# www.pearson-hyds.co.uk











With six decades of heritage, established in 1964, Pearson Hydraulics has been innovating in the fluid power industry. We celebrated our 60th year in the Fluid Power Industry in June 2024.



We are proud to conduct business from our purpose built 40,000 sq. ft head office, complete with full workshop facilities. This enables us to offer local, national and international customers an extensive range of distributor products and services from simple components

to full electro-hydraulic projects. We also operate branches in Grantham, Norwich, and Gateshead, along with multiple 24 hour service mobile repair vans for our local customers.

Pearson Hydraulics have secured distributor agreements with some of the major industry manufacturers which include: Danfoss Power Solutions, OMT, Intertraco and White Drive.

Our company philosophy remains the same as it did when we first began; we strive to be the customers' first choice for hydraulic components, delivering quality products from stock at competitive prices and complemented by unrivalled service.

































# Our Services

# **Bespoke Engineering**

Made-to-measure Hydraulic systems, including large scale Hydraulic Power Units and Test Rigs. From our customer specification, our technical team can design, procure, build, test and install your bespoke hydraulic system.

Industries we served for these bespoke hydraulic system have been Industrial, Mobile Machinery, Marine and Offshore.

An example commissioning of a hydraulic system was to design, build and install hydraulic and electrical power and



control systems for the "buttress formwork traveller" which is a system developed to cast an 800-meter-long mass concrete sea wall. The wall was cast in a series of individual 'buttresses', and the concrete was poured between tides. Our technical engineers designed and built a hydraulic power unit and integrated control panel.

# **Hydraulic Hose Assembly**

We have an over the counter service at each of our branches, you can bring your hose in and we'll make you a new one while you wait. We are open from 8am to 4.30pm, Monday to Friday. We stock an extensive range of products for hydraulic repairs.





# Emergency 24/7 hydraulic on-site service

For emergency on-site hose replacement, we have a hydraulic breakdown service just call: **Lincoln 07808 777 147** or Gateshead 0191 482 2511 any time.

# **Technical** Training Centre

In April 2024 R&G Fluid Power Group, unveiled their Technical Training Centre. Which is located at our Pearson Hydraulics head office and National Distribution Centre in Lincoln. Accredited by the British Fluid Power Association (BFPA), this training centre was developed to ensure the standard of training across the group and as a service provider are the best in the field.



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HYDRAULICS



# Hydraulic Management Service

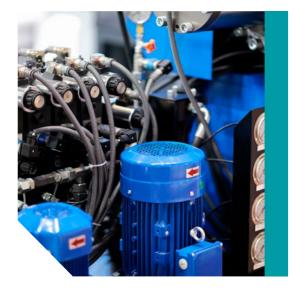
Maximise efficiency & minimise costs and downtime with our comprehensive asset management service.

# What is Asset Management?

In hydraulics, asset management refers to the systematic approach to overseeing, maintaining, and optimising the lifecycle of hydraulic assets, such as pumps, valves, pipes, cylinders, and other hydraulic components.

In practical terms, asset management involves activities such as inventory tacking, preventive and predictive maintenance, condition monitoring and lifecycle management. By maintaining detailed records of assets, hydraulic companies can better plan for maintenance, repairs, upgrades, or replacements.

Management of information. product specifications and service history, are all kept in an accessible cloud-based system available on your desktop 24/7, reducing valuable time and increasing profitability.



# What are the benefits?

Asset management provides a wealth of benefits for all types of industry, which collectively improves the efficiency, sustainability of any company and it's projects.

By maintaining assets, companies can prevent unexpected failures and minimise downtime - this reduces the disruption caused by equipment breakdowns and ensures continuous productivity.

At Pearson Hydraulics, we take the utmost care when carrying out any asset management tasks, helping companies make informed decisions about when to repair, replace or upgrade their hydraulic equipment.









# Q STAGE 1

# Pearson Hydraulic Engineer Visits Site for Baseline Inspection



The first stage in the process begins with one of our own Pearson Hydraulics Engineer, visiting on-site at your location to conduct a comprehensive baseline inspection. With a thorough assessment involved on all hydraulic systems, hydraulic components, the goal is to establish a detailed understanding of the current conditions of your hydraulic assets.

Carefully examining key indications, our hydraulic engineers look out for signs of wear, potential risks of failures and documents all their findings.

# 니 STAGE 2

### Data Analysis & Service Planning

Once the baseline of Stage 1 is complete, the data gathered is looked through and analysed by our hydraulics team to create a tailored service and maintenance package.

Working closely with your team, Pearson Hydraulics ensures that the service visits and inspections are scheduled in a way that minimises disruption to your daily operations and projects. By understanding your projects & maintenance windows and operational priorities, we can design a plan that fits well within your business schedule.

# X STAGE 3

# Hydraulic Service Inspection and Component Servicing

Returning to your site, our hydraulic engineers will execute the scheduled hydraulic service inspections. This includes a detailed inspection of all hydraulic components, such as hydraulic hoses, hydraulic fittings, accumulators, HPU pumps, motors and valves.

Depending on the specific requirements identified during Stage 1, our engineer performs the necessary tasks to service accumulators, hose and fittings. The aim of this is to address any emerging issues before they escalate, ensuring a smooth operation system and avoid future problems.

# STAGE 4

# Reporting, Quotation & Future Planning

Following the service visit, a comprehensive report is generated detailing the findings from Stage 3. This report includes recommendations for any replacements, hydraulic repairs or upgrades that may be necessary.

Based on this report, Pearson Hydraulics provide a detailed quotation for the required work, including labour, parts and estimated timelines for completion. Once agreed, the work is scheduled to begin at a time that suites both parties and especially your operational requirements.

Essentially, this stage lays out the foundation for future servicing by establishing a key maintenance schedule.

# 带 STAGE 5

# **Control Measure:** Planned Maintenance during Scheduled Shutdowns

The final stage involves a structured maintenance program which covers all hydraulic assets and is designed to sustain peak performance levels while reducing the risk of unscheduled downtime.

By adhering to a well-planned schedule, your projects can perform at a high quality level, reducing the likelihood of any failures. This approach helps to minimise operational costs over time by ensuring that your hydraulic assets are maintained in good working condition, leading to fewer hydraulic breakdowns & longer equipment life.

For more information contact Kevin Monaghan - EMAIL: kevinm@pearson-hyds.co.uk

PEARSON HYDRAULICS



# **Aluminium Single Group 0**



- High strength extruded aluminium body
- Pressure balanced floating bearing blocks
- Rotation is either clockwise or counter clockwise
- Excellent reputation for robust, dependable performance to continuous pressure and speeds
- Parallel shaft ends
- Standard mounting flange (European, 2-bolt)
- European port options

|                |                         | FRAME SIZE |       |       |       |       |  |  |  |
|----------------|-------------------------|------------|-------|-------|-------|-------|--|--|--|
|                |                         | ,25        | ,45   | ,57   | ,76   | 1,3   |  |  |  |
| Displacement   | cm³/rev                 | 0.25       | 0.45  | 0.57  | 0.76  | 1,27  |  |  |  |
|                | in³/rv                  | 0.015      | 0.027 | 0.034 | 0.045 | 0.075 |  |  |  |
| TFPONN         |                         |            |       |       |       |       |  |  |  |
| Rated pressure | Bar                     | 180        | 180   | 180   | 180   | 180   |  |  |  |
|                | PSI                     | 2600       | 2600  | 2600  | 2600  | 2600  |  |  |  |
| Max speed      | min <sup>-1</sup> (rpm) | 8000       | 8000  | 8000  | 8000  | 8000  |  |  |  |

# **Aluminium Single Group 1**

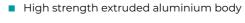


- High strength extruded aluminium body
- Various splined, parallel, tapered and tang shaft ends
- Various standard mounting flanges
- European, DIN, SAE 0-ring boss and BSPP (gas threaded) port options
- Compact and lightweight
- Quiet operation
- Available with integral relief valve

|                                   |                                   | FRAME SIZE |       |       |       |       |       |       |       |       |       |       |
|-----------------------------------|-----------------------------------|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                                   |                                   | 1,2        | 1,7   | 2,2   | 2,6   | 3,2   | 3,8   | 4,3   | 6,0   | 7,8   | 010   | 12    |
| Displacement                      | cm³/rev                           | 1.18       | 1.57  | 2.09  | 2.62  | 3.14  | 3.66  | 4.19  | 5.89  | 7.59  | 9.94  | 12.00 |
|                                   | in³/rv                            | 0.072      | 0.096 | 0.128 | 0.160 | 0.192 | 0.223 | 0.256 | 0.359 | 0.463 | 0.607 | 0.732 |
| SN PINN - 01 and 03 configuration |                                   |            |       |       |       |       |       |       |       |       |       |       |
| Rated pressure                    | Bar                               | 250        | 250   | 250   | 250   | 250   | 250   | 250   | 190   | 150   | -     | -     |
|                                   | PSI                               | 3625       | 3625  | 3625  | 3625  | 3625  | 3625  | 3625  | 2760  | 2175  | -     | -     |
| Max speed                         | min <sup>-1</sup> (rpm)           | 4000       | 4000  | 4000  | 4000  | 4000  | 4000  | 3000  | 3000  | 3000  | -     | -     |
| SNP1NN* - 02 and 06 con           | SNP1NN* - 02 and 06 configuration |            |       |       |       |       |       |       |       |       |       |       |
| Rated pressure                    | Bar                               | 250        | 250   | 250   | 250   | 250   | 250   | 250   | 230   | 200   | 150   | 150   |
|                                   | PSI                               | 3625       | 3625  | 3625  | 3625  | 3625  | 3625  | 3625  | 3335  | 2900  | 2175  | 2175  |
| Max speed                         | min <sup>-1</sup> (rpm)           | 4000       | 4000  | 4000  | 4000  | 4000  | 4000  | 3000  | 3000  | 3000  | 2000  | 2000  |

• SKPI NN is a special version of the SN PI. It is designed to accommodate an SAE 9T 20/40 DP-tooth splined shaft for higher torque applications.

# **Aluminium Single Group 2**



- Various splined, parallel, tapered and tang shaft ends
- Various standard and special engine mounting flanges
- Port configurations including European, German, BSPP, SAE 0-ring boss, and metric ports
- Numerous relief valve options, including full-flow, pilot and others
- Outrigger bearing assembly available for high radial and thrust load applications

|                |                         |      |      |      | l    | FRAME SIZE |      |      |      |      |
|----------------|-------------------------|------|------|------|------|------------|------|------|------|------|
|                |                         | 4,0  | 6,0  | 8,0  | 011  | 014        | 017  | 019  | 022  | 025  |
| Displacement   | cm³/rev                 | 3.9  | 6.0  | 8.4  | 10.8 | 14.4       | 16.8 | 19.2 | 22.8 | 25.2 |
|                | in³/rv                  | 0.24 | 0.37 | 0.51 | 0.66 | 0.88       | 1.02 | 1.17 | 1.39 | 1.54 |
| SNP2NN         |                         |      |      |      |      |            |      |      |      |      |
| Rated pressure | Bar                     | 250  | 250  | 250  | 250  | 250        | 250  | 210  | 180  | 160  |
|                | PSI                     | 3625 | 3625 | 3625 | 3625 | 3625       | 3625 | 3045 | 2610 | 2320 |
| Max speed      | min <sup>-1</sup> (rpm) | 4000 | 4000 | 4000 | 4000 | 3500       | 3000 | 3000 | 3000 | 3000 |
| SKP2NN*        |                         |      |      |      |      |            |      |      |      |      |
| Rated pressure | Bar                     | 250  | 250  | 250  | 250  | 250        | 250  | 240  | 210  | 190  |
|                | PSI                     | 3625 | 3625 | 3625 | 3625 | 3625       | 3625 | 3480 | 3045 | 2755 |
| Max speed      | min <sup>-1</sup> (rpm) | 4000 | 4000 | 4000 | 4000 | 3500       | 3000 | 3000 | 3000 | 3000 |

<sup>\*</sup> SKP2~N is a special version of the SNP2. SKP2 is designed for higher torque applications and is only available with SAE flange.

# **Aluminium Single Group 3**



- High strength extruded aluminium body
- Pressure plates that provide high efficiency and durability at all speeds
- Contact force between bearing face and gear is low and precisely controlled
- High volumetric efficiency• High quality, case hardened steel gears
- SAE, DIN and European standard mounting flanges

|                |                         |      | FRAME SIZE |      |      |      |      |      |      |      |      |
|----------------|-------------------------|------|------------|------|------|------|------|------|------|------|------|
|                |                         | 022  | 026        | 033  | 038  | 044  | 048  | 055  | 063  | 075  | 090  |
| Displacement   | cm³/rev                 | 22.1 | 26.2       | 33.1 | 37.9 | 44.1 | 48.3 | 55.1 | 63.4 | 74.4 | 88.2 |
|                | in³/rv                  | 1.35 | 1.60       | 2.02 | 2.32 | 2.69 | 2.93 | 3.36 | 3.87 | 4.54 | 5.38 |
| SNP3           |                         |      |            |      |      |      |      |      |      |      |      |
| Rated pressure | Bar                     | 250  | 250        | 250  | 250  | 250  | 230  | 230  | 210  | 180  | 150  |
|                | PSI                     | 3625 | 3625       | 3625 | 3625 | 3625 | 3350 | 3350 | 3045 | 2610 | 2175 |
| Max speed      | min <sup>-1</sup> (rpm) | 3000 | 3000       | 3000 | 3000 | 3000 | 3000 | 2500 | 2500 | 2500 | 2500 |

# Gear Pumps

**DANFOSS** POWER SOLUTIONS



# **Aluminium Single Group 4**



- High strength extruded aluminium body
- Pressure balanced floating bearing blocks
- High strength extruded aluminium body
- Moulded pressure seals, shaft seal with back-up ring
- Mounting flange options: European four bolts; German PTO; SAE C
- Shaft options: Taper 1:8 and Spline SAE 14 teeth and DIN; Parallel ø30 and ø31.75
- Port options: European flanged ports, SAE flanged ports, Threaded gas ports

|                |                         | FRAME SIZE |      |       |       |       |       |       |  |
|----------------|-------------------------|------------|------|-------|-------|-------|-------|-------|--|
|                |                         | 60         | 85   | 106   | 130   | 148   | 180   | 200   |  |
| Displacement   | cm³/rev                 | 58.0       | 83.3 | 103.4 | 126.1 | 143.8 | 174.1 | 194.3 |  |
|                | in³/rv                  | 3.54       | 5.08 | 6.31  | 7.69  | 8.77  | 10.62 | 11.86 |  |
| TAP4NN         |                         |            |      |       |       |       |       |       |  |
| Rated pressure | Bar                     | 230        | 230  | 230   | 230   | 220   | 180   | 160   |  |
|                | PSI                     | 3335       | 3335 | 3335  | 3335  | 3910  | 2610  | 2320  |  |
| Max speed      | min <sup>-1</sup> (rpm) | 3000       | 3000 | 2500  | 2500  | 2400  | 2400  | 2400  |  |

# Gear Pumps (Multiples)

Danfoss aluminium multi-stage pumps can be combined of group 1, 2, 3 and 4.

Danfoss multi-stage pumps are available in both modular and short versions. Modular pumps are easily assembled to provide a wide range of pump combinations, significantly increasing flexibility. This distributor friendly option also ensures oil separation, allowing different oil viscosities to be used for different functions.

Short versions of our multi-stage pumps are specifically designed to reduce envelope size, providing greater installation flexibility and enabling single inlet configurations.

Units available in varied displacements.







GEAR

**PRODUCTS** 



# **Cast Iron Pumps/Motors**

# Rugged, dependable performance under high pressure

Every component of the D-Series is specifically designed for maximum efficiency, dependability, durability and reliability in performing continuous operation in heavy duty applications with severe duty cycles and temperature conditions, all within the industry leading package size and power density.

- Thrust plate design for high efficiency over a wide temperature range
- Teflon coated bushings for extended life under high temperature & pressure
- High strength cast iron construction for efficient performance
- Easy installation in optimised machines due to compact, power-dense design
- Viton® seals are standard to sustain higher temperature and fluid capabilities
- A variety of integrated valve options



# Shhark® Low Noise

# Evolutionary low noise patented gear pump technology

Shhark® is the low noise external gear pump with outstanding performance guaranteed throughout the whole life of the pump.

With a simple but sophisticated design, we offer a gear pump that not only is quieter, it also has a unique advantage over the most popular low noise gear pump. The Shhark® patented design guarantees the pump will remain silent after many hours of heavy-duty operation.

- Quieter pump noise level emissions reduced by up to 10 db(a)
- Low vibration.- flow pulsation reduced by a stunning 78%
- Duration low noise performance throughout the life of the pump
- Efficiency- higher efficiency compared to standard gear pumps
- Savings cost, weight and footprint savings



# **Fan Drive Motors**

# Maximum cooling performance - optimum machine efficiency

Fan drive motors with integrated reversing and proportional relief valves specifically designed for high performance cooling applications on mobile machinery.

- An integrated dust cover to extend product life by preventing dirt ingression
- An enhanced gear teeth machining and special coating to reduce noise levels
- EH proportional valve integrated in the rear casting to provide more uniform performance over the entire operating temperature range
- PLUS+ 1 Compliant technology to •ensure all electro-hydraulic products integrate seamlessly in a customised control system

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D

# Gear Motors

**DANFOSS** POWER SOLUTIONS

- High strength extruded aluminium body with aluminium rear cover and aluminium front flange
- Mounting flange options: European four bolts; German; SAE
- Shaft options: Taper 1:8, Spline SAE and DIN; Straight Keyed
- Port options: German and European standard flanged ports; Metric, SAE O-ring boss and Gas Threaded ports





# **Gear Motor Group 1**

| 1000                        | FRAME SIZE              |               |                 |              |       |       |       |       |       |  |  |
|-----------------------------|-------------------------|---------------|-----------------|--------------|-------|-------|-------|-------|-------|--|--|
|                             |                         | 2,6           | 3,2             | 3,8          | 4,3   | 6,0   | 7,8   | 010   | 012   |  |  |
| Displacement                | cm³/rev                 | 2.62          | 3.14            | 3.66         | 4.19  | 5.89  | 7.59  | 9.94  | 12    |  |  |
|                             | in³/rev                 | 0.158         | 0.195           | 0.231        | 0.262 | 0.366 | 0.463 | 0.607 | 0.732 |  |  |
| SKM1 NN (a standard, bidire | ectional motor)         | SNM2NN (a sta | ndard, bidirect | ional motor) |       |       |       |       |       |  |  |
| Rated pressure              | Bar                     | 250           | 250             | 250          | 250   | 230   | 200   | 160   | 130   |  |  |
|                             | PSI                     | 3625          | 3625            | 3625         | 3625  | 3335  | 2900  | 2320  | 1895  |  |  |
| Min speed                   | min <sup>-1</sup> (rpm) | 1000          | 1000            | 1000         | 800   | 800   | 800   | 800   | 800   |  |  |
| Max speed                   | min <sup>-1</sup> (rpm) | 4000          | 4000            | 3000         | 3000  | 2000  | 2000  | 2000  | 2000  |  |  |



# **Gear Motor Group 2**

| 300                   |                         | FRAME SIZE |       |       |       |       |       |       |  |  |  |  |
|-----------------------|-------------------------|------------|-------|-------|-------|-------|-------|-------|--|--|--|--|
|                       |                         | 8,0        | 011   | 014   | 017   | 019   | 022   | 025   |  |  |  |  |
| Displacement          | cm³/rev                 | 8.4        | 10.8  | 14.4  | 16.8  | 19.2  | 22.8  | 25.2  |  |  |  |  |
|                       | in³/rev                 | 0.513      | 0.659 | 0.879 | 1.025 | 1.171 | 1.391 | 1.538 |  |  |  |  |
| SNM2NN (a standard, b | idirectional motor)     |            |       |       |       |       |       |       |  |  |  |  |
| Rated pressure        | Bar                     | 250        | 250   | 250   | 230   | 210   | 180   | 160   |  |  |  |  |
|                       | PSI                     | 3625       | 3625  | 3625  | 3335  | 3045  | 2610  | 2320  |  |  |  |  |
| Min speed             | min <sup>-1</sup> (rpm) | 700        | 700   | 700   | 500   | 500   | 500   | 500   |  |  |  |  |
| Max speed             | min <sup>-1</sup> (rpm) | 4000       | 4000  | 4000  | 4000  | 3500  | 3500  | 3500  |  |  |  |  |
| SNU2NN (a standard, u | nidirectional motor)    |            |       |       |       |       |       |       |  |  |  |  |
| Rated pressure        | Bar                     | 250        | 250   | 250   | 230   | 210   | 180   | 160   |  |  |  |  |
|                       | PSI                     | 3625       | 3625  | 3625  | 3335  | 3045  | 2610  | 2320  |  |  |  |  |
| Min speed             | min <sup>-1</sup> (rpm) | 600        | 600   | 600   | 500   | 500   | 500   | 500   |  |  |  |  |
| Max speed             | min <sup>-1</sup> (rpm) | 3500       | 3500  | 3500  | 3000  | 3000  | 3000  | 2500  |  |  |  |  |



# **Gear Motor Group 3**

| 000                      |                         |                 |               |          |      | FRAM | E SIZE |      |       |      |      |
|--------------------------|-------------------------|-----------------|---------------|----------|------|------|--------|------|-------|------|------|
| 0                        |                         | 022             | 026           | 033      | 038  | 044  | 048    | 055  | 063   | 075  | 090  |
| Displacement             | cm³/rev                 | 22.1            | 26.2          | 33.1     | 37.9 | 44.1 | 48.3   | 55.2 | 63.4  | 74.4 | 88.2 |
|                          | in³/rev                 | 1.35            | 1.60          | 2.02     | 2.32 | 2.69 | 2.93   | 3.36 | 3.87} | 4.54 | 5.38 |
| SNM3NN (bidirectional) m | notor in series SNU3N   | N (unidirection | onal) motor i | n series |      |      |        |      |       |      |      |
| Rated pressure           | Bar                     | 250             | 250           | 250      | 250  | 250  | 230    | 210  | 190   | 170  | 150  |
|                          | PSI                     | 3625            | 3625          | 3625     | 3625 | 3625 | 3336   | 3045 | 2755  | 2465 | 2175 |
| Min speed                | min <sup>-1</sup> (rpm) | 800             | 800           | 800      | 800  | 800  | 800    | 800  | 800   | 800  | 800  |
| Max speed                | min <sup>-1</sup> (rpm) | 2500            | 2500          | 2500     | 2500 | 2300 | 2300   | 2300 | 2300  | 2100 | 2100 |

### **1 01522 846846** ■ sales@pearson-hyds.co.uk

# **Series 45 Axial Piston** Open Circuit Pumps

**Pearson** hydraulics

DANFOSS POWER SOLUTIONS

# **Basic Units**

The Series 45 family of open circuit, variable piston pumps, offers a range of displacements from 25 to 147 cm<sup>3</sup>/rev [1.53 to 8.97 in<sup>3</sup> / rev]. With maximum speeds up to 3600 rpm and

continuous operating pressures up to 310 bar [4495 psi], product selection is easily tailored to the flow and pressure requirements of individual applications.













### FRAME K/L FRAME K2

FRAME E

|           | , -    |         |       |                         |                         |                         |      |      |            |                       |  |
|-----------|--------|---------|-------|-------------------------|-------------------------|-------------------------|------|------|------------|-----------------------|--|
| Pum       | ın     | Dienla  | ement |                         | Speed                   |                         | Pres | sure | Theoreti   | retical flow Mounting |  |
| Full      | P      | Dispide | ement | Continuous              | Max.                    | Min.                    | Maxi | num. | (at rated  | l speed)              | Mounting                               |
|           | Model  | cm³     | in³   | min <sup>-1</sup> (rpm) | min <sup>-1</sup> (rpm) | min <sup>-1</sup> (rpm) | bar  | psi  | US gal/min | l/min                 | Flange                                 |
| Frame L   | L25C   | 25      | 1.53  | 3200                    | 3600                    | 500                     | 260  | 3770 | 21.0       | 80.0                  | SAE B - 2 bolt                         |
| ridille L | L30D   | 30      | 1.83  | 3200                    | 3600                    | 500                     | 210  | 3045 | 25.4       | 96.0                  | SAE B - 2 bolt                         |
| Frame K   | K38C   | 38      | 2.32  | 2650                    | 2800                    | 500                     | 260  | 3770 | 26.6       | 100.7                 | SAE B - 2 bolt                         |
| rrame K   | K45D   | 45      | 2.75  | 2650                    | 2800                    | 500                     | 210  | 3045 | 31.5       | 119.3                 | SAE B - 2 bolt                         |
|           | K2-25C | 25      | 25    | 3450                    | 3750                    | 500                     | 260  | 3771 | 22.8       | 86.3                  | SAE B - 2 bolt                         |
|           | K2-30C | 30      | 30    | 3200                    | 3450                    | 500                     | 350  | 5075 | 25.4       | 96.0                  | SAE B - 2 bolt                         |
| Frame K2  | K2-38C | 38      | 38    | 2900                    | 2900                    | 500                     | 350  | 5075 | 29.1       | 110.2                 | SAE B - 2 bolt                         |
|           | K2-40C | 40      | 40    | 3100                    | 3100                    | 500                     | 350  | 5075 | 34.5       | 124                   | SAE B - 2 bolt                         |
|           | K2-45C | 45      | 45    | 2900                    | 2900                    | 500                     | 350  | 5075 | 34.5       | 130.5                 | SAE B - 2 bolt                         |
|           | J45B   | 45      | 2.75  | 2800                    | 3360                    | 500                     | 310  | 4495 | 33.3       | 126.0                 | SAE B - 2 bolt<br>SAE C - 2 & 4 - bolt |
|           | J51B   | 51      | 3.11  | 2700                    | 3240                    | 500                     | 310  | 4495 | 36.4       | 137.7                 | SAE B - 2 bolt SAE<br>C - 2 & 4 - bolt |
| Frame J   | J60B   | 60      | 3.66  | 2600                    | 3120                    | 500                     | 310  | 4495 | 41.2       | 156.0                 | SAE B - 2 bolt SAE<br>C - 2 & 4 - bolt |
|           | J65C   | 65      | 3.97  | 2500                    | 3000                    | 500                     | 260  | 3770 | 42.9       | 162.6                 | SAE B - 2 bolt SAE<br>C - 2 & 4 - bolt |
|           | J75C   | 75      | 4.58  | 2400                    | 2880                    | 500                     | 260  | 3770 | 47.5       | 180.0                 | SAE B - 2 bolt SAE<br>C - 2 & 4 - bolt |
| Frame F   | F74B   | 74      | 4.52  | 2400                    | 2800                    | 500                     | 310  | 4495 | 46.9       | 177.6                 | SAE B - 2 bolt SAE<br>C - 4 bolt       |
| rrame r   | F90C   | 90      | 5.49  | 2200                    | 2600                    | 500                     | 260  | 3770 | 52.3       | 198                   | SAE B - 2 bolt SAE<br>C - 4 bolt       |
|           | E100B  | 100     | 61.0  | 2450                    | 2880                    | 500                     | 310  | 4495 | 64.7       | 245.0                 | SAE C - 4 bolt                         |
| Frame E   | E130B  | 130     | 7.93  | 2200                    | 2600                    | 500                     | 310  | 4495 | 75.5       | 286.0                 | SAE C - 4 bolt                         |
|           | E147C  | 147     | 8.97  | 2100                    | 2475                    | 50                      | 260  | 3770 | 81.5       | 308.7                 | SAE C - 4 bolt                         |

**PISTON** 

PUMPS

# Axial Piston Pumps

**DANFOSS** POWER SOLUTIONS



# **D1P** Open Circuit High Power

**Axial Piston Pumps** 



### High power and reliability

The D1 pump is a high-pressure, high-performance variable axial piston pump, developed specifically for open-circuit systems in the most extreme application environments. Its robust design makes it an ideal solution for the toughest needs. The D1 pump expands the functionality and control options of our current portfolio to include higher hydraulic power product options. Our entire high power open circuit products are designed for high quality, reliability with high efficiency for easy installation.

# **MP1** Closed Circuit High Power

**Axial Piston Pumps** 



# Maximise performance, efficiency, & profit

The Danfoss MP1 is the next evolution in closed circuit axial piston pumps. No matter what industry you serve MPI pumps offer the performance needed for today's small- to medium-sized equipment. This is another example of our commitment to the mobile hydraulic industry. You can count on us to do business at your speed. Delivering what you need, when you need it - to propel you forward.

### Characteristic features

- Heavy duty design for robustness and reliability.
- Frame sizes: 130cc, 145cc, 193cc and 260cc.
- Proven and optimised 9 piston rotating group.
- Angled bore cylinder block design improves self-priming capability.
- Increased pump efficiency owing to unique valve plate and cylinder block design.
- Integral impeller charge pump for higher rotational speeds.
- PLUS+ 1 · compliant control.
- Full power through drive capability.
- Compact installation size providing high power density.
- Designed to work seamlessly with the new PVGI 28/256 high flow valves.
- Hydro-mechanical power/torque control available.
- Variety of control options including: pressure compensated control, load sensing control, power/ torque control and electric displacement control.
- Related applications: Offshore, mining, forestry, construction and material handling.
- ATEX rated options available.

# Characteristic features

- Uniform design concept across all frame sizes (28/32 and 38/45).
- Technologically advanced rotating kit and servo system.
- Predictable, low friction swashplate bearing for precise machine control.
- Increased pump efficiency.
- Lower control pressure for less power consumption.
- PLUS+ 1 · compliant control and options.
- Integrated flushing valve available.
- Industry leading pump length.
- Clean side for easier integration.
- Standard connection interfaces.
- Variety of control options including: Electrical Displacement Control (EDC), Mechanical Displacement Control (MDC), Hydraulic Displacement Control (HOC) and Electric 3 position control (FNR).
- Related applications: construction, crane and material handling, forestry, turf care and



# **H1P Closed Circuit**

**Axial Piston Pumps** 



# Designed for quality and reliability

The HIP pump is part of Danfoss' HI family of high power hydrostatic products. It has pioneered not only the closed circuit variable displacement axial piston pump but also the whole mobile hydraulic industry. Based on decades of experience, the HIP will provide you with the highest quality and standards as well as best-in-class, innovative, and efficient technology.

# **H1B Bent**



**Pearson** hydraulics

# Proven performance Exceptional efficiency

The Danfoss H1 motor family allows top design flexibility whether you are looking for high sophistication or simplicity itself. The H1 bent axis motors are designed to complement the growing family of H1 axial piston pumps. Featuring proven 32 degree bent axis technology, zero degree capability and higher overall efficiency, they offer a number of significant advantages. Optimised for electrical control, they are fully PLUS+1 compliant, enabling seamless integration with Danfoss' electronic machine control architecture.

## Characteristic features

- Displacements ranging from 45-280cm³
- High pressure capability, up to 480 bar.
- High efficiency integral gerotor charge pump.
- Precise and reliable control.
- Variety of control options including: Automotive Control (AC), Electrical Displacement Control (EDC), Mechanical Displacement Control (MDC) & Non-Feedback Proportional Hydraulics (NFPH).
- Low part count improves reliability & reduces weight.
- High overall efficiency.
- Compact design gives excellent high power density.
- Integral high pressure relief and pressure limiter valves.
- Integral full flow charge pressure filtration option.
- Durable and robust.
- Designed for heavy and medium duty applications.
- PLUS+ 1 compliant controls.
- Full power through drive capability.
- Related applications: heavy machinery, winches, mining, forestry, construction, agriculture and material handling.

# Characteristic features

- Displacements ranging from 60-250cm³
- Maximum working pressure 450 bar.
- High speed capability.
- Zero degree capability for wheel assist drives and anti-slip traction controls.
- Shortest unit length on the market.
- SAE, DIN and cartridge installation options.
- Lower total number of parts for improved reliability and weight reduction.
- High overall efficiency due to improvements in control, endcap and valve segment design.
- Design optimised for electrical controls.
- IP67 and IP69K rated electrical components.
- Durable and robust.
- Integral loop flushing valve/speed sensor options.
- Designed for heavy and medium duty applications.
- PLUS+ 1 compliant controls.
- Related applications: rough terrain forklifts, telescopic handlers, combine harvesters, crop sprayers; wheel loaders, winches and construction machinery.

POW

FOSS

# Cartridge Valves

DANFOSS POWER SOLUTIONS



Whatever your application, we've got you covered with over 500 cartridge valves. Setting us apart is a dynamic mix of technical expertise and application know-how.

Appearances may be deceiving. These small components hold the power to control even the biggest machines smoothly, and precisely. Our cartridge valves are each designed to enhance your machines for the better.

Combine cartridge valves seamlessly into a Hydraulic Integrated Circuit (HIC) manifold to match your application needs. With our EasyManifold configurator, designing

### Check Valves



- Normal Direction Check Valves
- In-line Check Valves
- Reverse Direction Check Valves
- Pilot to Open Check Valves
- Pilot to Close Check Valves
- Dual Pilot Operated Check Valves

# Sequence & Unloading Valves



- Direct Acting Pressure Sequence Valves
- Pilot Operated Pressure Sequence Valves
- 2-Way Directional Sequence Valves
- 3-Way Directional Sequence Valves
- Unloading Valves

# Pressure Reducing Valves



- Pressure Reducing/Relieving Valves
- Pressure Reducing Valves (Non-Relieving)

# **Directional Controls Valves**



- Manual Rotary Valves
- Manual Lever Valves
- Manual Push/Pull Valves
- Hydraulically Piloted 2-Way Valves
- Hydraulically Piloted 3-Way & 4-Way Valves
- Brake Release Valves

# **Motion Control Valves**



- Overcenter Valves, Standard
- Overcenter Valves, Part Balanced
- Overcenter Valves, Fully Balanced

Overcenter Valves, 2 Stage Counterbalance

- Overcenter Valves, Zero Differential
- Overcenter Valve Assemblies

### **Proportional Valves**



- Proportional Directional Valves
- Proportional Poppet Flow Control Valves **Proportional Spool Flow Control Valves**
- **Proportional Spool Flow Control Valves**
- Proportional Pressure Relief Valves
- Proportional Pressure Reducing Valves

# tailored hydraulic solutions is effortless, regardless of size.

### Shuttle Valves



- Load Shuttle Valves Cartridge
- Load Shuttle Valves In-line Hot
- Oil Shuttle Valves

## Relief Valves



- Direct Acting Poppet Relief Valves
- Direct Acting Spool Relief Valves
- Differential Area Relief Valves
- Pilot Operated Relief Valves
- Bi-Directional Relief Valves
- Cross Over Relief HIC

### Flow Control Valves



- Restrictive Type Pressure Compensated Flow Control Valves
- Priority Type Pressure Compensated
- Flow Divider / Combiner Valves
- Velocity Fuses

# **Logic Elements**



- Pressure Compensators, Restrictive Type ■ Pressure Compensators, Priority Type
- Logic Elements, Poppet Type
- Logic Elements, Spool Type
- Logic Elements, with Pilot Valve Adaptor

### Solenoid Valves



- Poppet Type Solenoid Valves
- Spool Type 2-Way, 2-Position Solenoid Valves
- Spool Type 3-Way, 2-Position Solenoid Valves
- Spool Type 4-Way, 2-Position Solenoid Valves
- Spool Type 4-Way, 3-Position Solenoid Valves
- Spool Type 5-Way, 3-Position Solenoid Valves

# Coils & Electronics



Available for all sizes and in a variety of connector types and voltages. Beyond our standard range, our robust and tough coils are built to withstand extremes - from voltage & temperature variations to water ingression

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# A Vast Range of Orbital Motors

**DANFOSS** POWER SOLUTIONS



# Optimum performance:

Offering you the widest orbital motor portfolio in the market, based on more than 70 years of experience in the field of hydraulics. Danfoss orbital motors have a very high efficiency over the entire lifetime of the product, meaning that you save energy and money. Pearson Hydraulics can offer more than 1600 different hydraulic motor versions categorised in types, variants and sizes.



# Characteristic Features

- Smooth running over the entire speed range
- Constant operating torque over a wide speed range
- High starting torque
- Brake units available as an add on
- High return pressure without the use of drain line [High pressure shaft seal]
- High efficiency
- Long life under extreme operating conditions
- Robust and compact design
- High radial and axial bearing capacity For applications in both open and
- closed loop hydraulic systems Suitable for a wide variety of hydraulic fluids



|            |                 | Orbital Motor Overview            |             |                  |
|------------|-----------------|-----------------------------------|-------------|------------------|
| Motor Type | Displacement    | Pressure Drop [cont / int / peak] | Flow (cont) | Max output (int) |
|            | cm³             | bar                               | l/min       | KW               |
|            | [in³]           | [psi]                             | [gpm US]    | [HP]             |
| ОМТ        | 160 - 500       | 200 / 240 / 280                   | 125         | 40               |
|            | [9,83 - 31,95]  | [2900 / 3500 / 4050]              | [33,0]      | [54]             |
| ТМТ        | 250 - 630       | 250 / 350 / 400*                  | 125         | 70               |
|            | [15,25 - 38,43] | [3600 / 5000 / 5800]              | [33,0]      | [95]             |
| OMV        | 315 - 800       | 200 / 240 / 280                   | 200         | 64               |
|            | [19,18 - 48,91] | [2900 / 3500 / 4050]              | [53,0]      | [87]             |
| тмк        | 160-470         | 325                               | 80          | 27               |
|            | [9,77 - 28,68]  | [4715]                            | [21.1]      | [36]             |
| TMTHW      | 315-800         | 350                               | 200         | 65               |
|            | [18,5 - 48,82]  | [5080]                            | [52.8]      | [87]             |
| TMV        | 400-800         | 350                               | 200         | 112              |
|            | [24,41 - 48,82] | [5080]                            | [52,8]      | [150]            |

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NFO

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# SNOILNIO

# PVG Proportional Valves

DANFOSS POWER SOLUTIONS



# **PVG 16**

**Proportional Valve** 



Load independent proportional valve for applications with flow up to 65 I/min [17.2 gal/min] and pressure up to 400 bar [5800 psi].

**PVG 16 characteristics** 

# **PVG 32**

**Proportional Valve** 



Load independent proportional valve for applications with flow up to 130 I/min [34.4 gal/min] and pressure

### PVG 32 characteristics

- Load-sensing technology for higher efficiency, safety, reduced energy consumption, and longer system life
- Optimized system architecture and unique machine features due to design flexibility and modular concept
- Improved efficiency obtained by precise matching of performance with flow requirements
- Reduced cooling and fuel requirements
- Low machine downtime supported by high quality products, modular concept and advanced product feedback
- Optimized production processes and less inventory due to modular concept and short delivery time actuator with integrated float function for increased safety
- Actuator with closed loop control for built-in fault monitoring
- Available with on/off and proportional CAN actuator for simplified machine wiring and bi-directional communication



up to 350 bar [5076 psi].

- Load independent flow control for smooth operation and improved productivity.
- Load-sensing technology for higher efficiency, safety, reduced energy consumption, and longer system life.
- Configurable as advanced electrically controlled proportional valve as well as load sensing directional control valve.
- Modular design providing a wide range of configuration possibilities.
- Up to twelve basic sections per valve group. Maximum flow per section: 130 I/min (34.3 gal/min].
- Can be configured in combination with our range of HIC hybrid modules and/or PVG 100 for maximum flexibility.
- Mechanical, hydraulic, and electrical actuation options.

# **PVG 48**

**Proportional Valve** 



Load independent proportional valve for applications with flow up to 180 liters per minute (47.6 gal/min), PVG 48 provides a right-sized option between the existing PVG 32 and PVG 128 valves.

### PVG 48 characteristics

- Load-independent flow control for precise operation and improved productivity
- Prevention against work port pressure build up Individual work port pressure setting
- Integrated compensator with neutral bleed off
- Integrated LS shuttle network
- Optional shock/anti-cavitation valve facility (PVLP/PVLA)
- Optional Integrated adjustable LS A/B pressure relief valves
- T0 facility
- Optional increased anti-cavitation on A port
- Easy integration with the entire PVG portfolio



**PVG 100** 

**Proportional Valve** 



Proportional Valve





Proportional Valve

Pearson hydraulics



Load independent proportional valve with flow up to 180 I/min [48 gpm] and pressures up to 350 bar [5076 psi].



Load independent proportional valve for applications with flow up to 500 I/min [109.9 gal/min] & pressure up to 420 bar [609] psi].



Load independent proportional valve for applications with flow up to 80 I/min [21 gal/min] and pressure up to 320 bar [4570 psi].

### PVG 100 characteristics

- Flow sharing for maximum controllability and safety.
- Load independent flow control for smooth operation and improved productivity.
- Load-sensing technology for higher efficiency, safety, reduced energy consumption and longer system lifetime.
- Configurable as advanced electrically controlled proportional valve as well as load sensing directional control valve.
- Modular design providing a wide range of configurations.
- Up to eight different sections per valve group. Maximum flow per section: 180 I/min [48 gpm].
- Can be configured in combination with our range of **HIC hybrid modules** and/or PVG 32 for maximum flexibility.
- Mechanical, hydraulic, and electrical actuation options.

### PVG 128/256 characteristics

- Smooth load-independent flow control for optimum productivity and precise operation
- Energy-efficient load-sensing technology for maximum safety and a long system life
- CAN bus control for lower installation cost and increased diagnostics
- Optimized for lower pressure drop and higher efficiency
- Compact sectional platform solution for easy integration with PVG 16 and PVG 32
- Compact design, easy installation and serviceability
- Individual LS NB relief valves ensure energy efficient, safe and reliable operation
- Mechanical actuation as default on all valve sections
- Hydraulic actuation
- Electrohydraulic actuators PVE (Ratio metric, 0-1 OV, CAN bus) as well as PVHC (High Current PWM) actuators

### PVG 100 characteristics

- Load-sensing technology for high efficiency, reduced energy consumption and a long system life
- Reduced time to market with modular design and short lead times
- Wide portfolio of options from mechanical to electrohydraulic (EH) control
- Combination of mechanical and EH control in same valve configuration
- Fine metering for better controllability and increased machine performance



PVG PROPORTIONAL

**VALVES** 

Z F O

S

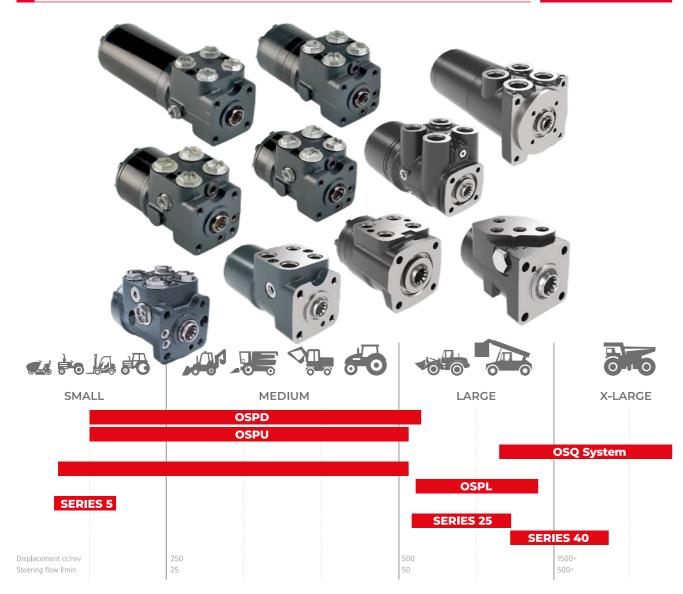
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# Steering Components

DANFOSS POWER SOLUTIONS





# **Electrohydraulic**

# **Steering Components**

Electrohydraulic steering components are being widely acknowledged by 3rd party certifications and are compliant with all current regulations and safety standards including the Machinery Directive.

### Characteristic features

- Latest steer-by-wire technology, improving machine and cabin design flexibility
- Integrated safety and steering controller in electrohydraulic valves
- Increased productivity with auto-guidance (GPS), quick steering and all-wheel steering
- Improved operator comfort and enhanced ergonomics with electric steering wheel and joystick

# **Hydraulic**

# Steering Components

We offer a comprehensive range of orbital steering products suitable for all types of applications ranging from ordinary two wheel, four wheel and articulated steering to GPS auto steering, steer-by-wire, joystick and other electrically controlled steering. Designed for outstanding steering performance, increased machine productivity and operator comfort.

### Characteristic features

- Maximum compatibility with existing and proven technology
- Reduced installation cost
- Easy compliance to current safety standards
- Enhanced comfort
- Increased productivity
- Better handling and control

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# Danfoss PLUS+1®

**DANFOSS** POWER SOLUTIONS



**DANFOSS PLUS+1**®

# PLUS+1<sup>®</sup> Guide & Service Tool



PLUS+1® GUIDE is a powerful programming environment which will increase your engineering productivity and help you bring high-performing, intelligent machines to market. PLUS+1 GUIDE is your gateway to the Danfoss world of advanced mobile machine control.

Deploy your applications to PLUS+1® programmable

hardware with the PLUS+1® Service Tool. This allows you to create customised service applications for easy machine tuning, diagnostics & troubleshooting.

- PLUS+1 GUIDE (Graphical User Integrated Development Environment) software enables high performance, intelligent vehicles to be brought to market faster.
- Fully tested PLUS+1® compliant software function blocks enable a reliable plug-and-perform solution.
- Reduced programming, installation, machine testing time & project risk.
- Easy to integrate and customise to your application needs using the PLUS+1® GUIDE software.
- PLUS+1® Service Tool enables applications to be downloaded to PLUS+1® programmable hardware and development/use of service applications for tuning and diagnostics.





# PLUS+ 1<sup>®</sup> Programmable & Compliant Hardware

PLUS +1® is the most respected product family for mobile machine control system development.

PLUS+ 1® programmable hardware includes all components that can be controlled with a customised application developed in PLUS+1® GUIDE. PLUS+1® Compliance ties advanced mobile control technology together ensuring all Danfoss electrohydraulic products integrate seamlessly in the customised control system developed using PLUS+1® GUIDE.

- Comprehensive range of programmable & compliant hardware including: microcontrollers, 1/0 modules, displays, joysticks, foot pedals, sensors, pumps, motors & valves.
- Rugged hardware design which will perform reliably even under the toughest and harshest conditions.
- Powerful, expandable, flexible and affordable hardware.
- CAN based communication for state-of-the art control performance.



# **Software Services**

To complement the comprehensive portfolio of Danfoss PLUS+1® programmable and compliant electronic hardware, Pearson Hydraulics also offer a complete advanced machine control software design and development service, including validation and verification, to help you bring high-performing, intelligent machines to market faster.

A customised software program can provide your machine with differentiating features, greater productivity, more reliable performance, longer service life and lower running costs.

We specialise in radio remote\_ control system integration, human-machine interface (HMI) design and controller area network (CAN) communication programming using the J1939 and CANopen higher layer protocols. CAN based communication provides seamless integration, state-of-the-art control performance, improved reliability, flexibility, high data transfer speeds and enhanced diagnostics.

We can provide powerful and expandable solutions for distributed and centralised (stand-alone) control system architectures.

A customised and proprietary service application file is provided as standard with each software implementation for easy machine tuning, diagnostics & troubleshooting.



Pearson Hydraulics can take your-machine control to the next level!

П

# Heavy Duty Joysticks

**DANFOSS** POWER SOLUTIONS



# **JS1-H Heavy Duty Joysticks**

Ergonomically designed, intelligent joystick solutions As a small or medium-sized manufacturer, you need to adapt joysticks to customer needs. Just as quickly and flexibly as a large OEM. That calls for flexible components and a lean development process.



### Features

- Rugged design up to IP66 overall
- Ergonomic left, right and straight grips
- Single and dual axis spring-return
- Single axis w/ adjust. Friction-hold
- Redundant hall effect or long-life potentiometric sensing (full redundant)
- 5 different output types: CAN (J1939, CANopen), CAN+ and CANalog PVE and Analog, PWM
- 5 different grip types: ST2- ST?- PR2- PR7\*) and HRI-grip
- Several grip functions: domed and flat push-button (max. 12), proportional roller, rocker switch and FNR, operator presence switch
- Connection: wiring harness with connector
- Grip travel :+ 18°
- EMI/RFI: 150V/m
- ESD: 20kV

POW

FOSS

20



# Benefits

- Customizable solutions
- The JS1-H base and grip options allow you to fulfil specific customer requirements for a smooth, comfortable and reliable operation. Choose from three bases and five ergonomic grip types with flexible button and switch placement.
- Smart compatibility
- Compatible grip and base options make joysticks simple to upgrade. Six standard electrical interfaces are available for ease of configuration.
- Superior performance
- The JS1-H family is suitable for almost any machine that requires joystick control. PLUS+I Compliance enables simple and seamless future-oriented integration in the machine control system.
- Faster More flexible fulfilment times.
- The JSI-H standard portfolio is readily available, enabling you to reduce your warehouse stocks. Even without compromising your ability to fulfil the specifications of individual customers. Easy integration with PLUS+I also secures fast and efficient development times.





EDITRON

ELECTRIC

MOTORS

# Electric motors

for vehicles, machines & marine applications

Danfoss Editron electric motors are based on synchronous reluctance assisted permanent magnet (SRPM) or permanent magnet synchronous machine (PMSM) technology. They are liquid-cooled and designed to work in harsh operating environments typical in drivetrain applications. For instance, traction motor in heavy machinery or propulsion motor in marine applications.

They can work both as a generator or as a motor.





# smaller dimensions, lighter weight and higher efficiency. The motors are available in various

speed and torque ratings

- EM-PMI with power up to 1,000 kW high torque with high efficiency
- EM-PMI project based machines with power up to 6,000 kW- high torque with high efficiency
- EM-PME outer rotor machines with power up to 50 kW - high torque with high efficiency

# **Applications**

- Traction motors for vehicles
- **Propulsion motors for marine vessels**
- Variable-speed generators for hybrid vehicle or marine vessels

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# Orbital Motors & Steering

WHITE MOTORS & STEERING

# White Drive Orbital Motors & Steering.



Leading motor and steering solutions that power the evolution of mobile and industrial applications around the world.

Operating globally for over fifty years, White develops innovative, durable, high performing, and efficient hydraulic products across many market sectors and in the most challenging applications across the globe. With a commitment to quality, White continues to invest in its engineering excellence and application know-how. White is a global leader in mobile hydraulics for motors and steering products with long heritage and world-class manufacturing.



### **Motors**

Pearson offer a complete range of Orbital Motors up to 100kw, covering small and large applications.



# **Electrohydraulic Steering**

A comprehensive portfolio with a range of 32-1,000 ccm displacement per turn & 5-100 steering flow, as well as Electrohydraulic Steering Units

| Orbital Motor Overview |                     |   |              |                  |  |  |  |  |
|------------------------|---------------------|---|--------------|------------------|--|--|--|--|
| Motor Type             | Displacement        | Pressure Drop (cont/int/Peak)           | Flow (cont)  | Max Output (int) |  |  |  |  |
|                        | cm3                 | bar                                     | l/min        | KW               |  |  |  |  |
|                        | [in3]               | [psi]                                   | [gpm, US]    | [HP]             |  |  |  |  |
| OML                    | 8-32                | 70 /125 /140 16 2                       | 16           | 2                |  |  |  |  |
|                        | [0,49 -1,95]        | [1000 / 1800   2000]                    | [4,2]        | [2,7]            |  |  |  |  |
| ОММ                    | 8-50                | 100 / 140 / 200                         | 20           | 3.2              |  |  |  |  |
|                        | [0,49 - 3,07]       | [1450 / 2000 / 2900]                    | [5,5]        | [4,4]            |  |  |  |  |
| ОМРХ                   | 25-400              | 140 / 175 / 200                         | 60           | 13               |  |  |  |  |
|                        | [2,96- 23,80)       | [2000 / 2500 / 3300]                    | [15,9]       | [17.4]           |  |  |  |  |
| OMRX                   | 50-375              | 175 / 200 / 225                         | 60           | 15               |  |  |  |  |
|                        | [3,15- 22,72}       | [2500 / 2900 / 3300]                    | [15,9]       | [20,1]           |  |  |  |  |
| ОМН                    | 200-500             | 175 / 200 / 225                         | 75           | 18.5             |  |  |  |  |
|                        | [12,28 - 28,72]     | [2500 / 2900 / 3300]                    | [20,0]       | [25]             |  |  |  |  |
| OMEW                   | 100-315             | 200 / 210 / 225                         | 60           | 15               |  |  |  |  |
|                        | [6,10-18,92]        | [2900 / 3000 / 3300]                    | [16]         | [20]             |  |  |  |  |
| OMS                    | 80-400 [4,91-23,98] | 175 / 210 / 225<br>[2500 / 3000 / 3300] | 75<br>[20,0] | 21<br>[28]       |  |  |  |  |

# Directional Control Valves Pearson hydraulics



DIRECTIONAL

CONTROL

HYDRAULIC

# **Hy-Pro Valves**

A low profile sectional spool valve which can be lever, solenoid, cable or pneumatic operated.

- Up to 100 Litres p/m
- 250 Bar
- Fully enclosed spool
- Excellent metering
- Integral load hold check
- Marine protection option
- Suitable for open or closed centre circuits
- Large range of ancillaries
- Manual, solenoid, cable & pneumatic options
- Radio Remote Control Option
- Manufactured in the UK





# The Official **Hy-Pro Specialist Repair Centre**

Pearson Hydraulics are the official repair centre for Hy-Pro valves.

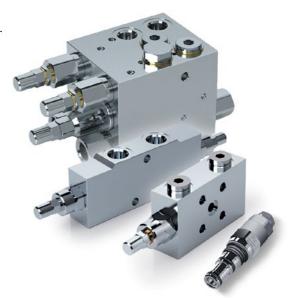
We can undertake all servicing, repairs and modifications to keep your equipment running smoothly.

# Hy-Pro motion and control solutions

# Hydraulic Valves

Complemented by cartridge and parts-in-body auxiliary valve packaged from Luen, Danfoss, CBF and Oleodinamica Marchesin which include:

- Counterbalance valves
- Relief valves
- Sequence valves
- Pressure Reducing valves
- Pump unloading valves
- Check valves
- Flow control valves
- Solenoid valves
- Integrated manifold blocks (H.I.C)
- Hose failure and boom lock valves











HY-PRO · YOULI · LUEN · DANFOSS · CBF · OM

BELL HOUSINGS

Ço

COUPLINGS

# **OMT Group**

PRODUCT RANGE



The OMT range of products are suitable for both the industrial and mobile

| machinery sectors. There are s     | e suitable for both the industria<br>ix main ranges of products: | al and mobile | irust it        |
|------------------------------------|--|---------------|-----------------|
| Bell Housings<br>& Drive Couplings | Filters  | Accumulators  | Heat Exchangers |
|                                    |  |               |                 |
|                                    |  |               |                 |
|                                    |  |               |                 |
|                                    |  |               |                 |
|                                    |  |               |                 |





We stock an extensive range of standard bell housings and couplings to suit most of the major manufacturers' pumps. Standard 4 bolt European gear pump part numbers.

# Bell housings to suit:

- Piston pumps
- Vane pumps
- Screw pumps
- Petrol & diesel engines

Drive coupling in steel, aluminium and cast iron. Our full machining service ensures most of our bell housing and coupling options can be delivered the next day.



| Motor Frame | 4 Pole Power Reg. |           |      | Bull Strate Co.           |              |
|-------------|-------------------|-----------|------|---------------------------|--------------|
|             | KW                | НР        | Pump | Bell Drive Housing<br>No. | Coupling No. |
| D63         | 0.12-0.18         | 0.16-0.25 | 0.5  | LS140                     | NDOI         |
| D63         | 0.12-0.18         | 0.16-0.25 | 1    | LS141                     | ND03         |
| D71         | 0.25-0.37         | 0.35-0.5  | 0.5  | LS160                     | NDIA         |
| D71         | 0.25-0.37         | 0.35-0.5  | 1    | LS161                     | ND2          |
| D80         | 0.55-0.75         | 0.75-1    | 0.5  | LS210                     | ND4C         |
| D80         | 0.55-0.75         | 0.75-1    | 1    | LS201                     | ND5          |
| D80         | 0.55-0.75         | 0.75-1    | 2    | LS203                     | ND7          |
| D80         | 0.55-0.75         | 0.75-1    | 3    | LSE206                    | ND50A        |
| D90         | 1.1-1.5           | 1.5-2     | 1    | LS201                     | NOS          |
| D90         | 1.1-1.5           | 1.5-2     | 2    | LS203                     | NDIO         |
| D90         | 1.1-1.5           | 1.5-2     | 3    | LSE206                    | ND5IA        |
| D100/112    | 2.2-4             | 3-5.5     | 1    | LS250                     | NDII         |
| D100/112    | 2.2-4             | 3-5.5     | 2    | LS253                     | ND61         |
| D100/112    | 2.2-4             | 3-5.5     | 3    | LS255                     | NDI5         |
| D132        | 5.5-9             | 7.5-12.5  | 2    | LS300                     | ND16         |
| D132        | 5.5-9             | 7.5-12.5  | 3    | LS302                     | ND17         |
| D160        | 11-15             | 15-20     | 2    | LS350                     | ND43A        |
| D160        | 11-15             | 15-20     | 3    | LS352                     | ND43C        |
| D180        | 18.5-22           | 25-30     | 2    | LS350                     | ND44A        |
| D180        | 18.5-22           | 25-30     | 3    | LS352                     | ND44C        |
| D200        | 30                | 40        | 3    | LSE401                    | ND40         |
| D200        | 30                | 40        | 3.5  | SE405                     | ND41         |
| D225        | 37-45             | 50-60     | 3    | LS456                     | ND32         |
| D225        | 37-45             | 50-60     | 3.5  | LS451                     | ND30         |

OMT GROUP

# Hydraulic Tube Fittings



# Hydraulic Tube Fittings

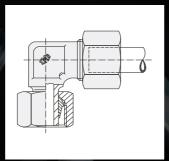
Gates is a leading manufacturer of application-specific fluid power and power transmission solutions.

All of their hydraulic products are specifically designed, tested and validated together to produce pre-tested and validated combinations that perform beyond any international standard.

At Pearson, we hold a vast stock of all different fittings including male stud coupling, straight connectors, swivel elbows, bulkheads and much more.

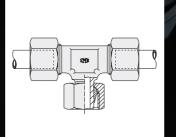
### **VB ADJUSTABLE ELBOW**





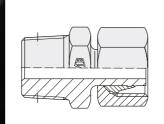
# **VC ADJUSTABLE BRANCH TEE**





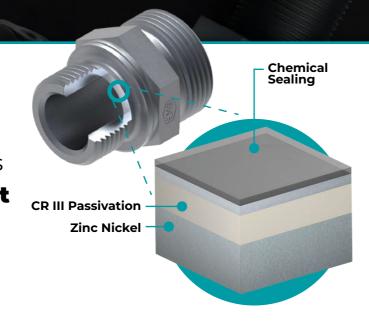
# **VA STUD STANDPIPE FITTING BSP**







Gates hydraulic fittings are recognised to **meet over 20** international standards and quality certifications



# Danfoss Partner Solutions



We are proud to be a Danfoss Premier Partner, traditionally working with the mobile hydraulic industry.



# **Adding Value To Our Expertise**

As a trusted partner, we aim to add value by providing exceptional technical support and offering quality products from the entire Danfoss range. Our expertise and close relationship with Danfoss allows us to transform mobile and industrial machinery markets, helping customers source the right product at the right time.

Danfoss is renowned for its uncompromising focus on quality, reliability and safety. Known for its strong heritage, Danfoss products are engineered with high attention to detail and meeting the standards of each industry. As a result, Pearson Hydraulics is well-positioned to deliver these hydraulic products to our clients, ensuring peak performance in all their applications and projects.



# What Pearson Hydraulics can offer

As a premier partner, Pearson Hydraulics provide a wide range of services and support to help get the most our of your Danfoss products:

# **Industry Training Days:**

We offer training days to educate and upskill your team on the latest technologies and best practises in hydraulic equipment and Danfoss products.

### **Build Centres:**

Our build centres are equipped to assemble and configure be spoke hydraulic systems tailored to your needs.

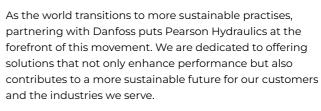
# Fully Stocked Spares:

We maintain a full inventory of Danfoss spare parts, ensuring availability for quick replacements.



# A Focus On Sustainability

With a core focus on creating a responsible supply chain, Danfoss heavily rely on their commitment to sustainability.









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**INTERTRACO HOSES** 



# **Tintertraco**

# **HOSE & FITTINGS**

Our hose and fittings products are sourced from our European partner Intertraco. Sizes of fittings include 1/8" to 4" BSP, Metric, JIC, SAE, ORFS, NPT, JIS, SAE flanges, staplelocks and a range of customer specials for automotive and mining.

Available in one and two piece to suit textile, wire braid and spiral interlock.





# Our hose portfolio includes...

ISN, 2SN, ISC, 25C, 4SP, 45H, R4, R5, R6, R7, R8, R12, R13, R14, R15, R16, R17.



Waterblast and Jetwash hose is available in sizes from 1/4" to 1/2".

All hose assemblies that we produce are fully validated and we are proud to be an approved hose assembly manufacturer by the BFPA.

# **Powerwash Hose**





# **Waterblast Hose**



# **Other Hose**



# Flexit 1T

Sintertraco Flexit T7

Sintertraco Flexit

Sintertraco Flexit Aintertraco Flexit 1T



HOSES

INTERTRACO

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The cutting-edge Technical Training Centre (TTC), located within the premises of the National Distribution Centre in Lincoln.

Introduced in April 2024, R&G Fluid Power Group and Pearson Hydraulics worked together to create a new cutting-edge Technical Training Centre, located within the premises of the R&G National Distribution Centre in Lincoln.

The TTC features a spacious conference room for collaborative learning and a fully equipped training centre, tailored to meet the evolving demands of the industry.









# **Courses Available**

A key highlight about the TTC is its dual focus on both hydraulic and pneumatic courses that are available, offering a range of industry topics and allowing participants the chance to delve into the world of fluid power systems. All whilst honing the essential skills and techniques under the expert guidance of industry professionals.

- Hose Assembly Technology
- Level 1 and Level 2 Hydraulics (Vocational / Competence Certification)
- Accumulator Nitrogen Charge and Discharged Procedures
- Proportional Control
- Setting Up Pressure Compensated and Load Sense Pumps
- Contamination Control
- Inverter Drives combined with Hydraulics

# **Approved by The British Fluid Power Association (BFPA)**

Backed by the formidable partnership with the British Fluid Power Association (BFPA), this state-of-the-art training centre was developed to become a statement in hydraulic and pneumatic training. With the backing of the BFPA, a leading expert in fluid power technology, the TTC is set to introduce everyday standards in technical training.







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www.pearson-hyds.co.uk

TECHNICAL TRAINING

CENTRE



### **Lincoln Branch - Head Office**

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- sales@pearson-hyds.co.uk

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- **U** 01476 593 569
- grsales@pearson-hyds.co.uk

### **Norwich Branch**

Unit 6-8 Airport Industrial Estate Norwich NR6 6HG

- **0**1603 424 880
- ☑ nrsales@pearson-hyds.co.uk

### **Gateshead Branch**

366 Dukesway Team Valley Trading Estate Gateshead NEII OPZ

- 0191 482 2511
- ghsales@pearson-hyds.co.uk

### **24 Hour Site Service**

- Lincoln: 07808 777 147
- Gateshead: 0191 482 2511

### **Hydraulic Management Services**

kevinm@pearson-hyds.co.uk







Lincoln -

Grantham -

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