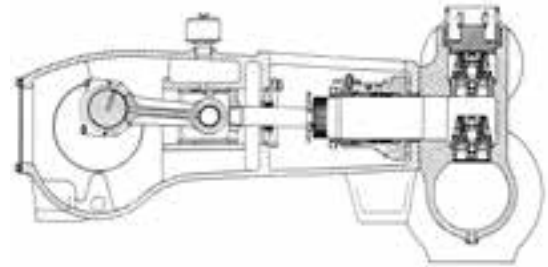


MYERS® APLEX SERIES

MA-240K-HD QUINTUPLEX PLUNGER PUMP



Number of Plungers 5
 Maximum Rated Speed 450 RPM
 Stroke Length 4.25 inches – 108.0 mm
 Maximum Rated Power 275 HP – 205 kW
 Maximum Rod Load 10,300 lbs. – 45.8 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
4.500	5.250	644	1.463	365.8	438.9	512.1	585.2	658.4
4.375	5.250	681	1.383	345.7	414.9	484.1	553.2	622.3
4.250	5.250	722	1.305	326.3	391.5	456.8	522.0	587.3
4.125	5.000	766	1.229	307.2	368.7	430.2	491.6	553.1
4.000	5.000	815	1.156	289.0	346.8	404.6	462.4	520.2
3.875	5.000	868	1.085	271.3	325.5	379.8	434.0	488.3
3.750	5.000	927	1.016	254.0	304.8	355.6	406.4	457.2
3.625	4.500	992	.9494	237.4	284.8	332.3	379.8	427.2
3.500	4.500	1065	.8851	221.3	265.5	309.8	354.0	298.3
HP REQUIRED @ RPM**				153	183	214	244	275

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
114.3	133.4	44.4	5.5389	1384.7	1661.7	1938.7	2245.6	2492.5
111.1	133.4	46.9	5.2360	1309.0	1570.8	1832.6	2094.4	2356.2
108.0	133.4	49.8	4.9407	1235.2	1482.2	1729.2	1976.3	2223.3
104.7	127.0	52.8	4.6529	1163.2	1395.8	1628.5	1861.2	2093.8
101.6	127.0	56.2	4.3766	1094.2	1313.0	1531.8	1750.6	1969.5
98.4	127.0	59.8	4.1078	1026.9	1232.3	1437.7	1643.1	1848.5
95.3	127.0	63.9	3.8466	961.7	1154.0	1346.1	1538.6	1731.0
92.1	114.3	68.4	3.5944	898.6	1078.3	1258.0	1437.8	1617.5
88.9	114.3	73.4	3.3510	837.8	1005.3	1172.9	1340.4	1508.0
kW REQUIRED @ RPM**				114	137	160	182	205

*Displacement based on 100% Volumetric Efficiency

**Power based on 90% Mechanical Efficiency

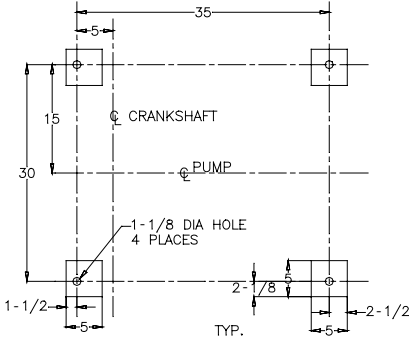
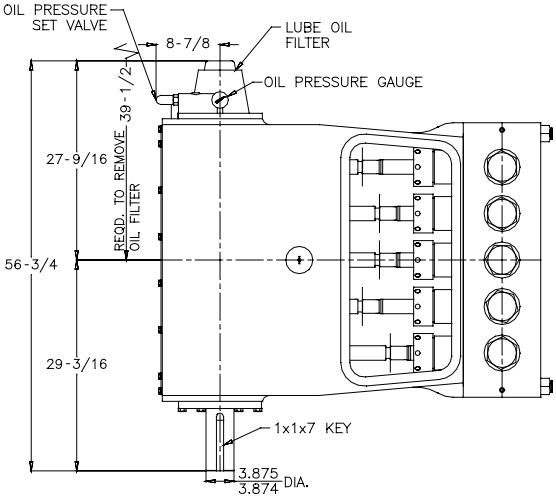
$$\text{IHP} = \frac{\text{USGPM} \times (\text{Discharge psig} - 1/2 \text{ Suction psig})}{1542}$$

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

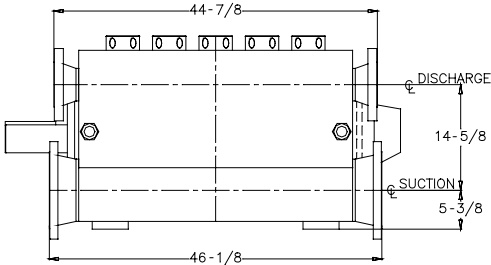
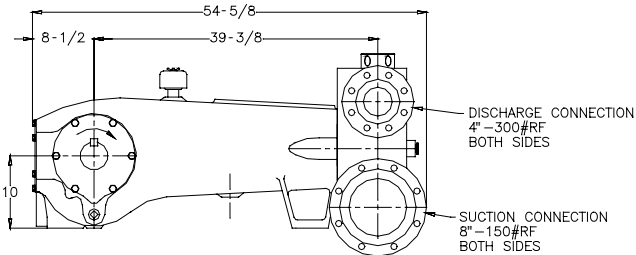
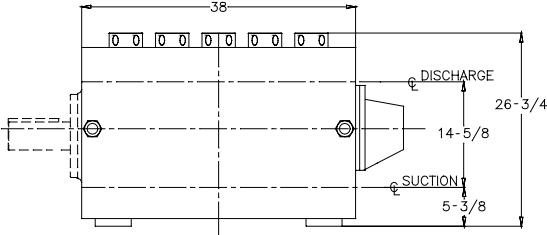
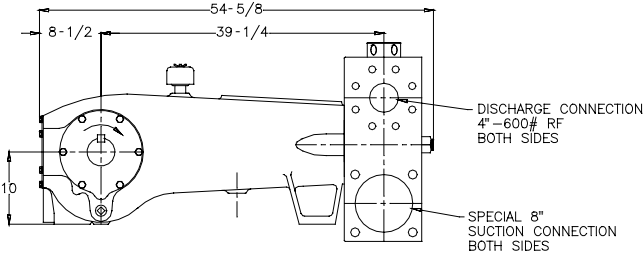
$$\text{PUMP RPM} = \frac{\text{USGPM Desired}}{\text{USGPM per Revolution of Selected Plunger}}$$

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

MA-240K-HD Quintuplex Pump



FOUNDATION PLAN



Engineering Data

MA-240K-HD Quintuplex Pump

Power End Engineering Data

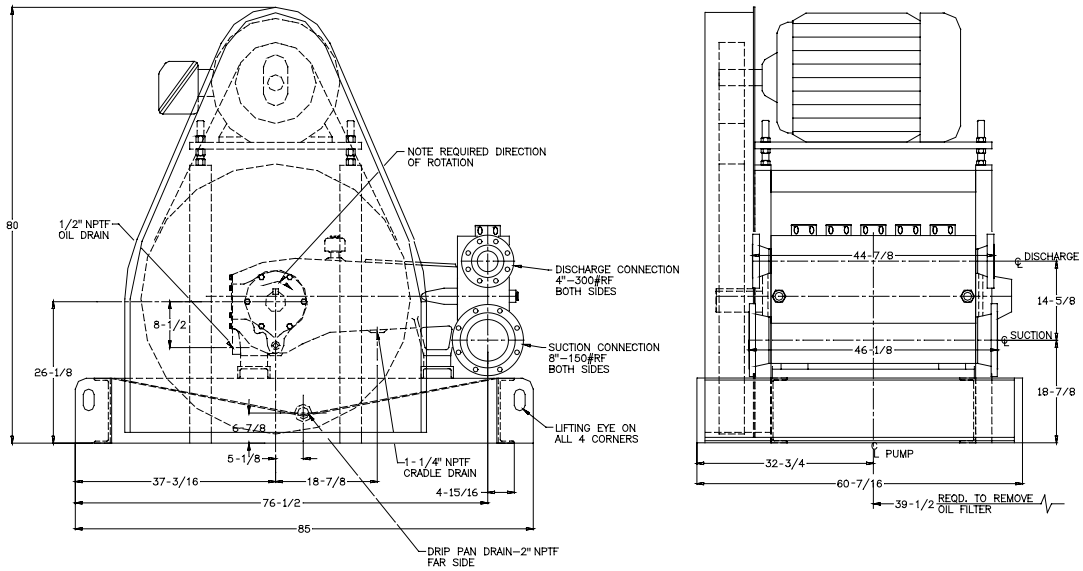
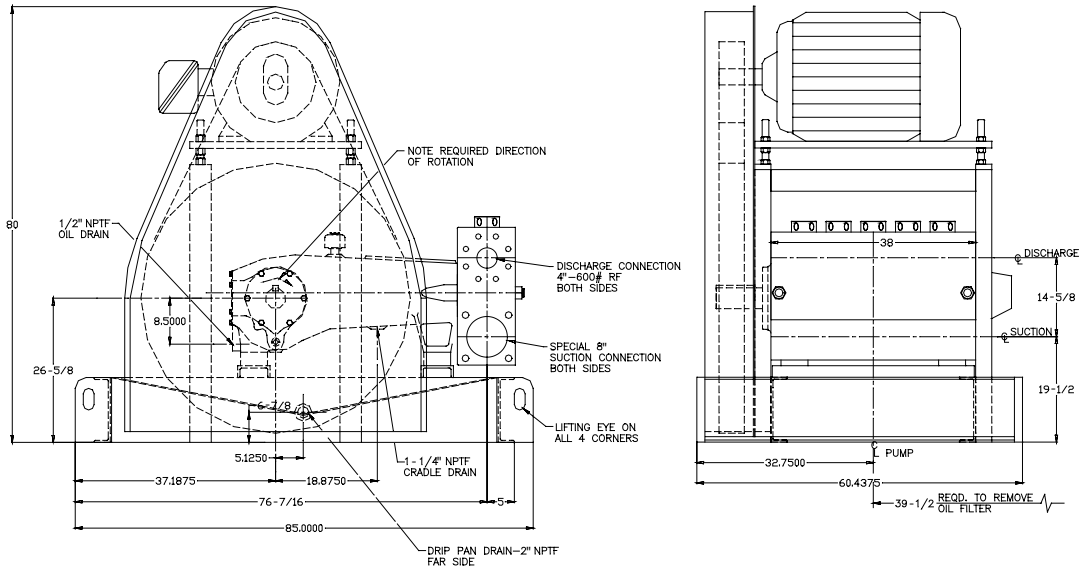
Maximum Input HP @ Speed	240 HP @ 450 RPM
Rated Continuous Plunger Load	10,300 lbs.
Maximum Rated Continuous Speed	450 RPM
Normal Continuous Speed Range	150 to 400 RPM
Minimum Speed	100 RPM
Oil Capacity	54 U.S. Quarts
Power End Oiling System.....	Pressure Lubrication System
Power Frame, One-Piece.....	Cast Iron
Crosshead, Full Cylindrical.....	Cast Iron
Crosshead, Diameter x Length.....	5-3/4 x 6-3/16 inches
Crankshaft	Forged & Nitrided Steel
Crankshaft Diameters:	
At Tapered Roller Bearings	4 inches
At Crankpin Bearings, Diameter x Length.....	4 x 3 inches
Crosshead (Wrist) Pin, Case-Hardened and Ground.....	AISI 8620
Wrist Pin Bushing, SAE 660, Diameter x Width.....	2 x 3 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 with Plungers.....	316 SS
Connecting Rod, Automotive Type.....	Ductile Iron
Average Crosshead Speed @ 550 RPM.....	300 fpm
Minimum Life Expectancy, Main Bearings, L ₁₀	75,000+ hrs.

Liquid End Engineering Data

Maximum Continuous Working Pressure	1,000 psi
Hydrostatic Test	1,500 psi
Available Liquid End Materials, ASTM:	
Stainless Steel Block.....	Various Grades
Nickel Aluminum Bronze Casting.....	B148-C955
Forged Steel Block	A105
Ductile Iron Casting.....	A536 Gr. 80-55-06
Plunger Type Rokide® (Chromium Oxide-Coated).....	316 SS
Stuffing Boxes, Field-Removable and Replaceable:	
Nickel Aluminum Bronze	B148-C954
Carbon Steel.....	1020
Packing Types Available:	
Gland-Loaded, Non-Adjustable.....	Style 838
Spring-Loaded, Braided Teflon® & Kevlar®	Style 140
Spring-Loaded, Cup-Type.....	Style 120X
Spring-Loaded, Garlock	Style 8921K
Seals, Stuffing Boxes, Valve Covers, Cylinder Heads.....	Buna-N
Disc Valve Types:	
Regularly Furnished, Acetal Resin	Delrin®
Optional, Hardened and Lapped.....	17-4 PH SS
Valve Spring Material.....	Inconel®
Valve Seat, Liquid Passage Area.....	6.54 square inches
Average Liquid Velocity with 4½" Plungers @ 450 RPM:	
Through Valves	12.9 fps
Through Suction Manifold	4.2 fps
Through Discharge Manifold	18.4 fps

All drawings and specifications subject to change without notice.

MA-240K-HD Quintuplex Pump



740 EAST 9TH STREET,
ASHLAND, OHIO 44805
WWW.FEMYERS.COM

490 PINEBUSH ROAD, UNIT 4,
CAMBRIDGE, ONTARIO N1T 0A5
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