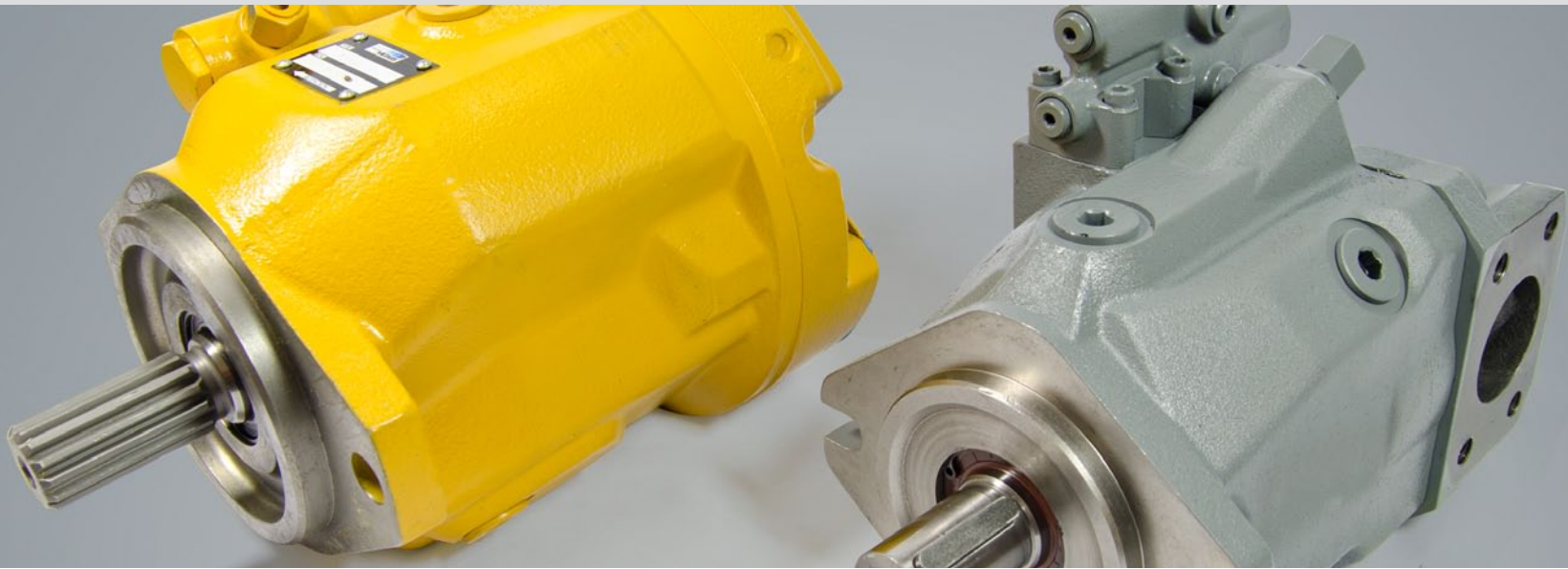


# Genuine Metaris MA10VO/VSO Series Piston Pumps

A10V Series 31 & 52 Replacement Pumps



## Performance When You Need it Most

The Metaris MA10V(S)O open loop piston pump has proven itself in many applications. Rear and side ported, through 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. Our units are easily serviceable and most all components are replaceable and stocked by Hydraulex Global. These units and parts are fit, form and function replacements for Rexroth® A10VO series components.

- Suitable for a variety of applications
- 31 and 52 Series Designs available
- Multiple displacements and options available
- Single and Through-drive shaft models
- Low operating noise level
- Multiple drive shaft options
- Controller options include: DR, DRG, DFR, DFR1 & DFLR
- SAE and metric flange options
- Replacement parts also available
- Direct replacements for Rexroth® A10VO series



# Variable Displacement Pumps

## Model Code Breakdown

**MA10V(S) - O - 71 - DR - 31 - R - P - S - C - 62 - N00**

### Axial Piston Unit

MA10V = Swash Plate Variable Pump

MA10VS = Swash Plate Variable Pump, for Industrial

### Modes of Operation

O = Pump, Open Circuit

### Displacement Size

cm<sup>3</sup>/r (in<sup>3</sup>/r)

18	28	45	60	71	100	140
(1.10)	(1.71)	(2.75)	(3.66)	(4.33)	(6.10)	(8.54)

### Control Devices

	18	28	45	60	71	100	140
<b>DR</b> = Pressure Control							
<b>DRG</b> = G - Remote Control	•	•	•	•	•	•	•
<b>DFR</b> = Pressure and Flow Control							
<b>DFR1</b> = X Channel Plugged	•	•	•	•	•	•	•
<b>DFLR</b> = Pressure, Flow and Power Control	-	•	•	-	•	•	•

### Series

31 Series

52 Series (45 & 60 Displacements Available)

### Rotation

R = Clockwise CW

L = Counter-Clockwise CCW

### Seals

P = Buna-N (NBR per DIN ISO 1629)

V = FPM (Fluorocarbon) Viton

### Shafts

	18	28	45	60	71	100	140
<b>S</b> = SAE Splined Shaft	¾"	7⁄8"	1"	1¼"	1¼"	1½"	1¾"
<b>R</b> = SAE Splined Shaft, Reinforced (Higher Through-drive Torques)	¾"	7⁄8"	1"	1¼"	1¼"	1½"	-
<b>U</b> = SAE Splined Shaft, Smaller Size (not for pumps w/Through-drive)	5⁄8"	-	7⁄8"	1"	-	1¼"	-
<b>W</b> = SAE Splined Shaft, Reinforced U-type Shaft	-	-	7⁄8"	1"	-	1¼"	-
<b>K</b> = SAE Keyed Shaft	¾"	7⁄8"	1"	1¼"	1¼"	1½"	1¾"
<b>P</b> = Parallel w/Key DIN 6885	18mm	22mm	25mm	32mm	32mm	40mm	45mm

### Mounting Flange

	18	28	45	60	71	100	140
<b>C</b> = SAE 2-Bolt	3¼"	4"	4"	4"	5"	5"	-
<b>A</b> = ISO 2-Bolt	80mm	100mm	100mm	-	125mm	125mm	-
<b>D</b> = SAE 4-Bolt	-	-	-	5"	-	-	6"
<b>B</b> = ISO 4-Bolt	-	-	-	-	-	-	180mm

### Through-drive

	18	28	45	60	71	100	140
<b>N00</b> = Without Through-drive	•	•	•	•	•	•	•

### With through-drive to accept axial piston or gear pump

Mtg. Flange / Shaft/Coupling	18	28	45	60	71	100	140
<b>K04</b> = 101-2 (B) 1" 15T (B-B) A10V45(S,R), 60(U,W)	-	•	•	•	•	•	•
<b>K01</b> = 82-2 (A) 5⁄8" 9T (A) A10V18(U,W)	•	•	•	•	•	•	•
<b>K02/K68</b> = 101-2 (B) 7⁄8" 13T (B) A10V28(S,R), 45(U,W)	-	•	•	•	•	•	•
<b>K07</b> = 127-2 (C) 1¼" 14T (C) A10V71(S,R), 100(U,W)	-	-	-	-	•	•	•
<b>K24</b> = 127-2 (C) 1½" 17T (C-C) A10V100(S,R), 85(S)	-	-	-	-	-	•	•
<b>K17</b> = 152-4 (D) 1¾" 13T (D) A10V140(S,R)	-	-	-	-	-	-	•
<b>KB7</b> = ISO 3019-2 1¾" 13T (D) A10V140(S,R)	-	-	-	-	-	-	•

### Service Ports

Pressure Port B & Suction Port S	18	28	45	60	71	100	140
<b>61</b> = Rear Ports, UNC Mounting Screws <sup>1 2</sup>	-	•	•	•	•	•	•
<b>62</b> = Opposite Side Ports, UNC Mounting Screws <sup>2</sup>	•	•	•	•	•	•	•
<b>11</b> = Rear Ports, Metric Mounting Screws <sup>1</sup>	-	•	•	•	•	•	•
<b>12</b> = Opposite Side Ports, Metric Mounting Screws	•	•	•	•	•	•	•
<b>91</b> = Rear Ports, UNC Mounting Screws <sup>1</sup>	-	-	-	-	•	-	-
<b>92</b> = Opposite Side Ports, UNC Mounting Screws	-	-	-	-	•	-	-
<b>41</b> = Rear Ports, Metric Mounting Screws <sup>1</sup>	-	-	-	-	•	-	-
<b>42</b> = Opposite Side Ports, Metric Mounting Screws	-	-	-	-	•	-	-
<b>64</b> = Rear Ports, UNC Mounting Screws <sup>3</sup>	-	-	•	-	-	-	-

Port pos. 61, 11 only for version without Through-drive

<sup>1</sup> All rear porting, non Through-drive only

<sup>2</sup> MA10V071 = 8 threaded holes on pressure port code 11, 61, 12 & 62

<sup>3</sup> 52 Series only

# Proven Performance

## A10V(S)O 18-140, Series 31

Pump Series	Displacement (in <sup>3</sup> / cm <sup>3</sup> )	Max RPM	Flow at 1800 RPM (gpm / lpm)	Operating Pressure (psi)
MA10VO-18	1.10 / 18	3000	8.5 / 32	4000
MA10VO-28	1.71 / 28	3000	13 / 50	4000
MA10VO-45	2.75 / 45	2600	21 / 81	4000
MA10VO-71	4.33 / 71	2200	33.5 / 127	4000
MA10VO-100	6.10 / 100	2000	47.5 / 179	4000
MA10VO-140	8.54 / 140	1800	66.5 / 251	4000



## A10V(S)O 45 & 60, Series 52

Pump Series	Displacement (in <sup>3</sup> / cm <sup>3</sup> )	Max RPM	Flow at 1800 RPM (gpm / lpm)	Operating Pressure (psi)
MA10VO-45	2.75 / 45	2600	21 / 81	3600
MA10VO-60	3.66 / 60	2700	28.3 / 107	3600

## Replacement Parts

We also carry a complete line of replacement parts for A10V style pumps. These parts are interchangeable with OEM and are available for most all displacement sizes. Our lineup of parts includes:

- Rotating Groups
- Cylinder Blocks
- Piston Sets
- Lens Plates
- Cradles
- Shafts
- Seal Kits
- Bearings



## Reman Options Available

In addition to our aftermarket line of A10V style pumps, we also remanufacture OEM Rexroth® A10V pumps. These units are like-new with new parts installed where necessary, and provide OEM level performance. All units are tested and set to OEM spec before leaving any of our facilities and are backed by our industry leading 18 month from time of purchase, 12 month from time of install, warranty.

# Hydralex 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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