



Dimensional and Flow Charts

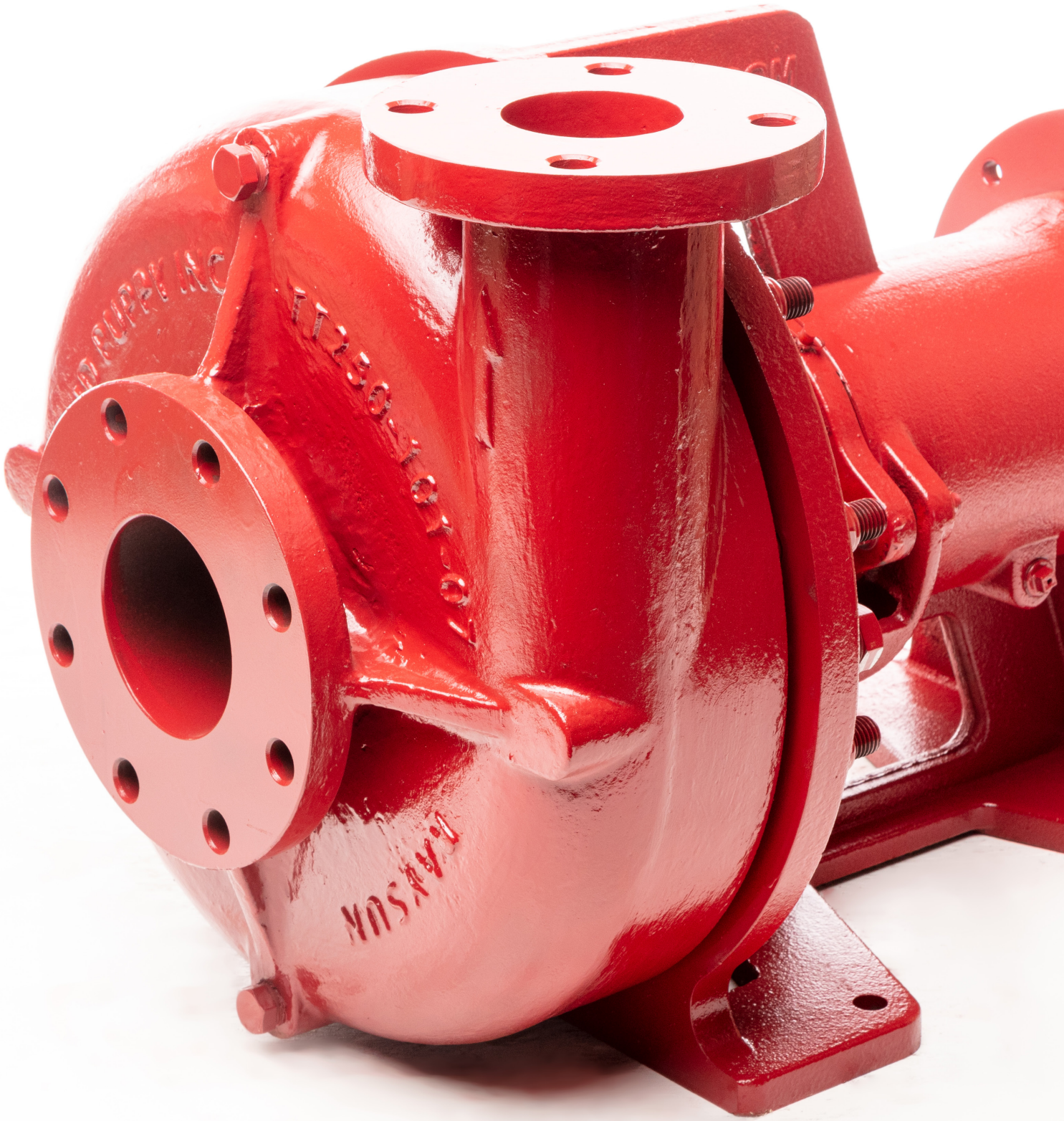
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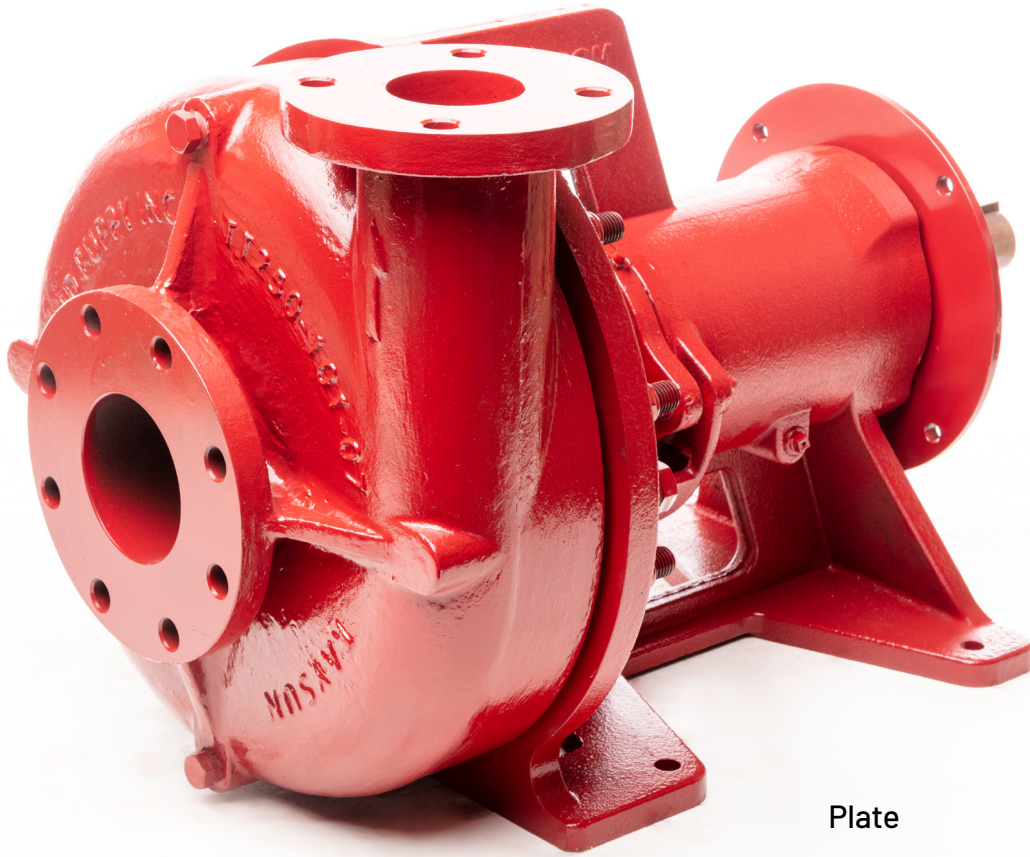
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 **250 CENTRIFUGAL PUMPS**



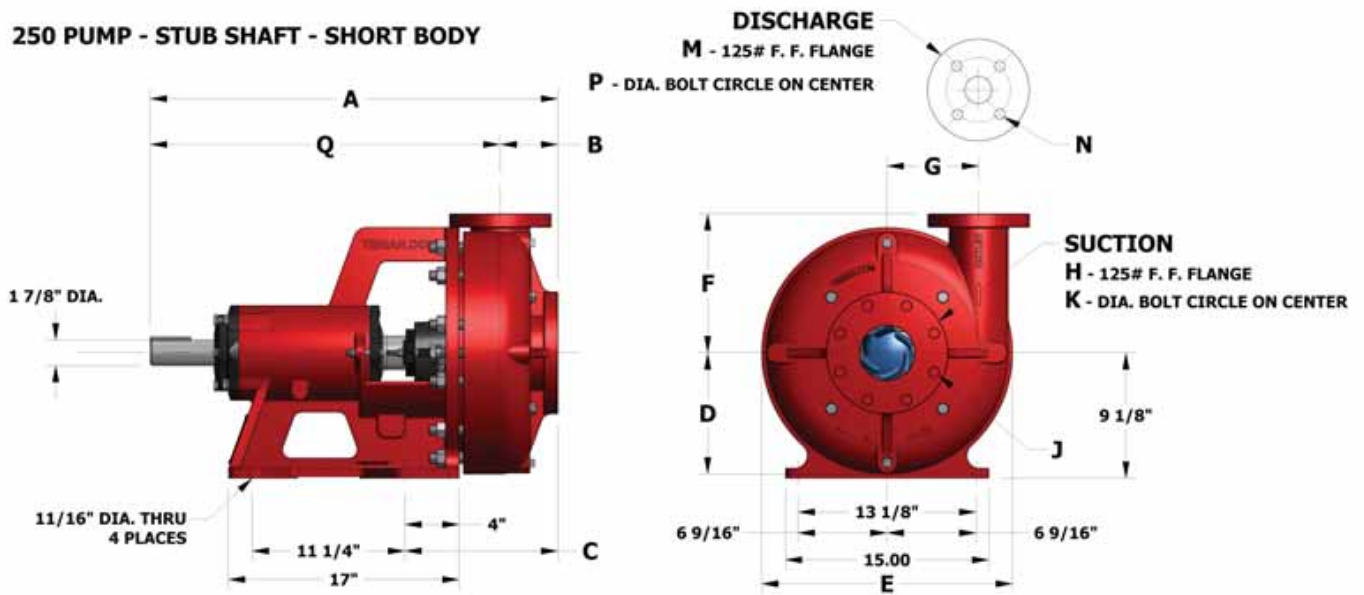
Plate



No Plate

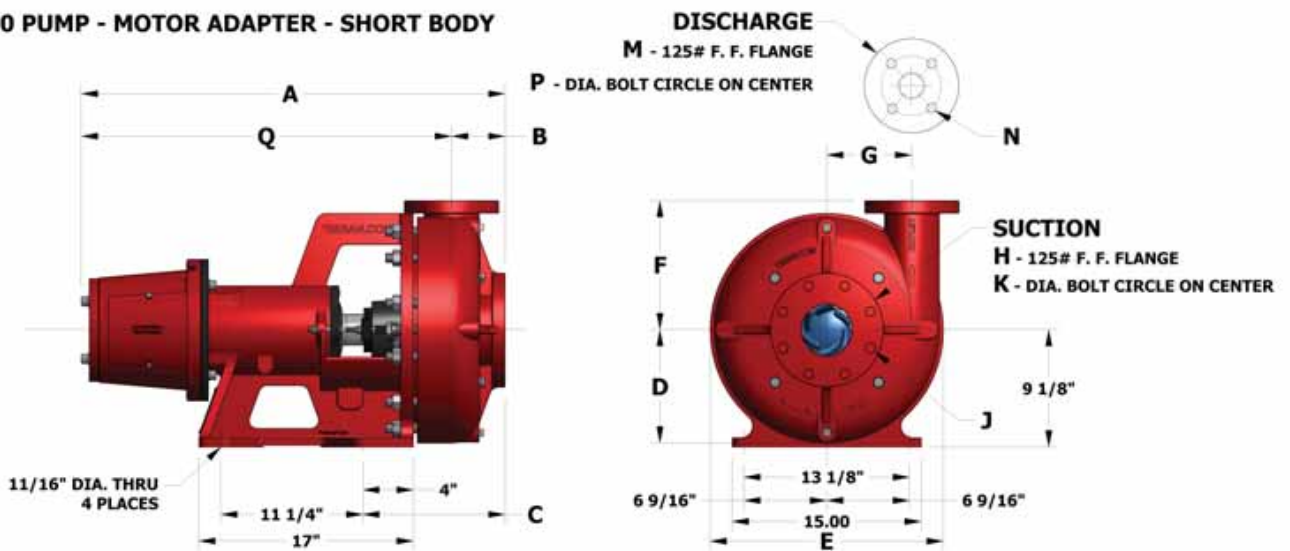
# 250 Pump

## 250 PUMP - STUB SHAFT - SHORT BODY



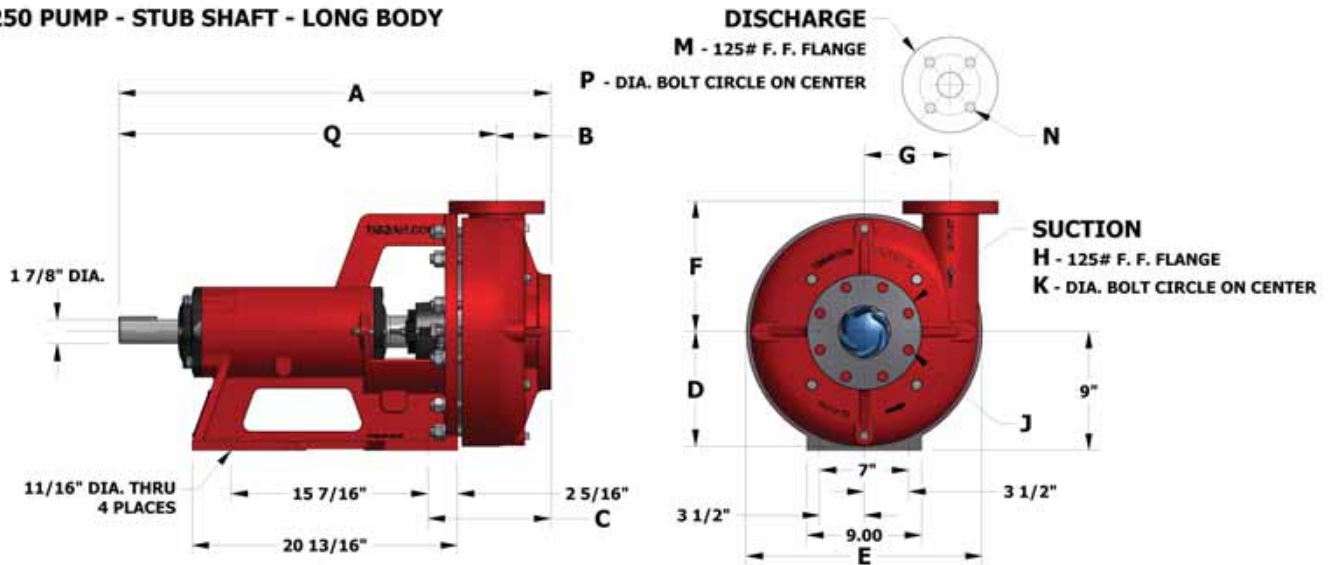
250 PUMP SIZE	A	B	C	D	E	F	G	H	J	K	M	N	P	Q
2" X 3"	28 13/16"	3 3/4"	10 7/16"	8 15/16"	17 7/8"	10 1/4"	7"	3"	3/4" DIA - 4 PLACES	6"	2"	3/4" DIA - 4 PLACES	4 3/4"	25 1/16"
3" X 4"	29 7/16"	4 1/4"	11 1/16"	8 15/16"	17 7/8"	10 1/4"	6 3/4"	4"	3/4" DIA - 8 PLACES	7 1/2"	3"	3/4" DIA - 4 PLACES	6"	25 1/8"
4" X 5"	30 13/16"	5"	12 7/16"	9 1/2"	19"	11"	6 1/8"	5"	7/8" DIA - 8 PLACES	8 1/2"	4"	3/4" DIA - 8 PLACES	7 1/2"	25 13/15"

## 250 PUMP - MOTOR ADAPTER - SHORT BODY



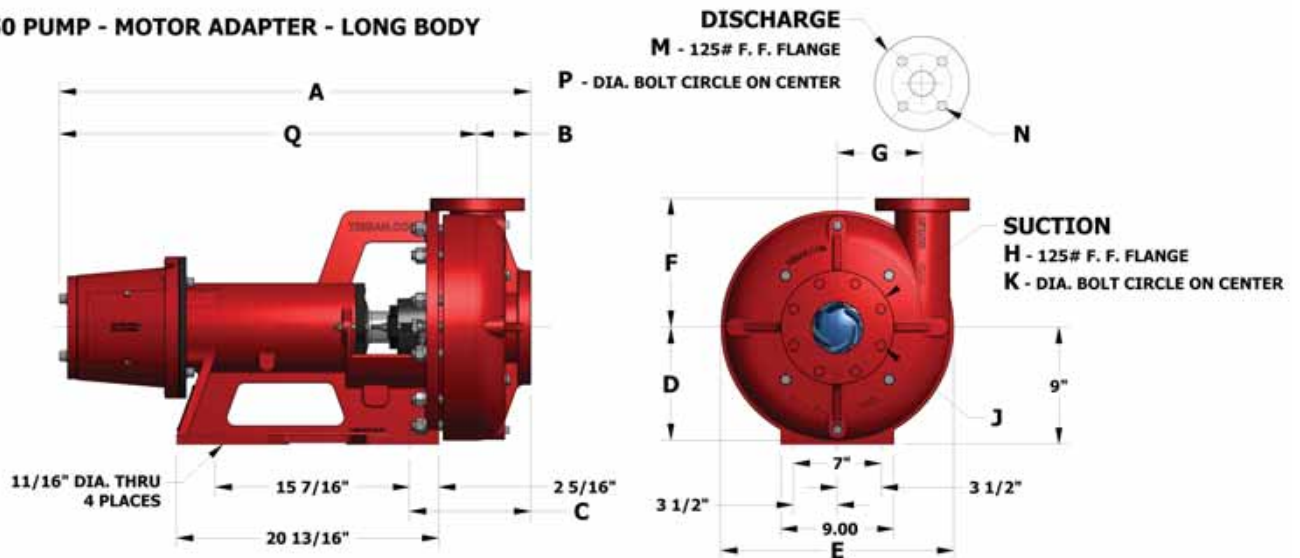
250 PUMP SIZE	A	B	C	D	E	F	G	H	J	K	M	N	P	Q
2" X 3"	33 5/8"	3 3/4"	10 7/16"	8 15/16"	17 7/8"	10 1/4"	7"	3"	3/4" DIA - 4 PLACES	6"	2"	3/4" DIA - 4 PLACES	4 3/4"	29 7/8"
3" X 4"	34 1/4"	4 1/4"	11 1/16"	8 15/16"	17 7/8"	10 1/4"	6 3/4"	4"	3/4" DIA - 8 PLACES	7 1/2"	3"	3/4" DIA - 4 PLACES	6"	29 15/16"
4" X 5"	35 1/2"	5"	12 7/16"	9 1/2"	19"	11"	6 1/8"	5"	7/8" DIA - 8 PLACES	8 1/2"	4"	3/4" DIA - 8 PLACES	7 1/2"	30 5/8"

**250 PUMP - STUB SHAFT - LONG BODY**



250 PUMP SIZE	A	B	C	D	E	F	G	H	J	K	M	N	P	Q
2" X 3"	33"	3 3/4"	8 3/4"	9"	17 7/8"	10 1/4"	7"	3"	3/4" DIA - 4 PLACES	6"	2"	3/4" DIA - 4 PLACES	4 3/4"	29 1/4"
3" X 4"	33 5/8"	4 1/4"	9 3/8"	9"	17 7/8"	10 1/4"	6 3/4"	4"	3/4" DIA - 8 PLACES	7 1/2"	3"	3/4" DIA - 4 PLACES	6"	29 3/8"
4" X 5"	35"	5"	10 3/4"	9"	19 3/8"	11"	6 1/8"	5"	7/8" DIA - 8 PLACES	8 1/2"	4"	3/4" DIA - 8 PLACES	7 1/2"	30"

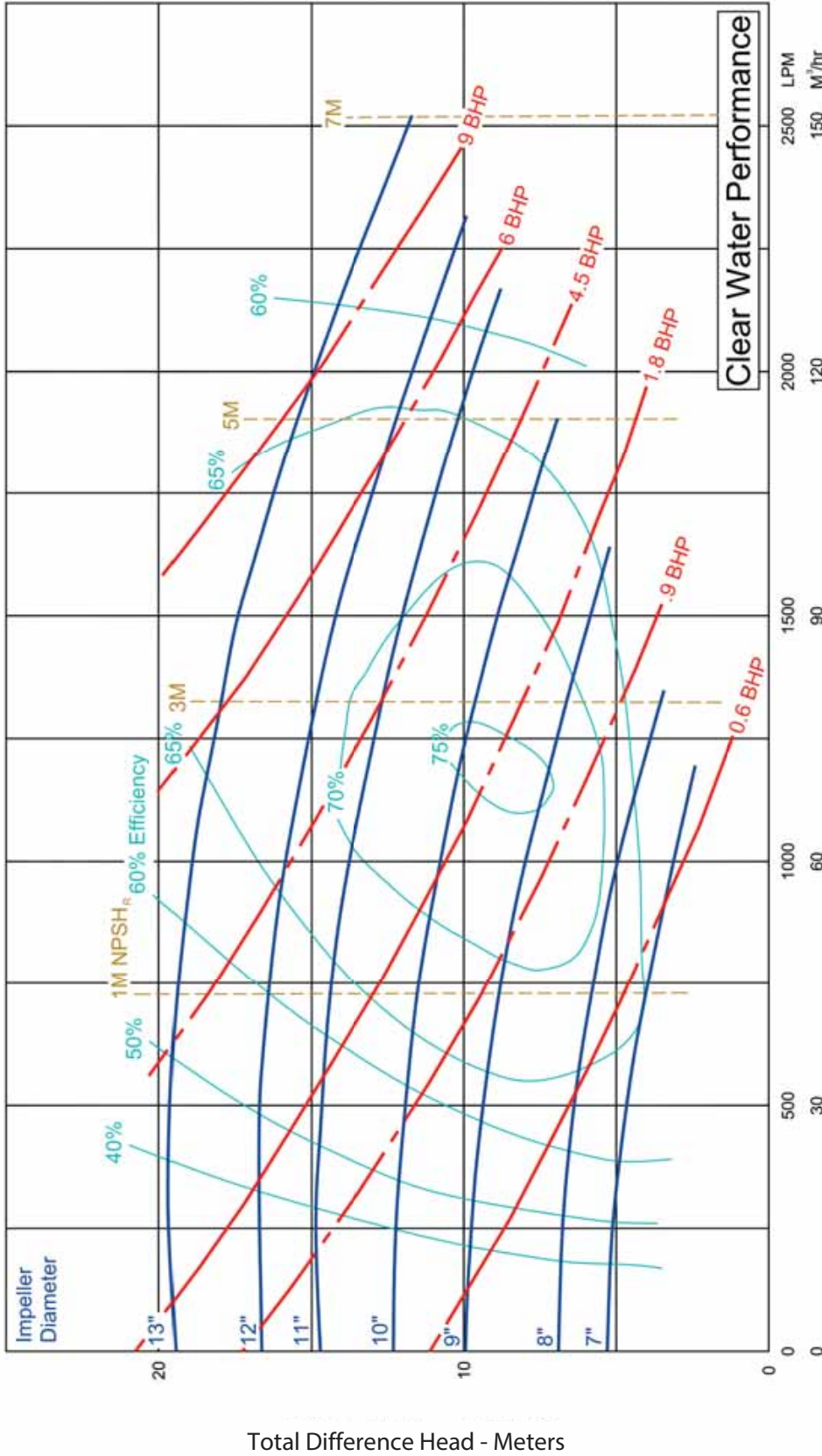
**250 PUMP - MOTOR ADAPTER - LONG BODY**



250 PUMP SIZE	A	B	C	D	E	F	G	H	J	K	M	N	P	Q
2" X 3"	37 13/16"	3 3/4"	8 3/4"	8 15/16"	17 7/8"	10 1/4"	7"	3"	3/4" DIA - 4 PLACES	6"	2"	3/4" DIA - 4 PLACES	4 3/4"	34 1/16"
3" X 4"	38 7/16"	4 1/4"	9 3/8"	8 15/16"	17 7/8"	10 1/4"	6 3/4"	4"	3/4" DIA - 8 PLACES	7 1/2"	3"	3/4" DIA - 4 PLACES	6"	34 3/16"
4" X 5"	39 13/16"	5"	10 3/4"	9 11/16"	19 3/8"	11"	6 1/8"	5"	7/8" DIA - 8 PLACES	8 1/2"	4"	3/4" DIA - 8 PLACES	7 1/2"	34 13/16"

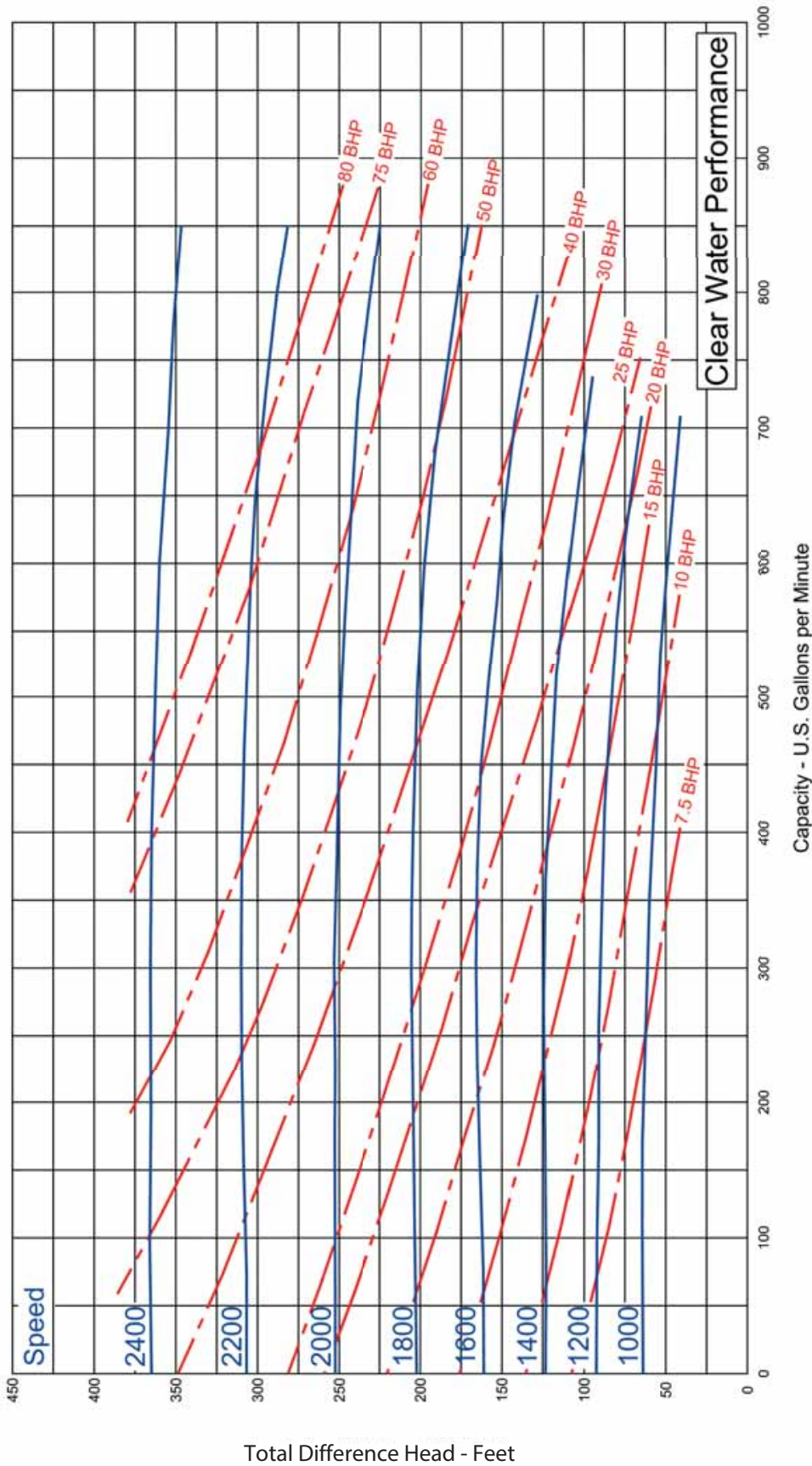


250 Pump



Open Impeller  
 Dia: 7" to 13"  
 Eye Area: 12.5 Sq. In.  
 Max Sphere: 3/4 In.

250 Pump  
 4X3X13  
 Speed: 970 RPM  
 Curve: 1044C

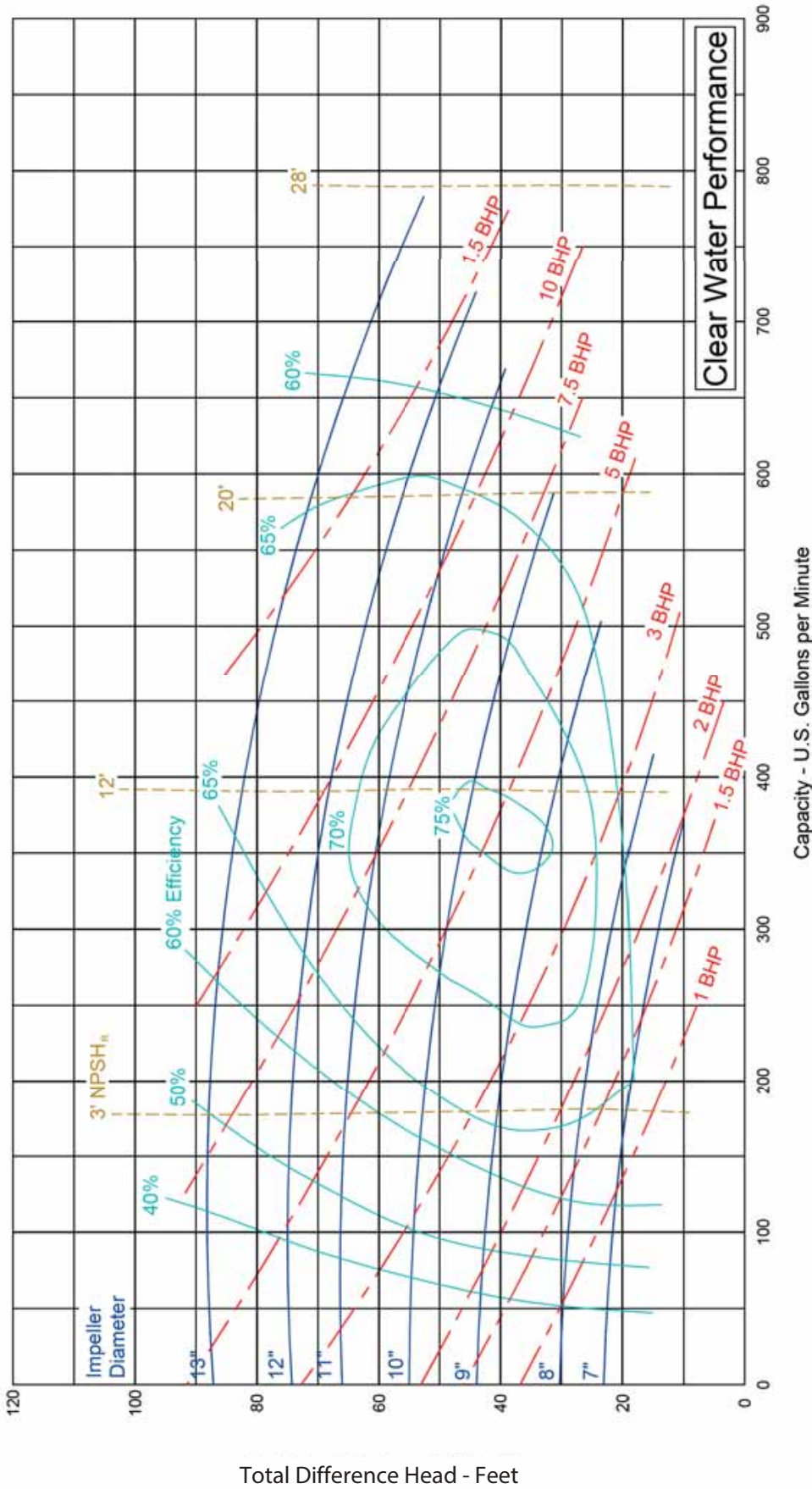


**250 Pump**  
**4X3X13**  
**Speed: 1000-2400 RPM**  
**Curve: 977**

**Open Impeller**  
**Dia: 13"**  
**Eye Area: 12.5 Sq. In.**  
**Max Sphere: 3/4 In.**

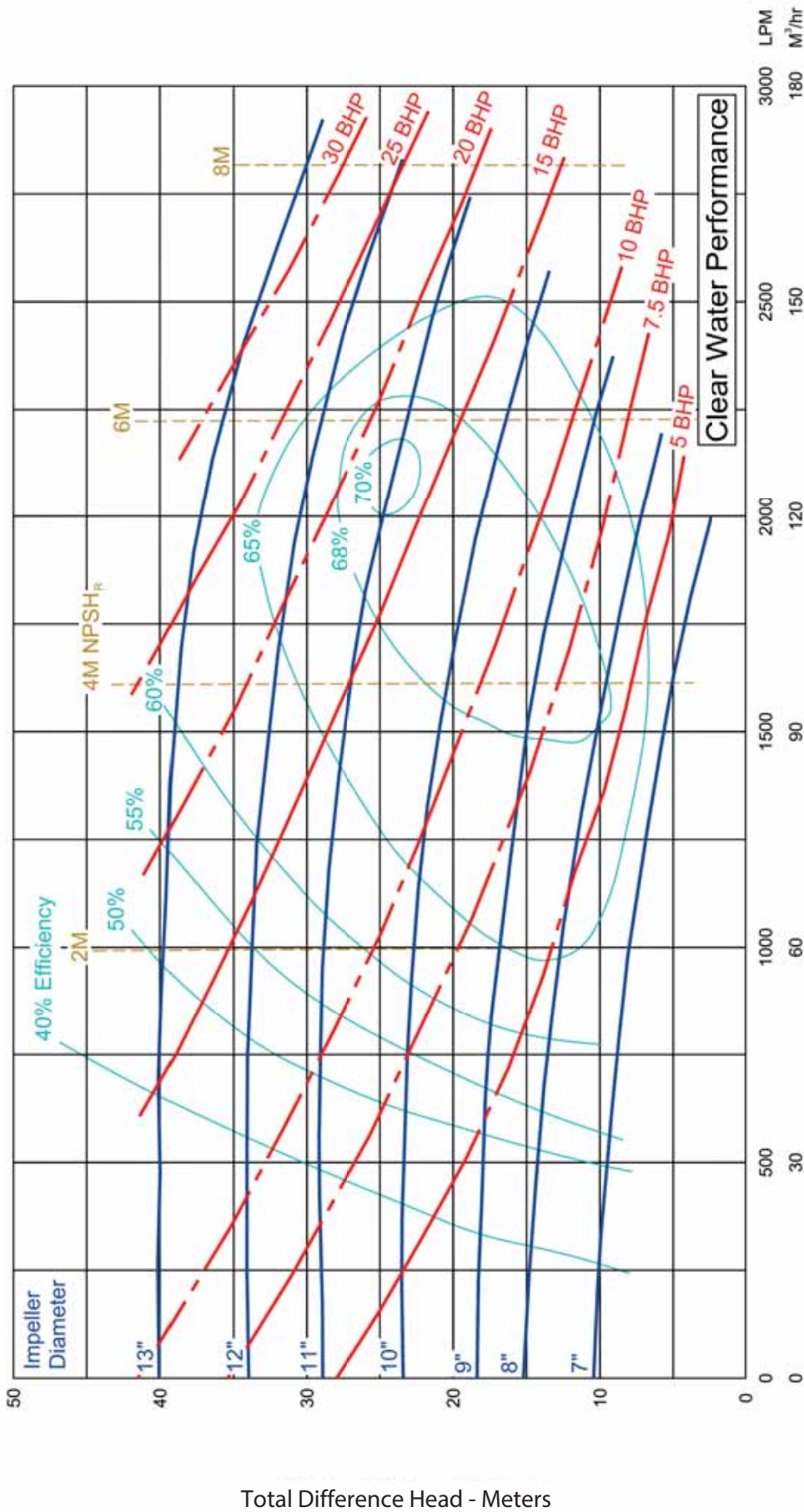


250 Pump



Open Impeller  
 Dia: 7" to 13"  
 Eye Area: 12.5 Sq. In.  
 Max Sphere: 3/4 In.

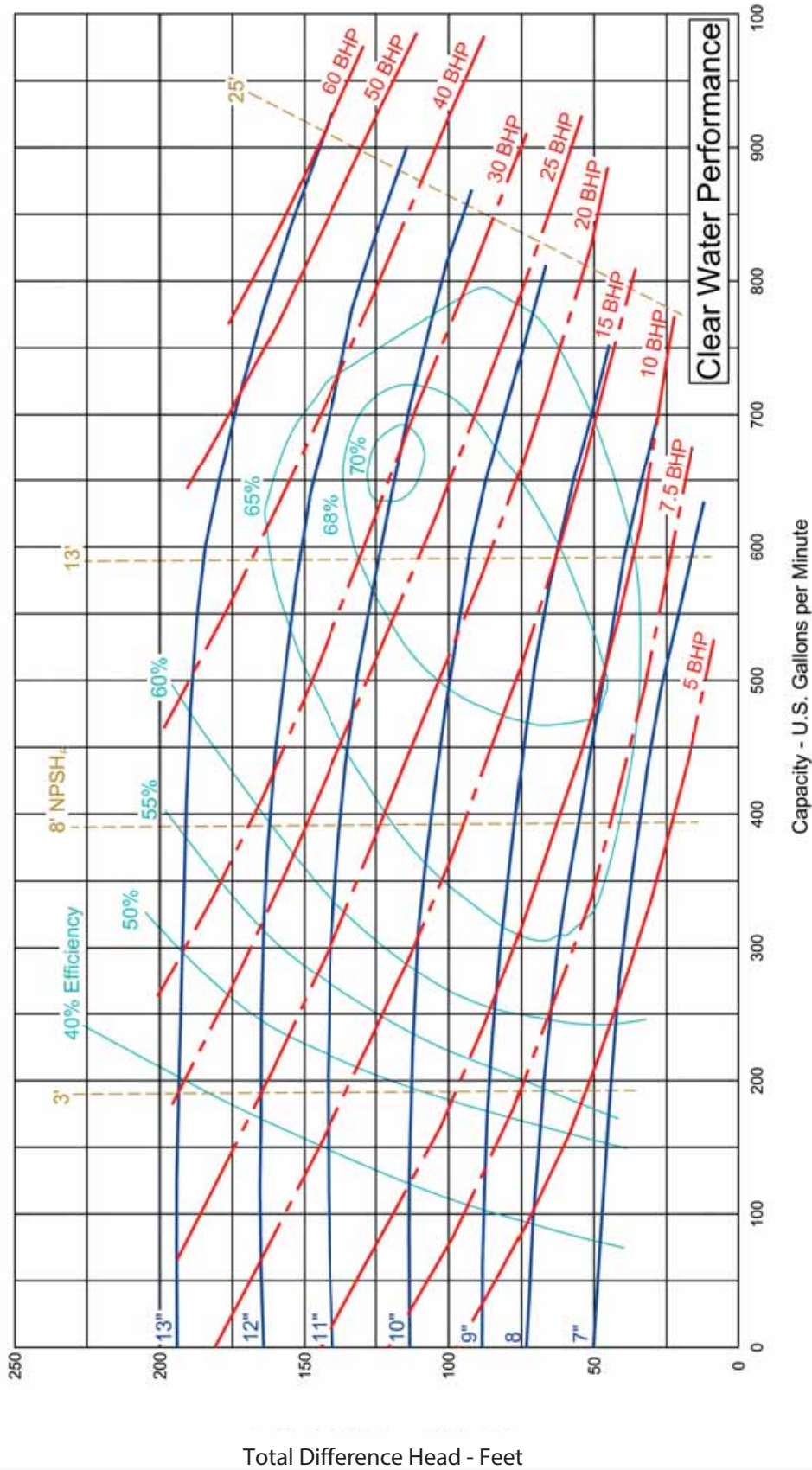
250 Pump  
 4X3X13  
 Speed: 1150 RPM  
 Curve: 947



Open Impeller  
 Dia: 7" to 13"  
 Eye Area: 12.5 Sq. In.  
 Max Sphere: 3/4 In.

250 Pump  
 4X3X13  
 Speed: 1450 RPM  
 Curve: 1052C

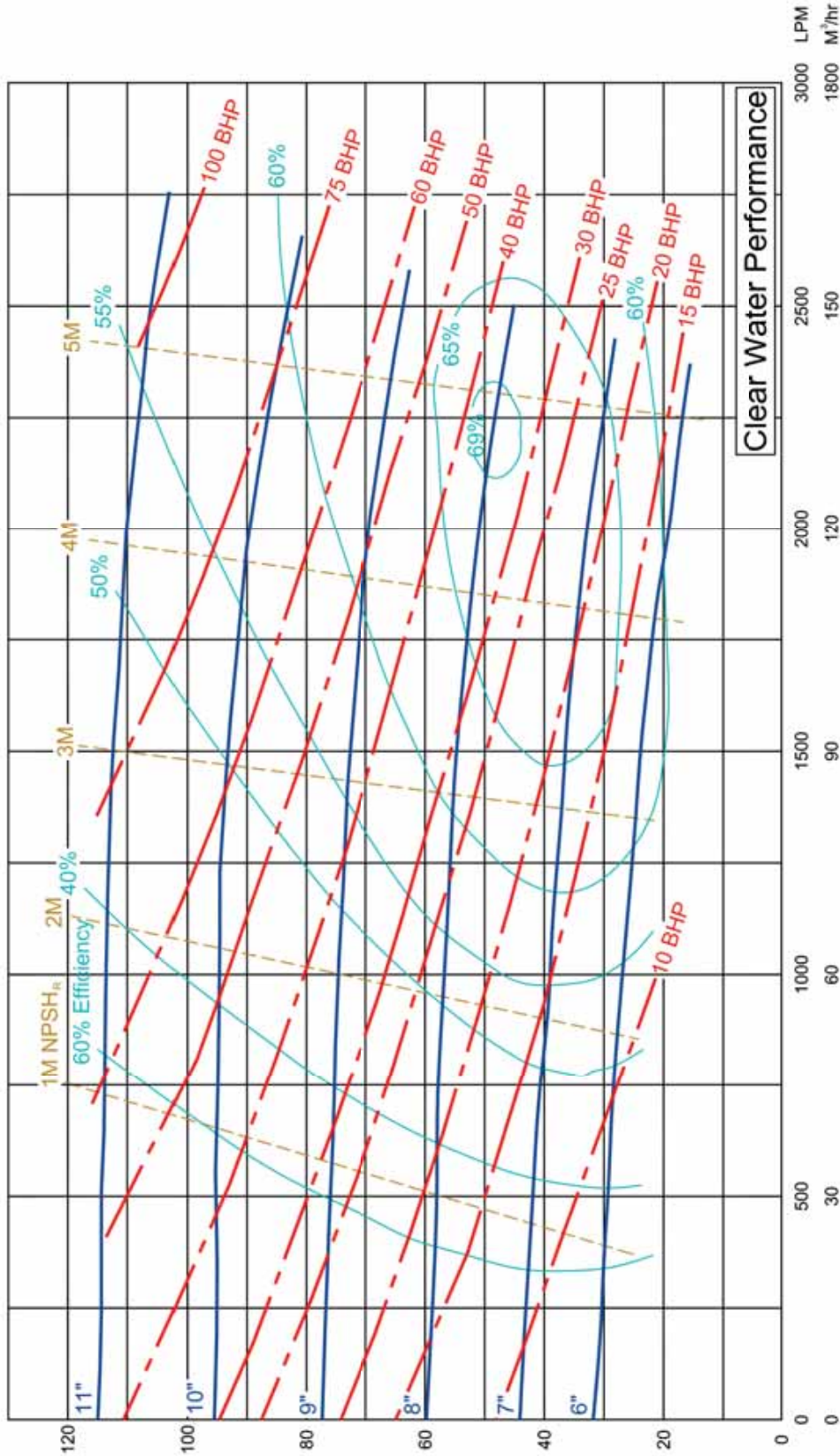
# 250 Pump



**250 Pump**  
**4X3X13**  
**Speed: 1750 RPM**  
**Curve: 948**

**Open Impeller**  
**Dia: 7" to 13"**  
**Eye Area: 12.5 Sq. In.**  
**Max Sphere: 3/4 In.**



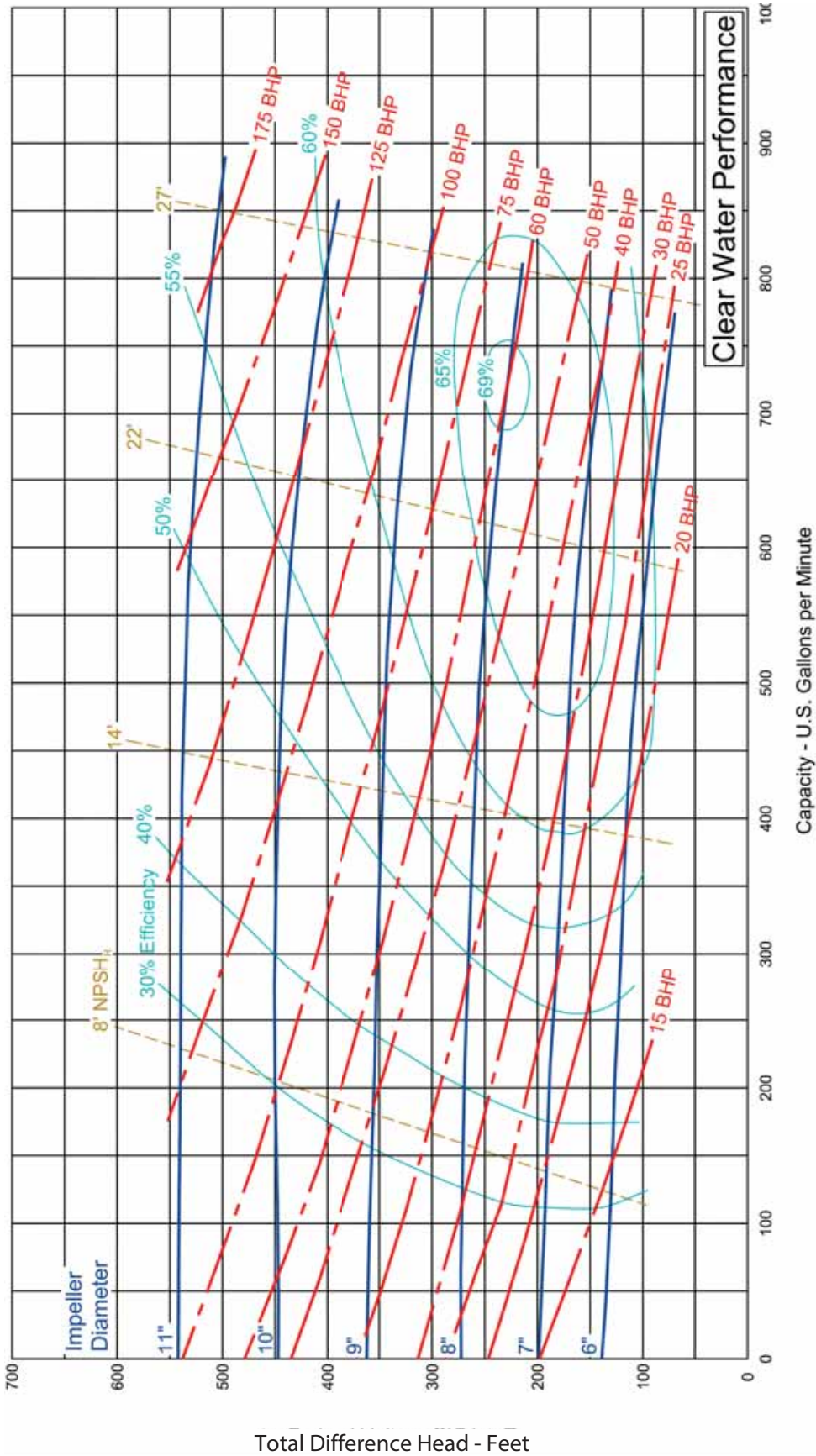


Total Difference Head - Meters

Open Impeller  
 Dia: 6" to 11"  
 Eye Area: 12.5 Sq. In.  
 Max Sphere: 3/4 In.

250 Pump  
 4X3X13  
 Speed: 2900 RPM  
 Curve: 1048C

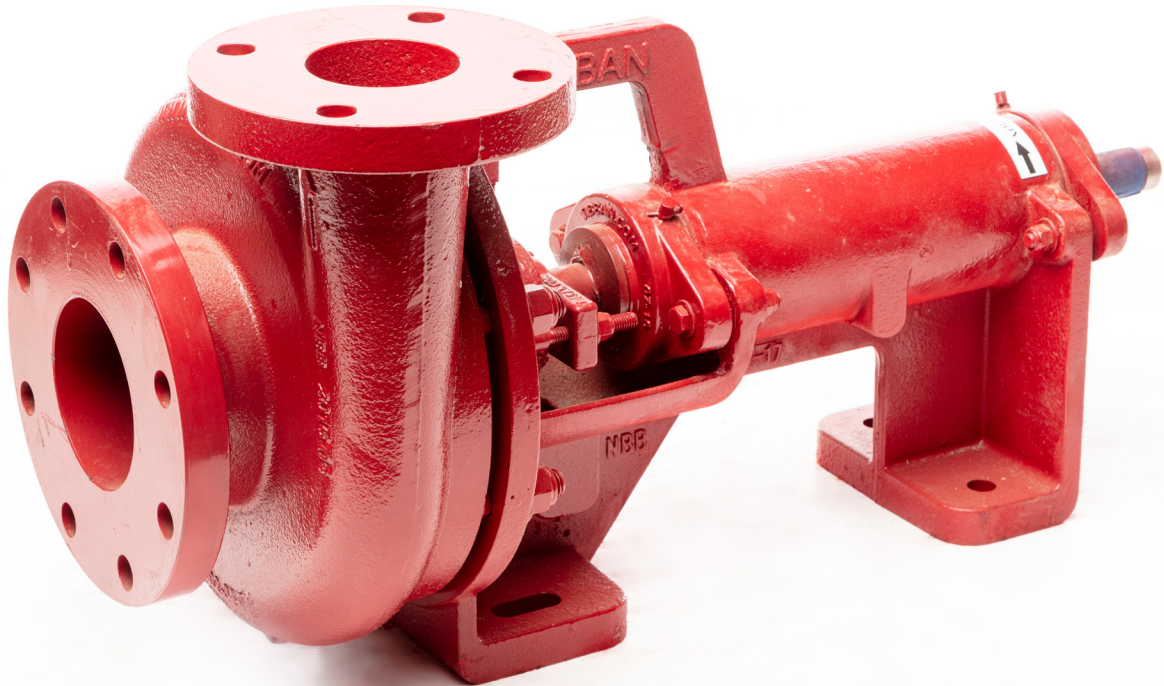
250 Pump



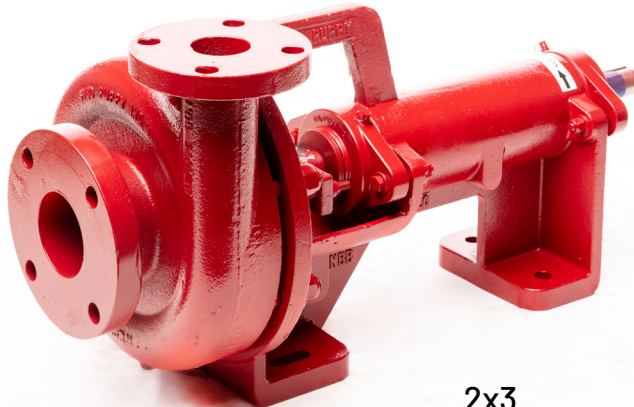
Open Impeller  
 Dia: 6" to 11"  
 Eye Area: 12.5 Sq. In.  
 Max Sphere: 3/4 In.

250 Pump  
 4X3X13  
 Speed: 3500 RPM  
 Curve: 949

**118 CENTRIFUGAL PUMPS**



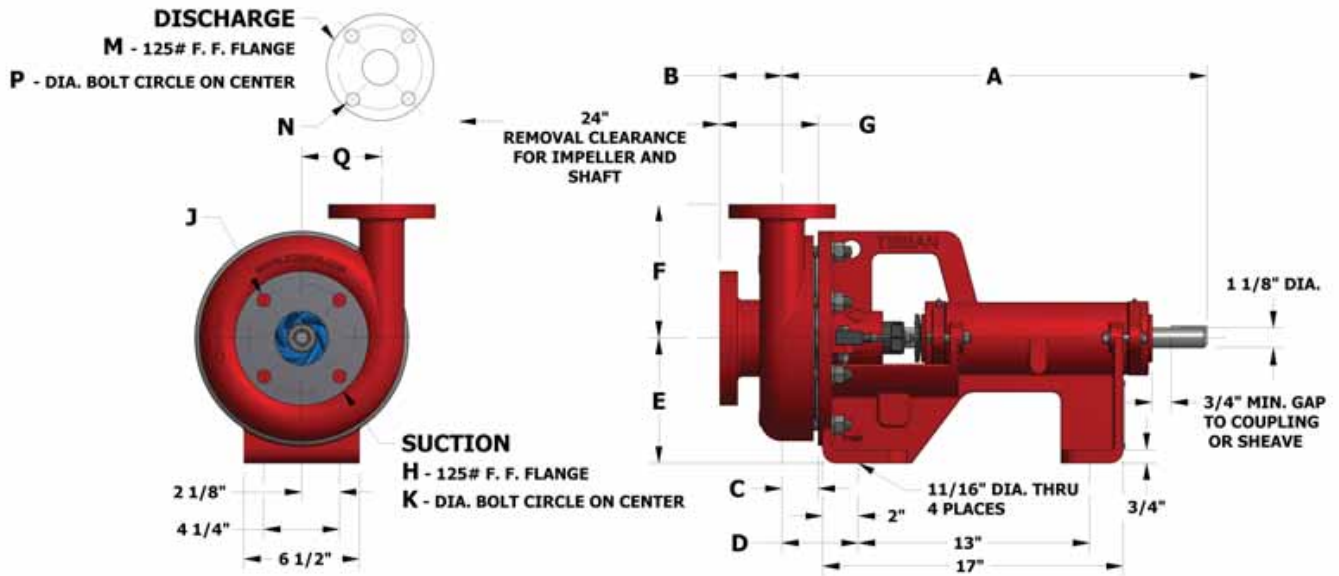
4x3



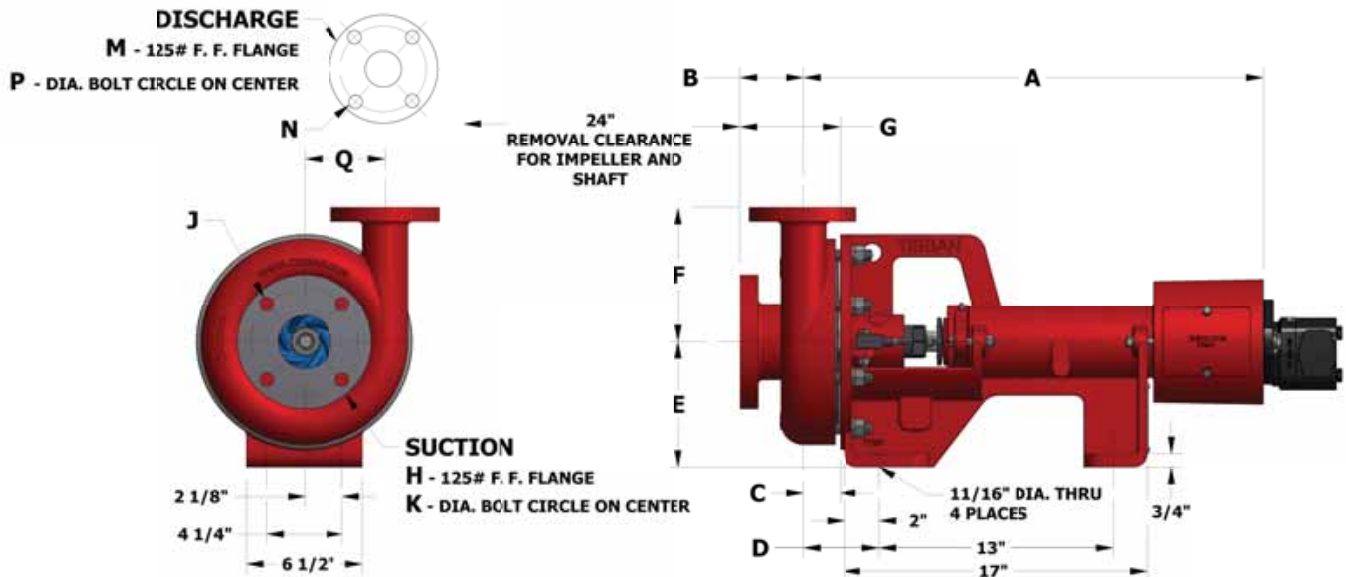
2x3



# 118 Pump

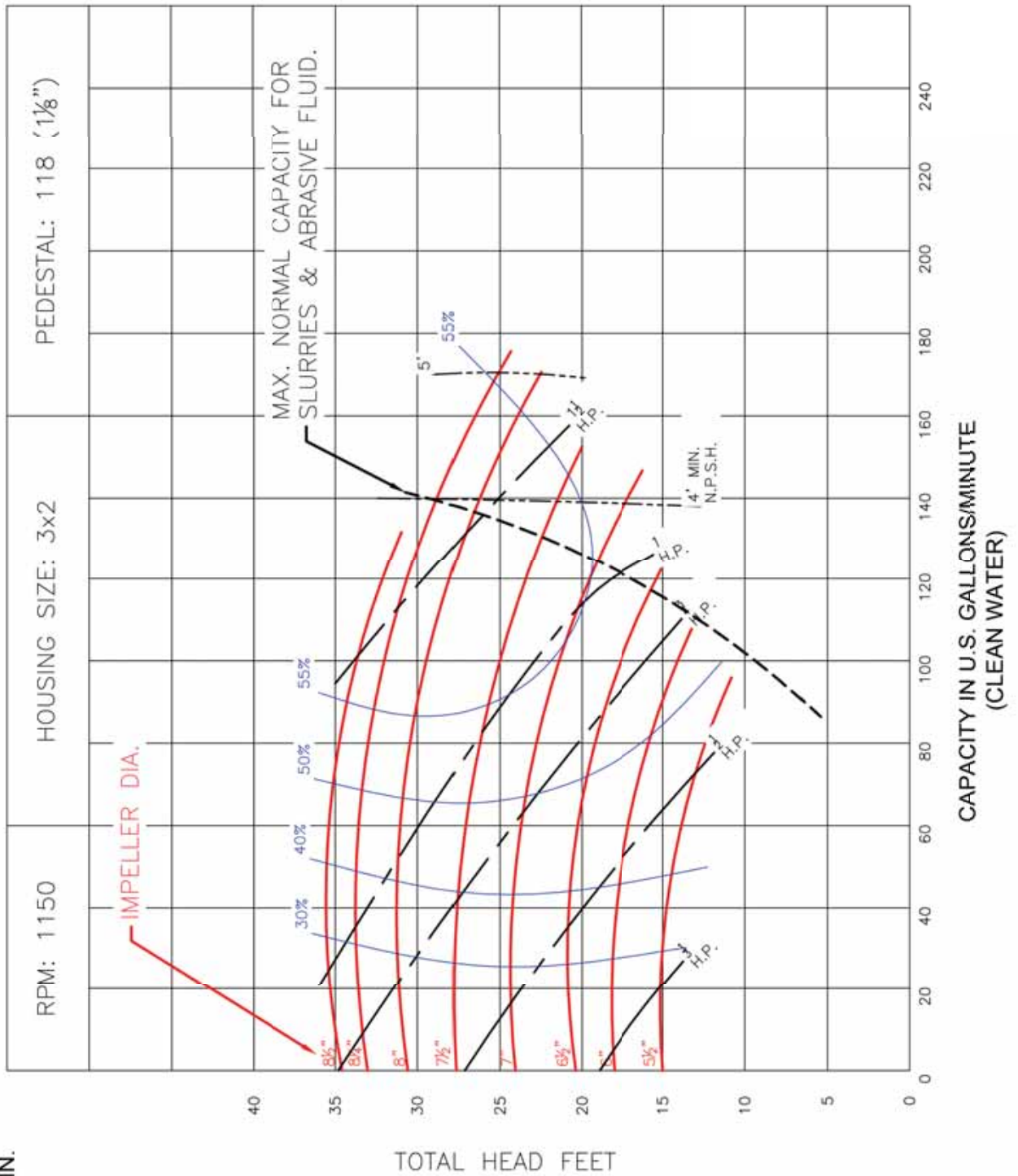


118 PUMP SIZE	A	B	C	D	E	F	G	H	J	K	M	N	P	Q
1 1/2" X 2"	23 5/8"	3"	1 5/8"	3 7/8"	7 3/16"	7 1/2"	4 5/8"	2"	3/4" DIA - 4 PLACES	3 7/8"	1 1/2"	5/8" DIA - 4 PLACES	3 7/8"	4 3/4"
2" X 3"	23 5/8"	3 1/2"	1 3/4"	4"	7 3/16"	7 1/2"	5 1/4"	3"	3/4" DIA - 4 PLACES	4 3/4"	2"	3/4" DIA - 4 PLACES	4 3/4"	4 1/2"
3" X 4"	24 1/32"	4 1/8"	2 1/8"	4 3/8"	7 3/16"	8"	6 1/4"	4"	3/4" DIA - 8 PLACES	6"	3"	3/4" DIA - 4 PLACES	6"	5"



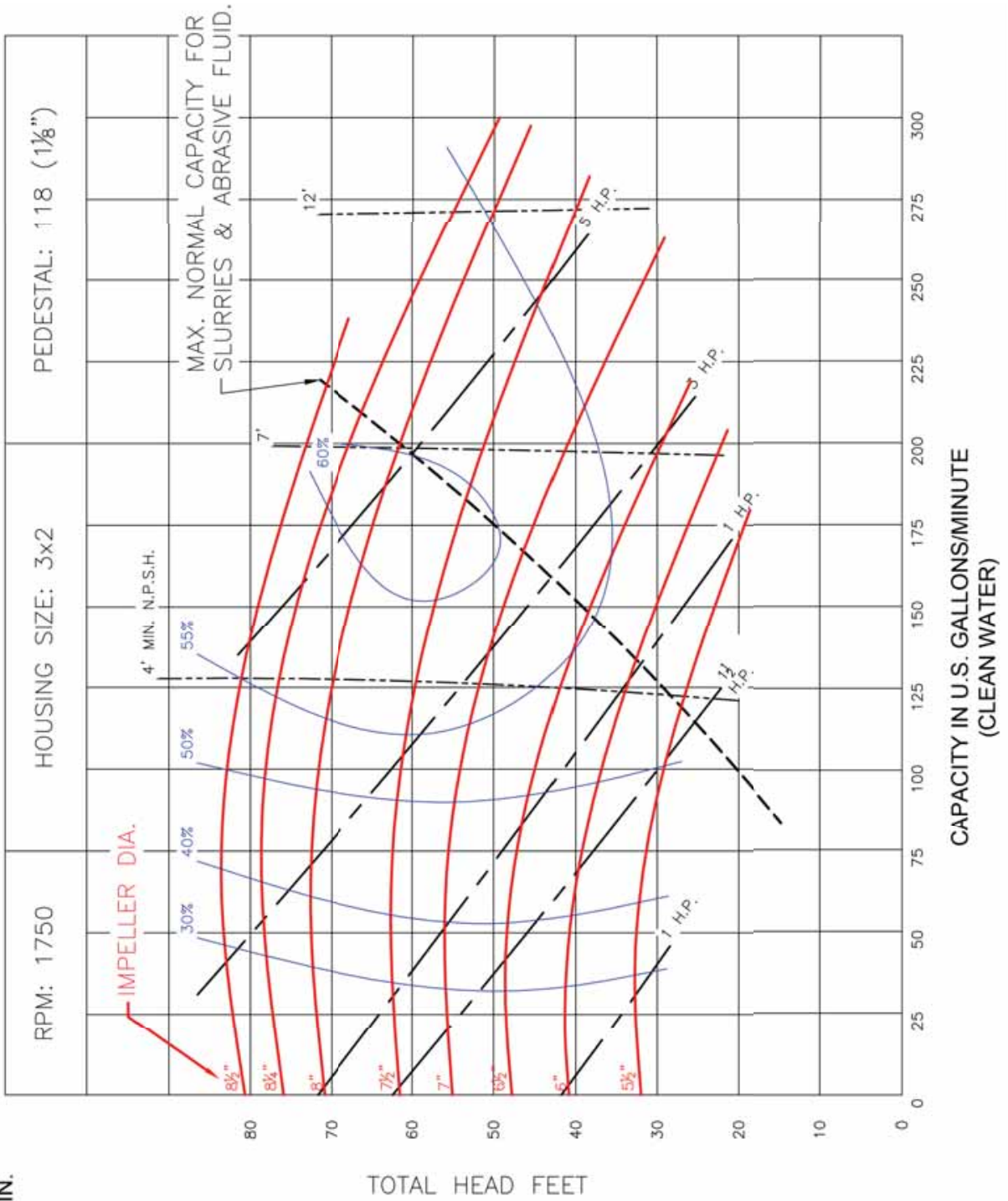
118 PUMP SIZE	A	B	C	D	E	F	G	H	J	K	M	N	P	Q
1 1/2" X 2"	25 11/16"	3"	1 5/8"	3 7/8"	7 3/16"	7 1/2"	4 5/8"	2"	3/4" DIA - 4 PLACES	3 7/8"	1 1/2"	5/8" DIA - 4 PLACES	3 7/8"	4 3/4"
2" X 3"	25 11/16"	3 1/2"	1 3/4"	4"	7 3/16"	7 1/2"	5 1/4"	3"	3/4" DIA - 4 PLACES	4 3/4"	2"	3/4" DIA - 4 PLACES	4 3/4"	4 1/2"
3" X 4"	25 27/32"	4 1/8"	2 1/8"	4 3/8"	7 3/16"	8"	6 1/4"	4"	3/4" DIA - 8 PLACES	6"	3"	3/4" DIA - 4 PLACES	6"	5"

IMPELLER: SEMI-OPEN  
 DIA: 5½" - 8½"  
 EYE-AREA: 5.2 SQ. IN.  
 MAX. SPHERE: 7/8"



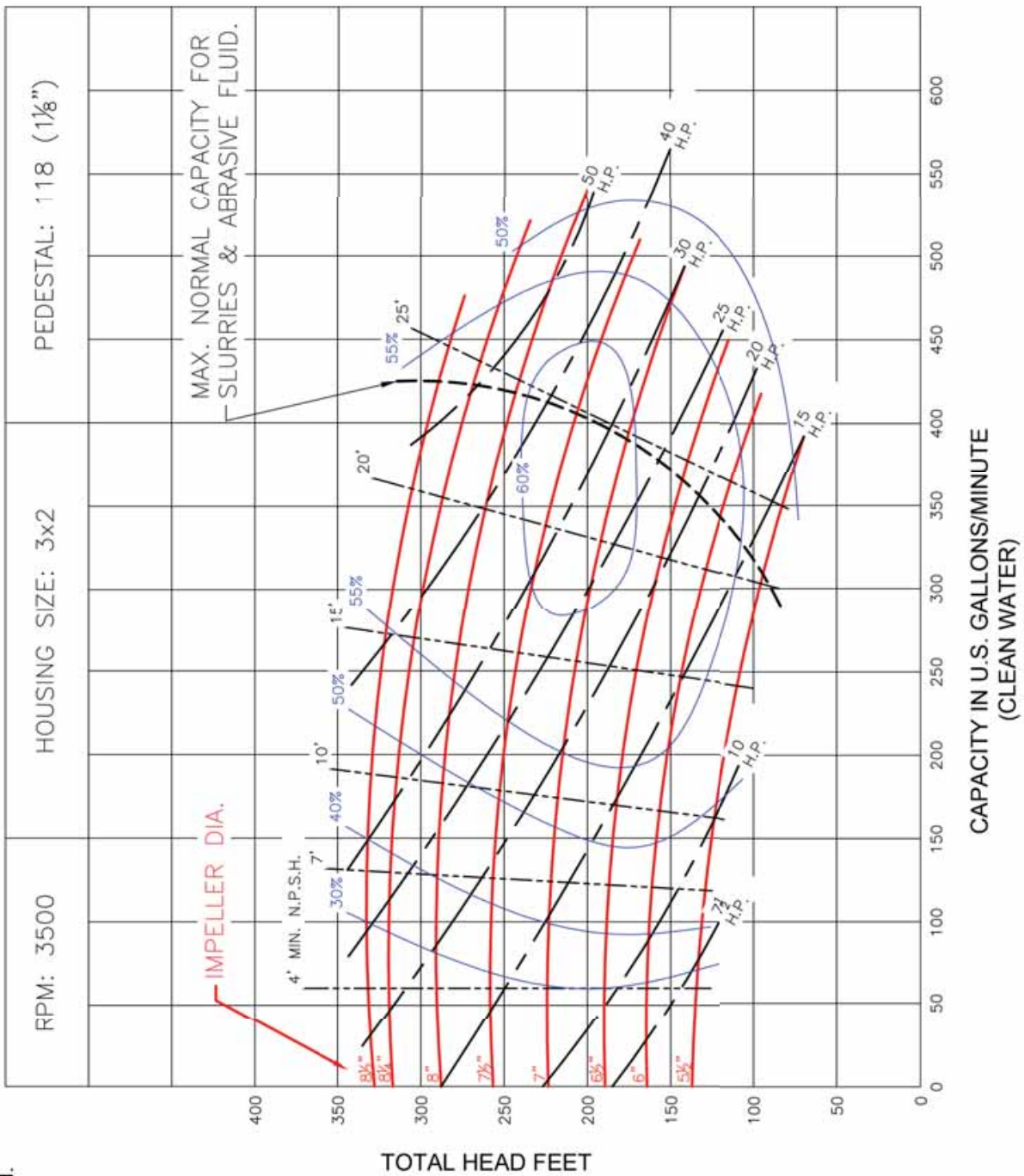
# 118 Pump

IMPELLER: SEMI-OPEN  
 DIA: 5½" - 8½"  
 EYE-AREA: 5.2 SQ. IN.  
 MAX. SPHERE: 7/8"

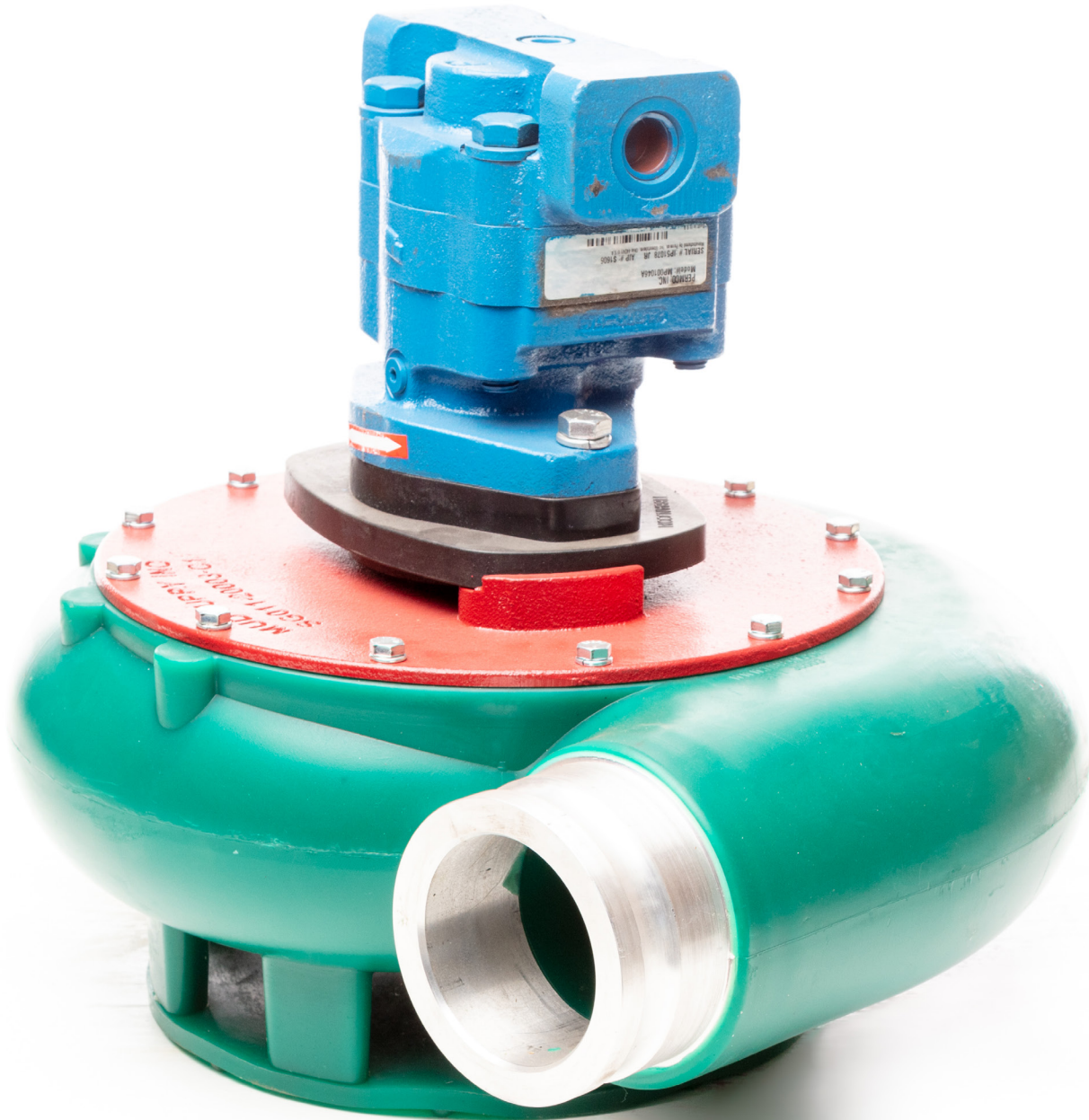




IMPELLER: SEMI-OPEN  
 DIA: 5½" - 8½"  
 EYE-AREA: 5.2 SQ. IN.  
 MAX. SPHERE: 7/8"

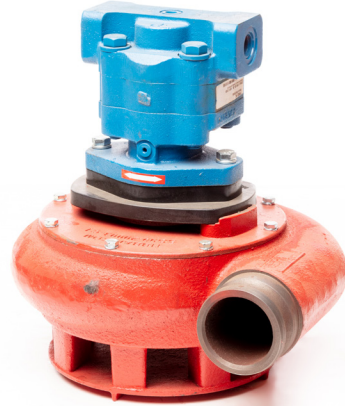


 **MUD PUPPY SAND GUZZLER**

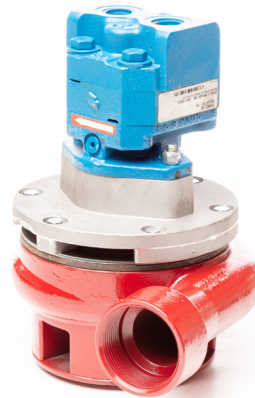




T11 Cast Iron



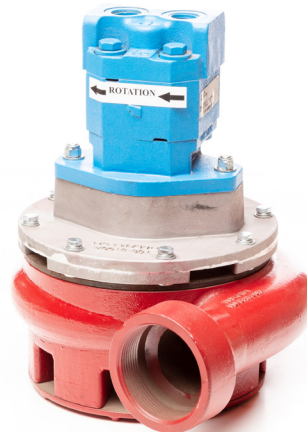
T09 Cast Iron



T08 Cast Iron



T09 Tetra Green



T06 Cast Iron

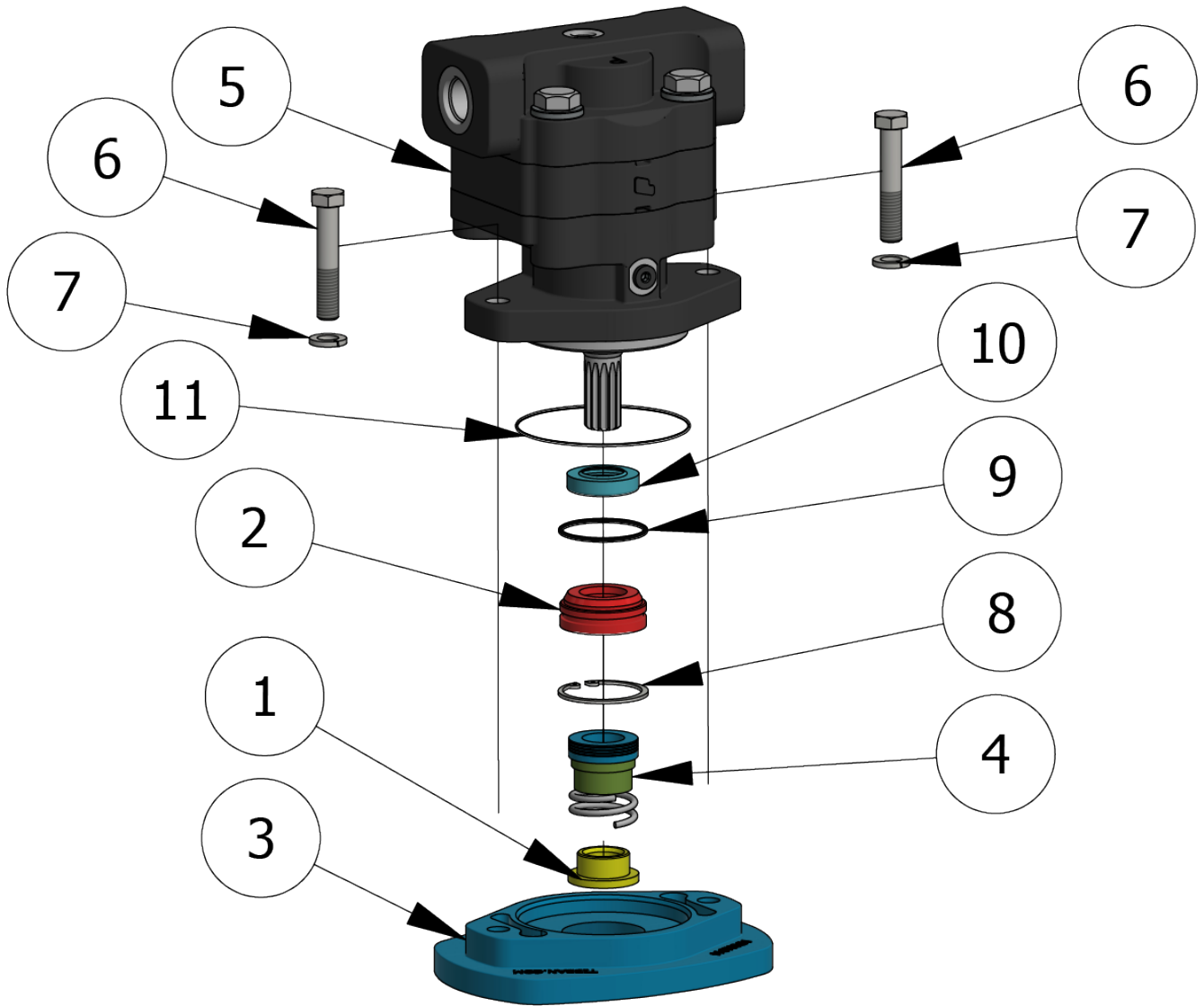




# MP001047 KIT T09 AND T11 SAND GUZZLER MOTOR 1 INCH MECHANICAL SEAL

## MP001047 Kit, T09 and T11 Sand Guzzler 1 Inch Mechanical Seal Packing List

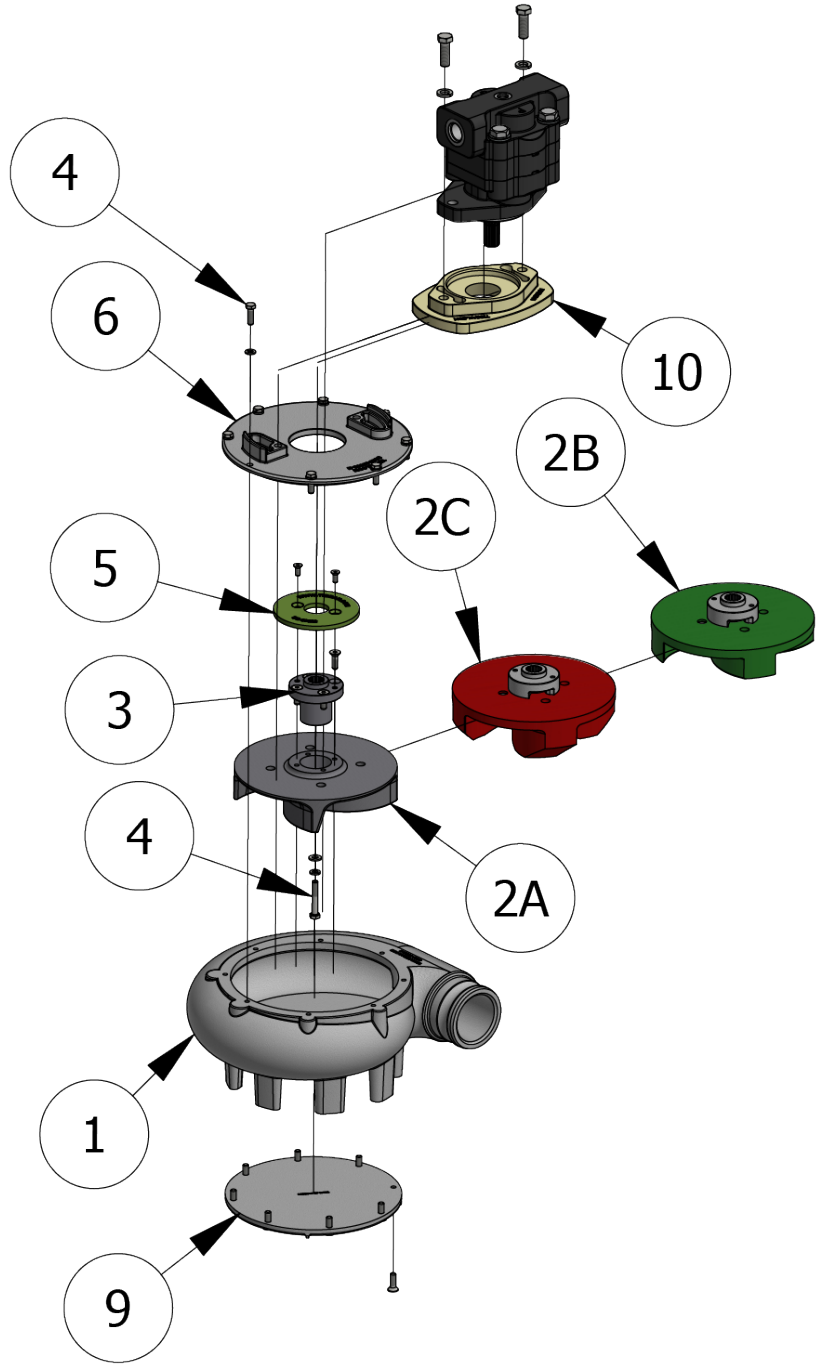
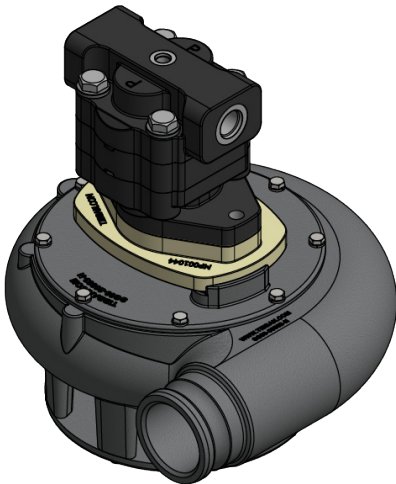
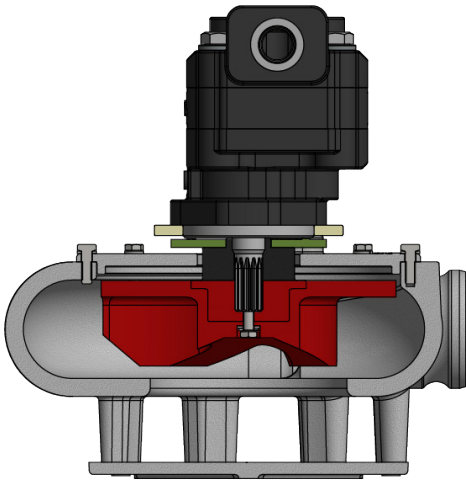
Item	Qty	Part #	Description
<b>Standard Pump Selection</b>			
1	1	MP001042	Spacer, Mechanical Seal Hub
2	1	MP001043	Sleeve, Mechanical Seal
3	1	MP001044	Plate, Mount, Sand Guzzler Mechanical Seal Motor
4	1	MP001045	Seal, Mechanical, Sand Guzzler
5	1	MP001046	Motor, Sand Guzzler
6	2	MPH-B-00058	Bolt, 1/2"-13 X 3-1/4" HCS G5Z
7	2	MPH-W-00012	Washer, Lock, 1/2", Grade 5
8	1	MP001065	Retaining Ring (MP001046 Motor)
9	1	MP001067	O-Ring, -134
10	1	MP301082	Seal, Primary, Sand Guzzler
11	1	MPH-R-00008	O-Ring, #2-045





# T09 SAND GUZZLER EXPLODED VIEW PERMCO MOTOR WITH MECHANICAL SEAL

MP001047 Kit, T09 and T11 Sand Guzzler 1 Inch Mechanical Seal Packing List				
Item	Qty	Part #	Description	
<b>Standard Pump Selection</b>				
4	1	T09-BK	Bolt Kit	Steel
5	1	SG00022	Sand Guzzler Splasher Plate	Steel
7	1	SG001001	Pick Up Pump Parker Motor	Varies
8	1	MP12613-2	Hub Spacer	Steel
9	1	SG09-30004	Base Plate	Aluminum
10	1	SG-20003-1	Sand Guzzler Motor Mount Plate	Aluminum
<b>Housing Selection</b>				
Aluminum Option - Good for clear water only; abrasion will wear quickly				
1	1	T09-01-AL	Housing	Aluminum
Cast Iron Option - Weighs more than aluminum but lasts 2-3 times longer				
1	1	T09-01-CI	Housing	Cast Iron
Polyurethane Option - Lasts 2-3 times longer than cast iron and weighs less than aluminum				
1	1	SG09-30002	Housing	Polyurethane
<b>Impeller and Top Plate Selection</b>				
Aluminum Option - Weighs less than cast iron and less durable				
2A	1	T09-02-AL	Impeller	Aluminum
6	1	T09-03-AL	Top Plate	Aluminum
3	1	T11-16-6-1	Splined Hub	Steel
Cast Iron Option - Lasts 2-3 times longer than aluminum; can be used with all drilling muds; cost effective but weighs more than aluminum				
2A	1	T09-02-CI	Impeller	Cast Iron
6	1	SG09-2003-CI	Top Plate	Cast Iron
3	1	T11-16-6-1	Splined Hub	Steel
Polyurethane Standard Pressure Option - Weighs less than aluminum and cast iron and lasts 2-3 times longer than aluminum				
2B	1	T09-02-P	Standard Pressure Impeller	Polyurethane
2C	1	MP301020	High Pressure Impeller	Polyurethane

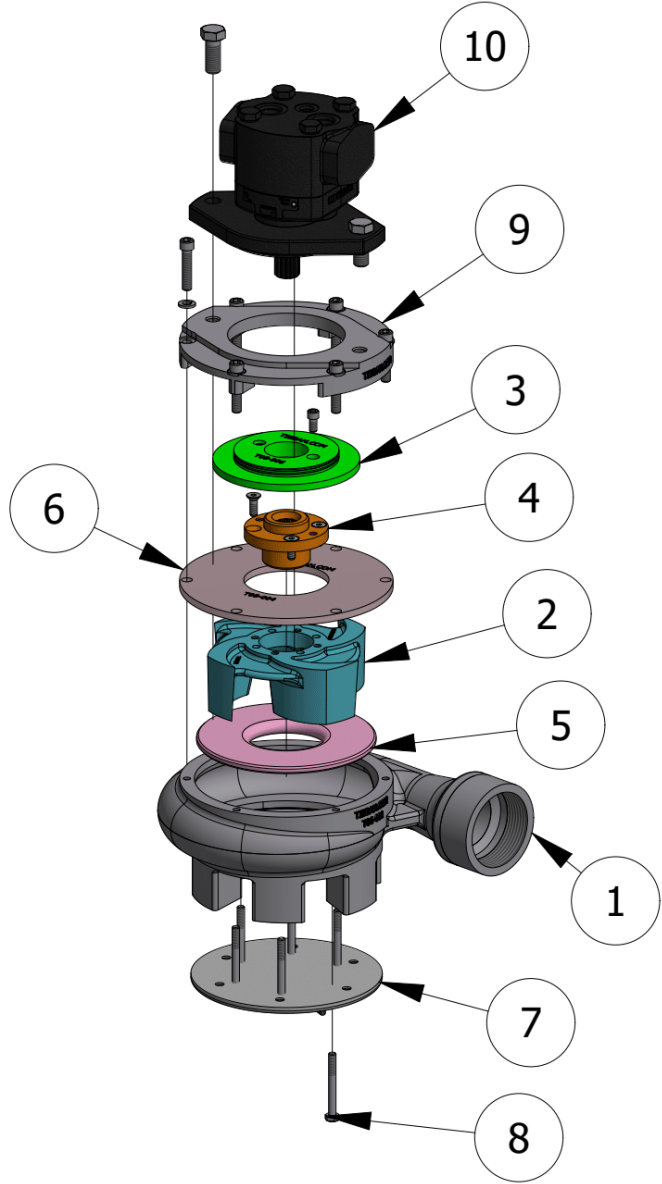
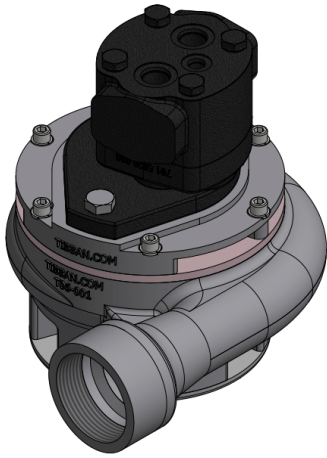
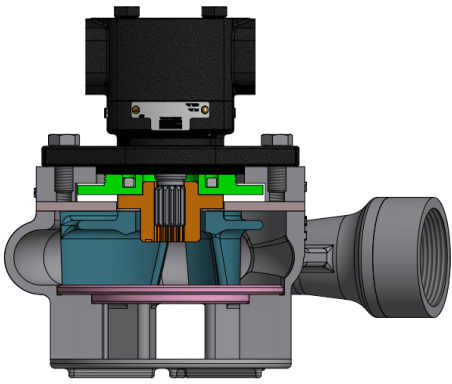






# T06 SAND GUZZLER EXPLODED VIEW CATALOG

T06 Sand Guzzler				
Item	Qty	Part Number	Description	Material
<b>Standard Pump Selection</b>				
1	1	T06-001	Pump Housing	Cast Iron
2	1	T06-002	Impeller	Cast Iron
3	1	T06-006	Splasher Plate	Cast Iron
4	1	T06-008	Splined Hub	Steel
5	1	T06-007	Wearplate Bottom	Cast Iron
6	1	T06-004	Top Plate	Cast Iron
7	1	T06-005	Base Plate	Cast Iron
8	1	T06-BK	Bolt Kit	Steel
<b>Motor and Motor Base Selection</b>				
<b>.5 CID Motor</b>				
9	1	T06-003	Motor Base Small	Cast Iron
10	1	MP-U262-00003	Motor Small	Varies
<b>1.5 CID Motor</b>				
9	1	T06-011	Motor Base Large	Cast Iron
10	1	SG001001	Motor Large 1.4 CIR 23cc	Varies



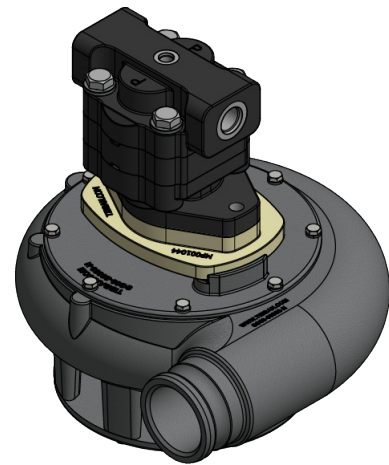
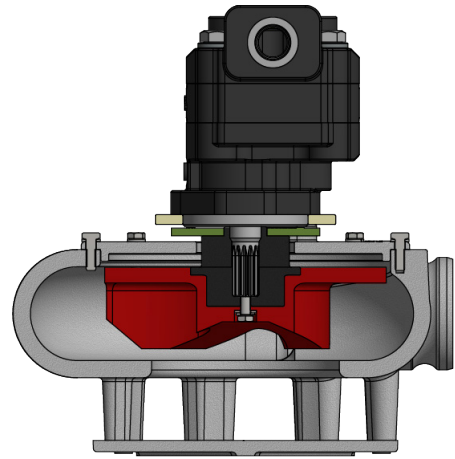
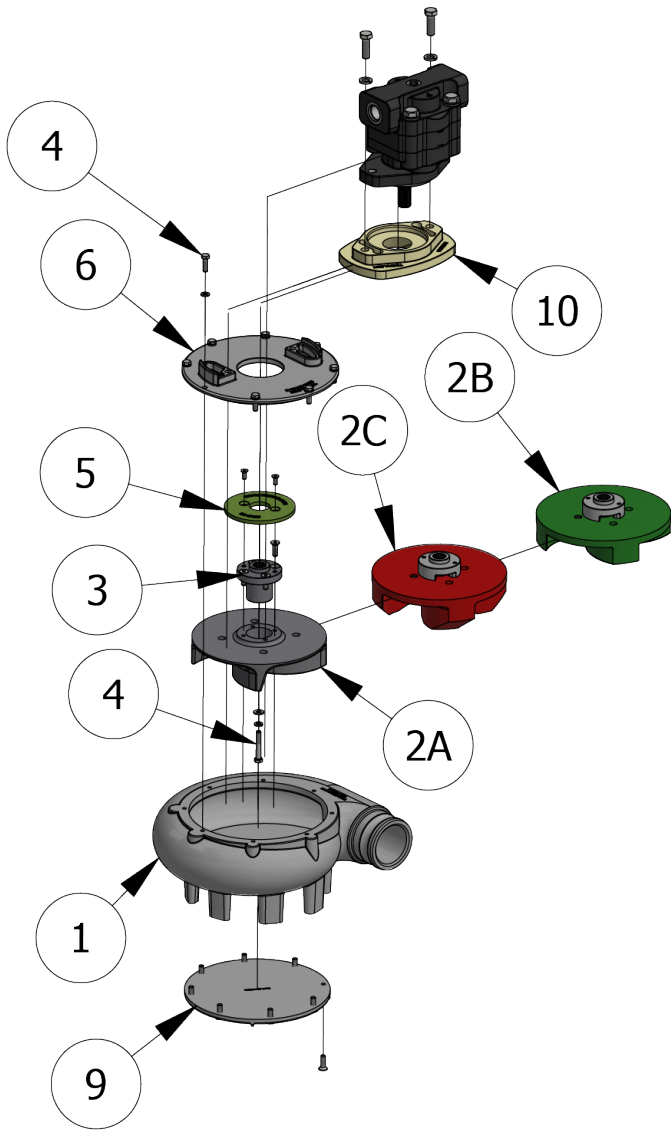


# T11 SAND GUZZLER EXPLODED VIEW

## PERMCO MOTOR WITH MECHANICAL SEAL

T11 Sand Guzzler				
Item	Qty	Part Number	Description	Material
<b>Standard Pump Selection</b>				
4	1	T09-BK	Bolt Kit	Steel
5	1	SG00022	Sand Guzzler Splasher Plate	Steel
7	1	SG001001	Pick Up Pump Parker Motor	Varies
9	1	SG09-30004	Base Plate	Aluminum
10	1	MP001044	Plate - Motor Mount Adapter, Nylon	Aluminum
<b>Housing Selection</b>				
Aluminum Option - Good for clear water only; abrasion will wear quickly				
1	1	T09-01-AL	Housing	Aluminum
Cast Iron Option - Weighs more than aluminum but lasts 2-3 times longer				
1	1	T09-01-CI	Housing	Cast Iron
Polyurethane Option - Lasts 2-3 times longer than cast iron and weighs less than aluminum				
1	1	SG09-30002	Housing	Polyurethane
<b>Impeller and Top Plate Selection</b>				
Aluminum Option - Weighs less than cast iron and less durable				
2A	1	T09-02-AL	Impeller	Aluminum
6	1	T09-03-AL	Top Plate	Aluminum
3	1	T11-16-6-1	Splined Hub	Steel
Cast Iron Option - Lasts 2-3 times longer than aluminum; can be used with all drilling muds; cost effective but weighs more than aluminum				
2A	1	T09-02-CI	Impeller	Cast Iron
6	1	SG09-2003-CI	Top Plate	Cast Iron
3	1	T11-16-6-1	Splined Hub	Steel
TetraGreene and Polyurethane Option - Weighs less than aluminum and cast iron				
2B	1	T09-TG-T	Impeller	TetraGreene
2C	1	T09-02-P	Impeller	Polyurethane





## SAND GUZZLER FLOW RATES

<b>T11 Sand Guzzler 500 GPM</b>								
<b>Hyrdraulic GPM</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>9.25</b>	<b>10</b>	
<b>11" Standard Impeller</b>								
Hydraulic PSI	1030	1280	1720	2210	2660	2940	X	
Feet of Head	4	7	9	13	16	19	X	
Water Capacity GPM	321	366	442	508	566	582	X	
<b>11" High Pressure Impeller</b>								
Hydraulic PSI	1535	2070	2550	2570	X	X	2900	
Feet of Head	15	20	23	23	X	X	25	
Water Capacity GPM	432	517	582	591	X	X	612	
<b>T09 Sand Guzzler 350 GPM</b>								
<b>Hyrdraulic GPM</b>	<b>5</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>12.5</b>
<b>9" Standard Impeller</b>								
Hydraulic PSI	560	960	1290	1615	1930	2460	2550	2840
Feet of Head	0.2	8	13	17	22	30	32	36
Water Capacity GPM	210	294	302	395	435	476	492	513
<b>9" High Pressure Impeller</b>								
Hydraulic PSI	630	1040	1340	1660	2100	2330	2680	2860
Feet of Head	6	10	15	21	27	32	39	46
Water Capacity GPM	236	324	370	411	455	472	496	488



[Mudpuppyinc.com](http://Mudpuppyinc.com)

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