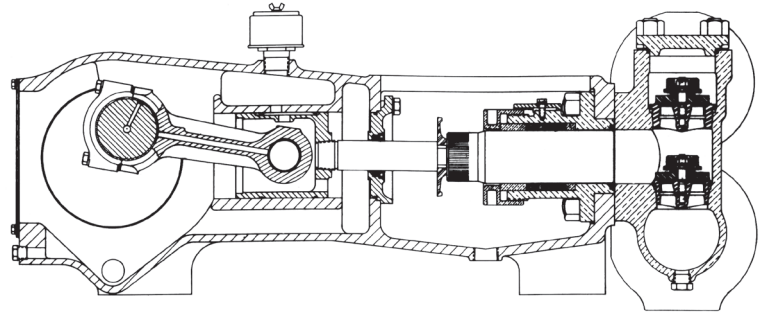


MYERS® APLEX SERIES

MA-120L

TRIPLEX PLUNGER PUMP



ENGLISH UNITS

MA-120L

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
3.500	4.500	775	0.531	132.8	159.3	185.9	212.4	239.0
3.375	4.500	833	0.494	123.4	148.1	172.8	197.5	222.2
3.250	4.500	898	0.458	114.5	137.4	160.3	183.2	206.0
3.125	4.000	971	0.423	105.8	127.0	148.2	169.3	190.5
3.000	4.000	1054	0.390	97.5	117.0	136.6	156.1	175.6
2.875	4.000	1148	0.358	89.6	107.5	125.4	143.3	161.2
2.750	4.000	1254	0.328	82.0	98.4	114.7	131.1	147.5
2.625	4.000	1377	0.299	74.7	89.6	104.5	119.5	134.4
2.500	3.250	1518	0.271	67.7	81.3	94.8	108.4	121.9
2.375	3.250	1682	0.245	61.1	73.4	85.6	97.8	110.0

HP REQUIRED @ RPM**

	66.7	80.1	93.4	106.8	120.0
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METRIC UNITS

MA-120L

PLUNGER SIZE MM.	STUFFING BOX BORE MM.	MAX PRESS. BAR	* LITER PER/REV.	250 RPM LPM	300 RPM LPM	350 RPM LPM	400 RPM LPM	450 RPM LPM
88.9	114.3	53.4	2.010	502.5	603.0	703.5	804.0	904.5
85.3	114.3	57.4	1.869	467.3	560.8	654.2	747.7	841.1
82.6	114.3	62.0	1.733	433.3	520.0	606.7	693.3	780.0
79.4	101.6	67.0	1.602	400.6	480.7	560.8	641.0	721.1
76.2	101.6	72.6	1.477	369.3	443.1	517.0	590.8	664.7
73.0	101.6	79.1	1.356	339.1	406.9	474.7	542.5	610.3
69.9	101.6	86.4	1.241	310.2	372.3	434.3	496.4	558.4
66.7	101.6	95.0	1.131	282.7	339.2	395.7	452.3	508.8
63.5	82.6	104.6	1.026	256.4	307.7	358.9	410.2	461.5
60.3	82.6	116.0	0.926	231.4	277.6	323.9	370.2	416.5

KW REQUIRED @ RPM**

	49.7	59.7	69.6	79.6	89.5
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*Displacement based on 100% Volumetric Efficiency

**Power based on 90% Mechanical Efficiency

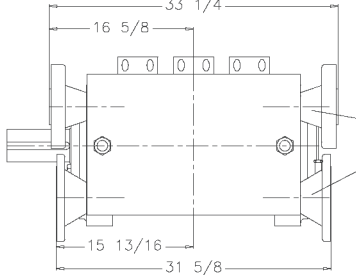
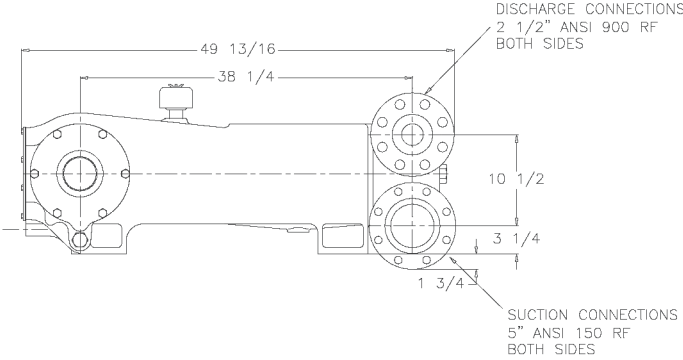
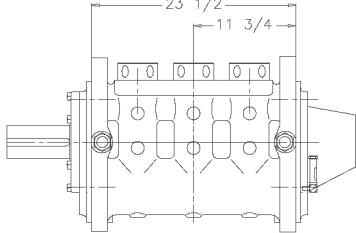
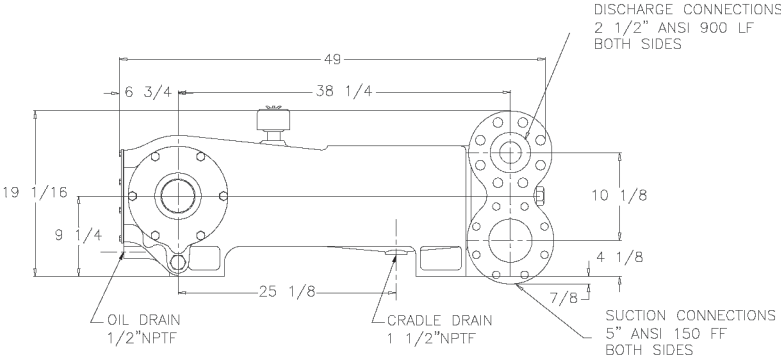
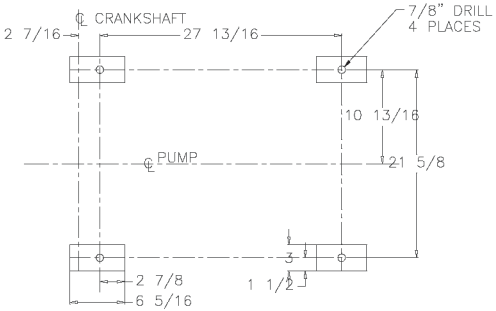
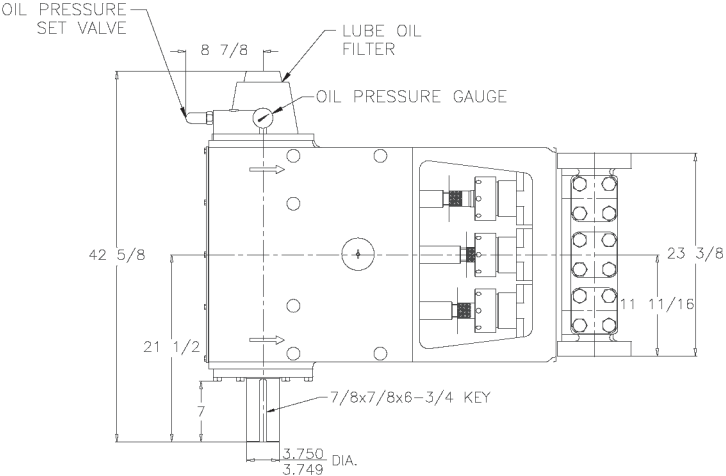
$$IHP = \frac{USGPM \times (\text{Discharge psig} - 1/2 \text{ Suction psig})}{1542}$$

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

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

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

MA-120L Triplex Pump



ENGINEERING DATA

MA-120L Triplex Pump

POWER END ENGINEERING DATA

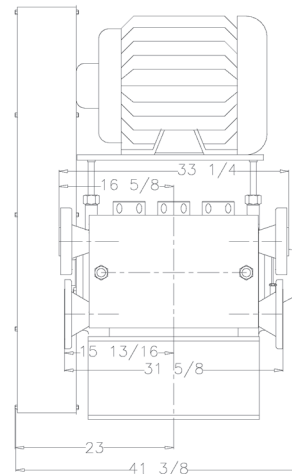
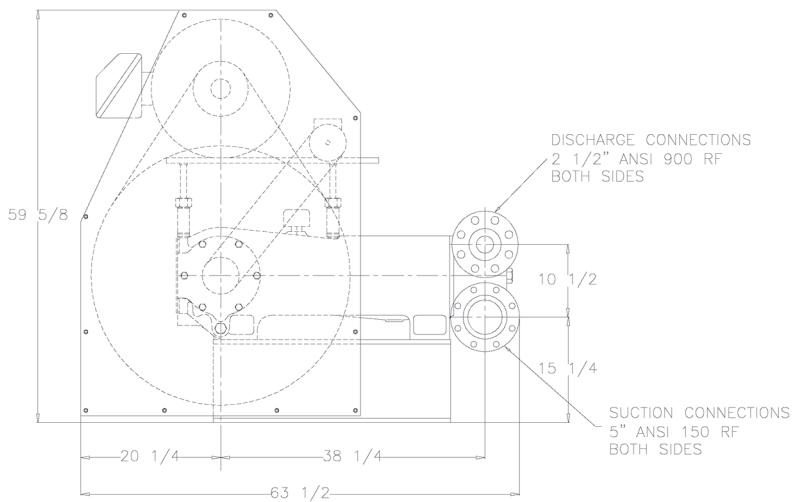
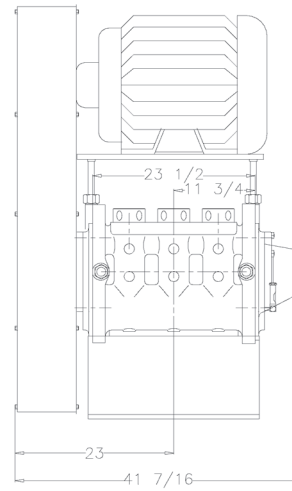
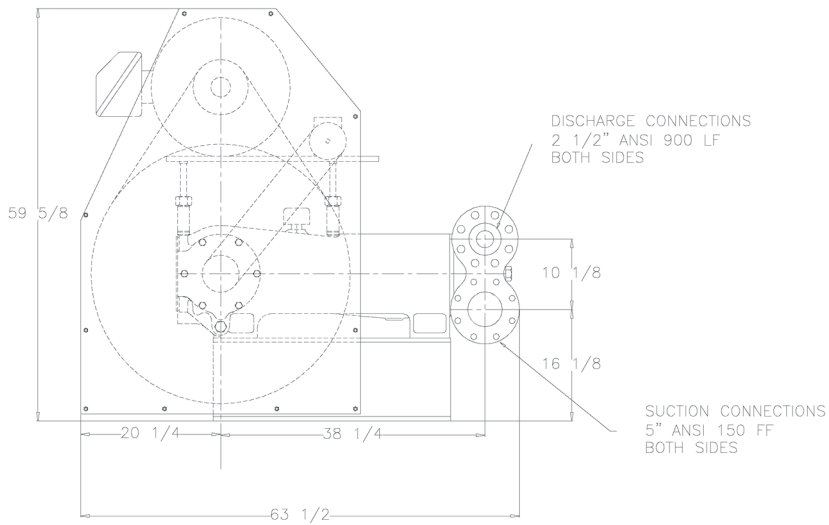
Max. Input HP @ Speed	120 @ 450 RPM
Rated Continuous Plunger Load	7452 lb.
Max. Rated Continuous Speed	450 RPM
Normal Continuous Speed Range	150 to 420 RPM
Minimum Speed	100 RPM
Oil Capacity	18 U.S. Qrts
Power End Oiling System	Pressure Lubrication
Power Frame, One-Piece	Cast Iron
Crosshead, Full Cylindrical	Cast Iron
Crosshead, Dia. x Length	5 3/4 x 6 3/16 inches
Crankshaft	Forged and Nitrided Chrome Moly Steel
Crankshaft Diameters:	
At Tapered Roller Bearings	4 in.
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 w/ Plungers	316 S.S.
Connecting Rod, Automotive Type	Ductile Iron
Average Crosshead Speed @ 450 rpm	318 fpm
Minimum Life Expectancy, Main Bearings, L ₁₀	35,000+ hr.

LIQUID END ENGINEERING DATA

Max. Continuous Working Pressure	1,682 psi
Hydrostatic Test	2,523 psi
Available Liquid End Materials, A.S.T.M.	
Nickel Aluminum Bronze Casting	B148-C955
Carbon Steel Block	A105
Stainless Steel Block	Various Grades
Ductile Iron Casting	A536 80-55-06
Plunger Type "Rokide" (Chromium Oxide-Coated)	316 S.S.
Stuffing Boxes, Field-Removable and Replaceable	Nickel Aluminum Bronze or Carbon Steel or S.S
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 892IK
Valve Cover and Cyl. Head Plugs	316 S.S.
Retainer Plates, Ductile Iron, A.S.T.M.	A536 80-55-06
Seals, Stuffing Boxes, Valve Covers, Cyl. Heads	Buna-N
Disc Valve Types	
Regularly furnished, acetal resin	Delrin®
Optional, Hardened and Lapped	17-4 PH S.S.
Valve Spring material	Inconel®
Valve Seat, Liquid Passage Areas	6.26 sq.in.
Avg. Liquid Velocity with 3 1/2" plungers @ 450 rpm	
thru Disc Valves	7.26 fps
thru Suction Manifold	3.82 fps
thru Discharge Manifold	18.09 fps

All drawings and specifications subject to change without notice.

MA-120L Triplex Pump



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