

## SERIES 4380 | VERTICAL IN-LINE PUMPS CLOSED-COUPLED | 2 × 2 × 10 | SUBMITTAL

File No: 43-724  
Date: NOV. 26, 2014  
Supersedes: 43-724  
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" (50 mm) Discharge: 2" (50 mm)

### 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	
	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

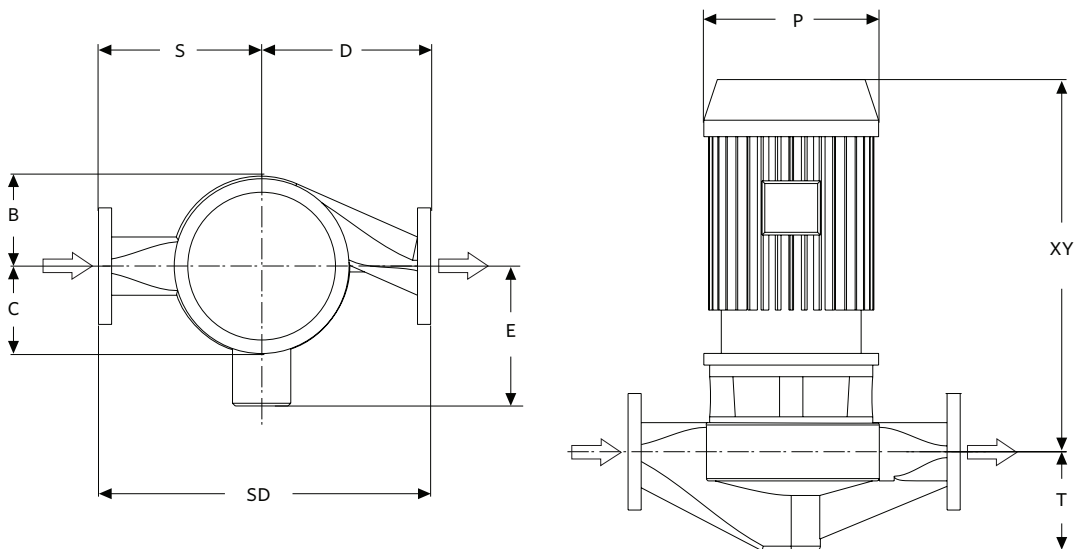
2

MOTOR FRAME	HORSEPOWER - @ RPM ODP & TEFC			DIMENSIONS inches (mm)			SHIP. WEIGHT lbs (kgs)	
	3600	1800	1200	E	P	XY	ODP	TEFC
143	—	—	0.75	6.13 (156)	8.63 (219)	17.29 (439)	—	—
145	—	2	1	6.13 (156)	8.63 (219)	17.29 (439)	217 (98.4)	223 (101.2)
182	—	3	1.5	7.50 (191)	10.38 (264)	20.13 (511)	220 (99.8)	264 (119.7)
184	—	5	2	7.50 (191)	10.38 (264)	20.13 (511)	235 (106.6)	271 (122.9)
213	15	7.5	—	8.25 (210)	12.13 (308)	25.49 (647)	315 (142.9)	440 (199.6)

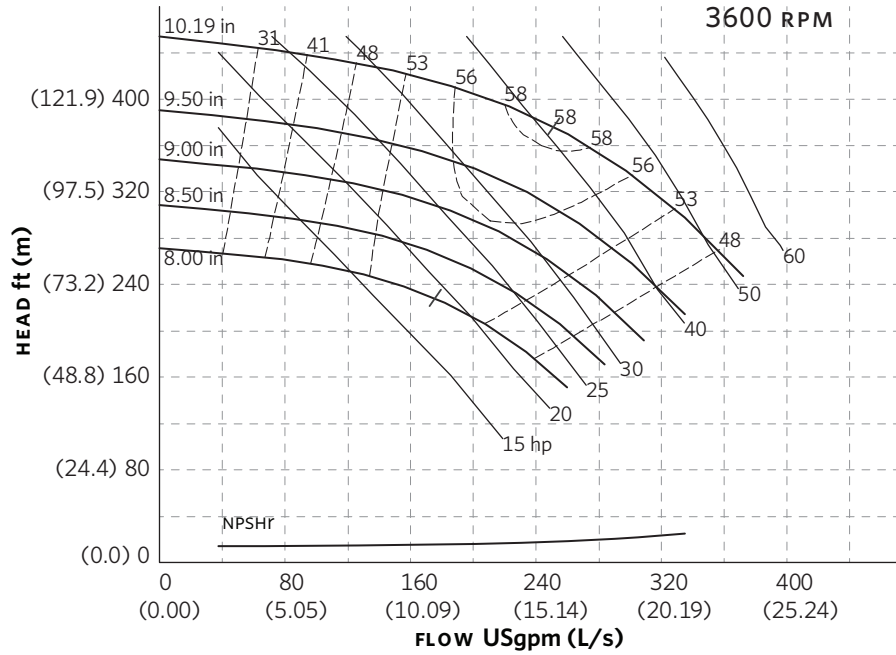
**PUMP DIMENSIONS**

inches (mm)

INLET	OUTLET	B	C	D	S	SD	T
2.00	2.00	6.75	6.75	9.00	10.00	19.00	5.34
(51)	(51)	(172)	(172)	(229)	(254)	(483)	(136)



**SERIES 4380 PERFORMANCE CURVES**



**Curve number**  
PT36-1-0-3600

**Series**  
4300  
4380

**Size**  
2 x 2 x 10

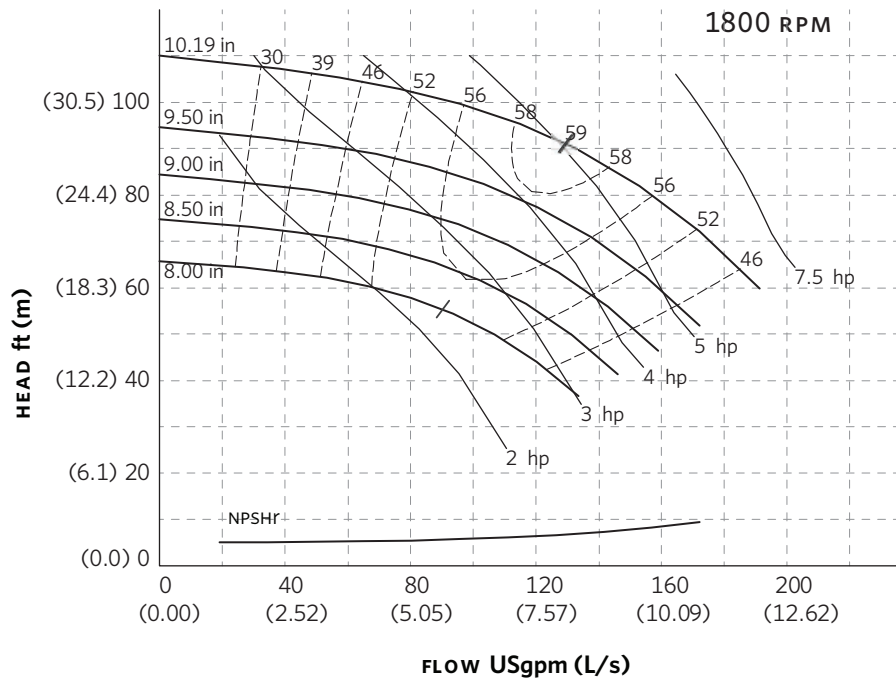
**RPM**  
3600

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**  
PT35-1-0-1800

**Series**  
4300  
4380

**Size**  
2 x 2 x 10

**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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