

## SERIES 4280 | END SUCTION MOTOR MOUNTED CLOSED-COUPLED | 1.5 × 1 × 6 | SUBMITTAL

File No: 42.54  
Date: DECEMBER 4, 2014  
Supersedes: 42.54  
Date: SEPTEMBER 10, 2012

Job: \_\_\_\_\_ Representative: \_\_\_\_\_  
 \_\_\_\_\_ Order no: \_\_\_\_\_ Date: \_\_\_\_\_  
 Engineer: \_\_\_\_\_ Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Contractor: \_\_\_\_\_ Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

### PUMP DESIGN DATA

No. of pumps: \_\_\_\_\_ Tag: \_\_\_\_\_  
 Capacity: \_\_\_\_\_ USgpm (L/s) Head: \_\_\_\_\_ ft (m)  
 Liquid: \_\_\_\_\_ Viscosity: \_\_\_\_\_  
 Temperature: \_\_\_\_\_ °F (°C) Specific gravity: \_\_\_\_\_  
 Suction: 1.5" (38mm) Flanged  
 Discharge: 1" (25mm) Flanged

### MOTOR DESIGN DATA

HP: \_\_\_\_\_ RPM: \_\_\_\_\_ Frame size: \_\_\_\_\_ Enclosure: \_\_\_\_\_  
 Volts: \_\_\_\_\_ Hertz: 60 Hz Phase: 3  
 Efficiency:  Energy EFF 12.11  NEMA premium 12.12

### MATERIALS OF CONSTRUCTION

ANSI FLANGE RATING	ANSI 125	ANSI 250
<b>Construction</b>	<input type="checkbox"/> BF	<input type="checkbox"/> DBF
<b>Casing</b>	Cast iron	Ductile iron
<b>Adapter</b>	Cast iron	Ductile iron

**Impeller:** Bronze

**Gasket:** Confined non-asbestos fiber

**Shaft:** Carbon steel

**Shaft sleeve:** Bronze

### MAXIMUM PUMP OPERATING CONDITIONS

#### ANSI 125

175 psig at 150°F (12 bars at 65°C)  
 140 psig at 250°F (10 bars at 121°C)

#### ANSI 250

300 psig at 150°F (20 bars at 65°C)  
 250 psig at 250°F (17 bars at 121°C)

- Tolerance of ±0.125" (±3 mm) should be used
- See performance curves on page 3
- For exact installation, data please write factory for certified dimensions
- Pump equipped with casing drain plug and ¼" NPT suction and discharge gauge ports

### MECHANICAL SEAL DATA

**Seal type:** 2A **Stationary seat:** Silicone carbide  
**Secondary seal:** EPDM **Rotating hardware:** Stainless steel  
**Spring:** Stainless steel

### OPTIONAL EQUIPMENT

FLUID TYPE	ALL GLYCOLS > 30% WT CONC		ALL OTHER NON-POTABLE FLUIDS		POTABLE (DRINKING) WATER	
	up to 200°F (93°C)	over 200°F (93°C)	up to 200°F (93°C)	over 200°F (93°C)	up to 200°F (93°C)	over 200°F (93°C)
<b>Temperature</b>	up to 200°F (93°C)	over 200°F (93°C)	up to 200°F (93°C)	over 200°F (93°C)	up to 200°F (93°C)	over 200°F (93°C)
<b>Rotating face</b>	Silicone carbide		Resin bonded carbon	Antimony loaded carbon	Resin bonded carbon	
<b>Seat elastomer</b>	EPDM (L-cup)	EPDM (O-ring)	EPDM (L-cup)	EPDM (O-ring)	EPDM (L-cup)	EPDM (O-ring)
<b>Material code</b>	SCSC L EPSS 2A	SCSC O EPSS 2A	C-SC L EPSS 2A	ACSC O EPSS 2A	C-SC L EPSS 2A	C-SC O EPSS 2A

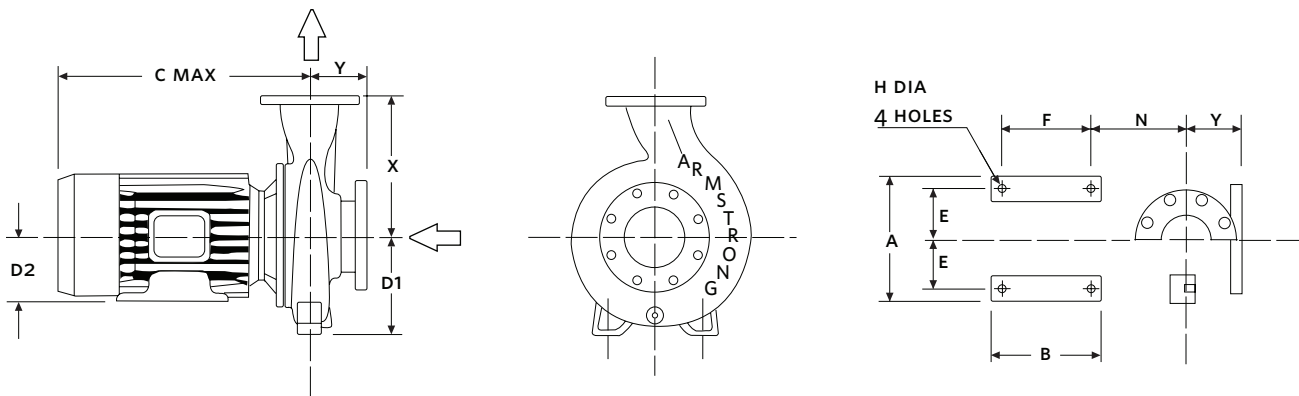
MOTOR FRAME	HP @ RPM (ODP & TEFC)		MAX. DIMENSIONS INCHES (mm)										ASSEMBLY WEIGHT*	
	3600	1800	A	B	C MAX		D1	D2	E	F	H	N	lbs (kgs)	
					ODP	TEFC							ODP	TEFC
143JM	1.5	1	7.00 (178)	6.50 (165)	13.18 (335)	13.18 (335)	5.25 (133)	3.50 (89)	2.75 (70)	4.00 (102)	0.34 (9)	6.12 (155)	86 (39.0)	87 (39.5)
145JM	2 & 3	—	7.00 (178)	6.50 (165)	13.18 (335)	13.18 (335)	5.25 (133)	3.50 (89)	2.75 (70)	4.00 (102)	0.34 (9)	6.12 (155)	93 (42.2)	136 (61.7)
184JM	5 & 7.5	—	7.00 (178)	6.50 (165)	13.18 (335)	13.18 (335)	5.25 (133)	3.50 (89)	2.75 (70)	5.00 (127)	0.41 (10)	6.12 (155)	107 (48.5)	188 (85.3)

**PUMP DIMENSIONS**

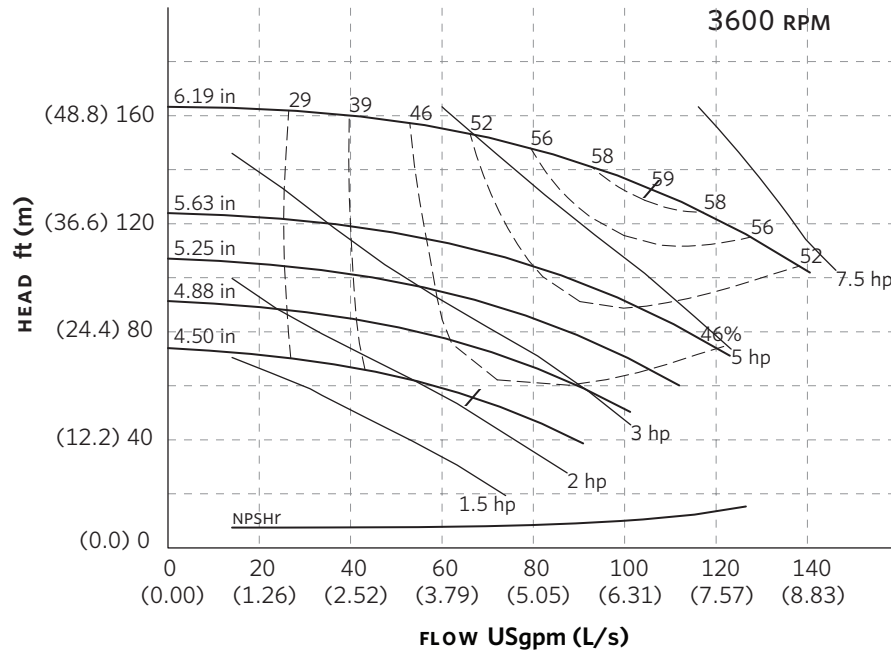
inches (mm)

X	Y
6.50 (165)	4.00 (102)

\*Assembly weight combines pump and motor.



## SERIES 4280 PERFORMANCE CURVES



**Curve number**  
PT16-2-0-3600

**Series**  
4030  
4280

**Size**  
1.5 x 1 x 6

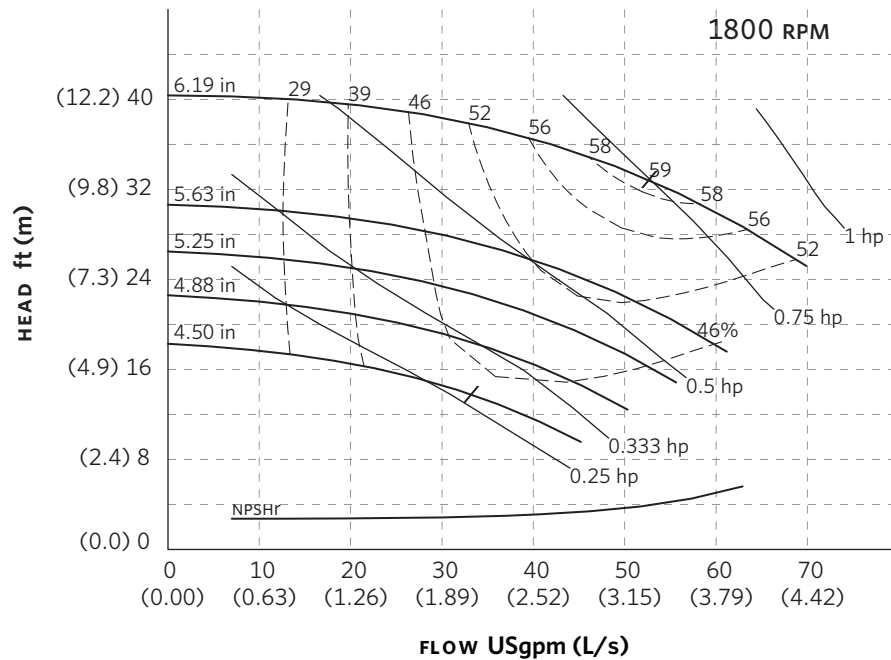
**RPM**  
3600

BHP based on shown  
Fluid's sp. gr.

**Availability**  
4030 all ratings  
4280 FR 143 MIN.

Performance  
guaranteed only  
at operating point  
indicated.

Curve shown for  
clear, cold water  
- SP. GR. 1.0000



**Curve number**  
PT16-2-0-1800

**Series**  
4030  
4280

**Size**  
1.5 x 1 x 6

**RPM**  
1800

BHP based on shown  
Fluid's sp. gr.

**Availability**  
4030 FR 56 MIN.  
4280 FR 143 MIN.

Performance  
guaranteed only  
at operating point  
indicated.

Curve shown for  
clear, cold water  
- SP. GR. 1.0000

Performance curves are for reference only.  
Confirm current performance data with Armstrong ACE Online selection software.

**TORONTO**

23 BERTRAND AVENUE  
TORONTO, ONTARIO  
CANADA  
M1L 2P3  
+1 416 755 2291

**BUFFALO**

93 EAST AVENUE  
NORTH TONAWANDA, NEW YORK  
U.S.A.  
14120-6594  
+1 716 693 8813

**BIRMINGHAM**

HEYWOOD WHARF, MUCKLOW HILL  
HALESOWEN, WEST MIDLANDS  
UNITED KINGDOM  
B62 8DJ  
+44 (0) 8444 145 145

**MANCHESTER**

WOLVERTON STREET  
MANCHESTER  
UNITED KINGDOM  
M11 2ET  
+44 (0) 8444 145 145

**BANGALORE**

#59, FIRST FLOOR, 3RD MAIN  
MARGOSA ROAD, MALLESWARAM  
BANGALORE, INDIA  
560 003  
+91 (0) 80 4906 3555

**SHANGHAI**

NO. 1619 HU HANG ROAD, XI DU TOWNSHIP  
FENG XIAN DISTRICT, SHANGHAI  
P.R.C.  
201401  
+86 21 3756 6696

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