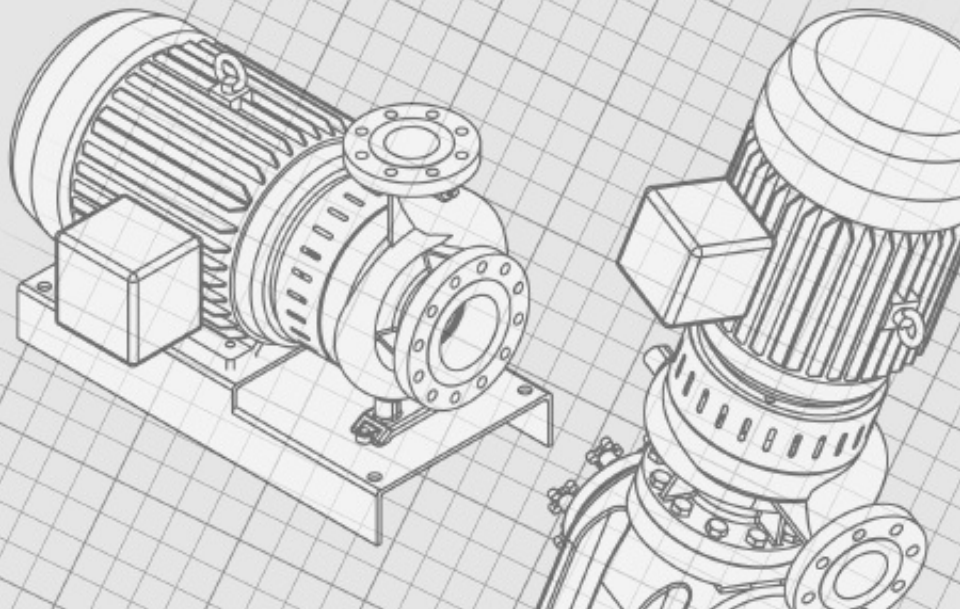
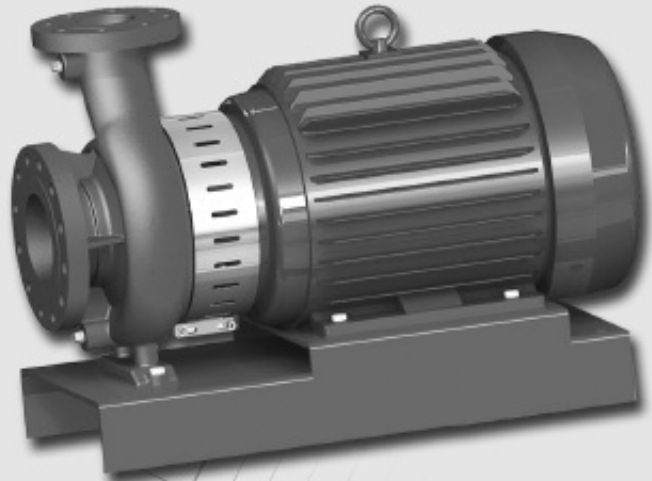


# DEAN PUMP® SERIES FW 1200

Vertical/Horizontal Water Pumps

## DATA PAK



A Met-Pro Fluid Handling Technologies Business  
 Combining the Resources of **Dean Pump, Fybroc & Sethco**  
 (317) 293-2930 • E-mail: info@deanpump.com

**VERTICAL/HORIZONTAL, SINGLE STAGE, END SUCTION, ENCLOSED IMPELLER CENTRIFUGAL PUMPS**

**THESE PUMPS ARE DESIGNED SPECIFICALLY FOR USE WITH WATER**

MECHANICAL DESIGN SPECIFICATIONS		
PUMP TYPE	FW1220	FW1280
<b>Direction of Rotation (Viewed from Motor End)</b>	CW	CCW
<b>Casing Thickness, Minimum</b>	3/8" (10 mm)	1/2" (13 mm)
<b>Corrosion Allowance</b>	1/8" (3 mm)	1/8" (3 mm)
<b>Impeller Balance</b> Standard Optional Extra	Single Plane Dynamic	Single Plane Dynamic
<b>Flanges</b> ANSI Class Facing Finish	300 Raised Face 125 Ra	300 Raised Face 125 Ra
<b>Suction Pressure, Maximum</b>	50 PSIG (345 kPa)	50 PSIG (345 kPa)
<b>Power Rating, Maximum</b> @1750 RPM @1150 RPM	40 hp (30 kW) 15 hp (11 kW)	125 hp (93 kW) 30 hp (22 kW)
<b>Seal Chamber Dimensions</b> Length (Depth) Inside Diameter (Bore Dia.)	3" (76 mm) 5 3/8" (137 mm)	3.75" (95 mm) 6" (152 mm)
<b>Material Class</b>	22 (Ductile Iron)	22 (Ductile Iron)
<b>Maximum Working Pressure</b>	100 PSIG (690 kPa)	100 PSIG (690 kPa)
<b>Pumping Temperature</b> Minimum Maximum	-20°F @ 100 PSIG (-29°C @ 690 kPa) 250°F @ 100 PSIG (121°C @ 690 kPa)	-20°F @ 100 PSIG (-29°C @ 690 kPa) 250°F @ 100 PSIG (121°C @ 690 kPa)
<b>Hydrostatic Test Pressure</b>	150 PSIG (1034 kPa)	150 PSIG (1034 kPa)

A Met-Pro Fluid Handling Technologies Business  
 Combining the Resources of **Dean Pump, Fybroc & Sethco**  
 (317) 293-2930 • E-mail: info@deanpump.com

**VERTICAL/HORIZONTAL, SINGLE STAGE, END SUCTION, ENCLOSED IMPELLER CENTRIFUGAL PUMPS**

**THESE PUMPS ARE DESIGNED SPECIFICALLY FOR USE WITH WATER**

<b>STANDARD MATERIALS OF CONSTRUCTION</b>		
<b>PART #</b>	<b>PART NAME</b>	<b>FW 1220/1280 CLASS 22</b>
3	Impeller	Bronze (3)
4	Impeller Key	Steel (2)
5	Casing	D.I. (6)
5A	Casing Drain Plug	Steel (2)
5B	Suction Gauge Plug	Steel (2)
5C	Jack Screw	Steel (2)
5D	Casing Bolts	Steel (2)
7	Cradle	C.I. (1)
7A	Cradle Bolts	Steel (2)
10	Shaft Extension	316SS (4)
10A	Shaft Fasteners	Steel (2)
12	Impeller Nut/Bolt	Steel (2)
12A	Impeller Washer	Steel (2)
22	Backhead	D.I. (6)
22A	Backhead Bolts	Steel (2)
22B	Vent Plug	Steel (2)
33	Bent Steel Base (Horizontal Option)	Steel (2)
56	Casing Foot (Horizontal Only)	C.I. (1)
56A	Casing Foot Bolts (Horizontal Only)	Steel (2)
75	Snap Ring	Steel (2)
77	Casing Gasket	Teflon (7)
95A	Mechanical Seal Stationary	Ceramic
95B	Mechanical Seal Rotary	S/S, Carbon & Viton (8)
98	Shaft Guard	Steel (2)
98A	Shaft Guard Bolts	Steel (2)
431	Strainer (Vertical Only)	304SS
432	Strainer Tank (Vertical Only)	C.I. (1)
432A	Tank Gasket (Vertical Only)	Buna-N (9)
432B	Tank Plug (Vertical Only)	Steel (2)
433	Strainer Tank Cover (Vertical Only)	Steel (2)
433A	Cover Bolts (Vertical Only)	Steel (2) / Cast Iron
433B	Cover Gasket (Vertical Only)	Buna-N (9)

(1) Cast Iron  
 (2) AISI 1020  
 (3) Bronze ASTM B584

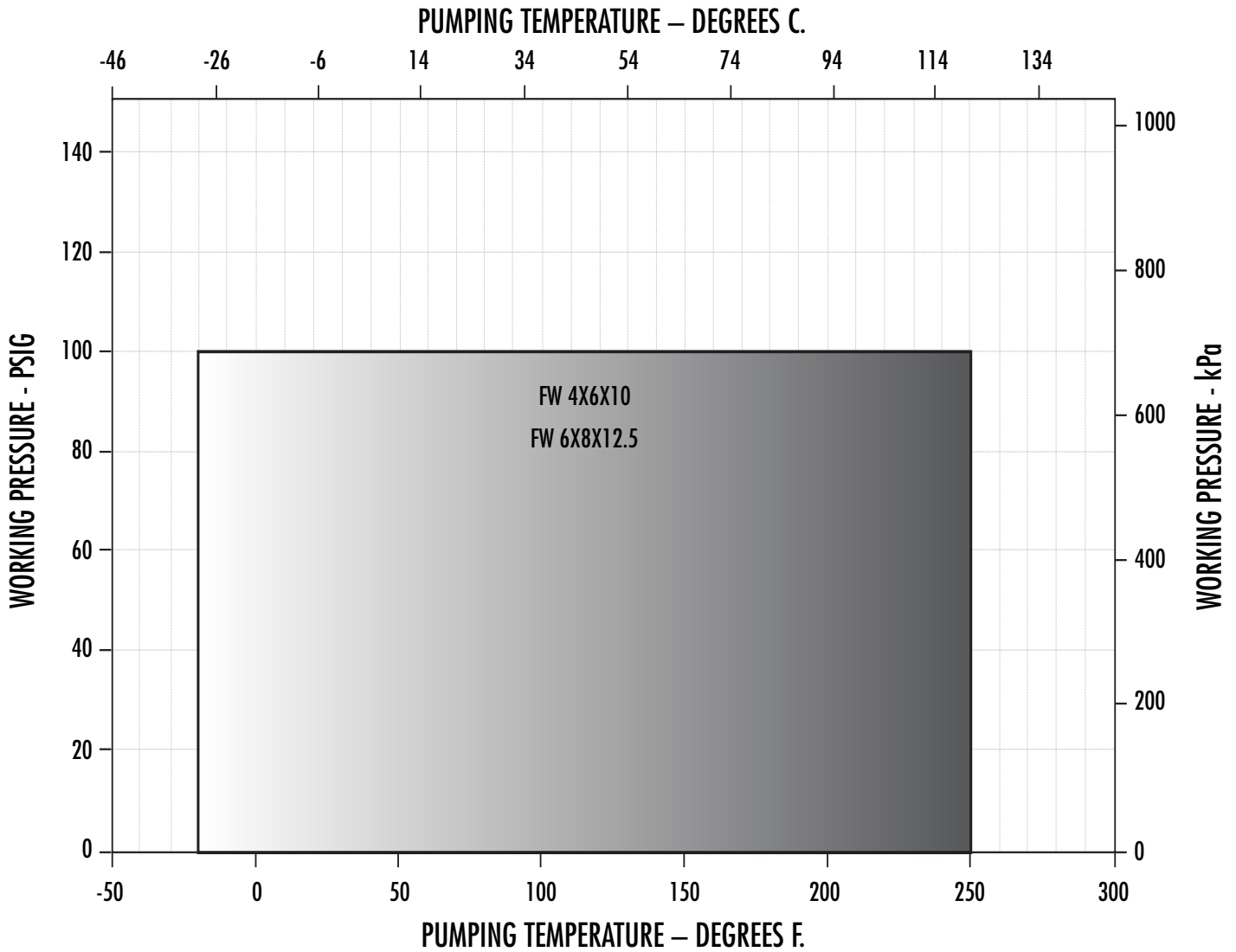
(4) ANSI 304 S/S  
 (5) ANSI 316 S/S  
 (6) Ductile Iron – ASTM A536

(7) Teflon  
 (8) Viton® Elastomer  
 (9) Buna-N Rubber

Viton® is a registered Trademark of E.I. DuPont Co.  
 Teflon® is a registered Trademark of E.I. DuPont Co.

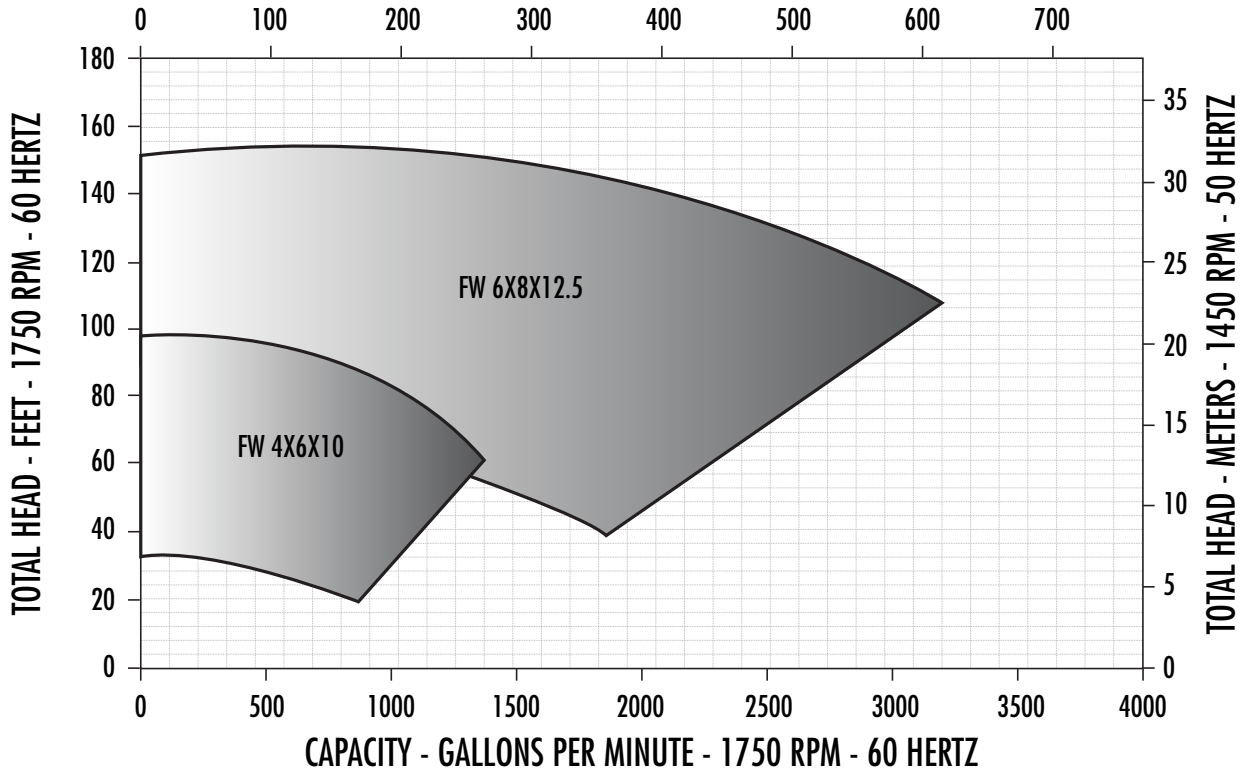
A Met-Pro Fluid Handling Technologies Business  
Combining the Resources of **Dean Pump, Fybroc & Sethco**  
(317) 293-2930 • E-mail: info@deanpump.com

**ALLOWABLE WORKING PRESSURE VS. PUMPING TEMPERATURE**

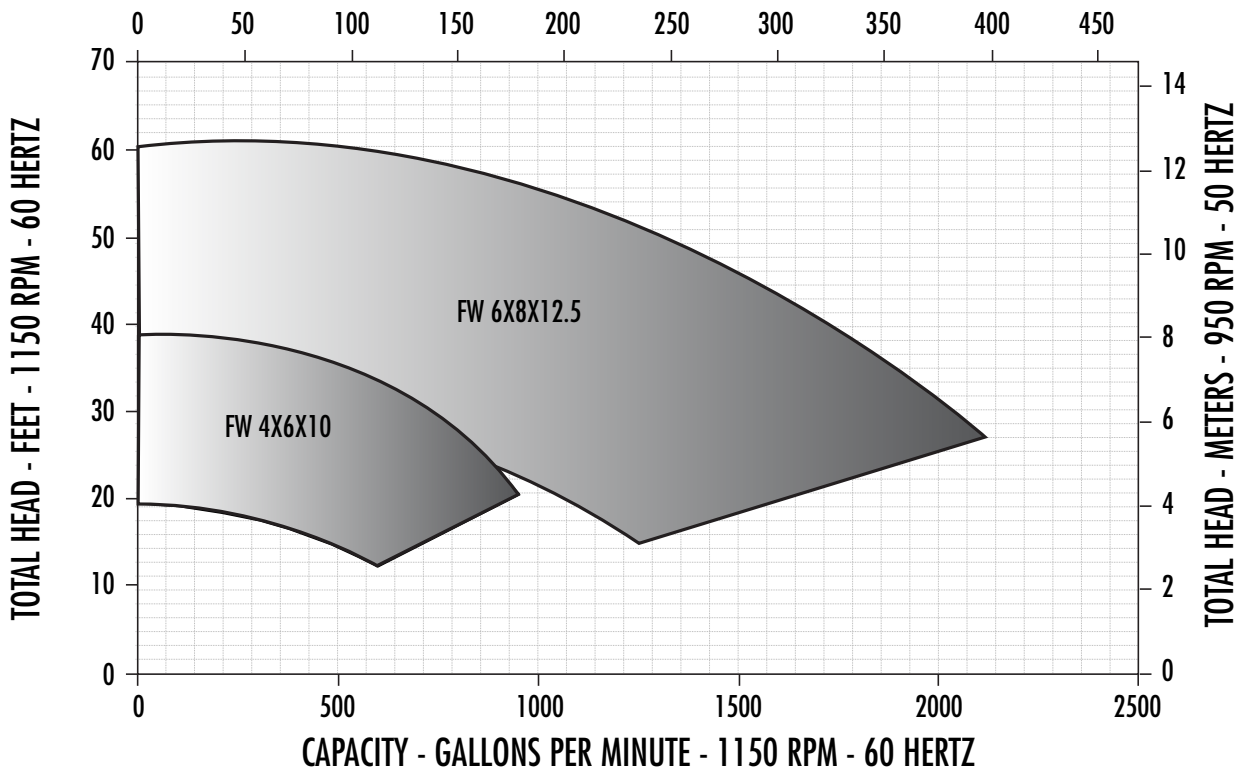


A Met-Pro Fluid Handling Technologies Business  
Combining the Resources of **Dean Pump, Fybroc & Sethco**  
(317) 293-2930 • E-mail: info@deanpump.com

**FW 1200 SERIES PUMP PERFORMANCE**  
CAPACITY - CUBIC METERS PER HOUR - 1450 RPM - 50 HERTZ

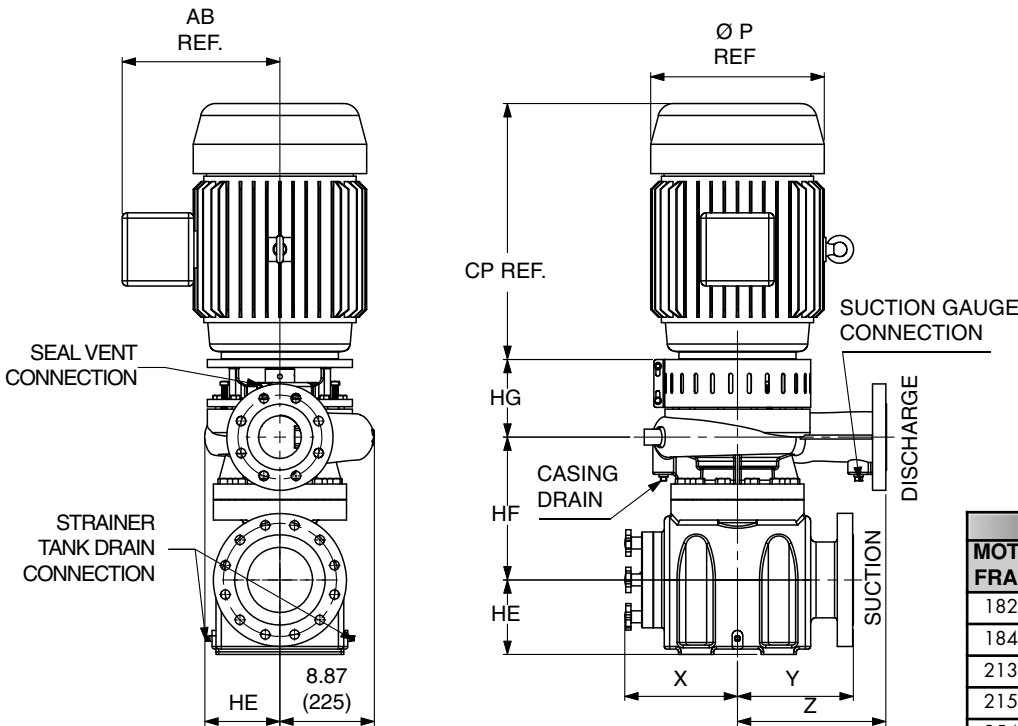


CAPACITY - CUBIC METERS PER HOUR - 950 RPM - 50 HERTZ

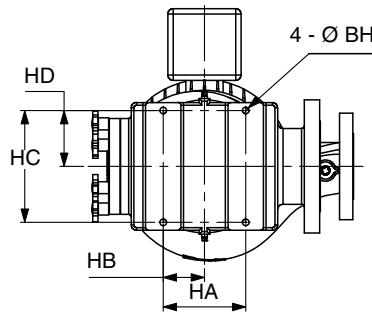


A Met-Pro Fluid Handling Technologies Business  
 Combining the Resources of **Dean Pump, Fybroc & Sethco**  
 (317) 293-2930 • E-mail: info@deanpump.com

### FW 1200 SERIES VERTICAL PUMPS WITH INTEGRAL STRAINER



FW1220/FW1280			
MOTOR FRAME	Ø P REF.	CP REF.	AB REF.
182TC	8.03 (204)	12.00 (305)	7.81 (198)
184TC	8.03 (204)	13.00 (330)	7.81 (198)
213TC	9.96 (253)	15.00 (381)	8.69 (221)
215TC	9.96 (253)	16.125 (410)	8.69 (221)
254TC	13.44 (341)	18.88 (479)	11.19 (284)
256TC	13.44 (341)	20.75 (527)	11.19 (284)
284TC	14.63 (372)	22.13 (562)	13.13 (334)
286TC	14.63 (372)	23.63 (600)	13.13 (334)
324TC	17.5 (445)	24.50 (622)	14.75 (375)
326TC	17.5 (445)	24.50 (622)	14.75 (375)
364TC	19.75 (502)	27.50 (699)	16.25 (413)
365TC	19.75 (502)	28.50 (724)	16.25 (413)
404TC	21.5 (546)	29.50 (749)	17.5 (445)
405TC	21.5 (546)	31.00 (787)	17.5 (445)



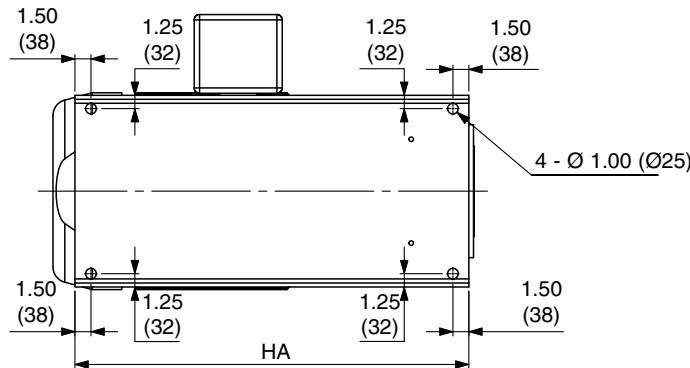
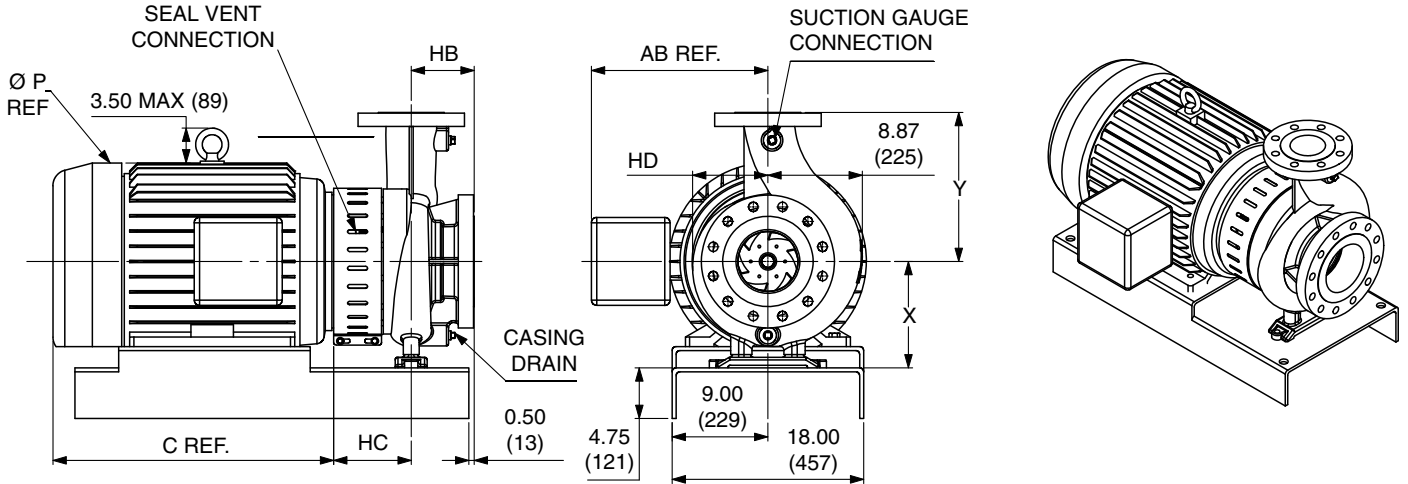
The FW1200, designed specifically for use with water, features two pump sizes (in ductile iron construction), capacities to 3200 GPM (727 m<sup>3</sup>/hr), heads to 155 ft (47 m), maximum working pressure to 100 psig (690 kPa), and maximum pumping temperatures to 250°F (121°C).

GENERAL TABLE																							
		DISCHARGE					SUCTION																
PUMP SERIES	PUMP SIZE	DISCHARGE SIZE	DISCHARGE O.D.	DISCHARGE THICKNESS	DISCHARGE B.C.	DISCHARGE BOLTS	SUCTION SIZE	SUCTION O.D.	SUCTION THICKNESS	SUCTION B.C.	SUCTION BOLTS	X	Y	Z	HA	HB	HC	HD	HE	HF	HG	HE	BH
FW1220	4X6X10	4.00 (102)	10.00 (254)	1.31 MIN (33)	7.88 (200)	(8) - ¾"	6.00 (152)	12.50 (318)	1.50 MIN (38)	10.62 (270)	(12) - ¾"	10.62 (270)	10.88 (276)	14.00 (356)	7.75 (197)	3.88 (99)	10.50 (267)	5.25 (133)	7.00 (178)	9.88 (251)	7.29 (185)	7.25 (184)	0.63 (16)
FW1280	6X8X12½	6.00 (152)	12.50 (318)	1.50 MIN (38)	10.62 (270)	(12) - ¾"	8.00 (203)	15.00 (381)	1.62 MIN (41)	13.00 (330)	(12) - ¾"	11.75 (299)	12.00 (305)	19.22 (488)	9.00 (229)	4.5 (114)	12.50 (318)	6.25 (159)	8.00 (203)	15.81 (402)	9.34 (237)	13.00 (330)	0.81 (21)

All dimensions are in inches and millimeters. **IMPORTANT:** Do not use for construction unless certified.

A Met-Pro Fluid Handling Technologies Business  
 Combining the Resources of **Dean Pump, Fybroc & Sethco**  
 (317) 293-2930 • E-mail: info@deanpump.com

**FW 1200 SERIES HORIZONTAL PUMPS WITH ECONOMY BASEPLATE**



MOTOR FRAME	FW1220/FW1280			FW1220	FW1280
	ØP REF.	CP REF.	AB REF.	HA	HA
182TC	8.03 (204)	12.00 (305)	7.81 (198)	30.00 (762)	-
184TC	8.03 (204)	13.00 (330)	7.81 (198)	30.00 (762)	-
213TC	9.96 (253)	15.00 (381)	8.69 (221)	33.00 (838)	35.50 (902)
215TC	9.96 (253)	16.125 (410)	8.69 (221)	33.00 (838)	35.50 (902)
254TC	13.44 (341)	18.88 (479)	11.19 (284)	33.00 (838)	35.50 (902)
256TC	13.44 (341)	20.75 (527)	11.19 (284)	33.00 (838)	35.50 (902)
284TC	14.63 (372)	22.13 (562)	13.13 (334)	37.00 (940)	39.00 (991)
286TC	14.63 (372)	23.63 (600)	13.13 (334)	37.00 (940)	39.00 (991)
324TC	17.5 (445)	24.50 (622)	14.75 (375)	37.00 (940)	39.00 (991)
326TC	17.5 (445)	24.50 (622)	14.75 (375)	37.00 (940)	39.00 (991)
364TC	19.75 (502)	27.50 (699)	16.25 (413)	-	39.00 (991)
365TC	19.75 (502)	28.50 (724)	16.25 (413)	-	39.00 (991)
404TC	21.5 (546)	29.50 (749)	17.5 (445)	-	42.00 (1067)
405TC	21.5 (546)	31.00 (787)	17.5 (445)	-	42.00 (1067)

The FW1200, designed specifically for use with water, features two pump sizes (in ductile iron construction), capacities to 3200 GPM (727 m<sup>3</sup>/hr), heads to 155 ft (47 m), maximum working pressure to 100 psig (690 kPa), and maximum pumping temperatures to 250°F (121°C).

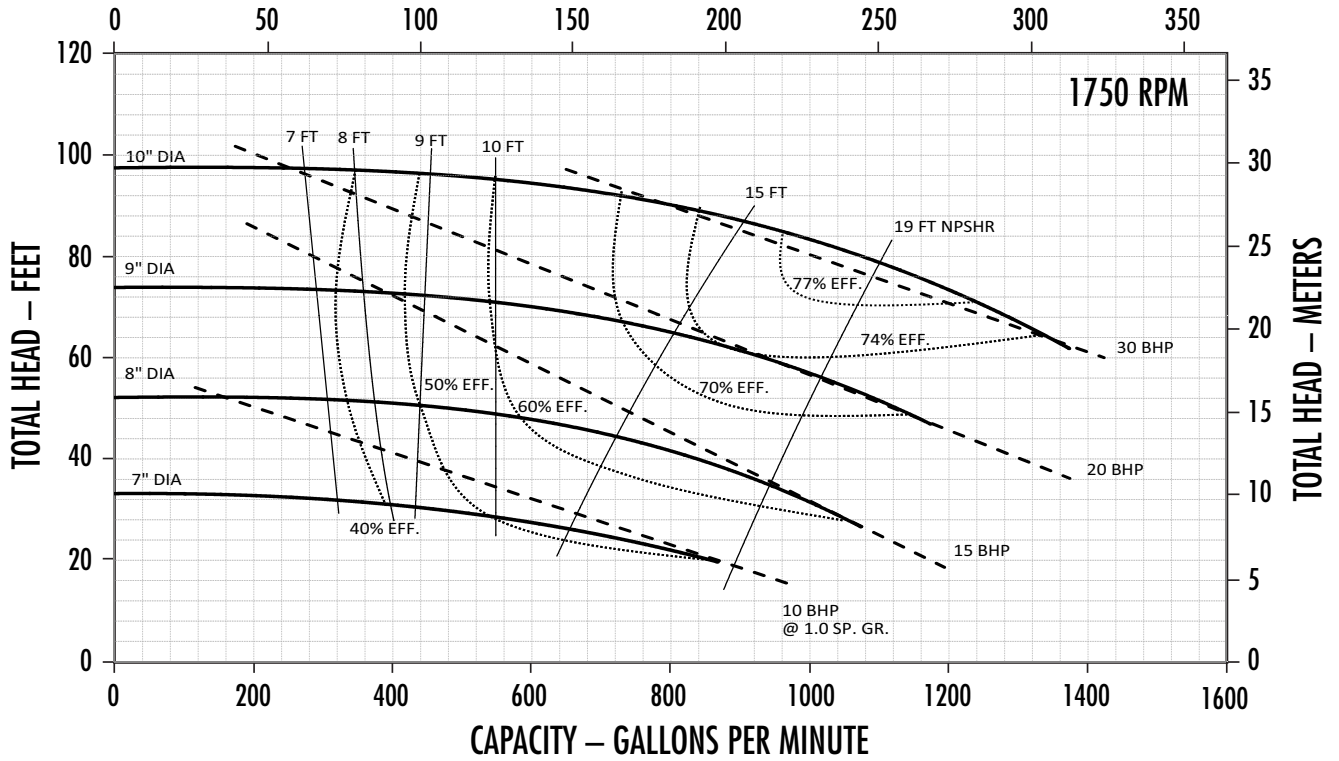
GENERAL TABLE																
PUMP SERIES	PUMP SIZE	DISCHARGE					SUCTION					X	Y	HB	HC	HD
		DISCHARGE SIZE	DISCHARGE O.D.	DISCHARGE THICKNESS	DISCHARGE B.C.	DISCHARGE BOLTS	SUCTION SIZE	SUCTION O.D.	SUCTION THICKNESS	SUCTION B.C.	SUCTION BOLTS					
FW1220	4X6X10	4.00 (102)	10.00 (254)	1.31 MIN (33)	7.88 (200)	(8) - 3/4"	6.00 (152)	12.50 (318)	1.50 MIN (38)	10.62 (270)	(12) - 3/4"	10.00 (254)	14.00 (356)	5.92 (150)	5.25 (133)	7.25 (184)
FW1280	6X8X12½	6.00 (152)	12.50 (318)	1.50 MIN (38)	10.62 (270)	(12) - 3/4"	8.00 (203)	15.00 (381)	1.62 MIN (41)	13.00 (330)	(12) - 7/8"	13.50 (343)	19.22 (488)	7.00 (178)	6.25 (159)	13.00 (330)

All dimensions are in inches and millimeters. **IMPORTANT:** Do not use for construction unless certified.

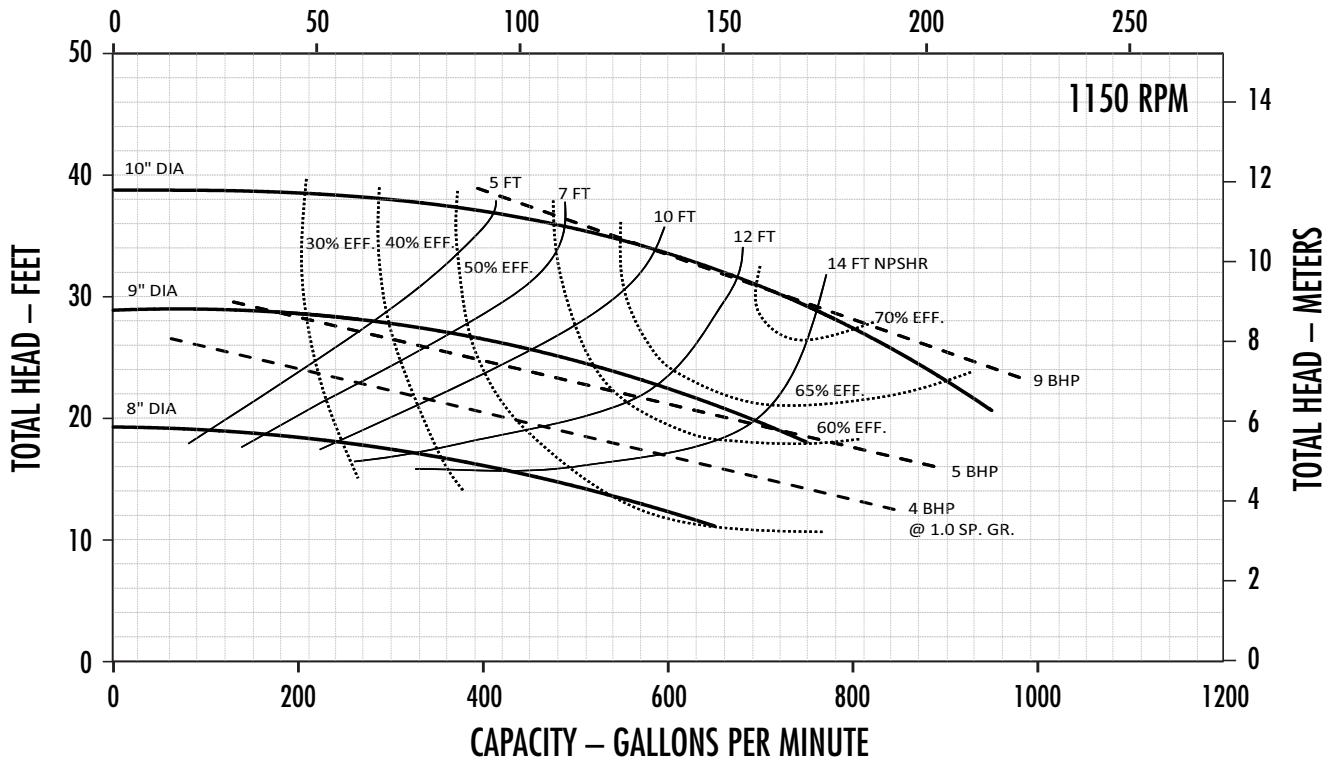
A Met-Pro Fluid Handling Technologies Business  
 Combining the Resources of **Dean Pump, Fybroc & Sethco**  
 (317) 293-2930 • E-mail: info@deanpump.com

### FW 1200 SERIES PUMP PERFORMANCE

CAPACITY – CUBIC METERS PER HOUR



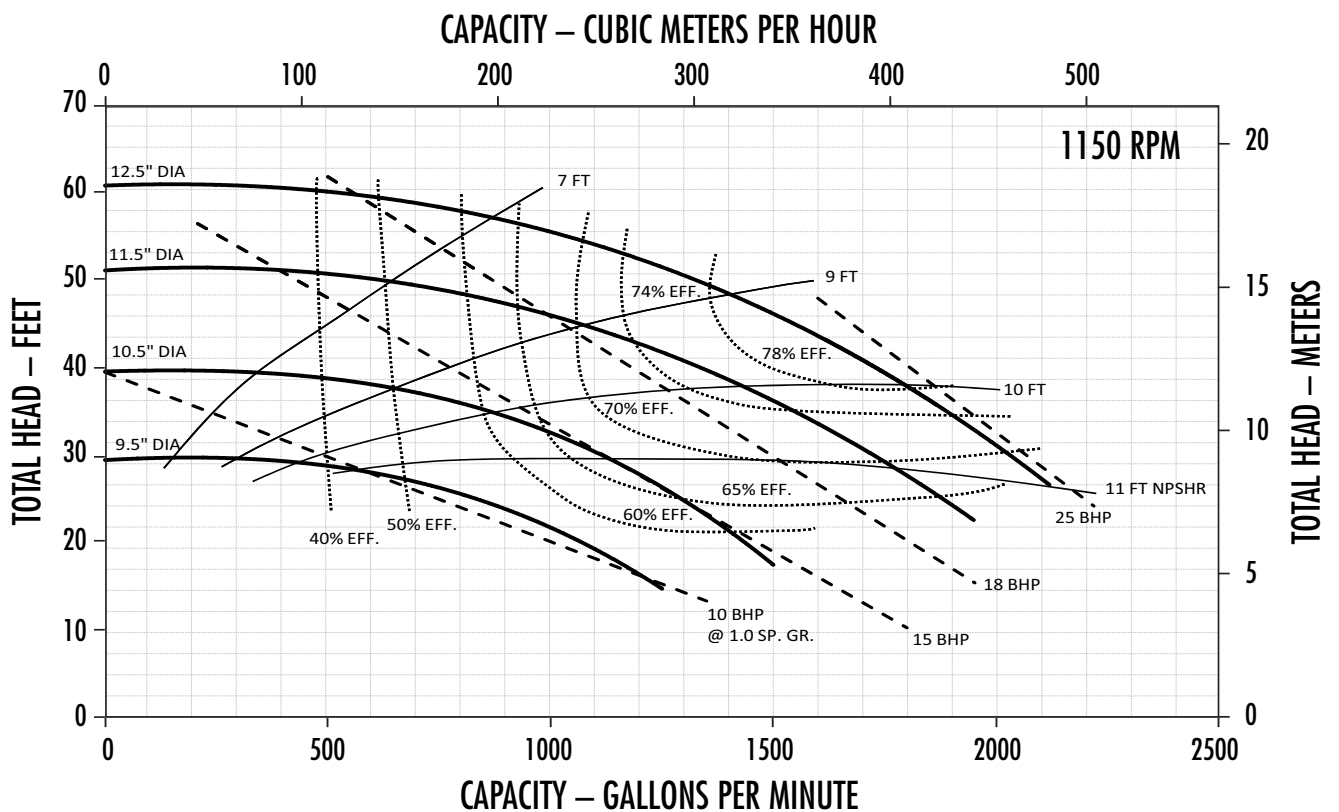
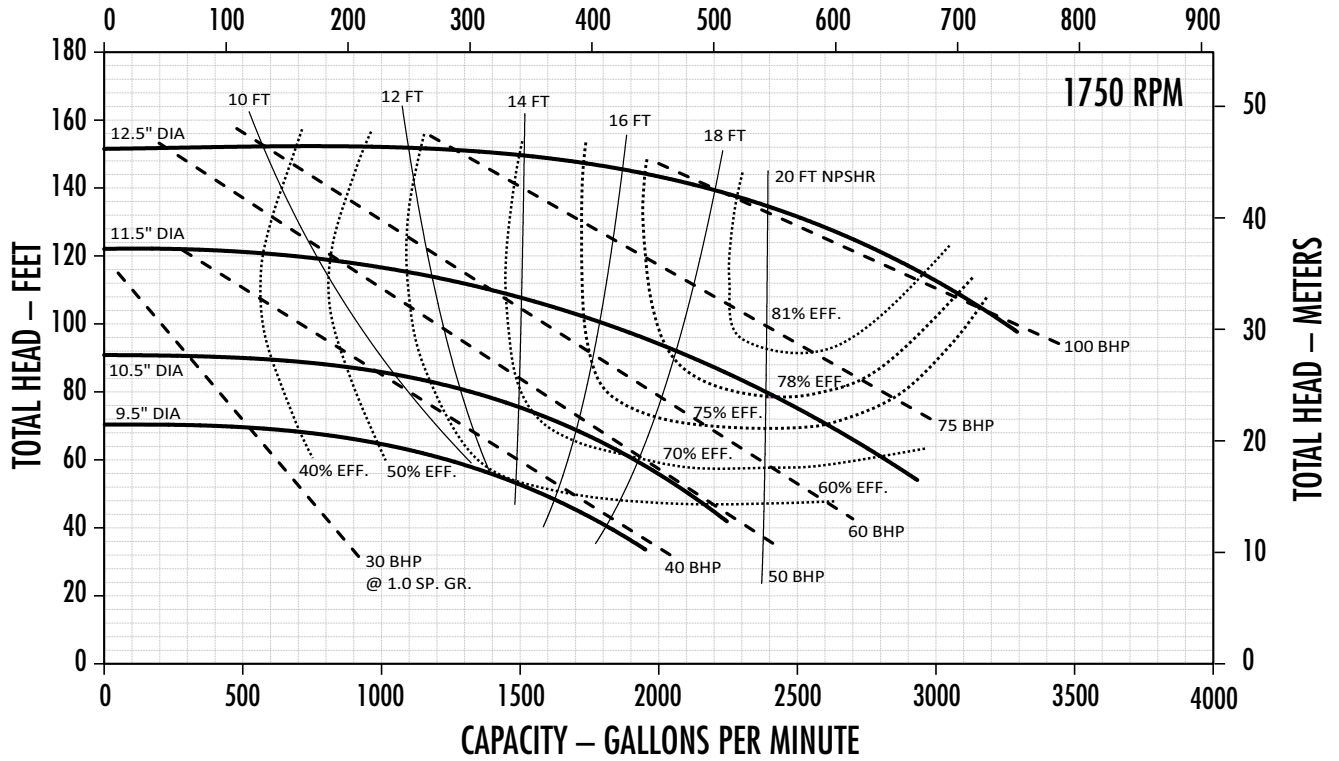
CAPACITY – CUBIC METERS PER HOUR



**PUMP PERFORMANCE:** This curve, based on extensive tests, defines the average performance of this pump for liquids having a viscosity of 70 SSU or less. Actual performance of individual units may differ slightly from the performance indicated on this curve. Pump applications made from the data contained herein are subject to confirmation and acceptance by our Engineering Department at our Indianapolis Office.



**FW 1200 SERIES PUMP PERFORMANCE**  
CAPACITY – CUBIC METERS PER HOUR

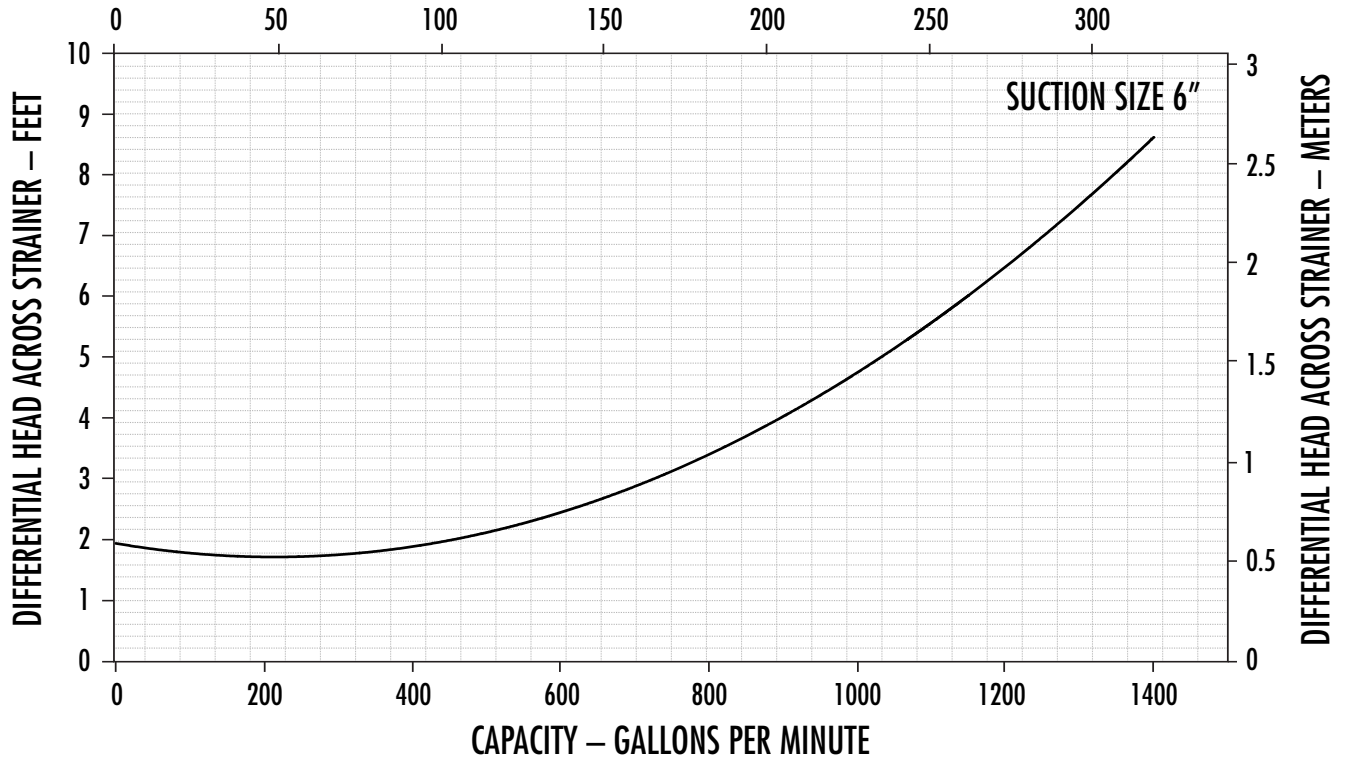


**PUMP PERFORMANCE:** This curve, based on extensive tests, defines the average performance of this pump for liquids having a viscosity of 70 SSU or less. Actual performance of individual units may differ slightly from the performance indicated on this curve. Pump applications made from the data contained herein are subject to confirmation and acceptance by our Engineering Department at our Indianapolis Office.

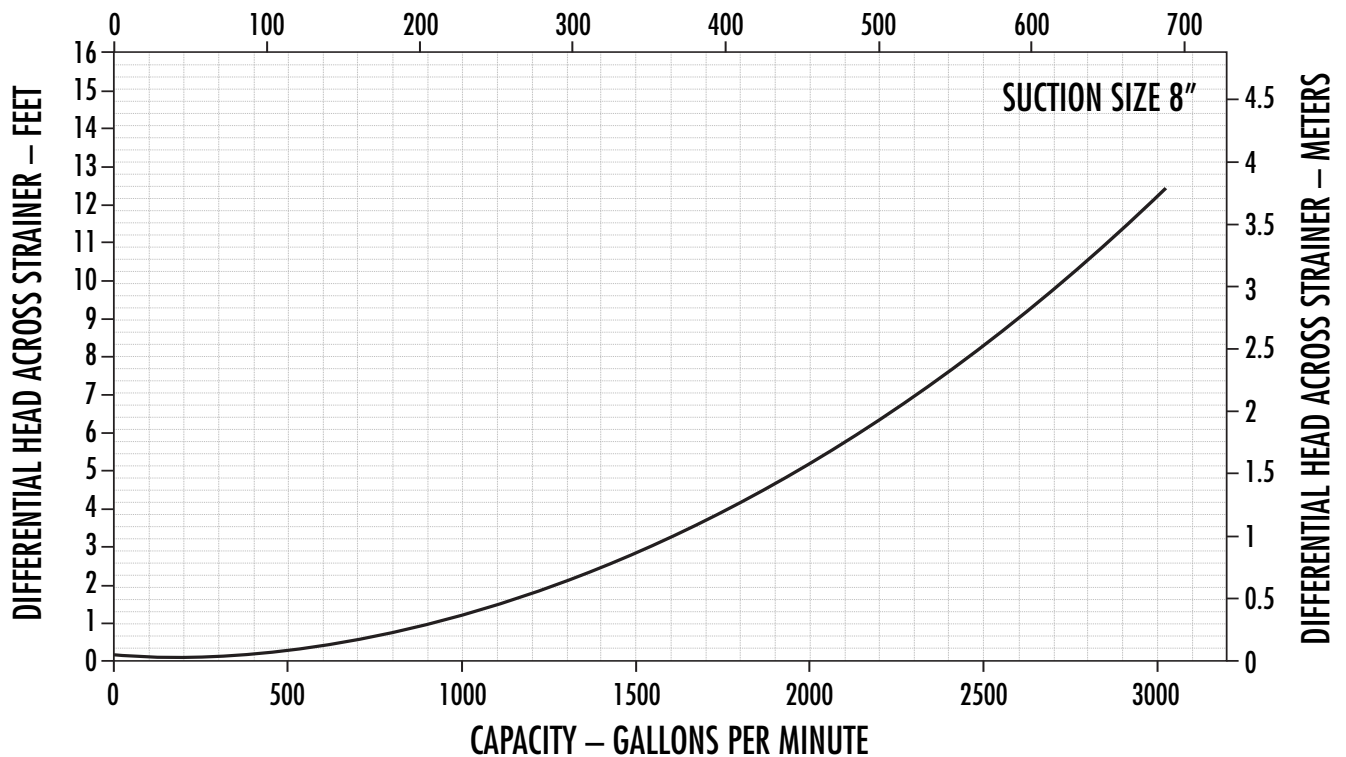
A Met-Pro Fluid Handling Technologies Business  
 Combining the Resources of **Dean Pump, Fybroc & Sethco**  
 (317) 293-2930 • E-mail: info@deanpump.com

### FW SERIES STRAINER PERFORMANCE

CAPACITY – CUBIC METERS PER HOUR



CAPACITY – CUBIC METERS PER HOUR



**PUMP PERFORMANCE:** This curve, based on extensive tests, defines the average performance of this pump for liquids having a viscosity of 70 SSU or less. Actual performance of individual units may differ slightly from the performance indicated on this curve. Pump applications made from the data contained herein are subject to confirmation and acceptance by our Engineering Department at our Indianapolis Office.





A Met-Pro Fluid Handling Technologies Business  
Combining the Resources of **Dean Pump, Fybroc & Sethco**

6040 Guion Road • Indianapolis, IN 46254  
(317) 293-2930 • FAX: (317) 297-7028  
E-mail: [info@deanpump.com](mailto:info@deanpump.com) • Web Site: [www.deanpump.com](http://www.deanpump.com)

