

RADIAL PISTON PUMP 12R

ENGINEERING

Ref. No. P09197

1

Release 10/2004

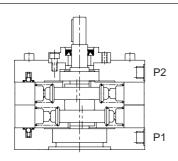
Description

Radial piston arrangement, with 5 or 7 pumping elements each per pump section. Oil immersed face mounting, Valve controlled, Fixed delivery, Bi-directional rotation of shaft, with extension shaft for through drive. Available with extension bracket assembly for coupling a low pressure pump having standard flange.

Flows can be combined internally, externally to feed one circuit or used independently to feed Two circuits.



Section



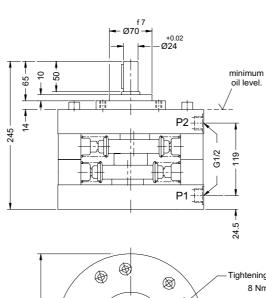
Hydraulic Symbol

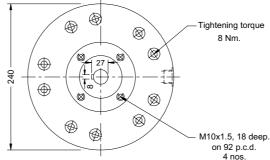


Unit Dimensions

Dimensions in mm.







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2

Technical Specifications

12RE Depends upon the direction of rotation of pump attached.

ConnectionSuction.........Suction Sucks oil directly from tank, no suction port is provided.

Delivery G 1/2 female.

Speed range 1000 to 2000 rpm.

(Do not exceed viscosity limits at extreme temperatures

for efficient running of the pump)

Fluid cleanliness requirement As per ISO Code 16/13.

Table no. 1.

Code No.	Geometrical displacement CC / REV	Rated output at 1450 rpm I / min	Rated output at 1450 rpm & 95% efficiency I/min.		Input power requirement (@ 1450 rpm & 95% efficiency)																	
							100 bar		150 bar 20		200) bar 250 ba		bar	300	bar	ar 315 bar		350 bar		400 bar	
					kW	hp	kW	hp	kW	hp	kW	hp	kW	hp	kW	hp	kW	hp	kW	hp	kW	hp
5A	7.7	11.2	10.6	400	1	1.4	2.1	2.8	3.1	4.2.	4.1	5.6	5.1	7	6.2	8.4	6.5	8.8	7.2	9.8	8.2	11.1
7A	10.8	15.7	14.9	400	1.4	2	2.9	3.9	4.3	5.9	5.8	7.8	7.2	9.8	8.7	11.8	9.1	12.3	10.1	13.7	11.5	15.7
5B	10.1	14.7	14	315	1.4	1.8	2.7	3.7	4.1	5.5	5.4	7.3	6.8	9.2	8.1	11	8.5	11.6		•		
7B	14.1	20.5	19.5	315	1.9	2.6	3.8	5.1	5.7	7.7	7.5	10.2	9.4	12.8	11.3	15.4	11.9	16.1				
5C	12.7	18.5	17.6	250	1.7	2.3	3.4	4.6	5.1	6.9	6.8	9.2	8.5	11.5								
7C	17.8	25.8	24.5	250	2.4	3.2	4.7	6.4	7.5	9.7	9.5	12.9	11.9	16.1								

Note: For double pumps, the above pump code number needs to be modified in the following manner. The first digit in the code number indicates number of pumping elements in each pump section. The second letter indicates flow and pressure rating of the pumping elements of P1 port end section and the third letter indicates flow and pressure rating of the pump elements of P2 port end section. Code no. 5AC for example, indicates a double pump having a flow and pressure rating of 5A for P1 port end section and 5C rating for P2 port end section.



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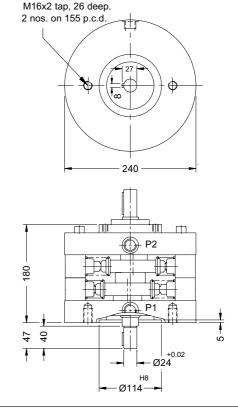
ENGINEERING

Ref. No. P09197

3

Accessories

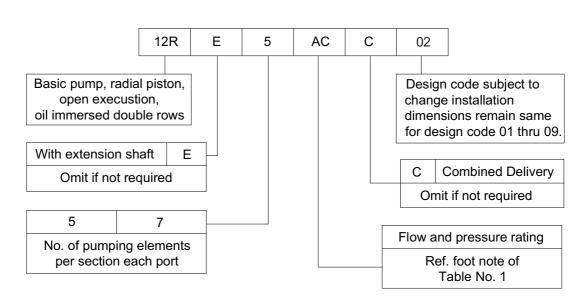
Extension shaft (For through drive) Unit dimensions



Note:

Torque limitation: The sum of torque used for the piston pump and torque used at extended shaft end should not exceed 148 Nm. (22.2 kW @ 1450 rpm)

Ordering Code



Note 1: A double pump of model code 12R5AC, for example, will have 5 pumping elements of 'A' flow and pressure rating at it's P1 port end section and 5 pumping elements of 'C' flow and pressure rating at it's P2 port end section.

Note 2: For Bell Housing refer Sheet No. P09035.

For Extesion Bracket refer Sheet No. P09090.



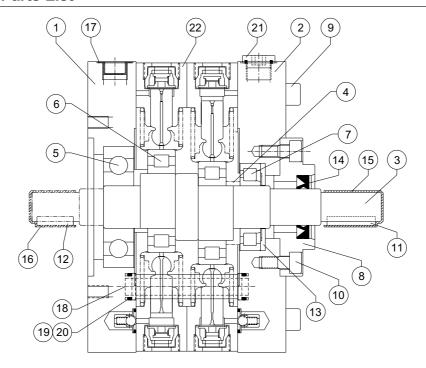
RADIAL PISTON PUMP 12R

ENGINEERING

4

Ref. No. P09197

Sectional View and Parts List



12R5**/12R7**	12RE5**/12RE7**
12R5**-C/12R7**-C	12RE5**-C/12RE7**-C

		SI. No.	Description	Par	Size	Qty.	
		1	Valve plate	12201/12203	12201/12203		1
		2	Valve plate	12205/12207	12205/12207		1
	*	3	Shaft	12243	12244		1
ပု	*(4	Spacer	12:		2	
*	(2)	5	Bottom Bearing	12:	KOYO 6407	1	
For 12R(5/7)**-C & 12RE(5/7)**-C	& 12RE(5/7)**	6	Centre Bearing.	12:	NUP 2206	1	
ZE(12	7 Top Bearing.		12:	NJ 207	1	
12F	∞o *	8	Mounting Flange	12:		1	
∞	<u>*</u>	9	Cap screw	12:	M12x140 L	10/14	
Ϋ́	(2)	10	Cap screw	00	M10x20 L	4	
*	12F	11	Shaft Key	122	277	8x7x40	1
(2)	For 12R(5/7)**	12	Shaft Key		12278	8x7x30	1
2R		13	Washer	122		1	
<u> </u>		*14	Rotary shaft seal	122	Dou.Lip 52	1	
Ľ		15	Plastic cap	122	270	11R	1
		16	Plastic cap		12271	11RE(Shaft)	1
		17	Rubber Port Plug	000	G 1/2 Plug Cap	2/1	
		18	Connecting Pipe	122	259		1
		19	O'Ring	122	279	17x2.5	2
		20 Backup Ring		12:	17.6x22x1.2	2	
		21	Elastomeric Plug	002	G 1/2	1	
		SI. No.	Desc	cription	Product	Qty.	
			Pump elei	ment assly.		11R-A-01	
		22		(Refer Data Sheet			

11R-C-01

No. A 12100)

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