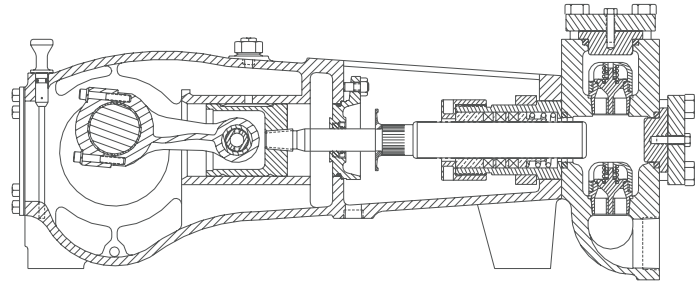




MYERS® APLEX SERIES

SC-45(L)(H) TRIPLEX PLUNGER PUMP



Intermittent Duty Only

No. of plungers	3	
Maximum rated speed	600 rpm	
Stroke length	2.25 in.	57.15 mm
Maximum rated power	60 hp	44.7 kW
Maximum rod load	5280 lbs.	23.44 kN
Weight SC-45	430 lbs.	
SC-45L	463 lbs.	
SC-45H	475 lbs.	

ENGLISH UNITS

SC-45

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	0.0807	16.1	24.2	32.3	40.3	48.4
1.750	2.500	2195	0.0703	14.1	21.1	28.1	35.1	42.2
1.625	2.500	2546	0.0606	12.1	18.2	24.2	30.3	36.4
1.500	2.500	2988	0.0516	10.3	15.5	20.7	25.8	31.0
hp REQUIRED @ RPM				20.0	30.0	40.0	50.0	60.0

ENGLISH UNITS

SC-45L

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
2.250	2.875	1330	0.1162	23.2	34.9	46.5	58.1	69.7
2.125	2.875	1491	0.1036	20.7	31.1	41.5	51.8	62.2
2.000	2.875	1683	0.0918	18.4	27.5	36.7	45.9	55.1
hp REQUIRED @ RPM				20.0	30.0	40.0	50.0	60.0

ENGLISH UNITS

SC-45H

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	3556	0.0434	8.7	13.0	17.4	21.7	26.0
1.250	2.250	4302	0.0359	7.2	10.8	14.3	17.9	21.5
1.125	1.750	5000	0.0290	5.8	8.7	11.6	14.5	17.4
hp REQUIRED @ RPM				20.0	30.0	40.0	50.0	60.0

METRIC UNITS

SC-45

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	0.3055	61.1	91.7	122.2	152.8	183.3
44.5	63.5	151.3	0.2611	52.2	78.3	104.4	130.6	156.7
41.3	63.5	176.5	0.2294	45.9	68.8	91.8	114.7	137.6
38.1	63.5	206.0	0.1953	39.1	58.6	78.1	97.7	117.2
kW REQUIRED @ RPM				14.9	22.3	29.8	37.3	44.7

METRIC UNITS

SC-45L

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
57.2	73.0	91.7	0.4399	88.0	132.0	176.0	220.0	263.9
54.0	73.0	102.8	0.3922	78.4	117.7	156.9	196.1	235.3
50.8	73.0	116.0	0.3475	69.5	104.3	139.0	173.8	208.5
kW REQUIRED @ RPM				14.9	22.4	29.9	37.4	44.7

METRIC UNITS

SC-45H

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	57.2	245.2	0.1643	32.9	49.3	65.7	82.2	98.6
31.8	57.2	296.6	0.1359	27.2	40.8	54.4	68.0	81.5
28.6	57.2	344.7	0.0980	219.6	329.4	439.2	549.0	658.8
kW REQUIRED @ RPM				14.9	22.3	29.8	37.3	44.7

*Displacement based on 100% Volumetric Efficiency

Power based on 90% Mechanical Efficiency

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

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

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

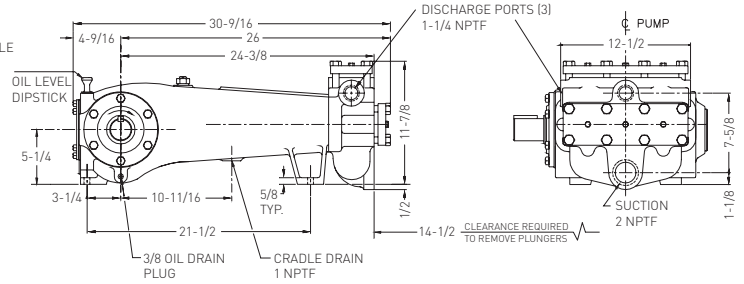
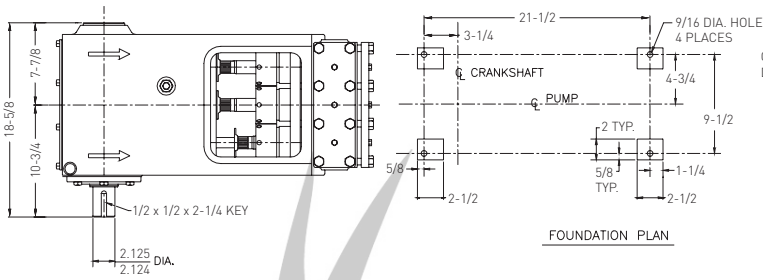
$$\text{PUMP RPM} = \frac{\text{M}^3/\text{HR Desired}}{\text{M}^3 \text{ per Revolution of Selected Plunger}}$$

SC-45 Series Triplex Pump (Measurements in inches)

SC-45(H)

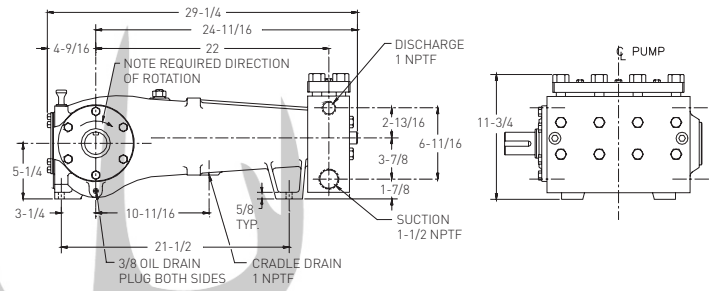
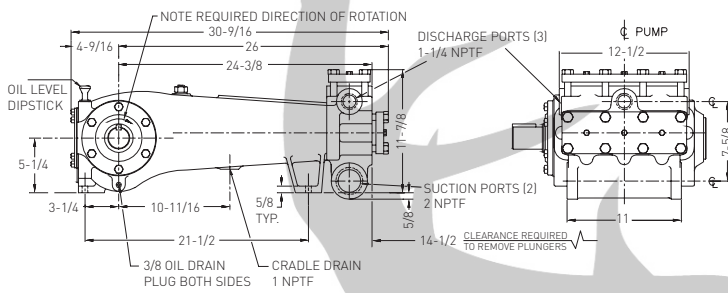
SC-45 Series

SC-45



SC-45

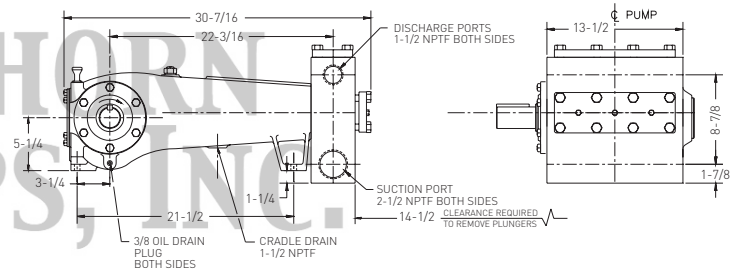
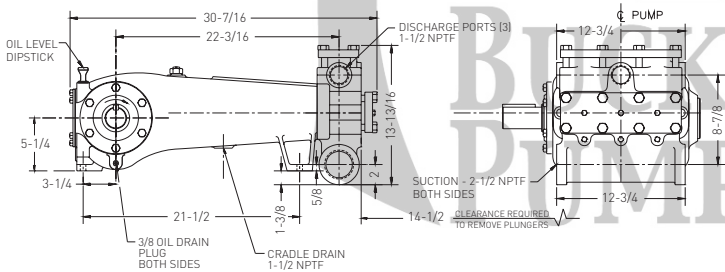
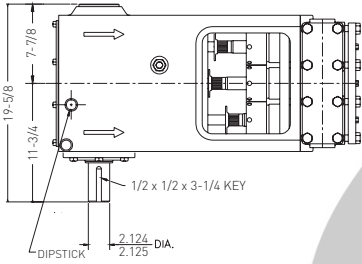
SC-45H



SC-45L

SC-45L

SC-45L



ENGINEERING DATA

SC-45(L)(H) Triplex Pump

POWER END ENGINEERING DATA

Max. Input Power @ Speed	60 HP @ 600 rpm
Rated Continuous Plunger Load	5,280 lbs.
Minimum Speed SC-45(L)	100 rpm
SC-45H	50 rpm
Oil Capacity	5 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	3.15 in.
At Crankpin Bearings	2-1/4
Crosshead (Wrist) Pin, Case-Hardened and Ground	AlSi 8620
Main Bearings, Tapered Roller	Timken®
Crankpin Bearings, Precision Automotive	Babbitt-Lined
Extension (Pony) Rod Integral w/ Plungers SC-45(L)	316 S.ST.
SC-45H	416 S.ST.
Connecting Rod, Automotive Type	Ductile Iron
Average Crosshead Speed @ 600 rpm	225 fpm
Minimum Life Expectancy, Main Bearings, L ₁₀	15,000+ hr.

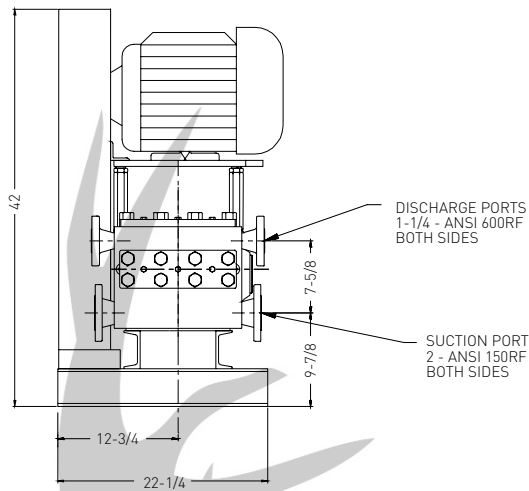
LIQUID END ENGINEERING DATA

Max. Continuous Working Pressure SC-45	3,500 psi
SC-45L	1,683 psi
SC-45H	3,000 psi
Hydrostatic Test SC-45	5,250 psi
SC-45L	2,500 psi
SC-45H	4,500 psi
Liquid End Materials, A.S.T.M.	
Ductile Iron SC-45(L)	A536 80-55-06
Nickel Aluminum Bronze SC-45	B148 C955
Carbon Steel SC-45(L)	A516 Gr.70
SC-45H	4140
Stainless Steel SC-45(L)	316 or 2205 S.ST.
SC-45H	15-5 PH S.ST.
Plunger Type Rokide® (Chromium Oxide-Coated) SC-45(L)	416 S.ST.
SC-45H	316 S.ST.
Piston Cup SC-45L	HSN and Kevlar®
Liner SC-45L	White Ceramic
Stuffing boxes, Field-Removable and Replaceable, Carbon Steel	1020
Packing Types Available:	
Gland Adjustable, Braided Teflon® and Kevlar® SC-45L	HI/LO
Gland-loaded, Non-Adjustable SC-45(L)	Style 838
Spring-loaded, Braided Teflon® and Kevlar® SC-45(L)	Style 140
Spring-loaded, cup-type SC-45(H)	Style 120X
Spring-loaded, Garlock	Style 8921K
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 SC-45(H)	17-4PH S.ST.
Abrasion Resistant SC-45L	17-4PH S.ST.
Valve Spring Material	Inconel®
Valve Seat, Liquid Passage Area	
Plate (disc) Valves, (Delrin® or S.S.) SC-45(L)	1.4 sq.in.
Suction SC-45H	0.573 sq.in.
Double Stem-Guided Valve or Discharge	.958 sq.in.
Avg. Liquid Velocity @ 600 RPM	
thru Plate Valves SC-45	7.40 fps
thru Dual Valves SC-45	10.81 fps
thru Suction Manifold SC-45	4.12 fps
SC-45L	4.5 fps
SC-45H	4.73 fps
thru Discharge Manifold SC-45	10.75 fps
SC-45L	9.7 fps
SC-45H	10.64 fps
thru Disc Valves SC-45L	6.5 fps
thru Abrasion Resistant Valves SC-45L	9.8 fps

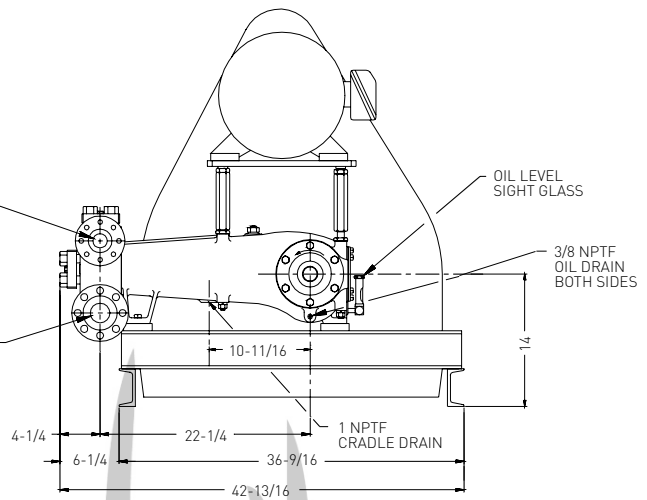
All drawings and specifications subject to change without notice.

SC-45 Triplex Pump (Measurements shown in inches)

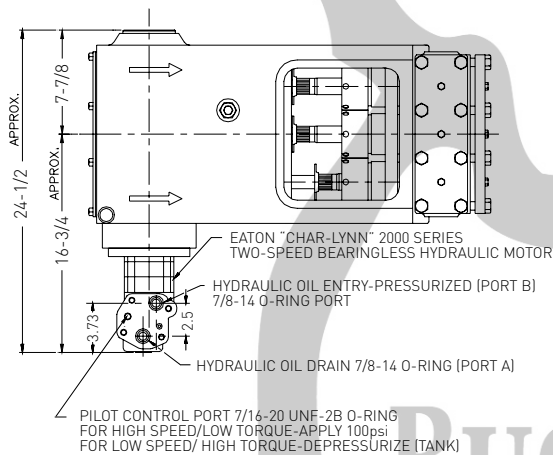
SC-45 Series



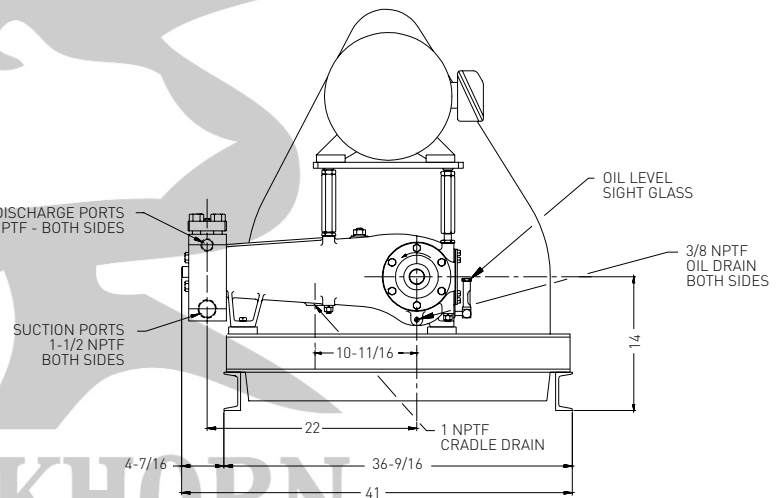
SC-45 Series



SC-45 Series



SC-45H



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ASHLAND, OHIO 44805
WWW.FEMYERS.COM

490 PINEBUSH ROAD, UNIT 4,
CAMBRIDGE, ONTARIO N1T 0A5
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