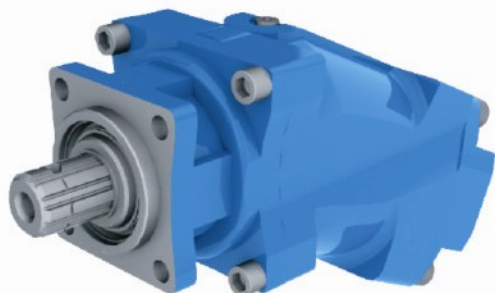


Fixed displacement axial piston pumps compact-series 311.K



Pnevmostroimashina JSC (brand name PSM-Hydraulics®) launched the production of fixed displacement axial piston bent-axis compact-series pumps 311.K, working displacement 12, 17, 25, 28, 34, 80 cc.

Design:

- keyed shaft: 8x32x35 DIN/ISO 14;
- pressure line: G1/2" DIN/ISO 228;
- suction line: G3/4" DIN/ISO 228;
- clockwise and counterclockwise rotation

Analogues

PSM (Russia)	Parker (USA)	Bosch Rexroth (Germany)	Sunfab (Sweden)	OMFB (Italy)	Hydro LEDUC (France)	Bezares (Spain)	Aber (Portugal)
311.K.12	-	-	SC 012	-	-	-	-
311.K.17	-	-	SC 017	-	-	FR 20	-
311.K.25	F1-25	A17FO23 (KFA2FO23)	SC 025 (SAP-025)	HDS-25	-	-	-
311.K.28	-	A17FO23 (KFA2FO23) A17FO32 (KFA2FO32)	-	-	XPi 25	FR 30	BI 30
311.K.34	F1-41-R(L)	A17FO32 (KFA2FO32)	SC 034 (SAP-034)	HDS-32	XPi 32	-	-
311.K.80	F1-61-R(L) F1-81-R(L)	A17FO80 (KFA2FO80)	SAP-084 (SCP-084)	MDS-80 ISO HDT-84	XPi 63 XPi 80	-	-

Technical parameters

Size	Values					
	311.K.12	311.K.17	311.K.25	311.K.28	311.K.34	311.K.80
Displacement (nominal), cc	11,6	17	25	28	34	80
Speed, s ⁻¹ (rpm)						
- minimum n _{min}	6.7 (400)	6.7 (400)	6.7 (400)	6.7 (400)	6.7 (400)	6.7 (400)
- nominal n _{nom}	40.0 (2400)	40.0 (2400)	32.0 (1920)	32.0 (1920)	32.0 (1920)	20.0 (1200)
- maximum n _{max} at min P _{input}	66.7 (4000)	66.7 (4000)	50 (3000)	50 (3000)	50 (3000)	37.3 (2240)
- peak n _{peak} at P _{input} not less than 0.2 MPa	100 (6000)	100 (6000)	79 (4750)	79 (4750)	79 (4750)	55.8 (3350)
Flow (nominal), cdm/s (l/min)	0.44 (26)	0.64 (39)	0.76 (45.6)	0.85 (51)	1.03 (62)	1.52 (91)
Input pressure, MPa	0.1					
- minimum (absolute)						
Output pressure, MPa	16 35					
- nominal						
- maximum						
Power (nominal), N, kW	7.5	11	13	15	18	27
Feed coefficient	0.95					
Overall efficiency coefficient	0.91					
Weight (without working fluid), kg	7.5	7.5	9	9	9	18

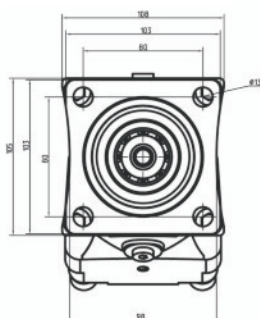
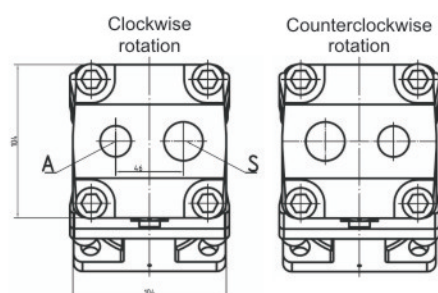
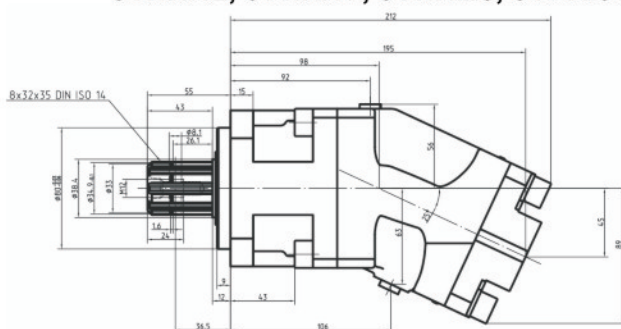
Installation:

The pumps are mounted directly on power take-off (PTO) or drive shaft of mobile machines.

Fixed displacement axial piston pumps compact-series 311.K

Overall dimensions

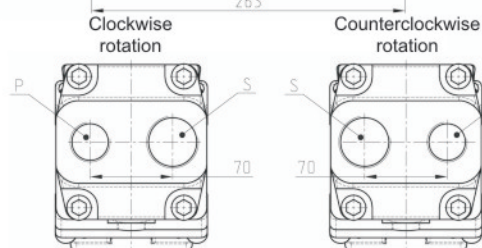
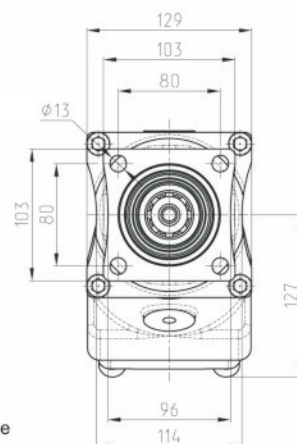
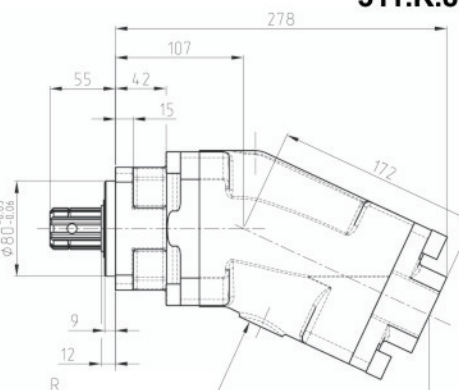
311.K.12, 311.K.17, 311.K.28, 311.K.34



Connections:

S - suction port G $\frac{3}{4}$ " as per DIN ISO 228, depth 16
A - pressure port G $\frac{1}{2}$ " as per DIN ISO 228, depth 14
R - air bleed ports (plugged) - M10x1

311.K.80



Connections:

S - suction port G1¼"x20
P - pressure port G1"x18
R - air bleed ports (plugged) - M10x1

Application:

The pumps are intended for hydraulic circuits of mobile machines



Construction machines



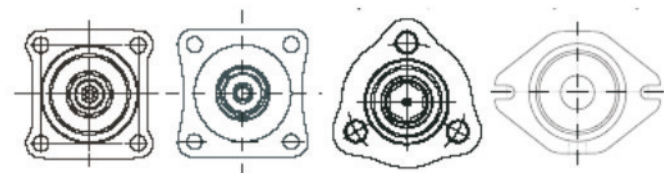
Road-building machines



Municipal machines

Forestry
machines

Special-purpose machines



Advantages:

- maximum pressure up to 35 MPa;
- compact size and light weight;
- easy installation;
- improved reliability

Options available upon agreement with the customer:

- complete set delivery "Pump + PTO";
- mounting flanges as per ISO, GOST, DIN;
- delivery of suction line hoses, pressure line fittings, spare parts & accessories;
- vertical and horizontal orientation of the pump

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www.psm-export.com

Ordering code

A			B	C			D	E	F			G	H	I
3	1	1	K											

• = standard
o = optional
- = not available

A – Series

code	description	12	17	25	28	34	80
311	311 series	•	•	•	•	•	•

B – Version

code	description	12	17	25	28	34	80
K	compact-series, mounting flange "ISO"	•	•	•	•	•	•
U	compact-series, mounting flange "UNI"	o	o	o	o	o	o

C – Working displacement

code	description	12	17	25	28	34	80
12	12 cc/rev	•	-	-	-	-	-
17	17 cc/rev	-	•	-	-	-	-
25	25 cc/rev	-	-	•	-	-	-
28	28 cc/rev	-	-	-	•	-	-
34	34 cc/rev	-	-	-	-	•	-
80	80 cc/rev	-	-	-	-	-	•

D – Rotation

code	description	12	17	25	28	34	80
L	left	•	•	•	•	•	•
R	right	•	•	•	•	•	•

E – Shaft end

code	description	12	17	25	28	34	80
P1	keyed W8x2x32x35 DIN ISO 14	•	•	•	•	•	•

F – Working ports, hydraulic valves

code	description	12	17	25	28	34	80
F 6 0	2 threaded ports at rear side as per DIN/ISO 228	-	-	S(G ^{3/4} "), A(G ^{1/2} ")	S(G ^{3/4} "), A(G ^{1/2} ")	S(G ^{3/4} "), A(G ^{1/2} ")	S(G ^{1 1/4} "), A(G ¹ ")
F 7 0	2 threaded ports at rear side as per DIN/ISO 228	-	-	-	-	-	S(G ¹ "), A(G ^{3/4} ")
F 9 0	2 threaded ports at rear side as per DIN/ISO 228	S(G ¹ "), A(G ^{3/4} ")	S(G ¹ "), A(G ^{3/4} ")	S(G ¹ "), A(G ^{3/4} ")	S(G ¹ "), A(G ^{3/4} ")	S(G ¹ "), A(G ^{3/4} ")	S(G ^{1 1/4} "), A(G ¹ ")

G – Special features

code	description	12	17	25	28	34	80
NN*	none	•	•	•	•	•	•
01	suction hose as per DIN ISO 228, angle 90°	o	o	o	o	o	•
02	suction hose as per DIN ISO 228, angle 45°	o	o	o	o	o	•
03	suction hose as per DIN ISO 228, straight	o	o	o	o	o	•

H – Shaft seal

code	description	12	17	25	28	34	80
B*	NBR	•	•	•	•	•	•
F	FKM	o	o	o	o	o	•
E	"Ecoflon-Z"	o	o	o	o	o	•

I – Climatic version and category of disposition

code	description	12	17	25	28	34	80
Y1*	temperate climate, placing on open air	o	o	o	o	o	•
T1	tropical climate, placing on open air	o	o	o	o	o	•

* allowed not to specify in the inquiry