

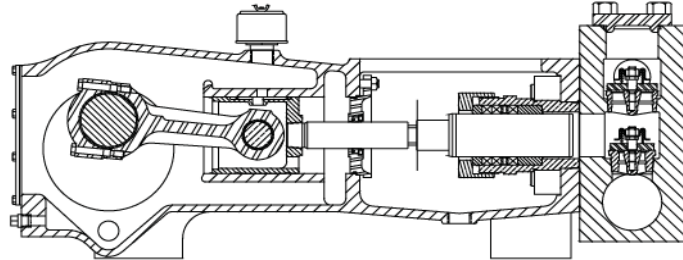


Official Distributor of Pentair Industrial Products

# MYERS® APLEX SERIES

## MA-240H

### QUINTUPLEX PLUNGER PUMP



Number of Plungers .....	5
Maximum Rated Speed.....	450 RPM
Stroke Length.....	4.25 inches – 108.0 mm
Maximum Rated Power .....	240.0 HP – 178.8 kW
Maximum Rod Load.....	8,937 lbs. – 39.7 kN
Weight.....	3,240 lbs.

#### English Units

PLUNGER SIZE IN.	STUFFING BOX BORE IN.	MAX. PSI	*GALLON PER REV.	250 RPM US GPM	300 RPM US GPM	350 RPM US GPM	400 RPM US GPM	450 RPM US GPM
1.875	2.875	3237	0.2540	63.5	76.2	88.9	101.6	114.3
1.750	2.875	3716	0.2213	55.3	66.4	77.5	88.5	99.6
1.625	2.500	4309	0.1908	47.7	57.2	66.8	76.3	85.9
1.500	2.500	5000	0.1626	40.7	48.8	56.9	65.0	73.2
HP REQUIRED @ RPM**				133.0	159.8	186.2	213.1	240.0

#### Metric Units

PLUNGER SIZE mm	STUFFING BOX BORE mm	MAX. PRESS. BAR	*LITERS PER REV.	250 RPM LPM	300 RPM LPM	350 RPM LPM	400 RPM LPM	450 RPM LPM
47.6	73.0	223.1	0.9616	240.4	288.5	336.6	384.6	432.7
44.5	73.0	256.2	0.8378	209.5	251.3	293.2	335.1	377.0
41.3	63.5	297.1	0.7224	180.6	216.7	252.8	289.0	325.1
38.1	63.5	344.7	0.6156	153.9	184.7	215.5	246.2	277.0
kW REQUIRED @ RPM**				99.0	119.0	138.7	158.7	178.8

\*Displacement based on 100% Volumetric Efficiency

\*\*Power based on 90% Mechanical Efficiency

$$IHP = \frac{USGPM \times (\text{Discharge psig} - 1/2 \text{ Suction psig})}{1542}$$

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

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

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

# MA-240H Quintuplex Pump

# Engineering Data

## MA-240H Quintuplex Pump

### Power End Engineering Data

Maximum Input HP @ Speed .....	240 HP @ 450 RPM
Rated Continuous Plunger Load .....	8,937 lbs.
Maximum Rated Continuous Speed .....	450 RPM
Normal Continuous Speed Range .....	150 to 420 RPM
Minimum Speed .....	100 RPM
Oil Capacity .....	54 U.S. Quarts
Power End Oiling System .....	Pressure Lubrication System
Power Frame, One-Piece .....	Cast Iron
Crosshead, Full Cylindrical .....	Cast Iron
Crosshead, Diameter x Length .....	5-3/4 x 6-3/16 inches
Crankshaft .....	Ductile Iron
Crankshaft Diameters:	
At Drive Extension .....	3.875/3.874 inches
At Tapered Roller Bearings .....	4 inches
At Center Bearings .....	9-3/8 inches
At Crankpin Bearings, Dia. x Length .....	4 x 3 inches
Crosshead (Wrist) Pin, Case-Hardened and Ground .....	AISI 8620
Main Bearings, Tapered Roller .....	Timken®
Crankpin Bearings, Precision Automotive .....	Steel Backed, Babbitt-Lined
Extension (Pony) Rod, Integral with Plungers .....	316 SS
Connecting Rod, Automotive Type .....	Ductile Iron
Average Crosshead Speed @ 450 RPM .....	300 fpm
Minimum Life Expectancy, Main Bearings, L <sub>10</sub> .....	75,000+ hrs.

### Liquid End Engineering Data

Maximum Continuous Working Pressure .....	5,000 psi
Hydrostatic Test:	
Discharge .....	7,500 psi
Suction .....	425 psi
Available Liquid End Materials, ASTM:	
Stainless Steel Block .....	15-5PH SS
Forged Steel .....	4140
Plunger Type Rokide (Chromium Oxide-Coated) .....	410 SS
Stuffing Boxes, Field-Removable and Replaceable:	
Nickel Aluminum Bronze .....	B148-C955
Carbon Steel .....	1020
Packing Types Available:	
Spring-Loaded, Braided Teflon® & Kevlar® .....	Style 140
Spring-Loaded, Cup-Type .....	Style 120X
Valve Cover and Cylinder Head Plugs .....	316 SS
Retainer Plates, Ductile Iron, ASTM .....	A536 80-55-06
Seals, Stuffing Boxes, Valve Covers, Cylinder Heads .....	Buna-N
Disc Valve Types .....	17-4 PH SS
Valve Spring Material .....	Inconel®
Valve Seat, Liquid Passage Area .....	2.3 square inches
Average Liquid Velocity with 1 7/8" Plungers @ 450 RPM:	
Through Valves .....	6.4 fps
Through Suction Manifold .....	2.9 fps
Through Discharge Manifold .....	11.9 fps

All drawings and specifications subject to change without notice.

# MA-240H Quintuplex Pump



740 EAST 9TH STREET,  
ASHLAND, OHIO 44805

269 TRILLIUM DRIVE, KITCHENER,  
ONTARIO, CANADA N2G 4W5

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