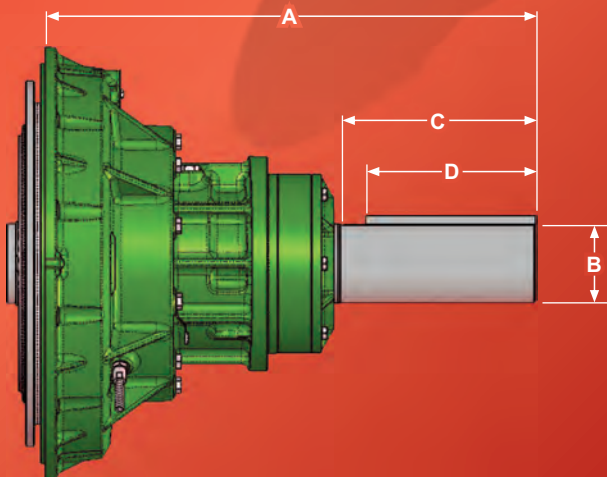
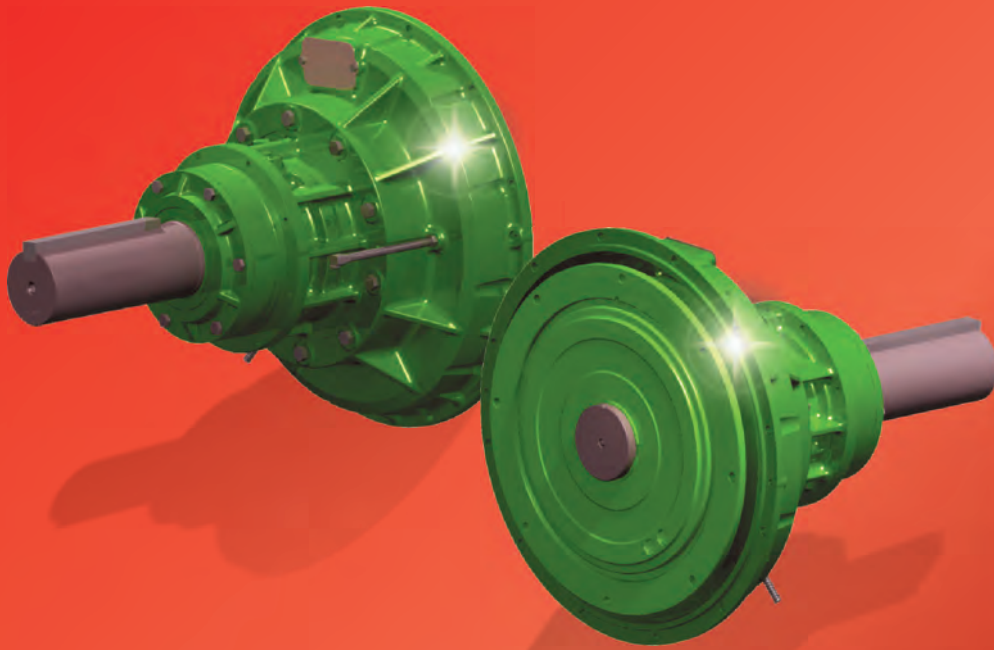


Quality products for Mechanical
& Fluid Power



HYDRAULICALLY ACTUATED POWER TAKE OFF UNITS





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Hydraulic Power Take-Off Units

The latest addition to the Twin Disc industrial products line is hydraulic PTOs. These units are available in side-load straddle-bearing clutched models, in-line clutched models and non-clutched models.

Applications for hydraulic clutches are similar to those for the mechanical PTOs. Hydraulic clutches can be used wherever a disconnect is required between the driven equipment and the prime mover.

Typical applications include:

- » Centrifugal Pumps
- » Waterjets
- » Propellers
- » Generators
- » Hydraulic Pumps
- » Agitators
- » Bow Thrusters
- » Winches
- » Horizontal Grinders
- » Blowers
- » Compressors
- » Conveyors
- » Rock Crushers
- » Mud Pumps
- » Piston Pumps
- » Hammer Mills
- » Tub Grinders
- » Fans



Hydraulic Wet Clutches

- » **HP Series:** Inline or side-load applications to 783 kW (1,050 hp) @2,100 rpm.
- » **HPTO Series:** Inline or side-load applications to 1119 kW (1,500 hp) @2,750 rpm.
- » **PFI Series:** Pump mount or shaft output with integrated oil pump. Up to 380 kW (510 hp).

Hydraulic Dry Clutches

- » **RC Series:** Remotely actuated via hydraulic circuit.
 - » **RO Series:** Remotely actuated via hydraulic/pneumatic circuit.
- PTO line, up to 11389Nm (8,400 ft-lb). Straddle bearing housing available.

#DriveLineHarmony stand 3E145 @



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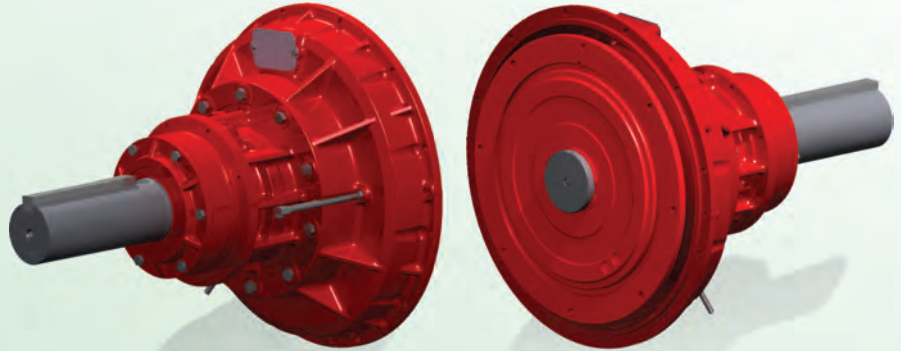


Standard RC PTO, RC214 • RC314

The RC is a series of hydraulically actuated dry-clutch power take-off (PTO) units. Key design features of the RC PTO allow for installation in applications where the PTO may otherwise be difficult to operate or maintain. An advanced control system can be used for “soft-starting” large inertia loads.

Features & Benefits:

- » Hydraulically actuated
- » Self-adjusting clutch
- » Oil lubricated tapered roller main bearings
- » No pilot bearing required
- » Advanced controls for high inertia loads
- » Optional sintered iron or composite plates
- » Suitable for side load and in-line applications

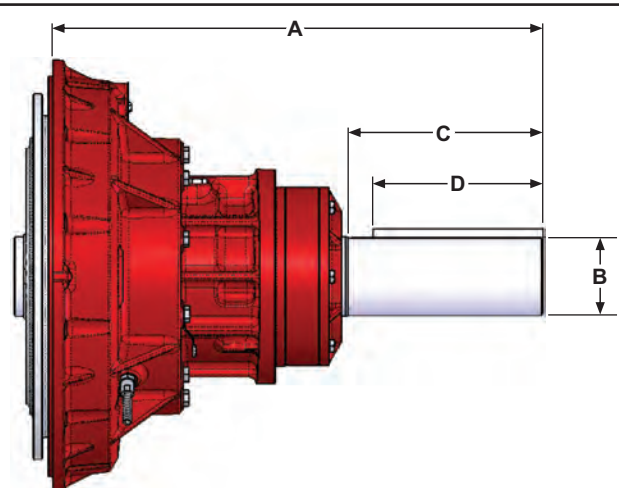


Specifications – RC214 & RC314

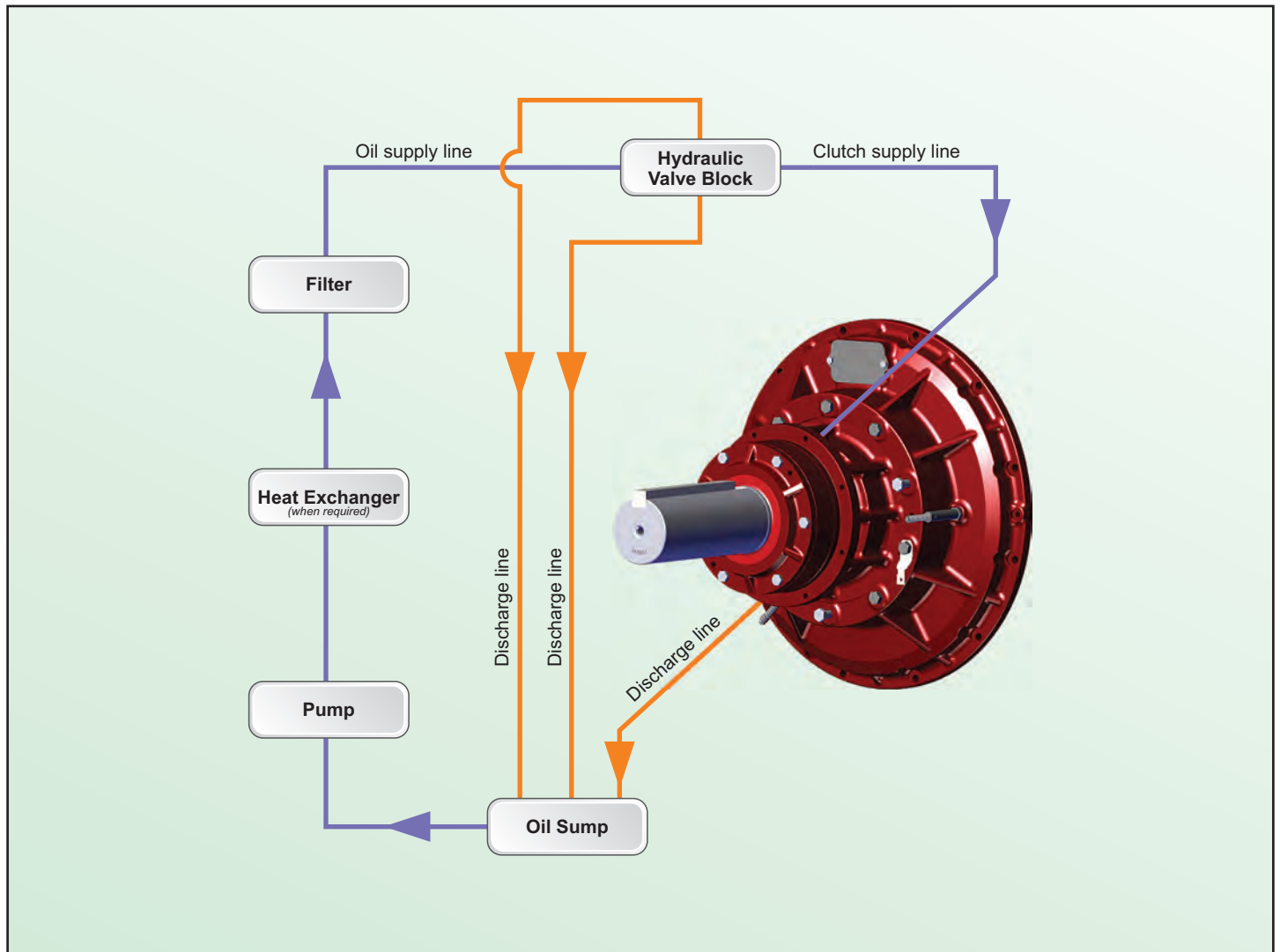
Model Number	SAE Housing	Max. Input Torque Nm (lb-ft) Class I		Clutch Maximum Power Rating kW (hp)			Maximum Safe Speed		Weight kg (lbs)
		Organic	Sintered	Class II light	Class III normal	Class IV heavy	Solid Plates	Split Plates	
							Nodular Drive Ring	Nodular Drive Ring	
RC214	1	2195 (1620)	2746 (2025)	281 (376)	187 (251)	140 (188)	3000	2750	179 (395)
RC314	1	3295 (2430)	4122 (3040)	421 (564)	281 (376)	210 (282)	3000	2700	198 (437)

Dimensions – RC214 & RC314

	RC214	RC314
SAE J617 Housing Size	1 & 0	
SAE J620 Clutch Size	14"	
A	595.4 (23.44)	624 (24.56)
B	100 (3.94)	
C	248 (9.76)	
D	215.9 (8.50)	
Dimensions in mm (in)		



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RC214 & RC314P - Allowable Side Load kg (lbs)

X Distance, mm (in) – see diagram									
RPM	25.4 (1.0)	50.8 (2.0)	76.2 (3.0)	101.6 (4.0)	127.0 (5.0)	152.4 (6.0)	177.8 (7.0)	203.2 (8.0)	228.6 (9.0)
1000	3755 (8278)	3397 (7489)	3102 (6838)	2846 (6274)	2575 (5677)	2351 (5183)	2163 (4769)	2003 (4416)	2003 (4416)
1500	3325 (7330)	3008 (6632)	2746 (6055)	2520 (5555)	2280 (5026)	2082 (4590)	1915 (4223)	1774 (3910)	1651 (3640)
2000	3050 (6724)	2759 (6083)	2519 (5554)	2311 (5096)	2091 (4611)	1910 (4210)	1757 (3873)	1627 (3587)	1515 (3339)
2200	2964 (6534)	2682 (5912)	2448 (5397)	2246 (4952)	2032 (4481)	1856 (4091)	1707 (3764)	1581 (3486)	1472 (3245)
Allowable Side Load kg (lbs)									

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Standard RO PTO, RO111P • RO211P

The Standard RO PTO is a hydraulic or pneumatically-actuated mechanical clutch. The RO PTO allows users to engage remotely and has been developed with a number of unique features that offer reliability, productivity and power, including: greasable shaft bearings, a permanently sealed pilot bearing and field retrofit kit option. The RO PTO is suitable for a wide range of heavy-duty applications including crushers, grinders and mulchers.

Features & Benefits:

- » Hydraulic or pneumatic actuation.
- » 6.2 bar to 6.9 bar (90 to 100 psi) engagement pressure.
- » Suitable for side load and in-line applications.
- » Tapered roller main bearings.
- » Optional sintered iron or composite plates.
- » Standard ball, thrust bearing throw out collar.
- » Field conversion kits available.



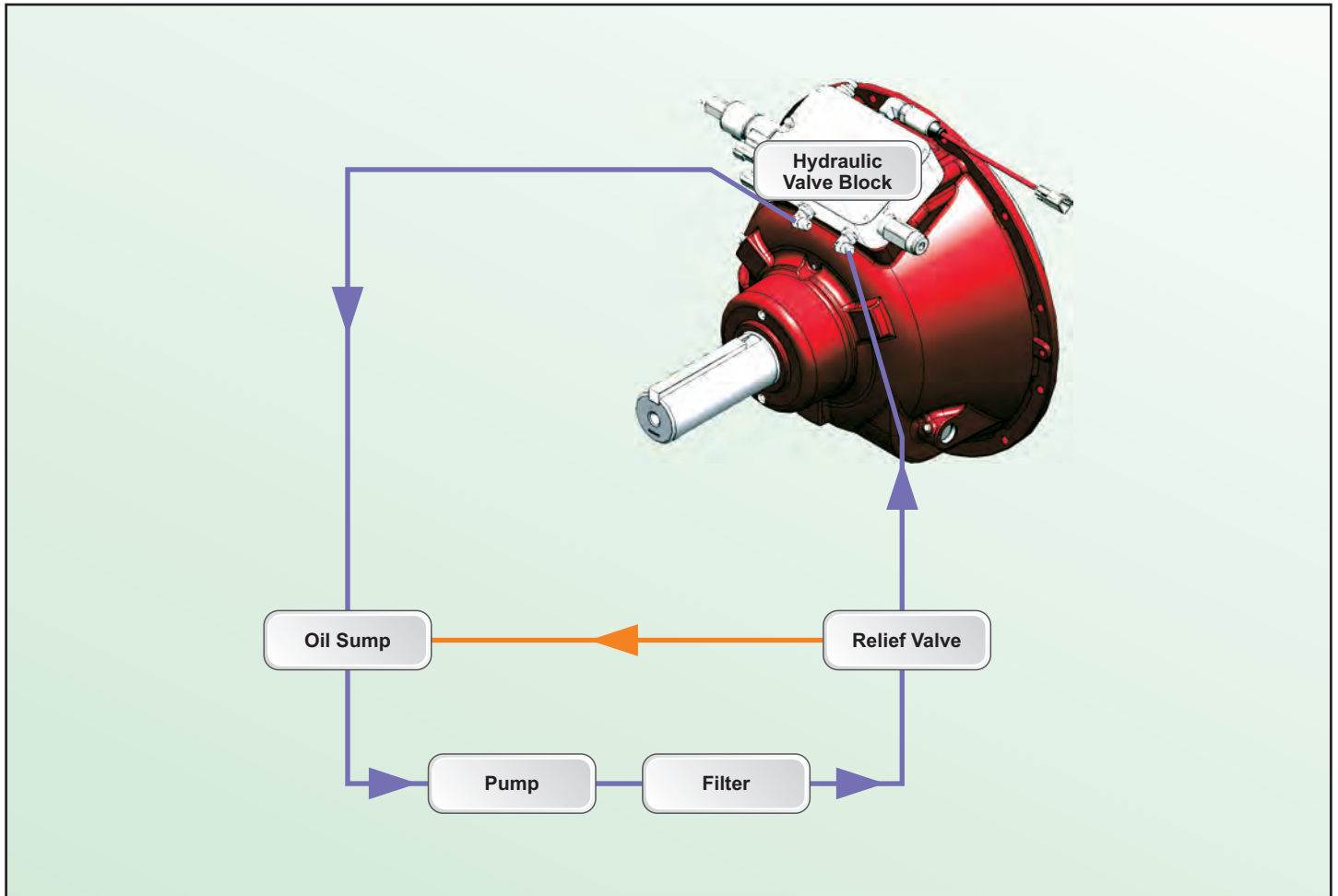
Specifications – RO111P & RO211P

Model Number	SAE Housing	Max. Input Torque Nm (<i>lb-ft</i>) Class I		Clutch Maximum Power Rating kW (<i>hp</i>)			Maximum Safe Speed		Weight kg (<i>lbs</i>)
		Organic	Sintered	Class II light	Class III normal	Class IV heavy	Solid Plates	Split Plates	
							Nodular Drive Ring	Nodular Drive Ring	
RO111P1	1	617 (455)	746 (550)	92 (124)	61 (82)	46 (62)	3600	3200	59 (129)
RO111P2	2								
RO111P3	3								
RO211P1	1	1234 (910)	1492 (1100)	184 (247)	123 (165)	92 (124)	3000	3000	79 (175)
RO211P2	2								
RO211P3	3								

Dimensions – RO111P & RO211P

	RO111P	RO211P
A	97.03 (3.82)	98.04 (3.86)
B	235.46 (9.27)	245.36 (9.66)
C	57.15 (2.25)	63.50 (2.50)
Dimensions in mm (<i>in</i>)		

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RO111P & RO211P - Allowable Side Load kg (lbs)

PTO MODEL	X DISTANCE, mm (in)						
	RPM	25.4 (1.0)	50.8 (2.0)	76.2 (3.0)	101.6 (4.0)	127.0 (5.0)	152.4 (6.0)
RO111P1 RO111P2 RO111P3	1000	1383 (3050)	1156 (2550)	907 (2000)	748 (1650)	635 (1400)	N/A
	1200	1315 (2900)					
	1800	1161 (2560)	1075 (2370)				
	2400	1061 (2340)	984 (2170)				
	2800	1014 (2235)	938 (2070)				
RO211P1 RO211P2 RO211P3	1000	2059 (4540)	1540 (3395)	1229 (2710)	1159 (2555)	875 (1930)	766 (1690)
	1200	1982 (4370)					
	1800	1769 (3900)					
	2400	1610 (3550)	1510 (3330)				
	2800	1538 (3390)	1436 (3165)				
Allowable Side Load kg (lbs)							

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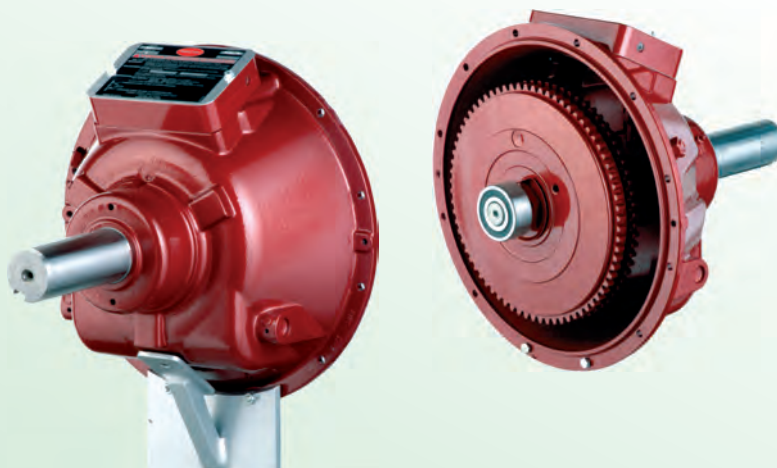


Standard RO PTO, RO114P • RO214P

The Standard RO PTO is a hydraulic or pneumatically-actuated mechanical clutch. The RO PTO allows users to engage remotely and has been developed with a number of unique features that offer reliability, productivity and power, including: greasable shaft bearings, a permanently sealed pilot bearing and field retrofit kit option. The RO PTO is suitable for a wide range of heavy-duty applications including crushers, grinders and mulchers.

Features & Benefits:

- » Hydraulic or pneumatic actuation.
- » 6.2 bar to 6.9 bar (90 to 100 psi) engagement pressure.
- » Suitable for side load and in-line applications.
- » Tapered roller main bearings.
- » Optional sintered iron & composite plates.
- » Standard ball bearing throw out collar.
- » Field conversion kits available.

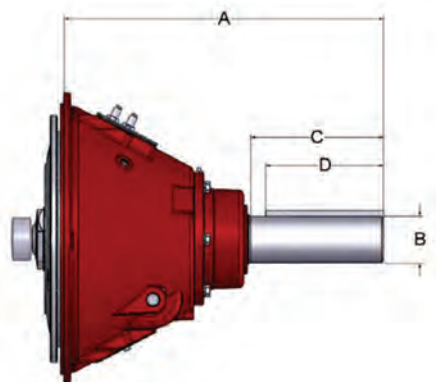


Specifications – RO114P • RO214P

Model Number	SAE Housing	Max. Input Torque Nm (<i>lb-ft</i>) Class I		Clutch Maximum Power Rating kW (<i>hp</i>)			Maximum Safe Speed		Weight kg (<i>lbs</i>)
		Organic	Sintered	Class II light	Class III normal	Class IV heavy	Solid Plates	Split Plates	
							Nodular Drive Ring	Nodular Drive Ring	
RO114P0	0	1098 (810)	1396 (1030)	140.3 (188)	93.3 (125)	70.1 (94)	3000	2750	60.8 (134)
RO114P1	1								
RO214P0	0	2182(1610)	2793 (2060)	280.6 (376)	187.3 (251)	140.3 (188)	3000	2750	85.3 (188)
RO214P1	1								

Dimensions – RO114P • RO214P

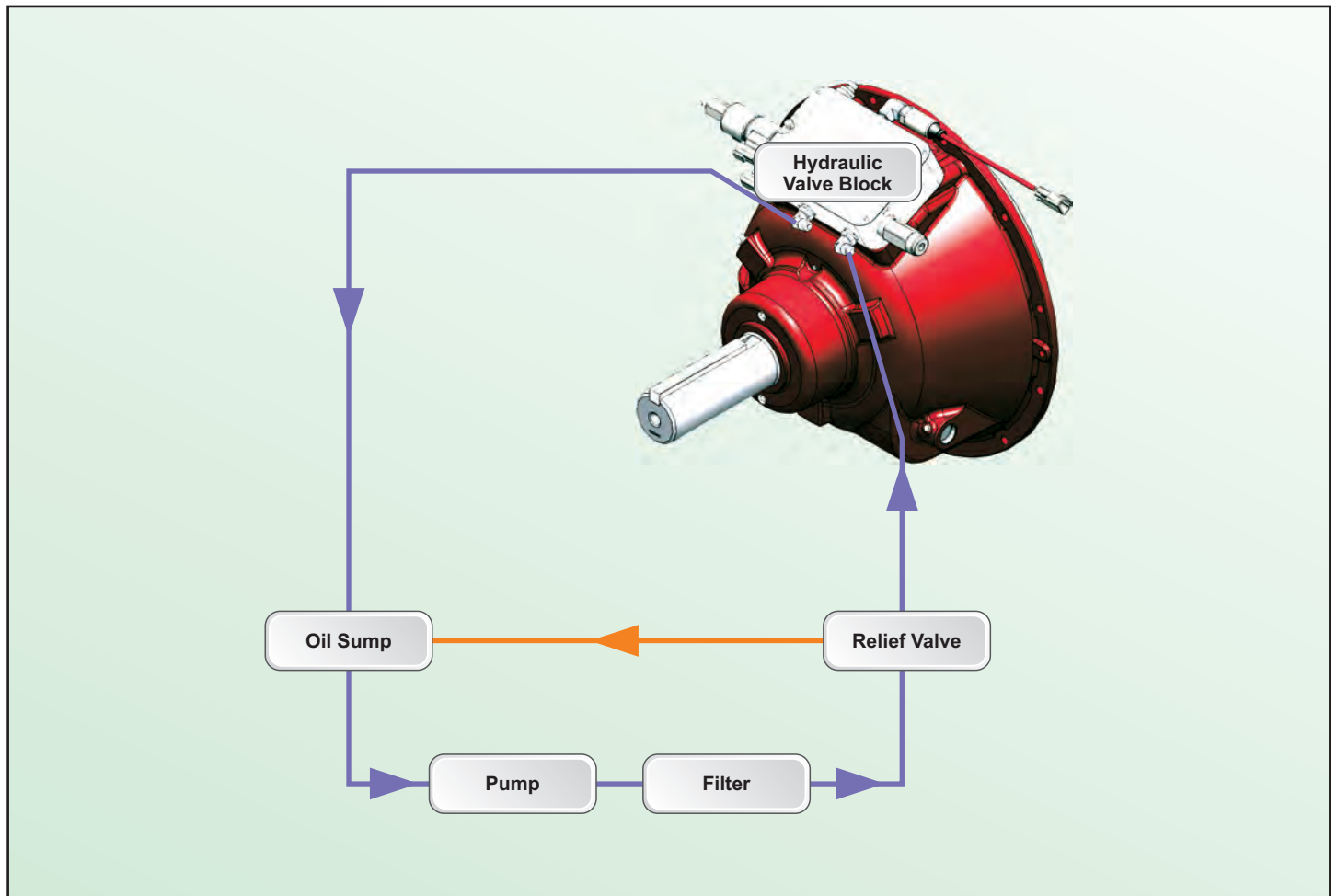
	RO114P	RO214P
A	524.00 (20.63)	603.25 (23.75)
ØB	76.20 (3.00)	88.90 (3.50)
C	215.14 (8.47)	254.00 (10.00)
D	184.15 (7.25)	222.25 (8.75)



Dimensions in mm (*in*)

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RO114P • RO214P - Allowable Side Load kg (*lbs*)

PTO MODEL	RPM	X DISTANCE, mm (<i>in</i>)							
		25.4 (1.0)	50.8 (2.0)	76.2 (3.0)	101.6 (4.0)	127.0 (5.0)	152.4 (6.0)	177.8 (7.0)	203.2 (8.0)
RO114P0 RO114P1	1000								
	1500	3390	2600	2120	1780	1535	1350	1210	1090
	2000	(7474)	(5732)	(4674)	(3924)	(3384)	(2976)	(2668)	(2403)
	2200								
RO214P0 RO214P1	1000								
	1500	5980	4700	3880	3290	2870	2540	2270	2060
	2000	(13184)	(10362)	(8554)	(7253)	(6327)	(5600)	(5004)	(4542)
	2200								
Allowable Side Load kg (<i>lbs</i>)									

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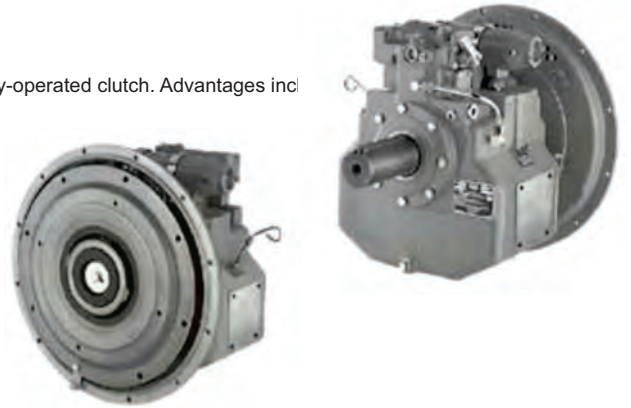


HPTO 140 / HPTO 244 / HPTO 366

This series of compact and lightweight power take-off (PTO) units incorporates a hydraulically-operated clutch. Advantages include improved reliability, increased efficiency, longer lifespan and lower maintenance costs.

- » Self adjustment (no more clutch adjustments).
- » Remote control (electric or mechanical).
- » Elimination of the pilot bearing.
- » Soft and progressive starts of the load.

Designed For: Stone crushers, wood chippers, grinders, marine drives (main propulsion and auxiliaries) and various centrifugal pumps, fans and blowers.



PFI-60 / PFI-120

These power take offs contain an integral bi-directional oil pump, integral pressure relief valve and SAE pump mount or keyed shaft output.

PFI-60

- » Maximum torque 600 Nm.
- » 12 or 24 Volt DC solenoid.
- » SAE 3, 2 and 1 pump pad configurations.
- » 1000 kg side load capability.

PFI-120

- » Maximum torque 1200 Nm.
- » 12 or 24 Volt DC solenoid.
- » SAE 3, 2 and 1 pump pad configurations.
- » 1000 kg side load capability.

Designed For: Direct engine mounting or mounted to AM pump drive and compact applications.

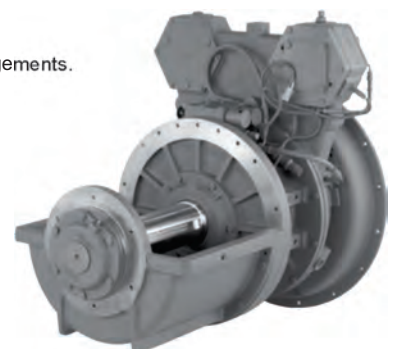


HP610S

The HP610S eliminates the need for manual adjustment and high speed engagement, while eliminating jammed engagements.

- | | |
|--|--|
| <ul style="list-style-type: none"> » 783 kW (1,050 hp) @2,100 rpm. » SAE 1 and SAE 0. » SAE 14" and SAE 18". » Via torsional coupling. » Wet hydraulic clutch. » In-line or side load. | <ul style="list-style-type: none"> » Electronic control. » Optional pump drive tower. » 4 pads. » To SAE D. » 358 kW (480 hp) total / 224 kW (300 hp) each. » 1:1 ratio. |
|--|--|

Designed For: Heavy duty side load applications.



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HP300I

With features similar to the HP610S, the HP300I also eliminates the need for manual adjustment and high speed engagement, while eliminating jammed engagements.

- » 783 kW (1,050 hp) @2,100 RPM
- » SAE 1 and SAE 0
- » SAE 14" and SAE 18"
- » Via Torsional Coupling
- » Wet Hydraulic Clutch
- » In Line Applications
- » Electronic Control
- » Optional Pump Drive Tower
- » 4 Pads
- » To SAE D
- » 358 kW (480 hp) total / 224 kW (300 hp) each
- » 1:1 Ratio



Designed For: Heavy duty in line applications.

HP1200

The HP1200 is an oil-filled, multiple disc, hydraulically-actuated self-adjusting clutch. The HP1200 has been developed with a number of unique features that offer reliability, productivity and power, including the following listed below.

- » Hydraulically actuated and self-adjusting wet clutch.
 - » Suitable for in-line and side-load applications.
 - » Advanced control system for smooth engagement.
 - » Remote actuation via J1939 or switch input.
 - » No pilot bearing.
 - » High side load capability.
 - » Maximum power rating 928 kW (1243hp) @ 1800 rpm.
 - » Two towers with two pump pads each.
 - » 298 kW (400 hp) maximum capacity per tower.
 - » 410 kW (550 hp) maximum capacity for both towers.
- Available pump pads:**
- » SAE "A", SAE "B", SAE "C", SAE "D", SAE "E".
 - » Pump tower rotatable by 0°/45°/90° CW/CCW.
 - » Optional 0.86:1 speed increase on pump tower.
 - » SAE 0 input housing.
 - » SAE 18" input coupling.
 - » Optional integrated reservoir.
 - » Standard charge/lube pump included.



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jbj Techniques is a specialist supplier of high-quality products for the mechanical power transmission and fluid power sectors. The company offers a high level of in-house expertise plus a huge selection of products to meet a very broad range of customer applications. From specification, through technical advice and manufacture to after-sales support, jbj Techniques provides a comprehensive and valued service to the power transmission and hydraulics industries. The company fields a UK-wide team of technical sales engineers to ensure that the business is close to its customers, and it enjoys excellent associations with European manufacturers, acting as sole UK distributor in many cases.

jbj's team is recognised for its expertise in the selection and configuration of hydraulic and mechanical transmission systems. Able to draw on an **extensive product range** that provides the building blocks for **bespoke systems both large and small**, the in-house design team offers a complete service, ranging from an assessment of customer requirements to full technical backup, including product specification, CAD based system design, system build and certification. Moreover customers can take advantage of **jbj's own machine-shop facilities and skilled engineers to guarantee quality and control costs.**

jbj Techniques provides one of the widest ranges of couplings available within the UK; mechanical power transmission couplings for a vast range of applications. Ranging from miniature couplings, all steel gear couplings, flexible spider couplings, shaft couplings, torque limiting couplings, disc and grid type couplings, ATEX compliant and shaft locking devices. Magnetic couplings for power transmission between hermetically sealed areas. However as extensive as the selection is, couplings make up a fraction of jbj's portfolio. As power transmission specialists the company stock and provide gearboxes, clutches, pumps, hydraulic motors, flow meters, fluid power accessories including: cooling & heat exchange products, reservoirs, pipe flanges, seals and level indicators, as well as a variety of bellhousings and engine adaptors, to name just a few of the product categories.

jbj Techniques Limited is proud of its relationship and reputation with customers and suppliers.

The core client base is stable and loyal, which is testament to the quality of service provided by the company. A similar relationship exists with suppliers, ensuring a continuing high quality service in which customers can have complete confidence.



Bellhousings



Torsionally Flexible Couplings



Torsionally Rigid Couplings



Torsional Couplings



Anti-static/Flameproof Couplings



Tyre Couplings



Torque Limiting Couplings



Permanent Magnetic Couplings



Hydraulic Adaptors



Engine Adaptor Kits



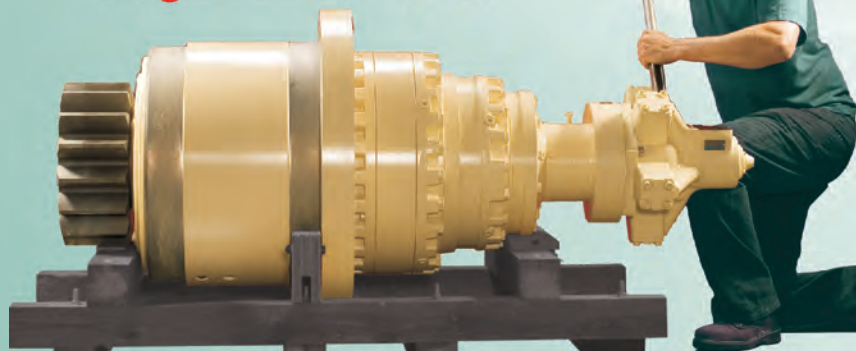
Dampers



**from
Small
Individual Components to
Large Combinations**



“ ensuring a continuing high quality service in which customers can have complete confidence. ”





an excellence in engineering

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Gear Pumps/Motors



Screw Pumps



Axial & Radial Piston Motors



LSHT Motors/Geared Motors



Vane Pumps



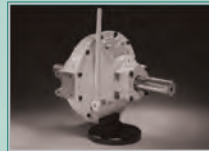
Splitter Gearboxes



Pneumatic Motors & Starters



BD Clutches & Gearboxes



BDS Clutches



Planetary Gearboxes



Coolers



Oil Bath Clutches



Flow Dividers



Tanks/Accessories



Fluid Level Indicators



Flanges



Mini Power Packs



Pressure Intensifiers



quality products for mechanical & fluid power



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