

## SERIES 4280 | END SUCTION BASE MOUNTED SPLIT COUPLED | 80-200A (4x3x8) | SUBMITTAL

File No: 42.63L  
Date: MARCH 24, 2014  
Supersedes: NEW  
Date: NEW

Job: \_\_\_\_\_ Representative: \_\_\_\_\_

Order no.: \_\_\_\_\_ Date: \_\_\_\_\_

Engineer: \_\_\_\_\_ Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_

Contractor: \_\_\_\_\_ Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

### PUMP DESIGN DATA

No. of pumps: \_\_\_\_\_ Tag: \_\_\_\_\_  
Capacity: \_\_\_\_\_ m<sup>3</sup>/h (USgpm) Head: \_\_\_\_\_ m (ft)  
Liquid: \_\_\_\_\_ Viscosity: \_\_\_\_\_  
Temperature: \_\_\_\_\_ °C (°F) Specific gravity: \_\_\_\_\_  
Suction: 100 mm (4") Flanged  
Discharge: 75 mm (3") Flanged

### MATERIALS OF CONSTRUCTION

FLANGE RATING	PN 16	PN 25
Construction	<input type="checkbox"/> BF	<input type="checkbox"/> DBF
Casing	Cast iron	Ductile iron
Adapter	Cast iron	Ductile iron

**Impeller:** Bronze

**Gasket:** Confined non-asbestos fiber

**Bearing frame:** Cast iron

**Shaft:** Carbon steel

**Shaft sleeve:** Bronze

### MECHANICAL SEAL DATA

**Seal type:** 2A

**Stationary seat:** Silicone carbide

**Secondary seal:** EPDM

**Rotating hardware:** Stainless steel

**Spring:** Stainless steel

### MOTOR DESIGN DATA

kW: \_\_\_\_\_ RPM: \_\_\_\_\_ Frame size: \_\_\_\_\_ Enclosure: \_\_\_\_\_  
Volts: \_\_\_\_\_ Hertz: 50 Hz Phase: 3  
Efficiency:  IE1 (NON-EU only)  IE2  IE3

### MAXIMUM PUMP OPERATING CONDITIONS

#### PN 16

16 bars at 121°C (232 psig at 250°F)

#### PN 25

20 bars at 121°C (300 psig at 250°F)

- 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

### OPTIONAL EQUIPMENT

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

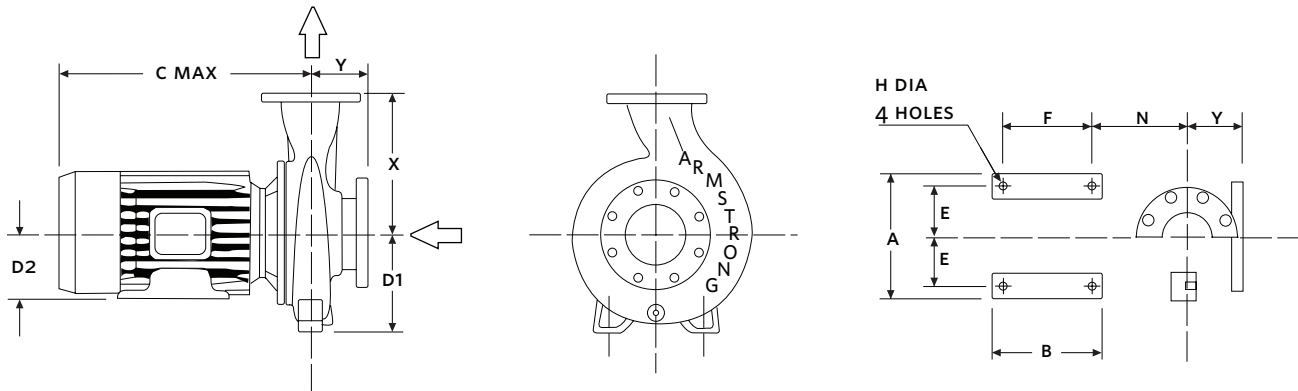
MOTOR	HORSEPOWER @ kW		FULL LOAD CURRENT (A)	STARTING CURRENT (A)		MAX. DIMENSIONS mm (INCHES)							MAX. ASSEMBLY WEIGHT*	
	3000	1500		STAR DELTA (SD)	DIRECT ON LINE (DOL)	A	B	C MAX	D1	D2	E	F		N
80	—	0.75	1.7	—	7.4	175 (6.89)	162 (6.38)	413 (16.24)	193 (7.61)	193 (7.61)	125 (4.92)	141 (5.55)	175 (6.89)	59.3 (131)
90S	—	1.1	2.47	—	12.6	190 (7.48)	187 (7.36)	364 (14.31)	193 (7.61)	193 (7.61)	140 (5.51)	166 (6.54)	156 (6.14)	64.8 (143)
90L	—	1.5	3.33	—	18.6	190 (7.48)	187 (7.36)	411 (16.16)	193 (7.61)	193 (7.61)	140 (5.51)	166 (6.54)	181 (7.13)	67.8 (150)
100L	—	2.2	4.82	—	26.5	240 (9.45)	220 (8.66)	436 (17.15)	193 (7.61)	193 (7.61)	160 (6.30)	190 (7.48)	184 (7.23)	76.3 (168)
100L	—	3	6.4	—	37.1	240 (9.45)	220 (8.66)	436 (17.15)	193 (7.61)	193 (7.61)	160 (6.30)	190 (7.48)	184 (7.23)	78.8 (174)
132S	5.5	—	10.8	25.9	88.6	306 (12.04)	220 (8.66)	589 (23.21)	193 (7.61)	193 (7.61)	216 (8.50)	190 (7.48)	266 (10.49)	105.8 (233)
132S	7.5	—	14.5	36.3	118.9	306 (12.04)	220 (8.66)	589 (23.21)	193 (7.61)	193 (7.61)	216 (8.50)	190 (7.48)	266 (10.49)	108.8 (240)
160M	11	—	21.1	52.8	164.6	334 (13.15)	364 (14.33)	695 (27.35)	193 (7.61)	193 (7.61)	254 (10.00)	332 (13.07)	295 (11.60)	149.8 (330)
160M	15	—	28.5	74.1	228.0	334 (13.15)	364 (14.33)	695 (27.35)	193 (7.61)	193 (7.61)	254 (10.00)	332 (13.07)	295 (11.60)	157.8 (348)
160L	18.5	—	34.9	94.23	303.63	334 (13.15)	364 (14.33)	765 (30.11)	193 (7.61)	193 (7.61)	254 (10.00)	332 (13.07)	339 (13.34)	169.8 (374)
180M	22	—	40.9	114.52	368.1	369 (14.52)	351 (13.82)	765 (30.11)	218 (8.60)	218 (8.60)	279 (10.98)	321 (12.64)	351 (13.81)	209.8 (463)

**PUMP DIMENSIONS**

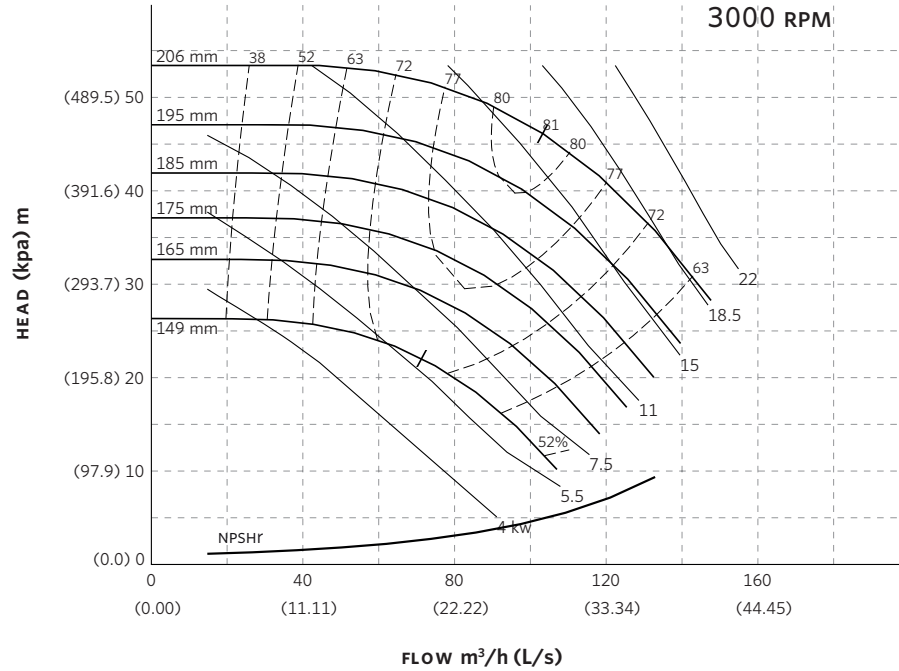
mm (inches)

G	I	X
102 (4.01)	178 (7.01)	279 (11.00)

\*Assembly weight combines pump and motor.



## SERIES 4280 PERFORMANCE CURVES



**Curve number**  
PT80-1-0-3000

**Series**  
4030  
4280

**Size**  
80-200

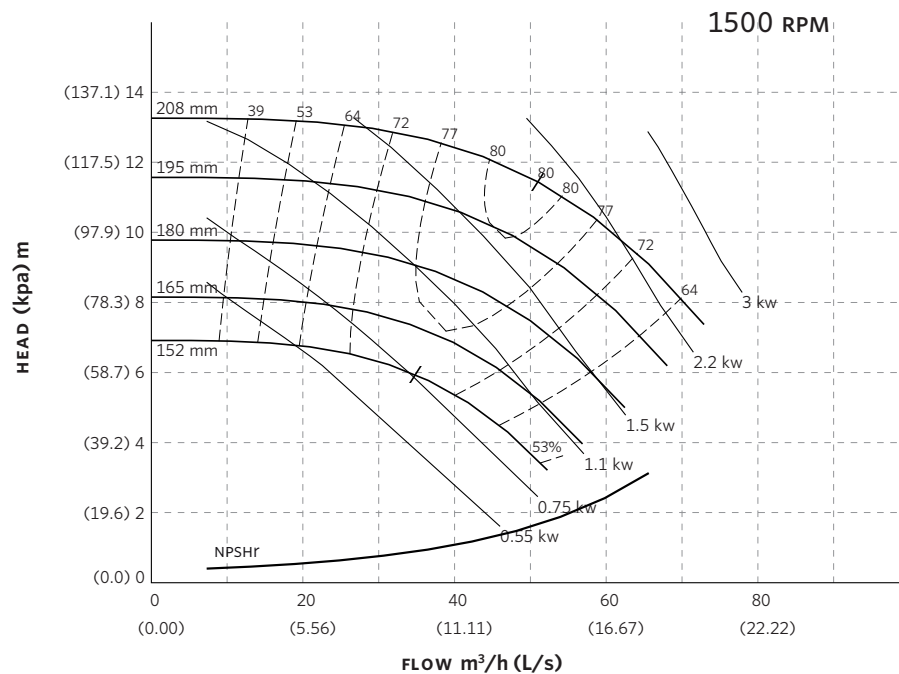
**RPM**  
3000

BHP based on shown  
Fluid's sp. gr.

**Availability**  
4030 all ratings  
4280 all ratings

Performance  
guaranteed only  
at operating point  
indicated.

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



**Curve number**  
PT79-1-0-1500

**Series**  
4030  
4280

**Size**  
80-200

**RPM**  
1500

BHP based on shown  
Fluid's sp. gr.

**Availability**  
4030 all ratings  
4280 all ratings.

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**

WENLOCK WAY  
MANCHESTER  
UNITED KINGDOM  
M12 5JL  
+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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