



# RADIAL PISTON PUMPS

## Model : 11RC\*\*\*\*

Ref. No. D 09206  
Release 10 / 2018

ENGINEERING - 1 of 3

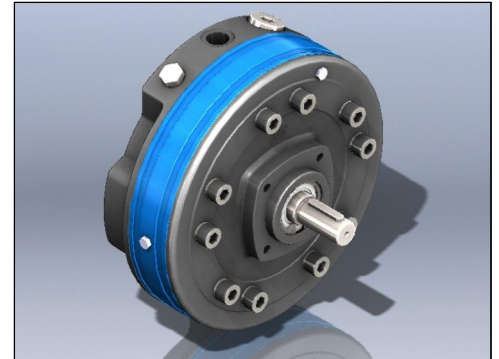
A Polyhydron Group Company

### Description

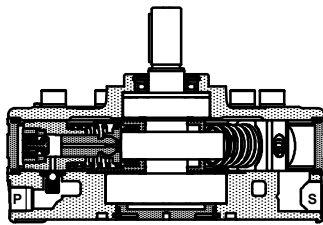
Model **11RC\*\*\*\*** are rugged Radial piston pumps and have either 5 or 7 pumping elements. These pumps are valve controlled and therefore there is no restriction on direction of rotation of the pump. These pumps can be submerged in oil or externally mounted above oil level.

They are available with 6 displacements and 3 pressure ratings. The pumps give fixed output per revolution of the shaft.

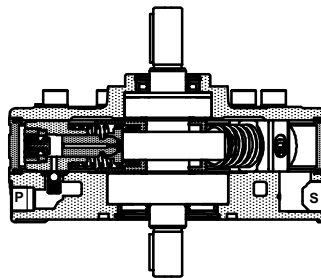
Pumps with model code **11RCE\*\*\*** have extension shaft for through drive and are available with extension bracket assembly for coupling a pump having standard flange as per ISO 3019/2.(Ref. datasheet no. D 09090).



### Section

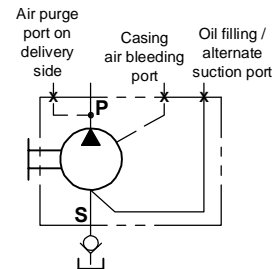


Model : 11RC\*\*\*

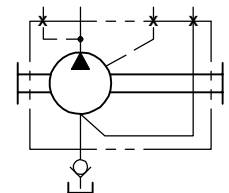


Model : 11RCE\*\*\*

### Hydraulic symbol



Model : 11RC\*\*\*



Model : 11RCE\*\*\*

### Technical specifications

|                            |   |  |   |        |       |        |
|----------------------------|---|--|---|--------|-------|--------|
| Designation                | : | 11RC is a basic radial piston pump with casing. 11RCE is a Radial piston pump with casing and extension shaft.   |   |        |       |        |
| Design                     | : | Radial piston, valve controlled.   |   |        |       |        |
| No. of Pumping elements    | : | 5 or 7.  |   |        |       |        |
| Mounting                   | : | Face mounting. (Maintain 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  | - 220 Nm  |        |       |        |
|                            | : | Extension shaft  | - 130 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 :   | 21.8  | 22.1   | 22.9  | 23.2   |

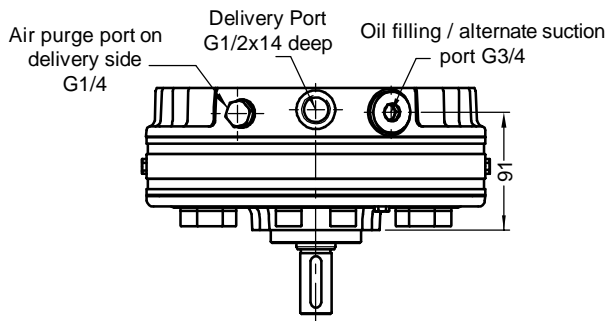
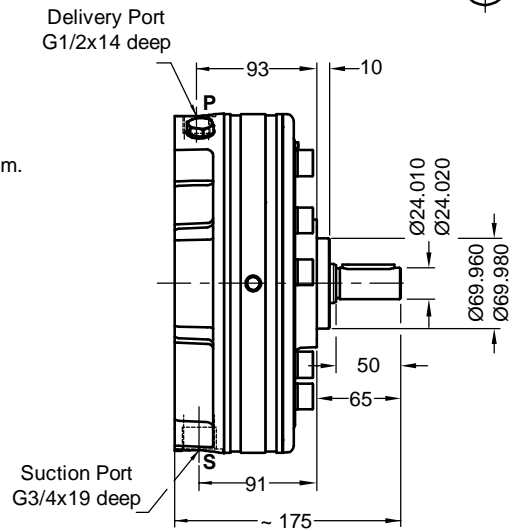
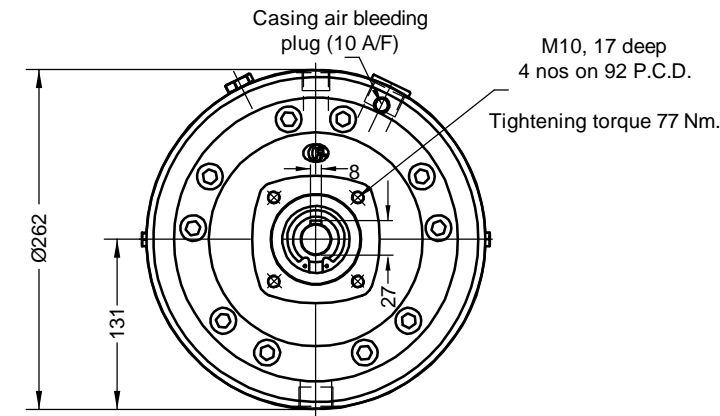
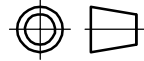


Unit dimensions

Dimensions in mm.

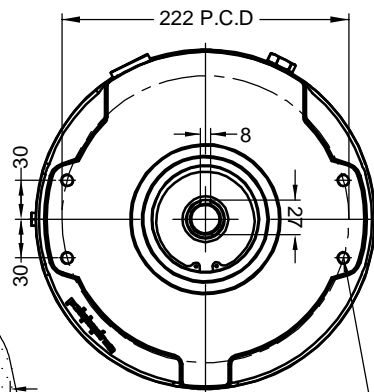
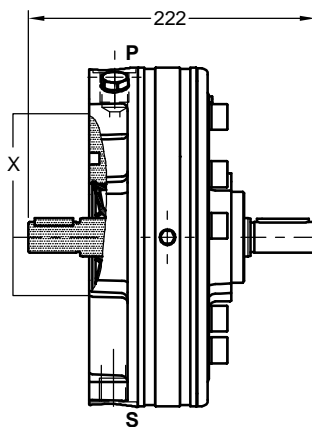
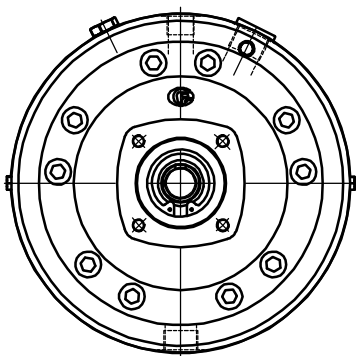
Pump without extension shaft

Model - 11RC5 OR 11RC7



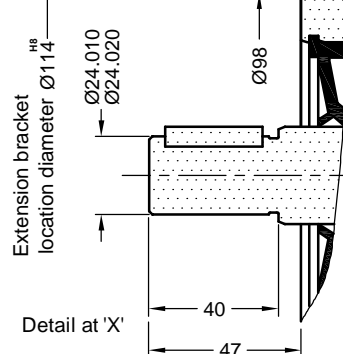
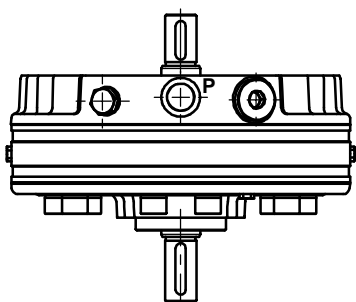
Pump with extension shaft

Model - 11RCE5 OR 11RCE7



Extension bracket mounting  
holes M10x17 deep, 4 nos.

Tightening torque 77 Nm.



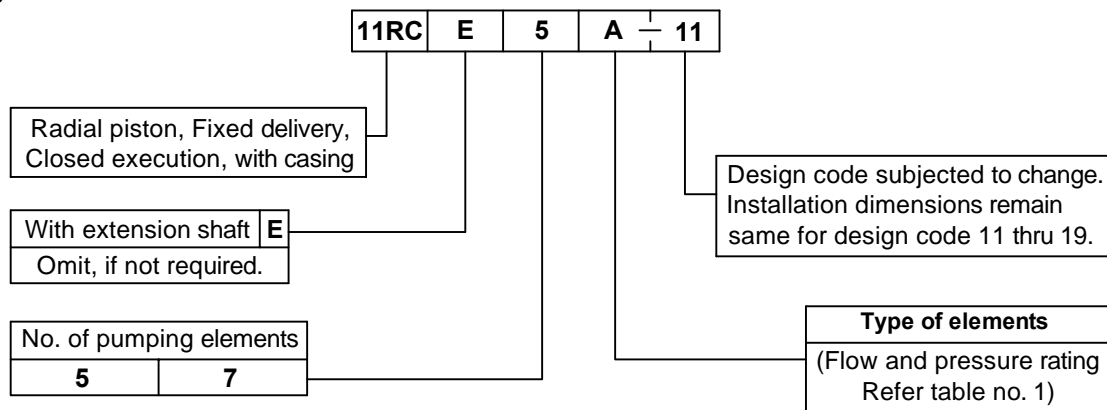


Performance table no. 1

| 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  | 350   | 400             |
| 5                       | A            | 7.70   | 10.5                               | 400                               | 0.87            | 1.75 | 2.62 | 3.50 | 4.37  | 5.25 | 5.51  | 6.99            |
| 7                       |              | 10.78  | 14.7                               |                                   | 1.22            | 2.45 | 3.67 | 4.90 | 6.12  | 7.34 | 7.71  | 9.79            |
| 5                       | B            | 10.05  | 13.7                               | 315                               | 1.14            | 2.28 | 3.43 | 4.57 | 5.71  | 6.85 | 7.19  | 1kW = 1.3410 hp |
| 7                       |              | 14.07  | 19.2                               |                                   | 1.60            | 3.20 | 4.80 | 6.39 | 7.99  | 9.59 | 10.07 |                 |
| 5                       | C            | 12.72  | 17.3                               | 250                               | 1.45            | 2.89 | 4.34 | 5.78 | 7.23  |      |       |                 |
| 7                       |              | 17.81  | 24.3                               |                                   | 2.02            | 4.05 | 6.07 | 8.09 | 10.12 |      |       |                 |

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

Ordering code



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

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