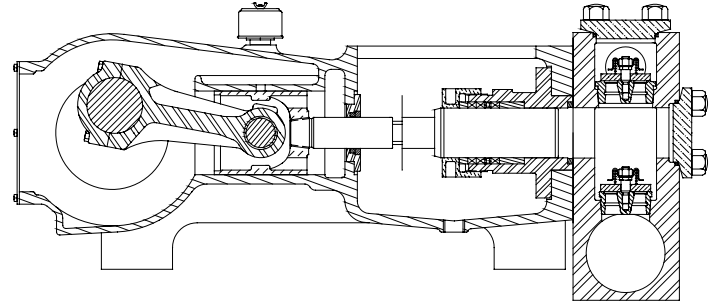


# MYERS® APLEX SERIES

## MA-155L

### TRIPLEX PLUNGER PUMP



No. of plungers.....	3
Maximum rated speed.....	450 rpm
Stroke length.....	4.50 in. 29.9 mm
Maximum rated power.....	155.0 HP 115.4 KW
Maximum rod load .....	9087 lb. 40.3 kN
Weight.....	2680 lbs.

#### ENGLISH UNITS

#### MA-155L

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
4.000	5.000	724	0.734	183.6	220.3	257.0	293.8	330.5
3.875	5.000	771	0.689	172.3	206.8	241.2	275.7	310.1
3.750	5.000	823	0.645	161.4	193.6	225.9	258.2	290.5
3.625	5.000	881	0.603	150.8	180.9	211.1	241.3	271.4
3.500	4.500	945	0.562	140.6	168.7	196.8	224.9	253.0
3.375	4.500	1016	0.523	130.7	156.8	183.0	209.1	235.3
3.250	4.500	1096	0.485	121.2	145.4	169.7	193.9	218.2
3.125	4.000	1185	0.448	112.1	134.5	156.9	179.3	201.7
3.000	4.000	1285	0.413	103.3	123.9	144.6	165.2	185.9
2.875	4.000	1400	0.379	94.8	113.8	132.8	151.8	170.7

HP REQUIRED @ RPM\*\*

86.2	103.4	120.7	137.9	155.0
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#### METRIC UNITS

#### MA-155L

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
101.6	127.0	44.3	2.780	695.0	834.0	973.0	1112.0	1251.0
98.4	127.0	47.2	2.610	652.5	783.0	913.5	1044.0	1174.5
95.3	127.0	50.4	2.444	610.9	733.0	855.2	977.4	1099.6
92.1	127.0	53.9	2.283	570.9	685.0	799.2	913.4	1027.5
88.9	114.3	57.8	2.129	532.1	638.5	745.0	851.4	957.8
85.7	114.3	62.2	1.979	494.8	593.7	692.6	791.6	890.6
82.6	114.3	67.0	1.835	458.8	550.6	642.3	734.1	825.8
79.4	101.6	72.5	1.697	424.2	509.0	593.8	678.6	763.5
76.2	101.6	78.8	1.564	391.0	469.1	547.3	625.5	703.7
73.0	101.6	85.7	1.436	359.0	430.9	502.7	574.5	646.3

KW REQUIRED @ RPM\*\*

64.3	77.1	90.0	102.8	115.6
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\*Displacement based on 100% Volumetric Efficiency

\*\*Power based on 90% Mechanical Efficiency

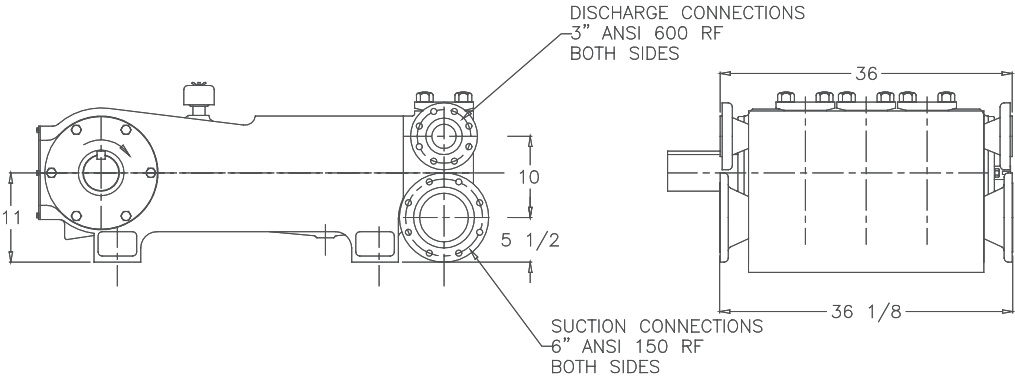
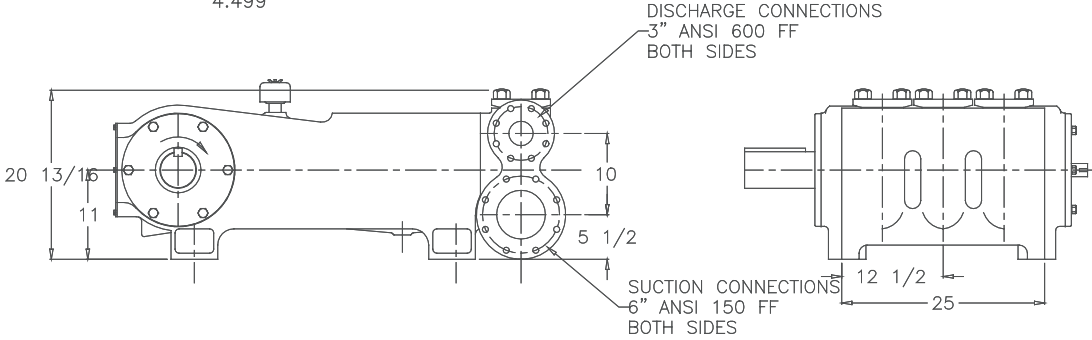
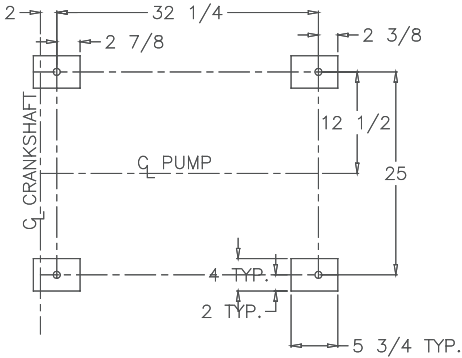
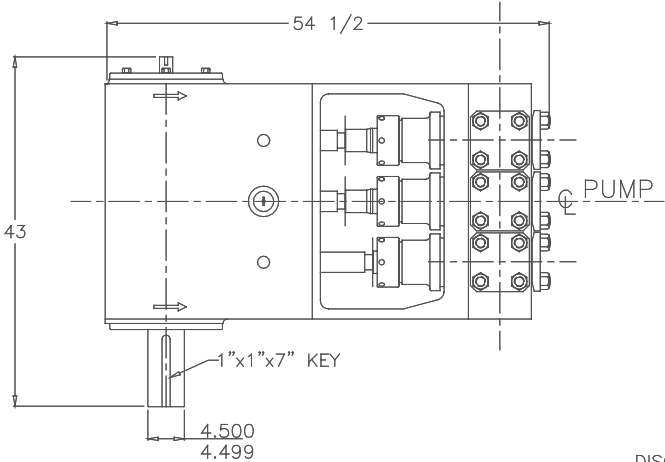
$$\text{IHP} = \frac{\text{USGPM} \times (\text{Discharge psig} - 1/2 \text{ Suction psig})}{1542}$$

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

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

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

# MA-155L Triplex Pump



# ENGINEERING DATA

## MA-155L Triplex Pump

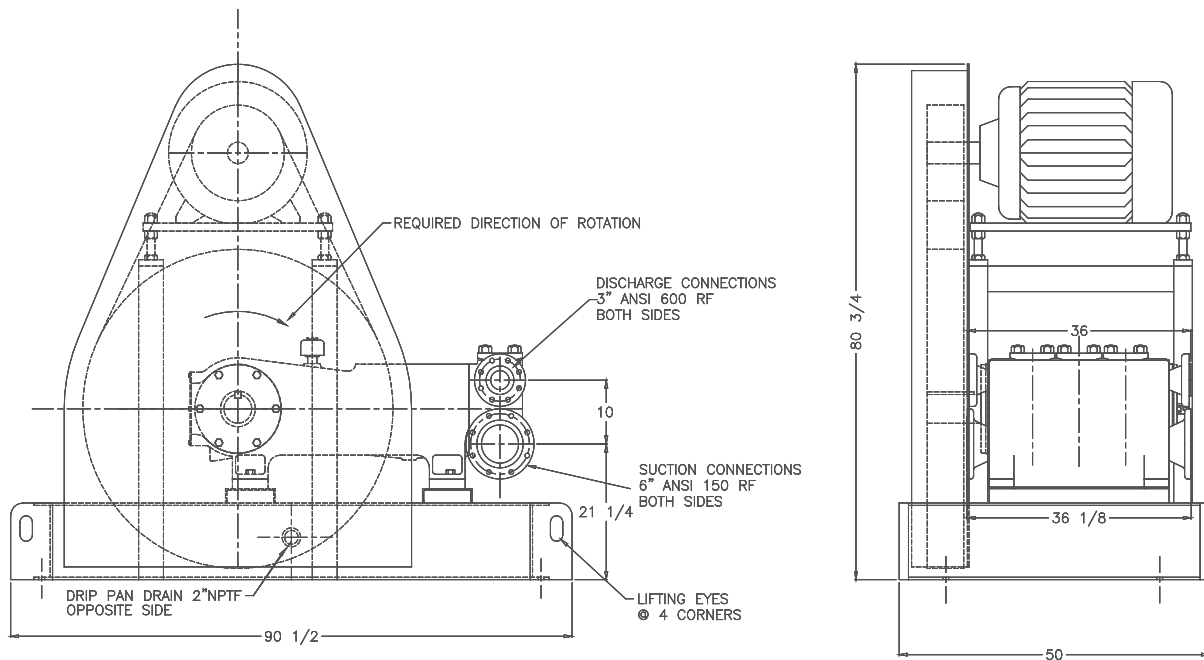
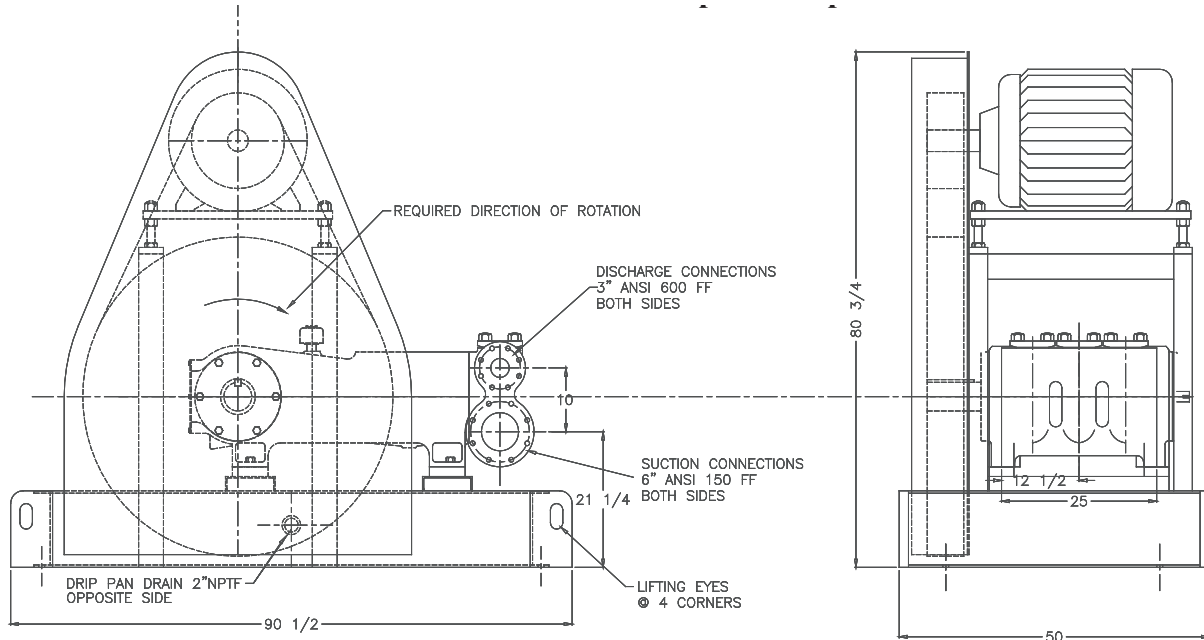
### POWER END ENGINEERING DATA

Max. Input HP @ Speed .....	155 @ 450 RPM
Rated Continuous Plunger Load .....	9,087 lb.
Max. Rated Continuous Speed .....	450 RPM
Normal Continuous Speed Range .....	150 to 420 RPM
Minimum Speed .....	100 RPM
Oil Capacity .....	22 U.S. Qrts
Power End Oiling System .....	Splash
Power Frame, One-Piece .....	Cast Iron
Crosshead, Full Cylindrical .....	Cast Iron
Crosshead, Dia. x Length .....	5 3/4 x 6 3/16 inches
Crankshaft .....	Ductile Iron
Crankshaft Diameters:	
At Tapered Roller Bearings .....	4 3/4 in.
At Crankpin Bearings, Dia. x Length .....	4 1/2 x 3 3/4 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 .....	338 fpm
Minimum Life Expectancy, Main Bearings, L <sub>10</sub> .....	60,000+ hr.

### LIQUID END ENGINEERING DATA

Max. Continuous Working Pressure .....	1,400 psi
Hydrostatic Test .....	2,100 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
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 .....	6.54 sq.in.
Avg. Liquid Velocity with 4" plungers @ 450 rpm	
thru Valves .....	10.8 fps
thru Suction Manifold .....	3.7 fps
thru Discharge Manifold .....	16.1 fps

# MA-155L Triplex Pump



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