



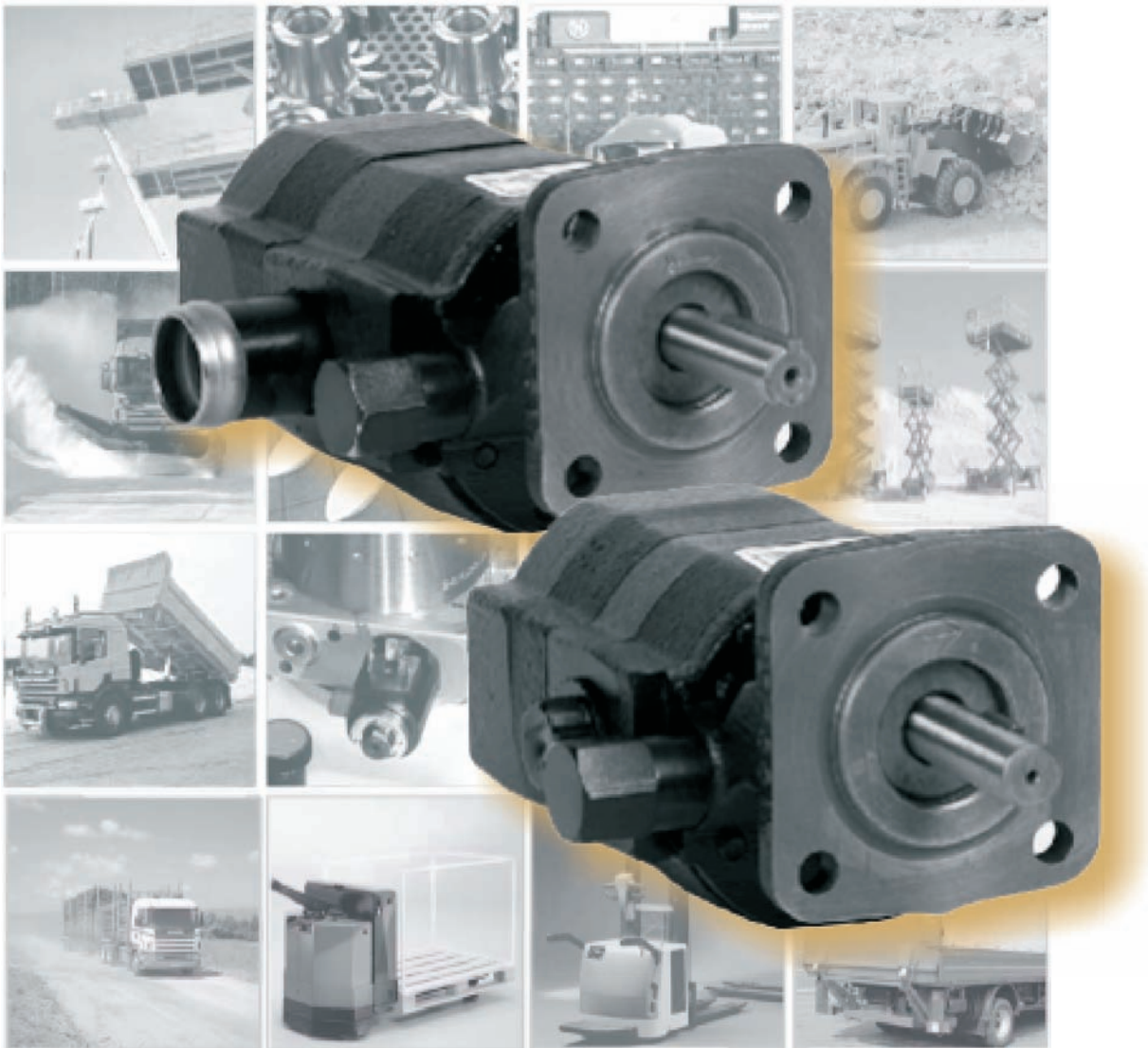
uk distributor for



CONCENTRIC

Innovation in Hydraulics

TWO STAGE HIGH/LOW HYDRAULIC PUMPS

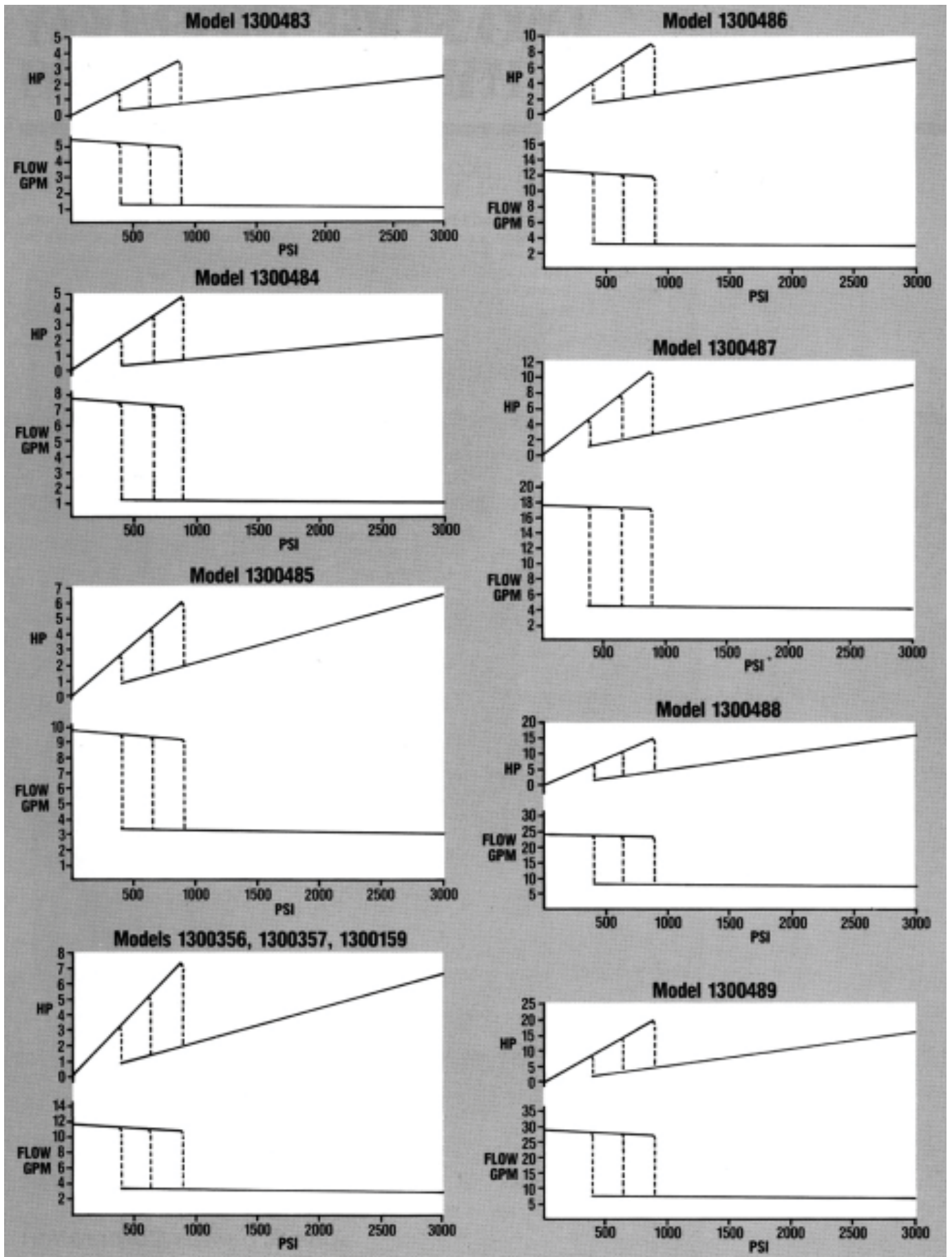


Concentric AB

Innovation in Hydraulics

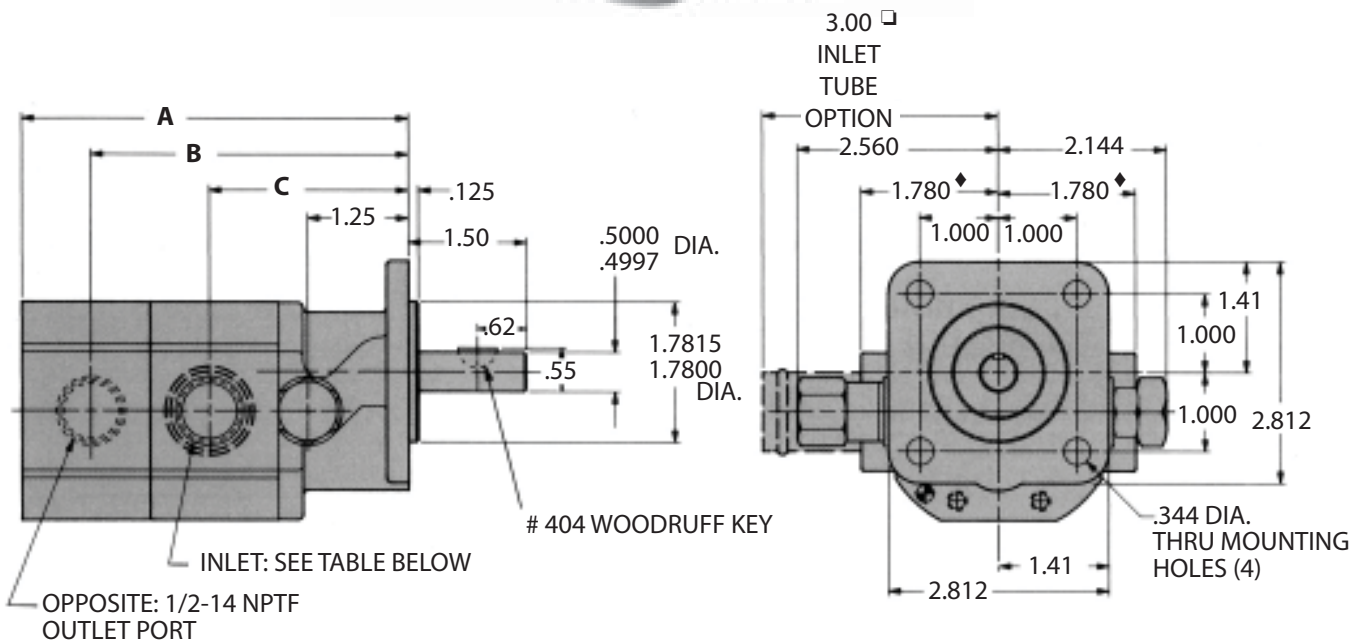
PERFORMANCE CURVES

at 3600 RPM, with 300SSU Oil



DIMENSIONAL DRAWINGS

GC Series



GC Series

P/N	Nominal Flow GPM *	Rotation	Shaft		Mount Type	Ports **		Dimensions (inches)		
			Dia.	Ext.		Inlet	Outlet	A	B	C
1300483	5	CW	1/2	1.5"	4-bolt	◆ 1/2" NPTF	1/2" NPTF	4.91	4.03	2.53
1300484	7	CW	1/2	1.5"	4-bolt	◆ 1/2" NPTF	1/2" NPTF	4.91	4.03	2.53
1300485	9	CW	1/2	1.5"	4-bolt	◆ 1/2" NPTF	1/2" NPTF	4.91	4.03	2.53
1300356	11	CW	1/2	1.5"	4-bolt	◆ 1/2" NPTF	1/2" NPTF	4.91	4.03	2.53
1300357	11	⊕ CCW	1/2	1.5"	4-bolt	◆ 1/2" NPTF	1/2" NPTF	4.91	4.03	2.53
1300159	11	CW	1/2	1.5"	4-bolt	✖ 1" tube	1/2" NPTF	4.91	4.03	2.53
1300486 ■	13	CW	1/2	1.5"	4-bolt	✖ 1" tube	1/2" NPTF	5.47	4.59	3.09
1300487 ■	16	CW	1/2	1.5"	4-bolt	✖ 1" tube	1/2" NPTF	5.47	4.59	3.09

* At 3600 RPM.

** SAE ports available, consult factory.

⊕ Ports and valves on opposite side of casting.

✓ As viewed from the shaft end.

■ These two pumps have square keys, 1/8" x 1", instead of #404 Woodruff Key.

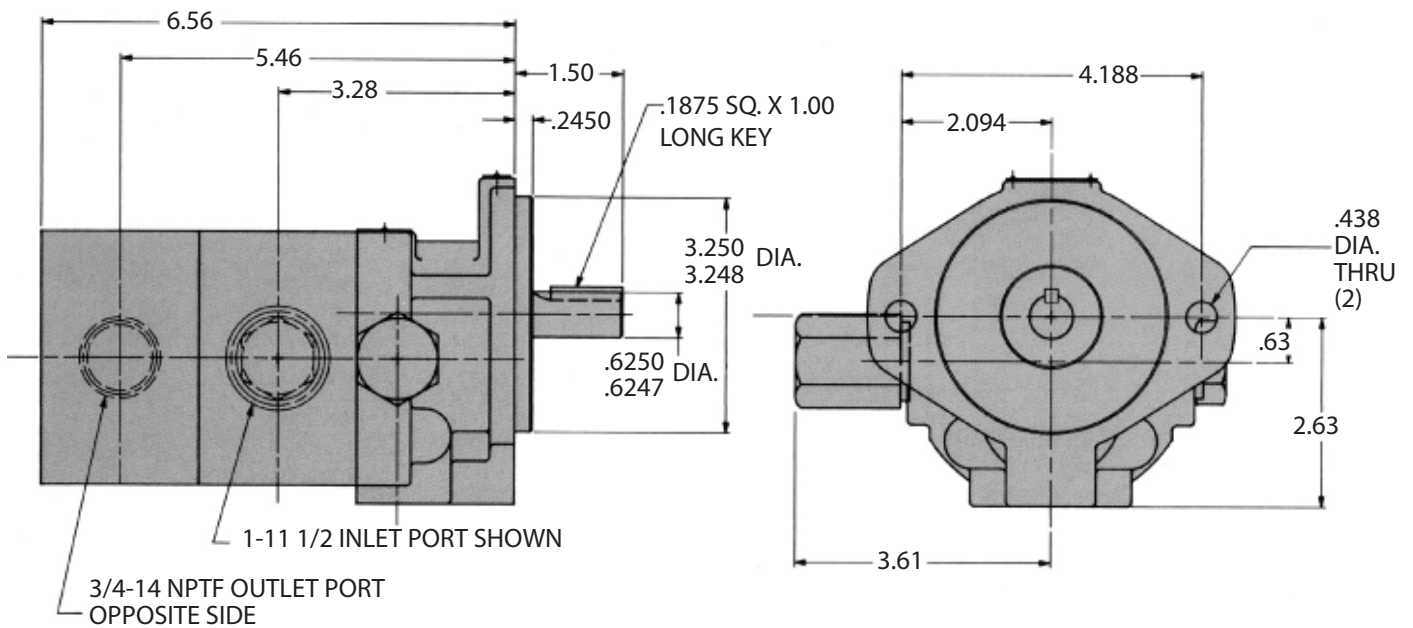
✖ Indicates a 1" inlet tube is used.

◆ Indicates 1/2" NPTF port.

Pictures on front cover are used with the kind permission of eg: Atlet, BT, Huddig, Scania, Toro and Volvo Construction Equipment.

DIMENSIONAL DRAWINGS

D Series



D Series

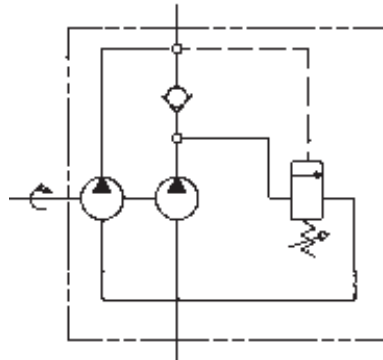
P/N	Nominal Flow GPM *	✓ Rotation	Shaft		Mount Type	Ports**	
			Dia.	Ext.		Inlet	Outlet
1300488	22	CW	5/8	1.5"	SAE A	1" NPTF	3/4" NPTF
1300489	28	CW	5/8	1.5"	SAE A	1" NPTF	3/4" NPTF

* At 3600 RPM.

** SAE ports available, consult factory.

✓ As viewed from the shaft end.

TWO STAGE HIGH/LOW HYDRAULIC GEAR PUMPS



Hydraulic Schematic

Pump Selection Guide

P/N	Nominal Flow GPM *	High Pressure Gear Displ. in. ³	Low Pressure Gear Displ. in. ³
1300483	5	.065	.258
1300484	7	.065	.388
1300485	9	.194	.388
1300356	11	.194	.517
1300357	11	.194	.517
1300159	11	.194	.517
1300486	13	.194	.647
1300487	16	.258	.776
1300488	22	.465	.930
1300489	28	.465	1.395

* At 3600 RPM.
All pumps factory preset at 650 PSI; for settings outside range, contact factory.

NOTE: All pumps above are 3000 PSI max. working pressure, 400-900 PSI unload adjustable range, and 500-4000 RPM range.

Cast Iron Pumps Heavy Duty



GC Series Pumps

Displacements
1.06 to 11.65 cc

GC Series High/Low Pumps

High Pressure Displacements
1.06 to 4.22 cc

Low Pressure Displacements
4.22 to 12.71 cc

Maximum Pressure
276 bar

Maximum Speed
4,000 rpm



F12 & F15 Ferra Series Pumps

F12 Displacements
16 – 41 cc

F15 Displacements
19 to 50 cc

Maximum Pressure
276 bar

Maximum Speed
3,600 rpm



F20/F30 Pumps & F20-LS/F30-LS Load Sense Ferra Series Pumps

Displacements
23 to 161 cc

Maximum Pressure
276 bar

Maximum Speed
3,600 rpm



D Series Pumps

Displacements
03.80 to 22.85 cc

D Series High/Low Pumps

High Pressure Displacements
7.62 cc

Low Pressure Displacements
15.24 to 22.86 cc

Maximum Pressure
207–276 bar

Maximum Speed
3,600 – 4,000 rpm

Aluminum Pumps Medium/Light Duty



W-Series Pumps

W100 Displacements
0.50 to 2.00 cc

W300 Displacements
0.80 to 5.70 cc

W600 Displacements
4 to 12 cc

W900 Displacements
5 to 31 cc

W1200 Displacements
25 to 33 cc

W1500 Displacements
19 to 50 cc

Maximum Pressure
276 bar

Maximum Speed
500 to 4,000 rpm



WK900 CALMA Pumps

Displacements
5 to 27 cc

Maximum Pressure
230 bar

Maximum Speed
4,000 rpm

Fluid Motors



Cast Iron

Displacements
1.06 to 161 cc

Speed
Up to 10,000 rpm

Aluminum

Displacements
4 to 50 cc

Speed
Up to 4,000 rpm

Flow Dividers



GC & D Series

GC Displacements
1.58 to 8.47 cc

D Displacements
3.8 to 13.32 cc

Maximum Pressure
310 bar

Maximum Input Flow Per Section
14 gpm (53 lpm)



PUMP/MOTORS (DC/AC)

DC Voltage Range

12 to 72 VDC

AC Horsepower Range

0.367749 to 2.2065 kW

Pump Displacements

0.65 to 28 cc

Maximum Pressure

4276 bar



HB800 POWER PACKS

Voltage Range

12 to 24 VDC

Pump Displacements

0.60 to 1.5 cc

Reservoirs

0.5 to 3.8 litres plastic

Maximum Pressure

180 bar



HE1000 SERIES POWER PACKS

Voltage Range

12 to 24 VDC

Pump Displacements

0.24 to 2 cc

Maximum Pressure

230 bar

Reservoirs

0.5 to 3.8 litres plastic



HE2000 SERIES POWER PACKS

Voltage Range

12 to 24 VDC, 115 to 230 VAC

Pump Displacements

0.80 to 6.36 cc

Maximum Pressure

230 bar

Reservoirs

0.9 to 15 litres steel,

0.76 to 1.6 litres plastic



HE "BOX" POWER PACKS

Voltage Range

12 to 24 VDC

Pump Displacements

0.80 to 6.36 cc

Maximum Pressure

230 bar

Reservoirs

32.84 to 19 litres steel

HE-Q (QUIET) POWER PACKS

Voltage Range

24 VDC

WQ300 Pump Displacements

1.2 to 5.7 cc

Noise

42dB(A)



BIROTATIONAL POWER PACKS

Voltage Range

12 to 24 VDC, 115 to 230 VAC

Pump Displacements

0.80 to 2.11 cc

Reservoirs

1.9 to 2.8 litres plastic,

3.8 to 7.6 litres steel



AC POWER PACKS GC-9500 SERIES

Displacements

1.06 to 22.85 cc

Maximum Pressure

207 bar

Maximum Speed

3,600 rpm

Reservoirs

19 to 76 litres steel

Only Concentric offers this extensive range of products worldwide.



an excellence in engineering

quality products for mechanical & fluid power

Getting the most out of your machinery often depends on close integration between all components. An organisation that manufactures and integrates all the diverse components of a drivetrain provides the experience to help you select the best component combination for your application. jbj Techniques' in-house design team and manufacturing facility provide tailored solutions for your applications at competitive prices with quick delivery.

The following examples are a simplistic view of how jbj Techniques assists customers.

Hydraulic Adaptors

Designed primarily to allow the close coupling of hydraulic pumps to a variety of prime movers, such as diesel / petrol engines, electric, air or hydraulic motors, they can also be used in the connection from prime mover to alternative driven parts i.e. gear boxes, generators, water or vacuum pumps etc. An additional range of engine front PTO adaptors, which provide additional connection between the engine pulley and the driven part are also available.

The kit comprises of a [bellhousing](#) and flexible drive [coupling](#) that are fully machined to suit the driving and driven components. These can be to suit either shaft to shaft, flange (flywheel) to shaft or even flange to flange connections.

Getting the most out of your equipment will demand close integration between all components. In specifying jbj Techniques as your preferred supplier, you will have selected a company with the experience to specify, manufacture and integrate all of the [diverse components](#) that will ensure the best component combination for your application.

jbj's in house design team and manufacturing facility provide tailored solutions for your applications at competitive pricing and on-time deliveries.

Pump shaft alignment is key to preventing unnecessary wear and [damage to the pump shaft seal](#) and bearing. Improper alignment may lead to premature pump failure.

Also to be considered are [unwanted torsional resonant frequencies](#) in the system which can quickly cause damage to components in the drivetrain and reduce system life and performance. Improper pump installation can lead to premature failure, increased maintenance costs and reduced production levels of final product.

jbj Techniques can advise on the correct installation of [hydraulic pumps](#) into Industrial / mobile / marine / machine tool / agricultural / offshore industries and can specify complete driveline systems from their [extensive range of components](#) which are available from stock or manufactured to order, albeit simple or complex, standard or bespoke.

Electric Motor – Hydraulic Pump Adaptors (safe area)

jbj Techniques Limited offer the most comprehensive range of [bellhousings](#) in Europe. Designed to connect electric motors with frame size IEC D56 - D400 (0.06kW – 750kW) and can be compatible with electric motor 'B5' or 'B14' flange configurations. Accompanying the metric frame units above is a complete range of mountings to suit Nema and imperial frame motors with 'C' face or 'D' flange fitments.

With fully machined [torsionally flexible couplings](#), or [torsionally rigid couplings](#) available, jbj ensure the most suitable combination is selected for the application in hand. As an example spider couplings are available in various materials including aluminium, grey cast iron, nodular iron, steel and stainless steels and can be finish machined with parallel, taper or splined bores to DIN, SAE, ANSI or ISO standards.

Bellhousings can be manufactured in aluminium or cast iron material as standard, however, units can be produced in a variety of exotic materials on request.

The aluminium product range is produced in either monoblock or composite formats giving great flexibility in design and allows for early delivery time, often with same or next day delivery possibilities.

For applications where low noise levels are a

requirement then a complete range of [anti-vibration and noise reduction components](#) add to the range.

Electric motor – Hydraulic Pump Adaptors (hazardous area)

Designed to meet the exacting safety standards of the offshore and chemical process industries, jbj Techniques produce [adaptor kits](#) certificated to Directive 2014/34/EU I12GD-IM2-TX -50 C < Service Temp < +105 C. Harmonised standards BS EN 1127:1, BS EN 13463:1, BS EN13463:5, BS EN 50303, BS EN 1834-1, BS EN 1834-3.

Generally manufactured in Cast or Nodular iron, bellhousings can be produced in steel, stainless steel or alternative exotic materials on customer request.

Couplings supplied for these applications are the jbj Techniques 'JXL' pin and bush range which provide an anti-static and flameproof drive which meet zone 1 area requirements, conforming to all of the above standards.

Also available are spider and gear couplings which are certified to zone 2 standards. ([Contact jbj Techniques](#) for details).

An important development of equipment for use within hazardous areas is the wet mount series of bellhousings. Commissioned to research and develop a product that would control the high temperature generated by a piston pump shaft seal when working within cycling applications. A little considered issue is the frictional heat generated at the shaft seal when the application requires the pump to cycle between different pressures causing the seal temperature to increase. This process will often take the seal temperature out and above the levels required by the relevant ATEX standards requirement. This specially designed assembly allows a pumped cooling flow to be passed over the seal face and through an auxiliary cooler, this in turn reduces the seal face temperature which can be maintained at an acceptable level. With a vast array of components to select from, jbj are well

placed to provide all required components to support the required cooling system.

Diesel Engine – Hydraulic Pump Adaptors

A complete range of bellhousing and couplings exist for the connection of a diesel engine flywheel to a specified driven component, be it an oil hydraulic pump, water pump, generator or similar device. With the bellhousing available in various materials to suit all application areas. With a standard range to connect Diesel engines with SAE dimensions from SAE '6' to SAE '0' jbj are well placed to satisfy the majority of customer requirements. Couplings to complete the assembly are available in either torsionally flexible or torsionally rigid design and can be supplied to suit SAE flywheel dimensions from SAE 6.5" to SAE 18".

For hydraulic pumps to be mounted to engines that do not conform to SAE dimensions, we offer a full range of assembly parts, some of which (but not all) are shown here » [for diesel engines](#)

All bellhousings within this range can be finished machined to accept any, piston, vane or gear pump interfaces requested by customer.

As with the electric motor range of product jbj offer complete solutions for ATEX environments, using our well proven 'JXL' coupling range which has standard design to connect to the engine flywheel.

Directive 2014/34/EU I12GD-IM2-TX -50°C ≤ Service Temp ≤ +105°C.

Harmonised Standards: BS EN 1127:1 BS EN 13463:1 BS EN 13463:5 BS EN 50303.

Petrol Engine – Hydraulic Pump Adaptors

Petrol engine adaptors have been developed for use with industrial petrol engines. Design exists to suit Honda, Briggs and Stratton, Kawasaki, Kubota, Hatz, Mag, Robin, Suzuki, Winsconsin, to name but a few, all adaptors can be finished to accept most hydraulic pumps. Adaptors to suit engine crankshaft drives and for vertical mounting are available on request.



Small Individual Components to Large Combinations

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



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.



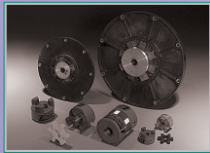
Bellhousings



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

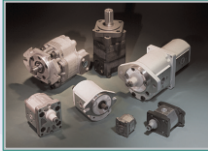
“ ensuring a continuing high quality service in which customers can have complete confidence. ”





an excellence in engineering

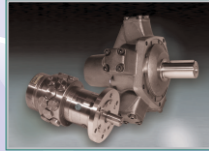
comprehensive range of components www.jbj.co.uk



Gear Pumps/Motors



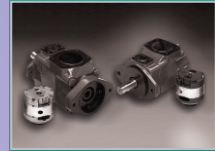
Screw Pumps



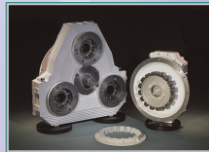
Axial & Radial Piston Motors



LSHT Motors/Geared Motors



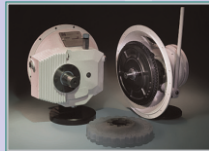
Vane Pumps



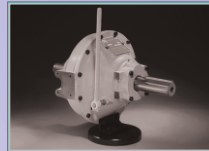
Splitter Gearboxes



Pneumatic Motors & Starters



BD Clutches & Gearboxes



BDS Clutches



Planetary Gearboxes



Coolers



Oil Bath Clutches



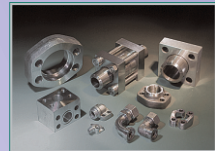
Flow Dividers



Tanks/Accessories



Fluid Level Indicators



Flanges



Mini Power Packs



Pressure Intensifiers



quality products for mechanical & fluid power



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jbj Techniques Limited is ISO certified, committed to international coordination & unification of industrial standards.

- registered in England No: 1185469 -

A range of products ATEX certified to directive 94/9/E requirements





uk distributor for



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PRODUCT RANGE

HE Powerpacks

12/24/48 VDC 0.3–4.5 kW and
0.75–3 kW AC modular power packs

HE Box Powerpacks

12/24/48 VDC modular powerpacks
in weatherproof boxes

Pressure Switches

5–350 bar, connecting/disconnecting

W100 Hydraulic pumps

0.5–2.0 cc/227 bar

W300 Hydraulic pumps

0.8–5.7 cc/230 bar

W600 Hydraulic pumps / motors

3–12 cc/276 bar

W900 Hydraulic pumps / motors

5–31 cc/section/276 bar

Calma The new quiet pumps

6.2–23.7 cc/section/250 bar

WQ900 The quiet pumps

5–23 cc/section/230 bar

WP900X Hydraulic pumps

16–31 cc/section/276 bar

W1500 Hydraulic pumps / motors

19–50 cc/section/276 bar

F12 FERRA Heavy duty pumps

16–41 cc/section/276 bar

F15 FERRA Heavy duty pumps

19–50 cc/section/276 bar

F20/F30 (LS) Hydraulic pumps / motors

23–161 cc/section/276 bar

GPA Internal Gear pumps

1.7–63 cc/section/100 bar

GC Hydraulic pumps / motors

1.06–11.65 cc/section/276 bar

D Hydraulic pumps

3.8–22.9 cc/section/207 bar

H Hydraulic pumps

9.8–39.4 cc/section/207 bar

II-Stage Hydraulic pumps

4.2–22.8 cc/section/276 bar

Rotary Flow Dividers

3.8–13.3 cc/section/300 bar

Transmission pumps



Concentric is an innovator in flow control and fluid power, supplying proprietary systems and components for trucks, buses and industrial vehicles, worldwide. With 1,156 employees and yearly sales exceeding 1,977 million Swedish Kronor, Concentric AB is listed on the Stockholm Stock Exchange (www.concentricAB.com).

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