



RADIAL PISTON PUMPS

Model : 11RC****

Ref. No. D 09206
Release 07 / 2016

ENGINEERING - 1 of 3

A Polyhydron Group Company

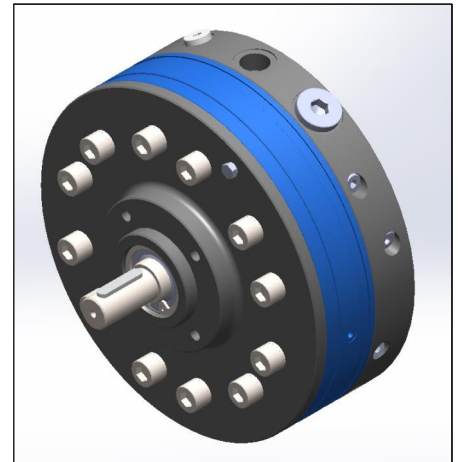
Description

Model **11RC****** are rugged radial piston pumps with 5 or 7 pumping elements. These pumps are valve controlled and therefore there no restriction on direction of rotation of the pump. These pumps can be submerged in oil or externally mounted above oil level.

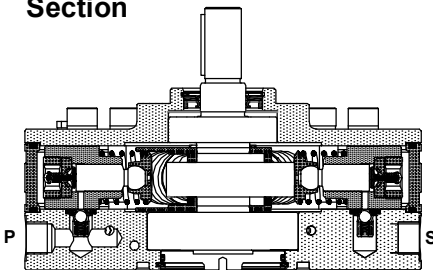
Pumps with model code **11RCE***** have extension shaft for through drive and are available with extension bracket assembly for coupling a pump having standard flange as per ISO 3019/2.

They are available with 6 displacements and 3 pressure ratings.

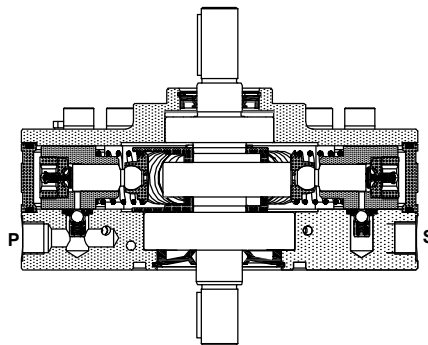
The pumps give fixed output per revolution of the shaft.



Section

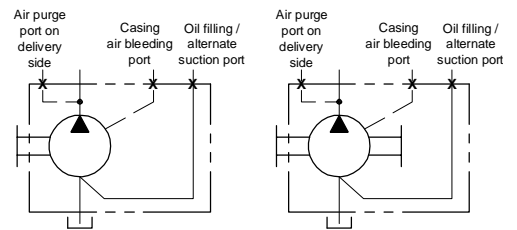


Model : 11RC***



Model : 11RCE***

Hydraulic symbol



Model : 11RC***

Model : 11RCE***

Technical specifications

Designation	:	11RC basic radial piston pump with casing. 11RCE radial piston pump with casing and extension shaft.
Design	:	Radial piston, valve controlled.
No. of pistons	:	5 or 7 elements.
Mounting	:	Face mounting with Air purge port at highest level.
Interface	:	Factory standard.
Direction of rotation	:	11RC - No restriction on direction of rotation. 11RCE - Depends upon the direction rotation of pump attached.
Connection	:	Suction port (S) - G3/4 female. Delivery (P) - G1/2 female.
Speed range	:	300 to 2000 r/min.
Max. Suction Head	:	At no time allow the oil level in the tank to fall 500 mm below the axis of the pump, when the pump is mounted horizontally, or 500 mm below the mounting face of the pump, when the pump is mounted vertically
Flow and Pressure	:	Refer Table no. 1
Torque limitations	:	Input drive shaft - 75 Nm Extension shaft - 53 Nm
Hydraulic medium	:	Mineral oil.
Temperature range	:	-20°C to + 80°C.
Viscosity range	:	10 cSt to 380 cSt.
Fluid cleanliness required	:	ISO 4406 20/18/15 or better.
Mass	:	Model : 11RC5 11RCE5 11RC7 11RCE7 Kg : 26.8 27.1 27.8 28.1

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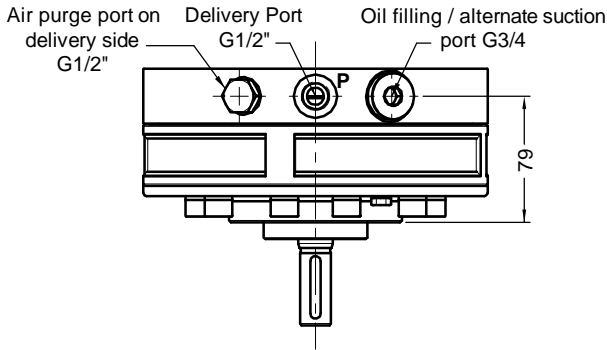
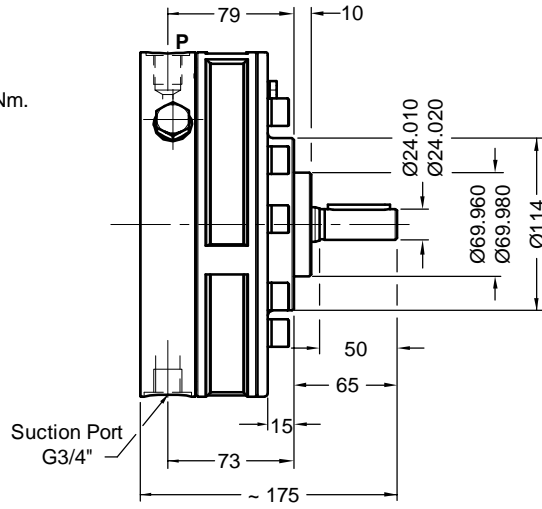
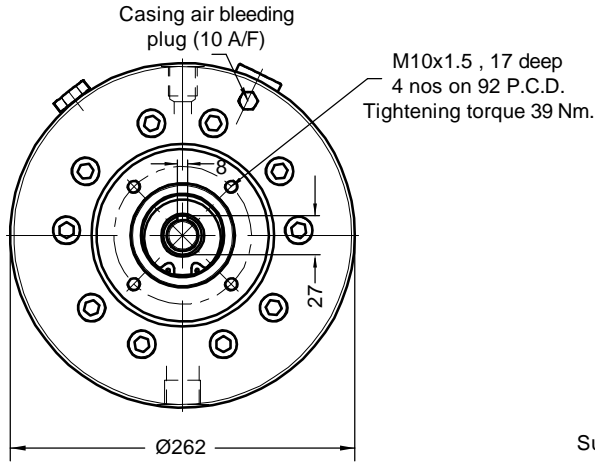
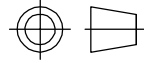


Unit dimensions

Dimensions in mm.

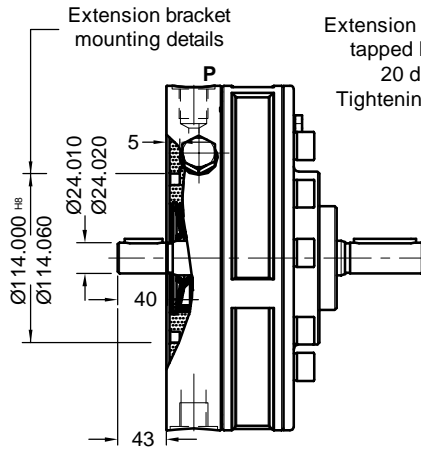
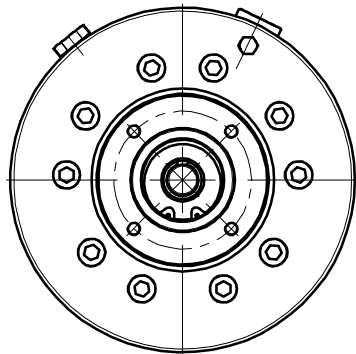
Pump without extension shaft

Model - 11RC5 OR 11RC7

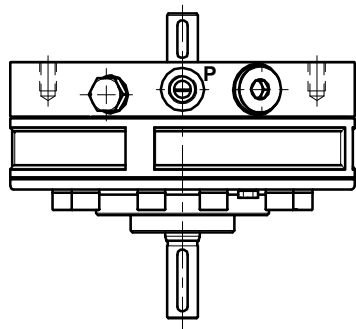
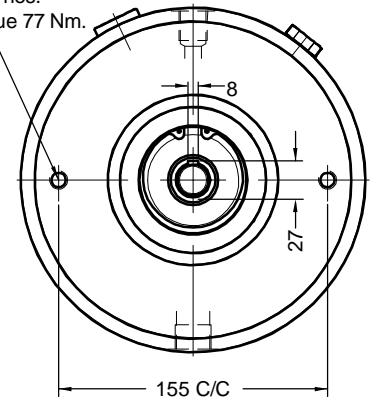


Pump with extension shaft

Model - 11RCE5 OR 11RCE7



Extension bracket mounting
tapped holes M16 tap,
20 deep, 2 nos.
Tightening torque 77 Nm.

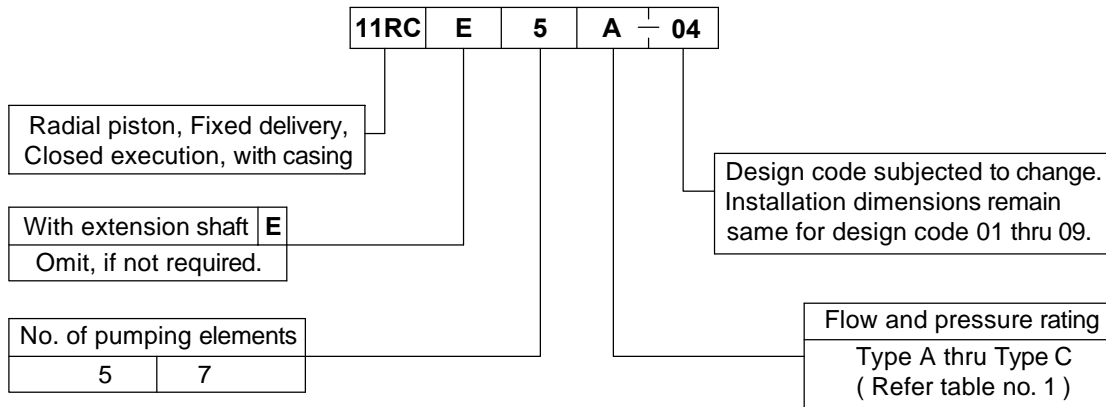




Performance
Table no. 1

No. of pistons	Element type	Geometrical displacement in cm ³ /r	Pump output in l/min At 1450 r/min	Operating pressure in bar	Input power requirement (@ 1450 r/min)							
					50 bar kW	100 bar kW	150 bar kW	200 bar kW	250 bar kW	300 bar kW	315 bar kW	400 bar kW
5	A	7.70	10.5	400	1.09	2.19	3.28	4.38	5.47	6.57	6.89	8.75
7		10.78	14.7		1.53	3.06	4.60	6.13	7.66	9.19	9.65	12.25
5	B	10.05	13.7	315	1.43	2.86	4.29	5.72	7.15	8.57	9.0	
7		14.07	19.2		2.0	4.0	6.0	8.0	10.0	12.0	12.6	
5	C	12.72	17.3	250	1.81	3.62	5.43	7.23	9.04	1kW = 1.3410 hp		
7		17.81	24.3		2.53	5.06	7.60	10.13	12.66			

Ordering code



Note : For Bell housing refer Data sheet no. D 09035 and For extension bracket refer Data sheet no. D 09090.
For commisioning of pump refer datasheet no. D 11200 L.