

DESIGN ENVELOPE 4280 END SUCTION | SINGLE PHASE | 1508-002.0 | SUBMITTAL

File No: 100,3618
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: 2 RPM: 1800 Frame size: 145JM
 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

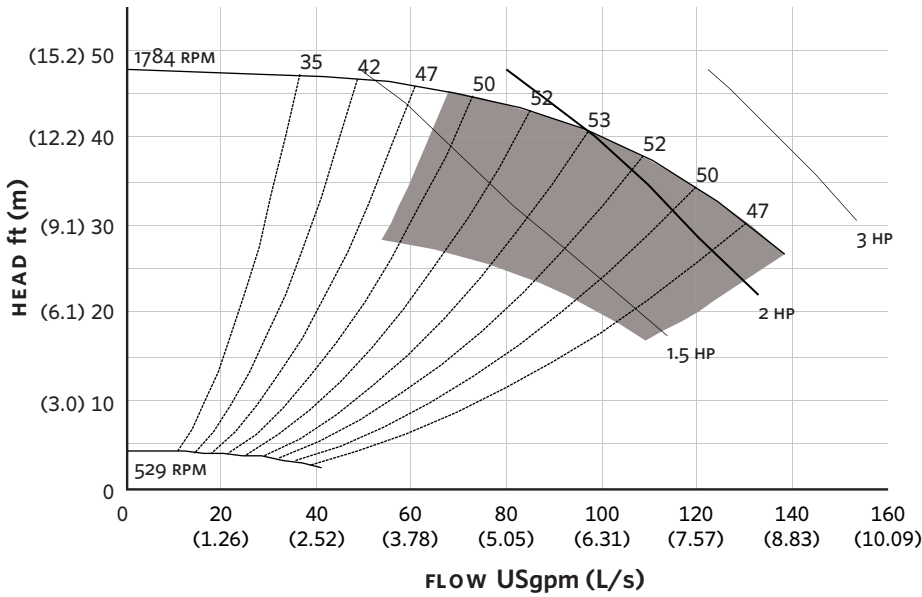
CONTROLS DATA

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: 145JM
- Size: 3×1.5×8
- HP: 2
- RPM: 1800
- A: 5.50 (140)
- B: 5.91 (150)
- C MAX: 19.71 (501)
- D1: 5.63 (143)
- D2: 3.50 (89)
- 2E: 7.09 (180)
- F: 5.00 (127)
- H: 0.40 (10)
- HD: 5.71 (145)
- HI: 23.64 (600)
- HV: 14.72 (374)
- N: 5.80 (147)
- NAN1: 6.00 (152)
- X: 8.50 (216)
- Y: 4.00 (102)
- Casing foot hole: 0.63 (16)
- Weight: 265 (120.2)

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

INDOOR

- TORONTO
+1 416 755 2291
- BUFFALO
+1 716 693 8813
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+44 (0) 8444 145 145
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