



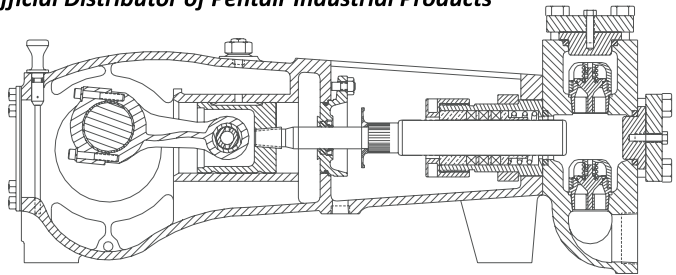
**POWER ZONE**  
Equipment, Inc.

Official Distributor of Pentair Industrial Products

# MYERS® APLEX SERIES

## SC-80

### QUINTUPLEX PLUNGER PUMP



#### Intermittent Duty Only

No. of plungers.....	5
Maximum rated speed.....	600rpm
Stroke length.....	2.25 in. 57.15 mm
Maximum rated power.....	100 HP 74.5 KW
Maximum rod load .....	5280 lb. 23.44 kN
Weight .....	510 lbs.

ENGLISH UNITS

SC-80

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	1912	0.1345	26.9	40.3	53.8	67.2	80.7
1.750	2.500	2195	0.1171	23.4	35.1	46.9	58.6	70.3
1.625	2.500	2550	0.1010	20.2	30.3	40.4	50.5	60.6
1.500	2.500	3000	0.0861	17.2	25.8	34.4	43.0	51.6
1.375	2.250	3500	0.0723	14.5	21.7	28.9	36.2	43.4

HP REQUIRED @ RPM\*\*

33.4	50.1	66.7	83.4	100.0
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METRIC UNITS

SC-80

PLUNGER SIZE MM.	STUFFING BOX BORE MM.	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	131.8	0.5091	101.8	152.7	203.6	254.6	305.5
44.5	63.5	151.3	0.4433	88.7	133.0	177.3	221.7	266.0
41.3	63.5	175.8	0.3824	76.5	114.7	153.0	191.2	229.4
38.1	63.5	206.0	0.3259	65.2	97.8	130.4	163.0	195.5
34.9	57.1	241.4	0.2736	54.7	82.1	109.4	136.8	164.2

KW REQUIRED @ RPM\*\*

24.9	37.4	49.7	62.2	74.6
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\*Displacement based on 100% Volumetric Efficiency

\*\*Power based on 90% Mechanical Efficiency

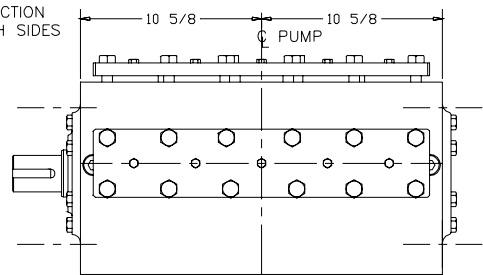
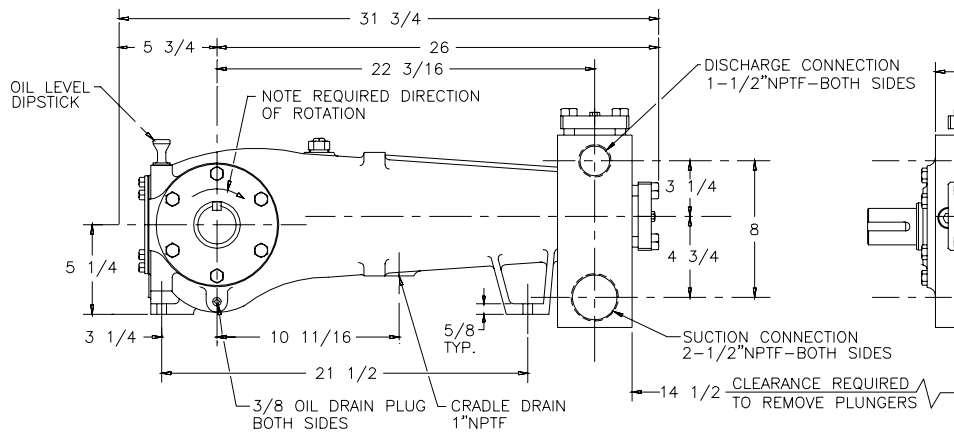
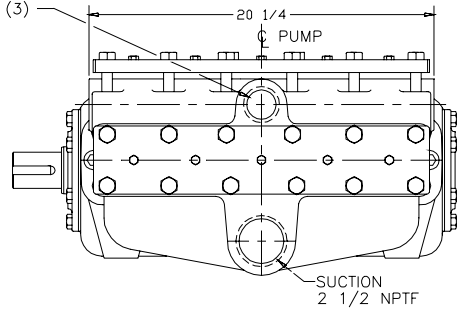
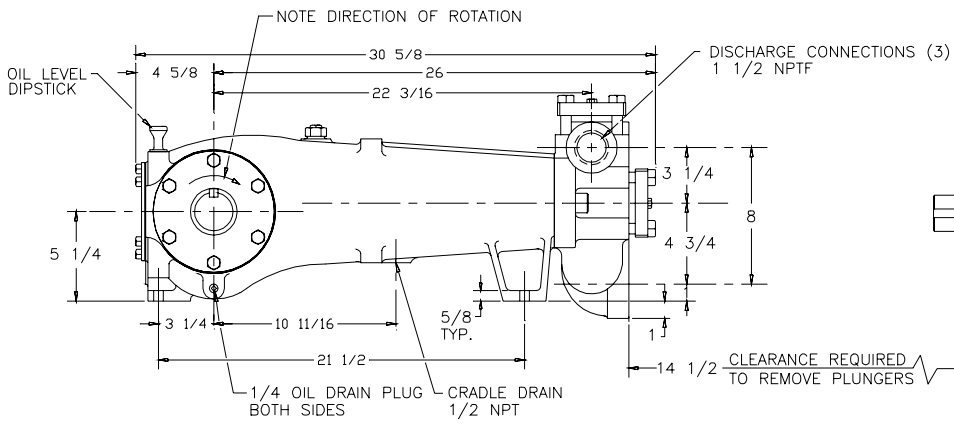
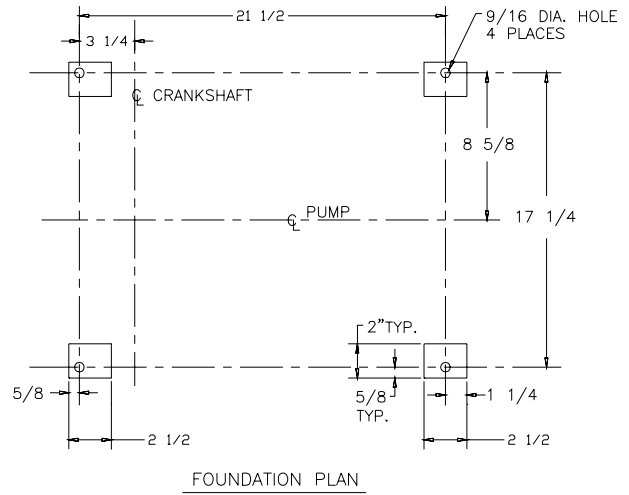
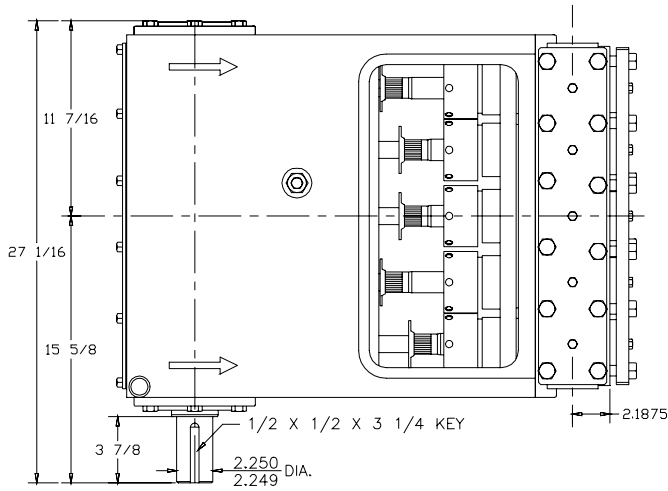
$$IHP = \frac{USGPM \times (\text{Discharge psig} - 1/2 \text{ Suction psig})}{1542}$$

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

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

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

# SC-80 Quintuplex Pump



# ENGINEERING DATA

## SC-80 Quintuplex Pump

### POWER END ENGINEERING DATA

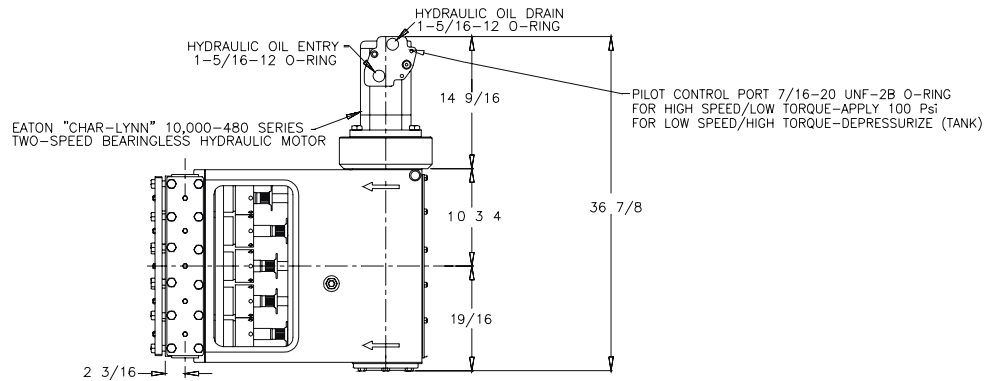
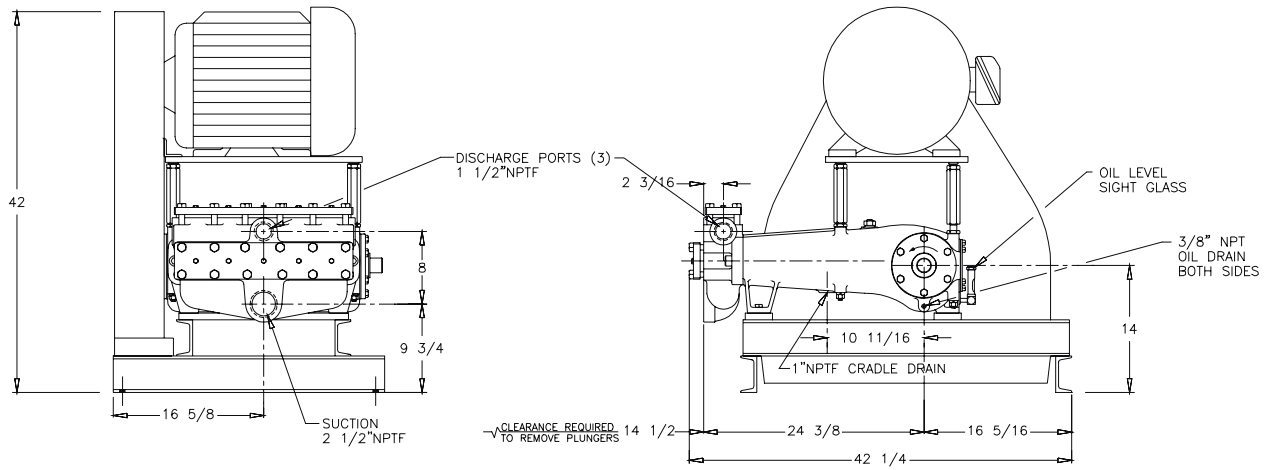
Max. Input Power @ Speed .....	100 HP @ 600 rpm
Rated Continuous Plunger Load .....	5,280 lb.
Normal Continuous Speed Range .....	600 rpm
Minimum Speed .....	50 rpm
Oil Capacity .....	8 U.S. Qrts
Power End Oiling System .....	Splash & Scoop
Power Frame, One-Piece .....	Cast Iron
Crosshead, Full Cylindrical .....	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, Dia. x Length.....	2 1/4 x 1 5/8 in.
Crosshead (Wrist) Pin, Case-Hardened and Ground .....	AISI 8620
Main Bearings, Tapered Roller .....	Timken®
Crankpin Bearings, Precision Automotive .....	Babbitt-Lined
Extension (Pony) Rod Integral w/ Plungers .....	316 S.ST.
Connecting Rod, Automotive Type .....	Ductile Iron
Average Crosshead Speed @ 550 rpm .....	225 fpm
Minimum Life Expectancy, Main Bearings, L <sub>10</sub> .....	30,000+ hr.

### LIQUID END ENGINEERING DATA

Max. Continuous Working Pressure .....	3,500 psi
Hydrostatic Test .....	5,250 psi
Liquid End Materials, A.S.T.M.	
Ductile Iron .....	A536 80-55-06
Carbon Steel.....	A516 Gr.70
Stainless Steel .....	316 or 2205 S.ST.
Plunger Type “Rokide” Stainless Steel, (Chromium Oxide-Coated) .....	316 S.ST.
Stuffing boxes, Field-Removable and Replaceable, 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 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
Valve Type, Double Stem-Guided .....	17-4PH S.ST.
Valve Spring Material .....	Inconel®
Valve Seat, Liquid Passage Area.....	1.400 sq.in.
Avg. Liquid Velocity, with 1 7/8” Plungers @ 550 RPM	
thru Plate Valves.....	7.40 fps
thru Dual Stem Valves.....	10.81 fps
thru Suction Manifold.....	5.40 fps
thru Discharge Manifold.....	14.65 fps

All drawings and specifications subject to change without notice.

## SC-80 Quintuplex Pump



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