

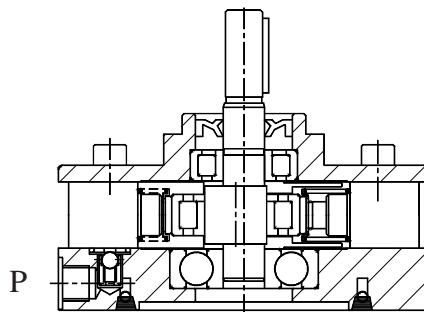
RADIAL PISTON PUMPS MODEL : 1RP

1 Description

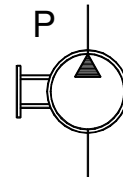
Radial piston arrangement with 3,5 or 7 pumping elements.
Oil immersed.
Face mounting.
Valve controlled.
Fixed delivery.
Bi-directional rotation of shaft.
Extension shaft for through drive



2 Section

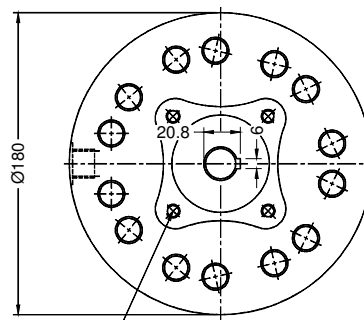
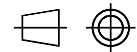
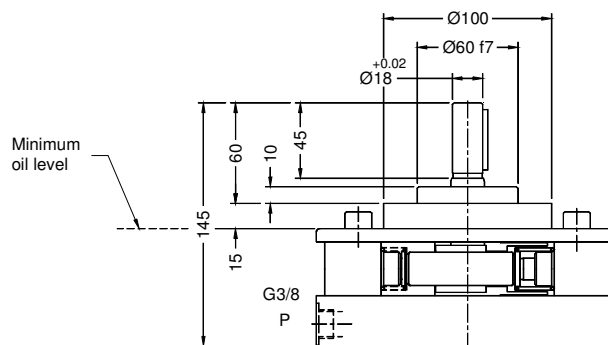


Hydraulic Symbol



3 Unit Dimensions

Dimensions in mm.



M8x1.25, 12 deep,
on 80 p.c.d. 4 nos.

PRISM HYDRAULICS PVT. LTD.

RADIAL PISTON PUMPS MODEL : 1RP

4 Tehnical Specifications

Designation	1RP, basic radial piston pump group
Design	Radial piston, valve controlled
No. of Pistons	3, 5 or 7 depending upon flow requirement
Mounting	Fcae mounting. (Factory standard)
Direction of rotation	1RP Can be run in either directions 1RPE Depends upon direction of rotation of low pr.pump
Connection	Suction ... Sucks oil directly from tank, No suction port is provided Delivery ... G 3/8 Female
Suction pressure	0.02 to 3 bar positive
Speed range	300 to 2000 rpm
Hydraulic medium	Mineral oil
Viscosity range	16 to 68 cSt
Temperature range	-10 to +80 degree celcius (Do not exceed viscosity limits at extreme temperatures for efficient running of pump)
Fluid cleanliness requirement	As per ISO code 16/13
Performance	Refer Table no. 1

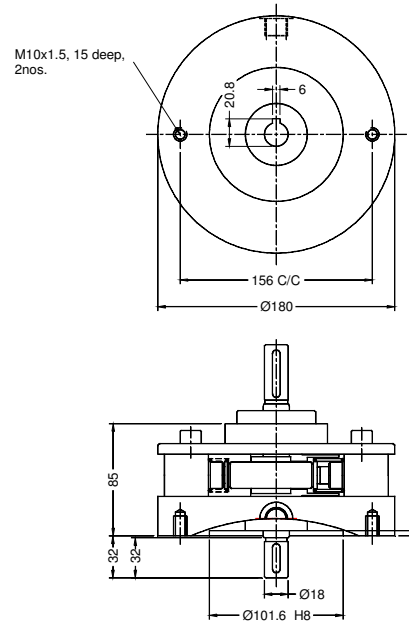
Table No.1

Code No.	Geometrical Displacement CC / REV	Rated Output @ 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		600 bar		650 bar		700 bar	
				KW	HP	KW	HP	KW	HP	KW	HP	KW	HP	KW	HP	KW	HP	KW	HP	KW	HP	KW	HP	KW	HP	KW	HP	KW	HP	KW	HP
3Z	0.69	0.9	700	0.1	0.13	0.19	0.26	0.29	0.39	0.39	0.52	0.48	0.64	0.58	0.78	0.68	0.91	0.77	1.03	0.87	1.17	0.96	1.29	1.06	1.4	1.16	1.55	1.25	1.68	1.35	1.81
5Z	1.15	1.5		0.16	0.22	0.32	0.43	0.48	0.64	0.64	0.86	0.80	1.07	0.96	1.29	1.13	1.52	1.29	1.73	1.45	1.94	1.61	2.16	1.77	2.37	1.93	2.59	2.09	2.8	2.25	3.02
7Z	1.61	2.2		0.23	0.31	0.45	0.60	0.68	0.91	0.90	1.21	1.13	1.52	1.35	1.81	1.58	2.12	1.80	2.41	2.03	2.72	2.25	3.02	2.48	3.32	2.70	3.62	2.93	3.93	3.15	4.22
3A	1.21	1.5	550	0.17	0.23	0.3	0.5	0.5	0.7	0.7	0.9	0.9	1.2	1	1.4	1.2	1.6	1.4	1.8	1.6	2.1	1.7	2.3	1.9	2.5						
5A	2.01	2.6		0.29	0.38	0.6	0.8	0.9	1.2	1.2	1.5	1.4	1.9	1.7	2.3	2	2.7	2.3	3.1	2.6	3.5	2.9	3.8	3.2	4.2						
7A	2.81	3.7		0.4	0.54	0.8	1.1	1.2	1.6	1.6	2.2	2	2.7	2.4	3.2	2.8	3.8	3.2	4.3	3.6	4.8	4	5.4	4.4	5.9						
3B	1.88	2.5	450	0.27	0.36	0.5	0.7	0.8	1.1	1.1	1.4	1.3	1.8	1.6	2.2	1.9	2.5	2.1	2.9	2.4	3.2										
5B	3.14	4.2		0.45	0.6	0.9	1.2	1.3	1.8	1.8	2.4	2.2	3	2.7	3.6	3.1	4.2	3.6	4.8	4	5.4										
7B	4.4	5.8		0.63	0.84	1.3	1.7	1.9	2.5	2.5	3.4	3.1	4.2	3.8	5	4.4	5.9	5	6.7	5.6	7.5										
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														
5C	4.52	6.2		0.64	0.86	1.3	1.7	1.9	2.6	2.6	3.5	3.2	4.3	3.9	5.2	4.5	6														
7C	6.33	8.6		0.9	1.21	1.8	2.4	2.7	3.6	3.6	4.8	4.5	6	5.4	7.2	6.3	8.5														
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																
5D	5.31	7.2		0.76	1.01	1.5	2	2.3	3	3	4.1	3.8	5.1	4.5	6.1																
7D	7.43	10		1.06	1.42	2.1	2.8	3.2	4.3	4.2	5.7	5.3	7.1	6.3	8.5																
3E	3.69	5	250	0.53	0.7	1.1	1.1	1.6	2.1	2.1	2.8	2.6	3.5																		
5E	6.16	8.4		0.88	1.17	1.8	2.4	2.6	3.5	3.5	4.7	4.4	5.9																		
7E	8.62	11.7		1.23	1.64	2.5	3.3	3.7	4.9	4.9	6.6	6.1	8.2																		
3F	4.24	5.8	200	0.6	0.81	1.2	1.6	1.8	2.4	2.4	3.2																				
5F	7.07	9.7		1	1.35	2	2.7	3	4	4	5.4																				
7F	9.9	13.6		1.41	1.89	2.8	3.8	4.2	5.7	5.6	7.5																				

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5 Accessories

5.1 Extension shaft (For through drive)
Dimensions.



Note :-

Torque limitation :- The sum of the torque used for the piston pump & torque used at the extended shaft end should not exceed 75 Nm (11 kw at 1450 rpm)

5.2 Extension bracket assemblies (For coupling low pressure pump)

Consists of -- Extension bracket
Set of flexible coupling
Mounting bolt kit

Dimensions -- Refer Table no.2

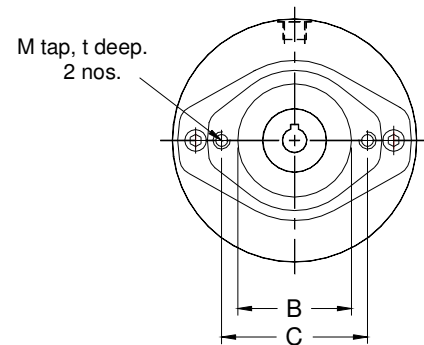
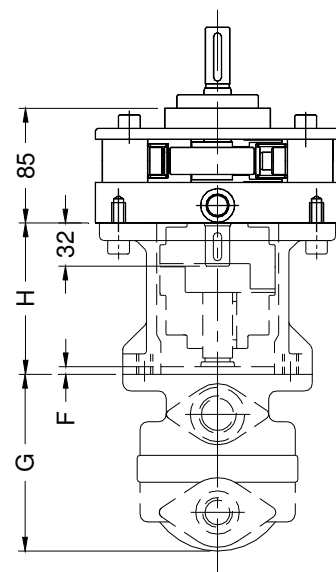


Table No.2

Code No.	B	C	F	H	M	t
B1	82.6	106.4	30	120	M10	15
B2	101.6	146	10	114	M12	18
B3	127	181	14	138	M16	20

Note : 1.For dimensions 'G' please refer pump manufacturer's catalogue.
2.Torque limitation :Refer note above.
3.Flexible coupling can be supplied with bored & key way machined coupling half to suit a specific brand & model of pump against specific request.

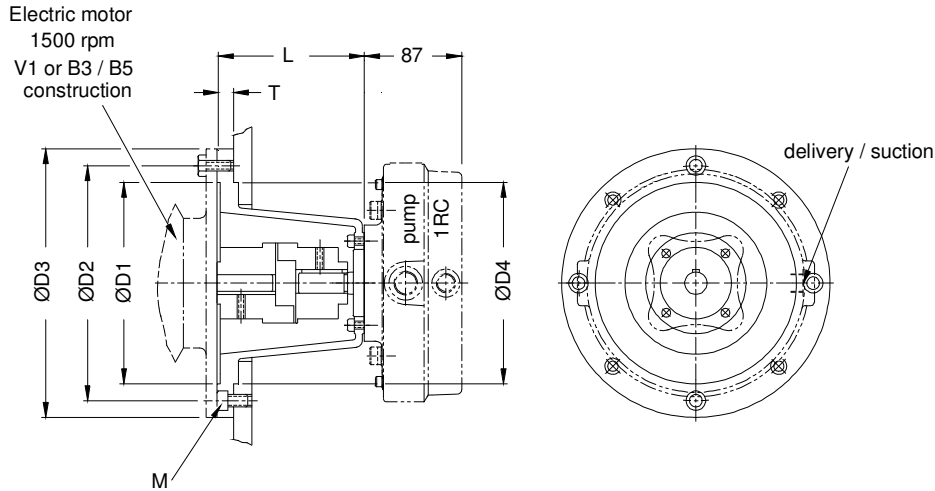


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5.3 Bell housing assemblies (For coupling pump to electric motor)

- Consists of : Bell Housing
- Flexible coupling set
- Bolt kits for pump, Motor & Bell housing

Dimensions : Refer table no.3



Ordering Code NO.	d1	d2	d3	d4	t	l	MxNos.	Suitable for electric motor of 1500 rpm V1 construction	
								K.W.	H.P
BHP/1	130	165	200	130	16	130	M10X4	0.75	1
BHP/1.5	130	165	200	130	16	130	M10X4	1.1	1.5
BHP/2	130	165	200	130	16	130	M10X4	1.5	2
BHP/3	180	215	250	180	16	145	M10X4	2.2	3
BHP/5	180	215	250	180	16	145	M10X4	3.75	5
BHP/7.5	230	265	300	230	16	170	M10X4	5.6	7.5
BHP/10	230	265	300	230	16	170	M10X4	7.5	10

Note :- Bell housing assembly to be ordered seperately.

6 Ordering code

