



# RADIAL PISTON PUMPS

## Model : 11R\*\*\*\*

Ref. No. D 09190  
Release 07 / 2019

ENGINEERING - 1 of 2

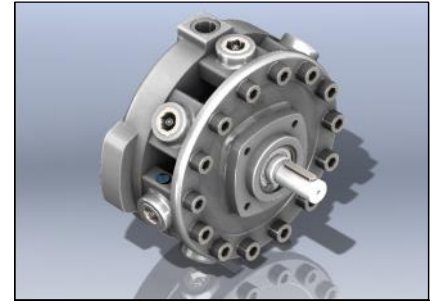
A Polyhydron Group Company

### Description

Model **11R\*\*\*\*** are rugged oil immersed type Radial Piston Pumps and have either 5, 7 or 9 pumping elements. These pumps are valve controlled and there is no restriction on direction of rotation of the pump.

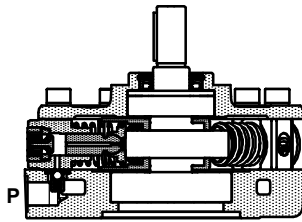
They are available with 9 displacements and 3 pressure ratings. These pumps give fixed output per revolution of the shaft.

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 (Ref. datasheet no. D 09090).

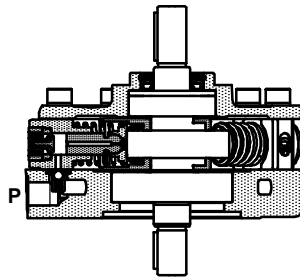


Hydraulic symbol

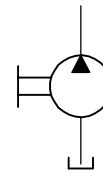
### Section



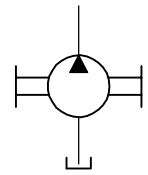
Model : 11R\*\*\*



Model : 11RE\*\*\*



Model : 11R\*\*\*



Model : 11RE\*\*\*

### Technical specifications

Designation	:	11R is a basic Radial piston pump. 11RE is a Radial piston pump with extension shaft.
Design	:	Radial piston, valve controlled, open execution.
No. of pumping elements	:	5, 7 or 9.
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 - 220 Nm Extension shaft - 130 Nm
Hydraulic medium	:	Mineral oil.
Temperature range	:	-20°C to + 80°C.
Viscosity range	:	10 cSt to 100 cSt.
Fluid cleanliness required	:	ISO 4406 20/18/15 or better.
Mass	:	Model : 11R5 11RE5 11R7 11RE7 11R9 11RE9 Kg : 18.5 18.8 19.7 19.9 20.9 21

### Performance table no. 1

No. of pumping elements	Element type	Geometrical displacement in cm <sup>3</sup> /r	Pump output in l/min At 1450 r/min	Maximum Operating pressure in bar	Pressure in bar							
					50	100	150	200	250	300	315	400
					Power required to drive the pump in 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
9		13.85	18.9		1.97	3.94	5.91	7.88	9.85	11.82	12.41	15.76
5	B	10.05	13.7	315	1.43	2.86	4.29	5.72	7.15	8.57	9.00	
7		14.07	19.2		2.00	4.00	6.00	8.00	10.0	12.0	12.6	
9		18.10	24.7		2.57	5.14	7.72	10.29	12.86	15.43	16.21	
5	C	12.72	17.3	250	1.81	3.62	5.43	7.23	9.04			
7		17.81	24.3		2.53	5.06	7.60	10.1	12.6			
9		22.90	31.2		3.26	6.51	9.77	13.02	16.28			

Note : Torque limitation : The total sum of torque applied to drive the pump and the pump attached (In case model 11RE is used), at any given instance, should not exceed 220 Nm.

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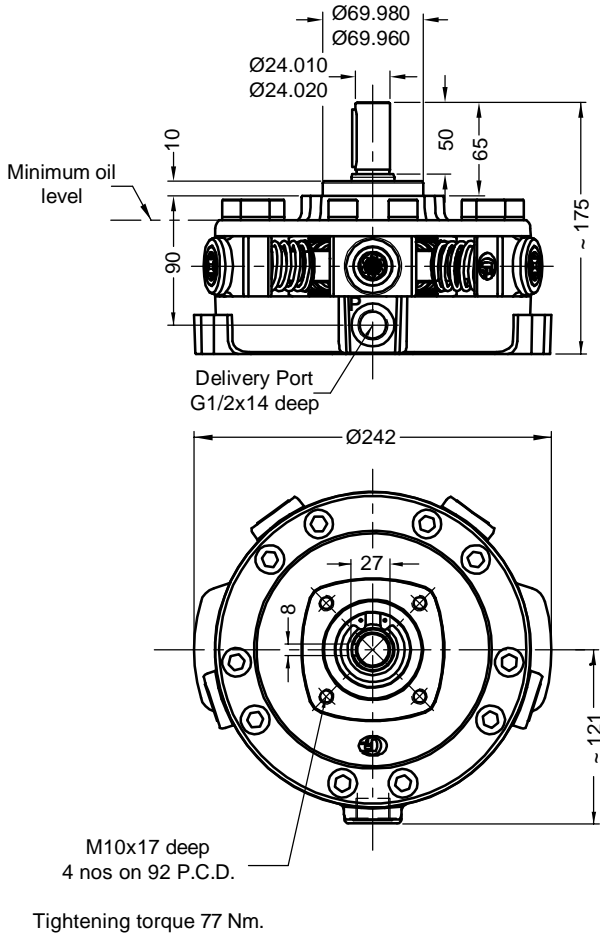


### Unit dimensions

Dimensions in mm.

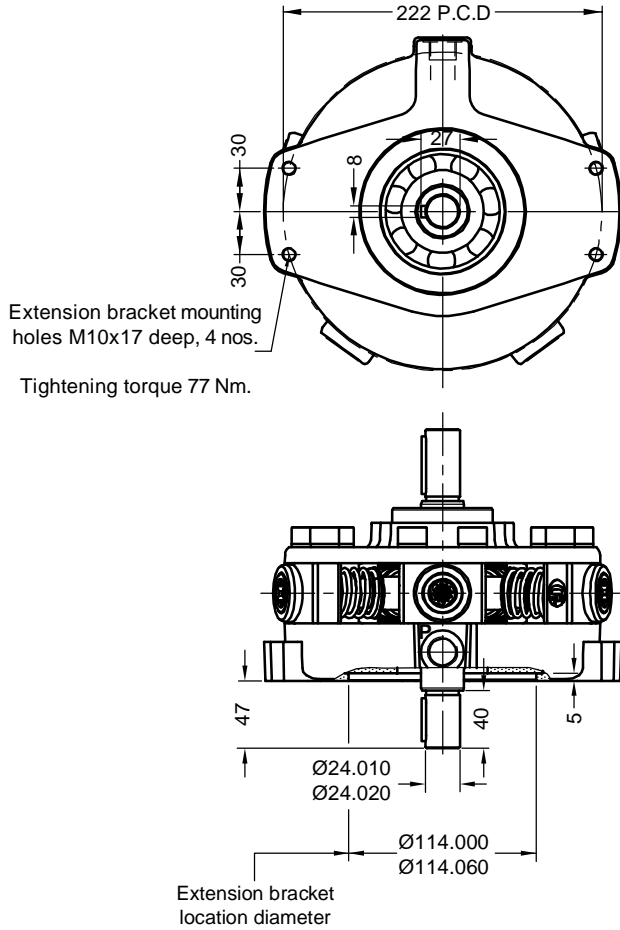
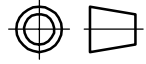
#### Pump without extension shaft

Model - 11R5, 11R7 or 11R9

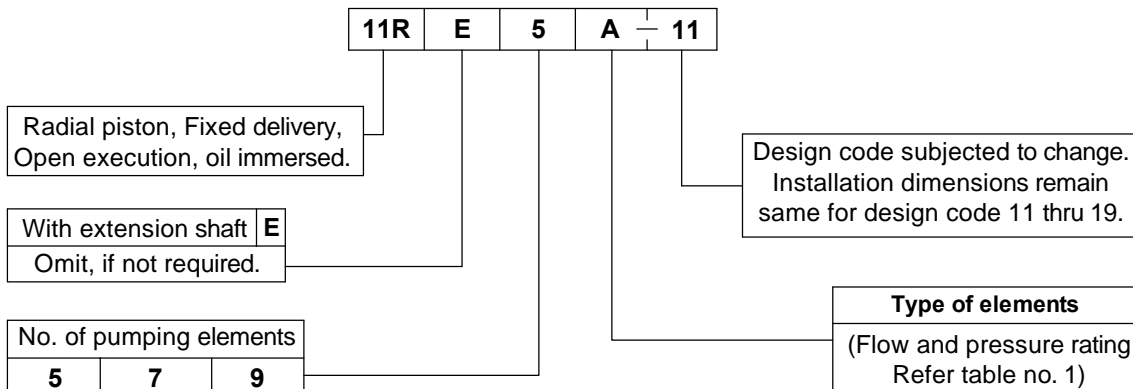


#### Pump with extension shaft

Model - 11RE5, 11RE7 or 11RE9



### Ordering code



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

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For critical applications, please ask for certified installation drawing.