

## SERIES 4380 | VERTICAL IN-LINE PUMPS CLOSED-COUPLED | 2 × 2 × 8 | SUBMITTAL

File No: 43-712  
Date: NOV. 26, 2014  
Supersedes: 43-712  
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: 2" (50mm) Discharge: 2" (50mm)

### 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
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

**Shaft:** Carbon steel

**Shaft sleeve:** Bronze

**Flush line:** Braided stainless steel

### 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

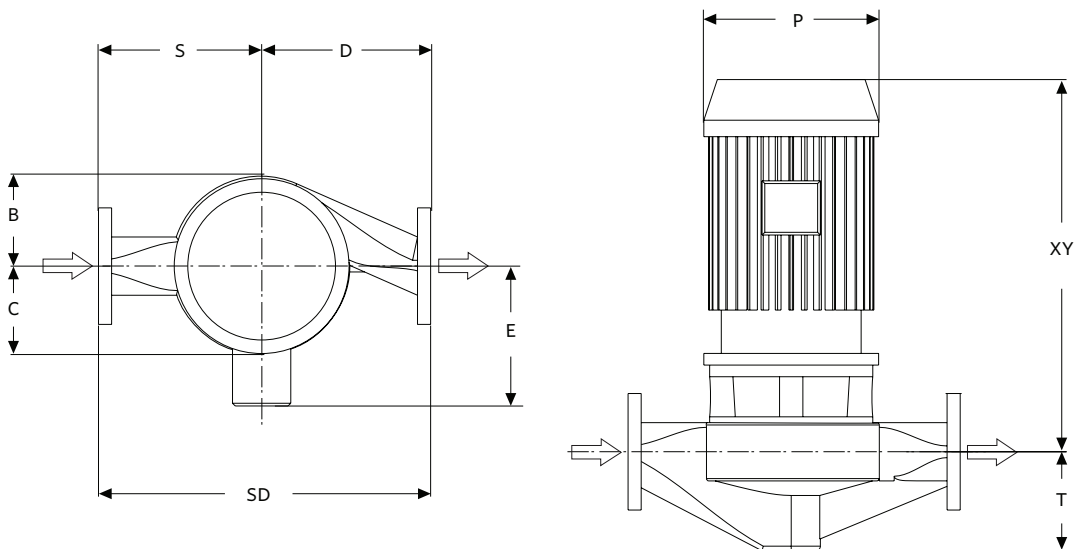
### OPTIONAL EQUIPMENT

FLUID TYPE	ALL GLYCOLS > 30% WT CONC		ALL OTHER NON-POTABLE FLUIDS		POTABLE (DRINKING) WATER	
Temperature	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)
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

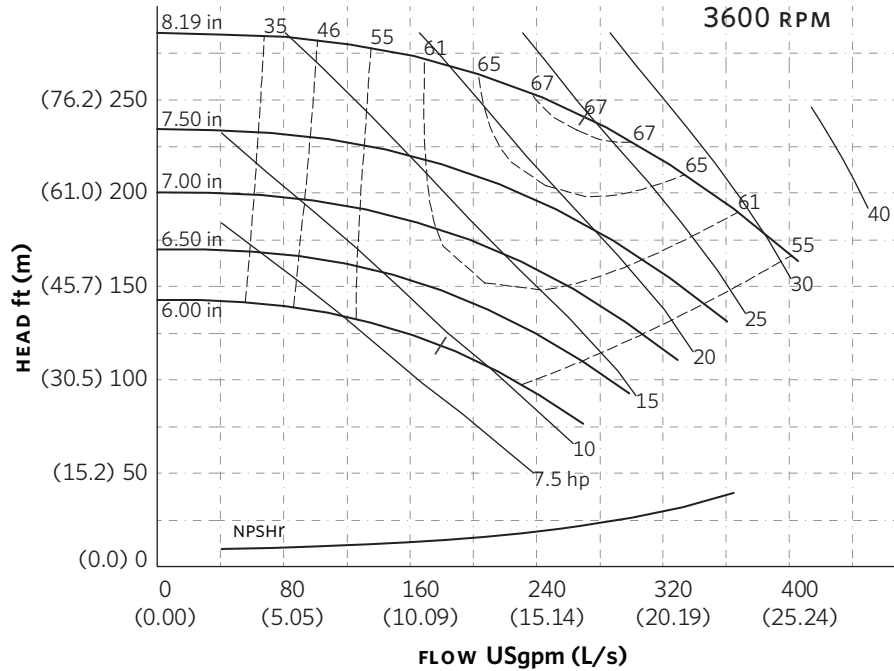
MOTOR FRAME	HORSEPOWER @ RPM ODP & TEFC			DIMENSIONS inches (mm)			SHIP. WEIGHT lbs (kgs)	
	3600	1800	1200	E	P	XY	ODP	TEFC
56C	—	—	0.5	6.00 (152)	7.50 (191)	16.01 (407)	—	—
143	—	1	0.75	6.13 (156)	8.63 (219)	17.26 (438)	177 (80.3)	180 (81.6)
145	—	1.5	1	6.13 (156)	8.63 (219)	17.26 (438)	184 (83.5)	188 (85.3)
145	—	2	1.5	6.13 (156)	8.63 (219)	17.26 (438)	184 (83.5)	190 (86.2)
182	—	3	—	7.50 (191)	10.38 (264)	19.26 (489)	187 (84.8)	231 (104.8)
184	7.5	5	—	7.50 (191)	10.38 (264)	19.26 (489)	200 (90.7)	281 (127.5)
213	10	—	—	8.25 (210)	12.13 (308)	25.49 (647)	276 (125.2)	318 (144.2)
215	15	—	—	8.25 (210)	12.13 (308)	25.49 (647)	281 (127.5)	406 (184.2)
254	20	—	—	9.94 (252)	12.13 (308)	24.86 (631)	361 (163.7)	466 (211.4)
256	25	—	—	9.94 (252)	12.13 (308)	24.86 (631)	425 (192.8)	551 (249.9)
284	30	—	—	10.81 (275)	11.50 (292)	27.73 (704)	528 (239.5)	587 (266.3)
286	40	—	—	10.81 (275)	11.50 (292)	27.73 (704)	612 (277.6)	745 (337.9)
324	50	—	—	10.81 (275)	11.50 (292)	28.98 (736)	694 (314.8)	782 (354.7)
326	60	—	—	10.81 (275)	11.50 (292)	28.98 (736)	780 (353.8)	1107 (502.1)

**PUMP DIMENSIONS**  
inches (mm)

INLET	OUTLET	B	C	D	S	SD	T
2.00	2.00	5.72	5.72	8.50	9.50	18.00	5.09
(51)	(51)	(145)	(145)	(216)	(241)	(457)	(129)



**SERIES 4380 PERFORMANCE CURVES**



**Curve number**  
PT40-2-0-3600

**Series**  
4300  
4380

**Size**  
2 × 2 × 8

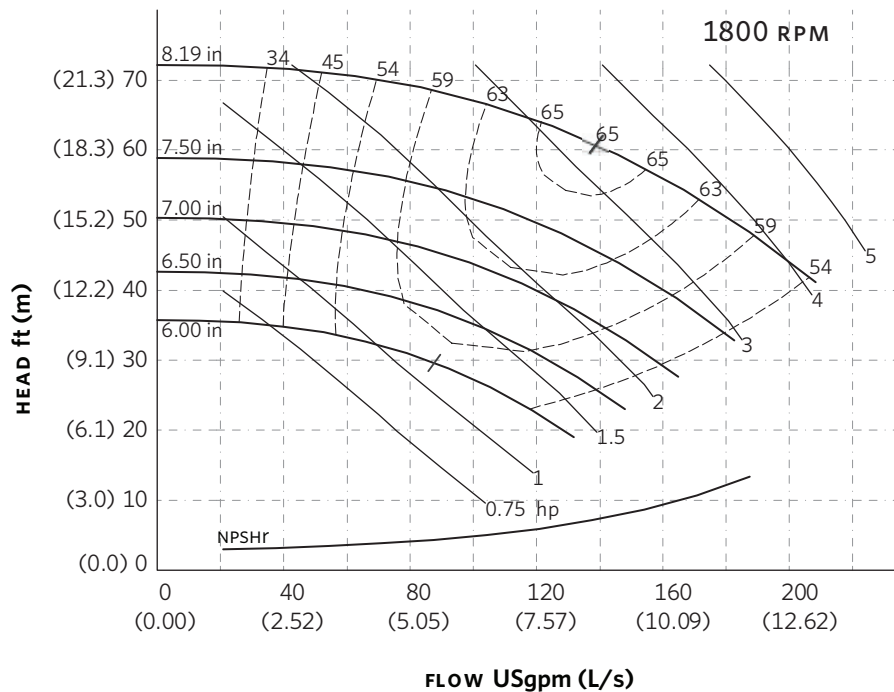
**RPM**  
3600

BHP based on shown  
Fluid's sp. gr.

**Availability**  
4300 all ratings  
4380 all ratings

Performance  
guaranteed only  
at operating point  
indicated.

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



**Curve number**  
PT39-2-0-1800

**Series**  
4300  
4380

**Size**  
2 × 2 × 8

**RPM**  
1800

BHP based on shown  
Fluid's sp. gr.

**Availability**  
4300 all ratings  
4380 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.

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