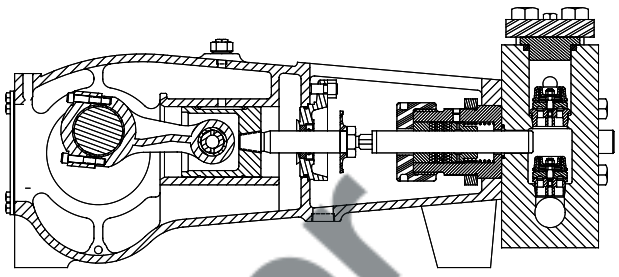
PENTAIR

MYERS® APLEX SERIES

MA-75H

QUINTUPLEX PLUNGER PUMP



No. of plungers		5
Maximum rated speed		550 rpm
Stroke length	2.75 in.	69.8 mm
Maximum rated power	75.0 HP	55.8 KW
Maximum rod load	3535 lb.	15.6 kN
Weight		1325 lbs.

ENGLISH UNITS **MA-75H**

PLUNGER SIZE IN.	STUFFING BOX BORE IN.	MAX PSI	* GALLON PER/REV.	150 RPM US GPM	250 RPM US GPM	350 RPM US GPM	450 RPM US GPM	550 RPM US GPM
1.125	1.750	3553	0.059	8.9	14.8	20.7	26.6	32.5
1.000	1.750	4497	0.047	7.0	11.7	16.4	21.0	25.7
0.875	1.500	5000	0.036	5.4	8.9	12.5	16.1	19.7
*HP REQUIRED @ RPM***				20.4	34.1	47.7	61.3	75.0

METRIC UNITS **MA-75H**

PLUNGER SIZE MM.	STUFFING BOX BORE MM.	MAX PRESS. BAR	* LITER PER/REV.	150 RPM LPM	250 RPM LPM	350 RPM LPM	450 RPM LPM	550 RPM LPM
28.6	44.5	244.9	0.244	36.6	61.0	85.4	109.8	134.3
25.4	44.5	310.2	0.177	26.6	44.3	62.0	79.7	97.5
22.2	38.1	344.7	0.136	20.3	33.9	47.4	61.0	74.5
*KW REQUIRED @ RPM***				15.2	25.4	35.6	45.7	55.9

**Displacement based on 100% Volumetric Efficiency*

***Power based on 90% Mechanical Efficiency*

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

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

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

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

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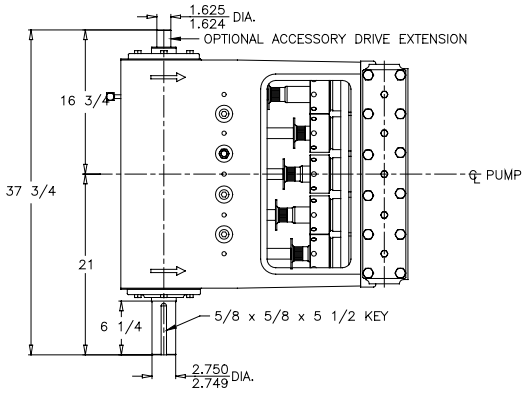

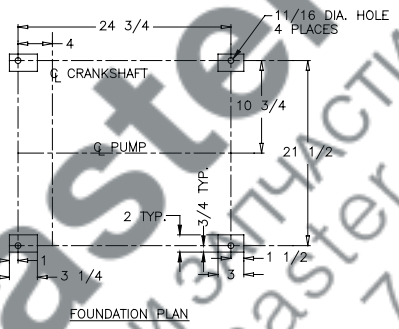

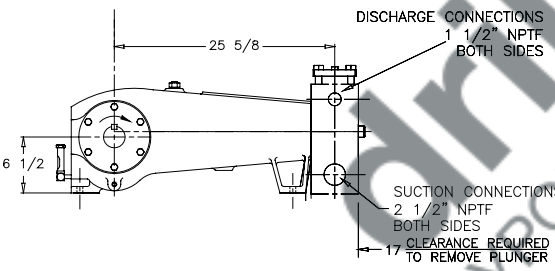

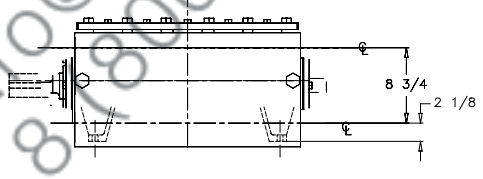

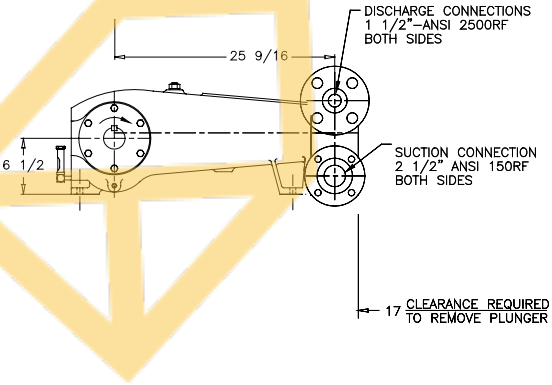

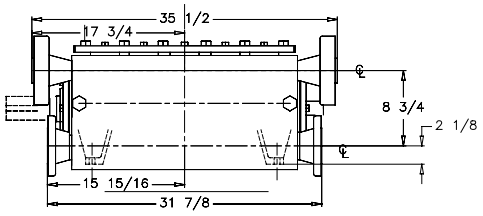

ENGINEERING DATA

MA-75H Quintuplex Pump

POWER END ENGINEERING DATA

Max. Input Power @ Speed	75 HP @ 550 rpm
Rated Continuous Plunger Load	3,535 lb.
Max. Rated Continuous Speed	550 rpm
Normal Continuous Speed Range	150 to 450 rpm
Minimum Speed	100 rpm
Oil Capacity	15 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	3.35 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®
Center Bearings, Two Precision Steel Backed	Babbitt Lined
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	200 fpm
Minimum Life Expectancy, Main Bearings, L_{10}	100,000+ hrs.

LIQUID END ENGINEERING DATA

Max. Continuous Working Pressure	5000 psi
Hydrostatic Test	7500 psi
Available Liquid End Materials, A.S.T.M.	
Forged Steel Block	4140
Stainless Steel Block	15-5PH
Plunger Type “Rokide” (Chromium Oxide-Coated)	316 S.S.
Stuffing Boxes, Field-Removable and Replaceable	
Packing Types Available	
Spring-loaded, Braided Teflon & Kevlar	Style 140
Spring-loaded, cup-type	Style 120X
Retainer Plates, Ductile Iron, A.S.T.M.	A536 80-55-06
Seals, Stuffing Boxes, Valve Covers, Cyl. Heads	Buna-N
Available Valve Types:	
Standard, Hardened and Lapped	17-4PH S.S.
Abrasion Resistant	17-4PH S.S.
Valve Spring Material	Inconel®
Valve Seat, Liquid Passage Area	
Plate (disc) Valves,	1.4 sq.in.
Abrasion Resistant Valve	.96 sq.in.
Avg. Liquid Velocity with 1 1/8” plungers @ 550 rpm	
thru Disc Valves	4.1 fps
thru Abrasion Resistant Valves	6.0 fps
thru Suction Manifold	1.75 fps
thru Discharge Manifold	4.0 fps

All drawings and specifications subject to change without notice.

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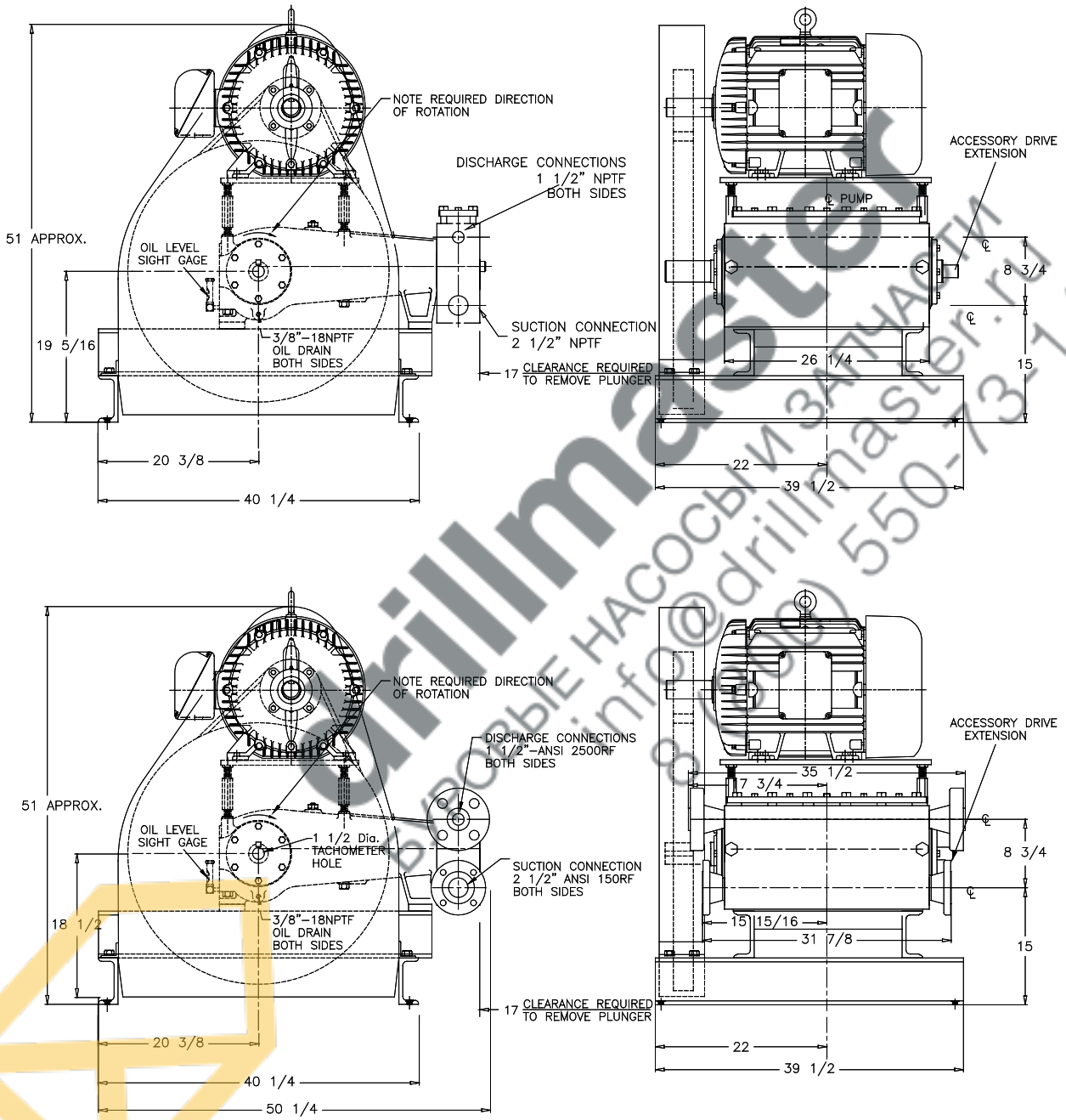

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