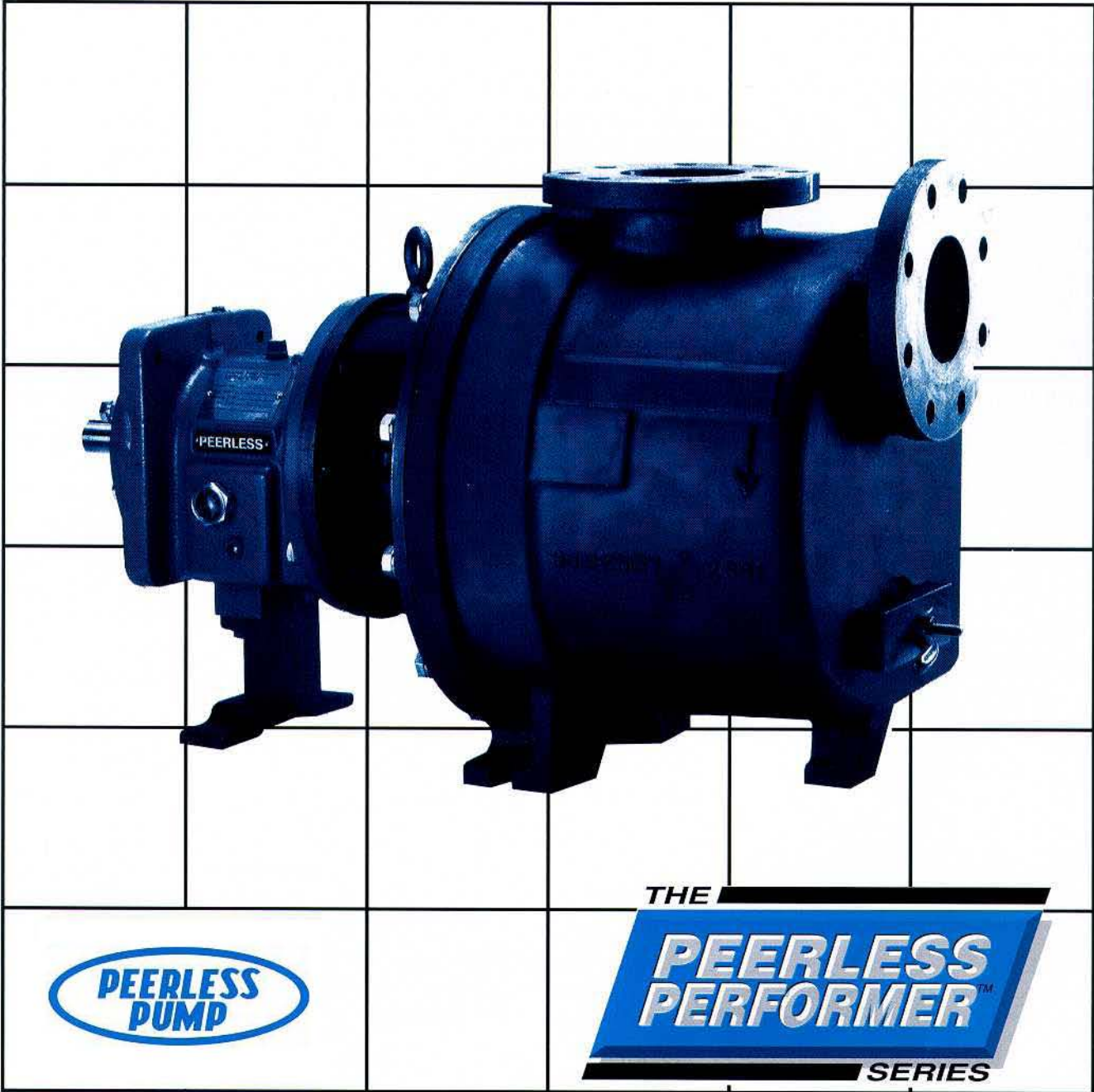


Peerless Pump Company

SERIES 8796 SELF PRIMING PUMP



Peerless® Pump Series 8796 Self Priming Pump

Standard Dimension Self Priming Pump:

Peerless Pump 8796 self priming pumps are designed for chemical transfer, industrial sump, waste treatment, mine dewatering, and other applications where a heavy duty self priming pump is the preferred choice.

The two piece inner and outer volute casing design allows for quick and economical replacement. The volutes can be cast in separate alloys to improve service life and corrosion resistance.

Our back pullout design requires no suction check valve and no external by-pass piping for priming.

Quality engineering, innovative design, rugged construction, and low cost combine to make the Peerless Pump 8796 self priming pumps the first choice for demanding applications.

Materials of Construction

- Ductile iron
- 316 SS
- CD4MCu
- Alloy 20
- Other materials available

Certified Hydraulic Performance

- Capacities to 700 gallons per minute
- Heads to 420 feet TDH
- Suction Lift to 25 feet
- Temperature to 500 °F

Construction Features: 8796 Self Priming Pump

► **CASING:** Two piece casing allows for quick replacement of inner and outer volutes. Casing is self venting with a top centerline discharge and includes a large

clean out port, case drain, and case fill plug. Standard flanges are 150 lb. Optional 300 lb. flanges and raised face flanges are available.

► **IMPELLER:** The fully open design significantly reduces clogging and the integrated back pumpout vanes reduce stuffing box pressure, prolonging mechanical seal life. Impeller and casing are matched to achieve high efficiency and low NPSH. A Teflon* O-ring seals the impeller to the shaft sleeve and prevents shaft corrosion. All impellers are dynamically balanced and are available in an optional keyed and bolted design.

► **BEARING FRAME:** Peerless Pump PERFORMER™ power frames feature heavy duty cast iron construction (ductile iron on STP frame sizes), an enlarged oil reservoir for improved dissipation of heat, and a bulls eye sight glass for easy monitoring of oil level. Labyrinth seals, designed especially for Peerless Pump by Inpro, provide both static and dynamic sealing of the bearings using contact technology to positively seal at pump shutdown and operate without contact while the pump is running. Dowel pins assure precision alignment between the bearing frame and adapter. For maximum oil protection, a water cooled corrosion resistant finned tube heat exchanger is available on all models. Bearing frame includes bosses for vibration and temperature monitoring devices.

► **BEARINGS:** The inboard bearing is deep groove, single row. This bearing carries the radial load and is pressed on the shaft, free to float axially in the frame. The double row outboard bearing is locked on the shaft with a locknut and washer and is secured in the bearing housing by a snap ring. This bearing carries the radial load and

any unbalanced thrust load. All bearing fits are precision bored and meet or exceed a minimum ANSI L10 life of 17,500 hours.

► **SHAFT:** Designed to meet ANSI standards, the maximum shaft deflection at the seal chamber face is .002". Shaft is heavy duty 4140 steel. Alloy shafts are optional.

► **SHAFT SLEEVE:** Renewable 316 SS shaft sleeve is positively driven by a drive pin. The hook type sleeve has a free end for thermal expansion. Leakage under the sleeve is prevented by a Teflon* O-ring. Alloy shaft sleeves are optional.

► **FRAME ADAPTER:** All frame adapters are ductile iron for improved strength, safety, and durability. Precision machining ensures accurate fit to the back-plate/seal chamber. The 1½x1½-8 pump size utilizes an adapter ring.

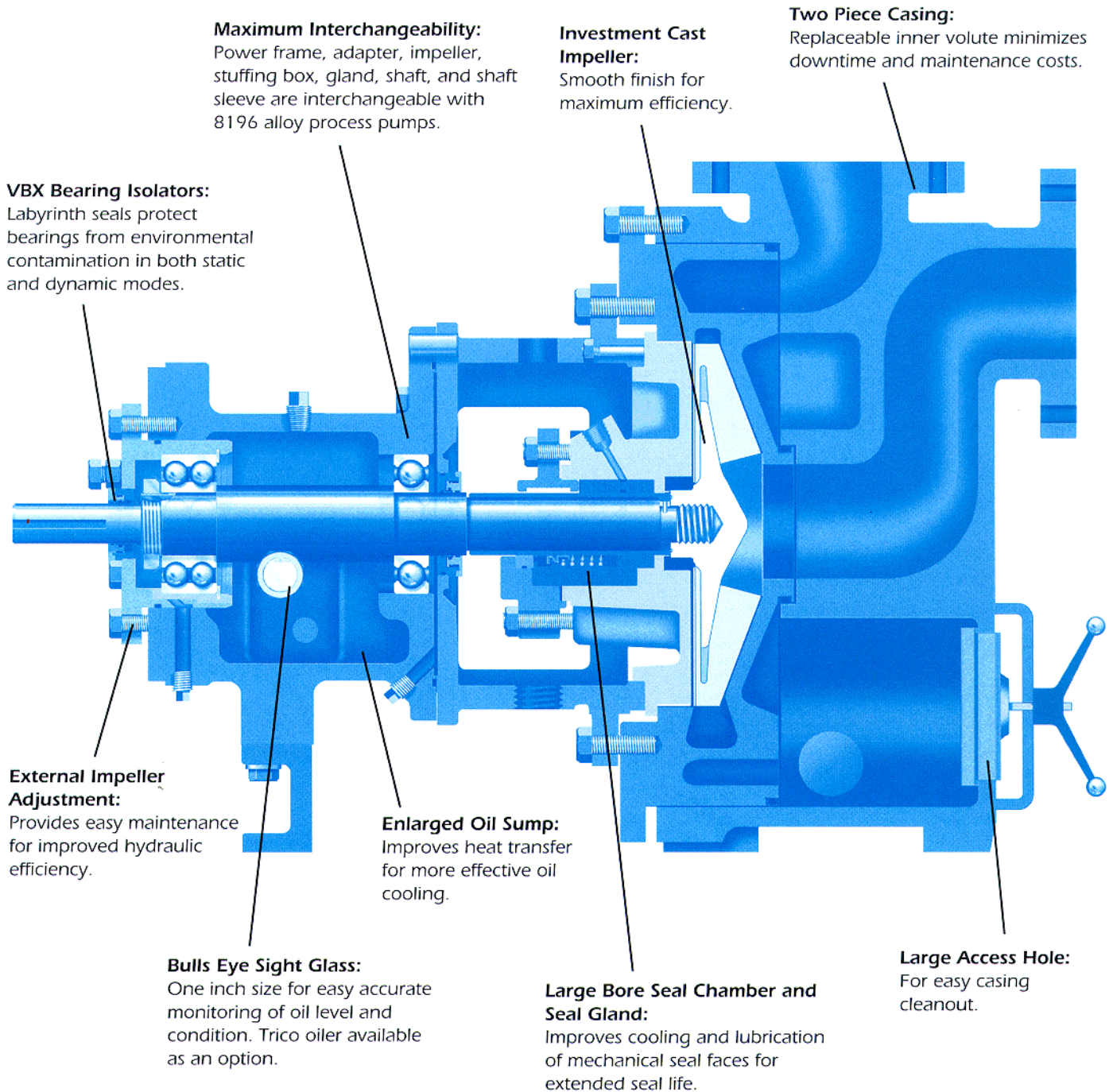
► **SEAL CHAMBER/STUFFING BOX COVER:** Three options are available which meet the latest ANSI specifications. Large bore seal chamber is available on all pumps with single and double inside mechanical seals. Standard bore seal chamber is provided on pumps with packing or cartridge seals. Optional self venting and draining taper bore seal chamber is available on all sizes.

► **INTERCHANGEABILITY:** Power frame, adapter, impeller, stuffing box, gland, shaft, and shaft sleeve are completely interchangeable with corresponding sizes of Peerless Pump 8196 alloy process pumps. The ease of parts interchangeability reduces plant inventory requirements and lowers costs.

*Teflon is a registered trademark of E.I. DuPont.

Features and Benefits:

Peerless Pump Series 8796 Self Priming Pump

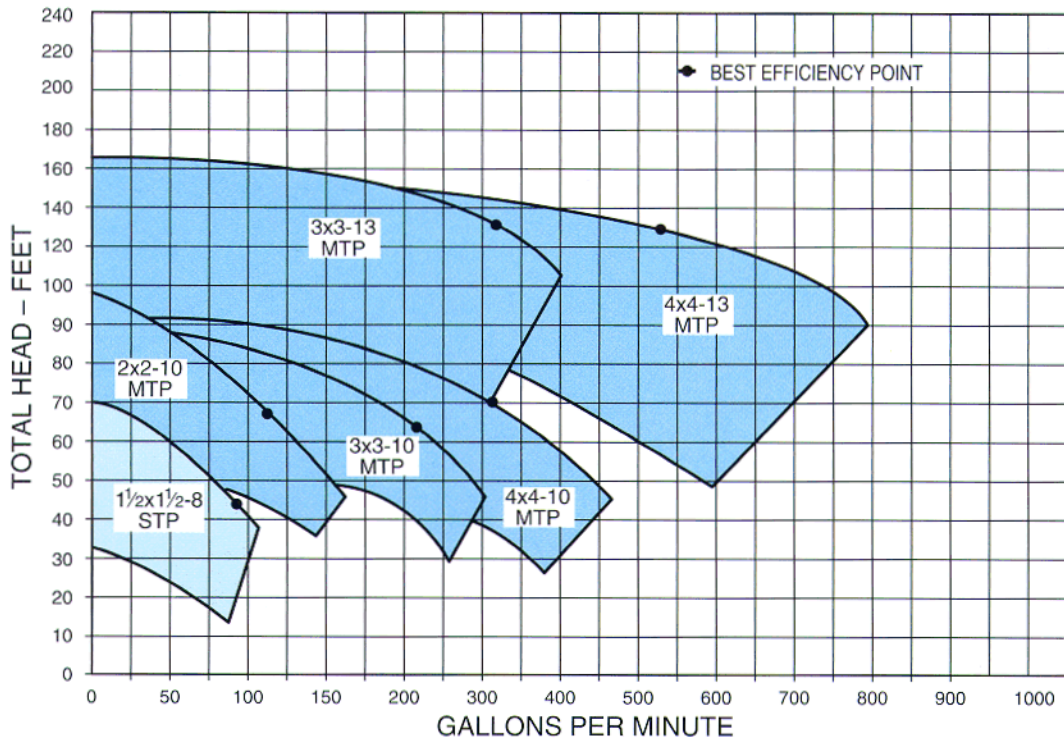


All PERFORMER™ series power ends carry a full 3 year warranty.

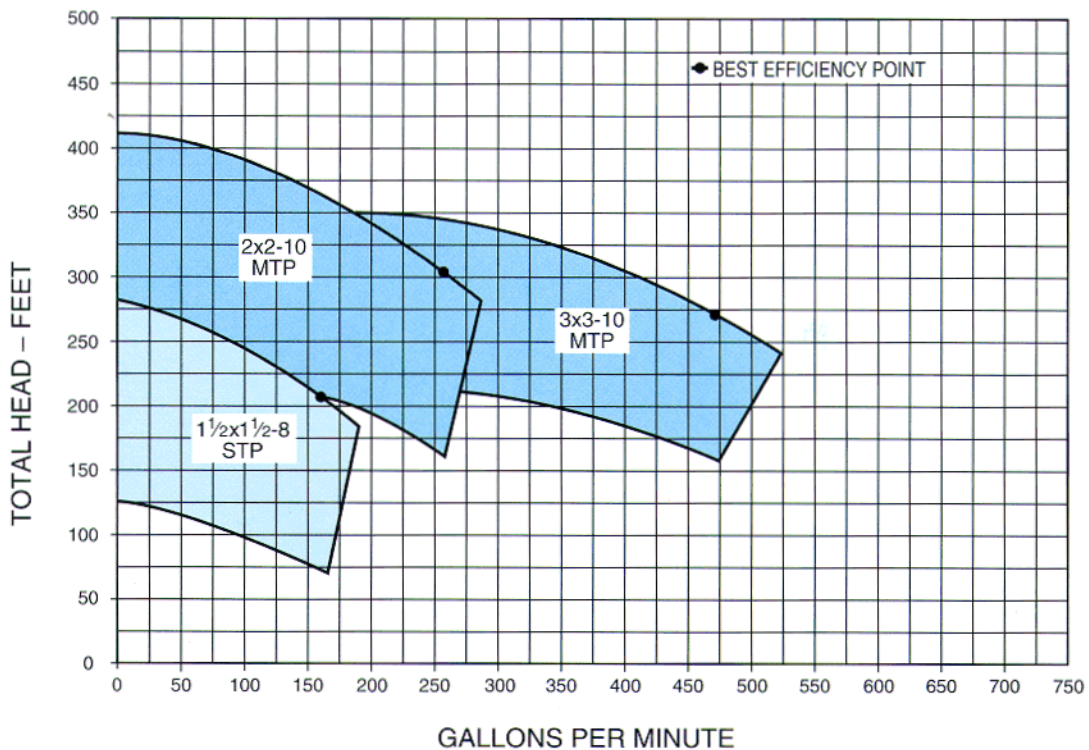
Performance Range:

Peerless Pump Series 8796 Self Priming Pump

1750 RPM

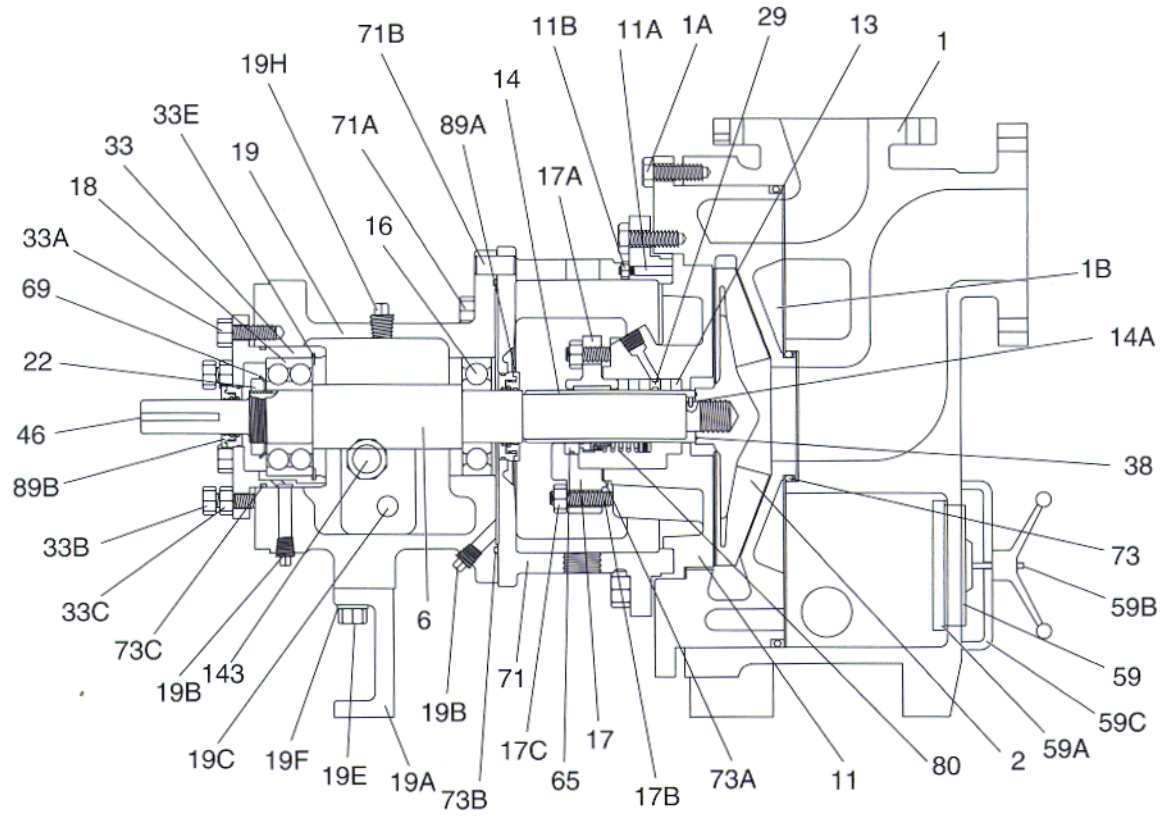


3550 RPM



Parts List:

Peerless Pump Series 8796 Self Priming Pump



ITEM #	MATERIAL	QTY	PART DESCRIPTION	ITEM #	MATERIAL	QTY	PART DESCRIPTION
59	Ductile Iron	1	Cover-Cleanout*	19F	Steel	1	Washer, Frame Foot
59A	Sponge	1	Gasket	19G	Steel	1	Plug, Oil Cooler Outlet (Not Shown)
59B	Steel	1	Wing Nut	19H	Steel	1	Plug, Oil Fill
59C	Steel	1	Cleanout Brace	22	Steel	1	Locknut, Bearing
1	Ductile Iron	1	Casing*	29	Teflon	1	Ring, Lantern
1A	Stainless Steel	4-16	Bolt, Casing	33	Cast Iron	1	Housing, Bearing Outboard
1B	Ductile-Iron	1	Inner Volute*	33A	Steel	3	Bolt, Bearing Housing
1C	Steel	1	Plug, Case Drain (Not Shown)	33B	Steel	3	Jack Bolt, Bearing Housing
1D	Steel	1	Plug, Case Fill (Not Shown)	33C	Steel	3	Jamnut, Bearing, Housing Jack Bolt
2	Ductile Iron	1	Impeller*	33E	Steel	1	Snap Ring, Bearing
6	4140 Steel	1	Shaft*	38	Teflon	1	O-Ring, Shaft Sleeve
11	Ductile Iron	1	Cover, Stuffing Box*	46	Steel	1	Key, Coupling
11A	Stainless Steel	2	Box Cover / Adapter Stud	65	Varies	1	Seal, Mechanical Stationary
11B	Stainless Steel	2	Nut, Box Cover / Adapter Stud	69	Steel	1	Lockwasher, Bearing
13	PTFE	5	Packing	71	Ductile Iron	1	Adapter***
14	316 SS	1	Sleeve, Shaft*	71A	Steel	4	Bolt, Frame / Adapter
14A	420 SS	1	Pin, Sleeve	71B	Steel	2	Dowel Pin, Frame / Adapter
16	Steel	1	Bearing, Inboard	73	Viton	1	O-Ring, Volute to Case
17	316 SS	1	Gland, Mechanical Seal*	73A	Varies	1	Gasket, Gland, Mechanical Seal
17A	316 SS	1	Gland, Packing*	73B	Buna N	1	Frame / Adapter O-Ring
17B	Stainless Steel	4**	Stud, Gland	73C	Buna N	1	Bearing Housing / Frame O-Ring
17C	Stainless Steel	4**	Nut, Gland Stud	80	Varies	1	Seal, Mechanical Rotating Element
18	Steel	1	Bearing, Outboard	89A	Bronze	1	Labyrinth, Inboard
19	Ductile Iron	1	Frame (Cast Iron MTP)	89B	Bronze	1	Labyrinth, Outboard
19A	Cast Iron	1	Foot, Frame	89C	Viton	1	Labyrinth, O-Ring (Not Shown)
19B	Steel	4	Plug, Frame Lubrication Port	89D	Viton	1	Labyrinth, O-Ring (Not Shown)
19C	Steel	1	Plug, Oil Cooler Inlet	89E	Viton	1	Labyrinth, O-Ring (Not Shown)
19D	Steel	1	Plug, Frame Drain (Not Shown)	89F	Viton	1	Labyrinth, O-Ring (Not Shown)
19E	Steel	2	Bolt, Frame Foot to Frame	143	Steel / Glass	1	Gauge, Sight Oil

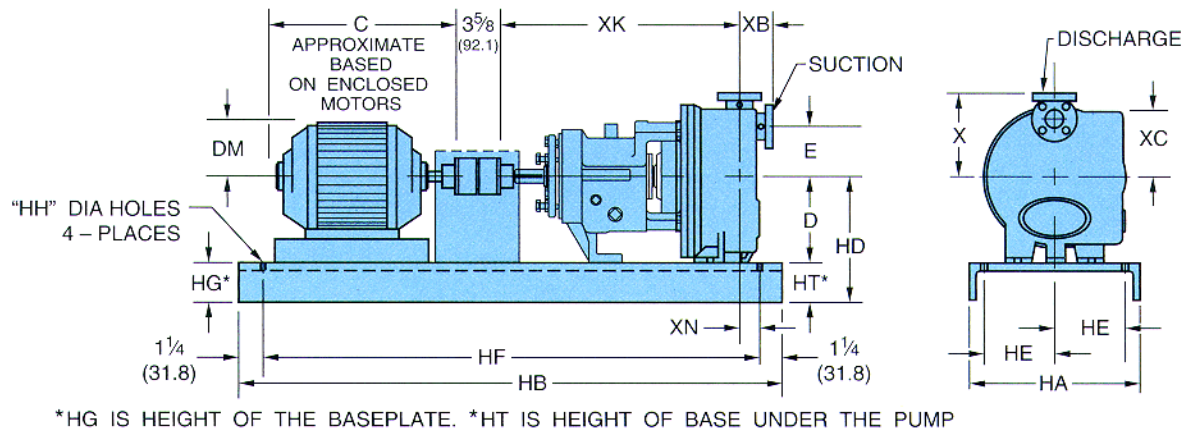
* Items are also available in 316 SS, CD4MCu, Alloy 20, and other optional materials.

** Packing Gland has only (2) Studs and Nuts.

*** Adapter ring on 1½x1½-8 pump size.

Dimensions:

Peerless Pump Series 8796 Self Priming Pump



8796 Pump Dimensions in Inches and Millimeters ()

Discharge Size	Suction Size	Casing Class	PUMP DIMENSIONS							
			D	E	X	XB	XC	XK	XN	WEIGHT*
1 1/2	1 1/2	8	7 1/2 (190.5)	4 (101.6)	7/8 (22.2)	5 (127.0)	5 11/16 (144.5)	15 1/2 (393.7)	1 1/4 (31.8)	170 (77.1)
2	2	10	10 (254.0)	6 (152.4)	10 (254.0)	6 1/2 (165.1)	7 1/4 (184.0)	21 3/4 (552.4)	11 (279.4)	270 (122.5)
3	3	10	10 (254.0)	6 (152.4)	10 (254.0)	6 3/4 (171.5)	7 1/2 (190.5)	22 5/8 (574.7)	10 1/8 (257.2)	315 (142.9)
4	4	10	10 (254.0)	6 (152.4)	10 (254.0)	9 3/16 (233.4)	7 1/2 (190.5)	23 3/8 (593.7)	9 3/8 (238.1)	370 (167.9)
3	3	13	10 (254.0)	6 (152.4)	11 1/2 (292.1)	6 3/4 (171.5)	9 (228.6)	22 5/8 (574.7)	10 1/8 (257.2)	400 (181.5)
4	4	13	10 (254.0)	6 (152.4)	11 1/2 (292.1)	9 3/16 (233.4)	9 3/8 (238.1)	23 3/8 (593.7)	9 3/8 (238.1)	470 (213.2)

*Weights are listed in pounds and kilograms ()

8796 Baseplate Dimensions in Inches and Millimeters ()

DIMENSIONS DETERMINED BY MOTOR				DIMENSIONS DETERMINED BY BASEPLATE							
Motor Frame Size	C Appx. Max.	DM	Base-Plate No.	HA	HB	HE	HF	HH	HD	HG STEEL	HT STEEL
143T-145T	13 1/2 (342.9)	3 1/2 (88.9)	139	12 (304.8)	39 (990.6)	4 1/2 (114.3)	36 1/2 (927.1)	3/4 (19.05)	D+HT	3 1/4 (82.6)	3 5/8 (92.1)
182T-184T	15 1/2 (393.7)	5 (127.0)	139	12 (304.8)	39 (990.6)	4 1/2 (114.3)	36 1/2 (927.1)	3/4 (19.05)	D+HT	3 1/4 (82.6)	3 5/8 (92.1)
213T-215T	19 1/2 (495.3)	6 (152.4)	148	15 (381.0)	48 (1219.2)	6 (152.4)	45 1/2 (1155.7)	3/4 (19.05)	D+HT	3 1/4 (82.6)	3 5/8 (92.1)
254T-256T	24 (609.6)	6 1/2 (165.1)	148	15 (381.0)	48 (1219.2)	6 (152.4)	45 1/2 (1155.7)	3/4 (19.05)	D+HT	3 3/8 (85.7)	3 3/4 (95.3)
284T-TS	25 1/2 (647.7)	7 1/2 (190.5)	153	18 (457.2)	53 (1346.2)	7 1/2 (190.5)	50 1/2 (1282.7)	3/4 (19.05)	D+HT	3 3/8 (85.7)	3 3/4 (95.3)
286T-TS	27 (685.8)	7 1/2 (190.5)	153	18 (457.2)	53 (1346.2)	7 1/2 (190.5)	50 1/2 (1282.7)	3/4 (19.05)	D+HT	3 3/8 (85.7)	3 3/4 (95.3)
143T-145T	13 1/2 (342.9)	3 1/2 (88.9)	245	12 (304.8)	45 (1143.0)	4 1/2 (114.3)	42 1/2 (1079.5)	3/4 (19.05)	D+HT	3 3/8 (85.7)	4 (101.6)
182T-184T	15 1/2 (393.7)	5 (127.0)	245	12 (304.8)	45 (1143.0)	4 1/2 (114.3)	42 1/2 (1079.5)	3/4 (19.05)	D+HT	3 3/8 (85.7)	4 (101.6)
213T-215T	19 1/2 (495.3)	6 (152.4)	252	15 (381.0)	52 (1320.8)	6 (152.4)	49 1/2 (1257.3)	3/4 (19.05)	D+HT	3 3/8 (85.7)	4 (101.6)
254T-256T	24 (609.6)	6 1/2 (165.1)	258	18 (457.2)	58 (1473.2)	6 (152.4)	55 1/2 (1409.7)	1 (25.4)	D+HT	3 3/8 (85.7)	4 (101.6)
284T-TS	25 1/2 (647.7)	7 1/2 (190.5)	258	18 (457.2)	58 (1473.2)	7 1/2 (190.5)	55 1/2 (1409.7)	1 (25.4)	D+HT	3 3/8 (85.7)	4 (101.6)
286T-TS	27 (685.8)	7 1/2 (190.5)	258	18 (457.2)	58 (1473.2)	7 1/2 (190.5)	55 1/2 (1409.7)	1 (25.4)	D+HT	3 3/8 (85.7)	4 (101.6)
324T-TS	28 1/2 (723.9)	9 (228.6)	264	19 (482.6)	64 (1625.6)	7 1/2 (190.5)	61 1/2 (1562.1)	1 (25.4)	D+HT	4 (101.6)	4 5/8 (117.5)
326T-TS	30 (762.0)	9 (228.6)	264	19 (482.6)	64 (1625.6)	7 1/2 (190.5)	61 1/2 (1562.1)	1 (25.4)	D+HT	4 (101.6)	4 5/8 (117.5)
364T-TS	33 (838.2)	9 1/2 (241.3)	264	19 (482.6)	64 (1625.6)	7 1/2 (190.5)	61 1/2 (1562.1)	1 (25.4)	D+HT	4 (101.6)	4 5/8 (117.5)
365T-TS	34 (863.6)	9 1/2 (241.3)	264	19 (482.6)	64 (1625.6)	7 1/2 (190.5)	61 1/2 (1562.1)	1 (25.4)	D+HT	4 (101.6)	4 5/8 (117.5)

Construction Details:

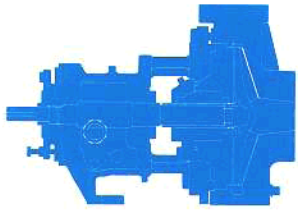
Peerless Pump Series 8796 Self Priming Pump

POWER END		MODEL 8796 STP	MODEL 8796 MTP
Shaft Diameter	At Impeller	¾" (19.0)	1" (25.4)
	In Stuffing Box (With Sleeve)	1½" (28.6)	1½" (38.1)
	In Stuffing Box (Less Sleeve)	1¾" (34.9)	1¾" (44.5)
	Sleeve Outside Diameter	1¾" (34.9)	1¾" (44.5)
	Between Bearings	1½" (38.1)	2½" (54.0)
	At Coupling	7⁄8" (22.2)	1½" (28.6)
Bearings	Radial	207-S	309-S
	Coupling End (Double Row)	5306	5309
	Bearing Span	4½" (105)	6¾" (171)
	Shaft Overhang	6½" (156)	8¾" (213)
Stuffing Box	Bore	2" (50.8)	2½" (63.5)
	Depth	2½" (54.0)	2¾" (66.7)
	Packing Size	5⁄16" x 5⁄16" (7.9x7.9)	3⁄8" x 3⁄8" (9.5x9.5)
	No. of Rings	5	5
	Width of Lantern Ring	7⁄16" (11.1)	5⁄8" (15.9)
	Distance – End of Box to Nearest Obstruction	2¾" (55.6)	3" (76.2)

PUMP END		8796 STP	8796 MTP				
		1½x1½-8	2x2-10	3x3-10	4x4-10	3x3-13	4x4-13
Max. Diameter Solids		1½" (8.73)	2" (16.11)	2½" (9.53)	3" (15.88)	3½" (9.53)	4" (15.88)
Shaft Defl. Load Factor (M)	3500RPM	6.0	7.2	9.8	15.0	15.7	35.5
	1750RPM	1.5	1.9	2.5	4.1	4.6	11.5
	1150RPM	0.7	0.8	1.1	1.7	1.9	5.0
Min. Casing Thickness		3⁄8" (9.5)	½" (12.7)			5⁄8" (14.3)	¾" (15.9)
Casing Corrosion Allowance		1⁄8" (3.2)					
Test Pressure		150% of Working Pressure at 100° F. (38°C.)					
Max. Liquid Temp. (without cooling)		350° F. (177° C.)					
Max. Liquid Temp. (with cooling)		500° F. (260° C.)					
Unit Wgt. lbs. (Kg)		See Dimensions					

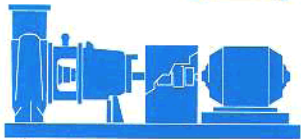
Metric equivalents are listed in parenthesis.

Other Peerless Products for the Industrial Market



8196 Process Pumps

Flows to: 4,500 gpm
 Heads to: 730 ft.
 Temperatures to: 500 °F
 Brochure: B-8196



Heavy Duty/Industrial/ Paper Stock/Slurry Pumps

Flows to: 21,000 gpm
 Heads to: 350 ft.
 Temperatures to: 450 °F
 Brochure: B-8175



Axial and Mixed Flow Pumps for Large Volume Pumping

Flows to: 220,000 gpm
 Heads to: 100 ft.
 Temperatures to: 140 °F
 Brochure: B-300



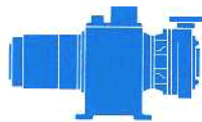
Horizontal Split Case Multi-Stage Pumps

Flows to: 4,500 gpm
 Heads to: 1,600 ft.
 Temperatures to: 300 °F
 Brochure: B-1400



General Purpose End Suction Pumps

Flows to: 3,400 gpm
 Heads to: 400 ft.
 Temperatures to: 250 °F
 Brochure: B-2300



Hydroconstant® Variable Speed Pump Drives

Flows to:
 Determined by pump selected
 Heads to:
 Determined by pump selected
 Temperatures to:
 Within limits of pump selected
 Brochure: B-4100A



Industrial Sump Pumps

Flows to: 1,600 gpm
 Heads to: 310 ft.
 Temperatures to: 180 °F
 Brochure: B-9200



Horizontal Split Case Single Stage Pumps

Flows to: 25,000 gpm
 Heads to: 660 ft.
 Temperatures to: 300 °F
 Brochure: B-1200



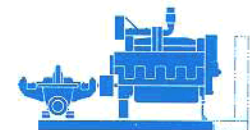
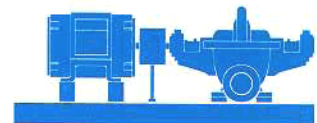
Vertical Industrial and Process Pumps

Flows to: 150,000 gpm
 Heads to: 2,300 ft.
 Temperatures to: 450 °F
 Brochure: B-110



Vertical Fire Pumps UL Listed, ULC Tested and FM Approved

Flows to: 5,000 gpm
 Heads to: 1,178 ft.
 Temperatures to: 115 °F
 Brochure: B-1500



Horizontal Fire Pumps UL Listed, ULC Tested and FM Approved

Flows to: 5,000 gpm
 Heads to: 900 ft.
 Temperatures to: Ambient
 within the limits for satisfactory
 equipment operation
 Brochure: B-1500



Peerless Pump Company

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