

# DESIGN ENVELOPE 4280 END SUCTION

0308-001.0 | SUBMITTAL

File No: 100.3536

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Supersedes: NEW

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Engineer:			Order No:	Date:		
			Submitted by:	Date:		
			Approved by:	Date:		
PUMP DESIG	IN DATA		CONTROLS DATA			
No. of pumps:		Tag:	: Sensorless control:	Standard		
		Head:ft (m) Viscosity:		ft (m)*		
emperature:	°F (°C)	Specific gravity:		□ Modbus RTU □ BACnet™ MS/TP □ Johnson® N2 □ Siemens® FLN		
Suction: 4" (100mm) Flanged			Protocol (optional):	☐ LonWorks®		
Discharge: 3" (75mm) Flanged			Enclosure:	☐ Indoor – UL TYPE 12		
SHPD Seismic Cert			Fused disconnect switch:			
IL STD 778 & CSA S	STD C22.2 NO.108	certified	EMI/RFI control:	Integrated filter designed to meet EN61800-3		
MOTOR DESIGN DATA  IP: 1 RPM: 1200 Frame size: 145JM			Harmonic suppression:	Dual pc-link reactors (equivalent: 5% Ac line reactor) supporting IEEE 519-1992 requirements**		
nclosure: TEFC		· -	: Coolina:	Fan-cooled through back channel		
		MA premium 12.12	•	-10°C to +45°C up to 1000 meters abov sea level (-14°F to +113°F, 3300 ft)		
MAXIMUM PUMP OPERATING CONDITIONS			Analog ı/o:	: Two current or voltage inputs, one current output		
NSI 125	(12 hars at 65°C)		Digital ı/o:	Six programmable inputs (two can be configured as outputs)		
75 psig at 150°F (12 bars at 65°C) 40 psig at 250°F (10 bars at 121°C)			Pulse inputs:	s: Two programmable		
			Relay outputs: Two programmable			
NSI 250			Communication port: 1-RS485, 1-USB			
900 psig at 150°F (20 bars at 65°C) 950 psig at 250°F (17 bars at 121°C)			*If minimum maintained system pressure is not known: Default to 40% of design head			

Representative: \_\_

• Tolerance of ±0.125" (±3 mm) should be used

• For exact installation, data please write factory for

Spring: Stainless steel

certified dimensions

\*\*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.

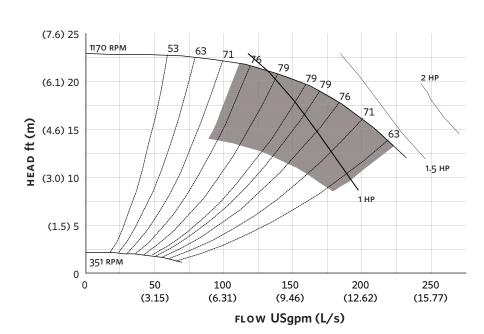
FLUID TYPE	ALL GLYCOLS > 30% WT CONC		ALL OTHER NON-POTABLE FLUIDS		POTABLE (DRINKING) WATER	
Temperature	up to 200°F / 93°C	over 200°F / 93°C	up to 200°F / 93°C	over 200°F / 93°C	up to 200°F / 93°C	over 200°F / 93°C
Rotating face	Silicone carbide		Resin bonded carbon	Antimony loaded carbon	Resin bonded carbon	
Seat elastomer	EPDM (L-cup)	EPDM (O-ring)	EPDM (L-cup)	EPDM (0-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

MECHANICAL SEAL DATA

Seal type: 2A Stationary seat: Silicone carbide

Secondary seal: EPDM Rotating hardware: Stainless steel

# **EXTENDED SPEED**



Performance curves are for reference only.

Confirm current performance data with Armstrong ACE Online selection software.

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# **DIMENSION DATA**

### INDOOR (UL TYPE 12/ODP)

Frame size: 145JM

Size:  $4 \times 3 \times 8$ 

**HP:** 1

**RPM:** 1200

**A:** 5.50 (140)

**B:** 5.91 (150)

**CMAX:** 19.71 (501)

**D1:** 6.63 (168)

**D2:** 3.50 (89)

**2E:** 7.09 (180)

**F:** 5.00 (127)

**H:** 0.40 (10)

**HD:** 5.71 (145)

**HI:** 22.34 (567)

**HV:** 12.28 (312)

**N:** 5.80 (147)

**NaN1:** 6.00 (152)

**x:** 11.00 (279)

**Y:** 4.00 (102)

Casing foot hole: 0.63 (16)

Weight: 315 (142.9)

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

### INDOOR

Hν

D<sub>2</sub>



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