

# **DESIGN ENVELOPE 4380 VIL**

MECHANICAL SEAL DATA

Stationary seat: Silicone carbide

Rotating hardware: Stainless steel

Secondary seal: EPDM

Spring: Stainless steel

Seal type: 2A

# SINGLE PHASE | 1506-002.0 | SUBMITTAL

File No: 100.4362

Date: OCTOBER 27, 2014

Supersedes: NEW

Date: NEW

Job:			Representative:				
			Order No:	Date:			
Engineer:			Submitted by:	Date:			
			Approved by:	Date:			
PUMP DES	SIGN DATA		CONTROLS DATA				
No. of pumps	:	Tag:	Power supply:	: Volts: 200-240VAC			
Capacity:	USgpm (L/s)	Head:ft (m)		Freq: 50/60Hz Phase: 1			
Liquid:		Viscosity:	Sensorless control:				
Temperature:	°F (°C)	Specific gravity:	Minimum system pressure	e :ft (m)*			
Suction: 1.5"			: to be maintained.	:			
Section in Germin, Section 2.00 in in Germin,			Protocol (standard): ☐ Modbus RTU ☐ BACnet™ MS/TP				
MOTOR DESIGN DATA			:	☐ Johnson® N2 ☐ Siemens® FLN			
HP: 2	RPM: 2000	Frame size:	Protocol (optional):	: □ LonWorks®			
			Enclosure:	: ☐ Indoor – UL TYPE 12			
	Volts: 208			☐ Outdoor – UL TYPE 4X with weather shield ☐ Outdoor – UL TYPE 4X less weather shield			
Phase: 3 Efficiency: NEMA premium 12.12			Disconnect switch: ☐ Non-fused				
MAXIMUM PUMP OPERATING CONDITIONS			EMI/RFI control:	: 1-phase IVS102 units do not meet the EN61800-3 directive			
ANSI 125			Harmonic suppression:	Harmonic suppression: Dual DC-link reactors (equivalent: 5%			
175 psig at 150°F (12 bars at 65°C)				AC line reactor) supporting IEEE			
140 psig at 250°F (10 bars at 121°C)			Coolings	519-1992 requirements**			
ANSI 250			•	Cooling: Fan-cooled through back channel  Ambient temperature: -10°C to +45°C up to 1000 meters above			
	0°F (20 bars at 65°		: Ambient temperature.	sea level (-14°F to +113°F, 3300 ft)			
250 psig at 250°F (17 bars at 121°C)  • Tolerance of ±0.125" (±3 mm) should be used			Analog ı/o:	Analog I/o: Two current or voltage inputs, one current output			
	stallation, data ple	should be used ase write factory for	Digital ı/o:	Six programmable inputs (two can be configured as outputs)			

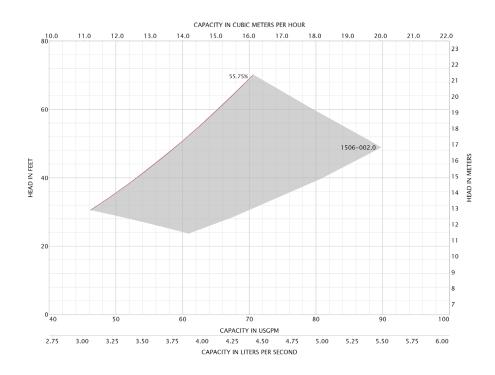
\*If minimum maintained system pressure is not known: Default to 40% of design head

\*\*The IVS 102 drive is a low harmonic drive via built-in DC line reactors. This does not guaranty
performance to any system wide harmonic specification or the costs to meet a system wide
specification. If supplied with the system electrical details, Armstrong will run a computer
simulation of the system wide harmonics. If system harmonic levels are exceeded Armstrong
can also recommend additional harmonic mitigation and the costs for such mitigation.

**Pulse inputs:** Two programmable **Relay outputs:** Two programmable

Communication port: 1-RS485, 1-USB

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 (0-ring)	EPDM (L-cup)	EPDM (0-ring)	EPDM (L-cup)	EPDM (0-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



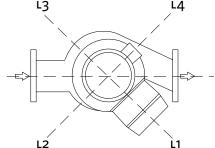
Performance curves are for reference only.

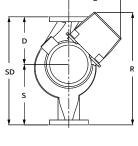
 $Confirm\ current\ performance\ data\ with\ Armstrong\ ACE\ Online\ selection\ software.$ 

# **DIMENSION DATA**

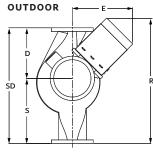
	INDOOR (UL TYPE 12/ODP)	OUTDOOR (UL TYPE 4X/TEFC)
Frame size:	145	145
Size:	1.5×1.5×6	1.5×1.5×6
HP:	2	2
RPM:	2900	2900
AB:	23.49(597)	29.52(750)
в:	3.86(98)	3.86(98)
c:	3.78(96)	3.78(96)
D:	7.25(184)	7.25(184)
E:	13.71(348)	17.20(437)
F:	13.71(348)	17.20(437)
P:	8.63(219)	7.83(199)
s:	7.00(178)	7.00(178)
SD:	14.25(362)	14.25(362)
T:	4.25(108)	4.25(108)
XY:	17.22(437)	16.97(431)
Weight:	189(85.7)	198(89.8)

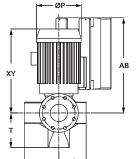
Dimensions - inch (mm) Weight - lbs (kg)

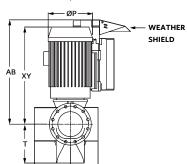




INDOOR







TORONTO +416 755 2291

# BUFFALO

+716 693 8813

## BIRMINGHAM

+44 (0) 8444 145 145

### MANCHESTER

+44 (0) 8444 145 145

## BANGALORE

+91 (0) 80 4906 3555

# SHANGHAI

+86 21 3756 6696

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