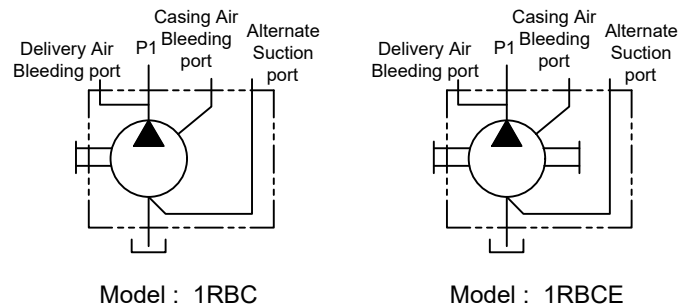


Description

Radial piston pump model 1RBC & 1RBCE are arrangement with 3, 5 or 7 pumping elements. External mounting type, Face Mounting. valve Control, Fixed delivery, Bi-Directional rotation of shaft. Available with extension shaft for through drive with extension bracket assembly for coupling a low pressure pump having standard flanges.

Hydraulic Symbol



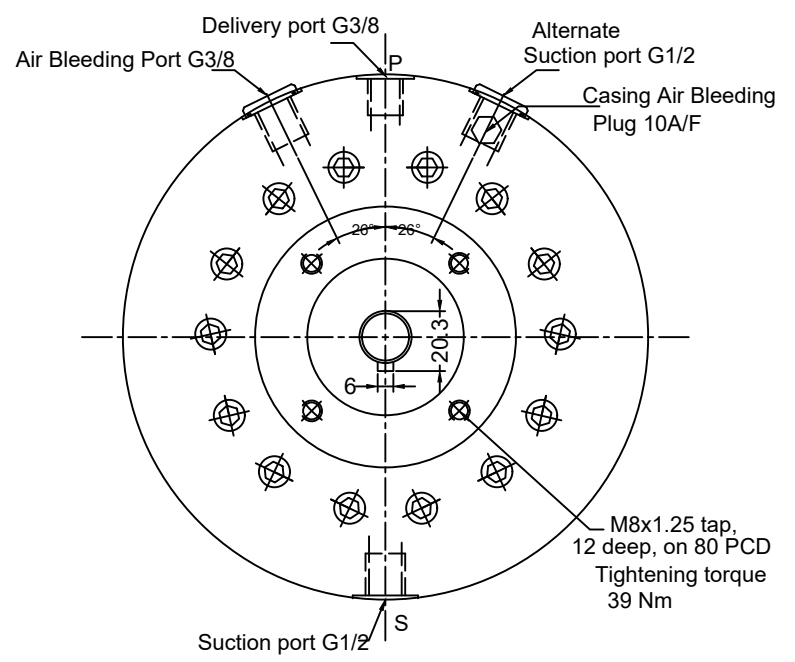
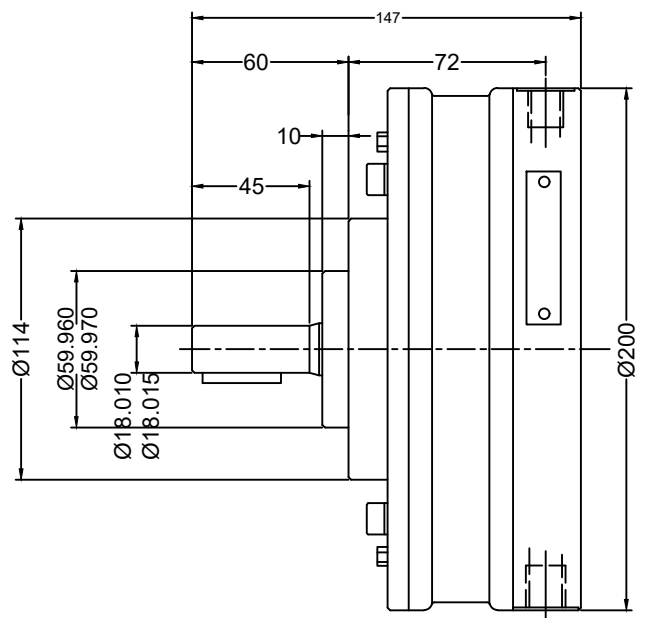
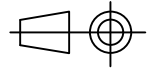
Technical Specification

Design	:	1RBC is a basic radial piston pump with casing, 1RBCE is a radial piston pump with casing and extension shaft. These pumps are valve controlled.
No. of pumping elements	:	3, 5 or 7
Mounting interface	:	Factory standard, face mounting.
Direction of rotation	:	1RBC - Bi-directional pump 1RBCE - Depends upon the direction rotation of pump attached
Connection	:	Suction port (S) - G1/2 female Delivery port (P) - G3/8 female
Speed range	:	300 to 2000 rpm
Flow and Pressure	:	Refer Performance table.
Torque limitation	:	Input drive shaft - 75 Nm Extension shaft - 53 Nm
Hydraulic medium	:	Mineral oil
Viscosity range	:	10 cSt to 100 cSt
Temperature range	:	-20°C to +80°C
Fluid cleanliness req.	:	ISO 4406 20/18/15 or better
Mass	:	1RBC3 - 9.8 kg, 1RBCE3 -10 kg, 1RBC5 -10.5 kg, 1RBCE5 -10.8 kg, 1RBC7- 11.2 kg, 1RBCE7- 11.4 kg.

Unit Dimension

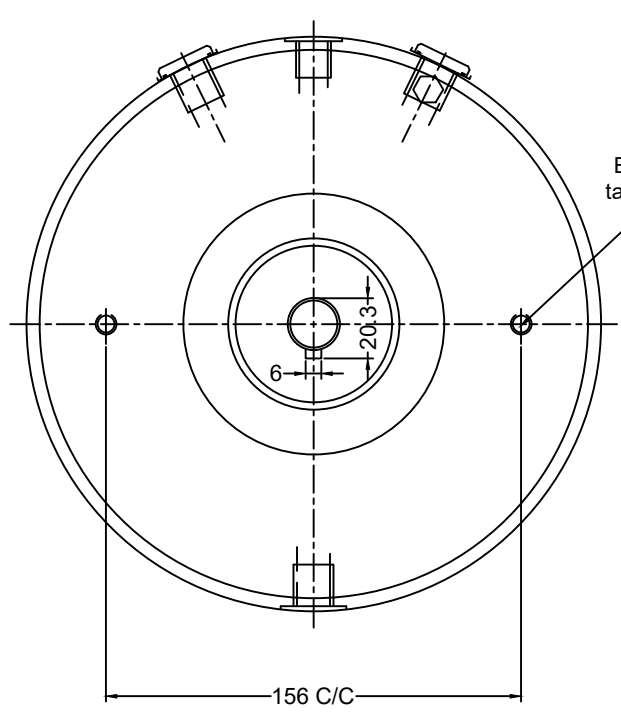
Model : 1RBC

Dimensions in mm

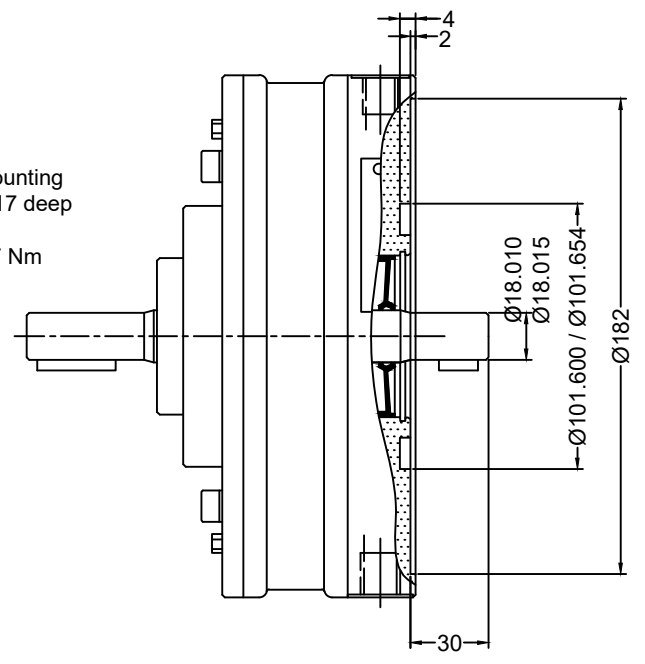


Model :1RBCE

Extension Bracket (for through drive)



Extension Bracket Mounting
taped holes M10 tap, 17 deep
2 nos.
Tightning torque 77 Nm



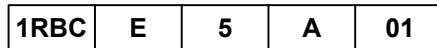
Performance Table

No. of Pumping Elements per section	Element Type	Geometrical displacement in cm ³ /r	Pump Output in l/min at 1450 rpm	Max Operating pressure in bar	Pressure in bar													
					50	100	150	200	250	300	350	400	450	500	550	600	650	700
					Power required for 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
5		1.15	1.5		0.16	0.32	0.48	0.64	0.80	0.96	1.13	1.29	1.45	1.61	1.77	1.93	2.09	2.25
7		1.61	2.2		0.23	0.45	0.68	0.90	1.13	1.35	1.58	1.80	2.03	2.25	2.48	2.70	2.93	3.15
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			
5		2.00	2.7		0.29	0.57	0.86	1.14	1.43	1.71	2.00	2.29	2.57	2.86	3.14			
7		2.80	3.8		0.40	0.80	1.20	1.60	2.00	2.40	2.80	3.20	3.60	4.00	4.40			
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					
5		3.15	4.3		0.45	0.89	1.34	1.89	2.23	2.68	3.13	3.57	4.02					
7		4.41	6.0		0.63	1.25	1.88	2.50	3.13	3.75	4.38	5.00	5.63					
3	C	2.70	3.7	350	0.39	0.77	1.16	1.54	1.93	2.32	2.70							
5		4.50	6.2		0.64	1.29	1.93	2.57	3.22	3.86	4.50							
7		6.30	8.6		0.90	1.80	2.70	3.60	4.50	5.40	6.30							
3	D	3.18	4.3	300	0.45	0.91	1.36	1.81	2.26	2.72								
5		5.30	7.2		0.75	1.51	2.26	3.02	3.77	4.53								
7		7.42	10.1		1.06	2.11	3.17	4.23	5.28	6.34								
3	E	3.69	5.0	250	0.53	1.05	1.58	2.10	2.63									
5		6.15	8.4		0.88	1.75	2.63	3.50	4.38									
7		8.61	11.7		1.23	2.45	3.68	4.90	6.13									
3	F	4.23	5.8	200	0.60	1.21	1.81	2.41										
5		7.05	9.6		1.00	2.01	3.01	4.02										
7		9.87	13.5		1.41	2.81	4.22	5.63										

1kW = 1.3410 hp

Note : Torque limitation - The sum of torque used for the piston pump and torque used at extension shaft end should not exceed 75 Nm (11 kW at 1450 rpm)

Ordering Code



Radial Piston, Fixed delivery,
Close execution, with casing

With extension shaft 'E'
Omit, if not required

No. of Pumping Element
3, 5, 7

Design Code

Type of Elements
Refer Performance table