

DESIGN ENVELOPE 4280 END SUCTION | SINGLE PHASE | 1508-003.0 | SUBMITTAL

File No: 100.3620
 Date: APRIL 18, 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: _____ USgpm (L/s) Head: _____ ft (m)
 Liquid: _____ Viscosity: _____
 Temperature: _____ °F (°C) Specific gravity: _____
 Suction: 3" (75mm) Flanged
 Discharge: 1.5" (40mm) Flanged
OSHDP Seismic Certification osp-0422-10
UL STD 778 & CSA STD C22.2 NO.108 certified

MOTOR DESIGN DATA

HP: 3 RPM: 1800 Frame size: 182JM
 Enclosure: TEFC 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

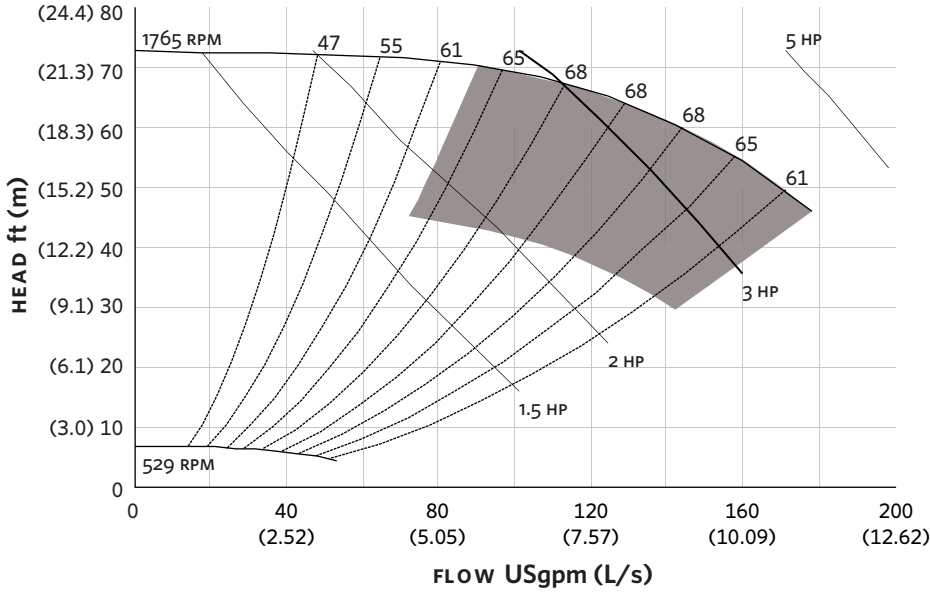
CONTROLS DATA

Power supply: Volts: 200-240VAC
 Freq: 50/60Hz Phase: 1
Sensorless Control: Standard
Minimum system pressure to be maintained: _____ ft (m)*
Protocol (standard): Modbus RTU BACnet™ MS/TP
 Johnson® N2 Siemens® FLN
Protocol (optional): LonWorks®
Enclosure: Indoor - UL TYPE 12
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 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 | |
|-----------------------|---------------------------|-------------------|------------------------------|------------------------|--------------------------|-------------------|
| | 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 |
| 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 |

EXTENDED SPEED



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

DIMENSION DATA

| INDOOR (UL TYPE 12/ODP) | |
|----------------------------|-------------|
| Frame size: | 182JM |
| Size: | 3×1.5×8 |
| HP: | 3 |
| RPM: | 1800 |
| A: | 7.50 (191) |
| B: | 6.10 (155) |
| C MAX: | 21.09 (536) |
| D1: | 5.63 (143) |
| D2: | 4.50 (114) |
| 2E: | 9.08 (231) |
| F: | 4.50 (114) |
| H: | 0.47 (12) |
| HD: | 6.89 (175) |
| HI: | 24.13 (613) |
| HV: | 16.23 (412) |
| N: | 6.30 (160) |
| NAN1: | 6.00 (152) |
| X: | 8.50 (216) |
| Y: | 4.00 (102) |
| Casing foot hole: | 0.63 (16) |
| Weight: | 295 (133.8) |

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

INDOOR

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