BENT-AXIS PISTON PUMPS

HBP

HBP is a range of rugged bent-axis spherical piston pumps, particularly fitting for mobile applications.

The design of HBP pumps results in a compact unit with a small number of moving parts and high starting torque, covering a wide displacement range (from 10 to 130 cm3/rev), and working at a maximum pressure of 400 bar..

Thanks to their robustly sized double tapered roller bearings, HBP pumps can withstand high shaft loads and achieve excellent speed features.

Materials chosen, their treatments as well as the finishing of the parts lead to a high reliability level.

TECHNICAL DATA

		12	17	25	34	47	56	64	84	108	130
Displacement	cm^3/rev	12,6	16,2	25,4	34,2	47,1	56,0	63,6	83,6	108,0	130,0
Max. continuous speed (1)	rpm	3.300	3.200	2.550	2.250	2.200	2.100	2.050	1.700	1.700	1.600
Max. admissible speed (2)	rpm	6.000	5.700	4.700	4.550	4.300	3.750	3.700	3.350	3.000	2.900
Max. continuous pressure	bar	400	400	400	400	400	400	400	400	400	400
Max. continuous power (2)	kW	20	25	40	55	65	80	90	100	130	135
Rotating parts moment of inertia	$kg\ m^2 \cdot 10^{-3}$	0,9	0,9	1,1	1,1	2,6	2,6	2,6	7,4	7,4	7,4
Approx. weight	kg	7,5	7,5	8,5	8,5	15,5	15,5	15,5	27,0	29,5	29,5

Notes:

(1) Stated maximum continuous speed values are valid for an absolute pressure of 1 bar at the suction inlet.
(2) By increasing the input pressure, the rotational speeds can be increased to the maximum admissible.
(3) Stated maximum continuous power values are based on maximum output power without external cooling of the pump.

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BENT-AXIS PISTON PUMPS

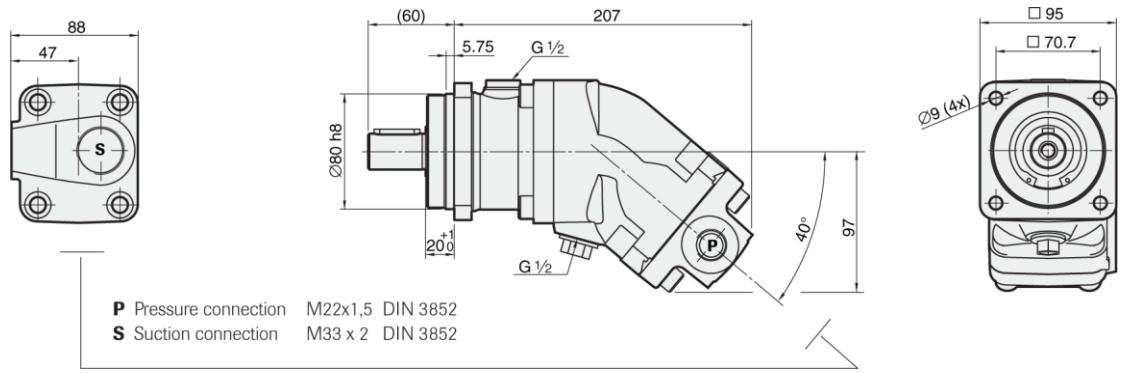
HBP

12
17

DRAWINGS

ISO 4 bolts (ISO 3019-2) mounting flange

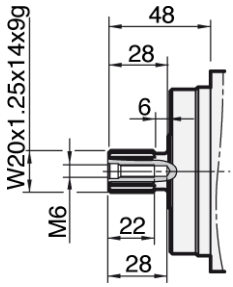
I4



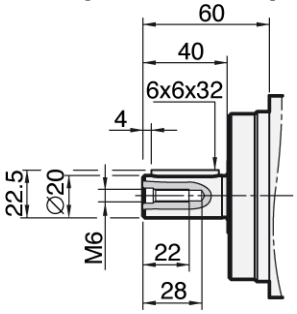
The counterclockwise pump has pressure connection on the opposite side

SHAFT ENDS

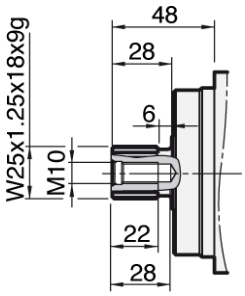
Splined W20x1.25x14x9g (DIN 5480) S1D



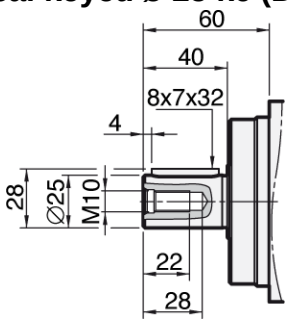
Cylindrical keyed ø 20 k6 (DIN 6885) C1D



Splined W25x1.25x18x9g (DIN 5480) S2D



Cylindrical keyed ø 25 k6 (DIN 6885) C2D



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BENT-AXIS PISTON PUMPS

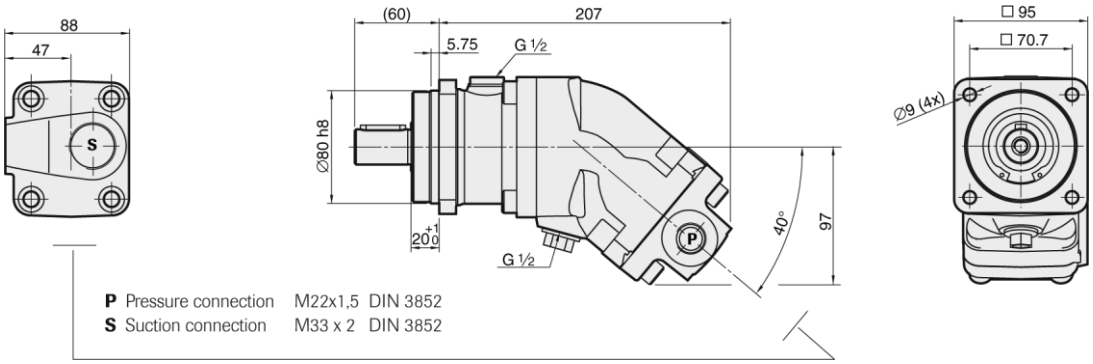
HBP

25
34

DRAWINGS

ISO 4 bolts (ISO 3019-2) mounting flange

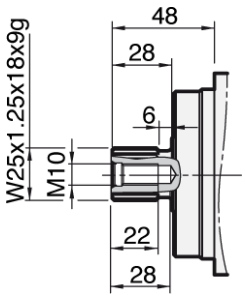
I4



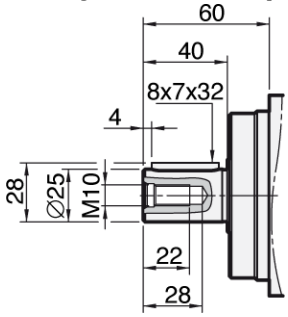
The counterclockwise pump has pressure connection on the opposite side

SHAFT ENDS

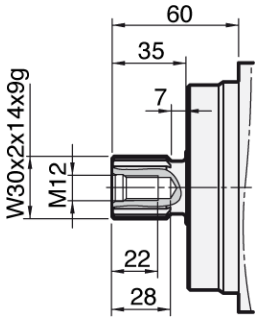
Splined W25x1.25x18x9g (DIN 5480) S2D



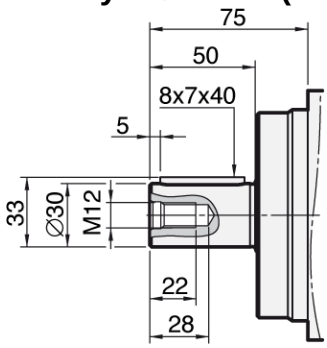
Cylindrical keyed ø 25 k6 (DIN 6885) C2D



Splined W30x2x14x9g (DIN 5480) S3D



Cylindrical keyed ø 30 k6 (DIN 6885) C3D



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BENT-AXIS PISTON PUMPS

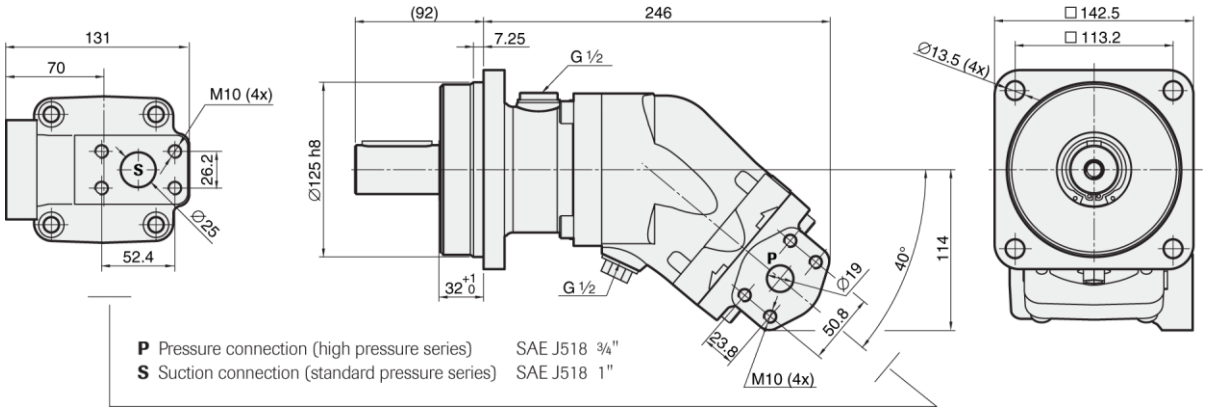
HBP

47
56
64

DRAWINGS

ISO 4 bolts (ISO 3019-2) mounting flange

I4

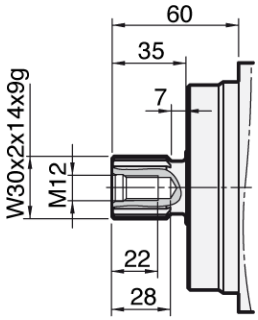


The counterclockwise pump has pressure connection on the opposite side

SHAFT ENDS

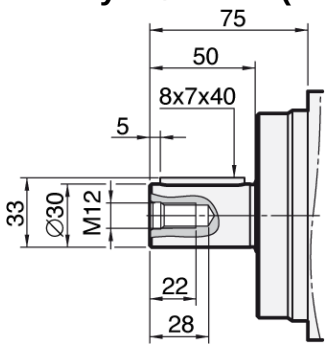
Splined W30x2x14x9g (DIN 5480)

S3D



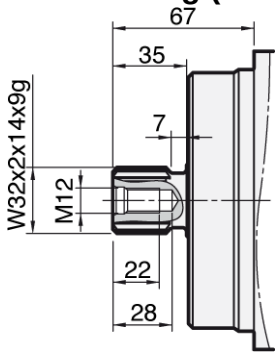
Cylindrical keyed ø 30 k6 (DIN 6885)

C3D



Splined W32x2x14x9g (DIN 5480)

S4D



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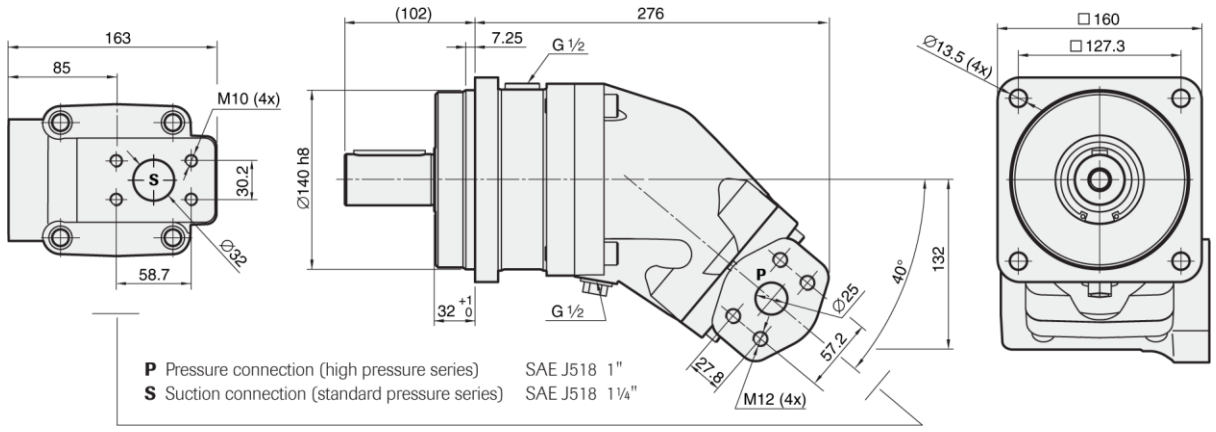
BENT-AXIS PISTON PUMPS

HBP 84

DRAWINGS

ISO 4 bolts (ISO 3019-2) mounting flange

I4

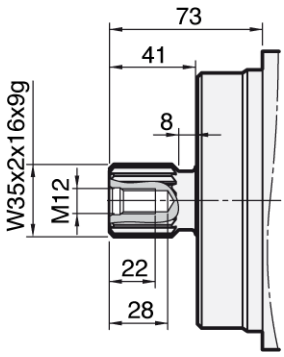


The counterclockwise pump has pressure connection on the opposite side

SHAFT ENDS

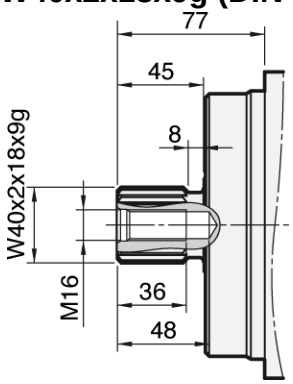
Splined W35x2x16x9g (DIN 5480)

S5D



Splined W40x2x18x9g (DIN 5480)

S6D



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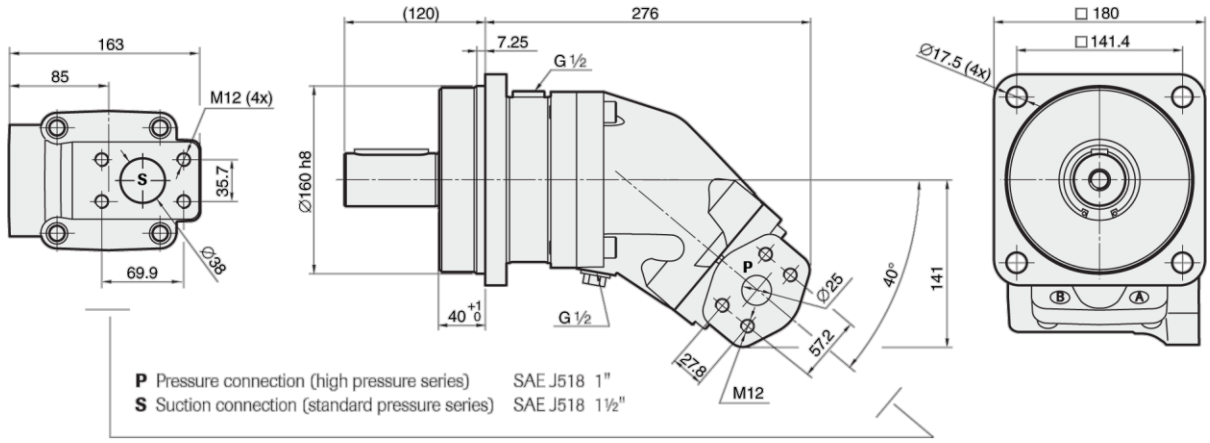
BENT-AXIS PISTON PUMPS

HBP 108

DRAWINGS

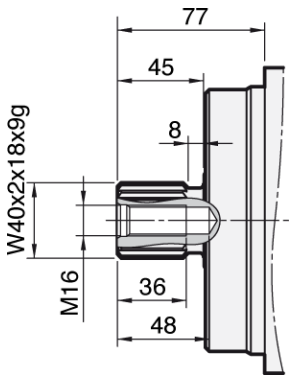
ISO 4 bolts (ISO 3019-2) mounting flange I4



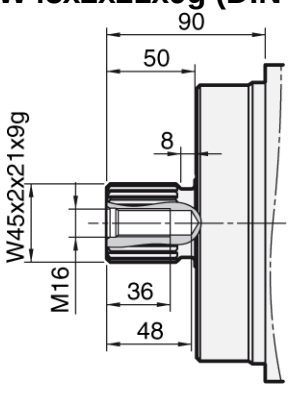
The counterclockwise pump has pressure connection on the opposite side

SHAFT ENDS

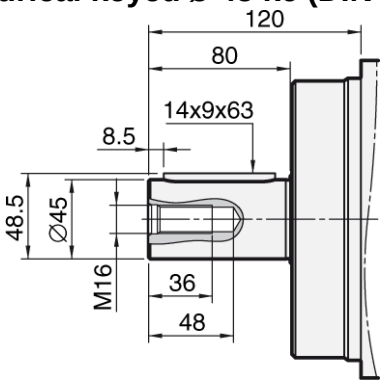
Splined W40x2x18x9g (DIN 5480) S6D



Splined W45x2x21x9g (DIN 5480) S7D



Cylindrical keyed ø 45 k6 (DIN 6885) C7D



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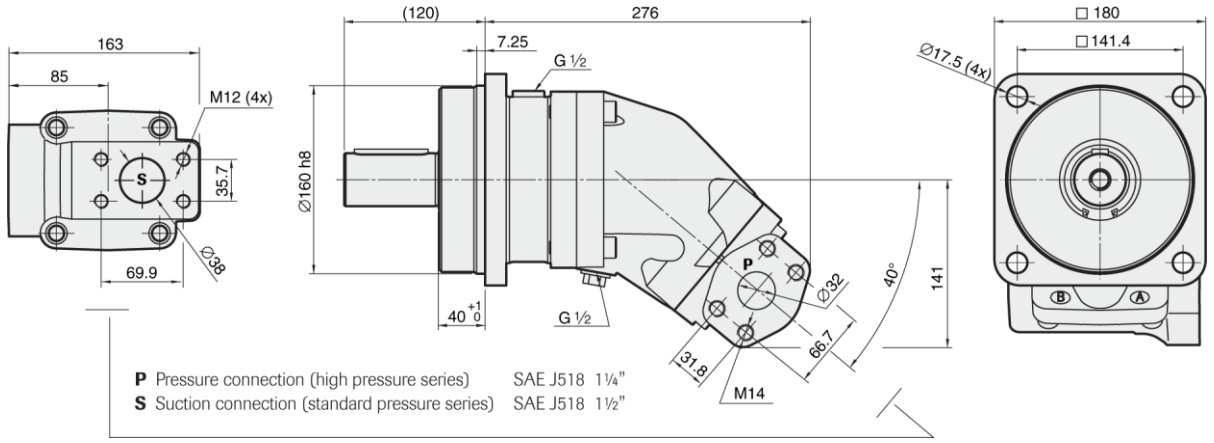
BENT-AXIS PISTON PUMPS

HBP 130

DRAWINGS

ISO 4 bolts (ISO 3019-2) mounting flange

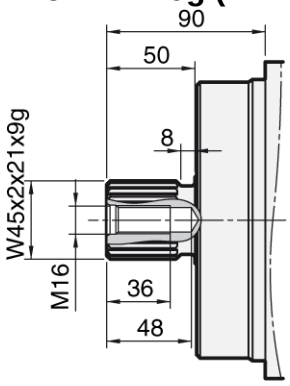
I4



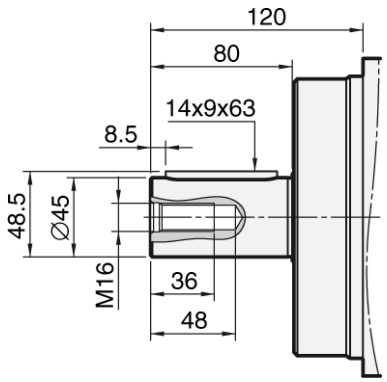
The counterclockwise pump has pressure connection on the opposite side

SHAFT ENDS

Splined W45x2x21x9g (DIN 5480) S7D



Cylindrical keyed ø 45 k6 (DIN 6885) C7D



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BENT-AXIS PISTON PUMPS

HBP

MODEL CODE

HBP	(_) _ _	_	I4	_ _ D	_
1	2	3	4	5	6

1. SERIES

Fixed displacement bent-axis piston motor	HBP

2. DISPLACEMENT

	12	17	25	34	47	56	64	84	108	130
Displacement in cm^3/rev	12,6	17,0	25,4	34,2	47,1	56,0	63,5	83,6	108,0	130,0

3. ROTATION DIRECTION

CW	R
CCW	L

4. MOUNTING FLANGE

	12	17	25	34	47	56	64	84	108	130	
ISO 4 bolts (ISO 3019-2)	•	•	•	•	•	•	•	•	•	•	I4

5. SHAFT END (ISO)

	12	17	25	34	47	56	64	84	108	130	
Splined W20x1.25x14x9g (DIN 5480)	•	•									S1D
Cylindrical keyed ø 20 k6 (DIN 6885)	•	•									C1D
Splined W25x1.25x18x9g (DIN 5480)	•	•	•								S2D
Cylindrical keyed ø 25 k6 (DIN 6885)	•	•	•								C2D
Splined W30x2x14x9g (DIN 5480)			•	•	•	•					S3D
Cylindrical keyed ø 30 k6 (DIN 6885)			•	•	•	•					C3D
Splined W32x2x14x9g (DIN 5480)					•	•					S4D
Splined W35x2x16x9g (DIN 5480)					•	•	•	•			S5D
Cylindrical keyed ø 35 h8 (DIN 6885)					•	•	•				C5D
Splined W40x2x18x9g (DIN 5480)								•	•		S6D
Cylindrical keyed ø 40 k6 (DIN 6885)								•			C6D
Splined W45x2x21x9g (DIN 5480)									•	•	S7D
Cylindrical keyed ø 45 k6 (DIN 6885)									•	•	C7D

5. PORTS TYPE

	12	17	25	34	47	56	64	84	108	130	
Threaded ISO G	•	•	•	•							T
Flange (SAE J518 code 62)					•	•	•	•	•	•	F

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