

**SERIES 4380 | VERTICAL IN-LINE |**  
**80-190 (3x3x7.5) | SUBMITTAL**

**File No:** 43-584IEC  
**Date:** FEBRUARY 08, 2024  
**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 (l/s) Head: \_\_\_\_\_ m (ft)  
 Liquid: \_\_\_\_\_ Viscosity: \_\_\_\_\_  
 Temperature: \_\_\_\_\_ °C (°F) Specific gravity: \_\_\_\_\_  
 Suction: 80 mm (3") Discharge: 80mm (3")

**MATERIALS OF CONSTRUCTION**

- PN 16**  
**CONSTRUCTION: SF**  
 E-coated cast iron, 316 stainless steel fitted  
 Upgrade impeller to duplex stainless steel fitted (DF)
- PN 25**  
**CONSTRUCTION: DSF**  
 E-coated ductile iron, 316 stainless steel fitted  
 Upgrade impeller to duplex stainless steel fitted (DDF)

**Gasket:** Confined non-asbestos fiber  
**Shaft:** 316SS  
**Shaft sleeve:** 316SS  
**Flush line:** Braided stainless steel

**MECHANICAL SEAL DESIGN 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:  IE 1 (non EU only)     IE 2     IE 3

**MAXIMUM PUMP OPERATING CONDITIONS**

- PN 16**  
 16 bar at 49°C (232 psig at 120°F)  
 7 bar at 150°C (100 psig at 300°F)
- PN 25**  
 25 bar at 65°C (362 psig at 149°F)  
 21 bar at 150°C (304 psig at 300°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 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

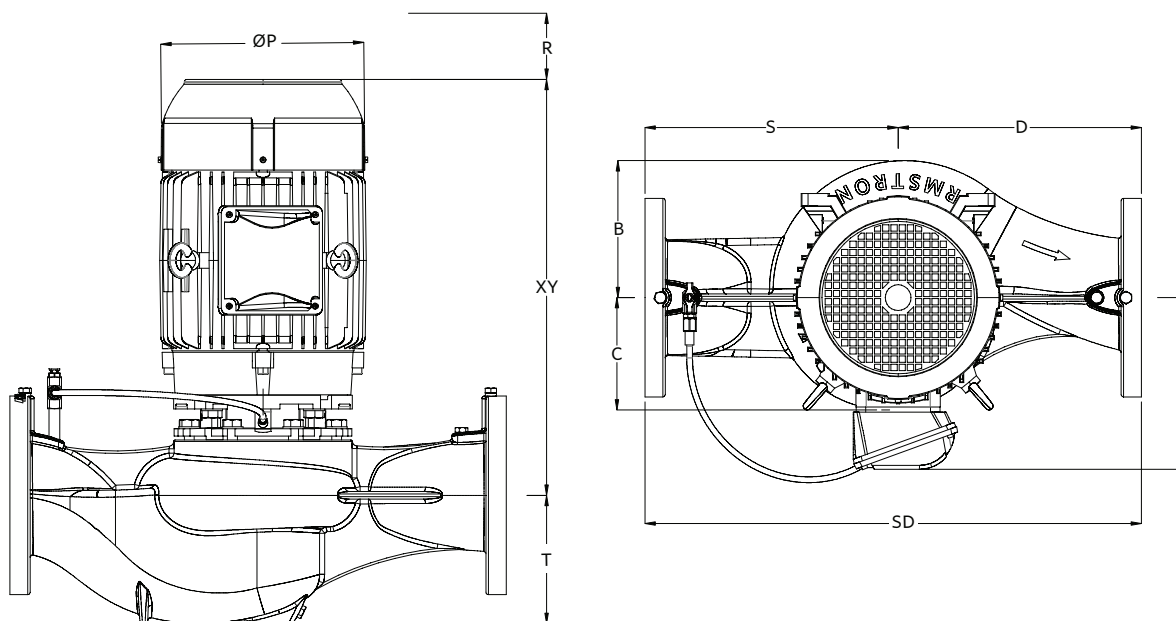
4380	FRAME	kW POWER	DIMENSIONS mm(INCHES)				WEIGHT* kgs (lbs)
			E	P	R	XY	
80-190	160M	11	255 (10.04)	311 (12.24)	47 (1.85)	950 (37.40)	201.0 (443)
	160M	15	255 (10.04)	311 (12.24)	47 (1.85)	950 (37.40)	212.0 (467)
	160L	18.5	255 (10.04)	311 (12.24)	57 (2.24)	950 (37.40)	226.0 (498)
	160M	22	277 (10.91)	365 (14.37)	57 (2.24)	970 (38.19)	260.0 (573)

\*Assembly weight combines pump and motor.

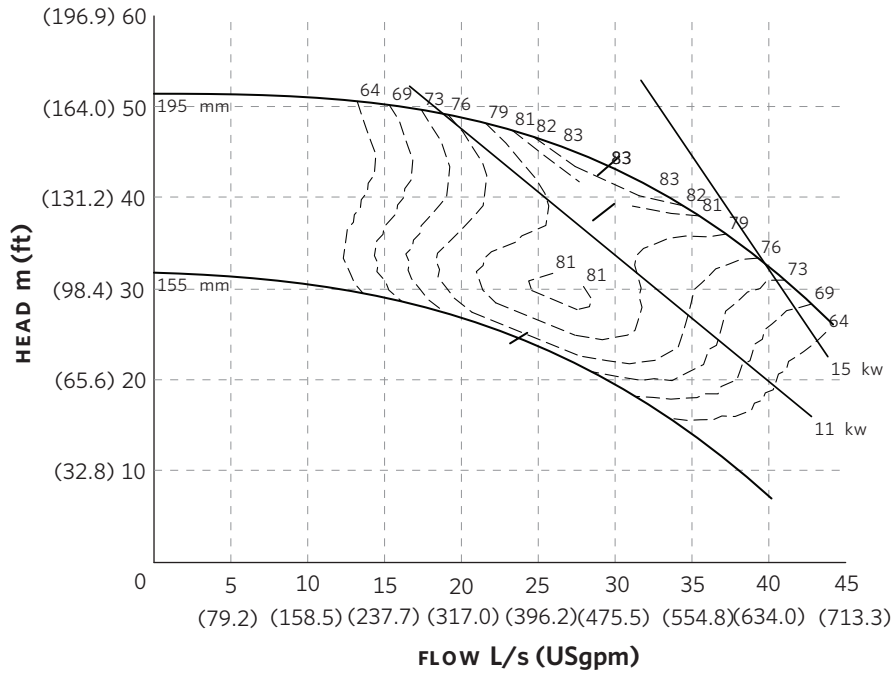
**PUMP DIMENSIONS**

mm (inches)

B	C	D	S	SD	T
164 (6.46)	145 (5.71)	254 (10.00)	305 (12.01)	559 (22.01)	170 (6.69)



## SERIES 4380 PERFORMANCE CURVES



**Curve number**

PT-784-0-0

**Series**

4380

**Size**

80-190

**RPM**

2970

BHP based on shown  
Fluid's sp. gr.

**Availability**

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 ADEPT 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

**DROITWICH SPA**

POINTON WAY, STONEBRIDGE CROSS  
BUSINESS PARK, DROITWICH SPA,  
WORCESTERSHIRE,  
UNITED KINGDOM, WR9 0LW  
+44 121 550 5333

**MANCHESTER**

WOLVERTON STREET, MANCHESTER  
UNITED KINGDOM, M11 2ET  
+44 161 223 2223

**BANGALORE**

#18, LEWIS WORKSPACE, 3<sup>RD</sup> FLOOR,  
OFF MILLERS - NANDIDURGA ROAD,  
JAYAMAHAL CBD, BENSON TOWN,  
BANGALORE, INDIA 560 046  
+91 80 4906 3555

**SHANGHAI**

UNIT 903, 888 NORTH SICHUAN RD.  
HONGKOU DISTRICT, SHANGHAI  
CHINA, 200085  
+86 21 5237 0909

**BEIJING**

ROOM 1612, NANYIN BUILDING NO.2  
NORTH EAST THRID RING ROAD  
CHAOYANG DISTRICT, BEIJING,  
CHINA 100027  
+86 21 5237 0909

**SÃO PAULO**

RUA JOSÉ SEMIÃO RODRIGUES  
AGOSTINHO, 1370 GALPÃO 6 EMBU  
DAS ARTES, SAO PAULO, BRAZIL  
+55 11 4785 1330

**LYON**

93 RUE DE LA VILLETTE  
LYON, 69003 FRANCE  
+33 4 26 83 78 74

**DUBAI**

JAFZA VIEW 19, OFFICE 402  
P.O.BOX 18226 JAFZA,  
DUBAI - UNITED ARAB EMIRATES  
+971 4 887 6775

**JIMBOLIA**

STR CALEA MOTILOR NR. 2C  
JIMBOLIA 305400, JUD.TIMIS  
ROMANIA  
+40 256 360 030

**FRANKFURT**

WESTERBACHSTRASSE 32,  
D-61476 KRONBERG IM TAUNUS  
GERMANY  
+49 6173 999 77 55

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