

HYDRAULIC
PUMPS, MOTORS
& FILTERS



Our passion for high performance in hydraulic drives us.

Constant evolution and a passion for hydraulics; this has been Casappa's strategy, a privately owned company that has been working for more than sixty years in the field of fluid power transmission.

We design and build the main components for the hydraulic system.

We listen to and work with our customers, from developing a new idea to after-sales service, anywhere around the globe.

As a tight-knit group of highly motivated and professionally qualified people, we are always ready to meet new challenges head on.

Thanks to the use of the most modern design engineering, simulation and lab testing technologies, we are always flexible and ready to quickly modify our offer to meet market demands.

We are convinced that integrating electronics with hydraulics is instrumental to improve hydraulic control circuit performance. For this reason we continuously invest in research & development, increasing the number of electronic control and regulation parts in our system.

Quality is our total commitment: that's why all of our products are thoroughly tested with constant monitoring including data analysis and traceability. Further, specific tests are performed on machines in the field to verify their effectiveness in their actual environment.

Casappa is worldwide recognized as a highly specialised manufacturer of hydraulic components.

We offer:

Fixed and variable displacement hydraulic pumps and motors

Hydraulic valves to control pressure and flow rate

Hydraulic filters



Some of the major companies that rely on our specialised expertise and choose us as an important supplier of hydraulic components for a wide range of applications include:

| | | | | | |
|-----------------------------|-----------------|---------------|---------------|---------|--------------|
| AGCO | CATERPILLAR | HUNAN SUNWARD | KOMATSU | SANDVIK | VOLVO CE |
| AMMAN APOLLO | CHENGGONG | HUSQVARNA | LEEBOY | SANY | XCMG |
| ARGO TRACTORS | CNH | HYUNDAI | LINDE | SCANIA | YANMAR |
| ASTRA Veicoli Industriali | DAIMLER | HYVA GROUP | MANITOU GROUP | SOOSAN | ZAPAGROMASCH |
| ATLAS COPCO | DOOSAN | JCB | MANITOWOC | STILL | ZOOMLION |
| BAI-Brescia Antincendi Int. | FARID | JLG | MAZ | TEREX | |
| BOBCAT | FOTON LOVOL | JOHN DEERE | MERLO | TEXTRON | |
| BROKK | GUIMA PALFINGER | JUNGHEINRICH | MC HALE | TORO | |

Product range

Aluminium body gear pumps and motors

Cast iron body gear pumps and motors

Aluminium body gear flow dividers

Cast iron body gear flow dividers

Fixed displacement axial piston pumps and motors

Variable displacement axial piston pumps

Hand pumps



A complete range of high quality pumps and motors, the end result of listening carefully to what customers need and of working closely with suppliers.

Headquarters:
CASAPPA S.p.A.
Via Balestrieri, 1
43044 Lemignano Di Collecchio
Parma (Italy)
Tel. (+39) 0521 30 41 11
Fax (+39) 0521 80 46 00
IP Videoconferencing
E-mail: info@casappa.com
www.casappa.com



Casappa offers nothing but the best value to its customers thanks to the skills and expertise of its workforce, investments in research and new technologies, cooperation with leading universities and electronics-hydraulics integration.

Casappa offers a wide choice of gear or piston pumps and motors for open-circuit applications. Many functions, such as valves and controls, are built directly into the products to optimise system space and costs.



POLARIS series

Gear pumps and motors built in three pieces with an extruded body in high resistance aluminium alloy. The wide choice of shafts, flanges and ports, in compliance with all international standards (SAE, DIN and EUROPEAN) allow for their use in an infinite variety of applications.

Displacements from 1,07 cm³/rev ▪ 0.07 in³/rev to 91,10 cm³/rev ▪ 5.56 in³/rev available in groups 10, 20 and 30.

Max. peak pressure up to 300 bar ▪ 4350 psi.

Max. speed up to 4000 min⁻¹.



Features

- High efficiencies
- Integrated outboard bearings for heavy duty applications
- Multiple units available in standard version, common inlet and separated stages
- Electro-hydraulic fan drive system
- Custom design

Optional built-in valves

- Anticavitation valves
- Maximum pressure relief valves
- Priority valves
- Load-Sensing priority valves
- By-pass electric valves
- Proportional relief valves
- Reverse valves

Main characteristics

| | Displacement | Max. continuous pressure | Max. speed |
|--------------------|---|--------------------------|-------------------|
| POLARIS 10 | cm ³ /rev ▪ in ³ /rev | bar ▪ psi | min ⁻¹ |
| PL. 10•1 | 1,07 ▪ 0.07 | 260 ▪ 3750 | 4000 |
| PL. 10•1,5 | 1,60 ▪ 0.10 | 260 ▪ 3750 | 4000 |
| PL. 10•2 | 2,13 ▪ 0.13 | 260 ▪ 3750 | 4000 |
| PL. 10•2,5 | 2,67 ▪ 0.16 | 260 ▪ 3750 | 4000 |
| PL. 10•3,15 | 3,34 ▪ 0.20 | 260 ▪ 3750 | 4000 |
| PL. 10•4 | 4,27 ▪ 0.26 | 250 ▪ 3600 | 4000 |
| PL. 10•5 | 5,34 ▪ 0.33 | 250 ▪ 3600 | 4000 |
| PL. 10•5,8 | 6,20 ▪ 0.38 | 230 ▪ 3350 | 3500 |
| PL. 10•6,3 | 6,67 ▪ 0.41 | 230 ▪ 3350 | 3500 |
| PL. 10•8 | 8,51 ▪ 0.52 | 180 ▪ 2600 | 3500 |
| PL. 10•10 | 10,67 ▪ 0.65 | 140 ▪ 2050 | 3500 |
| POLARIS 20 | cm ³ /rev ▪ in ³ /rev | bar ▪ psi | min ⁻¹ |
| PL. 20•4 | 4,95 ▪ 0.30 | 250 ▪ 3600 | 4000 |
| PL. 20•6,3 | 6,61 ▪ 0.40 | 250 ▪ 3600 | 4000 |
| PL. 20•7,2 | 7,29 ▪ 0.44 | 250 ▪ 3600 | 4000 |
| PL. 20•8 | 8,26 ▪ 0.50 | 250 ▪ 3600 | 3500 |
| PL. 20•9 | 9,17 ▪ 0.56 | 250 ▪ 3600 | 3500 |
| PL. 20•10,5 | 10,90 ▪ 0.66 | 250 ▪ 3600 | 3500 |
| PL. 20•11,2 | 11,23 ▪ 0.69 | 250 ▪ 3600 | 3500 |
| PL. 20•14 | 14,53 ▪ 0.89 | 250 ▪ 3600 | 3500 |
| PL. 20•16 | 16,85 ▪ 1.03 | 250 ▪ 3600 | 3000 |
| PL. 20•19 | 19,09 ▪ 1.16 | 200 ▪ 2900 | 3000 |
| PL. 20•20 | 21,14 ▪ 1.29 | 200 ▪ 2900 | 3000 |
| PL. 20•24,5 | 24,84 ▪ 1.52 | 170 ▪ 2450 | 2500 |
| PL. 20•25 | 26,42 ▪ 1.61 | 170 ▪ 2450 | 2500 |
| PL. 20•27,8 | 28,21 ▪ 1.72 | 130 ▪ 1900 | 2000 |
| PL. 20•31,5 | 33,03 ▪ 2.01 | 130 ▪ 1900 | 2000 |
| POLARIS 30 | cm ³ /rev ▪ in ³ /rev | bar ▪ psi | min ⁻¹ |
| PL. 30•22 | 21,99 ▪ 1.34 | 250 ▪ 3600 | 3000 |
| PL. 30•27 | 26,70 ▪ 1.63 | 250 ▪ 3600 | 3000 |
| PL. 30•34 | 34,55 ▪ 2.11 | 240 ▪ 3500 | 3000 |
| PL. 30•38 | 39,27 ▪ 2.40 | 240 ▪ 3500 | 3000 |
| PL. 30•43 | 43,98 ▪ 2.68 | 230 ▪ 3350 | 3000 |
| PL. 30•51 | 51,83 ▪ 3.16 | 210 ▪ 3050 | 2500 |
| PL. 30•61 | 61,26 ▪ 3.74 | 190 ▪ 2750 | 2500 |
| PL. 30•73 | 73,82 ▪ 4.50 | 170 ▪ 2450 | 2500 |
| PL. 30•82 | 81,68 ▪ 4.98 | 160 ▪ 2300 | 2200 |
| PL. 30•90 | 91,10 ▪ 5.56 | 150 ▪ 2200 | 2200 |

NOTES

PL. : PLP = pump / PLM = motor

Aluminium body gear pumps

WHISPER series: low noise emission - reduced pulsations by 75%

Gear pumps built in three pieces with an extruded body in high resistance aluminium alloy. WHISPER is a new and original technology protected by international patents and applied to a family of external gear pumps that feature low noise emissions. The wide choice of shafts, flanges and ports, in compliance with all international standards (SAE, DIN and EUROPEAN) allow for their use in an infinite variety of applications.

Displacements from 1,12 cm³/rev ▪ 0.07 in³/rev to 96,85 cm³/rev ▪ 5.91 in³/rev available in groups 10, 20 and 30.

Max. peak pressure up to 300 bar ▪ 4350 psi.

Max. speed up to 4000 min⁻¹.



Features

- ✦ High efficiencies
- ✦ Low noise emission
- ✦ Integrated outboard bearings for heavy duty applications
- ✦ Multiple units
- ✦ Custom design

Optional built-in valves

- ✦ Anticavitation valves
- ✦ Maximum pressure relief valves
- ✦ Priority valves
- ✦ Load-Sensing priority valves
- ✦ By-pass electric valves

Main characteristics

| | Displacement | | Max. continuous pressure | Max. speed |
|--------------------|----------------------|----------------------|--------------------------|-------------------|
| | cm ³ /rev | in ³ /rev | | |
| WHISPER 10 | cm ³ /rev | in ³ /rev | bar ▪ psi | min ⁻¹ |
| WSP 10•1 | 1,12 | 0.07 | 260 ▪ 3750 | 4000 |
| WSP 10•1,5 | 1,68 | 0.10 | 260 ▪ 3750 | 4000 |
| WSP 10•2 | 2,24 | 0.14 | 260 ▪ 3750 | 4000 |
| WSP 10•2,5 | 2,80 | 0.17 | 260 ▪ 3750 | 4000 |
| WSP 10•3,15 | 3,48 | 0.21 | 260 ▪ 3750 | 4000 |
| WSP 10•4 | 4,45 | 0.27 | 250 ▪ 3600 | 4000 |
| WSP 10•5 | 5,60 | 0.34 | 250 ▪ 3600 | 4000 |
| WSP 10•5,8 | 6,51 | 0.40 | 230 ▪ 3350 | 3500 |
| WSP 10•6,3 | 7,00 | 0.43 | 230 ▪ 3350 | 3500 |
| WSP 10•8 | 8,92 | 0.54 | 180 ▪ 2600 | 3500 |
| WSP 10•10 | 11,20 | 0.68 | 140 ▪ 2050 | 3500 |
| WHISPER 20 | cm ³ /rev | in ³ /rev | bar ▪ psi | min ⁻¹ |
| WSP 20•4 | 5,25 | 0.32 | 250 ▪ 3600 | 4000 |
| WSP 20•6,3 | 7,00 | 0.43 | 250 ▪ 3600 | 4000 |
| WSP 20•7,2 | 7,72 | 0.47 | 250 ▪ 3600 | 4000 |
| WSP 20•8 | 8,74 | 0.53 | 250 ▪ 3600 | 3500 |
| WSP 20•9 | 9,65 | 0.59 | 250 ▪ 3600 | 3500 |
| WSP 20•10,5 | 11,54 | 0.70 | 250 ▪ 3600 | 3500 |
| WSP 20•11,2 | 11,89 | 0.73 | 250 ▪ 3600 | 3500 |
| WSP 20•14 | 15,39 | 0.94 | 250 ▪ 3600 | 3500 |
| WSP 20•16 | 17,84 | 1.09 | 250 ▪ 3600 | 3000 |
| WSP 20•19 | 20,22 | 1.23 | 200 ▪ 2900 | 3000 |
| WSP 20•20 | 22,38 | 1.37 | 200 ▪ 2900 | 3000 |
| WSP 20•24,5 | 26,30 | 1.60 | 170 ▪ 2450 | 2500 |
| WSP 20•25 | 27,98 | 1.71 | 170 ▪ 2450 | 2500 |
| WSP 20•27,8 | 29,87 | 1.82 | 130 ▪ 1900 | 2000 |
| WSP 20•31,5 | 34,98 | 2.13 | 130 ▪ 1900 | 2000 |
| WHISPER 30 | cm ³ /rev | in ³ /rev | bar ▪ psi | min ⁻¹ |
| WSP 30•22 | 23,38 | 1.43 | 250 ▪ 3600 | 3000 |
| WSP 30•27 | 28,39 | 1.73 | 250 ▪ 3600 | 3000 |
| WSP 30•34 | 36,74 | 2.24 | 240 ▪ 3500 | 3000 |
| WSP 30•38 | 41,75 | 2.55 | 240 ▪ 3500 | 3000 |
| WSP 30•43 | 46,76 | 2.85 | 230 ▪ 3350 | 3000 |
| WSP 30•51 | 55,10 | 3.36 | 210 ▪ 3050 | 2500 |
| WSP 30•61 | 65,12 | 3.97 | 190 ▪ 2750 | 2500 |
| WSP 30•73 | 78,48 | 4.79 | 170 ▪ 2450 | 2500 |
| WSP 30•82 | 86,83 | 5.30 | 160 ▪ 2300 | 2200 |
| WSP 30•90 | 96,85 | 5.91 | 150 ▪ 2200 | 2200 |

POLARIS “PH” series

Gear pumps and motors built in three pieces with cast iron body. The new gear pumps and motors “PH” series is an evolution of the “POLARIS” series. “POLARIS PH” has a new body made of cast iron to have higher operating parameters and keep the full POLARIS versatility regarding shafts, flanges, ports and built-in valves.

This project is targeted for forklifts, skid steer loaders and all those applications where traditional aluminum pumps are being pushed close to their limits. The possibility to mate the body with the cast iron covers further reduces noise levels, in addition to increasing strength.

Displacements from 8,26 cm³/rev ▪ 0.50 in³/rev to 33,03 cm³/rev ▪ 2.01 in³/rev.

Max. peak pressure up to 300 bar ▪ 4350 psi.

Max. speed up to 3500 min⁻¹.



Main characteristics

| | Displacement | | Max. continuous pressure | | Max. speed min ⁻¹ |
|----------------------|----------------------|----------------------|--------------------------|------|---------------------------------|
| | cm ³ /rev | in ³ /rev | bar | psi | |
| POLARIS PH 20 | | | | | |
| PH. 20•8 | 8,26 | 0.50 | 250 | 3600 | 3500 |
| PH. 20•10,5 | 10,9 | 0.66 | 250 | 3600 | 3500 |
| PH. 20•11,2 | 11,23 | 0.68 | 250 | 3600 | 3500 |
| PH. 20•14 | 14,53 | 0.88 | 250 | 3600 | 3500 |
| PH. 20•16 | 16,85 | 1.02 | 250 | 3600 | 3500 |
| PH. 20•18 | 18,29 | 1.11 | 250 | 3600 | 3500 |
| PH. 20•19 | 19,09 | 1.16 | 250 | 3600 | 3500 |
| PH. 20•20 | 21,14 | 1.29 | 250 | 3600 | 3500 |
| PH. 20•23 | 23,32 | 1.42 | 250 | 3600 | 3000 |
| PH. 20•24,5 | 24,84 | 1.52 | 230 | 3350 | 3000 |
| PH. 20•25 | 26,42 | 1.61 | 230 | 3350 | 3000 |
| PH. 20•27,8 | 28,21 | 1.72 | 200 | 2900 | 2500 |
| PH. 20•31,5 | 33,03 | 2.01 | 200 | 2900 | 2500 |

NOTES

PH. : PHP = pump / PHM = motor

Features

- ✦ High working pressure also for high displacements
- ✦ Long service life
- ✦ Low noise level
- ✦ High volumetric efficiency also at high temperature
- ✦ Inlet & Outlet optimization – High speed
- ✦ Combination in multiple pumps
- ✦ Built-in Valves simplify circuit design

Optional built-in valves

- ✦ Anticavitation valves
- ✦ Maximum pressure relief valves
- ✦ Priority valves
- ✦ Load-Sensing priority valves
- ✦ By-pass electric valves
- ✦ Proportional relief valves
- ✦ Reverse valves

KAPPA series

Gear pumps and motors made of cast iron in two pieces. KAPPA is available with mounting flanges and side or rear ports according to SAE and European standard. The rigidity of assembly ensure reliability and high volumetric efficiency also at high operating pressures.

Displacements from 4,95 cm³/rev ▪ 0.30 in³/rev to 73,82 cm³/rev ▪ 4.50 in³/rev available in groups 20 and 30.

Max. peak pressure up to 330 bar ▪ 4800 psi.

Max. speed up to 4000 min⁻¹.



Main characteristics

| | Displacement | | Max. continuous pressure | | Max. speed min ⁻¹ |
|-------------------|----------------------|----------------------|--------------------------|------|---------------------------------|
| | cm ³ /rev | in ³ /rev | bar | psi | |
| KAPPA 20 | cm ³ /rev | in ³ /rev | bar | psi | min ⁻¹ |
| K. 20•4 | 4,95 | 0.30 | 285 | 4150 | 4000 |
| K. 20•6,3 | 6,61 | 0.40 | 285 | 4150 | 4000 |
| K. 20•8 | 8,26 | 0.50 | 285 | 4150 | 3500 |
| K. 20•11,2 | 11,23 | 0.69 | 275 | 4000 | 3500 |
| K. 20•14 | 14,53 | 0.89 | 265 | 3850 | 3500 |
| K. 20•16 | 16,85 | 1.03 | 260 | 3750 | 3000 |
| K. 20•20 | 21,14 | 1.29 | 210 | 3050 | 3000 |
| K. 20•25 | 26,42 | 1.61 | 180 | 2600 | 2500 |
| K. 20•31,5 | 33,03 | 2.01 | 140 | 2050 | 2500 |
| KAPPA 30 | cm ³ /rev | in ³ /rev | bar | psi | min ⁻¹ |
| K. 30•27 | 26,70 | 1.63 | 280 | 4050 | 3000 |
| K. 30•34 | 34,56 | 2.11 | 260 | 3750 | 3000 |
| K. 30•38 | 39,27 | 2.40 | 260 | 3750 | 3000 |
| K. 30•43 | 43,98 | 2.68 | 250 | 3600 | 3000 |
| K. 30•51 | 51,83 | 3.16 | 230 | 3350 | 2500 |
| K. 30•56 | 56,54 | 3.45 | 215 | 3100 | 2500 |
| K. 30•61 | 61,26 | 3.74 | 200 | 2900 | 2500 |
| K. 30•73 | 73,82 | 4.50 | 180 | 2600 | 2500 |

Features

- ◆ High operating pressures
- ◆ High efficiency at high temperature
- ◆ Low noise emission

Optional built-in valves

- ◆ Priority valves
- ◆ Load-Sensing priority valves

NOTES

K. : KP = pump / KM = motor

KAPPA COMPACT series

Gear pumps and motors made of cast iron in two pieces. A rigid and compact structure that makes it possible to incorporate a number of functions in a limited space. The reduced dimensions as well as a large variety of drive shafts, mounting flanges and ports ensure great flexibility in the "Compact" line.

Wide range of displacements: from 19,00 cm³/rev ▪ 1.16 in³/rev to 150,79 cm³/rev ▪ 9.20 in³/rev available in groups 25, 30, 35 and 40.

Max. peak pressure up to 325 bar ▪ 4700 psi.

Max. speed up to 3500 min⁻¹.



Features

- ✦ High operating pressures
- ✦ Low noise emission
- ✦ Exceptional working life expectancy
- ✦ Solid and compact design
- ✦ Custom design

Optional built-in valves

- ✦ Antishock and anticavitation valves
- ✦ Priority valves
- ✦ Load-Sensing priority valves
- ✦ By-pass electric valves

Main characteristics

| | Displacement | Max. continuous pressure | Max. speed |
|-------------------------|---|--------------------------|-------------------|
| KAPPA compact 25 | cm ³ /rev ▪ in ³ /rev | bar ▪ psi | min ⁻¹ |
| K. 25•19 | 19,00 ▪ 1.16 | 280 ▪ 4050 | 3500 |
| K. 25•21 | 21,07 ▪ 1.29 | 280 ▪ 4050 | 3500 |
| K. 25•23 | 23,06 ▪ 1.41 | 280 ▪ 4050 | 3500 |
| K. 25•25 | 25,04 ▪ 1.53 | 280 ▪ 4050 | 3500 |
| K. 25•27 | 27,03 ▪ 1.65 | 280 ▪ 4050 | 3500 |
| K. 25•31 | 31,09 ▪ 1.90 | 275 ▪ 4000 | 3000 |
| K. 25•34 | 34,03 ▪ 2.08 | 275 ▪ 4000 | 3000 |
| K. 25•38 | 38,00 ▪ 2.32 | 230 ▪ 3350 | 3000 |
| K. 25•43 | 43,01 ▪ 2.62 | 210 ▪ 3050 | 3000 |
| KAPPA compact 30 | cm ³ /rev ▪ in ³ /rev | bar ▪ psi | min ⁻¹ |
| K. 30•22 | 21,99 ▪ 1.34 | 280 ▪ 4050 | 3000 |
| K. 30•27 | 26,70 ▪ 1.63 | 280 ▪ 4050 | 3000 |
| K. 30•31 | 30,63 ▪ 1.87 | 260 ▪ 3750 | 3000 |
| K. 30•34 | 34,56 ▪ 2.11 | 260 ▪ 3750 | 3000 |
| K. 30•38 | 39,27 ▪ 2.40 | 260 ▪ 3750 | 3000 |
| K. 30•41 | 41,62 ▪ 2.54 | 250 ▪ 3600 | 3000 |
| K. 30•43 | 43,98 ▪ 2.68 | 250 ▪ 3600 | 3000 |
| K. 30•46 | 46,34 ▪ 2.83 | 250 ▪ 3600 | 3000 |
| K. 30•51 | 51,83 ▪ 3.16 | 230 ▪ 3350 | 2500 |
| K. 30•56 | 56,54 ▪ 3.45 | 215 ▪ 3100 | 2500 |
| K. 30•61 | 61,26 ▪ 3.74 | 200 ▪ 2900 | 2500 |
| K. 30•73 | 73,82 ▪ 4.50 | 180 ▪ 2600 | 2500 |
| KAPPA compact 35 | cm ³ /rev ▪ in ³ /rev | bar ▪ psi | min ⁻¹ |
| KP 35•63 | 63,88 ▪ 3.90 | 260 ▪ 3750 | 3000 |
| KP 35•71 | 72,40 ▪ 4.42 | 260 ▪ 3750 | 3000 |
| KP 35•80 | 80,91 ▪ 4.94 | 260 ▪ 3750 | 3000 |
| KP 35•90 | 91,56 ▪ 5.59 | 245 ▪ 3550 | 2500 |
| KP 35•100 | 100,08 ▪ 6.10 | 230 ▪ 3350 | 2500 |
| KAPPA compact 40 | cm ³ /rev ▪ in ³ /rev | bar ▪ psi | min ⁻¹ |
| K. 40•63 | 61,43 ▪ 3.75 | 300 ▪ 4350 | 2800 |
| K. 40•73 | 72,60 ▪ 4.43 | 300 ▪ 4350 | 2800 |
| K. 40•87 | 86,56 ▪ 5.28 | 280 ▪ 4050 | 2800 |
| K. 40•109 | 108,90 ▪ 6.64 | 250 ▪ 3600 | 2800 |
| K. 40•121 | 121,80 ▪ 7.43 | 230 ▪ 3350 | 2500 |
| K. 40•133 | 134,03 ▪ 8.18 | 220 ▪ 3200 | 2500 |
| K. 40•151 | 150,79 ▪ 9.20 | 200 ▪ 2900 | 2500 |

NOTES

K. : KP = pump / KM = motor

Cast iron body gear pumps

FORMULA and FORMULA SFP series

Gear pumps made of cast iron in two pieces, ideal for truck application.

Displacements from 8,26 cm³/rev ▪ 0.50 in³/rev to 150,79 cm³/rev ▪ 9.20 in³/rev available in groups 20, 30, 35 and 40.

Max. peak pressure up to 325 bar ▪ 4700 psi.

Max. speed up to 3000 min⁻¹.



Features

- ◆ High performance also at very low speed
- ◆ Different ports position availability
- ◆ Low noise emission
- ◆ Shaft seal system no leakage guarantee
- ◆ Modular design
- ◆ Direct mounting on the PTOs

Main characteristics

| | Displacement | Max. continuous pressure | Max. speed |
|-----------------------|---|--------------------------|-------------------|
| | cm ³ /rev ▪ in ³ /rev | bar ▪ psi | min ⁻¹ |
| FORMULA 20 | cm ³ /rev ▪ in ³ /rev | bar ▪ psi | min ⁻¹ |
| FP 20•8 | 8,26 ▪ 0.50 | 280 ▪ 4050 | 2000 |
| FP 20•11,2 | 11,23 ▪ 0.69 | 280 ▪ 4050 | 2000 |
| FP 20•16 | 16,85 ▪ 1.03 | 280 ▪ 4050 | 2000 |
| FP 20•20 | 21,14 ▪ 1.29 | 260 ▪ 3750 | 2000 |
| FP 20•25 | 26,42 ▪ 1.61 | 220 ▪ 3200 | 2000 |
| FP 20•31,5 | 33,03 ▪ 2.01 | 190 ▪ 2750 | 1800 |
| FP 20•36 | 35,94 ▪ 2.19 | 170 ▪ 2450 | 1800 |
| FP 20•40 | 39,64 ▪ 2.42 | 160 ▪ 2300 | 1800 |
| FORMULA 30 | cm ³ /rev ▪ in ³ /rev | bar ▪ psi | min ⁻¹ |
| FP 30•17 | 17,28 ▪ 1.05 | 290 ▪ 4200 | 3000 |
| FP 30•27 | 26,70 ▪ 1.63 | 290 ▪ 4200 | 3000 |
| FP 30•34 | 34,56 ▪ 2.11 | 280 ▪ 4050 | 2800 |
| FP 30•38 | 39,27 ▪ 2.40 | 280 ▪ 4050 | 2800 |
| FP 30•43 | 43,98 ▪ 2.68 | 270 ▪ 3900 | 2500 |
| FP 30•51 | 51,83 ▪ 3.16 | 240 ▪ 3500 | 2500 |
| FP 30•61 | 61,26 ▪ 3.74 | 220 ▪ 3200 | 2000 |
| FP 30•73 | 73,82 ▪ 4.50 | 200 ▪ 2900 | 1800 |
| FP 30•82 | 81,68 ▪ 4.98 | 190 ▪ 2750 | 1800 |
| FP 30•100 | 100,52 ▪ 6.16 | 180 ▪ 2600 | 1800 |
| FP 30•125 | 125,66 ▪ 7.67 | 160 ▪ 2300 | 1800 |
| FORMULA 40 | cm ³ /rev ▪ in ³ /rev | bar ▪ psi | min ⁻¹ |
| FP 40•63 | 61,43 ▪ 3.75 | 290 ▪ 4200 | 2700 |
| FP 40•73 | 72,60 ▪ 4.43 | 280 ▪ 4050 | 2700 |
| FP 40•87 | 86,56 ▪ 5.28 | 260 ▪ 3750 | 2700 |
| FP 40•109 | 108,90 ▪ 6.64 | 240 ▪ 3500 | 2700 |
| FP 40•133 | 134,03 ▪ 8.18 | 220 ▪ 3200 | 2500 |
| FP 40•151 | 150,79 ▪ 9.20 | 180 ▪ 2600 | 2500 |
| FORMULA SFP 30 | cm ³ /rev ▪ in ³ /rev | bar ▪ psi | min ⁻¹ |
| SFP 30•34 | 35,43 ▪ 2.16 | 280 ▪ 4050 | 2800 |
| SFP 30•43 | 45,09 ▪ 2.75 | 270 ▪ 3900 | 2500 |
| SFP 30•51 | 53,14 ▪ 3.24 | 250 ▪ 3600 | 2500 |
| SFP 30•61 | 62,80 ▪ 3.83 | 230 ▪ 3350 | 2500 |
| SFP 30•73 | 75,68 ▪ 4.62 | 205 ▪ 2950 | 2250 |
| SFP 30•82 | 83,74 ▪ 5.11 | 195 ▪ 2800 | 2250 |
| FORMULA SFP 35 | cm ³ /rev ▪ in ³ /rev | bar ▪ psi | min ⁻¹ |
| SFP 35•90 | 95,99 ▪ 5.86 | 230 ▪ 3350 | 2250 |
| SFP 35•100 | 104,92 ▪ 6.40 | 220 ▪ 3200 | 2250 |
| SFP 35•112 | 118,31 ▪ 7.22 | 205 ▪ 2950 | 2250 |

MAGNUM series

Gear pumps and motors made of cast iron in three pieces. An extremely versatile and reliable design, also in the most extreme operating conditions.

Displacements from 17,28 cm³/rev ▪ 1.05 in³/rev to 125,63 cm³/rev ▪ 7.66 in³/rev available in groups 30 and 35.

Max. peak pressure up to 320 bar ▪ 4650 psi.

Max. speed up to 3000 min⁻¹.



Features

- ◆ Wide range of drive shafts and flanges in SAE version
- ◆ More choices of port locations
- ◆ Integrated outboard bearings for heavy duty applications
- ◆ Multiple units available in standard version, common inlet and separated stages
- ◆ Exceptional working life expectancy

Main characteristics

| | Displacement | | Max. continuous pressure | | Max. speed min ⁻¹ |
|-------------------|----------------------|----------------------|--------------------------|--------|---------------------------------|
| | cm ³ /rev | in ³ /rev | bar | psi | |
| MAGNUM 30 | | | | | |
| HD. 30•17 | 17,28 | ▪ 1.05 | 280 | ▪ 4050 | 3000 |
| HD. 30•22 | 21,99 | ▪ 1.34 | 280 | ▪ 4050 | 3000 |
| HD. 30•24 | 24,03 | ▪ 1.47 | 280 | ▪ 4050 | 3000 |
| HD. 30•27 | 26,70 | ▪ 1.63 | 280 | ▪ 4050 | 3000 |
| HD. 30•34 | 34,56 | ▪ 2.11 | 270 | ▪ 3900 | 3000 |
| HD. 30•38 | 39,27 | ▪ 2.40 | 270 | ▪ 3900 | 3000 |
| HD. 30•43 | 43,98 | ▪ 2.68 | 260 | ▪ 3750 | 3000 |
| HD. 30•51 | 51,83 | ▪ 3.16 | 230 | ▪ 3350 | 2500 |
| HD. 30•56 | 56,55 | ▪ 3.45 | 215 | ▪ 3100 | 2500 |
| HD. 30•61 | 61,26 | ▪ 3.74 | 200 | ▪ 2900 | 2000 |
| HD. 30•73 | 73,82 | ▪ 4.50 | 190 | ▪ 2750 | 1700 |
| HD. 30•82 | 81,68 | ▪ 4.98 | 170 | ▪ 2450 | 1500 |
| MAGNUM 35 | | | | | |
| HD. 35•40 | 40,46 | ▪ 2.47 | 270 | ▪ 3900 | 3000 |
| HD. 35•50 | 51,10 | ▪ 3.12 | 270 | ▪ 3900 | 3000 |
| HD. 35•63 | 63,88 | ▪ 3.90 | 270 | ▪ 3900 | 3000 |
| HD. 35•71 | 72,40 | ▪ 4.42 | 250 | ▪ 3600 | 3000 |
| HD. 35•80 | 80,91 | ▪ 4.94 | 250 | ▪ 3600 | 3000 |
| HD. 35•90 | 91,56 | ▪ 5.59 | 230 | ▪ 3350 | 2700 |
| HD. 35•100 | 100,08 | ▪ 6.10 | 210 | ▪ 3050 | 2700 |
| HD. 35•112 | 112,85 | ▪ 6.88 | 190 | ▪ 2750 | 2700 |
| HD. 35•125 | 125,63 | ▪ 7.66 | 170 | ▪ 2450 | 2500 |

NOTES

HD. : HDP = pump / HDM = motor

Aluminium body gear flow dividers

POLARIS series

Gear flow dividers made of high resistance aluminium alloy. These components can be used as flow equalizers, flow dividers and pressure intensifiers.

Displacements from 2,14 cm³/rev ▪ 0.13 in³/rev to 33,03 cm³/rev ▪ 2.01 in³/rev available in groups 10 and 20.

Max. peak pressure up to 280 bar ▪ 4050 psi.



Features

- ◆ Modular design
- ◆ Accurate division of flow
- ◆ Built-in relief valves
- ◆ Combinations between different groups

Main characteristics

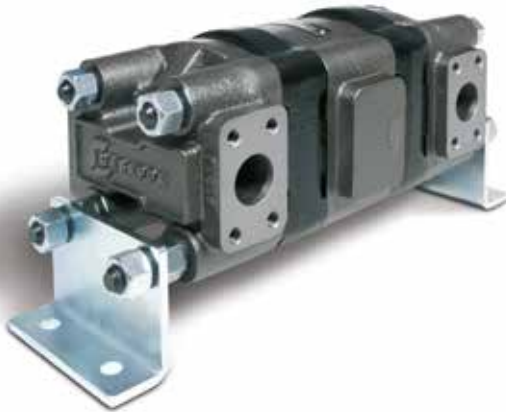
| | Displacement | Max. continuous outlet pressure | Max. speed |
|--------------------|---|---------------------------------|-------------------|
| POLARIS 10 | cm ³ /rev ▪ in ³ /rev | bar ▪ psi | min ⁻¹ |
| PLD 10•2 | 2,14 ▪ 0.13 | 250 ▪ 3600 | 4200 |
| PLD 10•3,15 | 3,34 ▪ 0.20 | 250 ▪ 3600 | 3990 |
| PLD 10•4 | 4,27 ▪ 0.26 | 250 ▪ 3600 | 3940 |
| PLD 10•5 | 5,34 ▪ 0.33 | 250 ▪ 3600 | 3680 |
| PLD 10•6,3 | 6,67 ▪ 0.41 | 250 ▪ 3600 | 3500 |
| POLARIS 20 | cm ³ /rev ▪ in ³ /rev | bar ▪ psi | min ⁻¹ |
| PLD 20•4 | 4,95 ▪ 0.30 | 250 ▪ 3600 | 4100 |
| PLD 20•6,3 | 6,61 ▪ 0.40 | 250 ▪ 3600 | 3970 |
| PLD 20•8 | 8,26 ▪ 0.50 | 250 ▪ 3600 | 3850 |
| PLD 20•11,2 | 11,23 ▪ 0.69 | 250 ▪ 3600 | 3660 |
| PLD 20•14 | 14,53 ▪ 0.89 | 250 ▪ 3600 | 3460 |
| PLD 20•16 | 16,85 ▪ 1.03 | 200 ▪ 2900 | 3335 |
| PLD 20•20 | 21,14 ▪ 1.29 | 200 ▪ 2900 | 3125 |
| PLD 20•25 | 26,42 ▪ 1.61 | 200 ▪ 2900 | 2900 |
| PLD 20•31,5 | 33,03 ▪ 2.01 | 200 ▪ 2900 | 2660 |

MAGNUM series

Gear flow dividers made of cast iron. These components can be used as flow equalizers, flow dividers and pressure intensifiers.

Displacements from 17,28 cm³/rev ▪ 1.05 in³/rev to 125,63 cm³/rev ▪ 7.66 in³/rev available in groups 30 and 35.

Max. peak pressure up to 320 bar ▪ 4650 psi.



Features

- ✦ Modular design
- ✦ Accurate division of flow
- ✦ High flow
- ✦ Combinations between different groups

Main characteristics

| | Displacement | Max. continuous outlet pressure | Max. speed |
|-------------------|---|---------------------------------|-------------------|
| MAGNUM 30 | cm ³ /rev ▪ in ³ /rev | bar ▪ psi | min ⁻¹ |
| HDD 30•17 | 17,28 ▪ 1.05 | 280 ▪ 4050 | 3000 |
| HDD 30•22 | 21,99 ▪ 1.34 | 280 ▪ 4050 | 3000 |
| HDD 30•27 | 26,70 ▪ 1.63 | 280 ▪ 4050 | 3000 |
| HDD 30•34 | 34,56 ▪ 2.11 | 270 ▪ 3900 | 3000 |
| HDD 30•43 | 43,98 ▪ 2.68 | 260 ▪ 3750 | 3000 |
| HDD 30•51 | 51,83 ▪ 3.16 | 230 ▪ 3350 | 2500 |
| HDD 30•61 | 61,26 ▪ 3.74 | 200 ▪ 2900 | 2000 |
| HDD 30•73 | 73,82 ▪ 4.50 | 190 ▪ 2750 | 1700 |
| HDD 30•82 | 81,68 ▪ 4.98 | 170 ▪ 2450 | 1500 |
| MAGNUM 35 | cm ³ /rev ▪ in ³ /rev | bar ▪ psi | min ⁻¹ |
| HDD 35•50 | 51,10 ▪ 3.12 | 270 ▪ 3900 | 3000 |
| HDD 35•63 | 63,88 ▪ 3.90 | 270 ▪ 3900 | 3000 |
| HDD 35•71 | 72,40 ▪ 4.42 | 250 ▪ 3600 | 3000 |
| HDD 35•80 | 80,91 ▪ 4.94 | 250 ▪ 3600 | 3000 |
| HDD 35•90 | 91,56 ▪ 5.59 | 230 ▪ 3350 | 2700 |
| HDD 35•100 | 100,08 ▪ 6.10 | 210 ▪ 3050 | 2700 |
| HDD 35•112 | 112,85 ▪ 6.88 | 190 ▪ 2750 | 2700 |
| HDD 35•125 | 125,63 ▪ 7.66 | 170 ▪ 2450 | 2500 |

Fixed displacement axial piston pumps

STRADA series

Fixed displacement bent axis piston pumps. STRADA pumps are ideally suited for PTOs applications in vehicles.

Displacements from 40,9 cm³/rev ▪ 2.49 in³/rev to 110 cm³/rev ▪ 6.71 in³/rev available in groups 32 and 37.

Max. peak pressure up to 400 bar ▪ 5800 psi.

Max. speed up to 2950 min⁻¹.



Main characteristics

| | Displacement | Max. continuous pressure | Max. speed |
|-------------------|---|--------------------------|-------------------|
| STRADA 32 | cm ³ /rev ▪ in ³ /rev | bar ▪ psi | min ⁻¹ |
| BAP 32•40 | 40,90 ▪ 2.49 | 350 ▪ 5100 | 2950 |
| BAP 32•50 | 50,10 ▪ 3.06 | 350 ▪ 5100 | 2750 |
| BAP 32•63 | 63,00 ▪ 3.84 | 350 ▪ 5100 | 2450 |
| BAP 32•71 | 71,60 ▪ 4.37 | 315 ▪ 4600 | 2250 |
| BAP 32•80 | 78,30 ▪ 4.78 | 315 ▪ 4600 | 2200 |
| STRADA 37 | cm ³ /rev ▪ in ³ /rev | bar ▪ psi | min ⁻¹ |
| BAP 37•80 | 79,10 ▪ 4.83 | 350 ▪ 5100 | 2500 |
| BAP 37•110 | 110,00 ▪ 6.71 | 300 ▪ 4350 | 2300 |

Features

- ◆ Low noise level
- ◆ Direct mounting on the PTOs
- ◆ Compact design
- ◆ High volumetric, mechanical and overall efficiency
- ◆ Available in ISO and UNI standard

PLATA series

Fixed displacement axial piston pumps and motors swash plate design for open circuit applications. The design itself is extremely compact while integrating a number of functions, with an electrically controlled valve on the pump and antishock valves on the motor.

Unidirectional pumps LFP48: displacements from 27 cm³/rev ▪ 1.65 in³/rev to 48,2 cm³/rev ▪ 2.94 in³/rev.

Reversible motors LFM30: displacements from 22 cm³/rev ▪ 1.34 in³/rev to 30,2 cm³/rev ▪ 1.84 in³/rev.

Max. peak pressure up to 350 bar ▪ 5100 psi.



Main characteristics

| | Displacement | | Max. continuous pressure | | Max. speed min ⁻¹ |
|---------------------|----------------------|----------------------|--------------------------|--------|---------------------------------|
| | cm ³ /rev | in ³ /rev | bar | psi | |
| PLATA pumps | | | | | |
| LFP 48•27 | 27,00 | ▪ 1.65 | 280 | ▪ 4050 | 2600 |
| LFP 48•34 | 34,00 | ▪ 2.07 | 280 | ▪ 4050 | 2600 |
| LFP 48•36,7 | 36,70 | ▪ 2.24 | 280 | ▪ 4050 | 2600 |
| LFP 48•45,5 | 45,50 | ▪ 2.78 | 280 | ▪ 4050 | 2600 |
| LFP 48•48 | 48,20 | ▪ 2.94 | 280 | ▪ 4050 | 2600 |
| PLATA motors | | | | | |
| LFM 30•22 | 22,00 | ▪ 1.34 | 280 | ▪ 4050 | 4900 |
| LFM 30•26,5 | 26,50 | ▪ 1.62 | 280 | ▪ 4050 | 4800 |
| LFM 30•28,5 | 28,50 | ▪ 1.74 | 280 | ▪ 4050 | 4700 |
| LFM 30•30,2 | 30,20 | ▪ 1.84 | 280 | ▪ 4050 | 4500 |

Pumps features

- ✦ Three-position electrically controlled valve with relief valve
- ✦ Electronic control of the rotor start-up and stop ramps
- ✦ Rotation reverse with controlled delay
- ✦ Easy integration with the machine cabin controls
- ✦ Auxiliary gear pump with common suction, available with either cast-iron or aluminium body

Motors features

- ✦ Reversible rotation with integral antishock valves
- ✦ European and SAE standard mounting flanges
- ✦ Side or rear inlet options
- ✦ Compact size

Variable displacement axial piston pumps

PLATA LVP series

Variable displacement axial piston pumps swash plate design. PLATA pumps are ideally suited for medium and high pressure open circuit applications.

Displacements from 28,70 cm³/rev ▪ 1.75 in³/rev to 87,90 cm³/rev ▪ 5.36 in³/rev.

Max. peak pressure up to 350 bar ▪ 5100 psi.

Max. speed up to 3000 min⁻¹.



Main characteristics

| PLATA LVP | Max displacement | | Max. continuous pressure | | Max. speed |
|---------------|----------------------|----------------------|--------------------------|------|-------------------|
| | cm ³ /rev | in ³ /rev | bar | psi | min ⁻¹ |
| LVP 30 | 28,70 | 1.75 | 280 | 4050 | 3000 |
| LVP 48 | 45,40 | 2.77 | 280 | 4050 | 2600 |
| LVP 75 | 73,60 | 4.49 | 280 | 4050 | 2600 |
| LVP 90 | 87,90 | 5.36 | 250 | 3600 | 2200 |

Features

- ✦ Energy savings
- ✦ Low noise emission
- ✦ Short response time
- ✦ Drive shaft bearing suitable for radial and axial loads
- ✦ Multiple combinations

Controls

- ✦ Pressure compensator
- ✦ Flow and pressure compensator (Load-Sensing)
- ✦ Torque limiter
- ✦ Electrohydraulic servocontrols

MVP and MVPD series

Variable displacement axial piston pumps swash plate design ideally suited for open circuit in mobile hydraulic applications. The compact design allows to be mounted directly on engine motors.

The new "MVPD" series allow higher flow rates than traditional pumps with same dimensions, higher machine speeds without affecting the design of the hydraulic system and a high power-to-dimensions ratio.

Displacements from 14 cm³/rev ▪ 0.85 in³/rev to 84,7 cm³/rev ▪ 5.17 in³/rev.

Max. peak pressure up to 350 bar ▪ 5100 psi.

Max. speed up to 3700 min⁻¹.



Main characteristics

| | Max displacement | Max. continuous pressure | Max. speed |
|-------------------|---|--------------------------|-------------------|
| MVP | cm ³ /rev ▪ in ³ /rev | bar ▪ psi | min ⁻¹ |
| MVP 30.28 | 28,00 ▪ 1.74 | 280 ▪ 4050 | 3500 |
| MVP 30.34 | 34,80 ▪ 2.12 | 250 ▪ 3600 | 2900 |
| MVP 48.45 | 45,00 ▪ 2.75 | 280 ▪ 4050 | 3000 |
| MVP 48.53 | 53,70 ▪ 3.28 | 250 ▪ 3600 | 2500 |
| MVP 60.60 | 60,00 ▪ 3.66 | 280 ▪ 4050 | 3000 |
| MVP 60.72 | 72,00 ▪ 4.39 | 280 ▪ 4050 | 2700 |
| MVP 60.84 | 84,70 ▪ 5.17 | 250 ▪ 3600 | 2300 |
| MVPD | cm ³ /rev ▪ in ³ /rev | bar ▪ psi | min ⁻¹ |
| MVPD 30.34 | 34,00 ▪ 2.07 | 230 ▪ 3350 | 3700 |
| MVPD 30.45 | 45,00 ▪ 2.75 | 230 ▪ 3350 | 3500 |
| MVPD 48.60 | 60,00 ▪ 3.66 | 230 ▪ 3350 | 2600 |
| MVPD 48.65 | 65,00 ▪ 3.97 | 230 ▪ 3350 | 2800 |

Features

- ✦ Exceptional working life expectancy
- ✦ Low noise emission
- ✦ Drive shaft bearing suitable for radial and axial loads
- ✦ Multiple combinations
- ✦ Short response time

MVPD additional features

- ✦ Higher speed
- ✦ Higher power-to-weight ratio
- ✦ Cost-optimized design

Controls

- ✦ Min. and max. displacement limiter
- ✦ Pressure compensator
- ✦ Flow and pressure compensator (Load-Sensing)
- ✦ Torque limiter
- ✦ Electronic controls

Variable displacement axial piston pumps

TVP series

Variable displacement axial piston pumps swash plate design ideally suited for open circuit truck applications.

The compact design allows to be mounted directly on the PTOs.

Displacements from 60,0 cm³/rev ▪ 3.66 in³/rev to 84,7 cm³/rev ▪ 5.17 in³/rev.

Max. peak pressure up to 400 bar ▪ 5800 psi.

Max. speed up to 3000 min⁻¹.



Main characteristics

| TVP | Max displacement | Max. continuous pressure | Max. speed |
|------------------|---|--------------------------|-------------------|
| | cm ³ /rev ▪ in ³ /rev | bar ▪ psi | min ⁻¹ |
| TVP 60.60 | 60,00 ▪ 3.66 | 350 ▪ 5100 | 3000 |
| TVP 60.72 | 72,00 ▪ 4.39 | 350 ▪ 5100 | 2700 |
| TVP 60.84 | 84,70 ▪ 5.17 | 350 ▪ 5100 | 2500 |

Features

- ✦ Pump internal drain line
- ✦ Compensators external drain line
- ✦ Direct mounting on the PTOs
- ✦ Body width 124,2 mm (4.8898 in)
- ✦ Compact design
- ✦ Low noise emission

Controls

- ✦ Min. and max. displacement limiter
- ✦ Flow and pressure compensator (Load-Sensing)
- ✦ Electro-proportional pressure compensator

PLATA SVP - DVP series

Variable displacement axial piston pumps swash plate design for open circuit applications. SVP single flow, DVP dual flow on piston pump and an additional piggybacked gear pump. The automatic overall torque limiter allows to optimize the performance of the machine. SVP and DVP pumps have been designed specifically for mini excavators where compactness and ease of installation are critical.

Piston pump: displacements from 7,8 cm³/rev ▪ 0.48 in³/rev to 30 cm³/rev ▪ 0.91 in³/rev.

Gear pump: displacements from 4,95 cm³/rev ▪ 0.30 in³/rev to 21,14 cm³/rev ▪ 1.29 in³/rev.

Max. speed up to 2600 min⁻¹.



SVP and DVP features

- ✦ Compact design
- ✦ Torque limiter
- ✦ Energy savings
- ✦ Low noise emission
- ✦ Long service life

Main characteristics

| | Max displacement | | Max. continuous pressure | | Max. speed min ⁻¹ |
|-------------------|----------------------|----------------------|--------------------------|------|---------------------------------|
| | cm ³ /rev | in ³ /rev | bar | psi | |
| PLATA SVP | cm ³ /rev | in ³ /rev | bar | psi | min ⁻¹ |
| SVP 15,6 | 15,60 | 0.95 | 210 | 3050 | 2600 |
| SVP 16 | 16,00 | 0.98 | 210 | 3050 | 2600 |
| SVP 17 | 17,00 | 1.04 | 210 | 3050 | 2600 |
| SVP 18 | 18,00 | 1.10 | 210 | 3050 | 2600 |
| SVP 20 | 20,00 | 1.22 | 210 | 3050 | 2600 |
| SVP 22 | 22,00 | 1.34 | 210 | 3050 | 2600 |
| SVP 25 | 25,00 | 1.53 | 210 | 3050 | 2600 |
| SVP 28 | 28,00 | 1.71 | 210 | 3050 | 2600 |
| SVP 30 | 30,00 | 1.83 | 210 | 3050 | 2600 |
| PLATA DVP | cm ³ /rev | in ³ /rev | bar | psi | min ⁻¹ |
| DVP 7,8 | 7,80x2 | 0.48x2 | 210 | 3050 | 2600 |
| DVP 8 | 8,00x2 | 0.49x2 | 210 | 3050 | 2600 |
| DVP 8,5 | 8,50x2 | 0.52x2 | 210 | 3050 | 2600 |
| DVP 9 | 9,00x2 | 0.55x2 | 210 | 3050 | 2600 |
| DVP 10 | 10,00x2 | 0.61x2 | 210 | 3050 | 2600 |
| DVP 11 | 11,00x2 | 0.67x2 | 210 | 3050 | 2600 |
| DVP 12,5 | 12,50x2 | 0.76x2 | 210 | 3050 | 2600 |
| DVP 14 | 14,00x2 | 0.85x2 | 210 | 3050 | 2600 |
| DVP 15 | 15,00x2 | 0.91x2 | 210 | 3050 | 2600 |
| Gear pump | cm ³ /rev | in ³ /rev | bar | psi | min ⁻¹ |
| KP 20•4 | 4,95 | 0.30 | 285 | 4150 | 2600 |
| KP 20•6,3 | 6,61 | 0.40 | 285 | 4150 | 2600 |
| KP 20•8 | 8,26 | 0.50 | 285 | 4150 | 2600 |
| KP 20•11,2 | 11,23 | 0.69 | 275 | 4000 | 2600 |
| KP 20•14 | 14,53 | 0.89 | 265 | 3850 | 2600 |
| KP 20•16 | 16,85 | 1.03 | 260 | 3750 | 2600 |
| KP 20•20 | 21,14 | 1.29 | 210 | 3050 | 2600 |

Hand pumps

Up Easy series

Double acting hand pumps providing flow in both directions of lever movement.
 Displacement from 12 cm³/cycle ▪ 0.73 in³/cycle to 45 cm³/cycle ▪ 2.75 in³/cycle.
 Max. pressure 315 bar ▪ 4600 psi.



Main characteristics

| Up Easy | Displacement | Max. pressure |
|--------------|---|---------------|
| | cm ³ /cycle ▪ in ³ /cycle | bar ▪ psi |
| EP 12 | 12 ▪ 0.73 | 315 ▪ 4600 |
| EP 25 | 25 ▪ 1.53 | 250 ▪ 3600 |
| EP 45 | 45 ▪ 2.75 | 220 ▪ 3200 |

Features

- ◆ New interchangeable modular design for maximum flexibility
- ◆ Same pumping group with or without reservoir
- ◆ Suitable for auxiliary or emergency applications



Product range

Suction filters

In line filters spin-on

Tank mounted return line filters

Tank mounted return and suction line filters

In line medium and high pressure filters

Accessories



IKRON "Fluid Filtration", real specialist in designing and manufacturing of hydraulic filters. More than fifty years of experience taught Casappa just how important filtering is to optimise hydraulic control system efficiency and to extend component service life.

Since its foundation, IKRON has followed the ISO 9001 procedures, guaranteeing the care and professionalism for which its production has always been distinguished, from design to delivery. This is why our customers rely on IKRON every day.

IKRON S.r.l.

Via Prampolini, 2
43044 Lemignano Di Collecchio
Parma (Italy)
Tel. (+39) 0521 30 49 11
Fax (+39) 0521 30 49 00
IP Videoconferencing
E-mail: info@ikron.it
www.ikron.it



IKRON uses virtual simulation tools during the design phase to analyse and predict how its products will behave when installed in the hydraulic circuit.

Ikron offers a wide range of filters and accessories. Suction filters, return filters, in line spin-on filters, medium and high pressure filters. Clogging indicators, level and temperature gauges, filler breathers.





Suction filters

The tank submerged suction filters are designed to be fitted directly on pump intake and provide versatility to safeguard the hydraulic components from contaminating particles.



HF 410 series

- ✦ Flow up to 300 lpm ▪ 79.3 US gpm
- ✦ By-pass valve
- ✦ Oversized filtering surface

HF 431-434-437 series

- External tank connection ◀
- Aluminium head ◀
- Special version on request ◀
- Washable filtering media ◀



Main characteristics

| Type | Nominal flow up to | | Degree of filtration* | |
|---------------|--------------------|--------|-----------------------|---------------|
| | l/min | US gpm | MS (µm) | MI (µm) |
| HF 410 | 300 | ▪ 79.3 | 90 | 25-60-125-250 |
| HF 431 | 220 | ▪ 58.1 | | 60-125-250 |
| HF 434 | 160 | ▪ 42.3 | | 60-125-250 |
| HF 437 | 160 | ▪ 42.3 | | 60-125-250 |

NOTES

(*): MS = zinc plated steel wire mesh / MI = stainless steel wire mesh

In line filters spin-on

These filters are specifically designed to be connected on the suction or in the return line of the hydraulic circuit and provide versatility to safeguard the circuit components from contaminating particles.



HF 620-625 series

- ▶ Easy filtering elements replacement
- ▶ Differential visual indicator
- ▶ Interchangeable with major manufacturers

HF 650 series

- Easy filtering elements replacement ◆
- High filtration performances ◆
- Operating pressure 35 bar ▪ 510 psi ◆
- Interchangeable with major manufacturers ◆



Main characteristics

| Type | Nominal flow up to | | Operating pressure | | Degree of filtration* | | | |
|---------------|--------------------|--------|--------------------|-------|-----------------------|-----------|---------|---------|
| | l/min | US gpm | bar | psi | FG (µm) | MS (µm) | SP (µm) | RP (µm) |
| HF 620 | 350 | ▪ 92.5 | 12 | ▪ 174 | 10-25 | 60-90-125 | 10-25 | |
| HF 625 | 220 | ▪ 58.1 | 25 | ▪ 360 | 10-25 | 60-90-125 | 10-25 | |
| HF 650 | 180 | ▪ 48 | 35 | ▪ 510 | 3-6-10-16-25 | | | 10-25 |

NOTES

(*): FG = micro-fibre glass / MS = zinc plated steel wire mesh / SP = cellulose / RP = reinforced cellulose



Tank mounted return line filters

These filters are specifically designed to be directly connected on the hydraulic circuits return line and provide versatility to safeguard the circuit components from contaminating particles.



HF 502 series

- ▶ Operating pressure 8 bar ▪ 115 psi
- ▶ Interchangeable with major manufacturers
- ▶ Filler cap



HF 547 series

- ▶ Air breather (available also with pressurized version)
- ▶ Antisplash system
- ▶ Anodized housing
- ▶ Flange with four holes (only HF 547-20)



HF 508 series

- Flow up to 1000 lpm ▪ 264 US gpm
- Double inlet port
- Extension on the oil way out of the pipe union
- Fluid-decelerating diffuser



HF 570-575-578 series

- ▶ Inside-to-outside flow direction
- ▶ Magnetic pre-filtration
- ▶ Filler cap
- ▶ Interchangeable with major manufacturers



HF 554 series

- Air breather (available also with pressurized version)
- Antisplash system
- Anodized housing

Main characteristics

| Type | Nominal flow up to | | Operating pressure | | Degree of filtration* | | | | |
|---------------|--------------------|---------|--------------------|-------|-----------------------|---------|-----------|---------|---------|
| | l/min | US gpm | bar | psi | FG (µm) | MS (µm) | MI (µm) | SP (µm) | RP (µm) |
| HF 502 | 630 | ▪ 166.5 | 8 | ▪ 115 | 3-6-10-25 | 90 | 25-60-125 | 10-25 | 10-25 |
| HF 508 | 1000 | ▪ 264 | 8 | ▪ 115 | 3-6-10-25 | 90 | 25-60-125 | 10-25 | 10-25 |
| HF 547 | 200 | ▪ 53 | 8 | ▪ 115 | 3-6-10-25 | 90 | 25-60-125 | 10-25 | 10-25 |
| HF 554 | 630 | ▪ 166.5 | 8 | ▪ 115 | 3-6-10-25 | 90 | 25-60-125 | 10-25 | 10-25 |
| HF 570 | 600 | ▪ 158 | 8 | ▪ 115 | 10-25 | | | 10-25 | |
| HF 575 | 1200 | ▪ 317 | 8 | ▪ 115 | 10-25 | | | 10-25 | |
| HF 578 | 1200 | ▪ 317 | 8 | ▪ 115 | 10-25 | | 60-125 | 10-25 | |

NOTES

(*): FG = micro-fibre glass / MS = zinc plated steel wire mesh / MI = stainless steel wire mesh / SP = cellulose / RP = reinforced cellulose

Tank mounted return and suction line filters

These filters are normally installed onto the tank and are used as the only solution to filter the oil flow coming from the open circuit return line and to supply with filtered oil, pressurized at 0,5 bar ▪ 7.25 psi, the closed circuit of the suction line.



HF 525 series

- ◆ Maximum operating pressure 12 bar ▪ 174 psi
- ◆ Internal by-pass set at 2,5 bar ▪ 36 psi
- ◆ Anti-cavitation valve with filter element

Main characteristics

| Type | Return flow up to | Suction flow up to | Operating pressure | Degree of filtration* |
|---------------|-------------------|--------------------|--------------------|-----------------------|
| | l/min ▪ US gpm | l/min ▪ US gpm | bar ▪ psi | FG (µm) |
| HF 525 | 270 ▪ 71 | 42 ▪ 160 | 12 ▪ 174 | 10-25 |

NOTES (*): FG = micro-fibre glass

In line medium and high pressure filters

The in-line medium and high pressure filters are specifically designed to be connected on the pressure line of the hydraulic circuit and provide versatility to safeguard the circuit components from contaminating particles.



HF 710 series

- ◆ Aluminium housing
- ◆ Operating pressure 250 bar ▪ 3600 psi
- ◆ Compact design and lightness
- ◆ By-pass valve
- ◆ Filtration ratio $\beta_x \geq 200$

Main characteristics

| Type | Nominal flow up to l/min ▪ US gpm | Operating pressure bar ▪ psi | Degree of filtration* | |
|---------------|--------------------------------------|---------------------------------|-----------------------|-------------|
| | | | FG (µm) | SB (µm) |
| HF 705 | 115 ▪ 30.4 | 350 ▪ 5100 | | 10-25-40-60 |
| HF 710 | 47 ▪ 12.4 | 250 ▪ 3600 | 3-6-10-25 | |

NOTES (*): FG = micro-fibre glass / SB = sintered bronze

- HF 705 series**
- ◆ Sintered bronze filter element
 - ◆ Bidirectional flow
 - ◆ Aluminium housing




In line medium and high pressure filters

HF 725 series

- ▶ CETOP 3 connections with reference to ISO4401
- ▶ Operating pressure 350 bar ▪ 5100 psi
- ▶ Modular assembly
- ▶ Compact design
- ▶ Filtration ratio $\beta_x \geq 200$

HF 733 - HF 735 series

- Multilayer system ◀
- Flanged directly on valve blocks and hydraulic Power-Pack ◀
- Filtration ratio $\beta_x \geq 200$ ◀


HF 743 - HF 745 - HF 748 series

- ▶ Interchangeable with major manufacturers
- ▶ Multilayer system
- ▶ Filtration ratio $\beta_x \geq 200$

HF 760-761 series

- Multilayer system ◀
- Wide range 20 - 30 - 40 ◀
- Interchangeable with major manufacturers ◀
- Filtration ratio $\beta_x \geq 200$ ◀


Main characteristics

| Type | Nominal flow up to | | Operating pressure bar ▪ psi | Degree of filtration* | |
|---------------|--------------------|--------|---------------------------------|-----------------------|---------|
| | l/min | US gpm | | FG (µm) | MI (µm) |
| HF 725 | 20 | 5.3 | 350 ▪ 5100 | 3-6-10-25 | 10-25 |
| HF 733 | 80 | 21.1 | 250 ▪ 3600 | 3-6-10-25 | |
| HF 735 | 150 | 39.7 | 320 ▪ 4650 | 3-6-10-25 | |
| HF 743 | 95 | 25.1 | 250 ▪ 3600 | 3-6-10-25 | |
| HF 745 | 170 | 45 | 310 ▪ 4495 | 3-6-10-25 | |
| HF 748 | 145 | 38 | 280 ▪ 4050 | 3-6-10-25 | |
| HF 760 | 450 | 120 | 420 ▪ 6100 | 3-6-10-25 | |
| HF 761 | 420 | 111 | 420 ▪ 6100 | 3-6-10-25 | |

NOTES (*): FG = micro-fibre glass / MI = stainless steel wire mesh

Accessories

Filler breathers - Air filters - Level and temperature gauges - Pressure gauges - Pressure/Vacuum gauges - Clogging indicators: visual, electrical, visual differential and electrical visual differential.



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Headquartes

CASAPPA S.p.A.

Via Balestrieri, 1

43044 Lemignano di Collecchio

Parma (Italy)

Tel. (+39) 0521 30 41 11

Fax (+39) 0521 80 46 00

IP Videoconferencing

E-mail: info@casappa.com

www.casappa.com

