



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	JUNGHEINRICH	SANDVIK	VOLVO CE
ARGO TRACTORS	CHENGGONG	HUSQVARNA	KOMATSU	SANY	XCMG
ASTRA Veicoli Industriali	CNH	HYUNDAI	LINDE	SCANIA	YANMAR
ATLAS COPCO	DAIMLER	HYVA GROUP	MANITOU GROUP	STILL	ZAPAGROMASCH
BAI-Brescia Antincendi Int.	DOOSAN	JCB	MANITOWOC	TEREX	ZOOMLION
BOBCAT	FARID	JLG	MAZ	TEXTRON	
BROKK	GUIMA PALFINGER	JOHN DEERE	MERLO	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](mailto:info@casappa.com)*  
**[www.casappa.com](http://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 cm<sup>3</sup>/rev ▪ 0.07 in<sup>3</sup>/rev to 91,10 cm<sup>3</sup>/rev ▪ 5.56 in<sup>3</sup>/rev available in groups 10, 20 and 30.

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

Max. speed up to 4000 min<sup>-1</sup>.



### 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
<b>POLARIS 10</b>	cm <sup>3</sup> /rev ▪ in <sup>3</sup> /rev	bar ▪ psi	min <sup>-1</sup>
<b>PL. 10•1</b>	1,07 ▪ 0.07	260 ▪ 3750	4000
<b>PL. 10•1,5</b>	1,60 ▪ 0.10	260 ▪ 3750	4000
<b>PL. 10•2</b>	2,13 ▪ 0.13	260 ▪ 3750	4000
<b>PL. 10•2,5</b>	2,67 ▪ 0.16	260 ▪ 3750	4000
<b>PL. 10•3,15</b>	3,34 ▪ 0.20	260 ▪ 3750	4000
<b>PL. 10•4</b>	4,27 ▪ 0.26	250 ▪ 3600	4000
<b>PL. 10•5</b>	5,34 ▪ 0.33	250 ▪ 3600	4000
<b>PL. 10•5,8</b>	6,20 ▪ 0.38	230 ▪ 3350	3500
<b>PL. 10•6,3</b>	6,67 ▪ 0.41	230 ▪ 3350	3500
<b>PL. 10•8</b>	8,51 ▪ 0.52	180 ▪ 2600	3500
<b>PL. 10•10</b>	10,67 ▪ 0.65	140 ▪ 2050	3500
<b>POLARIS 20</b>	cm <sup>3</sup> /rev ▪ in <sup>3</sup> /rev	bar ▪ psi	min <sup>-1</sup>
<b>PL. 20•4</b>	4,95 ▪ 0.30	250 ▪ 3600	4000
<b>PL. 20•6,3</b>	6,61 ▪ 0.40	250 ▪ 3600	4000
<b>PL. 20•7,2</b>	7,29 ▪ 0.44	250 ▪ 3600	4000
<b>PL. 20•8</b>	8,26 ▪ 0.50	250 ▪ 3600	3500
<b>PL. 20•9</b>	9,17 ▪ 0.56	250 ▪ 3600	3500
<b>PL. 20•10,5</b>	10,90 ▪ 0.66	250 ▪ 3600	3500
<b>PL. 20•11,2</b>	11,23 ▪ 0.69	250 ▪ 3600	3500
<b>PL. 20•14</b>	14,53 ▪ 0.89	250 ▪ 3600	3500
<b>PL. 20•16</b>	16,85 ▪ 1.03	250 ▪ 3600	3000
<b>PL. 20•19</b>	19,09 ▪ 1.16	200 ▪ 2900	3000
<b>PL. 20•20</b>	21,14 ▪ 1.29	200 ▪ 2900	3000
<b>PL. 20•24,5</b>	24,84 ▪ 1.52	170 ▪ 2450	2500
<b>PL. 20•25</b>	26,42 ▪ 1.61	170 ▪ 2450	2500
<b>PL. 20•27,8</b>	28,21 ▪ 1.72	130 ▪ 1900	2000
<b>PL. 20•31,5</b>	33,03 ▪ 2.01	130 ▪ 1900	2000
<b>POLARIS 30</b>	cm <sup>3</sup> /rev ▪ in <sup>3</sup> /rev	bar ▪ psi	min <sup>-1</sup>
<b>PL. 30•22</b>	21,99 ▪ 1.34	250 ▪ 3600	3000
<b>PL. 30•27</b>	26,70 ▪ 1.63	250 ▪ 3600	3000
<b>PL. 30•34</b>	34,55 ▪ 2.11	240 ▪ 3500	3000
<b>PL. 30•38</b>	39,27 ▪ 2.40	240 ▪ 3500	3000
<b>PL. 30•43</b>	43,98 ▪ 2.68	230 ▪ 3350	3000
<b>PL. 30•51</b>	51,83 ▪ 3.16	210 ▪ 3050	2500
<b>PL. 30•61</b>	61,26 ▪ 3.74	190 ▪ 2750	2500
<b>PL. 30•73</b>	73,82 ▪ 4.50	170 ▪ 2450	2500
<b>PL. 30•82</b>	81,68 ▪ 4.98	160 ▪ 2300	2200
<b>PL. 30•90</b>	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 cm<sup>3</sup>/rev ▪ 0.07 in<sup>3</sup>/rev to 96,85 cm<sup>3</sup>/rev ▪ 5.91 in<sup>3</sup>/rev available in groups 10, 20 and 30.

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

Max. speed up to 4000 min<sup>-1</sup>.



#### 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 <sup>3</sup> /rev	in <sup>3</sup> /rev		
<b>WHISPER 10</b>	cm <sup>3</sup> /rev	in <sup>3</sup> /rev	bar ▪ psi	min <sup>-1</sup>
<b>WSP 10•1</b>	1,12	0.07	260 ▪ 3750	4000
<b>WSP 10•1,5</b>	1,68	0.10	260 ▪ 3750	4000
<b>WSP 10•2</b>	2,24	0.14	260 ▪ 3750	4000
<b>WSP 10•2,5</b>	2,80	0.17	260 ▪ 3750	4000
<b>WSP 10•3,15</b>	3,48	0.21	260 ▪ 3750	4000
<b>WSP 10•4</b>	4,45	0.27	250 ▪ 3600	4000
<b>WSP 10•5</b>	5,60	0.34	250 ▪ 3600	4000
<b>WSP 10•5,8</b>	6,51	0.40	230 ▪ 3350	3500
<b>WSP 10•6,3</b>	7,00	0.43	230 ▪ 3350	3500
<b>WSP 10•8</b>	8,92	0.54	180 ▪ 2600	3500
<b>WSP 10•10</b>	11,20	0.68	140 ▪ 2050	3500
<b>WHISPER 20</b>	cm <sup>3</sup> /rev	in <sup>3</sup> /rev	bar ▪ psi	min <sup>-1</sup>
<b>WSP 20•4</b>	5,25	0.32	250 ▪ 3600	4000
<b>WSP 20•6,3</b>	7,00	0.43	250 ▪ 3600	4000
<b>WSP 20•7,2</b>	7,72	0.47	250 ▪ 3600	4000
<b>WSP 20•8</b>	8,74	0.53	250 ▪ 3600	3500
<b>WSP 20•9</b>	9,65	0.59	250 ▪ 3600	3500
<b>WSP 20•10,5</b>	11,54	0.70	250 ▪ 3600	3500
<b>WSP 20•11,2</b>	11,89	0.73	250 ▪ 3600	3500
<b>WSP 20•14</b>	15,39	0.94	250 ▪ 3600	3500
<b>WSP 20•16</b>	17,84	1.09	250 ▪ 3600	3000
<b>WSP 20•19</b>	20,22	1.23	200 ▪ 2900	3000
<b>WSP 20•20</b>	22,38	1.37	200 ▪ 2900	3000
<b>WSP 20•24,5</b>	26,30	1.60	170 ▪ 2450	2500
<b>WSP 20•25</b>	27,98	1.71	170 ▪ 2450	2500
<b>WSP 20•27,8</b>	29,87	1.82	130 ▪ 1900	2000
<b>WSP 20•31,5</b>	34,98	2.13	130 ▪ 1900	2000
<b>WHISPER 30</b>	cm <sup>3</sup> /rev	in <sup>3</sup> /rev	bar ▪ psi	min <sup>-1</sup>
<b>WSP 30•22</b>	23,38	1.43	250 ▪ 3600	3000
<b>WSP 30•27</b>	28,39	1.73	250 ▪ 3600	3000
<b>WSP 30•34</b>	36,74	2.24	240 ▪ 3500	3000
<b>WSP 30•38</b>	41,75	2.55	240 ▪ 3500	3000
<b>WSP 30•43</b>	46,76	2.85	230 ▪ 3350	3000
<b>WSP 30•51</b>	55,10	3.36	210 ▪ 3050	2500
<b>WSP 30•61</b>	65,12	3.97	190 ▪ 2750	2500
<b>WSP 30•73</b>	78,48	4.79	170 ▪ 2450	2500
<b>WSP 30•82</b>	86,83	5.30	160 ▪ 2300	2200
<b>WSP 30•90</b>	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 19,09 cm<sup>3</sup>/rev ▪ 1.16 in<sup>3</sup>/rev to 33,03 cm<sup>3</sup>/rev ▪ 2.01 in<sup>3</sup>/rev.

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

Max. speed up to 3500 min<sup>-1</sup>.



### Main characteristics

POLARIS PH 20	Displacement	Max. continuous pressure	Max. speed
	cm <sup>3</sup> /rev ▪ in <sup>3</sup> /rev	bar ▪ psi	min <sup>-1</sup>
<b>PH. 20•19</b>	19,09 ▪ 1.16	250 ▪ 3600	3500
<b>PH. 20•20</b>	21,14 ▪ 1.29	250 ▪ 3600	3500
<b>PH. 20•23</b>	23,32 ▪ 1.42	250 ▪ 3600	3000
<b>PH. 20•24,5</b>	24,84 ▪ 1.52	230 ▪ 3350	3000
<b>PH. 20•25</b>	26,42 ▪ 1.61	230 ▪ 3350	3000
<b>PH. 20•27,8</b>	28,21 ▪ 1.72	200 ▪ 2900	2500
<b>PH. 20•31,5</b>	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 cm<sup>3</sup>/rev ▪ 0.30 in<sup>3</sup>/rev to 73,82 cm<sup>3</sup>/rev ▪ 4.50 in<sup>3</sup>/rev available in groups 20 and 30.

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

Max. speed up to 4000 min<sup>-1</sup>.



## Main characteristics

	Displacement		Max. continuous pressure		Max. speed min <sup>-1</sup>
	cm <sup>3</sup> /rev	in <sup>3</sup> /rev	bar	psi	
<b>KAPPA 20</b>	cm <sup>3</sup> /rev	in <sup>3</sup> /rev	bar	psi	min <sup>-1</sup>
<b>K. 20•4</b>	4,95	0.30	285	4150	4000
<b>K. 20•6,3</b>	6,61	0.40	285	4150	4000
<b>K. 20•8</b>	8,26	0.50	285	4150	3500
<b>K. 20•11,2</b>	11,23	0.69	275	4000	3500
<b>K. 20•14</b>	14,53	0.89	265	3850	3500
<b>K. 20•16</b>	16,85	1.03	260	3750	3000
<b>K. 20•20</b>	21,14	1.29	210	3050	3000
<b>K. 20•25</b>	26,42	1.61	180	2600	2500
<b>K. 20•31,5</b>	33,03	2.01	140	2050	2500
<b>KAPPA 30</b>	cm <sup>3</sup> /rev	in <sup>3</sup> /rev	bar	psi	min <sup>-1</sup>
<b>K. 30•27</b>	26,70	1.63	280	4050	3000
<b>K. 30•34</b>	34,56	2.11	260	3750	3000
<b>K. 30•38</b>	39,27	2.40	260	3750	3000
<b>K. 30•43</b>	43,98	2.68	250	3600	3000
<b>K. 30•51</b>	51,83	3.16	230	3350	2500
<b>K. 30•56</b>	56,54	3.45	215	3100	2500
<b>K. 30•61</b>	61,26	3.74	200	2900	2500
<b>K. 30•73</b>	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 cm<sup>3</sup>/rev ▪ 1.16 in<sup>3</sup>/rev to 150,79 cm<sup>3</sup>/rev ▪ 9.20 in<sup>3</sup>/rev available in groups 25, 30, 35 and 40.

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

Max. speed up to 3500 min<sup>-1</sup>.



### 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
<b>KAPPA compact 25</b>	cm <sup>3</sup> /rev ▪ in <sup>3</sup> /rev	bar ▪ psi	min <sup>-1</sup>
<b>K. 25•19</b>	19,00 ▪ 1.16	280 ▪ 4050	3500
<b>K. 25•21</b>	21,07 ▪ 1.29	280 ▪ 4050	3500
<b>K. 25•23</b>	23,06 ▪ 1.41	280 ▪ 4050	3500
<b>K. 25•25</b>	25,04 ▪ 1.53	280 ▪ 4050	3500
<b>K. 25•27</b>	27,03 ▪ 1.65	280 ▪ 4050	3500
<b>K. 25•31</b>	31,09 ▪ 1.90	275 ▪ 4000	3000
<b>K. 25•34</b>	34,03 ▪ 2.08	275 ▪ 4000	3000
<b>K. 25•38</b>	38,00 ▪ 2.32	230 ▪ 3350	3000
<b>K. 25•43</b>	43,01 ▪ 2.62	210 ▪ 3050	3000
<b>KAPPA compact 30</b>	cm <sup>3</sup> /rev ▪ in <sup>3</sup> /rev	bar ▪ psi	min <sup>-1</sup>
<b>K. 30•22</b>	21,99 ▪ 1.34	280 ▪ 4050	3000
<b>K. 30•27</b>	26,70 ▪ 1.63	280 ▪ 4050	3000
<b>K. 30•31</b>	30,63 ▪ 1.87	260 ▪ 3750	3000
<b>K. 30•34</b>	34,56 ▪ 2.11	260 ▪ 3750	3000
<b>K. 30•38</b>	39,27 ▪ 2.40	260 ▪ 3750	3000
<b>K. 30•41</b>	41,62 ▪ 2.54	250 ▪ 3600	3000
<b>K. 30•43</b>	43,98 ▪ 2.68	250 ▪ 3600	3000
<b>K. 30•46</b>	46,34 ▪ 2.83	250 ▪ 3600	3000
<b>K. 30•51</b>	51,83 ▪ 3.16	230 ▪ 3350	2500
<b>K. 30•56</b>	56,54 ▪ 3.45	215 ▪ 3100	2500
<b>K. 30•61</b>	61,26 ▪ 3.74	200 ▪ 2900	2500
<b>K. 30•73</b>	73,82 ▪ 4.50	180 ▪ 2600	2500
<b>KAPPA compact 35</b>	cm <sup>3</sup> /rev ▪ in <sup>3</sup> /rev	bar ▪ psi	min <sup>-1</sup>
<b>KP 35•63</b>	63,88 ▪ 3.90	260 ▪ 3750	3000
<b>KP 35•71</b>	72,40 ▪ 4.42	260 ▪ 3750	3000
<b>KP 35•80</b>	80,91 ▪ 4.94	260 ▪ 3750	3000
<b>KP 35•90</b>	91,56 ▪ 5.59	245 ▪ 3550	2500
<b>KP 35•100</b>	100,08 ▪ 6.10	230 ▪ 3350	2500
<b>KAPPA compact 40</b>	cm <sup>3</sup> /rev ▪ in <sup>3</sup> /rev	bar ▪ psi	min <sup>-1</sup>
<b>K. 40•63</b>	61,43 ▪ 3.75	300 ▪ 4350	2800
<b>K. 40•73</b>	72,60 ▪ 4.43	300 ▪ 4350	2800
<b>K. 40•87</b>	86,56 ▪ 5.28	280 ▪ 4050	2800
<b>K. 40•109</b>	108,90 ▪ 6.64	250 ▪ 3600	2800
<b>K. 40•121</b>	121,80 ▪ 7.43	230 ▪ 3350	2500
<b>K. 40•133</b>	134,03 ▪ 8.18	220 ▪ 3200	2500
<b>K. 40•151</b>	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 cm<sup>3</sup>/rev ▪ 0.50 in<sup>3</sup>/rev to 150,79 cm<sup>3</sup>/rev ▪ 9.20 in<sup>3</sup>/rev available in groups 20, 30, 35 and 40.

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

Max. speed up to 3000 min<sup>-1</sup>.



#### 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 <sup>3</sup> /rev ▪ in <sup>3</sup> /rev	bar ▪ psi	min <sup>-1</sup>
<b>FORMULA 20</b>			
<b>FP 20•8</b>	8,26 ▪ 0.50	280 ▪ 4050	2000
<b>FP 20•11,2</b>	11,23 ▪ 0.69	280 ▪ 4050	2000
<b>FP 20•16</b>	16,85 ▪ 1.03	280 ▪ 4050	2000
<b>FP 20•20</b>	21,14 ▪ 1.29	260 ▪ 3750	2000
<b>FP 20•25</b>	26,42 ▪ 1.61	220 ▪ 3200	2000
<b>FP 20•31,5</b>	33,03 ▪ 2.01	190 ▪ 2750	1800
<b>FP 20•36</b>	35,94 ▪ 2.19	170 ▪ 2450	1800
<b>FP 20•40</b>	39,64 ▪ 2.42	160 ▪ 2300	1800
<b>FORMULA 30</b>			
<b>FP 30•17</b>	17,28 ▪ 1.05	290 ▪ 4200	3000
<b>FP 30•27</b>	26,70 ▪ 1.63	290 ▪ 4200	3000
<b>FP 30•34</b>	34,56 ▪ 2.11	280 ▪ 4050	2800
<b>FP 30•38</b>	39,27 ▪ 2.40	280 ▪ 4050	2800
<b>FP 30•43</b>	43,98 ▪ 2.68	270 ▪ 3900	2500
<b>FP 30•51</b>	51,83 ▪ 3.16	240 ▪ 3500	2500
<b>FP 30•61</b>	61,26 ▪ 3.74	220 ▪ 3200	2000
<b>FP 30•73</b>	73,82 ▪ 4.50	200 ▪ 2900	1800
<b>FP 30•82</b>	81,68 ▪ 4.98	190 ▪ 2750	1800
<b>FP 30•100</b>	100,52 ▪ 6.16	180 ▪ 2600	1800
<b>FP 30•125</b>	125,66 ▪ 7.67	160 ▪ 2300	1800
<b>FORMULA 40</b>			
<b>FP 40•63</b>	61,43 ▪ 3.75	290 ▪ 4200	2700
<b>FP 40•73</b>	72,60 ▪ 4.43	280 ▪ 4050	2700
<b>FP 40•87</b>	86,56 ▪ 5.28	260 ▪ 3750	2700
<b>FP 40•109</b>	108,90 ▪ 6.64	240 ▪ 3500	2700
<b>FP 40•133</b>	134,03 ▪ 8.18	220 ▪ 3200	2500
<b>FP 40•151</b>	150,79 ▪ 9.20	180 ▪ 2600	2500
<b>FORMULA SFP 30</b>			
<b>SFP 30•34</b>	35,43 ▪ 2.16	280 ▪ 4050	2800
<b>SFP 30•43</b>	45,09 ▪ 2.75	270 ▪ 3900	2500
<b>SFP 30•51</b>	53,14 ▪ 3.24	250 ▪ 3600	2500
<b>SFP 30•61</b>	62,80 ▪ 3.83	230 ▪ 3350	2500
<b>SFP 30•73</b>	75,68 ▪ 4.62	205 ▪ 2950	2250
<b>SFP 30•82</b>	83,74 ▪ 5.11	195 ▪ 2800	2250
<b>FORMULA SFP 35</b>			
<b>SFP 35•90</b>	95,99 ▪ 5.86	230 ▪ 3350	2250
<b>SFP 35•100</b>	104,92 ▪ 6.40	220 ▪ 3200	2250
<b>SFP 35•112</b>	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 cm<sup>3</sup>/rev ▪ 1.05 in<sup>3</sup>/rev to 125,63 cm<sup>3</sup>/rev ▪ 7.66 in<sup>3</sup>/rev available in groups 30 and 35.

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

Max. speed up to 3000 min<sup>-1</sup>.



### 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 <sup>-1</sup>
	cm <sup>3</sup> /rev	in <sup>3</sup> /rev	bar	psi	
<b>MAGNUM 30</b>	cm <sup>3</sup> /rev	in <sup>3</sup> /rev	bar	psi	min <sup>-1</sup>
<b>HD. 30•17</b>	17,28	1.05	280	4050	3000
<b>HD. 30•22</b>	21,99	1.34	280	4050	3000
<b>HD. 30•24</b>	24,03	1.47	280	4050	3000
<b>HD. 30•27</b>	26,70	1.63	280	4050	3000
<b>HD. 30•34</b>	34,56	2.11	270	3900	3000
<b>HD. 30•38</b>	39,27	2.40	270	3900	3000
<b>HD. 30•43</b>	43,98	2.68	260	3750	3000
<b>HD. 30•51</b>	51,83	3.16	230	3350	2500
<b>HD. 30•56</b>	56,55	3.45	215	3100	2500
<b>HD. 30•61</b>	61,26	3.74	200	2900	2000
<b>HD. 30•73</b>	73,82	4.50	190	2750	1700
<b>HD. 30•82</b>	81,68	4.98	170	2450	1500
<b>MAGNUM 35</b>	cm <sup>3</sup> /rev	in <sup>3</sup> /rev	bar	psi	min <sup>-1</sup>
<b>HD. 35•40</b>	40,46	2.47	270	3900	3000
<b>HD. 35•50</b>	51,10	3.12	270	3900	3000
<b>HD. 35•63</b>	63,88	3.90	270	3900	3000
<b>HD. 35•71</b>	72,40	4.42	250	3600	3000
<b>HD. 35•80</b>	80,91	4.94	250	3600	3000
<b>HD. 35•90</b>	91,56	5.59	230	3350	2700
<b>HD. 35•100</b>	100,08	6.10	210	3050	2700
<b>HD. 35•112</b>	112,85	6.88	190	2750	2700
<b>HD. 35•125</b>	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 cm<sup>3</sup>/rev ▪ 0.13 in<sup>3</sup>/rev to 33,03 cm<sup>3</sup>/rev ▪ 2.01 in<sup>3</sup>/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
<b>POLARIS 10</b>	cm <sup>3</sup> /rev ▪ in <sup>3</sup> /rev	bar ▪ psi	min <sup>-1</sup>
<b>PLD 10•2</b>	2,14 ▪ 0.13	250 ▪ 3600	4200
<b>PLD 10•3,15</b>	3,34 ▪ 0.20	250 ▪ 3600	3990
<b>PLD 10•4</b>	4,27 ▪ 0.26	250 ▪ 3600	3940
<b>PLD 10•5</b>	5,34 ▪ 0.33	250 ▪ 3600	3680
<b>PLD 10•6,3</b>	6,67 ▪ 0.41	250 ▪ 3600	3500
<b>POLARIS 20</b>	cm <sup>3</sup> /rev ▪ in <sup>3</sup> /rev	bar ▪ psi	min <sup>-1</sup>
<b>PLD 20•4</b>	4,95 ▪ 0.30	250 ▪ 3600	4100
<b>PLD 20•6,3</b>	6,61 ▪ 0.40	250 ▪ 3600	3970
<b>PLD 20•8</b>	8,26 ▪ 0.50	250 ▪ 3600	3850
<b>PLD 20•11,2</b>	11,23 ▪ 0.69	250 ▪ 3600	3660
<b>PLD 20•14</b>	14,53 ▪ 0.89	250 ▪ 3600	3460
<b>PLD 20•16</b>	16,85 ▪ 1.03	200 ▪ 2900	3335
<b>PLD 20•20</b>	21,14 ▪ 1.29	200 ▪ 2900	3125
<b>PLD 20•25</b>	26,42 ▪ 1.61	200 ▪ 2900	2900
<b>PLD 20•31,5</b>	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 cm<sup>3</sup>/rev ▪ 1.05 in<sup>3</sup>/rev to 125,63 cm<sup>3</sup>/rev ▪ 7.66 in<sup>3</sup>/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
<b>MAGNUM 30</b>	cm <sup>3</sup> /rev ▪ in <sup>3</sup> /rev	bar ▪ psi	min <sup>-1</sup>
<b>HDD 30•17</b>	17,28 ▪ 1.05	280 ▪ 4050	3000
<b>HDD 30•22</b>	21,99 ▪ 1.34	280 ▪ 4050	3000
<b>HDD 30•27</b>	26,70 ▪ 1.63	280 ▪ 4050	3000
<b>HDD 30•34</b>	34,56 ▪ 2.11	270 ▪ 3900	3000
<b>HDD 30•43</b>	43,98 ▪ 2.68	260 ▪ 3750	3000
<b>HDD 30•51</b>	51,83 ▪ 3.16	230 ▪ 3350	2500
<b>HDD 30•61</b>	61,26 ▪ 3.74	200 ▪ 2900	2000
<b>HDD 30•73</b>	73,82 ▪ 4.50	190 ▪ 2750	1700
<b>HDD 30•82</b>	81,68 ▪ 4.98	170 ▪ 2450	1500
<b>MAGNUM 35</b>	cm <sup>3</sup> /rev ▪ in <sup>3</sup> /rev	bar ▪ psi	min <sup>-1</sup>
<b>HDD 35•50</b>	51,10 ▪ 3.12	270 ▪ 3900	3000
<b>HDD 35•63</b>	63,88 ▪ 3.90	270 ▪ 3900	3000
<b>HDD 35•71</b>	72,40 ▪ 4.42	250 ▪ 3600	3000
<b>HDD 35•80</b>	80,91 ▪ 4.94	250 ▪ 3600	3000
<b>HDD 35•90</b>	91,56 ▪ 5.59	230 ▪ 3350	2700
<b>HDD 35•100</b>	100,08 ▪ 6.10	210 ▪ 3050	2700
<b>HDD 35•112</b>	112,85 ▪ 6.88	190 ▪ 2750	2700
<b>HDD 35•125</b>	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 cm<sup>3</sup>/rev ▪ 2.49 in<sup>3</sup>/rev to 110 cm<sup>3</sup>/rev ▪ 6.71 in<sup>3</sup>/rev available in groups 32 and 37.

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

Max. speed up to 2950 min<sup>-1</sup>.



### Main characteristics

	Displacement	Max. continuous pressure	Max. speed
<b>STRADA 32</b>	cm <sup>3</sup> /rev ▪ in <sup>3</sup> /rev	bar ▪ psi	min <sup>-1</sup>
<b>BAP 32•40</b>	40,90 ▪ 2.49	350 ▪ 5100	2950
<b>BAP 32•50</b>	50,10 ▪ 3.06	350 ▪ 5100	2750
<b>BAP 32•63</b>	63,00 ▪ 3.84	350 ▪ 5100	2450
<b>BAP 32•71</b>	71,60 ▪ 4.37	315 ▪ 4600	2250
<b>BAP 32•80</b>	78,30 ▪ 4.78	315 ▪ 4600	2200
<b>STRADA 37</b>	cm <sup>3</sup> /rev ▪ in <sup>3</sup> /rev	bar ▪ psi	min <sup>-1</sup>
<b>BAP 37•80</b>	79,10 ▪ 4.83	350 ▪ 5100	2500
<b>BAP 37•110</b>	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 cm<sup>3</sup>/rev ▪ 1.65 in<sup>3</sup>/rev to 48,2 cm<sup>3</sup>/rev ▪ 2.94 in<sup>3</sup>/rev.

Reversible motors LFM30: displacements from 22 cm<sup>3</sup>/rev ▪ 1.34 in<sup>3</sup>/rev to 30,2 cm<sup>3</sup>/rev ▪ 1.84 in<sup>3</sup>/rev.

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



### Main characteristics

	Displacement		Max. continuous pressure		Max. speed min <sup>-1</sup>
	cm <sup>3</sup> /rev	in <sup>3</sup> /rev	bar	psi	
<b>PLATA pumps</b>					
<b>LFP 48•27</b>	27,00	▪ 1.65	280	▪ 4050	2600
<b>LFP 48•34</b>	34,00	▪ 2.07	280	▪ 4050	2600
<b>LFP 48•36,7</b>	36,70	▪ 2.24	280	▪ 4050	2600
<b>LFP 48•45,5</b>	45,50	▪ 2.78	280	▪ 4050	2600
<b>LFP 48•48</b>	48,20	▪ 2.94	280	▪ 4050	2600
<b>PLATA motors</b>					
<b>LFM 30•22</b>	22,00	▪ 1.34	280	▪ 4050	4900
<b>LFM 30•26,5</b>	26,50	▪ 1.62	280	▪ 4050	4800
<b>LFM 30•28,5</b>	28,50	▪ 1.74	280	▪ 4050	4700
<b>LFM 30•30,2</b>	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 cm<sup>3</sup>/rev ▪ 1.75 in<sup>3</sup>/rev to 87,90 cm<sup>3</sup>/rev ▪ 5.36 in<sup>3</sup>/rev.

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

Max. speed up to 3000 min<sup>-1</sup>.



### Main characteristics

PLATA LVP	Max displacement		Max. continuous pressure		Max. speed
	cm <sup>3</sup> /rev	in <sup>3</sup> /rev	bar	psi	min <sup>-1</sup>
<b>LVP 30</b>	28,70	1.75	280	4050	3000
<b>LVP 48</b>	45,40	2.77	280	4050	2600
<b>LVP 75</b>	73,60	4.49	280	4050	2600
<b>LVP 90</b>	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 cm<sup>3</sup>/rev ▪ 0.85 in<sup>3</sup>/rev to 84,7 cm<sup>3</sup>/rev ▪ 5.17 in<sup>3</sup>/rev.

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

Max. speed up to 3700 min<sup>-1</sup>.



### Main characteristics

	Max displacement	Max. continuous pressure	Max. speed
<b>MVP</b>	cm <sup>3</sup> /rev ▪ in <sup>3</sup> /rev	bar ▪ psi	min <sup>-1</sup>
<b>MVP 30.28</b>	28,00 ▪ 1.74	280 ▪ 4050	3500
<b>MVP 30.34</b>	34,80 ▪ 2.12	250 ▪ 3600	2900
<b>MVP 48.45</b>	45,00 ▪ 2.75	280 ▪ 4050	3000
<b>MVP 48.53</b>	53,70 ▪ 3.28	250 ▪ 3600	2500
<b>MVP 60.60</b>	60,00 ▪ 3.66	280 ▪ 4050	3000
<b>MVP 60.72</b>	72,00 ▪ 4.39	280 ▪ 4050	2700
<b>MVP 60.84</b>	84,70 ▪ 5.17	250 ▪ 3600	2300
<b>MVPD</b>	cm <sup>3</sup> /rev ▪ in <sup>3</sup> /rev	bar ▪ psi	min <sup>-1</sup>
<b>MVPD 30.34</b>	34,00 ▪ 2.07	230 ▪ 3350	3700
<b>MVPD 30.45</b>	45,00 ▪ 2.75	230 ▪ 3350	3500
<b>MVPD 48.60</b>	60,00 ▪ 3.66	230 ▪ 3350	2600
<b>MVPD 48.65</b>	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 cm<sup>3</sup>/rev ▪ 3.66 in<sup>3</sup>/rev to 84,7 cm<sup>3</sup>/rev ▪ 5.17 in<sup>3</sup>/rev.

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

Max. speed up to 3000 min<sup>-1</sup>.



### Main characteristics

TVP	Max displacement	Max. continuous pressure	Max. speed
	cm <sup>3</sup> /rev ▪ in <sup>3</sup> /rev	bar ▪ psi	min <sup>-1</sup>
<b>TVP 60.60</b>	60,00 ▪ 3.66	350 ▪ 5100	3000
<b>TVP 60.72</b>	72,00 ▪ 4.39	350 ▪ 5100	2700
<b>TVP 60.84</b>	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 cm<sup>3</sup>/rev ▪ 0.48 in<sup>3</sup>/rev to 30 cm<sup>3</sup>/rev ▪ 1.83 in<sup>3</sup>/rev.

Gear pump: displacements from 4,95 cm<sup>3</sup>/rev ▪ 0.30 in<sup>3</sup>/rev to 21,14 cm<sup>3</sup>/rev ▪ 1.29 in<sup>3</sup>/rev.

Max. speed up to 2600 min<sup>-1</sup>.



### 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
<b>PLATA SVP</b>	cm <sup>3</sup> /rev ▪ in <sup>3</sup> /rev	bar ▪ psi	min <sup>-1</sup>
<b>SVP 15,6</b>	15,60 ▪ 0.95	210 ▪ 3050	2600
<b>SVP 16</b>	16,00 ▪ 0.98	210 ▪ 3050	2600
<b>SVP 17</b>	17,00 ▪ 1.04	210 ▪ 3050	2600
<b>SVP 18</b>	18,00 ▪ 1.10	210 ▪ 3050	2600
<b>SVP 20</b>	20,00 ▪ 1.22	210 ▪ 3050	2600
<b>SVP 22</b>	22,00 ▪ 1.34	210 ▪ 3050	2600
<b>SVP 25</b>	25,00 ▪ 1.53	210 ▪ 3050	2600
<b>SVP 28</b>	28,00 ▪ 1.71	210 ▪ 3050	2600
<b>SVP 30</b>	30,00 ▪ 1.83	210 ▪ 3050	2600
<b>PLATA DVP</b>	cm <sup>3</sup> /rev ▪ in <sup>3</sup> /rev	bar ▪ psi	min <sup>-1</sup>
<b>DVP 7,8</b>	7,80x2 ▪ 0.48x2	210 ▪ 3050	2600
<b>DVP 8</b>	8,00x2 ▪ 0.49x2	210 ▪ 3050	2600
<b>DVP 8,5</b>	8,50x2 ▪ 0.52x2	210 ▪ 3050	2600
<b>DVP 9</b>	9,00x2 ▪ 0.55x2	210 ▪ 3050	2600
<b>DVP 10</b>	10,00x2 ▪ 0.61x2	210 ▪ 3050	2600
<b>DVP 11</b>	11,00x2 ▪ 0.67x2	210 ▪ 3050	2600
<b>DVP 12,5</b>	12,50x2 ▪ 0.76x2	210 ▪ 3050	2600
<b>DVP 14</b>	14,00x2 ▪ 0.85x2	210 ▪ 3050	2600
<b>DVP 15</b>	15,00x2 ▪ 0.91x2	210 ▪ 3050	2600
<b>Gear pump</b>	cm <sup>3</sup> /rev ▪ in <sup>3</sup> /rev	bar ▪ psi	min <sup>-1</sup>
<b>KP 20•4</b>	4,95 ▪ 0.30	285 ▪ 4150	2600
<b>KP 20•6,3</b>	6,61 ▪ 0.40	285 ▪ 4150	2600
<b>KP 20•8</b>	8,26 ▪ 0.50	285 ▪ 4150	2600
<b>KP 20•11,2</b>	11,23 ▪ 0.69	275 ▪ 4000	2600
<b>KP 20•14</b>	14,53 ▪ 0.89	265 ▪ 3850	2600
<b>KP 20•16</b>	16,85 ▪ 1.03	260 ▪ 3750	2600
<b>KP 20•20</b>	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 cm<sup>3</sup>/cycle ▪ 0.73 in<sup>3</sup>/cycle to 45 cm<sup>3</sup>/cycle ▪ 2.75 in<sup>3</sup>/cycle.  
 Max. pressure 315 bar ▪ 4600 psi.



### Main characteristics

Up Easy	Displacement	Max. pressure
	cm <sup>3</sup> /cycle ▪ in <sup>3</sup> /cycle	bar ▪ psi
<b>EP 12</b>	12 ▪ 0.73	315 ▪ 4600
<b>EP 25</b>	25 ▪ 1.53	250 ▪ 3600
<b>EP 45</b>	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](http://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)
<b>HF 410</b>	300	▪ 79.3	90	25-60-125-250
<b>HF 431</b>	220	▪ 58.1		60-125-250
<b>HF 434</b>	160	▪ 42.3		60-125-250
<b>HF 437</b>	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)
<b>HF 620</b>	350	▪ 92.5	12	▪ 174	10-25	60-90-125	10-25	
<b>HF 625</b>	220	▪ 58.1	25	▪ 360	10-25	60-90-125	10-25	
<b>HF 650</b>	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 554 series

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



#### HF 570-575-578 series

- ▶ Inside-to-outside flow direction
- ▶ Magnetic pre-filtration
- ▶ Filler cap
- ▶ 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)	MI (µm)	SP (µm)	RP (µm)
<b>HF 502</b>	630	166.5	8	115	3-6-10-25	90	25-60-125	10-25	10-25
<b>HF 508</b>	1000	264	8	115	3-6-10-25	90	25-60-125	10-25	10-25
<b>HF 547</b>	200	53	8	115	3-6-10-25	90	25-60-125	10-25	10-25
<b>HF 554</b>	630	166.5	8	115	3-6-10-25	90	25-60-125	10-25	10-25
<b>HF 570</b>	600	158	8	115				10-25	
<b>HF 575</b>	1200	317	8	115				10-25	
<b>HF 578</b>	1200	317	8	115			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)
<b>HF 525</b>	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)
<b>HF 705</b>	115 ▪ 30.4	350 ▪ 5100		10-25-40-60
<b>HF 710</b>	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)
<b>HF 725</b>	20	5.3	350 ▪ 5100	3-6-10-25	10-25
<b>HF 733</b>	80	21.1	250 ▪ 3600	3-6-10-25	
<b>HF 735</b>	150	39.7	320 ▪ 4650	3-6-10-25	
<b>HF 743</b>	95	25.1	250 ▪ 3600	3-6-10-25	
<b>HF 745</b>	170	45	310 ▪ 4495	3-6-10-25	
<b>HF 748</b>	145	38	280 ▪ 4050	3-6-10-25	
<b>HF 760</b>	450	120	420 ▪ 6100	3-6-10-25	
<b>HF 761</b>	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.







DOC 03 R A

Edition: 03/04.2015

Replaces: DOC 02 R A



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](mailto:info@casappa.com)*

***[www.casappa.com](http://www.casappa.com)***

