

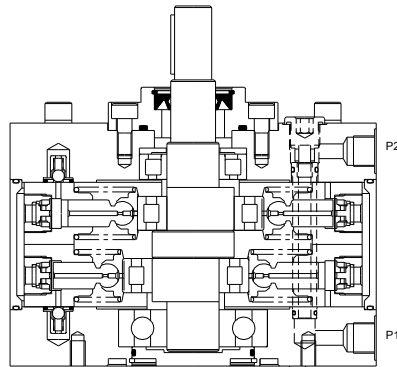
RADIAL PISTON DOUBLE PUMPS CASING TYPE MODEL : 12RPC

1 Description

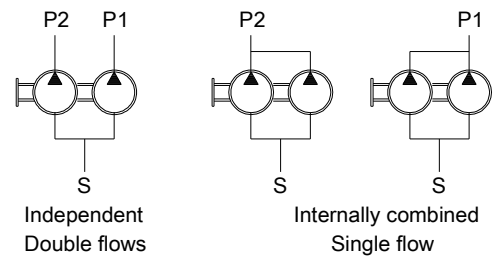
Radial piston arrangement with 3, 5, 7 & 9 pumping elements.
Oil immersed or external mounting type.
Face mounting.
Valve controlled.
Fixed delivery.
Bi-directional rotation of shaft.
Extension shaft for through drive
With extension bracket assembly for coupling a low pressure pump having standard flange.



2 Section

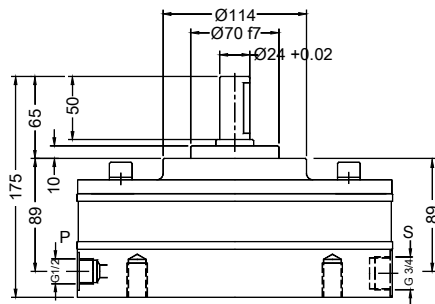


Hydraulic Symbol

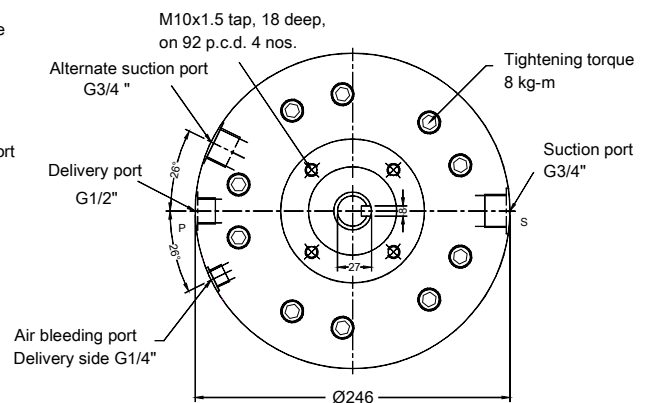
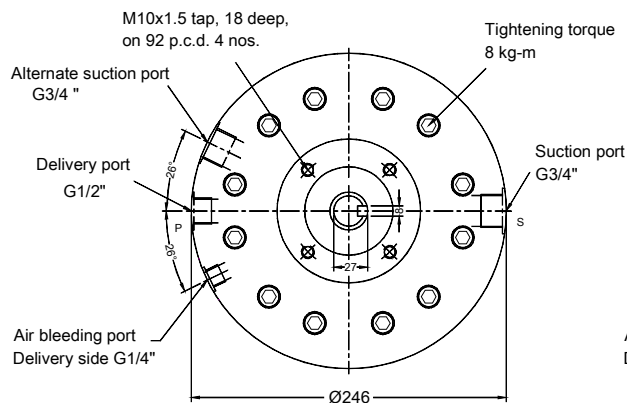
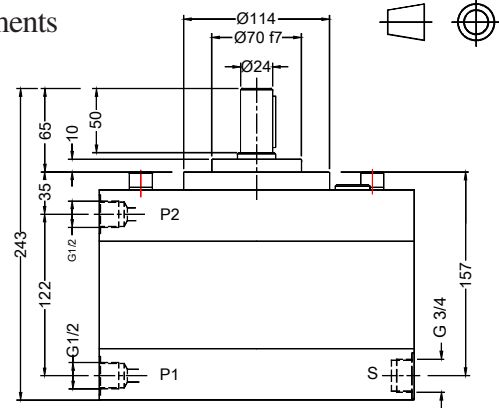


3 Unit Dimensions

2x3 Elements



2x5 / 7 Elements



PRISM HYDRAULICS PVT. LTD.

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4 Technical Specifications

Designation	12RPC, basic radial piston double pump group
Design	Radial piston, valve controlled
No. of Pistons	3, 5, 7 & 9 depending upon flow requirement
Mounting	Face mounting. (Factory standard)
Direction of rotation	12RPC .. Can be run in either directions 12RPCE Depends upon direction of rotation of low pr. pump
Connection	Suction ... G 3/4 female. Suction head -- 300 mm max Suction pipe size -- 30 o. d. x 2 th. (as far as possible use straight pipe)
Speed range	1000 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.	Operating pressure (bar)	Input power requirement (@ 1450 rpm)																	
				50 bar		100 bar		150 bar		200 bar		250 bar		300 bar		315 bar		350 bar		400 bar	
				KW	HP	KW	HP	KW	HP	KW	HP	KW	HP	KW	HP	KW	HP	KW	HP	KW	HP
3A	4.62	6.3	400	0.66	2.22	1.31	1.76	1.97	2.64	2.63	3.52	3.28	4.4	3.94	5.28	4.14	5.55	4.6	6.17	5.25	7.04
5A	7.7	10.6		1	1.4	2.1	2.8	3.1	4.2	4.1	5.6	5.1	7	6.2	8.4	6.5	8.8	7.2	9.8	8.2	11.1
7A	10.8	14.9		1.4	2	2.9	3.9	4.3	5.9	5.8	7.8	7.2	9.8	8.7	11.8	9.1	12.3	10.1	13.7	11.5	15.7
9A	13.85	18.9		1.97	2.64	3.94	5.28	5.91	7.92	7.88	10.56	9.85	13.2	11.82	15.84	12.41	16.63	13.8	18.5	15.76	21.12
3B	6.03	8.2	315	0.86	1.15	1.71	2.29	2.57	3.44	3.43	4.60	4.29	5.75	5.14	6.90	5.40	7.24				
5B	10.1	14		1.4	1.8	2.7	3.7	4.1	5.5	5.4	7.3	6.8	9.2	8.1	11	8.5	11.6				
7B	14.1	19.5		1.9	2.6	3.8	5.1	5.7	7.7	7.5	10.2	9.4	12.8	11.3	15.4	11.9	16.1				
9B	18.1	24.7		2.57	3.44	5.14	6.89	7.72	10.35	10.29	13.8	12.86	17.23	15.43	20.68	16.21	21.72				
3C	7.63	10.4	250	1.09	1.46	2.17	2.91	3.26	4.37	4.34	5.82	5.43	7.28								
5C	12.7	17.6		1.7	2.3	3.4	4.6	5.1	6.9	6.8	9.2	8.5	11.5								
7C	17.8	24.5		2.4	3.2	4.7	6.4	7.5	9.7	9.5	12.9	11.9	16.1								
9C	22.9	31.2		3.26	4.37	6.51	8.72	9.77	13.09	13.02	17.45	16.28	21.82								

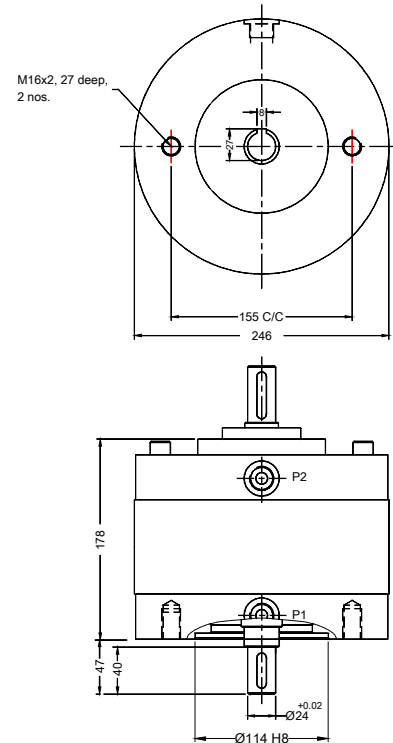
Note :- The first digit in the code No. indicates No. of pumping elements in the pump. The second letter indicates flow & pressure rating of the pumping elements.

Code 7C for example, indicates a pump with 7 pumping elements having rated flow of 24.5 l/ min. & operating pressure upto 250 bar.

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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 148 Nm (22.2 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

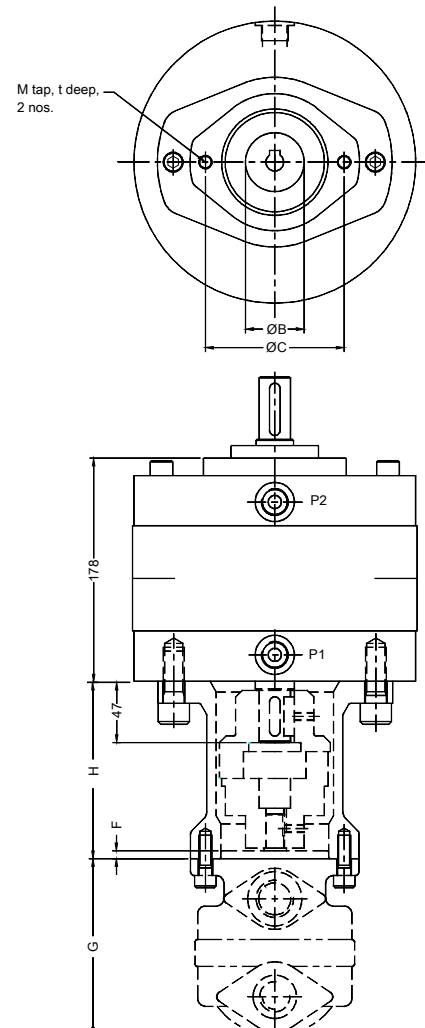


Table No.2

Code No.	B (H8)	C	F	H	M	t
EB1	82.6	106.4	30	140	M 10	15
EB2	101.6	146	10	134	M 12	18
EB3	127	181	14	158	M 16	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

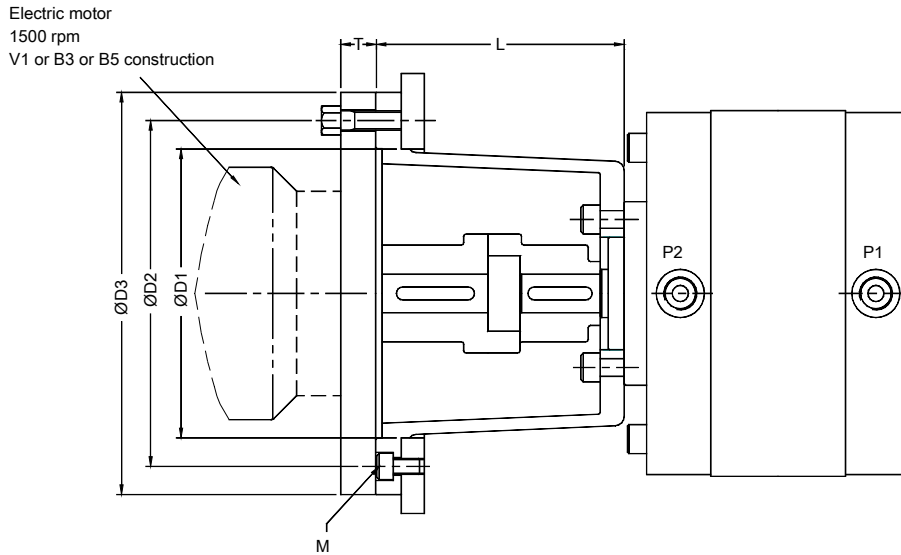


Table No.3

Ordering Code	D 1	D 2	D 3	D 4	T	L	M xN nos.	Suitable for electric motors of 1500 rpm	
								K W	H P
BHP /5	180	215	250	230	16	155	M 10x4	3.75	5
BHP /7.5	230	265	300	230	16	180	M 10x4	5.6	7.5
BHP /10	230	265	300	230	16	180	M 10x4	7.5	10
BHP /12.5	250	300	350	230	20	205	M 12x4	9.375	12.5
BHP /15	250	300	350	230	20	205	M 12x4	11.25	15
BHP /30	250	300	350	230	20	205	M 12x4	22.5	30

Note :- Bell housing assembly to be ordered separately.

6 Ordering code

