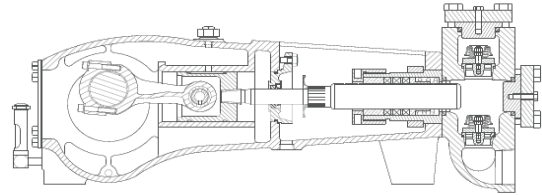




Official Distributor of Pentair Industrial Products



No. of plungers..... 3
 Maximum rated speed..... 500 rpm
 Stroke length..... 3.00 in. 76.2 mm
 Maximum rated power..... 60.0 HP 44.7 KW
 Maximum rod load 4752 lb. 21.09 kN
 Weight..... 945 lbs.

ENGLISH UNITS

MA-60H

PLUNGER SIZE IN.	STUFFING BOX BORE IN.	MAX PSI	* GALLON REV.	PER/	100 RPM US GPM	200 RPM US GPM	300 RPM US GPM	400 RPM US GPM	500 RPM US GPM
1.375	2.250	3200	0.058		5.8	11.6	17.4	23.1	28.9
1.250	2.250	3872	0.048		4.8	9.6	14.3	19.1	23.9
1.125	1.750	4780	0.039		3.9	7.7	11.6	15.5	19.4
1.000	1.750	5000	0.031		3.1	6.1	9.2	12.2	15.3

HP REQUIRED @ RPM**

12.0 24.0 36.0 48.0 60.0

METRIC UNITS

MA-60H

PLUNGER SIZE MM.	STUFFING BOX BORE MM.	MAX PRESS. BAR	* LITER REV.	PER/	100 RPM LPM	200 RPM LPM	300 RPM LPM	400 RPM LPM	500 RPM LPM
34.9	57.2	220.6	0.219		21.9	43.8	65.8	87.7	109.6
41.3	57.2	267.0	0.181		18.1	36.2	54.3	72.4	90.5
38.1	44.5	329.6	0.147		14.7	29.3	43.9	58.6	73.3
34.9	44.5	344.8	0.116		11.6	23.2	34.7	46.3	57.9

KW REQUIRED @ RPM**

8.9 17.9 26.8 35.8 44.7

*Displacement based on 100% Volumetric Efficiency

**Power based on 90% Mechanical Efficiency

$$IHP = \frac{USGPM \times (Discharge \text{ psig} - 1/2 \text{ Suction psig})}{1.542}$$

$$IKW = \frac{M^3/HR \times (Discharge \text{ Bar} - 1/2 \text{ Suction Bar})}{17.99}$$

$$PUMP \text{ RPM} = \frac{USGPM \text{ Desired}}{USGPM \text{ per Revolution of Selected Plunger}}$$

$$PUMP \text{ RPM} = \frac{M^3/HR \text{ Desired}}{M^3 \text{ per Revolution of Selected Plunger}}$$

MA-60H Triplex Pump

ENGINEERING DATA

MA-60H Triplex Pump

POWER END ENGINEERING DATA

Max. Input Power @ Speed	60 HP @ 500 rpm
Rated Continuous Plunger Load	4,752 lb.
Max. Rated Continuous Speed.....	550 rpm
Normal Continuous Speed Range	150 to 450 rpm
Minimum Speed	100 rpm
Oil Capacity	9 U.S. Qrts
Power End Oiling System	Splash
Power Frame, One-Piece	Cast Iron
Crosshead, Full Cylindrical	Cast Iron
Crosshead, Dia. x Length	4 3/4 x 5 in.
Crankshaft	Ductile Iron
Crankshaft Diameters:	
At Tapered Roller Bearings	2 5/8 in.
At Crankpin Bearings, Dia. x Length	3 1/2 x 3 in.
Crosshead (Wrist) Pin, Case-Hardened and Ground	AISI 8620
Wrist Pin Bushing, SAE 660, dia. x width	1 5/16 x 2 in.
Main Bearings, Tapered Roller	Timken
Center Bearings, Two Precision Steel Backed	Babbitt Lined
Crankpin Bearings, Precision Automotive.....	Steel Backed, Babbitt-Lined
Extension (Pony) Rod Integral w/ Plungers	316 S.S.
Connecting Rod, Automotive Type	Ductile Iron
Average Crosshead Speed @ 550 rpm	250 fpm
Minimum Life Expectancy, Main Bearings, L ₁₀	60,000+ hrs.

LIQUID END ENGINEERING DATA

Max. Continuous Working Pressure	5,000 psi
Hydrostatic Test	7,500 psi
Available Liquid End Materials, A.S.T.M.	
Carbon Steel Block	4140
Stainless Steel Block	2205 Duplex or 15-5 PH S.S.
Plunger Type "Rokide" (Chromium Oxide-Coated)	316 S.S.
Packing Types Available:	
Spring-loaded, Chevron	Style 120X
Spring-loaded, Kevlar Compression	Style 140
Valve Cover and Cyl. Head Plugs	316 S.S.
Seals, Stuffing Boxes, Valve Covers, Cyl. Heads	Buna-N
Available Valve Types:	
Standard, Disc Hardened and Lapped	17-4 PH S.S.
Optional, Hardened Abrasion Resistant	17-4PH S.S.
Valve Spring Material	Inconel
Valve Seat, Liquid Passage Area	2.3 sq.in.
Avg. Liquid Velocity with 1 1/4" plungers @ 500 rpm:	
thru Valve Seat	2.2 fps
thru Suction Manifold	1.92 fps
thru Discharge Manifold	13.5 fps

MA-60H Triplex Pump



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