

DESIGN ENVELOPE 4380 VIL | 0408-005.0 | SUBMITTAL

File No: 100.4348
Date: JANUARY 14, 2016
Supersedes: 100.4343
Date: AUGUST 14, 2015

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: 4" (100mm) Discharge: 4" (100mm)

OSHPD Seismic Certification OSP-0422-10

UL STD 778 & CSA STD C22.2 NO.108 certified

MOTOR DESIGN DATA

hp: _____ rpm: _____ Frame size: _____ Enclosure: _____

Volts: _____ Hertz: 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

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

Fused disconnect switch:

EMI/RFI control: Integrated filter designed to meet EN61800-3

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

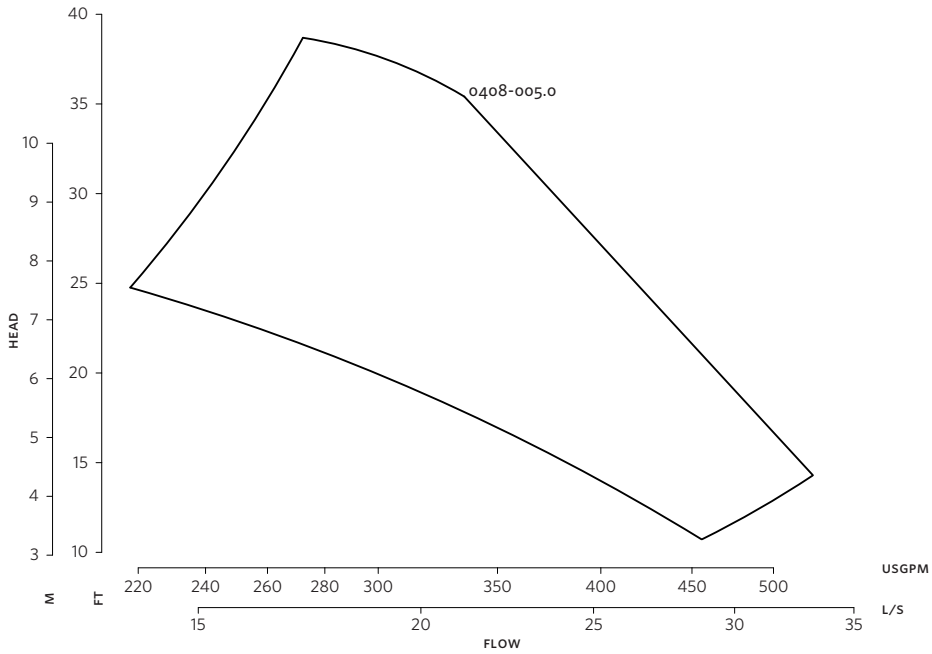
Relay outputs: Two programmable

Communication port: 1-RS485, 1-USB

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

**The 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.

| 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 |

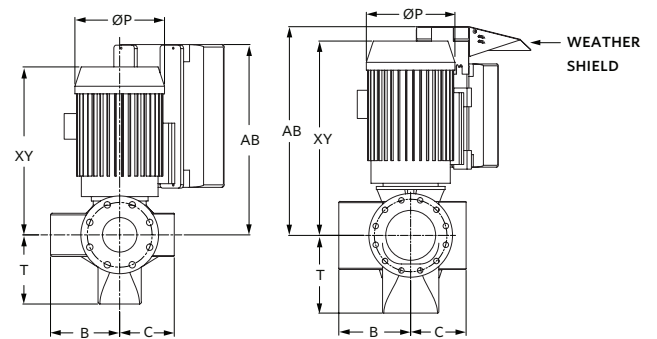
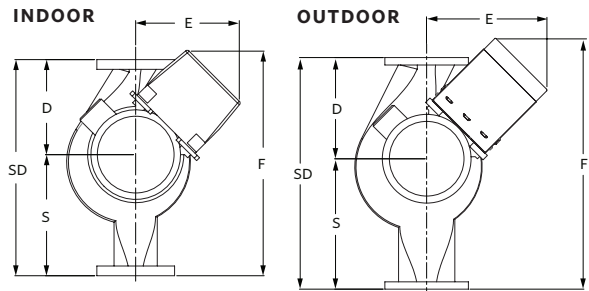
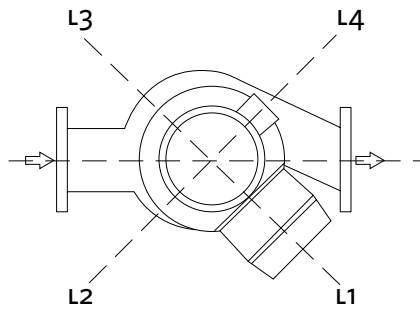


DIMENSION DATA

| | INDOOR (UL TYPE 12/ODP) | OUTDOOR (UL TYPE 4X/TEFC) |
|--------------------|-----------------------------------|-------------------------------------|
| Frame size: | 184 | 184 |
| Size: | 4×4×8 | 4×4×8 |
| HP: | 5 | 5 |
| RPM: | 1500 | 1500 |
| AB: | 22.02(559) | 22.02(559) |
| B: | 8.89(226) | 8.89(226) |
| C: | 6.80(173) | 6.80(173) |
| D: | 11.00(279) | 11.00(279) |
| E: | 12.64(321) | 12.64(321) |
| F: | 12.64(321) | 12.64(321) |
| P: | 10.38(264) | 9.50(241) |
| S: | 14.00(356) | 14.00(356) |
| SD: | 25.00(635) | 25.00(635) |
| T: | 8.00(203) | 8.00(203) |
| XY: | 19.42(493) | 20.17(512) |
| Weight: | 315(142.9) | 353(160.1) |

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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