

RADIAL PISTON PUMPS 1R3

ENGINEERING

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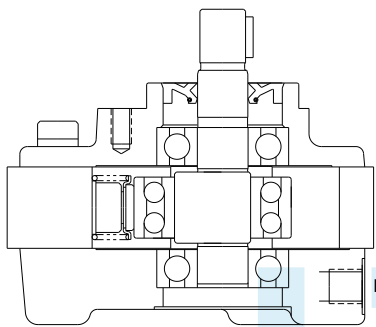
Ref. No. P04931
Release 06/2010

Description

Radial piston arrangement, with 3 pumping elements,
Oil immersed type, Open execution, Face mounting,
Valve controlled, Fixed delivery, Bi-directional rotation
of shaft.



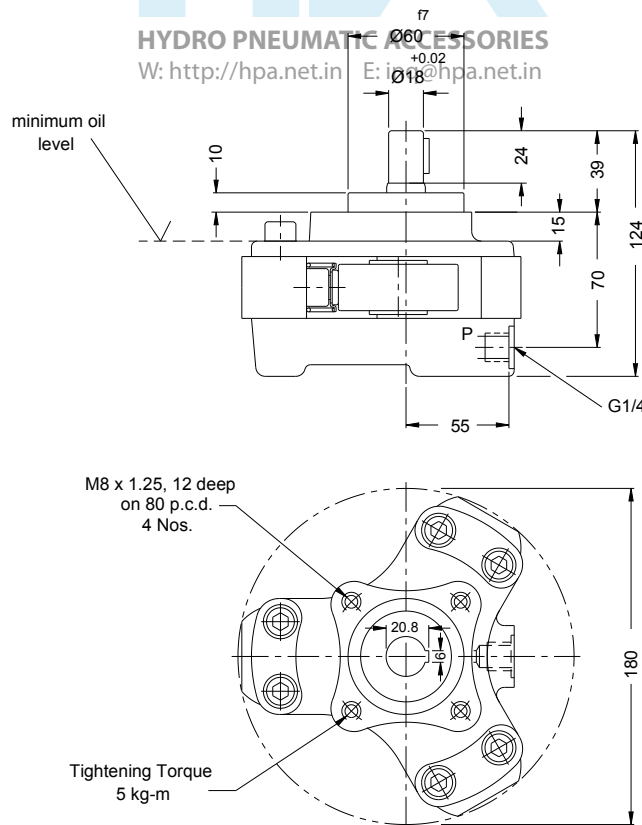
Section



Hydraulic symbol



Unit dimension



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ENGINEERING

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Ref. No. P04931

Technical specification

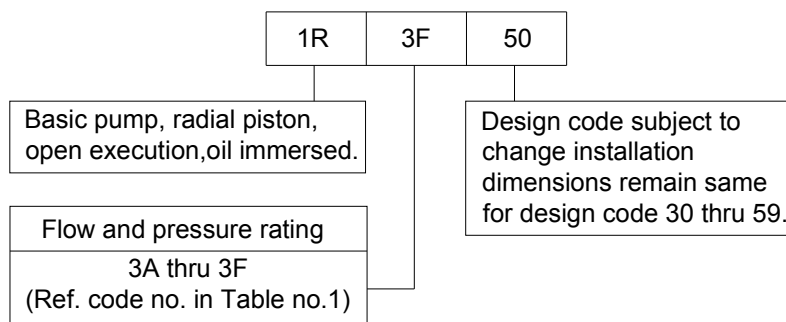
Designation	1R basic radial piston pump group.
Design	Radial piston, valve controlled.
No. of pistons	3
Mounting	Face mounting.
Interface	Factory standard.
Direction of rotation	Can be run in either direction.
Connection	Suction
Delivery (port P)	G1/4 female.
Speed range	300 to 2000 rpm.
Hydraulic medium	Mineral oil.
Viscosity range	10 to 100 cSt.
Optimum viscosity range	16 to 32 cSt.
Temperature range	-10 °C to +80 °C. (Do not exceed viscosity limits at extreme temperatures for efficient running of the pump)
Fluid cleanliness requirement	As per ISO Code 16/13.
Performance	Refer Table No. 1.
Mass	4.4 kg.

Table No. 1

Code No.	Geometrical displacement CC / REV	Rated output at 1450 rpm l / min	Operating pressure bar	Input power requirement (@ 1450 rpm)																							
				50 bar		100 bar		150 bar		200 bar		250 bar		300 bar		350 bar		400 bar		450 bar		500 bar		550 bar			
				kW	hp	kW	hp	kW	hp	kW	hp	kW	hp	kW	hp	kW	hp	kW	hp	kW	hp	kW	hp	kW	hp		
3A	1.21	1.5	550	0.17	0.23	0.3	0.5	0.7	0.7	0.9	0.9	1.2	1.4	1.6	1.6	1.4	1.8	1.6	2.1	1.7	2.3	1.9	2.5				
3B	1.88	2.5	450	0.27	0.36	0.5	0.7	0.8	1.1	1.4	1.3	1.8	1.6	2.2	1.9	2.5	2.1	2.9	2.4	3.2							
3C	2.71	3.7	350	0.39	0.52	0.8	1	1.2	1.6	1.5	2.1	1.9	2.6	2.3	3.1	2.7	3.6										
3D	3.19	4.3	300	0.45	0.61	0.9	1.2	1.4	1.8	1.8	2.4	2.3	3	2.7	3.6												
3E	3.69	5	250	0.53	0.7	1	1.4	1.6	2.1	2.1	2.8	2.6	3.5														
3F	4.24	5.8	200	0.6	0.81	1.2	1.6	1.8	2.4	2.4	3.2																

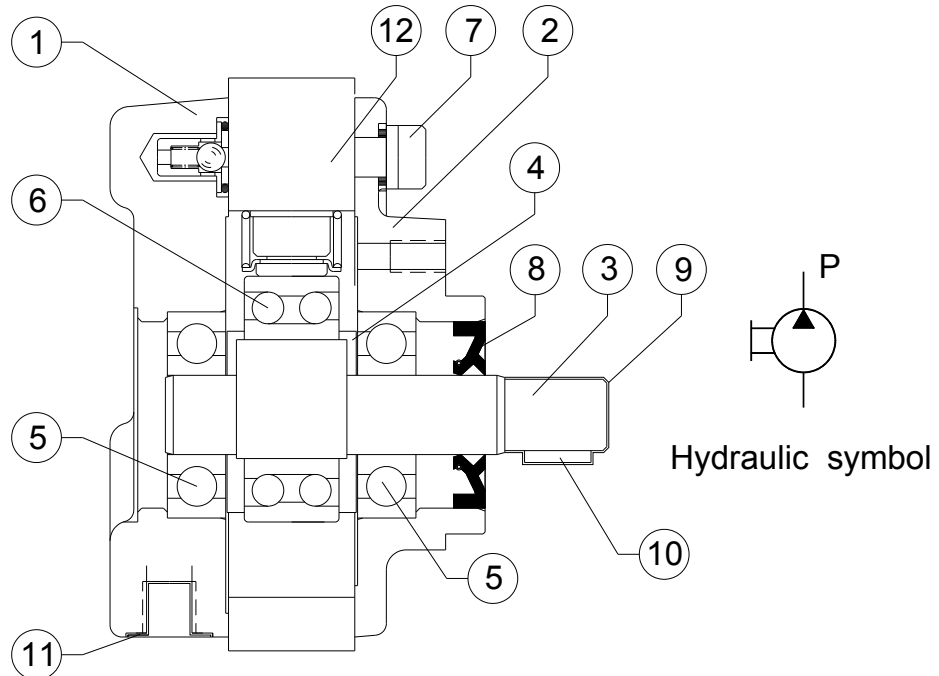
Note : The first digit in the code no. indicates no. of pumping elements in the pump. The second letter indicates flow and pressure rating of the pumping elements. Code no. 3D, for example, indicates a pump with 3 pumping elements having rated flow of 4.3 lpm and operating pressure upto 300 bar.

Ordering code



Note : For Bell housing refer sheet no. P09035.

Sectional view and Part list



Sl.No.	Description	Part No.	Size	Qty.
1	Valve plate	11203		1
2	Cover plate	11223		1
3	Shaft	11241		1
4	Balancing Plate	11251		2
5	Bottom Bearing	11261	6304	2
6	Centre Bearing.	11262	3206	1
7	Cap Screw	11271	M10 x 55 L	6
* 8	Rotary shaft seal	11277	20 x 47 x 8	1
9	Plastic Cap	11284	1R (Shaft)	1
10	Shaft Key	11292	6 x 6 x 16 L	1
11	Rubber Port Plug	00011	G 1/4 Plug Cap	1
Sl.No.	Description	Product	Qty.	
12	Pump element assly. (Refer Data Sheet No. D 11100)	1R-A-01 1R-B-01 1R-C-01 1R-D-01 1R-E-01 1R-F-01	3	

Note : Specified part numbers are available as spares.
* Recommended seal kit.



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1R3

SERVICE

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Ref. No. P04931



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Subject to revision.

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