

DESIGN ENVELOPE 4380 VIL

SINGLE PHASE | 0306-001.5 | SUBMITTAL

File No: 100.4372
 Date: OCTOBER 27, 2014
 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: _____ USgpm (L/s) Head: _____ ft (m)
 Liquid: _____ Viscosity: _____
 Temperature: _____ °F (°C) Specific gravity: _____
 Suction: 3" (75mm) Discharge: 3" (75mm)

MOTOR DESIGN DATA

HP: 1.5 RPM: 1740 Frame size: _____
 Enclosure: _____ Volts: 208 Freq: 60 Hz
 Phase: 3 Efficiency: NEMA premium 12.12

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
- For exact installation, data please write factory for certified dimensions

MECHANICAL SEAL DATA

Seal type: 2A
 Stationary seat: Silicone carbide
 Secondary seal: EPDM
 Rotating hardware: Stainless steel
 Spring: Stainless steel

CONTROLS DATA

Power supply: Volts: 200-240VAC
 Freq: 50/60Hz Phase: 1

Sensorless control: Standard

Minimum system pressure to be maintained: _____ ft (m)*

Orientation: L1 (default) L2 L3 L4

Protocol (standard): Modbus RTU BACnet™ MS/TP
 Johnson® N2 Siemens® FLN

Protocol (optional): LonWorks®

Enclosure: Indoor - UL TYPE 12
 Outdoor - UL TYPE 4X with weather shield
 Outdoor - UL TYPE 4X less weather shield

Disconnect switch: Non-fused

EMI/RFI control: 1-phase IVS102 units do not meet the EN61800-3 directive

Harmonic suppression: Dual DC-link reactors (equivalent: 5% AC line reactor) supporting IEEE 519-1992 requirements**

Cooling: Fan-cooled through back channel

Ambient temperature: -10°C to +45°C up to 1000 meters above sea level (-14°F to +113°F, 3300 ft)

Analog i/o: Two current or voltage inputs, one current output

Digital i/o: Six programmable inputs (two can be configured as outputs)

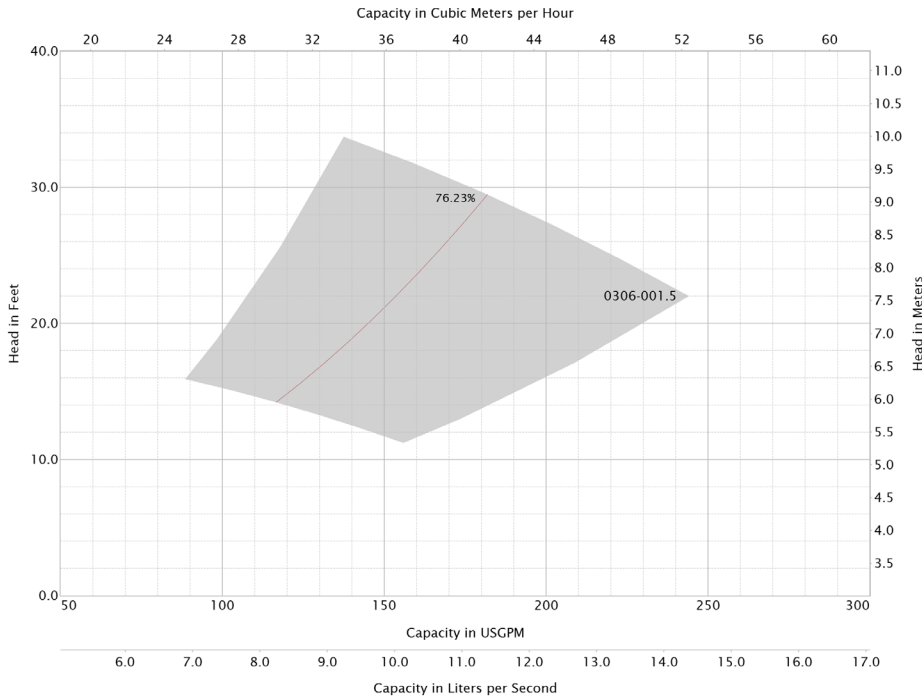
Pulse inputs: Two programmable

Relay outputs: Two programmable

Communication port: 1-RS485, 1-USB

*If minimum maintained system pressure is not known: Default to 40% of design head
 **The IVS102 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.

| 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 |

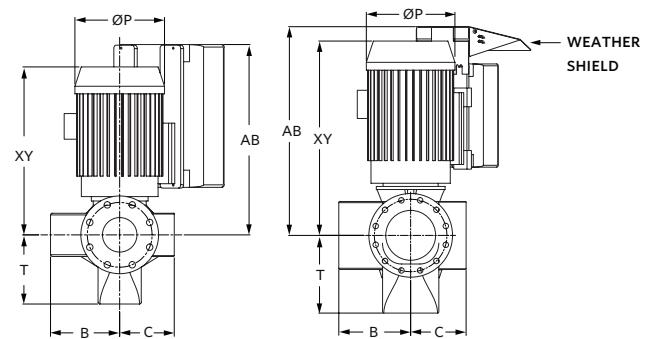
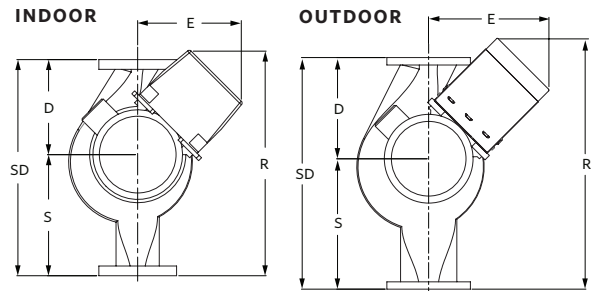
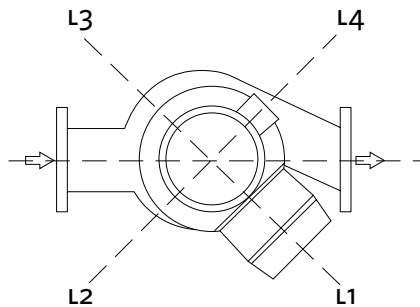


DIMENSION DATA

| | INDOOR (UL TYPE 12/ODP) | OUTDOOR (UL TYPE 4X/TEFC) |
|--------------------|----------------------------|------------------------------|
| Frame size: | 145 | 145 |
| Size: | 3×3×6 | 3×3×6 |
| HP: | 1.5 | 1.5 |
| RPM: | 1740 | 1740 |
| AB: | 22.15(563) | 28.18(716) |
| B: | 5.80(147) | 5.80(147) |
| C: | 4.65(118) | 4.65(118) |
| D: | 8.25(210) | 8.25(210) |
| E: | 12.04(306) | 17.20(437) |
| F: | 12.04(306) | 17.20(437) |
| P: | 8.63(219) | 7.83(199) |
| S: | 9.75(248) | 9.75(248) |
| SD: | 18.00(457) | 18.00(457) |
| T: | 6.06(154) | 6.06(154) |
| XY: | 17.25(438) | 17.00(432) |
| Weight: | 219(99.3) | 227(103.0) |

Performance curves are for reference only.
Confirm current performance data with Armstrong ACE Online selection software.

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



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