

# DESIGN ENVELOPE 4200H | END SUCTION BASE MOUNTED SPLIT-COUPLED | 0511-010.0 | SUBMITTAL

**File No:** 100.3328  
**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: 6" (150mm) Flanged  
Discharge: 5" (125mm) Flanged

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

## MOTOR DESIGN DATA

HP: 10 RPM: 1200 Frame size: 256TC Enclosure: TEFC  
Volts: \_\_\_\_\_ Hertz: 60 Hz Phase: 3  
Efficiency: NEMA premium 12.12

## MAXIMUM PUMP OPERATING CONDITIONS

### ANSI 125

175 psig at 140°F (12 bars at 60°C)  
100 psig at 300°F (7 bars at 149°C)

### ANSI 250

375 psig at 100°F (26 bars at 38°C)  
275 psig at 300°F (19 bars at 149°C)

- Tolerance of  $\pm 0.125"$  ( $\pm 3$  mm) should be used
- For exact installation, data please write factory for certified dimensions
- Pump equipped with casing drain plug and  $\frac{1}{4}"$  NPT suction and discharge gauge ports

## OPTIONAL EQUIPMENT

## CONTROLS DATA

**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

**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

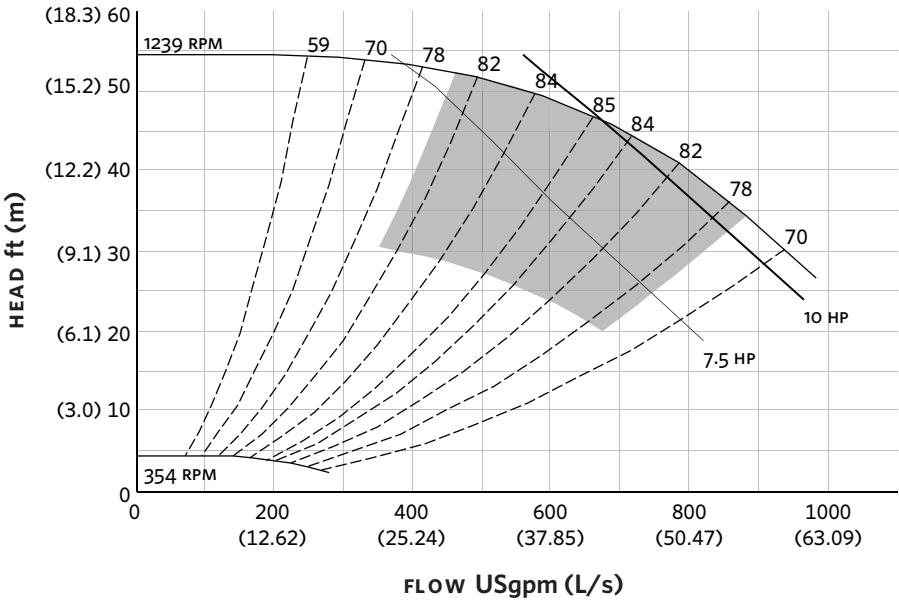
\*If minimum maintained system pressure is not known: Default to 40% of design head

\*\*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.

## MECHANICAL SEAL DATA

**Seal type:** AB2 **Stationary seat:** Sintered silicon carbide  
**Secondary seal:** Viton **Rotating hardware:** Stainless steel  
**Spring:** Stainless steel

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:	256TC
Size:	6×5×11.5
HP:	10
RPM:	1200
HA:	18.94 (481)
HB:	48.00 (1219)
HC:	40.32 (1024)
HD:	14.00 (356)
HE:	8.84 (225)
HF:	22.00 (559)
2HF:	44.00 (1118)
HG:	4.00 (102)
HI:	29.65 (753)
HL:	6.50 (165)
HV:	15.42 (392)
NAN1:	2.00 (51)
NAN2:	10.10 (257)
X:	14.00 (356)
Y:	6.00 (152)
Weight:	849 (385.0)

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

INDOOR

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