

# **DESIGN ENVELOPE EXPRESS PUMP** 4300 |

1508-001.5 | SUBMITTAL

File No: 100.3014

Date: DECEMBER 24, 2015

Supersedes: 100.3014

Date: SEPTEMBER 22, 2015

| Job: Re                                                                                                               |                       | Representative:                     |                                                                                                        |
|-----------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------------------------|--------------------------------------------------------------------------------------------------------|
|                                                                                                                       | (                     | Order No:                           | Date:                                                                                                  |
| Engineer:                                                                                                             |                       | ubmitted by:                        | Date:                                                                                                  |
| Contractor:                                                                                                           |                       | Approved by:                        | Date:                                                                                                  |
| PUMP DESIGN DATA                                                                                                      |                       | CONTROLS DATA                       | <b>∕</b> ⇒EXPRESS                                                                                      |
| No. of pumps:                                                                                                         | Tag:                  | Sensorless Control:                 | ol: Standard                                                                                           |
| Capacity:USgpm (L/s) Liquid:                                                                                          |                       |                                     | : ft (m)*                                                                                              |
| Temperature: °F (°C)                                                                                                  | Specific gravity:     | Orientation:                        | : ւյ                                                                                                   |
| Suction: 1.5" (38mm)                                                                                                  | Discharge: 1.5" (38mm | ) Protocol:                         | : BACnet <sup>TM</sup>                                                                                 |
| OSHPD Seismic Certification OSP-0422-10                                                                               |                       | Enclosure                           | : Indoor - UL TYPE 12                                                                                  |
| UL STD 778 & CSA STD C22.2 NO.108 certified                                                                           |                       | ЕМІ/RFI control:                    | : Integrated filter designed to meet<br>EN61800-3                                                      |
| MOTOR DESIGN DATA  HP: 1.5 RPM: 1800 Frame size: 145 Enclosure: TEFC                                                  |                       | Harmonic suppression:               | : Dual DC-link reactors (Equivalent: 5%<br>AC line reactor) Supporting IEEE<br>519-1992 requirements** |
| Volts: □ 230V □ 460V □ 575V Hertz: 60 Hz                                                                              |                       | Cooling                             | : Fan-cooled through back channel                                                                      |
| Phase: 3 Efficiency: NEMA premium 12.12                                                                               |                       | Ambient temperature                 | : -10°C to +45°C up to 1000 meters above<br>sea level (-14°F to +113°F, 3300 ft)                       |
| MAXIMUM PUMP OPERATING CONDITIONS  ANSI 125  175 psig at 150°F (12 bars at 65°C)  100 psig at 300°F (7 bars at 150°C) |                       | Analog ı/o:                         | : Two current or voltage inputs,<br>one current output                                                 |
|                                                                                                                       |                       | Digital ı/o:                        | Six programmable inputs (two can be configured as outputs)                                             |
|                                                                                                                       |                       | Pulse inputs:                       | : Two programmable                                                                                     |
| ANSI 250                                                                                                              |                       | Relay outputs:                      | : Two programmable                                                                                     |
| 375 psig at 150°F (26 bars at 65°C)<br>260 psig at 300°F (21 bars at 150°C)                                           |                       | Communication ports                 | : 1-RS485, 1-USB                                                                                       |
|                                                                                                                       |                       | *If minimum maintained system press | sure 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 DESIGN DATA

certified dimensions

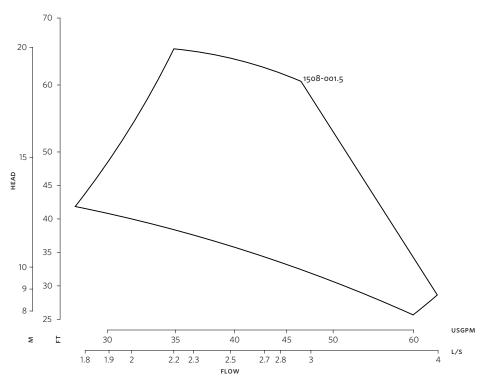
• Tolerance of ±0.125" (±3 mm) should be used

• For exact installation, data please write factory for

See file no. 43.50 for standard mechanical seal details as indicated below

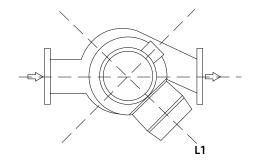
Armstrong seal reference number: c1 (a)

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Performance curves are for reference only.

 $Confirm\ current\ performance\ data\ with\ Armstrong\ {\tt ACE}\ Online\ selection\ software.$ 



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ARMSTRONG FLUID TECHNOLOGY ESTABLISHED 1934

### **DIMENSION DATA**

| INDOOR            |
|-------------------|
| (UL TYPE 12/TEFC) |
| 145               |
| 1.5×1.5×8         |
| 1.5               |
| 1800              |
| 24.92(633)        |
| 5.80(147)         |
| 5.80(147)         |
| 8.00(203)         |
| 11.85(301)        |
| 8.63(219)         |
| 19.85(504)        |
| 8.00(203)         |
| 16.00(406)        |
| 4.59(117)         |
| 22.03(560)        |
| 209(94.8)         |
|                   |

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

