



RADIAL PISTON PUMPS Model : 11R****

Ref. No. D 09190
Release 07 / 2016

ENGINEERING - 1 of 3

A Polyhydron Group Company

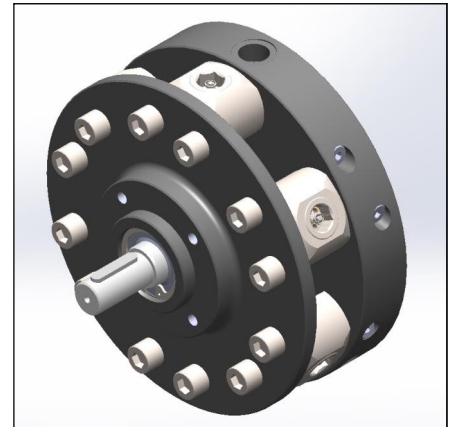
Description

Model **11R****** are rugged oil immersed type Radial Piston Pump with 5 or 7 pumping elements. These pumps are valve controlled and there is no restriction on direction of rotation of the pump.

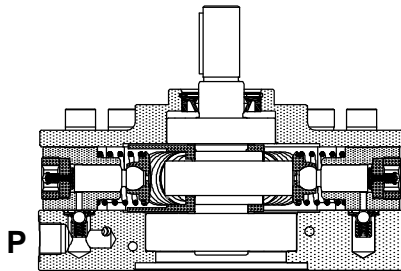
The pumps with model **11RE***** have extension shaft for through drive and are available with extension bracket assembly for coupling a low pressure pump having standard flanges as per ISO 3019/2.

They are available with 6 displacements and 3 pressure ratings.

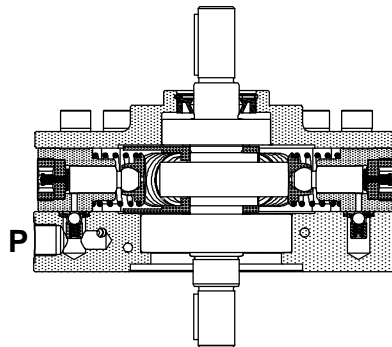
These pumps give fixed output per revolution of the shaft.



Section

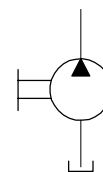


Model : 11R***

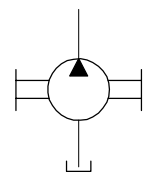


Model : 11RE***

Hydraulic symbol



Model : 11R***



Model : 11RE***

Technical specifications

Designation	:	11R basic radial piston pump. 11RE radial piston pump with extension shaft.
Design	:	Radial piston, valve controlled.
No. of pistons	:	5 or 7 elements.
Mounting	:	Oil immersed, face mounting.
Interface	:	Factory standard.
Direction of rotation	:	11R - No restriction on directions of rotation. 11RE - Depends upon the direction rotation of pump attached.
Connection	:	Suction port - Sucks oil directly from tank, no suction port is provided. Delivery (port P) - G1/2 female.
Speed range	:	300 to 2000 r/min.
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 : 11R5 11RE5 11R7 11RE7 Kg : 26.5 26.8 27.0 27.3

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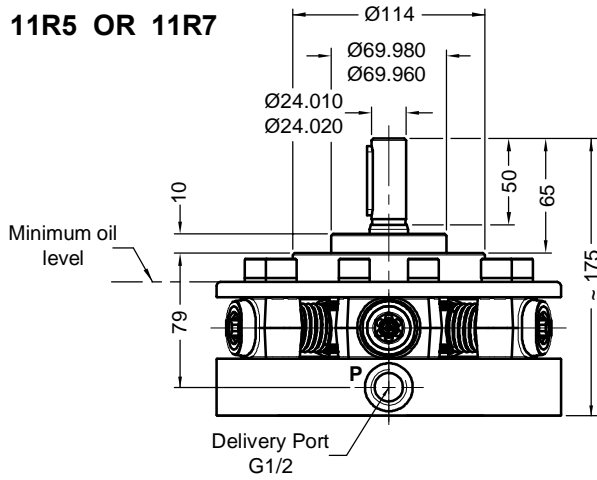


Unit dimensions

Dimensions in mm.

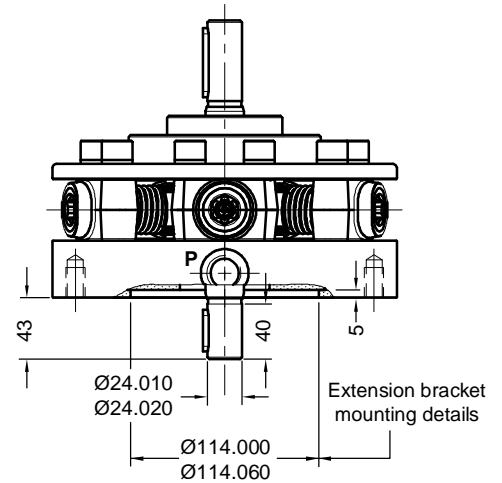
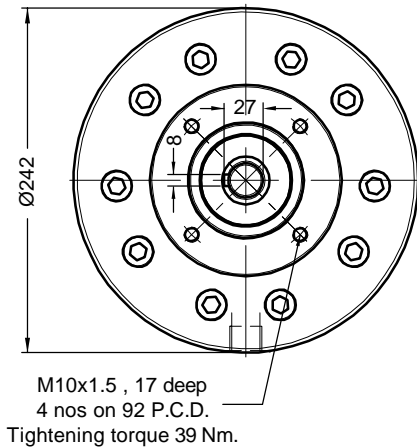
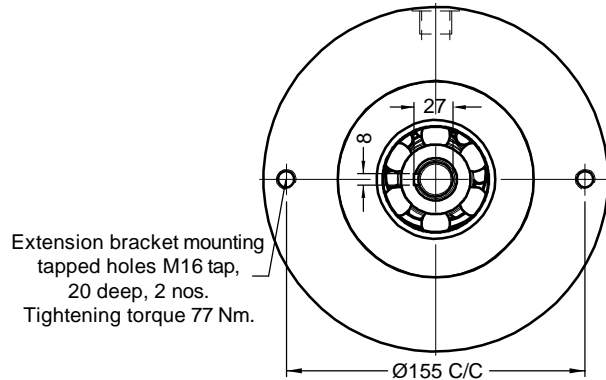
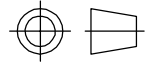
Pump without extension shaft

Model - 11R5 OR 11R7



Pump with extension shaft

Model - 11RE5 OR 11RE7



Performance Table no. 1

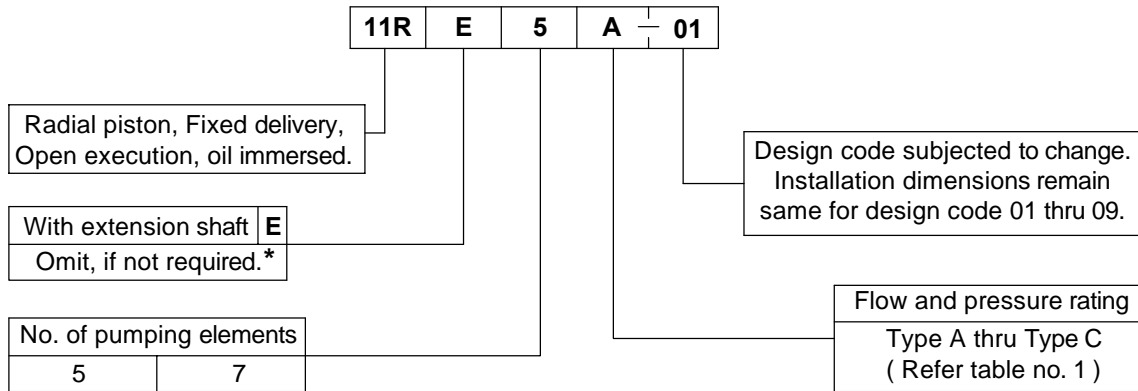
No. of pistons	Element type	Geometrical displacement in cm ³ /r	Pump output in l/min At 1450 r/min	Operating pressure in bar	Input power requirement (@ 1450 r/min)							
					50 bar	100 bar	150 bar	200 bar	250 bar	300 bar	315 bar	400 bar
					kW	kW	kW	kW	kW	kW	kW	kW
5	A	7.70	10.5	400	1.09	2.19	3.28	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			

Note :

Torque limitation : The sum total of torque applied to drive pump sections and pump attached (In case model 11RE is used), at any given instances should not exceed 75 Nm.



Ordering code



Note : For Bell housing refer Data sheet no. D 09035 and For extension bracket refer Data sheet no. D 09090.