



Hydraulics



MA10VO/VSO Series Piston Pumps

The Metaris MA10VO open loop piston pump has proven itself in many applications. Rear and side ported, thru drive auxiliary pump mounting flanges and a large selection of flow and pressure controls makes this pump a strong, versatile alternative in both industrial and mobile applications. Low noise levels, excellent control repeatability, short response times and pressure ratings up to 4000 psi are just a few of the performance characteristics this pump has to offer. Controllers available: Pressure, Pressure/Flow, Load Sensing/Pressure/Flow/Power. This unit is offered in series 31 and 52.



| Pump Series | Displacement (in ³ / cm ³) | Max RPM | Flow at 1800 RPM (gpm / lpm) |
|-------------|---|---------|------------------------------|
| MA10VO-18 | 1.1/18 | 3000 | 8.5/32 |
| MA10VO-28 | 1.7/28 | 3000 | 13/50 |
| MA10VO-45 | 2.7/28 | 3000 | 21/81 |
| MA10VO-60 | 3.7/60 | 2700 | 28.3/107 |
| MA10VO-71 | 4.3/71 | 2200 | 33.5/127 |
| MA10VO-100 | 6.1/100 | 2000 | 47.5/179 |
| MA10VO-140 | 8.5/140 | 1800 | 66.5/251 |

MPVH Series Piston Pumps

Our MPVH open loop piston pump is engineered around heavy duty construction and the durability of the cradle bearing design. Which makes the pump ideally suited for the mobile market. Available in four displacements.



| Pump Series | Displacement (in ³ / cm ³) | Max RPM | Flow at 1800 RPM (gpm / lpm) | Operating Pressure (psi) |
|-------------|---|---------|------------------------------|--------------------------|
| MPVH57 | 3.47/57 | 2400 | 27/102 | 3600 |
| MPVH74 | 4.5/74 | 2200 | 35/132 | 3600 |
| MPVH98 | 5.9/98 | 2100 | 46/176 | 3600 |
| MPVH131 | 8/131 | 2000 | 59/223 | 3600 |

MHPVB Series Piston Pumps

Our MHPVB in-line variable displacement piston pumps have excellent operating features and are capable of operating with many types of hydraulic fluid. These units are durable and offer a long service life, which makes them suitable for the industrial market. Available in six displacements to meet the demands of many applications.



| Pump Series | Displacement (in ³ / cm ³) | Max RPM | Flow at 1800 RPM (gpm / lpm) | Operating Pressure (psi) |
|-------------|---|---------|------------------------------|--------------------------|
| MHPVB5 | .643/10.5 | 3600 | 5/19 | 3000 |
| MHPVB6 | .843/13.8 | 3200 | 6.5/24.6 | 2000 |
| MHPVB10 | 1.29/21.2 | 3200 | 10/37.8 | 3000 |
| MHPVB15 | 2.01/33 | 3000 | 15.7/59.4 | 2000 |
| MHPVB20 | 2.61/42.8 | 2400 | 20/75.7 | 3000 |
| MHPVB29 | 3.76/61.7 | 2400 | 29/109.7 | 2000 |

MHPR Series Piston Pumps

The Metaris MHPR series are variable displacement swashplate piston pumps engineered for specific Caterpillar® applications. They incorporate quality tapered bearings for long service life, heavy duty forged shafts for extra durability and the proven performance of the cradle style swash plate design - providing longevity, reduced wear and lower operating noise.



| Pump Series | Displacement (in ³ / cm ³) | Max Speed Flooded Suction (RPM) | Max Speed with 20 psi boost (RPM) | Horse Power (Cont. / Int.) |
|-------------|---|---------------------------------|-----------------------------------|----------------------------|
| MHPR100 | 6.1/100 | 2300 | 2600 | 120/200 |

PV & MF Series Piston Pumps and Motors

Our 20 series aftermarket replacement pumps and motors are engineered for quality, durability and versatility. Components used are designed for high efficiency output. For example, the full length shaft utilizes a tapered roller bearing arrangement which offers a high loading capacity for external radial forces. Our units are easily serviceable and most all components are replaceable and stocked by Hydralex Global.



| Pump Series | Displacement (in ³ / cm ³) | RPM (Min / Max) | Max Torque (KG·M2·10 ⁻³ / LBF·FT2·10 ⁻³) |
|-------------|---|-----------------|---|
| PV-20 | 2.03/33.3 | 500/3800 | 4.34/103 |
| PV-21 | 3.15/51.6 | 500/3500 | 8.14/193.2 |
| PV-22 | 4.26/69.8 | 500/3200 | 12.34/292.8 |
| PV-23 | 5.43/89 | 500/2900 | 17.77/421.7 |
| PV-24 | 7.24/118.7 | 500/2700 | 29.11/690.80 |
| PV-25 | 10.12/165.8 | 500/2400 | 50.19/1191 |
| PV-26 | 13.87/227.3 | 500/2100 | 86.80/2059.80 |
| PV-27 | 20.36/333.7 | 500/1900 | 161.40/3830 |



| Pump Series | Displacement (in ³ / cm ³) | RPM (Min / Max) | Max Torque (KG·M2·10 ⁻³ / LBF·FT2·10 ⁻³) |
|-------------|---|-----------------|---|
| MF-20 | 2.03/33.3 | 500/3800 | 4.34/103 |
| MF-21 | 3.15/51.6 | 500/3500 | 8.14/193.2 |
| MF-22 | 4.26/69.8 | 500/3200 | 12.34/292.8 |
| MF-23 | 5.43/89 | 500/2900 | 17.77/421.7 |
| MF-24 | 7.24/118.7 | 500/2700 | 29.11/690.80 |
| MF-25 | 10.12/165.8 | 500/2400 | 50.19/1191 |
| MF-26 | 13.87/227.3 | 500/2100 | 86.80/2059.80 |
| MF-27 | 20.36/333.7 | 500/1900 | 161.40/3830 |

MHPR Series Piston Pumps

Our MHPR series pumps come equipped with a load sensing and pressure cut-off control. The load sensing regulator adjusts the amount of flow from the pump to maintain a given pressure differential through a throttling device. Essentially, this matches system flow and pressure by destroking the pump and consequently saves fuel and reduces heat generation.

In the event where system pressures reach a maximum limit, the pressure cut-off control automatically destrokes the pump to avoid opening the pressure relief valve with consequently high losses.



| Pump Series | Displacement (in ³ / cm ³) | Max Speed Flooded Suction (RPM) | Max Speed with 20 psi boost (RPM) | Horse Power (Cont. / Int.) |
|-------------|---|---------------------------------|-----------------------------------|----------------------------|
| MHPR130 | 7.93/130 | 2300 | 2600 | 155/255 |

MV10, 20 & MVTM42 Series Vane Pumps

We offer a large selection of balanced rotor vane pumps. With a variety of displacements, mounting angles and input shafts, this pump has grown to be a mainstay in both mobile and industrial applications. Optional flow control and priority flow end covers are also available.

The MVTM42 completes this range and is available with optional built-in 70 cu.in. & 115 cu.in reservoirs.



| Pump Series | Displacement (in ³ /r) | Max RPM | Flow at 1200 RPM (gpm / lpm) | Operating Pressure (psi) |
|-------------|-----------------------------------|-----------|------------------------------|--------------------------|
| MV10 | .2 to 1.39 | 2800/4800 | 1 to 7 | 2500 |
| MV20 | 1.1 to 2.6 | 2400/3400 | 6 to 13 | 2500 |
| MVTM42 | .2 to 1.18 | 2200 | 1 to 6 | 2000 |



MV/MVQ Series Vane Pumps

MV Series intra-vane design pumps are the workhorse in industrial applications. The 12 vane design, with noise ratings as low as 62 dB(A) makes this the ideal pump for the confined spaces of the industrial workplace. The Metaris MV pumps offer high volumetric efficiencies, pressures up to 3000 psi and time proven reliability.

MVQ Series intra-vane pumps for the mobile market are unmatched in reliability and service. The 10 vane design offers the capability of speeds and pressures required for the mobile environment.

| Pump Series | Displacement (in ³ /r) | Max RPM | Flow at 1200 RPM (gpm / lpm) | Operating Pressure (psi) |
|-------------|-----------------------------------|-----------|------------------------------|--------------------------|
| 20V/VQ | 1.1 to 2.8 | 2700 | 5.71 to 14.55 | 3000 |
| 25V/VQ | 2.47 to 4.12 | 2500/2700 | 12.83 to 21.40 | 2500 |
| 35V/VQ | 4.12 to 7.42 | 2400/2500 | 21.40 to 38.55 | 2500 |
| 45V/VQ | 8.46 to 11.80 | 2200 | 43.95 to 61.30 | 2500 |

MHP/M Series Gear Pumps

Genuine Metaris bearing pumps and motors are available in 10 models with a variety of mounting angles, shaft configurations & porting options. Multi-section units, piggyback designs, dowelled assemblies & flow dividers are also available.

Genuine Metaris bushing pumps and motors are available in 4 models with many of the same available options as our bearing pumps. With ductile iron housings, these pumps allow for pressure ratings as high as 3500 psi for the most demanding of applications.



| Pump Series | Displacement (in ³ /r) | Displacement (cm ³ /r) | Max RPM | Flow at 1800 RPM (gpm/lpm) |
|-------------|-----------------------------------|-----------------------------------|---------|----------------------------|
| MH15 | .69 to 2.7 | 11.2 to 44 | 2400 | 19/75 |
| MH20/30/31 | .99 to 3.94 | 16.1 to 64.6 | 2400 | 27/110 |
| MH25/51 | 1.28 to 6.38 | 20.9 to 104.5 | 2400 | 35/178 |
| MH37 | 2.25 to 9 | 36 to 146 | 2400 | 63/252 |
| MH75/76 | 3.07 to 12.3 | 50.3 to 201 | 2400 | 86/345 |

| Pump Series | Displacement (in ³ /r) | Displacement (cm ³ /r) | Max RPM | Flow at 1800 RPM (gpm/lpm) |
|-------------|-----------------------------------|-----------------------------------|---------|----------------------------|
| MH315 | .62 to 2.48 | 10.2 to 40.6 | 3000 | 17/69 |
| MH330 | .99 to 3.94 | 16.1 to 64.6 | 3000 | 27/110 |
| MH350 | 1.28 to 6.38 | 20.9 to 104.50 | 2400 | 36/178 |
| MH365 | 2.7 to 9 | 44.3 to 146 | 2400 | 75/252 |

MK & ML Series Specialty Gear Pumps

Metaris MK20 & ML51 pumps/motors are engineered with a combination 2/4 bolt mounting flange & bi-rotational construction, giving you the option of installing as a pump or motor. These units features make them the most flexible in today's cost minded market.



| Pump Series | Displacement (in ³ / cm ³) | Max RPM | Flow at 1000 RPM (gpm / lpm) | Pressure (psi) |
|-------------|---|---------|------------------------------|----------------|
| MK20 4 | .98/16 | 2400 | 4/14 | 3000 |
| MK20 6 | 1.47/24 | 2400 | 6/21 | 3000 |
| MK20 8 | 1.97/32 | 2400 | 8/28 | 3000 |
| MK20 11 | 2.46/40 | 2400 | 11/39 | 3000 |
| MK20 13 | 2.96/48 | 2400 | 13/46 | 3000 |
| MK20 15 | 3.45/57 | 2400 | 15/54 | 2500 |
| MK20 17 | 3.94/65 | 2400 | 17/61 | 2500 |
| MK51 19 | 4.46/73 | 2400 | 19/69 | 2500 |
| MK51 23 | 5.2/85 | 2400 | 23/81 | 2500 |
| MK51 25 | 5.73/93 | 2400 | 25/89 | 2500 |
| MK51 27 | 6.37/104 | 2400 | 27/99 | 2500 |

MHUP Series Unloader Pumps

The MHUP unloader pump is ideally suited for the refuse market. It can easily be retro fitted on existing packers without major system changes. The integral 12 VDC solenoid can be operated from the cab, allowing the operator to shift the pump from the work mode to standby mode. The rugged 4 bolt mounting can be installed at the PTO or front mounting off the crankshaft.



| Pump Series | Displacement (in ³ / cm ³) | Max RPM | Flow at 1000 RPM (gpm/lpm) | Pressure (psi) |
|-------------|---|---------|----------------------------|----------------|
| MHUP 27 | 6.1/102 | 2500 | 27/102 | 3000 |
| MHUP 31 | 7.11/117 | 2500 | 31/117 | 3000 |
| MHUP 35 | 8.2/132 | 2400 | 35/132 | 2750 |
| MHUP 40 | 9.27/151 | 2300 | 40/151 | 2750 |

MDV Series Dry Valve Pumps

A practical solution to stopping the vehicle & shifting to engage the PTO, we offer the MDV Dry Valve Pump. Ideal for refuse packers, snow and ice equipment and many other mobile applications, the MDV can reduce fuel costs and operator fatigue. Available in MH51 & MH76 Series with pressure ratings to 2500 psi.



| Pump Series | Displacement (in ³ / cm ³) | Max RPM | Flow at 1800 RPM (gpm/lpm) | Pressure (psi) |
|-------------|---|---------|----------------------------|----------------|
| MDVL 19 | 4.46/73 | 3000 | 19/72 | 3000 |
| MDVL 23 | 5.2/85 | 2500 | 23/87 | 2500 |
| MDVL 25 | 5.73/93 | 2500 | 25/84 | 2500 |
| MDV 27 | 6.1/102 | 3000 | 27/102 | 3000 |
| MDV 31 | 7.11/117 | 3000 | 31/117 | 3000 |
| MDV 35 | 8.2/132 | 3000 | 35/132 | 3000 |
| MDV 40 | 9.27/151 | 2500 | 40/151 | 2500 |

MH Series Dump Pumps

Metaris MH Series dump pumps are known for their ruggedness, reliability and interchangeability. Available in both the 101 Remote Mount and the 102 Direct Mount configurations and C or G frames, these pumps offer cast iron construction, a variety of displacements and "Air Shift" capabilities.

Our Dual Pressure dump pumps come equipped with two relief pressures on them: high pressure (3000 psi) for Walking Floor® applications and low pressure (2000 psi) for dump applications, each is selectable by a supplied air switch.



| Pump Series | Displacement (in ³ /r) | Max RPM | Flow at 1200 RPM (gpm) | Pressure (psi) |
|-------------|-----------------------------------|---------|------------------------|----------------|
| MHC-101/102 | 5.1 to 6.38 | 1800 | 26.5 to 33.1 | 2000 - 2500 |
| MHG-101/102 | 1.48 to 3.94 | 1800 | 7.6 to 20.4 | 2000 - 2500 |
| MHWFD2.0 | 5.1 | 1800 | 26.5 | 2000 - 3000 |



MM Series Orbital Motors

Genuine Metaris Orbital Motors come in a range of displacements and are a functional replacement for common motors in the market today such as Eaton®/Char-Lynn®, Danfoss®, Parker® and White®.

Utilizing proven Roller-Star technology, these motors allow for high efficiency, smooth operation and a long operational life.



| Pump Series | Displacement (in ³ /r) | Displacement (cm ³ /r) | RPM | Flow (gpm / lpm) |
|-------------|-----------------------------------|-----------------------------------|------------|-------------------------|
| MMPS | 3.1 to 24.1 | 50 to 395 | 750 to 133 | 10 to 14 / 38 to 53 |
| MMRSW | 3.1 to 24.1 | 50 to 395 | 775 to 150 | 10.6 to 15.9 / 40 to 60 |
| MMH | 12.2 to 38.4 | 200 to 630 | 360 to 100 | 21.1 / 80 |
| MMW | 12.2 to 38.4 | 200 to 630 | 360 to 100 | 21.1 / 80 |

We offer a variety of flange styles to accommodate a multitude of applications. This includes 2-Bolt, 4-Bolt, Square, Magneto and Wheel Mount options.

Our orbital motors come in both spool and disc valve configurations and are available with multiple shaft and porting options.



| Pump Series | Displacement (in ³ /r) | Displacement (cm ³ /r) | RPM | Flow (gpm / lpm) |
|-------------|-----------------------------------|-----------------------------------|------|----------------------------|
| MMS | 4.9 to 29.9 | 80 to 490 | 3000 | 19.8/75 |
| MMK | 6.7 to 38.1 | 110 to 625 | 3000 | 19.8 to 25.1 / 75 to 95 |
| MMT | 11.9 to 60.1 | 195 to 985 | 2400 | 39.6/150 |
| MMW | 18.9 to 76.3 | 310 to 1250 | 2400 | 42.3 to 52.80 / 160 to 200 |

MH6, MH8 & MHD8 Series Power Take-offs

The Metaris 6 & 8 Bolt Standard Duty PTO is built to last. Cast iron construction, heavy duty output bearings & oversized assembly bolts provide durability and reliability. With several mounting angle and shifter options, our PTOs offer versatility and ease of installation. Our PTOs are functional replacements for Muncie®, Chelsea® and Bezares® PTOs.

For extreme continuous duty applications, the Metaris 8 Bolt Heavy Duty PTO is the operator's choice. Heavy wall cast iron construction, high torque spur gears and extra heavy duty bearings, provide the torque and endurance needed for tough applications.



| Type | PTO Series | Intermittent Torque (lbs./ft.) | HP at 500 RPM Output Speed | HP at 1000 RPM Output Speed |
|-------------|------------|--------------------------------|----------------------------|-----------------------------|
| Medium Duty | MH6 | 250 | 24 | 49 |
| Medium Duty | MH8 | 250 | 24 | 49 |
| Heavy Duty | MHD8 | 400 | 40 | 80 |

Control Towers & Air Controllers

Genuine Metaris Control Towers come in 8", 10" and 12" heights. Their base dimensions are 4" x 5" to center of the bolt holes. These towers will accommodate our current dual controllers and our single controller with an MH102X adapter kit. These towers are made of sturdy steel construction.

Hydraulix offers single and dual controllers. The single controller operates the engagement and disengagement of the PTO. The dual controller operates the engagement and disengagement of both the PTO and the pump. Our dual controllers are available with and without the kick-out option.





Shifters, Feathering Valves & Hydraulic Tanks

We have 3 shifter choices to select from. Both the air, wire and lever PTO shifters utilize a steel fork for durability and strength. All shifters are very compact for close installation areas. Our feathering valves come with a heavy duty body and control lever. They are also equipped with a safety lockout device to prevent unintentional lever movement. Installation kits are available for our 8", 10" and 12" towers.

Genuine Metaris tank options include Polyethylene Upright, Steel and Aluminum Upright and Steel and Aluminum Saddle Mount. Available in the most popular gallon sizes and includes all mounting hardware. Hose kits are also available in 8 different setup configurations.



Piston Pump Replacement Parts

We offer an extensive range of replacement parts for OEM Piston Pumps including Caterpillar®, Kawasaki®, Hitachi®, Komatsu®, Rexroth®, Linde®, Eaton®/Vickers® and Sauer Sundstrand®.

We regularly stock parts like: Ball Guides, Bearings, Block Springs & Disc Springs, Cylinder Blocks & Valve Plates, Housings & Casings, Pilot Pumps, Piston Sets, Seal Kits, Set Plates, Shoe Plates, Shafts, Swash Plate Assemblies, Bolts & Screws and much, much more.

We carry many interchangeable replacement parts for a wide range of Caterpillar® piston and vane pumps.



Vane Pump Cartridge Kits & Parts

We stock a full-line of industrial, mobile & high pressure vane cartridge kits. Compatible with our MV and MVQ series pumps and other similar designed pumps in the market, Genuine Metaris cartridge kits are high in performance, durability and reliability. We also offer a wide range of components including shafts, rotors, vanes, seals & bearings.

In addition, we also offer the MVQH/32 High Pressure Cartridge Kit. Our two piece rotor design and hardened cam rings, improve efficiency and pressure capabilities.



Gear Pump Replacement Parts

Totally interchangeable with OEM, Hydralex Global offers a full line of quality engineered components for gear pumps, including precision heat treated gear sets, thrust plates, seals and bearings.

Whatever the application, Genuine Metaris Replacement Parts will allow you to reduce your costs, increase your ability to carry more inventory and meet customer demands while increasing profits.



iLok Coupling

iLok is the global hydraulic industry's first hand-torqued 5000 psi hydraulic hose connector. While primarily used in the mining industry, there are other hydraulic applications for which iLok is the perfect solution. The iLok coupling is simple to understand and use, easy to connect and disconnect by hand, withstands high impulse applications, has a secure, visible locking system.



GC@32TSi Crimper

The GC32TSi crimper is a revolutionary way to crimp Gates hose and couplings. This new smart, precision crimper includes all the necessary tools and information onboard to crimp factory-quality hose assemblies. The easy-to-use Android touch screen ensures a perfect crimp every time. Simply touch the icons for the hose and couplings you are assembling and the machine will list the proper dies to use as well as the correct crimping specs using Gates eCrimp data.



C5CXH XTreme Heat Hose

Gates C5CXH is a flexible hose for high temperature (300°F) applications. Today, engines contain more power in a smaller space, increasing operating temperatures. C5CXH is a medium- pressure multi-purpose hose used for hot oil line or air brake applications. It is also compatible with marine applications, off-road construction and agricultural vehicles offered with old attachable and crimp-on couplings.



M2T@ XtraTu Dual-Line Hose

Using two joined hoses is costly and cumbersome, adding unnecessary material and labor expense as well as extra bulk that can be problematic when routing. In this new construction, two M2T rubber hoses share a common XtraTuff cover, requiring no adhesives or mechanical bonds for a cost effective and efficient solution.

TuffCoa XTremeTM Plating

Hydraulic couplings need plating to prevent deterioration of the metal. Developed by Gates metallurgical engineers, TCX plating is hexavalent chromate-free. Plating thickness is carefully controlled to prevent damage during crimping that could expose the base metal to corrosion. Uniform plating thickness also ensures a leak-free fit between coupling connections. TCX offers 840 hours of red rust corrosion resistance based on ASTM B117 salt spray testing – 583% greater than the 144-hour SAE industry standard.

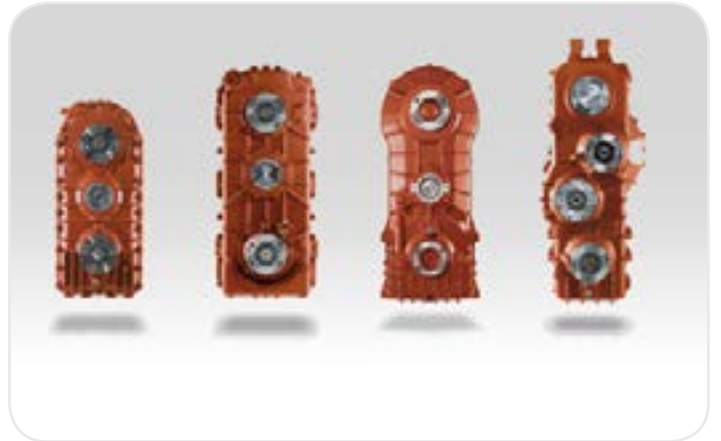
Hydraulic Cylinders



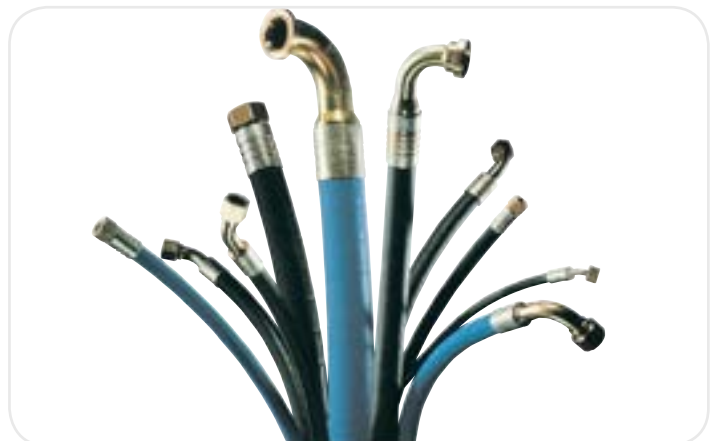
Hydraulic Rock Drills



Kessler Diff



Hydraulic Pipes and Fittings



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