



HYDRAULICALLY DRIVEN PUMPS SELECTION GUIDE

VERSION 1 – 9.09

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HYDRAULICALLY DRIVEN PUMPS

MP Pumps has the most comprehensive hydraulically driven/ centrifugal pump product line to meet your application requirements. Typical applications are bulk transfer, application spraying, stripping, and sump/vault water removal.

Every MP pump that is offered close coupled to an electric motor has one or more hydraulically driven bearing frames available with up to four different motor displacements to match the needs of most hydraulic systems. All of the pumps are close coupled to a hydraulic motor drive that uses oversized high quality ball bearings where some motors are integrally designed into the bearing frame to eliminate coupling two shafts. Pump materials available are cast iron, bronze, stainless steel, and aluminum. Pump flow rates up to 500 GPM and total developed head up to 400 feet.



Hydraulically driven pump products are shown in three groups.

Self priming

FM5, 8, 10, 15, HHLF, 2CT

End Suction

S30, 60, 80, 120, 300, CF1, 2, 3, 4, 5, 6, 7, 8

Submersible

HydraSub 20, 25, 30

MP Pumps offers high speed gerotor and gear type motors to drive the centrifugal pump with three different bearing frame arrangements sized to meet oil flow, pressure and load required. Pump and motor selection can be made by following the outline where the pump is selected first then motor options can be evaluated to choose the best motor selection. Performance data, outline drawings, and features can viewed for each selection.

Determine Pump Selection

Product line matrix

Pump Model	Max Flow Rate (GPM)	Max Pump Press. (psi)	Material of Const.	Inlet (inches)	Outlet (inches)	Motor Displacement (cu-in/rev)	Max Oil Flow (gpm)
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SELF PRIMING

Flomax 5	177	102	Al, Br, Cl	1 1/2	1 1/2	.22, .37, .45	11
Flomax 8	206	119	Al, Br, Cl, SS	2	2	.37, .45, .58	16
Flomax 10	199	86	Br, Cl, SS	2	2	0.73	15
Flomax 15	316	79	Br, Cl, SS	3	3	0.73	15
HHLF1.5	159	130	Br, Cl	1 1/2	1 1/2	0.73	14
HHLF2.0	195	130		2	2	0.73	14
2CT-3	330	39	Cl	3	3	0.58	

END SUCTION

Series 30	85	66	Br, Cl	1	3/4	.22, .37	9
S60	100	174	Cl	1 1/4	1	.22, .37, .45, .58	16
S80	145	161	Br, Cl	1 1/2	1 1/4	.37, .45, .58	15
S120	200	51	Br, Cl	2	1 1/2	.45, .58, .73	15
S300	500	95	Cl	3	2 1/2	1.16, 1.59	27
Chemflo 1	153	154	316 SS	1 1/2	1	.22, .37	10
CF 2	167	125	316 SS	1 1/2	1	.22, .37	10
CF 3	251	120	316 SS	2	1 1/2	.22, .37	10
CF 4	259	102	316 SS	2	1 1/2	.22, .37	10
CF 5	300	87	316 SS	2	1 1/2	1.16, 1.59	28
CF 6	510	86	316 SS	3	2	1.16, 1.59	27
CF 7	240	147	316 SS	2	1	1.16, 1.59	28
CF 8	395	130	316 SS	3	1 1/2	1.59	26

SUBMERSIBLE

HydraSub 20	320	40	Al	N/A	2	.22, .37, .45	9
HS 25	440	42	Al	N/A	2 1/2	.37, .45, .58	14
HS 30	470	46	Al	N/A	3	.45, .58	16

Determine Hydraulic Motor Drive

Motor drive matrix

Pump Model	Motor Size (cu-in/rev)	Hydraulic Assembly Type	Max Motor flow (gpm)	Max Press. (psi)	Perf. Curve No.	Motor Type	Inlet Size	Outlet Size	Bi-Rotation Y/N	Flow Cont. option Y/N
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SELF PRIMING PUMPS

Flomax 5	0.22	Pedestal	5	2000	7126-S	Gerotor	SAE 8	SAE 8	Y	Y
	0.37		11	2000	7088-S					
	0.45		10	2000	7089-S					
Flomax 8	0.37	Pedestal	9	2000	7090-S	Gerotor	SAE 8	SAE 8	Y	Y
		Hy Speed	10	2500	7093-S					
	0.45	Pedestal	11	2000	7091-S	Gerotor	SAE 8	SAE 8	Y	Y
		Hy Speed	12	2500	7094-S					
	0.58	Pedestal	12	2000	7092-S	Gerotor	SAE 8	SAE 8	Y	Y
		Hy Speed	16	2500	7095-S					
Flomax 10	0.73	Pedestal	15	2300	7029	Gear	SAE 10	SAE 10	Y	N
Flomax 15	0.73	Pedestal	15	2300	7030	Gear	SAE 10	SAE 10	Y	N
HHLF1.5	0.73	Pedestal	14	2300	7124	Gear	SAE 10	SAE 10	Y	N
HHLF2.0	0.73	Pedestal	14	2300	7125	Gear	SAE 10	SAE 10	Y	N
2CT-3	0.58	Hy Speed	10	2500	7127	Gerotor	SAE 8	SAE 8	Y	Y

END SUCTION PUMPS

Series 30	0.22	Pedestal	7	2000	7120-S	Gerotor	SAE 8	SAE 8	Y	Y
	0.37		9	2000	7085-S					
S60	0.22	Hy Speed	6	2500	7121-S	Gerotor	SAE 8	SAE 8	Y	Y
	0.37		11	2500	7102-S					
	0.45		12	2500	7101-S					
	0.58		16	2500	7122-S					
S80	0.37	Pedestal	9	2000	7129-S	Gerotor	SAE 8	SAE 8	Y	Y
		Hy Speed	10	2500	7103-S	Gerotor	SAE 8	SAE 8	Y	Y
	0.45	Pedestal	10	2000	7086-S	Gerotor	SAE 8	SAE 8	Y	Y
		Hy Speed	12	2500	7104-S					
	0.58	Pedestal	12	2000	7087-S	Gerotor	SAE 8	SAE 8	Y	Y
		Hy Speed	15	2500	7105-S					

Pump Model	Motor Size (cu-in/rev)	Hydraulic Assembly Type	Max Motor flow (gpm)	Max Press. (psi)	Perf. Curve No.	Motor Type	Inlet Size	Outlet Size	Bi-Rotation Y/N	Flow Cont. option Y/N
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END SUCTION PUMPS

S120	0.45	Hy Speed	11	2500	7107-S	Gerotor	SAE 8	SAE 8	N	Y
	0.58	Hy Speed	14	2500	7108-S	Gerotor	SAE 8	SAE 8	N	Y
	0.73	Pedestal	15	2300	7043-2	Gear	SAE 10	SAE 10	Y	N
S300	1.16	Pedestal	18	2200	7041-S	Gear	SAE 12	SAE 12	Y	N
	1.59		27	2200	7042-S	Gear	SAE 12	SAE 12	Y	N
Chemflo 1	0.22	Hy Speed	7	2500	7113-S	Gerotor	SAE 8	SAE 8	Y	Y
	0.37		10	2500	7109-S					
CF 2	0.22	Hy Speed	7	2500	7128-S	Gerotor	SAE 8	SAE 8	Y	Y
	0.37		10	2500	7110-S					
CF 3	0.22	Hy Speed	7	2500	7114-S	Gerotor	SAE 8	SAE 8	Y	Y
	0.37		10	2500	7111-S					
CF 4	0.22	Hy Speed	7	2500	7115-S	Gerotor	SAE 8	SAE 8	Y	Y
	0.37		10	2500	7112-S					
CF 5	1.16	Pedestal	18	2500	7065	Gear	SAE 12	SAE 12	Y	N
	1.59		28	2500	7068	Gear	SAE 12	SAE 12	Y	N
CF 6	1.16	Pedestal	18	2500	7066	Gear	SAE 12	SAE 12	Y	N
	1.59		27	2500	7064	Gear	SAE 12	SAE 12	Y	N
CF 7	1.16	Pedestal	18	2500	7067	Gear	SAE 12	SAE 12	Y	N
	1.59		28	2500	7069	Gear	SAE 12	SAE 12	Y	N
CF 8	1.59	Pedestal	26	2500	7070	Gear	SAE 12	SAE 12	Y	N

SUBMERSIBLE PUMPS

HydraSub 20	0.22	N/A	6	2000	7117-S	Gerotor	SAE 8	SAE 8	Y	Y
	0.37	N/A	9	2000	7096-S	Gerotor	SAE 8	SAE 8	Y	Y
	0.45	N/A	9	2000	7098-S	Gerotor	SAE 8	SAE 8	Y	Y
HS 25	0.45	N/A	10	2000	7099-S	Gerotor	SAE 8	SAE 8	Y	Y
	0.58	N/A	14	2000	7072	Gerotor	SAE 8	SAE 8	Y	Y
HS 30	0.45	N/A	11	2000	7100-S	Gerotor	SAE 8	SAE 8	Y	Y
	0.58	N/A	16	2000	7118-S	Gerotor	SAE 8	SAE 8	Y	Y

Gerotor Hydraulic Motor Options

Gerotor motors are available in the “G3 Hydraulic Pedestal” or the HySpeed Pedestal (excludes the HydraSub). All gerotor motors have a patented case drain option that is plugged and can be used by removing the plug and connecting to the open port. Flow control option is pressure compensated and available for right hand rotation only (cannot be applied to left hand pumps or HydraSub). The flow control will allow 10 gpm of oil flow maximum to be bypassed.

When to select a HySpeed drive.

1. Unusually high oil pressure/oil flow required and/or very low pump flow rate.
2. Bi-rotational is not required.
3. Flow control (open center) is not required.

MP Gerotor Series

<u>Feature</u>	<u>Pedestal</u>	<u>HySpeed</u>	<u>HydraSub</u>
Bi-rotational	Y	N	Ynr
Case Drain**	Y	Y	Y
Flow Control	Optional*	Optional	NA
Pressure Relief Valve	Optional*	Optional	N
Cast Iron Construction	Y	Y	Y
Single Shaft Design	Y	Y	Y
Seal (double/single)	D	S	D
Ports SAE	Y	Y	Y
Displacements Offered	4	4	4
Pump/motor rotation	R/L*	RH	LH
Seal rating PSI	200	100	100
Pressure Diff. Max PSI	2000	2500	2500

* Flow control and Pressure relief valve are available for RH only

**Motors are normally supplied with the case drain plugged

Motor Selection

Hydraulic System Types

There are three types of hydraulic systems: Open Center-OC, Closed Center pressure compensated-CCpc, and Closed Center load sensing CCLs. The hydraulic motor selection must match the system to be compatible.

Open Center OC Identified by oil flowrate

This hydraulic system is made for a constant oil flow at a specific amount. The hydraulic motor must match the oil flow rate. If it does not match some of the oil must be bypassed around the motor by using a motor with a flow control. The best motor selection is to use the largest displacement as possible. This will minimize the oil that is bypassed and operated most efficiently. All OC systems must have motors with a flow control or have motors sized exactly to match the flow rate. Wherever possible use the largest motor displacement possible. A motor with a flow control may bypass up to 10 gpm of oil.

Closed Center – pressure compensated CCpc Identified by oil pressure

This hydraulic system is made for delivering constant oil pressure. The hydraulic motor must be sized to match the system pressure. If the system pressure is higher than any motor performance curve offering an orifice must be used prior to the motor to reduce the pressure to the motor. The orifice is not available thru MP Pumps. This system is the most difficult to regulate for a centrifugal pump load where several orifices may need to be tested to achieve the correct size.

Select the smallest motor displacement possible. A motor with a flow control should not be used.

Closed Center – load sensing CCIs Identified by oil pressure and load sense

This system senses load and when the load is reduced the flow will be reduced to maintain a set pressure. The initial set-up fixes the hydraulic pressure to match the motor requirements where an orifice and a flow control is not needed. The motor should be sized close to the system pressure but the flow will be limited as well making the motor displacement selection not as critical.

Pump/Motor Detail

Pump Model	Material of Const.	Discharge Orientation	Motor Disp. (cu-in/rev)	Hyd. Asy. Type	Motor Type	Flow Control Y/N	Part No.	Perf. Curve No.	Install. Drawing	Service List No.
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SELF PRIMING PUMPS

Flomax 5	Cl	Vertical	0.22	Pedestal	Gerotor	Y	36471	CN 7126-S	36036	36036
						N	36472		35270	35270
	Cl	Vertical	0.37	Pedestal	Gerotor	Y	36036	CN 7088-S	36036	36036
						N	35270		35270	35270
	Cl	Vertical	0.45	Pedestal	Gerotor	Y	36473	CN 7089-S	36036	36036
						N	36004		35272	35272
Flomax 8	Cl	Vertical	0.37	Pedestal	Gerotor	Y	36042	CN 7090-S	36036	36036
						N	35272		35272	35272
	Cl	Vertical	0.37	Hy Speed	Gerotor	Y	36474	CN 7093-S	36474	36474
						N	29258		29258	29258
	Cl	Vertical	0.45	Pedestal	Gerotor	Y	36475	CN 7091-S	36036	36036
						N	36010		35272	35272
	Cl	Vertical	0.45	Hy Speed	Gerotor	Y	36476	CN 7094-S	36474	36474
						N	36008		29258	29258
	Cl	Vertical	0.58	Pedestal	Gerotor	Y	36477	CN 7092-S	36036	36036
						N	36011		35272	35272
	Cl	Vertical	0.58	Hy Speed	Gerotor	Y	36478	CN 7095-S	36474	36474
						N	36017		29258	29258
Flomax 10	Br	Vertical	0.73	Pedestal	Gear	N	29480	CN 7029	28552	28552
	Cl	Vertical	0.73		Gear	N	28552			
Flomax 15	Br	Vertical	0.73	Pedestal	Gear	N	29342	CN 7030	28553	28553
	Cl	Vertical	0.73		Gear	N	28553			
HHLF1.5	Br	Vertical	0.73	Pedestal	Gear	N	36181	CN 7124	36181	36181
	Cl	Vertical					36183			
HHLF2.0	Br	Vertical	0.73	Pedestal	Gear	N	36180	CN 7125	36180	36180
	Cl	Vertical					36182			
2CT-3	Cl	Vertical	0.58	Hy Speed	Gerotor	N	44223	CN 7084	44090	44090

Pump Model	Material of Const.	Discharge Orientation	Motor Disp. (cu-in/rev)	Hyd. Asy. Type	Motor Type	Flow Control Y/N	Part No.	Perf. Curve No.	Install. Drawing	Service List No.
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END SUCTION PUMPS

Series 30	Cl	Horizontal	0.22	Pedestal	Gerotor	Y	36001	CN 7120-S	36035	36035
						N	35999		36000	36000
	Cl	Horizontal	0.37	Pedestal	Gerotor	Y	36035	CN 7085-S	36035	36035
						N	36000		36000	36000
S60	Cl	Horizontal	0.22	Hy Speed	Gerotor	Y	36479	CN 7121-S	36273	36273
						N	36018		29259	29259
	Cl	Horizontal	0.37	Hy Speed	Gerotor	Y	36273	CN 7102-S	36273	36273
						N	29259		29259	29259
	Cl	Horizontal	0.45	Hy Speed	Gerotor	Y	36480	CN 7101-S	36273	36273
						N	36014		29259	29259
	Cl	Horizontal	0.58	Hy Speed	Gerotor	Y	36481	CN 7122-S	36273	36273
						N	36482		29259	29259
S80	Cl	Horizontal	0.37	Pedestal	Gerotor	Y	36096	CN 7129-S	36096	36096
						N	35274		35274	35274
	Cl	Horizontal	0.37	Hy Speed	Gerotor	Y	36483	CN 7103-S	36483	36483
						N	29260		29260	29260
	Cl	Horizontal	0.45	Pedestal	Gerotor	Y	36486	CN 7086-S	36096	36096
						N	36002		35274	35274
	Cl	Horizontal	0.45	Hy Speed	Gerotor	Y	36484	CN 7104-S	36483	36483
						N	36016		29260	29260
	Cl	Horizontal	0.58	Pedestal	Gerotor	Y	36487	CN 7087-S	36096	36096
						N	36003		35274	35274
	Cl	Horizontal	0.58	Hy Speed	Gerotor	Y	36485	CN 7105-S	36483	36483
						N	36015		29260	29260
S120	Cl	Horizontal	0.45	Hy Speed	Gerotor	Y	36488	CN 7107-S	36488	36488
						N	36007		36007	36007
	Cl	Horizontal	0.58	Hy Speed	Gerotor	Y	36489	CN 7108	36488	36488
						N	30359		36007	36007
	Br	Horizontal	0.73	Pedestal	Gear	N	31130	CN 7043-2	29379	29379
	Cl						29379			
S300	Cl	Horizontal	1.16	Pedestal	Gear	N	27285	CN 7041	27010	27010
	Cl	Horizontal	1.59		Gear	N	27010	CN 7042		

Pump Model	Material of Const.	Discharge Orientation	Motor Disp. (cu-in/rev)	Hyd. Asy. Type	Motor Type	Flow Control Y/N	Part No.	Perf. Curve No.	Install. Drawing	Service List No.
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END SUCTION PUMPS

Chemflo 1	316 SS	Vertical	0.22	Hy Speed	Gerotor	Y	36490	CN 7113-S	36038	36038
						N	36019		36005	36005
	316 SS	Vertical	0.37	Hy Speed	Gerotor	Y	36038	CN 7109-S	36038	36038
						N	36005		36005	36005
CF 2	316 SS	Vertical	0.22	Hy Speed	Gerotor	Y	36491	CN 7128-S	36038	36038
						N	36020		36005	36005
	316 SS	Vertical	0.37	Hy Speed	Gerotor	Y	36492	CN 7110-S	36038	36038
						N	36012		36005	36005
CF 3	316 SS	Vertical	0.22	Hy Speed	Gerotor	Y	36493	CN 7114-S	36274	36274
						N	36021		36006	36006
	316 SS	Vertical	0.37	Hy Speed	Gerotor	Y	36274	CN 7111-S	36274	36274
						N	36006		36006	36006
CF 4	316 SS	Vertical	0.22	Hy Speed	Gerotor	Y	36494	CN 7115-S	36274	36274
						N	36022		36006	36006
	316 SS	Vertical	0.37	Hy Speed	Gerotor	Y	36495	CN 7112-S	36274	36274
						N	36013		36006	36006
CF 5	316 SS	Vertical	1.16	Pedestal	Gear	N	33799	CN 7065	33799	33799
			1.59				33800	CN 7068	33800	33800
CF 6	316 SS	Vertical	1.16	Pedestal	Gear	N	33801	CN 7066	33801	33801
			1.59				33541	CN 7064	33541	33541
CF 7	316 SS	Vertical	1.16	Pedestal	Gear	N	33802	CN 7067	33802	33802
			1.59				33803	CN 7069	33803	33803
CF 8	316 SS	Vertical	1.59	Pedestal	Gear	N	33804	CN 7070	33804	33804

SUBMERSIBLE

HydraSub 20	Al	Vertical	0.22	N/A	Gerotor	N	36023	CN 7117-S	35585	35585
	Al	Vertical	0.37	N/A	Gerotor	N	35585	CN 7096-S		
	Al	Vertical	0.45	N/A	Gerotor	N	36027	CN 7098-S		
HS 25	Al	Vertical	0.45	N/A	Gerotor	N	35576	CN 7099-S	35576	35576
	Al	Vertical	0.58	N/A	Gerotor	N	36147	CN 7072		
HS 30	Al	Vertical	0.45	N/A	Gerotor	N	34902	CN 7100-S	35588	35588
	Al	Vertical	0.58	N/A	Gerotor	N	35588	CN 7118-S		

Comparison with Ace and Hypro

<u>Feature</u>	<u>MP PUMPS*</u>	<u>HYPRO</u>	<u>ACE</u>
Bi-rotational	Y	N	N
Reverse Check	NR	R	R
Orifice Limit	NA	R	R
Case Drain	Y	N	N
Flow Control	Ball/sp(op)**	Needle	Needle
Pressure Relief Valve	Y(op)	N	N
Gerotor	Y	Y	N
Cast Iron Construction	Y	Y	Y
Single Shaft Design	Y	Y	N
Seal (double/single)	D	S	S
Ports (SAE/NPT)	SAE 8	NPT	NPT
Displacements Offered	4	5	6
Pump/motor rotation	RH/LH***	LH	LH
Seal rating PSI	200	150	250
Pressure Diff. Max PSI	2000	2200	2000

*Pedestal features

Bi-rotational, case drain when not plugged (a patentable feature), cast iron, gerotor, flow control/pressure relief valve, with oil lubed bearings.

** Flow control is pressure compensating via ball and spring design that is optional.

*** Left hand rotation limited availability based upon the pump offered.

Op= optional

MP/Hydro/Ace Cross Reference

<u>MP Model</u>	<u>Motor</u>	<u>Oil Flow</u>	<u>Hydro Model</u>	<u>Motor</u>	<u>Oil Flow</u>	<u>Ace Model</u>	<u>Motor</u>	<u>Oil Flow</u>
S60	45	6 to 12	9302	HM1	11 to 13	NA		
	22	4 to 6		HM2	4 to 6	FMC-HYD-204	19	4
	37	6 to 11		HM4	6 to 8	FMC-HYD-210	48	10
	58	9 to 15	NA		FMC-HYD-310	98	16	
NA			NA			FMC-HYD-202	11	2
NA			NA			FMC-HYD-203	15	3
S80	45	6 to 12	9303	HM1	11 to 13	FMC-150-304	41	13
	22	4 to 6		HM2	4 to 6	FMC-150-206	27	7
	58	9 to 15*		HM3	15 to 20	NA		
	37	5 to 10		HM4	5 to 7	NA		
	58	9 to 15		HM5	13 to 16	FMC-650-HYD		14
FM5	45	6 to 11	9303-SP	HM1	11 to 13	NA		
	22	4 to 6		HM2	4 to 6	FMC-150-206	27	7
	58	9 to 15*		HM3	15 to 20	NA		
	37	5 to 9		HM4		NA		
	58	7 to 12		HM5	13 to 15	NA		
S120	58	9 to 14	9304	HM1	11 to 13	FMC-200-304	41	11
	45	6 to 11	NA			FMC-200-210	48	9 to 11
	58	9 to 14*		HM3	15 to 20			
	58	9 to 14*		HM5	15 to 17	FMC-200-310	98	16
	NA		9305	HM3	17 to 19	NA		
	NA		9305-SP	HM3	17 to 19	NA		
S120	58	9 to 14	9306	HM1	11 to 13	NA		
	NA			HM3	18 to 24	NA		
	75Gear	14 to 16		HM5	15 to 18	NA		

Open Center (flow controlled) *

Closed Center

* Open Center flow control/pressure relief valve required for flow rates 8 GPM above the rated oil flow

HM 1-5 represents hydraulic motor, size displacement 1,2,3,4,5

Motor size for MP is the displacement in (cubic-inches per rev)/100

Hydraulic Drive & Pump Selection

When selecting the best pump and motor for the application use this to guide you to the proper fit. In some cases there may be multiple solutions because of overlap in product.

Information Required (minimum)

Centrifugal pump

_____ GPM Pump flow rate expected
_____ PSI Discharge pressure
_____ Y/N Self priming requirement

Hydraulic System

One of three systems

1. *Open Center*- Usually stated as open and always rated for flow rate.

_____ GPM Oil flow rate

2. *Closed Center- Load Sensing (Closed-LS)*

_____ GPM Oil flow rate (max)

_____ PSI Oil system hydraulic pressure (max)

3. *Closed Center- Pressure Compensating (Closed-PC)*

_____ PSI Oil system hydraulic pressure

_____ GPM Oil flow rate (max)

Determine Best Fit

Select the pump based upon the hydraulic curves or the Hypro/Ace pump cross reference. In some cases the discharge of the pump can be used.

Select the motor by the system type and oil flow/pressure.

1. Open Center Systems

The motor must have a flow control.

Select the largest motor possible to match the oil flow rate. Whenever the flow rate exceeds the motor range the flow control will allow up to 10 GPM bypass.

2. Closed Center (LS)

The motor should not have a flow control.

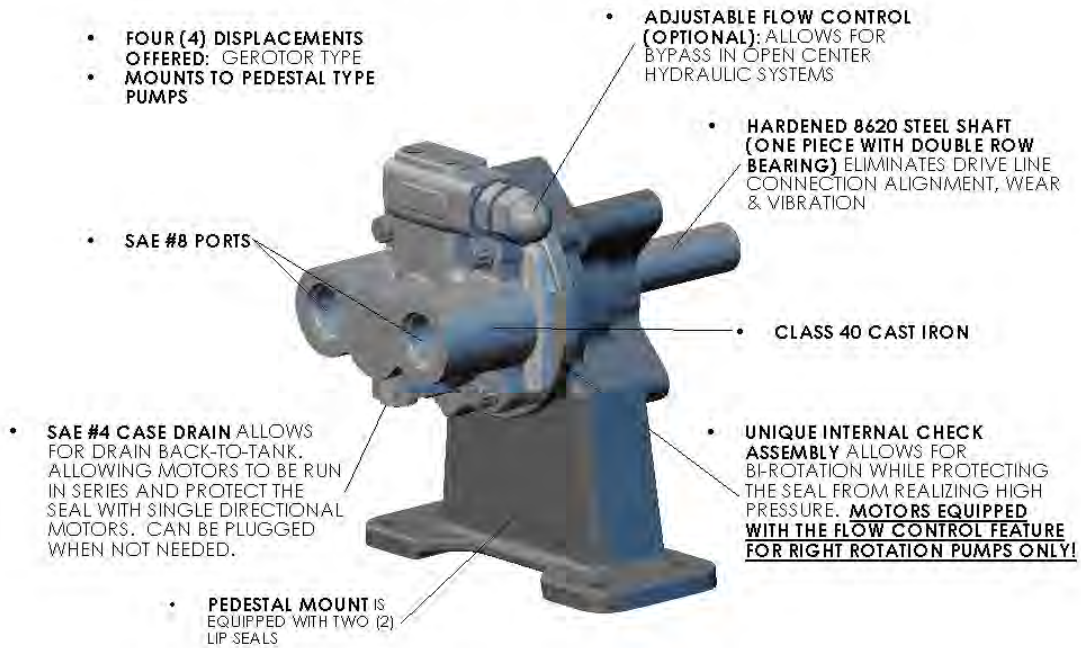
Select the motor size based upon flow rate to be smaller than the maximum oil system flow rate. If a smaller motor is available and the pressure requirement is within range use the smaller motor.

3. Closed Center (PC)

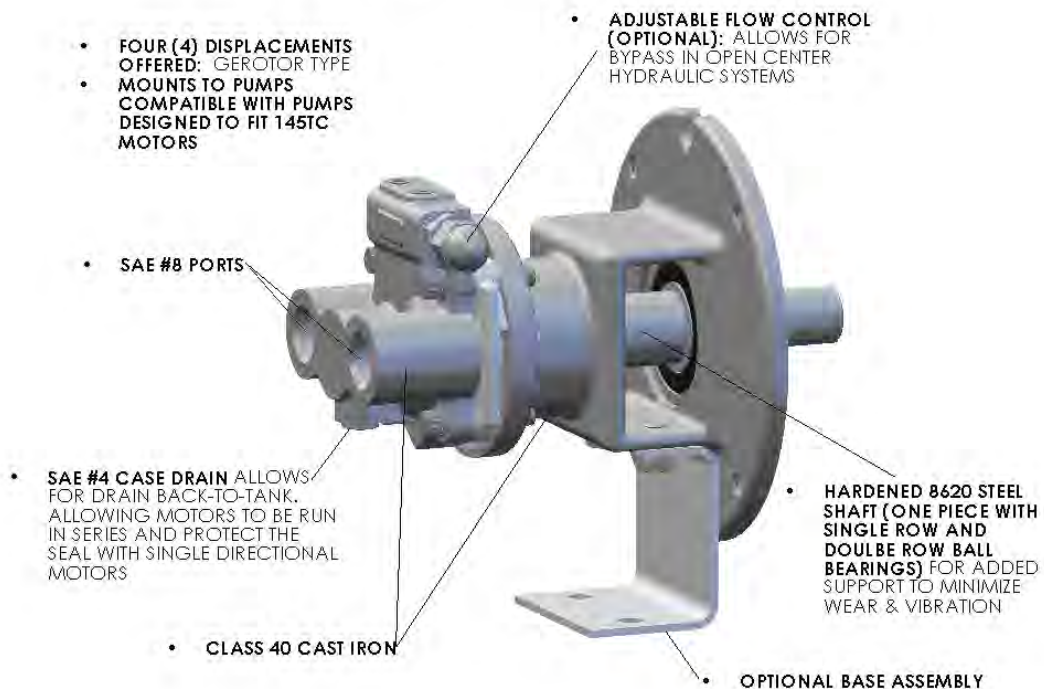
The motor should not have a flow control.

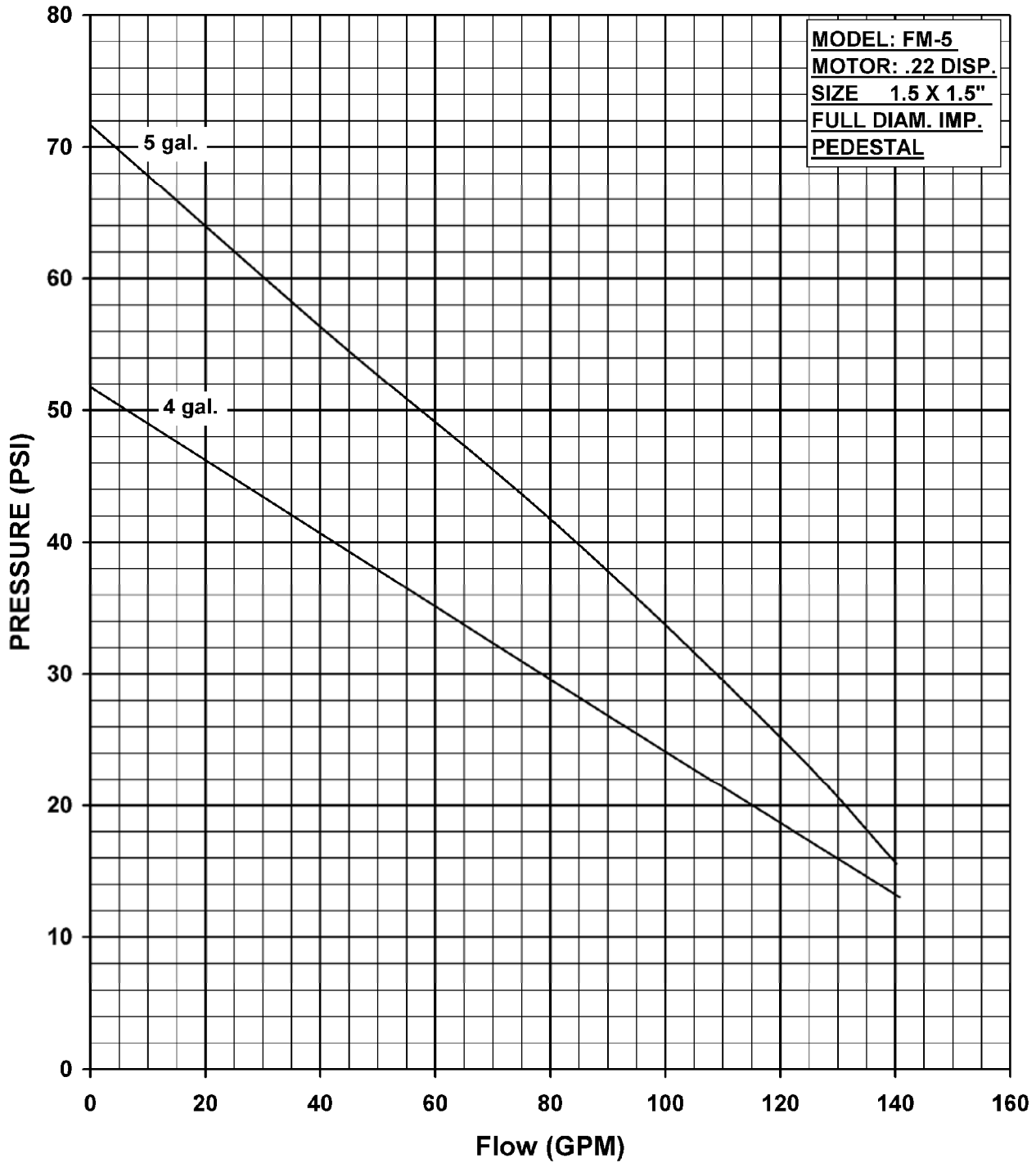
Select the smallest motor to match the motor pressure and the system pressure. If the pressure difference is greater than 400 psi (system-pump curve) an orifice will be required to limit hydraulic flow and we will not recommend the use of our pump. When in doubt consult the factory.

CAST IRON G-3 PEDESTAL HYDRAULIC MOTOR



CAST IRON G-3 HY SPEED HYDRAULIC MOTOR

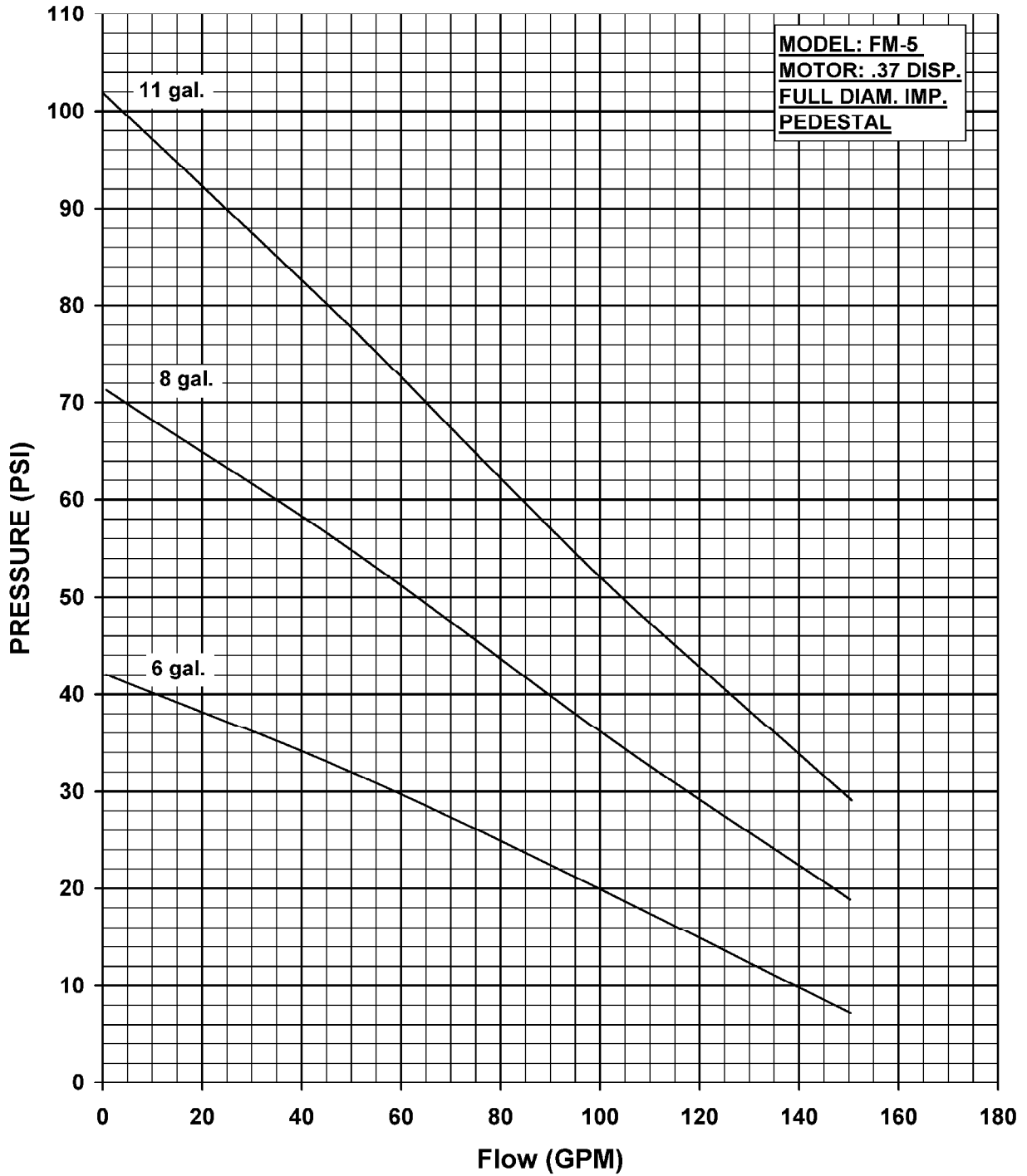




OIL FLOW	SHUT OFF 0 GPM	20 GPM	40 GPM	60 GPM	80 GPM	100 GPM	120 GPM	140 GPM	MAX. HYD. OIL PRESS. REQ.
5 GPM	72 PSI	64 PSI	56 PSI	49 PSI	42 PSI	34 PSI	25 PSI	13 PSI	2550 PSI
4 GPM	52 PSI	46 PSI	41 PSI	35 PSI	29 PSI	24 PSI	18 PSI	13 PSI	2150 PSI

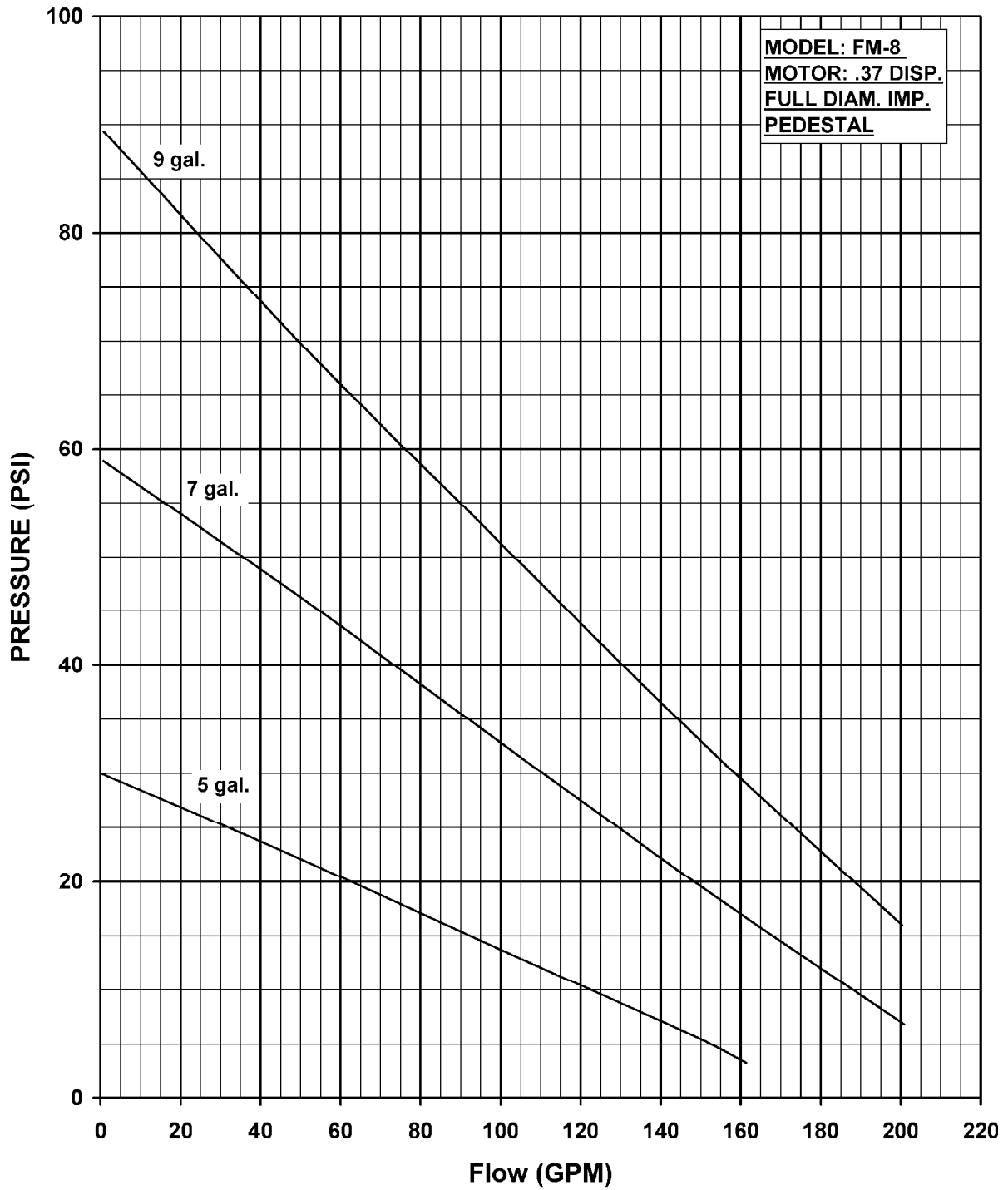
CN 7126-S

FLOMAX Performance - Pedestal



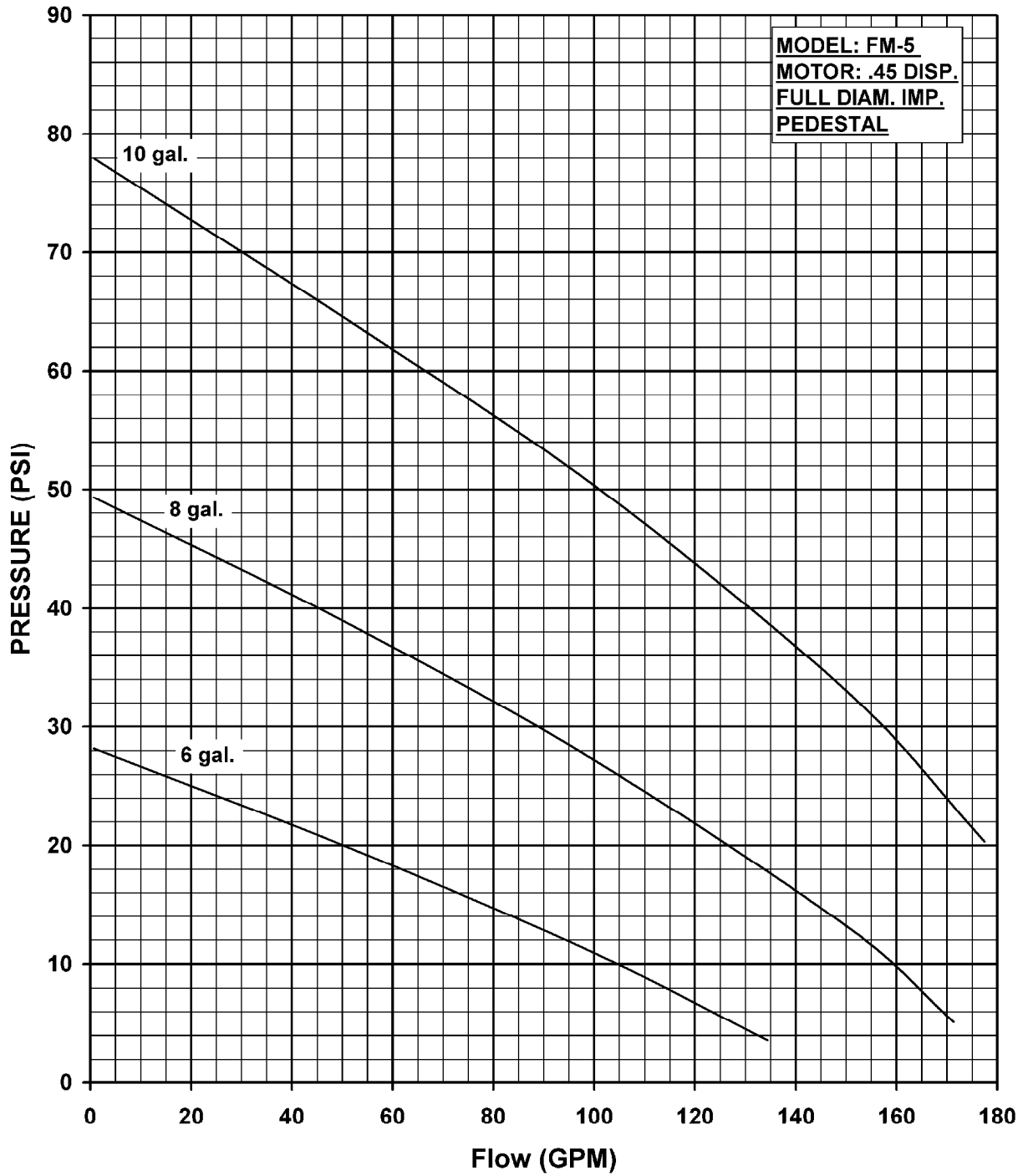
OIL FLOW	SHUT OFF 0 GPM	10 GPM	25 GPM	40 GPM	55 GPM	70 GPM	85 GPM	100 GPM	115 GPM	130 GPM	145 GPM	MAX. HYD. OIL PRESS.REQ.
6 GPM	42 PSI	40 PSI	37 PSI	34 PSI	31 PSI	27 PSI	24 PSI	20 PSI	16 PSI	13 PSI	9 PSI	1180 PSI
8 GPM	72 PSI	68 PSI	63 PSI	58 PSI	53 PSI	47 PSI	42 PSI	36 PSI	31 PSI	26 PSI	21 PSI	1610 PSI
11 GPM	72 PSI	97 PSI	90 PSI	83 PSI	75 PSI	67 PSI	60 PSI	53 PSI	43 PSI	39 PSI	32 PSI	1950 PSI

CN 7088-S



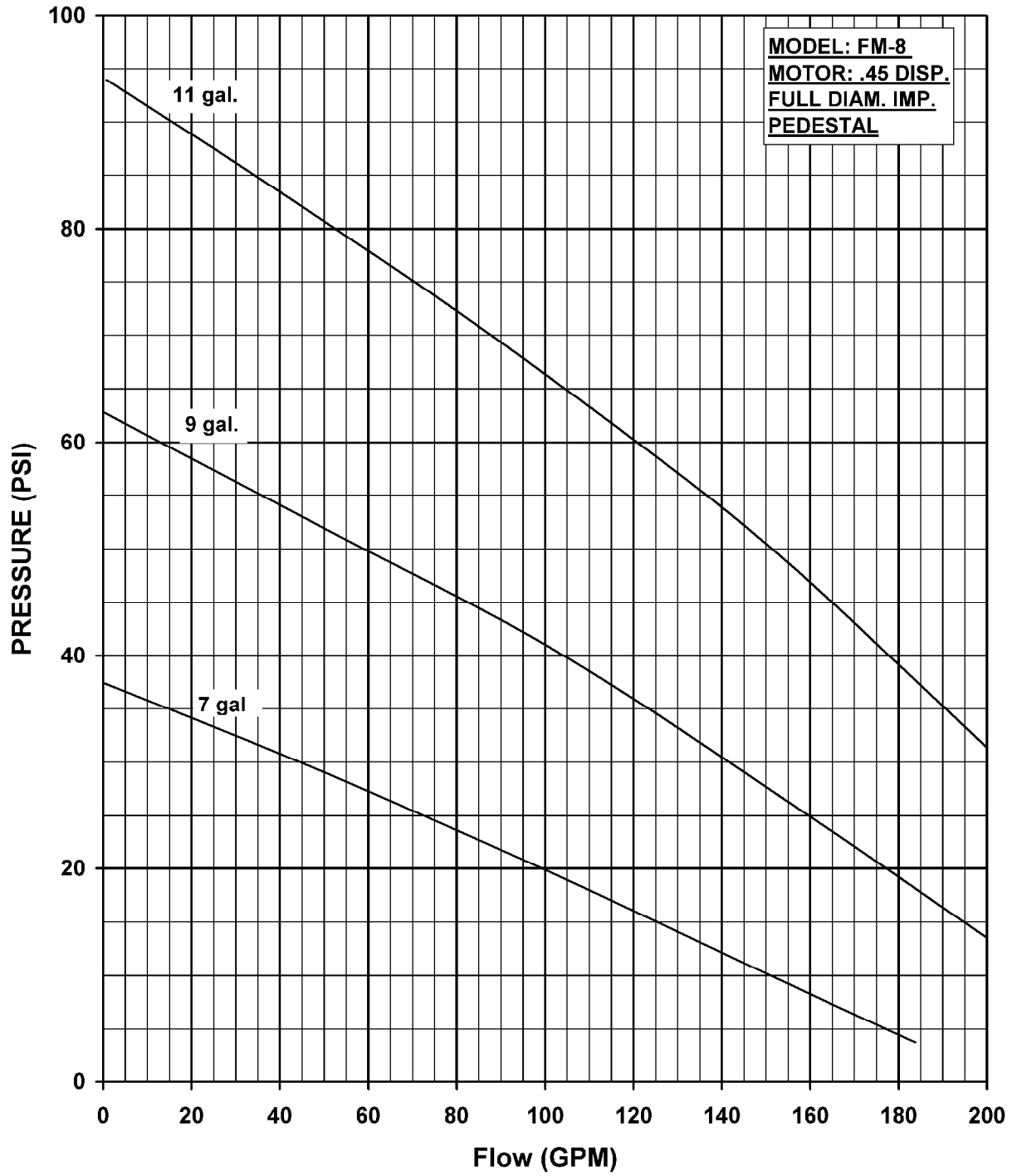
OIL FLOW	SHUT OFF 0 GPM	20 GPM	40 GPM	60 GPM	80 GPM	100 GPM	120 GPM	140 GPM	160 GPM	180 GPM	200 GPM	MAX. HYD. OIL PRESS.REQ.
5 GPM	30 PSI	27 PSI	24 PSI	21 PSI	17 PSI	14 PSI	11 PSI	7 PSI	4 PSI	-	-	920 PSI
7 GPM	59 PSI	54 PSI	49 PSI	43 PSI	37 PSI	33 PSI	27 PSI	22 PSI	17 PSI	12 PSI	7 PSI	1460 PSI
9 GPM	89 PSI	82 PSI	74 PSI	66 PSI	57 PSI	49 PSI	42 PSI	36 PSI	29 PSI	23 PSI	17 PSI	1850 PSI

CN 7090-S



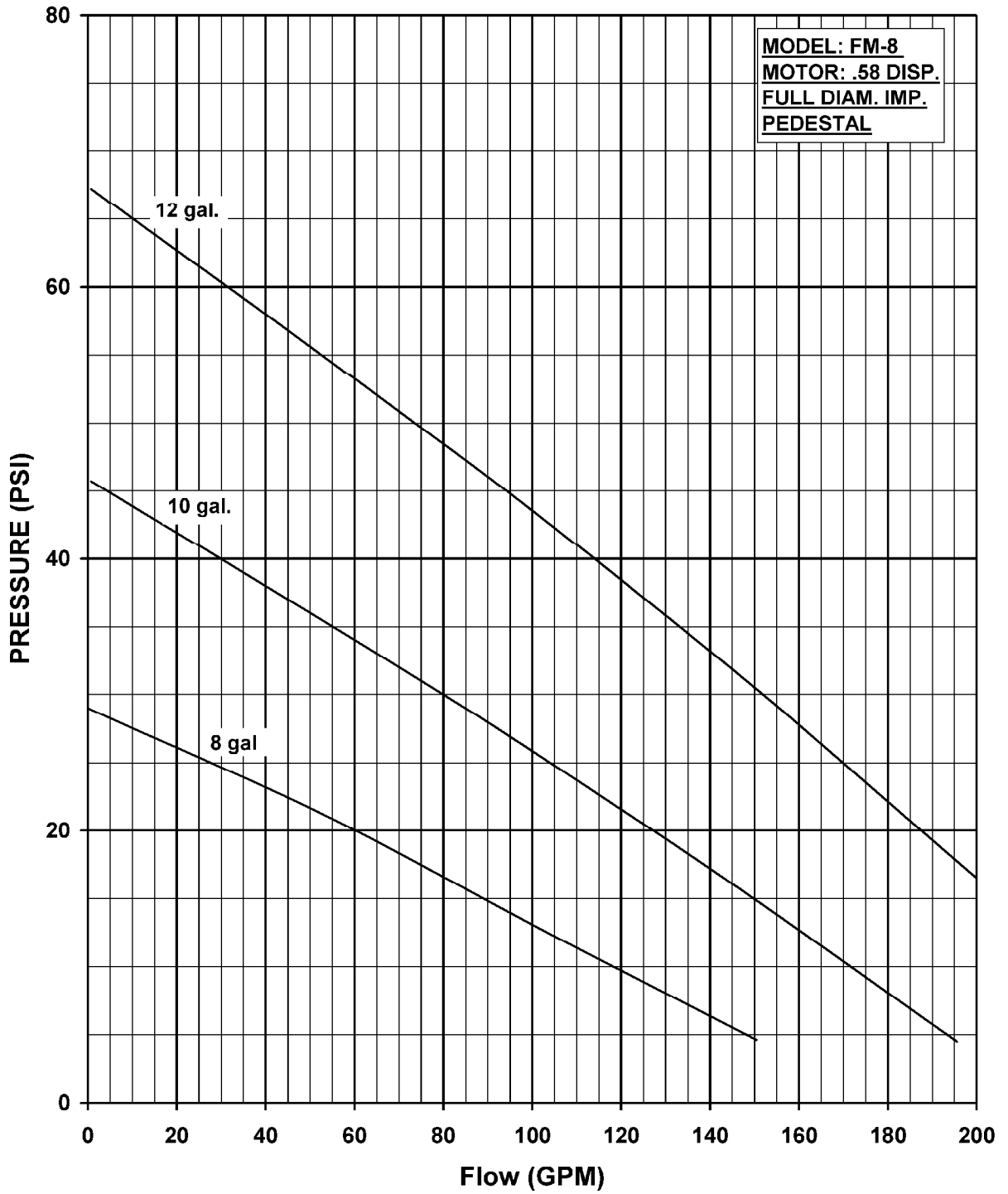
OIL FLOW	SHUT OFF 0 GPM	10 GPM	25 GPM	40 GPM	55 GPM	70 GPM	85 GPM	100 GPM	115 GPM	130 GPM	145 GPM	MAX. HYD. OIL PRESS.REQ.
6 GPM	28	27	24	22	19	16	14	11	8	4	-	720
8 GPM	49	47	44	42	37	34	31	27	23	19	15	1200
10 GPM	77	75	71	67	64	59	55	50	46	41	36	1650

CN 7089-S



OIL FLOW	SHUT OFF 0 GPM	20 GPM	40 GPM	60 GPM	80 GPM	100 GPM	120 GPM	140 GPM	160 GPM	180 GPM	200 GPM	MAX. HYD. OIL PRESS.REQ.
7 GPM	37 PSI	34 PSI	31 PSI	27 PSI	24 PSI	20 PSI	16 PSI	13 PSI	8 PSI	4 PSI	-	900 PSI
9 GPM	62 PSI	58 PSI	54 PSI	50 PSI	46 PSI	41 PSI	36 PSI	31 PSI	25 PSI	19 PSI	14 PSI	1400 PSI
11 GPM	94 PSI	89 PSI	83 PSI	78 PSI	72 PSI	66 PSI	60 PSI	54 PSI	46 PSI	37 PSI	29 PSI	1920 PSI

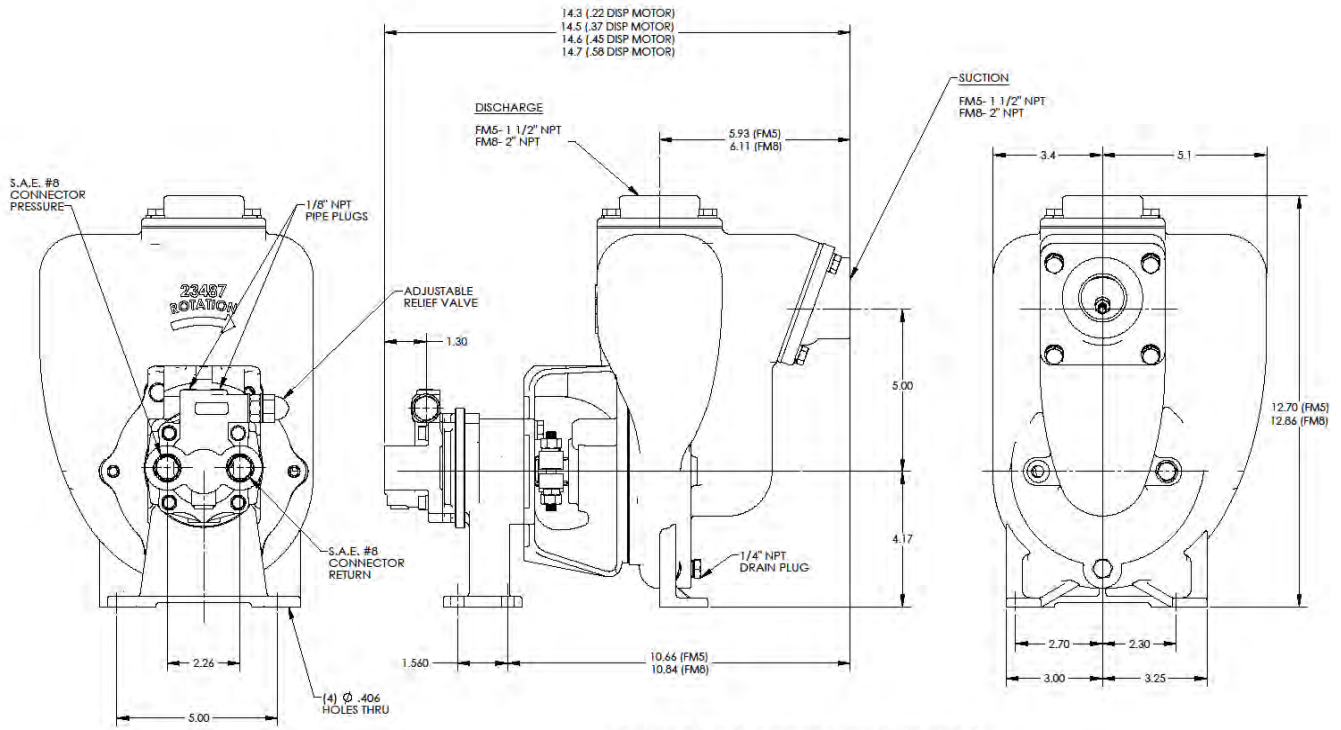
CN 7091-S



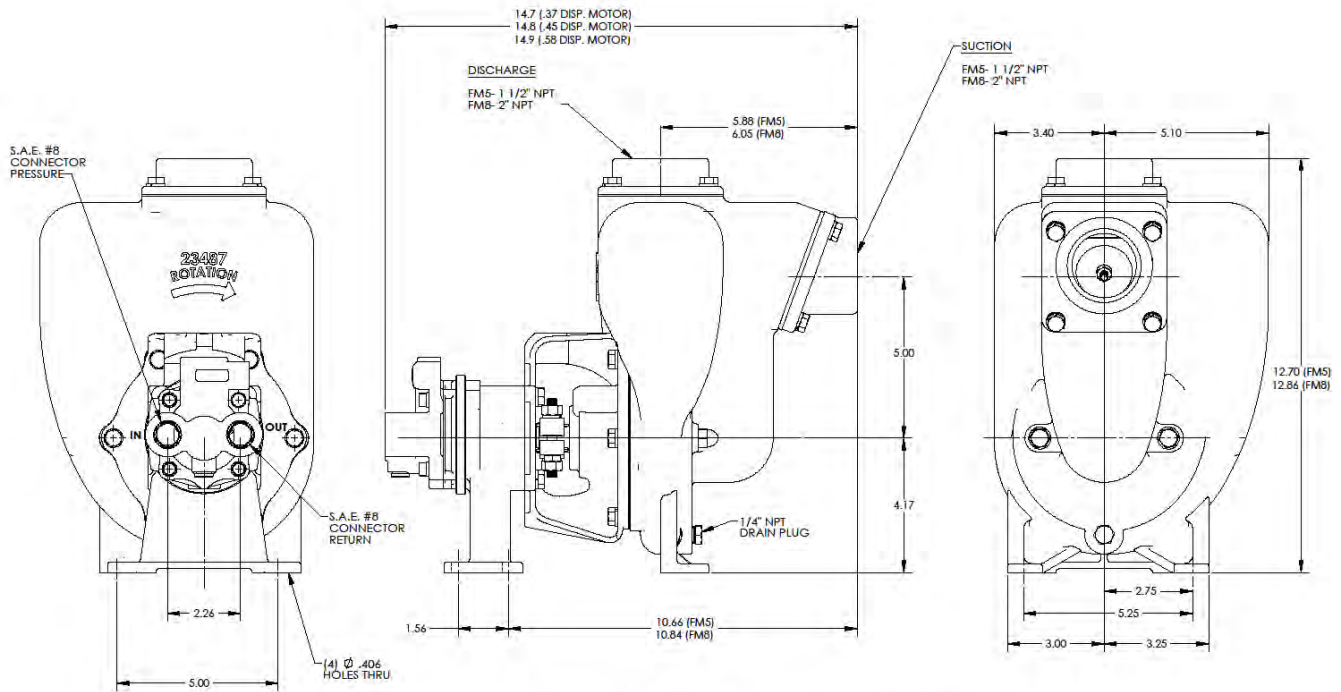
OIL FLOW	SHUT OFF 0 GPM	20 GPM	40 GPM	60 GPM	80 GPM	100 GPM	120 GPM	140 GPM	160 GPM	180 GPM	200 GPM	MAX. HYD. OIL PRESS. REQ.
8 GPM	29 PSI	26 PSI	23 PSI	20 PSI	16 PSI	13 PSI	10 PSI	6 PSI	-	-	-	650 PSI
10 GPM	46 PSI	42 PSI	38 PSI	34 PSI	30 PSI	26 PSI	22 PSI	17 PSI	13 PSI	8 PSI	-	900 PSI
12 GPM	67 PSI	63 PSI	58 PSI	54 PSI	48 PSI	43 PSI	38 PSI	33 PSI	27 PSI	23 PSI	17 PSI	1300 PSI

CN 7092-S

FLOMAX Dimensions - Pedestal



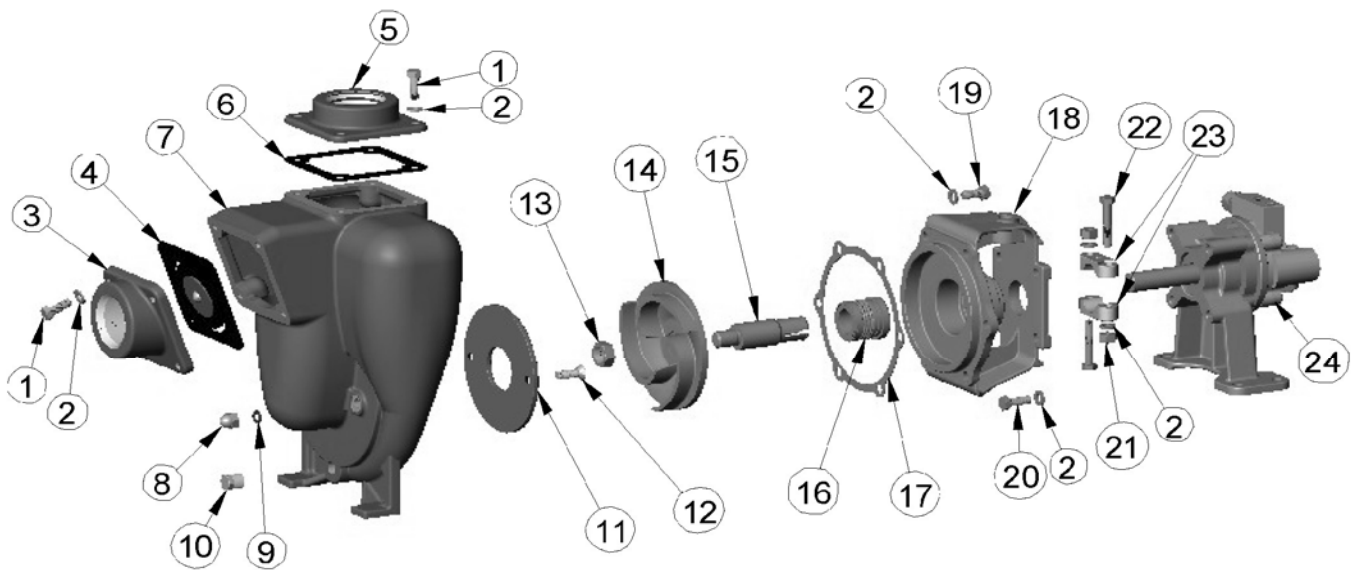
(FLOMAX 5 & 8 PEDESTAL ASSEMBLY)



(FLOMAX 5 & 8 PEDESTAL, NO FLOW CONTROL)

**FLOMAX 5 Exploded View – Pedestal
With Flow Control**

36036

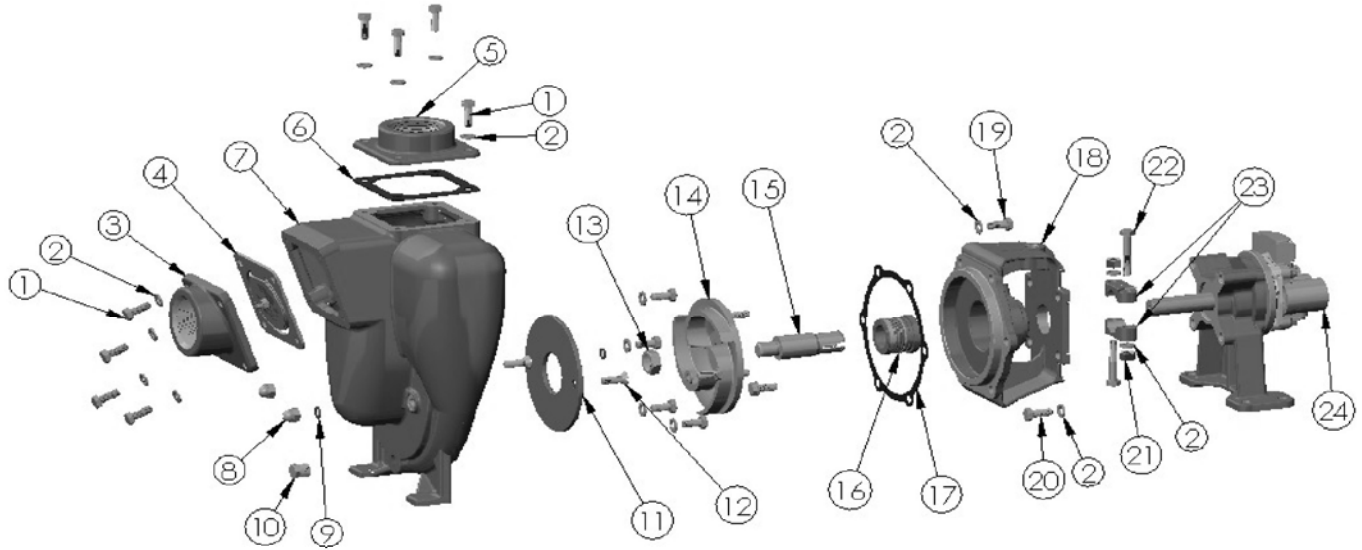


ITEM NO.	PART NO.	DESCRIPTION	QTY.		ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	21242	CAPSCREW - 5/16"-18 X 7/8"	8	*	15	22286	DRIVE SLEEVE SS - 3/4	1
2	21238	LOCKWASHER 5/16	16	*	16	22273	SEAL- VITON	1
3	22263	SUCTION FLANGE- 1.5" NPT	1	*	17	22255	GASKET	1
4	23022	FLAPPER ASY- BUNA	1		18	22247	ADAPTOR	1
5	22266	DISCHARGE FLANGE- 1.5" NPT	1		19	24965	CAPSCREW- 5/16"-18 X 3/4"	6
* 6	22256	GASKET- BUNA	1		20	21278	CAPSCREW- 5/16"-24 X .88	4
7	22251	HOUSING- CAST IRON	1		21	21284	HEX NUT- 5/16"-18	2
8	21237	ACORN NUT- 5/16"-18	2		22	21264	CAPSCREW- 5/16"-18 X 1 3/4"	2
* 9	21248	GASKET - 1/2 X 5/16 X 1/16	2		23	21946	CLAMP- 3/4 SL	1
* 10	41475	PIPE PLUG- 1/4" NPT	1		24	36039	.22 DISP. HYD. PEDESTAL ASY	1
* 11	22260	WEAR PLATE	1			36037	.37 DISP. HYD. PEDESTAL ASY	
12	21249	SCREW SS 5/16"-18X1	2			36040	.45 DISP. HYD. PEDESTAL ASY	
13	22655	JAM NUT- 5/8"-18	1			36041	.58 DISP. HYD. PEDESTAL ASY	
* 14	22293	IMPELLER	1					

* SUGGESTED REPLACEMENT PARTS

**FLOMAX 8 Exploded Views – Pedestal
With Flow Control**

36588

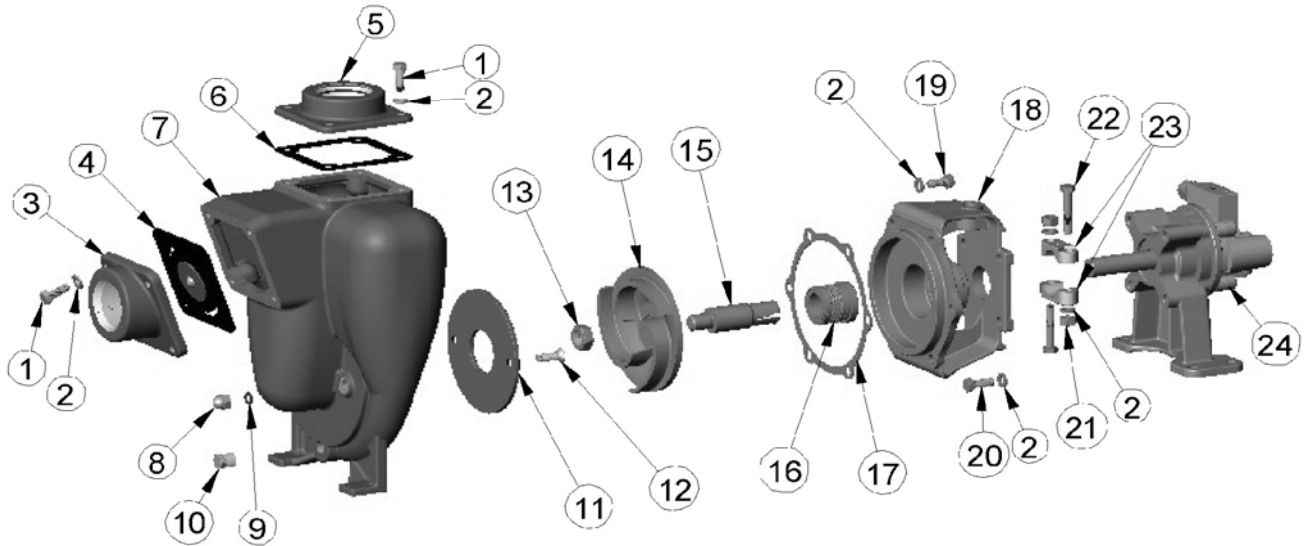


ITEM NO.	PART NO.	DESCRIPTION	QTY.		ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	21242	CAPSCREW - 5/16"-18 X 7/8"	8		15	22286	DRIVE SLEEVE SS - 3/4"	1
	21238	LOCKWASHER 5/16	16	*	16	22273	SEAL- VITON	1
	22387	SUCTION FLANGE- 2" NPT	1	*	17	22255	GASKET	1
*	23022	FLAPPER ASY- BUNA	1		18	22247	ADAPTOR	1
	22311	DISCHARGE FLANGE- 2" NPT	1		19	24965	CAPSCREW- 5/16"-18 X 3/4"	6
*	22256	GASKET- BUNA	1		20	21278	CAPSCREW- 5/16"-24 X .88	4
	22251	HOUSING- CAST IRON	1		21	21284	HEX NUT- 5/16"-18	2
	21237	ACORN NUT- 5/16"-18	2		22	21264	CAPSCREW- 5/16"-18 X 1 3/4"	2
*	21248	GASKET - 1/2 X 5/16 X 1/16	2		23	21946	CLAMP- 3/4 SL	2
	41475	PIPE PLUG- 1/4" NPT	1		24	35995	22 DISP. HYD. PEDESTAL ASY	1
*	22260	WEAR PLATE	1			36447	37 DISP. HYD. PEDESTAL ASY	
	21249	SCREW SS 5/16"-18X1	2			35996	45 DISP. HYD. PEDESTAL ASY	
	22655	JAM NUT- 5/8"-18	1			36448	58 DISP. HYD. PEDESTAL ASY	
	22293	IMPELLER	1					

* SUGGESTED REPLACEMENT PARTS

**FLOMAX 8 Exploded Views – Pedestal
With Flow Control**

36042

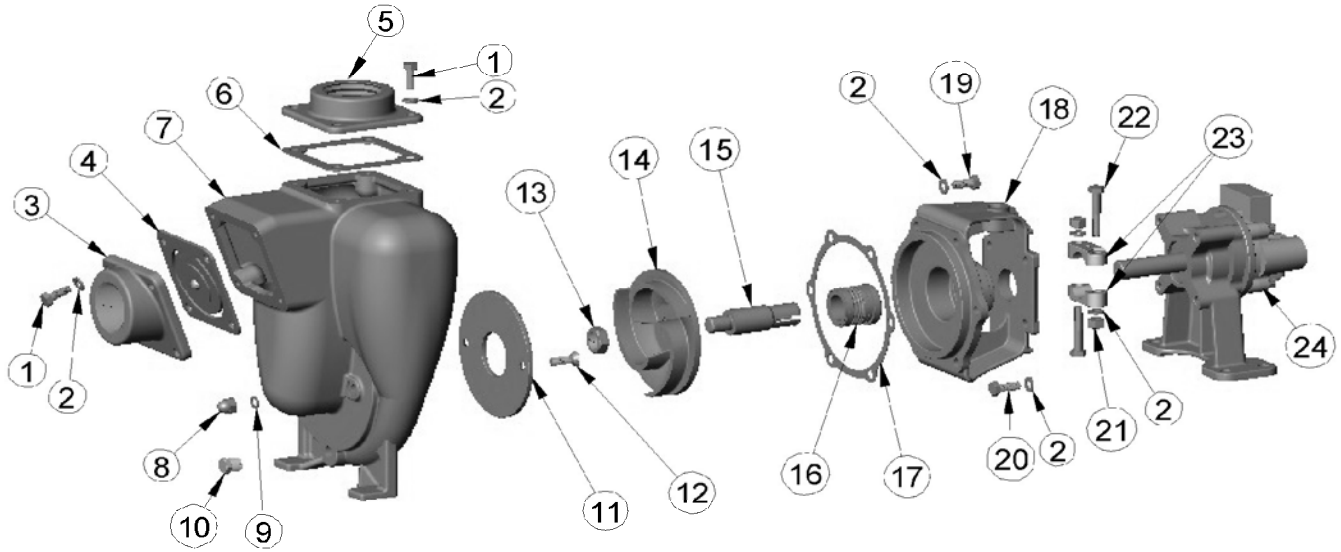


ITEM NO.	PART NO.	DESCRIPTION	QTY.		ITEM NO.	PART NO.	DESCRIPTION	QTY.	
	1	21242	CAPSCREW - 5/16"-18 X 7/8"	8	*	15	22286	DRIVE SLEEVE SS - 3/4	1
	2	21238	LOCKWASHER 5/16	16	*	16	22273	SEAL- VITON	1
	3	22387	SUCTION FLANGE- 2" NPT	1	*	17	22255	GASKET	1
	4	23022	FLAPPER ASY- BUNA	1		18	22247	ADAPTOR	1
	5	22311	DISCHARGE FLANGE- 2" NPT	1		19	24965	CAPSCREW- 5/16"-18 X 3/4"	6
*	6	22256	GASKET- BUNA	1		20	21278	CAPSCREW- 5/16"-24 X .88	4
	7	22251	HOUSING- CAST IRON	1		21	21284	HEX NUT- 5/16"-18	2
	8	21237	ACORN NUT- 5/16"-18	2		22	21264	CAPSCREW- 5/16"-18 X 1 3/4"	2
*	9	21248	GASKET - 1/2 X 5/16 X 1/16	2		23	21946	CLAMP- 3/4 SL	1
*	10	41475	PIPE PLUG- 1/4" NPT	1		24	36039	.22 DISP. HYD. PEDESTAL ASY	1
*	11	22260	WEAR PLATE	1			36037	.37 DISP. HYD. PEDESTAL ASY	
	12	21249	SCREW SS 5/16"-18X1	2			36040	.45 DISP. HYD. PEDESTAL ASY	
	13	22655	JAM NUT- 5/8"-18	1			36041	.58 DISP. HYD. PEDESTAL ASY	
*	14	22293	IMPELLER	1					

* SUGGESTED REPLACEMENT PARTS

FLOMAX 5 Exploded Views - Pedestal

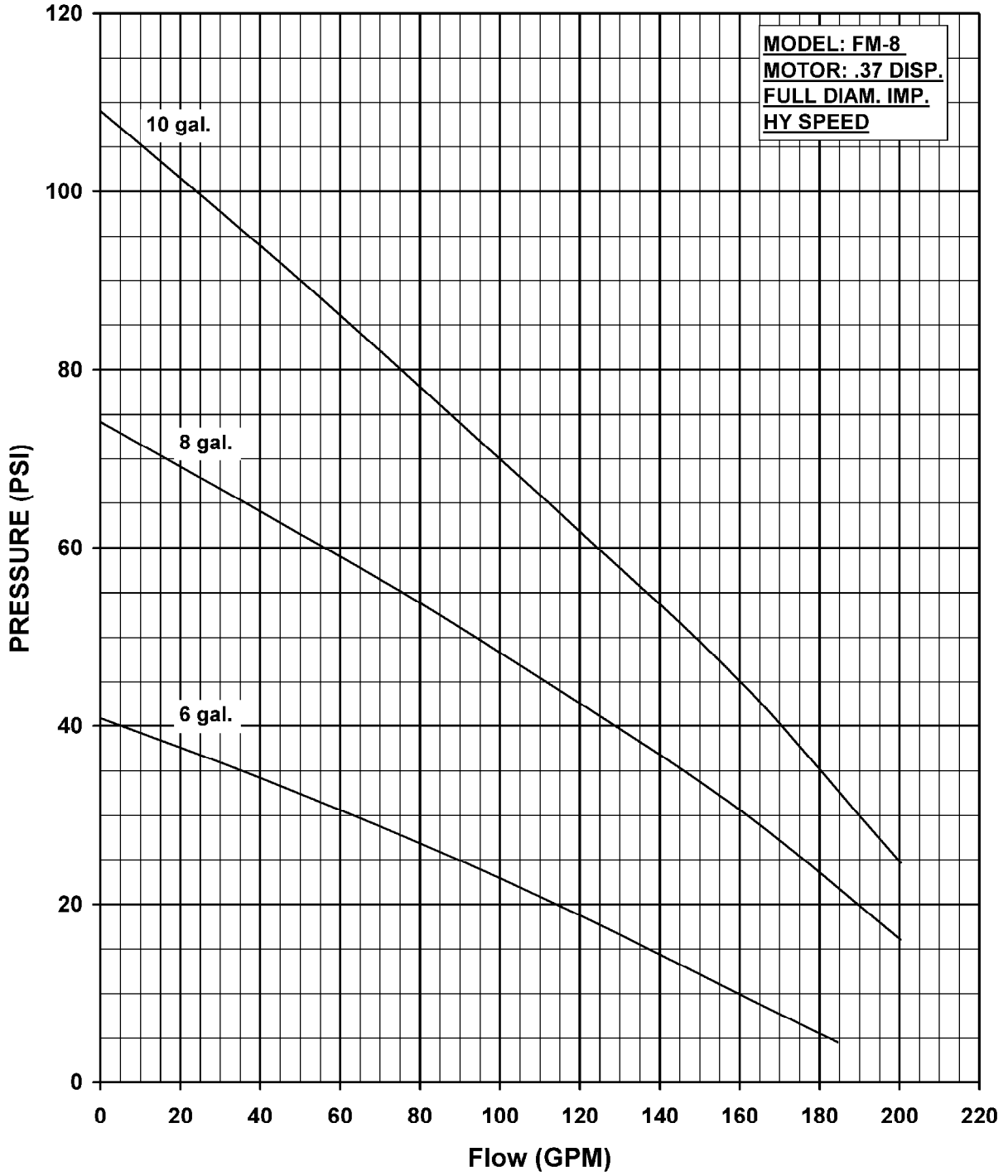
36587



ITEM NO.	PART NO.	DESCRIPTION	QTY.		ITEM NO.	PART NO.	DESCRIPTION	QTY.	
	1	21242	CAPSCREW - 5/16"-18 X 7/8"	8	*	15	22286	DRIVE SLEEVE SS - 3/4	1
	2	21238	LOCKWASHER 5/16	16	*	16	22273	SEAL- VITON	1
	3	22263	SUCTION FLANGE- 1 1/2" NPT	1	*	17	22255	GASKET	1
	4	23022	FLAPPER ASY- BUNA	1		18	22247	ADAPTOR	1
	5	22266	DISCHARGE FLANGE- 1 1/2" NPT	1		19	24965	CAPSCREW- 5/16"-18 X 3/4"	6
*	6	22256	GASKET- BUNA	1		20	21278	CAPSCREW- 5/16"-24 X .88	4
	7	22251	HOUSING- CAST IRON	1		21	21284	HEX NUT- 5/16"-18	2
	8	21237	ACORN NUT- 5/16"-18	2		22	21264	CAPSCREW- 5/16"-18 X 1 3/4"	2
*	9	21248	GASKET - 1/2 X 5/16 X 1/16	2		23	21946	CLAMP- 3/4 SL	2
*	10	41475	PIPE PLUG- 1/4" NPT	1		24	35995	.22 DISP. HYD. PEDESTAL ASY	1
*	11	22260	WEAR PLATE	1			36447	.37 DISP. HYD. PEDESTAL ASY	
	12	21249	SCREW SS 5/16"-18X1	2			35996	.45 DISP. HYD. PEDESTAL ASY	
	13	22655	JAM NUT- 5/8"-18	1			36448	.58 DISP. HYD. PEDESTAL ASY	
*	14	22293	IMPELLER	1					

* SUGGESTED REPLACEMENT PARTS

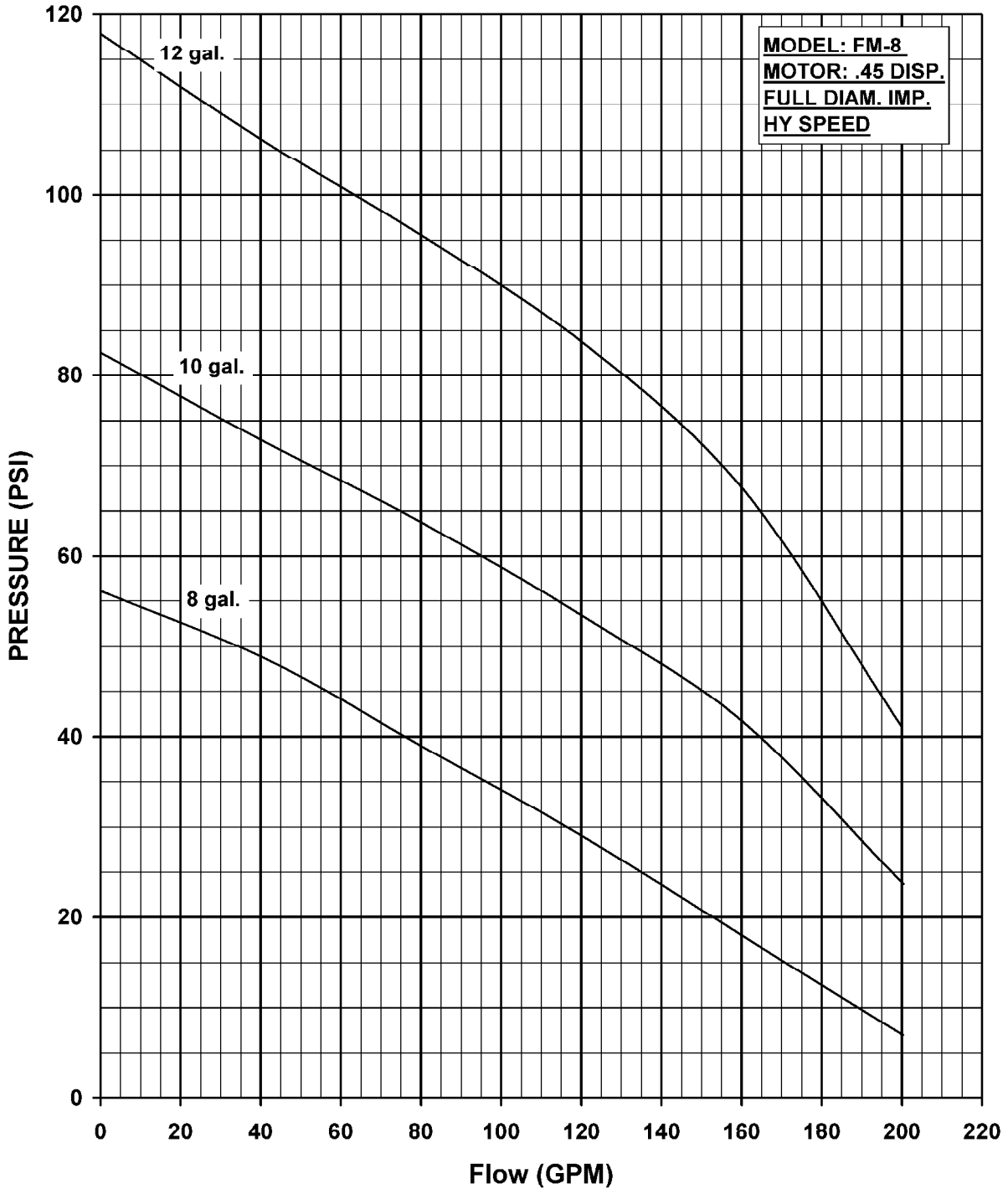
FLOMAX Performance – HY Speed



OIL FLOW	SHUT OFF 0 GPM	20 GPM	40 GPM	60 GPM	80 GPM	100 GPM	120 GPM	140 GPM	160 GPM	180 GPM	200 GPM	MAX. HYD. OIL PRESS. REQ.
6 GPM	41 PSI	38 PSI	34 PSI	31 PSI	27 PSI	22 PSI	18 PSI	14 PSI	10 PSI	5 PSI	-	1250 PSI
8 GPM	74 PSI	69 PSI	64 PSI	59	54 PSI	48 PSI	43 PSI	37 PSI	31 PSI	24 PSI	16 PSI	1950 PSI
10 GPM	109 PSI	102 PSI	94 PSI	86 PSI	78 PSI	70 PSI	62 PSI	54 PSI	45 PSI	35 PSI	25 PSI	2350 PSI

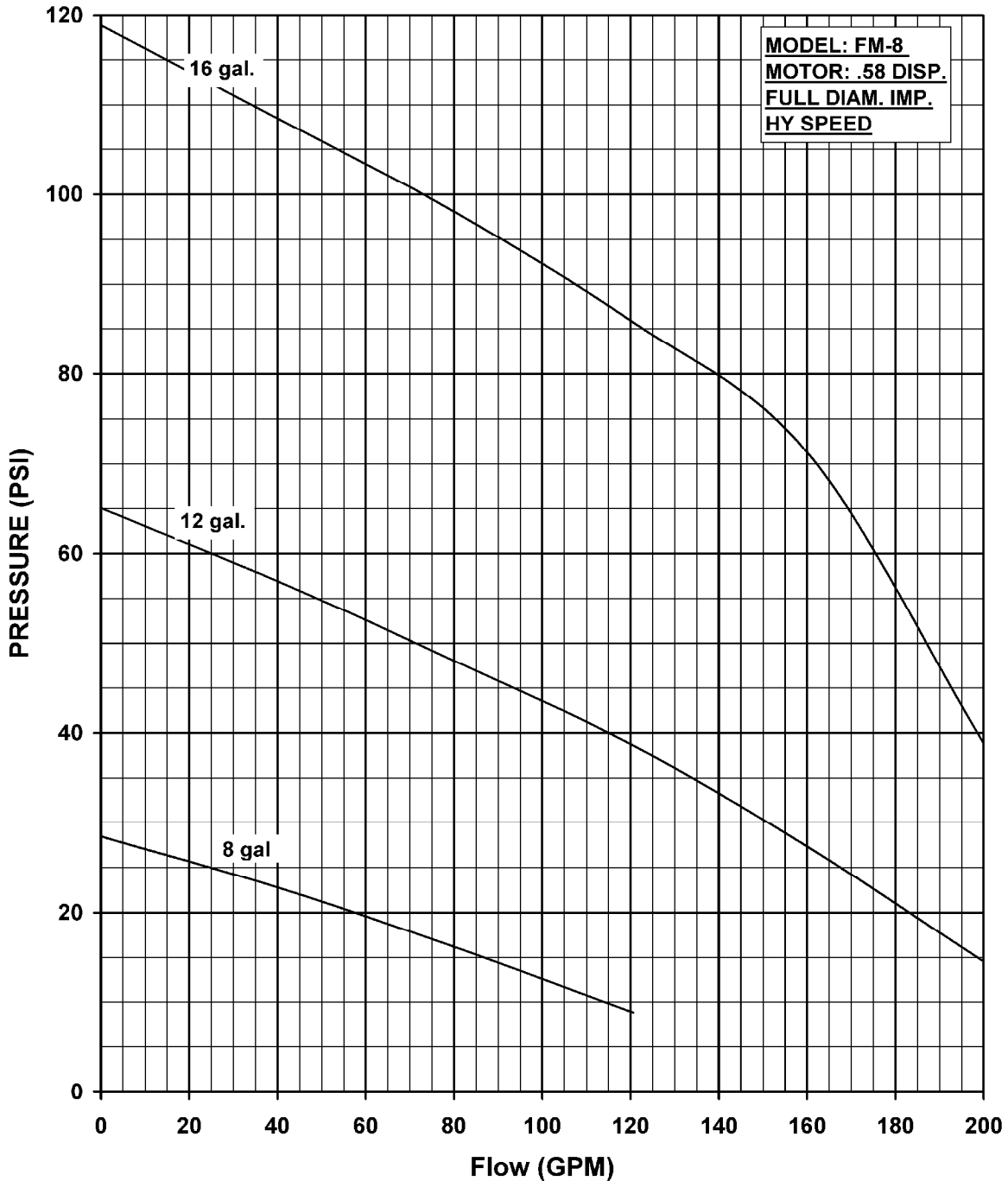
CN 7093-S

FLOMAX Performance – HY Speed



OIL FLOW	SHUT OFF 0 GPM	20 GPM	40 GPM	60 GPM	80 GPM	100 GPM	120 GPM	140 GPM	160 GPM	180 GPM	200 GPM	MAX. HYD. OIL PRESS. REQ..
8 GPM	53 PSI	49 PSI	44 PSI	41 PSI	37 PSI	33 PSI	28 PSI	24 PSI	18 PSI	14 PSI	6 PSI	1250 PSI
10 GPM	82 PSI	77 PSI	73 PSI	68 PSI	64 PSI	59 PSI	54 PSI	48 PSI	42 PSI	34 PSI	24 PSI	1850 PSI
12 GPM	118 PSI	110 PSI	105 PSI	100 PSI	96 PSI	90 PSI	83 PSI	76 PSI	67 PSI	54 PSI	37 PSI	2450 PSI

CN 7094-S

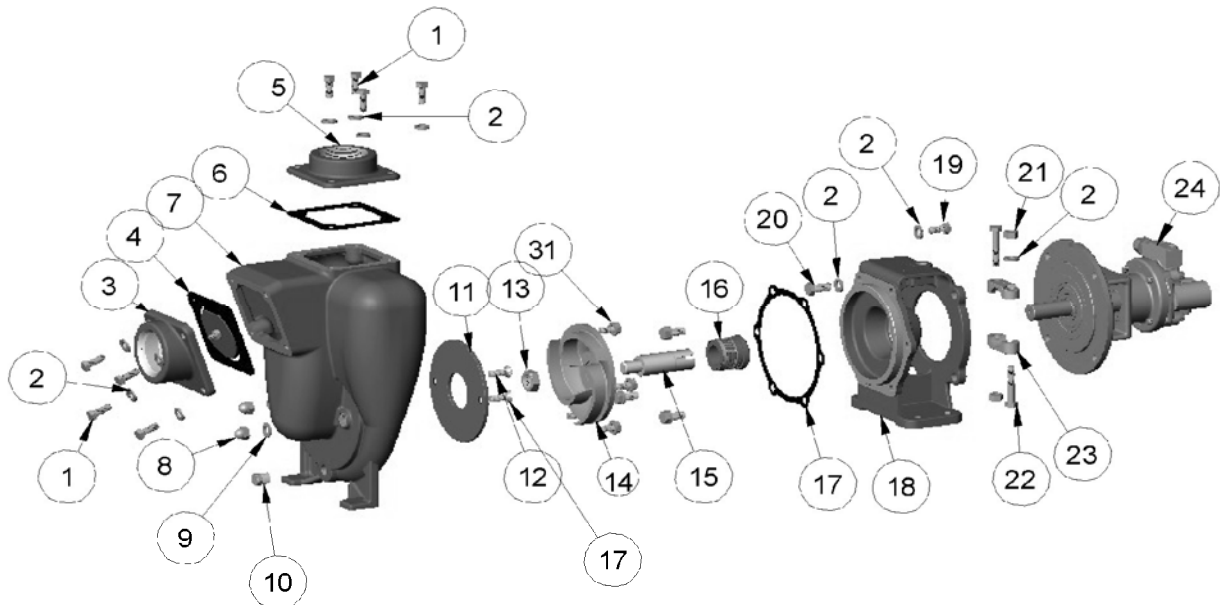


OIL FLOW	SHUT OFF 0 GPM	20 GPM	40 GPM	60 GPM	80 GPM	100 GPM	120 GPM	140 GPM	160 GPM	180 GPM	200 GPM	MAX. HYD. OIL PRESS. REQ...
8 GPM	28 PSI	26 PSI	23 PSI	20 PSI	16 PSI	13 PSI	9 PSI	-	-	-	-	650 PSI
12 GPM	65 PSI	61 PSI	56 PSI	53 PSI	48 PSI	43 PSI	38 PSI	44 PSI	27 PSI	21 PSI	15 PSI	1250 PSI
16 GPM	119 PSI	113 PSI	106 PSI	102 PSI	98 PSI	93 PSI	86 PSI	80 PSI	72 PSI	56 PSI	39 PSI	1950 PSI

CN 7095-S

**FLOMAX 8 Exploded View – HY Speed
With Flow Control**

36474

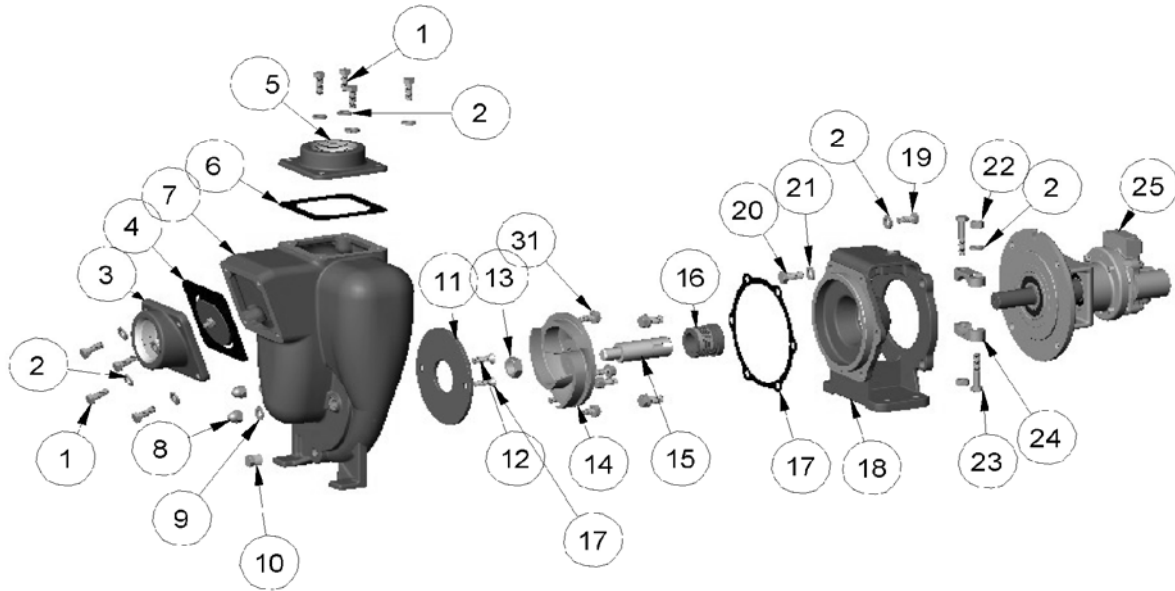


ITEM NO.	PART NO.	DESCRIPTION	QTY.		ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	21242	CAPSCREW - 5/16"-18 X 7/8"	8		15	25664	DRIVE SLEEVE SS - 7/8	1
2	21238	LOCKWASHER 5/16	16	*	16	22273	SEAL- VITON	1
3	22387	SUCTION FLANGE- 2" NPT	1	*	17	22255	GASKET	1
4	23022	FLAPPER ASY- BUNA	1		18	25904	ADAPTOR	1
5	22311	DISCHARGE FLANGE- 2" NPT	1		19	24965	CAPSCREW- 5/16"-18 X 3/4"	6
* 6	22256	GASKET- BUNA	1		20	21251	CAPSCREW- 3/8"-16-24 X .88	4
7	22251	HOUSING- CAST IRON	1		21	21266	LOCKWASHER SS- 3/8-16	4
8	21237	ACORN NUT- 5/16"-18	2		22	21284	HEX NUT- 5/16"-18	2
* 9	21248	GASKET - 1/2 X 5/16 X 1/16	2		23	21264	CAPSCREW- 5/16"-18 X 1 3/4"	2
10	41475	PIPE PLUG- 1/4" NPT	1		24	21946	CLAMP- 3/4 SL	1
* 11	22260	WEAR PLATE	1		25	36097	.37 DISP. HYD. PEDESTAL ASY	1
12	21249	SCREW SS 5/16"-18X1	2			36098	.45 DISP. HYD. PEDESTAL ASY	
13	22655	JAM NUT- 5/8"-18	1			36024	.58 DISP. HYD. PEDESTAL ASY	
14	22293	IMPELLER	1					

* SUGGESTED REPLACEMENT PARTS

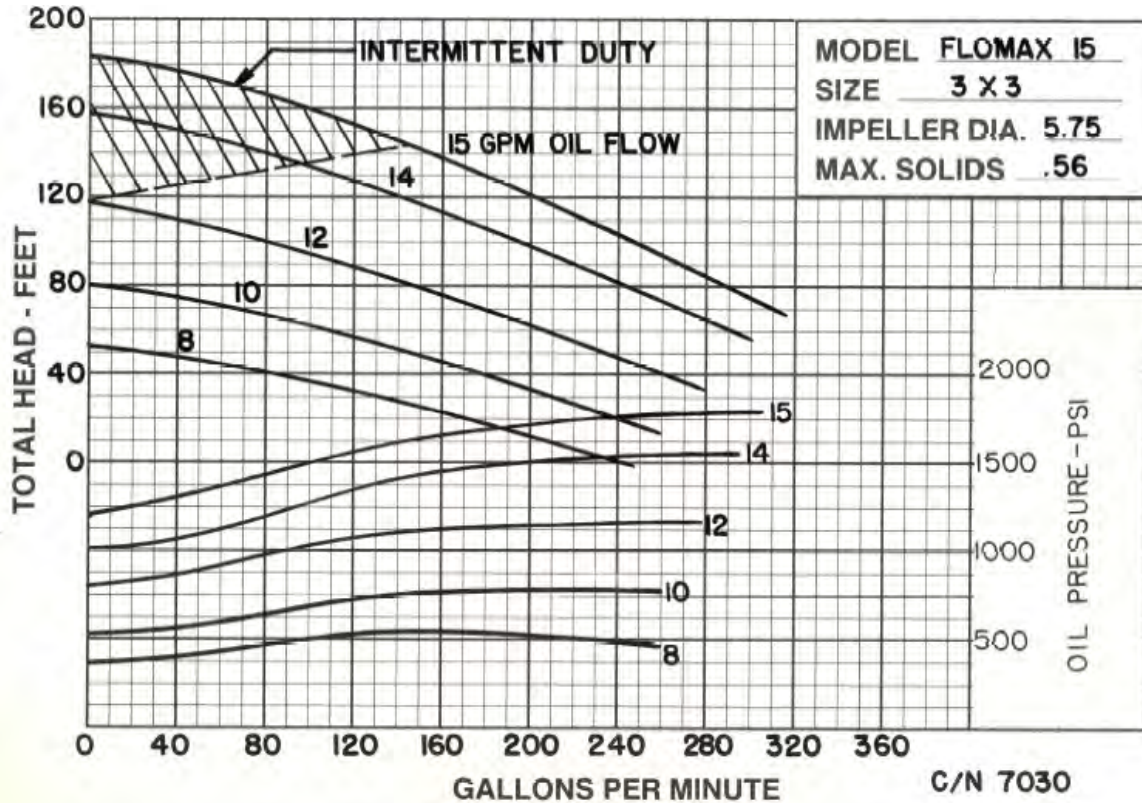
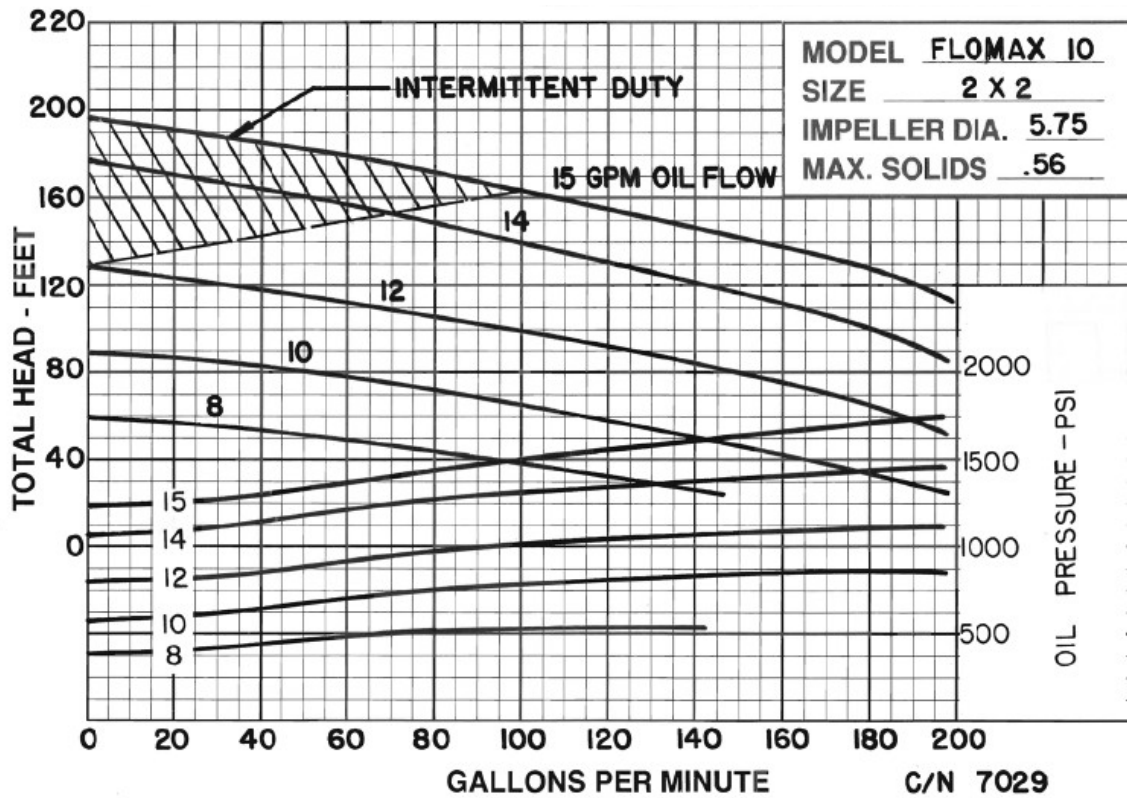
FLOMAX 8 Exploded View – HY Speed

36592

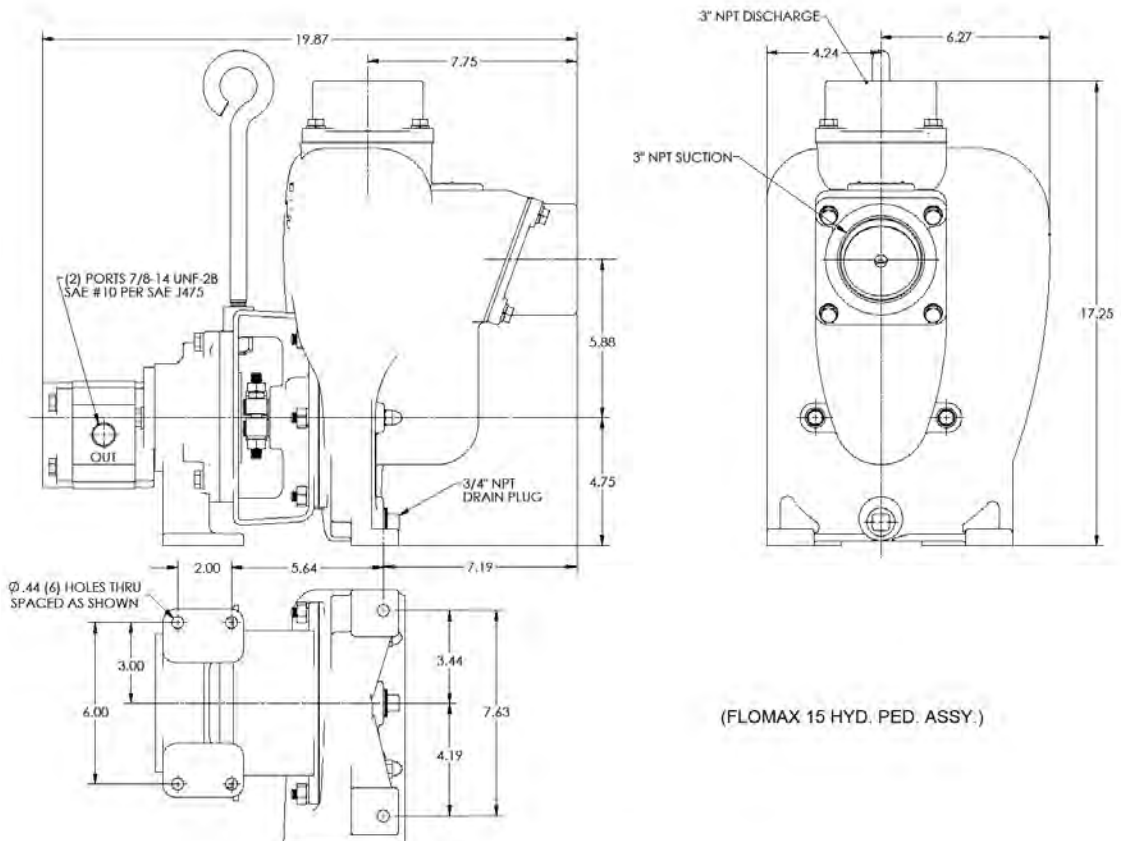
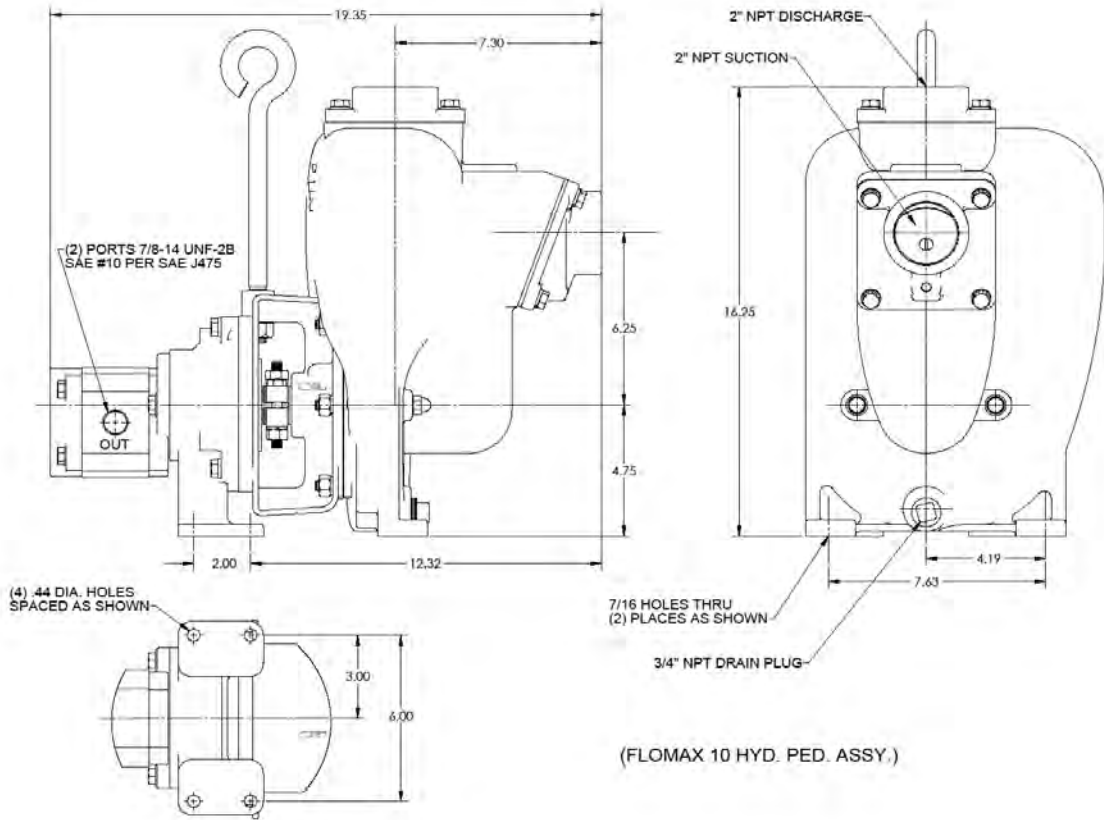


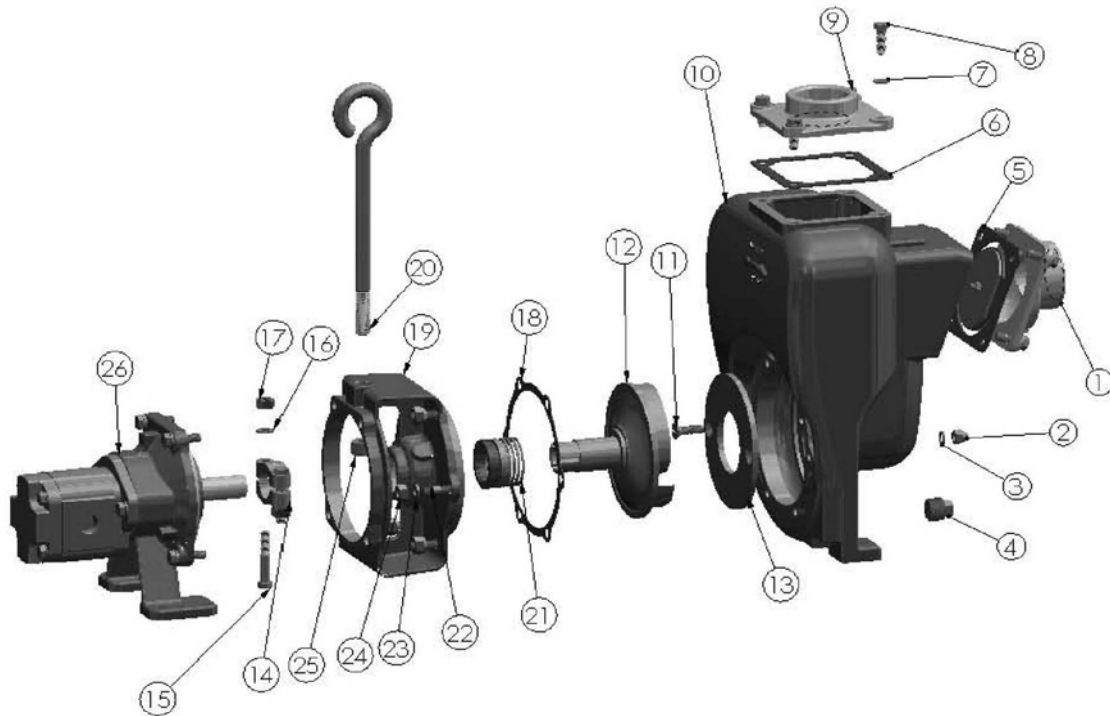
ITEM NO.	PART NO.	DESCRIPTION	QTY.		ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	21242	CAPSCREW - 5/16"-18 X 7/8"	8		15	25664	DRIVE SLEEVE SS - 7/8	1
2	21238	LOCKWASHER 5/16	16	*	16	22273	SEAL- VITON	1
3	22387	SUCTION FLANGE- 2" NPT	1	*	17	22255	GASKET	1
4	23022	FLAPPER ASY- BUNA	1		18	25904	ADAPTOR	1
5	22311	DISCHARGE FLANGE- 2" NPT	1		19	24965	CAPSCREW- 5/16"-18 X 3/4"	6
* 6	22256	GASKET- BUNA	1		20	21251	CAPSCREW- 3/8"-16-24 X .88	4
7	22251	HOUSING- CAST IRON	1		21	21266	LOCKWASHER SS- 3/8-16	4
8	21237	ACORN NUT- 5/16"-18	2		22	21284	HEX NUT- 5/16"-18	2
* 9	21248	GASKET - 1/2 X 5/16 X 1/16	2		23	21264	CAPSCREW- 5/16"-18 X 1 3/4"	2
10	41475	PIPE PLUG- 1/4" NPT	1		24	21946	CLAMP- 3/4 SL	1
* 11	22260	WEAR PLATE	1		25	36450	.37 DISP. HYD. PEDESTAL ASY	1
12	21249	SCREW SS 5/16"-18X1	2			35998	.45 DISP. HYD. PEDESTAL ASY	
13	22655	JAM NUT- 5/8"-18	1			36451	.58 DISP. HYD. PEDESTAL ASY	
14	22293	IMPELLER	1					

* SUGGESTED REPLACEMENT PARTS



FLOMAX Dimensions



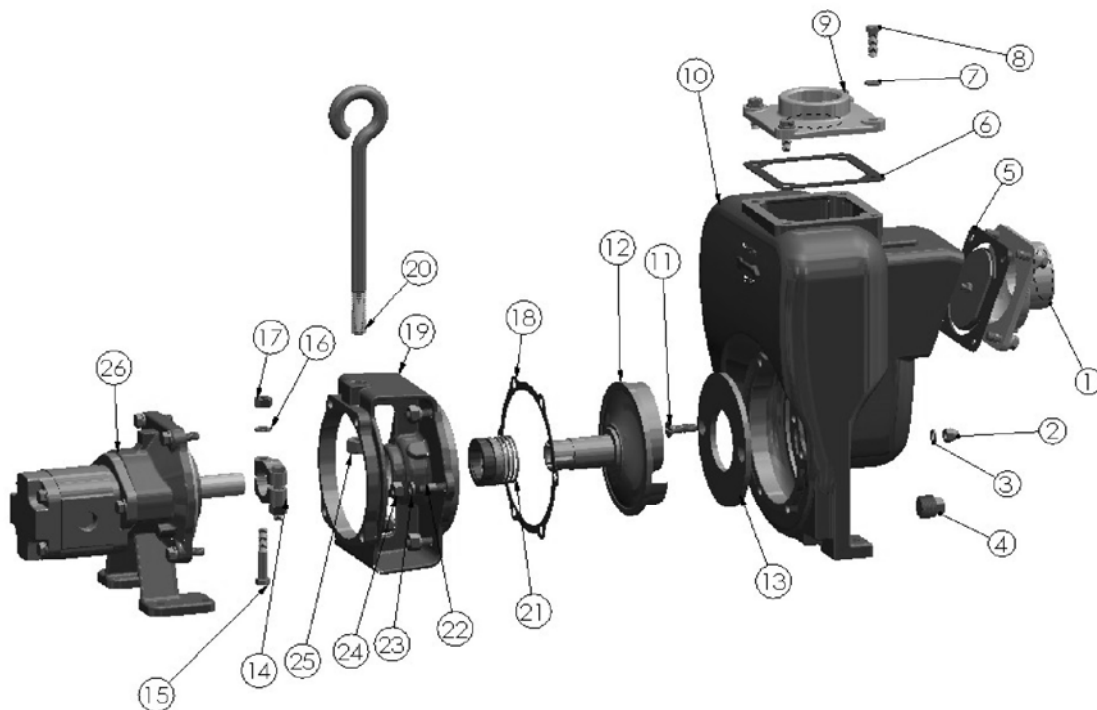


ITEM NO.	PART NO.	DESCRIPTION	QTY.	ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	22389	SUCTION FLANGE - C.I.	1	14	22358	CLAMP S.S. - 1"	2
2	21283	ACORN NUT S.S. - 3/8-16	2	15	21269	CAPSCREW S.S. - 3/8-16 X 2.25	2
3	21271	ANNULAR GASKET- 3/8	2	16	21266	LOCKWASHER S.S. - 3/8	2
4	41481	PIPE PLUG C.I. - 3/4" NPT	1	17	21268	HEXNUT S.S. - 3/8-16	2
5	23040	FLAPPER ASSY. BUNA	1	18	22240	GASKET .032 - NI-2085	1
6	22358	DISCHARGE GASKET BUNA	1	19	22348	ADAPTER C.I.	1
7	21266	LOCKWASHER S.S. - 3/8	8	20	22460	LIFTEYE ZPS. - 5/8-11 X 10"	1
8	21291	CAPSCREW S.S. - 3/8-16 X 1.13	8	21	22362	SEAL ASSY 1.5 TYPE 21 - VITON	1
9	22372	DISCHARGE FLANGE - C.I.	1	22	21260	STUD 3/8-16 X 1.32 S.S.	6
10	22351	HOUSING C.I.	1	23	21266	LOCKWASHER 3/8 X 1/8 S.S.	6
11	21282	FLAT HD SCREW S.S. - 3/8-16	2	24	21268	HEXNUT S.S. - 3/8-16	6
12	24721	IMPELLER DUCTILE - 5.75 DIA.	1	25	22481	HEXNUT STL. - 5/8-11	1
13	22244	WEAR PLATE STEEL	1	26	28551	PEDESTAL ASSY. - ULTRA	1

*RECOMMENDED REPLACEMENT PARTS

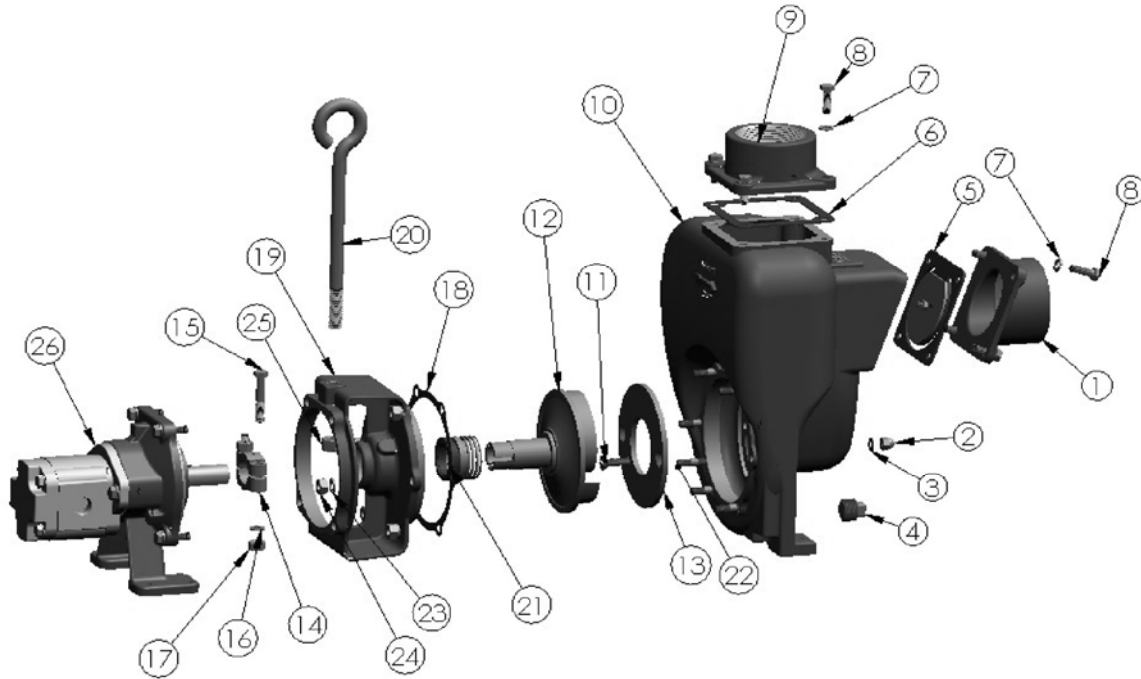
FLOMAX 10 Exploded View Bronze Impeller

30581



ITEM NO.	PART NO.	DESCRIPTION	QTY.	ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	22369	SUCTION FLANGE - C.I.	1	14	22356	CLAMP S.S. - 1"	2
2	21263	ACORN NUT S.S. - 3/8-16	2	15	21269	CAPSCREW S.S. - 3/8-16 X 2.25	2
3	21271	ANNULAR GASKET - 3/8	2	16	21266	LOCKWASHER S.S. - 3/8	2
4	41481	PIPE PLUG C.I. - 3/4" NPT	1	17	21268	HEXNUT S.S. - 3/8-16	2
5	23040	FLAPPER ASSY. BUNA	1	18	22240	GASKET .O32 - NI-2085	1
6	22358	DISCHARGE GASKET BUNA	1	19	22348	ADAPTER C.I.	1
7	21266	LOCKWASHER S.S. - 3/8	8	20	22460	LIFTEYE ZPS. - 5/8-11 X 10"	1
8	21291	CAPSCREW S.S. - 3/8-16 X 1.13	8	21	22362	SEAL ASSY 1.5 TYPE 21 - VITON	1
9	22372	DISCHARGE FLANGE - C.I.	1	22	21260	STUD 3/8-16 X 1.32 S.S.	6
10	22351	HOUSING C.I.	1	23	21266	LOCKWASHER 3/8 X 1/8 S.S.	6
11	21262	FLAT HD SCREW S.S. - 3/8-16	2	24	21268	HEXNUT S.S. - 3/8-16	6
12	23037	IMPELLER BRONZE - 6.0 DIA.	1	25	22461	HEXNUT STL. - 5/8-11	1
13	22244	WEAR PLATE STEEL	1	26	28551	PEDESTAL ASSY. - ULTRA	1

*RECOMMENDED REPLACEMENT PARTS

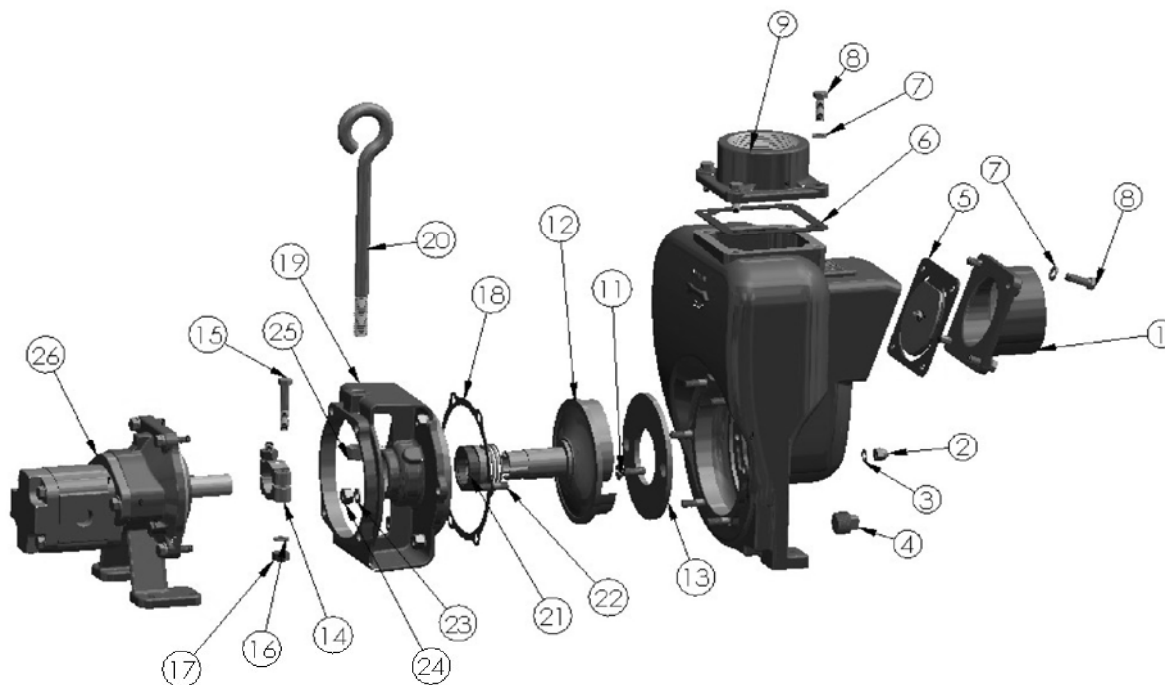


ITEM NO.	PART NO.	DESCRIPTION	QTY.		ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	22468	SUCTION FLANGE - C.I.	1		14	22356	CLAMP S.S. - 1"	2
2	21263	ACORN NUT S.S. - 3/8-16	2		15	21269	CAPSCREW S.S. - 3/8-16 X 2.25	2
3	21271	ANNULAR GASKET	2		16	21266	LOCKWASHER S.S. - 3/8	2
4	41481	PIPE PLUG C.I. - 3/4" NPT	1		17	21268	HEXNUT S.S. - 3/8-16	2
5	23040	FLAPPER ASSY. BUNA	1	*	18	22240	GASKET .032 - NI-2085	1
6	22358	DISCHARGE GASKET BUNA	1		19	22348	ADAPTER C.I.	1
7	21266	LOCKWASHER S.S. - 3/8	8		20	22460	LIFTEYE ZPS. - 5/8-11 X 10"	1
8	21291	CAPSCREW S.S. - 3/8-16 X 1.13	8	*	21	22362	SEAL ASSY 1.5 TYPE 21 - VITON	1
9	22471	DISCHARGE FLANGE - C.I.	1		22	21260	STUD 3/8-16 X 1.32 S.S.	6
10	22351	HOUSING C.I.	1		23	21266	LOCKWASHER 3/8 X 1/8 S.S.	6
11	21262	FLAT HD SCREW S.S. - 3/8-16	2		24	21268	HEXNUT S.S. - 3/8-16	6
12	24721	IMPELLER DUCTILE - 5.75 DIA.	1		25	22461	HEXNUT STL. - 5/8-11	1
13	22244	WEAR PLATE STEEL	1		26	28551	PEDESTAL ASSY. - ULTRA	1

*RECOMMENDED REPLACEMENT PARTS

**FLOMAX 15 Exploded View
Bronze Impeller**

29342

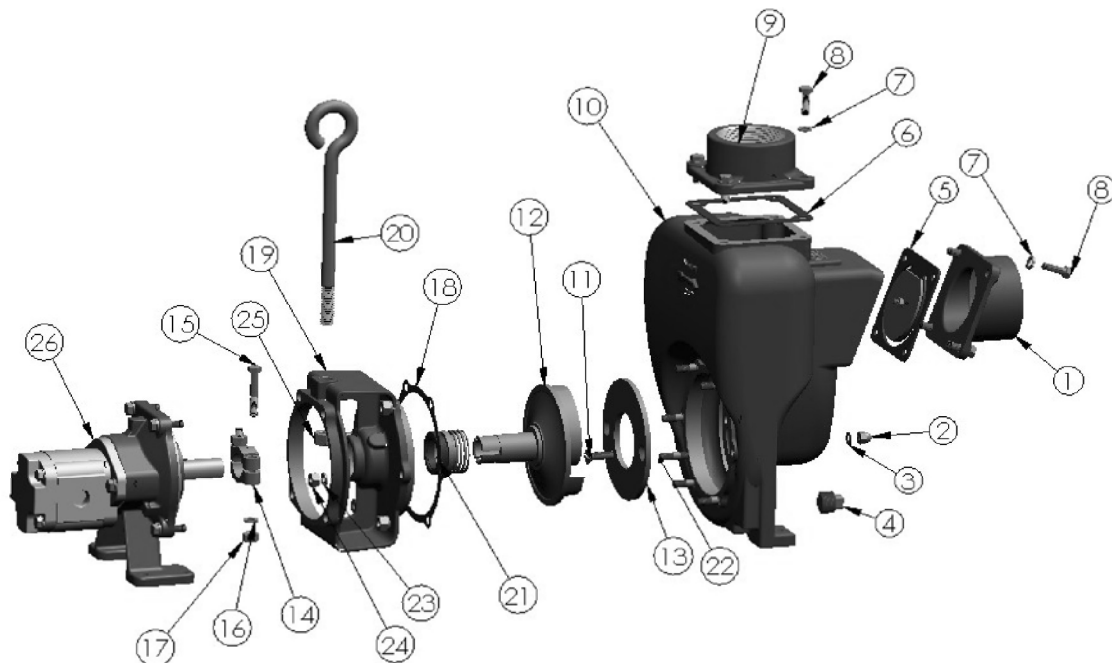


ITEM NO.	PART NO.	DESCRIPTION	QTY.		ITEM NO.	PART NO.	DESCRIPTION	QTY.	
1	22467	SUCTION FLANGE - BRONZE	1		14	22356	CLAMP S.S. - 1"	2	
2	26053	ACORN NUT BR. - 3/8-16	2		15	21269	CAPSCREW S.S. - 3/8-16 X 2.25	2	
3	21271	ANNULAR GASKET	2		16	21266	LOCKWASHER S.S. - 3/8	2	
4	21186	PIPE PLUG BR. - 1/4" NPT	1		17	21268	HEXNUT S.S. - 3/8-16	2	
*	5	FLAPPER ASSY. BUNA	1		*	18	22240	GASKET .032 - NI-2085	1
*	6	DISCHARGE GASKET BUNA	1		19	22347	ADAPTER BRONZE	1	
7	21266	LOCKWASHER S.S. - 3/8	8		20	22460	LIFTEYE ZPS. - 5/8-11 X 10"	1	
8	21291	CAPSCREW S.S. - 3/8-16 X 1.13	8		*	21	22362	SEAL ASSY 1.5 TYPE 21 - VITON	1
9	22470	DISCHARGE FLANGE - BRONZE	1		22	21260	STUD 3/8-16 X 1.32 S.S.	6	
10	22350	HOUSING BRONZE	1		23	21266	LOCKWASHER 3/8 X 1/8 S.S.	6	
11	22360	FLAT HD SCREW BR. - 3/8-16	2		24	21268	HEXNUT S.S. - 3/8-16	6	
12	23037	IMPELLER BRONZE - 6.0 DIA.	1		25	22461	HEXNUT STL. - 5/8-11	1	
13	22243	WEAR PLATE BR.	1		26	28551	PEDESTAL ASSY. - ULTRA	1	

*RECOMMENDED REPLACEMENT PARTS

FLOMAX 15 Exploded View Stainless Impeller

33766

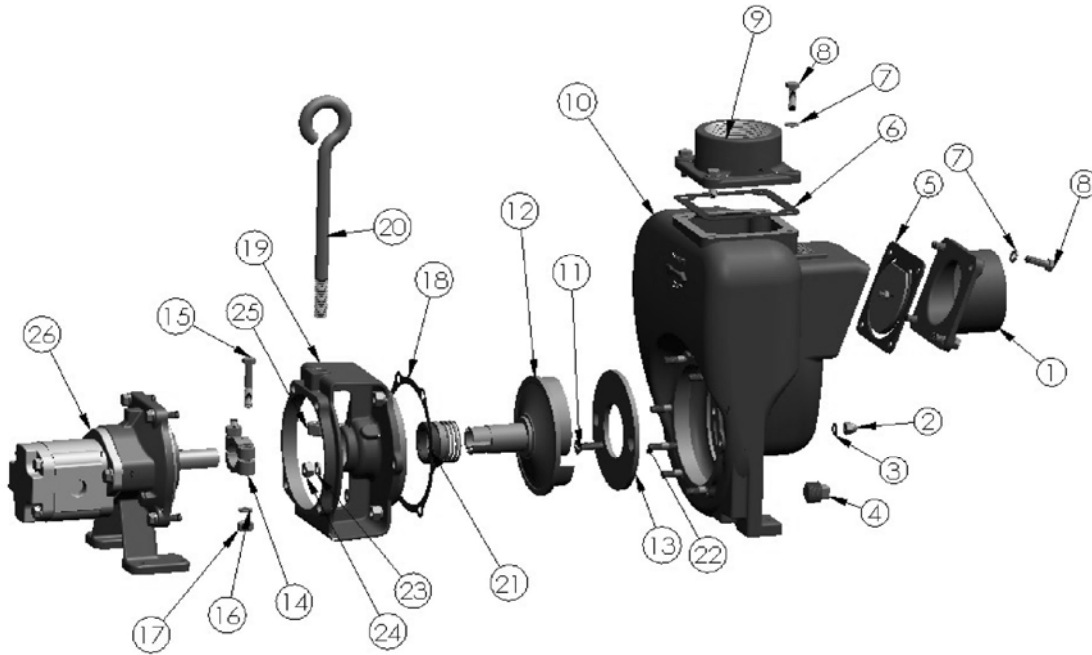


ITEM NO.	PART NO.	DESCRIPTION	QTY.	ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	22468	SUCTION FLANGE - C.I.	1	14	22356	CLAMP S.S. - 1"	2
2	21263	ACORN NUT S.S. - 3/8-16	2	15	21269	CAPSCREW S.S. - 3/8-16 X 2.25	2
3	21271	ANNULAR GASKET	2	16	21266	LOCKWASHER S.S. - 3/8	2
4	41481	PIPE PLUG C.I. - 3/4" NPT	1	17	21268	HEXNUT S.S. - 3/8-16	2
5	23040	FLAPPER ASSY. BUNA	1	18	22240	GASKET .032 - NI-2085	1
6	22358	DISCHARGE GASKET BUNA	1	19	22348	ADAPTER C.I.	1
7	21266	LOCKWASHER S.S. - 3/8	8	20	22460	LIFTEYE ZPS. - 5/8-11 X 10"	1
8	21291	CAPSCREW S.S. - 3/8-16 X 1.13	8	21	22362	SEAL ASSY 1.5 TYPE 21 - VITON	1
9	22471	DISCHARGE FLANGE - C.I.	1	22	21260	STUD 3/8-16 X 1.32 S.S.	6
10	22351	HOUSING C.I.	1	23	21266	LOCKWASHER 3/8 X 1/8 S.S.	6
11	21262	FLAT HD SCREW S.S. - 3/8-16	2	24	21268	HEXNUT S.S. - 3/8-16	6
12	29641	IMPELLER SS - 5.56 DIA.	1	25	22461	HEXNUT STL. - 5/8-11	1
13	27979	WEAR PLATE SS	1	26	28551	PEDESTAL ASSY. - ULTRA	1

*RECOMMENDED REPLACEMENT PARTS

**FLOMAX 15 Exploded View
Ni-Resist Seal**

34499

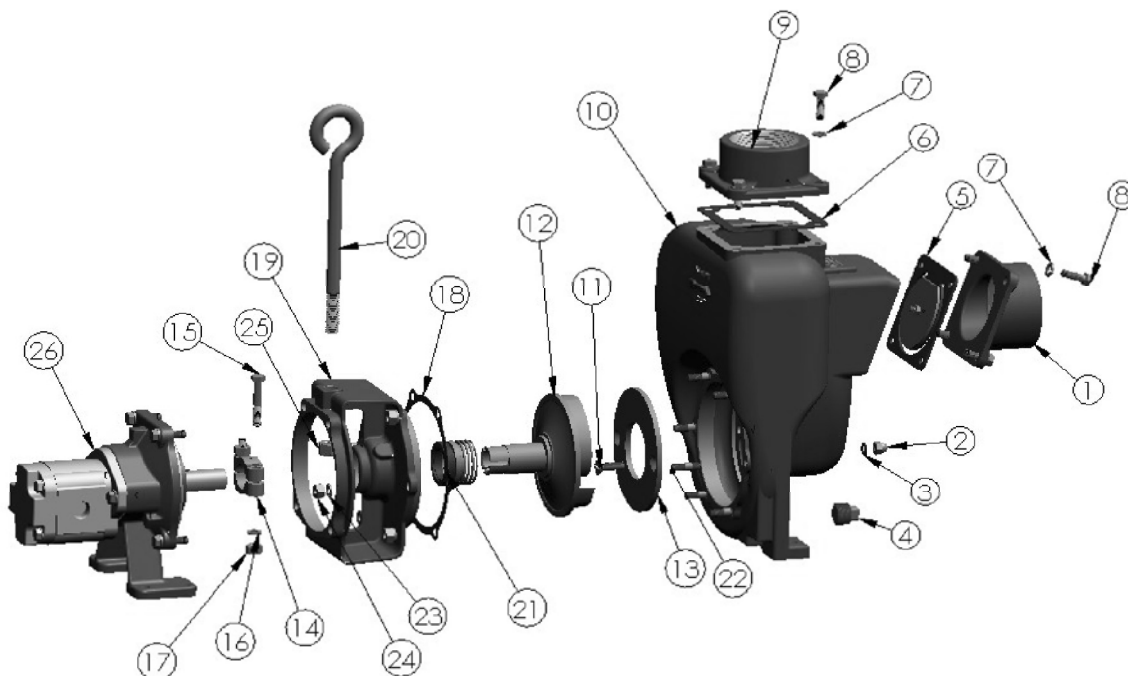


ITEM NO.	PART NO.	DESCRIPTION	QTY.	ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	22468	SUCTION FLANGE - C.I.	1	14	22356	CLAMP S.S. - 1"	2
2	21263	ACORN NUT S.S. - 3/8-16	2	15	21269	CAPSCREW S.S. - 3/8-16 X 2.25	2
3	21271	ANNULAR GASKET	2	16	21266	LOCKWASHER S.S. - 3/8	2
4	41481	PIPE PLUG C.I. - 3/4" NPT	1	17	21268	HEXNUT S.S. - 3/8-16	2
* 5	23040	FLAPPER ASSY. BUNA	1	* 18	22240	GASKET .032 - NI-2085	1
* 6	22358	DISCHARGE GASKET BUNA	1	19	22348	ADAPTER C.I.	1
7	21266	LOCKWASHER S.S. - 3/8	8	20	22460	LIFTEYE ZPS. - 5/8-11 X 10"	1
8	21291	CAPSCREW S.S. - 3/8-16 X 1.13	8	* 21	22363	SEAL ASSY 1.5 TYPE 21 - VITON	1
9	22471	DISCHARGE FLANGE - C.I.	1	22	21260	STUD 3/8-16 X 1.32 S.S.	6
10	22351	HOUSING C.I.	1	23	21266	LOCKWASHER 3/8 X 1/8 S.S.	6
11	21262	FLAT HD SCREW S.S. - 3/8-16	2	24	21268	HEXNUT S.S. - 3/8-16	6
12	23038	IMPELLER DUCTILE - 6.0 DIA.	1	25	22461	HEXNUT STL. - 5/8-11	1
13	22244	WEAR PLATE STEEL	1	26	28551	PEDESTAL ASSY. - ULTRA	1

*RECOMMENDED REPLACEMENT PARTS

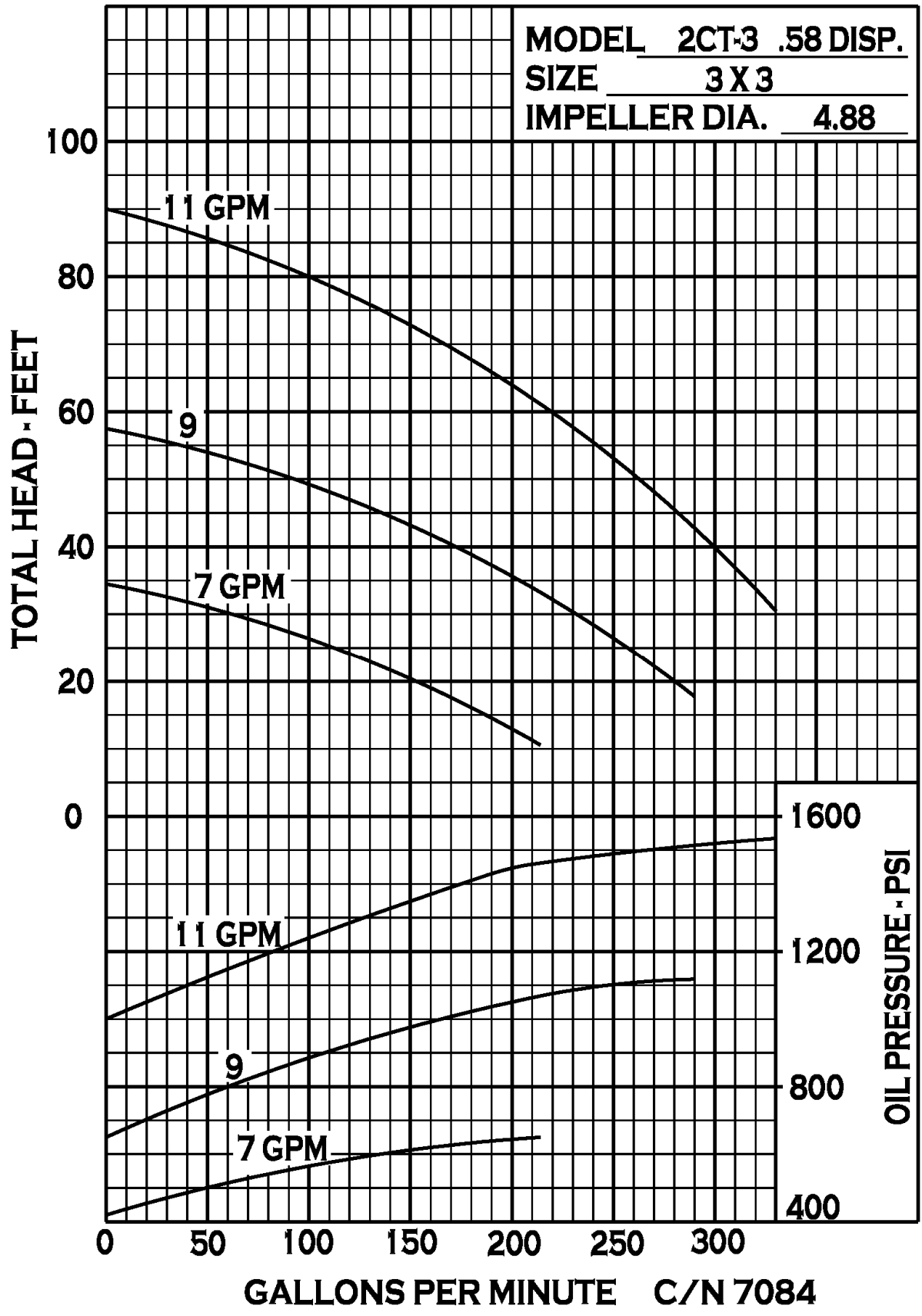
**FLOMAX 15 Exploded View
Stainless Pump
Ni-Resist Seal**

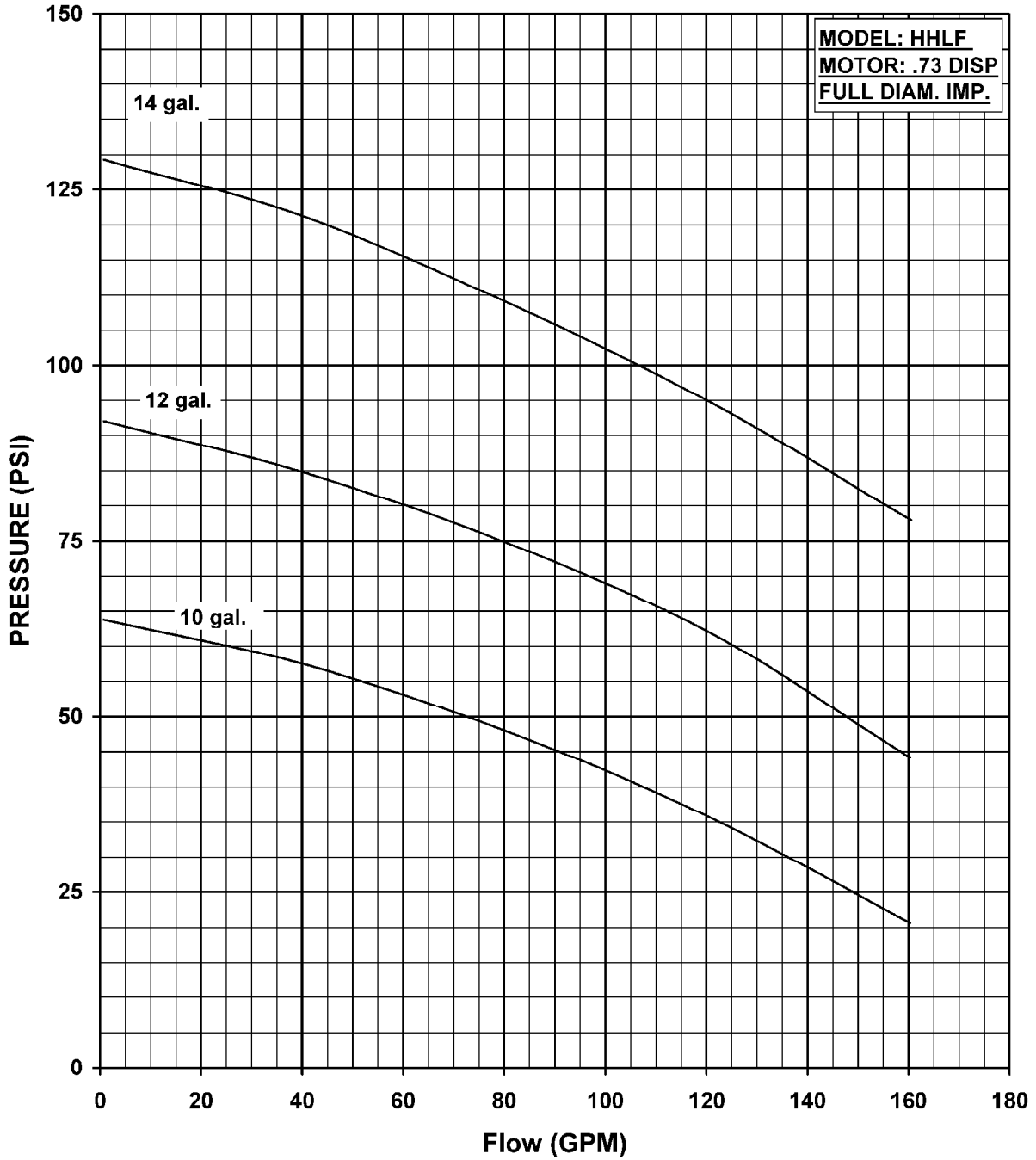
35204



ITEM NO.	PART NO.	DESCRIPTION	QTY.		ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	34974	SUCTION FLANGE - SS	1		14	22356	CLAMP S.S. - 1"	2
2	21263	ACORN NUT S.S. - 3/8-16	2		15	21269	CAPSCREW S.S. - 3/8-16 X 2.25	2
3	21271	ANNULAR GASKET	2		16	21266	LOCKWASHER S.S. - 3/8	2
4	22656	PIPE PLUG SS - 1/2" NPT	1		17	21268	HEXNUT S.S. - 3/8-16	2
5	23040	FLAPPER ASSY. BUNA	1	*	18	22240	GASKET .032 - NI-2085	1
6	22358	DISCHARGE GASKET BUNA	1		19	34976	ADAPTER - SS	1
7	21266	LOCKWASHER S.S. - 3/8	8		20	22460	LIFTEYE ZPS. - 5/8-11 X 10"	1
8	21291	CAPSCREW S.S. - 3/8-16 X 1.13	8	*	21	25260	SEAL ASSY 1.5 NI-RESIST-NEOPRENE	1
9	34975	DISCHARGE FLANGE - SS	1		22	21260	STUD 3/8-16 X 1.32 S.S.	6
10	34972	HOUSING- SS	1		23	21266	LOCKWASHER 3/8 X 1/8 S.S.	6
11	21262	FLAT HD SCREW S.S. - 3/8-16	2		24	21268	HEXNUT S.S. - 3/8-16	6
12	29466	IMPELLER SS - 6.0 DIA.	1		25	22461	HEXNUT STL. - 5/8-11	1
13	27979	WEAR PLATE SS	1		26	28551	PEDESTAL ASSY. - ULTRA	1

*RECOMMENDED REPLACEMENT PARTS

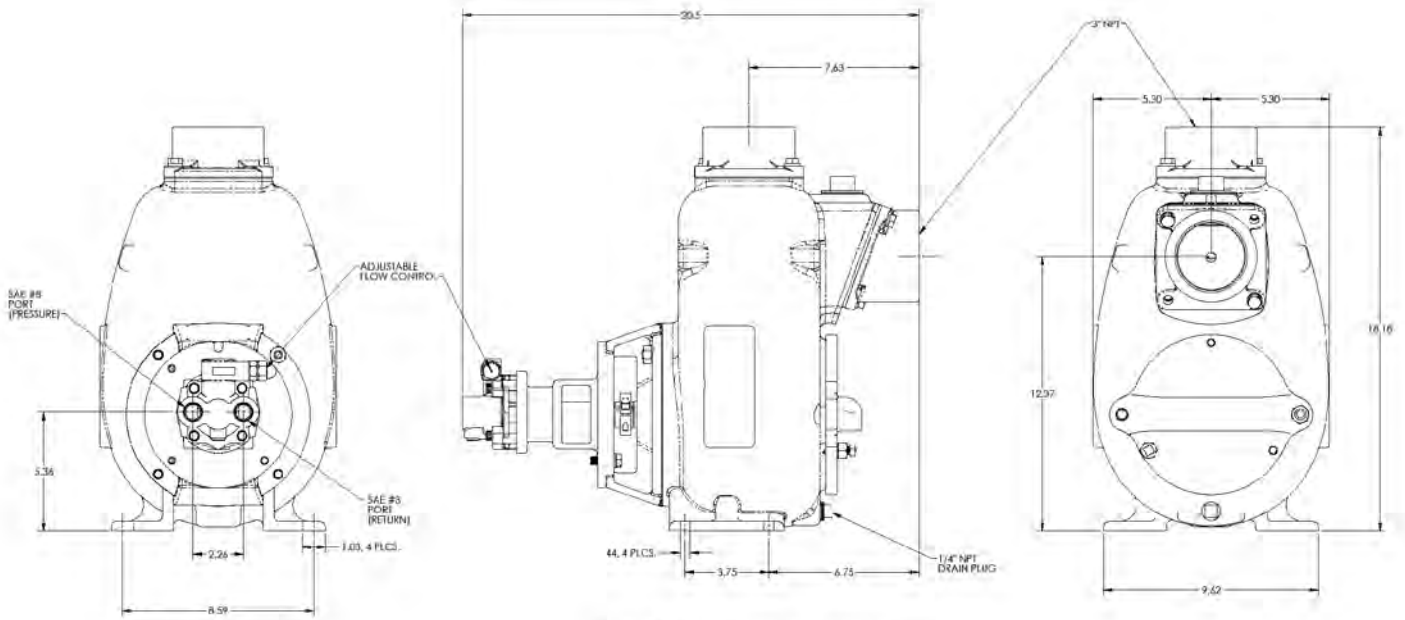




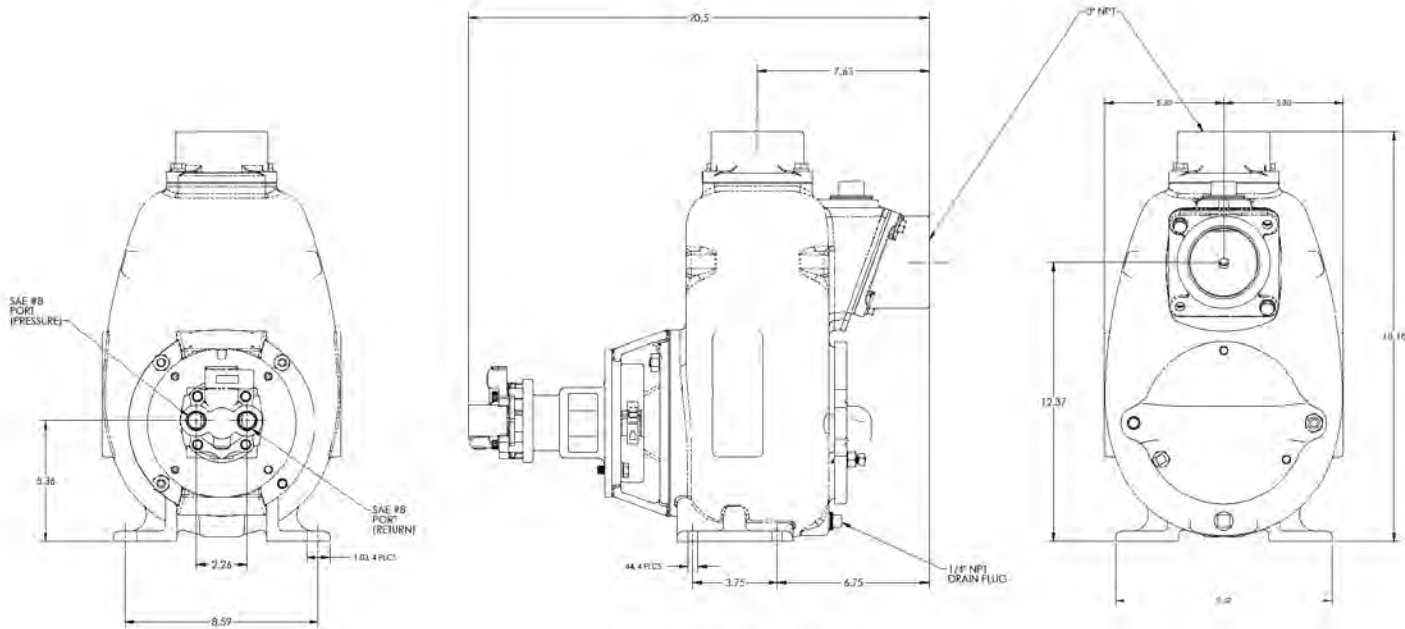
OIL FLOW	SHUT OFF	20	40	60	80	100	120	140	160	MAX. HYD. OIL PRESS. REQ.
	0 GPM	GPM	GPM	GPM	GPM	GPM	GPM	GPM	GPM	
10 GPM	63 PSI	62 PSI	57 PSI	53 PSI	48 PSI	43 PSI	36 PSI	28 PSI	21 PSI	1400 PSI
12 GPM	92 PSI	88 PSI	85 PSI	80 PSI	75 PSI	69 PSI	63 PSI	54 PSI	45 PSI	1850 PSI
14 GPM	129 PSI	125 PSI	121 PSI	116 PSI	109 PSI	103 PSI	95 PSI	87 PSI	78 PSI	2300 PSI

CN 7125-S

HHLF & 2CT Dimensions

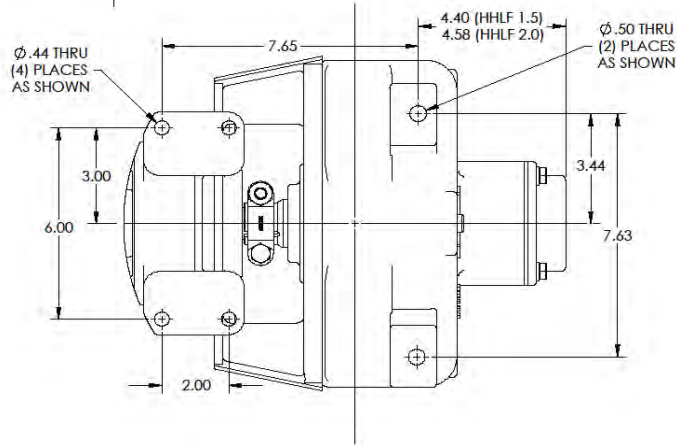
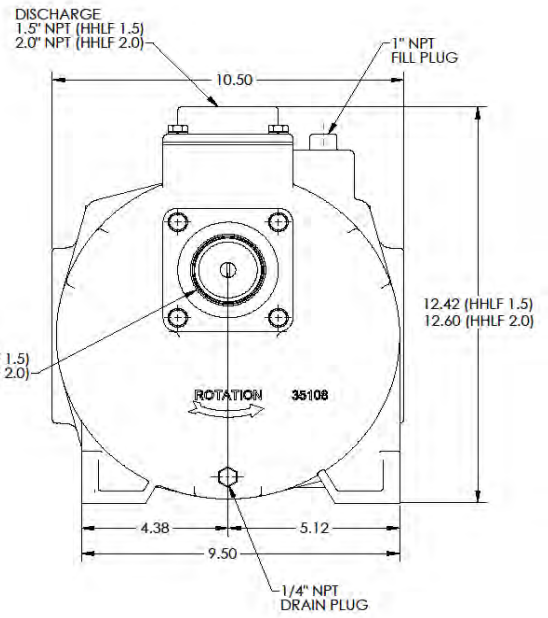
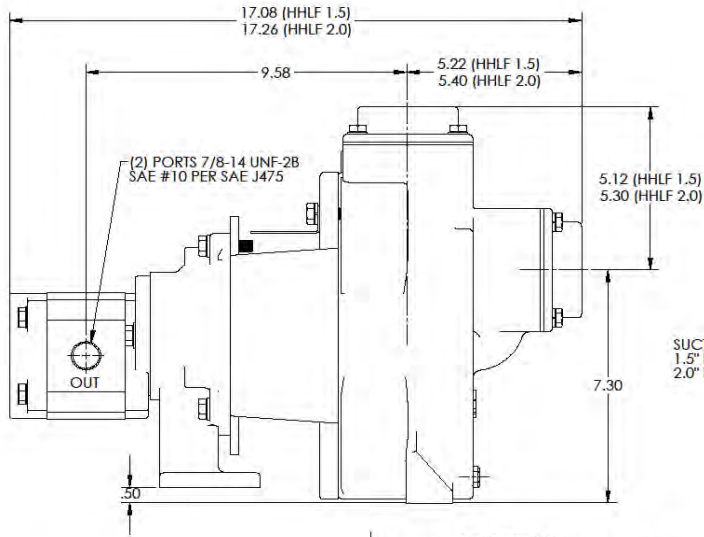


(2CT-3 HS HYDRAULIC WITH FLOW CONTROL)



(2CT-3 HS HYDRAULIC)

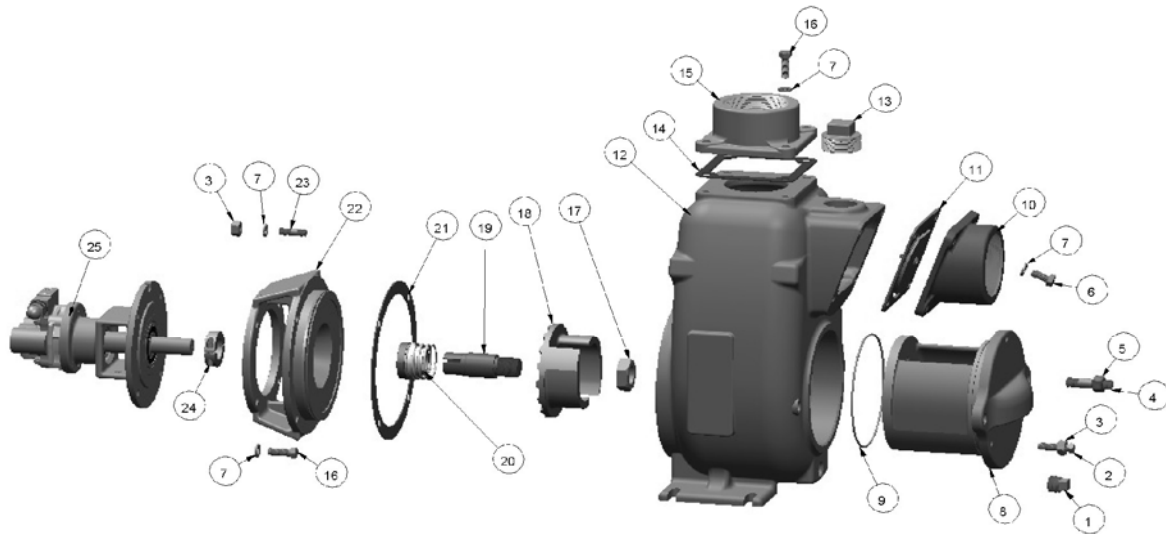
HHLF & 2CT Dimensions



(HHLF 1.5 HYD. PED. ULTRA)

**HHLF 2CT-3 & 2CT Exploded View
With Flow Control**

36595

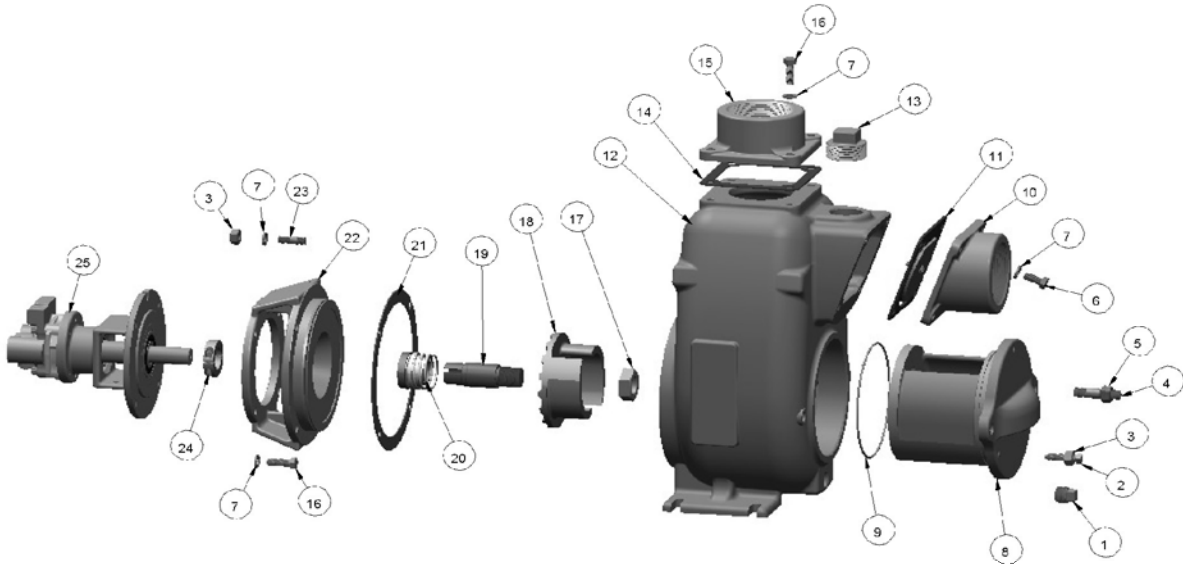


ITEM NO.	PART NO.	DESCRIPTION	QTY.		ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	41479	PIPE PLUG- 1/2 NPT	1		14	22358	GASKET- BUNA	1
2	43926	SET SCREW- 3/8-16	3		15	22471	FLANGE- DISCHARGE 3" NPT	1
3	21268	HEXNUT SS- 3/8-16	7		16	21291	CAPSCREW SS- 3/8-16 X 1.13	8
4	41449	STUD STL- 1/2-13 X 2.25	2		17	22417	JAM NUT SS- 1-14	1
5	41553	HEXNUT STL- 1/2-13	2		18	44091	IMPELLER- 4.88"	1
6	21251	CAPSCREW SS- 3/8-16 X 7/8	4	*	19	43907	DRIVE SLEEVE	1
7	21286	LOCKWASHER SS- 3/8	12	*	20	43906	SEAL ASY- VITON	1
8	43905	CLEANOUT	1	*	21	40815	GASKET	1
9	41187	O-RING	1		22	43910	ADAPTOR	1
10	22468	FLANGE- SUCTION 3" NPT	1		23	21260	STUD SS- 3/8-16 X 1.32	4
11	23040	FLAPPER ASSEMBLY	1		24	43908	CLAMP- 7/8"	1
12	43903	VOLUTE	1		25	36024	HS ASY W/FLW CNTRL- .58 MTR.	1
13	41484	PIPE PLUG- 1 1/2" NPT	1					

* SUGGESTED REPLACEMENT PARTS

HHLF 2CT-3 & 2CT Exploded View

36594

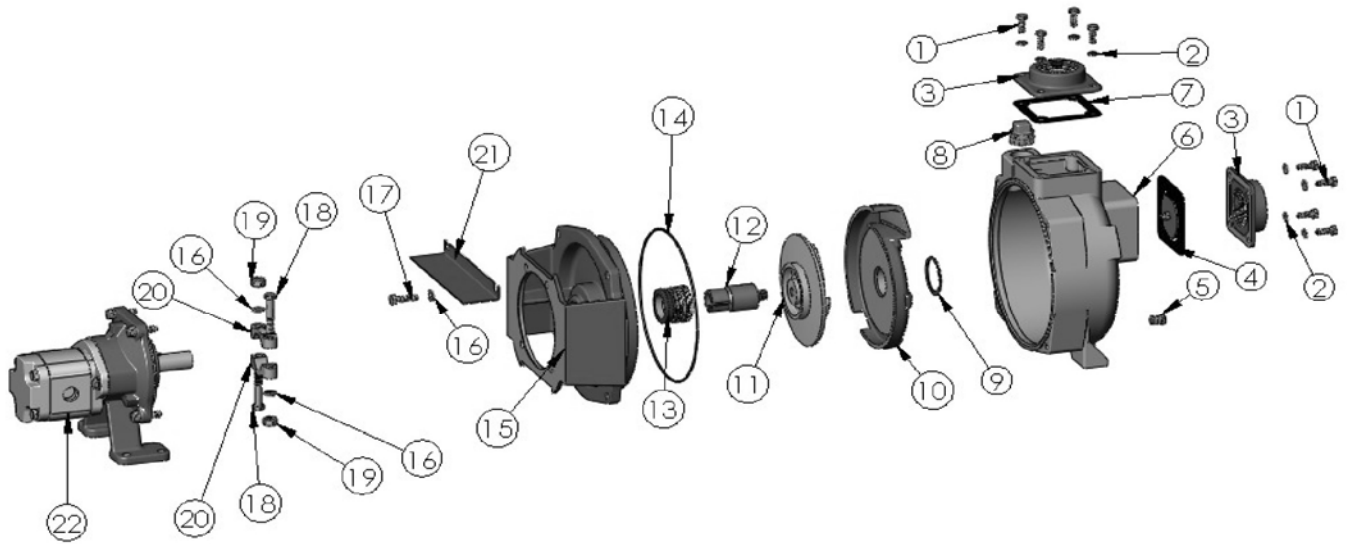


ITEM NO.	PART NO.	DESCRIPTION	QTY.		ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	41479	PIPE PLUG- 1/2 NPT	1		14	22358	GASKET- BUNA	1
2	43926	SET SCREW- 3/8-16	3		15	22471	FLANGE- DISCHARGE 3" NPT	1
3	21268	HEXNUT SS- 3/8-16	7		16	21291	CAPSCREW SS- 3/8-16 X 1.13	8
4	41449	STUD STL- 1/2-13 X 2.25	2		17	22417	JAM NUT SS- 1-14	1
5	41553	HEXNUT STL- 1/2-13	2		18	44091	IMPELLER- 4.88"	1
6	21251	CAPSCREW SS- 3/8-16 X 7/8	4	*	19	43907	DRIVE SLEEVE	1
7	21266	LOCKWASHER SS- 3/8	12	*	20	43906	SEAL ASY- VITON	1
8	43905	CLEANOUT	1	*	21	40815	GASKET	1
9	41187	O-RING	1		22	43910	ADAPTOR	1
10	22468	FLANGE- SUCTION 3" NPT	1		23	21260	STUD SS- 3/8-16 X 1.32	4
11	23040	FLAPPER ASSEMBLY	1		24	43908	CLAMP- 7/8"	1
12	43903	VOLUTE	1		25	36451	HS ASY- 58 MTR.	1
13	41484	PIPE PLUG- 1 1/2" NPT	1					

* SUGGESTED REPLACEMENT PARTS

**HHLF 2.0 Exploded View
Bronze Impeller**

36181

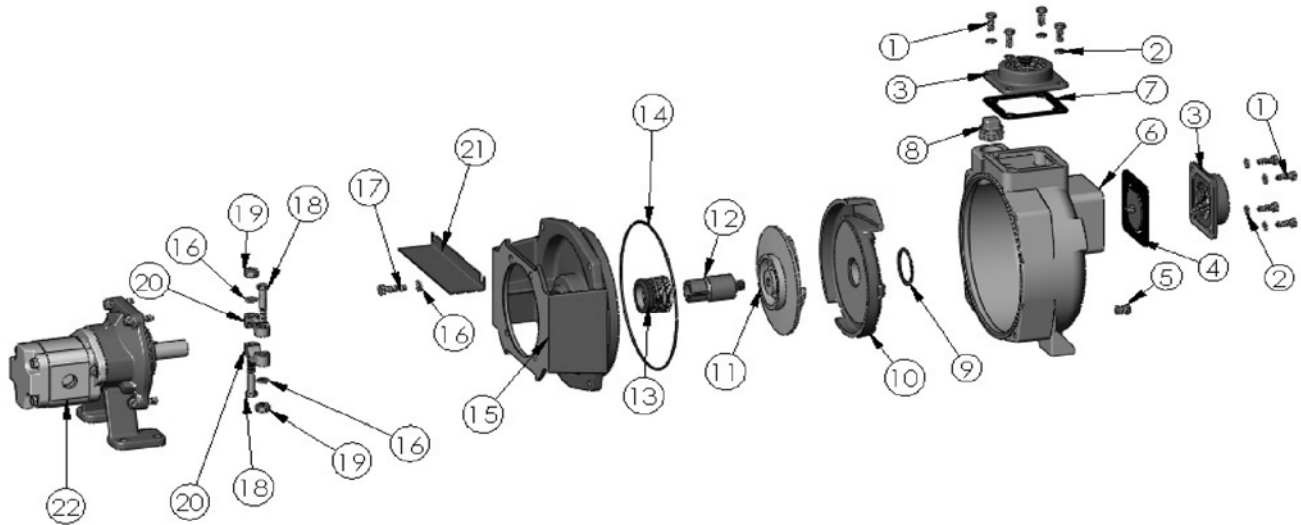


ITEM NO.	PART NO.	DESCRIPTION	QTY.	ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	21242	CAPSCREW - 5/16"-18 X 7/8" - S.S.	8	11	35921	IMPELLER - Ø6.70 - BRONZE	1
2	21238	LOCKWASHER - 5/16" - S.S.	8	12	28825	DRIVE SLEEVE -Ø1.00 - S.S	1
3	22265	FLANGES- 2" N.P.T. - BRONZE	2	* 13	29533	SEAL - Ø1.5 - T-21	1
* 4	23022	FLAPPER ASSEMBLY	1	* 14	28907	O-RING - AS-568-175 - VITON	1
5	21186	PIPE PLUG - 1/4" N.P.T. - BRONZE	1	15	29093	ADAPTER - BRONZE	1
6	35118	HOUSING - BRONZE	1	16	21266	LOCKWASHER - 3/8" - S.S.	6
* 7	22256	GASKET - BUNA	1	17	21274	CAPSCREW - 3/8"-16 X 1.25 - S.S.	4
8	22378	PIPE PLUG - 1" N.P.T. - BRONZE	1	18	21269	CAPSCREW - 3/8"-16 X 2.25 - S.S.	2
9	28906	GASKET - VITON	1	19	21268	HEXNUT - 3/8"-16 - S.S.	2
10	33453	VOLUTE - BRONZE	1	* 20	22356	CLAMP Ø1.00 - S.S.	2
				21	29192	CLAMP GUARD - STEEL	1
				22	28551	PEDESTAL ASSY. - ULTRA	1

SUGGESTED REPLACEMENT PARTS

HHLF 1.5 Exploded View

36183

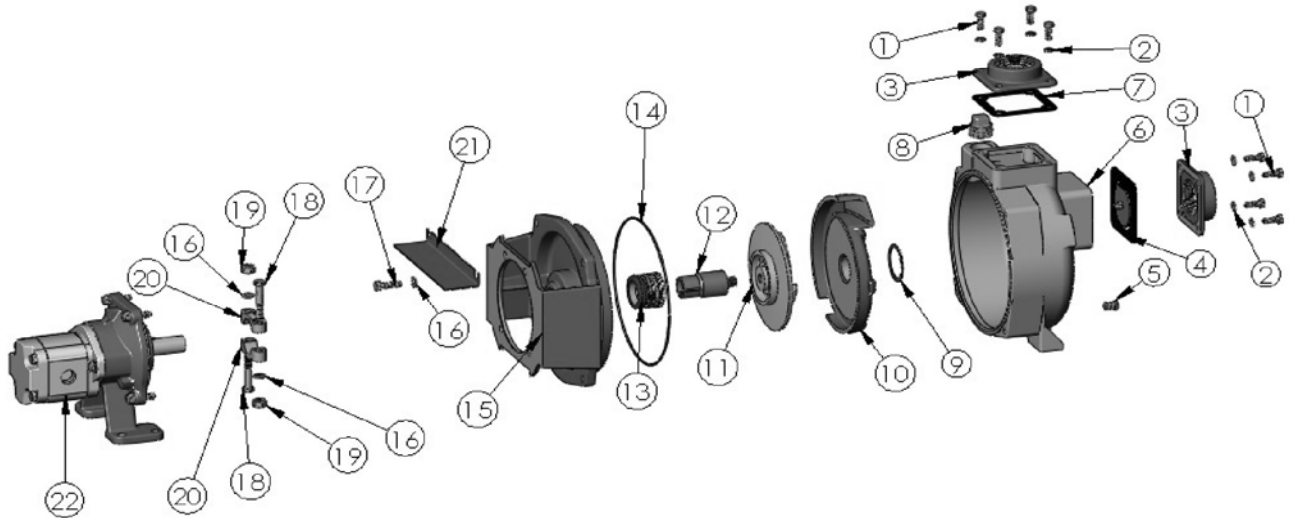


ITEM NO.	PART NO.	DESCRIPTION	QTY.	ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	21242	CAPSCREW - 5/16"-18 X 7/8" - S.S.	8	11	35919	IMPELLER - Ø6.70 - CAST	1
2	21238	LOCKWASHER - 5/16" - S.S.	8	12	28825	DRIVE SLEEVE -Ø1.00 - S.S.	1
3	22266	FLANGES- 1.5" N.P.T. - CAST	2	* 13	29533	SEAL - Ø1.5 - T-21	1
* 4	23022	FLAPPER ASSEMBLY	1	* 14	28907	O-RING - AS-568-175 - VITON	1
5	41475	PIPE PLUG - 1/4" N.P.T. - STL	1	15	29092	ADAPTER - CAST	1
6	35109	HOUSING - CAST	1	16	21266	LOCKWASHER - 3/8" - S.S.	6
* 7	22256	GASKET - BUNA	1	17	21274	CAPSCREW - 3/8"-16 X 1.25 - S.S.	4
8	41483	PIPE PLUG - 1" N.P.T. - STL	1	18	21269	CAPSCREW - 3/8"-16 X 2.25 - S.S.	2
9	28908	GASKET - VITON	1	19	21268	HEXNUT - 3/8"-16 - S.S.	2
10	31988	VOLUTE - CAST	1	* 20	22356	CLAMP Ø1.00 - S.S.	2
				21	29192	CLAMP GUARD - STEEL	1
				22	28551	PEDESTAL ASSY. - ULTRA	1

SUGGESTED REPLACEMENT PARTS

**HHLF 2.0 Exploded View
Bronze**

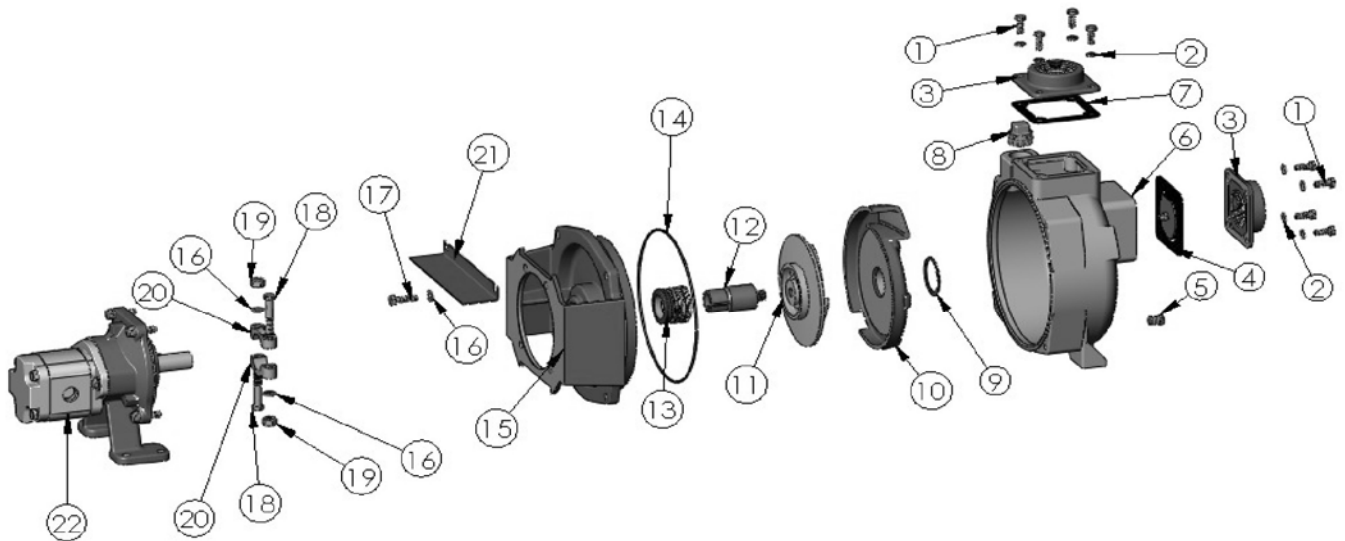
36180



ITEM NO.	PART NO.	DESCRIPTION	QTY.		ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	21242	CAPSCREW - 5/16"-18 X 7/8" - S.S.	8		11	35921	IMPELLER - Ø6.70 - BRONZE	1
2	21238	LOCKWASHER - 5/16" - S.S.	8		12	28825	DRIVE SLEEVE -Ø1.00 - S.S.	1
3	22310	FLANGES- 2" N.P.T. - BRONZE	2	*	13	29533	SEAL - Ø1.5 - T-21	1
* 4	23022	FLAPPER ASSEMBLY	1	*	14	28907	O-RING - AS-568-175 - VITON	1
5	21186	PIPE PLUG - 1/4" N.P.T. - BRONZE	1		15	29093	ADAPTER - BRONZE	1
6	35118	HOUSING - BRONZE	1		16	21266	LOCKWASHER - 3/8" - S.S.	6
* 7	22256	GASKET - BUNA	1		17	21274	CAPSCREW - 3/8"-16 X 1.25 - S.S.	4
8	22378	PIPE PLUG - 1" N.P.T. - BRONZE	1		18	21269	CAPSCREW - 3/8"-16 X 2.25 - S.S.	2
9	28908	GASKET - VITON	1		19	21268	HEXNUT - 3/8"-16 - S.S.	2
10	33453	VOLUTE - BRONZE	1	*	20	22356	CLAMP Ø1.00 - S.S.	2
					21	29192	CLAMP GUARD - STEEL	1
					22	28551	PEDESTAL ASSY. - ULTRA	1

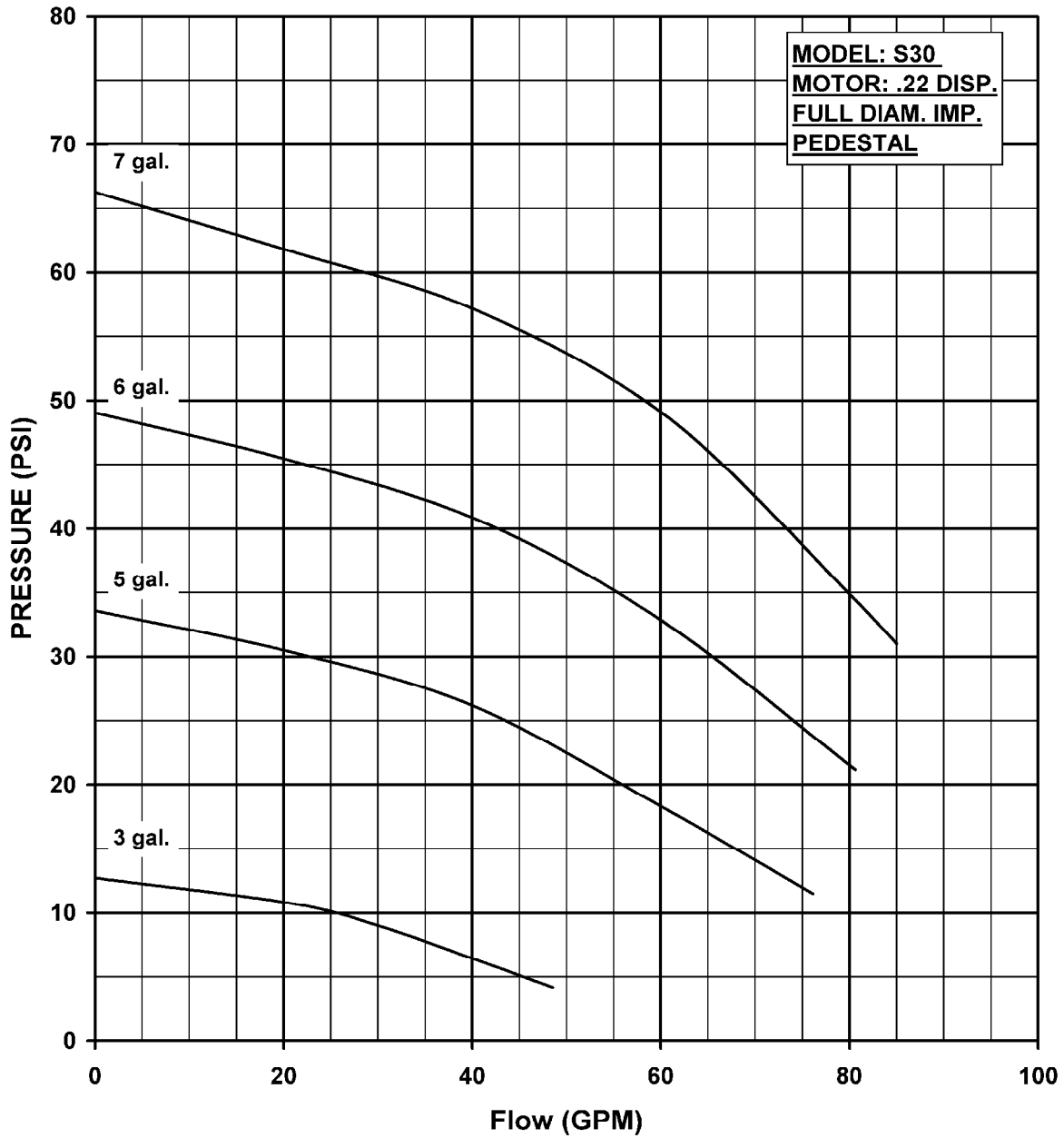
SUGGESTED REPLACEMENT PARTS

36182



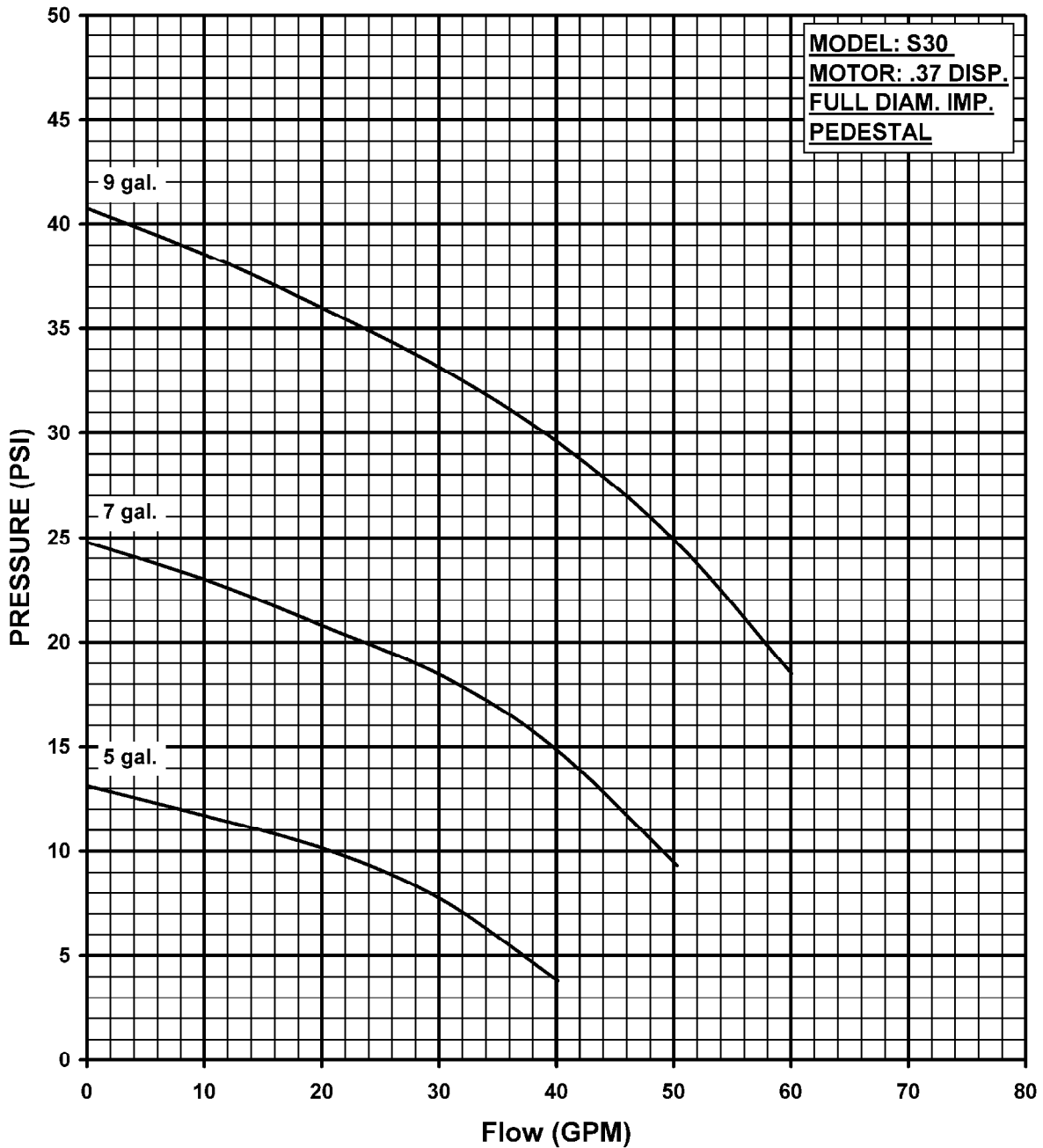
ITEM NO.	PART NO.	DESCRIPTION	QTY.		ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	21242	CAPSCREW - 5/16"-18 X 7/8" - S.S.	8		11	35919	IMPELLER - Ø6.70 - CAST	1
2	21238	LOCKWASHER - 5/16" - S.S.	8		12	28825	DRIVE SLEEVE - Ø1.00 - S.S.	1
3	22311	FLANGES- 2" N.P.T. - CAST	2	*	13	29533	SEAL - Ø1.5 - T-21	1
* 4	23022	FLAPPER ASSEMBLY	1	*	14	28907	O-RING - AS-568-175 - VITON	1
5	41475	PIPE PLUG - 1/4" N.P.T. - STL	1		15	29092	ADAPTER - CAST	1
6	35109	HOUSING - CAST	1		16	21266	LOCKWASHER - 3/8" - S.S.	6
* 7	22256	GASKET - BUNA	1		17	21274	CAPSCREW - 3/8"-16 X 1.25 - S.S.	4
8	41483	PIPE PLUG - 1" N.P.T. - STL	1		18	21269	CAPSCREW - 3/8"-16 X 2.25 - S.S.	2
9	28908	GASKET - VITON	1		19	21268	HEXNUT - 3/8"-16 - S.S.	2
10	31988	VOLUTE - CAST	1	*	20	22356	CLAMP Ø1.00 - S.S.	2
					21	29192	CLAMP GUARD - STEEL	1
					22	28551	PEDESTAL ASSY. - ULTRA	1

SUGGESTED REPLACEMENT PARTS



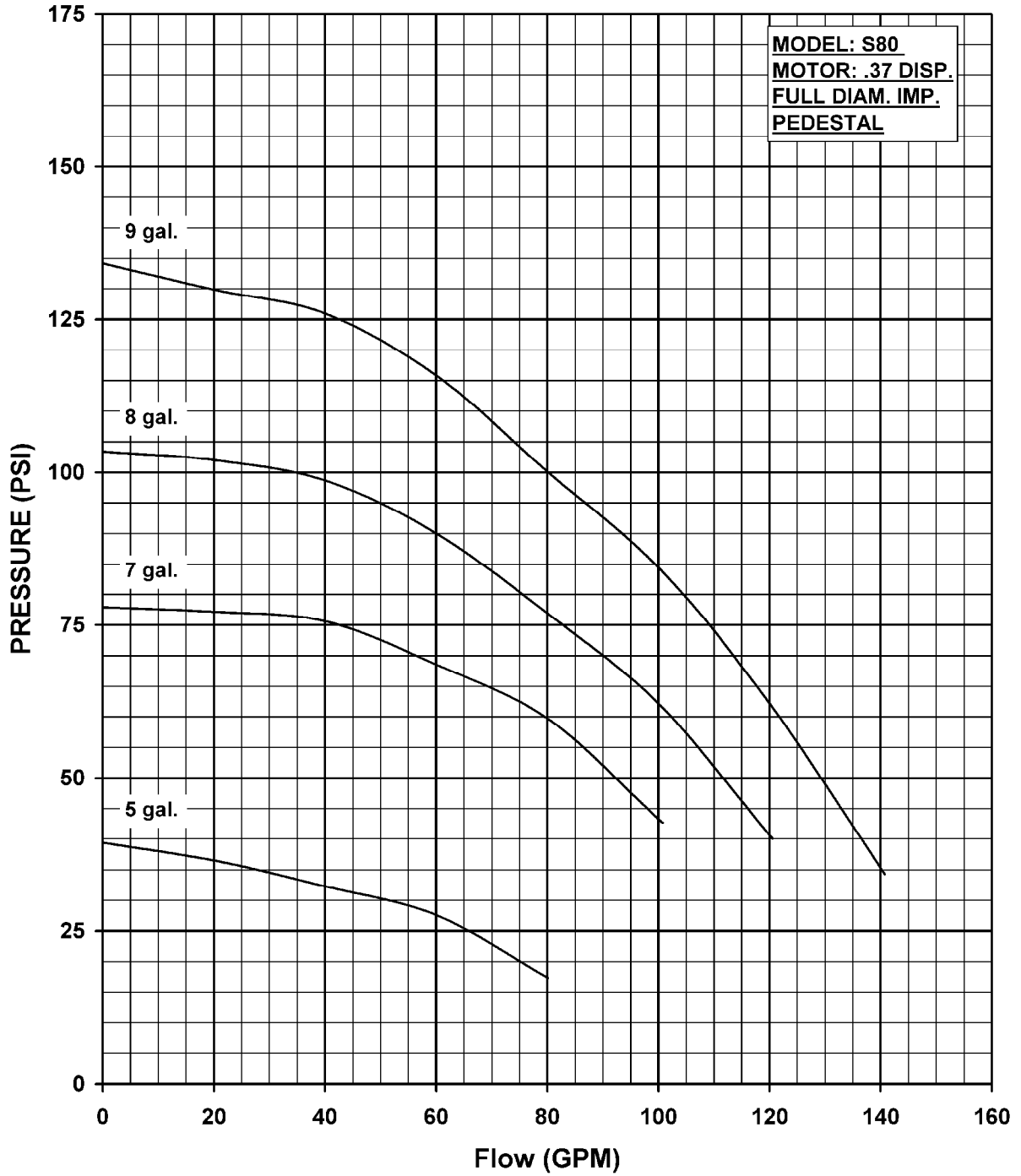
OIL FLOW	SHUT OFF 0 GPM	10 GPM	20 GPM	30 GPM	40 GPM	50 GPM	60 GPM	70 GPM	80 GPM	MAX. HYD. OIL PRESS.REQ.
3 GPM	13 PSI	12 PSI	11 PSI	8 PSI	6 PSI	-	-	-	-	650 PSI
5 GPM	33 PSI	32 PSI	31 PSI	28 PSI	26 PSI	23 PSI	18 PSI	14 PSI	-	1000 PSI
6 GPM	48 PSI	47 PSI	46 PSI	43 PSI	41 PSI	37 PSI	33 PSI	27 PSI	22 PSI	1300 PSI
7 GPM	66 PSI	64 PSI	62 PSI	59 PSI	57 PSI	54 PSI	49 PSI	42 PSI	35 PSI	1500 PSI

CN 7120-S



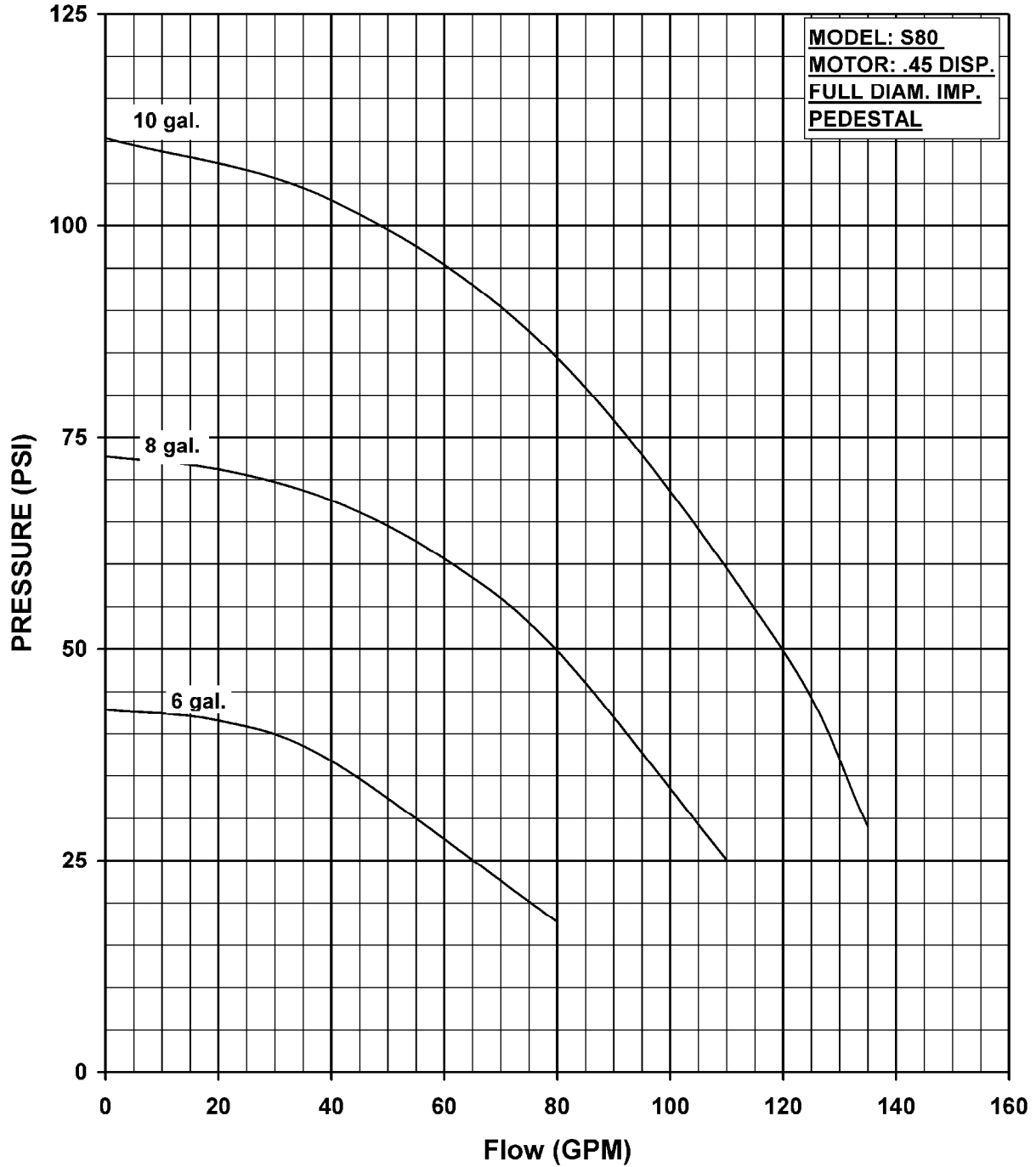
OIL FLOW	SHUT OFF 0 GPM	10 GPM	20 GPM	30 GPM	40 GPM	50 GPM	60 GPM	MAX. HYD. OIL PRESS.REQ.
5 GPM	13 PSI	12 PSI	10 PSI	8 PSI	4 PSI	-	-	450 PSI
7 GPM	24 PSI	23 PSI	21 PSI	18 PSI	15 PSI	9 PSI	-	600 PSI
9 GPM	41 PSI	38 PSI	36 PSI	33 PSI	29 PSI	25 PSI	19 PSI	750 PSI

CN 7085-S



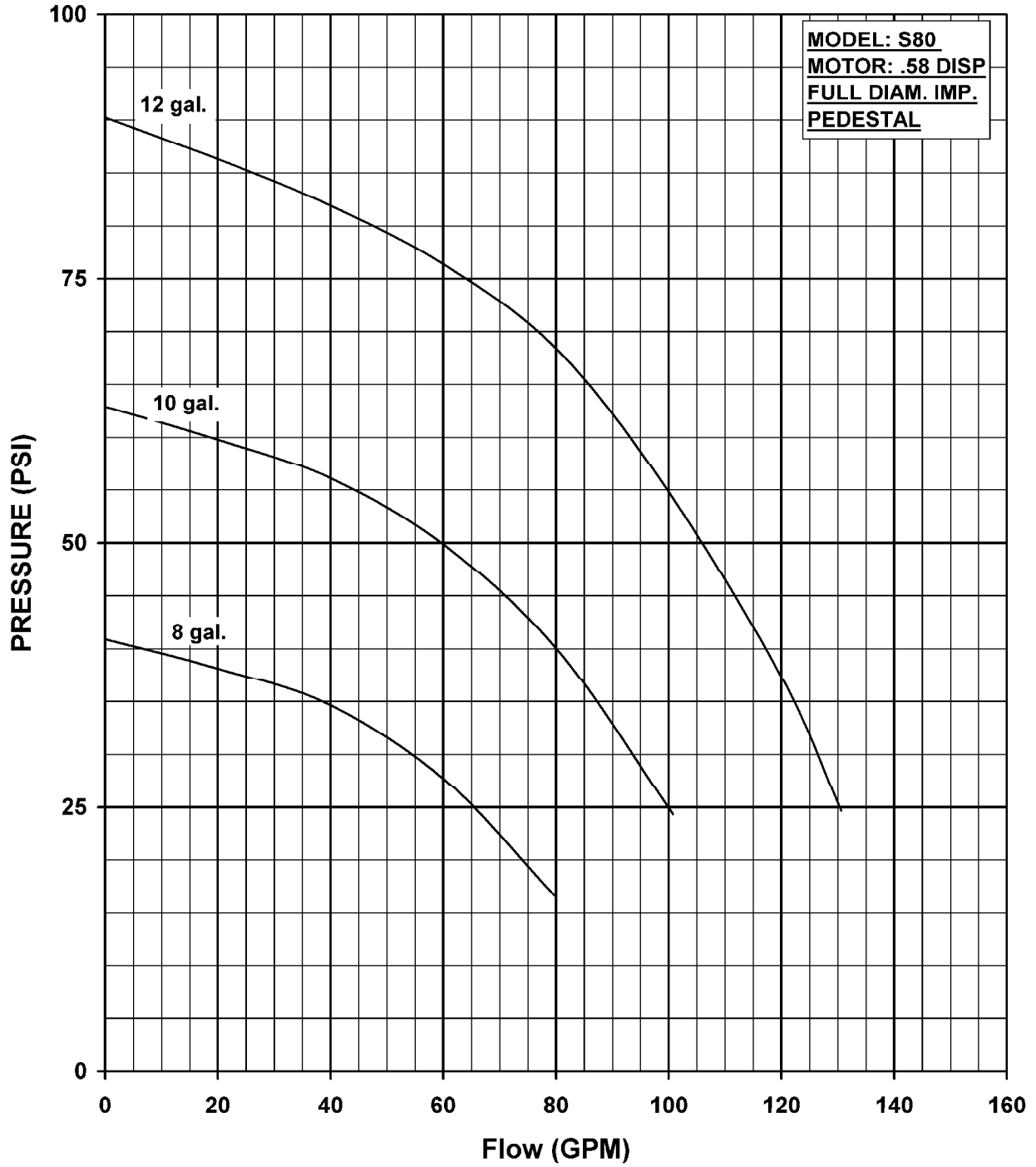
OIL FLOW	SHUT OFF 0 GPM	10 GPM	25 GPM	40 GPM	55 GPM	70 GPM	85 GPM	100 GPM	115 GPM	130 GPM	145 GPM	MAX. HYD. OIL PRESS.REQ.
5 GPM	39 PSI	37 PSI	36 PSI	32 PSI	29 PSI	23 PSI	-	-	-	-	-	1000 PSI
7 GPM	78 PSI	77 PSI	76 PSI	76 PSI	71 PSI	65 PSI	56 PSI	43 PSI	-	-	-	1700 PSI
8 GPM	104 PSI	103 PSI	101 PSI	99 PSI	93 PSI	84 PSI	74 PSI	62 PSI	46 PSI	-	-	2100 PSI
9 GPM	134 PSI	132 PSI	124 PSI	126 PSI	119 PSI	108 PSI	97 PSI	85 PSI	68 PSI	49 PSI	-	2450 PSI

CN 7129-S



OIL FLOW	SHUT OFF	20	40	60	80	100	120	MAX. HYD. OIL
	0 GPM	GPM	GPM	GPM	GPM	GPM	GPM	PRESS. REQ.
6 GPM	46 PSI	40 PSI	36 PSI	27 PSI	18 PSI	-	-	850 PSI
8 GPM	73 PSI	71 PSI	67 PSI	60 PSI	50 PSI	33 PSI	-	1300 PSI
10 GPM	112 PSI	108 PSI	103 PSI	95 PSI	84 PSI	69 PSI	50 PSI	1725 PSI

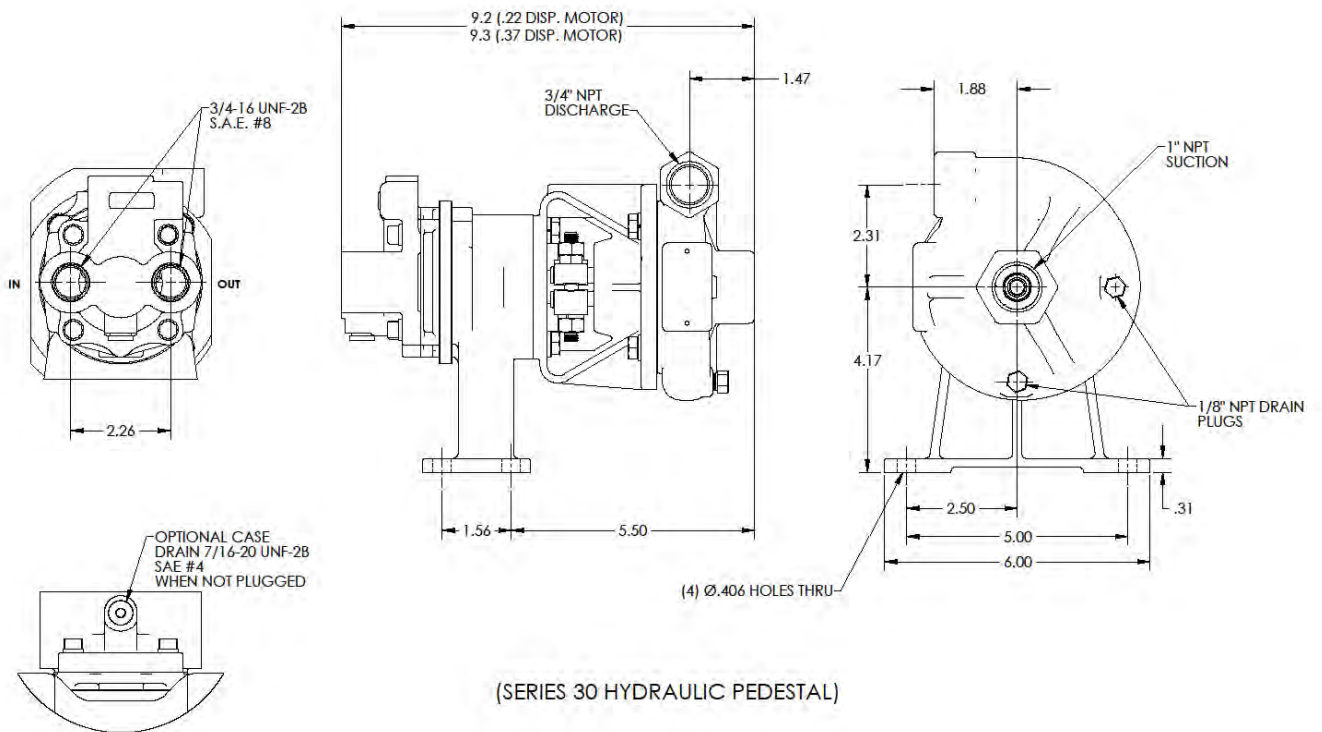
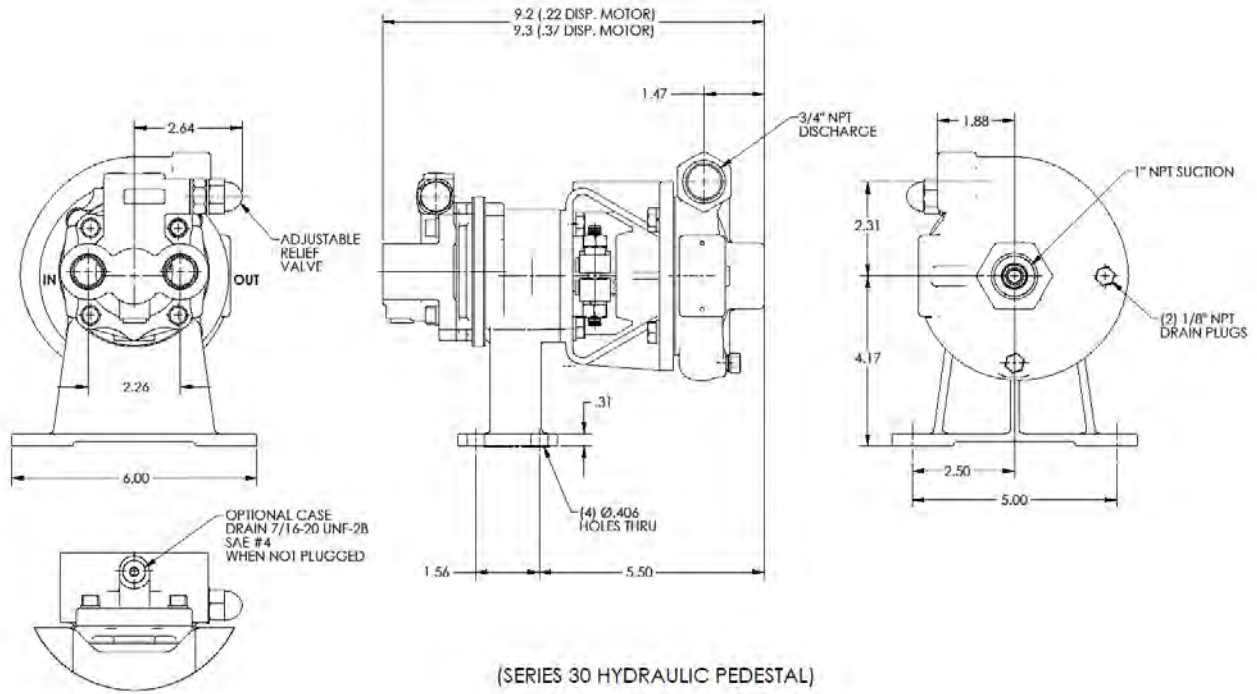
CN 7086-S



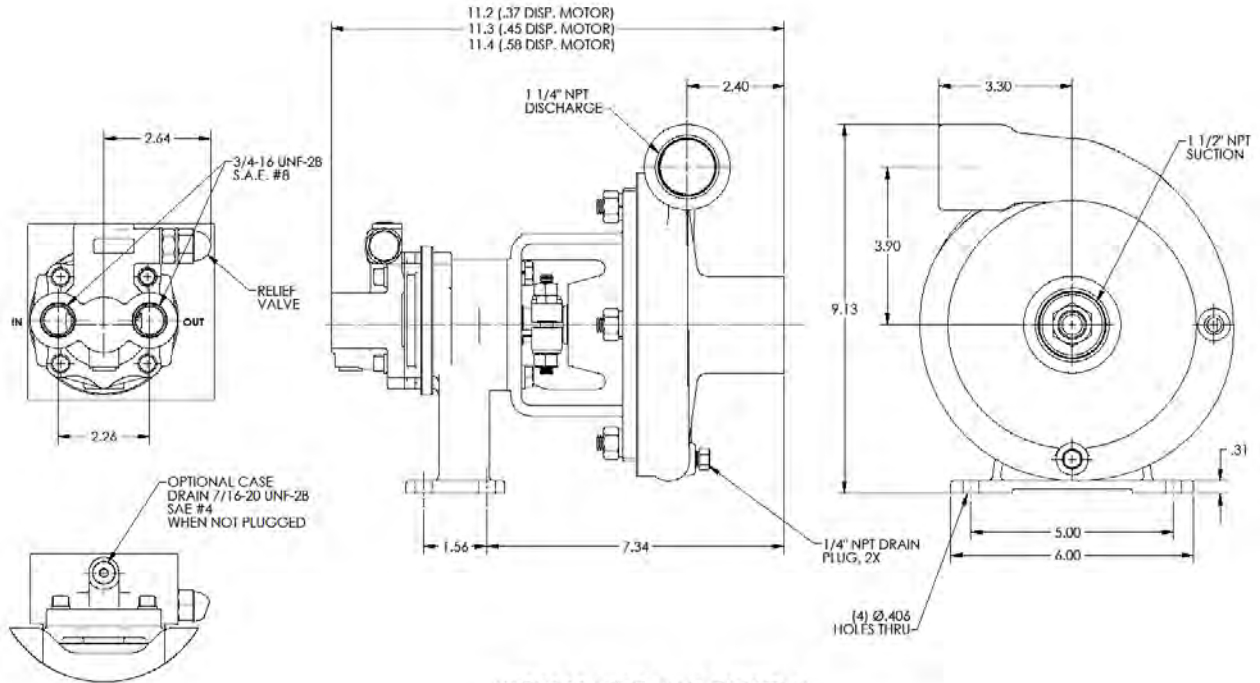
OIL FLOW	SHUT OFF 0 GPM	20 GPM	40 GPM	60 GPM	80 GPM	100 GPM	120 GPM	130 GPM	MAX. HYD. OIL PRESS. REQ.
8 GPM	42 PSI	38 PSI	34 PSI	28 PSI	17 PSI	-	-	-	680 PSI
10 GPM	63 PSI	60 PSI	56 PSI	50 PSI	40 PSI	25 PSI	-	-	950 PSI
12 GPM	91 PSI	87 PSI	83 PSI	77 PSI	68 PSI	55 PSI	37 PSI	25 PSI	1310 PSI

CN 7087-S

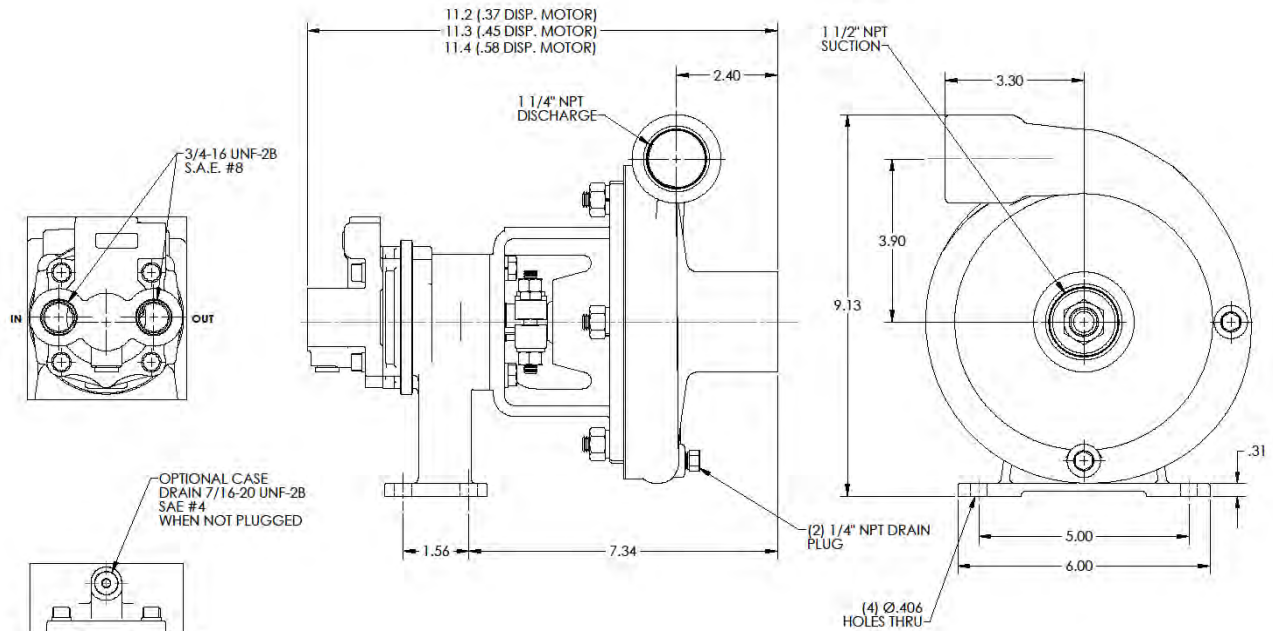
Series Dimensions - Pedestal



Series Dimensions - Pedestal



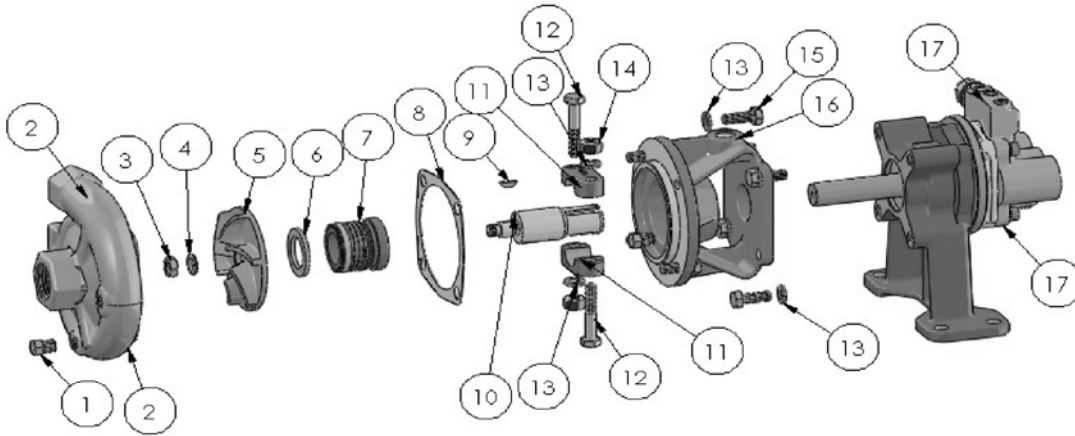
(SERIES 80 HYDRAULIC PEDESTAL)



(SERIES 80 HYDRAULIC PEDESTAL)

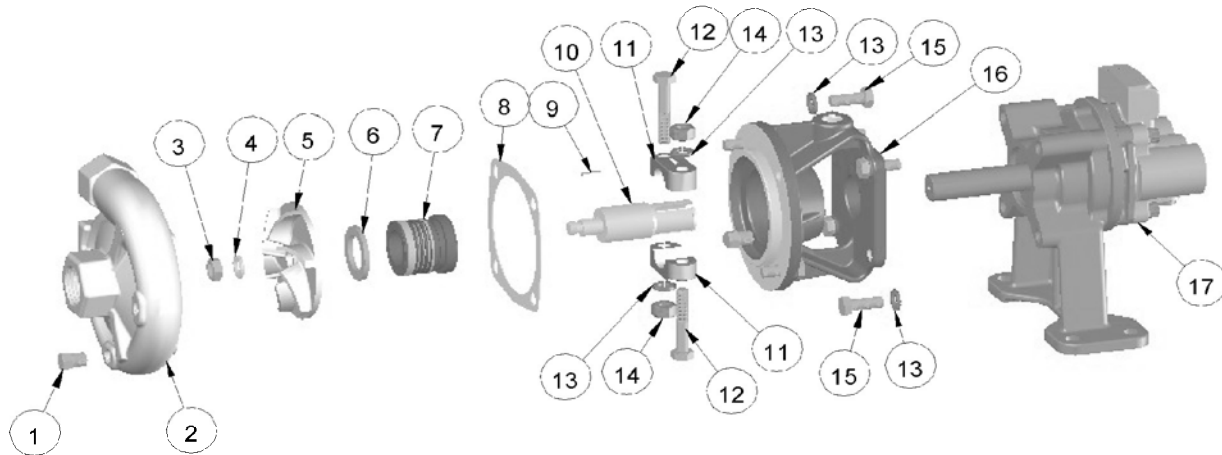
**Series 3.0 Exploded View – Pedestal
With Flow Control**

36035



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	21585	PIPE PLUG- 1/8" NPT	1
2	21107	HOUSING- DUCTILE 1" X 3/4"	1
3	22588	LOCK NUT- 3/8"-24	1
4	31224	LOCK WASHER	1
5	22573	IMPELLER	1
6	31103	WASHER	1
*	7	SEAL ASSEMBLY- VITON	1
*	8	GASKET	1
9	21865	KEY	1
10	22163	DRIVE SLEEVE	1
11	21946	CLAMP- 3/4"	2
12	21264	CAPSCREW SS- 5/16"-18 X 1.75"	2
13	21238	LOCK WASHER- 5/16"	10
14	21284	HEX NUT- 5/16"-18	2
15	21278	CAPSCREW SS- 5/16"-24 X .875"	8
16	22159	ADAPTOR- CAST IRON	1
17	36039	.22 DISP. HYD. PEDESTAL ASY.	1
	36037	.37 DISP. HYD. PEDESTAL ASY.	

*- RECOMMENDED REPLACEMENT PARTS

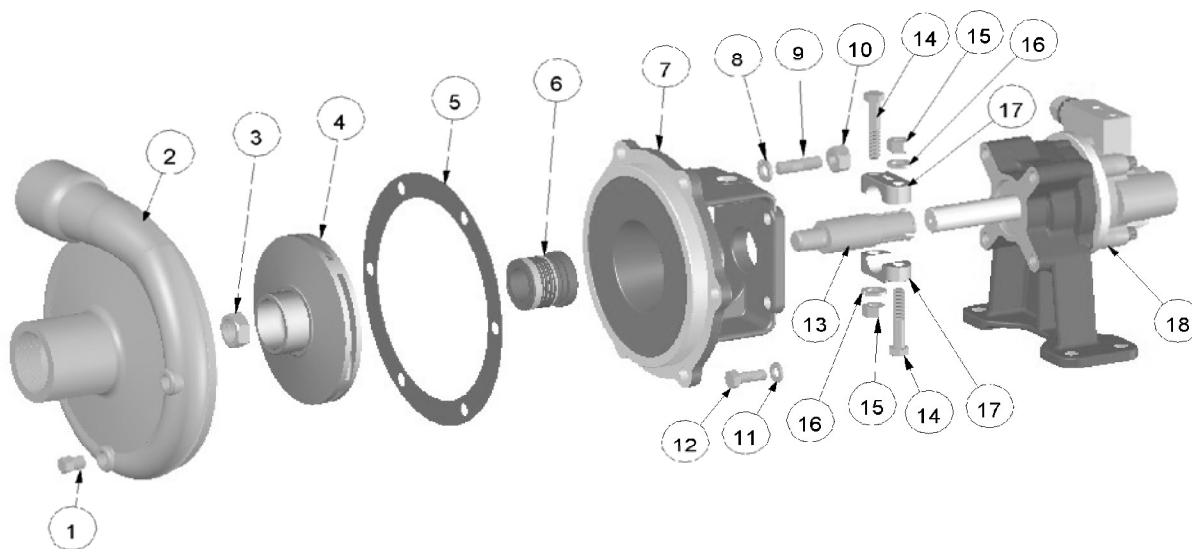


ITEM NO.	PART NO.	DESCRIPTION	QTY.	
1	21585	PIPE PLUG- 1/8" NPT	2	
2	21107	HOUSING- DUCTILE 1" X 3/4"	1	
3	22588	LOCK NUT- 3/8"-24	1	
4	31224	LOCK WASHER	1	
5	22573	IMPELLER	1	
6	31103	WASHER	1	
*	7	22273	SEAL ASSEMBLY- VITON	1
*	8	24987	GASKET	1
9	21865	KEY	1	
10	22163	DRIVE SLEEVE	1	
11	21946	CLAMP- 3/4"	2	
12	21264	CAPSCREW SS- 5/16"-18 X 1.75"	2	
13	21238	LOCK WASHER- 5/16"	10	
14	21284	HEX NUT- 5/16"-18	2	
15	21278	CAPSCREW SS- 5/16"-24 X .875"	8	
16	22159	ADAPTOR- CAST IRON	1	
17	35995	.22 DISP. HYD. PEDESTAL ASY.	1	
	36447	.37 DISP. HYD. PEDESTAL ASY.		

*- RECOMMENDED REPLACEMENT PARTS

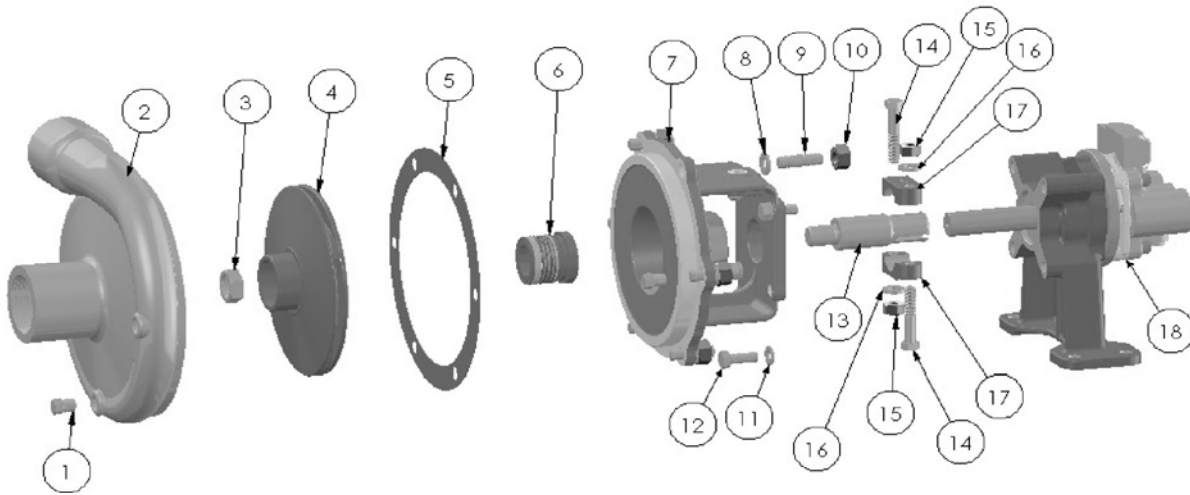
**Series 80 Exploded View – Pedestal
With Flow Control**

36096



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	21585	PIPE PLUG- 1/8" NPT	2
2	25666	HSG- DUCTILE 1.5" X 1.25"	1
3	22655	JAM NUT- 5/8"-18	1
4	25910	IMPELLER- 5.9" O.D.	1
*	25662	GASKET	1
*	22273	SEAL- VITON	1
7	25791	ADAPTOR	1
8	21266	LOCKWASHER- 3/8"	6
9	21260	STUD- 3/8"-16 X 1.32"	6
10	21268	HEXNUT- 3/8"-16	6
11	21238	LOCKWASHER- 5/16"	4
12	21278	CAPSCREW- 5/16"-24 X .875"	4
13	22286	DRIVE SLEEVE	1
14	21264	CAPSCREW- 5/16"-24 X 1.75"	2
15	21284	HEXNUT- 5/16"-18	2
16	21238	LOCKWASHER- 5/16"	2
17	21946	CLAMP	2
18	36037	PED ASY: HYD GEROTOR .37 DISP W/ R.VALVE	1
	36040	PED ASY: HYD GEROTOR .45 DISP W/ R.VALVE	
	36041	PED ASY: HYD GEROTOR .58 DISP W/ R.VALVE	

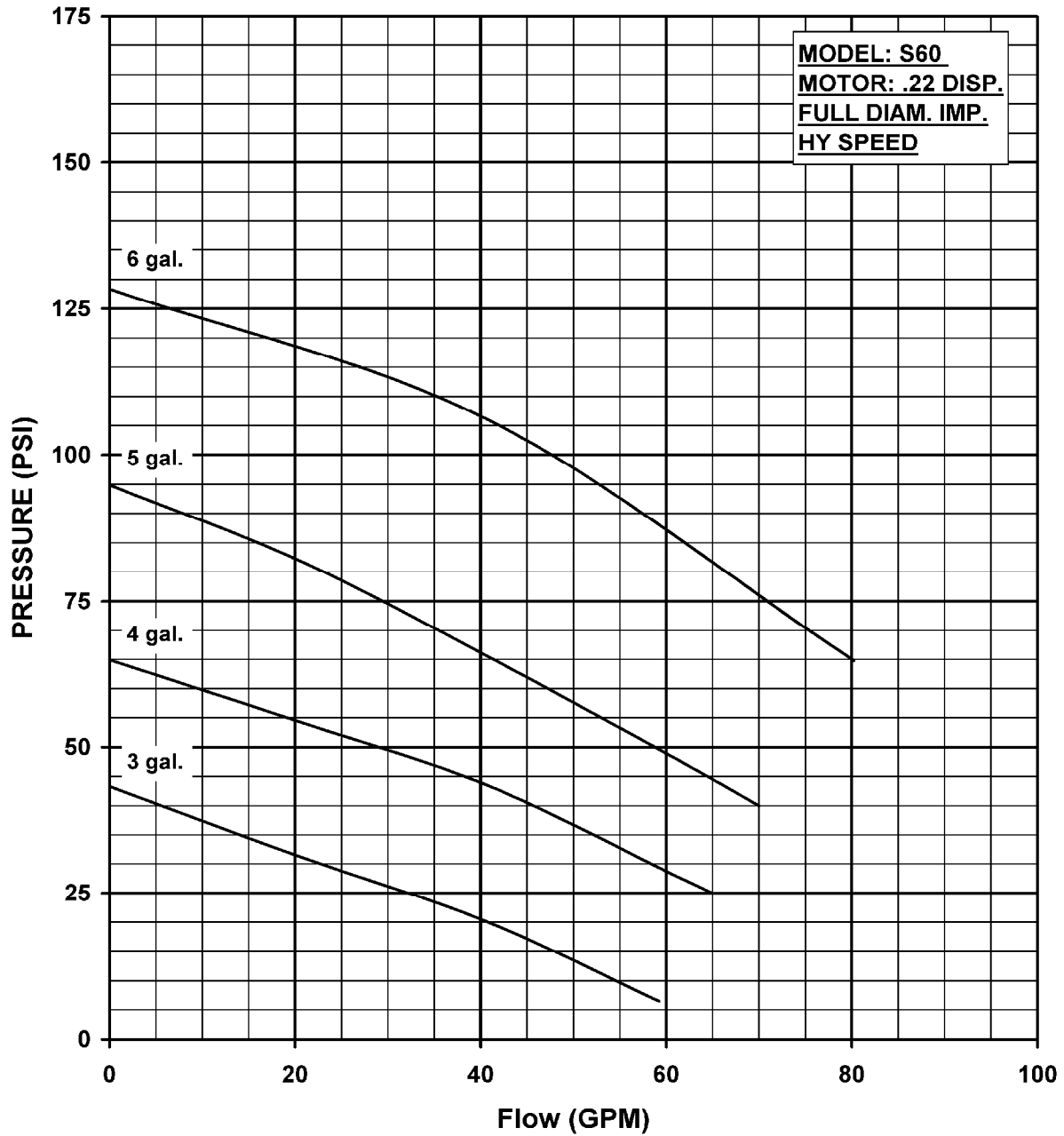
*- RECOMMENDED REPLACEMENT PARTS



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	21585	PIPE PLUG- 1/8" NPT	2
2	25666	HSG- DUCTILE 1.5" X 1.25"	1
3	22655	JAM NUT- 5/8"-18	1
4	25910	IMPELLER- 5.9" O.D.	1
*	25662	GASKET	1
*	22273	SEAL- VITON	1
7	25791	ADAPTOR	1
8	21266	LOCKWASHER- 3/8"	6
9	21260	STUD- 3/8"-16 X 1.32"	6
10	21268	HEXNUT- 3/8"-16	6
11	21238	LOCKWASHER- 5/16"	4
12	21278	CAPSCREW- 5/16"-24 X .875"	4
13	22286	DRIVE SLEEVE	1
14	21264	CAPSCREW- 5/16"-24 X 1.75"	2
15	21284	HEXNUT- 5/16"-18	2
16	21238	LOCKWASHER- 5/16"	2
17	21946	CLAMP	2
18	36447	PED ASY: HYD GEROTOR .37 DISP	1
	35996	PED ASY: HYD GEROTOR .45 DISP	
	36448	PED ASY: HYD GEROTOR .58 DISP	

*- RECOMMENDED REPLACEMENT PARTS

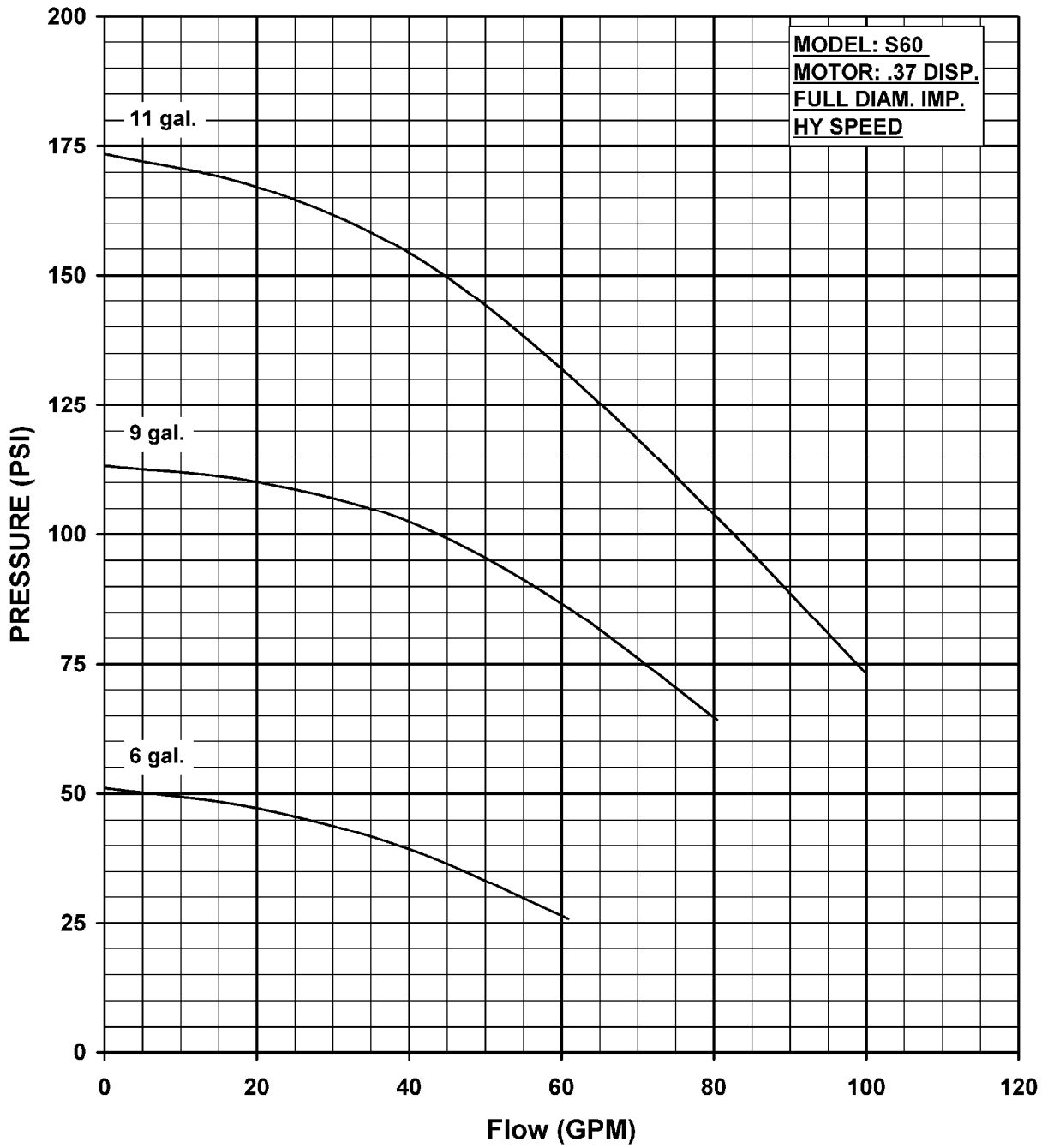
Series Performance – HY Speed



OIL FLOW	SHUT OFF 0 GPM	10 GPM	20 GPM	30 GPM	40 GPM	50 GPM	60 GPM	70 GPM	80 GPM	MAX. HYD. OIL PRESS. REQ.
3 GPM	43 PSI	37 PSI	31 PSI	26 PSI	20 PSI	13 PSI	-	-	-	1500 PSI
4 GPM	65 PSI	60 PSI	55 PSI	50 PSI	44 PSI	36 PSI	28 PSI	-	-	1800 PSI
5 GPM	95 PSI	89 PSI	82 PSI	75 PSI	66 PSI	57 PSI	49 PSI	40 PSI	-	2200 PSI
6 GPM	129 PSI	123 PSI	118 PSI	113 PSI	106 PSI	97 PSI	87 PSI	75 PSI	65 PSI	2500 PSI

CN 7121-S

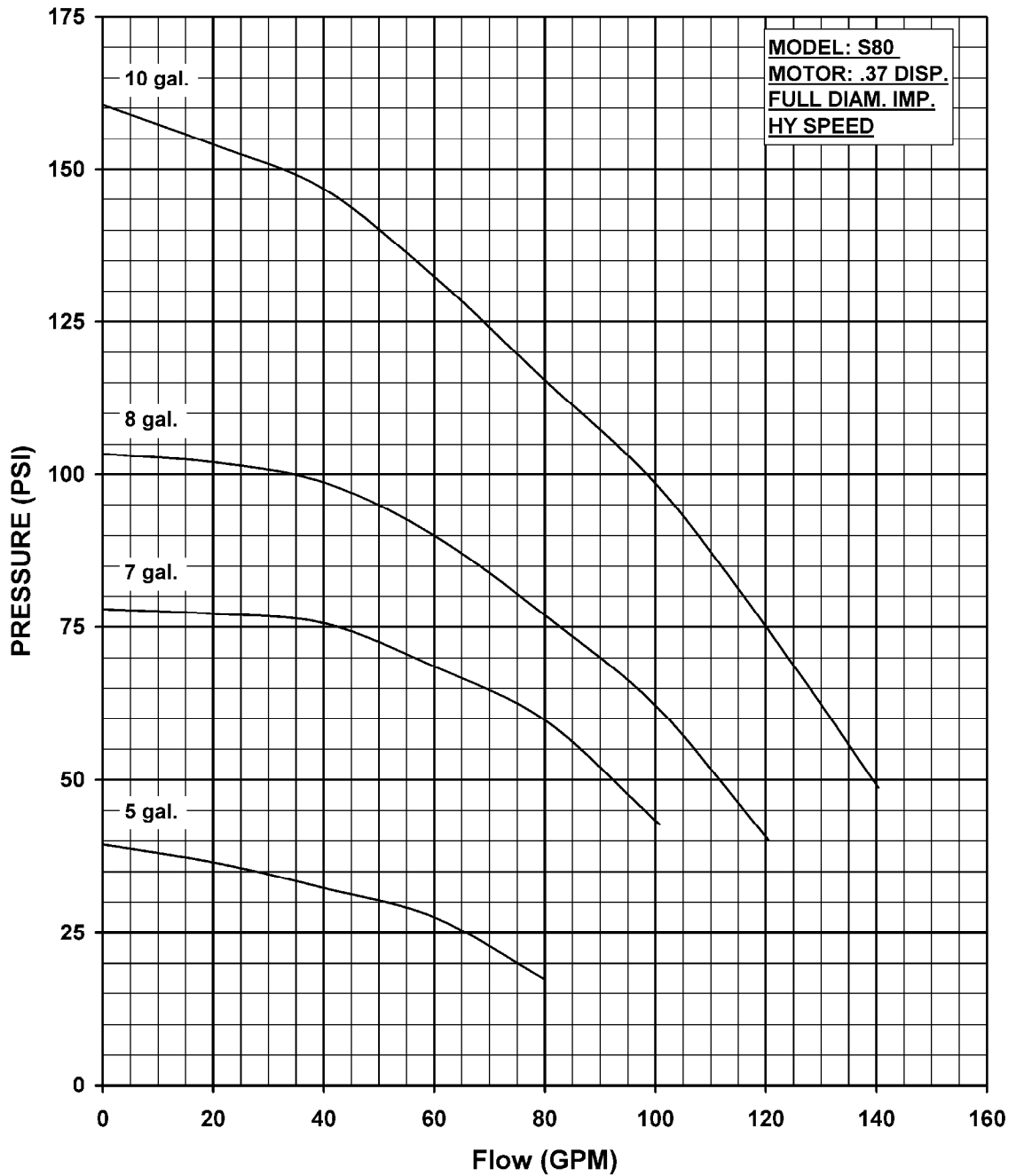
Series Performance – HY Speed



OIL FLOW	SHUT OFF 0 GPM	10 GPM	20 GPM	30 GPM	40 GPM	50 GPM	60 GPM	70 GPM	80 GPM	90 GPM	100 GPM	MAX. HYD. OIL PRESS.REQ.
6 GPM	51 PSI	49 PSI	47 PSI	44 PSI	39 PSI	33 PSI	26 PSI	-	-	-	-	950 PSI
9 GPM	113 PSI	112 PSI	110 PSI	106 PSI	102 PSI	96 PSI	87 PSI	76 PSI	65 PSI	-	-	1800 PSI
11 GPM	174 PSI	171 PSI	167 PSI	161 PSI	154 PSI	144 PSI	132 PSI	118 PSI	104 PSI	98 PSI	68 PSI	2300 PSI

CN 7102-S

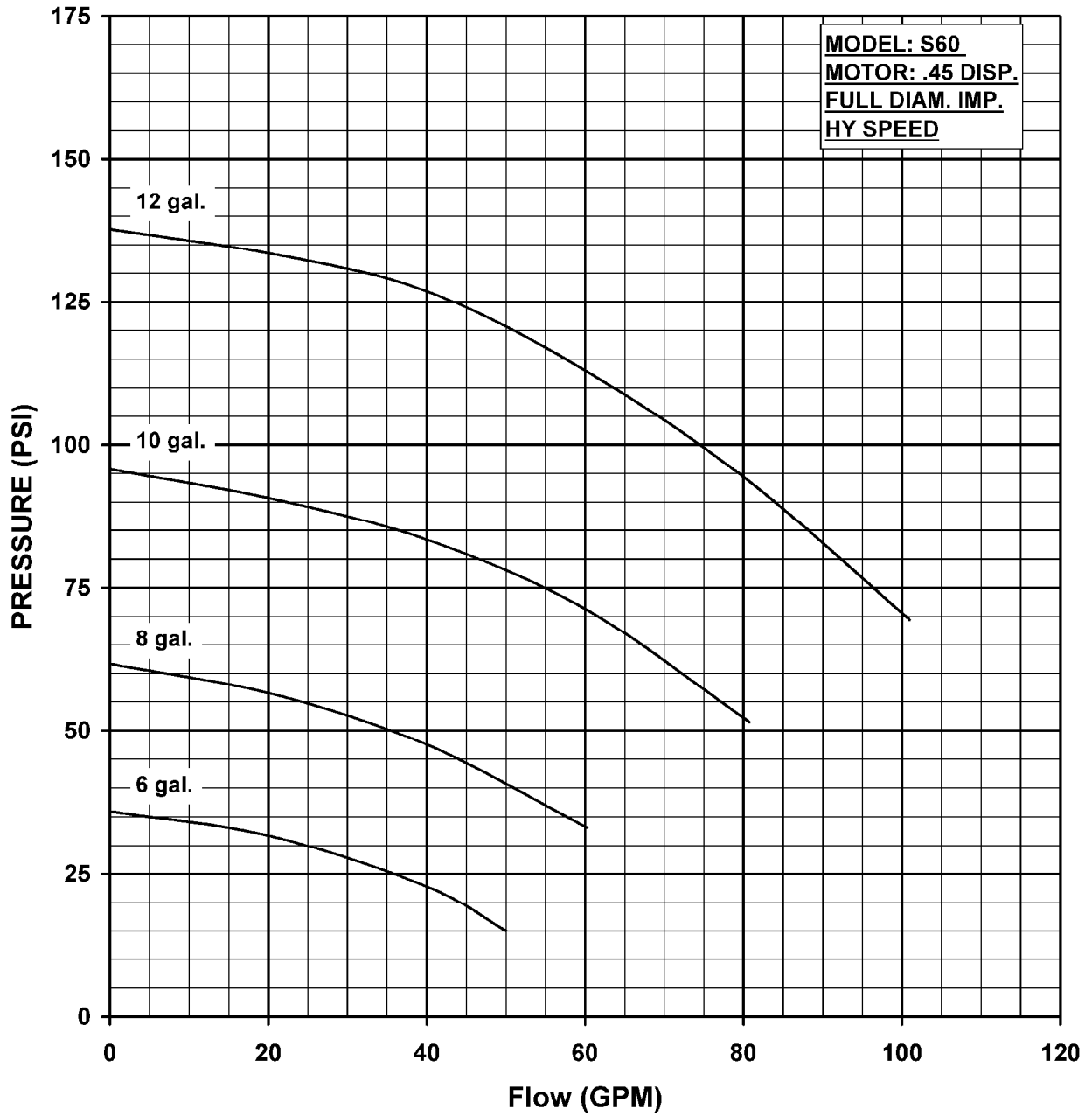
Series Performance – HY Speed



OIL FLOW	SHUT OFF 0 GPM	10 GPM	25 GPM	40 GPM	55 GPM	70 GPM	85 GPM	100 GPM	115 GPM	130 GPM	145 GPM	MAX. HYD. OIL PRESS.REQ.
5 GPM	39 PSI	37 PSI	36 PSI	32 PSI	29 PSI	23 PSI	-	-	-	-	-	1000 PSI
7 GPM	78 PSI	77 PSI	76 PSI	76 PSI	71 PSI	65 PSI	56 PSI	43 PSI	-	-	-	1700 PSI
8 GPM	104 PSI	103 PSI	101 PSI	99 PSI	93 PSI	84 PSI	74 PSI	62 PSI	46 PSI	-	-	2100 PSI
10 GPM	161 PSI	157 PSI	154 PSI	147 PSI	136 PSI	124 PSI	111 PSI	99 PSI	81 PSI	62 PSI	-	2700 PSI

CN 7103-S

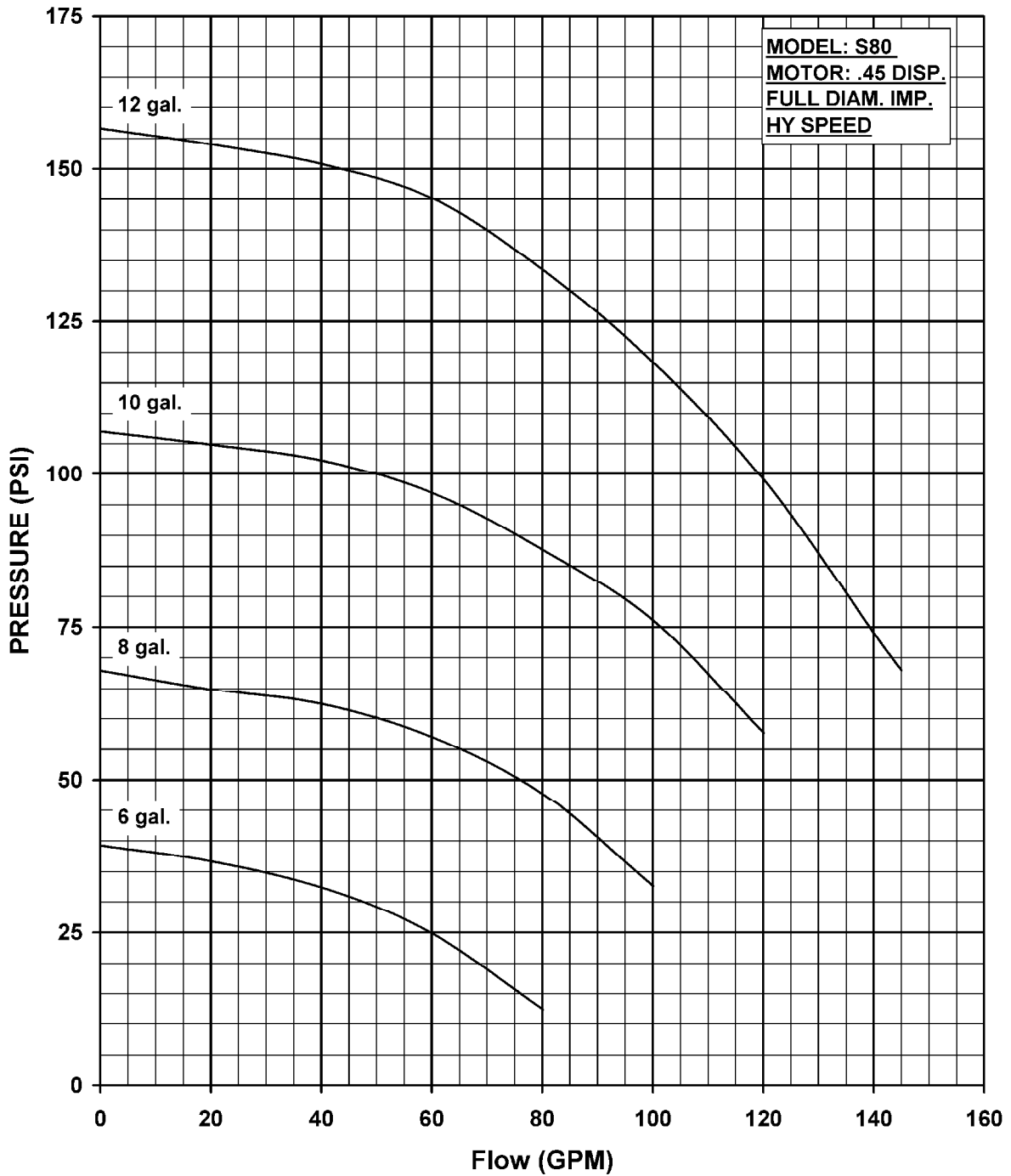
Series Performance – HY Speed



OIL FLOW	SHUT OFF 0 GPM	10 GPM	20 GPM	30 GPM	40 GPM	50 GPM	60 GPM	70 GPM	80 GPM	90 GPM	100 GPM	MAX. HYD. OIL PRESS.REQ.
6 GPM	36 PSI	34 PSI	32 PSI	27 PSI	23 PSI	15 PSI	-	-	-	-	-	650 PSI
8 GPM	62 PSI	59 PSI	57 PSI	53 PSI	48 PSI	41 PSI	33 PSI	-	-	-	-	950 PSI
10 GPM	96 PSI	93 PSI	91 PSI	87 PSI	83 PSI	78 PSI	72 PSI	62 PSI	52 PSI	-	-	1400 PSI
12 GPM	137 PSI	136 PSI	133 PSI	131 PSI	127 PSI	121 PSI	113 PSI	104 PSI	94 PSI	83 PSI	70 PSI	1800 PSI

CN 7101-S

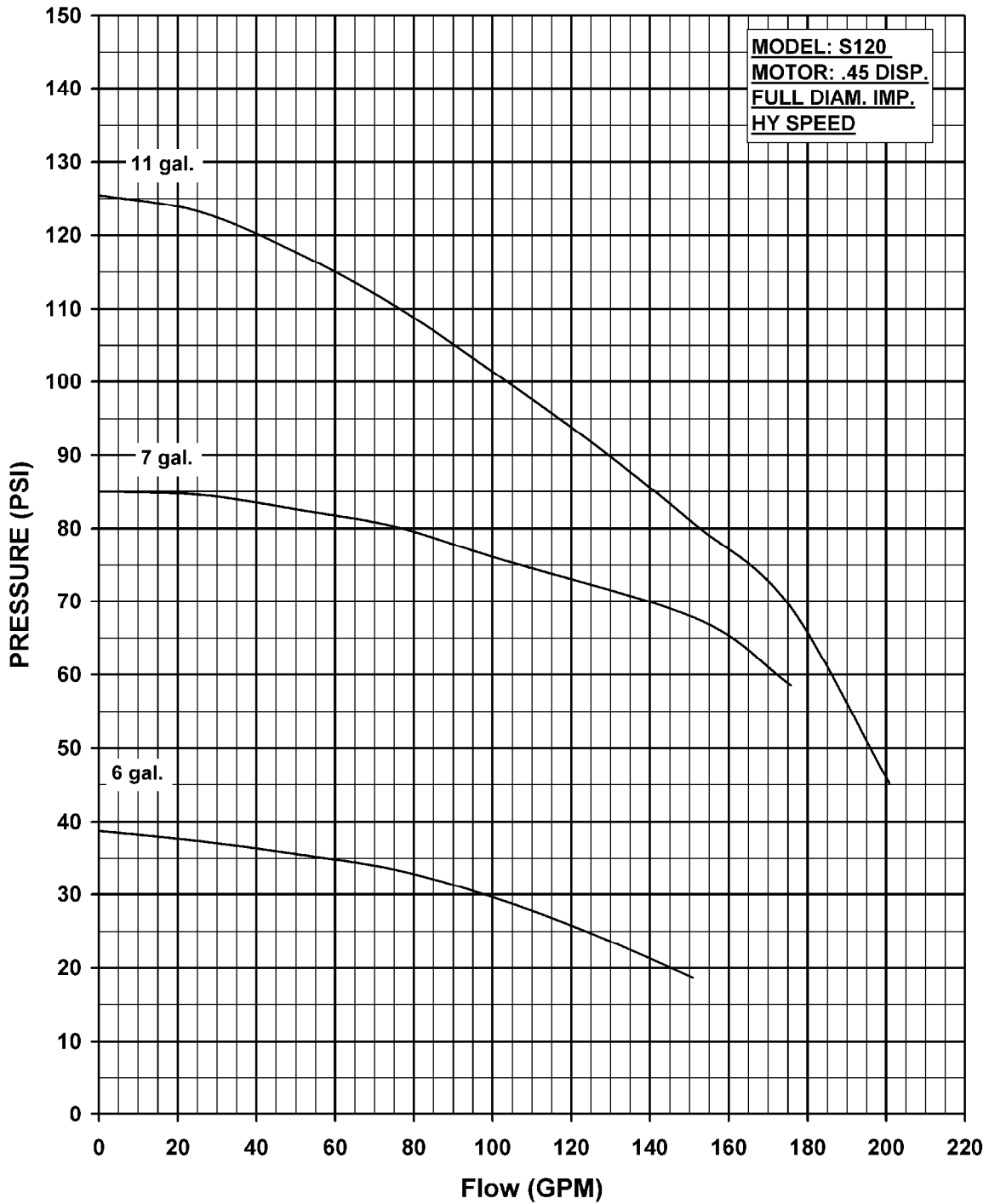
Series Performance – HY Speed



OIL FLOW	SHUT OFF 0 GPM	10 GPM	25 GPM	40 GPM	55 GPM	70 GPM	85 GPM	100 GPM	115 GPM	130 GPM	145 GPM	MAX. HYD. OIL PRESS.REQ.
6 GPM	39 PSI	38 PSI	36 PSI	32 PSI	27 PSI	19 PSI	-	-	-	-	-	800 PSI
8 GPM	68 PSI	66 PSI	64 PSI	62 PSI	59 PSI	53 PSI	45 PSI	33 PSI	-	-	-	1300 PSI
10 GPM	107 PSI	106 PSI	104 PSI	102 PSI	98 PSI	93 PSI	85 PSI	76 PSI	62 PSI	-	-	1900 PSI
12 GPM	156 PSI	155 PSI	154 PSI	151 PSI	147 PSI	140 PSI	130 PSI	118 PSI	105 PSI	81 PSI	68 PSI	2500 PSI

CN 7104-S

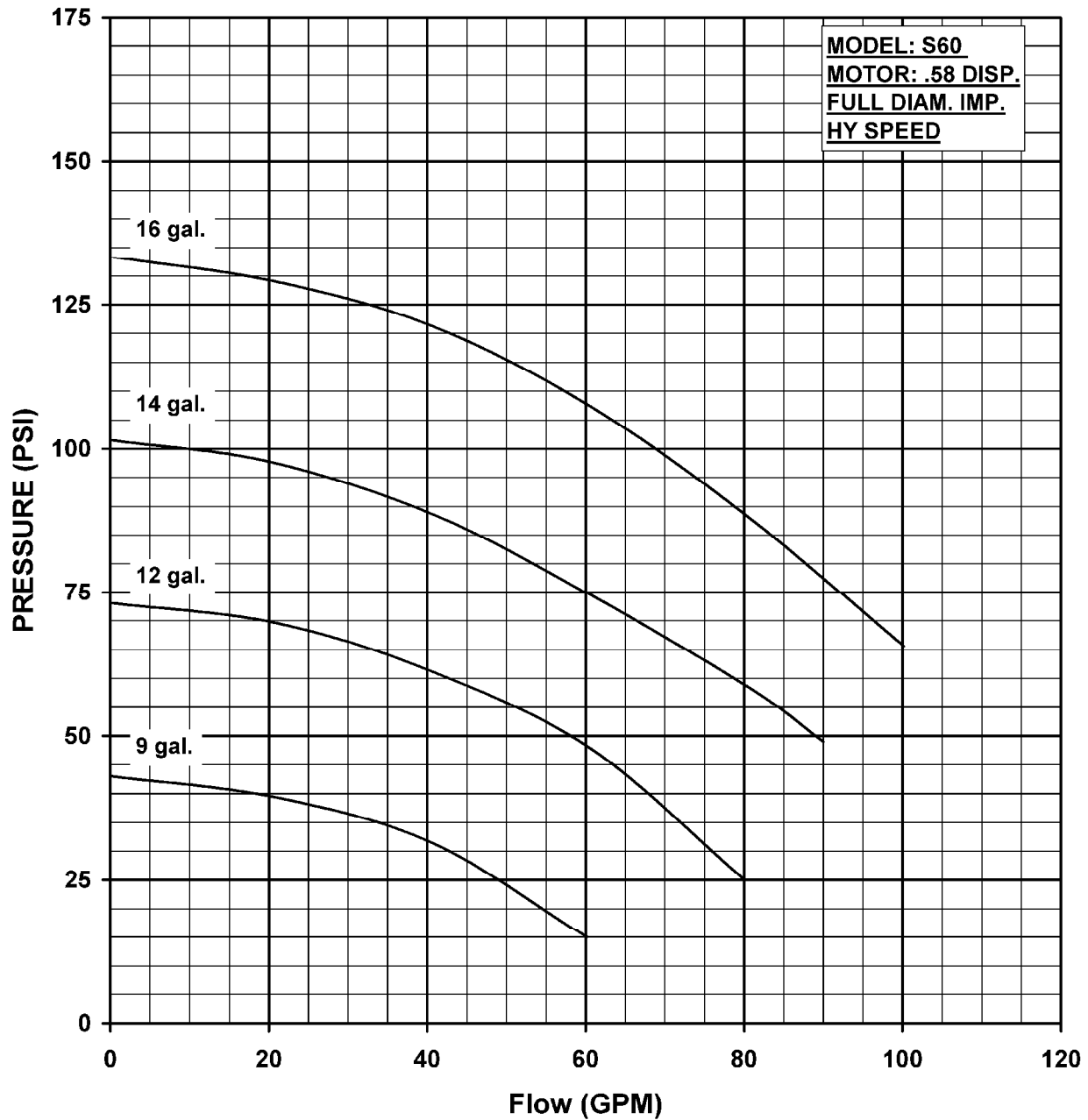
Series Performance – HY Speed



OIL FLOW	SHUT OFF 0 GPM	20 GPM	40 GPM	60 GPM	80 GPM	100 GPM	120 GPM	140 GPM	160 GPM	180 GPM	200 GPM	MAX. HYD. OIL PRESS.REQ.
6 GPM	40 PSI	37	36	35	33	29	27	22	-	-	-	1150 PSI
9 GPM	82 PSI	65	64	62	79	74	72	69	65	-	-	2150 PSI
11 GPM	121 PSI	124	120	115	109	102	94	86	77	66	45	2600 PSI

CN 7107-S

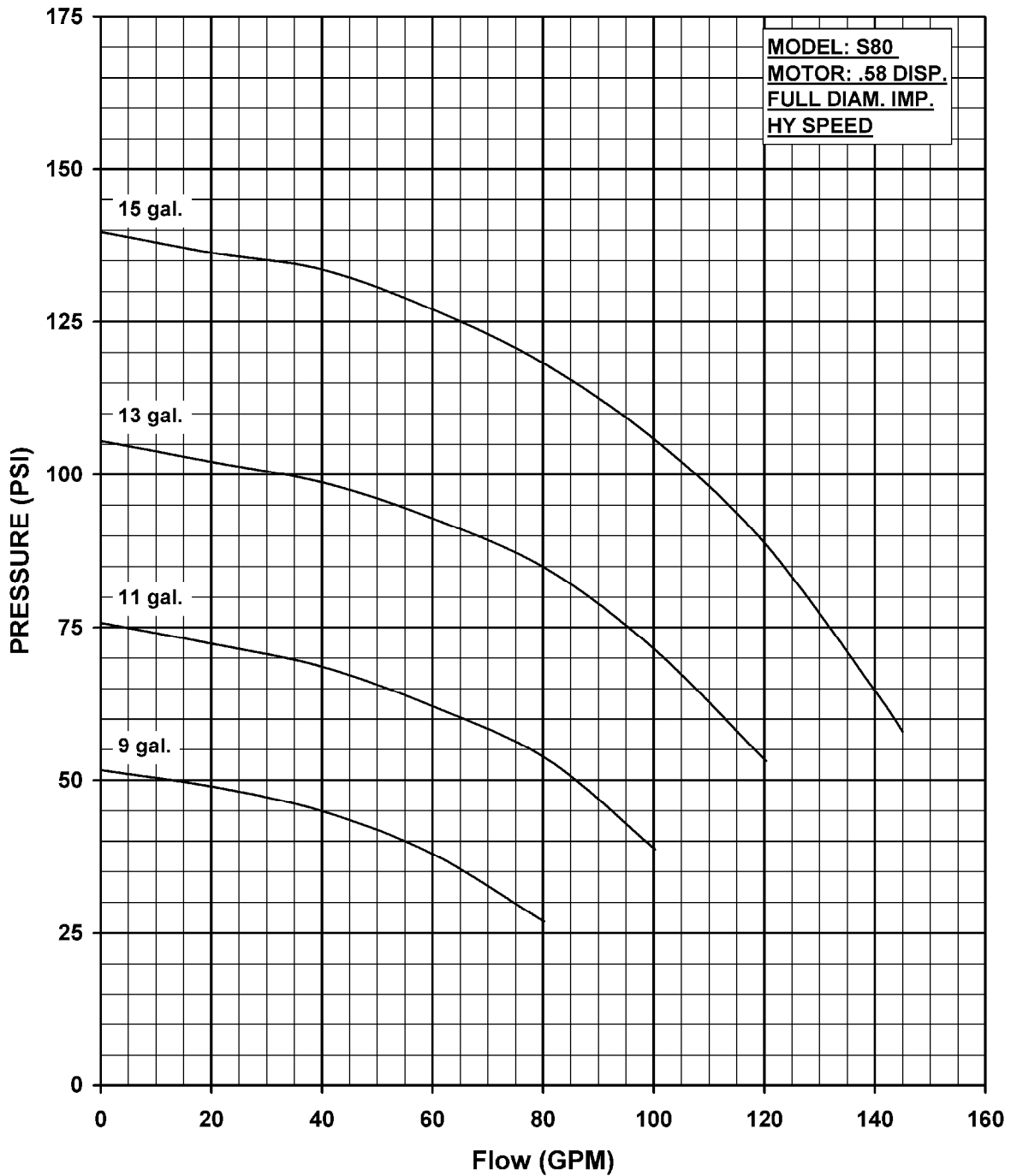
Series Performance – HY Speed



OIL FLOW	SHUT OFF 0 GPM	10 GPM	20 GPM	30 GPM	40 GPM	50 GPM	60 GPM	70 GPM	80 GPM	90 GPM	100 GPM	MAX. HYD. OIL PRESS.REQ.
9 GPM	43 PSI	41 PSI	40 PSI	36 PSI	32 PSI	24 PSI	15 PSI	-	-	-	-	600 PSI
12 GPM	73 PSI	71 PSI	70 PSI	66 PSI	61 PSI	56 PSI	48 PSI	37 PSI	25 PSI	-	-	900 PSI
14 GPM	101 PSI	100 PSI	98 PSI	94 PSI	89 PSI	82 PSI	75 PSI	67 PSI	59 PSI	49 PSI	-	1200 PSI
16 GPM	133 PSI	131 PSI	129 PSI	126 PSI	122 PSI	115 PSI	108 PSI	99 PSI	88 PSI	77 PSI	66 PSI	1500 PSI

CN 7122-S

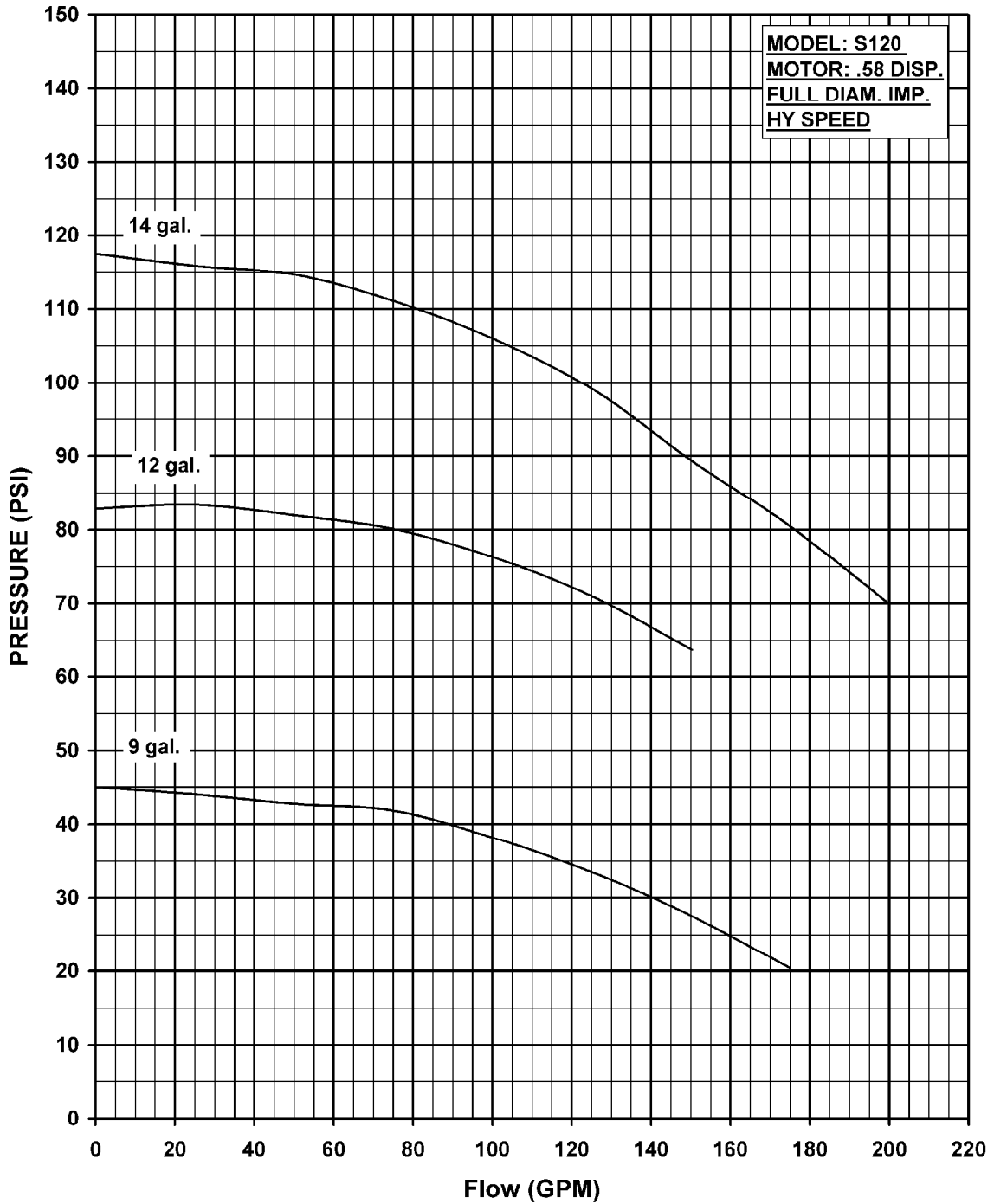
Series Performance – HY Speed



OIL FLOW	SHUT OFF 0 GPM	10 GPM	25 GPM	40 GPM	55 GPM	70 GPM	85 GPM	100 GPM	115 GPM	130 GPM	145 GPM	MAX. HYD. OIL PRESS.REQ.
9 GPM	51 PSI	50 PSI	48 PSI	45 PSI	40 PSI	33 PSI	-	-	-	-	-	800 PSI
11 GPM	76 PSI	74 PSI	72 PSI	78 PSI	64 PSI	63 PSI	51 PSI	39 PSI	-	-	-	1100 PSI
13 GPM	106 PSI	104 PSI	101 PSI	98 PSI	95 PSI	89 PSI	82 PSI	72 PSI	58 PSI	-	-	1500 PSI
15 GPM	140 PSI	137 PSI	136 PSI	134 PSI	129 PSI	123 PSI	115 PSI	102 PSI	94 PSI	77 PSI	58 PSI	1900 PSI

CN 7105-S

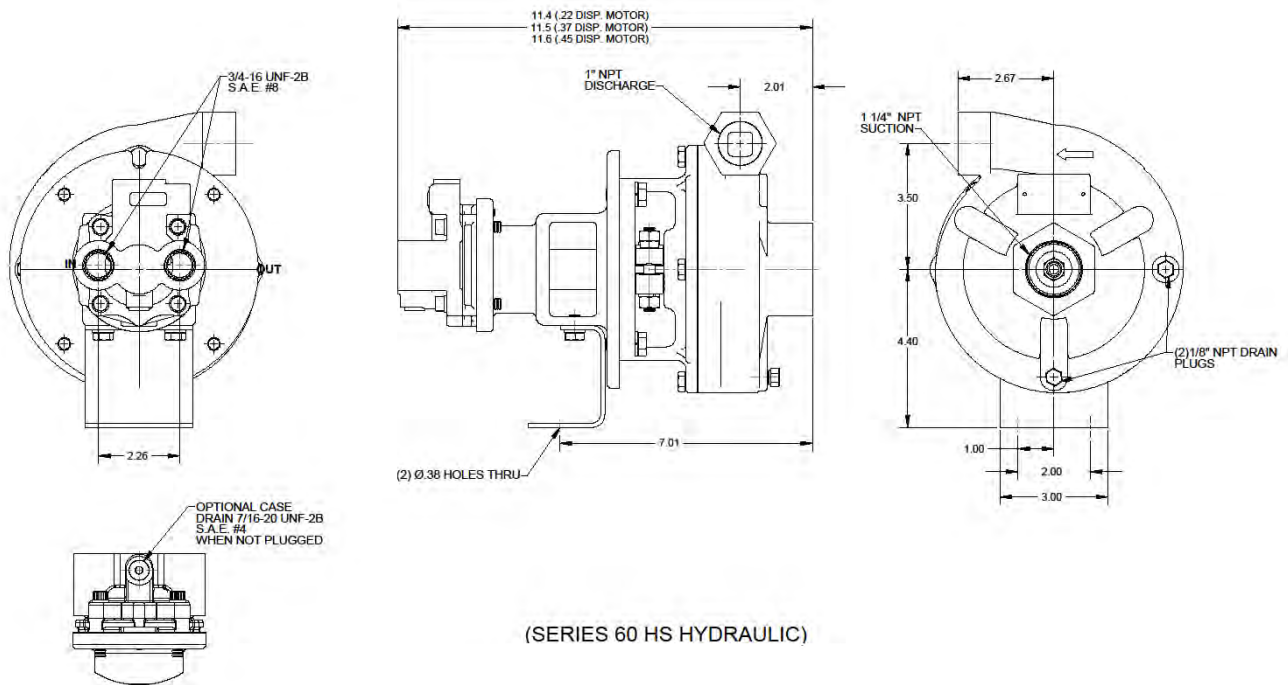
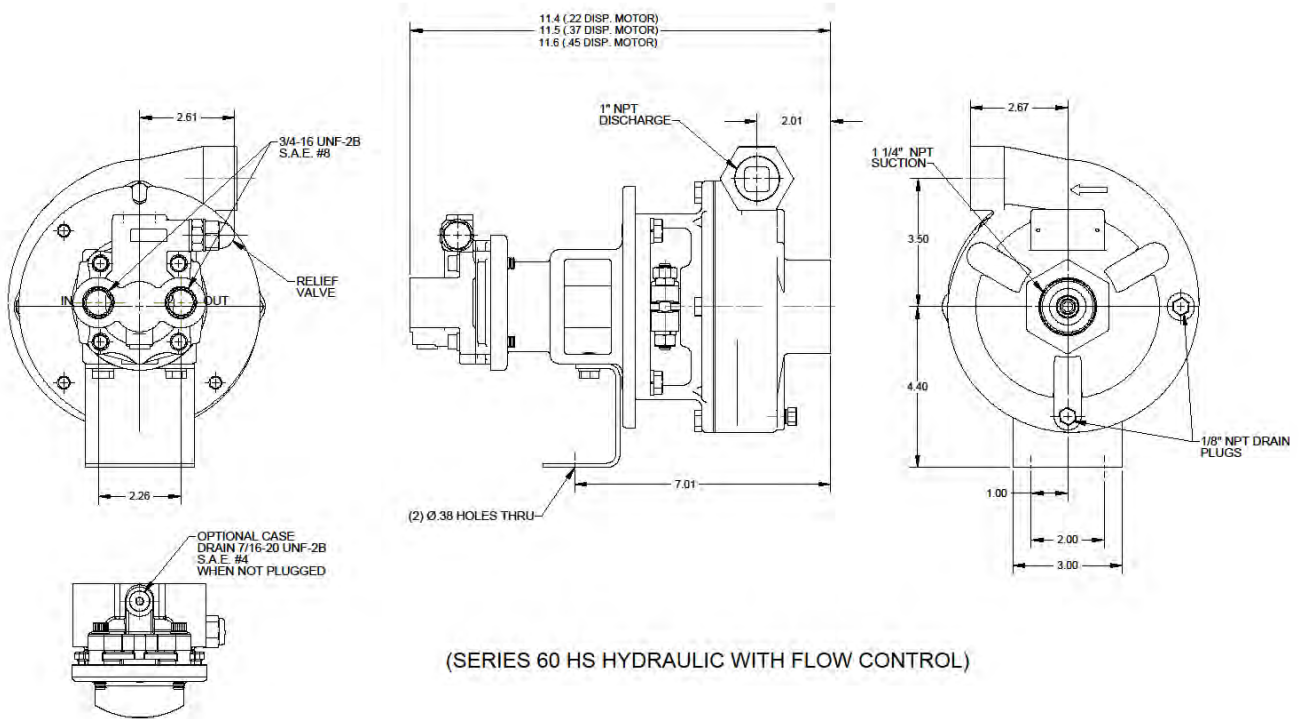
Series Performance – HY Speed



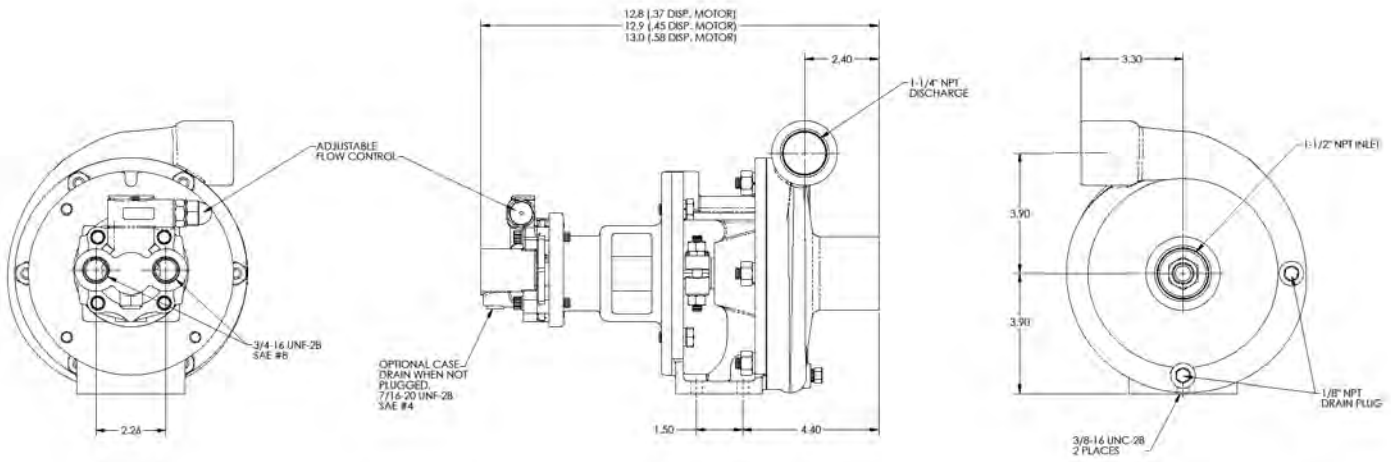
OIL FLOW	SHUT OFF 0 GPM	20 GPM	40 GPM	60 GPM	80 GPM	100 GPM	120 GPM	140 GPM	160 GPM	180 GPM	200 GPM	MAX. HYD. OIL PRESS.REQ.
9 GPM	40 PSI	45	43	42	41	38	35	30	25	19	-	1050 PSI
12 GPM	82 PSI	83	82	81	79	76	73	67	-	-	-	1850 PSI
14 GPM	121 PSI	116	115	114	110	106	103	94	85	79	-	2300 PSI

CN 7108-S

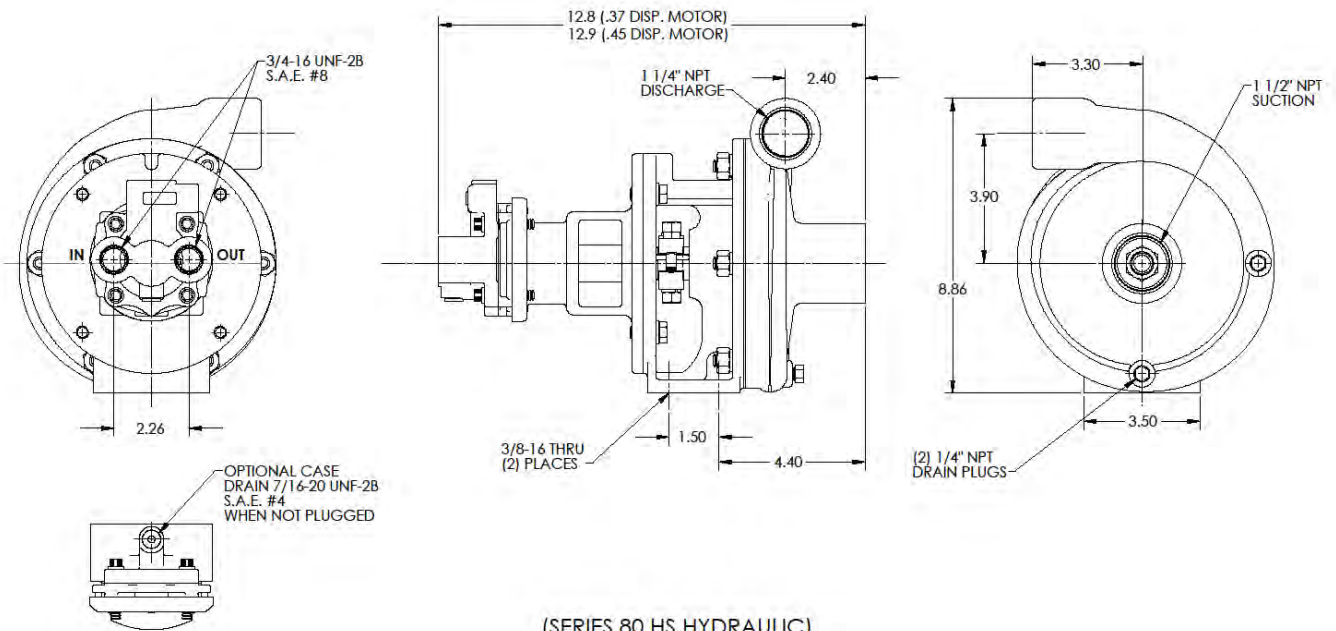
Series Dimensions – HY Speed



Series Dimensions – HY Speed

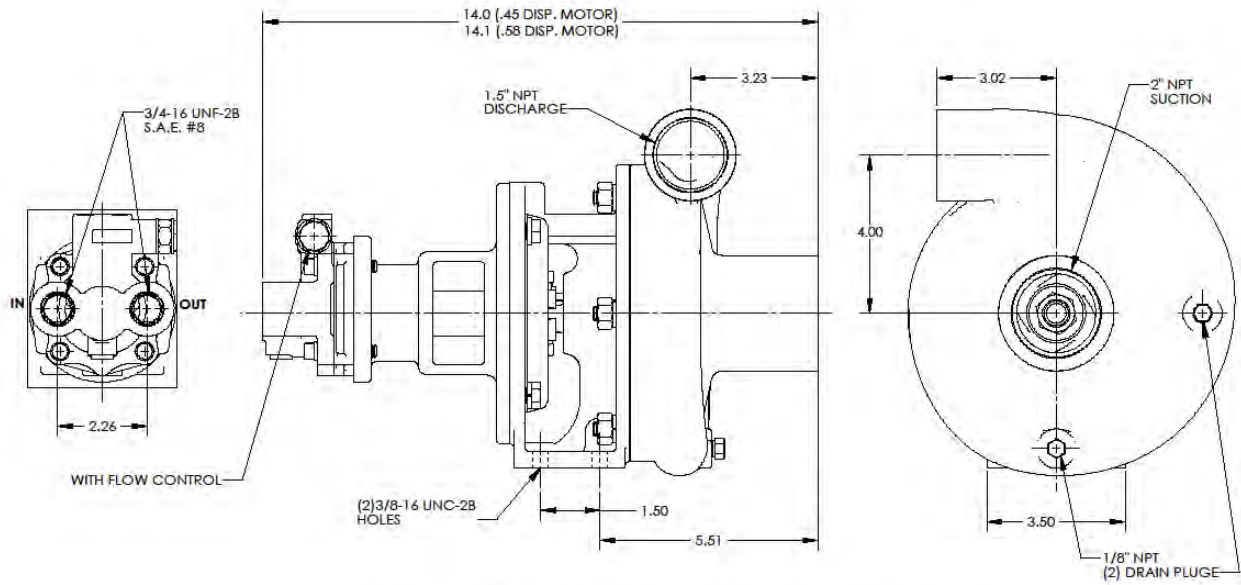


(SERIES 80 HS HYDRAULIC WITH FLOW CONTROL)

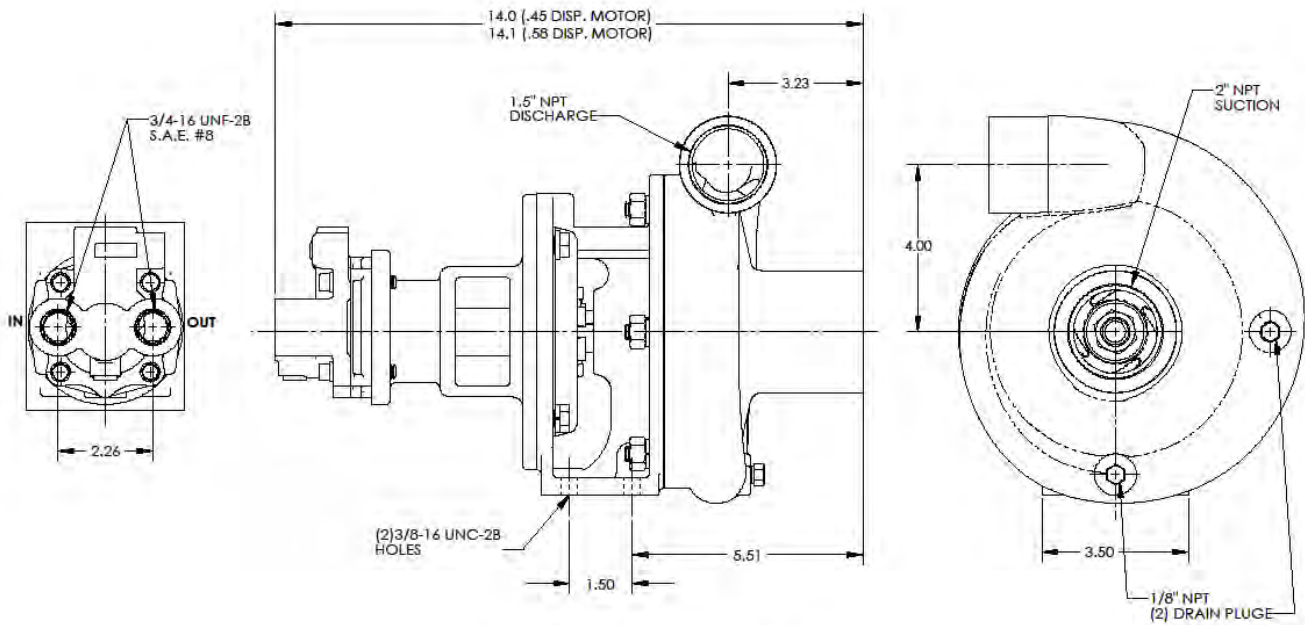


(SERIES 80 HS HYDRAULIC)

Series Dimensions – HY Speed



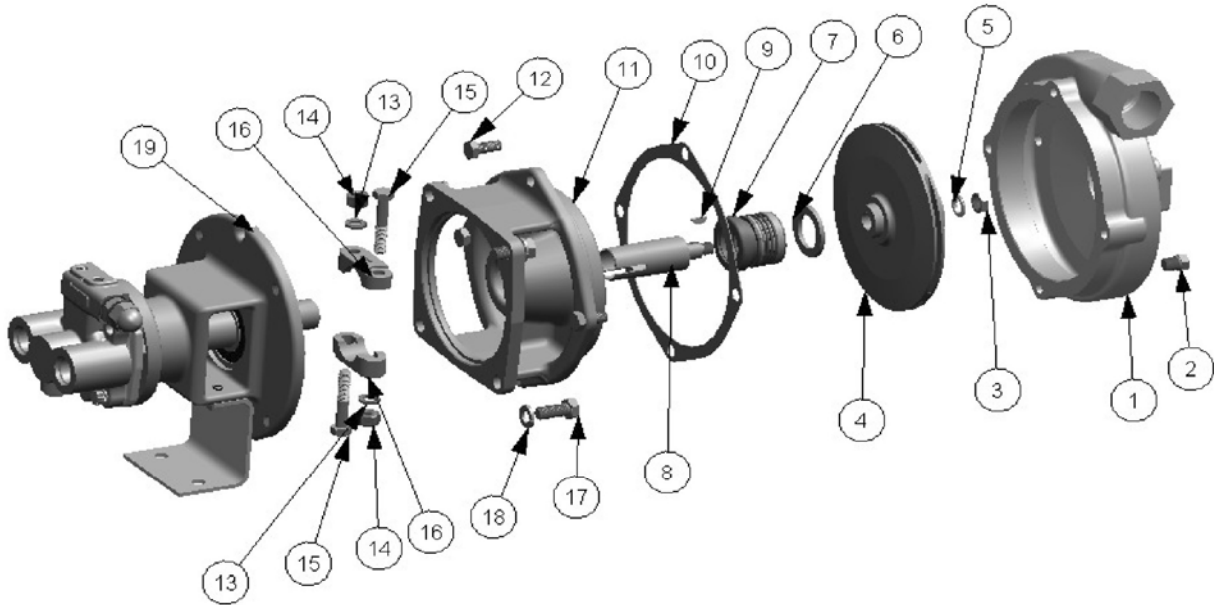
(SERIES 120 HS HYDRAULIC WITH FLOW CONTROL)



(SERIES 120 HS HYDRAULIC)

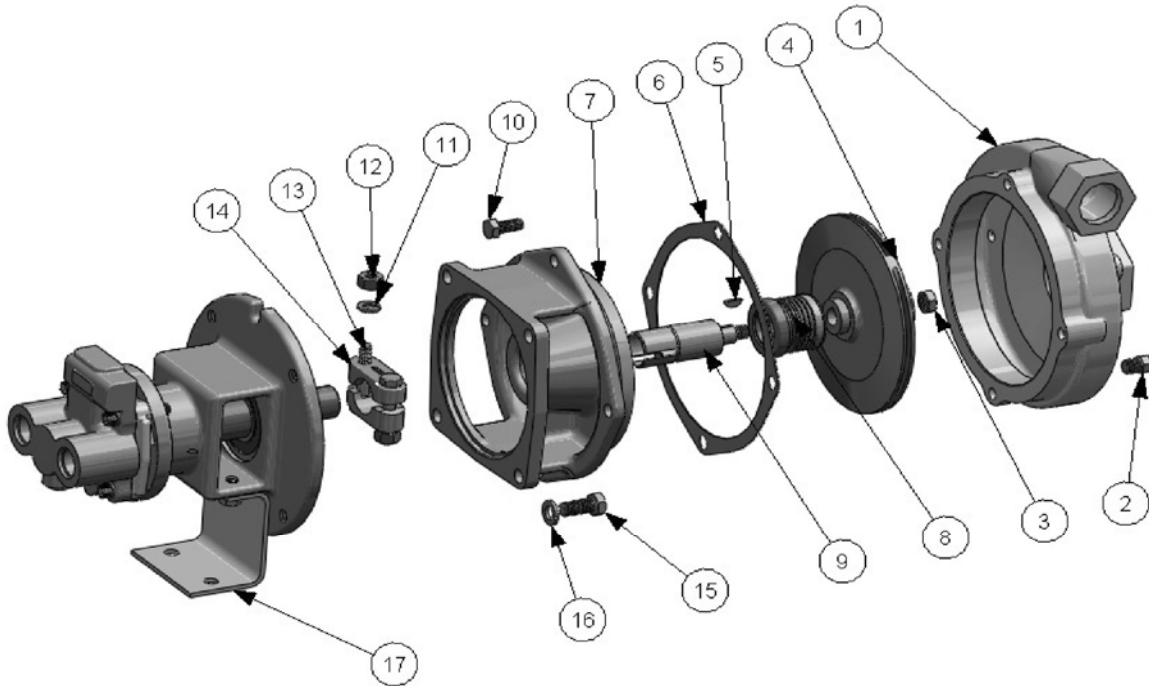
**Series 60 Exploded View – HY Speed
With Flow Control**

36273



ITEM NO.	PART NO.	DESCRIPTION	QTY.	ITEM NO.	PART NO.	DESCRIPTION	QTY.	
1	27658	HOUSING - CAST IRON	1	13	21238	LOCKWASHER S.S. - 5/16	2	
2	21585	PIPE PLUG - 1/8" NPT	2	14	21284	HEXNUT S.S. - 5/16-18	2	
3	22588	LOCKNUT S.S. - 3/8-24	1	15	21264	CAPSCREW S.S. - 5/16-18	2	
4	27998	IMPELLER - CAST IRON	1	16	21954	CLAMP S.S. - 7/8	2	
5	31224	WASHER	1	17	21251	CAPSCREW S.S. - 3/8-16	4	
6	31103	WASHER	1	18	21266	LOCKWASHER S.S. - 3/8	4	
*	7	22273	SEAL ASSY. - 1" VITON	1	19	36271	HS ASY. W/.22 CU. IN.	1
8	29032	DRIVE SLEEVE S.S. - 7/8	1		36269	HS ASY. W/.37 CU. IN.		
9	21865	WOODRUFF KEY - S.S.	1		36270	HS ASY. W/.45 CU. IN.		
*	10	27665	GASKET - NI-2085	1		36596	HS ASY. W/.58 CU. IN.	
11	28593	ADAPTER - CAST IRON	1					
12	24965	CAPSCREW S.S. - 5/16-18	4					

* SUGGESTED REPLACEMENT PARTS

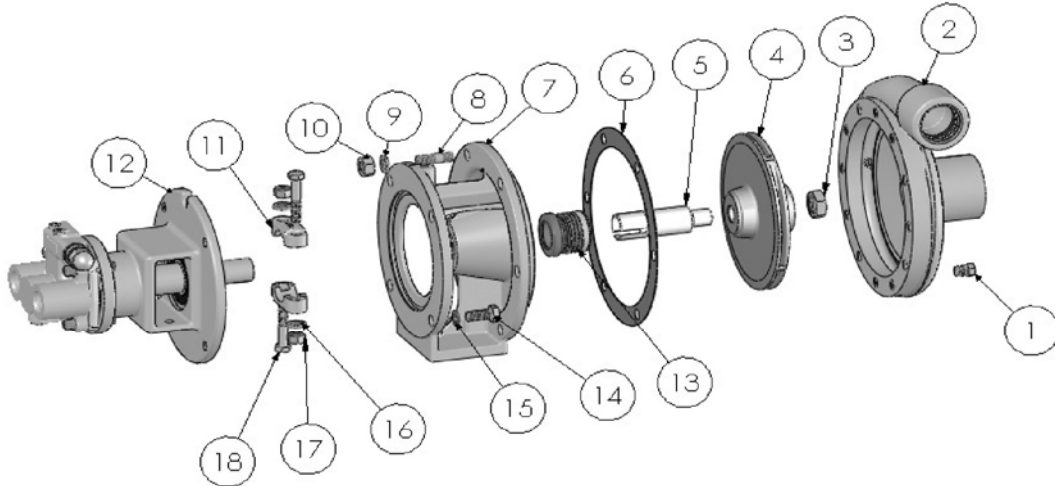


ITEM NO.	PART NO.	DESCRIPTION	QTY.	ITEM NO.	PART NO.	DESCRIPTION	QTY.	
1	27659	HOUSING - CAST IRON	1	11	21238	LOCKWASHER S.S. - 5/16	2	
2	21585	PIPE PLUG - 1/8" NPT	2	12	21284	HEXNUT S.S. - 5/16-18	2	
3	22588	LOCKNUT S.S. - 3/8-24	1	13	21264	CAPSCREW S.S. - 5/16-18	2	
4	27998	IMPELLER - CAST IRON	1	14	21954	CLAMP S.S. - 7/8	2	
5	21865	WOODRUFF KEY - S.S.	1	15	21251	CAPSCREW S.S. - 3/8-16	4	
*	6	27665	GASKET - NI-2085	1	16	21266	LOCKWASHER S.S. - 3/8	4
7	28593	ADAPTER - CAST IRON	1	17	36025	PED. ASSY. W/.22 CU. IN.	1	
*	8	22273	SEAL ASSY. - 1" VITON	1	29139	PED. ASSY. W/.37 CU. IN.		
9	29032	DRIVE SLEEVE S.S. - 7/8	1	36026	PED. ASSY. W/.45 CU. IN.			
10	24965	CAPSCREW S.S. - 5/16-18	4	36024	PED. ASSY. W/.58 CU. IN.			

* SUGGESTED REPLACEMENT PARTS

**Series 80 Exploded View – HY Speed
With Flow Control**

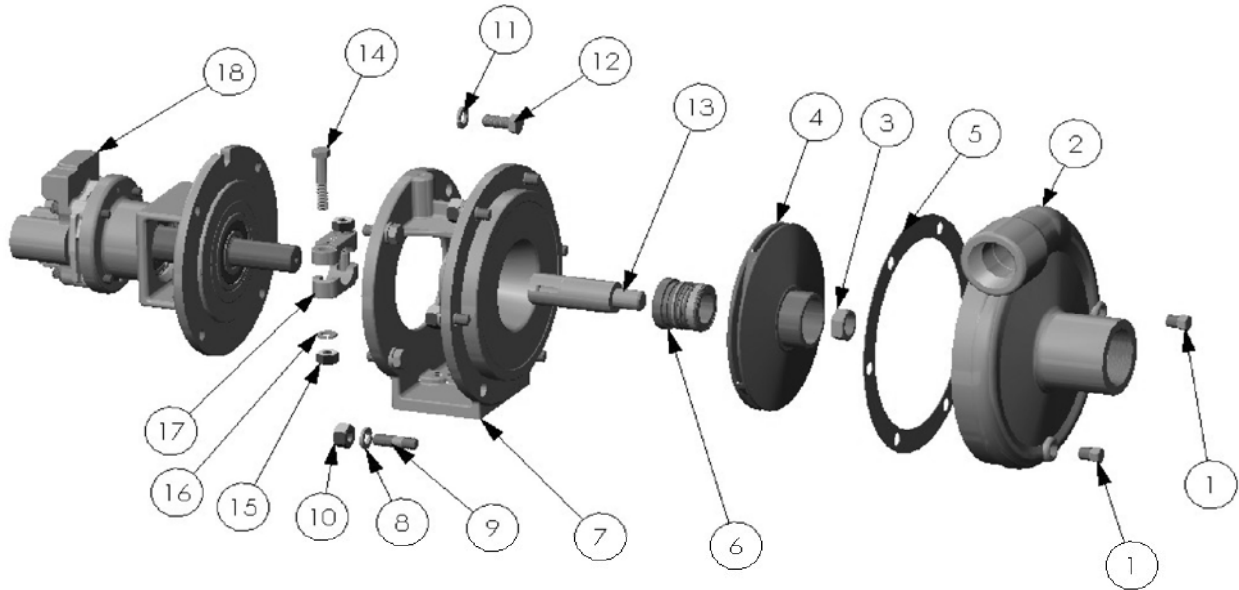
36483



ITEM NO.	PART NO.	DESCRIPTION	QTY.	ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	21585	PIPE PLUG - 1/8" NPT	2	13	22273	SEAL ASSY. - 1" VITON	1
2	25666	HOUSING - CAST IRON	1	14	21251	CAPSCREW S.S. - 3/8-16 X .88	4
3	22655	HEX JAM NUT S.S. - 5/8-18	1	15	21266	LOCKWASHER S.S. - 3/8	4
4	25910	IMPELLER - STL.	1	16	21238	LOCKWASHER S.S. - 5/16	2
5	25664	DRIVE SLEEVE S.S. - 7/8	1	17	21268	HEXNUT S.S. - 5/16-18	2
6	25662	GASKET - KLINGERSIL C-4433	1	18	21264	CAPSCREW S.S. - 5/16-18	2
* 7	25332	ADAPTER - CAST IRON	1				
8	21260	STUD S.S. - 3/8-16 X 1/32	6				
9	21266	LOCKWASHER S.S. - 3/8	6				
* 10	21268	HEXNUT S.S. - 3/8-16	4				
11	21954	CLAMP S.S. - 7/8	2				
12	36097	HS PED. ASSY. W/.37 CU. IN.	1				
	36098	HS PED. ASSY. W/.45 CU. IN.					
	36024	HS PED. ASSY. W/.58 CU. IN.					

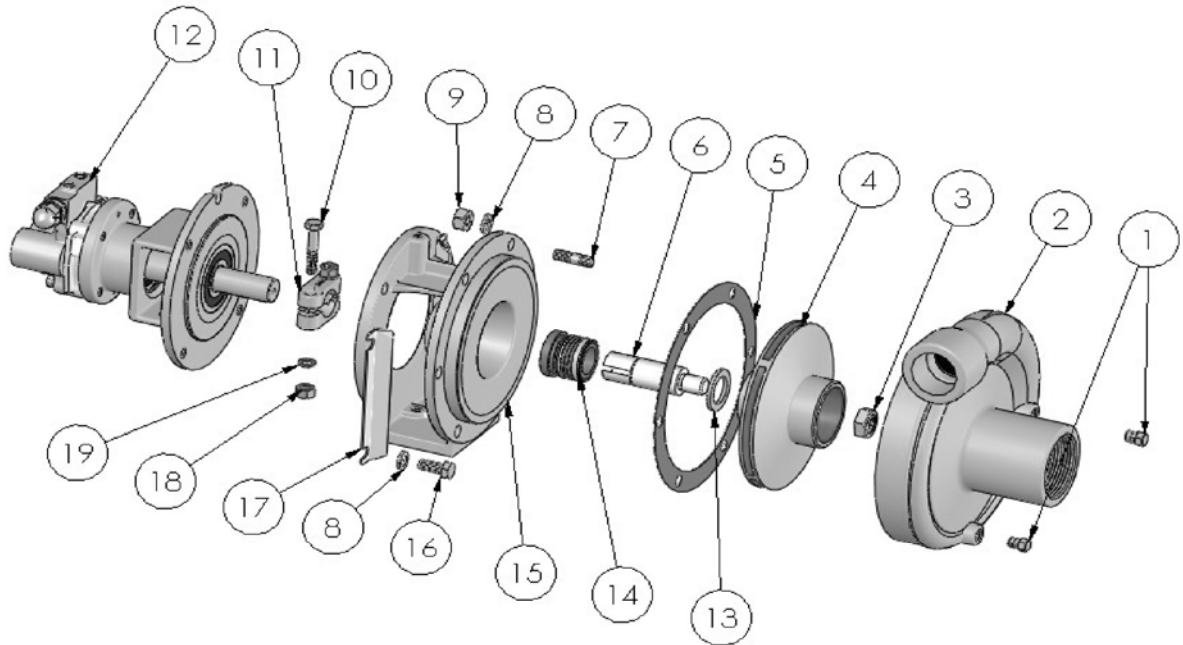
* SUGGESTED REPLACEMENT PARTS

36591



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	21585	PIPE PLUG- 1/8" NPT - ZPS	2
2	25666	HSG- DUCTILE 1.5" X 1.25"	1
3	22655	JAM NUT- 5/8"-18 S.S.	1
4	25910	IMPELLER- 5.9" O.D.	1
*	5	25662 GASKET - C-4433	1
*	6	22273 SEAL- VITON - T-2100	1
7	25332	ADAPTOR C.I.	1
8	21266	LOCKWASHER- 3/8" - S.S.	6
9	21260	STUD- 3/8"-16 X 1.32" - S.S.	6
10	21268	HEXNUT- 3/8"-16 - S.S.	6
11	21266	LOCKWASHER- 5/16" - S.S.	4
12	21251	CAPSCREW- 3/8"-16 X .875" - S.S.	4
13	22286	DRIVE SLEEVE - S.S.	1
14	21264	CAPSCREW- 5/16"-24 X 1.75" - S.S.	2
15	21284	HEXNUT- 5/16"-18 - S.S.	2
16	21238	LOCKWASHER- 5/16" - S.S.	2
17	21946	CLAMP - S.S.	2
18	36450	PED ASY: HYD GEROTOR .37 DISP	1
	35998	PED ASY: HYD GEROTOR .45 DISP	
	36451	PED ASY: HYD GEROTOR .58 DISP	

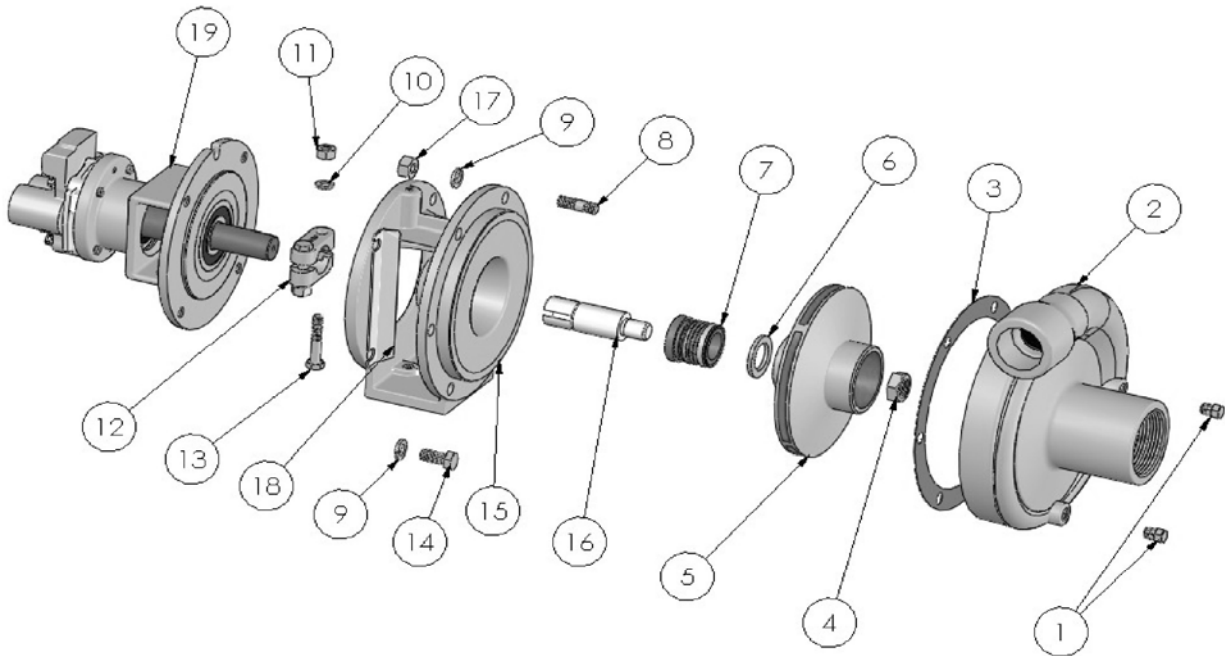
*- RECOMMENDED REPLACEMENT PARTS



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	21585	HEX HD. PIPE PLUG ZPS- 1/8" NPT	2
2	26587	HOUSING DUCTILE	1
3	22655	HEX JAM NUT S.S. - 5/8-18	1
4	29770	IMPELLER C.I. - 5.96 DIA.	1
*	25662	GASKET KLINGERSEAL	1
6	25664	DRIVE SLEEVE S.S. - 7/8"	1
7	21260	STUD S.S. - 3/8-16 X 1.32	6
8	21266	LOCK WASHER S.S.- 3/8"	10
9	21268	HEX NUT S.S. - 3/8-16	6
10	21264	HEX HD. SCR. S.S. - 5/16-18 X 1.75	2
11	21954	CLAMP S.S. - 7/8"	2
12	35998	.45 DISP. HS PEDESTAL ASSY.	1
	36451	.58 DISP. HS PEDESTAL ASSY.	
13	31103	WASHER S.S.	1
*	22273	SEAL ASSEMBLY VITON - T-2100 1"	1
15	25332	ADAPTER C.I.	1
16	21251	HEX HD. SCR. S.S. - 3/8-16 X .875	4
17	25124	CLAMP GUARD ZPS	2
18	21284	HEX NUT S.S.- 5/16"-18	2
19	21238	LOCK WASHER S.S.- 5/16"	2

*- RECOMMENDED REPLACEMENT PARTS

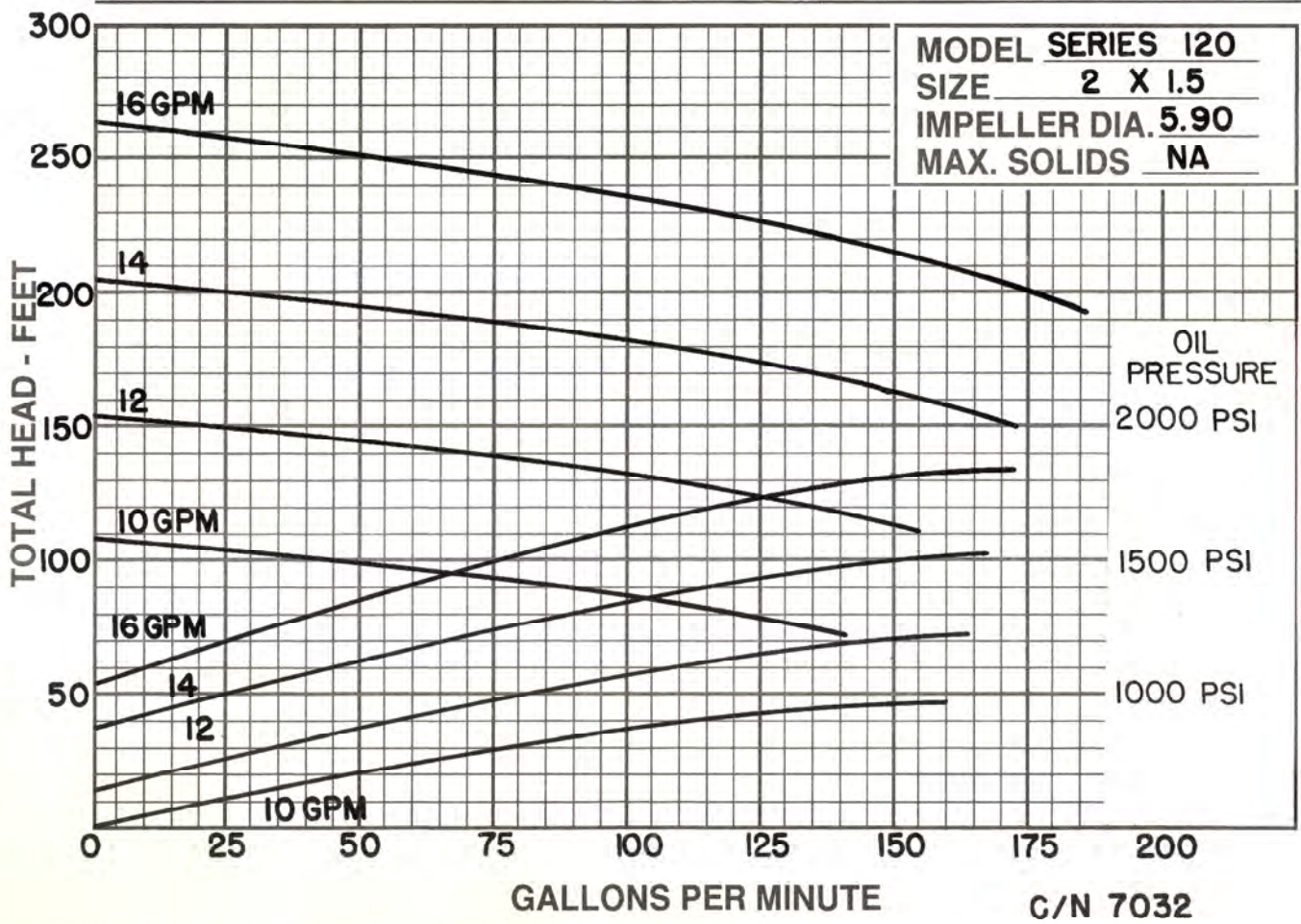
36007



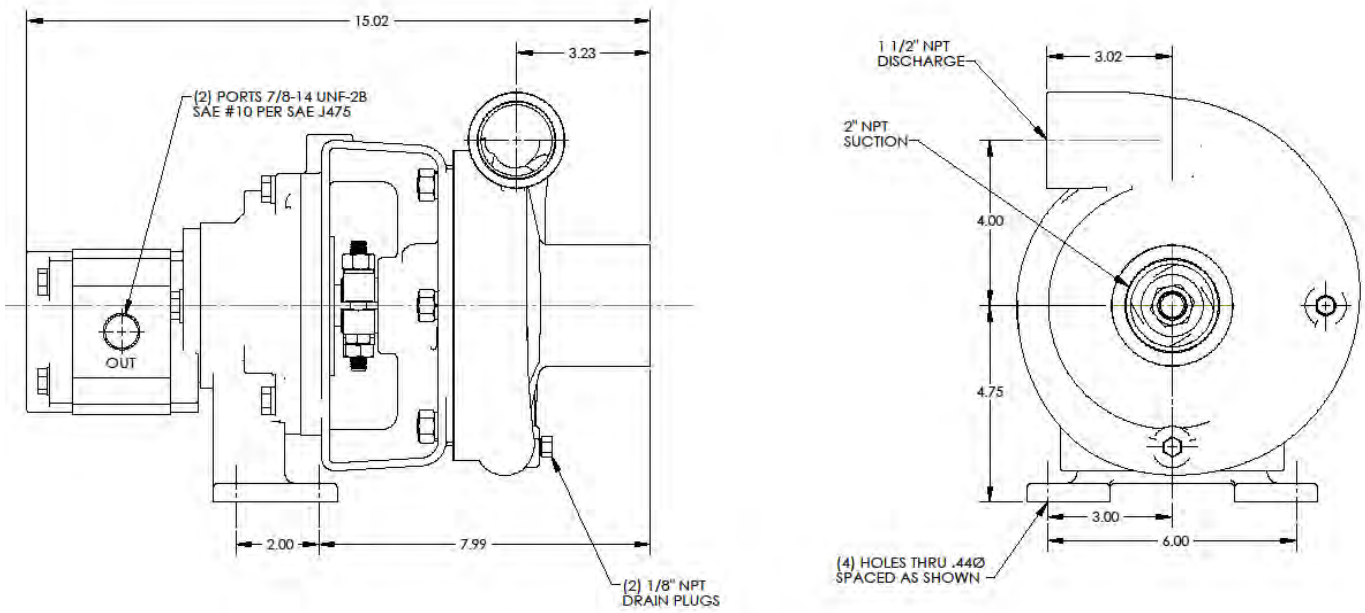
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	21585	HEX HD.PIPE PLUG ZPS- 1/8" NPT	2
2	26587	HOUSING DUCTILE	1
*	3	GASKET KLINGERSEAL	1
4	22655	HEX JAM NUT S.S. - 5/8-18	1
5	29770	IMPELLER C.I. - 5.96 DIA.	1
6	31103	WASHER S.S.	1
*	7	SEAL ASSEMBLY VITON - T-2100 1"	1
8	21260	STUD S.S. - 3/8-16 X 1.32	6
9	21266	LOCK WASHER S.S. - 3/8"	10
10	21238	LOCK WASHER S.S. - 5/16"	2
11	21284	HEX NUT S.S. - 5/16"-18	2
12	21954	CLAMP S.S. - 7/8"	2
13	21264	HEX HD. SCR. S.S. - 5/16-18 X 1.75	2
14	21251	HEX HD. SCR. S.S. - 3/8-16 X .875	4
15	25332	ADAPTER C.I.	1
16	25664	DRIVE SLEEVE S.S. - 7/8"	1
17	21268	HEX NUT S.S. - 3/8-16	6
18	25124	CLAMP GUARD ZPS	2
19	35998	.45 DISP. HS PEDESTAL ASSY.	1
	36451	.58 DISP. HS PEDESTAL ASSY.	

*- RECOMMENDED REPLACEMENT PARTS

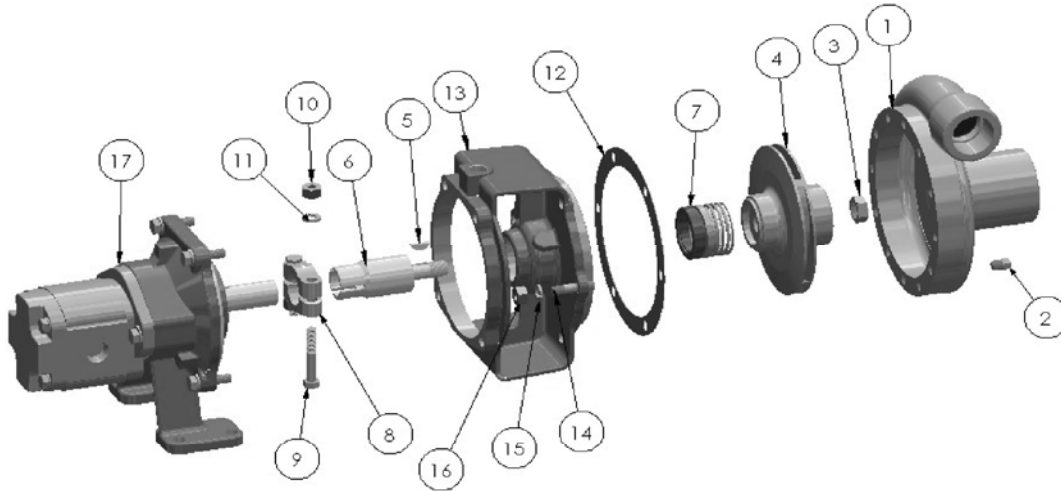
Series Performance



Series Dimensions



(SERIES 120 HS HYDRAULIC PEDESTAL)

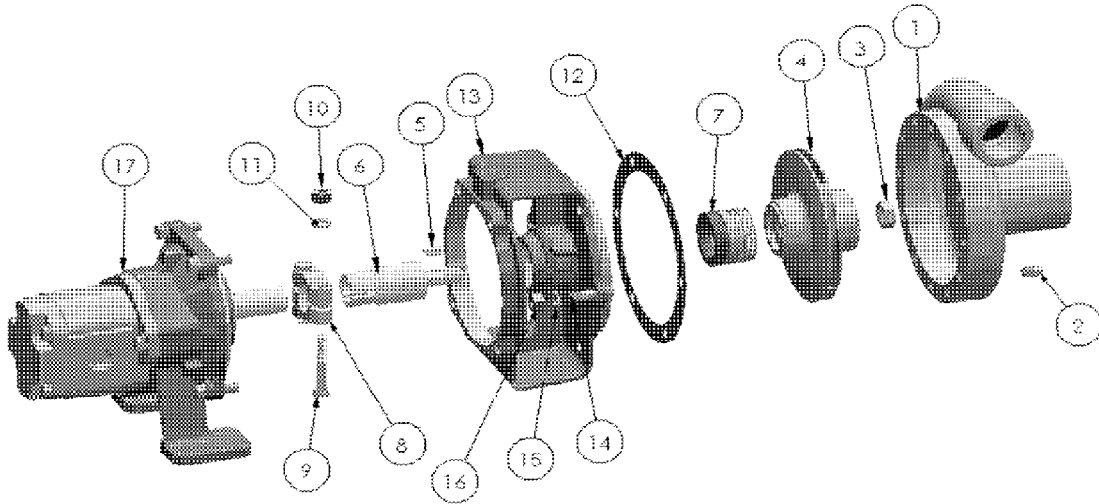


ITEM NO.	PART NO.	DESCRIPTION	QTY.	ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	26587	HOUSING - DUCTILE IRON	1	10	21268	HEXNUT S.S. - 3/8-16	2
2	21585	PIPE PLUG ZPS - 1/8" NPT	2	11	21266	LOCKWASHER S.S. - 3/8	2
3	22655	HEX JAM NUT - S.S. - 5/8-18	1	12	25662	GASKET KLINGERSIL C-4433	1
4	27027	IMPELLER - CAST IRON - Ø5.96	1	13	22348	ADAPTER CAST IRON	1
5	21762	WOODRUFF KEY S.S. - #8	1	14	21261	STUD S.S. - 3/8-16 X 1.63	6
6	22700	DRIVE SLEEVE S.S. - 1" O.D.	1	15	21266	LOCKWASHER S.S. - 3/8	6
7	22362	SEAL ASSY. - TYPE 21 VITON	1	16	21268	HEXNUT S.S. - 3/8-16	6
8	22356	CLAMP S.S. - 1"	2	17	28551	PEDESTAL ASSY. - ULTRA	1
9	21269	CAPSCREWS S.S. - 3/8-16 X 2.25	2				

*RECOMMENDED REPLACEMENT PARTS

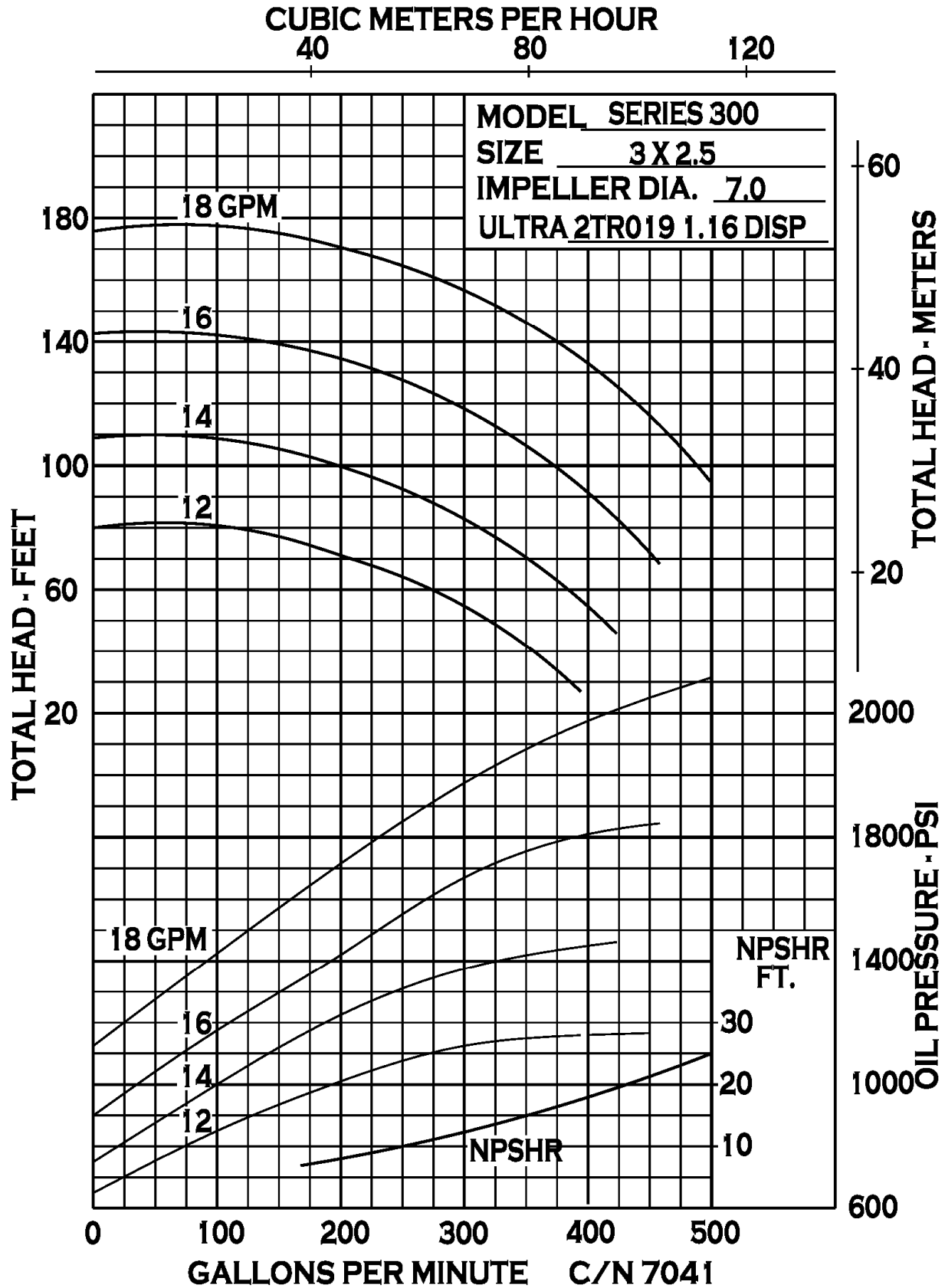
**Series 120 Exploded View
Bronze Pump**

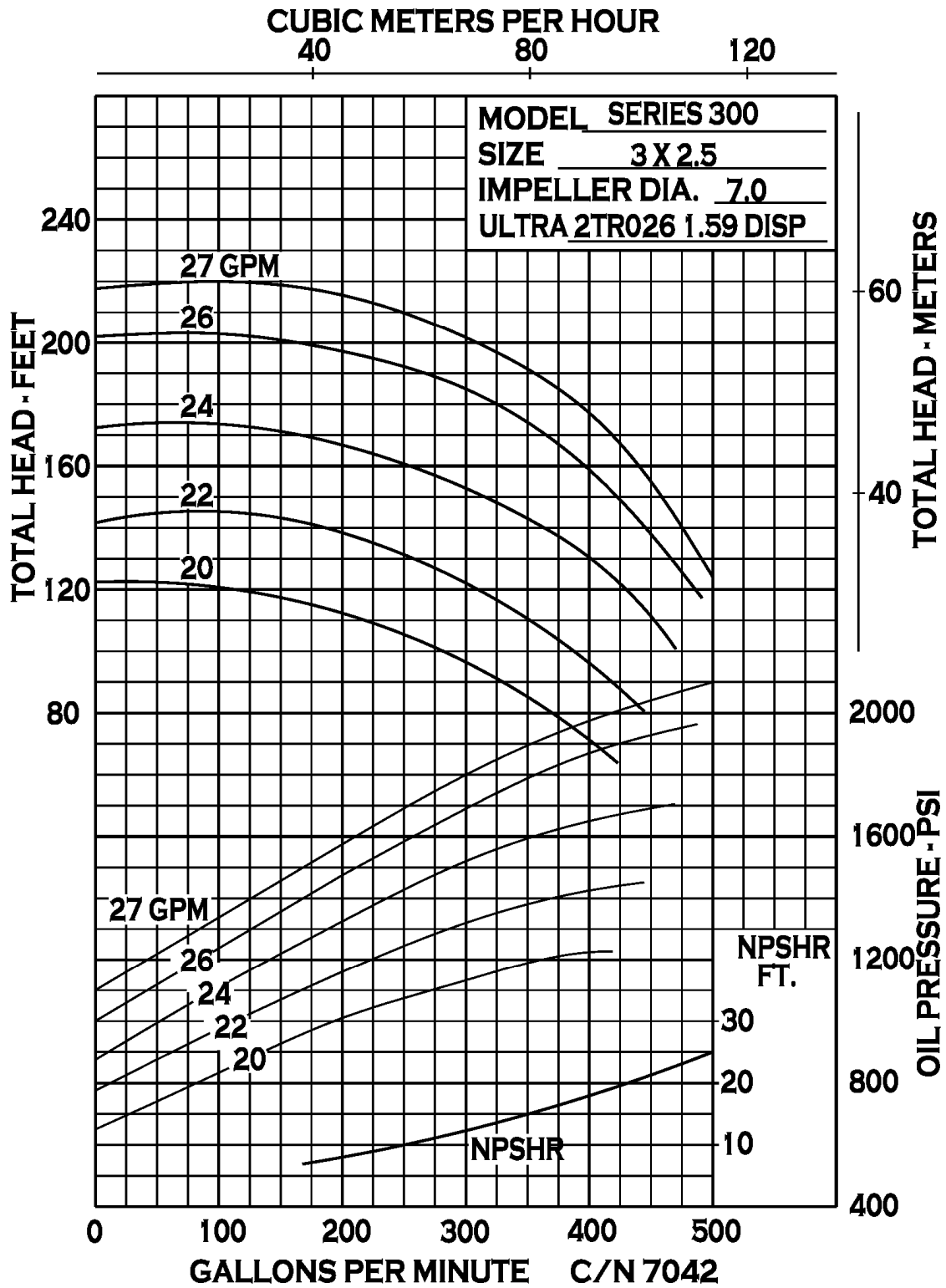
31130



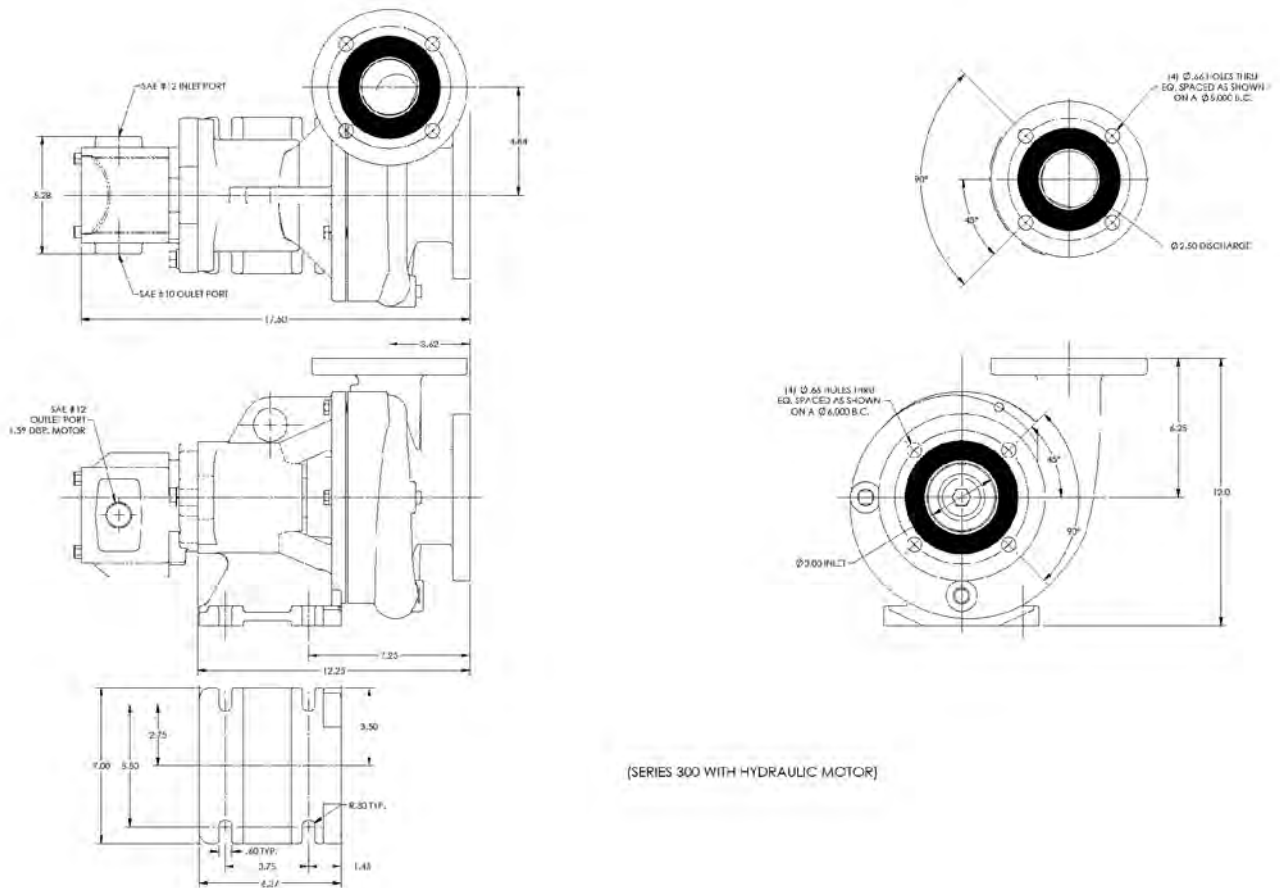
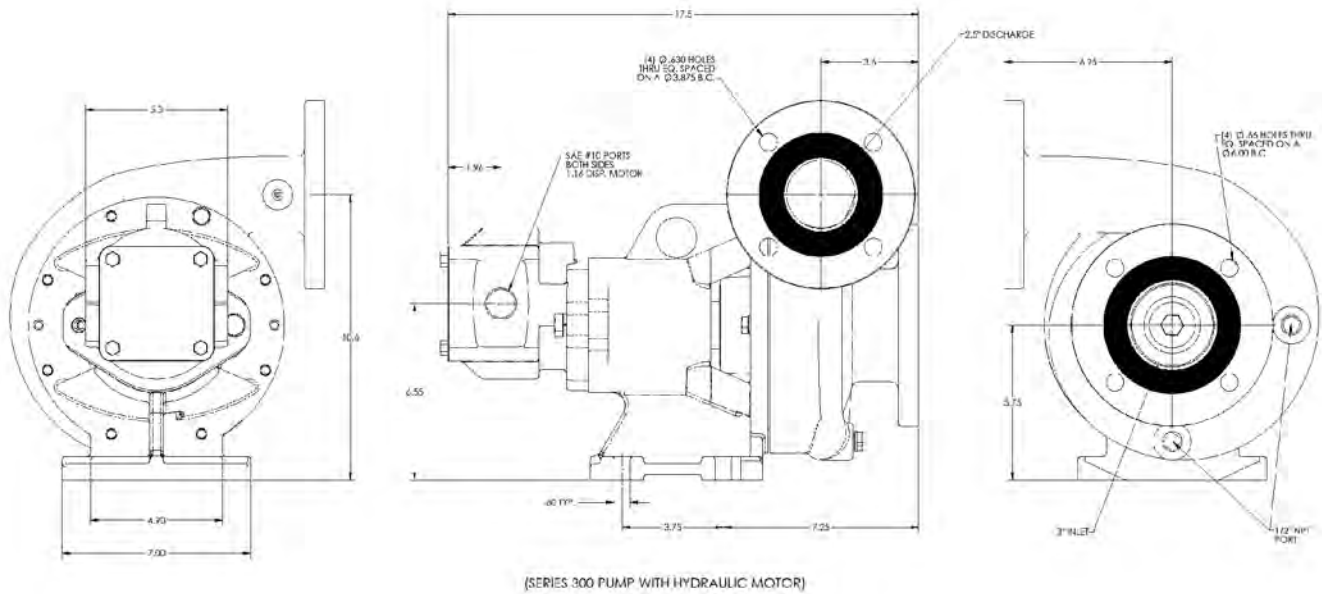
ITEM NO.	PART NO.	DESCRIPTION	QTY.	ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	26612	HOUSING - BRONZE	1	10	21268	HEXNUT S.S. - 3/8-16	2
2	21185	PIPE PLUG BR. - 1/8" NPT	2	11	21266	LOCKWASHER S.S. - 3/8	2
3	22655	HEX JAM NUT - S.S. - 5/8-18	1	12	25662	GASKET KLINGERSIL C-4433	1
4	26760	IMPELLER - BRONZE - Ø5.96	1	13	22347	ADAPTER- BRONZE	1
5	21762	WOODRUFF KEY S.S. - #8	1	14	21261	STUD S.S. - 3/8-16 X 1.63	6
6	22700	DRIVE SLEEVE S.S. - 1" O.D.	1	15	21266	LOCKWASHER S.S. - 3/8	6
7	22362	SEAL ASSY. - TYPE 21 VITON	1	16	21268	HEXNUT S.S. - 3/8-16	6
8	22356	CLAMP S.S. - 1"	2	17	28551	PEDESTAL ASSY. - ULTRA	1
9	21269	CAPSCREW S.S. - 3/8-16 X 2.25	2				

*RECOMMENDED REPLACEMENT PARTS



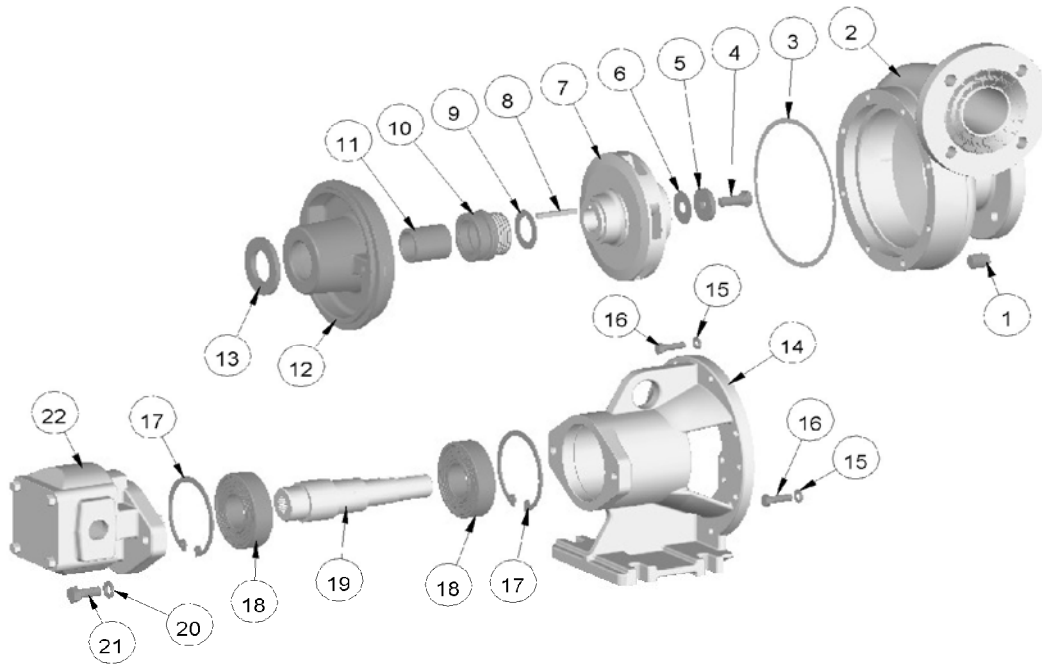


Series Dimensions



**SERIES 300 Exploded View
With 1.16 Disp. Motor**

27285

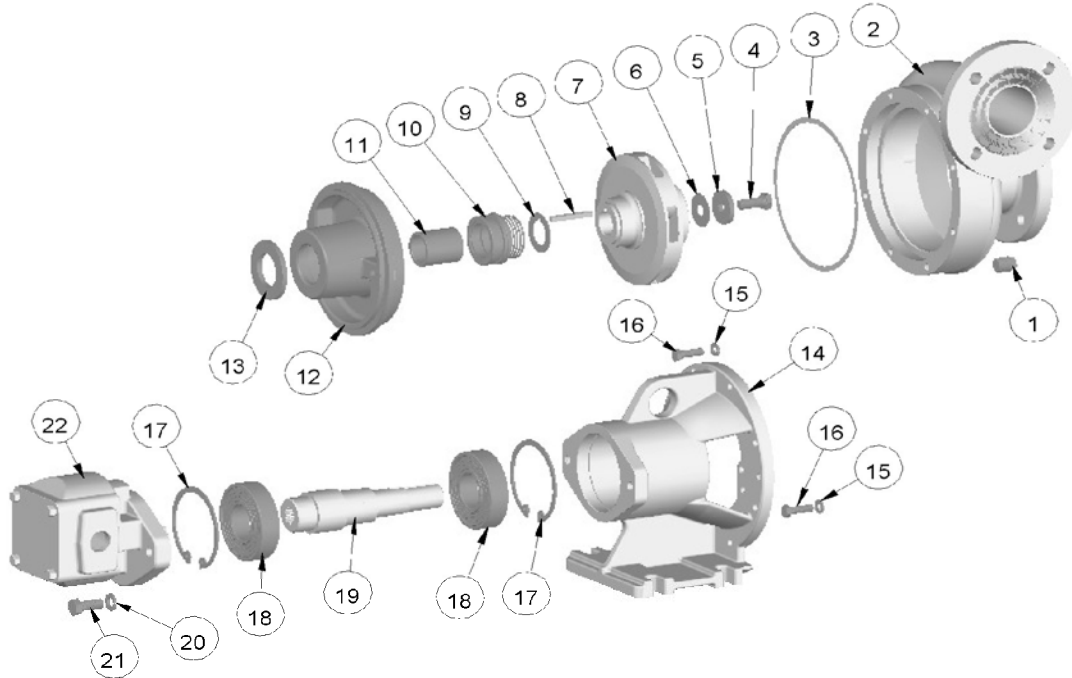


ITEM NO.	PART NO.	DESCRIPTION	QTY.		ITEM NO.	PART NO.	DESCRIPTION	QTY.	
1	22656	PIPE PLUG: 1/2" NPT	2		12	26737	ADAPTOR: CI	1	
2	26733	HOUSING: DUCTILE	1		13	26680	SLINGER	1	
*	3	26744	GASKET	1	14	26994	BODY: CI	1	
4	26674	SEAL BOLT	1		15	21266	LOCKWASHER SS: 3/8"	10	
5	26675	WASHER SS: IMPELLER	1		16	21274	CAPSCREW SS: 3/8-16 X 1.25"	10	
*	6	27403	GASKET	1	17	26998	SNAP RING: STL	2	
7	26788	IMPELLER: CI 7" DIAM.	1		18	26997	BALL BEARING	2	
8	26796	SQ. KEY: .25 X .25 X 2.12	1		19	26995	SHAFT	1	
*	9	27404	GASKET	1	20	21254	LOCKWASHER SS: 1/2"	2	
*	10	26685	MECH. SEAL: VITON	1	21	21246	CAPSCREW SS: 1/2-13 X 1.25	2	
*	11	26996	SHAFT SLEEVE	1	*	22	29992	HYD MTR: 7/8 SPLINE 1.16 DISP	1

* - SUGGESTED REPLACEMENT PARTS

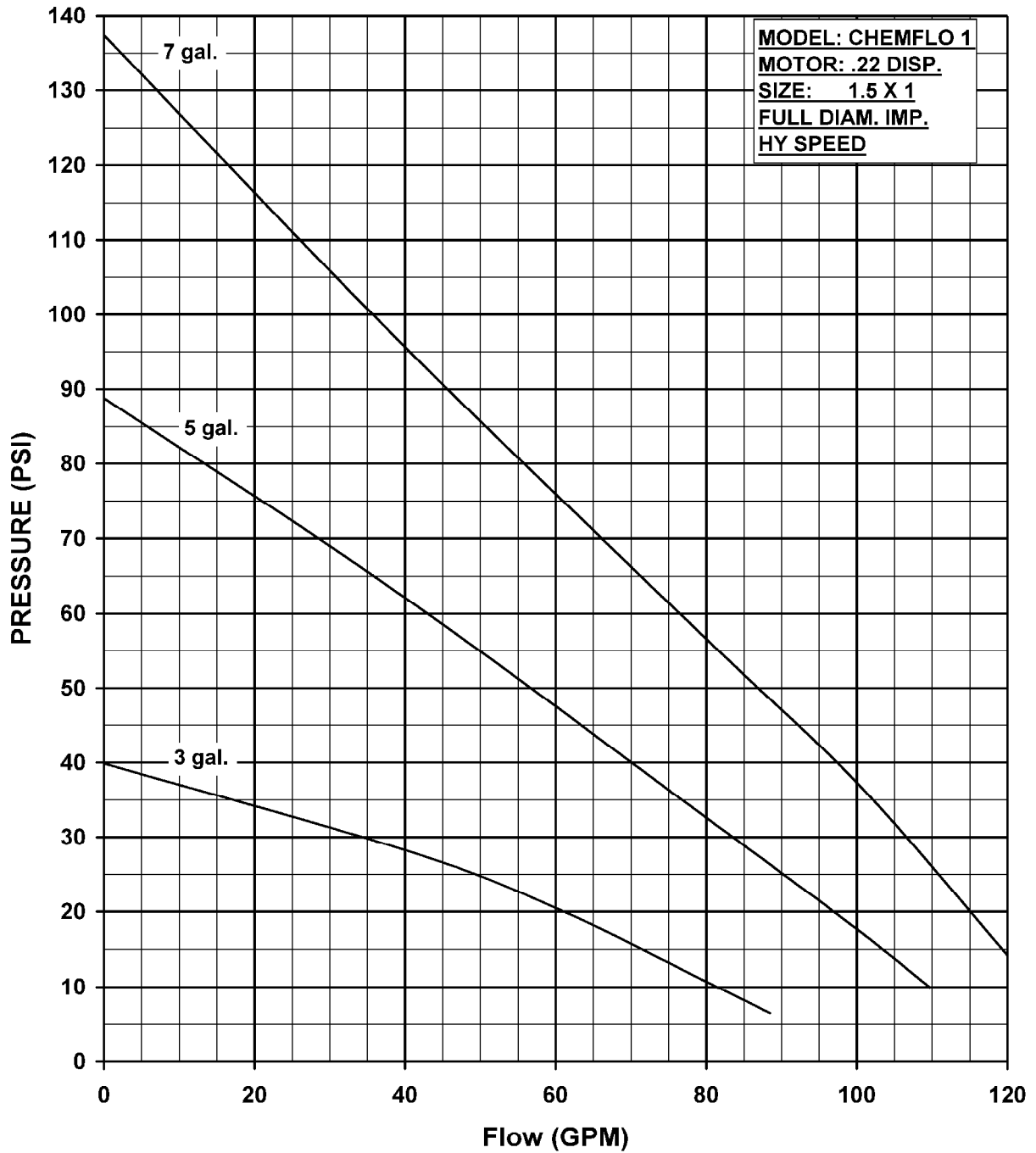
**SERIES 300 Exploded View
With 1.59 Disp. Motor**

27010



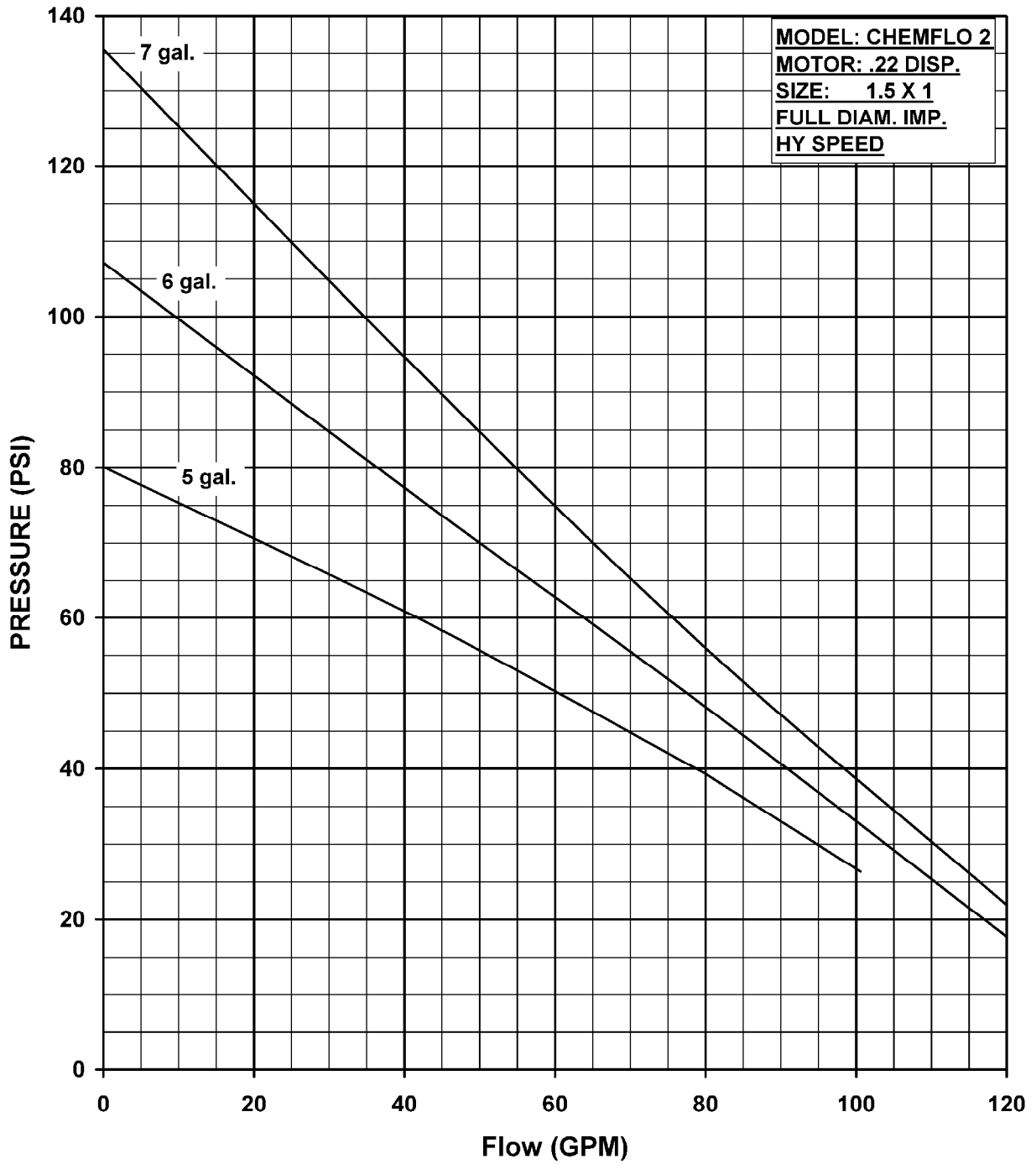
ITEM NO.	PART NO.	DESCRIPTION	QTY.		ITEM NO.	PART NO.	DESCRIPTION	QTY.	
1	22656	PIPE PLUG: 1/2" NPT	2		12	26737	ADAPTOR: CI	1	
2	26733	HOUSING: DUCTILE	1		13	26680	SLINGER	1	
*	3	26744	GASKET	1	14	26994	BODY: CI	1	
4	26674	SEAL BOLT	1		15	21266	LOCKWASHER SS: 3/8"	10	
5	26675	WASHER SS: IMPELLER	1		16	21274	CAPSCREW SS: 3/8-16 X 1.25"	10	
*	6	27403	GASKET	1	17	26998	SNAP RING: STL	2	
7	26788	IMPELLER: CI 7" DIAM.	1		18	26997	BALL BEARING	2	
8	26796	SQ. KEY: .25 X .25 X 2.12	1		19	26995	SHAFT	1	
*	9	27404	GASKET	1	20	21254	LOCKWASHER SS: 1/2"	2	
*	10	26685	MECH. SEAL: VITON	1	21	21246	CAPSCREW SS: 1/2-13 X 1.25	2	
*	11	26996	SHAFT SLEEVE	1	*	22	29993	HYD MTR: 7/8 SPLINE 1.59 DISP	1

* - SUGGESTED REPLACEMENT PARTS



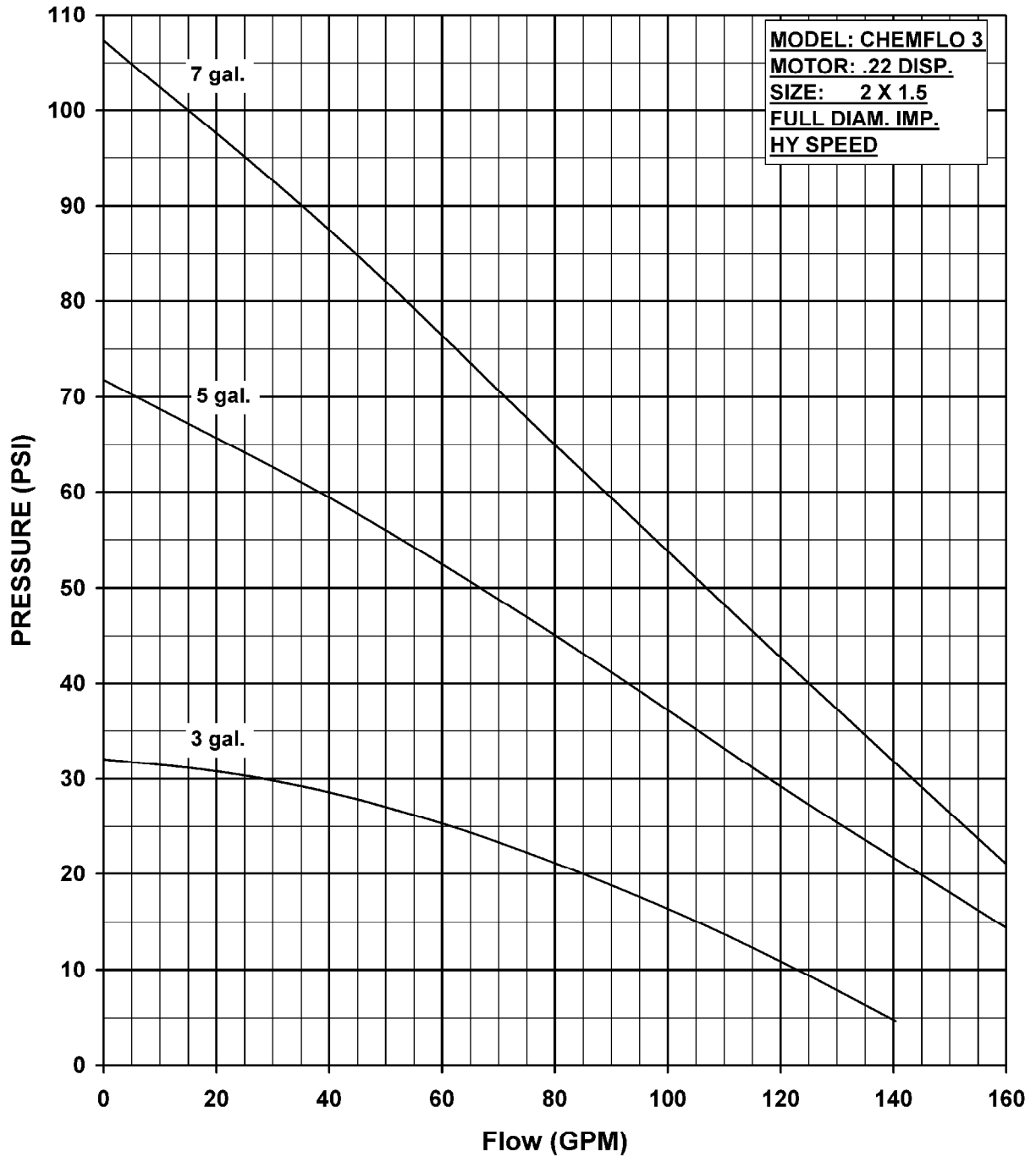
OIL FLOW	SHUT OFF 0 GPM	20 GPM	40 GPM	60 GPM	80 GPM	100 GPM	120 GPM	MAX. HYD. OIL PRESS. REQ.
3 GPM	40 PSI	35 PSI	28 PSI	20 PSI	12 PSI	-	-	1550 PSI
5 GPM	88 PSI	111 PSI	60 PSI	46 PSI	33 PSI	17 PSI	-	2150 PSI
7 GPM	137 PSI	110 PSI	86 PSI	66 PSI	48 PSI	34 PSI	14 PSI	2650 PSI

CN 7113-S



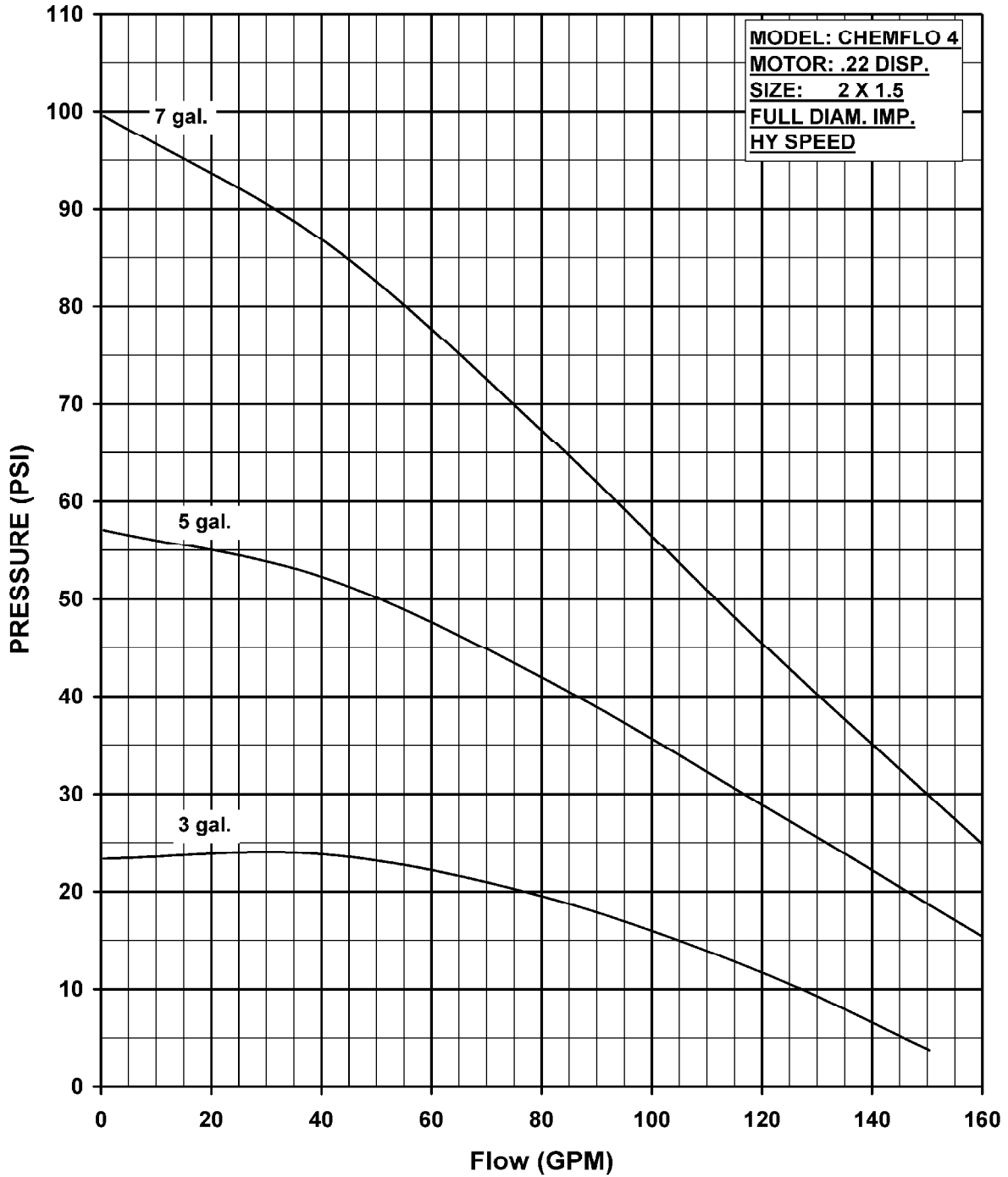
OIL FLOW	SHUT OFF 0 GPM	20 GPM	40 GPM	60 GPM	80 GPM	100 GPM	120 GPM	MAX. HYD. OIL PRESS. REQ.
5 GPM	80 PSI	71 PSI	61 PSI	50 PSI	39 PSI	32 PSI	-	2200 PSI
6 GPM	107 PSI	92 PSI	77 PSI	63 PSI	48 PSI	34 PSI	18 PSI	2350 PSI
7 GPM	136 PSI	115 PSI	95 PSI	75 PSI	56 PSI	38 PSI	23 PSI	2600 PSI

CN 7128-S



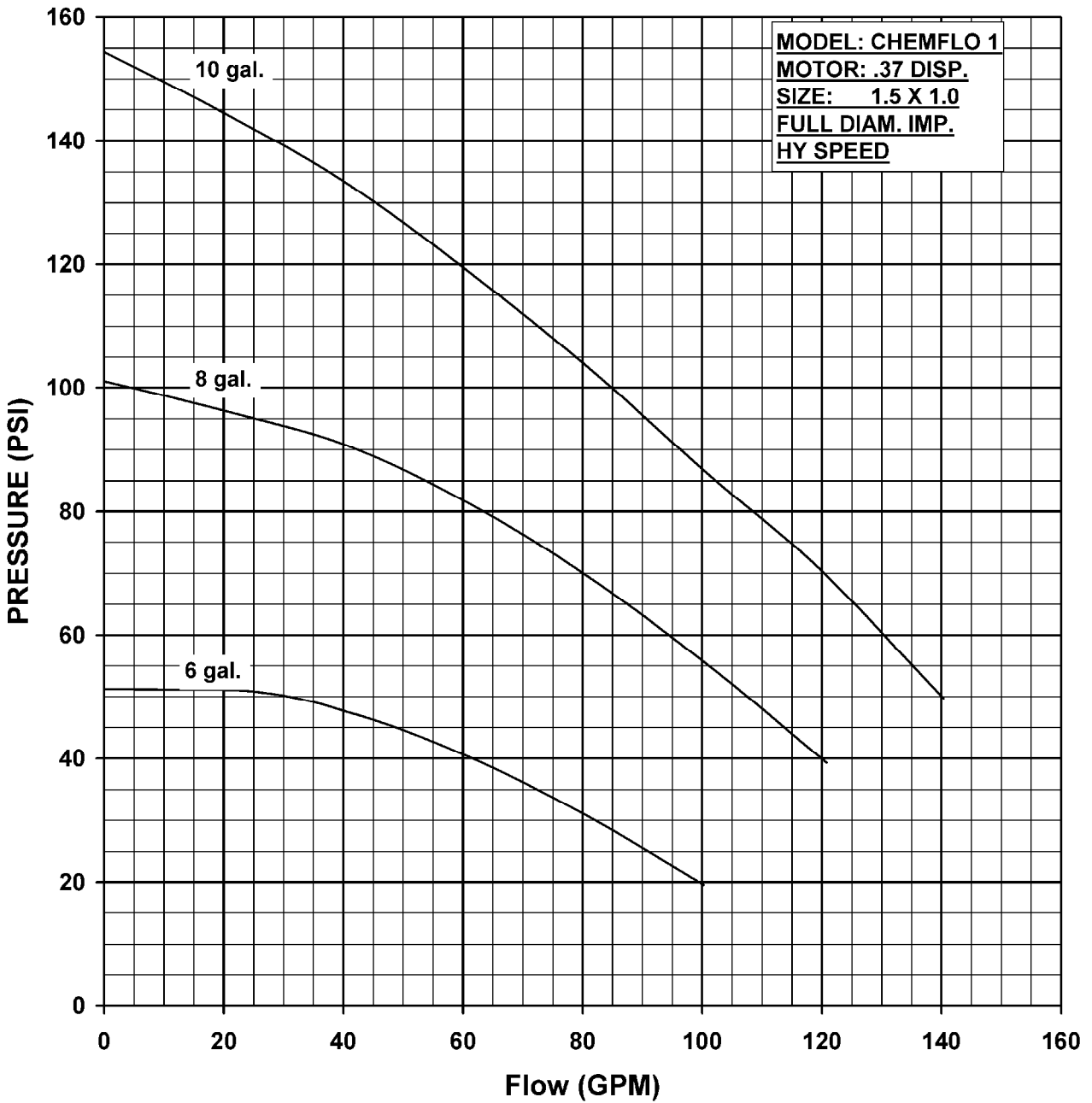
OIL FLOW	SHUT OFF 0 GPM	20 GPM	40 GPM	60 GPM	80 GPM	100 GPM	120 GPM	140 GPM	160 GPM	MAX. HYD. OIL PRESS. REQ.
3 GPM	32 PSI	30 PSI	28 PSI	25 PSI	21 PSI	17 PSI	11 PSI	5 PSI	-	1600 PSI
5 GPM	72 PSI	66 PSI	58 PSI	52 PSI	44 PSI	37 PSI	28 PSI	22 PSI	15 PSI	2200 PSI
7 GPM	108 PSI	95 PSI	83 PSI	70 PSI	57 PSI	47 PSI	38 PSI	29 PSI	22 PSI	2600 PSI

CN 7114-S



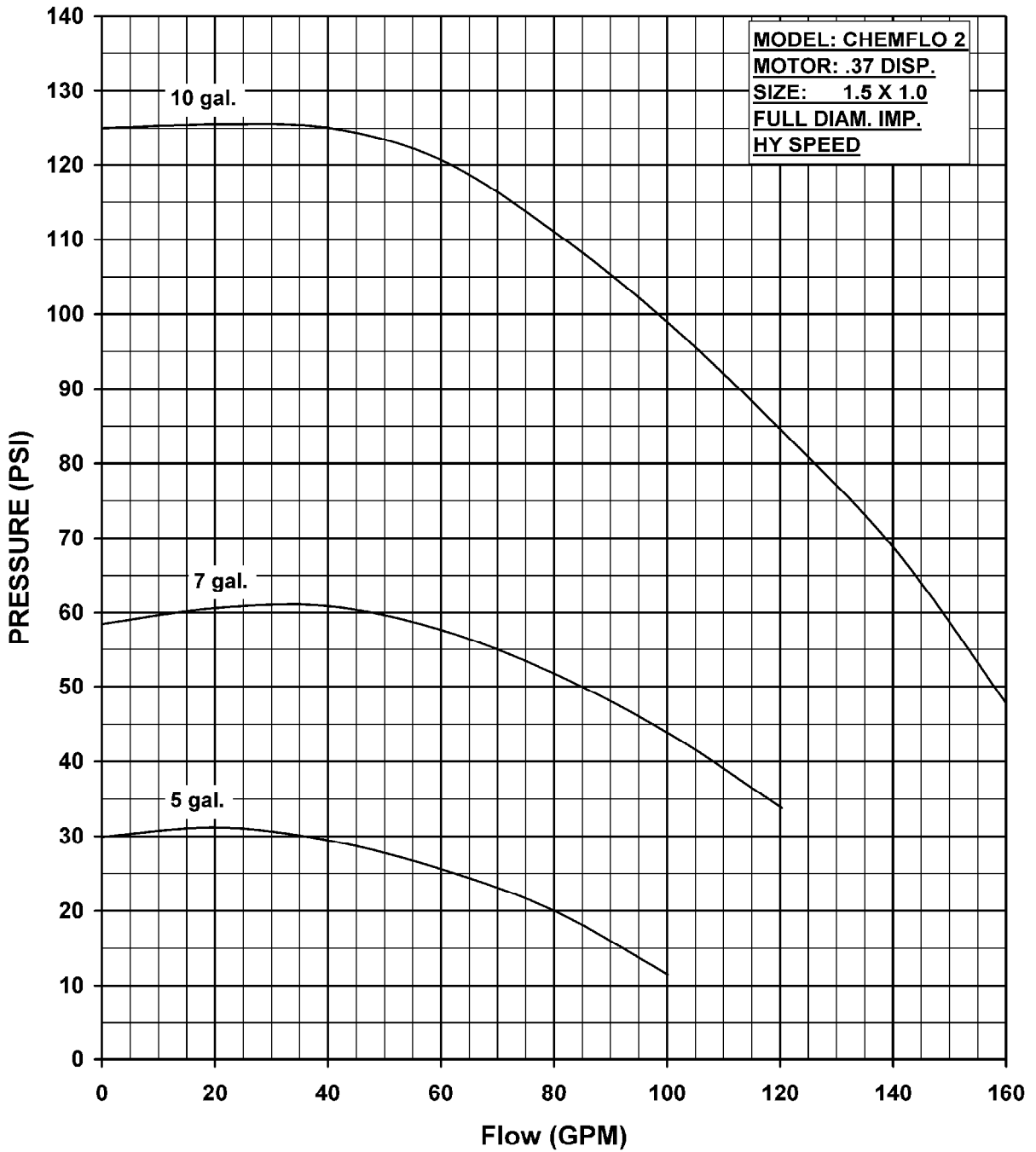
OIL FLOW	SHUT OFF 0 GPM	20 GPM	40 GPM	60 GPM	80 GPM	100 GPM	120 GPM	140 GPM	160 GPM	MAX. HYD. OIL PRESS REQ.
3 GPM	23 PSI	24 PSI	24 PSI	23 PSI	19 PSI	16 PSI	12 PSI	7 PSI	-	1550 PSI
5 GPM	57 PSI	55 PSI	52 PSI	47 PSI	43 PSI	36 PSI	29 PSI	23 PSI	13 PSI	2200 PSI
7 GPM	102 PSI	92 PSI	82 PSI	72 PSI	62 PSI	52 PSI	43 PSI	33 PSI	25 PSI	2600 PSI

CN 7115-S



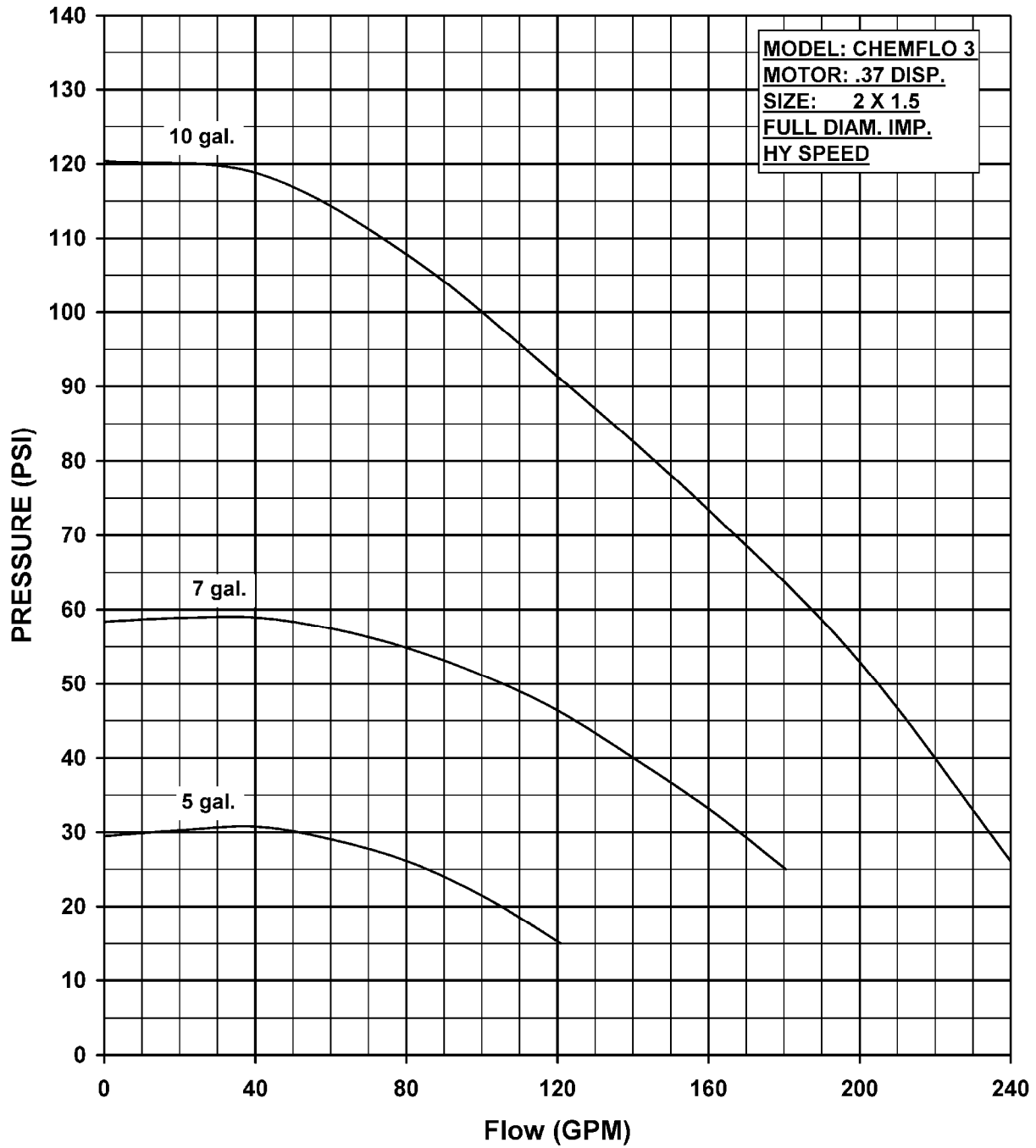
OIL FLOW	SHUT OFF 0 GPM	20 GPM	40 GPM	60 GPM	80 GPM	100 GPM	120 GPM	140 GPM	MAX. HYD. OIL PRESS. REQ.
6 GPM	51 PSI	51 PSI	47 PSI	40 PSI	31 PSI	20 PSI	-	-	1250 PSI
8 GPM	101 PSI	96 PSI	91 PSI	83 PSI	70 PSI	56 PSI	40 PSI	-	1950 PSI
10 GPM	154 PSI	145 PSI	134 PSI	120 PSI	104 PSI	86 PSI	70 PSI	50 PSI	2500 PSI

CN 7109-S



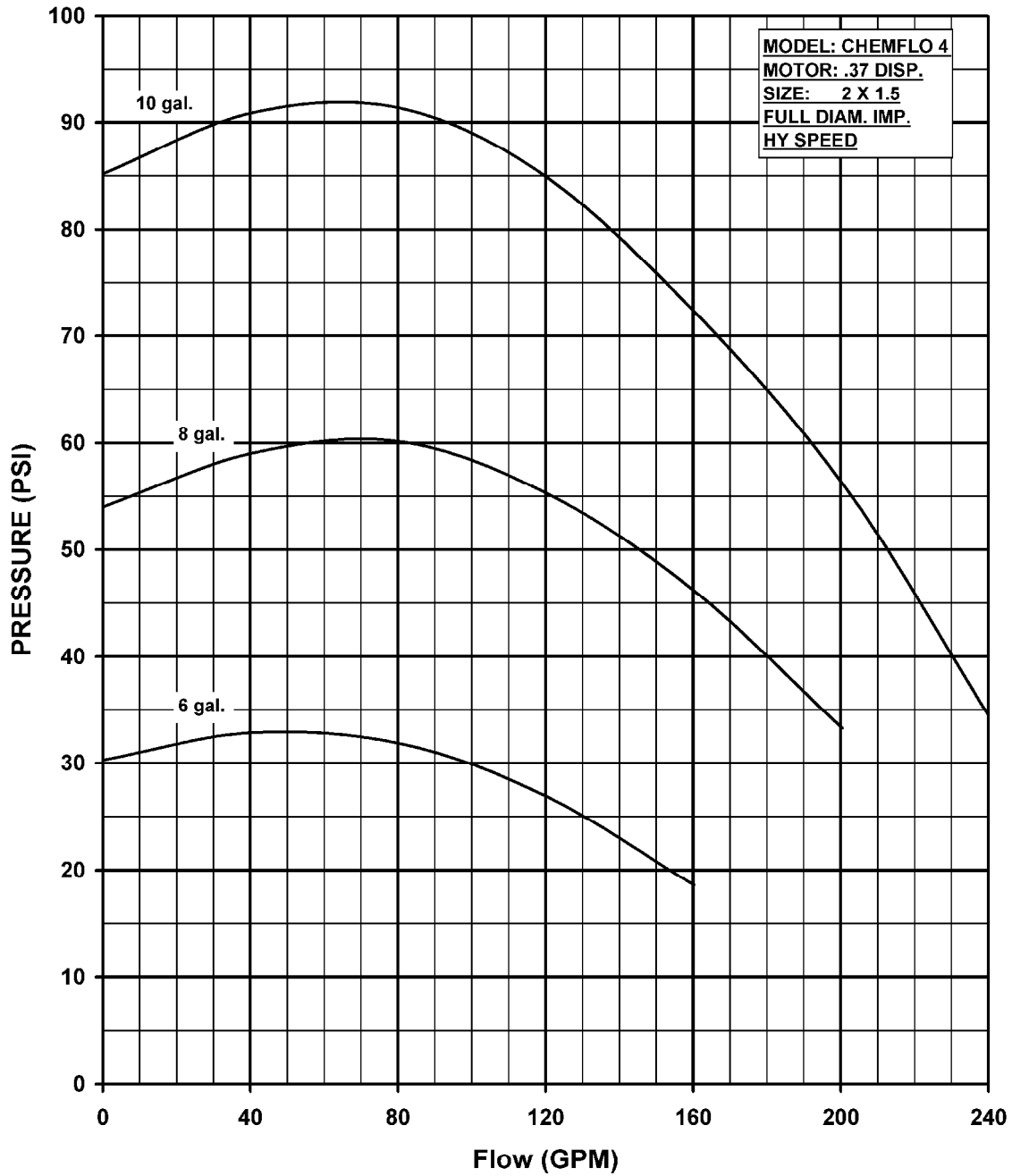
OIL FLOW	SHUT OFF 0 GPM	20 GPM	40 GPM	60 GPM	80 GPM	100 GPM	120 GPM	140 GPM	160 GPM	MAX. HYD. OIL PRESS. REQ.
5 GPM	30 PSI	30 PSI	29 PSI	25 PSI	20 PSI	12 PSI	-	-	-	950 PSI
7 GPM	58 PSI	59 PSI	61 PSI	57 PSI	52 PSI	45 PSI	34 PSI	-	-	1600 PSI
10 GPM	125 PSI	124 PSI	125 PSI	120 PSI	111 PSI	98 PSI	84 PSI	69 PSI	48 PSI	2600 PSI

CN 7110-S



OIL FLOW	SHUT OFF 0 GPM	40 GPM	80 GPM	120 GPM	160 GPM	200 GPM	240 GPM	MAX. HYD OIL PRESS. REQ.
5 GPM	29 PSI	28 PSI	24 PSI	15 PSI	-	-	-	950 PSI
7 GPM	59 PSI	59 PSI	55 PSI	47 PSI	33 PSI	-	-	1750 PSI
10 GPM	120 PSI	119 PSI	108 PSI	92 PSI	73 PSI	53 PSI	27 PSI	2650 PSI

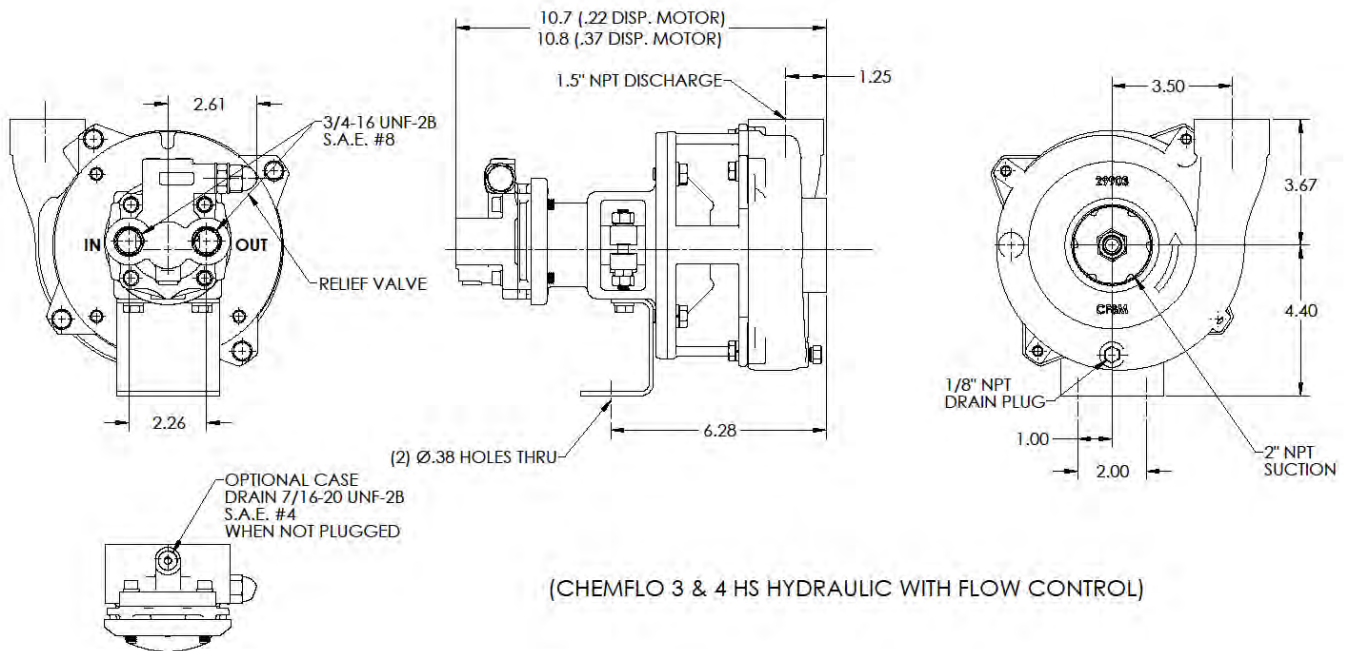
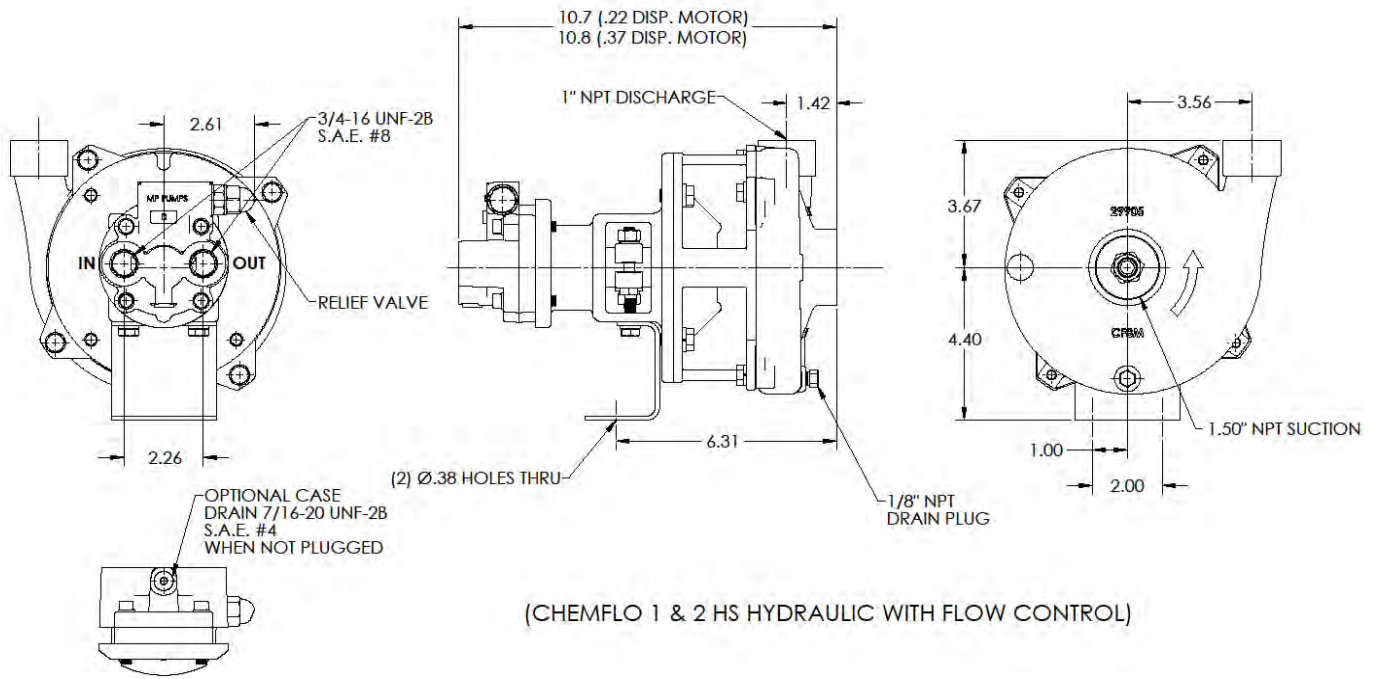
CN 7111-S



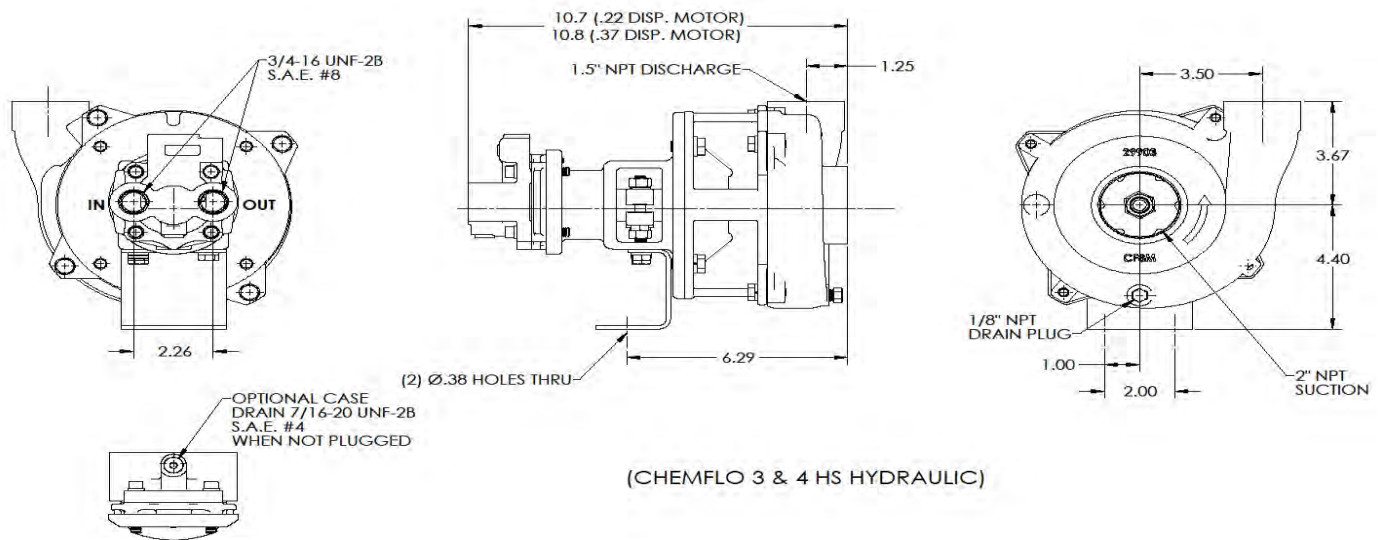
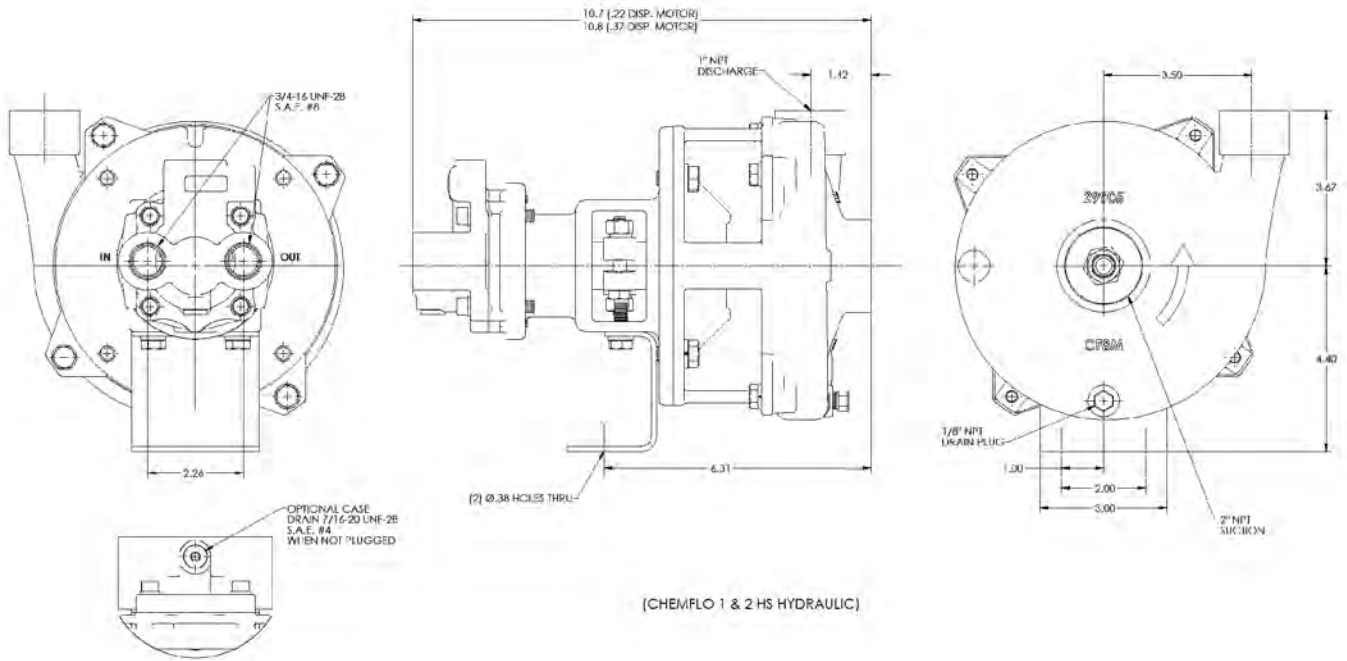
OIL FLOW	SHUT OFF 0 GPM	40 GPM	80 GPM	120 GPM	160 GPM	200 GPM	240 GPM	MAX. HYD. OIL PRESS. REQ.
6 GPM	31 PSI	33 PSI	32 PSI	27 PSI	18 PSI	-	-	1300 PSI
8 GPM	54 PSI	59 PSI	60 PSI	55 PSI	46 PSI	34 PSI	-	2050 PSI
10 GPM	85 PSI	91 PSI	93 PSI	85 PSI	72 PSI	57 PSI	35 PSI	2650 PSI

CN 7112-S

CHEMFLO Dimensions – HY Speed

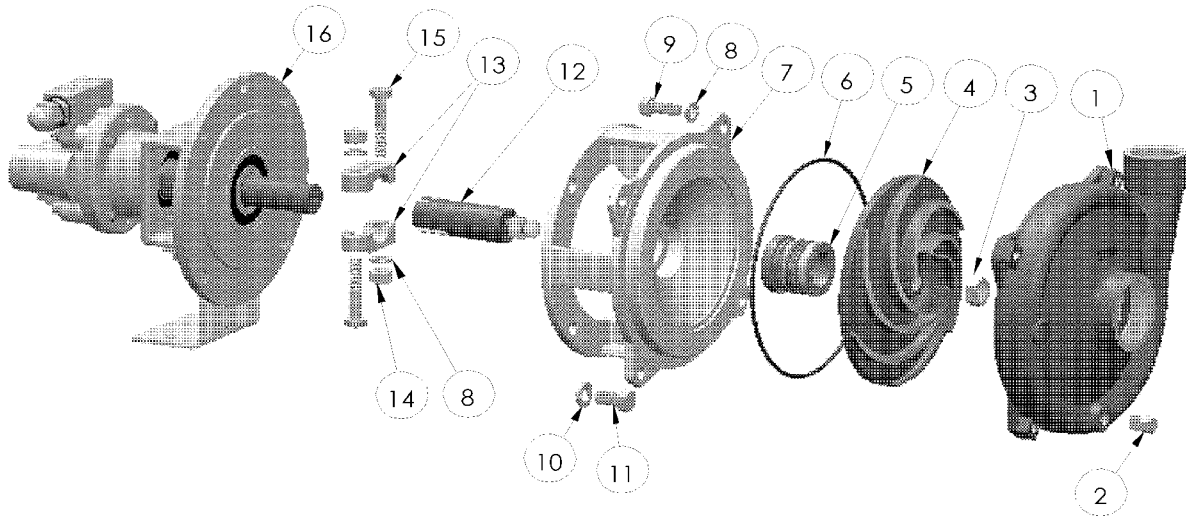


CHEMFLO Dimensions – HY Speed



**CHEMFLO 1-2 Exploded View – HY Speed
With Flow Control**

36038

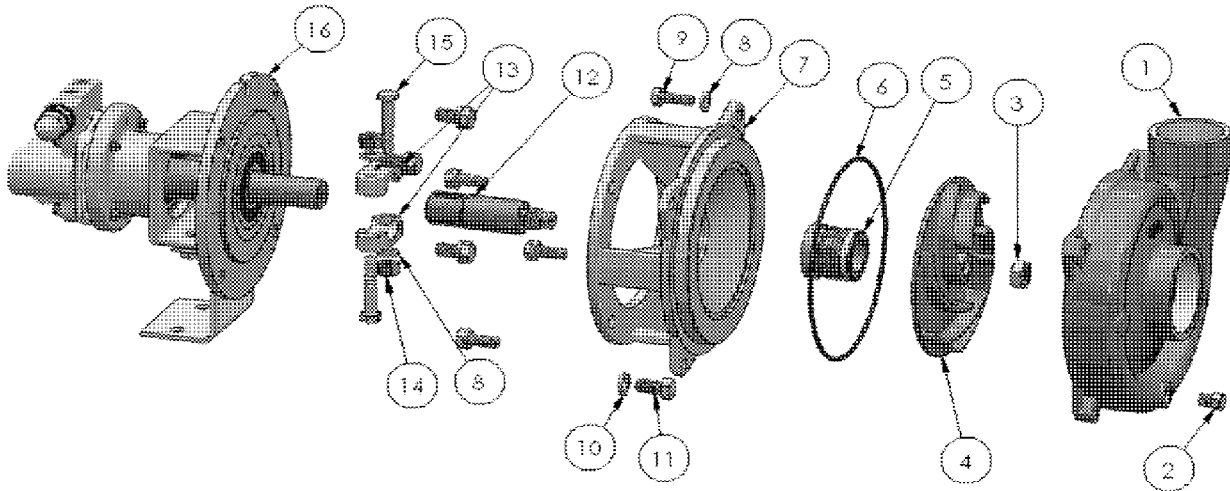


ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	29906	HOUSING SS- (CHEM 1)	1
2	21255	PIPE PLUG SS- 1/8" NPT	1
3	35599	HEX JAM NUT SS- 1/2"-20	1
4	34207	IMPELLER SS- CHEM 1 (6.0")	1
	34208	IMPELLER SS- CHEM2 (5.25")	
*	5	22273 SEAL ASSEMBLY- VITON	1
*	6	29715 O-RING- VITON	1
7	33794	ADAPTOR	1
8	21238	LOCK WASHER SS- 5/16"	6
9	21242	CAPSCREW SS- 5/16"-*18 X .875"	4
10	21266	LOCK WASHER SS- 3/8"	4
11	25663	CAPSCREW SS- 3/8"-*16 X .75"	4
12	35753	DRIVE SLEEVE	1
13	21954	CLAMP- 3/4"	2
14	21284	HEX NUT SS- 5/16"-18	2
15	21264	CAPSCREW SS- 5/16"-*18 X 1.75"	2
16	36271	.22 DISP. HS PEDESTAL ASY.	1
	36269	.37 DISP. HS PEDESTAL ASY.	

*- RECOMMENDED REPLACEMENT PARTS

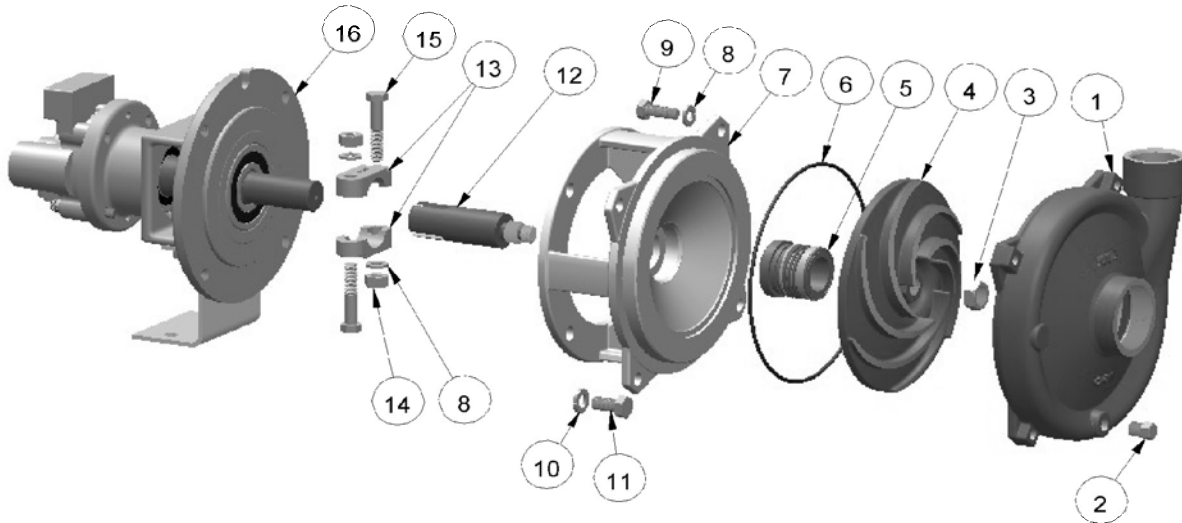
**CHEMFLO 3-4 Exploded View – HY Speed
With Flow Control**

36274



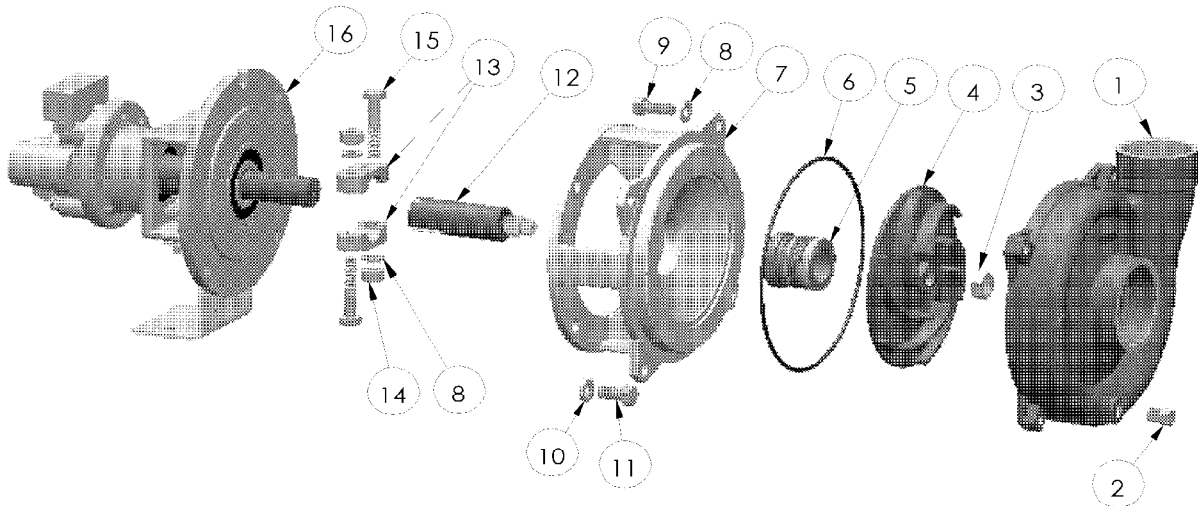
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	29904	HOUSING SS- (CHEM 3)	1
2	21255	PIPE PLUG SS- 1/8" NPT	1
3	35599	HEX JAM NUT SS- 1/2"-20	1
4	34208	IMPELLER SS- CHEM 3 (5.25")	1
	34209	IMPELLER SS- CHEM 4 (4.5")	
*	5	22273 SEAL ASSEMBLY- VITON	1
*	6	29715 O-RING- VITON	1
7	33794	ADAPTOR	1
8	21238	LOCK WASHER SS- 5/16"	6
9	21242	CAPSCREW SS- 5/16"-18 X .875"	4
10	21266	LOCK WASHER SS- 3/8"	4
11	25663	CAPSCREW SS- 3/8"-16 X .75"	4
12	35753	DRIVE SLEEVE	1
13	21954	CLAMP- 3/4"	2
14	21284	HEX NUT SS- 5/16"-18	2
15	21264	CAPSCREW SS- 5/16"-18 X 1.75"	2
16	36271	.22 DISP. HS PEDESTAL ASY.	1
	36269	.37 DISP. HS PEDESTAL ASY.	

*- RECOMMENDED REPLACEMENT PARTS



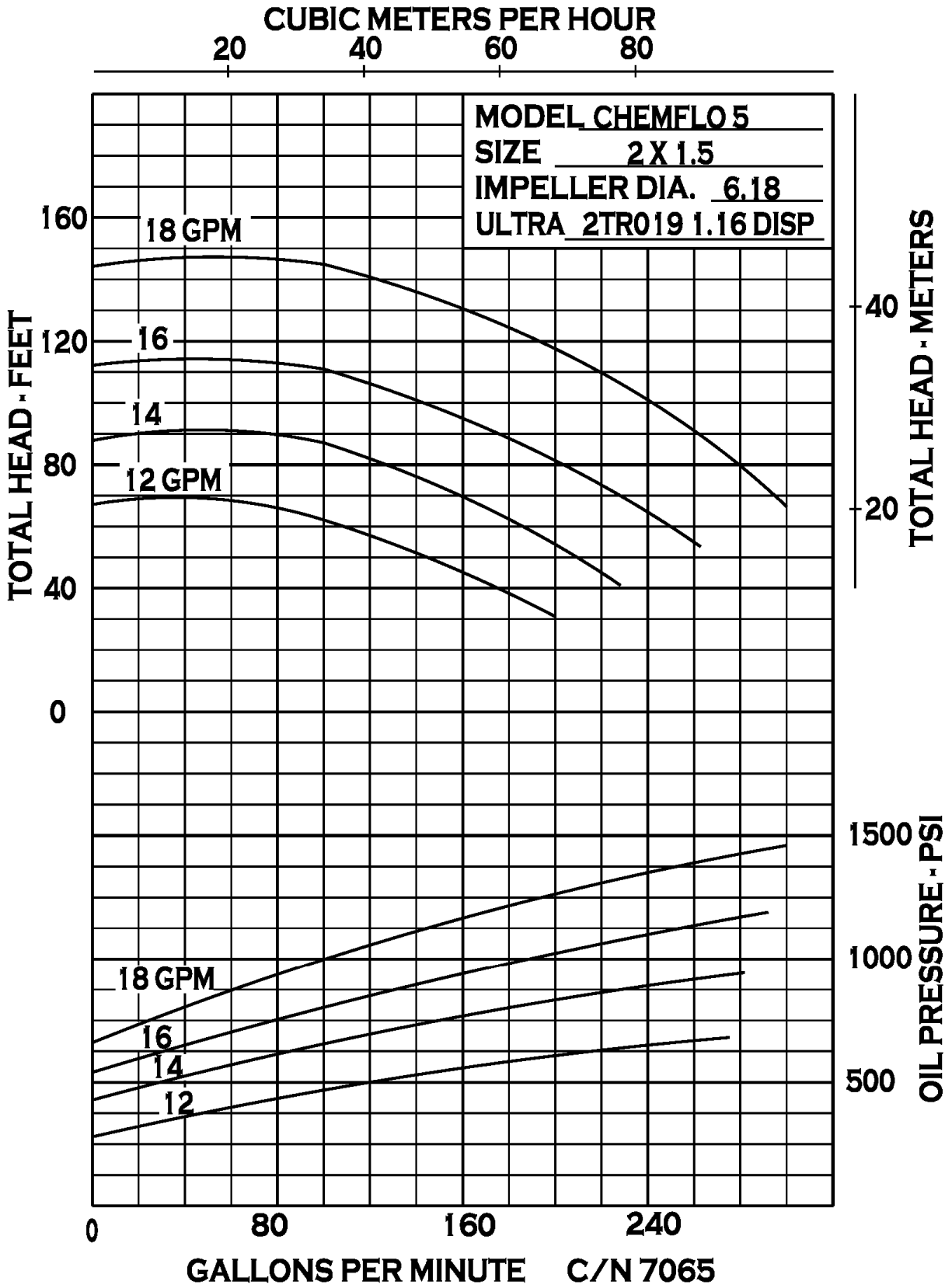
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	29906	HOUSING SS	1
2	21255	PIPE PLUG SS- 1/8" NPT	1
3	35599	HEX JAM NUT SS- 1/2"-20	1
4	29910	IMPELLER SS- CHEM 1 (6.0")	1
	29912	IMPELLER SS- CHEM2 (5.25")	
*	5	22273 SEAL ASSEMBLY- VITON	1
*	6	29715 O-RING- VITON	1
7	33794	ADAPTOR	1
8	21238	LOCK WASHER SS- 5/16"	6
9	21242	CAPSCREW SS- 5/16"-18 X .875"	4
10	21266	LOCK WASHER SS- 3/8"	4
11	25663	CAPSCREW SS- 3/8"-16 X .75"	4
12	35753	DRIVE SLEEVE	1
13	21954	CLAMP- 3/4"	2
14	21284	HEX NUT SS- 5/16"-18	2
15	21264	CAPSCREW SS- 5/16"-18 X 1.75"	2
16	36025	.22 DISP. HS PEDESTAL ASY.	1
	36449	.37 DISP. HS PEDESTAL ASY.	

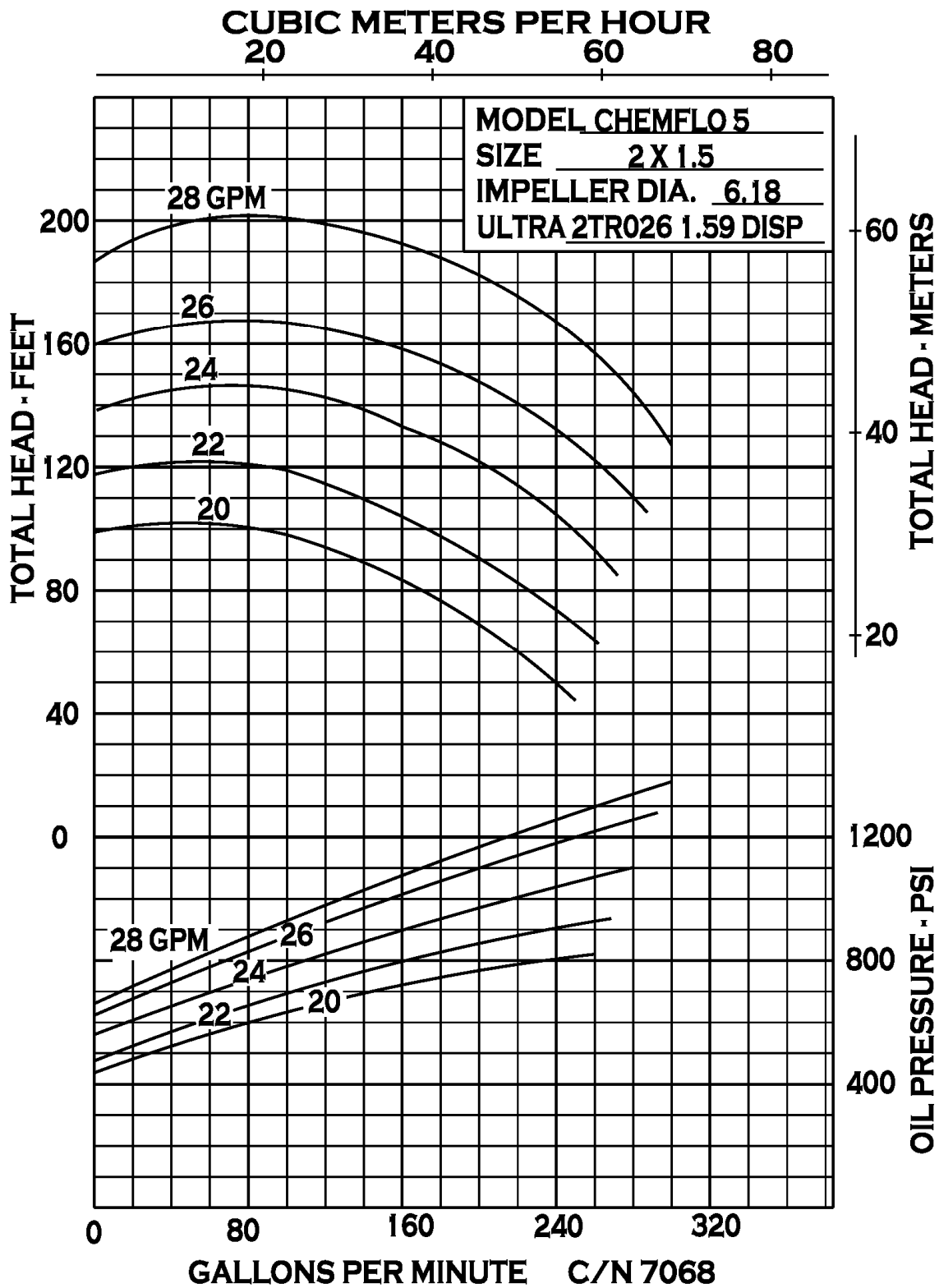
*- RECOMMENDED REPLACEMENT PARTS

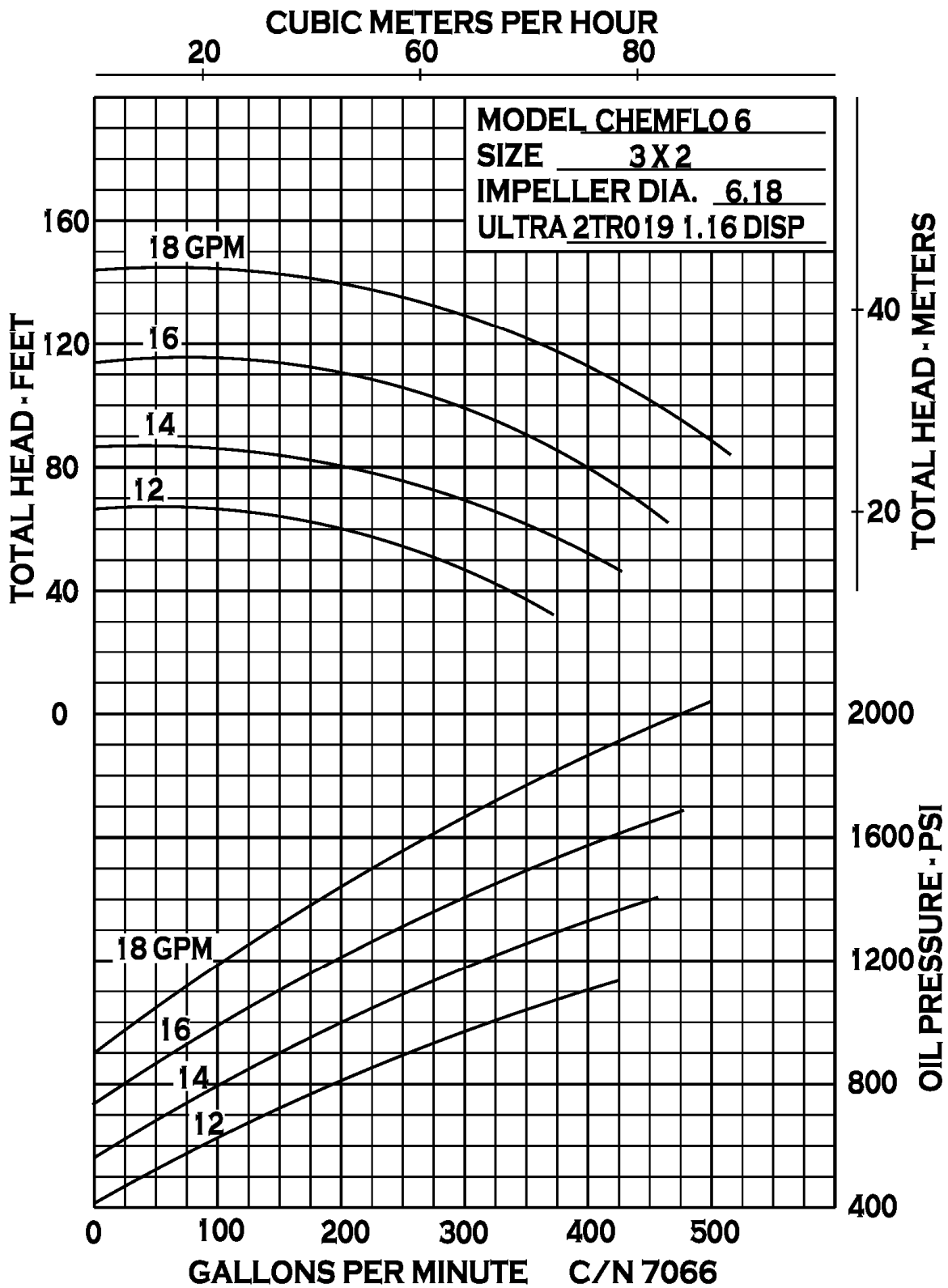


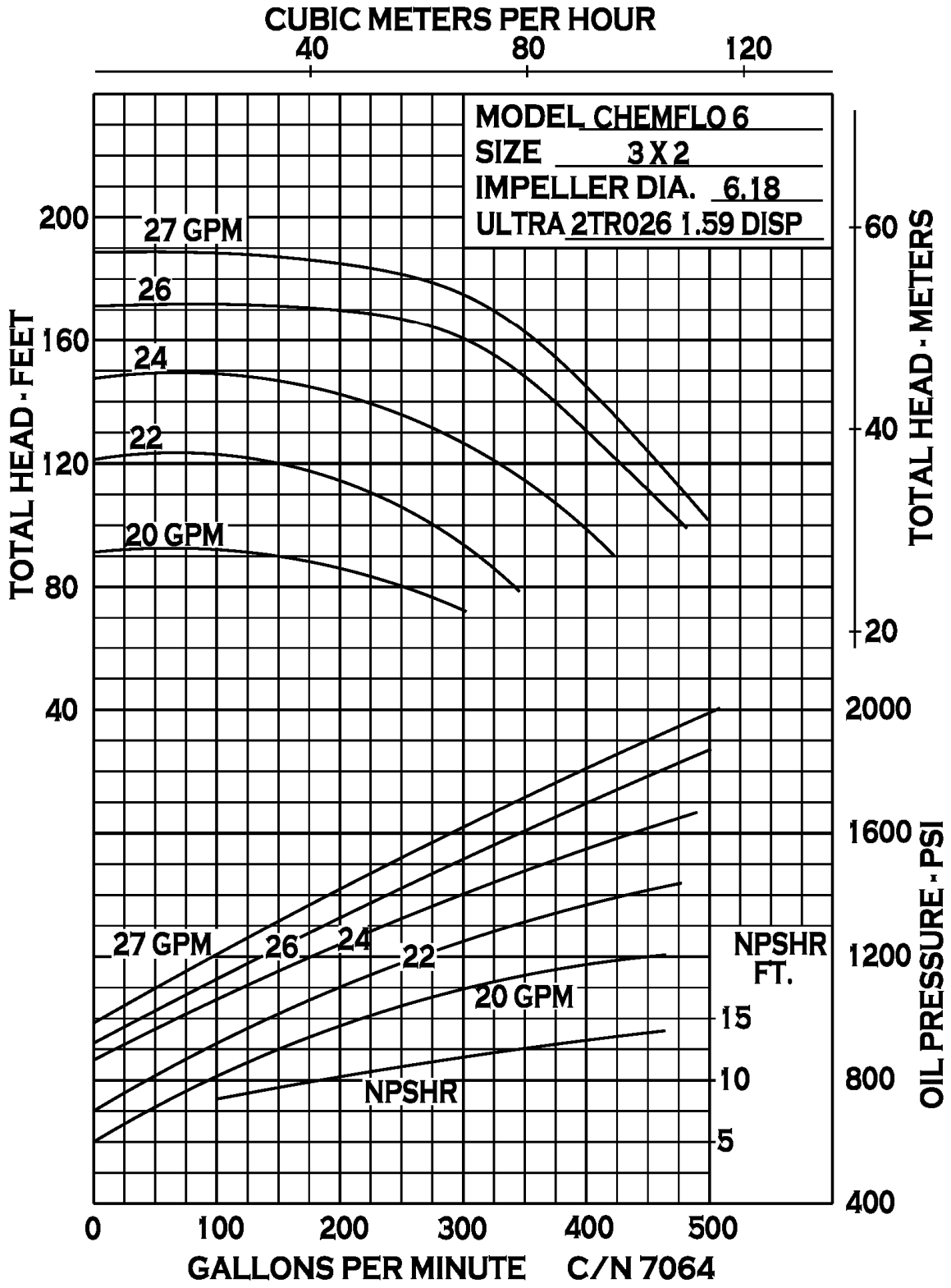
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	29904	HOUSING SS- (CHEM 1)	1
2	21255	PIPE PLUG SS- 1/8" NPT	1
3	35599	HEX JAM NUT SS- 1/2"-20	1
4	34208	IMPELLER SS- CHEM 3 (5.25")	1
	34209	IMPELLER SS- CHEM 4 (4.5")	1
*	5	22273 SEAL ASSEMBLY- VITON	1
*	6	29715 O-RING- VITON	1
7	33794	ADAPTOR	1
8	21238	LOCK WASHER SS- 5/16"	6
9	21242	CAPSCREW SS- 5/16"-18 X .875"	4
10	21266	LOCK WASHER SS- 3/8"	4
11	25663	CAPSCREW SS- 3/8"-16 X .75"	4
12	35753	DRIVE SLEEVE	1
13	21954	CLAMP- 3/4"	2
14	21284	HEX NUT SS- 5/16"-18	2
15	21264	CAPSCREW SS- 5/16"-18 X 1.75"	2
16	36025	.22 DISP. HS PEDESTAL ASY.	1
	36449	.37 DISP. HS PEDESTAL ASY.	1

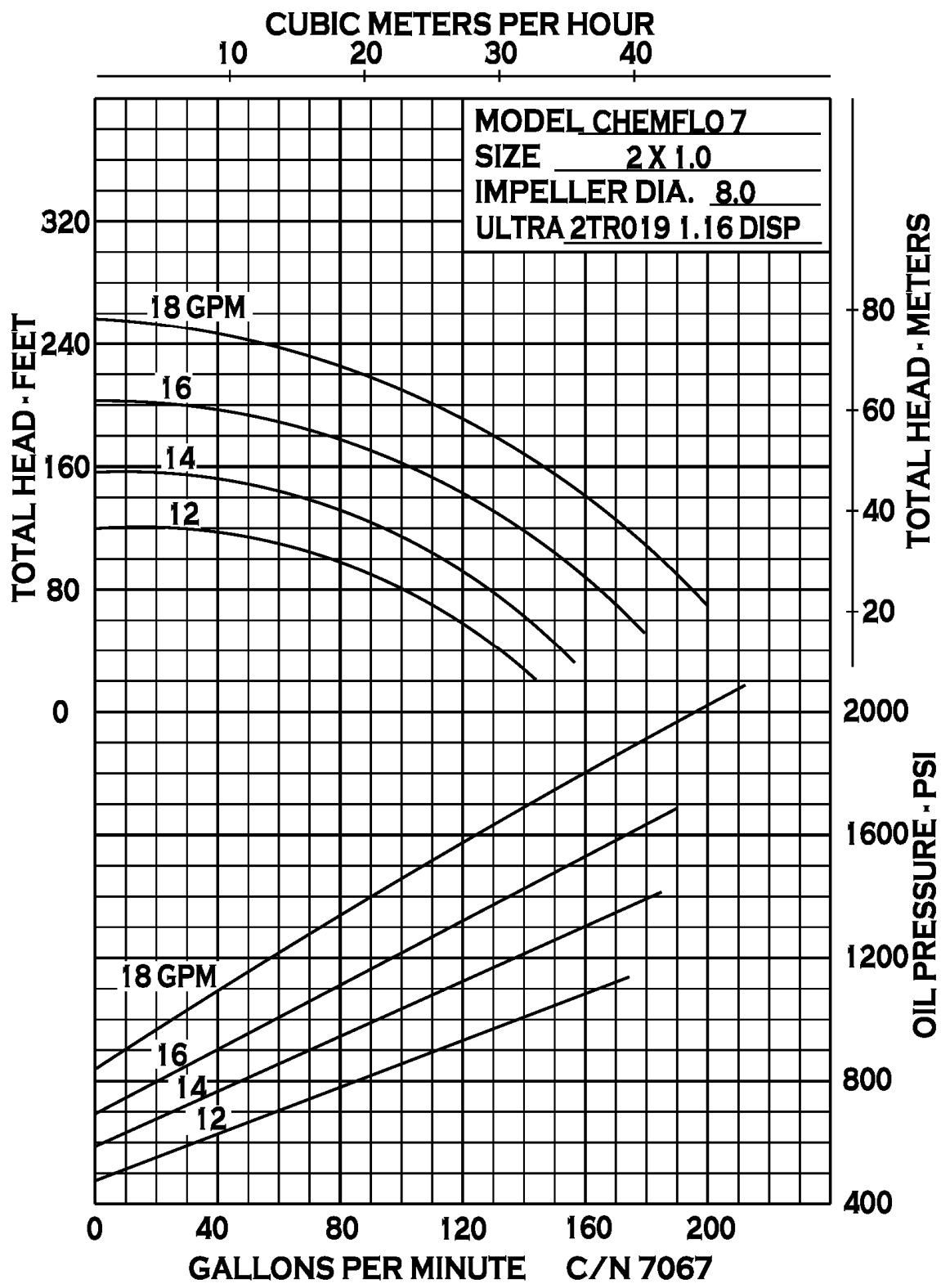
*- RECOMMENDED REPLACEMENT PARTS

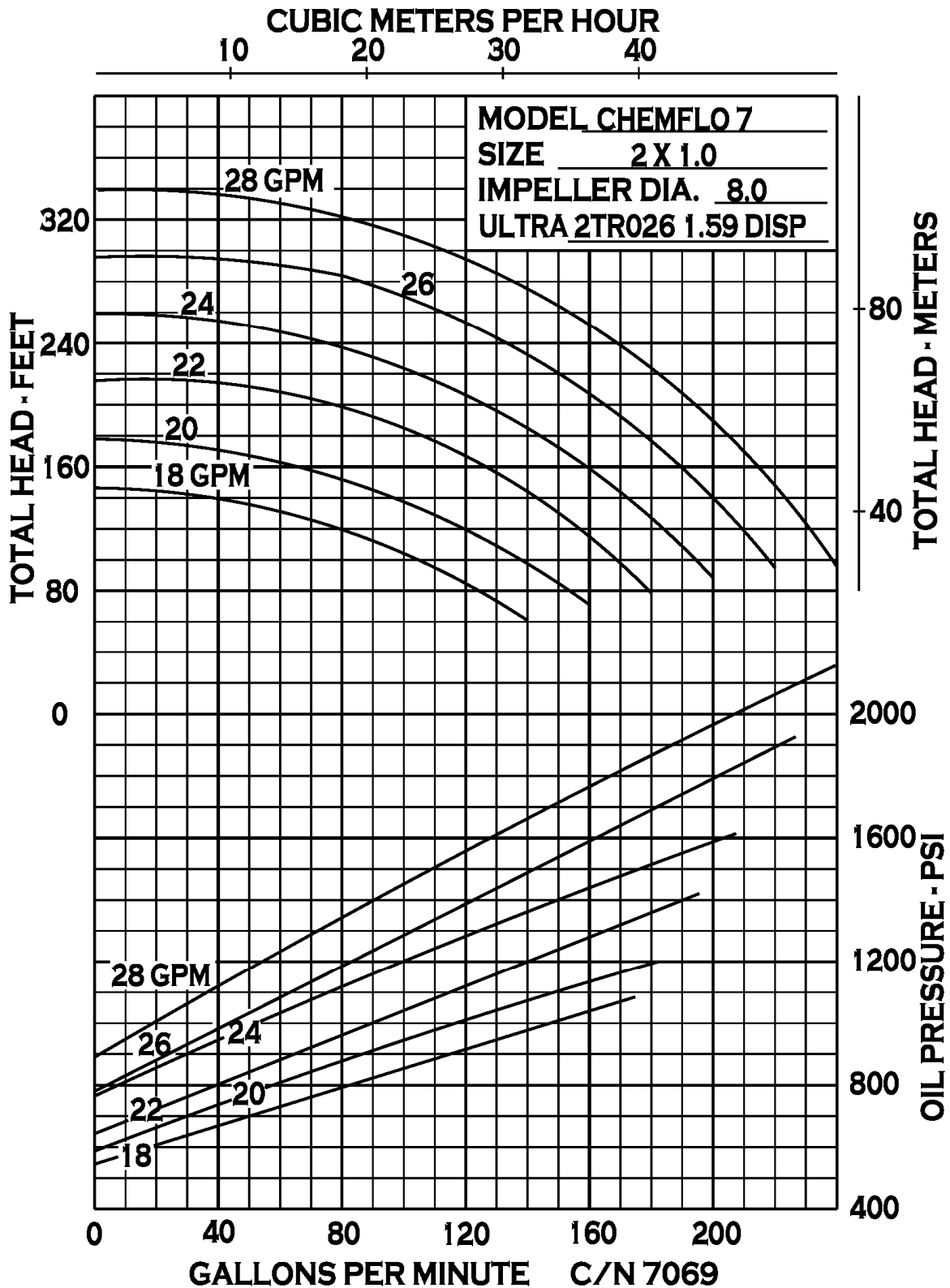


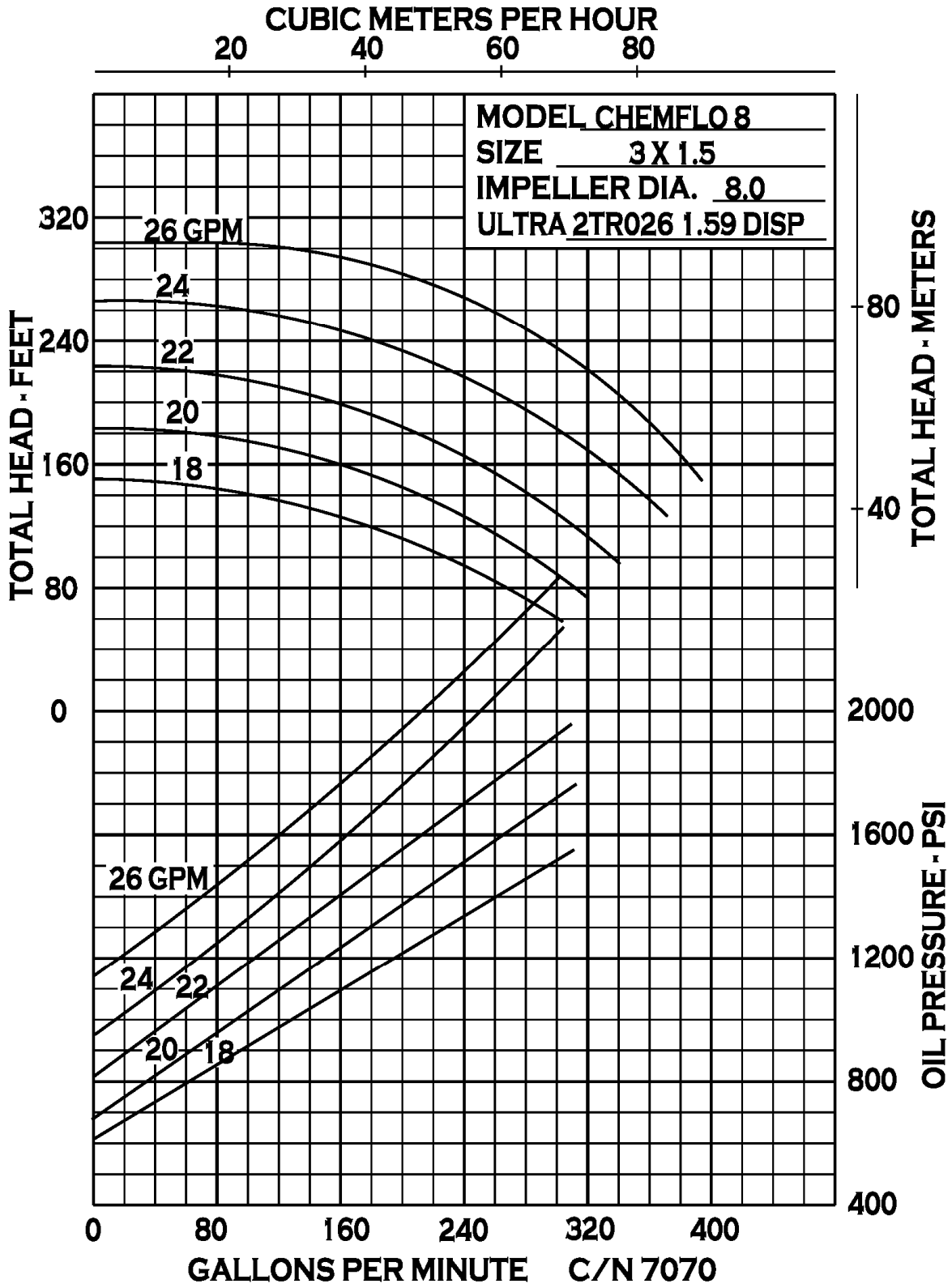




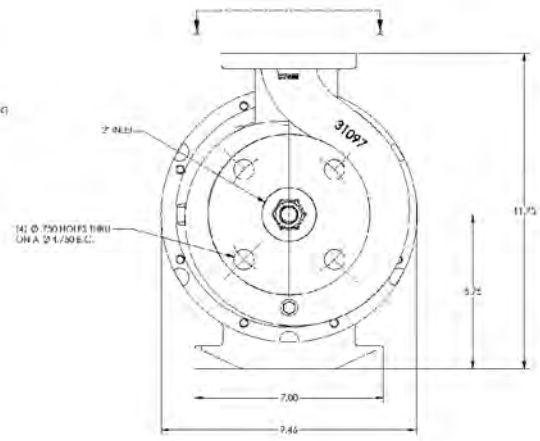
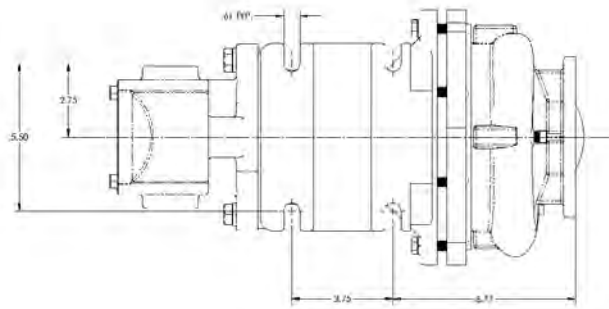
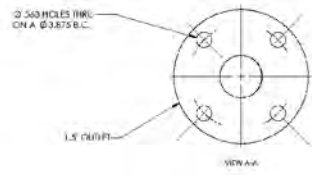
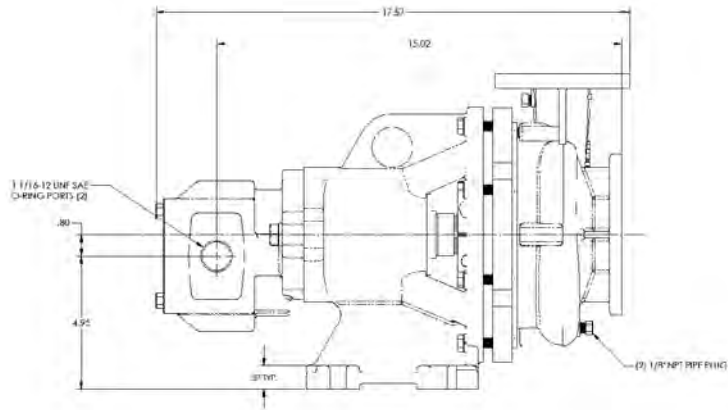




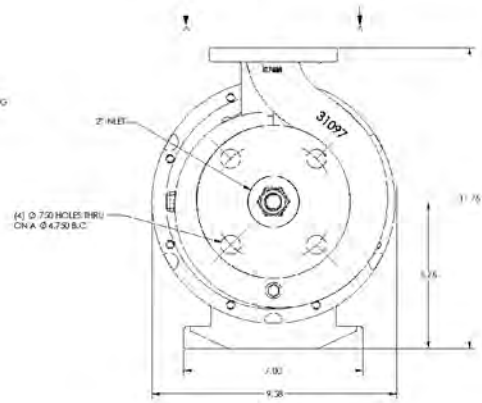
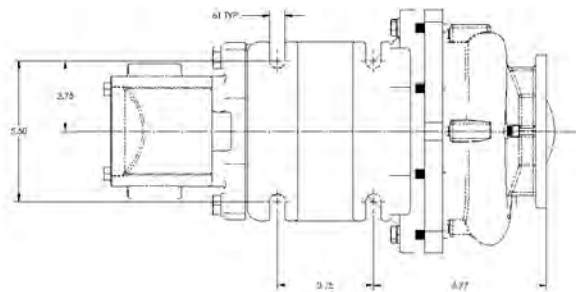
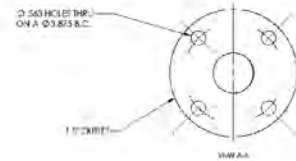
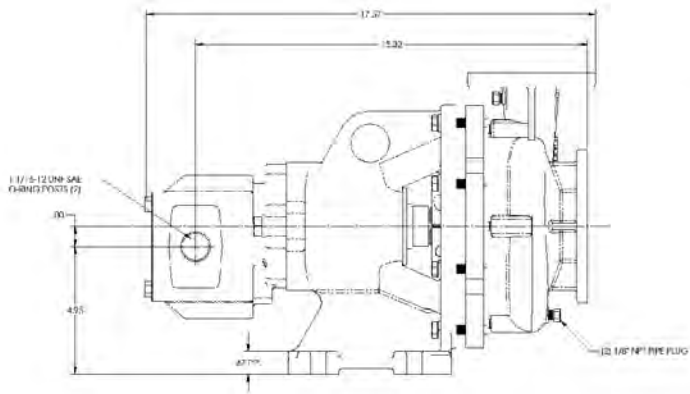




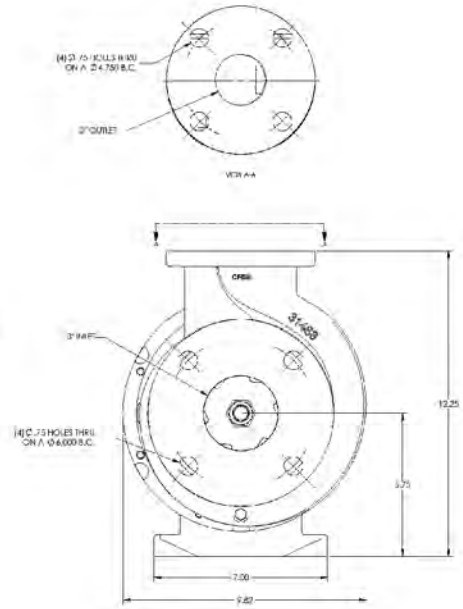
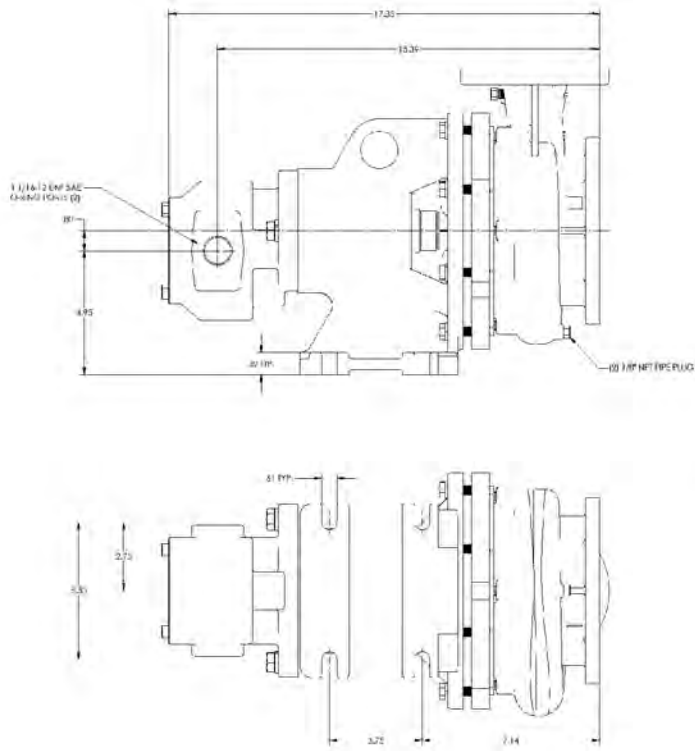
CHEMFLO Dimensions



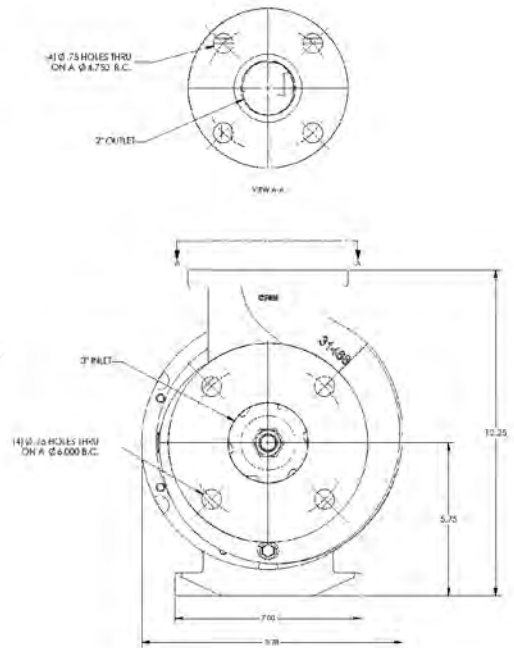
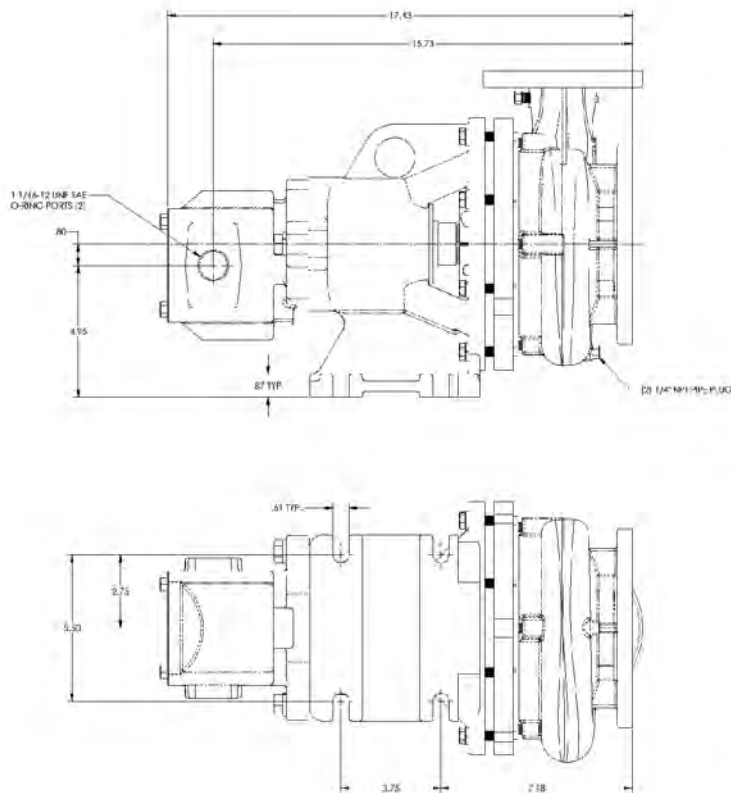
(CHEMFLO 5 W/ 1.16 DISP. HYDRAULIC MOTOR)



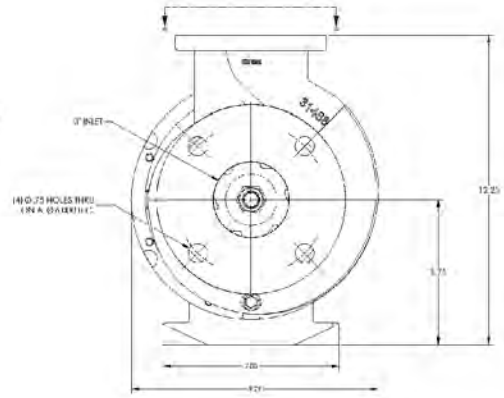
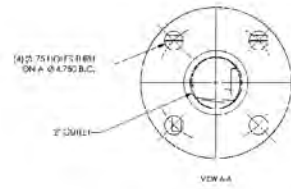
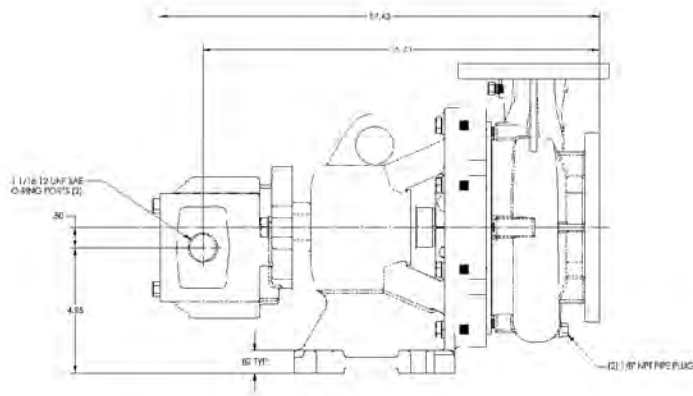
(CHEMFLO 5 W/ 1.59 DISP. HYDRAULIC MOTOR)



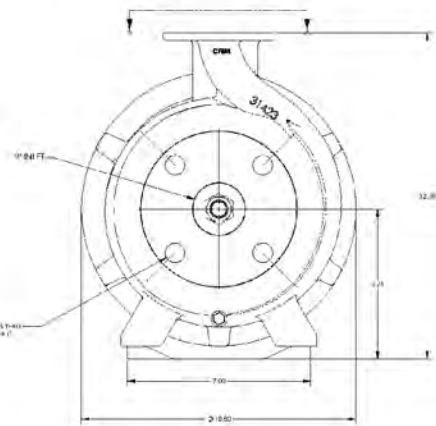
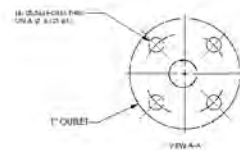
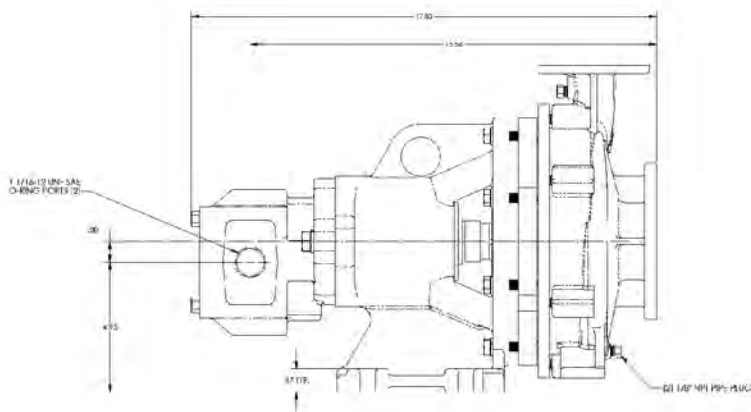
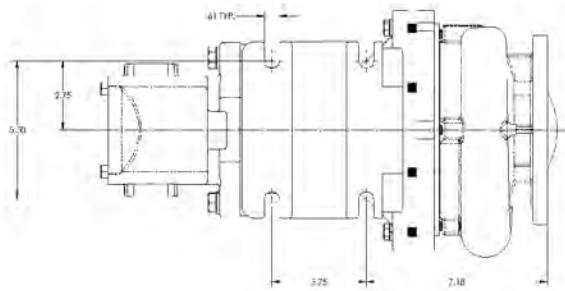
(CHEMFLO 6 W/ 1.16 DISP. HYDRAULIC MOTOR)



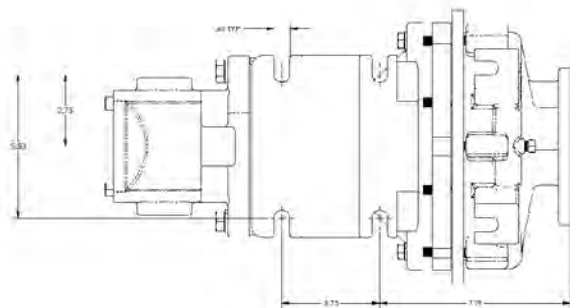
(CHEMFLO 6 W/ 1.59 DISP. HYDRAULIC MOTOR AND 1/4" NPT FLUGS)



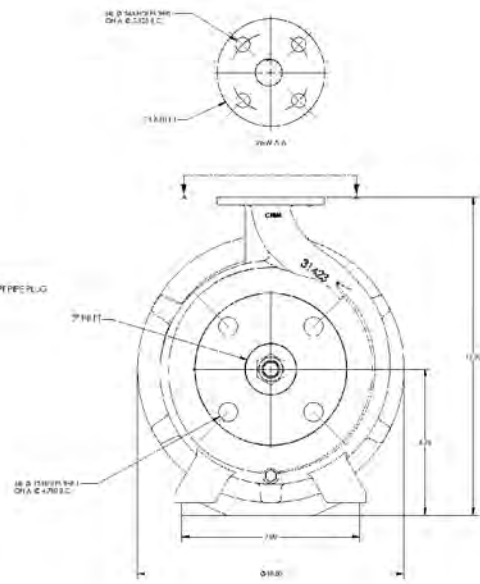
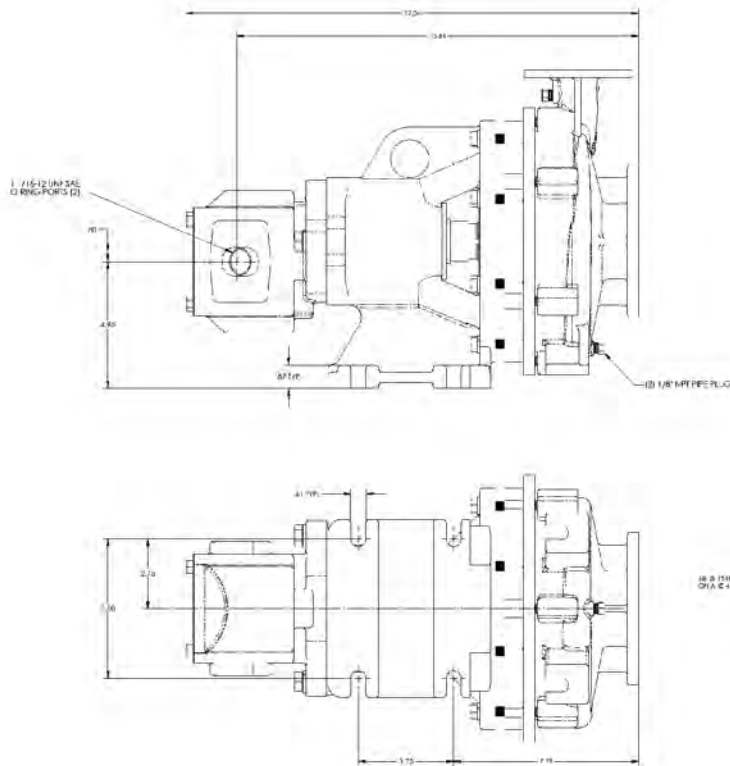
[CHEMFLO 6 W/ 1.59 DISP. HYDRAULIC MOTOR]



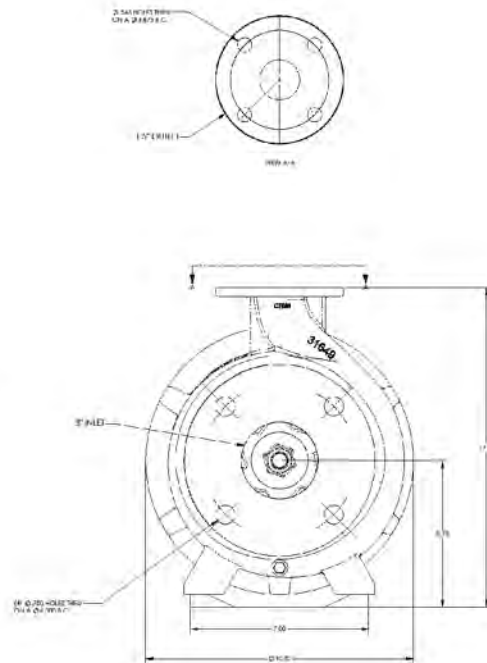
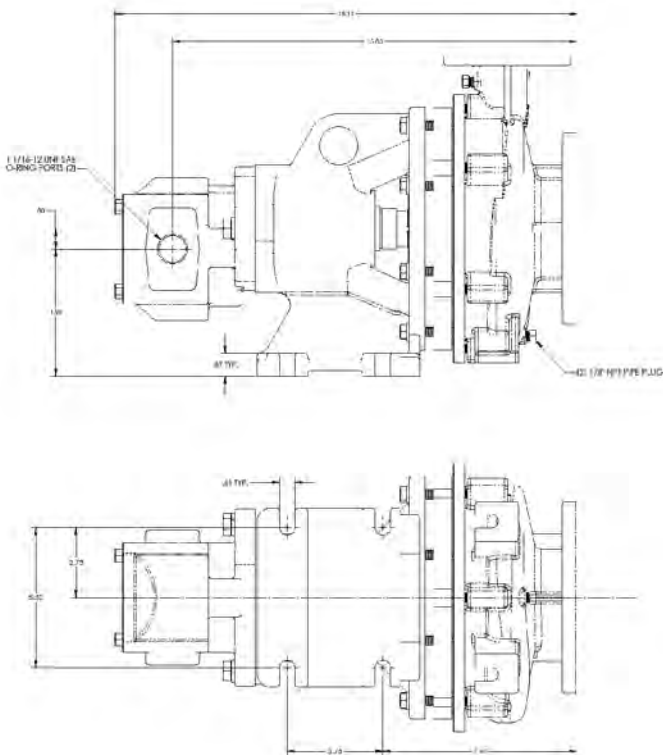
[CHEMFLO 7 W/ 1.16 DISP. HYDRAULIC MOTOR]



CHEMFLO Dimensions



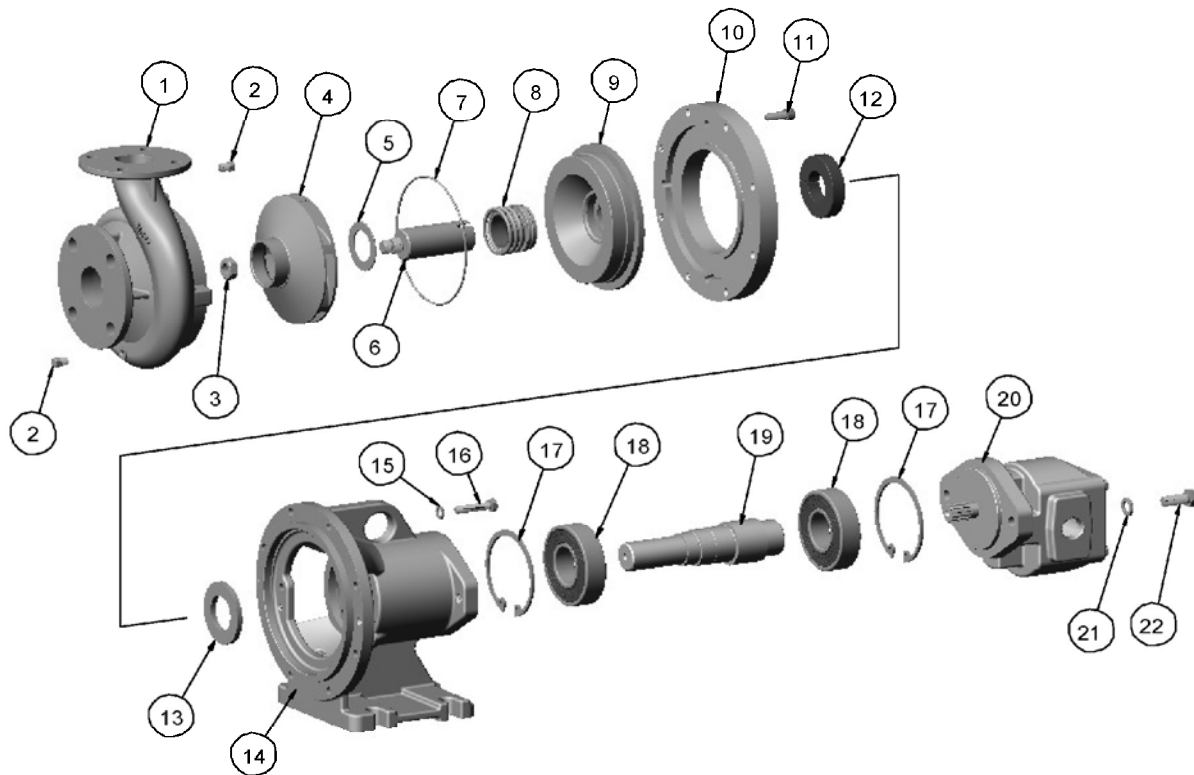
(CHEMFLO 7 W / 1.59 DISP. HYDRAULIC MOTOR)



(CHEMFLO 8 W / 1.59 DISP. HYDRAULIC MOTOR)

**CHEMFLO 5 Exploded View
With 1.16 Disp. Motor**

33799

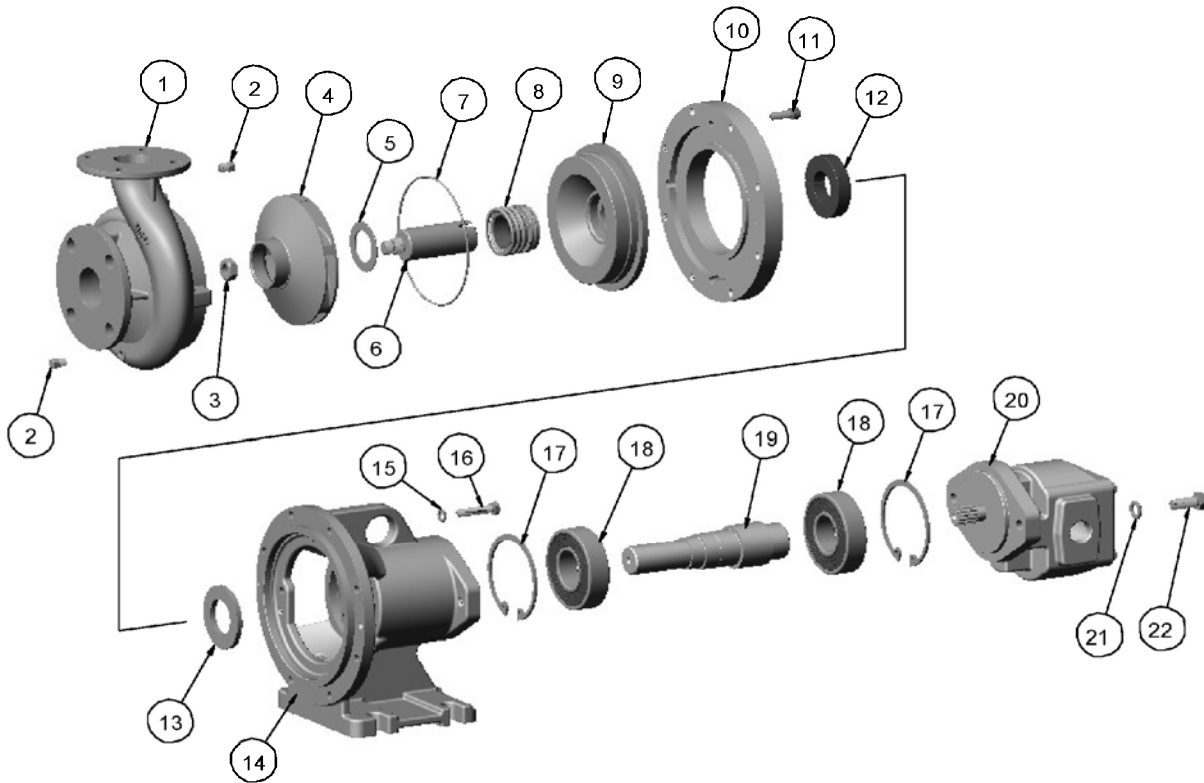


ITEM NO.	PART NO.	DESCRIPTION	QTY.		ITEM NO.	PART NO.	DESCRIPTION	QTY.	
1	31098	VOLUTE S.S.	1	*	12	31312	CLAMP- 1.5"	1	
2	21255	PIPE PLUG S.S.- 1/8" NPT	2		13	26680	SLINGER	1	
*	3	29194	HEX JAM NUT S.S.- 5/8-18	1	14	26994	BODY C.I.	1	
*	4	31096	IMPELLER S.S.- 6.18" DIA.	1	15	21266	LOCKWASHER- 3/8"	8	
*	5	31372	SHIM	1	16	41259	CAPSCREW- HH 3/8-16 X 1.75"	8	
*	6	31311	DRIVE SLEEVE S.S.	1	17	26998	INTERNAL SNAP RING STL.	2	
*	7	31233	O-RING- VITON	1	*	18	26997	BALL BEARING	2
*	8	26461	SEVERE SRVC. SEAL- 1.5" T-2 SSC	1	19	33367	SHAFT	1	
	9	31093	SEAL HOUSING S.S.	1	20	29992	HYDRAULIC MOTOR	1	
	10	33366	ADAPTER	1	21	21254	LOCK WASHER- 1/2"	2	
	11	31520	CAPSCREW- SOC. HD. 3/8-16 X 1"	4	22	21246	CAPSCREW- HH 1/2-13 X 1.25"	2	

*- RECOMMENDED REPLACEMENT PARTS

**CHEMFLO 5 Exploded View
With 1.59 Disp. Motor**

33800

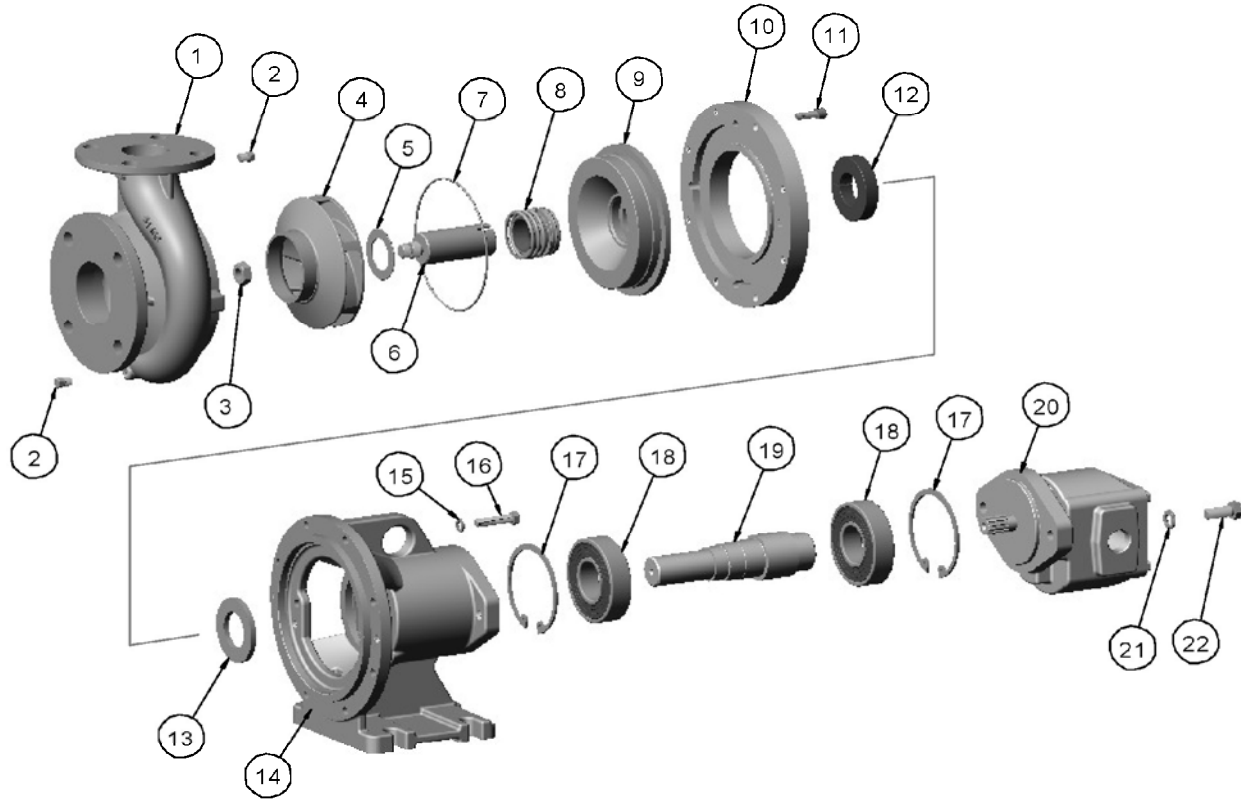


ITEM NO.	PART NO.	DESCRIPTION	QTY.		ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	31098	VOLUTE S.S.	1		* 12	31312	CLAMP- 1.5"	1
2	21255	PIPE PLUG S.S.- 1/8" NPT	2		13	26680	SLINGER	1
* 3	29194	HEX JAM NUT S.S.- 5/8-18	1		14	26994	BODY C.I.	1
* 4	31096	IMPELLER S.S.- 6.18" DIA.	1		15	21266	LOCKWASHER- 3/8"	8
* 5	31372	SHIM	1		16	41259	CAPSCREW- HH 3/8-16 X 1.75"	8
* 6	31311	DRIVE SLEEVE S.S.	1		17	26998	INTERNAL SNAP RING STL.	2
* 7	31233	O-RING- VITON	1		* 18	26997	BALL BEARING	2
* 8	26461	SEVERE SRVC. SEAL- 1.5" T-2 SSC	1		19	33367	SHAFT	1
9	31093	SEAL HOUSING S.S.	1		20	29993	HYDRAULIC MOTOR	1
10	33366	ADAPTER	1		21	21254	LOCK WASHER- 1/2"	2
11	31520	CAPSCREW- SOC. HD. 3/8-16 X 1"	4		22	21246	CAPSCREW- HH 1/2-13 X 1.25"	2

*- RECOMMENDED REPLACEMENT PARTS

**CHEMFLO 6 Exploded View
With 1.16 Disp. Motor**

33801

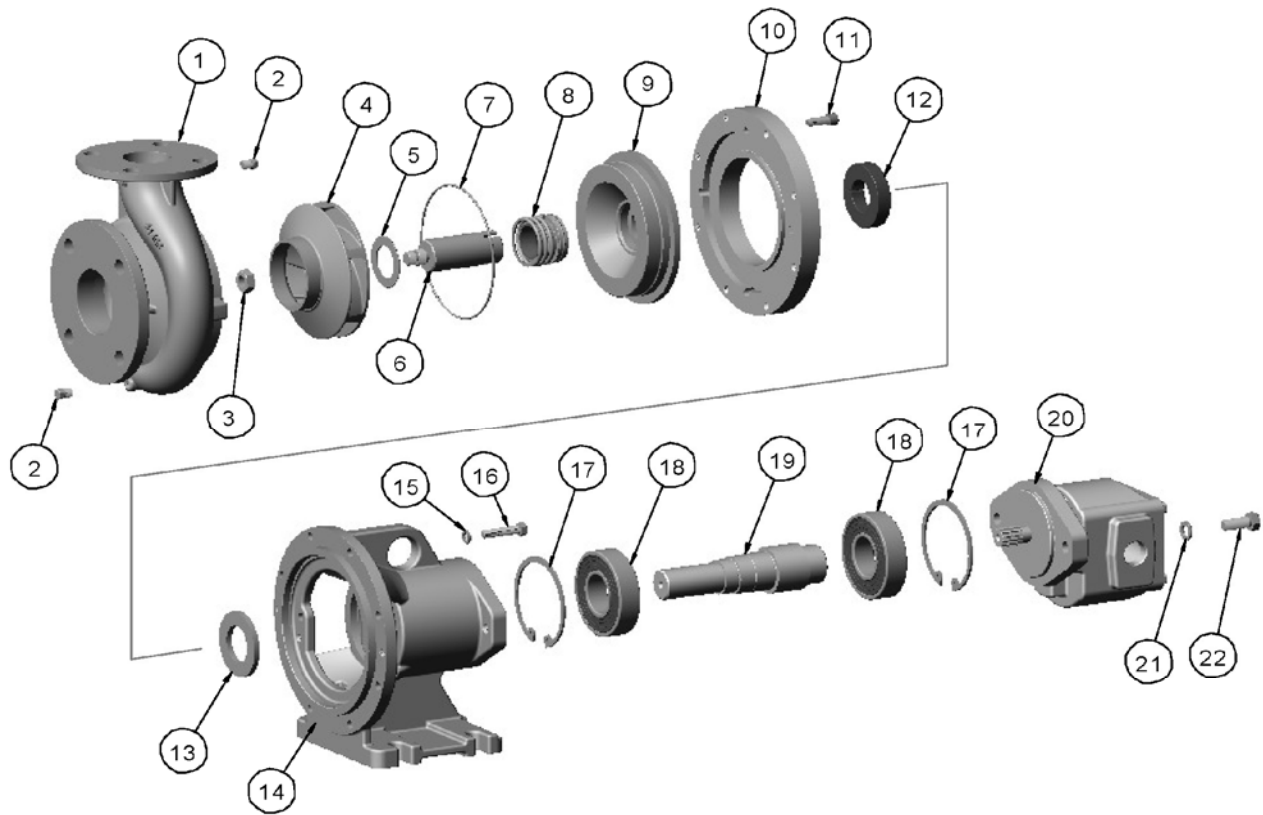


ITEM NO.	PART NO.	DESCRIPTION	QTY.		ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	31469	VOLUTE S.S.	1		* 12	31312	CLAMP- 1.5"	1
2	21255	PIPE PLUG S.S.- 1/8" NPT	2		13	26680	SLINGER	1
* 3	29194	HEX JAM NUT S.S.- 5/8-18	1		14	26994	BODY C.I.	1
* 4	31467	IMPELLER S.S.- 6.18" DIA.	1		15	21266	LOCKWASHER- 3/8"	8
* 5	31372	SHIM	1		16	41259	CAPSCREW- HH 3/8-16 X 1.75"	8
* 6	31311	DRIVE SLEAVE S.S.	1		17	26998	INTERNAL SNAP RING STL.	2
* 7	31233	O-RING- VITON	1		* 18	26997	BALL BEARING	2
* 8	26461	SEVERE SRVC. SEAL- 1.5" T-2 SSC	1		19	33367	SHAFT	1
9	31093	SEAL HOUSING S.S.	1		20	29992	HYDRAULIC MOTOR	1
10	33366	ADAPTER	1		21	21254	LOCK WASHER- 1/2"	2
11	31520	CAPSCREW- SOC. HD. 3/8-16 X 1"	4		22	21246	CAPSCREW- HH 1/2-13 X 1.25"	2

*- RECOMMENDED REPLACEMENT PARTS

**CHEMFLO 6 Exploded View
With 1.59 Disp. Motor**

33541

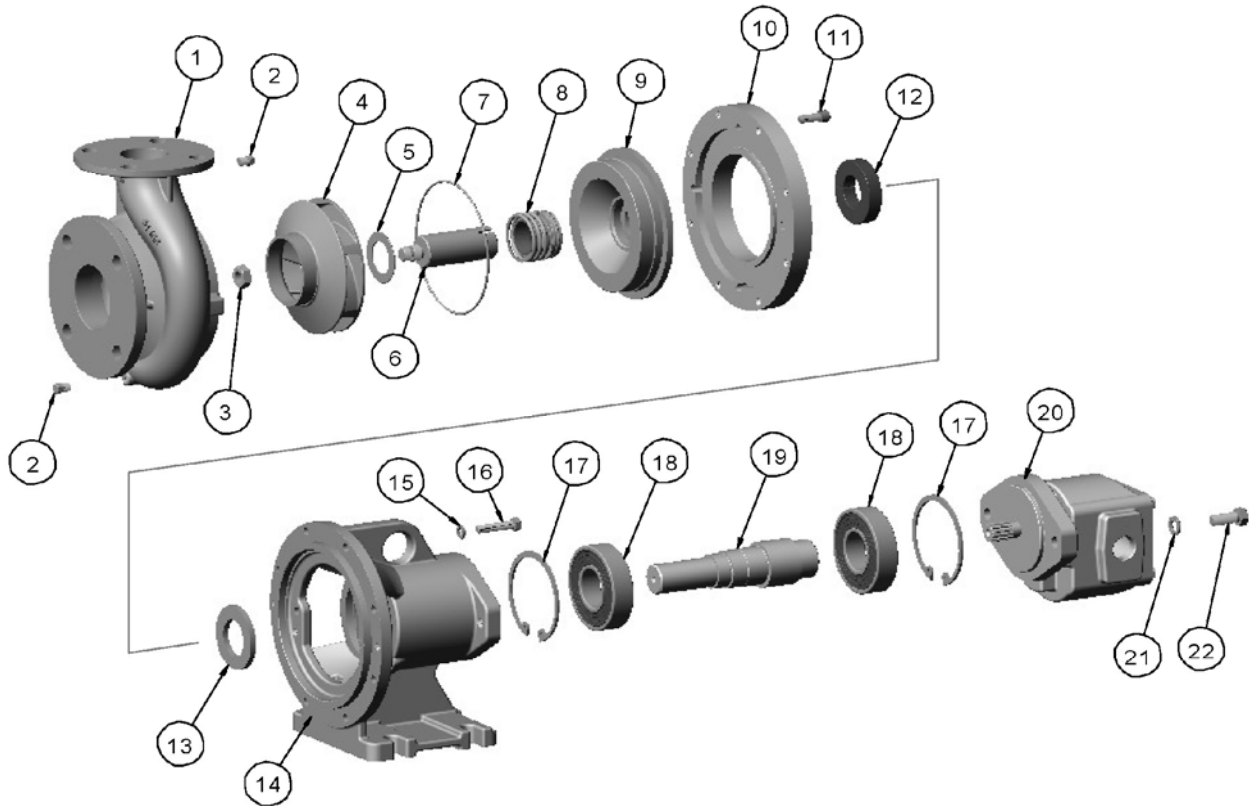


ITEM NO.	PART NO.	DESCRIPTION	QTY.		ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	33540	VOLUTE S.S.	1		* 12	31312	CLAMP- 1.5"	1
2	21267	PIPE PLUG S.S.- 1/8" NPT	2		13	26680	SLINGER	1
* 3	29194	HEX JAM NUT S.S.- 5/8-18	1		14	26994	BODY C.I.	1
* 4	31467	IMPELLER S.S.- 6.18" DIA.	1		15	21266	LOCKWASHER- 3/8"	8
* 5	31372	SHIM	1		16	41259	CAPSCREW- HH 3/8-16 X 1.75"	8
* 6	31311	DRIVE SLEEVE S.S.	1		17	26998	INTERNAL SNAP RING STL.	2
* 7	31233	O-RING- VITON	1		* 18	26997	BALL BEARING	2
* 8	26461	SEVERE SRVC. SEAL- 1.5" T-2 SSC	1		19	33367	SHAFT	1
9	31093	SEAL HOUSING S.S.	1		20	29993	HYDRAULIC MOTOR	1
10	33366	ADAPTER	1		21	21254	LOCK WASHER- 1/2"	2
11	31520	CAPSCREW- SOC. HD. 3/8-16 X 1"	4		22	21246	CAPSCREW- HH 1/2-13 X 1.25"	2

*- RECOMMENDED REPLACEMENT PARTS

**CHEMFLO 6 Exploded View
With 1.59 Disp. Motor and
Severe Service Seal**

33253

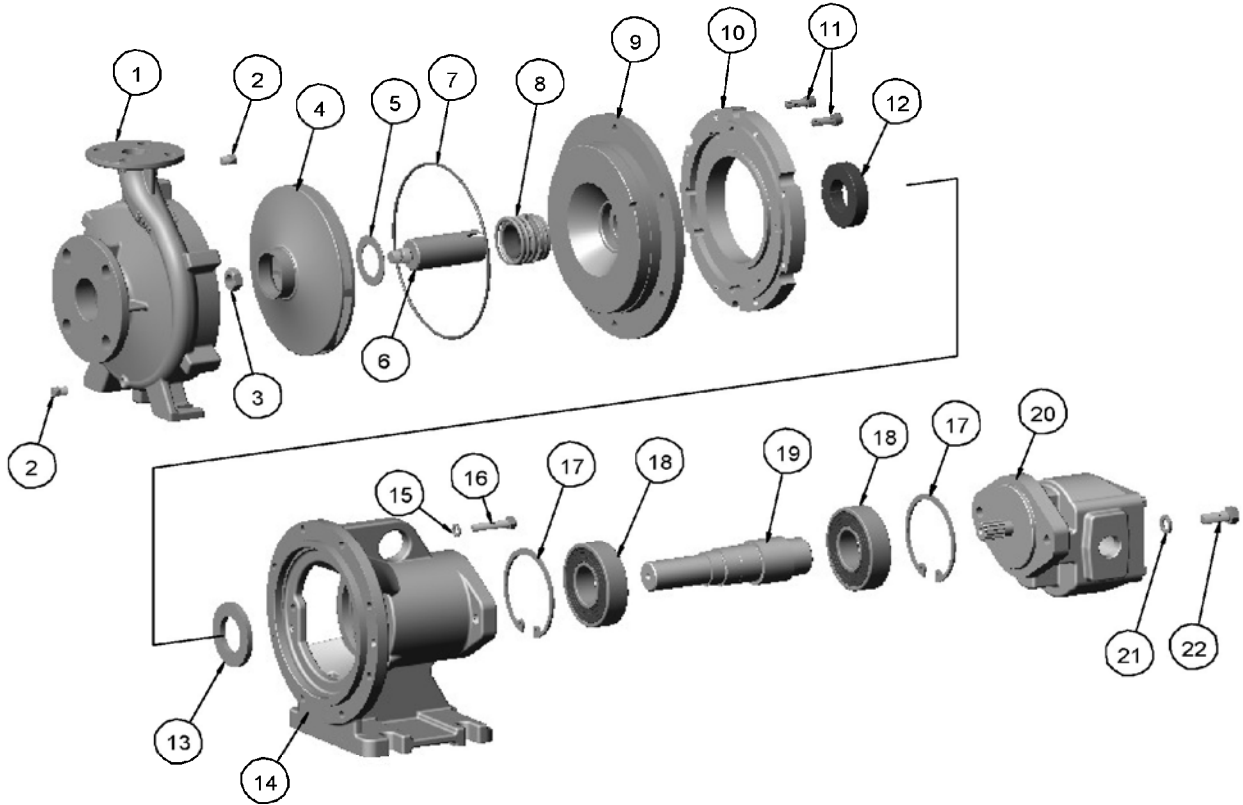


ITEM NO.	PART NO.	DESCRIPTION	QTY.		ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	31469	VOLUTE S.S.	1		* 12	31312	CLAMP- 1.5"	1
2	21255	PIPE PLUG S.S.- 1/8" NPT	2		13	26680	SLINGER	1
* 3	29194	HEX JAM NUT S.S.- 5/8-18	1		14	26994	BODY C.I.	1
* 4	31467	IMPELLER S.S.- 6.18" DIA.	1		15	21266	LOCKWASHER- 3/8"	8
* 5	31372	SHIM	1		16	41259	CAPSCREW- HH 3/8-16 X 1.75"	8
* 6	31311	DRIVE SLEAVE S.S.	1		17	26998	INTERNAL SNAP RING STL.	2
* 7	31233	O-RING- VITON	1		* 18	26997	BALL BEARING	2
* 8	31374	SEVERE SRVC. SEAL- 1.5" T-2 SSC	1		19	33367	SHAFT	1
9	31093	SEAL HOUSING S.S.	1		20	29993	HYDRAULIC MOTOR	1
10	33366	ADAPTER	1		21	21254	LOCK WASHER- 1/2"	2
11	31520	CAPSCREW- SOC. HD. 3/8-16 X 1"	4		22	21246	CAPSCREW- HH 1/2-13 X 1.25"	2

*- RECOMMENDED REPLACEMENT PARTS

**CHEMFLO 7 Exploded View
With 1.16 Disp. Motor and
Severe Service Seal**

33802

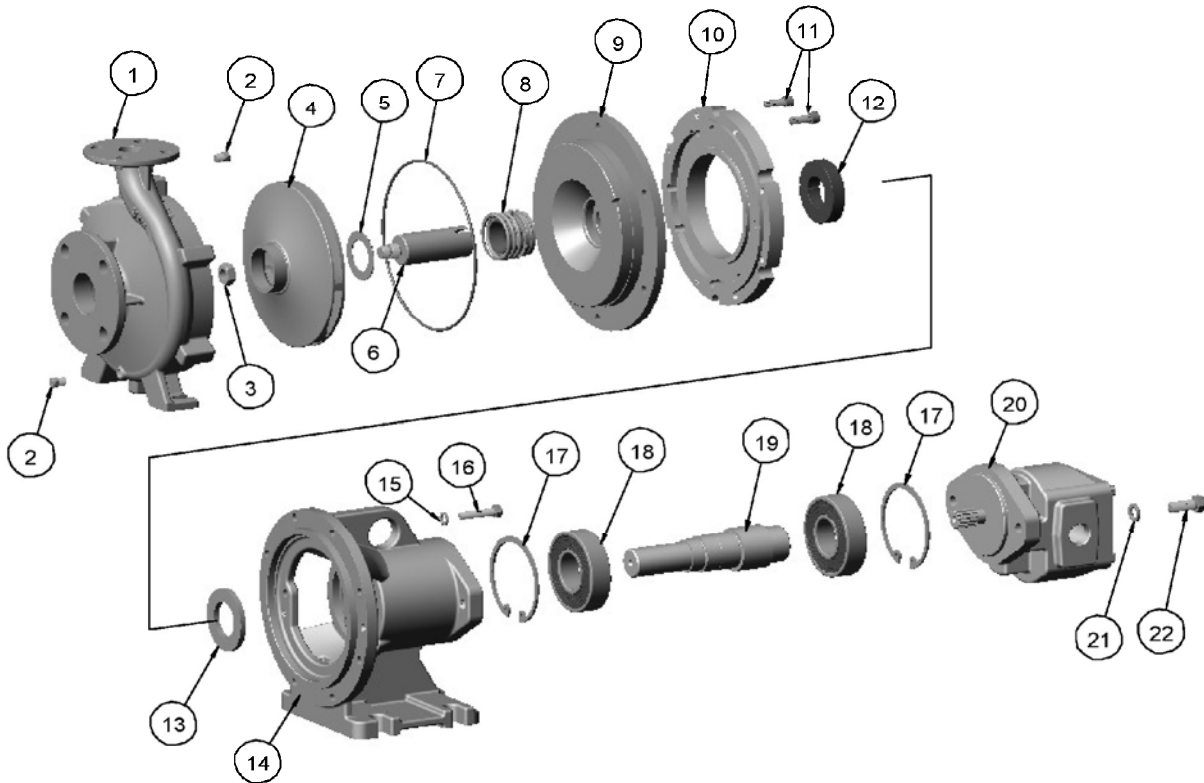


ITEM NO.	PART NO.	DESCRIPTION	QTY.		ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	31424	VOLUTE S.S.	1		* 12	31312	CLAMP- 1.5"	1
2	21255	PIPE PLUG S.S.- 1/8" NPT	2		13	26680	SLINGER	1
* 3	29194	HEX JAM NUT S.S.- 5/8-18	1		14	26994	BODY C.I.	1
* 4	31429	IMPELLER S.S.- 6.18" DIA.	1		15	21266	LOCKWASHER- 3/8"	8
* 5	31372	SHIM	1		16	41259	CAPSCREW- HH 3/8-16 X 1.75"	8
* 6	31311	DRIVE SLEAVE S.S.	1		17	26998	INTERNAL SNAP RING STL.	2
* 7	31233	O-RING- VITON	1		18	26997	BALL BEARING	2
* 8	26461	SEVERE SRVC. SEAL- 1.5" T-2 SSC	1		19	33367	SHAFT	1
	31426	SEAL HOUSING S.S.	1		20	29992	HYDRAULIC MOTOR	1
	33366	ADAPTER	1		21	21254	LOCK WASHER- 1/2"	2
11	31520	CAPSCREW- SOC. HD. 3/8-16 X 1"	4		22	21246	CAPSCREW- HH 1/2-13 X 1.25"	2

*- RECOMMENDED REPLACEMENT PARTS

**CHEMFLO 7 Exploded View
With 1.59 Disp. Motor and
Severe Service Seal**

33803

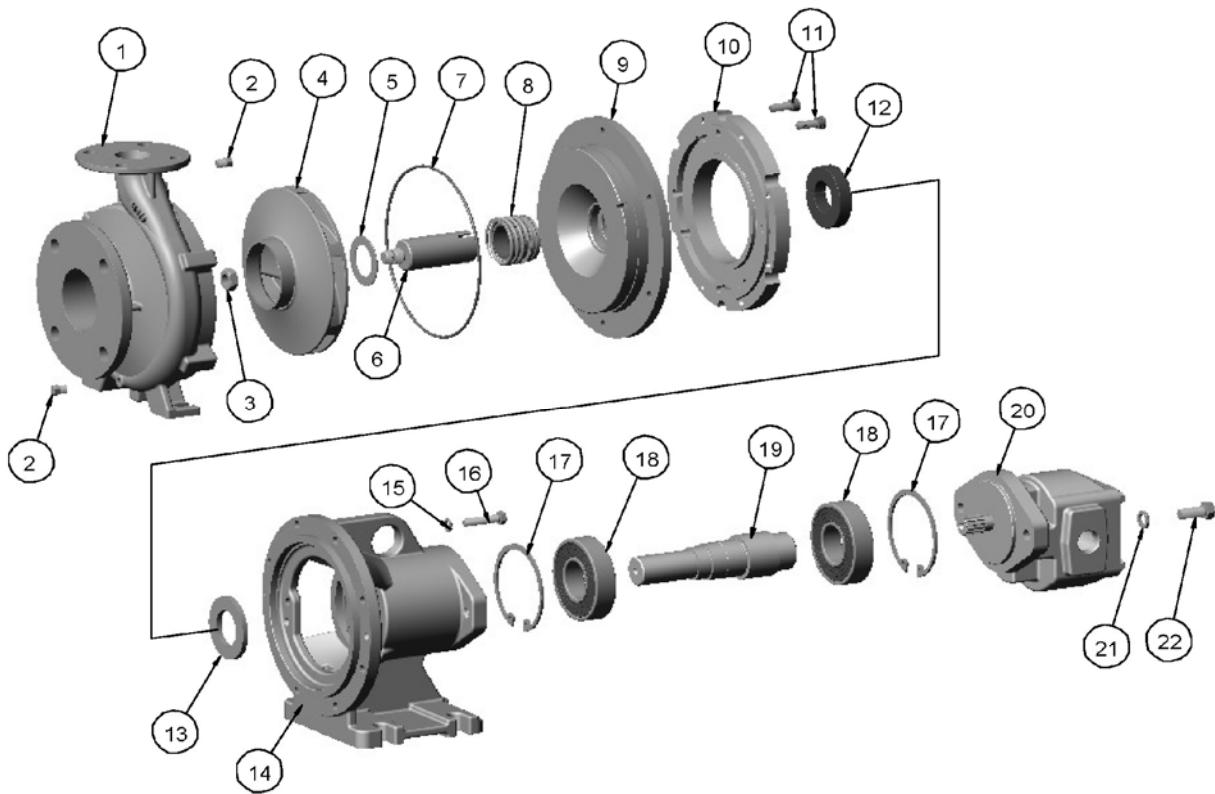


ITEM NO.	PART NO.	DESCRIPTION	QTY.		ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	31424	VOLUTE S.S.	1	*	12	31312	CLAMP- 1.5"	1
2	21255	PIPE PLUG S.S.- 1/8" NPT	2		13	26680	SLINGER	1
* 3	29194	HEX JAM NUT S.S.- 5/8-18	1		14	26994	BODY C.I.	1
* 4	31429	IMPELLER S.S.- 6.18" DIA.	1		15	21266	LOCKWASHER- 3/8"	8
* 5	31372	SHIM	1		16	41259	CAPSCREW- HH 3/8-16 X 1.75"	8
* 6	31311	DRIVE SLEAVE S.S.	1		17	26998	INTERNAL SNAP RING STL.	2
* 7	31233	O-RING- VITON	1	*	18	26997	BALL BEARING	2
* 8	26461	SEVERE SRVC. SEAL- 1.5" T-2 SSC	1		19	33367	SHAFT	1
9	31426	SEAL HOUSING S.S.	1		20	29993	HYDRAULIC MOTOR	1
10	33366	ADAPTER	1		21	21254	LOCK WASHER- 1/2"	2
11	31520	CAPSCREW- SOC. HD. 3/8-16 X 1"	4		22	21246	CAPSCREW- HH 1/2-13 X 1.25"	2

*- RECOMMENDED REPLACEMENT PARTS

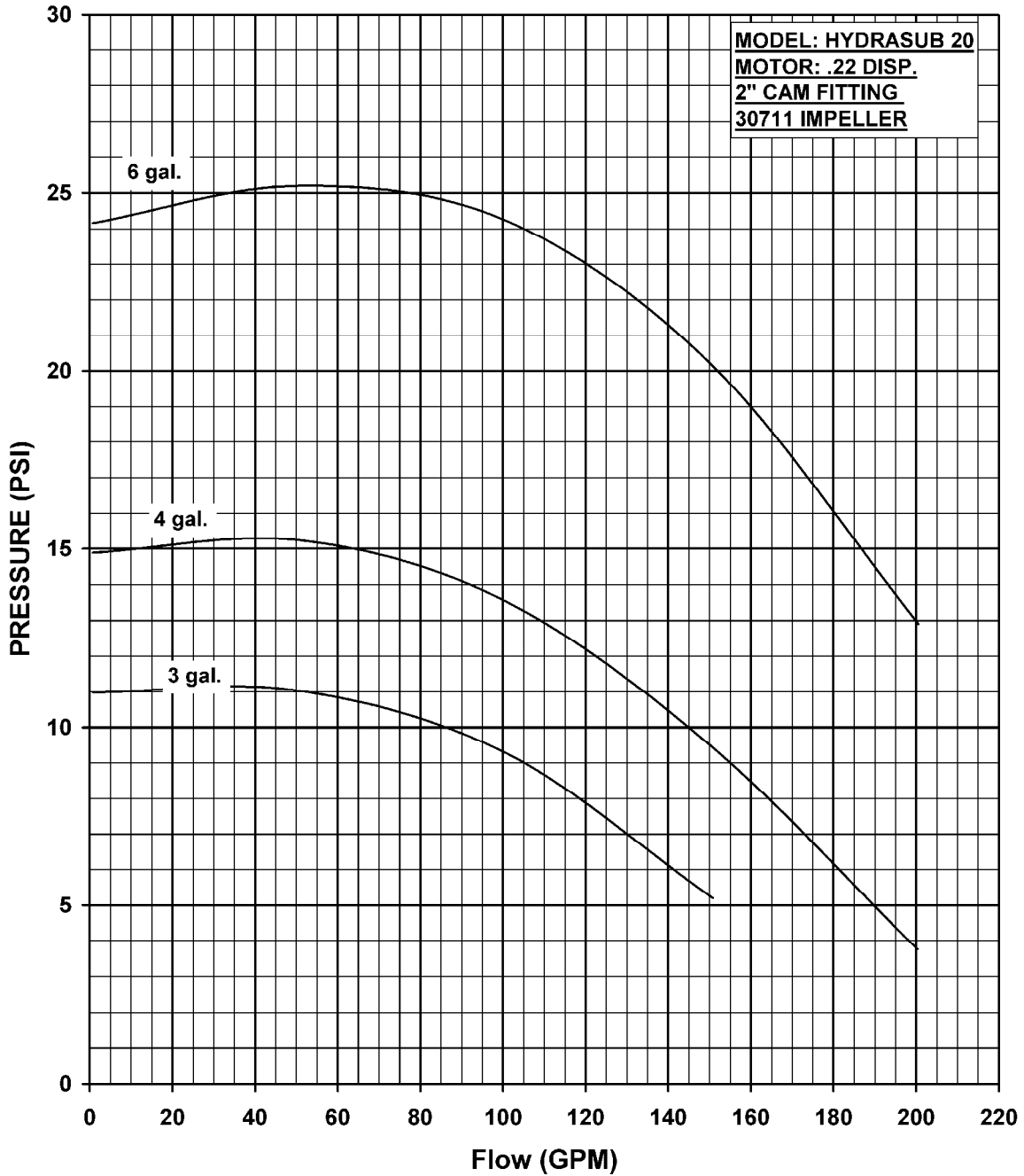
CHEMFLO 8 Exploded View

33804



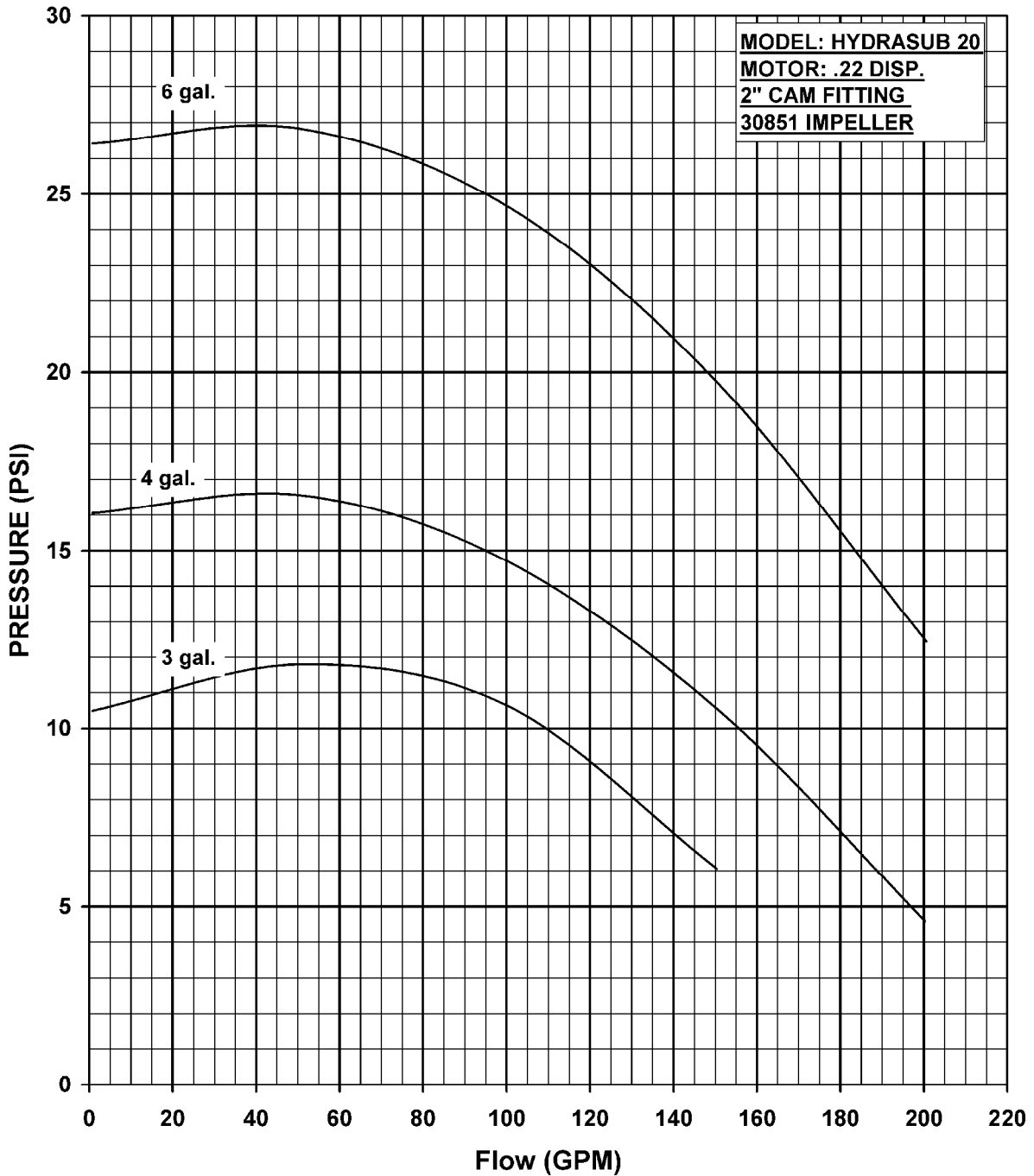
ITEM NO.	PART NO.	DESCRIPTION	QTY.		ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	31650	VOLUTE S.S.	1	*	12	31312	CLAMP- 1.5"	1
2	21255	PIPE PLUG S.S.- 1/8" NPT	2		13	26680	SLINGER	1
* 3	29194	HEX JAM NUT S.S.- 5/8-18	1		14	26994	BODY C.I.	1
* 4	31648	IMPELLER S.S.- 6.18" DIA.	1		15	21266	LOCKWASHER- 3/8"	8
* 5	31372	SHIM	1		16	41259	CAPSCREW- HH 3/8-16 X 1.75"	8
* 6	31311	DRIVE SLEEVE S.S.	1		17	26998	INTERNAL SNAP RING STL.	2
* 7	31233	O-RING- VITON	1	*	18	26997	BALL BEARING	2
* 8	26461	SEVERE SRVC. SEAL- 1.5" T-2 SSC	1		19	33367	SHAFT	1
9	31426	SEAL HOUSING S.S.	1		20	29993	HYDRAULIC MOTOR	1
10	33366	ADAPTER	1		21	21254	LOCK WASHER- 1/2"	2
11	31520	CAPSCREW- SOC. HD. 3/8-16 X 1"	4		22	21246	CAPSCREW- HH 1/2-13 X 1.25"	2

*- RECOMMENDED REPLACEMENT PARTS



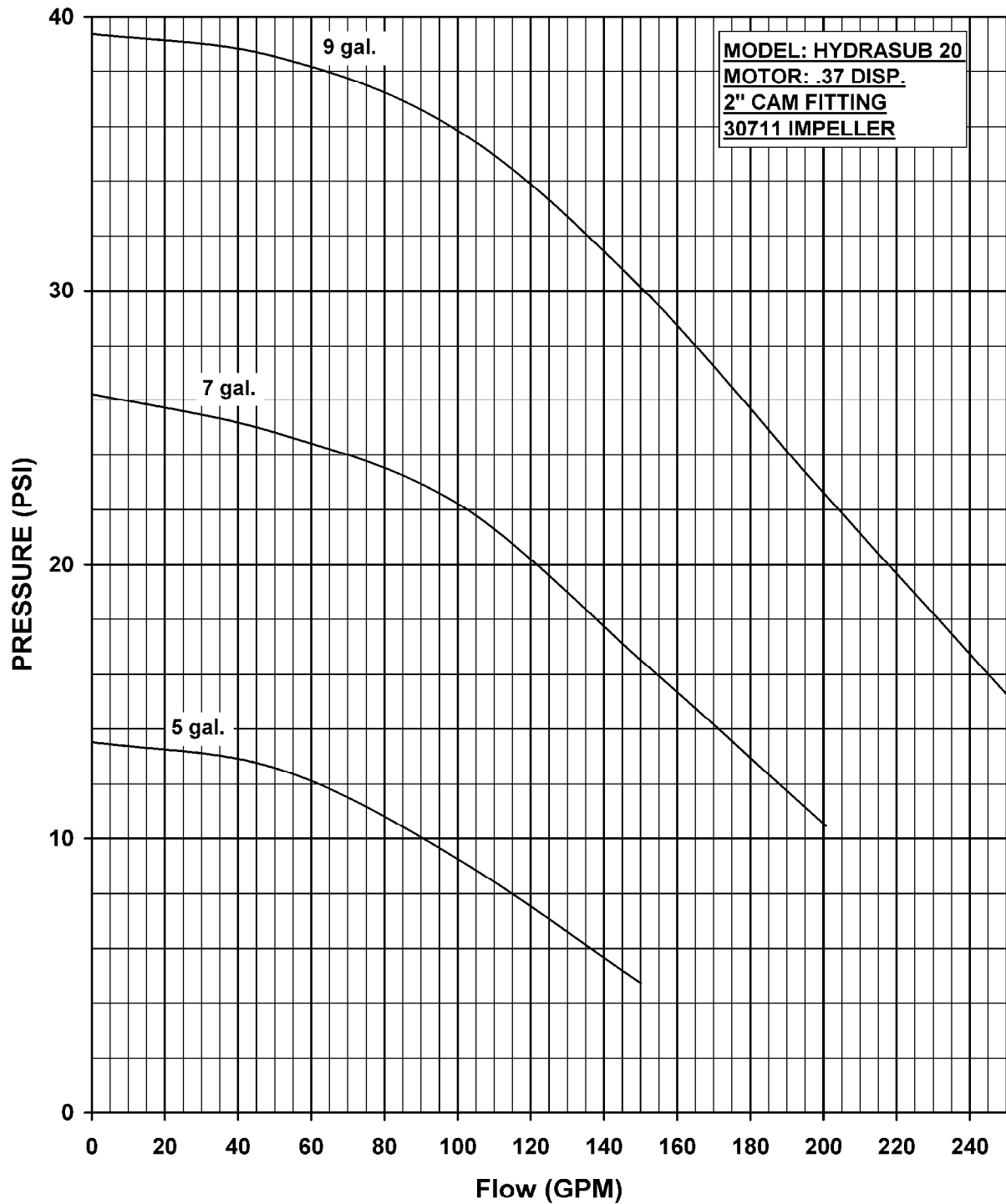
OIL FLOW	SHUT OFF 0 GPM	20 GPM	40 GPM	60 GPM	80 GPM	100 GPM	120 GPM	140 GPM	160 GPM	180 GPM	200 GPM	MAX. HYD. OIL PRESS. REQ.
3 GPM	11 PSI	11 PSI	11 PSI	10 PSI	10 PSI	9 PSI	8 PSI	6 PSI	-	-	-	1550 PSI
4 GPM	15 PSI	15 PSI	15 PSI	15 PSI	15 PSI	14 PSI	12 PSI	10 PSI	8 PSI	6 PSI	4 PSI	1900 PSI
6 GPM	24 PSI	25 PSI	25 PSI	25 PSI	25 PSI	24 PSI	23 PSI	21 PSI	19 PSI	16 PSI	13 PSI	2700 PSI

CN 7117-S



OIL FLOW	SHUT OFF 0 GPM	20 GPM	40 GPM	60 GPM	80 GPM	100 GPM	120 GPM	140 GPM	160 GPM	180 GPM	200 GPM	MAX. HYD. OIL PRESS. REQ.
3 GPM	10 PSI	10 PSI	10 PSI	11 PSI	12 PSI	11 PSI	9 PSI	8 PSI	-	-	-	1850 PSI
4 GPM	16 PSI	16 PSI	17 PSI	16 PSI	16 PSI	15 PSI	13 PSI	12 PSI	9 PSI	7 PSI	5 PSI	2200 PSI
6 GPM	27 PSI	27 PSI	27 PSI	27 PSI	26 PSI	25 PSI	23 PSI	21 PSI	18 PSI	15 PSI	12 PSI	2800 PSI

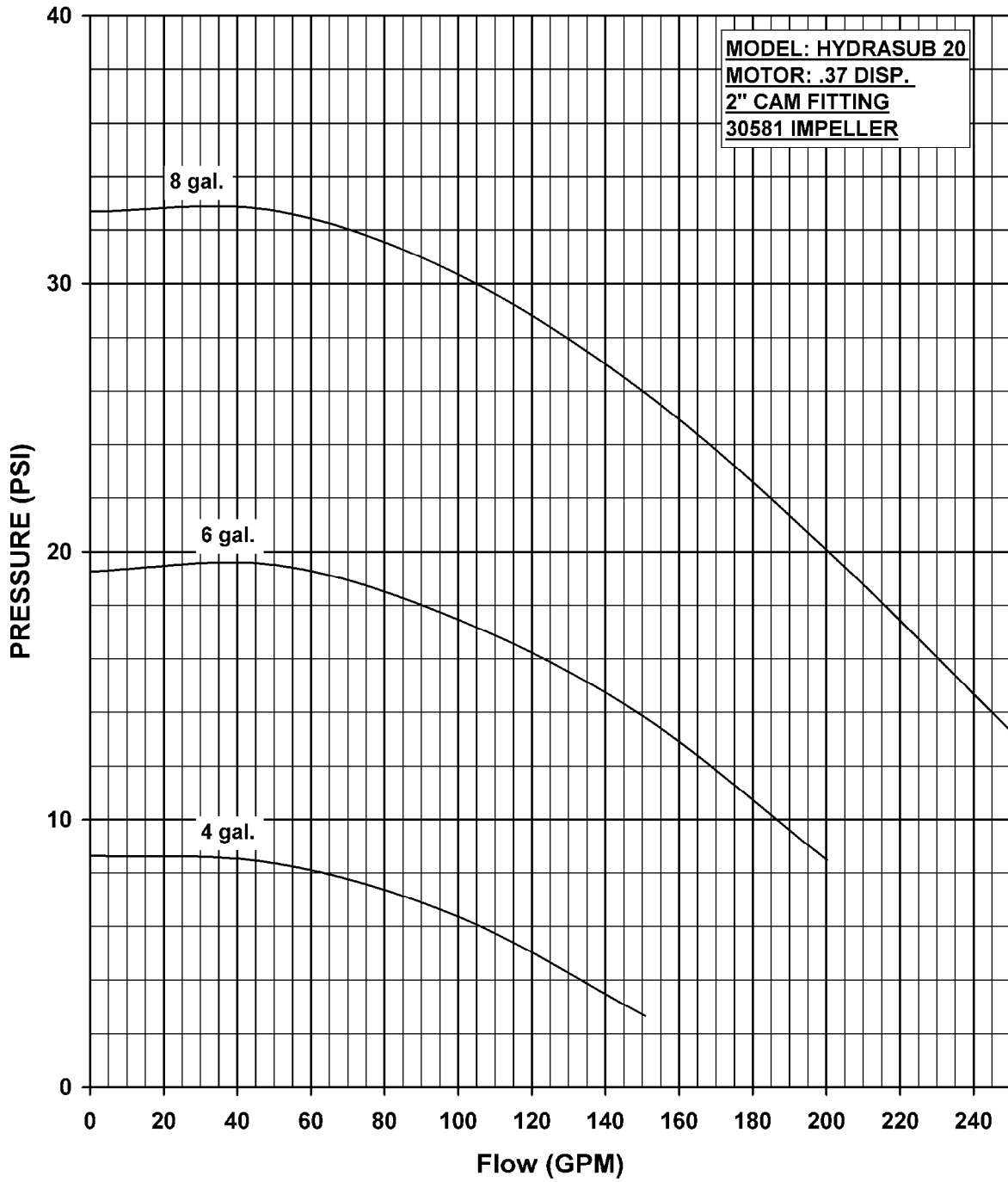
CN 7116-S



OIL FLOW	SHUT OFF 0 GPM	20 GPM	40 GPM	60 GPM	80 GPM	100 GPM	120 GPM	140 GPM	160 GPM	180 GPM	200 GPM	220 GPM	240 GPM	MAX. HYD. OIL PRESS. REQ.
5 GPM	14 PSI	14 PSI	13 PSI	13 PSI	12 PSI	9 PSI	7 PSI	6 PSI	-	-	-	-	-	730 PSI
7 GPM	27 PSI	26 PSI	25 PSI	24 PSI	24 PSI	23 PSI	20 PSI	18 PSI	16 PSI	13 PSI	11 PSI	-	-	1290 PSI
9 GPM	39 PSI	38 PSI	38 PSI	37 PSI	37 PSI	36 PSI	34 PSI	32 PSI	28 PSI	26 PSI	23 PSI	18 PSI	17 PSI	1850 PSI

CN 7096-S

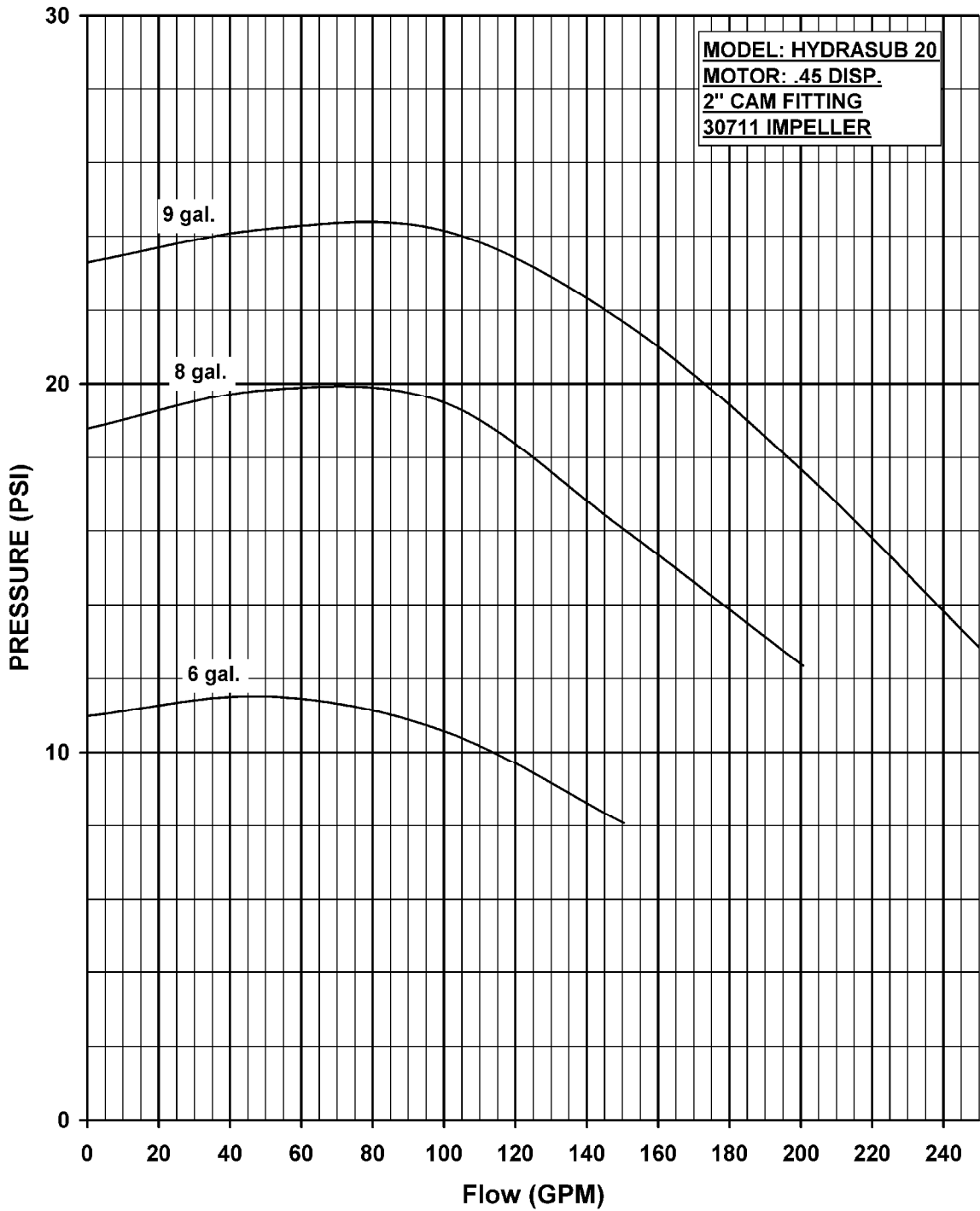
HYDRASUB Performance



OIL FLOW	SHUT OFF	20	40	60	80	100	120	140	160	180	200	220	240	MAX. HYD. OIL PRESS REQ.
	0 GPM	GPM	GPM	GPM	GPM	GPM	GPM	GPM	GPM	GPM	GPM	GPM	GPM	
4 GPM	8 PSI	8 PSI	8 PSI	8 PSI	7 PSI	6 PSI	5 PSI	4 PSI	-	-	-	-	-	700
6 GPM	19 PSI	19 PSI	19 PSI	19 PSI	18 PSI	17 PSI	16 PSI	15 PSI	16 PSI	11 PSI	8 PSI	-	-	1350
8 GPM	33 PSI	33 PSI	33 PSI	33 PSI	32 PSI	29 PSI	28 PSI	27 PSI	26 PSI	23 PSI	20 PSI	17 PSI	13 PSI	1680

CN 7097-S

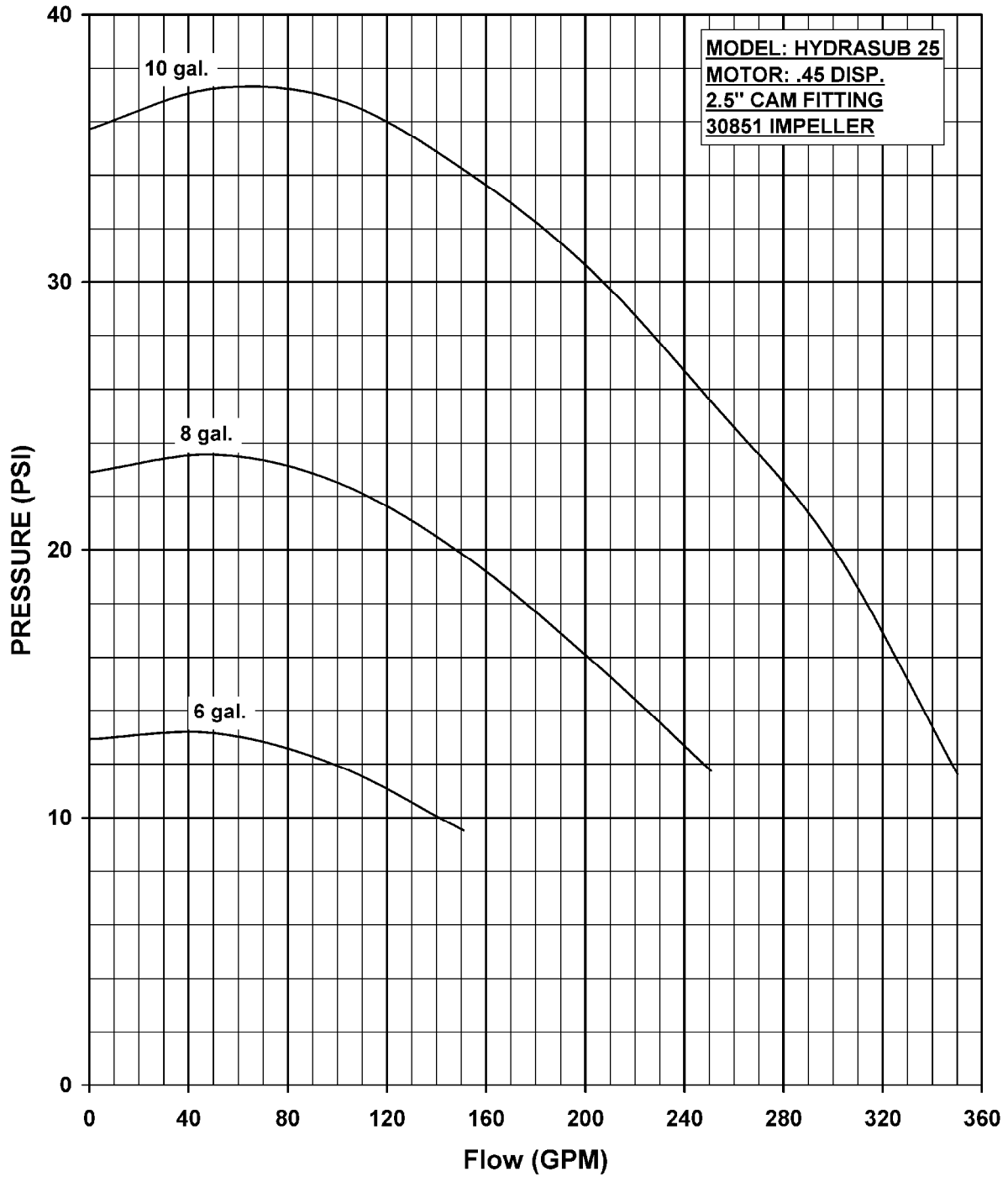
HYDRASUB Performance



OIL FLOW	SHUT OFF 0 GPM	20 GPM	40 GPM	60 GPM	80 GPM	100 GPM	120 GPM	140 GPM	160 GPM	180 GPM	200 GPM	220 GPM	240 GPM	MAX. HYD. OIL PRESS.
6 GPM	11 PSI	12 PSI	12 PSI	12 PSI	12 PSI	11 PSI	9 PSI	8 PSI	-	-	-	-	-	760 PSI
8 GPM	18 PSI	19 PSI	20 PSI	20 PSI	20 PSI	20 PSI	18 PSI	16 PSI	15 PSI	14 PSI	13 PSI	-	-	1230 PSI
9 GPM	24 PSI	24 PSI	24 PSI	24 PSI	24 PSI	24 PSI	24 PSI	23 PSI	22 PSI	19 PSI	17 PSI	16 PSI	13 PSI	1450 PSI

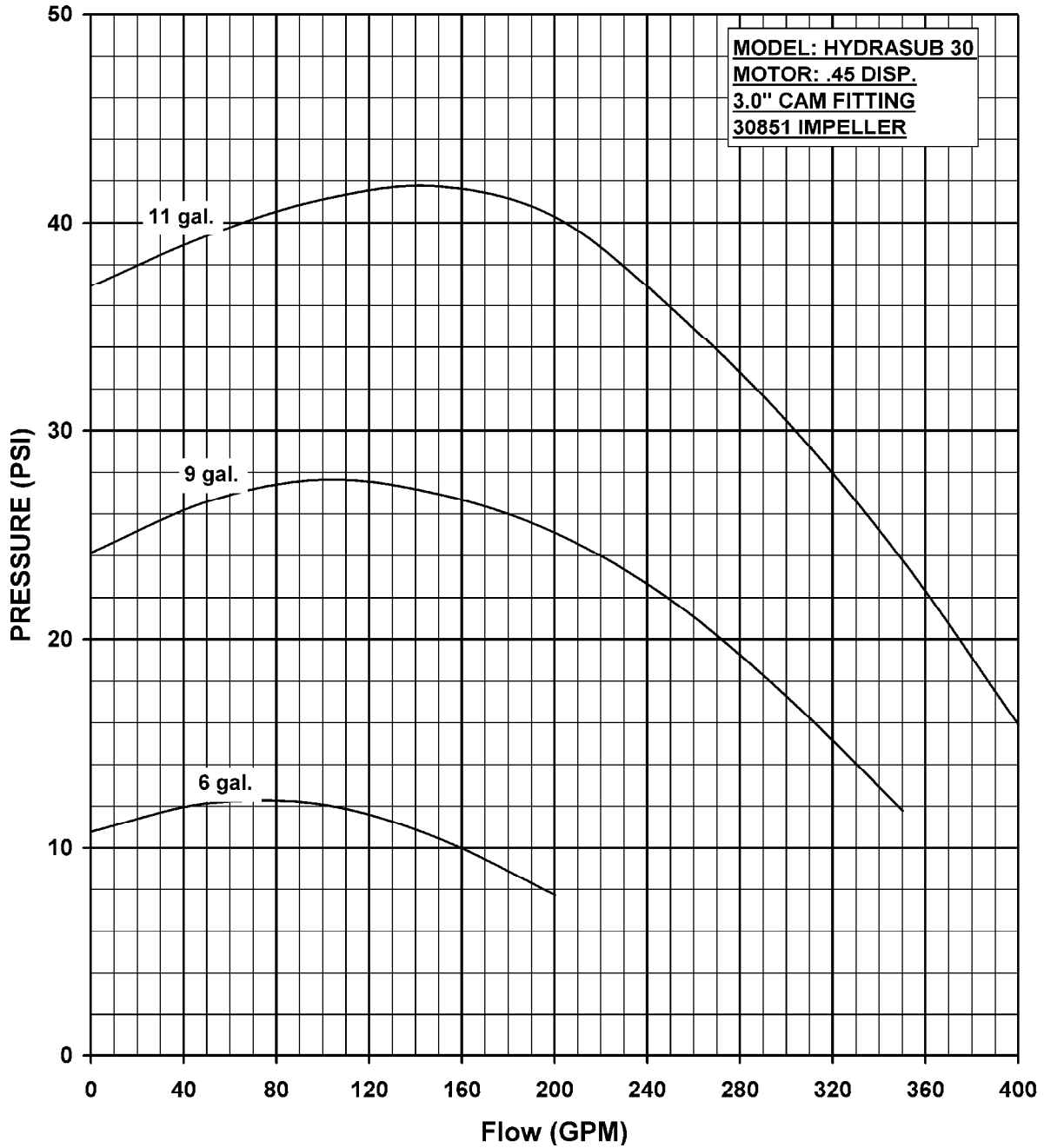
CN 7098-S

HYDRASUB Performance



OIL FLOW	SHUT OFF 0 GPM	40 GPM	80 GPM	120 GPM	160 GPM	200 GPM	240 GPM	280 GPM	320 GPM	360 GPM	MAX. HYD. OIL PRESS. REQ.
6 GPM	13 PSI	13 PSI	13 PSI	12 PSI	-	-	-	-	-	-	850 PSI
8 GPM	23 PSI	24 PSI	23 PSI	22 PSI	19 PSI	17 PSI	12 PSI	-	-	-	1500 PSI
10 GPM	36 PSI	38 PSI	37 PSI	36 PSI	34 PSI	31 PSI	27 PSI	23 PSI	17 PSI	-	2150 PSI

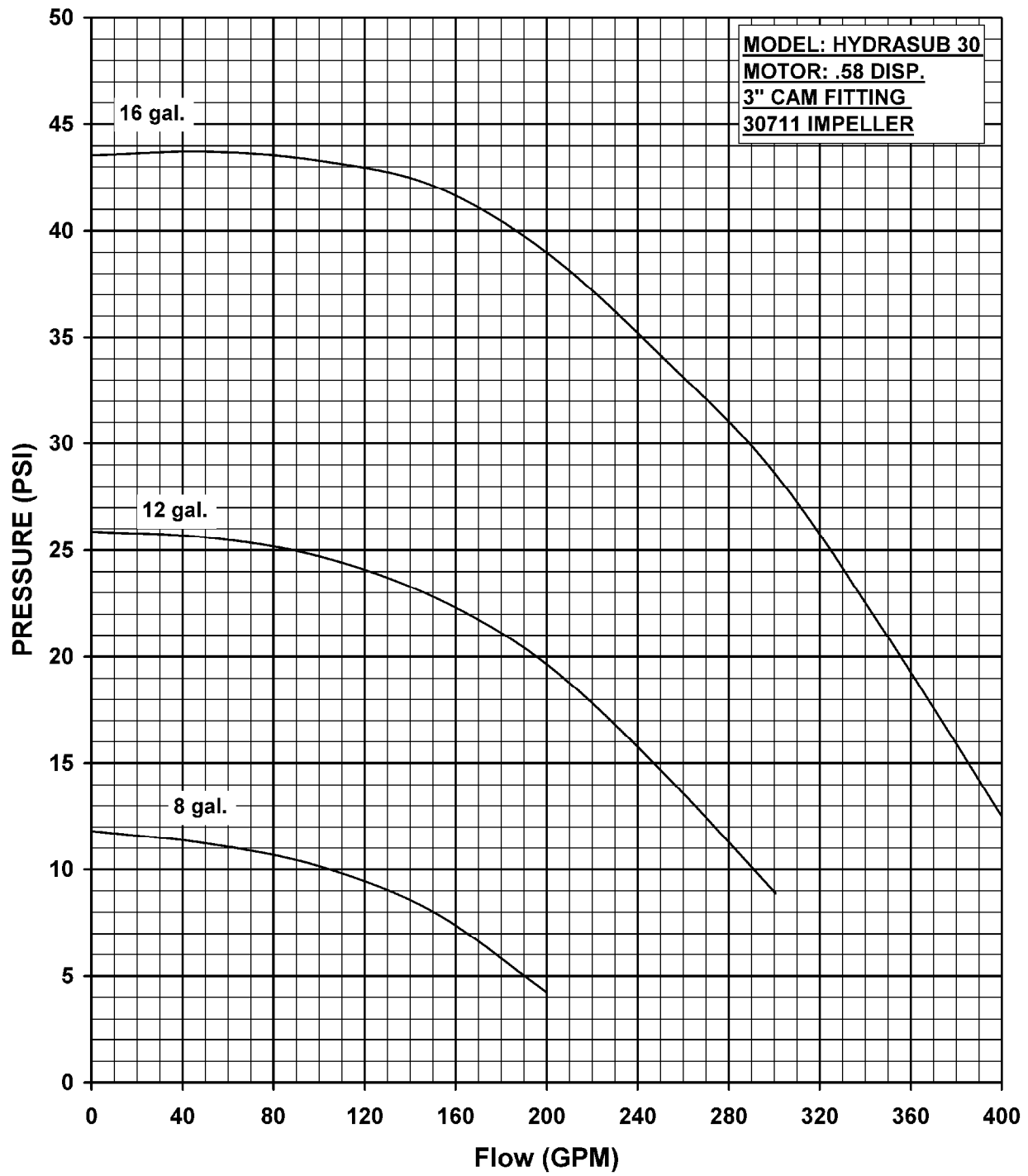
CN 7099-S



OIL FLOW	SHUT OFF 0 GPM	40 GPM	80 GPM	120 GPM	160 GPM	200 GPM	240 GPM	280 GPM	320 GPM	360 GPM	400 GPM	MAX. HYD. OIL PRESS. REQ.
6 GPM	11 PSI	12 PSI	13 PSI	12 PSI	10 PSI	8 PSI	-	-	-	-	-	940 PSI
9 GPM	24 PSI	26 PSI	27 PSI	27 PSI	26 PSI	25 PSI	23 PSI	19 PSI	15 PSI	-	-	1920 PSI
11 GPM	37 PSI	38 PSI	40 PSI	42 PSI	42 PSI	38 PSI	37 PSI	33 PSI	27 PSI	23 PSI	16 PSI	2450 PSI

CN 7100-S

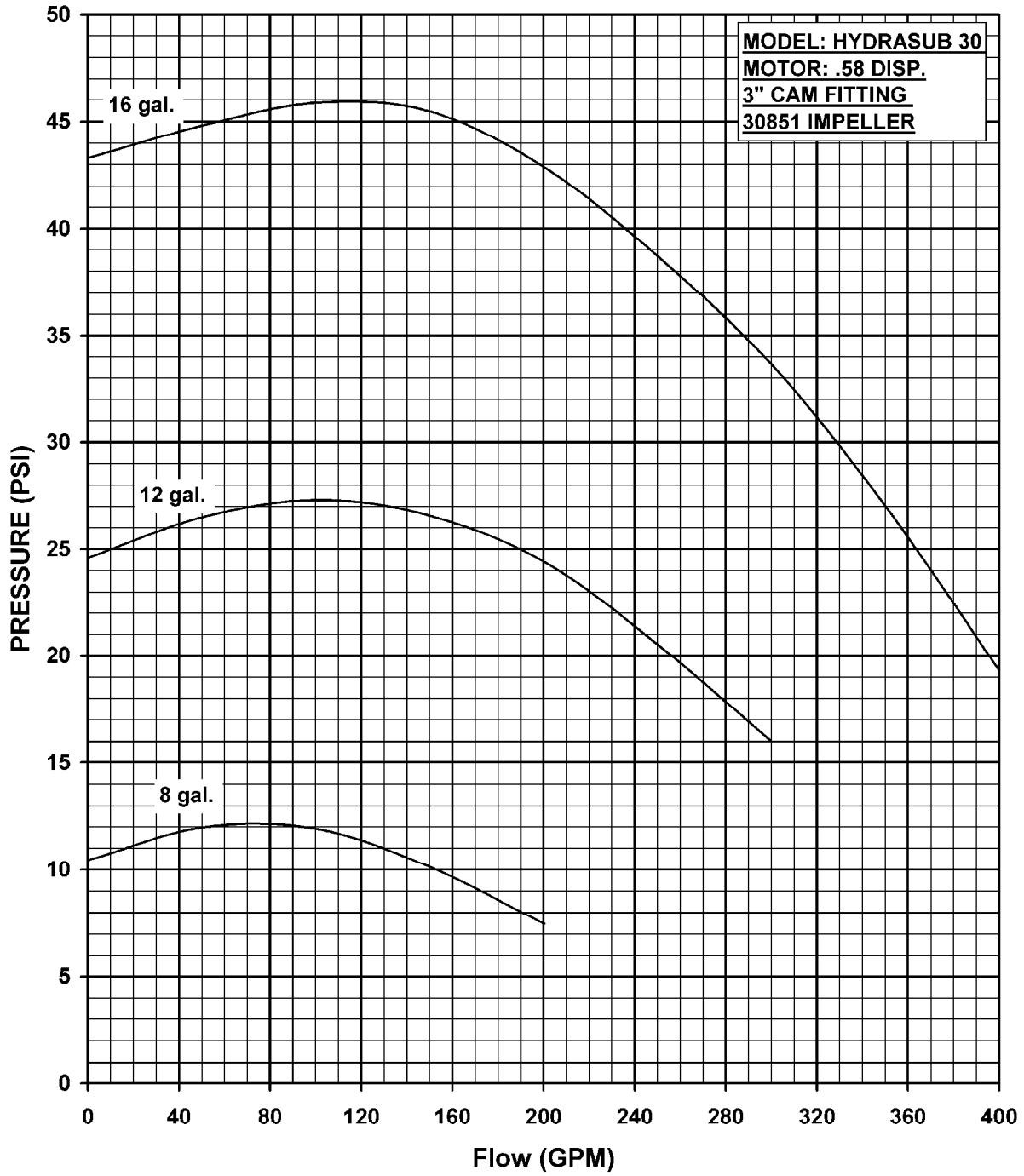
HYDRASUB Performance



OIL FLOW	SHUT OFF 0 GPM	40 GPM	80 GPM	120 GPM	160 GPM	200 GPM	240 GPM	280 GPM	320 GPM	360 GPM	400 GPM	MAX. HYD. OIL PRESS. REQ.
8 GPM	12 PSI	11 PSI	11 PSI	9 PSI	7 PSI	4 PSI	-	-	-	-	-	650 PSI
12 GPM	26 PSI	26 PSI	25 PSI	24 PSI	22 PSI	20 PSI	16 PSI	11 PSI	-	-	-	1100 PSI
16 GPM	43 PSI	43 PSI	43 PSI	43 PSI	42 PSI	39 PSI	35 PSI	31 PSI	26 PSI	19 PSI	13 PSI	1700 PSI

CN 7119-S

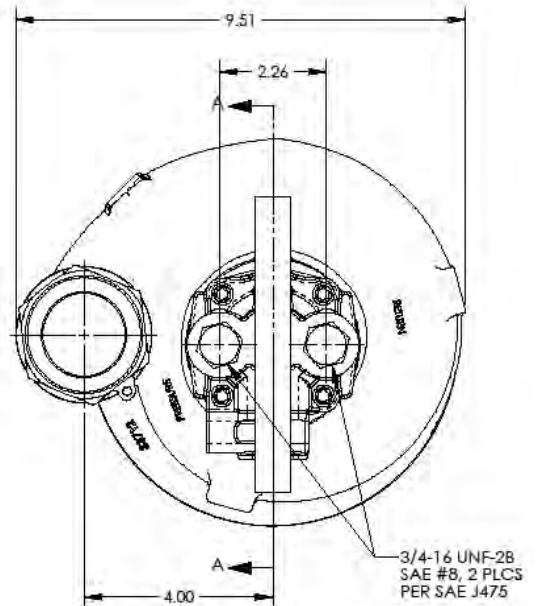
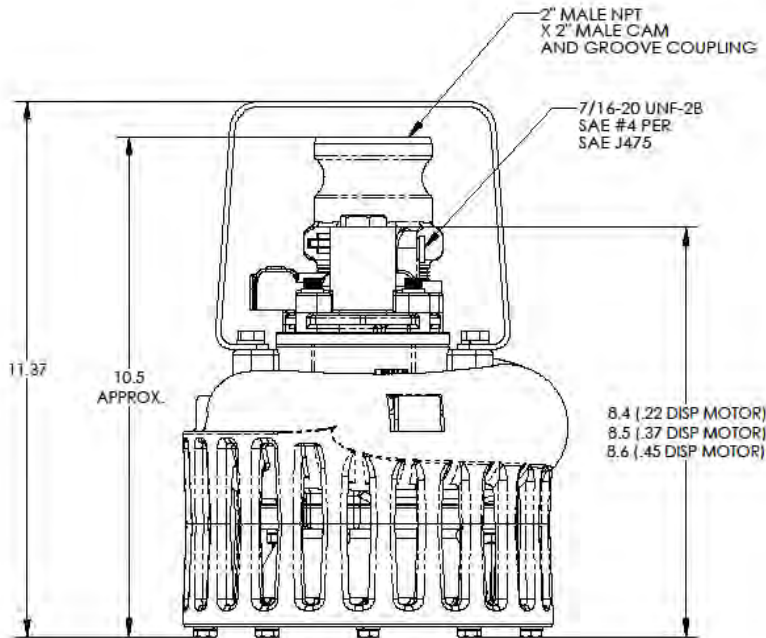
HYDRASUB Performance



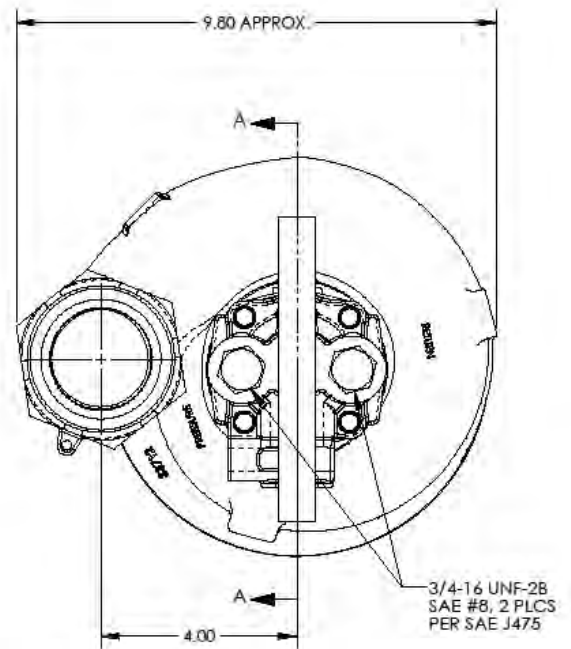
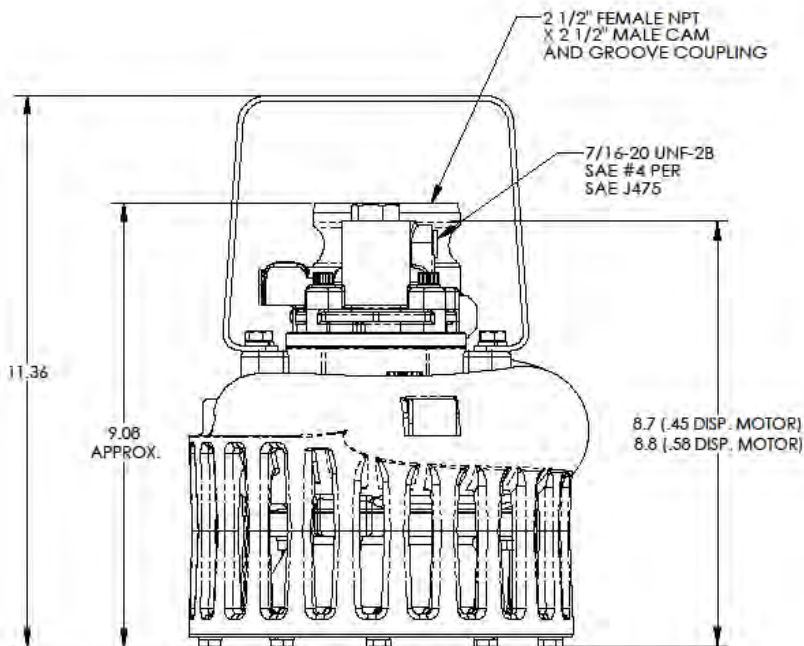
OIL FLOW	SHUT OFF 0 GPM	40 GPM	80 GPM	120 GPM	160 GPM	200 GPM	240 GPM	280 GPM	320 GPM	360 GPM	400 GPM	MAX. HYD. OIL PRESS. REQ.
8 GPM	10 PSI	12 PSI	12 PSI	11 PSI	10 PSI	12 PSI	18 PSI	-	-	-	-	800 PSI
12 GPM	25 PSI	26 PSI	27 PSI	27 PSI	26 PSI	24 PSI	21 PSI	-	-	-	-	1500 PSI
16 GPM	43 PSI	44 PSI	46 PSI	47 PSI	46 PSI	43 PSI	40 PSI	36 PSI	31 PSI	26 PSI	19 PSI	2200 PSI

CN 7118-S

HYDRASUB Dimensions

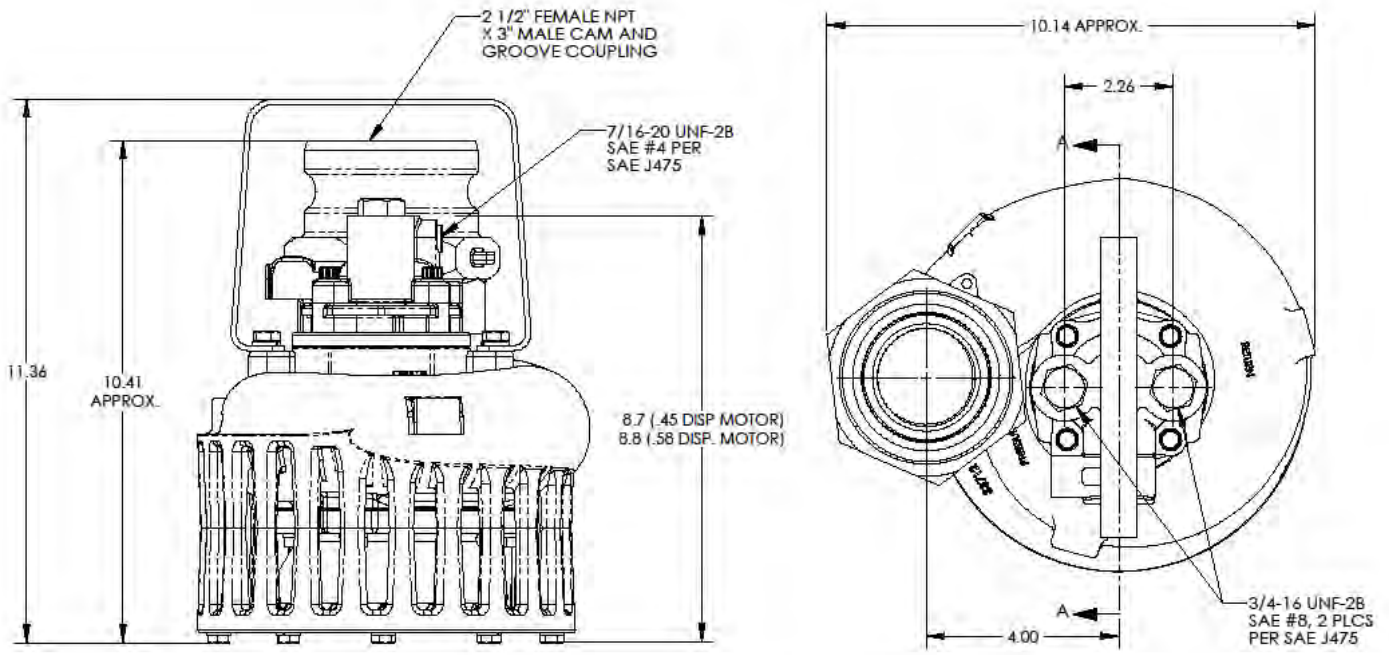


(HYDRAULIC HYDRASUB WITH 2" DISCHARGE)



(HYDRAULIC HYDRASUB WITH 2.5" DISCHARGE)

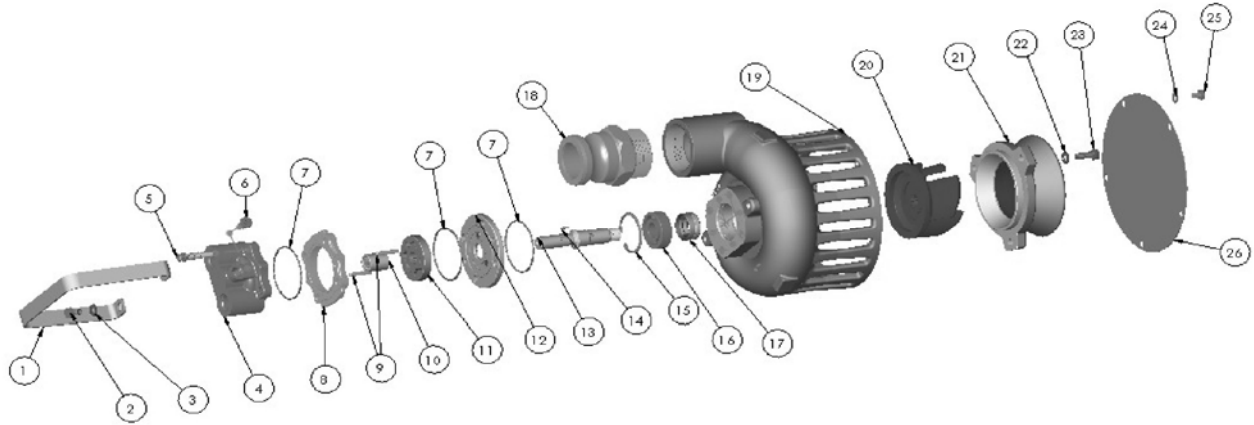
HYDRASUB Dimensions



(HYDRAULIC HYDRASUB WITH 3" DISCHARGE)

**HYDRASUB 20 Exploded View
.22 Disp. Motor**

36023

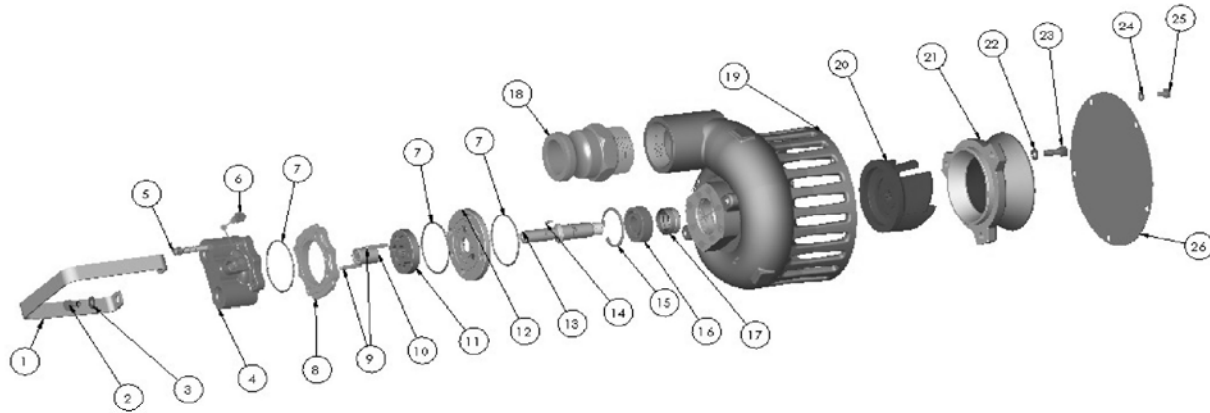


ITEM NO.	PART NO.	DESCRIPTION	QTY.		ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	33778	HANDLE STL.	1		14	29044	DOWEL PIN STL. 1/8 X 3/8 LG.	1
2	30320	HEX HEAD CAP SCREW S.S. 5/16-18 X 1/2	2		15	33742	SNAP RING STL.	1
3	21238	LOCK WASHER S.S. 5/16 X 1/8	2		16	27556	BALL BEARING	1
4	36316	HYDRAULIC MOTOR COVER	1	*	17	33718	LIP SEAL VITON	2
5	29029	12 POINT SCREW 5/16-24	4		18	34022	HOSE ADAPTER 2" NPT	1
6	35635	PORT PLUG 7/16-20 UNF SAE #4 W/ORING	1		19	33713	HOUSING HYDRASUB	1
7	34054	QUAD RING VITON	3		20	30711	IMPELLER S.S. 5 BLADE	1
8	36319	SPACER C.I. - .22 DISP	1		21	33715	SUCTION FLANGE AL. HYDRASUB	1
9	36586	DOWEL PIN .19 X .875 LG.	2		22	21238	LOCKWASHER S.S. 5/16 X 1/8	3
10	29046	NEEDLE BEARING	1		23	21242	HEX HEAD CAP SCREW S.S. 5/16-18 X 7/8	3
* 11	36452	GEROTOR ASSY. - .22 DISP.	1		24	33564	LOCK WASHER S.S. 1/4"	5
12	35726	THRUST PLATE ASSY.	1		25	30551	HEX HEAD CAPSCREW S.S. 1/4-20 X 3/8	5
* 13	33720	SHAFT STL. HYDRASUB	1		26	33716	COVER PLATE S.S.	1

*- RECOMMENDED REPLACEMENT PARTS

**HYDRASUB 20 Exploded View
.37 Disp. Motor**

35585

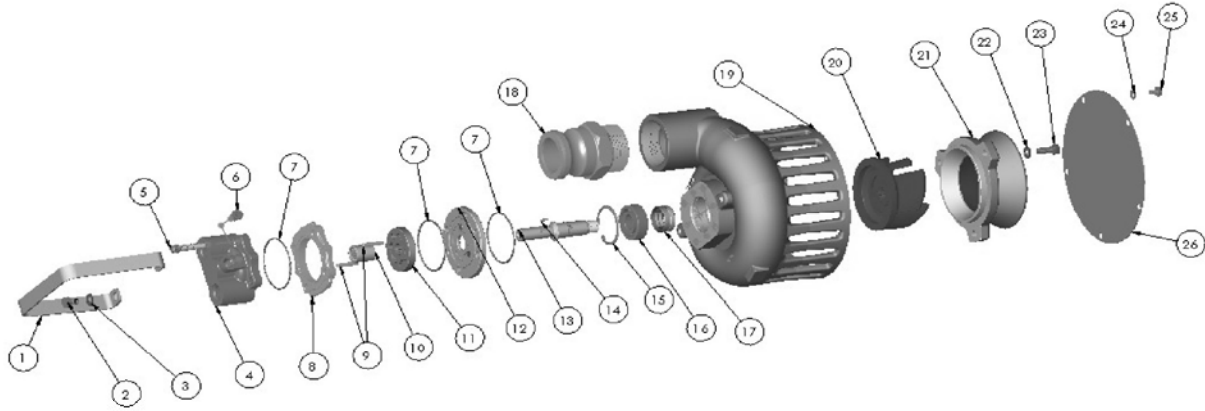


ITEM NO.	PART NO.	DESCRIPTION	QTY.	ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	33778	HANDLE STL.	1	14	29044	DOWEL PIN STL. 1/8 X 3/8 LG.	1
2	30320	HEX HEAD CAP SCREWS S.S. 5/16-18 X 1/2	2	15	33742	SNAP RING STL.	1
3	21238	LOCK WASHER S.S. 5/16 X 1/8	2	16	27556	BALL BEARING	1
4	36316	HYDRAULIC MOTOR COVER	1	* 17	33718	LIP SEAL VITON	2
5	29029	12 POINT SCREW 5/16-24	4	18	34022	HOSE ADAPTER 2" NPT	1
6	35635	PORT PLUG 7/16-20 UNF SAE #4 W/ORING	1	19	33713	HOUSING HYDRASUB	1
7	34054	QUAD RING VITON	3	20	30711	IMPELLER S.S. 5 BLADE	1
8	36320	SPACER C.I. - .37 DISP	1	21	33715	SUCTION FLANGE AL. HYDRASUB	1
9	36370	DOWEL PIN .19 X 1.12 LG.	2	22	21238	LOCKWASHER S.S. 5/16 X 1/8	3
10	29046	NEEDLE BEARING	1	23	21242	HEX HEAD CAP SCREW S.S. 5/16-18 X 7/8	3
* 11	29045	GEROTOR ASSY. - .37 DISP.	1	24	33564	LOCK WASHER S.S. 1/4"	5
12	35726	THRUST PLATE ASSY.	1	25	30551	HEX HEAD CAPSCREW S.S. 1/4-20 X 3/8	5
* 13	33720	SHAFT STL. HYDRASUB	1	26	33716	COVER PLATE S.S.	1

*- RECOMMENDED REPLACEMENT PARTS

**HYDRASUB 20 Exploded View
.45 Disp. Motor**

36027

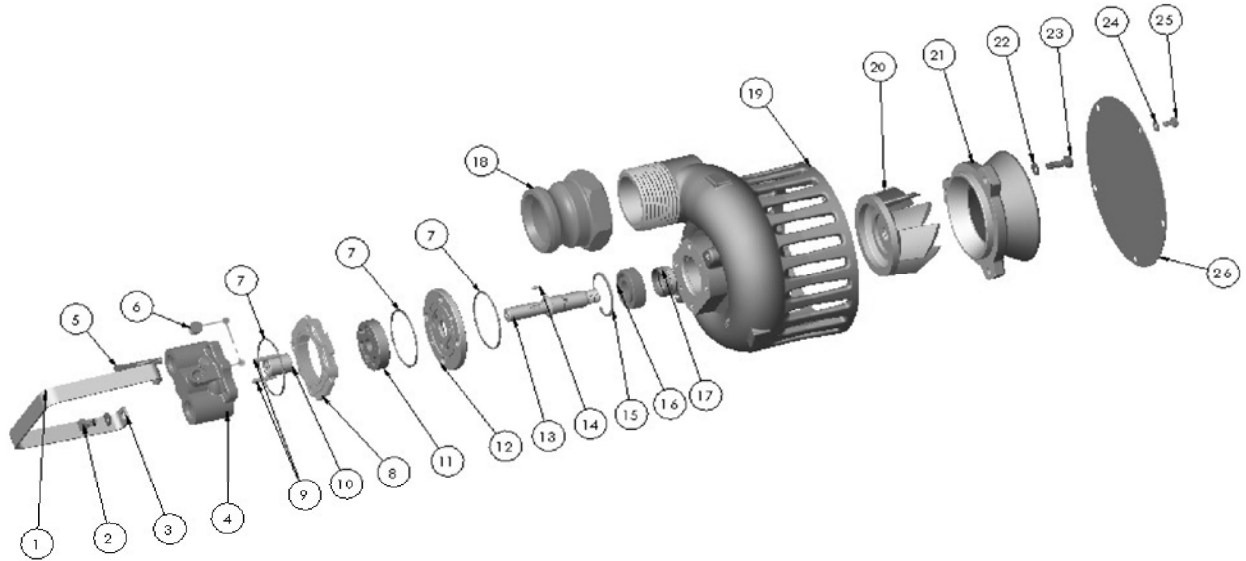


ITEM NO.	PART NO.	DESCRIPTION	QTY.		ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	33778	HANDLE STL.	1		14	29044	DOWEL PIN STL. 1/8 X 3/8 LG.	1
2	30320	HEX HEAD CAP SCREWS S.S. 5/16-18 X 1/2	2		15	33742	SNAP RING STL.	1
3	21236	LOCK WASHER S.S. 5/16 X 1/8	2		16	27556	BALL BEARING	1
4	36316	HYDRAULIC MOTOR COVER	1	*	17	33718	LIP SEAL VITON	2
5	29029	12 POINT SCREW 5/16-24	4		18	34022	HOSE ADAPTER 2 NPT	1
6	35635	PORT PLUG 7/16-20 UNF SAE #4 W/WRING	1		19	33713	HOUSING HYDRASUB	1
7	34054	QUAD RING VITON	3		20	30711	IMPELLER S.S. 5 BLADE	1
8	36325	SPACER C.I. - .45 DISP	1		21	33715	SUCTION FLANGE AL. HYDRASUB	1
9	36370	DOWEL PIN .19 X 1.13 LG.	2		22	21238	LOCKWASHER S.S. 5/16 X 1/8	3
10	29046	NEEDLE BEARING	1		23	21242	HEX HEAD CAP SCREW S.S. 5/16-18 X 7/8	3
* 11	34652	GEROTOR ASSY. - .45 DISP.	1		24	33564	LOCK WASHER S.S. 1/4"	5
12	35726	THRUST PLATE ASSY.	1		25	30551	HEX HEAD CAPSCREW S.S. 1/4-20 X 3/8	5
* 13	33720	SHAFT STL. HYDRASUB	1		26	33716	COVER PLATE S.S.	1

*- RECOMMENDED REPLACEMENT PARTS

HYDRASUB 25 Exploded View .45 Disp. Motor

35576

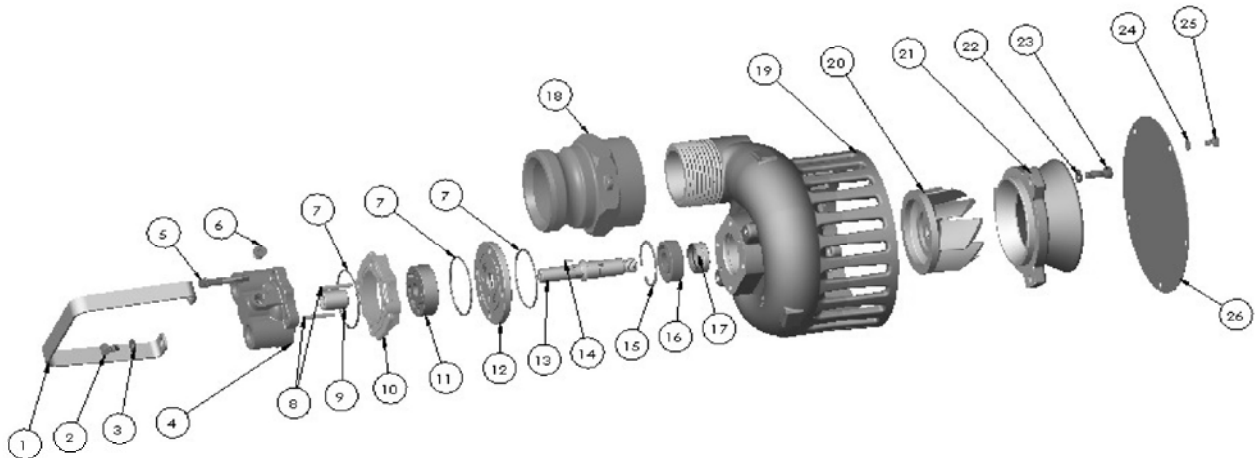


ITEM NO.	PART NO.	DESCRIPTION	QTY.		ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	33778	HANDLE STL.	1	*	13	33720	SHAFT STL. HYDRASUB	1
2	30320	HEX HEAD CAP SCREWS S.S. 5/16-18 X 1/2	2		14	29044	DOWEL PIN STL. 1/8 X 3/8 LG.	1
3	21238	LOCK WASHER S.S. 5/16 X 1/8	2		15	33742	SNAP RING STL.	1
4	36316	HYDRAULIC MOTOR COVER	1		16	27556	BALL BEARING	1
5	29029	12 POINT SCREW 5/16-24	4	*	17	33718	LIP SEAL VITON	2
6	35635	PORT PLUG 7/16-20 UNF SAE #4 W/ORING	1		18	34023	HOSE ADAPTER 2 1/2" NPT	1
7	34054	QUAD RING VITON	3		19	33783	HOUSING HYDRASUB	1
8	36325	SPACER C.I. - .45 DISP	1		20	30851	IMPELLER S.S. 8 BLADE	1
9	36370	DOWEL PIN .19 X 1.12 LG.	2		21	33715	SUCTION FLANGE AL. HYDRASUB	1
10	29046	NEEDLE BEARING	1		22	21238	LOCKWASHER S.S. 5/16 X 1/8	3
* 11	34652	GEROTOR ASSY. - .45 DISP.	1		23	21242	HEX HEAD CAP SCREW S.S. 5/16-18 X 7/8	3
12	35726	THRUST PLATE ASSY.	1		24	33564	LOCK WASHER S.S. 1/4"	5
					25	30551	HEX HEAD CAPSCREW S.S. 1/4-20 X 3/8	5
					26	33716	COVER PLATE S.S.	1

*- RECOMMENDED REPLACEMENT PARTS

**HYDRASUB 30 Exploded View
.58 Disp. Motor**

36147

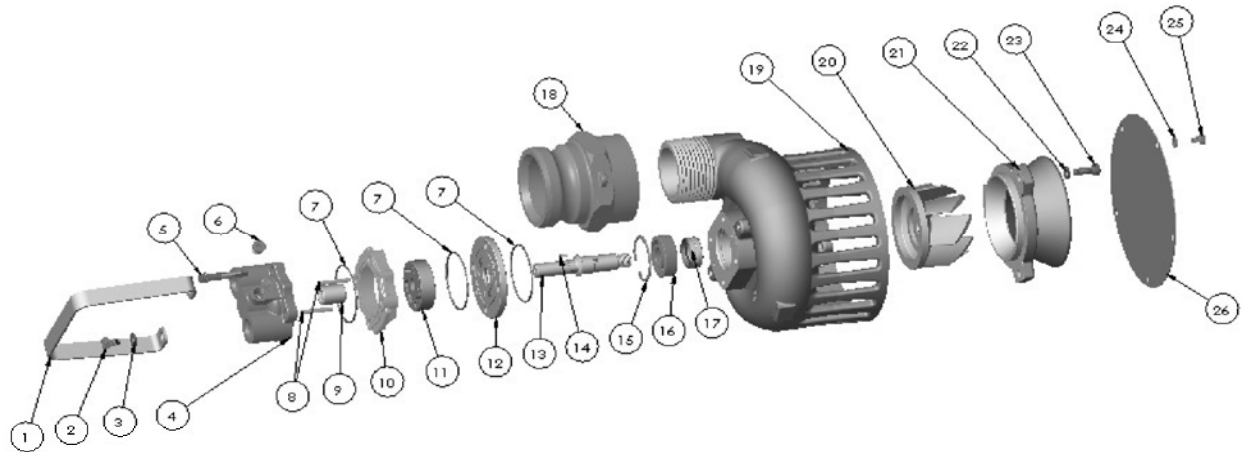


ITEM NO.	PART NO.	DESCRIPTION	QTY.		ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	33778	HANDLE STL.	1		14	29044	DOWEL PIN STL. 1/8 X 3/8 LG.	1
2	30320	HEX HEAD CAP SCREW S.S. 5/16-18 X 1/2	2		15	33742	SNAP RING STL.	1
3	21238	LOCK WASHER S.S. 5/16 X 1/8	2		16	27556	BALL BEARING	1
4	36316	HYDRAULIC MOTOR COVER	1	*	17	33718	LIP SEAL VITON	2
5	34030	12 POINT SCREW 5/16-24	4		18	35003	HOSE ADAPTER 3" NPT	1
6	35635	PORT PLUG 7/16-20 UNF SAE #4 W/ORING	1		19	33783	HOUSING HYDRASUB	1
7	34054	QUAD RING VITON	3		20	30711	IMPELLER S.S. 5 BLADE	1
8	36469	DOWEL PIN .19 X 1.38 LG.	2		21	33715	SUCTION FLANGE AL. HYDRASUB	1
9	29046	NEEDLE BEARING	1		22	21238	LOCKWASHER S.S. 5/16 X 1/8	3
10	35726	THRUST PLATE ASSY.	1		23	21242	HEX HEAD CAP SCREW S.S. 5/16-18 X 7/8	3
* 11	30354	GEROTOR ASSY. - .58 DISP.	1		24	33564	LOCK WASHER S.S. 1/4"	5
12	36326	SPACER C.I. - .58 DISP	1		25	30551	HEX HEAD CAPSCREW S.S. 1/4-20 X 3/8	5
* 13	33720	SHAFT STL. HYDRASUB	1		26	33716	COVER PLATE S.S.	1

*- RECOMMENDED REPLACEMENT PARTS

**HYDRASUB 30 Exploded View
.58 Disp. Motor**

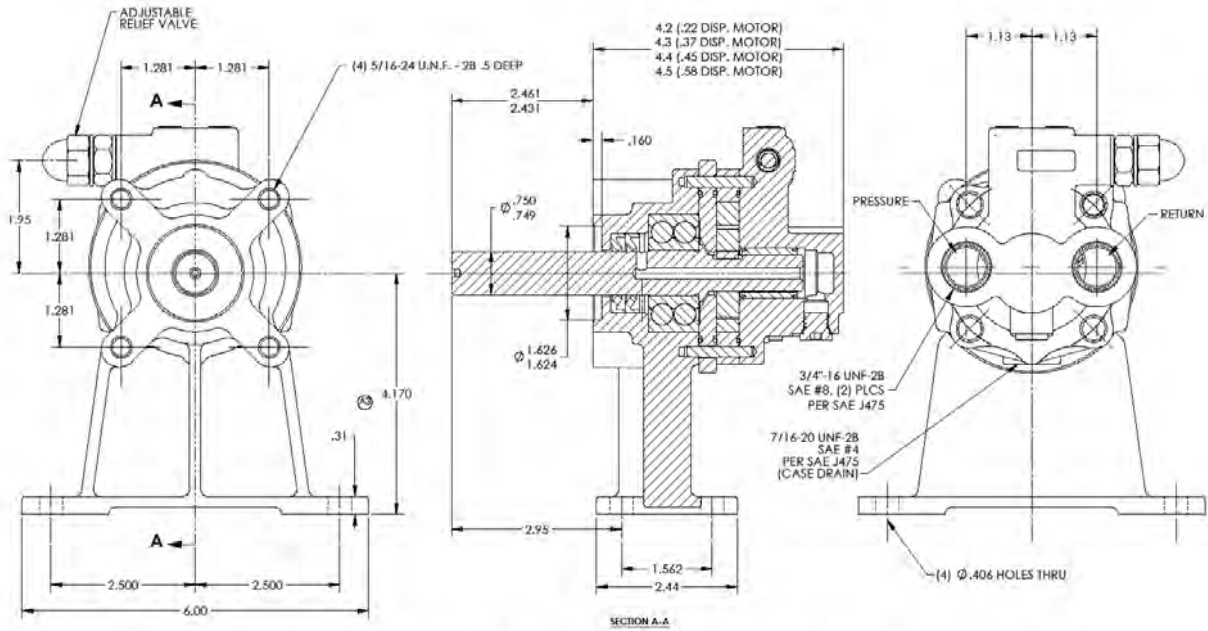
35588



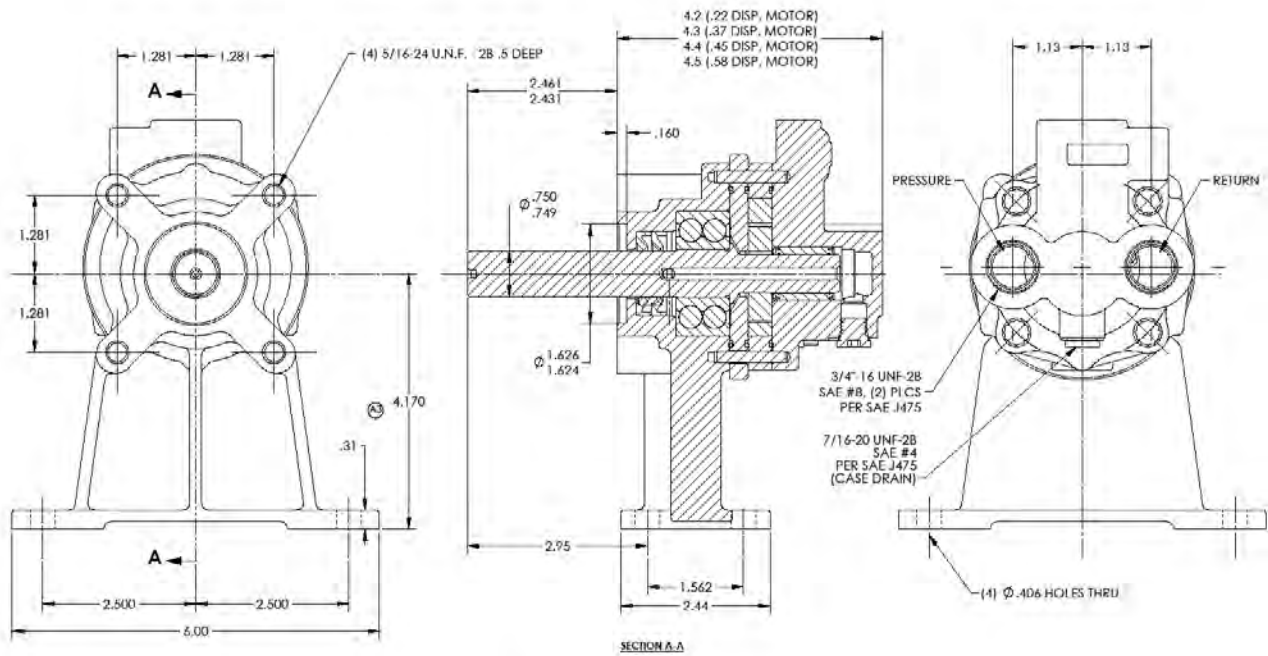
ITEM NO.	PART NO.	DESCRIPTION	QTY.	ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	33778	HANDLE STL.	1	14	29044	DOWEL PIN STL. 1/8 X 3/8 LG.	1
2	30320	HEX HEAD CAP SCREW S.S. 5/16-18 X 1/2	2	15	33742	SNAP RING STL.	1
3	21238	LOCK WASHER S.S. 5/16 X 1/8	2	16	27556	BALL BEARING	1
4	36316	HYDRAULIC MOTOR COVER	1	17	33718	LIP SEAL VITON	2
5	34030	12 POINT SCREW 5/16-24	4	18	35003	HOSE ADAPTER 3" NPT	1
6	35635	PORT PLUG 7/16-20 UNF SAE #4 W/ORING	1	19	33783	HOUSING HYDRASUB	1
7	34054	QUAD RING VITON	3	20	30851	IMPELLER S.S. 8 BLADE	1
8	36469	DOWEL PIN .19 X 1.38 LG.	2	21	33715	SUCTION FLANGE AL. HYDRASUB	1
9	29046	NEEDLE BEARING	1	22	21238	LOCKWASHER S.S. 5/16 X 1/8	3
10	35726	THRUST PLATE ASSY.	1	23	21242	HEX HEAD CAP SCREW S.S. 5/16-18 X 7/8	3
* 11	30354	GEROTOR ASSY. - .58 DISP.	1	24	33564	LOCK WASHER S.S. 1/4"	5
12	36326	SPACER C.I. - .58 DISP	1	25	30551	HEX HEAD CAPSCREW S.S. 1/4-20 X 3/8	5
* 13	33720	SHAFT STL. HYDRASUB	1	26	33716	COVER PLATE S.S.	1

*. RECOMMENDED REPLACEMENT PARTS

HYDRAULIC Dimensions - Pedestal



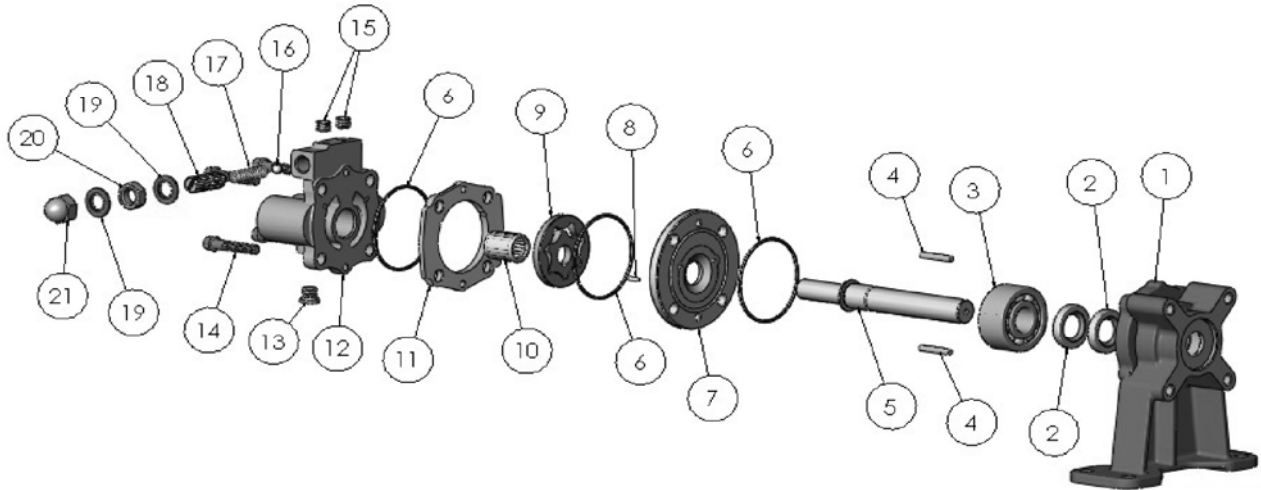
(HYDRAULIC PEDESTAL ASSEMBLY WITH FLOW CONTROL)



(HYDRAULIC PEDESTAL)

**HYDRAULIC Exploded View – Pedestal
.22 Disp. Motor
With Flow Control**

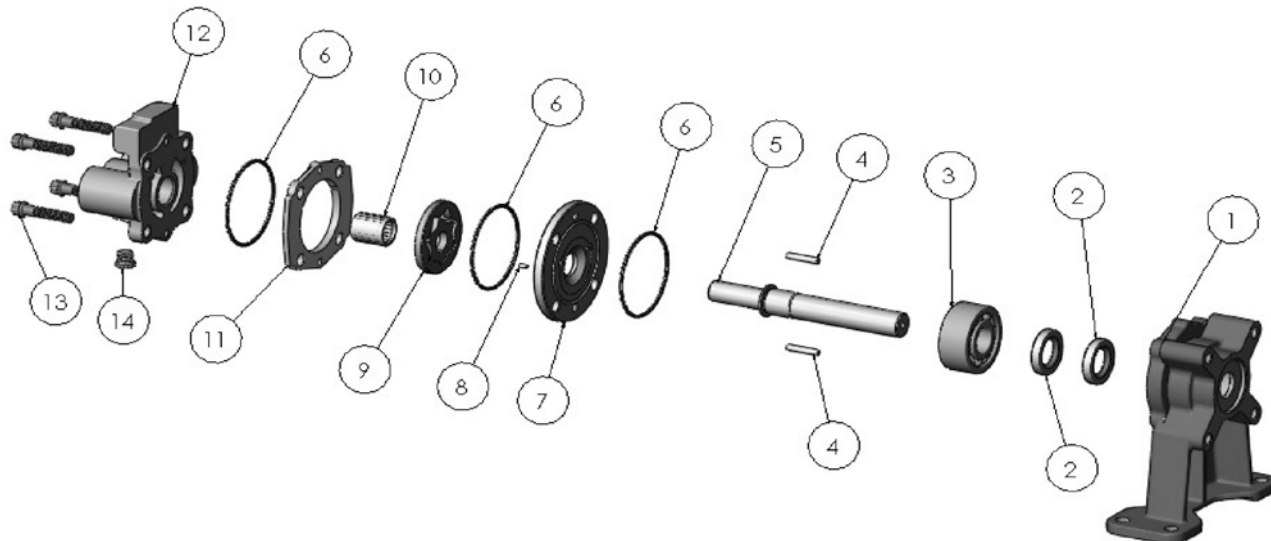
36039



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	34627	BODY - CAST IRON	1
2	33718	LIP SEAL - .75 DIA.	2
3	34591	BEARING - 5304	1
4	36586	DOWEL - 3/16 DIA. X 7/8 LG. - SS	2
5	34601	SHAFT - STEEL	1
6	34054	QUAD RING - VITON	3
7	35726	THRUST PLATE ASSY.	1
8	36468	DOWEL - 1/8 DIA. X .25 LG. - STEEL	1
9	36452	GEROTOR ASSEMBLY - .22 - DISP.	1
10	29046	NEEDLE BEARING - STEEL	1
11	36319	SPACER C.I. - .22 DISP.	1
12	36318	HYD. MTR. COVER	1
13	35635	DRAIN PLUG	1
14	30356	FASTENER 5/16-24 X 1.50 LG. - STEEL	4
15	30824	PIPE PLUG- 1/8" NPT	2
16	35520	STEEL BALL- 17/64"	1
17	35521	SPRING- 1.28" X .36 O.D.	1
18	35522	STUD- 1/2"-20 X 1.25"	1
19	35524	WASHER- 1/2"	2
20	22621	HEX NUT- 1/2"-20	1
21	35523	ACORN NUT- 1/2"-20	1

**HYDRAULIC Exploded View – Pedestal
.22 Disp. Motor**

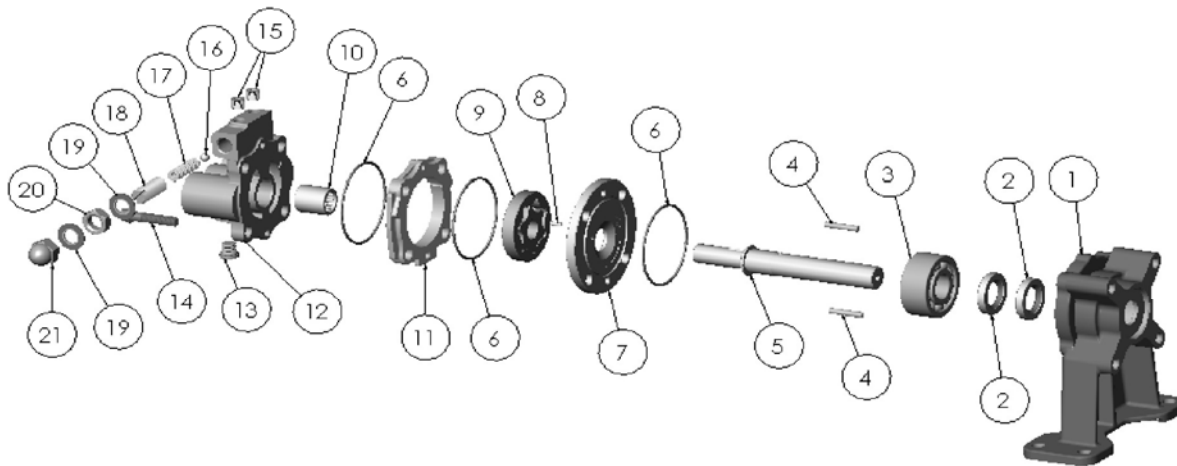
35995



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	34627	BODY - CAST IRON	1
2	33718	LIP SEAL - .75 DIA.	2
3	34591	BEARING - 5304	1
4	36586	DOWEL - 3/16 DIA. X 7/8 LG. - SS	2
5	34601	SHAFT - STEEL	1
6	34054	QUAD RING - VITON	3
7	35726	THRUST PLATE ASSY.	1
8	36468	DOWEL - 1/8 DIA. X .25 LG. - STEEL	1
9	36452	GEROTOR ASSEMBLY - .22 - DISP.	1
10	29046	NEEDLE BEARING - STEEL	1
11	36319	SPACER C.I. - .22 DISP.	1
12	36316	HYD. MTR. COVER	1
13	30356	FASTENER 5/16-24 X 1.50 LG. - STEEL	4
14	35635	DRAIN PLUG	1

**HYDRAULIC Exploded View – Pedestal
.37 Disp. Motor
With Flow Control**

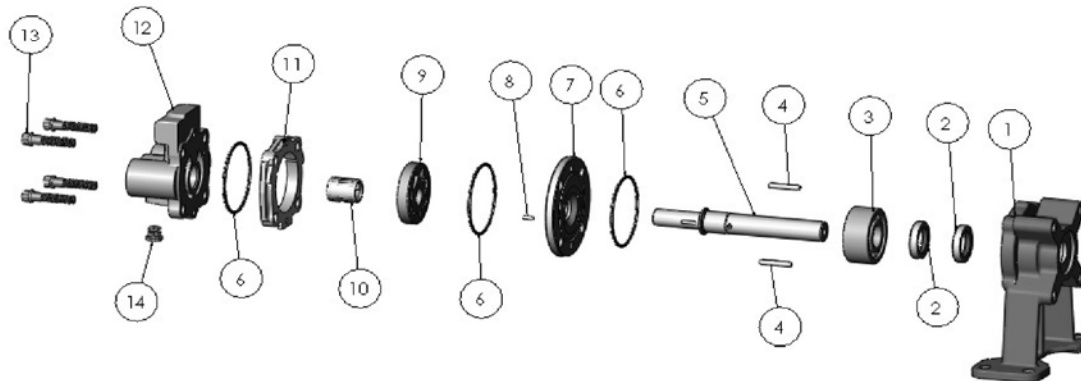
36037



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	34627	BODY - CAST IRON	1
2	33718	LIP SEAL - .75 DIA.	2
3	34591	BEARING - 5304	1
4	36370	DOWEL - 3/16 DIA. X 3/4 LG. - STEEL	2
5	34601	SHAFT - STEEL	1
6	34054	QUAD RING - VITON	3
7	35726	THRUST PLATE ASSY.	1
8	29044	DOWEL - 1/8 DIA. X .375 LG. - STEEL	1
9	29045	GEROTOR ASSEMBLY - .37 - DISP.	1
10	29046	NEEDLE BEARING - STEEL	1
11	36320	SPACER C.I. - .37 DISP.	1
12	36318	HYD. MTR. COVER	1
13	35635	DRAIN PLUG	1
14	30356	FASTENER 5/16-24 X 1.50 LG. - STEEL	4
15	30824	PIPE PLUG- 1/8" NPT	2
16	35520	STEEL BALL- 17/64"	1
17	35521	SPRING- 1.28" X .36 O.D.	1
18	35522	STUD- 1/2"-20 X 1.25"	1
19	35524	WASHER- 1/2"	2
20	22621	HEX NUT- 1/2"-20	1
21	35523	ACORN NUT- 1/2"-20	1

**HYDRAULIC Exploded View – Pedestal
.37 Disp. Motor**

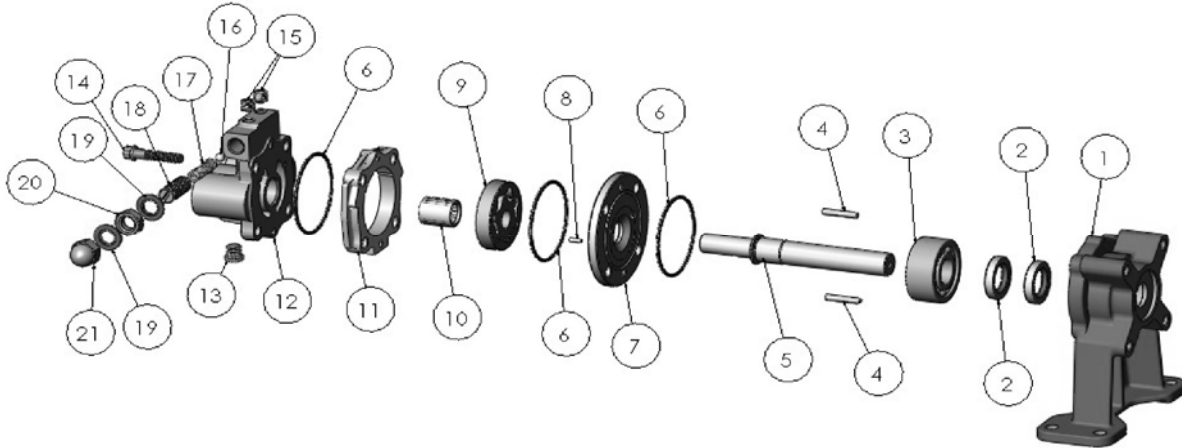
36447



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	34627	BODY - CAST IRON	1
2	33718	LIP SEAL - .75 DIA.	2
3	34591	BEARING - 5304	1
4	36370	DOWEL - 3/16 DIA. X 3/4 LG. - STEEL	2
5	34601	SHAFT - STEEL	1
6	34054	QUAD RING - VITON	3
7	35726	THRUST PLATE ASSY.	1
8	29044	DOWEL - 1/8 DIA. X .375 LG. - STEEL	1
9	29045	GEROTOR ASSEMBLY - .37 - DISP.	1
10	29046	NEEDLE BEARING - STEEL	1
11	36320	SPACER C.I. - .37 DISP.	1
12	36316	HYD. MTR. COVER	1
13	30356	FASTENER 5/16-24 X 1.50 LG. - STEEL	4
14	35635	DRAIN PLUG	1

**HYDRAULIC Exploded View – Pedestal
.45 Disp. Motor
With Flow Control**

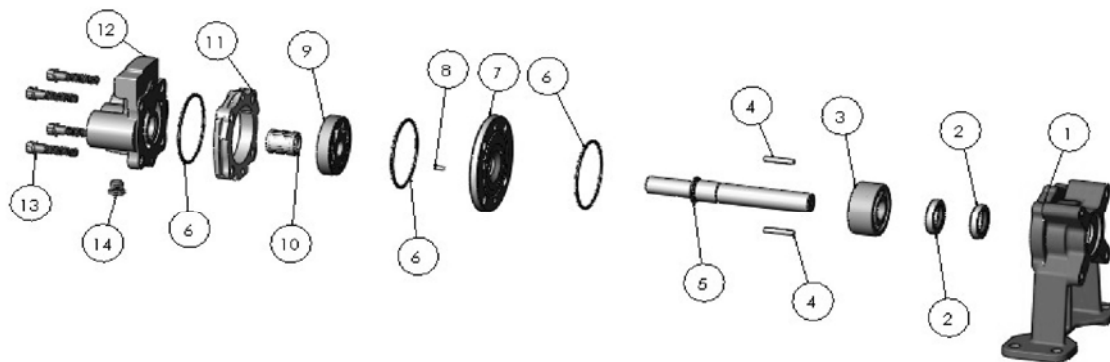
36040



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	34627	BODY - CAST IRON	1
2	33718	LIP SEAL - .75 DIA.	2
3	34591	BEARING - 5304	1
4	36370	DOWEL - 3/16 DIA. X 1.13 LG. - STEEL	2
5	34601	SHAFT - STEEL	1
6	34054	QUAD RING - VITON	3
7	35726	WEAR PLATE ASY- STEEL	1
8	29044	DOWEL - 1/8 DIA. X 3/8 LG. - STEEL	1
9	34652	GEROTOR ASSEMBLY - .45 - STEEL	1
10	29046	NEEDLE BEARING - STEEL	1
11	36325	SPACER C.I. - .45 DISP.	1
12	36318	CI HYD. MTR. COVER	1
13	35635	DRAIN PLUG	1
14	30356	FASTENER 5/16-24 X 1.50 LG. - STEEL	4
15	30824	PIPE PLUG - 1/8" NPT	2
16	35520	STEEL BALL- 17/64"	1
17	35521	SPRING- 1.28" X .36 O.D.	1
18	35522	STUD- 1/2"-20 X 1.25"	1
19	35524	WASHER- 1/2"	2
20	22621	HEX NUT - 1/4-20	1
21	35523	ACORN NUT - 1/2-20	1

**HYDRAULIC Exploded View – Pedestal
.45 Disp. Motor**

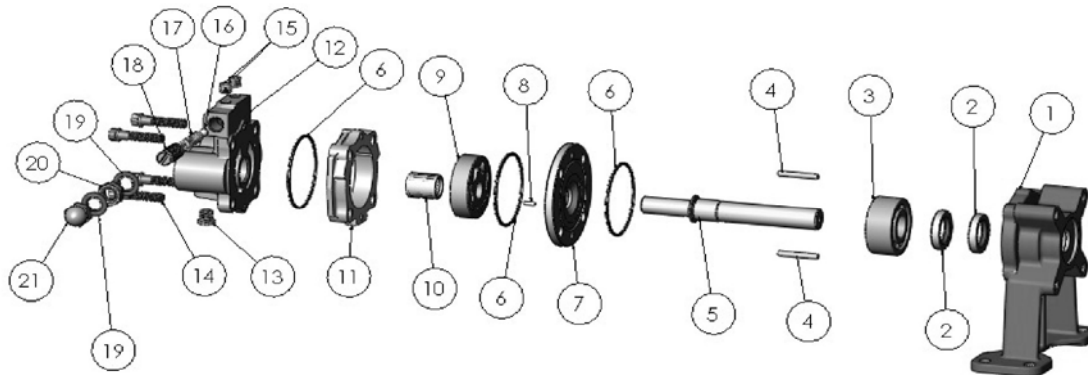
35996



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	34627	BODY - CAST IRON	1
2	33718	LIP SEAL - .75 DIA.	2
3	34591	BEARING - 5304	1
4	36370	DOWEL - 3/16 DIA. X 3/4 LG. - STEEL	2
5	34601	SHAFT - STEEL	1
6	34054	QUAD RING - VITON	3
7	35726	THRUST PLATE ASSY.	1
8	29044	DOWEL - 1/8 DIA. X .375 LG. - STEEL	1
9	34652	GEROTOR ASSEMBLY - .45 - DISP.	1
10	29046	NEEDLE BEARING - STEEL	1
11	36325	SPACER C.I. - .45 DISP.	1
12	36316	HYD. MTR. COVER	1
13	30356	FASTENER 5/16-24 X 1.50 LG. - STEEL	4
14	35635	DRAIN PLUG	1

**HYDRAULIC Exploded View – Pedestal
.58 Disp. Motor
With Flow Control**

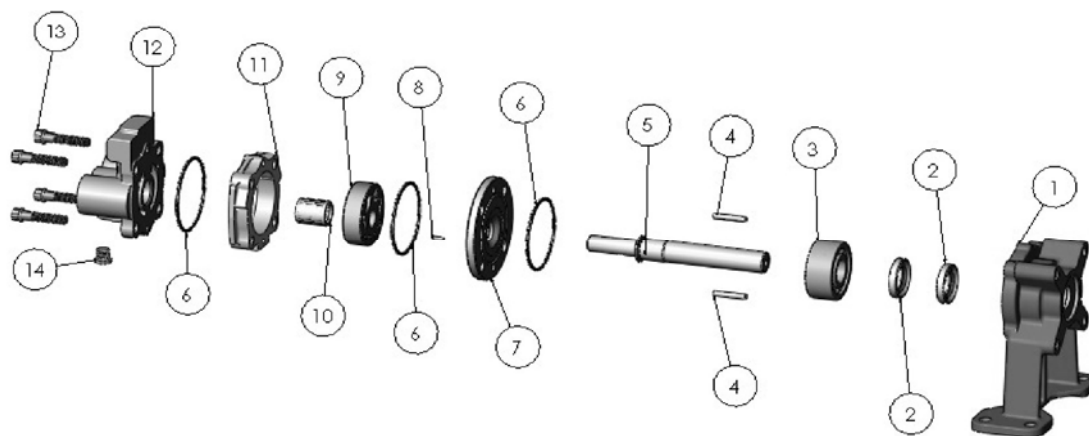
36041



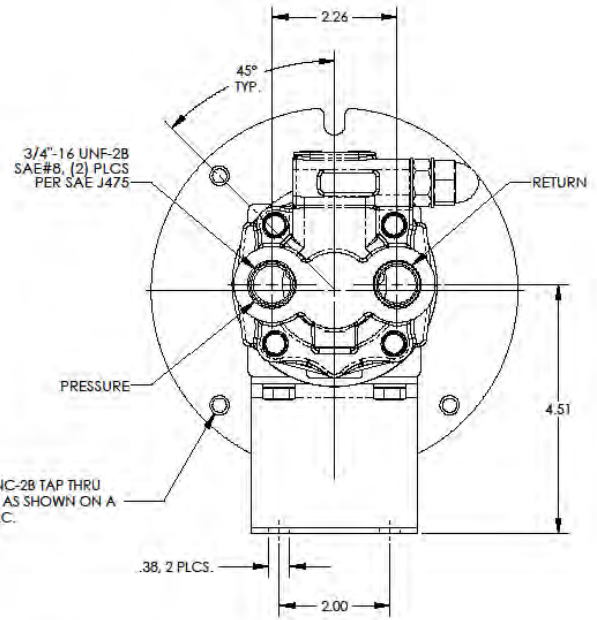
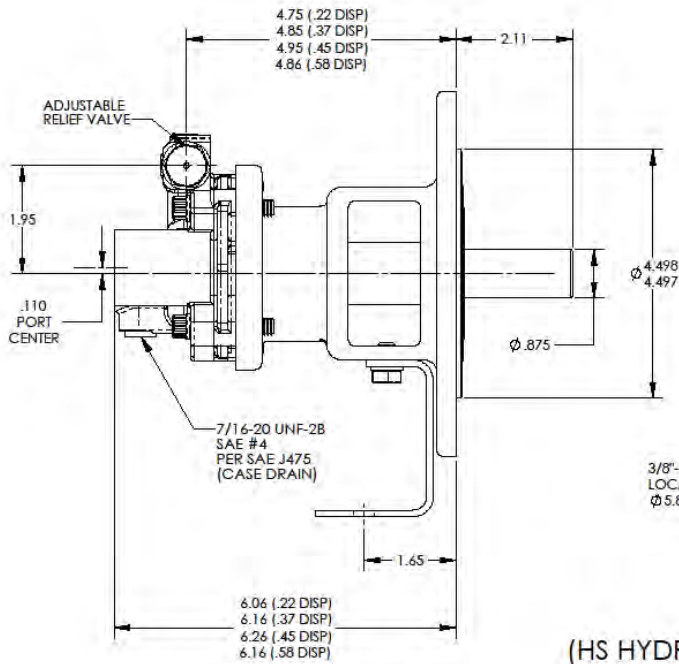
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	34627	BODY - CAST IRON	1
2	33718	LIP SEAL - .75 DIA.	2
3	34591	BEARING - 5304	1
4	36370	DOWEL - 3/16 DIA. X 1.13 LG. - STEEL	2
5	34601	SHAFT - STEEL	1
6	34054	QUAD RING - VITON	3
7	35726	THRUST PLATE ASY- STEEL	1
8	29044	DOWEL - 1/8 DIA. X 3/8 LG. - STEEL	1
9	30354	GEROTOR ASSEMBLY - .58 - STEEL	1
10	29046	NEEDLE BEARING - STEEL	1
11	36326	SPACER C.I. - .58 DISP.	1
12	36318	CI HYD. MTR. COVER	1
13	35635	DRAIN PLUG	1
14	30356	FASTENER 5/16-24 X 1.50 LG. - STEEL	4
15	30824	PIPE PLUG - 1/8" NPT	2
16	35520	STEEL BALL- 17/64"	1
17	35521	SPRING- 1.28" X .36 O.D.	1
18	35522	STUD- 1/2"-20 X 1.25"	1
19	35524	WASHER- 1/2"	2
20	22621	HEX NUT - 1/4-20	1
21	35523	ACORN NUT - 1/2-20	1

**HYDRAULIC Exploded View – Pedestal
.58 Disp. Motor**

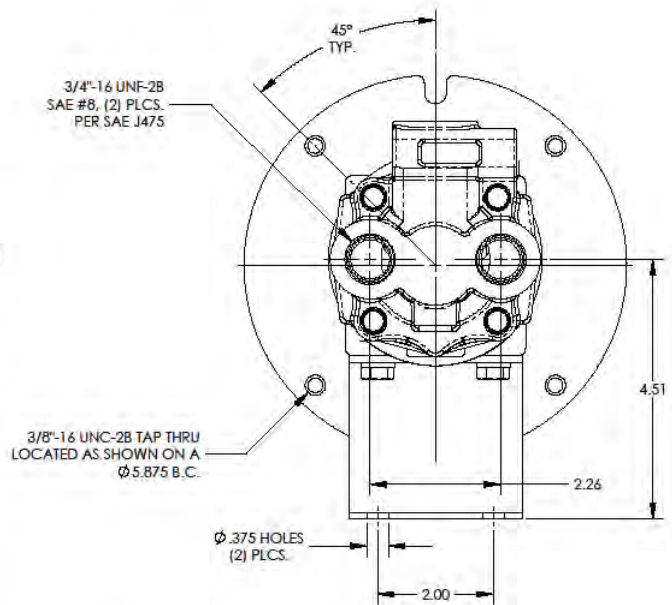
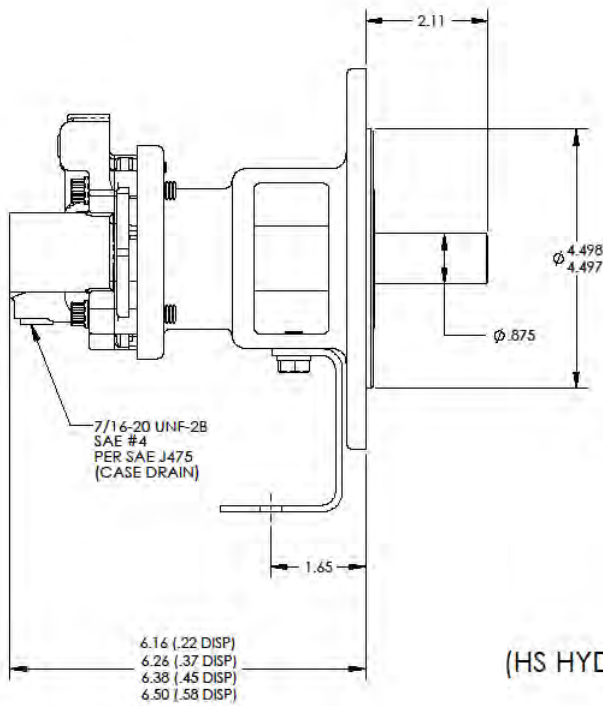
36448



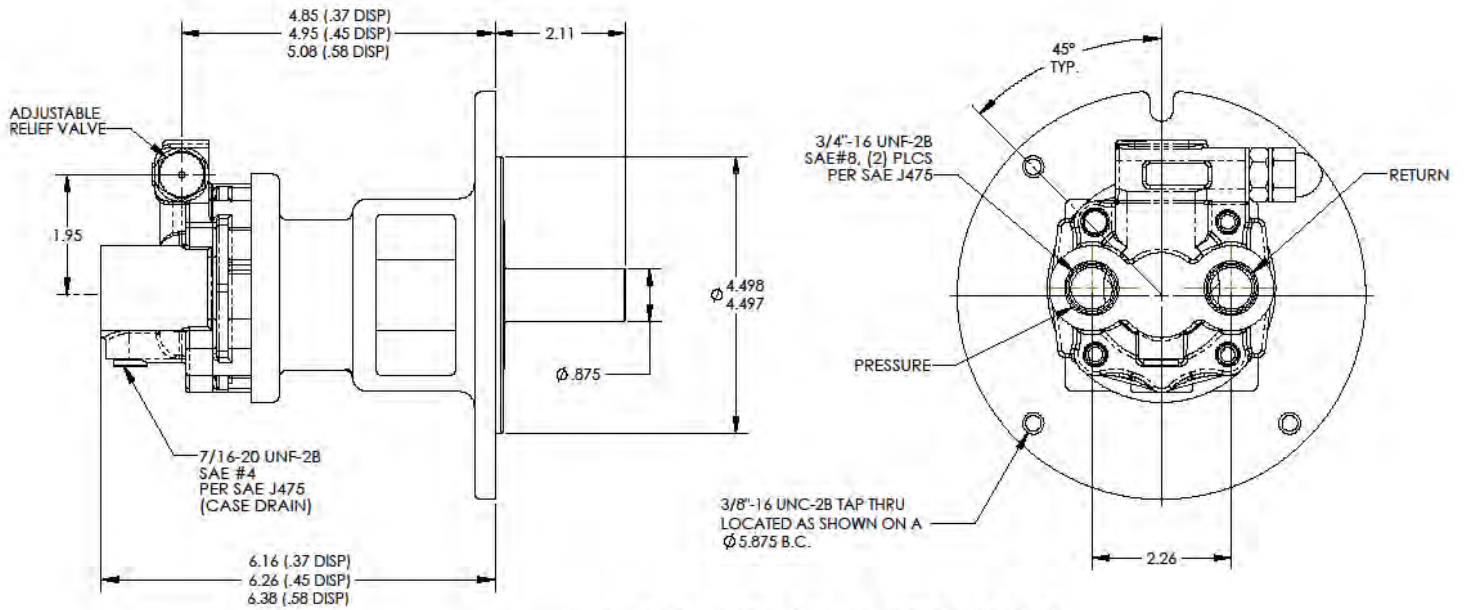
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	34627	BODY - CAST IRON	1
2	33718	LIP SEAL - .75 DIA.	2
3	34591	BEARING - 5304	1
4	36370	DOWEL - 3/16 DIA. X 3/4 LG. - STEEL	2
5	34601	SHAFT - STEEL	1
6	34054	QUAD RING - VITON	3
7	35726	THRUST PLATE ASSY.	1
8	29044	DOWEL - 1/8 DIA. X .375 LG. - STEEL	1
9	30354	GEROTOR ASSEMBLY - .58 - DISP.	1
10	29046	NEEDLE BEARING - STEEL	1
11	36326	SPACER C.I. - .58 DISP.	1
12	36316	HYD. MTR. COVER	1
13	34030	FASTENER 5/16-24 X 1.50 LG. - STEEL	4
14	35635	DRAIN PLUG	1



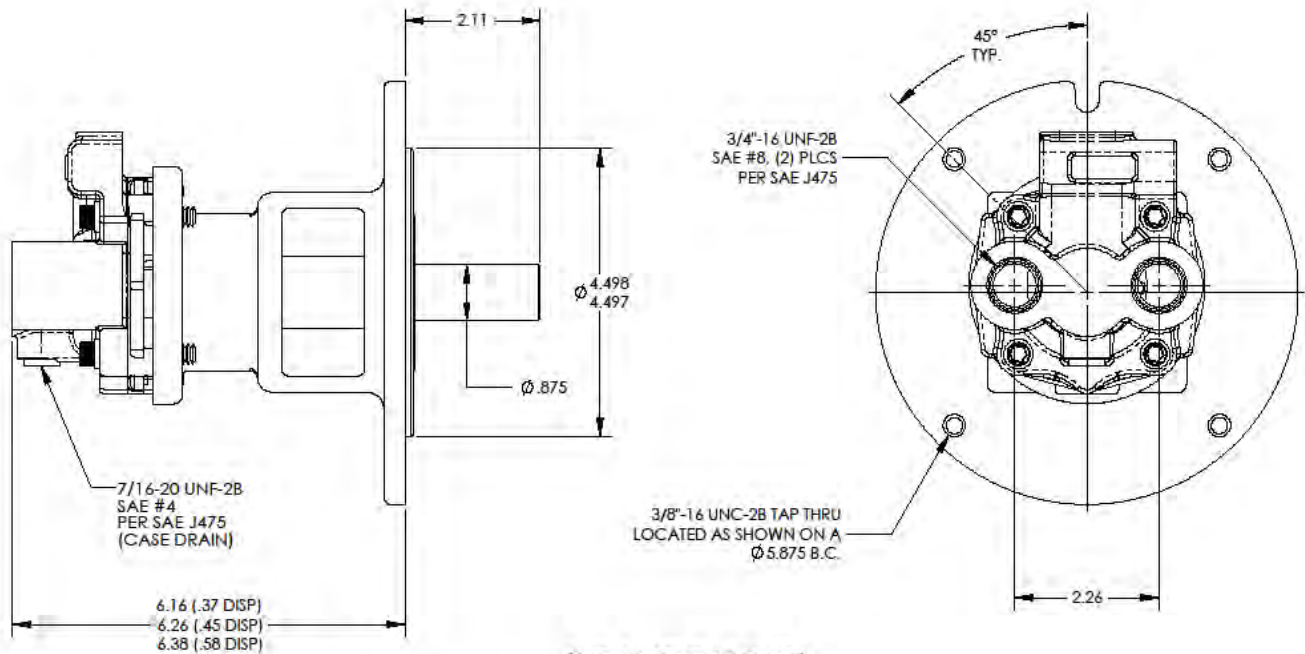
(HS HYDRAULIC PEDESTAL)



(HS HYDRAULIC PEDESTAL)



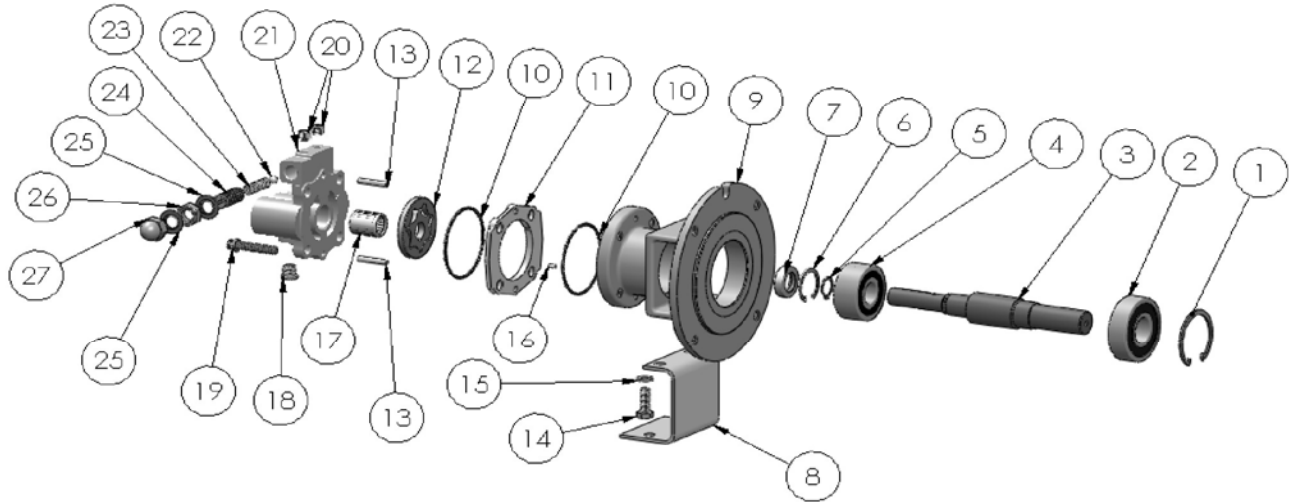
(HS HYD HYDRAULIC PEDESTAL)



(HS HYDRAULIC)

**HYDRAULIC Exploded View – HY Speed
.22 Disp. Motor
With Flow Control**

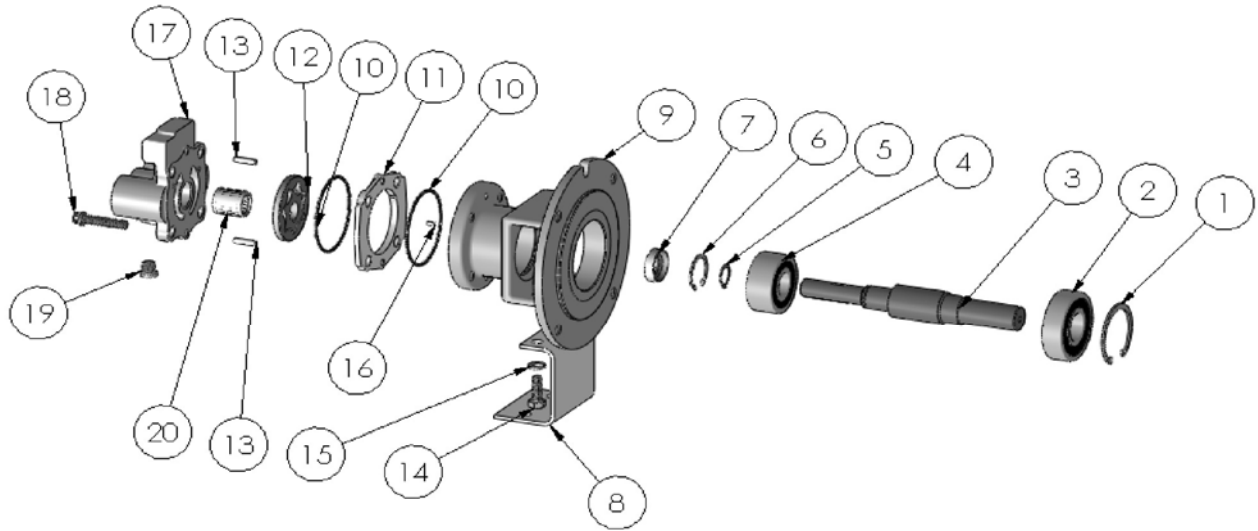
36271



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	29019	SNAP RING STL.	1
2	29023	BEARING - 6305	1
3	29017	SHAFT - STEEL	1
4	29024	BEARING - 5304	1
5	29020	SNAP RING STL.	1
6	29021	SNAP RING STL.	1
7	29018	LIP SEAL VITON	1
8	29022	BASE STL.	1
9	29016	BEARING HOUSING	1
10	34054	QUAD RING VITON	2
11	36319	SPACER C.I. - .22 DISP.	1
12	36452	GEROTOR ASSEMBLY - .22 DISP.	1
13	36370	DOWEL PIN STL.	2
14	30320	FASTENER 5/16-18 X .50 LG. - STEEL	2
15	21238	WASHER - 5/16	2
16	36468	DOWEL PIN STL. - 1/8 DIA. X .25 LG.	1
17	29046	NEEDLE BEARING STL.	1
18	35635	DRAIN PLUG	1
19	30356	FASTENER 5/16-24 X 1.50 LG. - STEEL	4
20	30824	PIPE PLUG - 1/8 NPT	2
21	36318	HYD. MOTOR COVER	1
22	35520	STEEL BALL - 17/64"	1
23	35521	SPRING - 1.28" X .36 O.D.	1
24	35522	STUD - 1/2"-20 X 1.25	1
25	35524	WASHER - 1.2"	2
26	22621	HEX NUT - 1/4-20	1
27	35523	ACORN NUT 1/2-20	1

**HYDRAULIC Exploded View – HY Speed
.22 Disp. Motor**

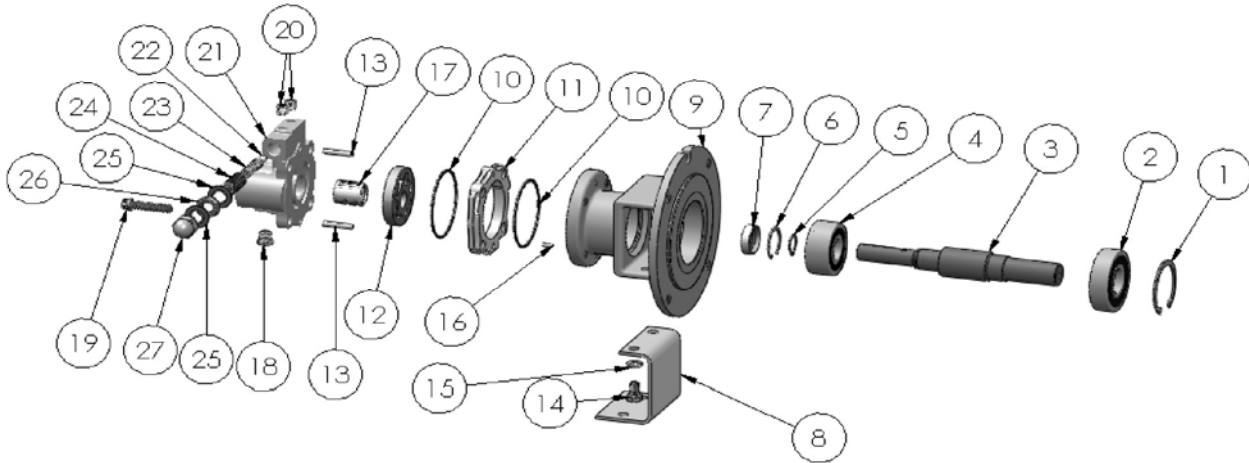
36025



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	29019	SNAP RING STL.	1
2	29023	BEARING - 6305	1
3	29017	SHAFT - STEEL	1
4	29024	BEARING - 5304	1
5	29020	SNAP RING STL.	1
6	29021	SNAP RING STL.	1
7	29018	LIP SEAL VITON	1
8	29022	BASE STL.	1
9	29016	BEARING HOUSING	1
10	34054	QUAD RING VITON	2
11	36319	SPACER C.I. - .22 DISP.	1
12	36452	GEROTOR ASSEMBLY - .22 DISP.	1
13	36370	DOWEL PIN STL.	2
14	30320	FASTENER 5/16-18 X .50 LG. - STEEL	2
15	21238	WASHER - 5/16	2
16	36468	DOWEL PIN STL. - 1/8 DIA. X .25 LG.	1
17	36316	HYD. MOTOR COVER	1
18	30356	FASTENER 5/16-24 X 1.50 LG. - STEEL	4
19	35635	DRAIN PLUG	1
20	29046	NEEDLE BEARING STL.	1

**HYDRAULIC Exploded View – HY Speed
.37 Disp. Motor
With Flow Control**

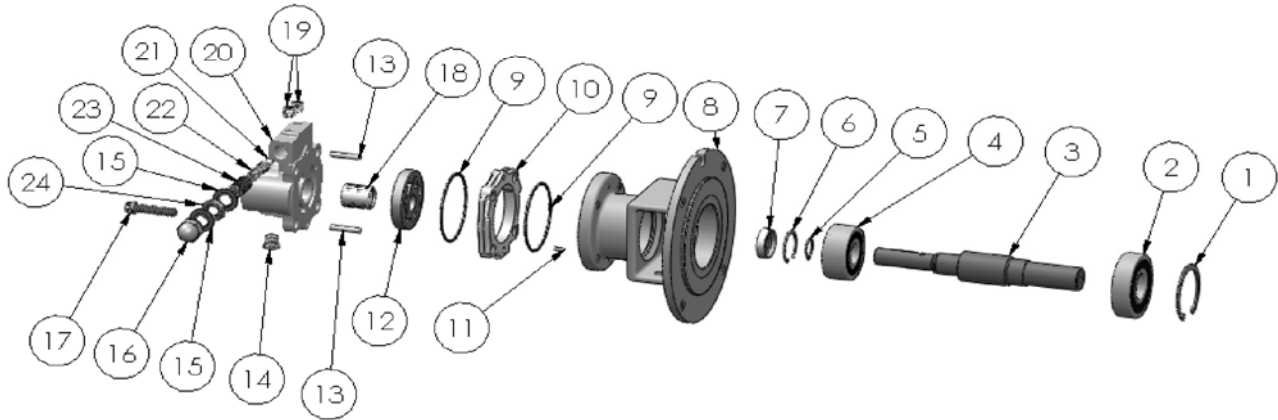
36269



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	29019	SNAP RING STL.	1
2	29023	BEARING - 6305	1
3	29017	SHAFT - STEEL	1
4	29024	BEARING - 5304	1
5	29020	SNAP RING STL.	1
6	29021	SNAP RING STL.	1
7	29018	LIP SEAL VITON	1
8	29022	BASE STL.	1
9	29016	BEARING HOUSING	1
10	34054	QUAD RING VITON	2
11	36320	SPACER C.I. - .37 DISP.	1
12	29045	GEROTOR ASSEMBLY - .37 DISP.	1
13	36370	DOWEL PIN STL.	2
14	30320	FASTENER 5/16-18 X .50 LG. - STEEL	2
15	21238	WASHER - 5/16	2
16	29044	DOWEL PIN STL. - 1/8 DIA. X .375 LG.	1
17	29046	NEEDLE BEARING STL.	1
18	35635	DRAIN PLUG	1
19	30356	FASTENER 5/16-24 X 1.50 LG. - STEEL	4
20	30824	PIPE PLUG - 1/8 NPT	2
21	36318	HYD. MOTOR COVER	1
22	35520	STEEL BALL - 17/64"	1
23	35521	SPRING - 1.28" X .36 O.D.	1
24	35522	STUD - 1/2"-20 X 1.25	1
25	35524	WASHER - 1.2"	2
26	22621	HEX NUT - 1/4-20	1
27	35523	ACORN NUT 1/2-20	1

**HYDRAULIC Exploded View – HY Speed
.37 Disp. Motor
With Flow Control**

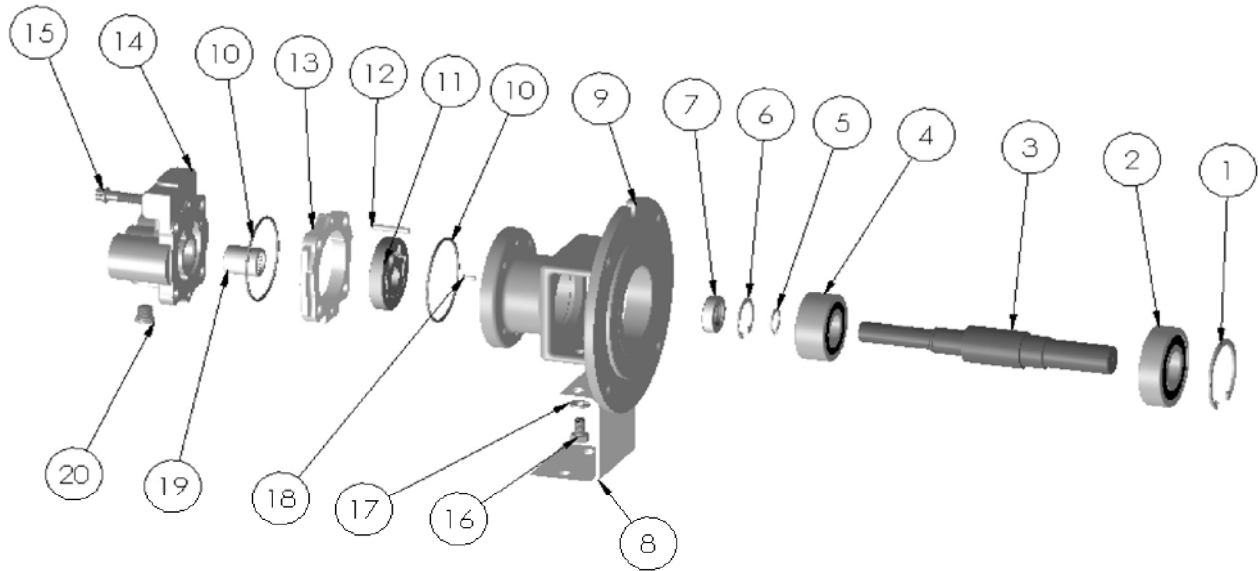
36097



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	29019	SNAP RING STL.	1
2	29023	BEARING - 6305	1
3	29017	SHAFT - STEEL	1
4	29024	BEARING - 5304	1
5	29020	SNAP RING STL.	1
6	29021	SNAP RING STL.	1
7	29018	LIP SEAL VITON	1
8	29016	BEARING HOUSING	1
9	34054	QUAD RING VITON	2
10	36320	SPACER C.I. - .37 DISP.	1
11	29044	DOWEL PIN STL.	1
12	29045	GEROTOR ASSEMBLY - .37 DISP.	1
13	36370	DOWEL PIN STL. - 3/16 DIA. X 1.13 LG.	2
14	35635	DRAIN PLUG	1
15	35524	WASHER - 1/2"	2
16	35523	ACORN NUT 1/2-20	1
17	30359	FASTENER 5/16-24 X 1.50 LG. - STEEL	4
18	29046	NEEDLE BEARING STL.	1
19	30824	PIPE PLUG - 1/8 NPT	2
20	36318	HYD. MOTOR COVER	1
21	35520	STEEL BALL - 17/64"	1
22	35521	SPRING - 1.28" X .36 O.D.	1
23	35522	STUD - 1/2"-20 X 1.25	1
24	22621	HEX NUT - 1/4-20	1

**HYDRAULIC Exploded View – HY Speed
.37 Disp. Motor**

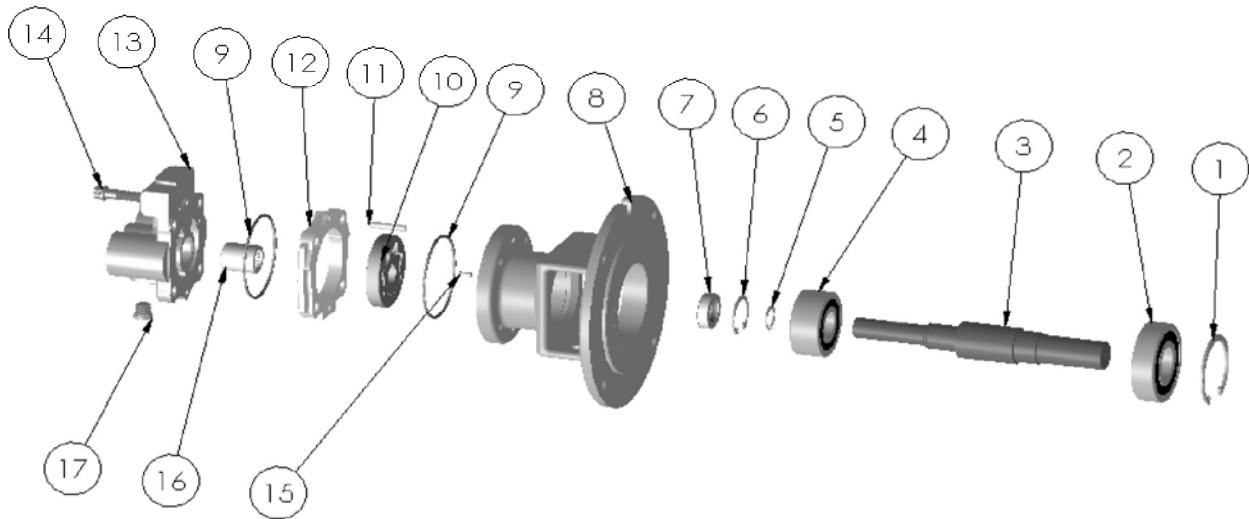
36449



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	29019	SNAP RING STL.	1
2	29023	BEARING - 6305	1
3	29017	SHAFT - STEEL	1
4	29024	BEARING - 5304	1
5	29020	SNAP RING STL.	1
6	29021	SNAP RING STL.	1
7	29018	LIP SEAL VITON	1
8	29022	BASE STL.	1
9	29016	BEARING HOUSING	1
10	34054	QUAD RING VITON	2
11	29045	GEROTOR ASSEMBLY - .37 DISP.	1
12	36370	DOWEL PIN STL.	2
13	36320	SPACER C.I. - .37 DISP.	1
14	36316	HYD. MOTOR COVER	1
15	30356	FASTENER 5/16-24 X 1.50 LG. - STL.	4
16	30320	FASTENER 5/16-18 X .50 LG. - STEEL	2
17	21238	WASHER - 5/16	2
18	29044	DOWEL PIN STL. - 1/8 DIA. X .375 LG.	1
19	29046	NEEDLE BEARING STL.	1
20	35635	DRAIN PLUG	1

**HYDRAULIC Exploded View – HY Speed
.37 Disp. Motor**

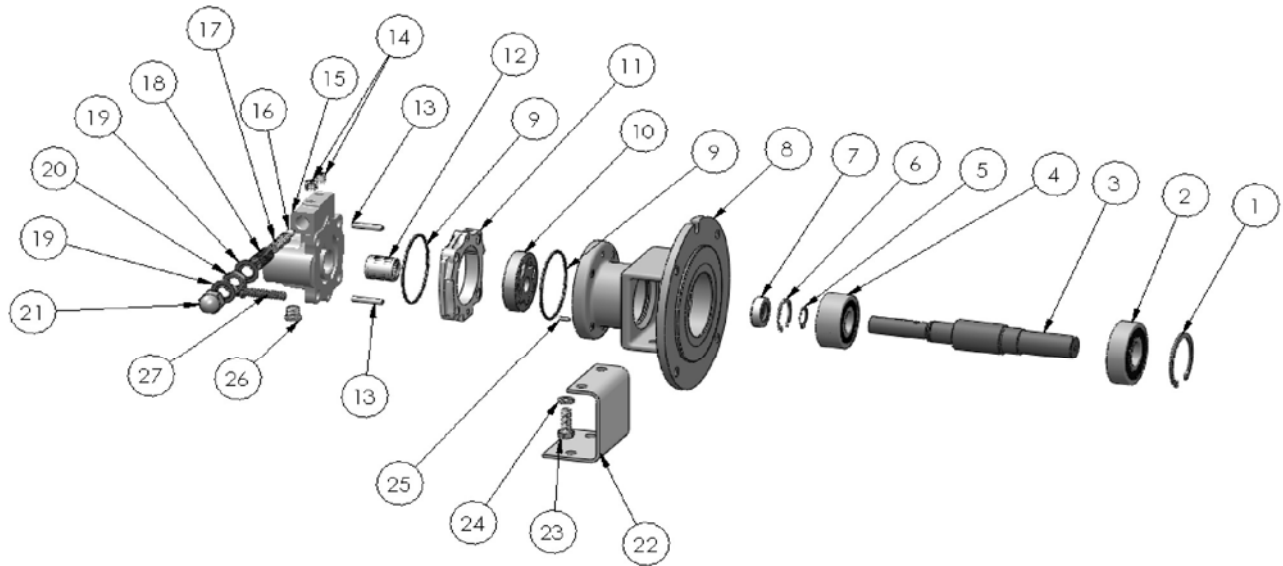
36450



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	29019	SNAP RING STL.	1
2	29023	BEARING - 6305	1
3	29017	SHAFT - STEEL	1
4	29024	BEARING - 5304	1
5	29020	SNAP RING STL.	1
6	29021	SNAP RING STL.	1
7	29018	LIP SEAL VITON	1
8	29016	BEARING HOUSING	1
9	34054	QUAD RING VITON	2
10	29045	GEROTOR ASSEMBLY - .37 DISP.	1
11	36370	DOWEL PIN STL.	2
12	36320	SPACER C.I. - .37 DISP.	1
13	36316	HYD. MOTOR COVER	1
14	30356	FASTENER 5/16-24 X 1.50 LG. - STL.	4
15	29044	DOWEL PIN STL. - 1/8 DIA. X .375 LG.	1
16	29046	NEEDLE BEARING STL.	1
17	35635	DRAIN PLUG	1

**HYDRAULIC Exploded View – HY Speed
.45 Disp. Motor
With Flow Control**

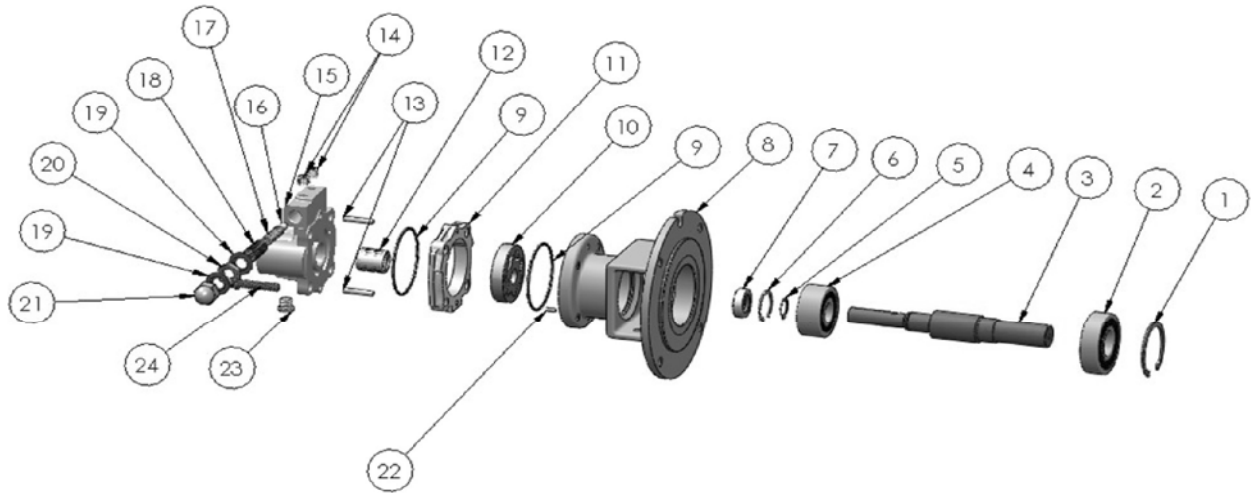
36270



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	29019	SNAP RING STL.	1
2	29023	BEARING - 6305	1
3	29017	SHAFT - STEEL	1
4	29024	BEARING - 5304	1
5	29020	SNAP RING STL.	1
6	29021	SNAP RING STL.	1
7	29018	LIP SEAL VITON	1
8	29016	BEARING HOUSING	1
9	34054	QUAD RING VITON	2
10	34652	GEROTOR ASSEMBLY - .45 DISP.	1
11	36325	SPACER C.I. - .45 DISP.	1
12	29046	NEEDLE BEARING STL.	1
13	36370	DOWEL PIN STL.	2
14	30824	PIPE PLUG - 1/8 NPT	2
15	36318	HYD. MOTOR COVER	1
16	35520	STEEL BALL - 17/64"	1
17	35521	SPRING - 1.28" X .36 O.D.	1
18	35522	STUD - 1/2"-20 X 1.25	1
19	21238	WASHER - 5/16	2
20	22621	HEX NUT - 1/4-20	1
21	35523	ACORN NUT 1/2-20	1
22	29022	BASE STL.	1
23	30320	FASTENER 5/16-18 X .50 LG. - STEEL	2
24	35524	WASHER - 1.2"	2
25	29044	DOWEL PIN STL. - 1/8 DIA. X .375 LG.	1
26	35635	DRAIN PLUG	1
27	30356	FASTENER 5/16-24 X 1.50 LG. - STEEL	4

**HYDRAULIC Exploded View – HY Speed
.45 Disp. Motor
With Flow Control**

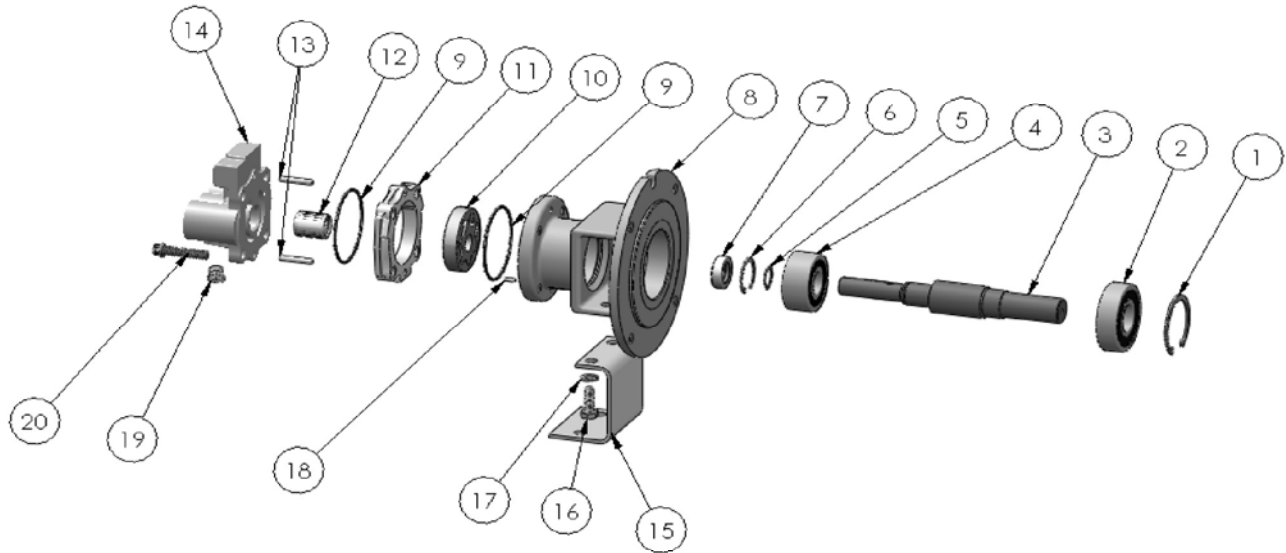
36098



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	29019	SNAP RING STL.	1
2	29023	BEARING - 6305	1
3	29017	SHAFT - STEEL	1
4	29024	BEARING - 5304	1
5	29020	SNAP RING STL.	1
6	29021	SNAP RING STL.	1
7	29018	LIP SEAL VITON	1
8	29016	BEARING HOUSING	1
9	34054	QUAD RING VITON	2
10	34652	GEROTOR ASSEMBLY - .45 DISP.	1
11	36325	SPACER C.I. - .45 DISP.	1
12	29046	NEEDLE BEARING STL.	1
13	36370	DOWEL PIN STL.	2
14	30824	PIPE PLUG - 1/8 NPT	2
15	36318	HYD. MOTOR COVER	1
16	35520	STEEL BALL - 17/64"	1
17	35521	SPRING - 1.28" X .36 O.D.	1
18	35522	STUD - 1/2"-20 X 1.25	1
19	35524	WASHER - 1/2	2
20	22621	HEX NUT - 1/4-20	1
21	35523	ACORN NUT 1/2-20	1
22	29044	DOWEL PIN STL. - 1/8 DIA. X .375 LG.	1
23	35635	DRAIN PLUG	1
24	30359	FASTENER 5/16-24 X 1.50 LG. - STEEL	4

**HYDRAULIC Exploded View – HY Speed
.45 Disp. Motor**

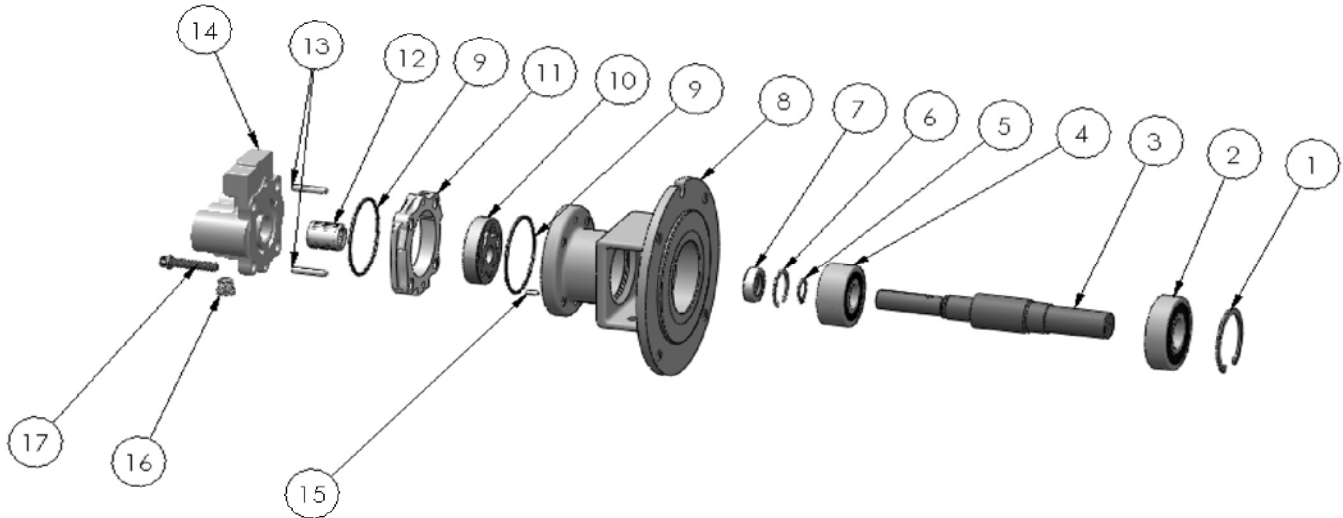
36026



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	29019	SNAP RING STL.	1
2	29023	BEARING - 6305	1
3	29017	SHAFT - STEEL	1
4	29024	BEARING - 5304	1
5	29020	SNAP RING STL.	1
6	29021	SNAP RING STL.	1
7	29018	LIP SEAL VITON	1
8	29016	BEARING HOUSING	1
9	34054	QUAD RING VITON	2
10	34652	GEROTOR ASSEMBLY - .45 DISP.	1
11	36325	SPACER C.I. - .45 DISP.	1
12	29046	NEEDLE BEARING STL.	1
13	36370	DOWEL PIN STL.	2
14	36316	HYD. MOTOR COVER	1
15	29022	BASE STL.	1
16	30320	FASTENER 5/16-18 X .50 LG. - STEEL	2
17	21238	WASHER - 5/16	2
18	29044	DOWEL PIN STL. - 1/8 DIA. X .375 LG.	1
19	35635	DRAIN PLUG	1
20	30356	FASTENER 5/16-24 X 1.50 LG. - STL.	4

**HYDRAULIC Exploded View – HY Speed
.45 Disp. Motor**

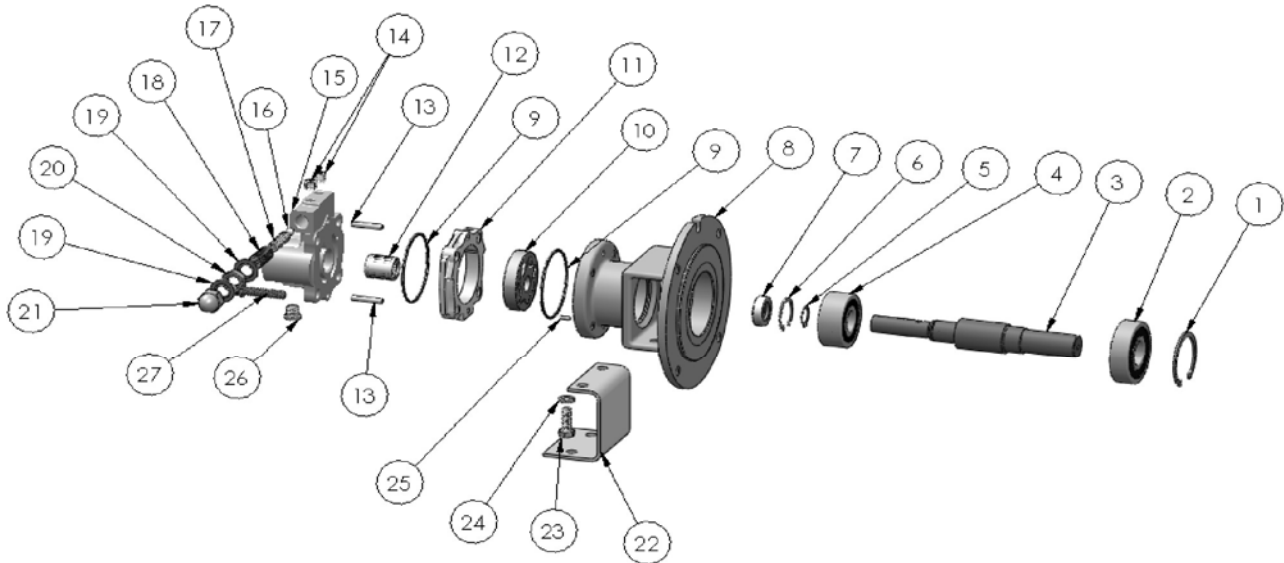
35998



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	29019	SNAP RING STL.	1
2	29023	BEARING - 6305	1
3	29017	SHAFT - STL.	1
4	29024	BEARING - 5304	1
5	29020	SNAP RING STL.	1
6	29021	SNAP RING STL.	1
7	29018	LIP SEAL VITON	1
8	29016	BEARING HOUSING	1
9	34054	QUAD RING VITON	2
10	34652	GEROTOR ASSEMBLY - .45 DISP.	1
11	36325	SPACER C.I. - .45 DISP.	1
12	29046	NEEDLE BEARING STL.	1
13	36370	DOWEL PIN STL.	2
14	36316	HYD. MOTOR COVER	1
15	29044	DOWEL PIN STL. - 1/8 DIA. X .375 LG.	1
16	35635	DRAIN PLUG	1
17	30356	FASTENER 5/16-24 X 1.50 LG. - STL.	4

**HYDRAULIC Exploded View – HY Speed
.58 Disp. Motor
With Flow Control**

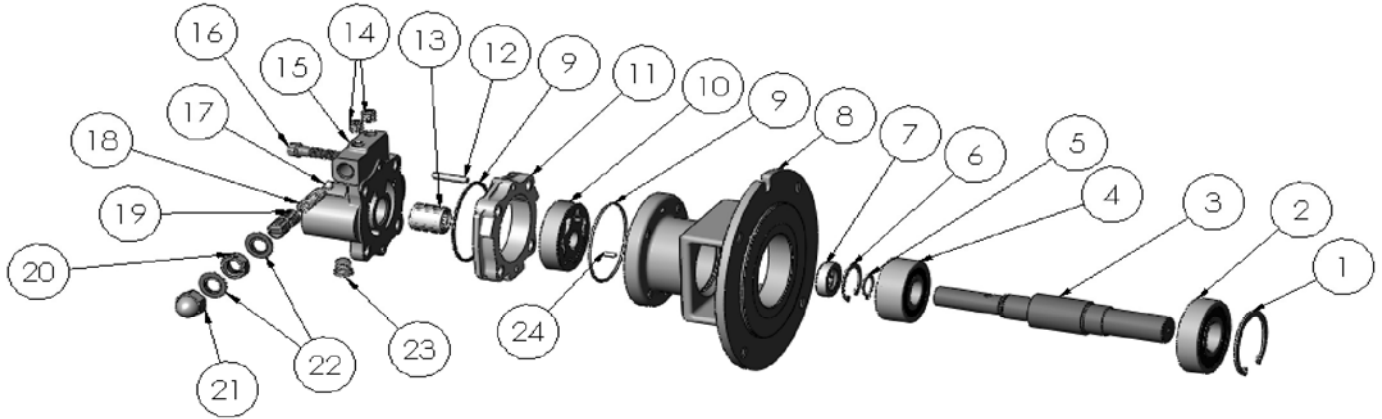
36596



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	29019	SNAP RING STL.	1
2	29023	BEARING - 6305	1
3	29017	SHAFT - STEEL	1
4	29024	BEARING - 5304	1
5	29020	SNAP RING STL.	1
6	29021	SNAP RING STL.	1
7	29018	LIP SEAL VITON	1
8	29016	BEARING HOUSING	1
9	34054	QUAD RING VITON	2
10	30354	GEROTOR ASSEMBLY - .58 DISP.	1
11	36326	SPACER C.I. - .58 DISP.	1
12	29046	NEEDLE BEARING STL.	1
13	36370	DOWEL PIN STL.	2
14	30824	PIPE PLUG - 1/8 NPT	2
15	36318	HYD. MOTOR COVER	1
16	35520	STEEL BALL - 17/64"	1
17	35521	SPRING - 1.28" X .36 O.D.	1
18	35522	STUD - 1/2"-20 X 1.25	1
19	21238	WASHER - 5/16	2
20	22621	HEX NUT - 1/4-20	1
21	35523	ACORN NUT 1/2-20	1
22	29022	BASE STL.	1
23	30320	FASTENER 5/16-18 X .50 LG. - STEEL	2
24	35524	WASHER - 1.2"	2
25	29044	DOWEL PIN STL. - 1/8 DIA. X .375 LG.	1
26	35635	DRAIN PLUG	1
27	30356	FASTENER 5/16-24 X 1.50 LG. - STEEL	4

**HYDRAULIC Exploded View – HY Speed
.58 Disp. Motor
With Flow Control**

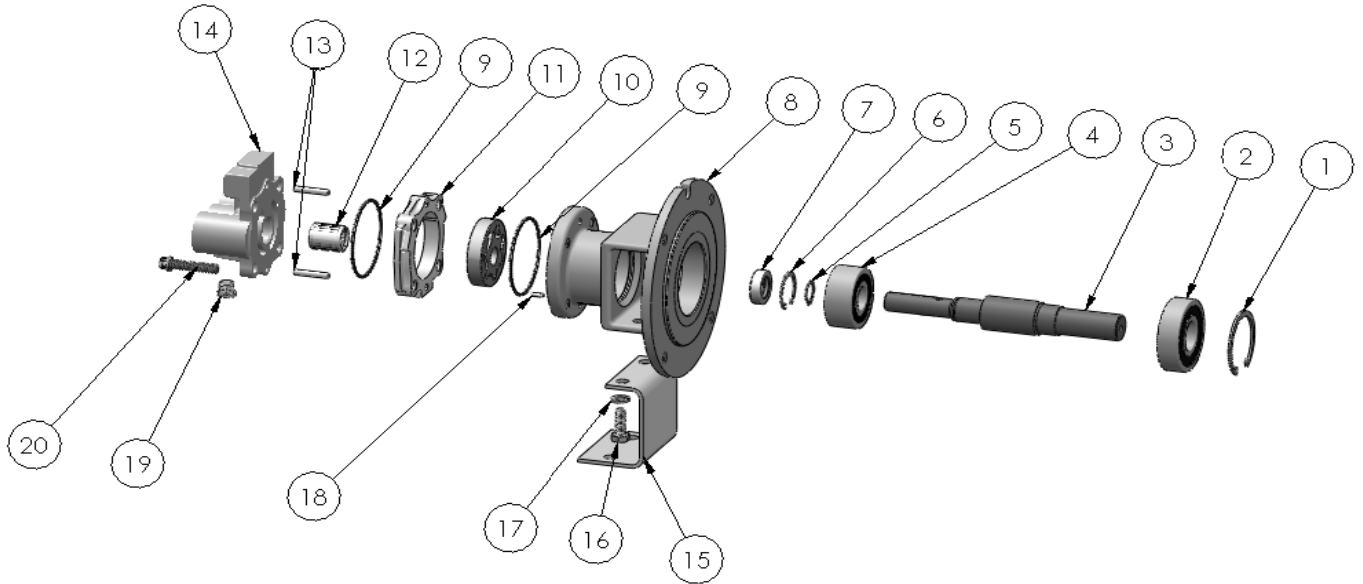
36024



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	29019	SNAP RING	1
2	29023	BALL BEARING	1
3	29017	SHAFT	1
4	29024	BALL BEARING	1
5	29020	SNAP RING	1
6	29021	SNAP RING	1
7	29018	LIP SEAL	1
8	29016	BEARING HOUSING	1
9	34054	QUAD RING VITON	2
10	30354	GEROTOR ASSY. - .58 DISP.	1
11	36326	SPACER C.I. - .58 DISP.	1
12	36370	DOWEL PIN	2
13	29046	NEEDLE BEARING	1
14	30824	PIPE PLUG- 1/8" NPT	2
15	36318	HYD. MOTOR COVER	1
16	30356	CAPSCREW 5/16"-24	4
17	35520	STEEL BALL- 17/64" DIA.	1
18	35521	SPRING	1
19	35522	STUD- 1/2"-20 X 1.25"	1
20	22621	JAM NUT SS- 1/2"-20	1
21	35523	ACORN NUT- 1/2"-20	1
22	35524	WASHER - 1/2	2
23	35635	DRAIN PLUG	1
24	29044	DOWEL PIN	1

**HYDRAULIC Exploded View – HY Speed
.58 Disp. Motor**

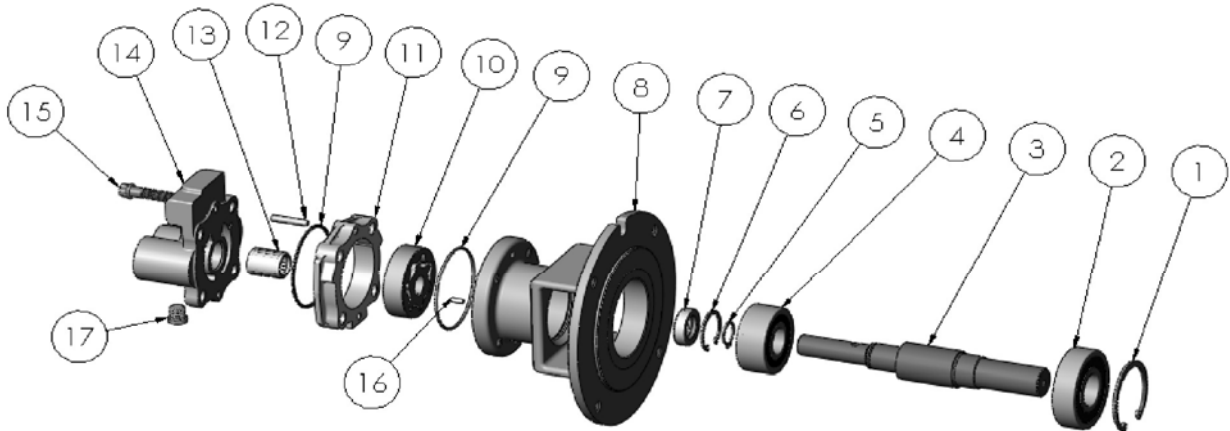
36597



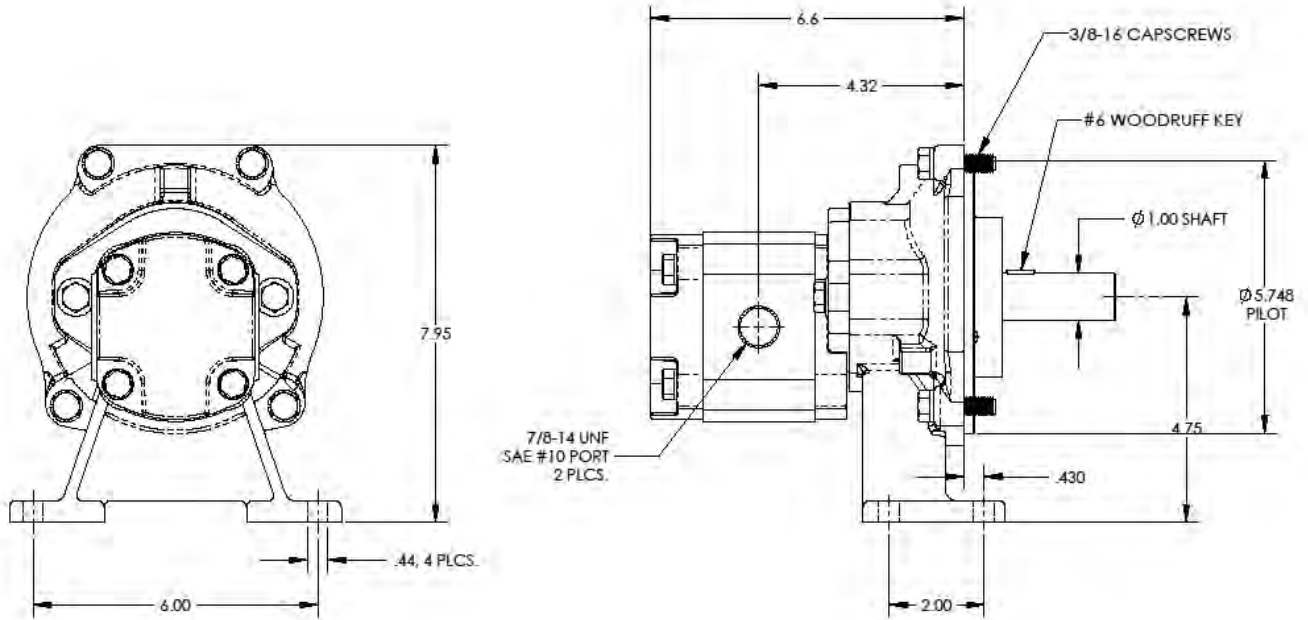
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	29018	SNAP RING STL.	1
2	29023	BEARING - 6305	1
3	29017	SHAFT - STEEL	1
4	29024	BEARING - 5304	1
5	29020	SNAP RING STL.	1
6	29021	SNAP RING STL.	1
7	29018	LIP SEAL VITON	1
8	29016	BEARING HOUSING	1
9	34054	QUAD RING VITON	2
10	30354	GEROTOR ASSEMBLY - .58 DISP.	1
11	36326	SPACER C.I. - .58 DISP.	1
12	29046	NEEDLE BEARING STL.	1
13	36370	DOWEL PIN STL.	2
14	36316	HYD. MOTOR COVER	1
15	29022	BASE STL.	1
16	30320	FASTENER 5/16-18 X .50 LG. - STEEL	2
17	21238	WASHER - 5/16	2
18	29044	DOWEL PIN STL. - 1/8 DIA. X .375 LG.	1
19	35635	DRAIN PLUG	1
20	30356	FASTENER 5/16-24 X 1.50 LG. - STL.	4

**HYDRAULIC Exploded View – HY Speed
.58 Disp. Motor**

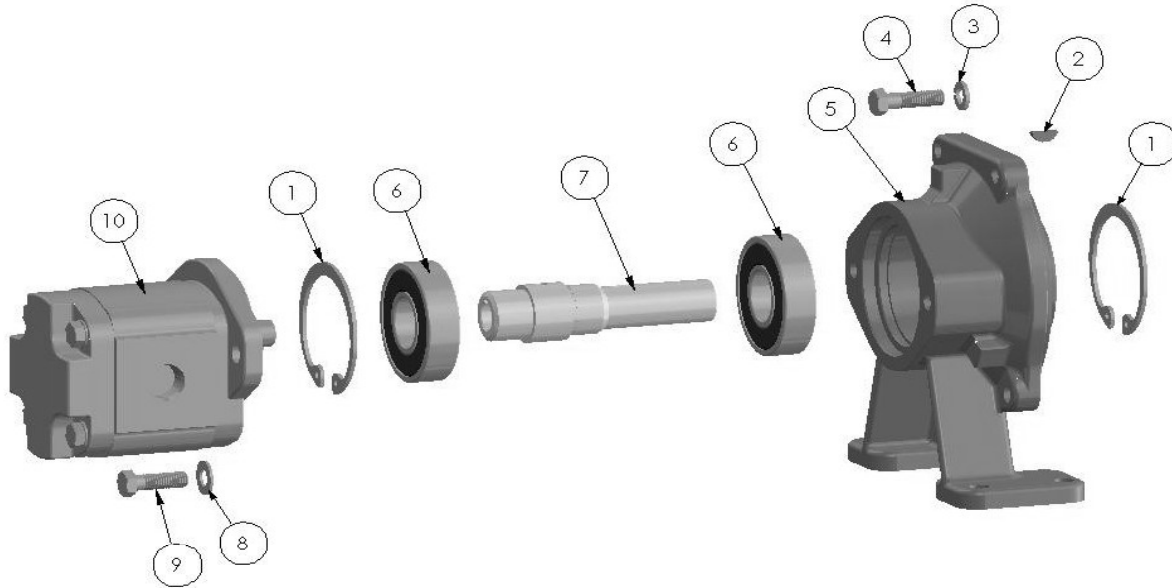
36451



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	29019	SNAP RING STL.	1
2	29023	BEARING - 6305	1
3	29017	SHAFT - STL.	1
4	29024	BEARING - 5304	1
5	29020	SNAP RING STL.	1
6	29021	SNAP RING STL.	1
7	29018	LIP SEAL VITON	1
8	29016	BEARING HOUSING	1
9	34054	QUAD RING VITON	2
10	30354	GEROTOR ASSEMBLY - .58 DISP.	1
11	36326	SPACER C.I. - .58 DISP.	1
12	36370	DOWEL PIN STL.	2
13	29046	NEEDLE BEARING STL.	1
14	36316	HYD. MOTOR COVER	1
15	30356	FASTENER 5/16-24 X 1.50 LG. - STL.	4
16	36468	DOWEL PIN STL. - 1/8 DIA. X .25 LG.	1
17	35635	DRAIN PLUG	1



(HYD MOTOR ASY)



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	22035	SNAP RING: STL	2
2	21163	WOODRUFF KEY: SS	1
*	3	LOCKWASHER SS: 3/8"	4
	4	CAPSCREW SS: 3/8-16 X 1.375"	4
	5	PEDESTAL: CI	1
*	6	BALL BEARING	2
	7	SHAFT: SS	1
	8	WASHER STL: 7/8"	2
*	9	CAPSCREW SS: 3/8-16 X 1.25"	2
*	10	HYD MTR: .73 CU. IN. DISP.	1

* - SUGGESTED REPLACEMENT PARTS