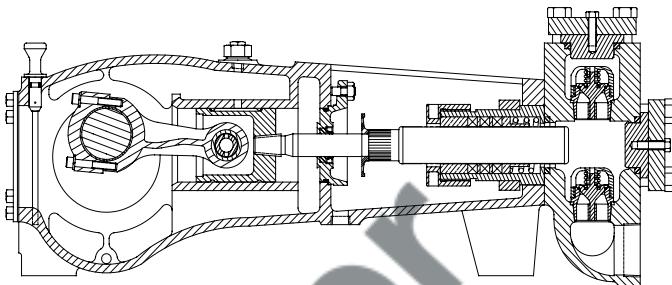




## MYERS® APLEX SERIES

### MA-40L TRIPLEX PLUNGER PUMP



No. of plungers.....	3
Maximum rated speed.....	550 rpm
Stroke length.....	2.5 in. 63.5 mm
Maximum rated power.....	40.0 HP 29.8 KW
Maximum rod load .....	3456 lb. 15.3 kN
Weight .....	810 lbs.

#### ENGLISH UNITS

PLUNGER SIZE IN.	STUFFING BOX BORE IN.	MAX PSI	* GALLON PER/REV.	200 RPM US GPM	250 RPM US GPM	350 RPM US GPM	450 RPM US GPM	550 RPM US GPM	MA-40L
2.750	3.500	580	0.193	38.6	48.2	67.5	86.8	106.1	
2.625	3.500	637	0.176	35.1	43.9	61.5	79.1	96.6	
2.500	3.250	703	0.159	31.9	39.8	55.8	71.7	87.7	
2.375	3.250	779	0.144	28.8	36.0	50.3	64.7	79.1	
2.250	2.875	867	0.129	25.8	32.3	45.2	58.1	71.0	

HP REQUIRED @ RPM\*\* 14.5 18.1 25.4 32.6 40.0

#### METRIC UNITS

PLUNGER SIZE MM.	STUFFING BOX BORE MM.	MAX PRESS. BAR	* LITER PER/REV.	200 RPM LPM	250 RPM LPM	350 RPM LPM	450 RPM LPM	550 RPM LPM	MA-40L
69.9	88.9	40.1	0.730	146.0	182.4	255.4	328.4	401.4	
66.7	88.9	47.5	0.665	133.0	166.3	232.8	299.3	365.8	
63.5	82.6	48.5	0.603	120.7	150.8	211.2	271.5	331.8	
60.3	82.6	53.7	0.543	108.7	135.8	190.2	244.5	298.8	
57.2	73.0	59.7	0.489	97.7	122.2	171.0	219.9	268.8	

KW REQUIRED @ RPM\*\* 10.8 13.5 18.9 24.3 29.8

\*Displacement based on 100% Volumetric Efficiency

\*\*Power based on 90% Mechanical Efficiency

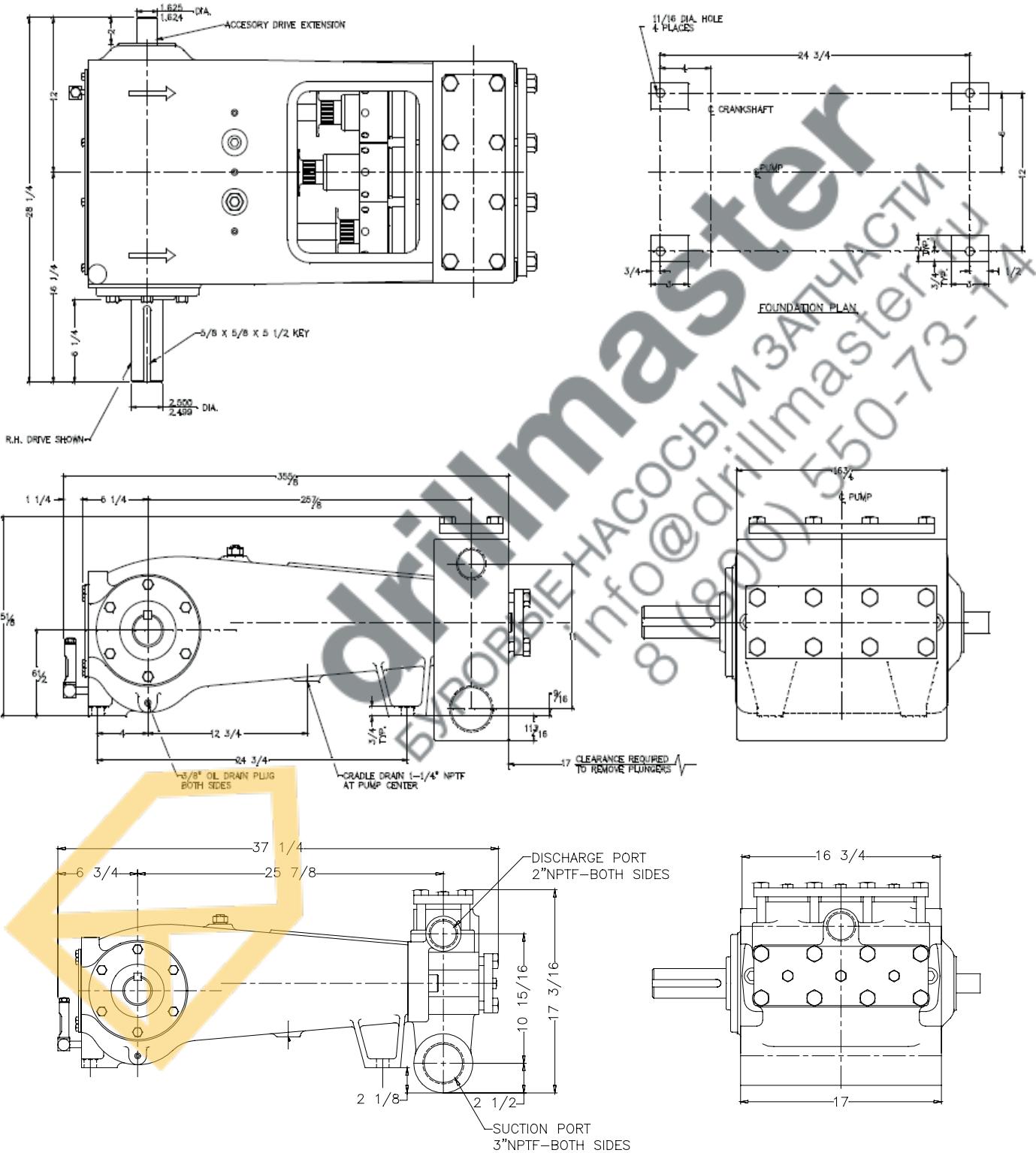
$$IHP = \frac{\text{USGPM} \times (\text{Discharge psig} - 1/2 \text{ Suction psig})}{1542}$$

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

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

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

## MA-40L Triplex Pump



# ENGINEERING DATA

## MA-40L Triplex Pump

### POWER END ENGINEERING DATA

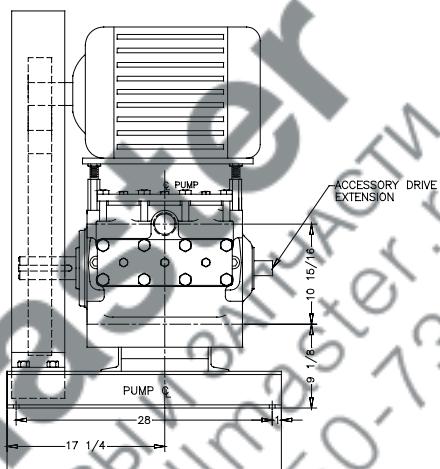
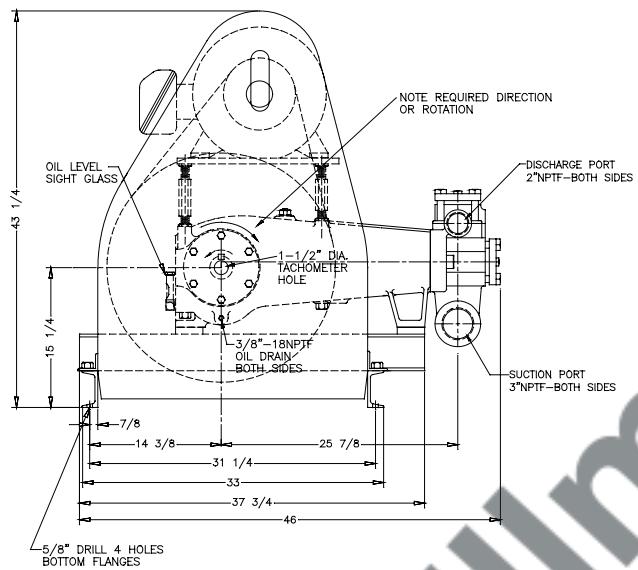
Max. Input Power @ Speed .....	40 HP@ 550 rpm
Rated Continuous Plunger Load .....	3,456 lb.
Max. Rated Continuous Speed.....	550 rpm
Normal Continuous Speed Range .....	150 to 450 rpm
Minimum Speed .....	100 rpm
Oil Capacity .....	8 U.S. Qrts
Power End Oiling System .....	Splash & Scoop
Power Frame, One-Piece .....	Cast Iron
Crosshead, Full Cylindrical .....	Cast Iron
Crosshead, Dia. x Length.....	4 x 4 1/2 in.
Crankshaft .....	Ductile Iron
Crankshaft Diameters:	
At Tapered Roller Bearings .....	2 1/2 in.
At Crankpin Bearings, Dia. x Length .....	2 3/4 x 2 in.
Crosshead (Wrist) Pin, Case-Hardened and Ground .....	AISI 8620
Wrist Pin Bushing, SAE 660, dia. x width .....	1 5/16 x 2 in.
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 @ 550 rpm .....	229 fpm
Minimum Life Expectancy, Main Bearings, L <sub>10</sub> .....	100,000+ hr.

### LIQUID END ENGINEERING DATA

Max. Continuous Working Pressure .....	867 psi
Hydrostatic Test .....	1,300 psi
Available Liquid End Materials, A.S.T.M.	
Ductile Iron Casting .....	A536 80-55-06
Carbon Steel Block .....	A516 Gr. 70 or A105
Stainless Steel Block .....	Various Grades
Plunger Type "Rokide" (Chromium Oxide-Coated) .....	316 S.S.
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
Retainer Plates, Ductile Iron, A.S.T.M. .....	A536 80-55-06
Seals, Stuffing Boxes, Valve Covers, Cyl. Heads .....	Buna-N
Valve Types:	
Standard, Acetal Resin .....	Delrin®
Optional, Disc Hardened and Lapped .....	17-4 PH S.S.
Optional, Dual Stem Guided.....	17-4PH S.S.
Valve Spring Material .....	Inconel®
Valve Seat, Liquid Passage Areas	
Plate (disc) Valves, (Delrin or S.S.) .....	2.4 sq.in.
Dual Stem Guided Valves .....	2.3 sq.in.
Avg. Liquid Velocity with 2 3/4" plungers @ 550 rpm	
thru Disc Valves Seat .....	9.8 fps
thru Dual Stem Valves.....	8.8 fps
thru Suction Manifold .....	2.1 fps
thru Discharge Manifold .....	11.33 fps

All drawings and specifications subject to change without notice.

## MA-40L Triplex Pump



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