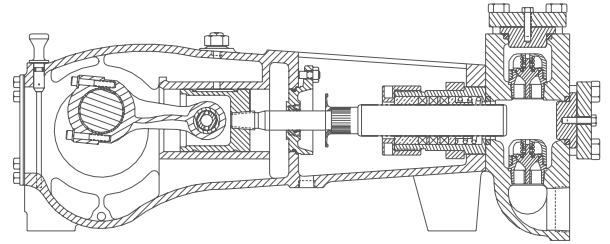


# APLEX SERIES QUINTUPLEX PLUNGER PUMP

SC-80(H)



## INTERMITTENT DUTY ONLY

<b>NO. OF PLUNGERS</b>	5
<b>MAXIMUM RATED SPEED</b>	600 RPM
<b>STROKE LENGTH</b>	2.25 in. (57.15 mm)
<b>MAXIMUM RATED POWER</b>	100 hp (74.5 kW)
<b>MAXIMUM ROD LOAD</b>	5280 lbs. (23.44 kN)
<b>WEIGHT SC-80</b>	510 lbs.
<b>WEIGHT SC-80H</b>	720 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
HP REQUIRED @ RPM				33.4	50.1	66.7	83.4	100.0

## 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
kW REQUIRED @ RPM				24.9	37.4	49.7	62.2	74.6

# MYERS APLEX SERIES SC-8Q(H) QUINTUPLEX PLUNGER PUMP

## ENGLISH UNITS SC-80H

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
1.375	2.250	3558	0.0723	14.5	21.7	28.9	36.2	43.4
1.250	2.250	4306	0.0598	12.0	17.9	23.9	29.9	35.9
1.125	1.750	5316	0.0484	9.7	14.5	19.4	24.2	29.0
1.000	1.750	6500	0.0383	7.7	11.5	15.3	19.1	23.0
"hp REQUIRED @ RPM"				33.5	50.1	66.7	83.4	100.0

## METRIC UNITS SC-80H

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
34.9	57.1	245.4	0.2737	54.7	82.1	109.5	136.9	164.2
31.7	57.1	296.9	0.2264	45.3	67.9	90.6	113.2	135.8
28.5	44.4	366.6	0.1832	36.6	55.0	73.3	91.6	109.9
25.4	44.4	448.3	0.1450	29.0	43.5	58.0	72.5	87.0
"kW REQUIRED @ RPM"				24.9	37.4	49.7	62.2	74.6

\*Displacement based on 100% Volumetric Efficiency

Power based on 90% Mechanical Efficiency

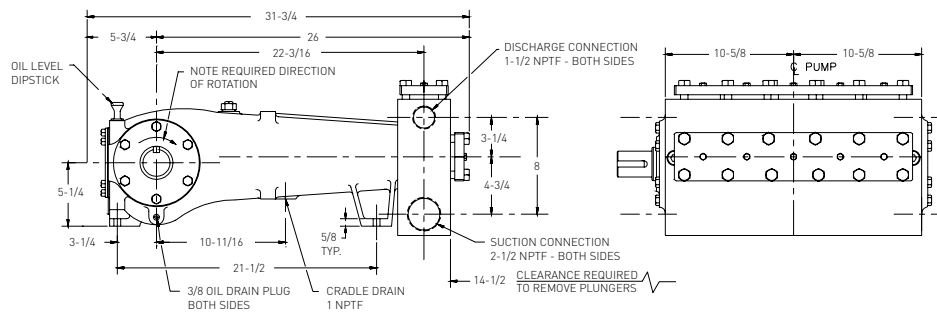
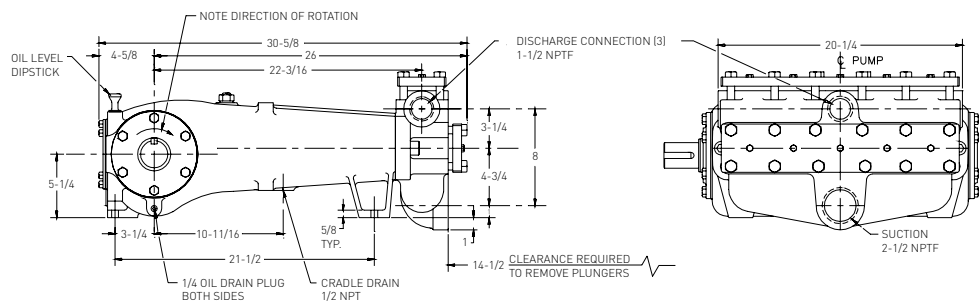
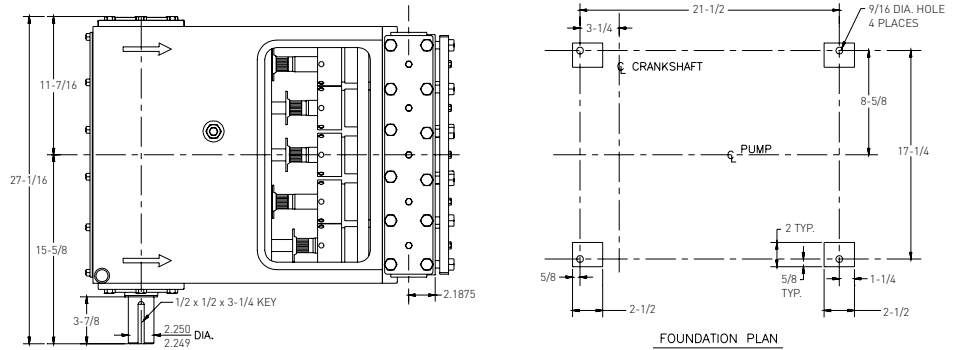
$$I_{hp} = \frac{USGPM \times (\text{Discharge psig} - 1/2 \text{ Suction psig})}{1542}$$

$$I_{kW} = \frac{M^3/HR \times (\text{Discharge Bar} - 1/2 \text{ Suction Bar})}{32.4}$$

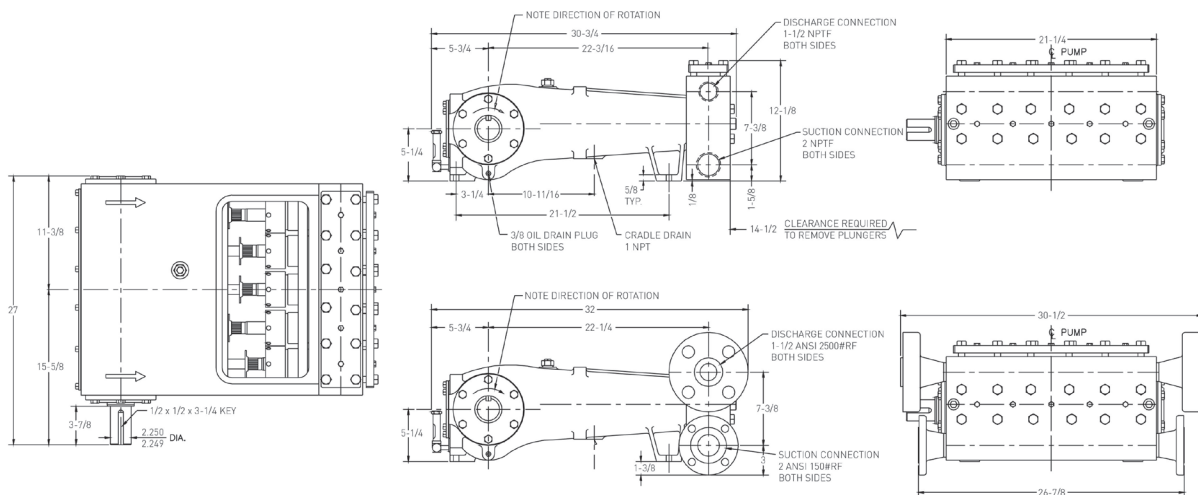
$$PUMP \text{ RPM} = \frac{USGPM \text{ Desired}}{USGPM \text{ per Revolution of Selected Plunger}}$$

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

SC-80 QUINTUPLEX PUMP (MEASUREMENTS SHOWN IN INCHES)



SC-80H QUINTUPLEX PUMP (MEASUREMENTS SHOWN IN INCHES)



**ENGINEERING DATA SC-80(H) QUINTUPLEX PUMP**

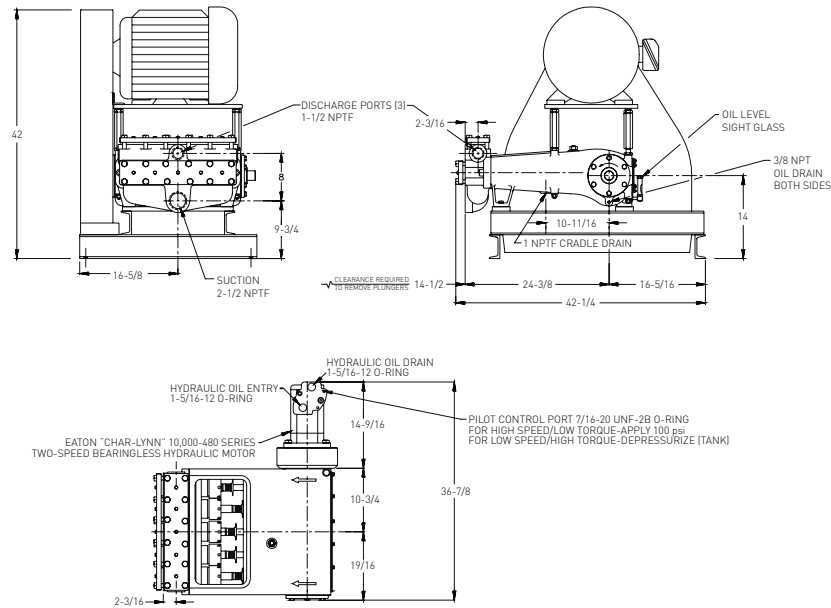
POWER END ENGINEERING DATA

Max. Input Power @ Speed .....	100 hp @ 600 rpm
Rated Plunger Load .....	5,280 lbs.
Minimum Speed .....	100 rpm
Oil Capacity .....	8 U.S. Qts.
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 .....	3.06 in.
At Crankpin Bearings, Dia. x Length .....	2-1/4 x 1-5/8 in.
Crosshead (Wrist) Pin, Case-Hardened and Ground .....	AISI 8620 <sup>®</sup>
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 @ 600 rpm .....	225 fpm

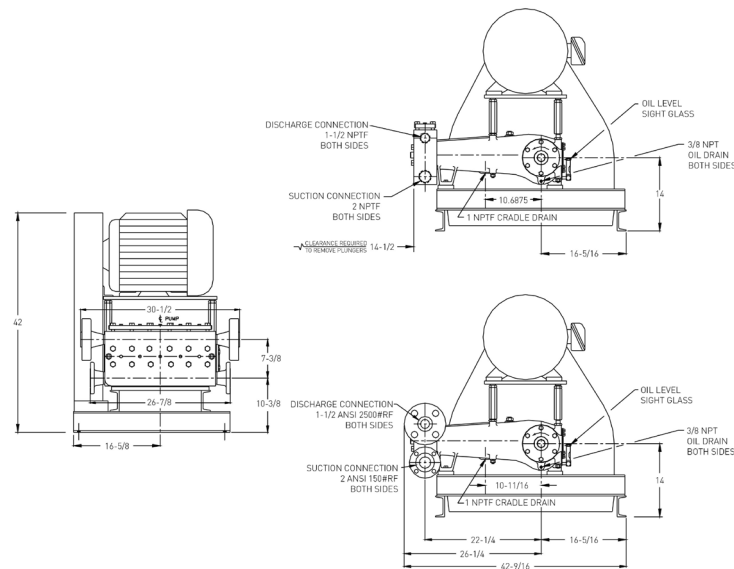
LIQUID END ENGINEERING DATA

Max. Working Pressure SC-80 .....	3,000 psi
SC-80H .....	6,500 psi
Hydrostatic Test SC-80 .....	4,500 psi
SC-80H .....	9,750 psi
Liquid End Materials, A.S.T.M.	
Ductile Iron SC-80 .....	A536 80-55-06
Nickel Aluminum Bronze SC-80 .....	AB148 C955
Carbon Steel .....	Various Grades
Stainless Steel SC-80 .....	Various Grades
Plunger Type Rokide <sup>®</sup> , (Chromium Oxide-Coated) .....	Tungsten Carbide, Ceramic and other types also available
Stuffing Boxes, Field-Removable and Replaceable	
Stainless Steel .....	Various Grades
Carbon Steel .....	1020
Packing Types Available:	
Gland-loaded, Non-Adjustable (SC-80 only) .....	Style 838
Spring-loaded, Braided PTFE coating and Aramid Fiber .....	Style 0140, 0141, 8921K
Spring-loaded, cup-type .....	Style 120X
Valve Cover and Cyl. Head Plugs .....	316 S.ST.
Retainer Plates, Steel, A.S.T.M. ....	A36
Seals, Stuffing Boxes, Valve Covers .....	Nitrile
Valve Type Dual Stem Guided .....	17-4PH S.ST.
Abrasion Resistant .....	17-4PH S.ST.
Disc Style .....	17-4 PH SST, Acetal <sup>®</sup>
Valve Spring Material .....	Inconel
Valve Seat, Liquid Passage Area .....	1.4 sq.in.
Avg. Liquid Velocity, with 1-7/8" Plungers @ 600 RPM	
thru Plate Valves SC-80 .....	7.04 fps
thru Dual Stem Valves SC-80 .....	11.1 fps
thru Suction Manifold SC-80 .....	5.40 fps
SC-80H .....	4.4 fps
thru Discharge Manifold SC-80 .....	14.65 fps
SC-80H .....	7.9 fps

**SC-80 QUINTUPLEX PUMP (MEASUREMENTS SHOWN IN INCHES)**



**SC-80H QUINTUPLEX PUMP (MEASUREMENTS SHOWN IN INCHES)**



1101 MYERS PARKWAY, ASH-  
LAND, OH 44805  
USA  
Ph: 855-274-8948  
Orders Fax: 888-606-5484

490 Pinebush Road, Unit 4  
Cambridge, Ontario N1T 0A5  
Canada  
Ph: 800.363.7867  
Orders Fax: 888-606-5484

pentair.com

All indicated Pentair trademarks and logos are property of Pentair. Third party registered and unregistered trademarks and logos are the property of their respective owners. Because we are continuously improving our products and services, Pentair reserves the right to change specifications without prior notice. Pentair is an equal opportunity employer.

Inconel® is a registered trademark of the Special Metals family of companies.  
Timken® is a registered trademark of The Timken Company. Rokide® is a registered trademark of Saint-Gobain Abrasives, Inc.

©2021 Pentair. All Rights Reserved.

MA3008 (10/01/2021)