

DESIGN ENVELOPE 4280 END SUCTION | SINGLE PHASE | 0308-007.5 | SUBMITTAL

File No: 100.3630
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: 4" (100mm) Flanged
Discharge: 3" (75mm) Flanged
OSHDP Seismic Certification osp-0422-10
UL STD 778 & CSA STD C22.2 NO.108 certified

MOTOR DESIGN DATA

HP: 7.5 RPM: 1800 Frame size: 213JP
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

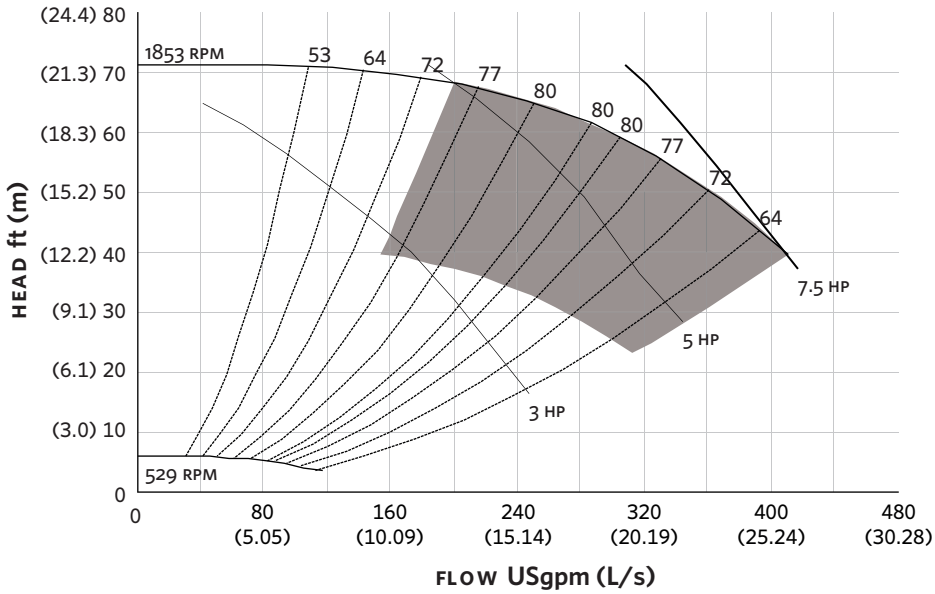
CONTROLS DATA

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:	213JP
Size:	4×3×8
HP:	7.5
RPM:	1800
A:	10.27 (261)
B:	7.48 (190)
C MAX:	27.65 (702)
D1:	6.63 (168)
D2:	5.25 (133)
2E:	8.50 (216)
F:	5.50 (140)
H:	0.47 (12)
HD:	7.68 (195)
HI:	28.37 (721)
HV:	16.98 (431)
N:	11.13 (283)
NAN1:	6.00 (152)
X:	11.00 (279)
Y:	4.00 (102)
Casing foot hole:	0.63 (16)
Weight:	380 (172.4)

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

INDOOR

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