

RADIAL PISTON PUMPS Model : 1R3**

Ref. No. D 04931 Release 10 / 2020

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Description

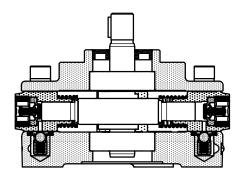
Pumps model **1R3**** are small, low weight, rugged oil immersed type Radial Piston Pumps. These pumps are valve controlled and there is no restriction on direction of rotation of the pump.

These are available with 7 displacements and 7 pressure ratings.

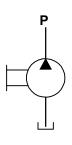
These pumps give fixed output per revolution of the shaft.



Section



Hydraulic symbol



Technical specifications

Designation : 1R is a basic radial piston pump group.

Design : Radial piston, valve controlled.

No. of elements : 3.

Mounting : Face mounting. Interface : Factory standard.

Direction of rotation : No restriction on directions of rotation

Connection : Suction port - Sucks oil directly from tank no suction port is provided.

Delivery (port P) - G1/4 female.

Speed range : 300 to 2000 r/min.
Flow and Pressure : Refer Table no.1
Hydraulic medium : Mineral oil.
Temperature range : -20°C to +80°C.
Viscosity range : 10 cSt to 100 cSt.

Fluid cleanliness required : ISO 4406 20/18/15 or better.

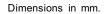
Mass : 5.29 Kg.

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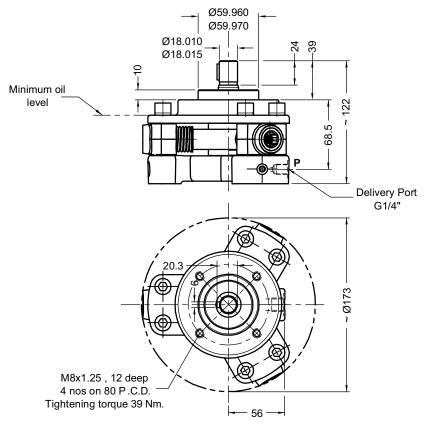
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Unit dimensions

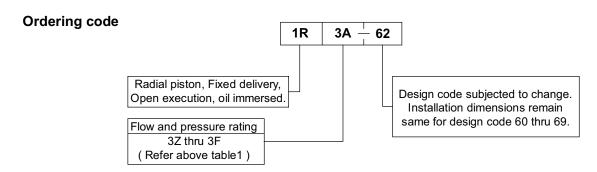






Performance Table no. 1

No. and type of Elements	Geometrical displacement in cm^3/r	Pump output in I/min at 1450 r/min	Maximum operating pressure	Pressure in bar													
				50	100	150	200	250	300	350	400	450	500	550	600	650	700
	cm^3/r	l/min.	bar	Power required to drive the pump in kW													
3 Z	0.69	0.9	700	0.10	0.19	0.29	0.39	0.48	0.58	0.68	0.77	0.87	0.96	1.06	1.16	1.25	1.35
3 A	1.20	1.6	550	0.17	0.34	0.51	0.69	0.86	1.03	1.20	1.37	1.54	1.71	1.89			
3 B	1.89	2.6	450	0.27	0.54	0.80	1.07	1.34	1.61	1.88	2.14	2.41					
3 C	2.70	3.7	350	0.39	0.77	1.16	1.54	1.93	2.32	2.70							
3 D	3.18	4.3	300	0.45	0.91	1.36	1.81	2.26	2.72								
3 E	3.69	5.0	250	0.53	1.05	1.58	2.10	2.63		-							
3 F	4.23	5.8	200	0.60	1.21	1.81	2.41		_						1kW =	1.341	0 hp



Note: For Bell housing refer Data sheet no. D 09035.

