

Genuine Metaris Product Catalog Pumps, Motors, PTOs, Parts and Accessories







Hydraulex Global is a recognized global leading provider of high quality hydraulic and power transmission components servicing the mobile and industrial markets. Our commitment to quality, delivery and customer satisfaction makes us the supplier of choice for hydraulic piston, vane and gear pumps and motors, orbital motors, power take-off products, valves, cylinders and parts.

Hydraulic Piston Pumps

Hydraulex Global's line of Genuine Metaris piston pumps are known for their efficiency, durability and reliability. Available in multiple models, displacements and configurations, our piston pumps are used in a variety of industries, covering both mobile and industrial applications.

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.



The MA10VSO and MPVH Pumps are both available in multiple Caterpillar® applications.

Pump Series	Displacement (in³ / cm³)	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 / 45	2600	21 / 81
MA10VO-60	3.7 / 60	2700	28.05 / 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 (in³ / cm³)	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	8.0 / 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 (in³ / cm³)	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



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 Hydraulex Global.



Pump Series	Displacement (in³ / cm³)	RPM (Min. / Max.)	Max Torque* (KG·M²·10⁻³ / LBF·FT²·10⁻³)
PV-20	2.03 / 33.3	500 / 3800	4.34 / 103.0
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 / 89.0	500 / 2900	17.77 / 421.7
PV-24	7.24 / 118.7	500 / 2700	29.11 / 690.8
PV-25	10.12 / 165.8	500 / 2400	50.19 / 1191.0
PV-26	13.87 / 227.3	500 / 2100	86.80 / 2059.8
PV-27	20.36 / 333.7	500 / 1900	161.40 / 3830.0

^{*} Without Charge Pump

Pump Series	Displacement (in³ / cm³)	RPM (Min. / Max.)	Max Torque (KG·M²·10 ⁻³ / LBF·FT²·10 ⁻³)
MF-20	2.03 / 33.3	500 / 3800	4.34 / 103.0
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 / 89.0	500 / 2900	17.77 / 421.7
MF-24	7.24 / 118.7	500 / 2700	29.11 / 690.8
MF-25	10.12 / 165.8	500 / 2400	50.19 / 1191.0
MF-26	13.87 / 227.3	500 / 2100	86.80 / 2059.8
MF-27	20.36 / 333.7	500 / 1900	161.40 / 3830.0



Hydraulic Piston Pumps

Hydraulex Global's line of Genuine Metaris piston pumps are known for their efficiency, durability and reliability. Available in multiple models, displacements and configurations, our piston pumps are used in a variety of industries, covering both mobile and industrial applications.

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	Max Speed	Max Speed	Horse Power
	(in³ / cm³)	Flooded Suction (RPM)	with 20 psi boost (RPM)	(Cont. / Int.)
MHPR100	6.1 / 100	2300	2600	120 / 200



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	Max Speed	Max Speed	Horse Power
	(in³ / cm³)	Flooded Suction (RPM)	with 20 psi boost (RPM)	(Cont. / Int.)
MHPR130	7.93 / 130	2300	2600	155 / 255

Hydraulic Vane Pumps

Hydraulex Global's selection of Genuine Metaris vane pumps include units for both mobile and industrial applications. Available in a variety of displacements, mounting flanges and shaft options, whatever your need may be - we have you covered.

MV10, 20 & MVTM42 Series Vane Pumps

We offer a large selection of balanced rotor vane pumps. With a variety of displacements, mounting flanges 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 (in³/r)	Max RPM	Max Flow at 1200 RPM (gpm)	Max Operating Pressure (psi)
MV10	.2 to 1.39	2800 - 4800	1 to 7	2500
MV20	1.10 to 2.60	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.

The MV & MVQ series are also available with Thrudrive capability.

Max Operating Displacement Max Flow at 1200 **Pump Series** Max RPM RPM (gpm) (in³/r) Pressure (psi) 1.1 to 2.80 20V / VQ 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

43.95 to 61.30

2500

2200

Tandem pumps available in series:

- V2010, V2020
- 2520V/VQ
- 3520V/VQ, 3525V/VQ
- 4520V/VQ, 4525V/VQ, 4535V/VQ

Triple pumps available in series:

• 2520VQ/V10, 3525VQ/V10, 4535VQ/V10

45V / VQ

8.46 to 11.80

Hydraulic Gear Pumps

Superb technical expertise and modern manufacturing processes make Genuine Metaris gear pumps and motors high quality dependable products. Our gear pumps are well known for there durability, reliability and efficiency. Available in bearing and bushing configurations, our gear pumps are utilized on a wide variety of applications.

MHP/M Series Gear Pumps

Genuine Metaris bearing pumps and motors are available in 10 models with a variety of mounting flanges, 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

Pump Series	Displacement (in³/r)	Displacement (cm³/r)	Max RPM	Flow at 16 (gpm /	
	(/ . /	(5 7.7		min.	max.
MH15	.69 to 2.7	11.2 to 44	2400	5.3 / 21	19 / 75
MH20/30/31	.99 to 3.94	16.1 to 64.6	2400	7.7 / 30.7	27 / 110
MH25/51	1.28 to 6.38	20.9 to 104.5	2400	9.9 / 49.7	35 / 178
MH37	2.25 to 9	36 to 146	2400	17.5 / 70	63 / 252
MH75/76	3.07 to 12.3	50.3 to 201	2400	23.9 / 95.8	86 / 345

ductile iron housings, these pumps allow for pressure ratings as high as 3500 psi for the most demanding of applications.

Pump Series	Displacement (in³/r)	Displacement (cm³/r)	Max RPM	Flow at 1800 RPM (gpm / lpm)	
Corres	(/./	(5111 71)		min.	max.
MH315	.62 to 2.48	10.2 to 40.6	3000	4.8 / 19.3	17 / 69
MH330	.99 to 3.94	16.1 to 64.6	3000	7.7 / 30	27 / 110
MH350	1.28 to 6.38	20.9 to 104.5	2400	9.9 / 49.7	36 / 178
MH365	2.7 to 9	44.3 to 146	2400	21 / 70	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.

The ML51's large diameter dual porting (side & rear) and the MK20's wide range of output flows/pressure ratings of up to 3000 psi will lower your inventory requirements and provide you with a popular product offering.



Pump Series	Displacement (in³ / cm³)	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
ML51 19	4.46 / 73	2400	19 / 69	2500
ML51 23	5.2 / 85	2400	23 / 81	2500
ML51 25	5.73 / 93	2400	25 / 89	2500
ML51 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 retrofitted 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 (in³ / cm³)	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 (in³ / cm³)	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 (in³/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 to 2500
MHG-101/102	1.48 to 3.94	1800	7.6 to 20.4	2000 to 2500

Pump Series	Displacement (in³/r)	RPM	Flow at 1200 RPM (gpm)	Pressure (psi)
MHWFD2.0	5.1	1800	26.5	2000 to 3000

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We're Not Just an Aftermarket Supplier



Get OEM Level Performance with a Hydraulex Reman

When it comes to providing hydraulic component solutions, we not only supply aftermarket products, we also remanufacture units back to like-new specifications. Our Hydraulex Reman units offer you an affordable alternative to the costly and timely replacement of a new component. You get the performance and reliability of a new OEM unit at a fraction of the cost.

Every Hydraulex Reman unit is quality engineered to deliver OEM level performance. All units and parts are thoroughly inspected, machined and/ or replaced when necessary, and then reassembled by one of our expert technicians. Each unit is then tested to OEM specifications. When you choose a Hydraulex Reman, you're getting a top quality, worry-free product that's backed by an industry leading warranty - the same as new.

Ask us about our Hydraulex Reman line today.

Mobile & Industrial Applications

Pumps

Motors

Valves

Servo Valves

Proportional Valves

Cylinders



Hydraulic Orbital Motors

Genuine Metaris Orbital Motors are your best low speed high torque motor option in an economical and compact design. Utilizing proven Roller-Star technology, these motors allow for high efficiency, smooth operation and a long operational life.

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.

Motor Series	Displacement (in³/r)	Displacement (cm³/r)	RPM	Flow (gpm / lpm)
MMPS	3.1 to 24.1	50 to 395	750 to 133	10.0 to 14.0 / 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.

Motor Series	Displacement (in³/r)	Displacement (cm³/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
MMV	18.9 to 76.3	310 to 1250	2400	42.3 to 52.8 / 160 to 200

Hydraulic Power Take-offs

Durability and reliability is what our Power Take-offs (PTOs) for mobile equipment are built around. Available in standard and heavy duty models and in 6 or 8 bolt mounting patterns - we have options to mount on a variety of different transmissions.

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 flange 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.

Туре	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 $\frac{1}{2}$ " 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.

Hydraulex 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.



Hydraulic Replacement Parts

Hydraulex Global offers a full line of aftermarket Genuine Metaris gear, vane and piston replacement parts that meet or exceed the specifications of competitive products. Not to mention, we service a large dealer network both domestically and internationally with our trusted line of quality OEM interchangeable replacement parts. Our extensive inventories assure you prompt shipping to any place in the world.

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



Cartridge kits available for:

- 20V/VQ
- 25V/VQ
- 30V/VQ
- 35V/VQ
- 45V/VQ

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.



Setting the Industry Standard in Hydraulic Repairs

We've specialized in hydraulic component repair services for over 35 years, so you can trust that when it comes to hydraulic component repairs, there is no one better equipped to handle them than Hydraulex Global. We have the experience and expertise necessary for repairing and rebuilding piston, vane and gear type pumps and motors, valves, servo & proportional valves and cylinders, for most any mobile or industrial application.

Every repaired unit goes through systematic testing procedures on contaminate controlled test benches, in accordance with OEM specifications before it leaves our facilities. This ensures your unit is running efficiently, contaminant free, set to OEM spec and ready to get back to work. Exceptional technical knowledge, state-of-the-art equipment and full in-house machining capabilities, give you a flexible one-stop shop for hydraulic repairs.

Contact us for a free quote for repair today.

Repair Services at a Glance

- Expertly Trained and Experienced Technicians
- Free Quotes for Repairs
- Flexible Repair Options
- Service Most All Component Manufacturers
- Stringent Quality Control Procedures
- Equipped with State-of-the-art Contamination Control
- In-house Performance Testing Capabilities of All Brands of Components
- Backed by an Industry Leading Warranty



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Hydraulex Global - A Recognized Global Leading Provider of High Quality Hydraulic Components



Products We Offer

- · Inline Piston Pumps
- · Radial Piston Pumps & Motors
- · Bent Axis Piston Pumps & Motors
- Fixed Volume Vane Pumps
- Variable Volume Vane Pumps
- Gear Pumps
- · Vane Motors

- · Axial Piston Motors
- · High Speed Motors
- · Servo Motors
- · Orbital Motors
- Directional Valves
- Flow Control Valves
- Pressure Control Valves

- · Relief Valves
- · Check Valves
- Stack Valves
- · Servo Valves
- · Proportional Valves
- PTOs (Power Take-offs)
- Cylinders









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