مؤسسة القمم الصناعية
Al-Qemam Industrial Est.

HIGH PRESSURE GEAR PUMP



Products of Al-Qemam Hydraulics Engg.

Contact for spare parts to keep your machine in running.

AL-QEMAM HYDRAULICS ENG.

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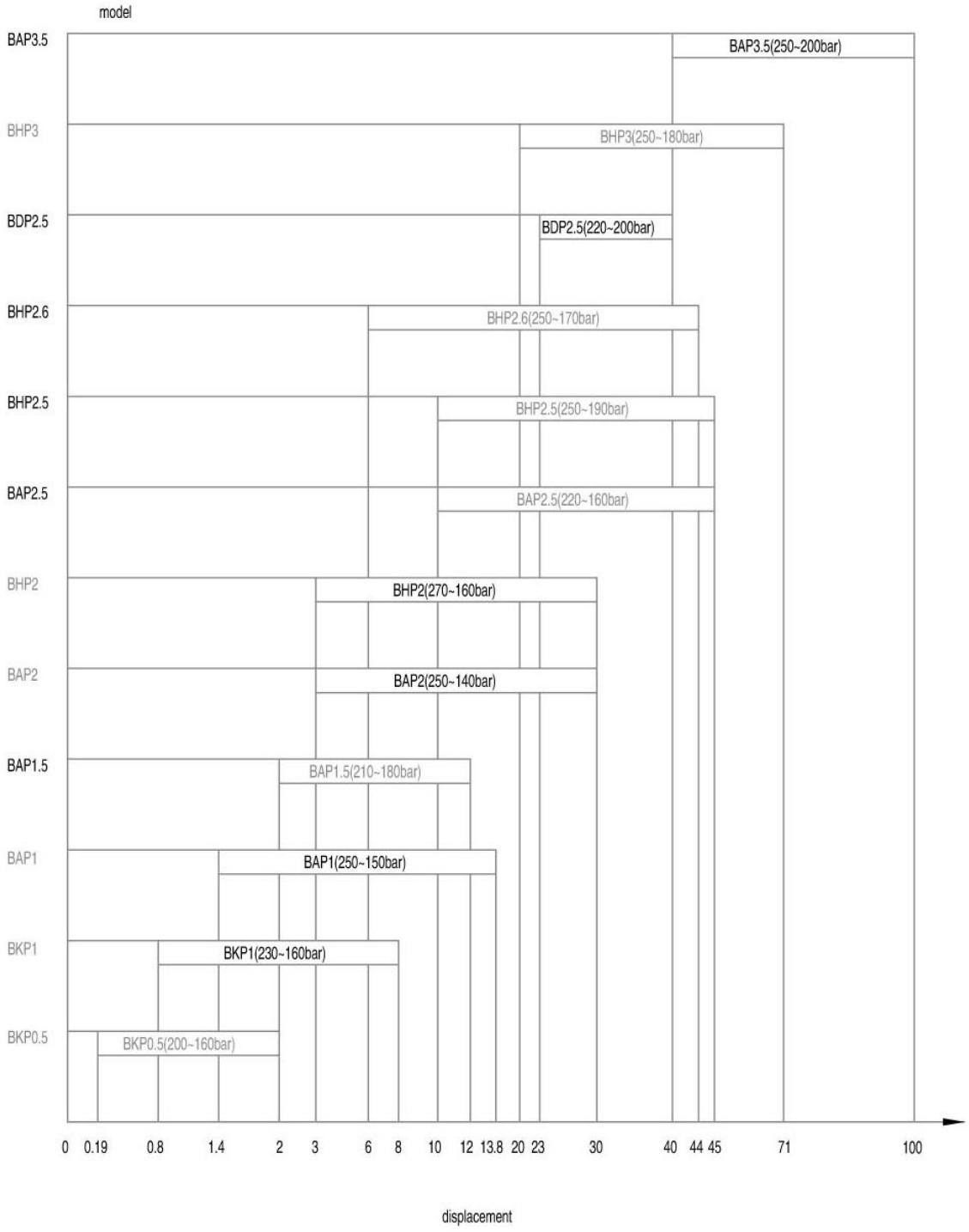
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HIGH PRESSURE GEAR PUMP

PRODUCT RANGE



Remark: Show these pressures as maximum continuous pressure in the graph, product series "BH" denote front and end cover material cast iron, etcaeteras series denote front and end cover material aluminum.

TECHNICAL INFORMATION

Please strictly follow assembly and use indications given in this catalogue for top performance and longer life of Boden pump.

INSTALLATION NOTES

Before starting the system on a continuous basis, we suggest to adopt as follows simple precautions.

- Check for the direction of rotation of the pump to be consistent with the drive shaft one, be sure no reversion revolved.
- Check for the proper aligment of pump shaft and motor shaft, it is necessary that the connection does not induce axial or radial loads.
- Check if contact area between seal ring and shaft is clean, remove all dirt, chips and all foreign bodies form flanges connecting inlet and delivery ports, dust could provoke quicker wear and leakage.
- Ensure that intake and return pipes ends are always below fluid level and as far from each other as possible.
- Fill the pump with fluid, and turn it by hand.
- Disconnect pump drain during startup to bleed air off the circuit.
- Always avoid or limit load starting for pump longer life.

HYDRAULIC FLUIDS

Use specific mineral oil based hydraulic fluids having good antioxidant, anti-foaming(rapid de-aeration), anti-wear, anti--corrosion and lubricating properties, Fluids should also complywith DIN 51525 and VDMA 24317 standards and get through11th stage of FZG test.
For the standard models, the temperature of the fluid should range between -10℃ and +80℃.
Fluid kinematic viscosity ranges are the following:

allowed range	6...500 cSt
recommended range	10...100 cSt
value allowed at startup	...2000 cSt

INLET PRESSURE

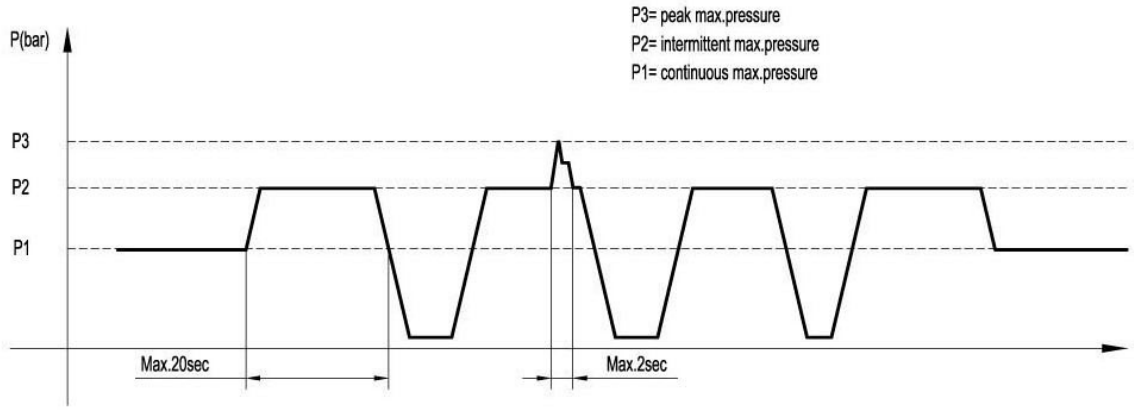
Under standard working conditions, intake pipe pressure is lower than atmospheric pressure. The operating inlet pressure should range between 0.7 and 3 bars (absolute).

FILTER RECOMMENDATION

It is widely known that most pumps early failures are due to contaminated fluids. As a warranty cannot be issued for dirt-related wear, we recommend a filter to be used, which can reduce the degree of contamination to a permissible dimension in terms of the size and concentration of dirt particles.
The filtering system shall always ensure contamination levels not exceeding the values indicated below:

Pressure	<140 bar	140...210 bar	>210 bar
NAS 1638 Class	10	9	8
ISO 4406 Class	19/16	18/15	17/14
Ratio $\beta x = 75$	25–40 mμ	12–15 mμ	6–12 mμ

PRESSURE DEFINITION



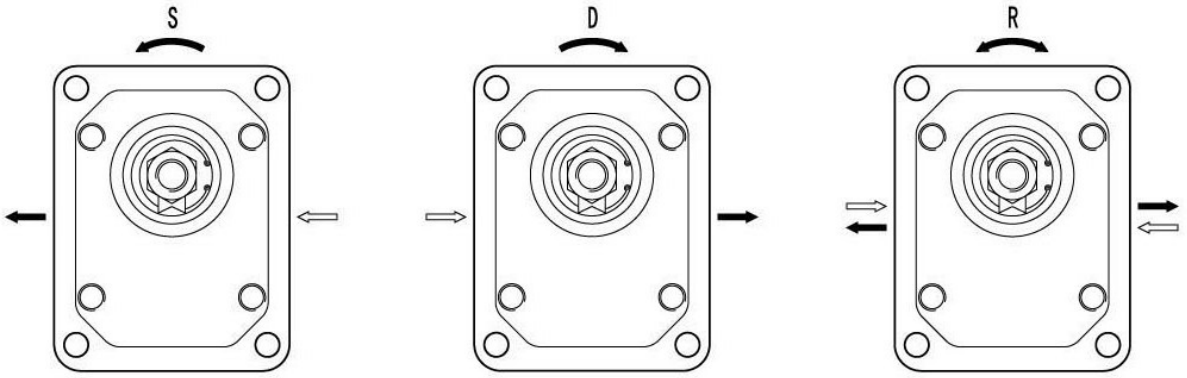
INLET AND DELIVERY LINES

Hydraulic system pipes should show no sudden changes of direction, sharp bends and sudden differences in cross-section.
They should not be too long or out of proportion.
Pipe cross-section should be sized so that fluid velocity does not exceed recommended values.
It is advisable to carefully consider the possible diameter reduction of the inlet or outlet pipes fitted on flange fittings.
Reference values are the following:

Intake line	0.5...1.6 m/s
Delivery line	2...6 m/s
Return line	1.6...3 m/s

ROTATION DIRECTION

Definition of rotation direction: when standing before the pump with driving shaft up with its projecting end towards the observer, the pump is rotating clockwise in case of right-hand rotation "D" .The contrary will happen with left-hand pumps "S", keeping the same point of view.



S= anti-clock rotation　　D= clockwise rotation　　R= reversible rotation

DESIGN CALCULATIONS FOR PUMP

Flow	Q	L/min
Torque	M	Nm
Power	P	kW
Speed	n	r/min
Pressure	△P	bar
Displacement	V	cm^3/rev

Volumetric efficiency	$\eta_v = \eta_v(V, \triangle P, n)$	≈0.93
Mechanical efficiency	$\eta_{hm} = \eta_{hm}(V, \triangle P, n)$	≈0.85
Total efficiency	$\eta_t = \eta_v \cdot \eta_{hm}$	≈0.80

$Q = V \cdot n \cdot \eta_v \cdot 10^{-3}$	[L/min]
$M = (\triangle P \cdot V)/(62.83 \cdot \eta_{hm})$	[Nm]
$P = (\triangle P \cdot Q)/(612 \cdot \eta_t)$	[kW]

HIGH PRESSURE GEAR PUMP

BKP0.5

HOW TO ORDER

BK	P	0.5	Front cover	Rotation	Size	Shaft	Ports	Ports position	Seals	Options
Series	P– Pump	Group	A0	D Clockwise	0.19					
			A1	S Counter clockwise	0.26					
			B0		0.38					
			B1	R Reversible	0.50					
					0.65					
					0.75					
					0.88					
					1.00					
					1.25					
					1.50					
					1.75					
					2.00					

Options

V–Directional valves

Drain

Q0– internal drain
Q1– external drain ø5
Q2– external drain G1/8

Ports position

Omit-Side inlet and side outlet
A-Front inlet and front outlet
B-Back inlet and front outlet
C-Back inlet and side outlet
D-Side inlet and front outlet
R-Back inlet and back outlet

Seals

Omit-Range between -10˚C and +80˚C,inlet pressure up to max. 3 bar absolute.
V-Version suitable for fluid at hi-temperatures, range between -10˚C and +120˚C.
H-Version suitable for fluid at low-temperatures, range between -40˚C and +80˚C.
T-Version suitable for inlet pressure up to max. 3 and 6 bar absolute.
N-Version suitable for inlet pressure up to max. 3 and 10 bar absolute.

Examples:

BKP0.5–B0–D–0.19–G0–L0–B= clockwise rotation, 0.19 cc/rev, B0 front cover, G0 tang shaft, setting ports L0 type, back inlet and front outlet (B), standard seals

BKP0.5–B1–D–0.19–G0–L2= clockwise rotation, 0.19 cc/rev, B1 front cover, G0 tang shaft, setting ports L2 type, standard seals

BKP0.5–A0–D–0.19–C0–L2–N= clockwise rotation, 0.19 cc/rev, A0 front cover, C0 parallel shaft, setting ports L2 type, high pressure seals(N)

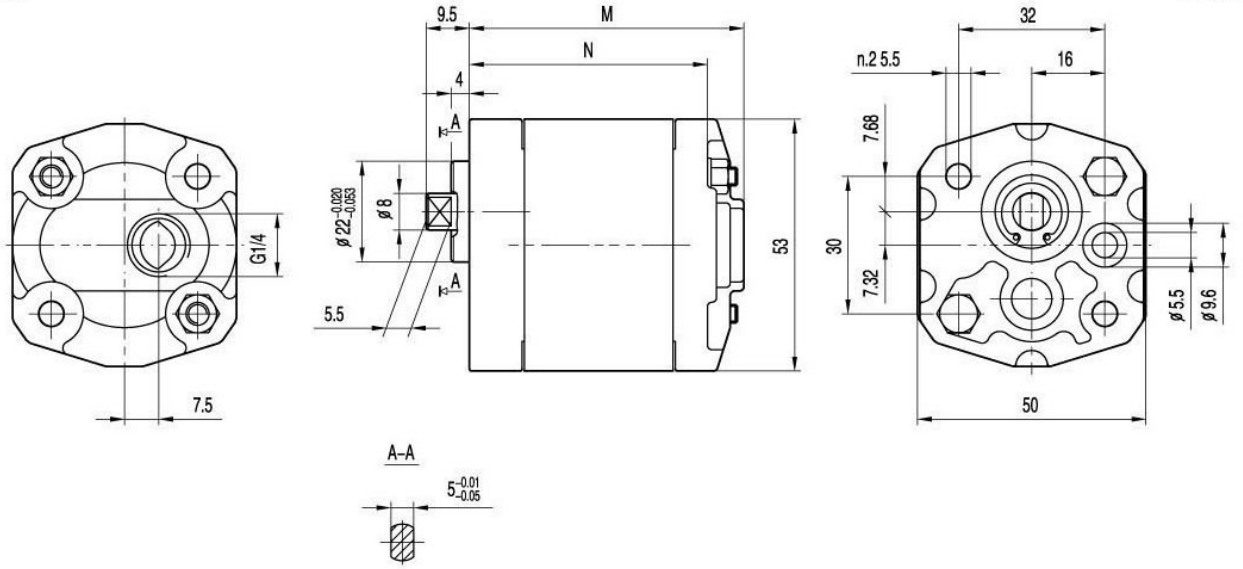
HIGH PRESSURE GEAR PUMP

BKP0.5B0



End cover: G1/4 thread depth 12.
To mount the pump, n.2 M5 screws, with a torque wrench setting fixed at 5.4 ± 0.5 Nm.

INLET



OUTLET

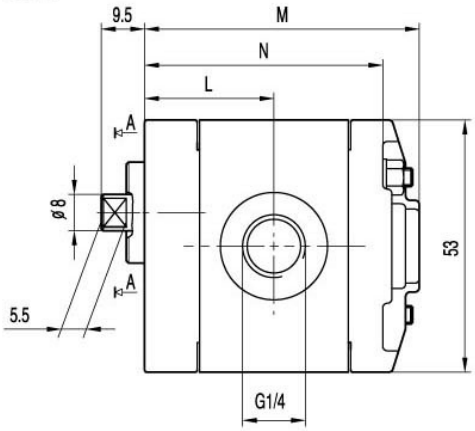
Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions	
		P1	P2	P3			M	N
	(cm³/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm
BKP0.5B0-D-0.19	0.19	200	230	250	7000	1000	60	51
BKP0.5B0-D-0.26	0.26	200	230	250	7000	1000	60.5	51.5
BKP0.5B0-D-0.38	0.38	200	230	250	7000	1000	61.5	52.5
BKP0.5B0-D-0.50	0.50	200	230	250	7000	1000	62.5	53.5
BKP0.5B0-D-0.65	0.65	200	230	250	7000	1000	63.5	54.5
BKP0.5B0-D-0.75	0.75	200	230	250	7000	1000	64.5	55.5
BKP0.5B0-D-0.88	0.88	200	230	250	7000	1000	65.5	56.5
BKP0.5B0-D-1.00	1.00	200	230	250	6000	850	66.5	57.5
BKP0.5B0-D-1.25	1.25	200	230	250	5000	700	68.5	59.5
BKP0.5B0-D-1.50	1.50	200	230	250	4000	600	70.5	61.5
BKP0.5B0-D-1.75	1.75	180	210	230	4000	600	72.5	63.5
BKP0.5B0-D-2.00	2.00	160	190	210	3000	500	74.5	65.5

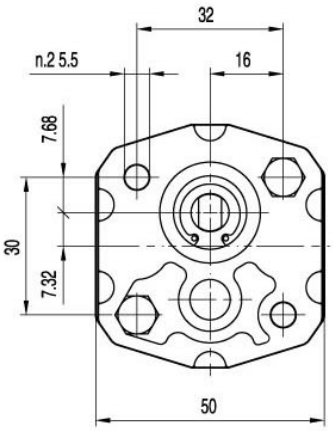
BKP0.5B1



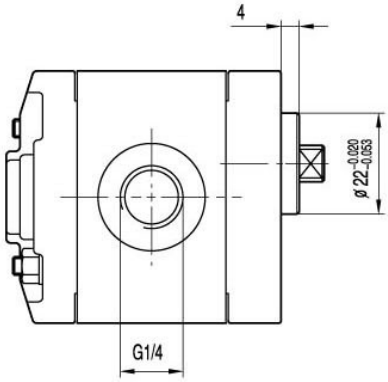
G1/4 thread depth 9.
To mount the pump, n.2 M5 screws, with a torque wrench setting fixed at 5.4 ± 0.5 Nm.

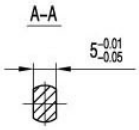
OUTLET





INLET





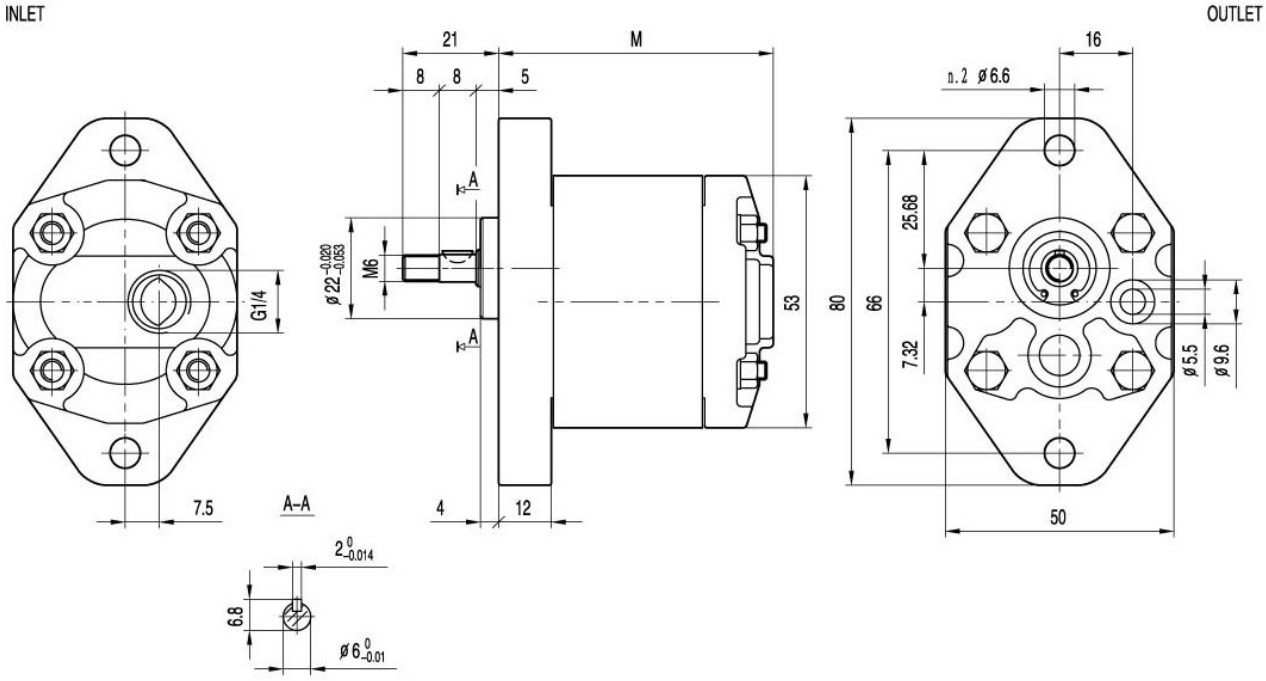
Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions		
		P1	P2	P3			M	N	L
	(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm	mm
BKP0.5B1-D-0.19	0.19	200	230	250	7000	1000	60	51	27.2
BKP0.5B1-D-0.26	0.26	200	230	250	7000	1000	60.5	51.5	27.5
BKP0.5B1-D-0.38	0.38	200	230	250	7000	1000	61.5	52.5	28
BKP0.5B1-D-0.50	0.50	200	230	250	7000	1000	62.5	53.5	28.5
BKP0.5B1-D-0.65	0.65	200	230	250	7000	1000	63.5	54.5	29
BKP0.5B1-D-0.75	0.75	200	230	250	7000	1000	64.5	55.5	29.5
BKP0.5B1-D-0.88	0.88	200	230	250	7000	1000	65.5	56.5	30
BKP0.5B1-D-1.00	1.00	200	230	250	6000	850	66.5	57.5	30.5
BKP0.5B1-D-1.25	1.25	200	230	250	5000	700	68.5	59.5	31.5
BKP0.5B1-D-1.50	1.50	200	230	250	4000	600	70.5	61.5	32.5
BKP0.5B1-D-1.75	1.75	180	210	230	4000	600	72.5	63.5	33.5
BKP0.5B1-D-2.00	2.00	160	190	210	3000	500	74.5	65.5	34.5

HIGH PRESSURE GEAR PUMP

BKP0.5A0



End cover: G1/4 thread depth 12.
To mount the pump, n.4 M5 screws, with a torque wrench setting fixed at 5.4 ± 0.5 Nm.
Shaft M6 nut, with a torque wrench setting fixed at 7 Nm.



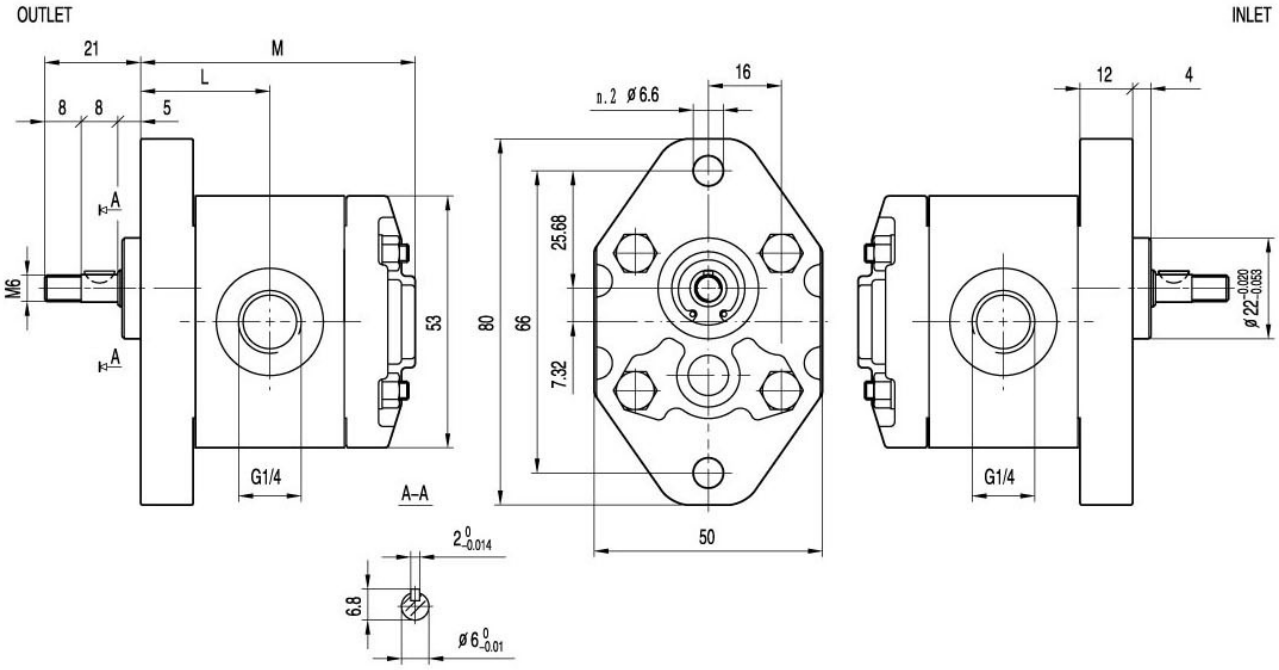
Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions
		P1	P2	P3			M
	(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm
BKP0.5A0-D-0.19	0.19	200	230	250	7000	1000	60
BKP0.5A0-D-0.26	0.26	200	230	250	7000	1000	60.5
BKP0.5A0-D-0.38	0.38	200	230	250	7000	1000	61.5
BKP0.5A0-D-0.50	0.50	200	230	250	7000	1000	62.5
BKP0.5A0-D-0.65	0.65	200	230	250	7000	1000	63.5
BKP0.5A0-D-0.75	0.75	200	230	250	7000	1000	64.5
BKP0.5A0-D-0.88	0.88	200	230	250	7000	1000	65.5
BKP0.5A0-D-1.00	1.00	200	230	250	6000	850	66.5
BKP0.5A0-D-1.25	1.25	200	230	250	5000	700	68.5
BKP0.5A0-D-1.50	1.50	200	230	250	4000	600	70.5
BKP0.5A0-D-1.75	1.75	180	210	230	4000	600	72.5
BKP0.5A0-D-2.00	2.00	160	190	210	3000	500	74.5

HIGH PRESSURE GEAR PUMP

BKP0.5A1



G1/4 thread depth 9.
To mount the pump, n.4 M5 screws, with a torque wrench setting fixed at 5.4 ± 0.5 Nm.
Shaft M6 nut, with a torque wrench setting fixed at 7 Nm.

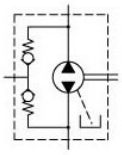


Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions	
		P1	P2	P3			M	L
	(cm³/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm
BKP0.5A1-D-0.19	0.19	200	230	250	7000	1000	60	27.2
BKP0.5A1-D-0.26	0.26	200	230	250	7000	1000	60.5	27.5
BKP0.5A1-D-0.38	0.38	200	230	250	7000	1000	61.5	28
BKP0.5A1-D-0.50	0.50	200	230	250	7000	1000	62.5	28.5
BKP0.5A1-D-0.65	0.65	200	230	250	7000	1000	63.5	29
BKP0.5A1-D-0.75	0.75	200	230	250	7000	1000	64.5	29.5
BKP0.5A1-D-0.88	0.88	200	230	250	7000	1000	65.5	30
BKP0.5A1-D-1.00	1.00	200	230	250	6000	850	66.5	30.5
BKP0.5A1-D-1.25	1.25	200	230	250	5000	700	68.5	31.5
BKP0.5A1-D-1.50	1.50	200	230	250	4000	600	70.5	32.5
BKP0.5A1-D-1.75	1.75	180	210	230	4000	600	72.5	33.5
BKP0.5A1-D-2.00	2.00	160	190	210	3000	500	74.5	34.5

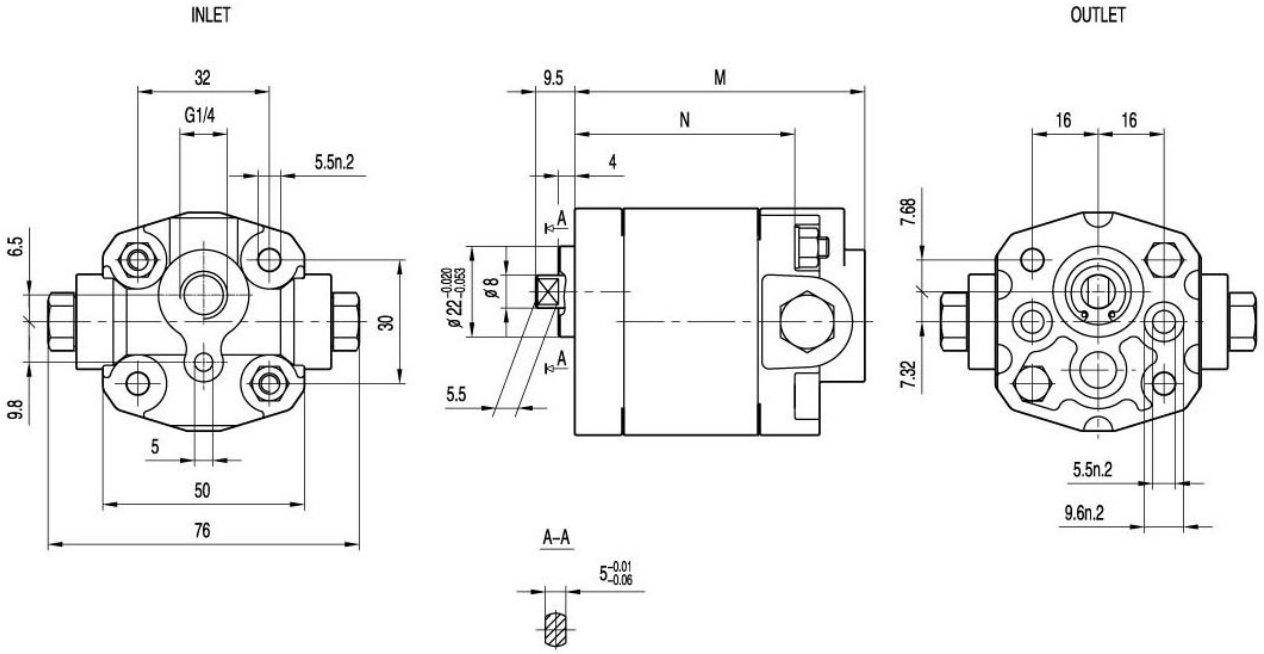
HIGH PRESSURE GEAR PUMP

BKP0.5B2R-VQ1





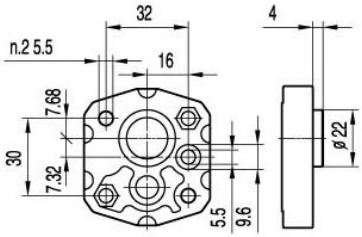
End cover: G1/4 thread depth 12.
To mount the pump, n.2 M5 screws, with a torque wrench setting fixed at 5.4 ± 0.5 Nm.



Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions	
		P1	P2	P3			M	N
	(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm
BKP0.5B2-R-0.19-VQ1	0.19	150	170	190	7000	1000	68	51
BKP0.5B2-R-0.26-VQ1	0.26	150	170	190	7000	1000	68.5	51.5
BKP0.5B2-R-0.38-VQ1	0.38	150	170	190	7000	1000	69.5	52.5
BKP0.5B2-R-0.50-VQ1	0.50	150	170	190	7000	1000	70.5	53.5
BKP0.5B2-R-0.65-VQ1	0.65	150	170	190	7000	1000	71.5	54.5
BKP0.5B2-R-0.75-VQ1	0.75	150	170	190	7000	1000	72.5	55.5
BKP0.5B2-R-0.88-VQ1	0.88	150	170	190	7000	1000	73.5	56.5
BKP0.5B2-R-1.00-VQ1	1.00	150	170	190	6000	850	74.5	57.5
BKP0.5B2-R-1.25-VQ1	1.25	150	170	190	5000	700	76.5	59.5
BKP0.5B2-R-1.50-VQ1	1.50	150	170	190	4000	600	78.5	61.5
BKP0.5B2-R-1.75-VQ1	1.75	150	170	190	4000	600	80.5	63.5
BKP0.5B2-R-2.00-VQ1	2.00	150	170	190	3000	500	82.5	65.5

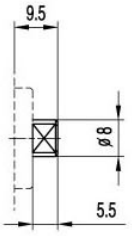
BKP0.5

FRONT COVER



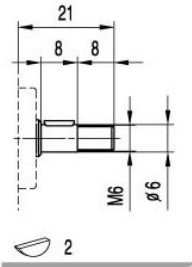
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SHAFTS



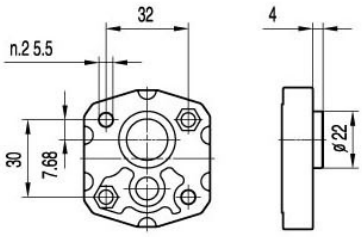
G0

Max.Torque 10 Nm

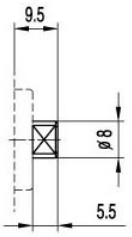


C0

Max.Torque 8 Nm

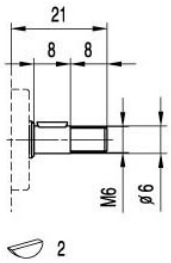


B1



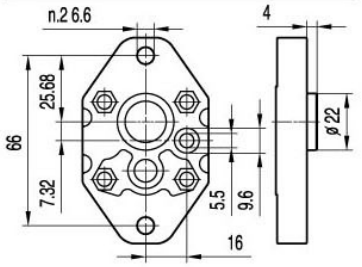
G0

Max.Torque 10 Nm

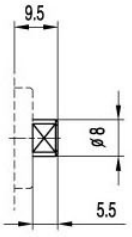


C0

Max.Torque 8 Nm

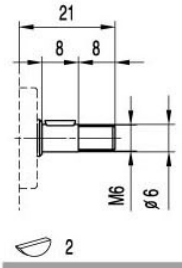


A0



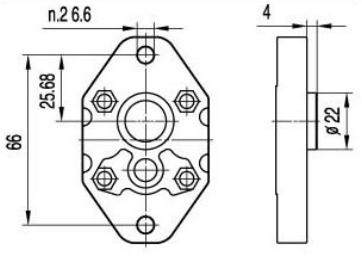
G0

Max.Torque 10 Nm

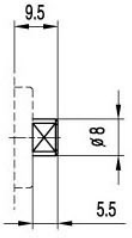


C0

Max.Torque 8 Nm

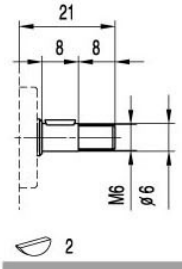


A1



G0

Max.Torque 10 Nm

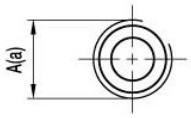


C0

Max.Torque 8 Nm

BKP0.5

PORTS



Z0

TYPE	INLET	OUTLET
	A	a
BKP0.5...0.19 ÷ BKP0.5...2.00	M10x1	M10x1



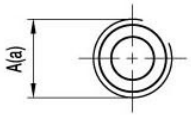
L0

TYPE	INLET	OUTLET
	A	a
BKP0.5...0.19 ÷ BKP0.5...2.00	G1/4	ø 5.5



L1

TYPE	INLET	OUTLET
	A	a
BKP0.5...0.19 ÷ BKP0.5...2.00	G3/8	ø 5.5



L2

TYPE	INLET	OUTLET
	A	a
BKP0.5...0.19 ÷ BKP0.5...2.00	G1/4	G1/4

BKP1

HOW TO ORDER

BK	P	1	Front cover	Rotation	Size	Shaft	Ports	Ports position	Seals	Options
Series	Pump	Group	Q0	D Clockwise	0.8					
			Q1	S Counter clockwise	1.1					
			Q2	R Reversible	1.3					
			B0		1.6					
					1.8					
					2.1					
					2.7					
					3.2					
					3.7					
					4.2					
					4.8					
					5.8					
					7.0					
					8.0					

Ports position

Omit–Side inlet and side outlet
A–Front inlet and front outlet
B–Back inlet and front outlet
C–Back inlet and side outlet
D–Side inlet and front outlet
R–Back inlet and back outlet

Seals

Omit–Range between –10℃ and +80℃,inlet pressure up to max. 3 bar absolute.
V–Version suitable for fluid at hi–temperatures, range between –10℃ and +120℃.
H–Version suitable for fluid at low–temperatures, range between –40℃ and +80℃.
T–Version suitable for inlet pressure up to max. 3 and 6 bar absolute.
N–Version suitable for inlet pressure up to max. 3 and 10 bar absolute.

Examples:

BKP1–Q0–D–0.8–G0–L1–B= clockwise rotation, 0.8 cc/rev, Q0 front cover, G0 tang shaft, setting ports L1 type, back inlet and front outlet (B), standard seals

BKP1–Q1–D–0.8–G0–L3= clockwise rotation, 0.8 cc/rev, Q1 front cover, G0 tang shaft, setting ports L3 type, standard seals

BKP1–B0–D–0.8–T0–F0–N= clockwise rotation, 0.8 cc/rev, B0 front cover, 1:8 tapered shaft(T0), setting ports F0 type, high pressure seals(N)

HIGH PRESSURE GEAR PUMP

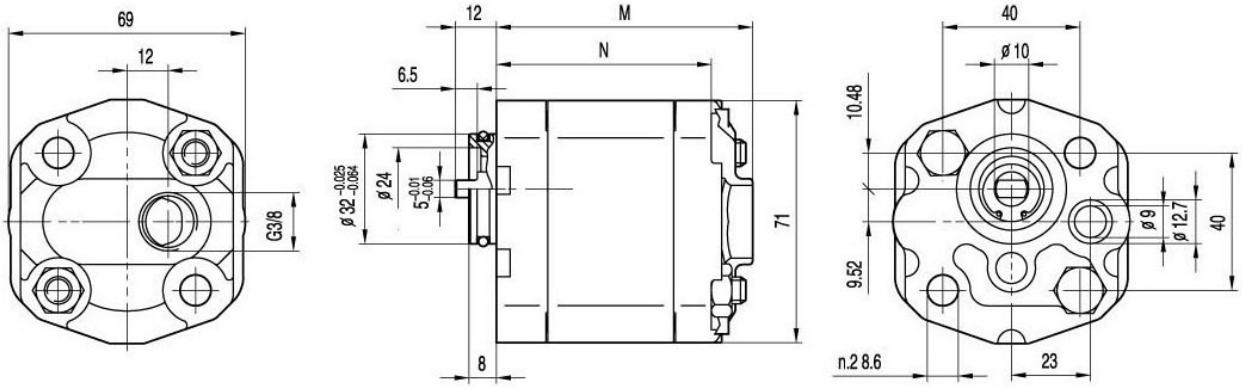
BKP1Q0



End cover: G3/8 thread depth 12.
To mount the pump, n.2 M8 screws, with a torque wrench setting fixed at 27 ± 3 Nm.

INLET

OUTLET



Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions	
		P1	P2	P3			M	N
	(cm³/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm
BKP1Q0-D-0.8	0.8	230	250	270	6000	1000	73.5	61.5
BKP1Q0-D-1.1	1.1	230	250	270	6000	1000	74	62
BKP1Q0-D-1.3	1.3	230	250	270	6000	1000	75	63
BKP1Q0-D-1.6	1.6	230	250	270	6000	1000	76	64
BKP1Q0-D-1.8	1.8	230	250	270	6000	1000	77	65
BKP1Q0-D-2.1	2.1	230	250	270	6000	1000	78	66
BKP1Q0-D-2.7	2.7	230	250	270	6000	800	80	68
BKP1Q0-D-3.2	3.2	210	230	250	5000	800	82	70
BKP1Q0-D-3.7	3.7	210	230	250	4500	800	84	72
BKP1Q0-D-4.2	4.2	210	230	250	4000	800	86	74
BKP1Q0-D-4.8	4.8	190	210	230	3500	600	88	76
BKP1Q0-D-5.8	5.8	190	210	230	3000	600	92	80
BKP1Q0-D-7.0	7.0	160	180	200	2500	600	96	84
BKP1Q0-D-8.0	8.0	160	180	200	2100	600	100	88

HIGH PRESSURE GEAR PUMP

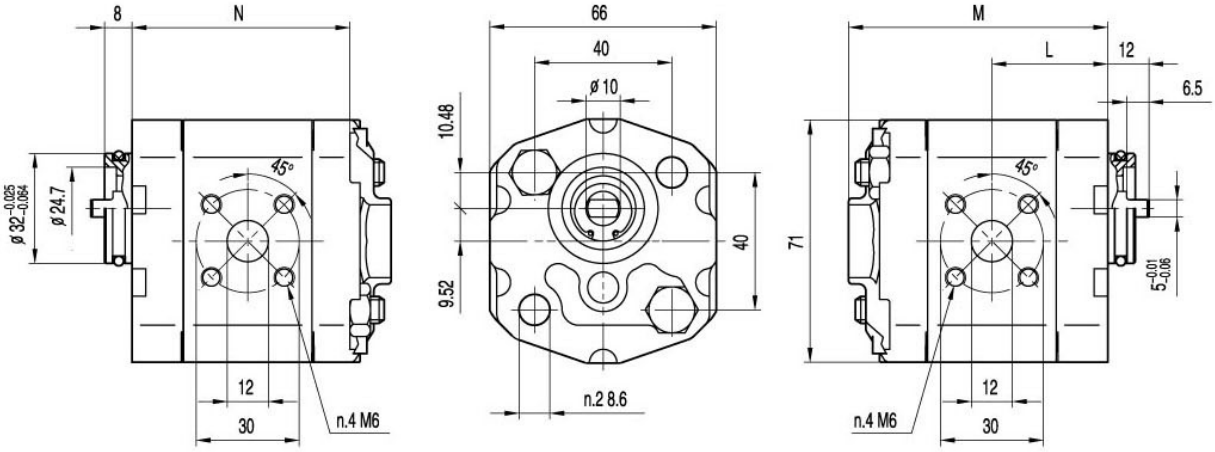
BKP1Q1



M6 threads depth 12.
To mount the pump, n.2 M8 screws,
with a torque wrench setting fixed
at 27 ± 3 Nm.

OUTLET

INLET



Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions		
		P1	P2	P3			M	N	L
	(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm	mm
BKP1Q1-D-0.8	0.8	230	250	270	6000	1000	73.5	61.5	32.8
BKP1Q1-D-1.1	1.1	230	250	270	6000	1000	74	62	33
BKP1Q1-D-1.3	1.3	230	250	270	6000	1000	75	63	33.5
BKP1Q1-D-1.6	1.6	230	250	270	6000	1000	76	64	34
BKP1Q1-D-1.8	1.8	230	250	270	6000	1000	77	65	34.5
BKP1Q1-D-2.1	2.1	230	250	270	6000	1000	78	66	35
BKP1Q1-D-2.7	2.7	230	250	270	6000	800	80	68	36
BKP1Q1-D-3.2	3.2	210	230	250	5000	800	82	70	37
BKP1Q1-D-3.7	3.7	210	230	250	4500	800	84	72	38
BKP1Q1-D-4.2	4.2	210	230	250	4000	800	86	74	39
BKP1Q1-D-4.8	4.8	190	210	230	3500	600	88	76	40
BKP1Q1-D-5.8	5.8	190	210	230	3000	600	92	80	42
BKP1Q1-D-7.0	7.0	160	180	200	2500	600	96	84	44
BKP1Q1-D-8.0	8.0	160	180	200	2100	600	100	88	46

HIGH PRESSURE GEAR PUMP

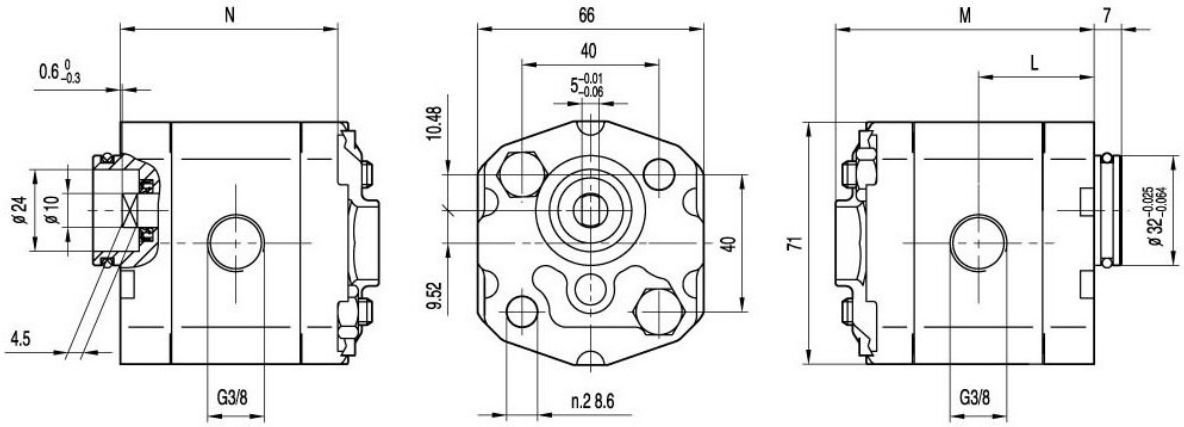
BKP1Q2



G3/8 threads depth 12.
To mount the pump, n.2 M8 screws, with a torque wrench setting fixed at 27 ± 3 Nm.

OUTLET

INLET



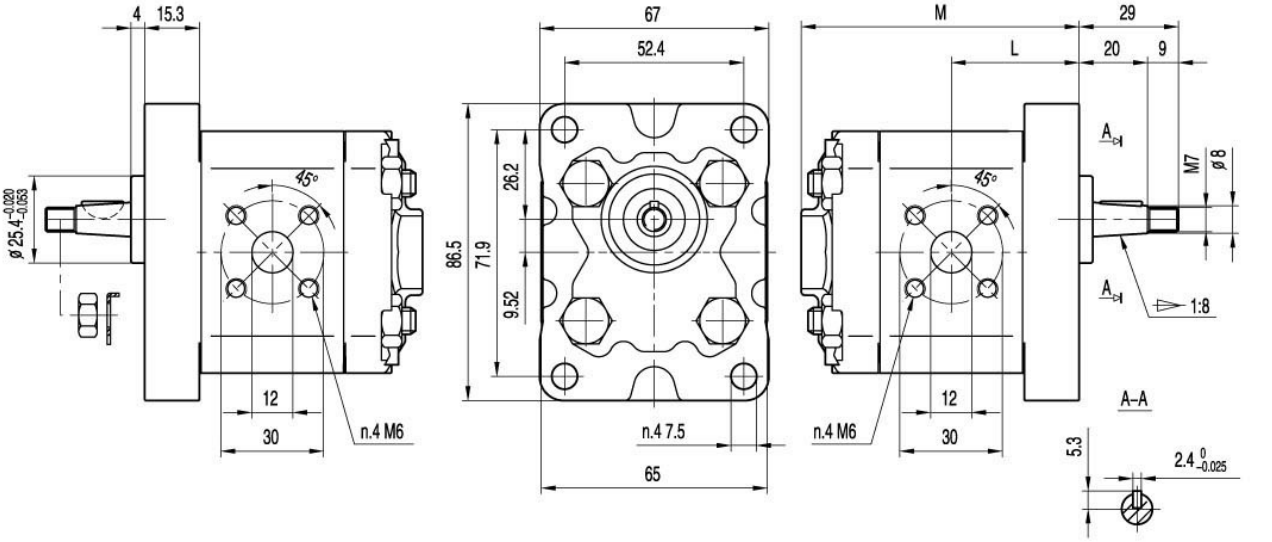
Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions		
		P1	P2	P3			M	N	L
	(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm	mm
BKP1Q2-D-0.8	0.8	230	250	270	6000	1000	73.5	61.5	32.8
BKP1Q2-D-1.1	1.1	230	250	270	6000	1000	74	62	33
BKP1Q2-D-1.3	1.3	230	250	270	6000	1000	75	63	33.5
BKP1Q2-D-1.6	1.6	230	250	270	6000	1000	76	64	34
BKP1Q2-D-1.8	1.8	230	250	270	6000	1000	77	65	34.5
BKP1Q2-D-2.1	2.1	230	250	270	6000	1000	78	66	35
BKP1Q2-D-2.7	2.7	230	250	270	6000	800	80	68	36
BKP1Q2-D-3.2	3.2	210	230	250	5000	800	82	70	37
BKP1Q2-D-3.7	3.7	210	230	250	4500	800	84	72	38
BKP1Q2-D-4.2	4.2	210	230	250	4000	800	86	74	39
BKP1Q2-D-4.8	4.8	190	210	230	3500	600	88	76	40
BKP1Q2-D-5.8	5.8	190	210	230	3000	600	92	80	42
BKP1Q2-D-7.0	7.0	160	180	200	2500	600	96	84	44
BKP1Q2-D-8.0	8.0	160	180	200	2100	600	100	88	46

BKP1B0



M6 thread depth 12.
To mount the pump, n.4 M8 screws, with a torque wrench setting fixed at 27 ± 3 Nm.
Shaft M7 nut, with a torque wrench setting fixed at 8 Nm.

OUTLET INLET

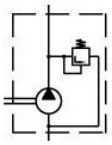


Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions	
		P1	P2	P3			M	L
	(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm
BKP1B0-D-0.8	0.8	230	250	270	6000	1000	73.5	32.8
BKP1B0-D-1.1	1.1	230	250	270	6000	1000	74	33
BKP1B0-D-1.3	1.3	230	250	270	6000	1000	75	33.5
BKP1B0-D-1.6	1.6	230	250	270	6000	1000	76	34
BKP1B0-D-1.8	1.8	230	250	270	6000	1000	77	34.5
BKP1B0-D-2.1	2.1	230	250	270	6000	1000	78	35
BKP1B0-D-2.7	2.7	230	250	270	6000	800	80	36
BKP1B0-D-3.2	3.2	210	230	250	5000	800	82	37
BKP1B0-D-3.7	3.7	210	230	250	4500	800	84	38
BKP1B0-D-4.2	4.2	210	230	250	4000	800	86	39
BKP1B0-D-4.8	4.8	190	210	230	3500	600	88	40
BKP1B0-D-5.8	5.8	190	210	230	3000	600	92	42
BKP1B0-D-7.0	7.0	160	180	200	2500	600	96	44
BKP1B0-D-8.0	8.0	160	180	200	2100	600	100	46

HIGH PRESSURE GEAR PUMP

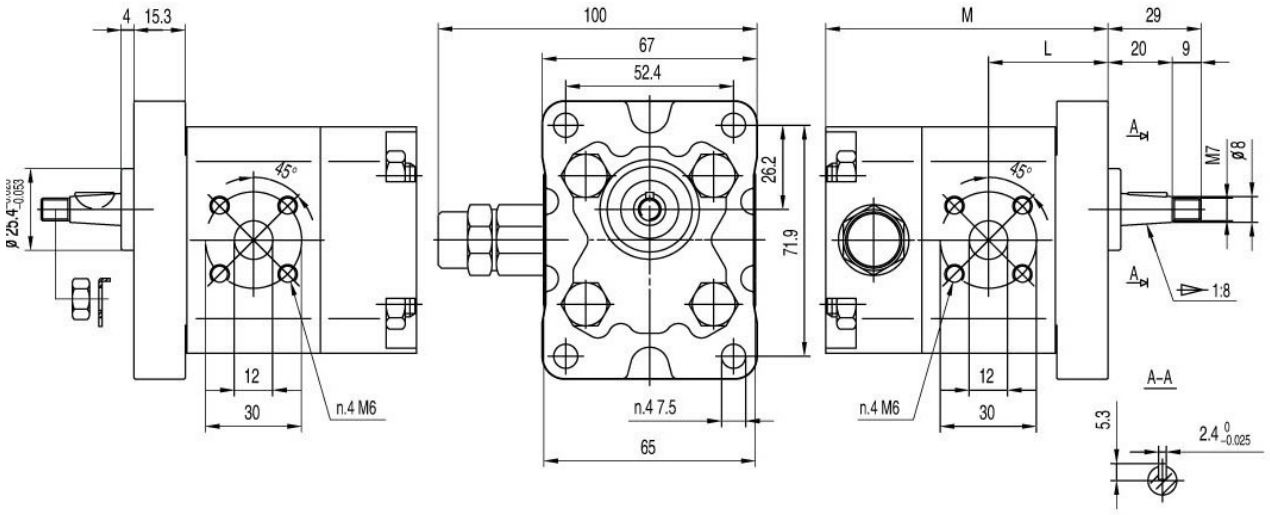
BKP1B0-Y





M6 thread depth 12.
To mount the pump, n.4 M8 screws, with a torque wrench setting fixed at 27 ±3 Nm.
Shaft M7 nut, with a torque wrench setting fixed at 8 Nm.

OUTLET INLET



Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions	
		P1	P2	P3			M	L
	(cm³/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm
BKP1B0-D-0.8-Y	0.8	230	250	270	6000	1000	82.5	32.8
BKP1B0-D-1.1-Y	1.1	230	250	270	6000	1000	83	33
BKP1B0-D-1.3-Y	1.3	230	250	270	6000	1000	84	33.5
BKP1B0-D-1.6-Y	1.6	230	250	270	6000	1000	85	34
BKP1B0-D-1.8-Y	1.8	230	250	270	6000	1000	86	34.5
BKP1B0-D-2.1-Y	2.1	230	250	270	6000	1000	87	35
BKP1B0-D-2.7-Y	2.7	230	250	270	6000	800	89	36
BKP1B0-D-3.2-Y	3.2	210	230	250	5000	800	91	37
BKP1B0-D-3.7-Y	3.7	210	230	250	4500	800	93	38
BKP1B0-D-4.2-Y	4.2	210	230	250	4000	800	95	39
BKP1B0-D-4.8-Y	4.8	190	210	230	3500	600	97	40
BKP1B0-D-5.8-Y	5.8	190	210	230	3000	600	101	42
BKP1B0-D-7.0-Y	7.0	160	180	200	2500	600	105	44
BKP1B0-D-8.0-Y	8.0	160	180	200	2100	600	109	46

BHLP1

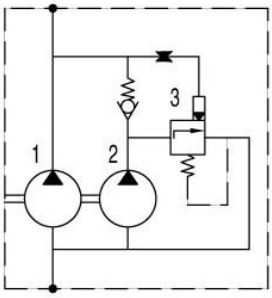
HIGH–LOW MUULTIPLE PUMPS

BHLP1 High–Low hydraulic gear pumps is the very ideal pump for applications which require a quick approach and/or return of the actuator at low loads and slow motion of the actuator at high loads. In particular this model offers the advantage of requiring lower power of the motor.

BHLP1 High–Low hydraulic gear pumps is a special double stage pump with special integrated valves (as shown in the hydraulic diagram) has been specially designed for applications such as trash compactors, log splitters, clamping mechanisms, crimping machines, metal forming machines etc.

Technical features

First stage Low displacement high pressure	From 1. 1cm ^{3}/r ev to 3.2cm ^{3}/r ev– P1= 230 bar
Second stage High displacement low pressure	From 3.7cm ^{3}/r ev to 9.8cm ^{3}/r ev– (Pressure set by unloading val ve)
Unloading valve	Standard setting 3 5 bar
RPM pump range	From 1000 rpm to 3500 rpm
Flanges and shafts	Ref. BKP1 catalogue
Ports	Common inlet. Common outlet. Side ports code L5

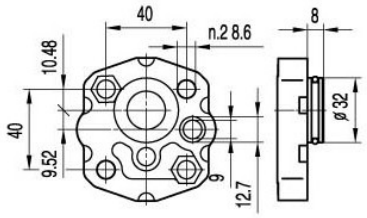


1. First stage high pressure
2. Second stage low pressure
3. Unloading valve



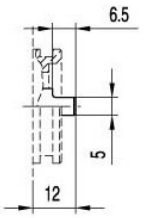
BKP1

FRONT COVER



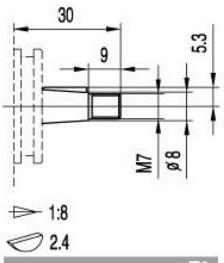
Q0

SHAFTS



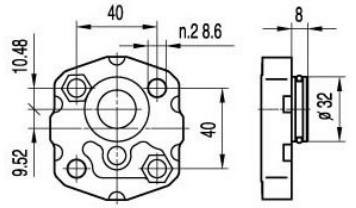
G0

Max.Torque 20 Nm

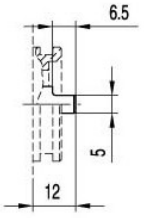


T0

Max.Torque 25 Nm

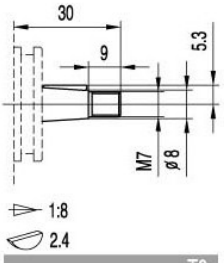


Q1



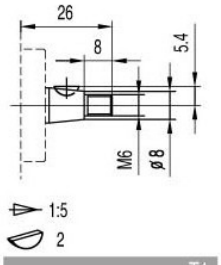
G0

Max.Torque 20 Nm



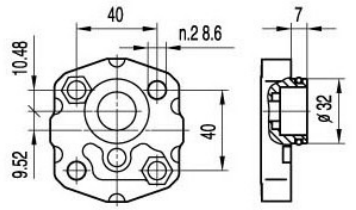
T0

Max.Torque 25 Nm

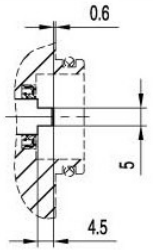


T1

Max.Torque 23 Nm

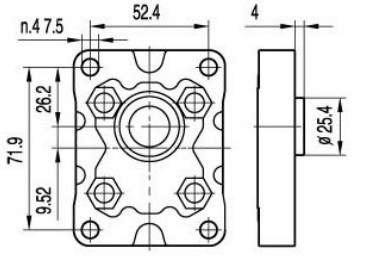


Q2

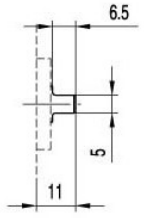


G1

Max.Torque 20 Nm

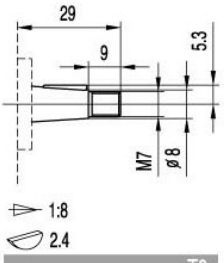


B0



G0

Max.Torque 20 Nm

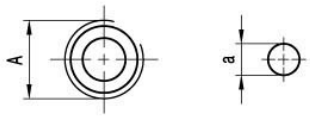


T0

Max.Torque 25 Nm

BKP1

PORTS



L0

规格 TYPE	进油口 INLET	出油口 OUTLET
	A	a
BKP1...0.8 ÷ BKP1...8.0	G1/4	ø 9



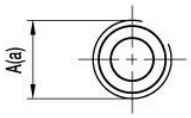
L1

TYPE	INLET	OUTLET
	A	a
BKP1...0.8 ÷ BKP1...8.0	G3/8	ø 9



N0

TYPE	INLET	OUTLET
	A	a
BKP1...0.8 ÷ BKP1...8.0	3/8 NPT	ø 9

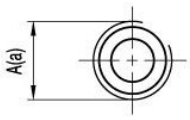


L2

TYPE	INLET	OUTLET
	A	a
BKP1...0.8 ÷ BKP1...8.0	G3/8	G1/4

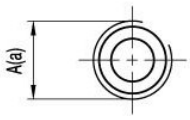
BKP1

PORTS



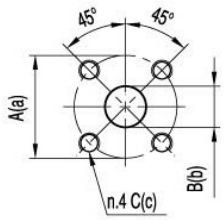
L3

TYPE	INLET	OUTLET
	A	a
BKP1...0.8 ÷ BKP1...8.0	G3/8	G3/8



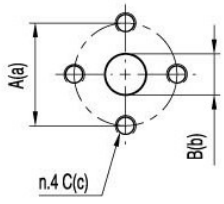
Z0

TYPE	INLET	OUTLET
	A	a
BKP1...0.8 ÷ BKP1...8.0	M18x1.5	M14x1.5



F0

TYPE	INLET			OUTLET		
	A	B	C	a	b	c
BKP1...0.8 ÷ BKP1...8.0	30	12	M6	30	12	M6

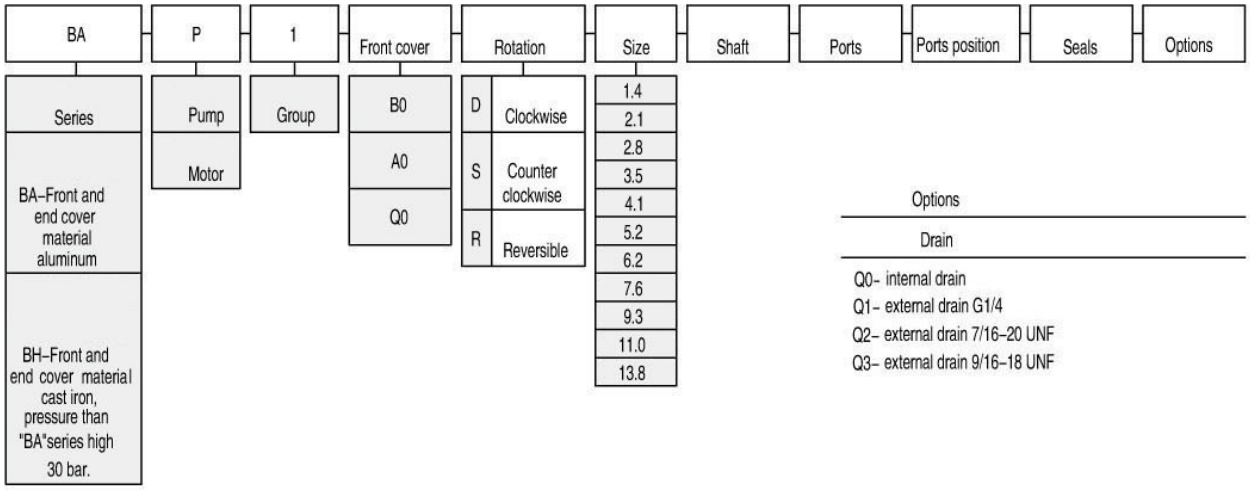


E0

TYPE	INLET			OUTLET		
	A	B	C	a	b	c
BKP1...0.8 ÷ BKP1...8.0	30	12	M6	30	12	M6

BAP1 [BHM1]

HOW TO ORDER



Options

Drain

Q0– internal drain
Q1– external drain G1/4
Q2– external drain 7/16–20 UNF
Q3– external drain 9/16–18 UNF

Ports position

Omit–Side inlet and side outlet
A–Front inlet and front outlet
B–Back inlet and front outlet
C–Back inlet and side outlet
D–Side inlet and front outlet
R–Back inlet and back outlet

Seals

Omit–Range between –10℃ and +80℃,inlet pressure up to max. 3 bar absolute.
V–Version suitable for fluid at hi–temperatures, range between –10℃ and +120℃.
H–Version suitable for fluid at low–temperatures, range between –40℃ and +80℃.
T–Version suitable for inlet pressure up to max. 3 and 6 bar absolute.
N–Version suitable for inlet pressure up to max. 3 and 10 bar absolute.

Examples:

BAP1–B0–D–1.4–T0–E0 = clockwise rotation, 1.4 cc/rev, B0 front cover, 1:8 tapered shaft(T0), setting ports E0 type, standard seals

BAP1–A0–D–1.4–C0–R0 = clockwise rotation, 1.4 cc/rev, A0 front cover, C0 parallel shaft, setting ports R0 type, standard seals

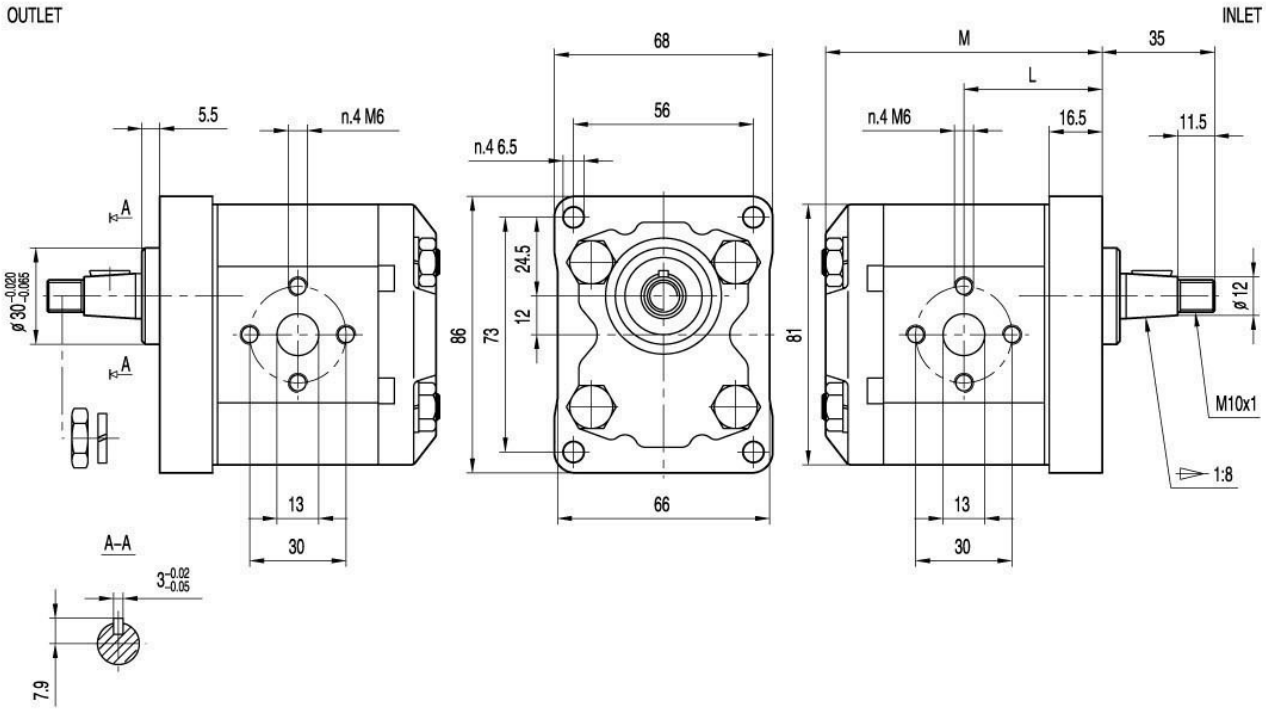
BAP1–Q0–D–1.4–C2–U0–N= clockwise rotation, 1.4 cc/rev, Q0 front cover, C2 parallel shaft, setting ports U0 type, high pressure seals(N)

HIGH PRESSURE GEAR PUMP

BAP1B0



M6 thread depth 13.
To mount the pump, n.4 M8 screws, with a torque wrench setting fixed at 27 ± 3 Nm.
Shaft M10 nut, with a torque wrench setting fixed at 40 Nm.



Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions	
		P1	P2	P3			M	L
	(cm³/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm
BAP1B0-D-1.4	1.4	250	270	290	6000	800	80.5	40
BAP1B0-D-2.1	2.1	250	270	290	6000	800	82.5	41
BAP1B0-D-2.8	2.8	250	270	290	5000	800	84.5	42
BAP1B0-D-3.5	3.5	250	270	290	5000	800	86.5	43
BAP1B0-D-4.1	4.1	250	270	290	4000	800	88.5	44
BAP1B0-D-5.2	5.2	230	245	260	4000	800	91.5	45.5
BAP1B0-D-6.2	6.2	230	245	260	3800	800	94.5	47
BAP1B0-D-7.6	7.6	200	215	230	3200	600	98.5	49
BAP1B0-D-9.3	9.3	180	195	210	2600	600	103.5	51.5
BAP1B0-D-11.0	11.0	170	185	200	2200	600	108.5	54
BAP1B0-D-13.8	13.8	150	165	180	1800	600	116.5	58

HIGH PRESSURE GEAR PUMP

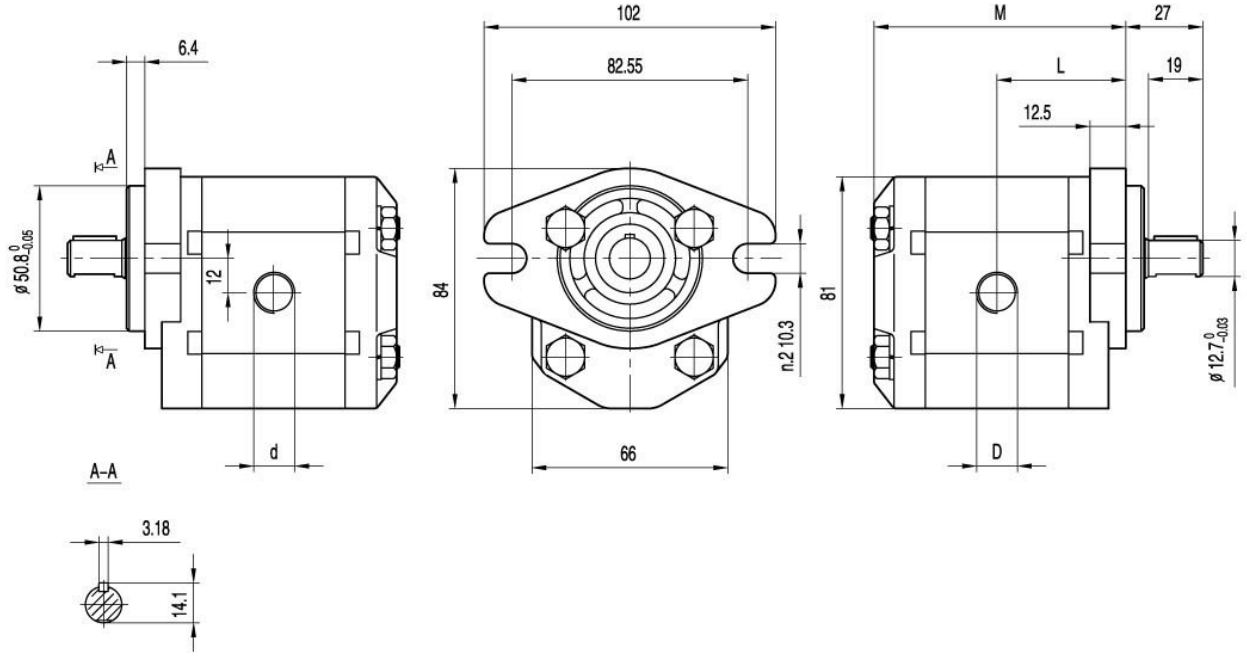
BAP1A0



"D" and "d" ports are machined in compliance with threaded port with O–ring seal in truncated housing SAE J1926/1(ISO J1926–1).
To mount the pump, n.4 M8 screws, with a torque wrench setting fixed at 27 ± 3 Nm.

OUTLET

INLET



Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions			
		P1	P2	P3			M	L	D	d
	(cm³/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm		
BAP1A0-D-1.4	1.4	250	270	290	6000	800	82.5	42	PT1/2	PT3/8
BAP1A0-D-2.1	2.1	250	270	290	6000	800	84.5	43	PT1/2	PT3/8
BAP1A0-D-2.8	2.8	250	270	290	5000	800	86.5	44	PT1/2	PT3/8
BAP1A0-D-3.5	3.5	250	270	290	5000	800	88.5	45	PT1/2	PT3/8
BAP1A0-D-4.1	4.1	250	270	290	4000	800	90.5	46	PT1/2	PT3/8
BAP1A0-D-5.2	5.2	230	245	260	4000	800	93.5	47.5	PT1/2	PT3/8
BAP1A0-D-6.2	6.2	230	245	260	3500	800	96.5	49	PT1/2	PT3/8
BAP1A0-D-7.6	7.6	200	215	230	3000	600	100.5	51	PT3/4	PT1/2
BAP1A0-D-9.3	9.3	180	195	210	2500	600	105.5	53.5	PT3/4	PT1/2
BAP1A0-D-11.0	11.0	170	185	200	2500	600	110.5	56	PT3/4	PT1/2
BAP1A0-D-13.8	13.8	150	165	180	2000	600	118.5	60	PT3/4	PT1/2

HIGH PRESSURE GEAR PUMP

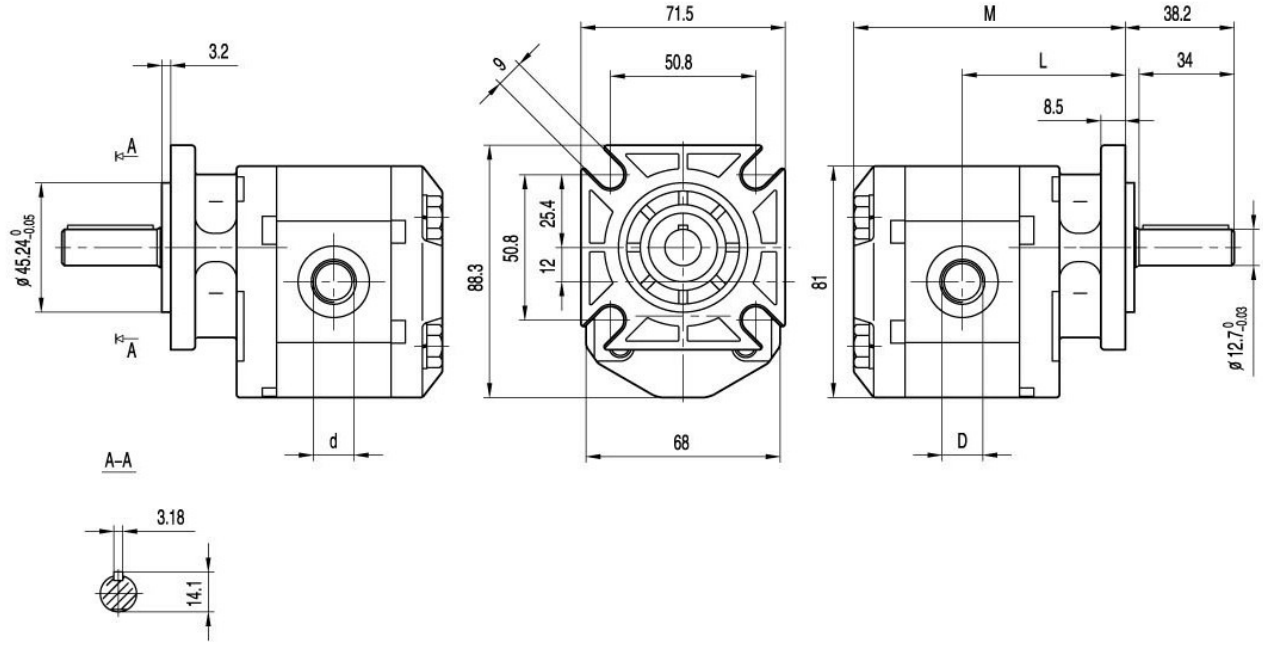
BAP1Q0



"D" and "d" ports are machined in compliance with threaded port with O–ring seal in truncated housing SAE J1926/1(ISO J1926–1).
To mount the pump, n.4 M8 screws, with a torque wrench setting fixed at 27 ± 3 Nm.

OUTLET

INLET

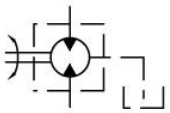


Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions			
		P1	P2	P3			M	L	D	d
	(cm³/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm		
BAP1Q0-D-1.4	1.4	250	270	290	6000	800	98	59	3/4-16UNF	9/16-18UNF
BAP1Q0-D-2.1	2.1	250	270	290	6000	800	100	60	3/4-16UNF	9/16-18UNF
BAP1Q0-D-2.8	2.8	250	270	290	5000	800	102	61	3/4-16UNF	9/16-18UNF
BAP1Q0-D-3.5	3.5	250	270	290	5000	800	104	62	3/4-16UNF	9/16-18UNF
BAP1Q0-D-4.1	4.1	250	270	290	4000	800	106	63	3/4-16UNF	9/16-18UNF
BAP1Q0-D-5.2	5.2	230	245	260	4000	800	109	64.5	3/4-16UNF	9/16-18UNF
BAP1Q0-D-6.2	6.2	230	245	260	3500	800	112	66	3/4-16UNF	9/16-18UNF
BAP1Q0-D-7.6	7.6	200	215	230	3000	600	116	68	7/8-14UNF	3/4-16UNF
BAP1Q0-D-9.3	9.3	180	195	210	2500	600	121	70.5	7/8-14UNF	3/4-16UNF
BAP1Q0-D-11.0	11.0	170	185	200	2500	600	126	73	7/8-14UNF	3/4-16UNF
BAP1Q0-D-13.8	13.8	150	165	180	2000	600	134	77	7/8-14UNF	3/4-16UNF

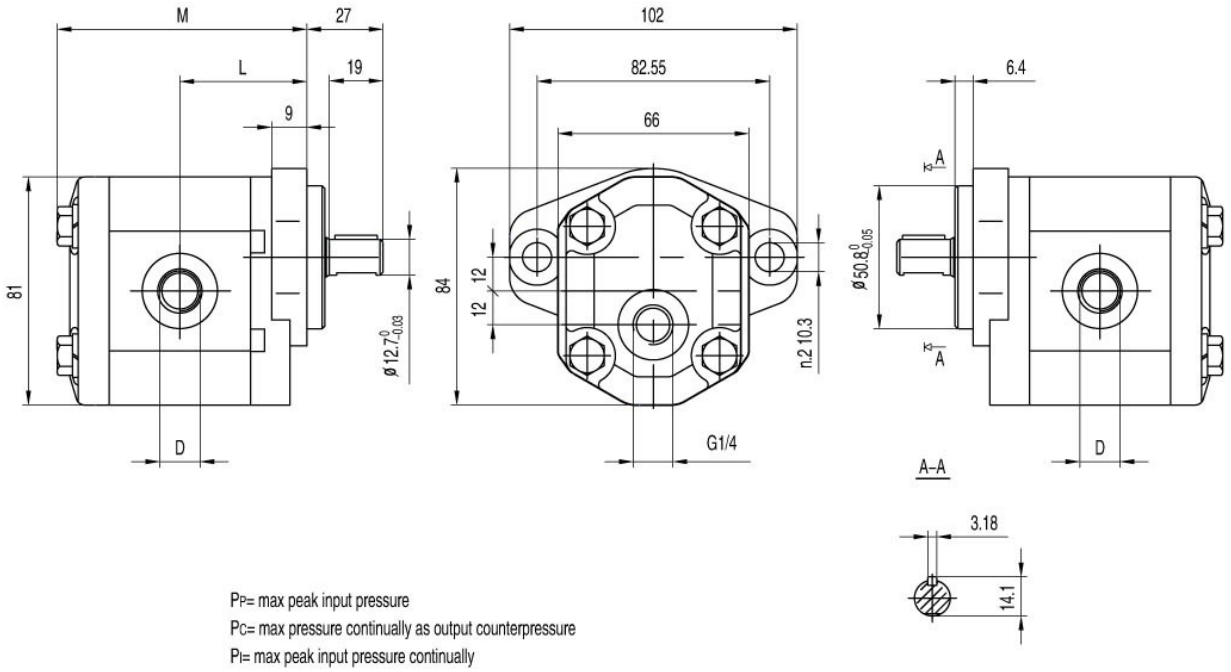
HIGH PRESSURE GEAR PUMP

BHM1A0





"D" and "d" ports are machined in compliancewith threaded port with O–ring seal in truncated housing SAE J1926/1(ISO J1926–1).
To mount the pump, n.4 M8 screws, with a torque wrench setting fixed at 30 ± 3Nm.

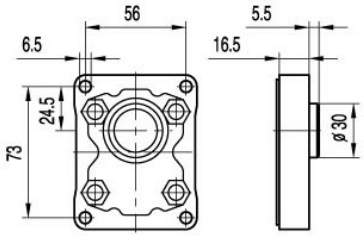


P_P= max peak input pressure
P_C= max pressure continually as output counterpressure
P_I= max peak input pressure continually

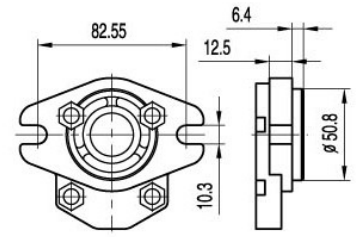
Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions		
		P_I	P_C	P_P			M	L	D
	(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm	
BHM1A0–R–1.4–Q1	1.4	270	260	290	5000	800	82.5	42	3/4–16UNF
BHM1A0–R–2.1 –Q1	2.1	270	260	290	5000	800	84.5	43	3/4–16UNF
BHM1A0–R–2.8 –Q1	2.8	270	260	290	5000	800	86.5	44	3/4–16UNF
BHM1A0–R–3.5 –Q1	3.5	270	260	290	5000	800	88.5	45	3/4–16UNF
BHM1A0–R–4.1 –Q1	4.1	270	260	290	4000	800	90.5	46	3/4–16UNF
BHM1A0–R–5.2 –Q1	5.2	260	250	275	3500	800	93.5	47.5	3/4–16UNF
BHM1A0–R–6.2 –Q1	6.2	260	250	275	3000	800	96.5	49	3/4–16UNF
BHM1A0–R–7.6 –Q1	7.6	230	220	245	3000	600	100.5	51	7/8–14UNF
BHM1A0–R–9.3 –Q1	9.3	210	200	225	3000	600	105.5	53.5	7/8–14UNF
BHM1A0–R–11.0 –Q1	11.0	200	190	215	2500	600	110.5	56	7/8–14UNF
BHM1A0–R–13.8 –Q1	13.8	180	170	195	2200	600	118.5	60	7/8–14UNF

BAP1

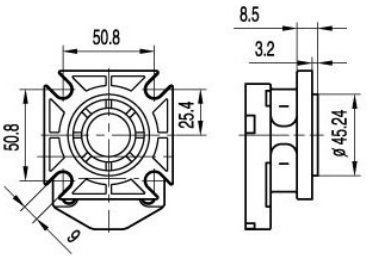
FRONT COVER



B0

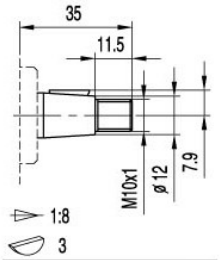


A0



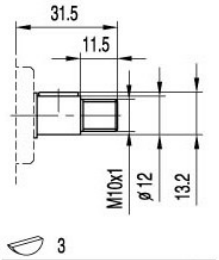
Q0

SHAFTS



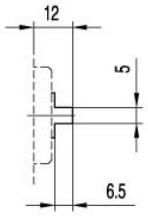
T0

Max.Torque 100 Nm



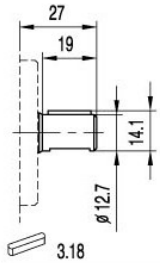
C1

Max.Torque 55 Nm



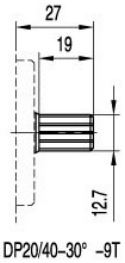
G0

Max.Torque 45 Nm



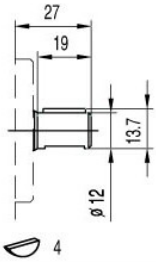
C0

Max.Torque 60 Nm



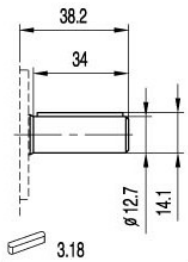
S0

Max.Torque 100 Nm



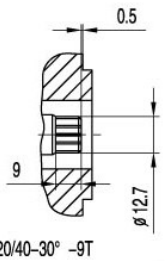
C5

Max.Torque 70 Nm



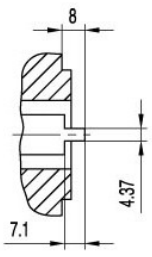
C2

Max.Torque 100 Nm



S1

Max.Torque 95 Nm

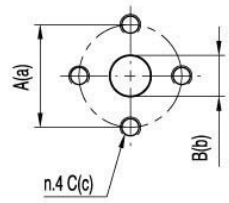


G1

Max.Torque 45 Nm

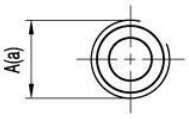
BAP1 [BHP1]

PORTS



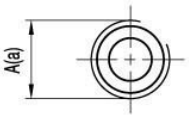
E0

TYPE	INLET			OUTLET		
	A	B	C	a	b	c
BAP1...1.4 ÷ BAP1...13.8	30	13	M6	30	13	M6



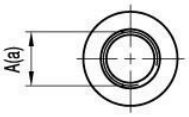
L0/L1/L2/L3

TYPE	PORTS CODE	INLET	OUTLET
		A	a
BAP1...1.4 ÷ BAP1...3.5	L0	G1/2	G3/8
BAP1...4.1 ÷ BAP1...13.8	L1	G1/2	G1/2
BAP1...1.4 ÷ BAP1...3.5	L2	G3/8	G3/8
BAP1...4.1 ÷ BAP1...13.8	L3	G3/4	G1/2



R0/R1/R2/R3

TYPE	PORTS CODE	INLET	OUTLET
		A	a
BAP1...1.4 ÷ BAP1...6.2	R0	PT1/2	PT3/8
BAP1...7.6 ÷ BAP1...13.8	R1	PT3/4	PT1/2
BAP1...1.4 ÷ BAP1...13.8	R2	PT1/2	PT1/2
BAP1...1.4 ÷ BAP1...6.2	R3	PT3/8	PT3/8



U0/U1/U2/U3

TYPE	PORTS CODE	INLET	OUTLET
		A	a
BAP1...1.4 ÷ BAP1...6.2	U0	3/4–16UNF	9/16–18UNF
BAP1...7.6 ÷ BAP1...13.8	U1	7/8–14UNF	3/4–16UNF
BAP1...1.4 ÷ BAP1...6.2	U0	3/4–16UNF	3/4–16UNF
BAP1...7.6 ÷ BAP1...13.8	U1	7/8–14UNF	7/8–14UNF

HIGH PRESSURE GEAR PUMP

BAP1.5

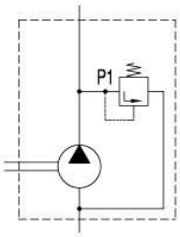
HOW TO ORDER

BA	P	1.5	Front cover	Rotation	Size	Shaft	Ports	Ports position	Seals	Options
Series	Pump	Group	Q0	D Clockwise S Counter clockwise R Reversible	2 3 4 5 6 8 9 11 12					

Seals

Omit–Range between –10°C and +80°C,inlet pressure up to max. 3 bar absolute.
V–Version suitable for fluid at hi–temperatures, range between –10°C and +120°C.
H–Version suitable for fluid at low–temperatures, range between –40°C and +80°C.
T–Version suitable for inlet pressure up to max. 3 and 6 bar absolute.
N–Version suitable for inlet pressure up to max. 3 and 10 bar absolute.

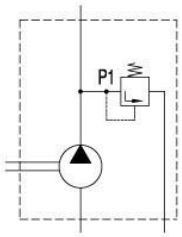
Options



Pressure relief valve.
Discharge returned to suction.
P1= 5...250 bar.

Ordering code

Y	180xx



Pressure relief valve.
Discharge returned to externally.
P1= 5...250 bar.

P	120xx

Examples:

BAP1.5–Q0–D–2–C0–E0 = clockwise rotation, 2 cc/rev, Q0 front cover, C0 parallel shaft, setting ports E0 type, standard seals

BAP1.5–Q0–D–2–C0–E0–N= clockwise rotation, 2 cc/rev, Q0 front cover, C0 parallel shaft, setting ports E0 type, high pressure seals(N)

HIGH PRESSURE GEAR PUMP

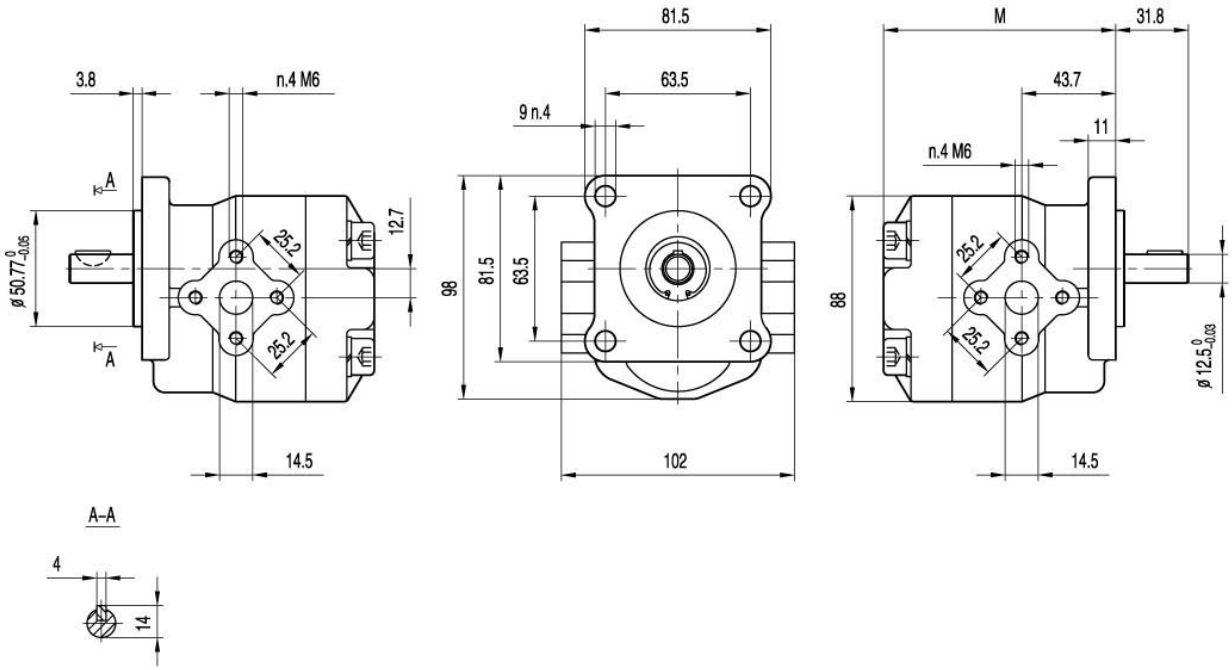
BAP1.5Q0



M6 thread depth 16.
To mount the pump, n.4 M10 screws,
with a torque wrench setting fixed
at 47 ± 3 Nm.

OUTLET

INLET

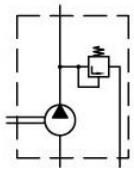


Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions
		P1	P2	P3			M
	(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm
BAP1.5Q0-D-2	2	210	230	250	5000	900	96.7
BAP1.5Q0-D-3	3	210	230	250	5000	850	96.7
BAP1.5Q0-D-4	4	210	230	250	4500	800	96.7
BAP1.5Q0-D-5	5	210	230	250	4000	800	96.7
BAP1.5Q0-D-6	6	210	230	250	3500	700	99.7
BAP1.5Q0-D-8	8	210	230	250	3000	600	99.7
BAP1.5Q0-D-9	9	180	200	220	2500	550	102.7
BAP1.5Q0-D-11	11	180	200	220	2000	500	105.7
BAP1.5Q0-D-12	12	180	200	220	2000	500	105.7

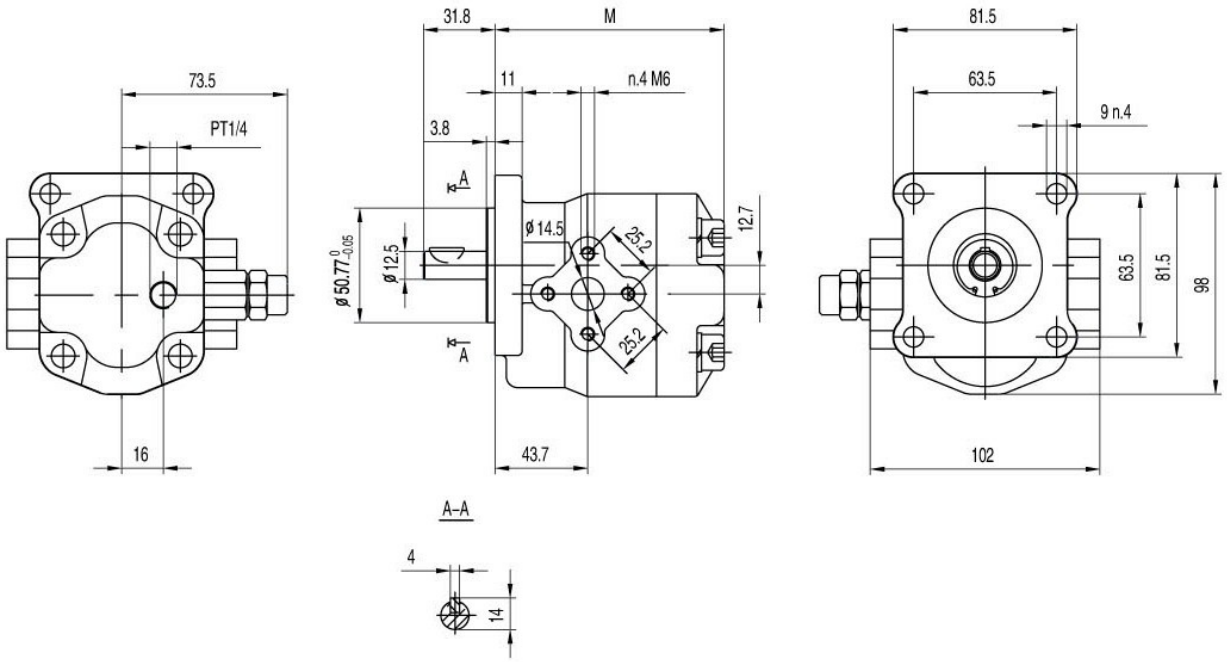
HIGH PRESSURE GEAR PUMP

BAP1.5Q0-Px





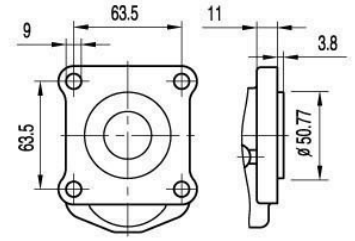
M6 thread depth 16.
To mount the pump, n.4 M10 screws, with a torque wrench setting fixed at 47 ± 3 Nm.



Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions
		P1	P2	P3			M
	(cm³/rev)	bar	bar	bar	(r/min)	(r/min)	mm
BAP1.5Q0-D-2-Px	2	210	230	250	5000	900	96.7
BAP1.5Q0-D-3-Px	3	210	230	250	5000	850	96.7
BAP1.5Q0-D-4-Px	4	210	230	250	4500	800	96.7
BAP1.5Q0-D-5-Px	5	210	230	250	4000	800	96.7
BAP1.5Q0-D-6-Px	6	210	230	250	3500	700	99.7
BAP1.5Q0-D-8-Px	8	210	230	250	3000	600	99.7
BAP1.5Q0-D-9-Px	9	180	200	220	2500	550	102.7
BAP1.5Q0-D-11-Px	11	180	200	220	2000	500	105.7
BAP1.5Q0-D-12-Px	12	180	200	220	2000	500	105.7

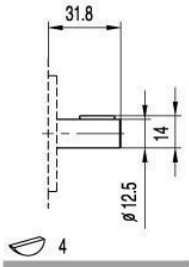
BAP1.5

FRONT COVER



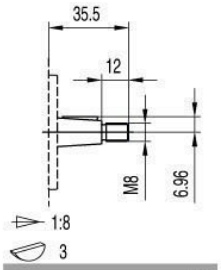
Q0

SHAFTS



C0

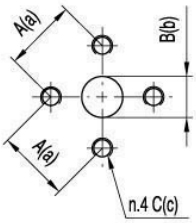
Max.Torque 60 Nm



T0

Max.Torque 100 Nm

PORTS



E0

TYPE	INLET			OUTLET		
	A	B	C	a	b	c
BAP1.5...2 ÷ BAP1.5...12	25.2	14.5	M6	25.2	14.5	M6

HIGH PRESSURE GEAR PUMP

BAP2[BHP2]

HOW TO ORDER

BA	P	2	Front cover	Rotation	Size	Shaft	Ports	Ports position	Seals	Options
Series	Pump	Group	A0	D Clockwise	3					
BA–Front and end cover material aluminum	Motor		B0	S Counter clockwise	4					
BH–Front and end cover material cast iron, pressure than "BA"series high 30 bar.			B1	R Reversible	6					
			B2		8					
			Q0		10					
			Q1		12					
			Q2		14					
					16					
					18					
					20					
					22					
					25					
					28					
					30					

Ports position

Omit–Side inlet and side outlet
B–Back inlet and front outlet
C–Back inlet and side outlet
D–Side inlet and front outlet
R–Back inlet and back outlet

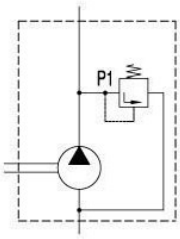
Drain

Q0– internal drain
Q1– external drain G1/4
Q2– external drain 9/16–18 UNF
Q3– external drain 7/16–20 UNF
Q4– external drain M12x1.5

Seals

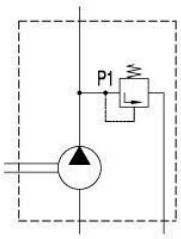
Omit–Range between –10℃ and +80℃,inlet pressure up to max. 3 bar absolute.
V–Version suitable for fluid at hi–temperatures, range between –10℃ and +120℃.
H–Version suitable for fluid at low–temperatures, range between –40℃ and +80℃.
T–Version suitable for inlet pressure up to max. 3 and 6 bar absolute.
N–Version suitable for inlet pressure up to max. 3 and 10 bar absolute.

Options



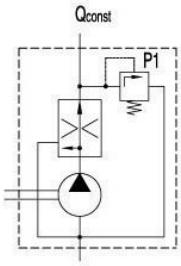
Pressure relief valve.
Discharge returned to suction.
P1= 5...250 bar.

Ordering code: Y 180xx



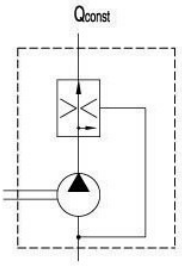
Pressure relief valve.
Discharge returned to externally.
P1= 5...250 bar.

Ordering code: P 120xx



3–way flow control valve
with pressure relief valve.
Excess flow returned to suction.
P1= 100...180 bar.
Qconst= 2...30 L/min.

Ordering code: F 15015



3–way flow control valve.
Excess flow returned to suction.
Qconst= 2...30 L/min.

Ordering code: Q xxx15

Examples:

BHP2–B0–D–3–T0–E0 = clockwise rotation, 3 cc/rev, B0 front cover, 1:8 tapered shaft(T0), setting ports E0 type, standard seals

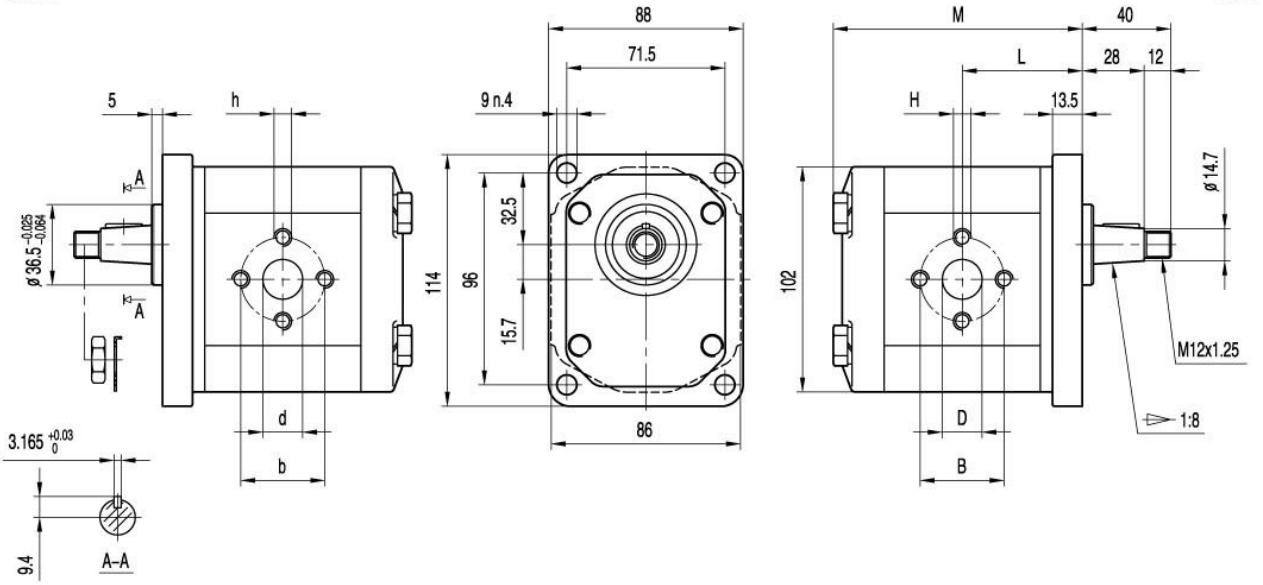
BAP2–A0–D–3–C0–U0 = clockwise rotation, 3 cc/rev, A0 front cover, C0 parallel shaft, setting ports U0 type, standard seals

BHP2–Q0–D–3–T1–F0–N= clockwise rotation, 3 cc/rev, Q0 front cover, 1:8 tapered shaft(T0), setting ports F0 type, high pressure seals(N)

BHP2B0



M6 thread depth 13,M8 thread depth 17.
To mount the pump, n.4 M10 screws, with a torque wrench setting fixed at 70...75 Nm.
Shaft M12x1.25 nut, with a torque wrench setting fixed at 50 Nm.



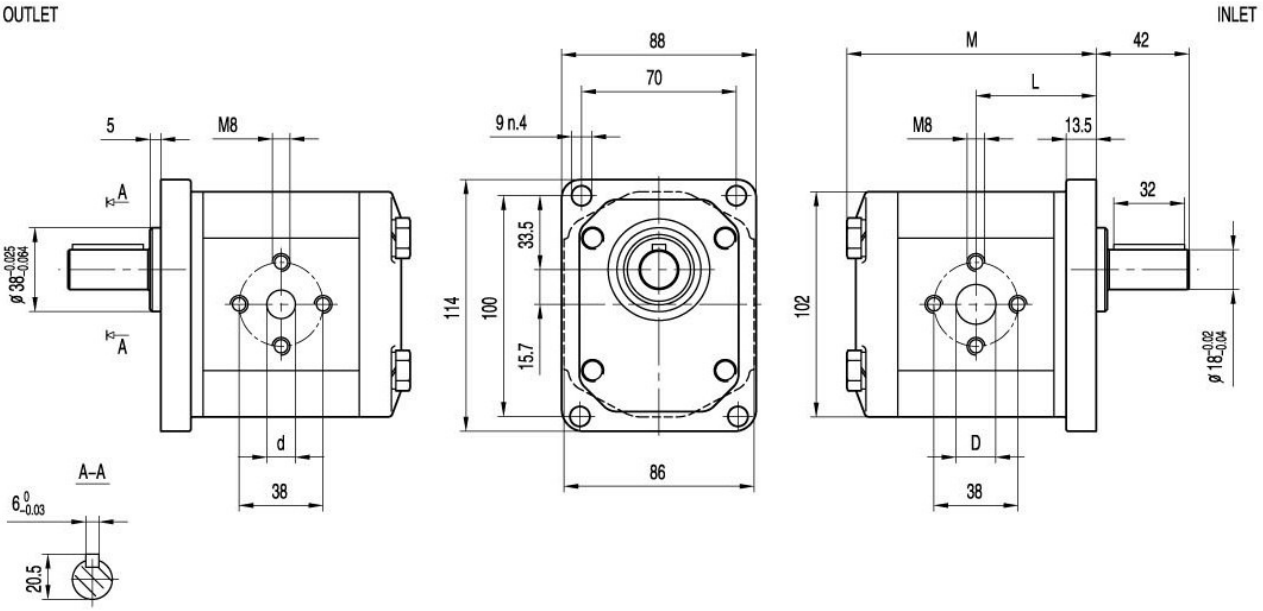
Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions							
		P1	P2	P3			M	L	B	D	H	b	d	h
	(cm³/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm	mm	mm		mm	mm	
BHP2B0-D-3	3	270	285	300	4000	800	91.1	43.6	30	13	M6	30	13	M6
BHP2B0-D-4	4	270	285	300	4000	600	92.7	44.4	30	13	M6	30	13	M6
BHP2B0-D-6	6	270	285	300	4000	600	96	46	30	13	M6	30	13	M6
BHP2B0-D-8	8	270	285	300	3500	500	99.3	47.7	30	13	M6	30	13	M6
BHP2B0-D-10	10	270	285	300	3000	500	102.6	49.3	40	20	M8	30	13	M6
BHP2B0-D-12	12	270	285	300	3000	500	105.9	51	40	20	M8	30	13	M6
BHP2B0-D-14	14	250	265	280	4000	500	109.3	52.7	40	20	M8	30	13	M6
BHP2B0-D-16	16	250	265	280	4000	500	112.7	54.4	40	20	M8	30	13	M6
BHP2B0-D-18	18	250	265	280	3600	400	116	56	40	20	M8	30	13	M6
BHP2B0-D-20	20	220	235	250	3200	400	119.3	57.7	40	20	M8	30	13	M6
BHP2B0-D-22	22	220	235	250	3000	400	122.6	59.3	40	20	M8	30	13	M6
BHP2B0-D-25	25	200	215	230	3000	400	127.6	61.8	40	22	M8	30	13	M6
BHP2B0-D-28	28	180	190	200	2500	400	132.6	64.3	40	22	M8	30	13	M6
BHP2B0-D-30	30	160	170	180	2500	400	135.9	66	40	22	M8	30	13	M6

HIGH PRESSURE GEAR PUMP

BHP2B1



M8 thread depth 16.
To mount the pump, n.4 M10 screws, with a torque wrench setting fixed at 70...75 Nm.



Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions			
		P1	P2	P3			M	L	D	d
	(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm	mm	mm
BHP2B1-D-3	3	270	285	300	4000	800	91.1	43.6	14	10
BHP2B1-D-4	4	270	285	300	4000	600	92.7	44.4	14	10
BHP2B1-D-6	6	270	285	300	4000	600	96	46	14	10
BHP2B1-D-8	8	270	285	300	3500	500	99.3	47.7	14	10
BHP2B1-D-10	10	270	285	300	3000	500	102.6	49.3	18	15
BHP2B1-D-12	12	270	285	300	3000	500	105.9	51	18	15
BHP2B1-D-14	14	250	265	280	4000	500	109.3	52.7	18	15
BHP2B1-D-16	16	250	265	280	4000	500	112.7	54.4	18	15
BHP2B1-D-18	18	250	265	280	3600	400	116	56	18	15
BHP2B1-D-20	20	220	235	250	3200	400	119.3	57.7	18	15
BHP2B1-D-22	22	220	235	250	3000	400	122.6	59.3	18	15
BHP2B1-D-25	25	200	215	230	3000	400	127.6	61.8	20	15
BHP2B1-D-28	28	180	190	200	2500	400	132.6	64.3	20	15
BHP2B1-D-30	30	160	170	180	2500	400	135.9	66	20	15

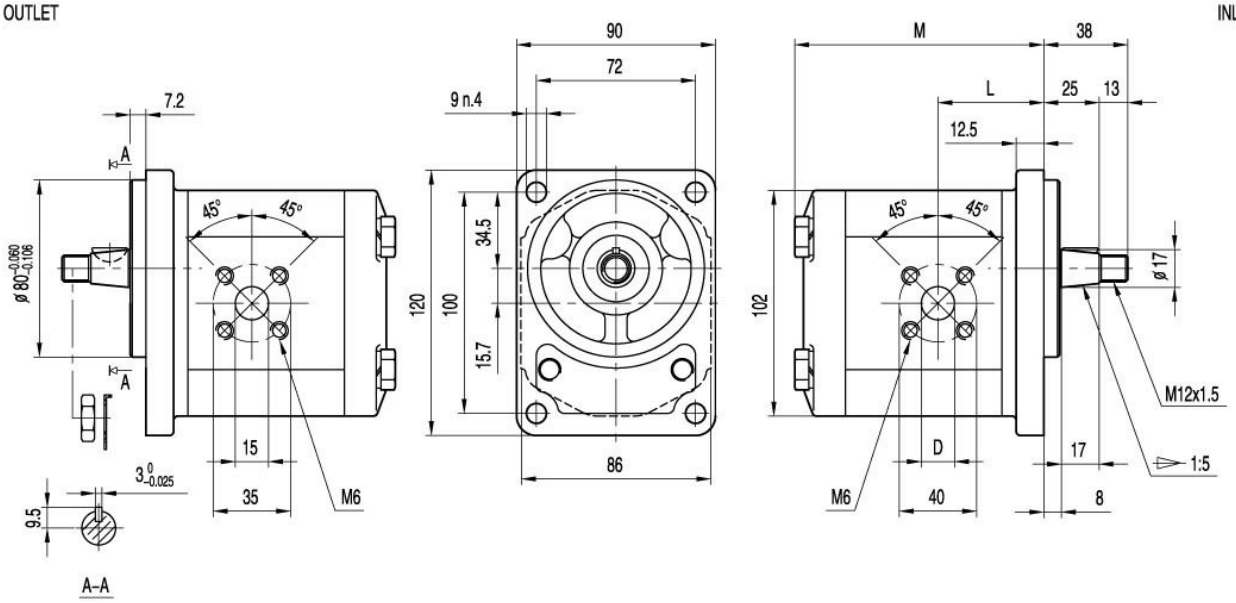
BHP2B2



M6 thread depth 13.
To mount the pump, n.4 M10 screws, with a torque wrench setting fixed at 70...75 Nm.
Shaft M12x1.5 nut, with a torque wrench setting fixed at 50 Nm.

OUTLET

INLET



Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions		
		P1	P2	P3			M	L	D
	(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm	mm
BHP2B2-D-3	3	270	285	300	4000	800	91.1	39.9	15
BHP2B2-D-4	4	270	285	300	4000	600	92.7	39.9	15
BHP2B2-D-6	6	270	285	300	4000	600	96	41.1	15
BHP2B2-D-8	8	270	285	300	3500	500	99.3	43.2	15
BHP2B2-D-10	10	270	285	300	3000	500	102.6	43.7	20
BHP2B2-D-12	12	270	285	300	3000	500	105.9	47.5	20
BHP2B2-D-14	14	250	265	280	4000	500	109.3	47.5	20
BHP2B2-D-16	16	250	265	280	4000	500	112.7	47.5	20
BHP2B2-D-18	18	250	265	280	3600	400	116	47.5	20
BHP2B2-D-20	20	220	235	250	3200	400	119.3	47.5	20
BHP2B2-D-22	22	220	235	250	3000	400	122.6	55.1	20
BHP2B2-D-25	25	200	215	230	3000	400	127.6	61.8	20
BHP2B2-D-28	28	180	190	200	2500	400	132.6	64.3	20
BHP2B2-D-30	30	160	170	180	2500	400	135.9	66	20

HIGH PRESSURE GEAR PUMP

BHP2A0[BAP2A0]

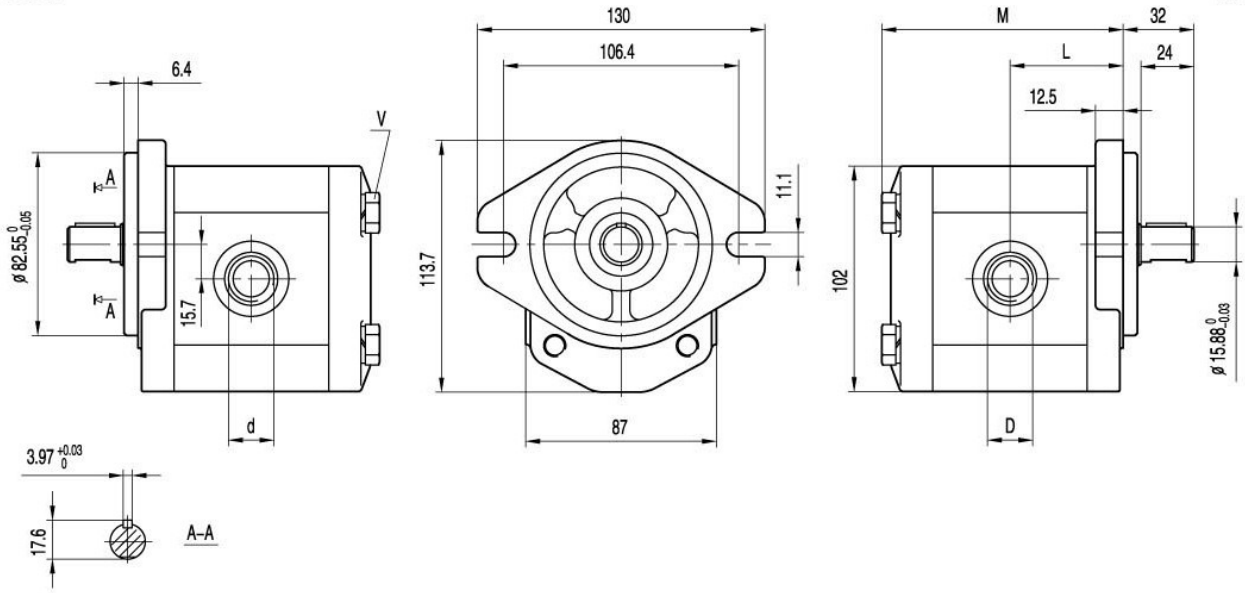


"D" and "d" ports are machined in compliance with threaded port with O–ring seal in truncated housing SAE J1926/1(ISO J1926–1).

Mounting flange material	V
	Screws tightening torque Nm
Aluminum	40...45
Cast iron	70...75

OUTLET

INLET

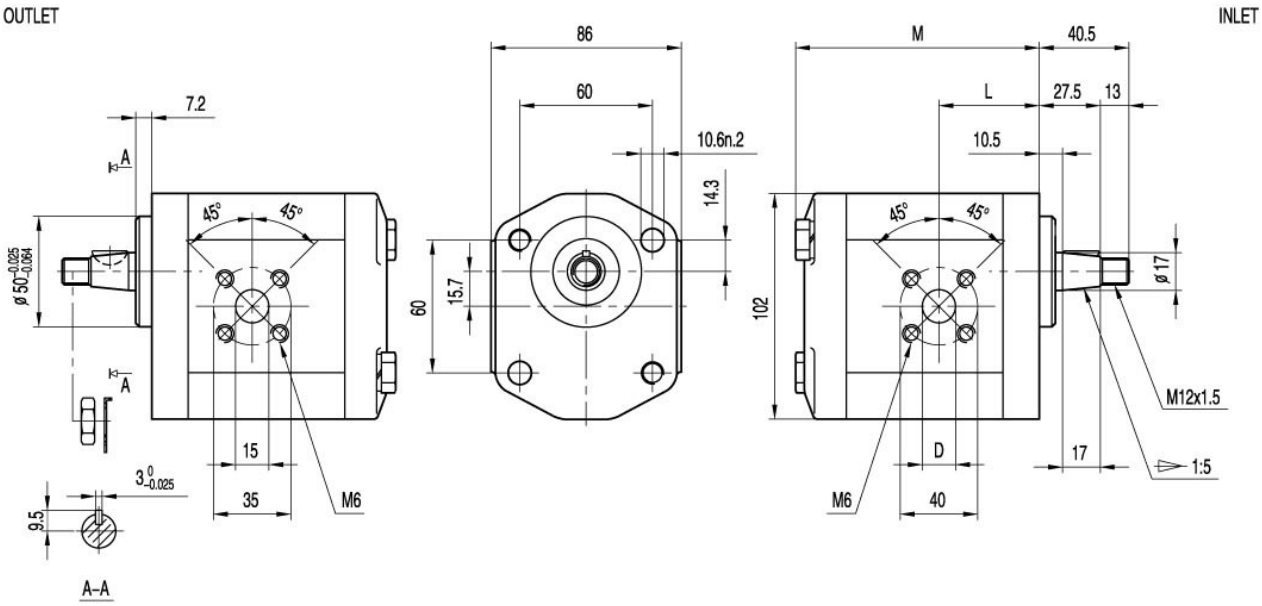


Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions			
		P1	P2	P3			M	L	D	d
	(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm		
BHP2A0-D-3	3	270	285	300	4000	800	91.1	43.6	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-4	4	270	285	300	4000	600	92.7	44.4	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-6	6	270	285	300	4000	600	96	46	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-8	8	270	285	300	3500	500	99.3	47.7	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-10	10	270	285	300	3000	500	102.6	49.3	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-12	12	270	285	300	3000	500	105.9	51	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-14	14	250	265	280	4000	500	109.3	52.7	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-16	16	250	265	280	4000	500	112.7	54.4	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-18	18	250	265	280	3600	400	116	56	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-20	20	220	235	250	3200	400	119.3	57.7	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-22	22	220	235	250	3000	400	122.6	59.3	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-25	25	200	215	230	3000	400	127.6	61.8	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-28	28	180	190	200	2500	400	132.6	64.3	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-30	30	160	170	180	2500	400	135.9	66	1 5/16-12UNF	7/8-14UNF

BHP2Q0



M6 thread depth 13.
To mount the pump, n.2 M10 screws, with a torque wrench setting fixed at 45...50 Nm.
Shaft M12x1.5 nut, with a torque wrench setting fixed at 50 Nm.



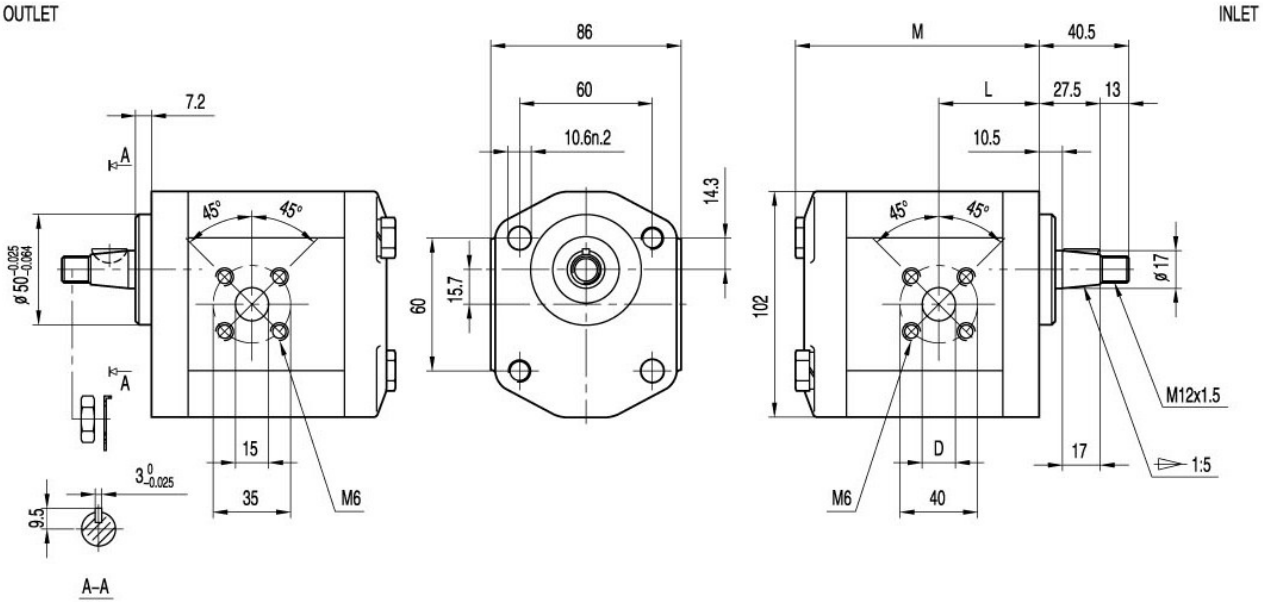
Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions		
		P1	P2	P3			M	L	D
	(cm³/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm	mm
BHP2Q0-D-3	3	270	285	300	4000	800	88.6	37.4	15
BHP2Q0-D-4	4	270	285	300	4000	600	90.2	37.4	15
BHP2Q0-D-6	6	270	285	300	4000	600	93.5	38.6	15
BHP2Q0-D-8	8	270	285	300	3500	500	96.8	40.7	15
BHP2Q0-D-10	10	270	285	300	3000	500	100.1	41.2	20
BHP2Q0-D-12	12	270	285	300	3000	500	103.4	45	20
BHP2Q0-D-14	14	250	265	280	4000	500	106.8	45	20
BHP2Q0-D-16	16	250	265	280	4000	500	110.2	45	20
BHP2Q0-D-18	18	250	265	280	3600	400	113.5	45	20
BHP2Q0-D-20	20	220	235	250	3200	400	116.8	45	20
BHP2Q0-D-22	22	220	235	250	3000	400	120.1	52.6	20
BHP2Q0-D-25	25	200	215	230	3000	400	125.1	59.3	20
BHP2Q0-D-28	28	180	190	200	2500	400	130.1	61.8	20
BHP2Q0-D-30	30	160	170	180	2500	400	133.4	63.5	20

HIGH PRESSURE GEAR PUMP

BHP2Q1



M6 thread depth 13.
To mount the pump, n.2 M10 screws, with a torque wrench setting fixed at 45...50 Nm.
Shaft M12x1.5 nut, with a torque wrench setting fixed at 50 Nm.

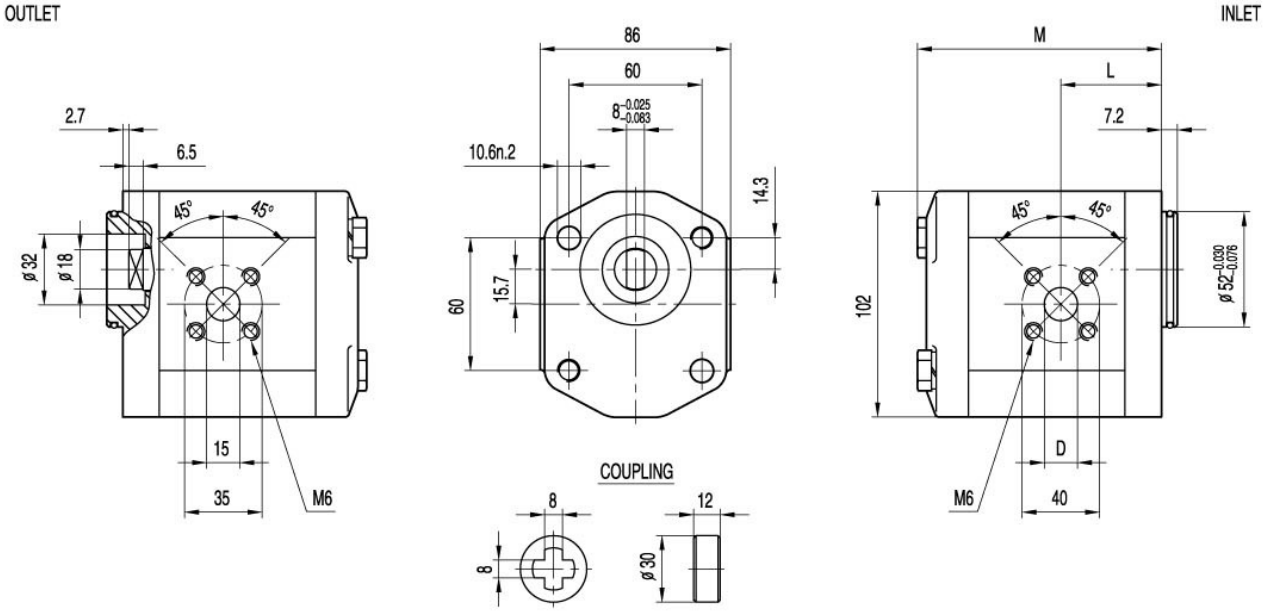


Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions		
		P1	P2	P3			M	L	D
	(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm	mm
BHP2Q1-D-3	3	270	285	300	4000	800	88.6	37.4	15
BHP2Q1-D-4	4	270	285	300	4000	600	90.2	37.4	15
BHP2Q1-D-6	6	270	285	300	4000	600	93.5	38.6	15
BHP2Q1-D-8	8	270	285	300	3500	500	96.8	40.7	15
BHP2Q1-D-10	10	270	285	300	3000	500	100.1	41.2	20
BHP2Q1-D-12	12	270	285	300	3000	500	103.4	45	20
BHP2Q1-D-14	14	250	265	280	4000	500	106.8	45	20
BHP2Q1-D-16	16	250	265	280	4000	500	110.2	45	20
BHP2Q1-D-18	18	250	265	280	3600	400	113.5	45	20
BHP2Q1-D-20	20	220	235	250	3200	400	116.8	45	20
BHP2Q1-D-22	22	220	235	250	3000	400	120.1	52.6	20
BHP2Q1-D-25	25	200	215	230	3000	400	125.1	59.3	20
BHP2Q1-D-28	28	180	190	200	2500	400	130.1	61.8	20
BHP2Q1-D-30	30	160	170	180	2500	400	133.4	63.5	20

BHP2Q2



M6 thread depth 13.
To mount the pump, n.2 M10 screws, with a torque wrench setting fixed at 45...50 Nm.
Shaft M12x1.5 nut, with a torque
Coupling Max. torque 70 Nm.



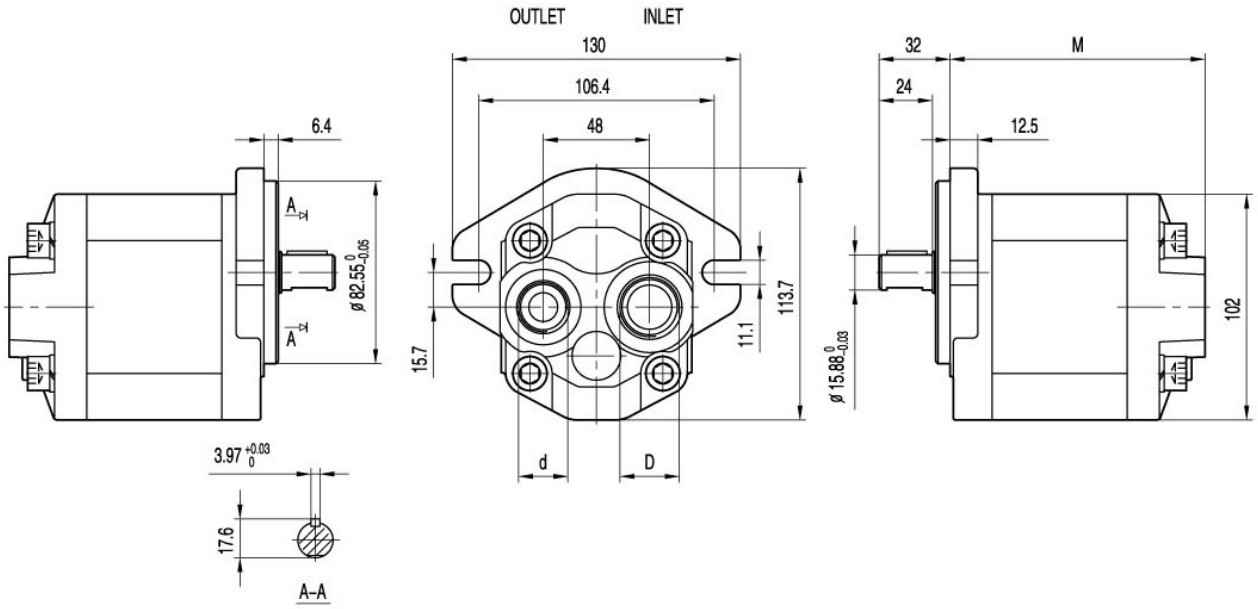
Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions		
		P1	P2	P3			M	L	D
	(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm	mm
BHP2Q2-D-3	3	270	285	300	4000	800	88.6	37.4	15
BHP2Q2-D-4	4	270	285	300	4000	600	90.2	37.4	15
BHP2Q2-D-6	6	270	285	300	4000	600	93.5	38.6	15
BHP2Q2-D-8	8	270	285	300	3500	500	96.8	40.7	15
BHP2Q2-D-10	10	270	285	300	3000	500	100.1	41.2	20
BHP2Q2-D-12	12	270	285	300	3000	500	103.4	45	20
BHP2Q2-D-14	14	250	265	280	4000	500	106.8	45	20
BHP2Q2-D-16	16	250	265	280	4000	500	110.2	45	20
BHP2Q2-D-18	18	250	265	280	3600	400	113.5	45	20
BHP2Q2-D-20	20	220	235	250	3200	400	116.8	45	20
BHP2Q2-D-22	22	220	235	250	3000	400	120.1	52.6	20
BHP2Q2-D-25	25	200	215	230	3000	400	125.1	59.3	20
BHP2Q2-D-28	28	180	190	200	2500	400	130.1	61.8	20
BHP2Q2-D-30	30	160	170	180	2500	400	133.4	63.5	20

HIGH PRESSURE GEAR PUMP

BHP2A0-R



"D" and "d" ports are machined in compliance with threaded port with O-ring seal in truncated housing SAE J1926/1(ISO J1926-1).
To mount the pump, n.4 M10 screws, with a torque wrench setting fixed at 70...75 Nm.

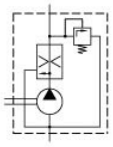


Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions		
		P1	P2	P3			M	D	d
	(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm		
BHP2A0-D-3-R	3	270	285	300	4000	800	103.1	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-4-R	4	270	285	300	4000	600	104.7	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-6-R	6	270	285	300	4000	600	108	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-8-R	8	270	285	300	3500	500	111.3	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-10-R	10	270	285	300	3000	500	114.6	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-12-R	12	270	285	300	3000	500	117.9	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-14-R	14	250	265	280	4000	500	121.3	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-16-R	16	250	265	280	4000	500	124.7	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-18-R	18	250	265	280	3600	400	128	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-20-R	20	220	235	250	3200	400	131.3	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-22-R	22	220	235	250	3000	400	134.6	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-25-R	25	200	215	230	3000	400	139.6	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-28-R	28	180	190	200	2500	400	144.6	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-30-R	30	160	170	180	2500	400	147.9	1 1/16-12UNF	7/8-14UNF

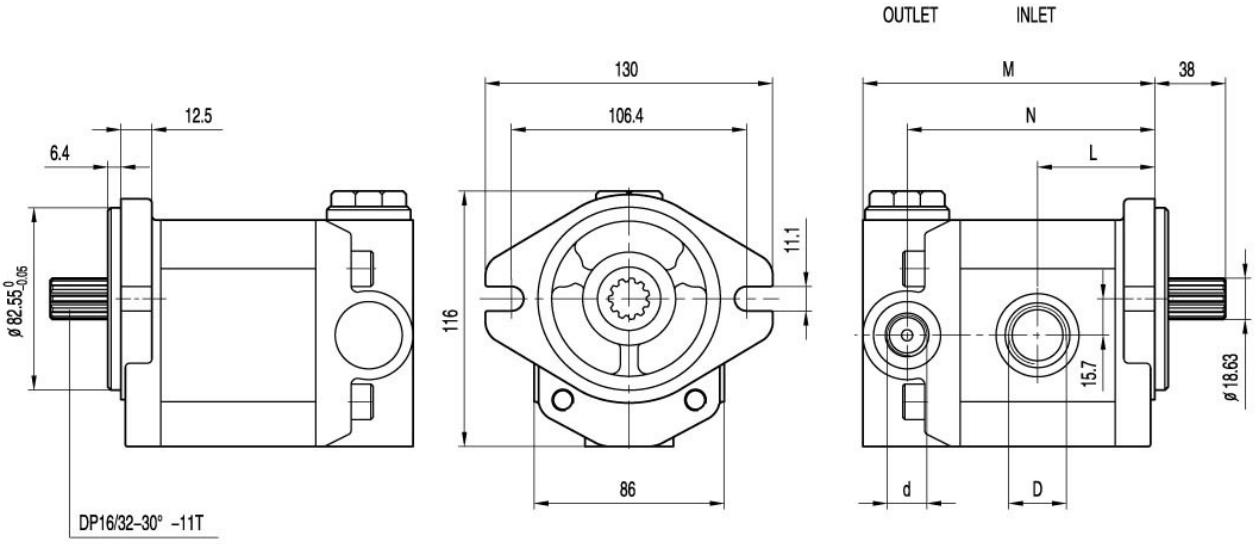
HIGH PRESSURE GEAR PUMP

BHP2A0-Fx





"D" and "d" ports are machined in compliance with threaded port with O–ring seal in truncated housing SAE J1926/1(ISO J1926–1).
To mount the pump, n.4 M10 screws, with a torque wrench setting fixed at 70...75 Nm.



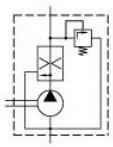
Type	Displacement	Control pressure P1	Control flow Q_{const}	Max. speed	Min. speed	Dimensions				
						M	L	N	D	d
	(cm^3/rev)	bar	L/min	(r/min)	(r/min)	mm	mm	mm		
BHP2A0-D-3-Fx	3	100...180	2...30	4000	800	112.1	43.6	92.1	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-4-Fx	4			4000	600	113.7	44.4	93.7	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-6-Fx	6			4000	600	117	46	97	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-8-Fx	8			3500	500	120.3	47.7	100.3	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-10-Fx	10			3000	500	123.6	49.3	103.6	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-12-Fx	12			3000	500	126.9	51	106.9	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-14-Fx	14			4000	500	130.3	52.7	110.3	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-16-Fx	16			4000	500	133.7	54.4	113.7	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-18-Fx	18			3600	400	137	56	117	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-20-Fx	20			3200	400	140.3	57.7	120.3	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-22-Fx	22			3000	400	143.6	59.3	123.6	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-25-Fx	25			3000	400	148.6	61.8	128.6	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-28-Fx	28			2500	400	153.6	64.3	133.6	1 1/16-12UNF	7/8-14UNF
BHP2A0-D-30-Fx	30			2500	400	156.9	66	136.9	1 1/16-12UNF	7/8-14UNF

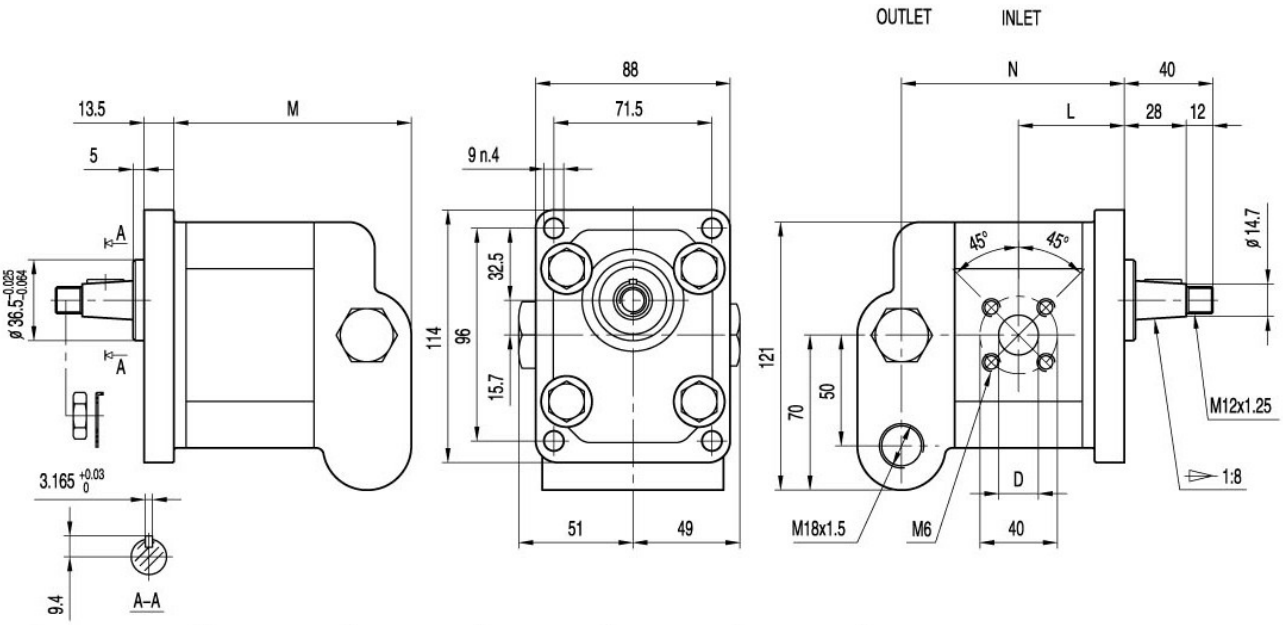
HIGH PRESSURE GEAR PUMP

BHP2B0-FAx



M6 thread depth 13,M18x1.5 thread depth 14.
To mount the pump, n.4 M10 screws,
with a torque wrench setting fixed
at 70...75 Nm.
Shaft M12x1.25 nut, with a torque
wrench setting fixed at 50 Nm.

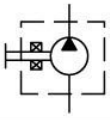




Type	Displacement	Control pressure P1	Control flow Q_{const}	Max. speed	Min. speed	Dimensions			
						M	L	N	D
	(cm^3/rev)	bar	L/min	(r/min)	(r/min)	mm	mm	mm	mm
BHP2B0–D–3–FAx	3	100...180	2...30	4000	800	112.1	43.6	96.1	15
BHP2B0–D–4–FAx	4			4000	600	113.7	44.4	97.7	15
BHP2B0–D–6–FAx	6			4000	600	117	46	101	15
BHP2B0–D–8–FAx	8			3500	500	120.3	47.7	104.3	15
BHP2B0–D–10–FAx	10			3000	500	123.6	49.3	107.6	20
BHP2B0–D–12–FAx	12			3000	500	126.9	51	110.9	20
BHP2B0–D–14–FAx	14			4000	500	130.3	52.7	114.3	20
BHP2B0–D–16–FAx	16			4000	500	133.7	54.4	117.7	20
BHP2B0–D–18–FAx	18			3600	400	137	56	121	20
BHP2B0–D–20–FAx	20			3200	400	140.3	57.7	124.3	20
BHP2B0–D–22–FAx	22			3000	400	143.6	59.3	127.6	20
BHP2B0–D–25–FAx	25			3000	400	148.6	61.8	132.6	20
BHP2B0–D–28–FAx	28			2500	400	153.6	64.3	137.6	20
BHP2B0–D–30–FAx	30			2500	400	156.9	66	140.9	20

BAP2B3

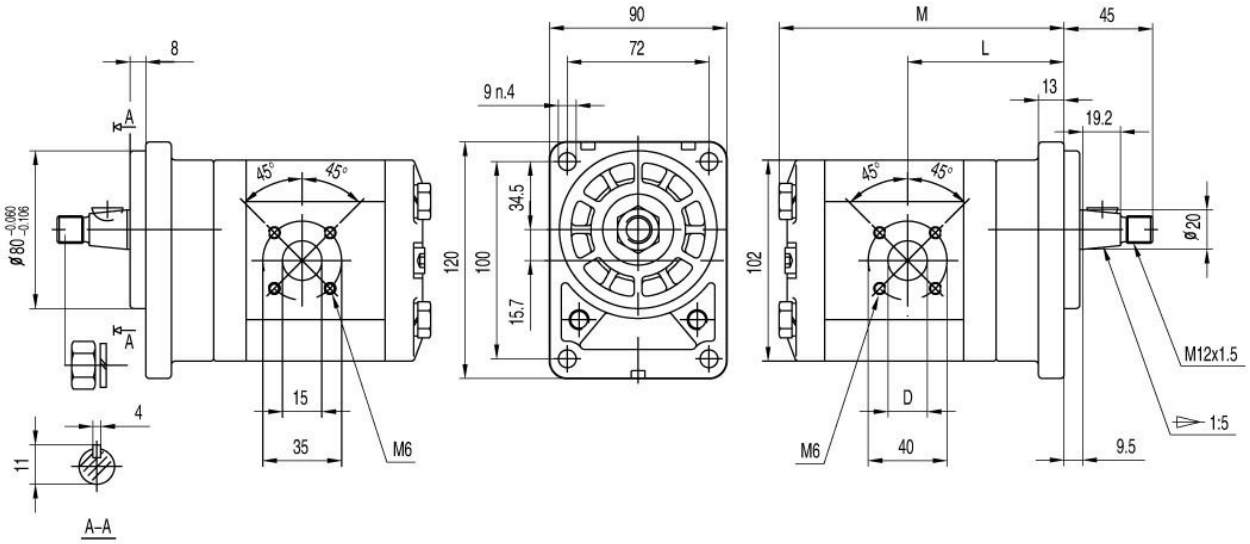




Pump with bearing,This option allows radial and/or axial loads on the pump shaft.
M6 thread depth 13.
To mount the pump, n.4 M10 screws, with a torque wrench setting fixed at 70...75 Nm.
Shaft M14x1.5 nut, with a torque wrenchs etting fixe d at 70 Nm.

OUTLET

INLET

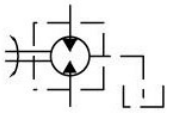


Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions		
		P1	P2	P3			M	L	D
	(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm	mm
BHP2B3-D-3	3	270	285	300	4000	800	123.1	71.9	15
BHP2B3-D-4	4	270	285	300	4000	600	124.7	71.9	15
BHP2B3-D-6	6	270	285	300	4000	600	128.0	73.1	15
BHP2B3-D-8	8	270	285	300	3500	500	131.3	75.2	15
BHP2B3-D-10	10	270	285	300	3000	500	134.6	75.7	20
BHP2B3-D-12	12	270	285	300	3000	500	137.9	79.5	20
BHP2B3-D-14	14	250	265	280	4000	500	141.3	79.5	20
BHP2B3-D-16	16	250	265	280	4000	500	144.7	79.5	20
BHP2B3-D-18	18	250	265	280	3600	400	148.0	79.5	20
BHP2B3-D-20	20	220	235	250	3200	400	151.3	79.5	20
BHP2B3-D-22	22	220	235	250	3000	400	154.6	87.1	20
BHP2B3-D-25	25	200	215	230	3000	400	159.6	93.8	20
BHP2B3-D-28	28	180	190	200	2500	400	164.6	96.3	20
BHP2B3-D-30	30	160	170	180	2500	400	167.9	98.0	20

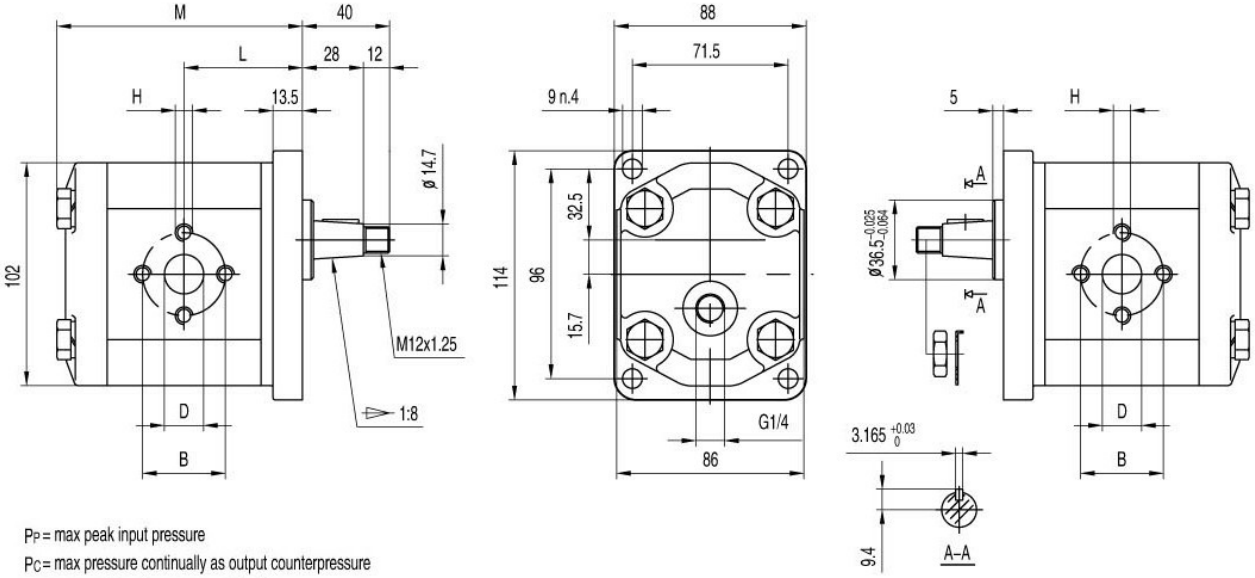
HIGH PRESSURE GEAR PUMP

BHM2B0





M6 thread depth 13, M8 thread depth 17.
To mount the pump, n.4 M10 screws,
with a torque wrench setting fixed
at 70...75 Nm.
Shaft M12x1.25 nut, with a torque
wrenchsetting fixed at 50 Nm.

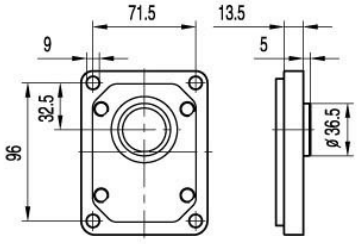


P_P = max peak input pressure
P_C = max pressure continually as output counterpressure
P_I = max peak input pressure continually

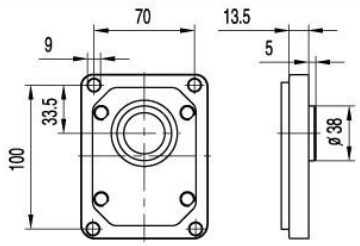
Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions				
		P1	P2	P3			M	L	B	D	H
	(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm	mm	mm	
BHM2B0-R-3-Q1	3	280	270	295	4000	800	91.1	43.6	30	13	M6
BHM2B0-R-4-Q1	4	280	270	295	4000	600	92.7	44.4	30	13	M6
BHM2B0-R-6-Q1	6	280	270	295	4000	600	96.0	46.0	30	13	M6
BHM2B0-R-8-Q1	8	280	270	295	3500	500	99.3	47.7	30	13	M6
BHM2B0-R-10-Q1	10	280	270	295	3000	500	102.6	49.3	40	20	M8
BHM2B0-R-12-Q1	12	280	270	295	3000	500	105.9	51.0	40	20	M8
BHM2B0-R-14-Q1	14	260	250	275	4000	500	109.3	52.7	40	20	M8
BHM2B0-R-16-Q1	16	260	250	275	4000	500	112.7	54.4	40	20	M8
BHM2B0-R-18-Q1	18	260	250	275	3600	400	116.0	56.0	40	20	M8
BHM2B0-R-20-Q1	20	230	220	245	3200	400	119.3	57.7	40	20	M8
BHM2B0-R-22-Q1	22	230	220	245	3000	400	122.6	59.3	40	20	M8
BHM2B0-R-25-Q1	25	210	200	225	3000	400	127.6	61.8	40	22	M8
BHM2B0-R-28-Q1	28	200	190	215	2500	400	132.6	64.3	40	22	M8
BHM2B0-R-30-Q1	30	180	170	195	2500	400	135.9	66.0	40	22	M8

BAP2[BHP2]

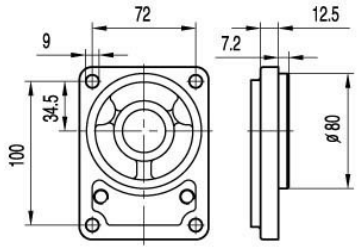
FRONT COVER



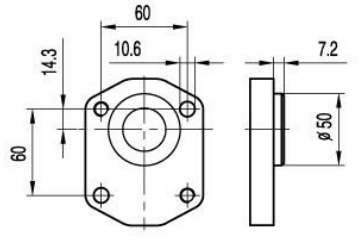
B0



B1

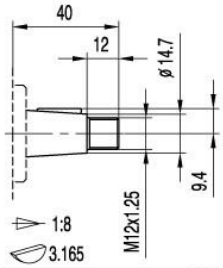


B2



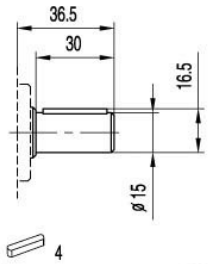
Q0

SHAFTS



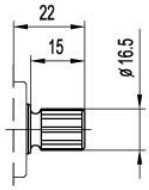
T0

Max.Torque 200 Nm



C4

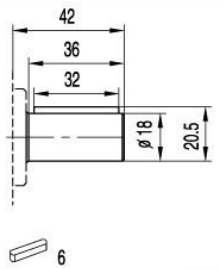
Max.Torque 135 Nm



DIN5482 B17X14

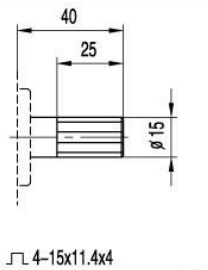
S7

Max.Torque 150 Nm



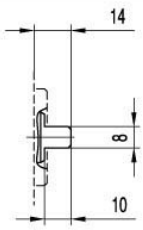
C2

Max.Torque 150 Nm



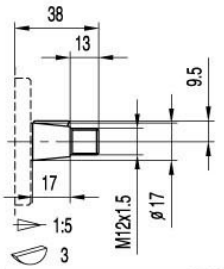
H0

Max.Torque 185 Nm



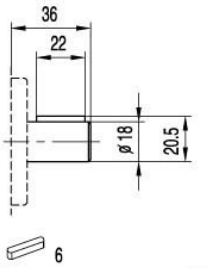
G0

Max.Torque 100 Nm



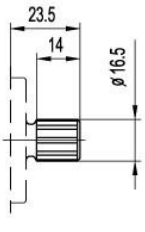
T1

Max.Torque 180 Nm



C3

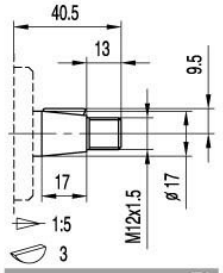
Max.Torque 150 Nm



DIN5482 B17X14

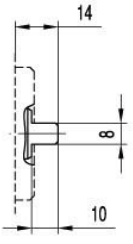
S6

Max.Torque 150 Nm



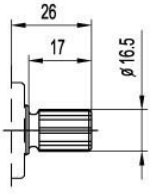
T1

Max.Torque 180 Nm



G0

Max.Torque 100 Nm



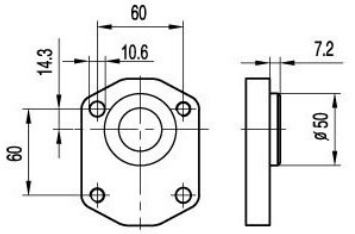
DIN5482 B17X14

S3

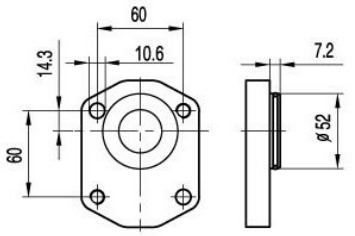
Max.Torque 150 Nm

BAP2[BHP2]

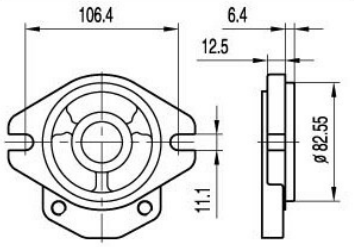
FRONT COVER



Q1

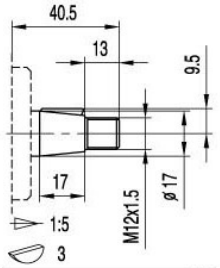


Q2



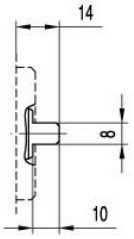
A0

SHAFTS



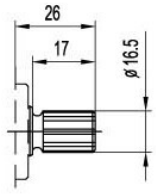
T1

Max.Torque 180 Nm



G0

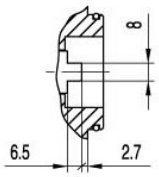
Max.Torque 100 Nm



DIN5482 B17X14

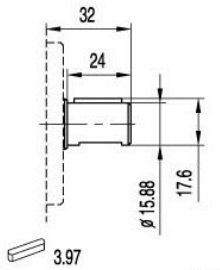
S3

Max.Torque 150 Nm



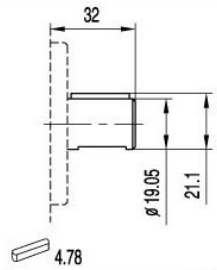
G1

Max.Torque 100 Nm



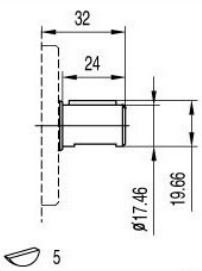
C0

Max.Torque 140 Nm



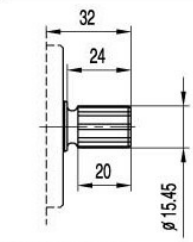
C1

Max.Torque 160 Nm



C6

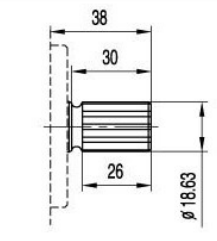
Max.Torque 180 Nm



DP16/32-30° -9T

S0

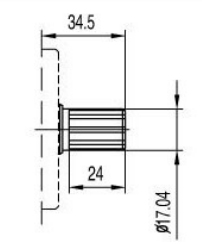
Max.Torque 185 Nm



DP16/32-30° -11T

S1

Max.Torque 200 Nm



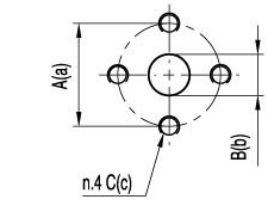
DP16/32-30° -10T

S8

Max.Torque 190 Nm

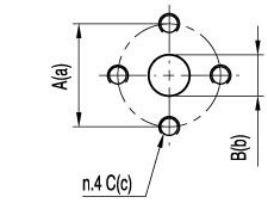
BAP2[BHP2]

PORTS



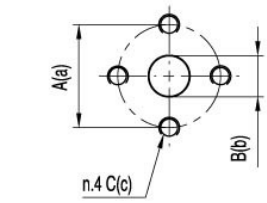
E0/E1/E2

TYPE	PORTS CODE	INLET			OUTLET		
		A	B	C	a	b	c
BA(H)P2...3 ÷ BA(H)P2...8	E0	30	13	M6	30	13	M6
BA(H)P2...10 ÷ BA(H)P2...22	E1	40	20	M8	30	13	M6
BA(H)P2...25 ÷ BA(H)P2...30	E2	40	22	M8	30	13	M6



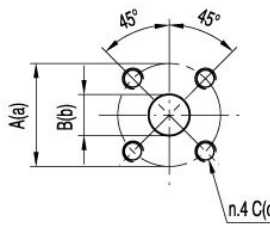
E3

TYPE	INLET			OUTLET		
	A	B	C	a	b	c
BA(H)P2...3 ÷ BA(H)P2...8	38	14	M8	38	10	M8
BA(H)P2...10 ÷ BA(H)P2...22	38	18	M8	38	15	M8
BA(H)P2...25 ÷ BA(H)P2...30	38	20	M8	38	15	M8



E4

TYPE	INLET			OUTLET		
	A	B	C	a	b	c
BA(H)P2...8 ÷ BA(H)P2...10	40	13	M8	40	13	M8
BA(H)P2...12 ÷ BA(H)P2...20	40	19	M8	40	13	M8
BA(H)P2...22 ÷ BA(H)P2...28	40	19	M8	40	19	M8
BA(H)P2...30	40	21	M8	40	19	M8

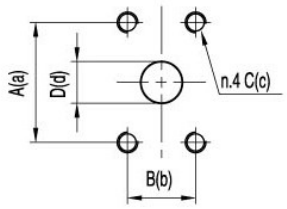


F0/F1/F5

TYPE	PORTS CODE	INLET			OUTLET		
		A	B	C	a	b	c
BA(H)P2...3 ÷ BA(H)P2...8	F0	40	15	M6	35	15	M6
BA(H)P2...10 ÷ BA(H)P2...30	F1	40	20	M6	35	15	M6
BA(H)P2...16 ÷ BA(H)P2...30	F5	55	26	M8	55	18	M8

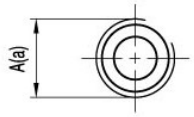
BAP2[BHP2]

PORTS



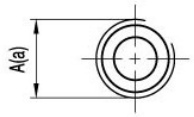
F2/F3/F4

TYPE	PORTS CODE	INLET				OUTLET			
		A	B	C	D	a	b	c	d
BA(H)P2...3 ÷ BA(H)P2...16	F2	38.1	17.48	5/16–18UNC	13	38.1	17.48	5/16–18UNC	13
BA(H)P2...18 ÷ BA(H)P2...20	F3	47.63	22.23	3/8–16UNC	20	38.1	17.48	5/16–18UNC	13
BA(H)P2...22 ÷ BA(H)P2...30	F4	47.63	22.23	3/8–16UNC	20	47.63	22.23	3/8–16UNC	20



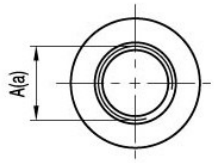
L0/L1/L3/L4

TYPE	PORTS CODE	INLET	OUTLET
		A	a
BA(H)P2...3 ÷ BA(H)P2...6	L0	G1/2	G1/2
BA(H)P2...8 ÷ BA(H)P2...30	L1	G3/4	G1/2
BA(H)P2...16 ÷ BA(H)P2...30	L3	G 1	G3/4
BA(H)P2...8 ÷ BA(H)P2...30	L4	G3/4	G3/4



R0/R1/R2

TYPE	PORTS CODE	INLET	OUTLET
		A	a
BA(H)P2...3 ÷ BA(H)P2...12	R0	PT1/2	PT1/2
BA(H)P2...14 ÷ BA(H)P2...25	R1	PT3/4	PT1/2
BA(H)P2...28 ÷ BA(H)P2...30	R2	PT 1	PT3/4



U0/U1/U2/U3

TYPE	PORTS CODE	INLET	OUTLET
		A	a
BA(H)P2...3 ÷ BA(H)P2...28	U0	1 1/16–12 UNF	7/8–14 UNF
BA(H)P2...30	U1	1 5/16–12 UNF	7/8–14 UNF
BA(H)P2...3 ÷ BA(H)P2...28	U2	7/8–14 UNF	3/4–16 UNF
BA(H)P2...8 ÷ BA(H)P2...30	U3	1 5/16–12 UNF	1 1/16–12 UNF

BAP2.5[BHP2.5]

HOW TO ORDER

BA	P	2.5	Front cover	Rotation	Size	Shaft	Ports	Ports position	Seals	Options
Series	Pump	Group	A0	D Clockwise	10					
BA–Front and end cover material aluminum			A1	S Counter clockwise	12.5					
BH–Front and end cover material cast iron, pressure than "BA"series high 30 bar.				R Reversible	14					
					16					
					18					
					19					
					20					
					23					
					25					
					26.5					
					28					
					30					
					32					
					36					
					40					
					45					

Ports position

Omit–Side inlet and side outlet
A–Front inlet and front outlet
B–Back inlet and front outlet
C–Back inlet and side outlet
D–Side inlet and front outlet
R–Back inlet and back outlet

Seals

Omit–Range between –10˚C and +80˚C,inlet pressure up to max. 3 bar absolute.
V–Version suitable for fluid at hi–temperatures, range between –10˚C and +120˚C.
H–Version suitable for fluid at low–temperatures, range between –40˚C and +80˚C.
T–Version suitable for inlet pressure up to max. 3 and 6 bar absolute.
N–Version suitable for inlet pressure up to max. 3 and 10 bar absolute.

Examples:

BAP2.5–A0–D–10–C0–Z0 = clockwise rotation, 10 cc/rev, A0 front cover, C0 parallel shaft, setting ports Z0 type, standard seals

BHP2.5–A1–D–10–C1–F0 = clockwise rotation, 10 cc/rev, A1 front cover, C1 parallel shaft, setting ports F0 type, standard seals

BHP2.5–A2–D–10–S3–U0–N= clockwise rotation, 10 cc/rev, A2 front cover, SAE B splined 13T shaft(S3), setting ports U0 type, high pressure seals(N)

HIGH PRESSURE GEAR PUMP

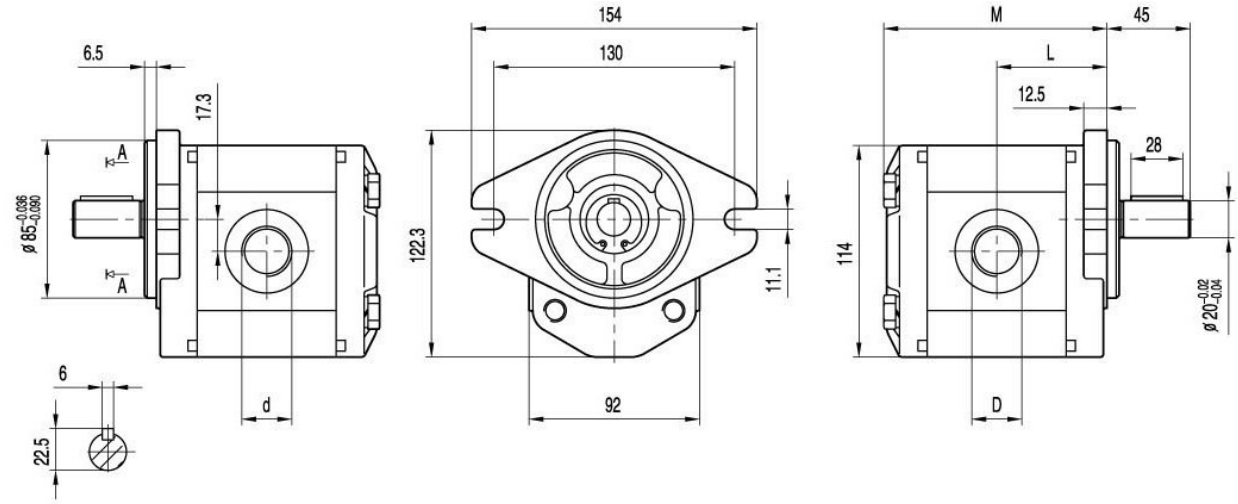
BAP2.5A0



M18x1.5 thread depth 15,
M22x1.5 thread depth 16,
M27x2 thread depth 19,
M33x2 thread depth 20,
To mount the pump, n.4 M12 screws,
with a torque wrench setting fixed
at 75...80 Nm.

OUTLET

INLET



Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions			
		P1	P2	P3			M	L	D	d
	(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm		
BAP2.5A0-D-10	10	250	270	290	4000	800	110	53.3	M22x1.5	M18x1.5
BAP2.5A0-D-12.5	12.5	250	270	290	4000	800	113	54.8	M22x1.5	M18x1.5
BAP2.5A0-D-14	14	250	270	290	4000	700	115	55.8	M22x1.5	M18x1.5
BAP2.5A0-D-16	16	250	270	290	3500	700	118	57.1	M27x2	M22x1.5
BAP2.5A0-D-18	18	250	270	290	3500	600	120	58.3	M27x2	M22x1.5
BAP2.5A0-D-19	19	250	270	290	3500	600	121	58.8	M27x2	M22x1.5
BAP2.5A0-D-20	20	250	270	290	3000	500	123	59.6	M27x2	M22x1.5
BAP2.5A0-D-23	23	230	250	260	3500	500	126	61.3	M33x2	M27x2
BAP2.5A0-D-25	25	230	250	260	3500	500	129	62.6	M33x2	M27x2
BAP2.5A0-D-26.5	26.5	230	250	260	3500	500	131	63.6	M33x2	M27x2
BAP2.5A0-D-28	28	230	250	260	3500	500	133	64.6	M33x2	M27x2
BAP2.5A0-D-30	30	230	250	260	3000	400	135	65.6	M33x2	M27x2
BAP2.5A0-D-32	32	200	230	250	3000	400	138	67.1	M33x2	M27x2
BAP2.5A0-D-36	36	200	230	250	2750	400	142	69.1	M33x2	M27x2
BAP2.5A0-D-40	40	160	180	200	2500	400	148	71.6	M33x2	M27x2
BAP2.5A0-D-45	45	160	180	200	2500	400	153	74.6	M33x2	M27x2

HIGH PRESSURE GEAR PUMP

BAP2.5A1[BHP2.5A1]

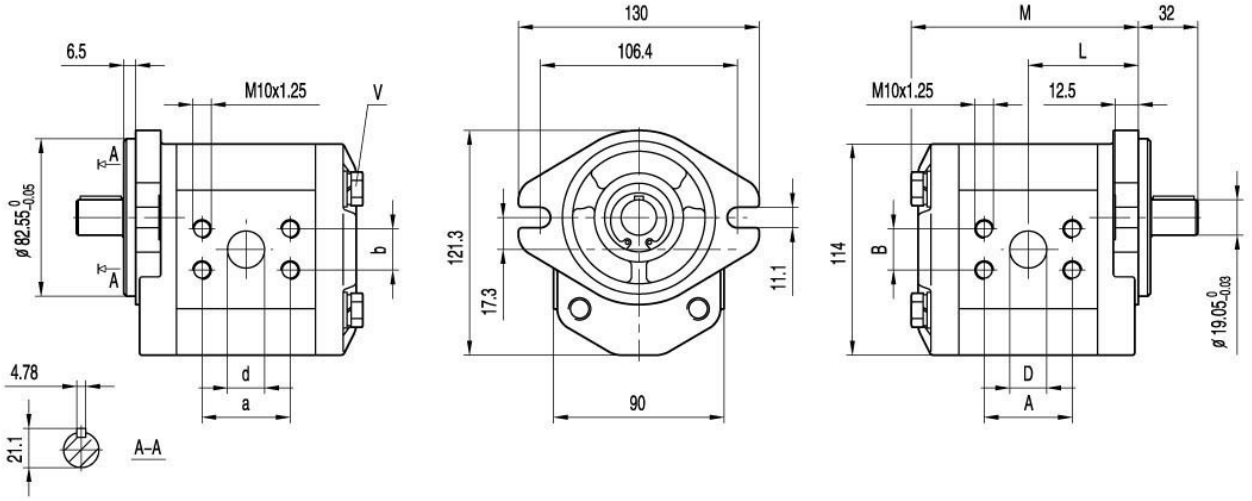


M10x1.25 thread depth 15.

Mounting flange material	V
	Screws tightening torque Nm
Aluminum	75...80
Cast iron	130...135

OUTLET

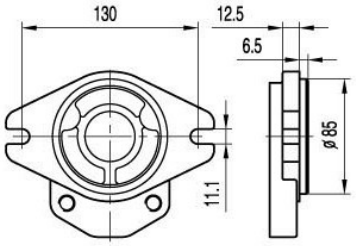
INLET



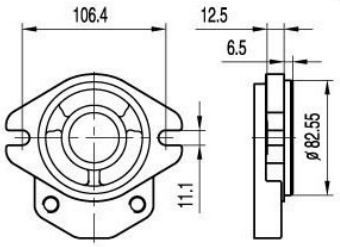
Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions							
		P1	P2	P3			M	L	A	B	D	a	b	d
	(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm	mm	mm	mm	mm	mm	mm
BAP2.5A1-D-10	10	250	270	290	4000	800	110	53.3	47.6	22.2	20	47.6	22.2	13
BAP2.5A1-D-12.5	12.5	250	270	290	4000	800	113	54.8	47.6	22.2	20	47.6	22.2	13
BAP2.5A1-D-14	14	250	270	290	4000	700	115	55.8	47.6	22.2	20	47.6	22.2	13
BAP2.5A1-D-16	16	250	270	290	3500	700	118	57.1	47.6	22.2	20	47.6	22.2	13
BAP2.5A1-D-18	18	250	270	290	3500	600	120	58.3	52.4	26.2	25	47.6	22.2	20
BAP2.5A1-D-19	19	250	270	290	3500	600	121	58.8	52.4	26.2	25	47.6	22.2	20
BAP2.5A1-D-20	20	250	270	290	3000	500	123	59.6	52.4	26.2	25	47.6	22.2	20
BAP2.5A1-D-23	23	230	250	260	3500	500	126	61.3	52.4	26.2	25	47.6	22.2	20
BAP2.5A1-D-25	25	230	250	260	3500	500	129	62.6	52.4	26.2	25	47.6	22.2	20
BAP2.5A1-D-26.5	26.5	230	250	260	3500	500	131	63.6	52.4	26.2	25	47.6	22.2	20
BAP2.5A1-D-28	28	230	250	260	3500	500	133	64.6	52.4	26.2	25	47.6	22.2	20
BAP2.5A1-D-30	30	230	250	260	3000	400	135	65.6	52.4	26.2	25	47.6	22.2	20
BAP2.5A1-D-32	32	200	230	250	3000	400	138	67.1	52.4	26.2	25	47.6	22.2	20
BAP2.5A1-D-36	36	200	230	250	2750	400	142	69.1	52.4	26.2	25	47.6	22.2	20
BAP2.5A1-D-40	40	160	180	200	2500	400	148	71.6	52.4	26.2	25	47.6	22.2	20
BAP2.5A1-D-45	45	160	180	200	2500	400	153	74.6	52.4	26.2	25	47.6	22.2	20

BAP2.5[BHP2.5]

FRONT COVER

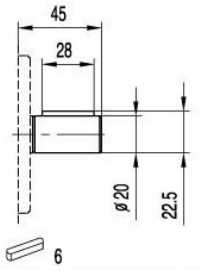


A0



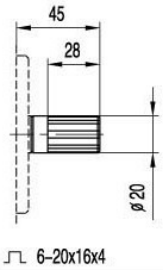
A1

SHAFTS



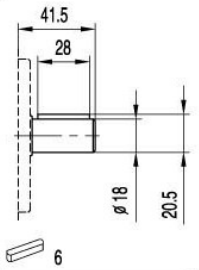
C0

Max.Torque 200 Nm



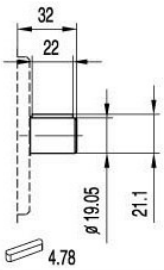
H0

Max.Torque 240 Nm



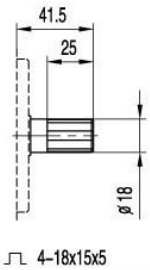
C1

Max.Torque 180 Nm



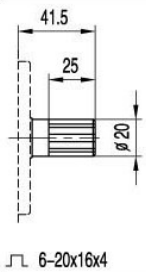
C2

Max.Torque 190 Nm



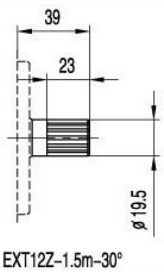
H1

Max.Torque 200 Nm



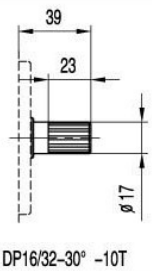
H2

Max.Torque 240 Nm



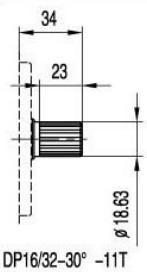
S0

Max.Torque 220 Nm



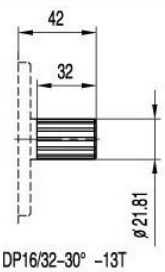
S1

Max.Torque 200 Nm



S2

Max.Torque 210 Nm

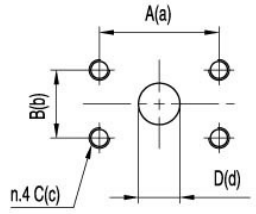


S3

Max.Torque 300 Nm

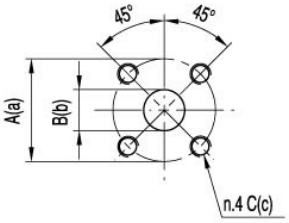
BAP2.5[BHP2.5]

PORTS



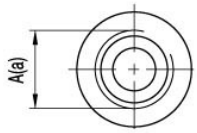
F0/F1

TYPE	PORTS CODE	INLET				OUTLET			
		A	B	C	D	a	b	c	d
BA(H)P2.5...10 ÷ BA(H)P2.5...16	F0	47.6	22.2	M10x1.25	20	47.6	22.2	M10x1.25	13
BA(H)P2.5...18 ÷ BA(H)P2.5...45	F1	52.4	26.2	M10x1.25	25	47.6	22.2	M10x1.25	20



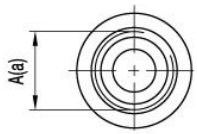
F2

TYPE	INLET			OUTLET		
	A	B	C	a	b	c
BA(H)P2.5...10 ÷ BA(H)P2.5...16	55	20	M8	55	13	M8
BA(H)P2.5...18 ÷ BA(H)P2.5...45	55	25	M8	55	20	M8



Z0/Z1/Z2

TYPE	PORTS CODE	INLET	OUTLET
		A	a
BA(H)P2.5...10 ÷ BA(H)P2.5...14	Z0	M22x1.5	M18x1.5
BA(H)P2.5...16 ÷ BA(H)P2.5...20	Z1	M27x2	M22x1.5
BA(H)P2.5...23 ÷ BA(H)P2.5...45	Z2	M33x2	M27x2

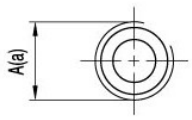


U0/U1

TYPE	PORTS CODE	INLET	OUTLET
		A	a
BA(H)P2.5...10 ÷ BA(H)P2.5...23	U0	1 1/16–12 UNF	7/8–14 UNF
BA(H)P2.5...25 ÷ BA(H)P2.5...45	U1	1 5/16–12 UNF	1 1/16–12 UNF

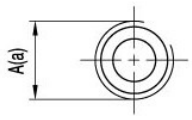
BAP2.5[BHP2.5]

PORTS



L0/L1

TYPE	PORTS CODE	INLET	OUTLET
		A	a
BA(H)P2.5...10 ÷ BA(H)P2.5...23	L0	G3/4	G1/2
BA(H)P2.5...25 ÷ BA(H)P2.5...45	L1	G 1	G3/4

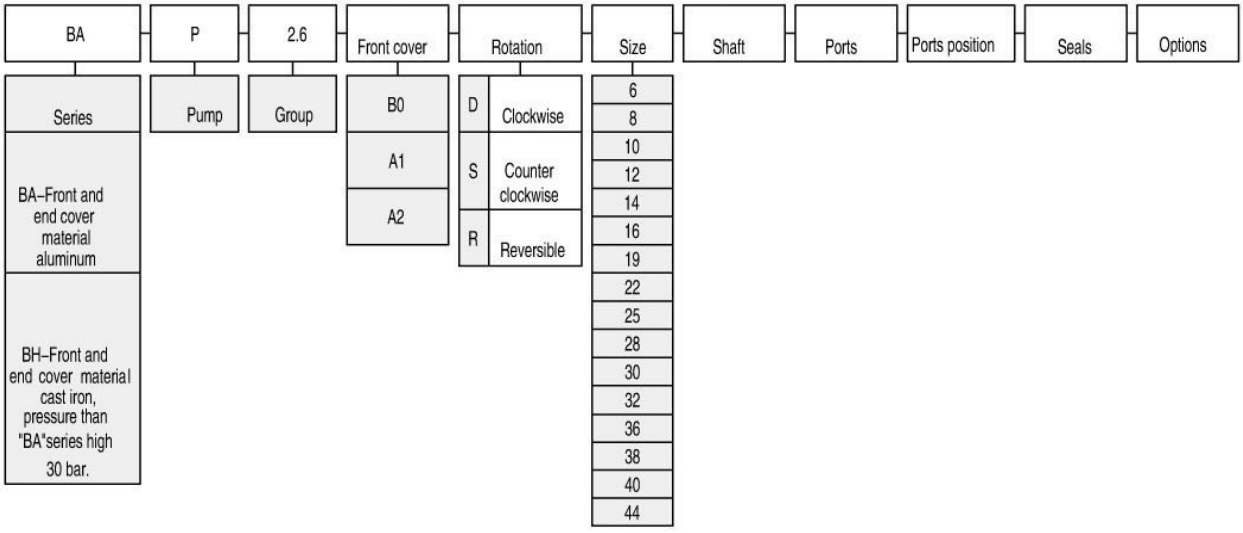


R0/R1

TYPE	PORTS CODE	INLET	OUTLET
		A	a
BA(H)P2.5...10 ÷ BA(H)P2.5...23	R0	PT3/4	PT1/2
BA(H)P2.5...25 ÷ BA(H)P2.5...45	R1	PT 1	PT3/4

BHP2.6

HOW TO ORDER



Ports position

Omit–Side inlet and side outlet
A–Front inlet and front outlet
B–Back inlet and front outlet
C–Back inlet and side outlet
D–Side inlet and front outlet
R–Back inlet and back outlet

Seals

Omit–Range between –10℃ and +80℃,inlet pressure up to max. 3 bar absolute.
V–Version suitable for fluid at hi–temperatures, range between –10℃ and +120℃.
H–Version suitable for fluid at low–temperatures, range between –40℃ and +80℃.
T–Version suitable for inlet pressure up to max. 3 and 6 bar absolute.
N–Version suitable for inlet pressure up to max. 3 and 10 bar absolute.

Examples:

BHP2.6–B0–D–10–T0–E1= clockwise rotation, 10 cc/rev, B0 front cover,1:8 tapered shaft(T0), setting ports E1 type, standard seals

BHP2.6–A1–D–10–C1–F0 = clockwise rotation, 10 cc/rev, A1 front cover, C1 parallel shaft, setting ports F0 type, standard seals

BHP2.6–A2–D–10–S3–U0–N= clockwise rotation, 10 cc/rev, A2 front cover, SAE B splined 13T shaft(S3), setting ports U0 type, high pressure seals(N)

HIGH PRESSURE GEAR PUMP

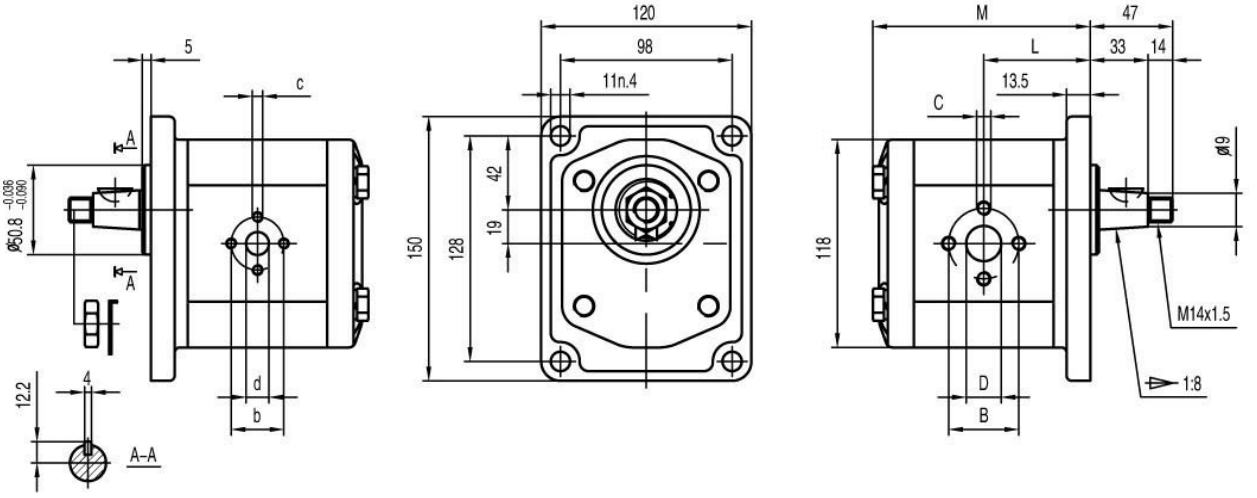
BAP2.6B0



To mount the pump, n.4 M10 screws, with a torque wrench setting fixed at 130...135 Nm.
Shaft M14x1.5 nut,with a torque wrench setting fixed at 75 Nm.

OUTLET

INLET



Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions							
		P1	P2	P3			M	L	B	D	C	b	d	c
	(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm	mm	mm		mm	mm	
BHP2.6B0–D–6	6	250	280	300	4000	800	103	49.3	30	13	M6	30	13	M6
BHP2.6B0–D–8	8	250	280	300	4000	800	105	50.3	30	13	M6	30	13	M6
BHP2.6B0–D–10	10	250	280	300	4000	700	107	51.3	40	20	M8	30	13	M6
BHP2.6B0–D–12	12	250	280	300	3500	700	110	52.5	40	20	M8	30	13	M6
BHP2.6B0–D–14	14	250	280	300	3500	600	111	53.3	40	20	M8	30	13	M6
BHP2.6B0–D–16	16	250	280	300	3500	600	114	54.5	40	20	M8	30	13	M6
BHP2.6B0–D–19	19	250	280	300	3000	500	117	56.3	40	20	M8	30	13	M6
BHP2.6B0–D–22	22	250	280	300	3000	500	121	58.0	51	25	M10	40	18	M8
BHP2.6B0–D–25	25	250	280	300	3000	500	123	59.3	51	25	M10	40	18	M8
BHP2.6B0–D–28	28	250	280	300	3000	500	126	60.8	51	25	M10	40	18	M8
BHP2.6B0–D–30	30	230	250	260	3000	500	129	62.0	51	25	M10	40	18	M8
BHP2.6B0–D–32	32	230	250	260	3000	400	131	63.3	51	25	M10	40	18	M8
BHP2.6B0–D–36	36	200	230	250	2750	400	135	65.3	51	25	M10	40	18	M8
BHP2.6B0–D–38	38	200	230	250	2750	400	137	66.3	51	25	M10	40	18	M8
BHP2.6B0–D–40	40	170	190	210	2500	400	139	67.3	51	25	M10	40	18	M8
BHP2.6B0–D–44	44	170	190	210	2500	400	144	69.5	51	25	M10	40	18	M8

HIGH PRESSURE GEAR PUMP

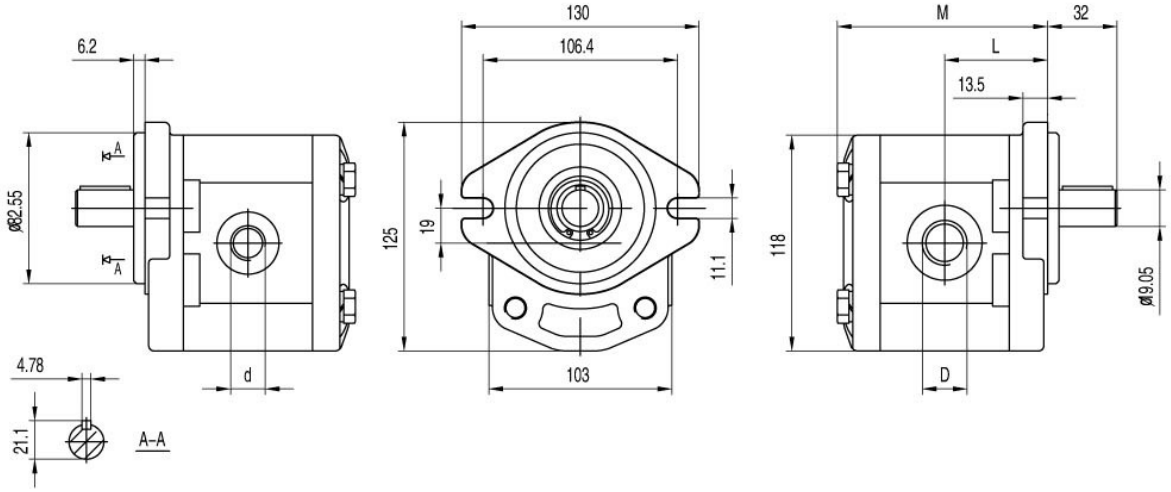
BHP2.6A1



G 1 thread depth 19,
G 3/4 thread depth 16,
G 1/2 thread depth 15,
To mount the pump, n.4 M12 screws, with a torque wrench setting fixed at 130...135 Nm.

OUTLET

INLET



Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions			
		P1	P2	P3			M	L	D	d
	(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm		
BHP2.6A1-D-6	6	250	280	300	4000	800	103	49.3	G 3/4	G 1/2
BHP2.6A1-D-8	8	250	280	300	4000	800	105	50.3	G 3/4	G 1/2
BHP2.6A1-D-10	10	250	280	300	4000	700	107	51.3	G 3/4	G 1/2
BHP2.6A1-D-12	12	250	280	300	3500	700	110	52.5	G 3/4	G 1/2
BHP2.6A1-D-14	14	250	280	300	3500	600	111	53.3	G 3/4	G 1/2
BHP2.6A1-D-16	16	250	280	300	3500	600	114	54.5	G 3/4	G 1/2
BHP2.6A1-D-19	19	250	280	300	3000	500	117	56.3	G 3/4	G 1/2
BHP2.6A1-D-22	22	250	280	300	3000	500	121	58.0	G 3/4	G 1/2
BHP2.6A1-D-25	25	250	280	300	3000	500	123	59.3	G 1	G 3/4
BHP2.6A1-D-28	28	250	280	300	3000	500	126	60.8	G 1	G 3/4
BHP2.6A1-D-30	30	230	250	260	3000	500	129	62.0	G 1	G 3/4
BHP2.6A1-D-32	32	230	250	260	3000	400	131	63.3	G 1	G 3/4
BHP2.6A1-D-36	36	200	230	250	2750	400	135	65.3	G 1	G 3/4
BHP2.6A1-D-38	38	200	230	250	2750	400	137	66.3	G 1	G 3/4
BHP2.6A1-D-40	40	170	190	210	2500	400	139	67.3	G 1	G 3/4
BHP2.6A1-D-44	44	170	190	210	2500	400	144	69.5	G 1	G 3/4

HIGH PRESSURE GEAR PUMP

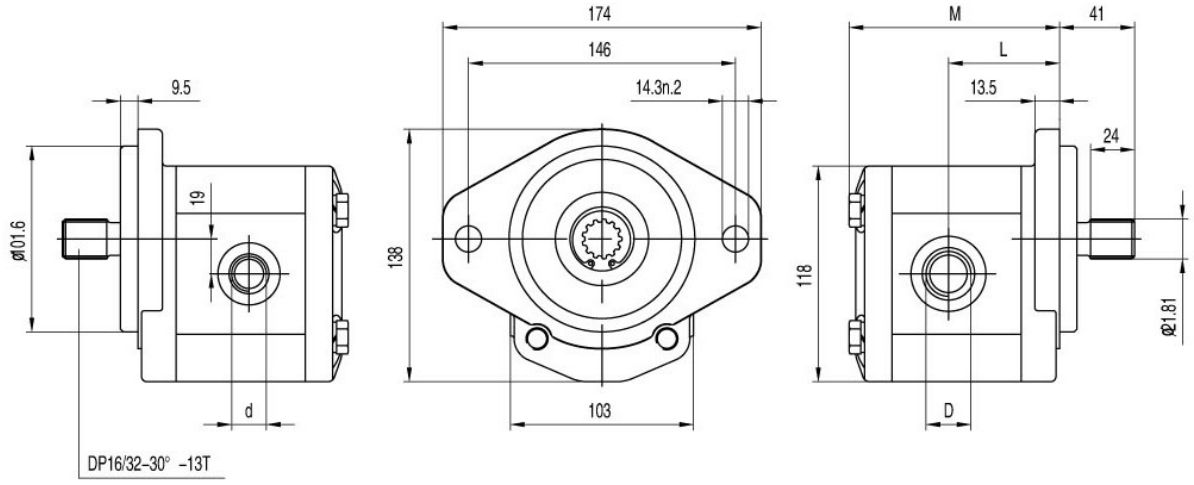
BHP2.6A2



"D" and "d" ports are machined in compliance with threaded port with O-ring seal in truncated housing SAE J1926/1(ISO J1926-1).
To mount the pump, n.4 M12 screws, with a torque wrench setting fixed at 130...135 Nm.

OUTLET

INLET



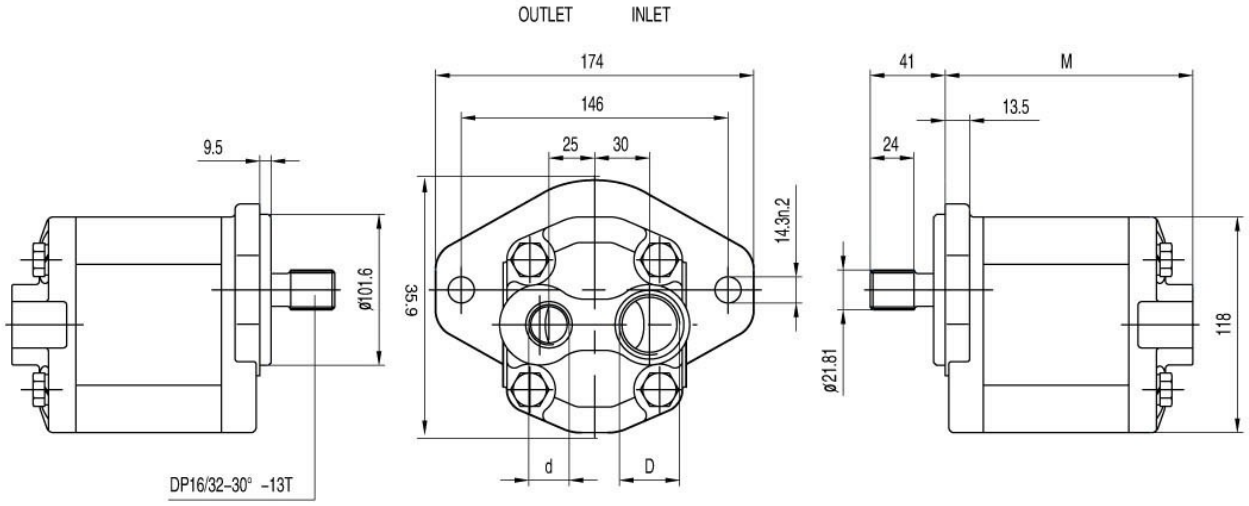
Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions			
		P1	P2	P3			M	L	D	d
	(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm		
BHP2.6A2-D-6	6	250	280	300	4000	800	103	49.3	1 1/16-12UNF	7/8-14UNF
BHP2.6A2-D-8	8	250	280	300	4000	800	105	50.3	1 1/16-12UNF	7/8-14UNF
BHP2.6A2-D-10	10	250	280	300	4000	700	107	51.3	1 1/16-12UNF	7/8-14UNF
BHP2.6A2-D-12	12	250	280	300	3500	700	110	52.5	1 1/16-12UNF	7/8-14UNF
BHP2.6A2-D-14	14	250	280	300	3500	600	111	53.3	1 1/16-12UNF	7/8-14UNF
BHP2.6A2-D-16	16	250	280	300	3500	600	114	54.5	1 1/16-12UNF	7/8-14UNF
BHP2.6A2-D-19	19	250	280	300	3000	500	117	56.3	1 1/16-12UNF	7/8-14UNF
BHP2.6A2-D-22	22	250	280	300	3000	500	121	58.0	1 1/16-12UNF	7/8-14UNF
BHP2.6A2-D-25	25	250	280	300	3000	500	123	59.3	1 5/16-12UNF	1 1/16-12UNF
BHP2.6A2-D-28	28	250	280	300	3000	500	126	60.8	1 5/16-12UNF	1 1/16-12UNF
BHP2.6A2-D-30	30	230	250	260	3000	500	129	62.0	1 5/16-12UNF	1 1/16-12UNF
BHP2.6A2-D-32	32	230	250	260	3000	400	131	63.3	1 5/16-12UNF	1 1/16-12UNF
BHP2.6A2-D-36	36	200	230	250	2750	400	135	65.3	1 5/16-12UNF	1 1/16-12UNF
BHP2.6A2-D-38	38	200	230	250	2750	400	137	66.3	1 5/16-12UNF	1 1/16-12UNF
BHP2.6A2-D-40	40	170	190	210	2500	400	139	67.3	1 5/16-12UNF	1 1/16-12UNF
BHP2.6A2-D-44	44	170	190	210	2500	400	144	69.5	1 5/16-12UNF	1 1/16-12UNF

HIGH PRESSURE GEAR PUMP

BHP2.6A2-R



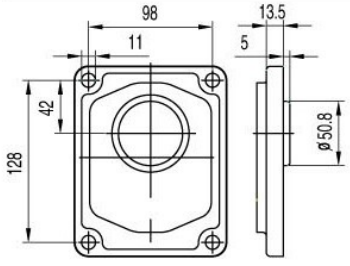
"D" and "d" ports are machined in compliance with threaded port with O-ring seal in truncated housing SAE J1926/1(ISO J1926-1).
To mount the pump, n.4 M12 screws, with a torque wrench setting fixed at 130...135 Nm.



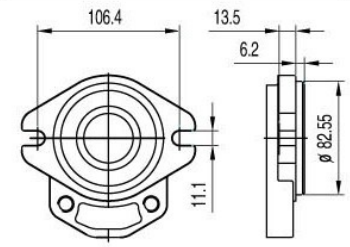
Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions		
		P1	P2	P3			M	D	d
	(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm		
BHP2.6A2-D-6-R	6	250	280	300	4000	800	118	1 1/16-12UNF	7/8-14UNF
BHP2.6A2-D-8 -R	8	250	280	300	4000	800	120	1 1/16-12UNF	7/8-14UNF
BHP2.6A2-D-10 -R	10	250	280	300	4000	700	122	1 1/16-12UNF	7/8-14UNF
BHP2.6A2-D-12 -R	12	250	280	300	3500	700	125	1 1/16-12UNF	7/8-14UNF
BHP2.6A2-D-14 -R	14	250	280	300	3500	600	126	1 1/16-12UNF	7/8-14UNF
BHP2.6A2-D-16 -R	16	250	280	300	3500	600	129	1 1/16-12UNF	7/8-14UNF
BHP2.6A2-D-19 -R	19	250	280	300	3000	500	132	1 1/16-12UNF	7/8-14UNF
BHP2.6A2-D-22 -R	22	250	280	300	3000	500	136	1 1/16-12UNF	7/8-14UNF
BHP2.6A2-D-25 -R	25	250	280	300	3000	500	138	1 1/16-12UNF	7/8-14UNF
BHP2.6A2-D-28 -R	28	250	280	300	3000	500	141	1 1/16-12UNF	7/8-14UNF
BHP2.6A2-D-30 -R	30	230	250	260	3000	500	144	1 1/16-12UNF	7/8-14UNF
BHP2.6A2-D-32 -R	32	230	250	260	3000	400	146	1 1/16-12UNF	7/8-14UNF
BHP2.6A2-D-36 -R	36	200	230	250	2750	400	150	1 1/16-12UNF	7/8-14UNF
BHP2.6A2-D-38 -R	38	200	230	250	2750	400	152	1 1/16-12UNF	7/8-14UNF
BHP2.6A2-D-40 -R	40	170	190	210	2500	400	154	1 1/16-12UNF	7/8-14UNF
BHP2.6A2-D-44 -R	44	170	190	210	2500	400	159	1 1/16-12UNF	7/8-14UNF

BHP2.6

FRONT COVER

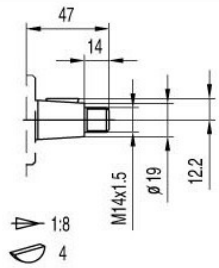


B0



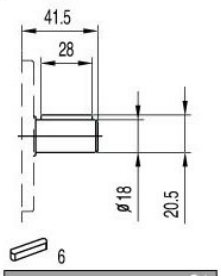
A1

SHAFTS



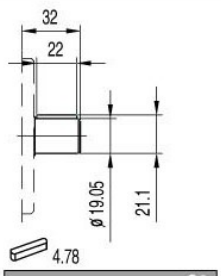
T0

Max.Torque 300 Nm



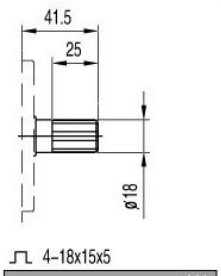
C1

Max.Torque 180 Nm



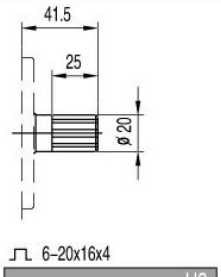
C2

Max.Torque 190 Nm



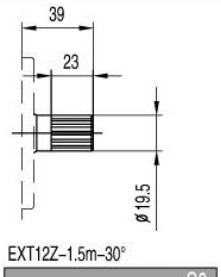
H1

Max.Torque 200 Nm



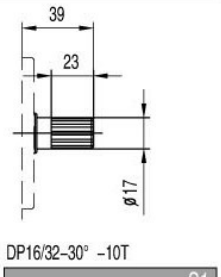
H2

Max.Torque 240 Nm



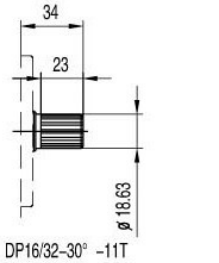
S0

Max.Torque 220 Nm



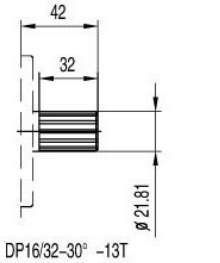
S1

Max.Torque 200 Nm



S2

Max.Torque 210 Nm

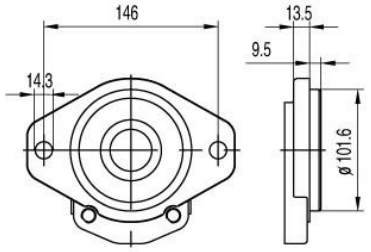


S3

Max.Torque 300 Nm

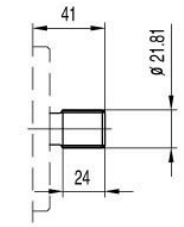
BHP2.6

FRONT COVER



A2

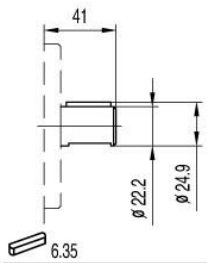
SHAFTS



DP16/32–30° –13T

S3

Max.Torque 400 Nm

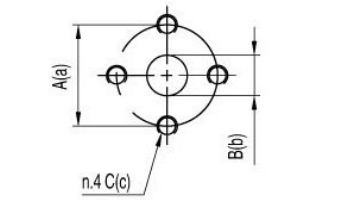


C6

Max.Torque 350 Nm

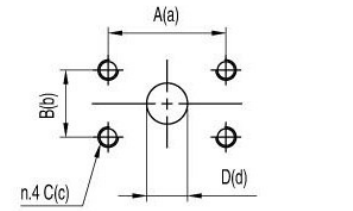
BHP2.6

PORTS



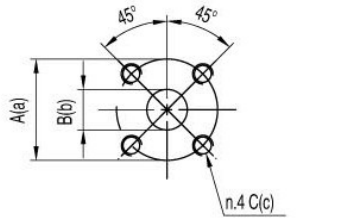
E0/E1/E2

TYPE	PORTS CODE	INLET			OUTLET		
		A	B	C	a	b	c
BHP2.6...6 ÷ BHP2.6...8	E0	30	13	M6	30	13	M6
BHP2.6...10 ÷ BHP2.6...19	E1	40	20	M8	30	13	M6
BHP2.6...22 ÷ BHP2.6...44	E2	51	25	M10	40	18	M8



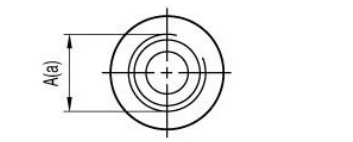
F0/F1

TYPE	PORTS CODE	INLET				OUTLET			
		A	B	C	D	a	b	c	d
BHP2.5...6 ÷ BHP2.6...16	F0	47.6	22.2	M10x1.5	20	47.6	22.2	M10x1.5	13
BHP2.6...19 ÷ BHP2.6...44	F1	52.4	26.2	M10x1.5	25	47.6	22.2	M10x1.5	20



F2

TYPE	INLET			OUTLET		
	A	B	C	a	b	c
BHP2.6...6 ÷ BHP2.6...16	55	20	M8	55	13	M8
BHP2.6...19 ÷ BHP2.6...44	55	25	M8	55	20	M8

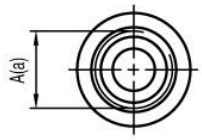


Z0/Z1/Z2

TYPE	PORTS CODE	INLET	OUTLET
		A	a
BHP2.6...6 ÷ BHP2.6...14	Z0	M22x1.5	M18x1.5
BHP2.6...16 ÷ BHP2.6...19	Z1	M27x2	M22x1.5
BHP2.6...22 ÷ BHP2.6...44	Z2	M33x2	M27x2

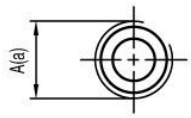
BHP2.6

PORTS



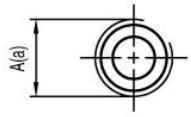
U0/U1

TYPE	PORTS CODE	INLET	OUTLET
		A	a
BHP2.6...6 ÷ BHP2.6...22	U0	1 1/16–12 UNF	7/8–14 UNF
BHP2.6...25 ÷ BHP2.6...44	U1	1 5/16–12 UNF	1 1/16–12 UNF



L0/L1

TYPE	PORTS CODE	INLET	OUTLET
		A	a
BHP2.6...6 ÷ BHP2.6...22	L0	G3/4	G1/2
BHP2.6...25 ÷ BHP2.6...44	L1	G 1	G3/4



R0/R1

TYPE	PORTS CODE	INLET	OUTLET
		A	a
BHP2.6...10 ÷ BHP2.6...22	R0	PT3/4	PT1/2
BHP2.6...25 ÷ BHP2.6...44	R1	PT 1	PT3/4

HIGH PRESSURE GEAR PUMP

BDP2.5

HOW TO ORDER

BD	P	2.5	Front cover	Rotation	Size	Shaft	Ports	Ports position	Seals	Options
Series	Pump	Group	A0	D Clockwise S Counter clockwise R Reversible	23 25 26.5 28 30 32 36 40					

Ports position

Omit–Side inlet and side outlet
A–Front inlet and front outlet
B–Back inlet and front outlet
C–Back inlet and side outlet
D–Side inlet and front outlet
R–Back inlet and back outlet

Seals

Omit–Range between –10˚C and +80˚C,inlet pressure up to max. 3 bar absolute.
V–Version suitable for fluid at hi–temperatures, range between –10˚C and +120˚C.
H–Version suitable for fluid at low–temperatures, range between –40˚C and +80˚C.
T–Version suitable for inlet pressure up to max. 3 and 6 bar absolute.
N–Version suitable for inlet pressure up to max. 3 and 10 bar absolute.

Examples:

BDP2.5–A0–D–23–C0–Z0–R = clockwise rotation, 23 cc/rev, A0 front cover, C0 parallel shaft, setting ports Z0 type, Ports position (R),standard seals

BDP2.5–A0–D–23–H1–L0–R = clockwise rotation, 23 cc/rev, A0 front cover, H1 rectangle splined shaft, setting ports L0 type, Ports position (R),standard seals

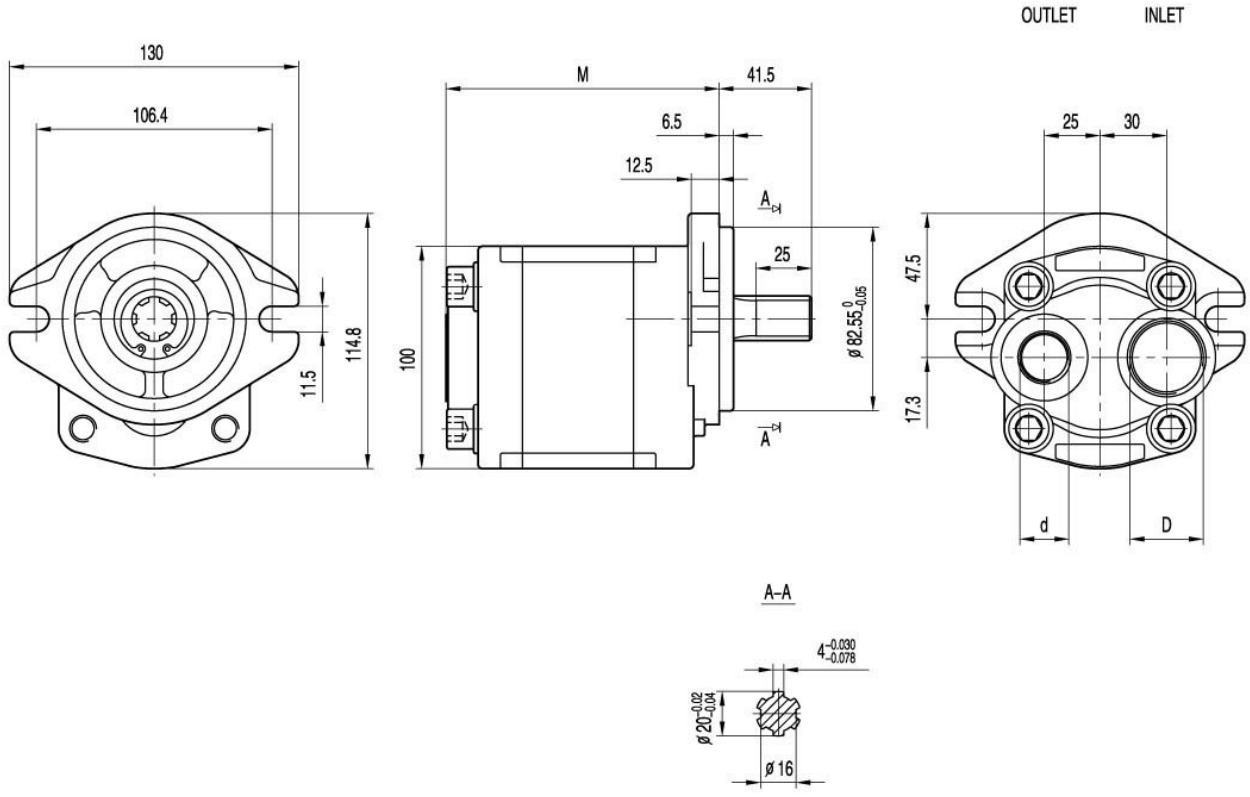
BDP2.5–A0–D–23–S3–F0–N = clockwise rotation, 23 cc/rev, A0 front cover, SAE B splined 13T shaft(S3), setting ports F0 type, high pressure seals(N)

HIGH PRESSURE GEAR PUMP

BDP2.5A0-R



G 1 thread depth 21,
G 1/2 thread depth 16,
To mount the pump, n.4 M12 screws,
with a torque wrench setting fixed
at 75...80 Nm.



Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions		
		P1	P2	P3			M	D	d
	(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm		
BDP2.5A0-D-23-R	23	230	250	260	3500	600	118	G 1	G 1/2
BDP2.5A0-D-25-R	25	230	250	260	3500	600	120	G 1	G 1/2
BDP2.5A0-D-26.5-R	26.5	230	250	260	3500	600	122	G 1	G 1/2
BDP2.5A0-D-28-R	28	230	250	260	3500	600	124	G 1	G 1/2
BDP2.5A0-D-30-R	30	230	250	260	3000	600	126	G 1	G 1/2
BDP2.5A0-D-32-R	32	200	230	250	3000	600	129	G 1	G 1/2
BDP2.5A0-D-36-R	36	200	230	250	2750	500	133	G 1	G 1/2
BDP2.5A0-D-40-R	40	160	180	200	2500	500	138	G 1	G 1/2

HIGH PRESSURE GEAR PUMP

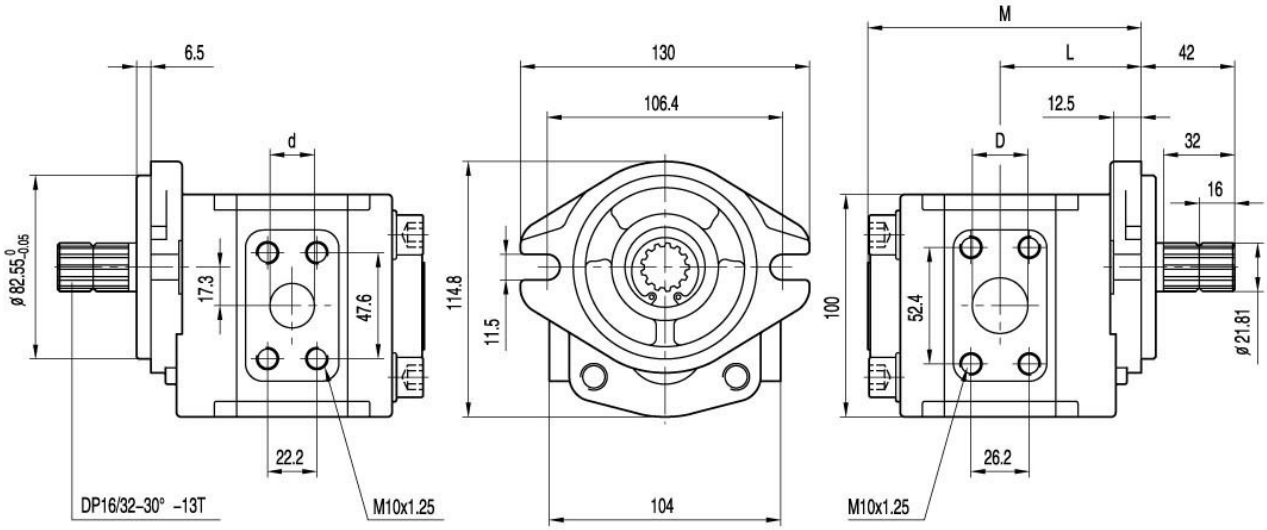
BDP2.5A0



M10x1.25 thread depth 15,
To mount the pump, n.4 M12 screws,
with a torque wrench setting fixed
at 75...80 Nm.

OUTLET

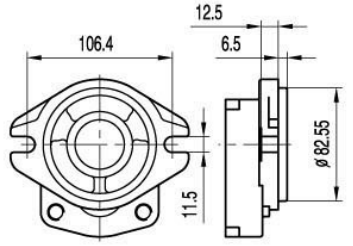
INLET



Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions			
		P1	P2	P3			M	L	D	d
	(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm	mm	mm
BDP2.5A0-D-23	23	230	250	260	3500	600	118	60.5	25	20
BDP2.5A0-D-25	25	230	250	260	3500	600	120	61.8	25	20
BDP2.5A0-D-26.5	26.5	230	250	260	3500	600	122	62.8	25	20
BDP2.5A0-D-28	28	230	250	260	3500	600	124	63.8	25	20
BDP2.5A0-D-30	30	230	250	260	3000	600	126	64.8	25	20
BDP2.5A0-D-32	32	200	230	250	3000	600	129	66.3	25	20
BDP2.5A0-D-36	36	200	230	250	2750	500	133	68.3	25	20
BDP2.5A0-D-40	40	160	180	200	2500	500	138	70.8	28	20

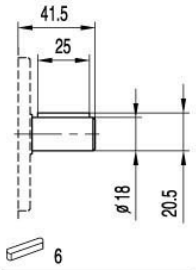
BDP2.5

FRONT COVER



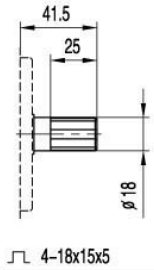
A0

SHAFTS



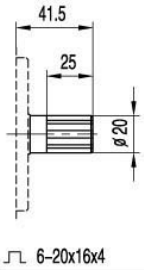
C0

Max.Torque 180 Nm



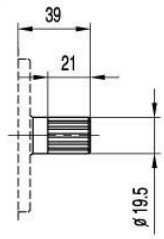
H0

Max.Torque 200 Nm



H1

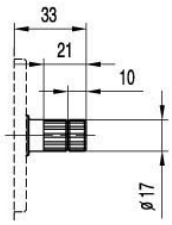
Max.Torque 240 Nm



EXT12Z-1.5m-30°

S0

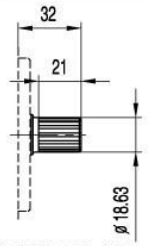
Max.Torque 220 Nm



DP16/32-30° -10T

S1

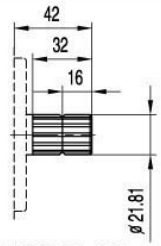
Max.Torque 200 Nm



DP16/32-30° -11T

S2

Max.Torque 210 Nm



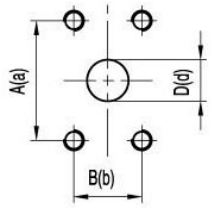
DP16/32-30° -13T

S3

Max.Torque 300 Nm

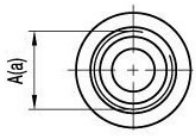
BDP2.5

PORTS



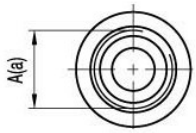
F0

TYPE	INLET				OUTLET			
	A	B	C	D	a	b	c	d
BDP2.5...23 ÷ BDP2.5...36	52.4	26.2	M10x1.25	25	47.6	22.2	M10x1.25	20
BDP2.5...40	52.4	26.2	M10x1.25	28	47.6	22.2	M10x1.25	20



L0

TYPE	INLET	OUTLET
	A	a
BDP2.5...23 ÷ BDP2.5...40	G 1	G 1/2



Z0

TYPE	INLET	OUTLET
	A	a
BDP2.5...23 ÷ BDP2.5...40	M33x2	M22x1.5

BHP3 [BHM3]

HOW TO ORDER

BH	P	3	Front cover	Rotation	Size	Shaft	Ports	Ports position	Seals	Options
Series	Pump Motor	Group	B0 B1 A0 A1	D Clockwise S Counter clockwise R Reversible	20 22 26 33 39 46 50 52 55 63 71					

Options

Drain

Q0– internal drain
Q1– external drain G3/8
Q2– external drain 3/4–16 UNF
Q3– external drain G1/4
Q4– external drain 9/16–18 UNF

Ports position

Omit–Side inlet and side outlet
A–Front inlet and front outlet
B–Back inlet and front outlet
C–Back inlet and side outlet
D–Side inlet and front outlet
R–Back inlet and back outlet

Seals

Omit–Range between –10˚C and +80˚C,inlet pressure up to max. 3 bar absolute.
V–Version suitable for fluid at hi–temperatures, range between –10˚C and +120˚C.
H–Version suitable for fluid at low–temperatures, range between –40˚C and +80˚C.
T–Version suitable for inlet pressure up to max. 3 and 6 bar absolute.
N–Version suitable for inlet pressure up to max. 3 and 10 bar absolute.

Examples:

BHP3–B0–D–20–C0–F0 = clockwise rotation, 20 cc/rev, B0 front cover, C0 parallel shaft, setting ports F0 type, standard seals

BHP3–B1–D–20–T0–E0 = clockwise rotation, 20 cc/rev, B1 front cover, 1:8 tapered shaft(T0), setting ports E0 type, standard seals

BHP3–A0–D–20–C2–F4–N= clockwise rotation, 20 cc/rev, A0 front cover, C2 parallel shaft, setting ports F4 type, high pressure seals(N)

HIGH PRESSURE GEAR PUMP

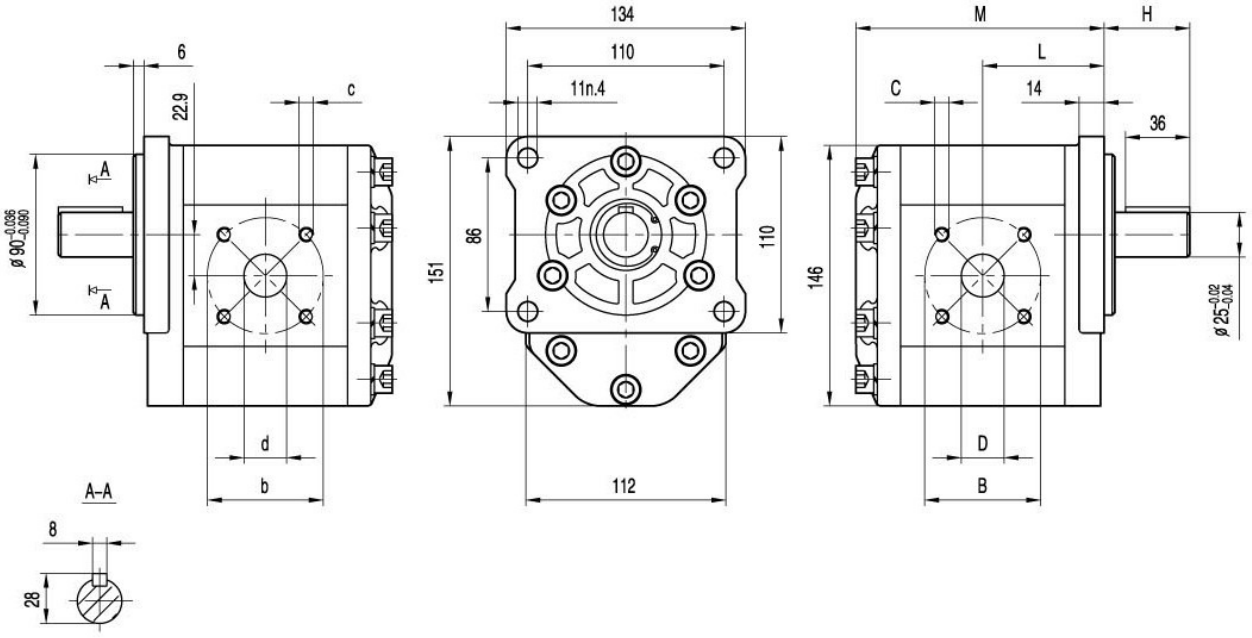
BHP3B0



M10 thread depth 18.
M8 thread depth 16.
To mount the pump, n.8 M10 screws, with a torque wrench setting fixed at 47 ± 3 Nm.

OUTLET

INLET



Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions								
		P1	P2	P3			M	L	H	B	D	C	b	d	c
	(cm³/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm	mm	mm	mm		mm	mm	
BHP3B0-D-20	20	250	265	280	3500	600	128	63	48	50	20	M8	50	16.5	M8
BHP3B0-D-22	22	250	265	280	3500	600	130	64	48	50	20	M8	50	16.5	M8
BHP3B0-D-26	26	250	265	280	3000	600	133	65	48	50	20	M8	50	20	M8
BHP3B0-D-33	33	230	250	270	3000	500	139	68	48	65	25	M8	65	20	M8
BHP3B0-D-39	39	230	250	270	3000	500	146	72	48	65	25	M8	65	20	M8
BHP3B0-D-46	46	230	250	270	3000	500	152	75	48	65	25	M8	65	20	M8
BHP3B0-D-50	50	220	240	260	3000	500	156	77	51	76	33	M10	76	25	M10
BHP3B0-D-52	52	220	240	260	3000	500	158	78	51	76	33	M10	76	25	M10
BHP3B0-D-55	55	200	230	250	2800	400	160	79	51	76	33	M10	76	25	M10
BHP3B0-D-63	63	200	230	250	2800	400	168	83	51	76	33	M10	76	25	M10
BHP3B0-D-71	71	180	200	220	2500	400	175	86	51	76	33	M10	76	25	M10

HIGH PRESSURE GEAR PUMP

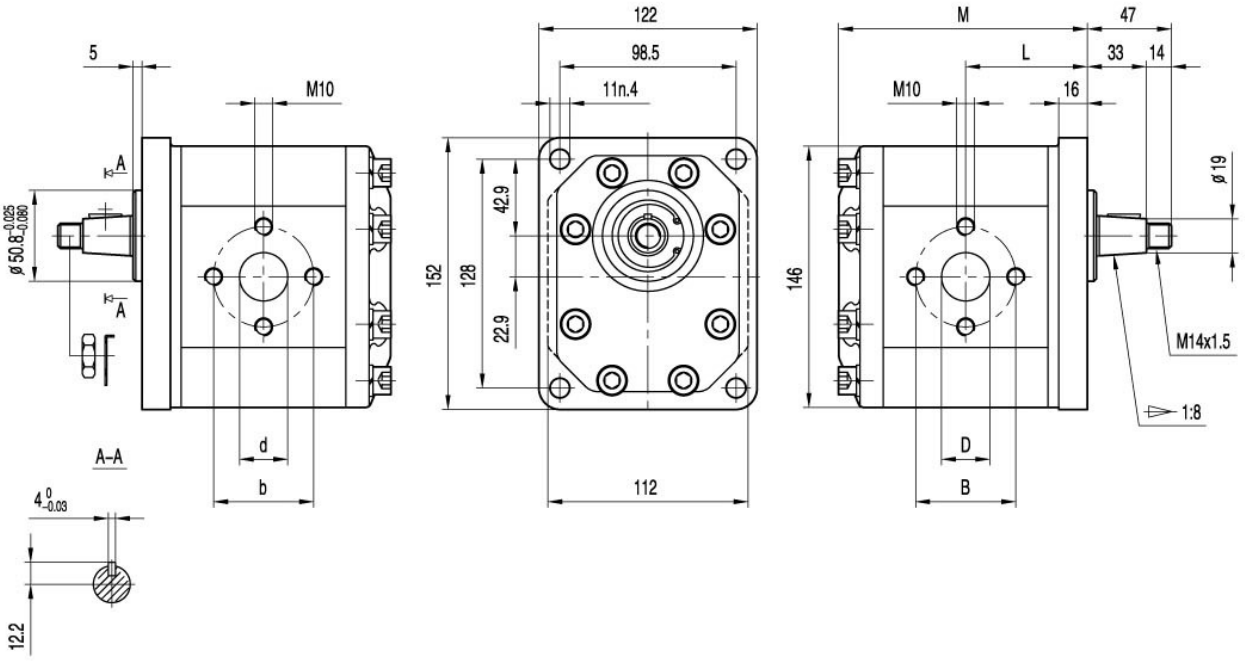
BHP3B1



M10 thread depth 18,
To mount the pump, n.8 M10 screws, with a torque wrench setting fixed at 47 ± 3 Nm.
Shaft M14x1.5 nut, with a torque wrench setting fixed at 80 Nm.

OUTLET

INLET



Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions					
		P1	P2	P3			M	L	B	D	b	d
	(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm	mm	mm	mm	mm
BHP3B1-D-20	20	250	265	280	3500	600	128	63	56	27	56	19
BHP3B1-D-22	22	250	265	280	3500	600	130	64	56	27	56	19
BHP3B1-D-26	26	250	265	280	3000	600	133	65	56	27	56	19
BHP3B1-D-33	33	230	250	270	3000	500	139	68	56	27	56	19
BHP3B1-D-39	39	230	250	270	3000	500	146	72	56	27	56	19
BHP3B1-D-46	46	230	250	270	3000	500	152	75	51	27	51	27
BHP3B1-D-50	50	220	240	260	3000	500	156	77	56	27	56	27
BHP3B1-D-52	52	220	240	260	3000	500	158	78	56	27	56	27
BHP3B1-D-55	55	200	230	250	2800	400	160	79	62	33	51	27
BHP3B1-D-63	63	200	230	250	2800	400	168	83	62	33	51	27
BHP3B1-D-71	71	180	200	220	2500	400	175	86	62	33	51	27

Patriot
HIGH PRESSURE GEAR PUMP

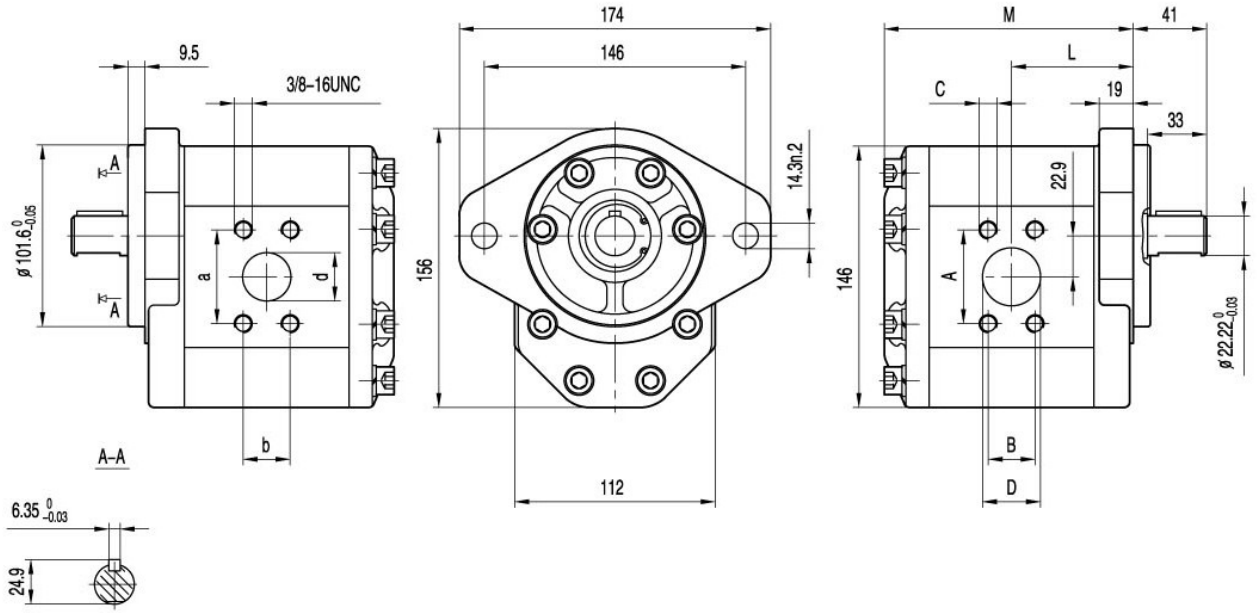
BHP3A0



3/8–16 UNC thread depth 19.
7/16–14 UNC thread depth 19.
To mount the pump, n.8 M10 screws, with a torque wrench setting fixed at 47 ± 3 Nm.

OUTLET

INLET



Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions								
		P1	P2	P3			M	L	A	B	C	D	a	b	d
	(cm³/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm	mm	mm	UNC	mm	mm	mm	mm
BHP3A0-D-20	20	250	265	280	3500	600	128	63	52.4	26.2	3/8	27	47.6	22.2	19
BHP3A0-D-22	22	250	265	280	3500	600	130	64	52.4	26.2	3/8	27	47.6	22.2	19
BHP3A0-D-26	26	250	265	280	3000	600	133	65	52.4	26.2	3/8	27	47.6	22.2	19
BHP3A0-D-33	33	230	250	270	3000	500	139	68	52.4	26.2	3/8	27	47.6	22.2	19
BHP3A0-D-39	39	230	250	270	3000	500	146	72	52.4	26.2	3/8	27	47.6	22.2	19
BHP3A0-D-46	46	230	250	270	3000	500	152	75	52.4	26.2	3/8	27	47.6	22.2	19
BHP3A0-D-50	50	220	240	260	3000	500	156	77	52.4	26.2	3/8	27	47.6	22.2	19
BHP3A0-D-52	52	220	240	260	3000	500	158	78	52.4	26.2	3/8	27	47.6	22.2	19
BHP3A0-D-55	55	200	230	250	2800	400	160	79	58.7	30.2	7/16	33	52.4	26.2	27
BHP3A0-D-63	63	200	230	250	2800	400	168	83	58.7	30.2	7/16	33	52.4	26.2	27
BHP3A0-D-71	71	180	200	220	2500	400	175	86	58.7	30.2	7/16	33	52.4	26.2	27

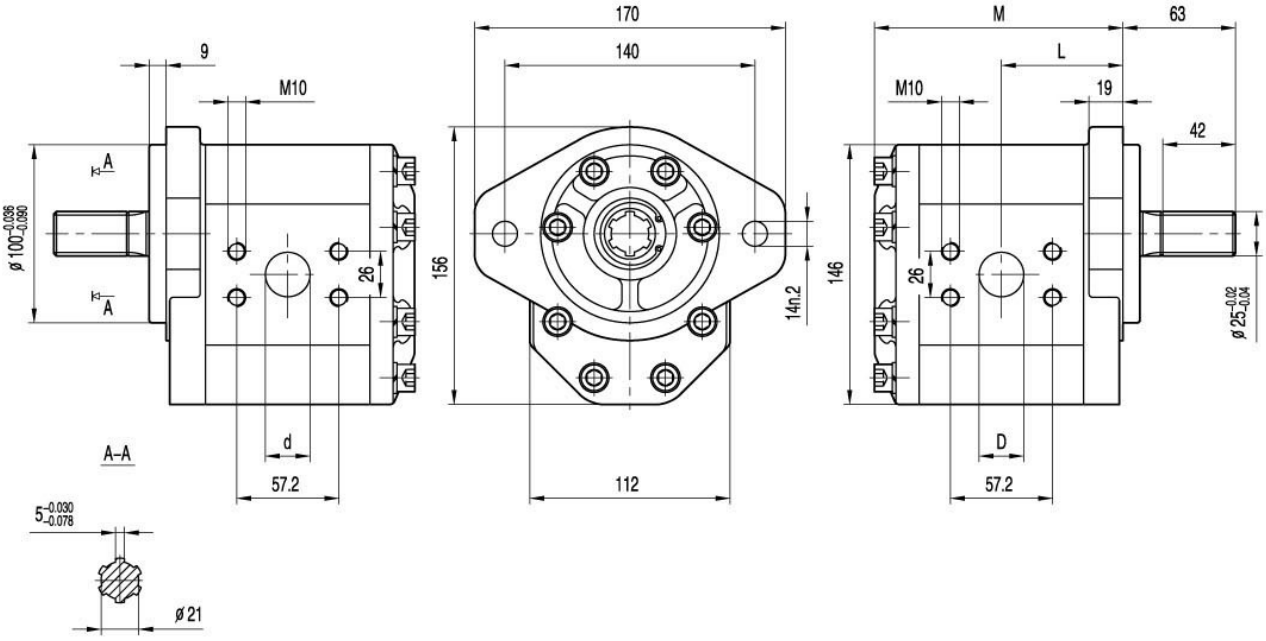
BHP3A1



M10 thread depth 19.
To mount the pump, n.8 M10 screws, with a torque wrench setting fixed at 47 ± 3 Nm.

OUTLET

INLET

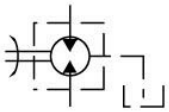


Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions			
		P1	P2	P3			M	L	D	d
	(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm	mm	mm
BHP3A1-D-20	20	250	265	280	3500	600	128	63	25	20
BHP3A1-D-25	25	250	265	280	3000	600	133	65	25	20
BHP3A1-D-32	32	230	250	270	3000	500	139	68	30	20
BHP3A1-D-40	40	230	250	270	3000	500	146	72	35	20
BHP3A1-D-50	50	220	240	260	3000	500	156	77	35	25
BHP3A1-D-63	63	200	230	250	2800	400	168	83	35	25

HIGH PRESSURE GEAR PUMP

BHM3B1

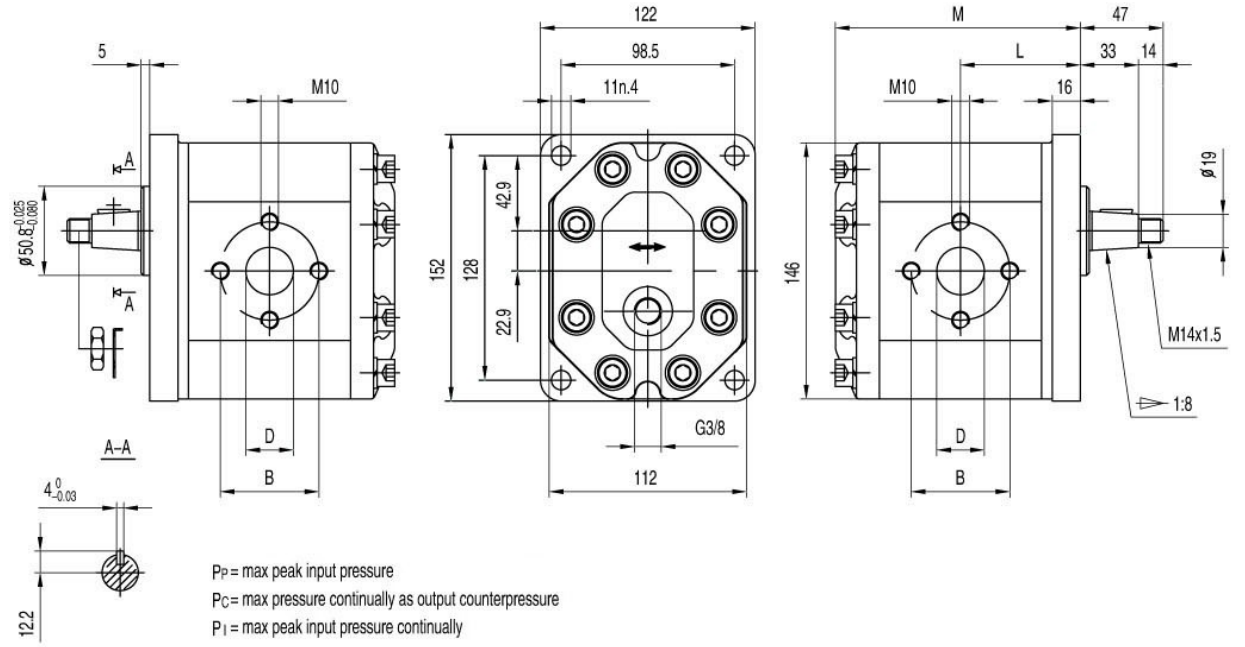




M10 thread depth 18,
To mount the pump, n.8 M10 screws,
with a torque wrench setting fixed
at47 ± 3Nm.
Shaft M14x1.5 nut,with a torque
wrench setting fixed at 80 Nm.

OUTLET

INLET

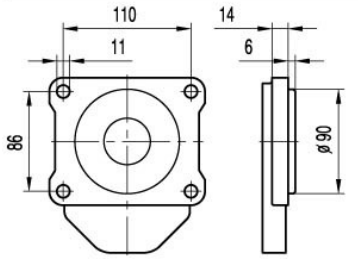


P_P = max peak input pressure
P_C = max pressure continually as output counterpressure
P_I = max peak input pressure continually

Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions			
		P_I	P_C	P_P			M	L	B	D
	(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm	mm	mm
BHM3B1-R-20	20	280	265	290	3500	600	128	63	56	27
BHM3B1-R-22	22	280	265	290	3500	600	130	64	56	27
BHM3B1-R-26	26	280	265	290	3000	600	133	65	56	27
BHM3B1-R-33	33	270	250	280	3000	500	139	68	56	27
BHM3B1-R-39	39	270	250	280	3000	500	146	72	56	27
BHM3B1-R-46	46	270	250	280	3000	500	152	75	51	27
BHM3B1-R-50	50	260	240	270	3000	500	156	77	56	27
BHM3B1-R-52	52	260	240	270	3000	500	158	78	56	27
BHM3B1-R-55	55	250	230	260	2800	400	160	79	62	33
BHM3B1-R-63	63	250	230	260	2800	400	168	83	62	33
BHM3B1-R-71	71	220	200	230	2500	400	175	86	62	33

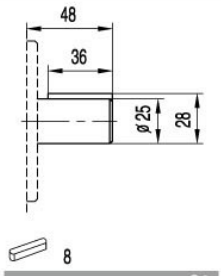
BHP3

FRONT COVER



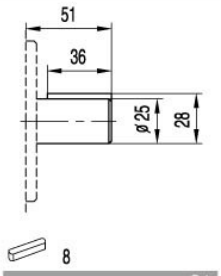
B0

SHAFTS



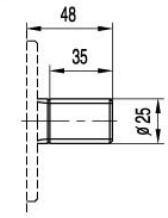
C0

Max.Torque 450 Nm



C1

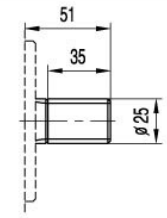
Max.Torque 450 Nm



6–25x20.1x6

H0

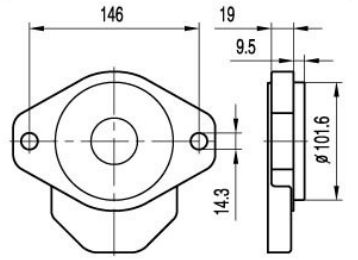
Max.Torque 500 Nm



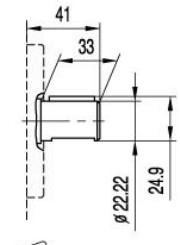
6–25x20.1x6

H1

Max.Torque 500 Nm

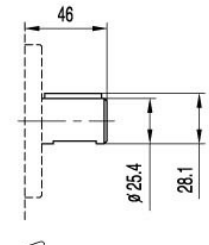


A0



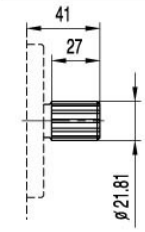
C2

Max.Torque 400 Nm



C3

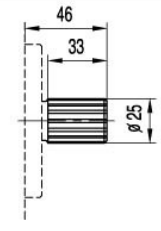
Max.Torque 450 Nm



DP16/32–30° –13T

S0

Max.Torque 500 Nm



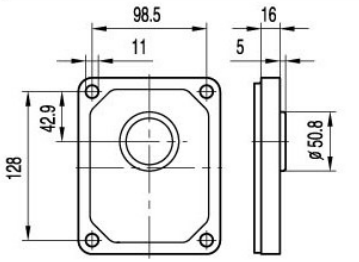
DP16/32–30° –15T

S1

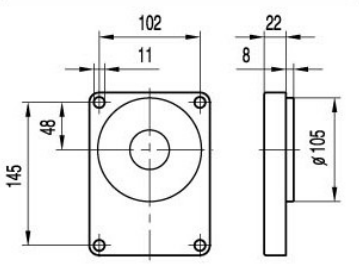
Max.Torque 600 Nm

BHP3

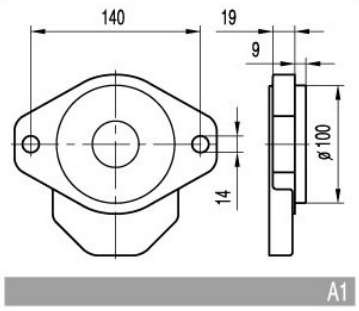
FRONT COVER



B1

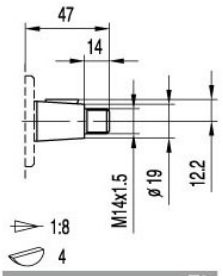


B2



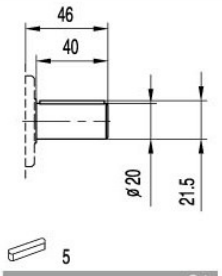
A1

SHAFTS



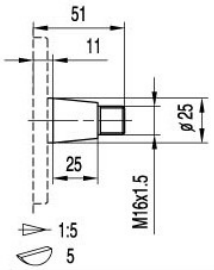
T0

Max.Torque 300 Nm



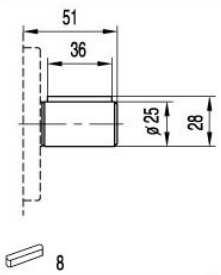
C4

Max.Torque 350 Nm



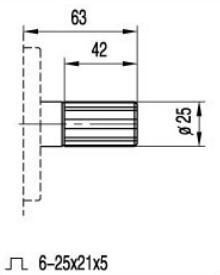
T1

Max.Torque 350 Nm



C1

Max.Torque 450 Nm

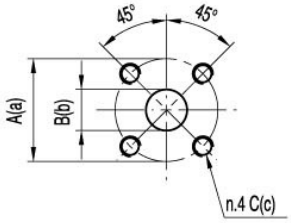


H2

Max.Torque 500 Nm

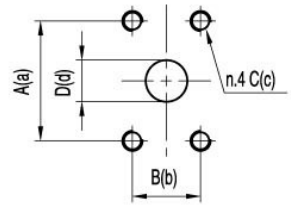
BHP3

PORTS



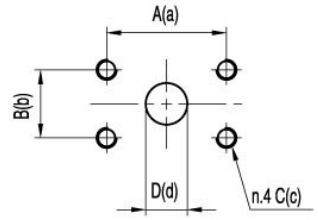
F0/F1/F2/F3

TYPE	PORTS CODE	INLET			OUTLET		
		A	B	C	a	b	c
BHP3...20 ÷ BHP3...26	F0	50	20	M8	50	20	M8
BHP3...33 ÷ BHP3...46	F1	65	25	M8	65	20	M8
BHP3...50 ÷ BHP3...71	F2	76	33	M10	76	25	M10
BHP3...50 ÷ BHP3...63	F3	76	33	M8	76	25	M8



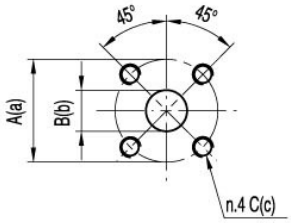
F4/F5

TYPE	PORTS CODE	INLET				OUTLET			
		A	B	C	D	a	b	c	d
BHP3...20 ÷ BHP3...52	F4	52.4	26.2	3/8–16UNC	27	47.6	22.2	3/8–16UNC	19
BHP3...55 ÷ BHP3...71	F5	58.7	30.2	7/16–14UNC	33	52.4	26.2	3/8–16UNC	27



F6

TYPE	INLET				OUTLET			
	A	B	C	D	a	b	c	d
BHP3...20 ÷ BHP3...25	57.2	26	M10	25	57.2	26	M10	20
BHP3...32	57.2	26	M10	30	57.2	26	M10	20
BHP3...40	57.2	26	M10	35	57.2	26	M10	20
BHP3...50 ÷ BHP3...63	57.2	26	M10	35	57.2	26	M10	25

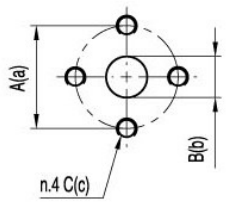


F7

TYPE	INLET			OUTLET		
	A	B	C	a	b	c
BHP3...20 ÷ BHP3...71	55	27	M8	55	19	M8

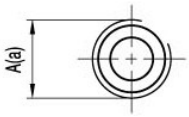
BHP3

PORTS



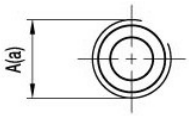
E0/E1/E2/E3

TYPE	PORTS CODE	INLET			OUTLET		
		A	B	C	a	b	c
BHP3...20 ÷ BHP3...39	E0	56	27	M10	56	19	M10
BHP3...46	E1	51	27	M10	51	27	M10
BHP3...50 ÷ BHP3...52	E2	56	27	M10	56	27	M10
BHP3...55 ÷ BHP3...71	E3	62	33	M10	51	27	M10



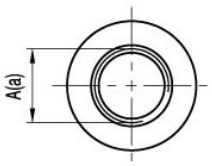
L0/L1/L2/L3

TYPE	PORTS CODE	INLET	OUTLET
		A	a
BHP3...20 ÷ BHP2...22	L0	G3/4	G3/4
BHP3...26 ÷ BHP2...39	L1	G 1	G3/4
BHP3...46 ÷ BHP2...63	L2	G1 1/4	G 1
BHP3...71	L3	G1 1/2	G1 1/4



R0/R1/R2/R3

TYPE	PORTS CODE	INLET	OUTLET
		A	a
BHP3...20 ÷ BHP2...22	R0	PT3/4	PT3/4
BHP3...26 ÷ BHP2...39	R1	PT 1	PT3/4
BHP3...46 ÷ BHP2...63	R2	PT1 1/4	PT 1
BHP3...71	R3	PT1 1/2	PT1 1/4



U0/U1/U2

TYPE	PORTS CODE	INLET	OUTLET
		A	a
BHP3...20 ÷ BHP3...33	U0	1 5/16–12UNF	1 1/16–12UNF
BHP3...39 ÷ BHP3...52	U1	1 5/8–12UNF	1 1/16–12UNF
BHP3...55 ÷ BHP3...71	U2	1 7/8–12UNF	1 5/16–12UNF

BAP3.5

HOW TO ORDER

BA	P	3.5	Front cover	Rotation	Size	Shaft	Ports	Ports position	Seals	Options
Series	Pump	Group	Q0	D Clockwise	40					
			Q1	S Counter clockwise	50					
			A0	R Reversible	63					
			A1		71					
					80					
					90					
					100					

Ports position

Omit–Side inlet and side outlet
A–Front inlet and front outlet
B–Back inlet and front outlet
C–Back inlet and side outlet
D–Side inlet and front outlet
R–Back inlet and back outlet

Seals

Omit–Range between –10˚C and +80˚C,inlet pressure up to max. 3 bar absolute.
V–Version suitable for fluid at hi–temperatures, range between –10˚C and +120˚C.
H–Version suitable for fluid at low–temperatures, range between –40˚C and +80˚C.
T–Version suitable for inlet pressure up to max. 3 and 6 bar absolute.
N–Version suitable for inlet pressure up to max. 3 and 10 bar absolute.

Examples:

BAP3.5–Q0–D–40–C0–F0 = clockwise rotation, 40 cc/rev, Q0 front cover, C0 parallel shaft, setting ports F0 type, standard seals

BAP3.5–Q1–D–40–S3–F2 = clockwise rotation, 40 cc/rev, Q1 front cover, splined shaft 14T(S3), setting ports F2 type, standard seals

BAP3.5–A0–D–50–C1–F5 = clockwise rotation, 50 cc/rev, A0 front cover, C1 parallel shaft, setting ports F5 type, standard seals

HIGH PRESSURE GEAR PUMP

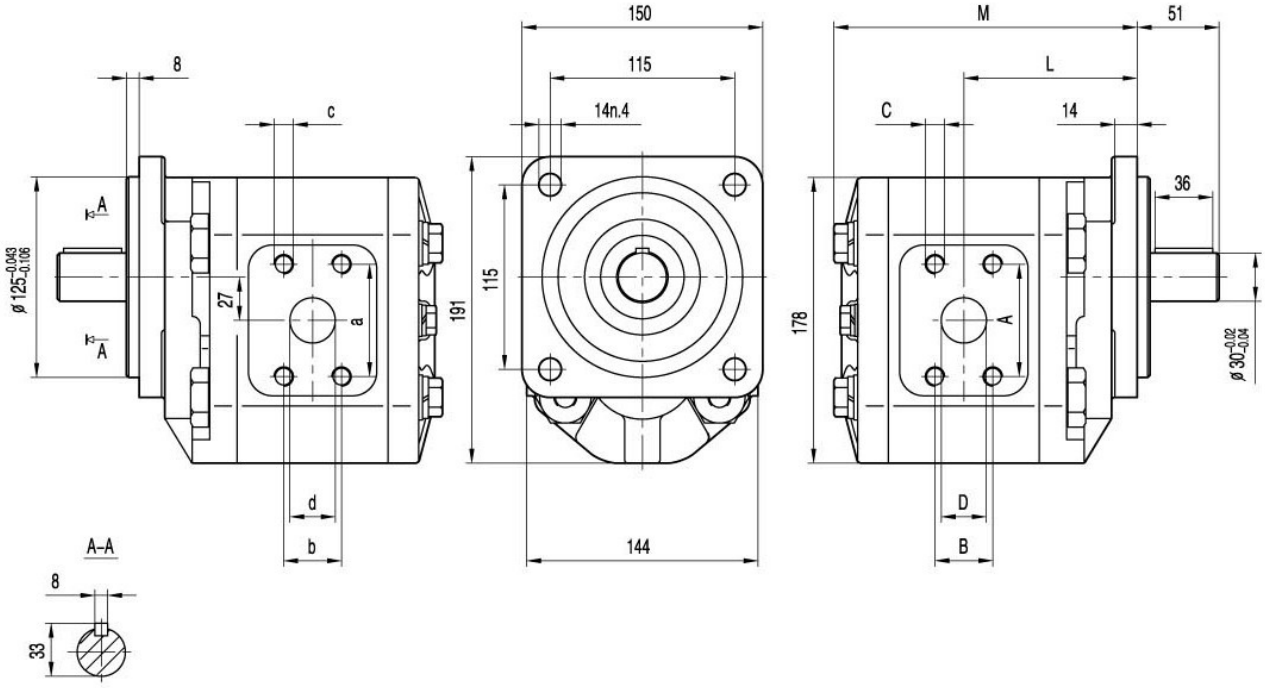
BAP3.5Q0



M8 thread depth 16.
M10 thread depth 20.
M12 thread depth 20.
To mount the pump, n.8 M14 screws, with a torque wrench setting fixed at 185 ± 5 Nm.

OUTLET

INLET



Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions									
		P1	P2	P3			M	L	A	B	C	D	a	b	c	d
	(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm	mm	mm		mm	mm	mm		mm
BAP3.5Q0-D-40	40	250	265	280	2750	600	189	108	48	22	M8	20	48	22	M8	20
BAP3.5Q0-D-50	50	250	265	280	2750	600	195	111	52	26	M10	25	48	22	M8	20
BAP3.5Q0-D-63	63	250	265	280	2750	500	203	115	60	30	M10	32	52	26	M10	25
BAP3.5Q0-D-71	71	230	250	270	2500	500	208	117	70	36	M12	35	60	30	M10	32
BAP3.5Q0-D-80	80	230	250	270	2500	500	213	120	70	36	M12	35	60	30	M10	32
BAP3.5Q0-D-90	90	200	230	250	2500	500	219	123	70	36	M12	40	60	30	M10	32
BAP3.5Q0-D-100	100	200	230	250	2500	500	225	126	70	36	M12	40	60	30	M10	32

HIGH PRESSURE GEAR PUMP

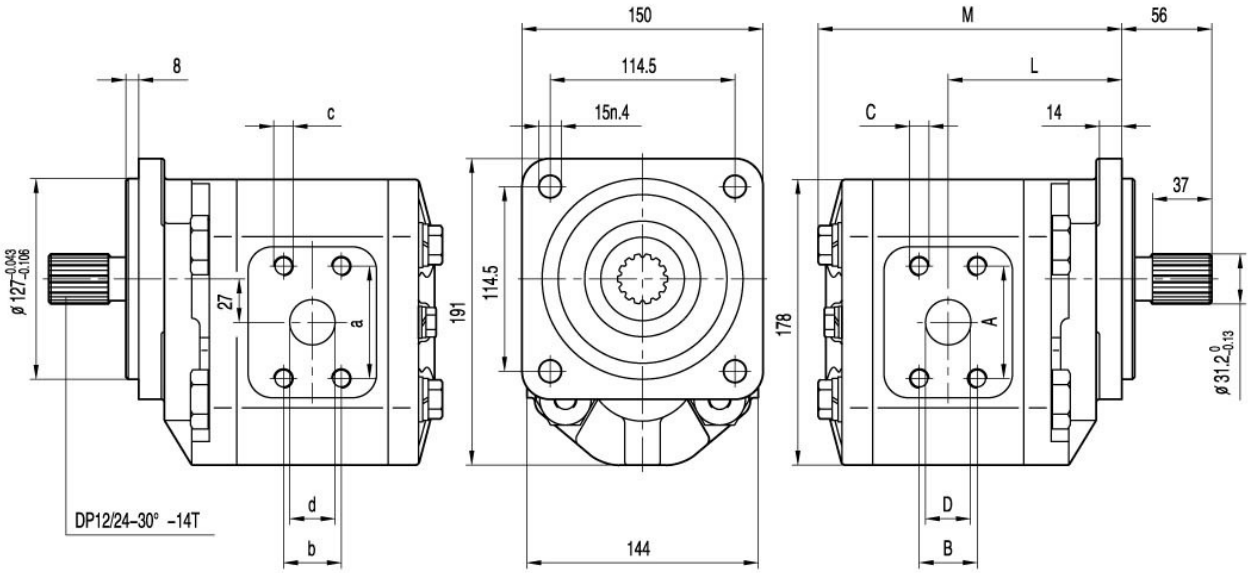
BAP3.5Q1



M8 thread depth 16.
M12 thread depth 20.
To mount the pump, n.8 M14 screws, with a torque wrench setting fixed at 185 ± 5 Nm.

OUTLET

INLET



Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions									
		P1	P2	P3			M	L	A	B	C	D	a	b	c	d
	(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm	mm	mm		mm	mm	mm		mm
BAP3.5Q1-D-40	40	250	265	280	2750	600	189	108	60	30	M10	32	52	26	M10	25
BAP3.5Q1-D-50	50	250	265	280	2750	600	195	111	60	30	M10	32	52	26	M10	25
BAP3.5Q1-D-63	63	250	265	280	2750	500	203	115	60	30	M10	32	52	26	M10	25
BAP3.5Q1-D-71	71	230	250	270	2500	500	208	117	70	36	M12	35	60	30	M10	32
BAP3.5Q1-D-80	80	230	250	270	2500	500	213	120	70	36	M12	35	60	30	M10	32
BAP3.5Q1-D-90	90	200	230	250	2500	500	219	123	70	36	M12	40	60	30	M10	32
BAP3.5Q1-D-100	100	200	230	250	2500	500	225	126	70	36	M12	40	60	30	M10	32

HIGH PRESSURE GEAR PUMP

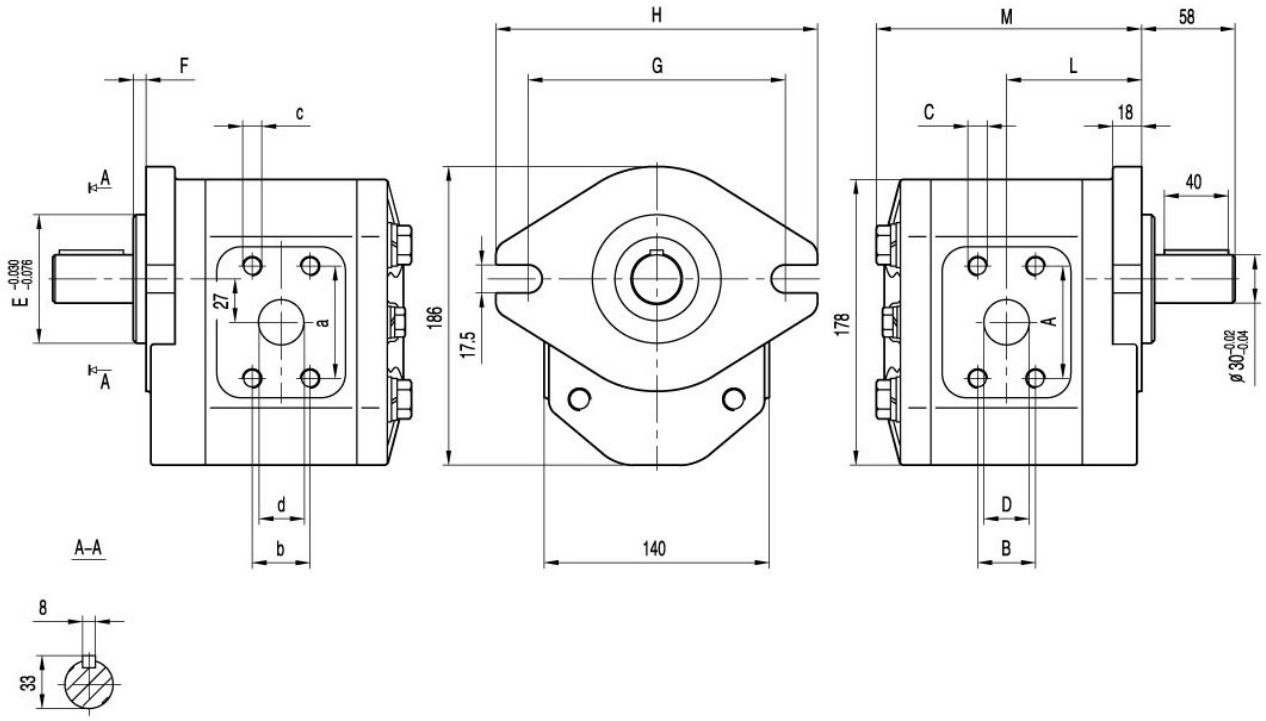
BAP3.5A0[BAP3.5A1]



M8 thread depth 16.
M12 thread depth 20.
To mount the pump, n.8 M14 screws, with a torque wrench setting fixed at 145 ± 5 Nm.

OUTLET

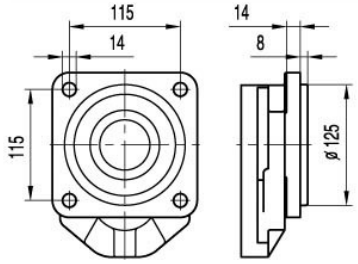
INLET



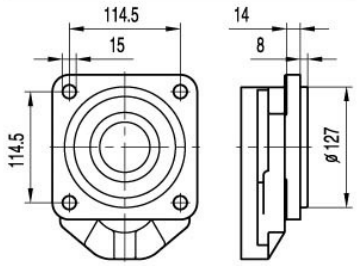
Type	Displacement	Max pressure			Max. speed	Min. speed	Dimensions													
		P1	P2	P3			M	L	E	F	G	H	A	B	C	D	a	b	c	d
	(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm	mm	mm	mm	mm	mm	mm	mm		mm	mm	mm		mm
BAP3.5A0–D–50	50	250	265	280	2750	600	171	87	80	8	160	200	60	30	M10	32	52	26	M8	25
BAP3.5A0–D–63	63	250	265	280	2750	500	179	91	80	8	160	200	60	30	M10	32	52	26	M8	25
BAP3.5A0–D–71	71	230	250	270	2500	500	184	93	80	8	160	200	60	36	M10	35	60	36	M10	28
BAP3.5A0–D–80	80	230	250	270	2500	500	189	96	80	8	160	200	60	36	M10	35	60	36	M10	28
BAP3.5A0–D–90	90	200	230	250	2500	500	195	99	80	8	160	200	60	36	M10	40	60	36	M10	32
BAP3.5A1–D–100	100	200	230	250	2500	500	201	102	127	6.3	180	215	60	36	M10	40	60	36	M10	32

BAP3.5

FRONT COVER

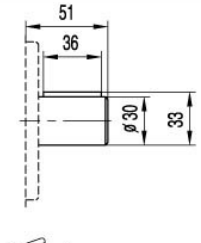


Q0



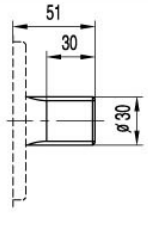
Q1

SHAFTS



8

C0

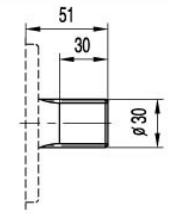


6–30x25.3x8

H0

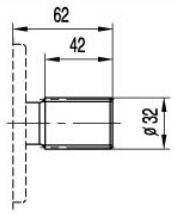
Max.Torque 600 Nm

720 Nm



m2–30° –14T

S0

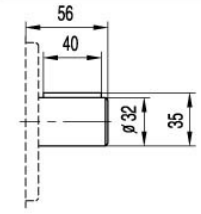


m2–30° –15T

S1

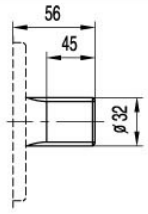
900 Nm

980 Nm



10

C2

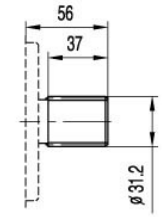


6–32x28x7

H2

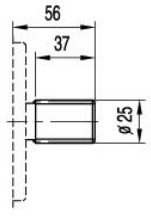
650 Nm

800 Nm



DP12/24–30° –14T

S3



DP16/32–30° –15T

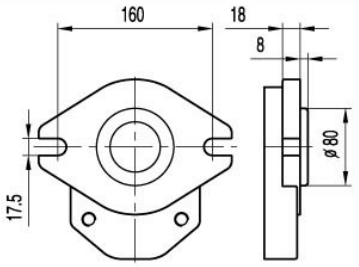
S4

920 Nm

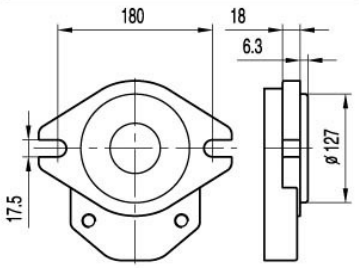
600 Nm

BAP3.5

FRONT COVER

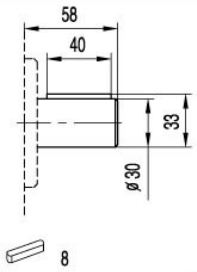


A0



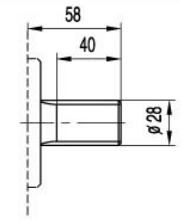
A1

SHAFTS



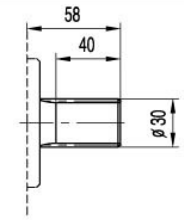
C1

600 Nm



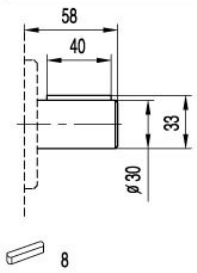
H1

600 Nm



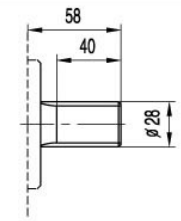
S2

900 Nm



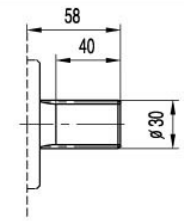
C1

600 Nm



H1

600 Nm

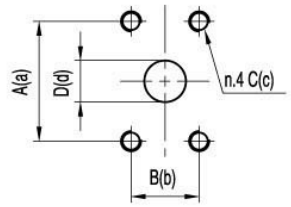


S2

900 Nm

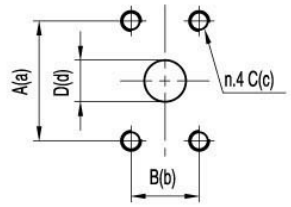
BAP3.5

PORTS



F0/F1/F2/F3/F4

TYPE	PORTS CODE	INLET				OUTLET			
		A	B	C	D	a	b	c	d
BAP3.5...40	F0	48	22	M8	20	48	22	M8	20
BAP3.5...50	F1	52	26	M10	25	48	22	M8	20
BAP3.5...40 ÷ BAP3.5...63	F2	60	30	M10	32	52	26	M10	25
BAP3.5...71 ÷ BAP3.5...80	F3	70	36	M12	35	60	30	M10	32
BAP3.5...90 ÷ BAP3.5...100	F4	70	36	M12	40	60	30	M10	32



F5/F6

TYPE	PORTS CODE	INLET				OUTLET			
		A	B	C	D	a	b	c	d
BAP3.5...50 ÷ BAP3.5...63	F5	60	30	M10	32	52	26	M8	25
BAP3.5...71 ÷ BAP3.5...80	F6	60	36	M10	35	60	36	M10	28
BAP3.5...90 ÷ BAP3.5...100		60	36	M10	40	60	36	M10	32

MULTIPLE PUMPS

HOW TO ORDER

BH	P	2/2/2	Front cover	Rotation	16/16/6	Shaft	Ports	Ports position	Seals	Options
Series	Pump	Group	A0	D Clockwise	3					
			B0	S Counter clockwise	4					
			B1	R Reversible	6					
			B2		8					
			Q0		10					
			Q1		12					
			Q2		14					
					16					
					18					
					20					
					22					
					25					
					28					
					30					

MULTIPLE PUMPS COMBTNATION

Reduced inlets provide overall systems savings by reducing the cost of redundant inlet hose and fittings.

For other combinations please consult our sales department

Seals

Omit–Range between –10˚C and +80˚C,inlet pressure up to max. 3 bar absolute.
V–Version suitable for fluid at hi–temperatures, range between –10˚C and +120˚C.
H–Version suitable for fluid at low–temperatures, range between –40˚C and +80˚C.
T–Version suitable for inlet pressure up to max. 3 and 6 bar absolute.
N–Version suitable for inlet pressure up to max. 3 and 10 bar absolute.

Examples:

BHP2/2/2–B0–D–16/16/6–T0–E0 = clockwise rotation, group 2, front pump 16 cc/rev, middle pump 16 cc/rev, rear pump 6 cc/rev, B0 front cover, 1:8 tapered shaft(T0), setting ports E0 type, standard seals

BHP2/2–B0–D–16/16–T0–E0 = clockwise rotation, group 2, front pump 16 cc/rev, rear pump 16 cc/rev, B0 front cover, 1:8 tapered shaft(T0), setting ports E0 type, standard seals

BAP2/2–A0–D–25/16–C0–U0 = clockwise rotation, group 2, front pump 25 cc/rev, rear pump 16 cc/rev, A0 front cover, C0 parallel shaft, setting ports U0 type, standard seals

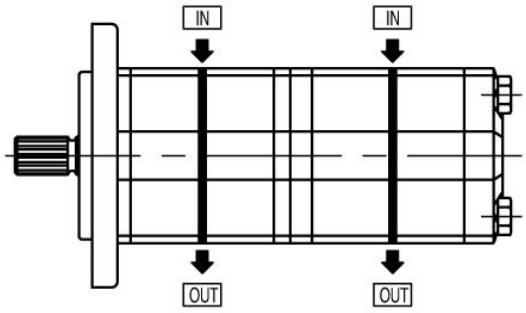
HOW TO ORDER

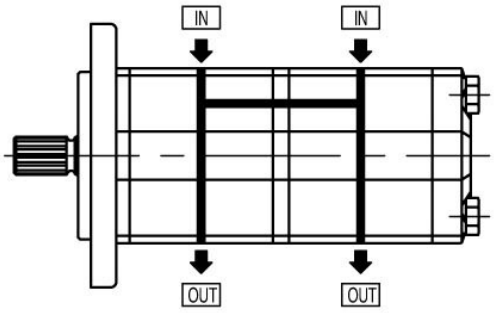
Ports position

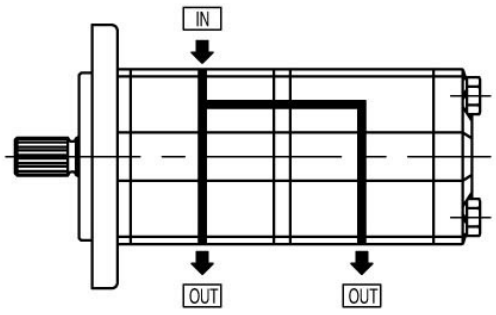
Omit–Side inlet and side outlet
B–Back inlet and front outlet
C–Back inlet and side outlet
D–Side inlet and front outlet
R–Back inlet and back outlet

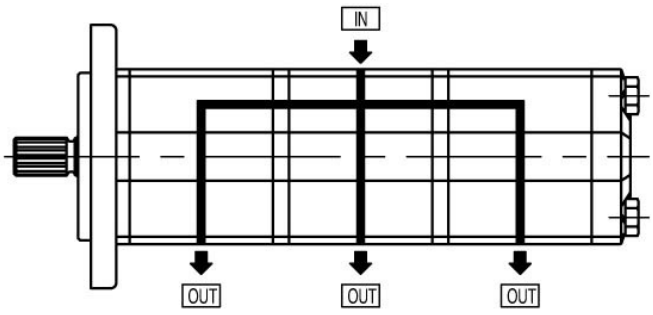
Standard version

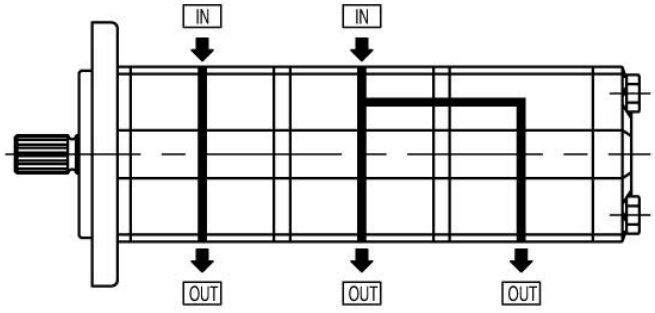
E–two inlet and two outlet(separated type)
F–two inlet and two outlet(common type)
G–one inlet and two outlet
J–one inlet and three outlet
K–two inlet and three outlet





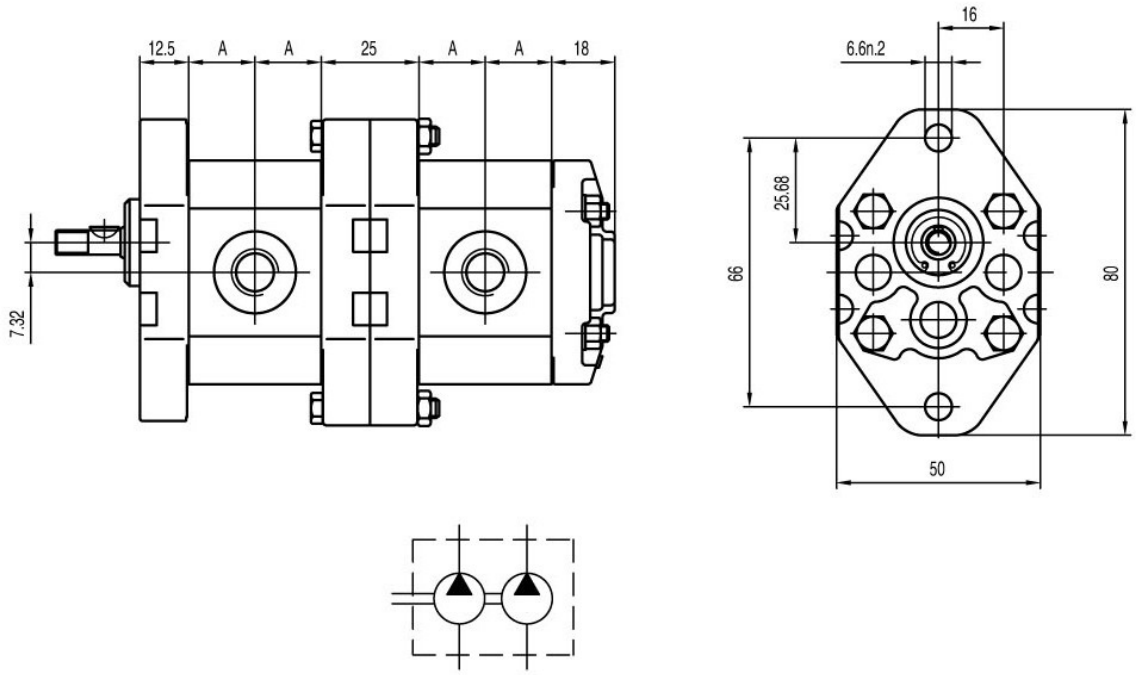






BKP0.5/0.5

BKP0.5/0.5–E

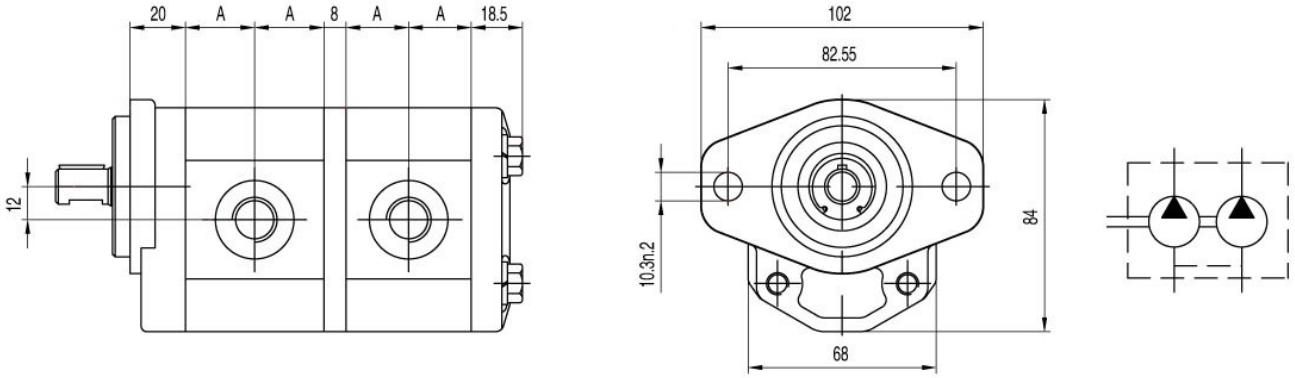


BKP0.5

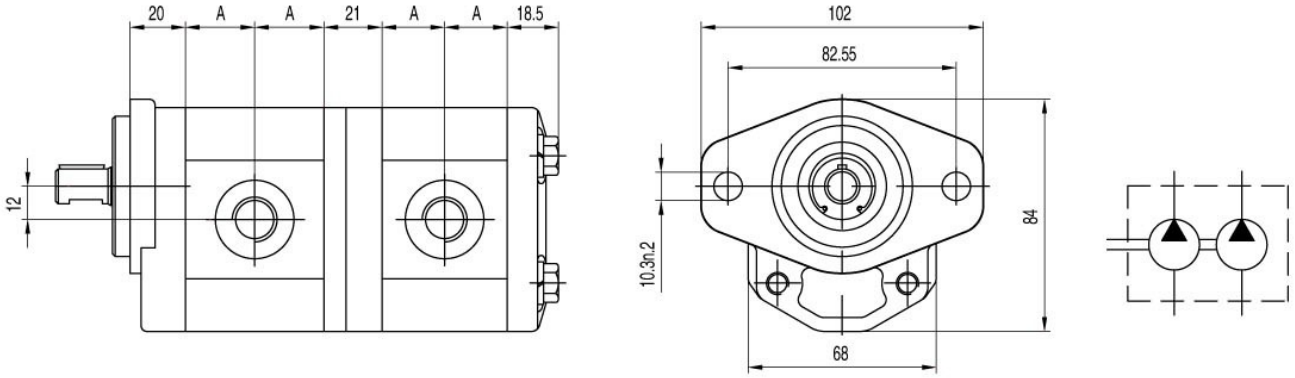
Displacement	Max pressure			Max. speed	Min. speed	Dimensions
	P1	P2	P3			A
(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm
0.19	200	230	250	7000	1000	14.8
0.26	200	230	250	7000	1000	15
0.38	200	230	250	7000	1000	15.5
0.50	200	230	250	7000	1000	16
0.65	200	230	250	7000	1000	16.5
0.75	200	230	250	7000	1000	17
0.88	200	230	250	7000	1000	17.5
1.00	200	230	250	6000	850	18
1.25	200	230	250	5000	700	19
1.50	200	230	250	4000	600	20
1.75	180	210	230	4000	600	21
2.00	160	190	210	3000	500	22

BHP1/1 BKP1/1

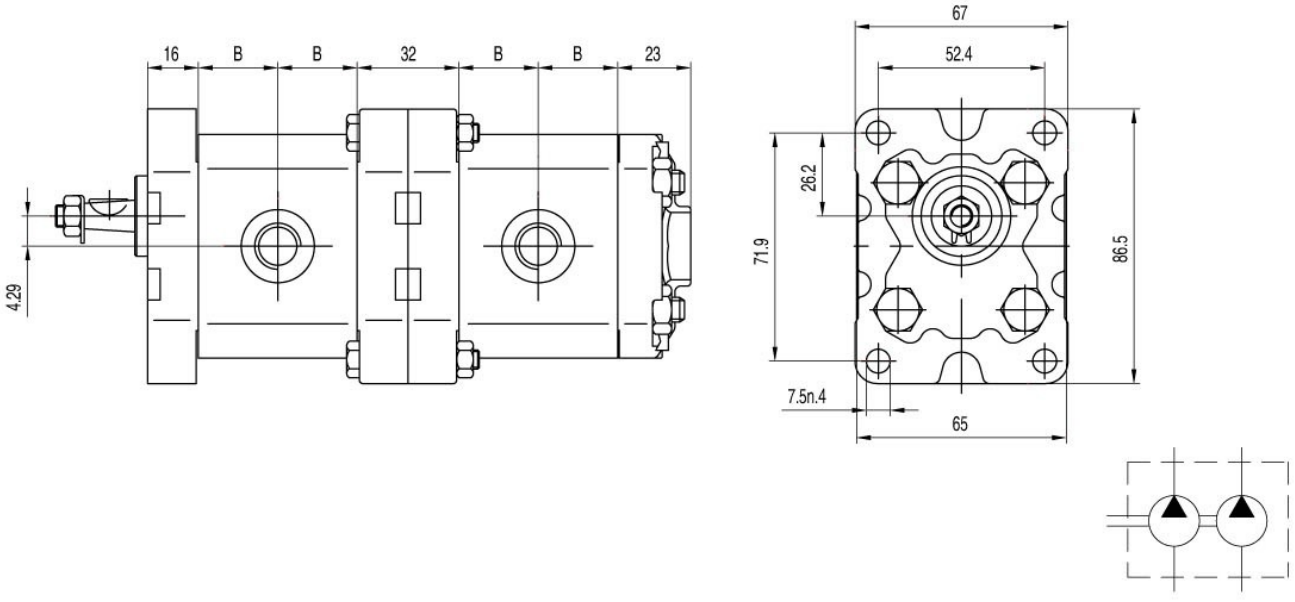
BHP1/1-F



BHP1/1-E



BKP1/1-E



BHP1/1 BKP1/1

BHP1

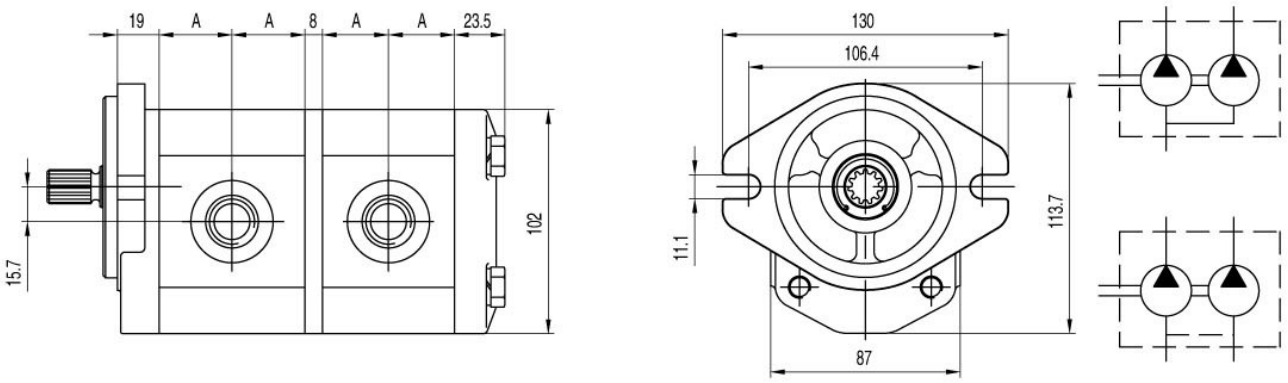
Displacement	Max pressure			Max. speed	Min. speed	Dimensions
	P1	P2	P3			A
(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm
1.4	250	270	290	6000	800	22
2.1	250	270	290	6000	800	23
2.8	250	270	290	5000	800	24
3.5	250	270	290	5000	800	25
4.1	250	270	290	4000	800	26
5.2	230	245	260	4000	800	27.5
6.2	230	245	260	3500	800	29
7.6	200	215	230	3000	600	31
9.3	180	195	210	2500	600	33.5
11.0	170	185	200	2500	600	36
13.8	150	165	180	2000	600	40

BKP1

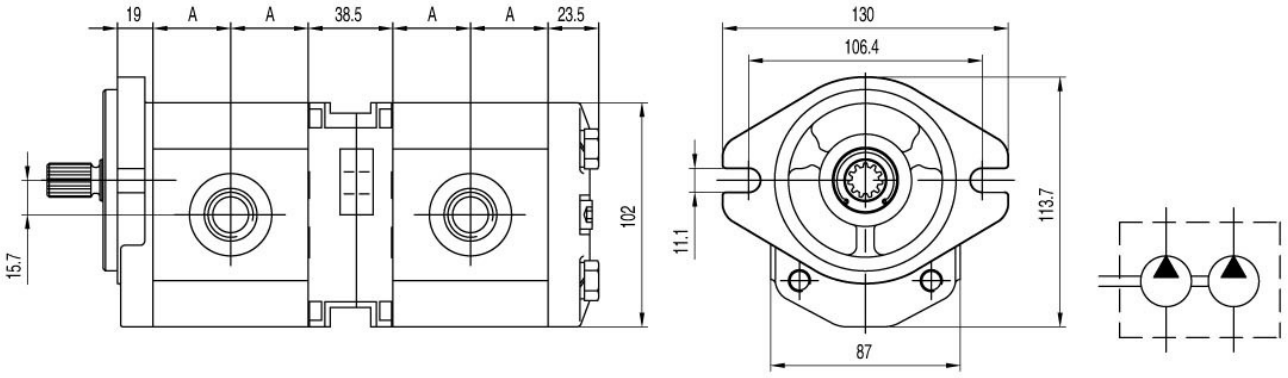
Displacement	Max pressure			Max. speed	Min. speed	Dimensions
	P1	P2	P3			B
(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm
0.8	230	250	270	6000	1000	17.8
1.1	230	250	270	6000	1000	18
1.3	230	250	270	6000	1000	18.5
1.6	230	250	270	6000	1000	19
1.8	230	250	270	6000	1000	19.5
2.1	230	250	270	6000	1000	20
2.7	230	250	270	6000	800	21
3.2	210	230	250	5000	800	22
3.7	210	230	250	4500	800	23
4.2	210	230	250	4000	800	24
4.8	190	210	230	3500	600	25
5.8	190	210	230	3000	600	27
7.0	160	180	200	2500	600	29
8.0	160	180	200	2100	600	31

BHP2/2/2 BHP2/2 BHP2/1 BHP2/0.5

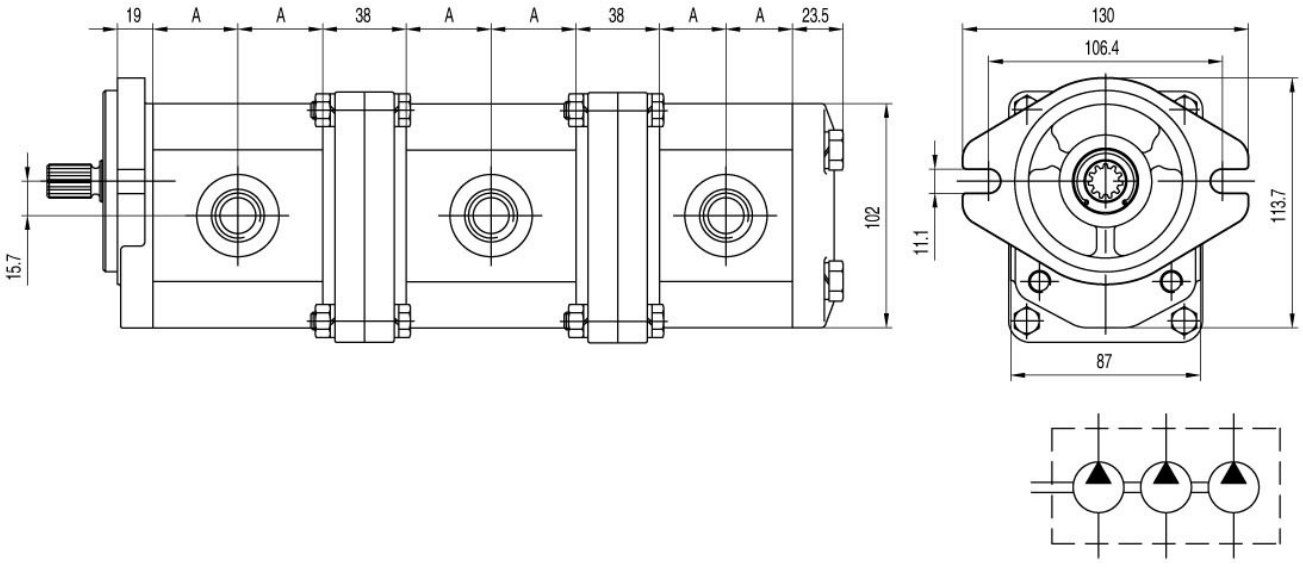
BHP2/2-Fa BHP2/2-G



BHP2/2-E

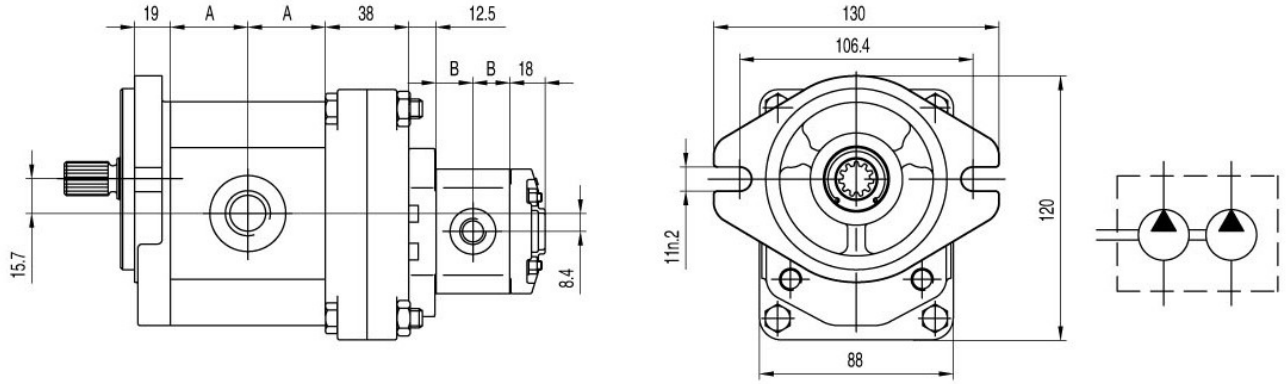


BHP2/2/2-Ea BHP2/2/2-Fb

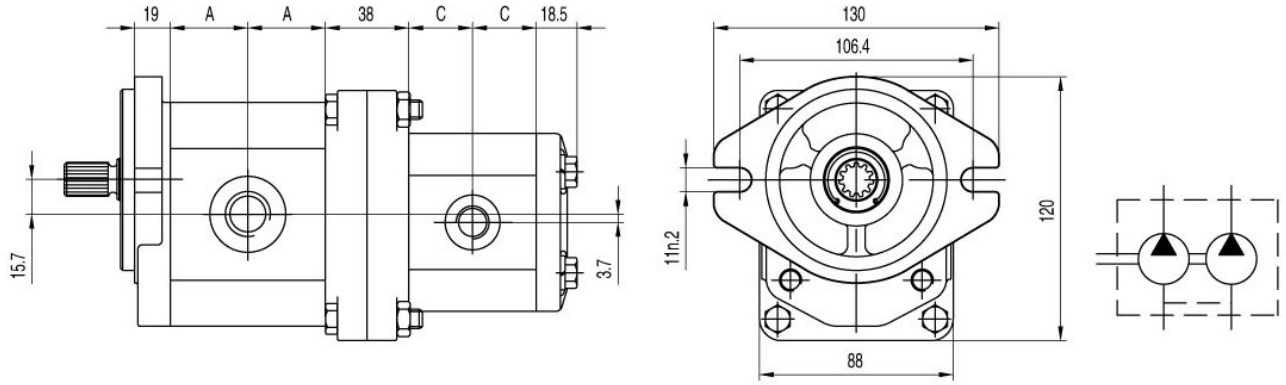


BHP2/2/2 BHP2/2 BHP2/1 BHP2/0.5

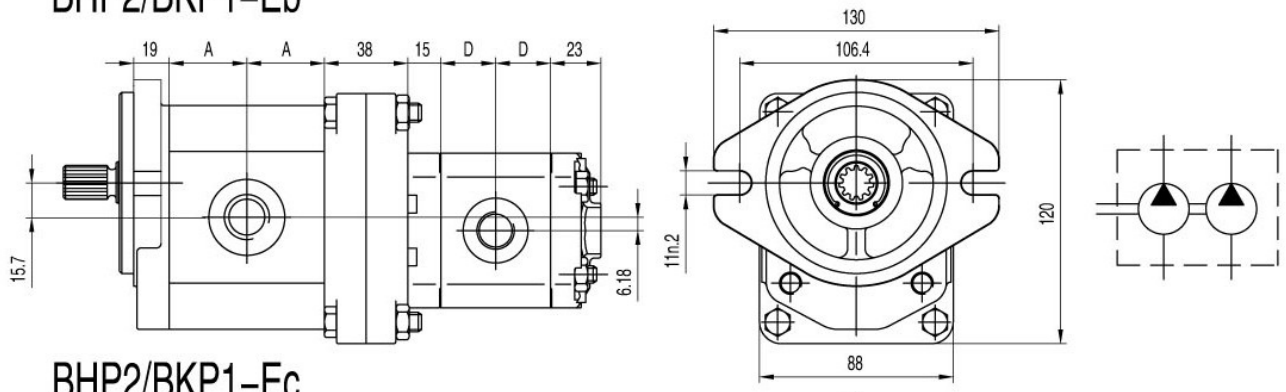
BHP2/0.5–E



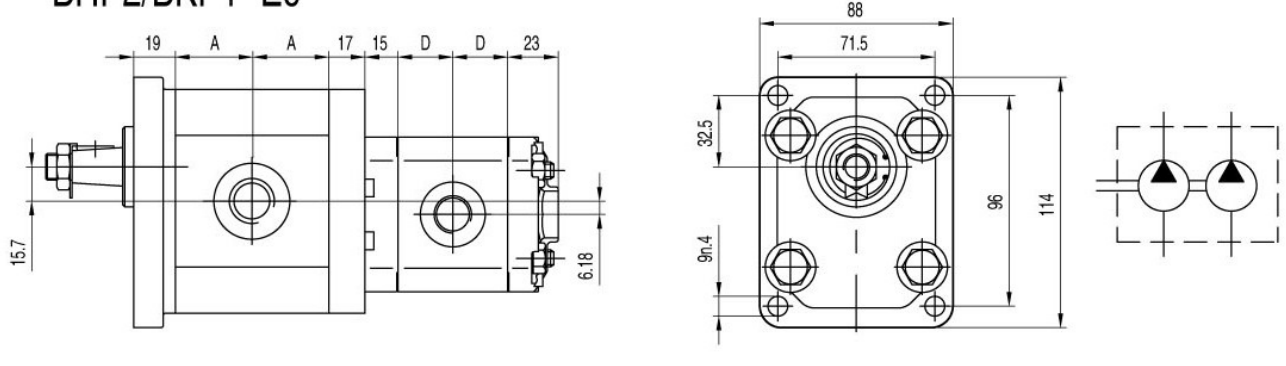
BHP2/BAP1–F



BHP2/BKP1–Eb



BHP2/BKP1–Ec



BHP2/2/2 BHP2/2 BHP2/1 BHP2/0.5

BHP2

Displacement	Max pressure			Max. speed	Min. speed	Dimensions
	P1	P2	P3			A
(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm
3	270	285	300	4000	800	24.5
4	270	285	300	4000	600	25.3
6	270	285	300	4000	600	27
8	270	285	300	3500	500	28.6
10	270	285	300	3000	500	30.3
12	270	285	300	3000	500	32
14	250	265	280	4000	500	33.6
16	250	265	280	4000	500	35.3
18	250	265	280	3600	400	37
20	220	235	250	3200	400	38.6
22	220	235	250	3000	400	40.3
25	200	215	230	3000	400	42.8
28	180	190	200	2500	400	45.3
30	160	170	180	2500	400	47

BKP0.5

Displacement	Max pressure			Max. speed	Min. speed	Dimensions
	P1	P2	P3			B
(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm
0.19	200	230	250	7000	1000	14.8
0.26	200	230	250	7000	1000	15
0.38	200	230	250	7000	1000	15.5
0.50	200	230	250	7000	1000	16
0.65	200	230	250	7000	1000	16.5
0.75	200	230	250	7000	1000	17
0.88	200	230	250	7000	1000	17.5
1.00	200	230	250	6000	850	18
1.25	200	230	250	5000	700	19
1.50	200	230	250	4000	600	20
1.75	180	210	230	4000	600	21
2.00	160	190	210	3000	500	22

BHP2/2/2 BHP2/2 BHP2/1 BHP2/0.5

BAP1

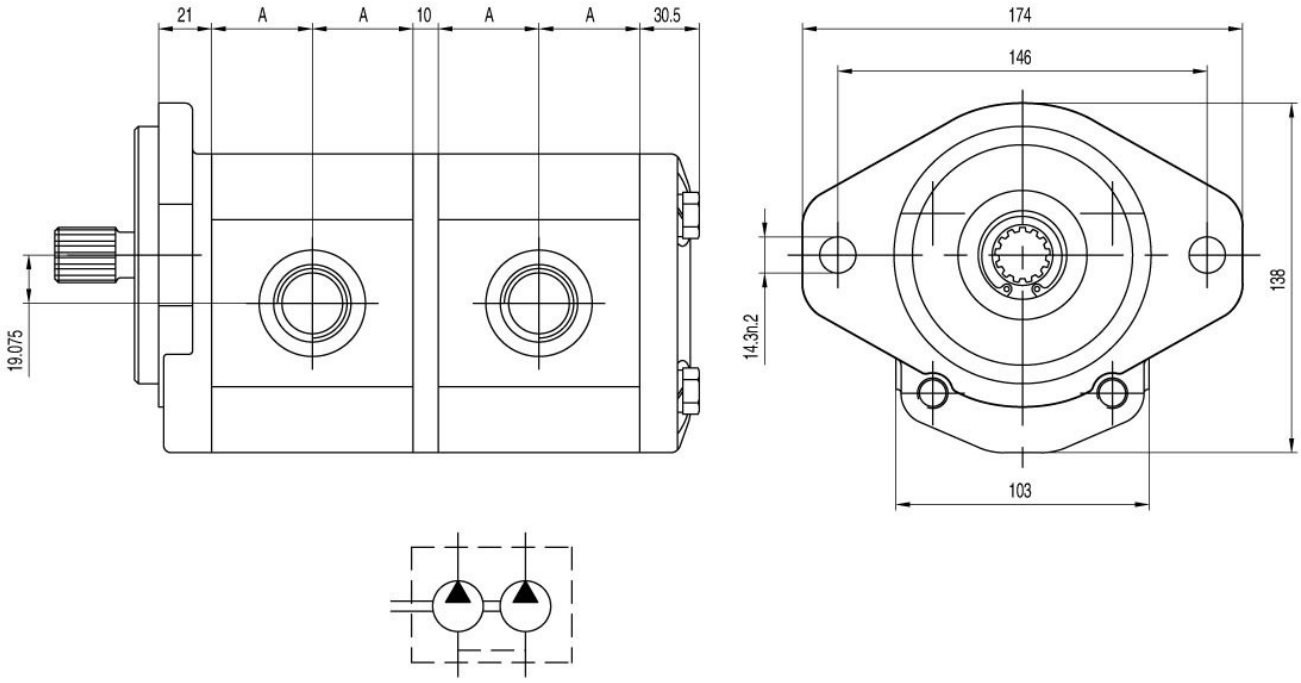
Displacement	Max pressure			Max. speed	Min. speed	Dimensions
	P1	P2	P3			C
(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm
1.4	250	270	290	6000	800	22
2.1	250	270	290	6000	800	23
2.8	250	270	290	5000	800	24
3.5	250	270	290	5000	800	25
4.1	250	270	290	4000	800	26
5.2	230	245	260	4000	800	27.5
6.2	230	245	260	3500	800	29
7.6	200	215	230	3000	600	31
9.3	180	195	210	2500	600	33.5
11.0	170	185	200	2500	600	36
13.8	150	165	180	2000	600	40

BKP1

Displacement	Max pressure			Max. speed	Min. speed	Dimensions
	P1	P2	P3			D
(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm
0.8	230	250	270	6000	1000	17.8
1.1	230	250	270	6000	1000	18
1.3	230	250	270	6000	1000	18.5
1.6	230	250	270	6000	1000	19
1.8	230	250	270	6000	1000	19.5
2.1	230	250	270	6000	1000	20
2.7	230	250	270	6000	800	21
3.2	210	230	250	5000	800	22
3.7	210	230	250	4500	800	23
4.2	210	230	250	4000	800	24
4.8	190	210	230	3500	600	25
5.8	190	210	230	3000	600	27
7.0	160	180	200	2500	600	29
8.0	160	180	200	2100	600	31

BHP2.6/2.6

BHP2.6/2.6–F

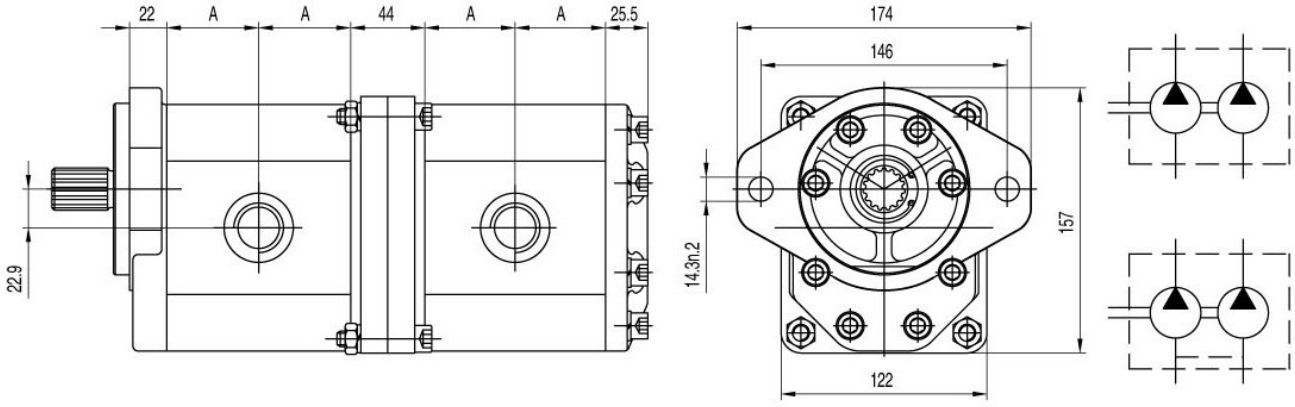


BHP2.6

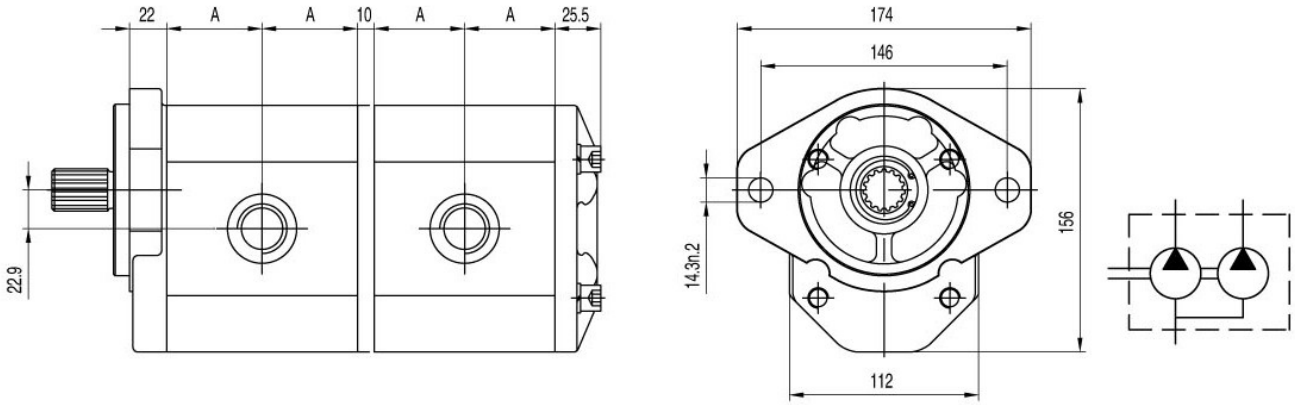
Displacement	Max pressure			Max. speed	Min. speed	Dimensions
	P1	P2	P3			A
(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm
6	250	280	300	4000	800	28.3
8	250	280	300	4000	800	29.3
10	250	280	300	4000	700	30.3
12	250	280	300	3500	700	31.5
14	250	280	300	3500	600	32.3
16	250	280	300	3500	600	33.5
19	250	280	300	3000	500	35.3
22	250	280	300	3000	500	37
25	250	280	300	3000	500	38.3
28	250	280	300	3000	500	39.8
30	230	250	260	3000	500	41
32	230	250	260	3000	400	42.3
36	200	230	250	2750	400	44.3
38	200	230	250	2750	400	45.3
40	170	190	210	2500	400	46.3
44	170	190	210	2500	400	48.5

BHP3/3 BHP3/2 BHP3/1 BHP3/0.5

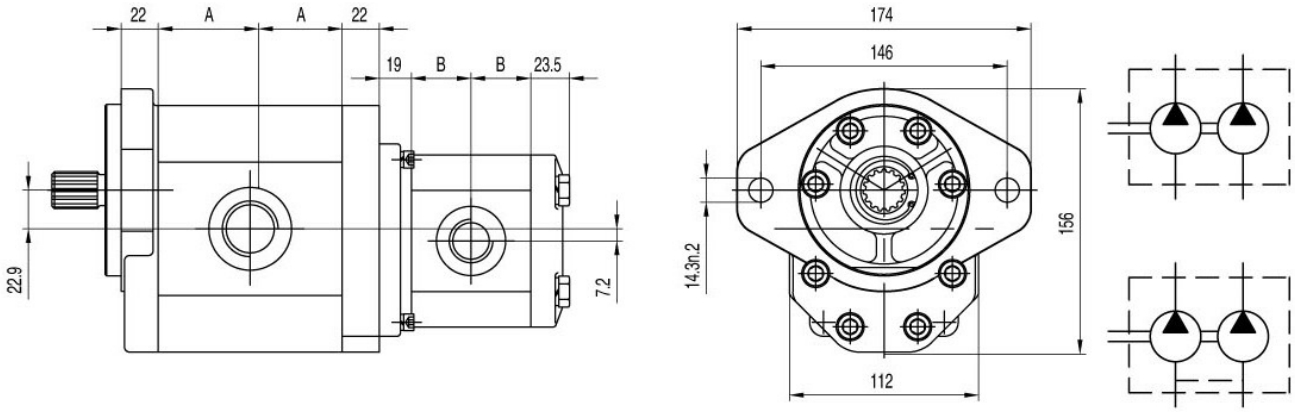
BHP3/3–E BHP3/3–F



BHP3/3–G

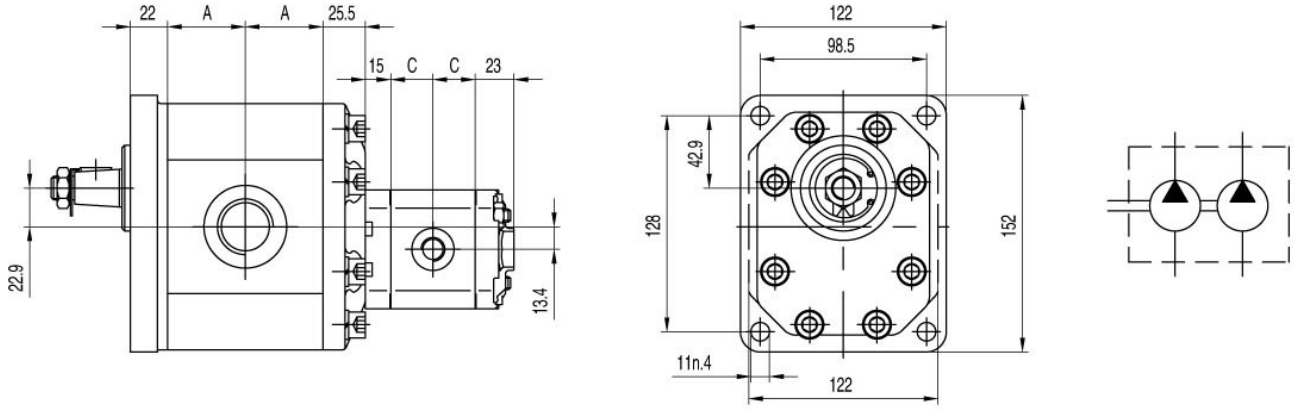


BHP3/2–E BHP3/2–F

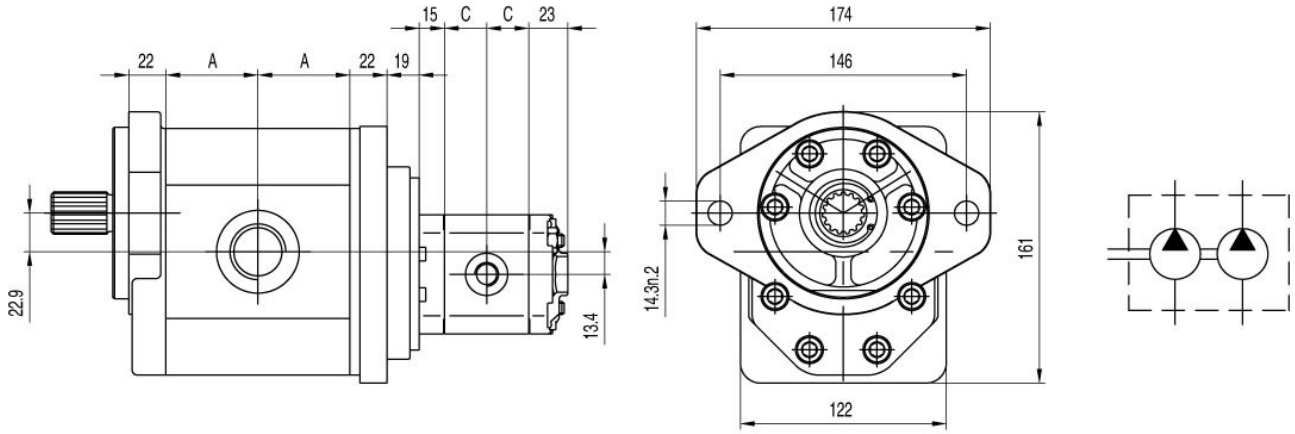


BHP3/3 BHP3/2 BHP3/1 BHP3/0.5

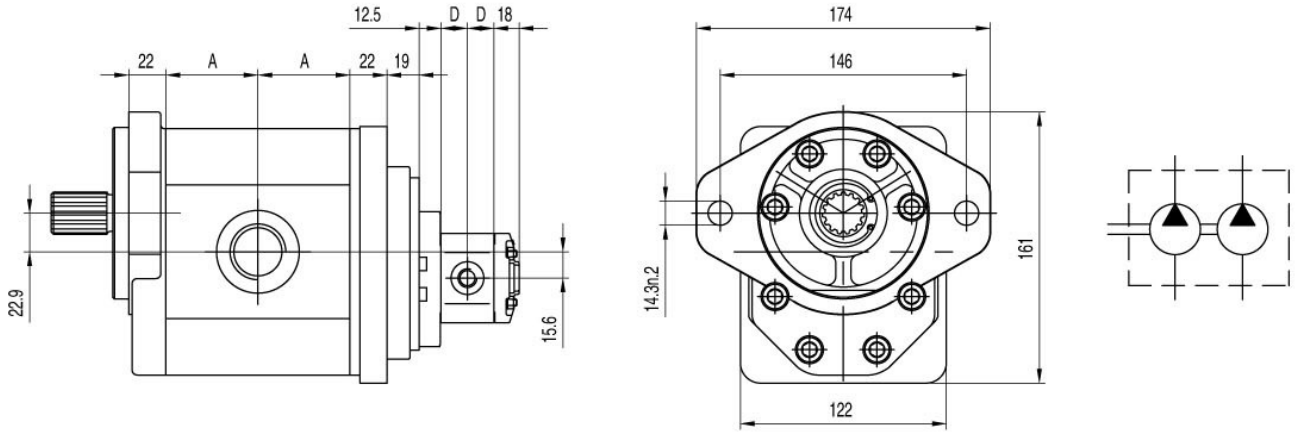
BHP3/1-Ec



BHP3/1-Eb



BHP3/0.5-Ea



BHP3/3 BHP3/2 BHP3/1 BHP3/0.5

BHP3

Displacement	Max pressure			Max. speed	Min. speed	Dimensions
	P1	P2	P3			A
(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm
20	250	265	280	3500	600	40.5
22	250	265	280	3500	600	41.5
26	250	265	280	3000	600	43
33	230	250	270	3000	500	46
39	230	250	270	3000	500	49.5
46	230	250	270	3000	500	52.5
50	220	240	260	3000	500	54.5
52	220	240	260	3000	500	55.5
55	200	230	250	2800	400	56.5
63	200	230	250	2800	400	60.5
71	180	200	220	2500	400	64

BHP2

Displacement	Max pressure			Max. speed	Min. speed	Dimensions
	P1	P2	P3			B
(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm
3	270	285	300	4000	800	24.5
4	270	285	300	4000	600	25.3
6	270	285	300	4000	600	27
8	270	285	300	3500	500	28.6
10	270	285	300	3000	500	30.3
12	270	285	300	3000	500	32
14	250	265	280	4000	500	33.6
16	250	265	280	4000	500	35.3
18	250	265	280	3600	400	37
20	220	235	250	3200	400	38.6
22	220	235	250	3000	400	40.3
25	200	215	230	3000	400	42.8
28	180	190	200	2500	400	45.3
30	160	170	180	2500	400	47

BHP3/3 BHP3/2 BHP3/1 BHP3/0.5

BKP1

Displacement	Max pressure			Max. speed	Min. speed	Dimensions
	P1	P2	P3			C
(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm
0.8	230	250	270	6000	1000	17.8
1.1	230	250	270	6000	1000	18
1.3	230	250	270	6000	1000	18.5
1.6	230	250	270	6000	1000	19
1.8	230	250	270	6000	1000	19.5
2.1	230	250	270	6000	1000	20
2.7	230	250	270	6000	800	21
3.2	210	230	250	5000	800	22
3.7	210	230	250	4500	800	23
4.2	210	230	250	4000	800	24
4.8	190	210	230	3500	600	25
5.8	190	210	230	3000	600	27
7.0	160	180	200	2500	600	29
8.0	160	180	200	2100	600	31

BKP0.5

Displacement	Max pressure			Max. speed	Min. speed	Dimensions
	P1	P2	P3			D
(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	mm
0.19	200	230	250	7000	1000	14.8
0.26	200	230	250	7000	1000	15
0.38	200	230	250	7000	1000	15.5
0.50	200	230	250	7000	1000	16
0.65	200	230	250	7000	1000	16.5
0.75	200	230	250	7000	1000	17
0.88	200	230	250	7000	1000	17.5
1.00	200	230	250	6000	850	18
1.25	200	230	250	5000	700	19
1.50	200	230	250	4000	600	20
1.75	180	210	230	4000	600	21
2.00	160	190	210	3000	500	22