

## SERIES 4380 | CLOSED-COUPLED VERTICAL IN-LINE | 100-290A (4×4×11.5) | SUBMITTAL

**File No:** 43.734L  
**Date:** APRIL 04, 2016  
**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: 100mm (4") Discharge: 100mm (4")

### MATERIALS OF CONSTRUCTION

DIN FLANGE RATING	PN 16	PN 25
<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

**Flush line:** Braided stainless steel

### 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     IE2     IE3

### MAXIMUM PUMP OPERATING CONDITIONS

#### PN 16

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

#### PN 25

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

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

### OPTIONAL EQUIPMENT

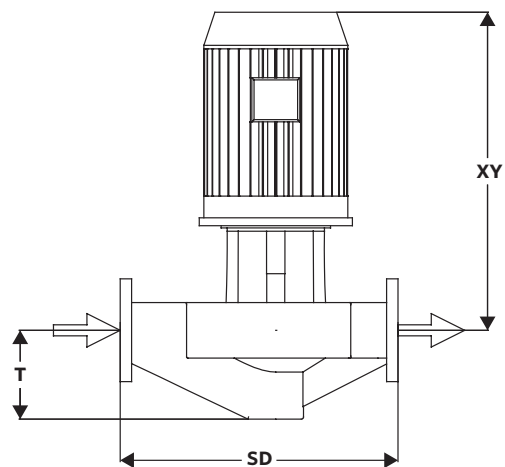
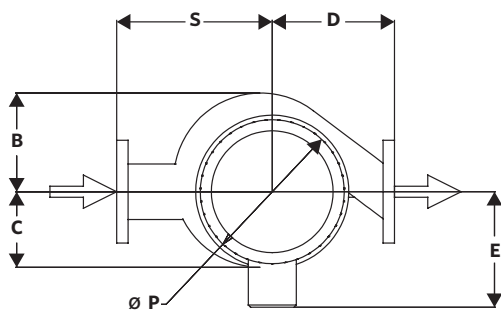
FLUID TYPE	ALL GLYCOLS > 30% WT CONC		ALL OTHER NON-POTABLE FLUIDS		POTABLE (DRINKING) WATER	
	up to 93°C (200°F)	over 93°C (200°F)	up to 93°C (200°F)	over 93°C (200°F)	up to 93°C (200°F)	over 93°C (200°F)
<b>Rotating face</b>	Silicone carbide		Resin bonded carbon	Antimony loaded carbon	Resin bonded 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	KILOWATT @ RPM		FULL LOAD CURRENT (A)	STARTING CURRENT (A)		DIMENSIONS mm (inches)			WEIGHT kg (lbs)
	3000	1500		STAR DELTA (SD)	DIRECT ON LINE (DOL)	E	P	XY	
112M	—	4	8.4	18.5	58.9	146 (5.75)	146 (5.75)	146 (5.75)	160.5 (354)
132S	—	5.5	10.9	24.0	81.8	175 (6.89)	280 (11.02)	566 (22.29)	170.8 (377)
132M	—	7.5	14.9	32.8	111.8	175 (6.89)	280 (11.02)	566 (22.29)	178.8 (394)
160M	—	11	21.9	50.4	168.6	208 (8.19)	315 (12.40)	668 (26.29)	239.8 (529)

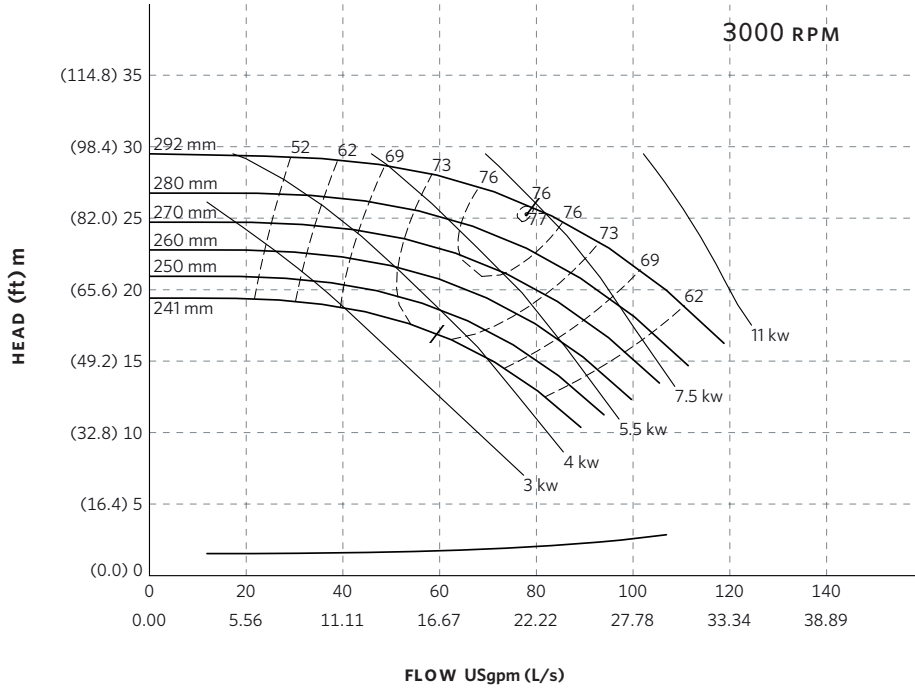
**PUMP DIMENSIONS**

mm (inches)

B	C	D	S	T
188 (7.40)	207 (8.13)	324 (12.75)	387 (15.25)	195 (7.69)



## SERIES 4380 PERFORMANCE CURVES



**Curve number**  
PT83-1-0-3000

**Series**  
4300  
4380

**Size**  
100-290A

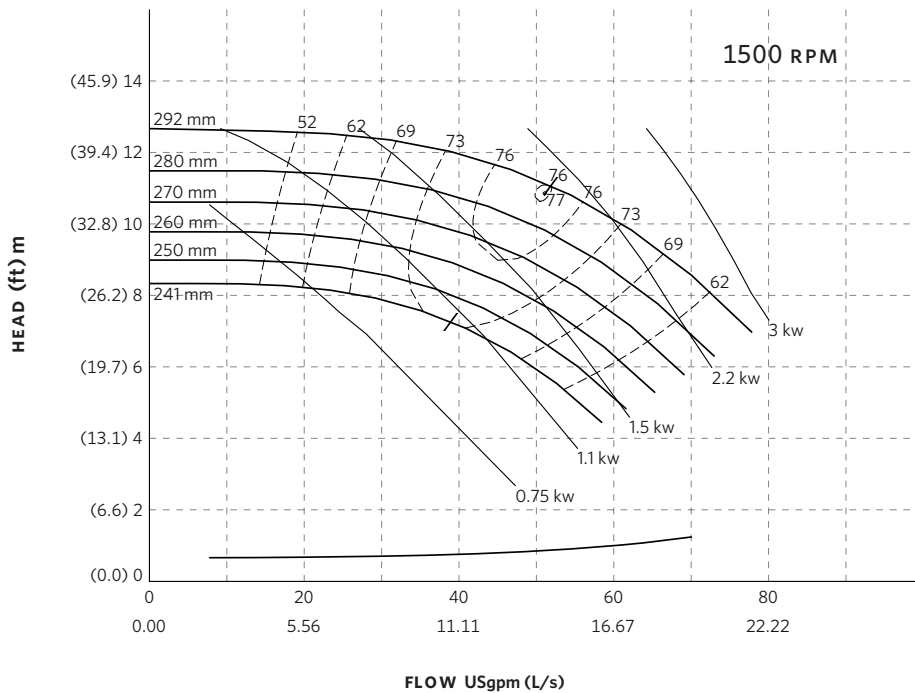
**RPM**  
3000

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. 1.000



**Curve number**  
PT83-1-0-1500

**Series**  
4300  
4380

**Size**  
100-290A

**RPM**  
1500

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. 1.000

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

**SÃO PAULO**

RUA JOSÉ SEMIÃO RODRIGUES AGOSTINHO,  
1370 GALPÃO 6  
EMBU DAS ARTES  
SAO PAULO, BRAZIL  
+55 11 4781 5500

ARMSTRONG FLUID TECHNOLOGY  
ESTABLISHED 1934

ARMSTRONGFLUIDTECHNOLOGY.COM

**MAKING  
ENERGY  
MAKE  
SENSE™**