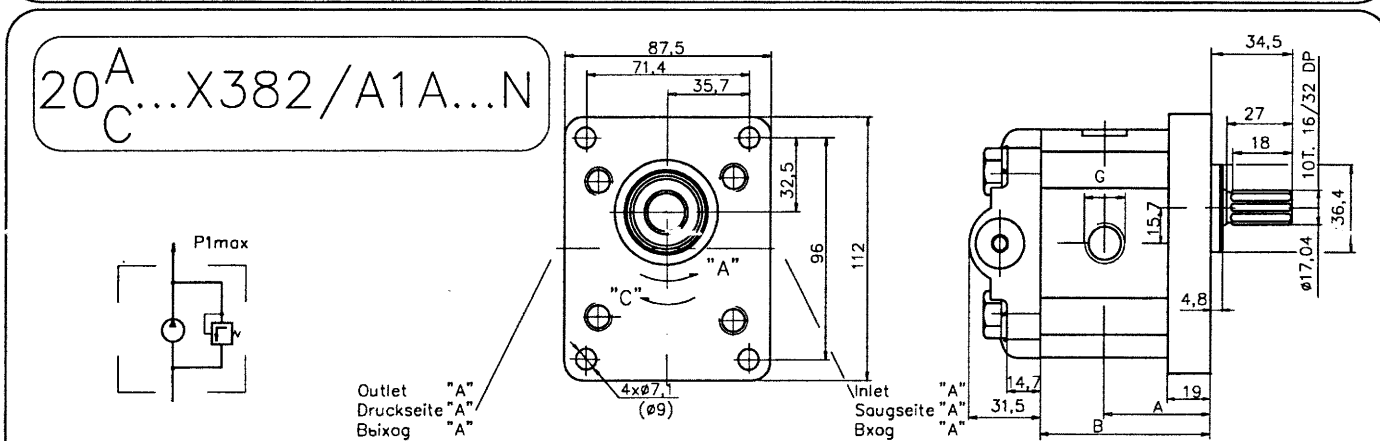
Inlet "C"
Saugseite "C"
Вхог "C"



Type Typ Тип	Displacement Fördervolumen Рабочий объем	P1max	Qconst	Dimensions Abmessungen Размеры											
				A		Inlet Saugseite Вхог					Outlet Druckseite Выхог				
				E	d	F	M	G	E	d	F	M	G		
	cm ³	Bar	l/min	mm											
20A(C)11X290/12VR1	11,3														
20A(C)12X290/12VR1	12														
20A(C)14X290/12VR1	14														
20A(C)15X290/12VR1	15		12 +15% -10%	45	79,4	40	M6	20						M18x1,5	
20A(C)16X290/12VR1	16	45		80,9	40	M6	20							M18x1,5	
20A(C)19X290/12VR1	19	45		82,5	40	M6	20							M18x1,5	
20A(C)22X290/12VR1	22														
20A(C)25X290/12VR1	25														



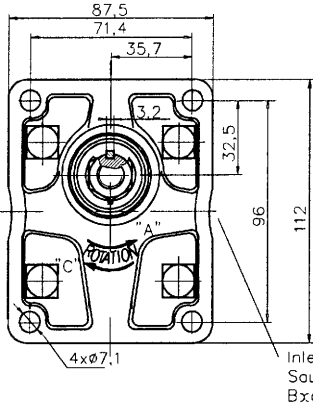
Type Typ Тун	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		P1max	A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог					
					E	d	F	M	G	E	d	F	M	G	
	cm ³	bar	mm		mm					mm					
20A(C)4,5X384/A1A...N	4,5	15 40 70 100	42,5	66	30	M6	13	M20x1,5	G1/2	30	M6	13	M16x1,5	G1/2	
20A(C)6,3X384/A1A...N	6,3		42,5	66	30	M6	13	M20x1,5	G1/2	30	M6	13	M16x1,5	G1/2	
20A(C)8,2X384/A1A...N	8,2		42,5	66	30	M6	13	M20x1,5	G1/2	30	M6	13	M16x1,5	G1/2	
20A(C)10X384/A1A...N	10		47	74,9	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)11X384/A1A...N	11,3		48	77	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)12X384/A1A...N	12		48,7	78,3	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)14X384/A1A...N	14		50,2	81,4	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)15X384/A1A...N	15		51	82,9	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)16X384/A1A...N	16		51,8	84,5	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	
20A(C)19X384/A1A...N	19		54	89,5	40	M8	19	M20x1,5	G3/4	30	M6	14	M16x1,5	G1/2	

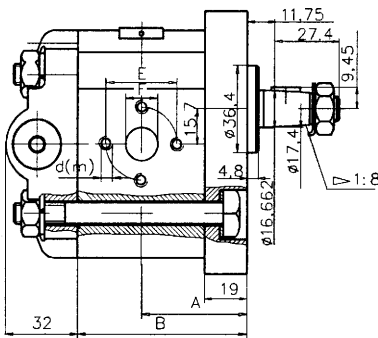


Type Typ Тун	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры													
		P1max	A	B	Inlet Saugseite Вхог					Outlet Druckseite Выхог					
					E	d	F	M	G	E	d	F	M	G	
	cm ³	bar	mm		mm					mm					
20A(C)4,5X382/A1A...N	4,5	15 40 70 100													
20A(C)6,3X382/A1A...N	6,3														
20A(C)8,2X382/A1A...N	8,2														
20A(C)10X382/A1A...N	10														
20A(C)11X382/A1A...N	11,3														
20A(C)12X382/A1A...N	12			48,7	78,3					G3/8				G3/8	
20A(C)14X382/A1A...N	14														
20A(C)15X382/A1A...N	15														
20A(C)16X382/A1A...N	16														

A...X.../A1A...N

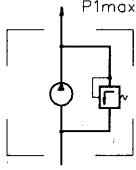
C





...XP4/... - "UNC" thread (d)
 ...XP4M/... - metric thread (m)

P1max



Outlet "A"
 Druckseite "A"
 Выход "A"

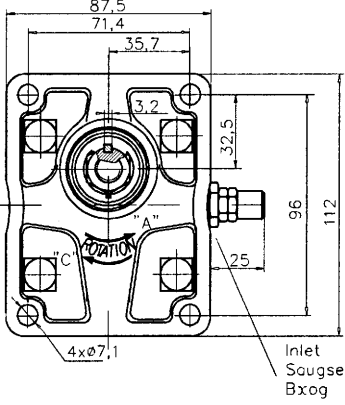
Inlet "A"
 Saugseite "A"
 Вхог "A"

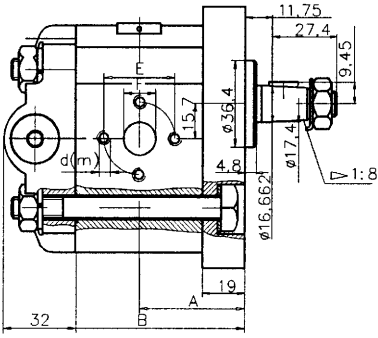
Example: A10XP4/A1A21N

Type Typ Тун	Displacement Foerdervolumen Рабочий объем	P1max	Dimensions Abmessungen Размеры												
			A		Inlet Saugseite Вхог					Outlet Druckseite Выход					
			E	B	d	m	F	G	E	d	m	F	G		
	cm ³	bar	mm												
A(C)10X.../A1A...N	4,5	100	42,5	66	30	1/4 - 20UNC	M6	13		30	1/4 - 20UNC	M6	13		
A(C)14X.../A1A...N	6,3		42,5	66	30		M6	13		30		M6	13		
A(C)18X.../A1A...N	8,2		42,5	66	30		M6	13		30		M6	13		
A(C)25X.../A1A...N	11,3		48	77	40	M8	19		30	M6		14			
A(C)33X.../A1A...N	15		48	77	40	M8	19		30	M6		14			
A(C)42X.../A1A...N	19		51	83,7	40	5/16 - 18UNC	M8	19		30		M6	14		

A...X.../A2A...N

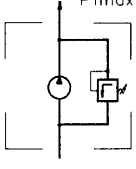
C





...XP4/... - "UNC" thread (d)
 ...XP4M/... - metric thread (m)

P1max



Outlet "A"
 Druckseite "A"
 Выход "A"

Inlet "A"
 Saugseite "A"
 Вхог "A"

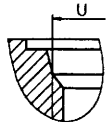
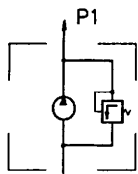
Example: A10XP4/A2A1N

Type Typ Тун	Displacement Foerdervolumen Рабочий объем	P1max	Dimensions Abmessungen Размеры												
			A		Inlet Saugseite Вхог					Outlet Druckseite Выход					
			E	B	d	m	F	G	E	d	m	F	G		
	cm ³	bar	mm												
A(C)10X.../A2A...N	4,5	100	42,5	66	30	1/4 - 20UNC	M6	13		30	1/4 - 20UNC	M6	13		
A(C)14X.../A2A...N	6,3		42,5	66	30		M6	13		30		M6	13		
A(C)18X.../A2A...N	8,2		42,5	66	30		M6	13		30		M6	13		
A(C)25X.../A2A...N	11,3		48	77	40	M8	19		30	M6		14			
A(C)33X.../A2A...N	15		48	77	40	M8	19		30	M6		14			
A(C)42X.../A2A...N	19		51	83,7	40	5/16 - 18UNC	M8	19		30		M6	14		

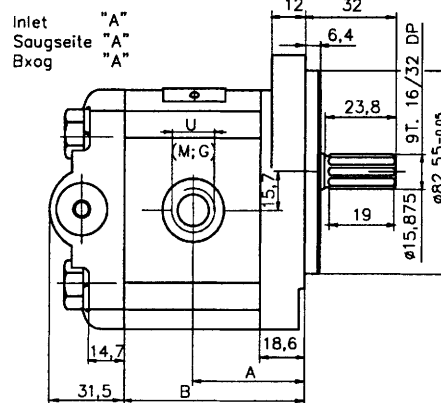
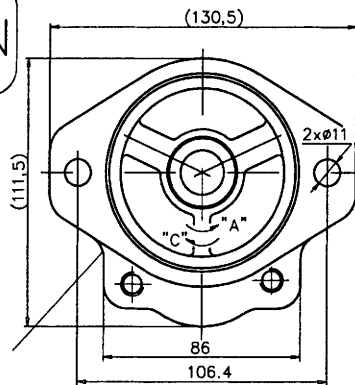
20^A_C...X388../A1A...N

M - metric thread
G - GAS thread
U - UNF thread

SAE J475
(ISO R725)

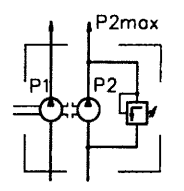


Outlet "A"
Druckseite "A"
Выход "A"

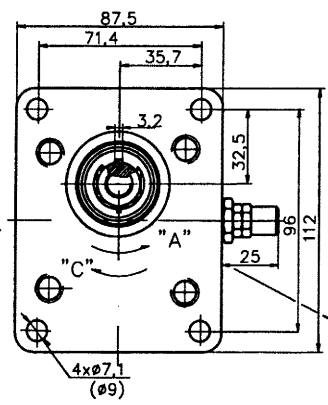


Type Typ Typ	Displacement Foerdervolumen Рабочий объем	Dimensions Abmessungen Размеры																			
		P1				Inlet Saugseite Вхог			Outlet Druckseite Выог												
		bar				A	B	E	d	U	M	G	E	d	U	M	G				
	cm ³					mm		mm			mm										
20A(C)4,5X388../A1A...N	4,5	100	120	140	150	42,1	65,6	1 1/16"	12UNF-2B	M20x1,5	G1/2	7/8"	14UNF-2B	M16x1,5	G1/2						
20A(C)6,3X388../A1A...N	6,3					43,6	68,6									M20x1,5	G1/2	M16x1,5	G1/2		
20A(C)8,2X388../A1A...N	8,2					45,1	71,5									M20x1,5	G1/2	M16x1,5	G1/2		
20A(C)10X388../A1A...N	10					46,6	74,6									M20x1,5	G3/4	M16x1,5	G1/2		
20A(C)11X388../A1A...N	11					47,6	76,7									M20x1,5	G3/4	M16x1,5	G1/2		
20A(C)12X388../A1A...N	12					48,2	77,9									M20x1,5	G3/4	M16x1,5	G1/2		
20A(C)14X388../A1A...N	14					49,6	81									M20x1,5	G3/4	M16x1,5	G1/2		
20A(C)15X388../A1A...N	15					50,6	82,5									M20x1,5	G3/4	M16x1,5	G1/2		
20A(C)16X388../A1A...N	16					51,6	84,1									M20x1,5	G3/4	M16x1,5	G1/2		

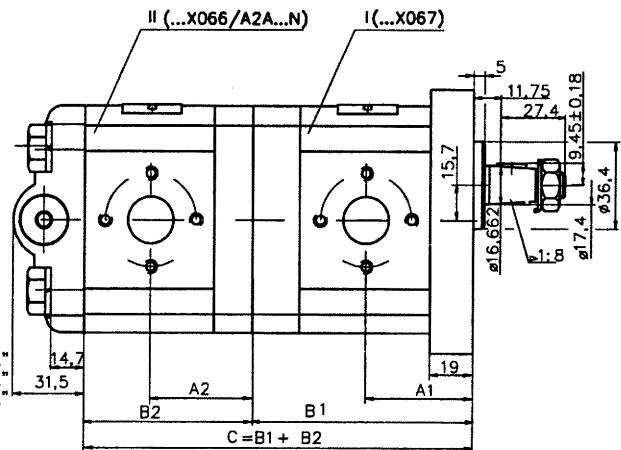
22^A
C... / ...



Outlet "A"
Druckseite "A"
Выход "A"



Inlet "A"
Saugseite "A"
Вход "A"



Note: For the supply ports sizes (input-output) see the schemes of the relevant single pump-type. For other pumps' combinations contact with the manufacturer.

Bemerkung: Für die Abmessungen der Speisebohrungen (Druck- und Saugseite)-sieh Schema des entsprechenden Einzelpumpentypes. Für andere Pumpencombination-bitte Rücksprache mit dem Hersteller.

Размеры питательных отверстий (вход-выход) выполняются в соответствии с чертежами одинарных насосов составляющие комбинацию.

Type	Typ	Tun	A1	B1
20A(C)4,5X067			42,5	87,2
20A(C)6,3X067			44	90,2
20A(C)8,2X067			45,5	93,1
20A(C)10X067			47	96,2
20A(C)11X067			48	98,2
20A(C)12X067			48,6	99,5
20A(C)14X067			50	102,6
20A(C)15X067			51	104,1
20A(C)16X067			52	105,8
20A(C)19X067			54,3	110,7
20A(C)22X067			56,8	115,7
20A(C)25X067			59,2	120,6

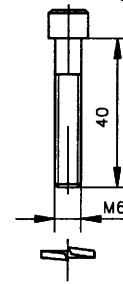
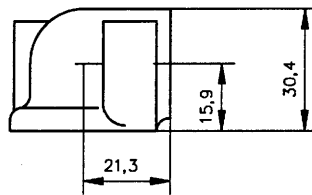
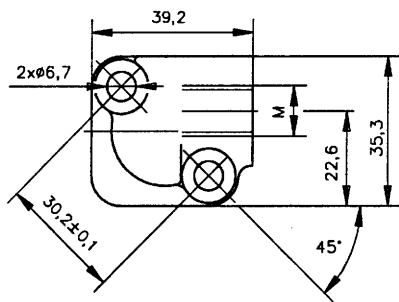
Type	Typ	Tun	A2	B2	P2max		
					bar		
20A(C)4,5X066/A2A...N			40,5	64	A2A2N - 40...100	A2A1N - 70...180	A2A3N - 100...250
20A(C)6,3X066/A2A...N			42	67			
20A(C)8,2X066/A2A...N			43,5	70			
20A(C)10X066/A2A...N			45	73			
20A(C)11X066/A2A...N			46	75			
20A(C)12X066/A2A...N			46,6	76,3			
20A(C)14X066/A2A...N			48	79,4			
20A(C)15X066/A2A...N			49	81			
20A(C)16X066/A2A...N			50	82,5			

Type Typ Tun	M
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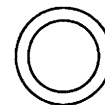
K1M12	M12 x 1.5
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K1G1/4	G 1/4
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K1G3/8	G 3/8
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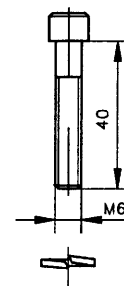
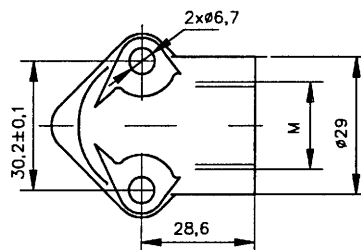
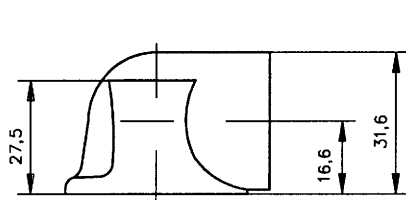
"O" - ring 15,5x2,6



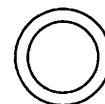
Type Typ Tun	M
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K2M18	M18 x 1.5
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K2G1/2	G 1/2
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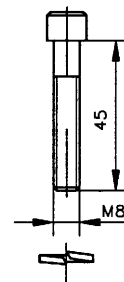
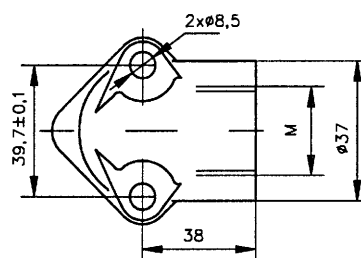
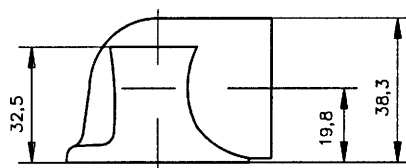
"O" - ring 15,5x2,6



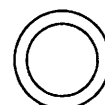
Type Typ Tun	M
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K3M22	M22 x 1.5
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K3G3/4	G 3/4
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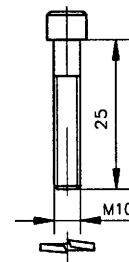
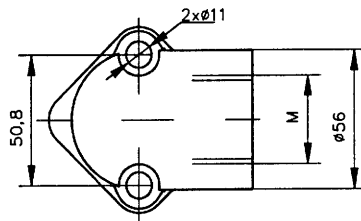
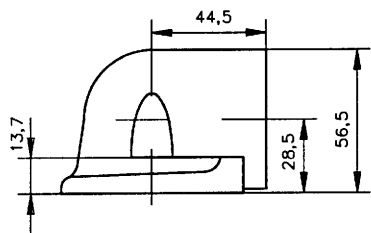
"O" - ring 22,2x2,6



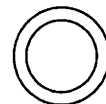
Type Typ Tun	M
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K4M30	M30 x 2
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K1G1	G 1
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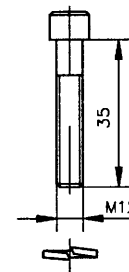
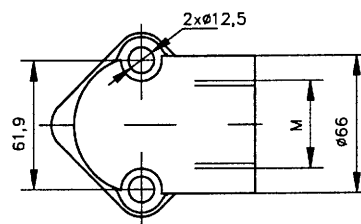
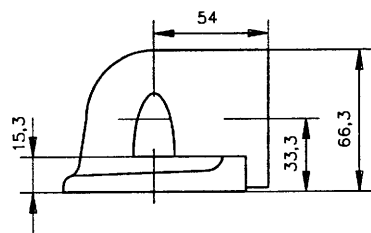
"O" - ring 29,7x3,5



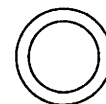
Type Typ Tun	M
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K5M42	M42 x 2
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K5G1 1/4	G 1 1/4
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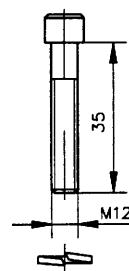
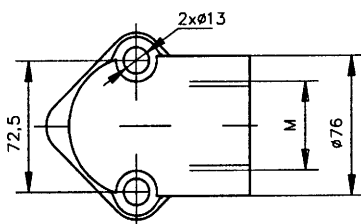
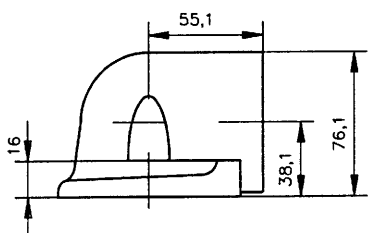
"O" - ring 37,7x3,5



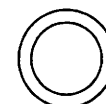
Type Typ Tun	M
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K6M45	M45 x 2
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K6G1 1/2	G 1 1/2
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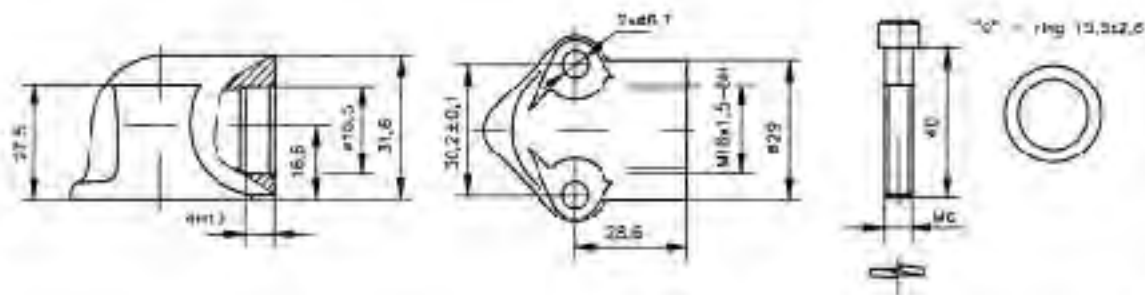


"O" - ring 44,5x3,5



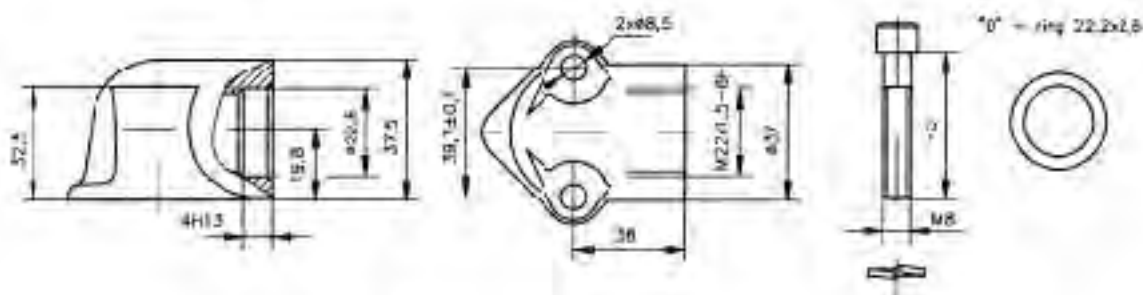
Type
yp
un

K2L



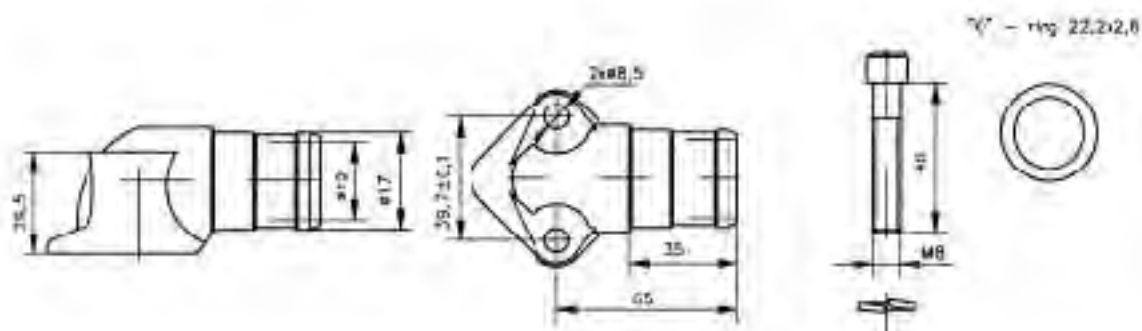
Type
Typ
Tun

K3L



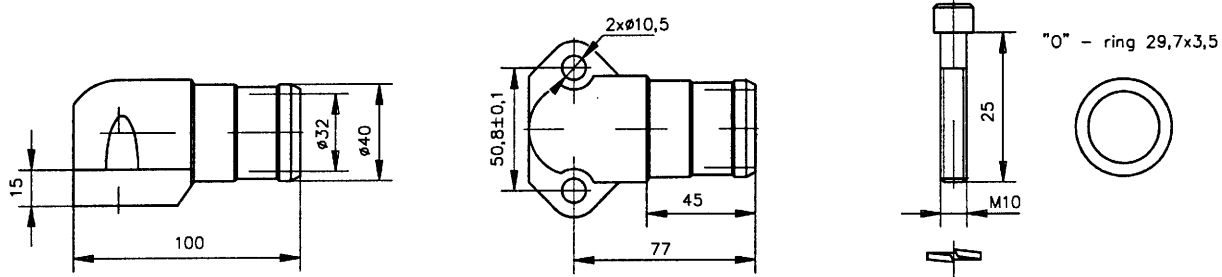
Type
yp
Tun

F2



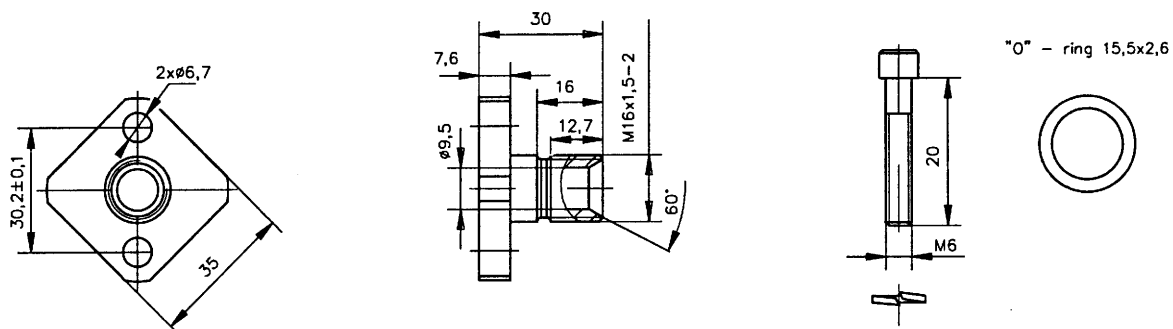
Type
Typ
Tun

F3



Type
Typ
Tun

KP1



Type
Typ
Tun

KP2

