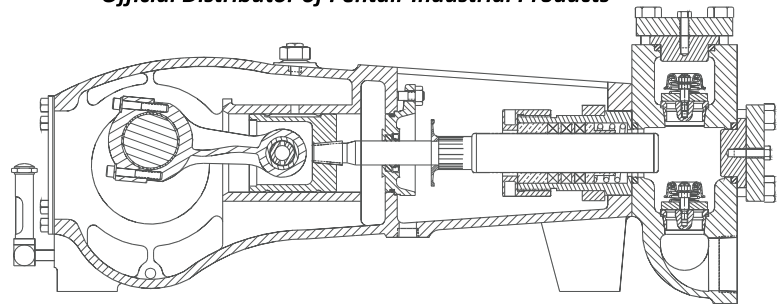


MYERS® APLEX SERIES

RO-38

TRIPLEX PLUNGER PUMP



REVERSE OSMOSIS DUTY ONLY

No. of plungers.....	3
Maximum rated speed.....	600 rpm
Stroke length.....	2.00 in. 50.8 mm
Maximum rated power.....	30.0 HP 22.3 KW
Maximum rod load	2968 lb. 13.17 kN
Weight	430 lbs.

<u>ENGLISH UNITS</u>								RO-38
PLUNGER SIZE IN.	STUFFING BOX BORE IN.	MAX PSI.	*GALLON PER/REV.	200 RPM US GPM	300 RPM US GPM	400 RPM US GPM	500 RPM US GPM	600 RPM US GPM
1.875	2.500	1075	0.0717	14.3	21.5	28.7	35.9	43.0
1.750	2.500	1234	0.0625	12.5	18.7	25.0	31.2	37.5
1.625	2.500	1431	0.0539	10.8	16.2	21.5	26.9	32.3
1.500	2.500	1680	0.0459	9.2	13.8	18.4	23.0	27.5
1.375	2.250	1999	0.0386	7.7	11.6	15.4	19.3	23.1
1.250	2.250	2419	0.0319	6.4	9.6	12.8	15.9	19.1
HP REQUIRED @ RPM**				10.0	15.0	20.0	25.0	30.0
<u>METRIC UNITS</u>								RO-38
PLUNGER SIZE MM.	STUFFING BOX BORE IN.	MAX PRESS. BAR	*LITER PER/REV.	200 RPM LPM	300 RPM LPM	400 RPM LPM	500 RPM LPM	600 RPM LPM
47.6	63.5	74.1	0.2714	54.3	81.4	108.6	135.7	162.8
44.5	63.5	85.1	0.2366	47.3	71.0	94.6	118.3	142.0
41.9	63.5	98.7	0.2040	40.8	61.2	81.6	102.0	122.4
38.1	63.5	115.8	0.1738	34.8	52.1	69.5	86.9	104.3
34.9	57.2	137.8	0.1461	29.2	43.8	58.4	73.1	87.7
31.7	57.2	166.8	0.1208	24.2	36.2	48.3	60.4	72.5
KW REQUIRED @ RPM**				7.5	11.2	14.9	18.6	22.3

*Displacement based on 100% Volumetric Efficiency

**Power based on 90% Mechanical Efficiency

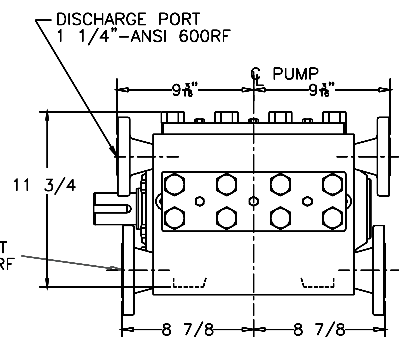
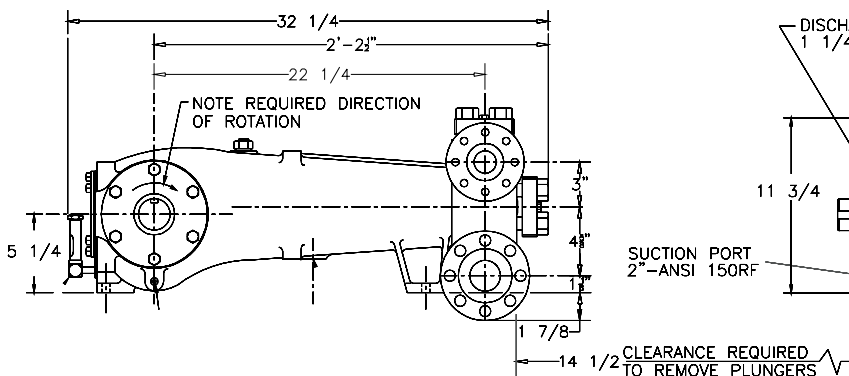
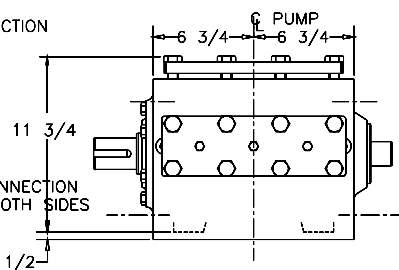
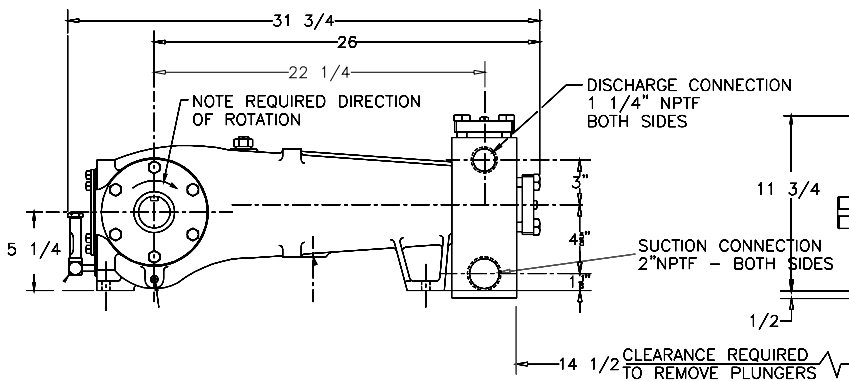
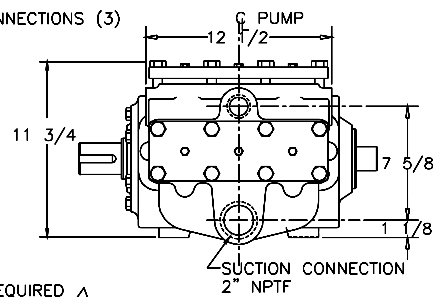
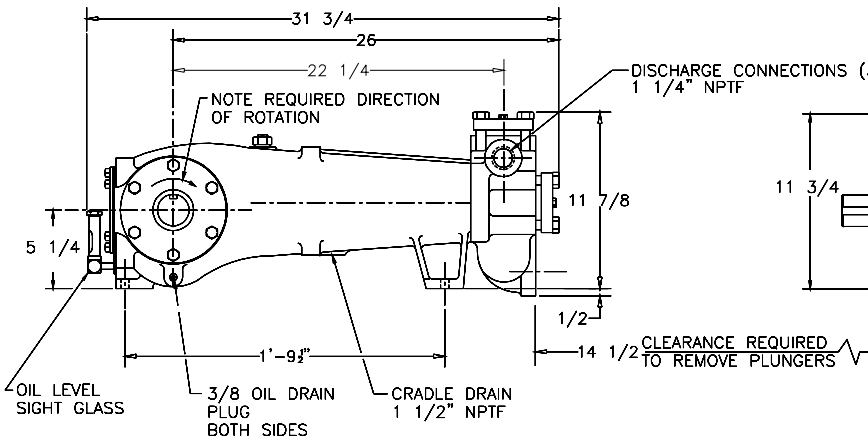
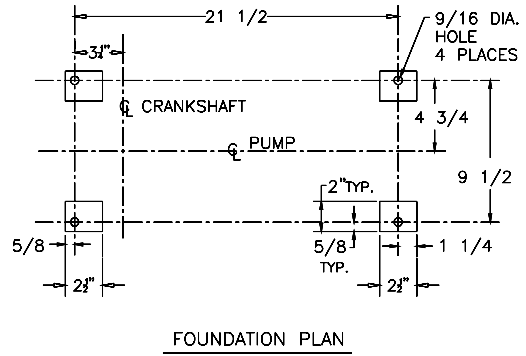
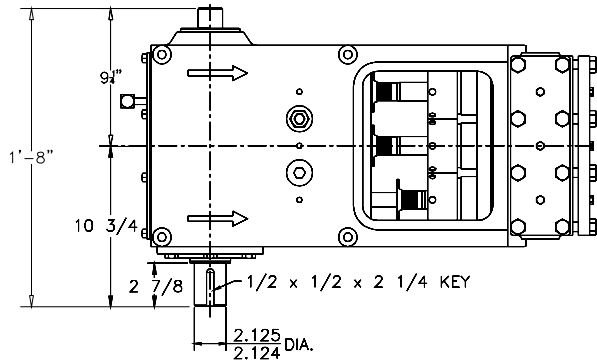
$$IHP = \frac{USGPM \times (\text{Discharge psig} - 1/2 \text{ Suction psig})}{1542}$$

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

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

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

RO-38 Triplex Pump



ENGINEERING DATA

RO-38 Triplex Pump

POWER END ENGINEERING DATA

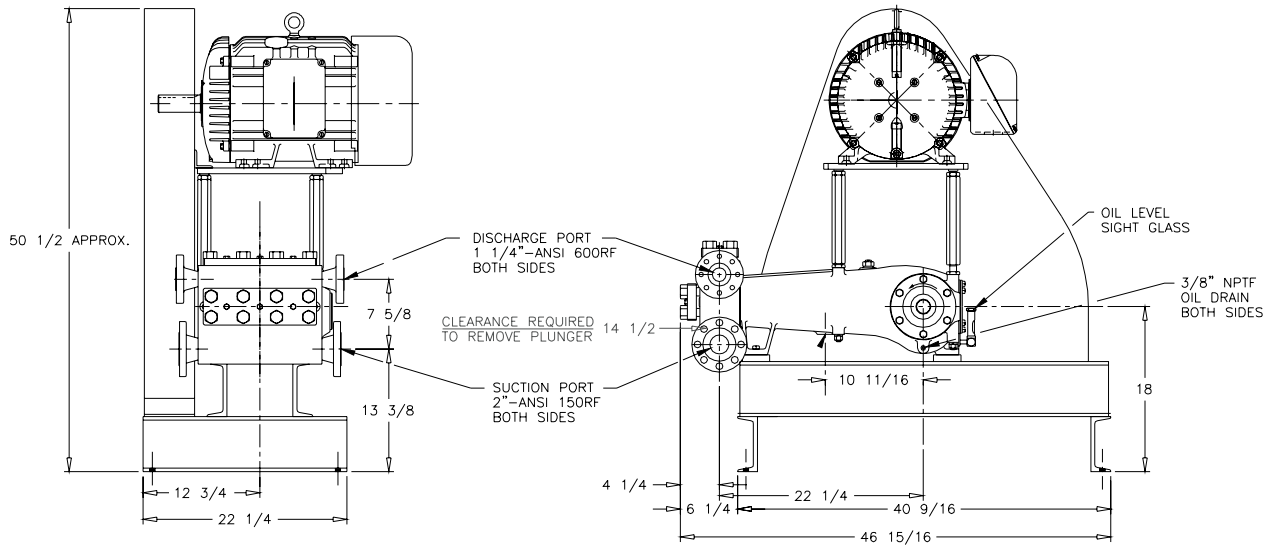
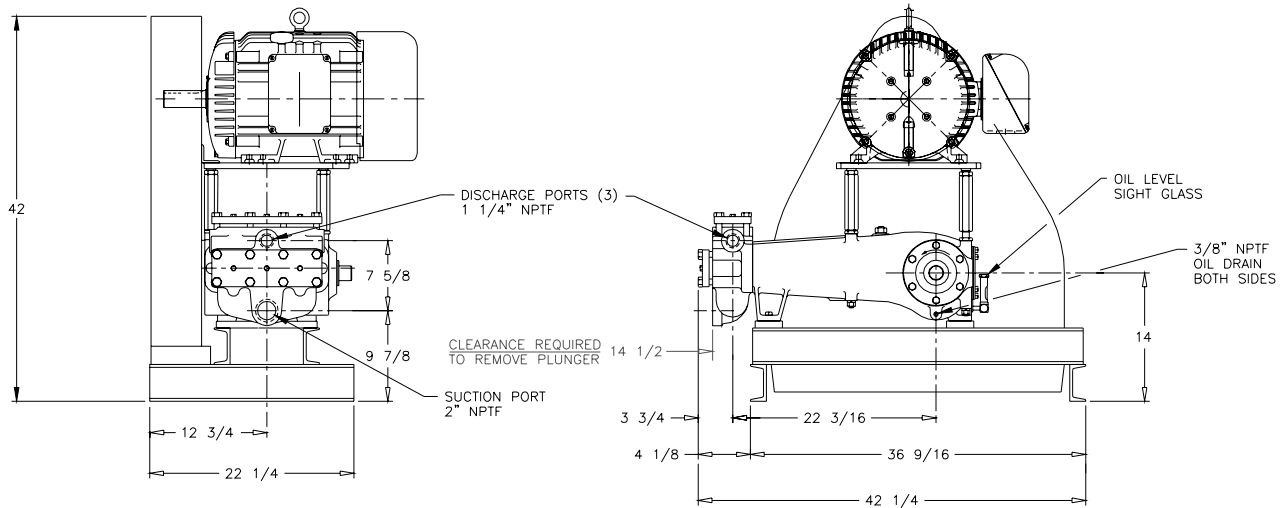
Max. Input HP @ Speed	30 HP @ 600 rpm
Rated Continuous Plunger Load	2,968 lb.
Normal Continuous Speed Range	350 to 575 rpm
Minimum Speed	100 rpm
Oil Capacity	5 U.S. Qrts
Power End Oiling System	Splash & Scoop
Power Frame, One-Piece	Cast Iron
Crosshead, Full Cylindrical	Cast Iron
Crosshead, Dia. x Length	3 1/4 x 3 5/8 in.
Crankshaft	Ductile Iron
Crankshaft Diameters:	
At Tapered Roller Bearings	3.15 in.
At Crankpin Bearings	2.25 in.
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.ST.
Connecting Rod, Automotive Type	Ductile Iron
Average Crosshead Speed @ 600 rpm	200 fpm
Minimum Life Expectancy, Main Bearings, L ₁₀	84,000+ hr.

LIQUID END ENGINEERING DATA

Max. Continuous Working Pressure	2,418 psi
Hydrostatic Test	3,750 psi
Liquid End Materials, A.S.T.M.	
Nickel Aluminum Bronze	B148-C955
Stainless Steel Block	2205 Duplex S.ST.
Stainless Steel Block	316 S.ST.
Plunger Type "Rokide" (Chromium Oxide-Coated)	316 S.ST.
Stuffing Boxes, Field-Removable and Replaceable	Stainless Steel
Gland, Stuffing Box	Nickel Aluminum Bronze
Packing Types Available:	
Spring-loaded, Cup-type	Style 120X
Spring-loaded, Garlock	Style 892IK
Valve Cover and Cyl. Head Plugs	316 S.ST.
Retainer Plates, Steel, A.S.T.M.	A36
Seals, Stuffing Boxes, Valve Covers	Buna-N
Bolting, High Strength, Heat Treated	Alloy Steel
Valve Types Available:	
Standard, Acetal Resin	Delrin®
Optional, Hardened and Lapped	17-4PH S.ST.
Valve Spring Material	Inconel®
Valve Seat, Liquid Passage Area	1.4 sq.in.
Avg. Liquid Velocity with 1 7/8" Plungers @ 600 Crankshaft rpm	
thru Valve Seat	6.57 fps
thru Suction Manifold	4.12 fps
thru Discharge Manifold	10.75 fps

All drawings and specifications subject to change without notice.

RO-38 Triplex Pump



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