## .33 hp (.25 kW) M Series Pump Models

• Pressures to 25000 psi

• All Hydraulic fluids, water (plain or DI), solvents, mild

chemicals, liquefied gases

(1724 bar)



## **Key Features**

- Choice of 6 models, 9 ratios, 28 possible combinations
- Flows to 2 gpm (7.5 l/min)
- Choice of wetted materials
- Single air head
- Drive pressure 25 to 125 psi (1.8 to 9 bar)

## **Optional Modifications**

Number	Description
-HP 26082 26220-2 26220-3	Hand pump attachment (with handle). Provides manual operation of pump for precision pressure control or use without air power. Handle only. With handle. Without handle. Kits for converting existing units.
-V	$Manual \ release \ with \ relief \ valve. For \ M \ and \ MS \ pumps \ only. \ Provides \ high \ pressure needle \ valve \ with \ internal \ adjustable \ safety \ relief \ downstream \ of \ pump \ outlet \ checks. \ Tank \ return \ is \ \%'' \ NPT \ in \ pump \ body.$
26063-3	Dead Man valve. ¼″ NPT port.
26064-3	Combination air regulator/filter with gauge. ¼" NPT port.
26065-3	Speed control valve. ¼" NPT port.
26065-3 plus 26064-3	-C air controls installed on pump. ¼″ NPT port.
28320	Manifold mount inlet port. Provides 0-ring boss in aluminum block to enable mounting on side of tank below oil level. Modification applies to M-21 through M-188 only.
28590	Palm or foot start/stop button drive. Spring loaded shut.
28700-1	Air OP release valve.
28926	Remote start/stop control. Provides $\ensuremath{\sc {start}}\xspace^{\mbox{"}}$ NPT bleed signal port for single line remote control.
29002	Viton air drive.
29697	Single stroke from remote air pulse. Useful for metering applications. One stroke per air pulse signal; eliminates automatic cycling. $\%^{\prime\prime}$ NPT signal port.
51331	EPR seals for liquid section for 29723-XX ratio pumps.
51788	Piped exhaust – standard. Provides connection ports for drive and pilot exhausts. Enables under tank top mounting and/or natural gas drive.
51794	Piped exhaust – sour gas. With hand pump (HP).
51794-2	Piped exhaust – sour gas. Without hand pump (HP).
51804	Muffler (for use with piped exhaust modifications below). $\ensuremath{\ensuremath{\mathcal{M}}}^{\prime\prime}$ NPT male port.

Model	Nominal Ratio	Maximum working pressure Consult chart on page 6 for more information regarding continuous/intermittent pressures.	Displacement per Cycle		
M, MDSTV, MDTV	-5	625 psi (43 bar)	.83 cu in (13.6 ml)		
M, MS	-7	900 psi (62 bar)	.6 cu in (9.8 ml)		
	-12	1500 psi (103 bar)	.36 cu in (5.9 ml)		
M, MS,	-21	2600 psi (179 bar)	.2 cu in (3.3 ml)		
MCPV,	-36	4500 psi (310 bar)	.12 cu in (2.0 ml)		
29723	-71	8800 psi (607 bar)	.06 cu in (1.0 ml)		
M, MS	-110	13,500 psi (931 bar)	.039 cu in (0.6 ml)		
	-188	15,000 psi (1034 bar)	.023 cu in (.4 ml)		
MCPV,	-110	10,000 psi (688 bar)	.039 cu in (0.6 ml)		
29723	-188		.023 cu in (.4 ml)		
MS	-220	25000 psi (1723 bar)	.021 cu in (.34 ml)		
For servi	For service codes, see page 17.				

For weights and dimensions, see page 18.

Number	Description
51809	Normally open air operated release with relief valve. Provides highest release flow capacity. Will hold full pump psi piloted from drive air. Vents are not threaded. Ref. drawing 56643 for tank top mounting parts.
51809-1	Normally closed air operated release with relief valve. Used to hold hydraulic jacks. Will release up to 11000 psi (using 100 psi air). Vents are not threaded. Ref. drawing 56643 for tank top mounting parts. Not available in 188:1 ratio.
51810	Safety relief valve. Relief is upstream of outlet check. Vent hole 1/16 NPT M or MS series -21 through 188.
51811	External air pilot. Provides ¼" NPT port for external air to pilot for remote start/stop.
52340	Solid air cap.
52950	Electric stroke counter provision. Micro switch (BZE6-2RQ) mounted on upper cap trips with each cycle.
53175	Level II cleaning.
53304	High pressure outlet port. Fits $\ensuremath{\sc 4}^{\prime\prime}$ 0.D. high pressure threaded and coned tube.
53784	Piped exhaust (drive only). For field conversion of any .33 HP pump. Provides $\ensuremath{\ensuremath{\mathcal{W}}}$ NPT exhaust port.
53935	Low temperature drive. Enables operation down to 5°F. Some sacrifice of seal life at normal temperature. M or MS series.
54179	Stroke adjuster (includes 29697 above). Useful for metering applications. Knurled knob with vertical scale on pump cap.
57905	No return spring. Provides improved fill on suction stroke pumping liquefied gases by utilizing the inlet pressure. Only available on M and MS series.
59888	Cycle timer installed.
80103	Noise reduction kit fitted.
80348	SAE outlet for M-pumps, %" SAE, 6500 psi (448 bar) max.
81499	EPR Seals for M and MS series for Liquid Section.
82367	SS Trim and Sour Gas Mod for 29723, MCPV, and M series pumps
82500	ATEX Modification (Available on MS & 29723 but not M series).
85630	Conversion kit, new style exhaust muffler.
86337	Extended life air drive.

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