

comprehensive range of components www.jbj.co.uk





































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quality products for mechanical & fluid power











quality products for mechanical & fluid power

power take-off units, PTOs

www.jbj.co.uk/mechanical-power-conversion.html





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A range of products ATEX certificated to directive 94/9/EC requirements

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 machineshop facilities and skilled engineers to guarantee quality and control costs.

jbj Techniques provides probably the widest range of couplings available within the UK with 14 different designs and 22 different styles of gear couplings alone. The product portfolio includes miniature couplings, allsteel gear couplings, flexible spider couplings, shaft couplings, torque limiting couplings, disc and grid type couplings, ATEX compliant and shaft locking devices. However, as extensive as the selection is, couplings make up a fraction of jbj's portfolio. In addition, the company can provide gearboxes, clutches, pumps, hydraulic motors, flow meters, fluid power accessories including cooling systems, reservoirs, seals and indicators - as well as a variety of bell housings and flanges, to name just a few of the product categories.

jbj Techniques Limited is proud of it's 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.

jbj Techniques Limited providing . . . a diverse range of mechanical drive & transmission solutions to industrial markets, including design engineering, product supply & after-sales service . . .



as extensive as the selection is, couplings make up a fraction of jbj's portfolio



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Individual Componer

Large Combinations

Mechanical power take-off units

Available in sizes up to SAE 21 these mechanical PTOs are ideal for many basic actuation installations.

Remotely actuated versions are available for safer, easier operation and greater equipment design flexibility.



SP Series

- » SAE 3 through SAE 00.
- » SAE 11.5 through SAE 21.
- Single, double & triple organic drive plate (standard).
- Sintered iron available.

SP-S Series

» SAE 1 through SAE 0.

» SAE 14 through SAE 18.

Sintered iron available.

» Ball bearing thrust bearing.

High side load.

» No pilot bearing.

SP-IL Series

» No pilot bearing.

CA Series

> SAF 10

» SAE 4 through SAE 3.

» SAE 1 through SAE 0.

» SAE 14 through SAE 18.

ntered iron available.

-line applications only - no side load.

>>> Bronze or ball bearing thrust bearing.

Single & double organic drive plate.

Sealed for life main ball bearing.

In-line applications only.

» Bronze thrust bearing.

Capacity from 610 to 1220 Nm. (450 to 900 lb.ft.).

Capacity from 617 to 11,389 Nm. (455 to 8400 lb.ft.).

» Single, double & triple organic drive plate (standard).

Capacity from 3295 to 10,169 Nm (2430 to 7500 lb.ft.).

- Side load or in-line applications.
- Tapered roller bearings on main shaft.
- » Bronze or ball bearing thrust bearing.



Pump Mount

- » SAE "A" through SAE "D" pads.
- » SAE 4 through SAE 1 housing.
- » SAE 11.5 clutch.
- » Various input options. » Shaft clutch.

SL Series

» SAE 4 through SAE 1.

» SAE 11.5 through SAE 14.

» Single & double organic drive plate.

Re-greasable main & pilot bearings.

» Sealed pilot bearing optional.

Limited side load.

» Capacity from 475 to 1356 Nm. (350 to 1000 lb.ft).

> Spring loaded clutch eliminates need for adjustment.







- » Capacity to 610 Nm. (450 lb.ft.). » Spring loaded clutch.
 - » Limited side load. Sealed for life pilot bearing.
 - » No adjustment required.

IB Series

- » SAE 1 through SAE 00.
- » SAE 11.5 through SAE 21.
- » Single & double organic drive plate.
- » Sintered iron drive plate available.
- Capacity to 2196 to 11,389 Nm (1620 to 8400 lb.ft.).
- Bronze throw out collar.

C(X) Series » SAE 6 through SAE 1. » SAE 6.5 through SAE 11.5. » Single organic drive plate – standard. >> Sintered iron available: SAE 8 to SAE 11.5. » Capacity from 216 to 525 Nm. (159 lb. ft. to 387 lb. ft.).

- Limited side load.
- Ball bearing on main shaft.
- » Bronze thrust bearing.





- /entilated centre plates & drive ring.
- > Higher side-load capability.
- » Tapered roller bearings on main shaft.

RB Series

- » SAE 3 through SAE 1. » SAE 11.5 through SAE 14.
- Rubber block drive.
- » SAE 11.5 single row.
- » SAE 14 double row.
- » Direct drive no disconnect.
- » Limited side load.

Hydraulic power take-off units

Available in side-load straddle-bearing clutched models, in-line clutched and non-clutched models.

For similar applications as the mechanical PTOs. Hydraulic clutches can be used wherever a disconnect is required between driven equipment and the prime mover.

Ideally suited for applications such as:

» Waterjets	» F
» Hydraulic pumps	» A
» Winches	» F
» Compressors	» (
» Mud pumps	» F
	» Hydraulic pumps» Winches» Compressors

» Hammer mills » Tub grinders

HP610S

- » 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.
- » 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.

HP300I

- 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.







an excellence in engineering

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- Propellors
- Agitators
- Horizontal grinders
- Conveyors
- Piston pumps
- » Fans

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



With features similar to the HP610S, the HP300I also eliminates the need for manual adjustment and high speed engagement,



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...

- >> 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 927 kW (1243 hp) @ 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.

HPTO 140 / HPTO 244 / HPTO 366

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

- » Self Adjustment (no more clutch adjustments).

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

PFI-60 and 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

- » 205 kW (275 hp) capability
- » 12 or 24 Volt DC solenoid.
- >> SAE 3, 2 and 1 pump pad configurations.
- » 1000 kg side load capability.

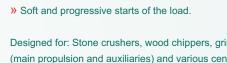
PFI-120

- » 380 kW (510 hp) capability
- » 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. Free standing clutches of the multiple plate, oil bath type. These clutches are particularly suited to arduous applications and are capable of withstanding high radial loads. The PFI 60 and PFI 120 are manufactured with input and output shafts. The PFI 60P and PFI120P are intended for hydraulic pump direct connection with the same pump adaptor flanges and couplings as on AM 230 - 450 pump drives which means the possibility to fit a large number of pumps with standard components.







» Remote Control (Electric or Mechanical).

» Elimination of the Pilot Bearing.





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

Further information including dimensions, torque, etc » pages 1 and 2 of the *Hydraulically* actuated PTOs catalogue.

RO Series remote over-centre

» Hydraulic or pneumatic actuation

- » 6.21 to 6.89 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.
- » Creates suitable application torque capacity.

Further information including dimensions, torque, etc » pages 3 to 6 of the Hydraulically actuated PTOs catalogue.



Pneumatic clutches

Available in sizes up to SAE 42 designed to provide maximum dependability and lowest installation and operating costs. These air clutches are available in triple, double or single plate construction.

- » SAE 8 to SAE 42 sizes.
- » Single, double and triple plate organic drive plate.
- » Capacity from 526 to 280,654 Nm (388 to 207,000 lb-ft).
- » Air actuated.
- Integral quick release valve.
- » Heavy, rugged teeth for long life.

For multiple power take off units / splitter gearboxes, BD and BDS clutches, RM speed increasing / reducing gearboxes, and planetary gearboxes please see the '*clutches & gearboxes*' summary.



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