

## Technical Information

STG73P SmartLine Flush Mount Gauge Pressure  
Specification 34-ST-03-108, October 2023**Introduction**

Part of the SmartLine® family of products, the STG73P is a gauge pressure transmitter with a flush mounted diaphragm. Installed using a 1" sleeve welded to the process piping the diaphragm face may be situated flush with the process piping wall. Typically applied to applications such as head boxes in pulp and paper mills, flush mounting eliminates the possibility of clogging. In addition, the transmitter mounting facilitates rapid and trouble free replacement. The SmartLine family is also fully tested and compliant with Experion® PKS providing the highest level of compatibility assurance and integration capabilities. SmartLine easily meets the most demanding application needs for pressure measurement applications.

**Best in Class Features:**

- Flush mounting design.
- Accuracies up to 0.065 % of span standard & 0.04% of span optional.
- Stability up to 0.020% of URL per year for 10 years.
- Automatic temperature compensation.
- Rangeability up to 100:1.
- Response times as fast as 100ms.
- Multiple local display capabilities.
- External zero, span, & configuration capability.
- Polarity insensitive electrical connections.
- Comprehensive on-board diagnostic capabilities.
- Integral Dual Seal design for safety based on ANSI/NFPA 70-202 and ANSI/ISA 12.27.0.
- Full compliance to SIL 2/3 requirements.
- Modular design characteristics.
- Available with additional 4-year warranty.



**Figure 1 – STG73P Flush Mount Gauge Pressure Transmitters feature field-proven piezoresistive sensor technology**

**Communications/Output Options:**

- Honeywell Digitally Enhanced (DE)
- HART® (version 7.0)

All transmitters are available with the above listed communications protocols.

**Span & Range Limits:**

| Model  | URL/Max Span<br>psig (barg) | LRL<br>psig (barg) | Min Span |
|--------|-----------------------------|--------------------|----------|
| STG73P | 100 (7.0)                   | -14.7 (-1.0)       | 1 (0.07) |

## Description

The SmartLine family pressure transmitters are designed around a high performance piezo-resistive sensor. This one sensor actually integrates multiple sensors linking process pressure measurement with on-board static pressure (DP Models) and temperature compensation measurements. This level of performance allows the ST 700 to replace most competitive transmitters available today.

## Unique Indication/Display Option

The ST 700 modular design accommodates a standard alphanumeric LCD display or a unique advanced graphics LCD display with many unparalleled features.

### Standard LCD Display Features

- Modular (may be added or removed in the field).
- Supports HART protocol variant.
- 0, 90, 180, & 270 degree position adjustments.
- Four configurable screens.
- Standard and custom measurement units available.
- Display calculated flow (square root) value in addition to analog output signal.
- 2 Lines 6 digits PV (9.95H x 4.20W mm) 8 Characters.
- Write protect Indication.
- Built-in Basic Device Configuration through Internal or External Buttons – Range/Engineering Unit/Loop Test /Loop Calibration/Zero /Span Setting.
- Multiple language capabilities (EN, RU).

### Advanced Graphics LCD Display Features

- Modular (may be added or removed in the field).
- 0, 90, 180, & 270-degree position adjustments.
- Standard and custom measurement units available.
- Up to eight display screens with 3 formats are possible.
- Large PV with Bar Graph or PV with Trend Graph.
- Configurable screen rotation timing (1 to 30 sec).
- Display calculated flow (square root) value in addition to analog output signal.
- Unique “Health Watch” indication provides instant visibility of diagnostics.
- Multiple language capability (EN, DE, FR, IT, ES, RU, TR, CN, & JP).

## Diagnostics

SmartLine transmitters all offer digitally accessible diagnostics which aid in providing advanced warning of possible failure events minimizing unplanned shutdowns, providing lower overall operational costs.

## System Integration

- SmartLine communications protocols all meet the most current published standards for HART/DE.
- Integration with Honeywell's Experion PKS offers the following unique advantages.
  - Tamper reporting.
  - FDM Plant Area Views with Health summaries.
  - All ST 700 units are Experion tested to provide the highest level of compatibility assurance.

## Configuration Tools

### Integral Two Button Configuration Option

Suitable for all electrical and environmental requirements, SmartLine offer the ability to configure the transmitter and display via three externally accessible buttons when either display option is selected. Zero/span capabilities are also optionally available via these buttons with or without selection of a display option.

### Handheld Configuration

SmartLine transmitters feature two-way communication and configuration capability between the operator and the transmitter. All Honeywell transmitters are designed and tested for compliance with the offered communication protocols and are designed to operate with any standards compliant handheld configuration device, such as Honeywell Versatilis Configurator.

### Personal Computer Configuration

On a personal computer or laptop, Honeywell Field Device Manager (FDM) Software and FDM Express can be used for managing HART device configurations.

## Modular Design

To help contain maintenance & inventory costs, all ST 700 transmitters are modular in design supporting the user's ability to replace meter bodies, add indicators or change electronic modules without affecting overall performance or approval body certifications. Each meter body is uniquely characterized to provide in-tolerance performance over a wide range of application variations in temperature and pressure and due to the Honeywell advanced interface, electronic modules may be swapped with any electronics module without losing in-tolerance performance characteristics.

### Modular Features

- Meter body replacement
- Exchange/replace electronics/comms modules\*
- Add or remove integral indicator\*
- Add or remove lightning protection (terminal connection)\*

\* Field replaceable in all electrical environments (including IS) except flameproof without violating agency approvals.

With no performance effects, Honeywell's unique modularity results in **lower inventory needs and lower overall operating costs.**

## Performance Specifications

**Reference Accuracy:** (conformance to +/-3 Sigma)

**Table 1**

| Model  | URL               | LRL                  | Min Span           | Maximum Turndown Ratio | Stability (% URL/Year for 10 years) | Reference Accuracy <sup>1,2</sup> (% Span) Standard/ optional |
|--------|-------------------|----------------------|--------------------|------------------------|-------------------------------------|---------------------------------------------------------------|
| STG73P | 100 psi (7.0 bar) | -14.7 psi (-1.0 bar) | 1.0 psi (0.07 bar) | 100:1                  | 0.02                                | 0.065 / 0.040                                                 |

Zero and span may be set anywhere within the listed (URL/LRL) range limits.

**Accuracy, Span and Temperature Effect:** (conformance to +/-3 Sigma)

**Table 2**

|                      |        |                   | Accuracy <sup>1,2</sup> (% of Span)                                                                               |       |       |                   | Combined Zero & Span temperature Effect (% Span / 28°C (50 F)) |       |
|----------------------|--------|-------------------|-------------------------------------------------------------------------------------------------------------------|-------|-------|-------------------|----------------------------------------------------------------|-------|
|                      | Model  | URL               | Reference Turndown                                                                                                | A     | B     | C (see URL units) | D                                                              | E     |
| Standard Accuracy    | STG73P | 100 psi (7.0 bar) | 5:1                                                                                                               | 0.005 | 0.060 | 20 (1.4)          | 0.050                                                          | 0.050 |
| High Accuracy option | STG73P | 100 psi (7.0 bar) | 5:1                                                                                                               | 0.005 | 0.035 | 20 (1.4)          | 0.050                                                          | 0.050 |
|                      |        |                   | Turn Down Effect                                                                                                  |       |       |                   | Temp Effect                                                    |       |
|                      |        |                   | $\pm [A + B] \text{ if Span} \geq C$ $\pm \left[ A + B \left( \frac{C}{Span} \right) \right] \text{ if Span} < C$ |       |       |                   | $\pm \left[ D + E \left( \frac{URL}{Span} \right) \right]$     |       |

**Total Performance (% of Span):**

**Total Performance Calculation:**  $= \pm \sqrt{(\text{Accuracy})^2 + (\text{Temperature Effect})^2}$

**Total Performance Examples (for comparison):** standard accuracy, @ 5:1 Turndown, +/-50 °F (28°C) shift  
**STG73P @20 psi:** 0.307% of span

## Typical Calibration Frequency:

Calibration verification is recommended every two (2) years.

## Notes:

1. Terminal based Accuracy – Includes combined effects of linearity, hysteresis and repeatability. Analog output adds 0.005% of span.
2. For zero based spans and reference conditions of 25°C (77°F), for LRV ≥ 0 psia, 10 to 55% RH.

### Operating Conditions – All Models

| Parameter                                                                                                                                                                                                     | Reference Condition                                                                                                                                                                              |      | Rated Condition |          | Operative Limits                                             |          | Transportation and Storage |            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------------|----------|--------------------------------------------------------------|----------|----------------------------|------------|
|                                                                                                                                                                                                               | °C                                                                                                                                                                                               | °F   | °C              | °F       | °C                                                           | °F       | °C                         | °F         |
| Ambient Temperature <sup>1</sup>                                                                                                                                                                              | 25±1                                                                                                                                                                                             | 77±2 | -15 to 65       | 5 to 149 | -15 to 65                                                    | 5 to 149 | -55 to 75                  | -67 to 167 |
| Process Interface Temperature                                                                                                                                                                                 | 25±1                                                                                                                                                                                             | 77±2 | -15 to 65       | 5 to 149 | -15 to 95 <sup>2</sup>                                       | 5 to 203 | N/A                        | N/A        |
| Humidity %RH                                                                                                                                                                                                  | 10 to 55                                                                                                                                                                                         |      | 0 to 100        |          | 0 to 100                                                     |          | 0 to 100                   |            |
| Vac. Region – Min. Pressure<br>mmHg absolute<br>inH <sub>2</sub> O absolute                                                                                                                                   | Atmospheric<br>Atmospheric                                                                                                                                                                       |      | 300<br>150      |          | 2 (short term ) <sup>3</sup><br>1 (short term ) <sup>3</sup> |          |                            |            |
| Supply Voltage<br>Load Resistance                                                                                                                                                                             | HART: 10.8 to 42.4 VDC at terminals (IS versions limited to 30 VDC), 0 to 1,440 ohms<br>DE: 15 to 49.3VDC at terminals (IS versions limited to 30VDC), 0 to 1,200 ohms<br>(as shown in Figure 2) |      |                 |          |                                                              |          |                            |            |
| Maximum Allowable Working Pressure (MAWP) <sup>4, 5</sup><br><br>(ST700 products are rated to Maximum Allowable Working Pressure. MAWP depends on Approval Agency and transmitter materials of construction.) | STG73P: 100 psi (7.0 bar)                                                                                                                                                                        |      |                 |          |                                                              |          |                            |            |

<sup>1</sup> LCD Display Storage temperature lower limit is -30°C.

<sup>2</sup> Process temperatures above 65°C (149°F) require a 1:1 reduction in maximum ambient temperature.

<sup>3</sup> Short term equals 2 hours at 70°C (158°F)

<sup>4</sup> Units can withstand overpressure of 1.5 x MAWP without damage

<sup>5</sup> Consult factory for MAWP of ST 700 transmitters with CRN approval

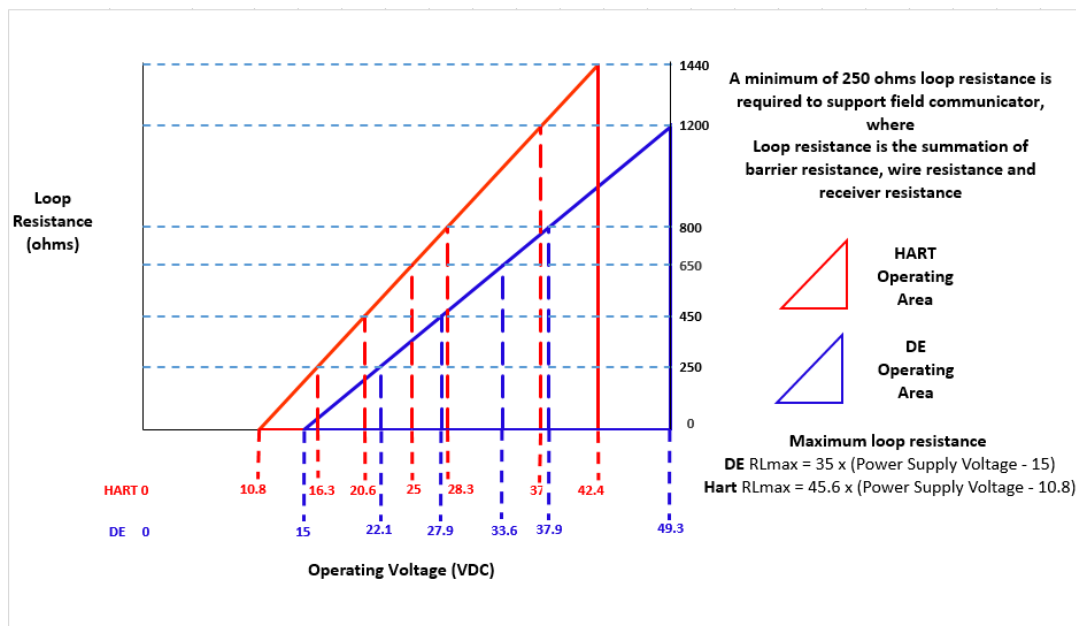


Figure 2 - Supply voltage and loop resistance chart & calculations

**Performance Under Rated Conditions – All Models**

| Parameter                                                         | Description                                                                                                                                                                                                                                                       |                        |                    |                        |                |               |               |               |                     |                        |
|-------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|--------------------|------------------------|----------------|---------------|---------------|---------------|---------------------|------------------------|
| Analog Output<br>Digital Communications:                          | Two-wire, 4 to 20 mA (HART & DE Transmitters only)<br>Honeywell DE, HART protocol<br>All transmitters, irrespective of protocol have polarity insensitive connection.                                                                                             |                        |                    |                        |                |               |               |               |                     |                        |
| Output Failure Modes<br>(configurable)                            | <table><tr><td></td><td>Honeywell Standard</td><td>NAMUR NE 43 Compliance</td></tr><tr><td>Normal Limits:</td><td>3.8 – 20.8 mA</td><td>3.8 – 20.5 mA</td></tr><tr><td>Failure Mode:</td><td>≤ 3.6 mA and ≥ 21.0</td><td>≤ 3.6 mA and ≥ 21.0 mA</td></tr></table> |                        | Honeywell Standard | NAMUR NE 43 Compliance | Normal Limits: | 3.8 – 20.8 mA | 3.8 – 20.5 mA | Failure Mode: | ≤ 3.6 mA and ≥ 21.0 | ≤ 3.6 mA and ≥ 21.0 mA |
|                                                                   | Honeywell Standard                                                                                                                                                                                                                                                | NAMUR NE 43 Compliance |                    |                        |                |               |               |               |                     |                        |
| Normal Limits:                                                    | 3.8 – 20.8 mA                                                                                                                                                                                                                                                     | 3.8 – 20.5 mA          |                    |                        |                |               |               |               |                     |                        |
| Failure Mode:                                                     | ≤ 3.6 mA and ≥ 21.0                                                                                                                                                                                                                                               | ≤ 3.6 mA and ≥ 21.0 mA |                    |                        |                |               |               |               |                     |                        |
| Supply Voltage Effect                                             | 0.005% span per volt.                                                                                                                                                                                                                                             |                        |                    |                        |                |               |               |               |                     |                        |
| Transmitter Turn on Time<br>(includes power up & test algorithms) | HART or DE: 2.5 seconds                                                                                                                                                                                                                                           |                        |                    |                        |                |               |               |               |                     |                        |
| Response Time<br>(delay + time constant)                          | <u>DE/HART Protocol</u><br>100ms                                                                                                                                                                                                                                  |                        |                    |                        |                |               |               |               |                     |                        |
| Damping Time Constant                                             | <b>HART:</b> Adjustable from 0 to 32 seconds in 0.1 increments. <b>Default Value:</b> 0.5 seconds<br><b>DE:</b> Discrete values 0, 0.16, 0.32, 0.48, 1, 2, 4, 8, 16, 32 seconds. <b>Default Value:</b> 0.48 seconds                                               |                        |                    |                        |                |               |               |               |                     |                        |
| Vibration Effect:                                                 | Less than +/- 0.1% of URL w/o damping<br>Per IEC60770-1 field or pipeline, high vibration level (10-2000Hz: 0.21 displacement/3g max acceleration)                                                                                                                |                        |                    |                        |                |               |               |               |                     |                        |
| Electromagnetic Compatibility                                     | IEC 61326-3-1                                                                                                                                                                                                                                                     |                        |                    |                        |                |               |               |               |                     |                        |
| Lightning Protection Option                                       | <b>Leakage Current:</b> 10uA max @ 42.4VDC 93C<br><b>Impulse rating:</b><br>8/20us                      5000A (>10 strikes)                      10000A (1 strike min.)<br>10/1000us                200A (> 300 strikes)                                          |                        |                    |                        |                |               |               |               |                     |                        |

**Materials Specifications (see model selection guide for availability/restrictions with various models)**

| Parameter                            | Description                                                                                                                                                |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Process Diaphragms (wetted)</b>   | Hastelloy <sup>®</sup> C-276 <sup>2</sup>                                                                                                                  |
| <b>Meter Body Materials (wetted)</b> | 316L Stainless Steel                                                                                                                                       |
| <b>Process Seal</b>                  | Viton <sup>®</sup> O-ring                                                                                                                                  |
| <b>Fill Fluid</b>                    | Silicone oil 200                                                                                                                                           |
| <b>Mounting Bracket</b>              | Carbon Steel (Zinc-Chromate plated) or 304 Stainless Steel or 316 Stainless Steel.. See Figures 4 & 5                                                      |
| <b>Electronic Housing</b>            | Pure Polyester Powder Coated Low Copper (<0.4%)-Aluminum. Meets NEMA 4X, IP66, IP67 and NEMA 7 (explosion proof). All stainless steel housing is optional. |
| <b>Process Connection Type</b>       | <b>STG73P:</b> Flush mount in 1" sleeve with O-ring and locking bolt.                                                                                      |
| <b>Wiring</b>                        | Accepts up to 16 AWG (1.5 mm diameter).                                                                                                                    |
| <b>Dimensions</b>                    | See Figures 4                                                                                                                                              |
| <b>Net Weight</b>                    | <b>STG73P:</b> 3.9 pounds (1.8 Kg) with Aluminum Housing                                                                                                   |

<sup>2</sup> Hastelloy<sup>®</sup> C-276 or UNS N10276

## Communications Protocols & Diagnostics

### HART Protocol

#### Version:

HART 7

### Honeywell Digitally Enhanced (DE)

DE is a Honeywell proprietary protocol which provides digital communications between Honeywell DE enabled field devices and Hosts.

### Standard Diagnostics

ST 700 top level diagnostics are reported as either critical or non-critical and are readable via the DD/DTM/FDI tools or integral display. All critical diagnostics will appear on the Advanced and Standard integral displays, and some non-critical diagnostics will also appear on the Advanced integral display. Some of the diagnostics are listed below.

#### Critical Diagnostics

- Electronics Module Fault.
- Meter body Memory Corruption.
- Config Data Corruption.
- Electronics Module Diagnostics Failure.
- Meter body Critical Failure.
- Sensor Communication Timeout.

#### Non-Critical Diagnostics

- Electronics Module Fault.
- Display Failure.
- Electronics Module Comm Failure.
- Meter body Excess Correct.
- Sensor Over Temperature.
- Fixed Current Mode.
- PV Out of Range.
- No DAC Compensation.
- Tamper Attempt Alarm.

Refer to the product user manual for comprehensive list of diagnostics and details.

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## Hazardous Areal Certifications:

| MSG CODE | AGENCY                                              | TYPE OF PROTECTION                                                                                                                                                                                                                                                                                                                                   | COMM. OPTION                            | ELECTRICAL PARAMETERS | AMBIENT TEMP (Ta)                        |
|----------|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-----------------------|------------------------------------------|
| A        | FM Approvals™ USA                                   | <b>Explosionproof:</b><br>Class I, Division 1, Groups A, B, C, D;<br>Dust Ignition Proof:<br>Class II, III, Division 1, Groups E, F, G;<br>T6..T5<br>Class I, Zone 0/1, AEx db IIC T6..T5 Ga/Gb<br>Class II, Zone 21, AEx tb IIIC T95° Db                                                                                                            | All                                     | Note 1                | T5: -50 °C to 85°C<br>T6: -50 °C to 65°C |
|          |                                                     | <b>Intrinsically Safe:</b><br>Class I, II, III, Division 1, Groups A, B, C, D, E, F, G: T4<br>Class I, Zone 0, AEx ia IIC T4 Ga<br>FISCO Field Device (Only for FF Option)<br>Ex ia IIC T4 Ga; Ex ic IIC T4 Gc                                                                                                                                       | 4-20 mA / DE/ HART                      | Note 2a               | -50 °C to 70°C                           |
|          |                                                     |                                                                                                                                                                                                                                                                                                                                                      | Foundation Fieldbus                     | Note 2b               | -50 °C to 70°C                           |
|          |                                                     | <b>Nonincendive:</b><br>Class I, Division 2, Groups A, B, C, D locations, T4<br>Class I, Zone 2, AEx nA IIC T4 Gc                                                                                                                                                                                                                                    | 4-20 mA / DE/ HART/ Foundation Fieldbus | Note 1                | -50 °C to 85°C                           |
|          |                                                     | <b>Enclosure:</b> Type 4X/ IP66/ IP67                                                                                                                                                                                                                                                                                                                | All                                     | All                   | -                                        |
|          |                                                     | <b>STANDARDS:</b> FM Class 3600:2011; FM Class 3610: 2010; FM Class 3611: 2004; FM Class 3615: 2006; FM Class 3616: 2011; FM Class 3810: 2005; ANSI/ISA 60079-0: 2013; ANSI/UL 60079-1: 2015; ANSI/UL 60079-11: 2014; ANSI/ISA 60079-15: 2012; ANSI/UL 60079-26: 2017; ANSI/UL 60079-31: 2015; ANSI/NEMA 250: 2003; ANSI/ IEC 60529: 2004            |                                         |                       |                                          |
| B        | Canadian Standards Association (CSA) USA and Canada | <b>Explosion Proof:</b><br>Class I, Division 1, Groups A, B, C, D;<br>Class II, Division 1, Groups E, F, G;<br>Class III, Division 1, T6..T5<br>Class I Zone 1 AEx db IIC T6..T5 Ga/Gb<br>Ex db IIC T6..T5 Ga/Gb<br>Zone 22 AEx tb IIIC T95° Db<br>Ex tb IIIC T95° Db                                                                                | All                                     | Note 1                | T5: -50°C TO 85°C<br>T6: -50°C TO 65°C   |
|          |                                                     | <b>Intrinsically Safe:</b><br>Class I, II, III, Division 1, Groups A, B, C, D;<br>Class II, Division 1, Groups E, F, G;<br>Class III, Division 1, T4<br>Class I Zone 0, AEx ia IIC T4 Ga<br>Class I Zone 2, AEx ic IIC T4 Gc<br>Ex ia IIC T4 Ga<br>Ex ic IIC T4 Gc<br>FISCO Field Device (Only for FF Option)<br>Ex ia IIC T4 Ga;<br>Ex ic IIC T4 Gc | 4-20 mA / DE/ HART                      | Note 2                | -50°C TO 70°C                            |
|          |                                                     |                                                                                                                                                                                                                                                                                                                                                      | Foundation Fieldbus                     | Note 2                | -50°C TO 70°C                            |
|          |                                                     | <b>Nonincendive:</b><br>Class I, Division 2, Groups A, B, C, D;<br>Class II, Division 2, Groups F, G;<br>Class III, Division 2, T4<br>Class I Zone 2 AEx nA IIC T4 Gc<br>Ex nA IIC T4 Gc                                                                                                                                                             | 4-20 mA / DE/ HART/ Foundation Fieldbus | Note 1                | -50°C to 85°C                            |
|          |                                                     | <b>Enclosure:</b> Type 4X/ IP66/ IP67                                                                                                                                                                                                                                                                                                                | All                                     | All                   | -                                        |
|          |                                                     | <b>STANDARDS:</b> CSA C22.2 No. 0-10; CSA C22.2 No. 94-M91; CSA C22.2 No. 25-1966; CSA C22.2 No. 30-M1986; CSA C22.2 No. 142-M1987; CSA C22.2 No. 157-92; CSA C22.2 No. 213-M1987;                                                                                                                                                                   |                                         |                       |                                          |

| MSG CODE | AGENCY | TYPE OF PROTECTION                                                                                                                                                                                                                                                                                                                                          | COMM. OPTION                                     | ELECTRICAL PARAMETERS | AMBIENT TEMP (Ta)                      |
|----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|-----------------------|----------------------------------------|
|          |        | CSA-C22.2 No. 60529:05; CSA-C22.2 No. 60079-0:11; CSA-C22.2 No. 60079-1:11; CSA-C22.2 No. 60079-11:11; CSA-C22.2 No. 60079-15:12; CSA-C22.2 No. 60079-31:12; ISA 12.12.01-2010; ISA 60079-0: 2009; ISA 60079-11: 2011; ISA 60079-15: 2009; ISA 60079-26: 2008; ISA-60079-27:2007 (12.02.04)-2006 (R2011); UL 913 Ed. 6; UL 916:1998; ANSI/ISA-12.27.01-2011 |                                                  |                       |                                        |
| C        | ATEX   | <b>Flameproof: SIRA 12ATEX2233X</b><br> II 1/2 G Ex db IIC T6..T5 Ga/Gb<br>II 2 D Ex tb IIIC T95°C...T120°C Db                                                                                                                                                             | All                                              | Note 1                | T5: -50°C TO 85°C<br>T6: -50°C TO 65°C |
|          |        | <b>Intrinsically Safe: SIRA 12ATEX2233X</b><br> II 1 G Ex ia IIC T4 Ga<br>II 2 D Ex ia IIIC T125°C Db<br>FISCO Field Device (Only for FF Option)<br>II 1 G Ex ia IIC T4 Ga                                                                                                 | 4-20 mA / DE/<br>HART                            | Note 2                | -50°C TO 70°C                          |
|          |        |                                                                                                                                                                                                                                                                                                                                                             | Foundation<br>Fieldbus                           | Note 2                | -50°C TO 70°C                          |
|          |        | <b>Zone 2, Increase Safety: SIRA 12ATEX4234X</b><br> II 3 G Ex ec IIC T4 Gc                                                                                                                                                                                                | 4-20 mA / DE/<br>HART/                           | Note 1                | -50°C TO 85°C                          |
|          |        | <b>Zone 2, Intrinsically Safe: SIRA 12ATEX4234X</b><br> II 3 G Ex ic IIC T4 Gc<br>FISCO Field Device (Only for FF Option)<br>II 3 G Ex ic IIC T4 Gc                                                                                                                        | 4-20 mA / DE/<br>HART/<br>Foundation<br>Fieldbus | Note 2                | -50°C TO 85°C                          |
|          |        | <b>Enclosure:</b> IP66/ IP67                                                                                                                                                                                                                                                                                                                                | All                                              | All                   | -                                      |
|          |        | <b>STANDARDS:</b> EN 60079-0: 2018; EN 60079-1: 2014; EN 60079-7: 2015+A1: 2018; EN 60079-11: 2012; EN 60079-26: 2015; EN 60079-31: 2014                                                                                                                                                                                                                    |                                                  |                       |                                        |
|          | UKEX   | <b>Flameproof: SIRA 12ATEX2233X</b><br> II 1/2 G Ex db IIC T6..T5 Ga/Gb<br>II 2 D Ex tb IIIC T95°C...T120°C Db                                                                                                                                                           | All                                              | Note 1                | T5: -50°C TO 85°C<br>T6: -50°C TO 65°C |
|          |        | <b>Intrinsically Safe: SIRA 12ATEX2233X</b><br> II 1 G Ex ia IIC T4 Ga<br>II 2 D Ex ia IIIC T125°C Db<br>FISCO Field Device (Only for FF Option)<br>II 1 G Ex ia IIC T4 Ga                                                                                               | 4-20 mA / DE/<br>HART                            | Note 2                | -50°C TO 70°C                          |
|          |        |                                                                                                                                                                                                                                                                                                                                                             | Foundation<br>Fieldbus                           | Note 2                | -50°C TO 70°C                          |
|          |        | <b>Zone 2, Increase Safety: SIRA 12ATEX4234X</b><br> II 3 G Ex ec IIC T4 Gc                                                                                                                                                                                              | 4-20 mA / DE/<br>HART/                           | Note 1                | -50°C TO 85°C                          |
|          |        | <b>Zone 2, Intrinsically Safe: SIRA 12ATEX4234X</b><br> II 3 G Ex ic IIC T4 Gc<br>FISCO Field Device (Only for FF Option)<br>II 3 G Ex ic IIC T4 Gc                                                                                                                      | 4-20 mA / DE/<br>HART/<br>Foundation<br>Fieldbus | Note 2                | -50°C TO 85°C                          |
|          |        | <b>Enclosure:</b> IP66/ IP67                                                                                                                                                                                                                                                                                                                                | All                                              | All                   | -                                      |
|          |        | <b>STANDARDS:</b> EN 60079-0: 2018; EN 60079-1: 2014; EN 60079-7: 2015+A1: 2018; EN 60079-11: 2012; EN 60079-26: 2015; EN 60079-31: 2014                                                                                                                                                                                                                    |                                                  |                       |                                        |



| MSG CODE | AGENCY      | TYPE OF PROTECTION                                                                                                                                                      | COMM. OPTION                                     | ELECTRICAL PARAMETERS | AMBIENT TEMP (Ta)                      |
|----------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|-----------------------|----------------------------------------|
| D        | IECEX World | <b>Flameproof: IECEx SIR 12.0100X</b><br>Ex db IIC T6..T5 Ga/Gb<br>Ex tb IIIC T95°C...T120°C Db                                                                         | All                                              | Note 1                | T5: -50°C TO 85°C<br>T6: -50°C TO 65°C |
|          |             | <b>Intrinsically Safe: IECEx SIR 12.0100X</b><br>Ex ia IIC T4 Ga<br>Ex ia IIIC T125°C Db<br>FISCO Field Device (Only for FF Option)<br>Ex ia IIC T4 Ga; Ex ic IIC T4 Gc | 4-20 mA / DE/<br>HART                            | Note 2                | -50°C TO 70°C                          |
|          |             |                                                                                                                                                                         | Foundation<br>Fieldbus                           | Note 2                | -50°C TO 70°C                          |
|          |             | <b>Zone 2, Increase Safety: IECEx SIR 12.0100X</b><br>Ex ec IIC T4 Gc                                                                                                   | 4-20 mA / DE/<br>HART/<br>Foundation<br>Fieldbus | Note 1                | -50°C TO 85°C                          |
|          |             | <b>Zone 2, Intrinsically Safe: IECEx SIR 12.0100X</b><br>Ex ic IIC T4 Gc<br>FISCO Field Device (Only for FF Option)<br>Ex ic IIC T4 Gc                                  | 4-20 mA / DE/<br>HART/<br>Foundation<br>Fieldbus | Note 2                | -50°C TO 85°C                          |
|          |             | <b>Enclosure:</b> IP66/ IP67                                                                                                                                            | All                                              | All                   | -                                      |
|          |             | <b>STANDARDS:</b> IEC 60079-0: 2017; IEC 60079-1: 2014; IEC 60079-7: 2017; IEC 60079-11: 2011; IEC 60079-26: 2014; IEC 60079-31: 2013                                   |                                                  |                       |                                        |

|   |                      |                                                                                                                                  |                                                  |         |                                        |
|---|----------------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|---------|----------------------------------------|
| E | SAEx<br>South Africa | <b>Flameproof :</b><br>Ex d IIC T6...T5 Ga/Gb<br>Ex tb IIIC T95°C...T120°C Db                                                    | All                                              | Note 1  | T5: -50°C TO 85°C<br>T6: -50°C TO 65°C |
|   |                      | <b>Intrinsically Safe:</b><br>Ex ia IIC Ga T4<br>FISCO Field Device (Only for FF Option)<br>Ex ia IIC T4 Ga; Ex ic IIC T4 Gc     | 4-20 mA / DE/<br>HART                            | Note 2  | -50°C TO 70°C                          |
|   |                      |                                                                                                                                  | Foundation<br>Fieldbus                           | Note 2  | -50°C TO 70°C                          |
|   |                      | <b>Zone 2, Increase Safety:</b><br>II 3 G Ex ec IIC T4 Gc                                                                        | 4-20 mA / DE/<br>HART/<br>Foundation<br>Fieldbus | Note 1  | -50°C TO 85°C                          |
|   |                      | <b>Zone 2, Intrinsically Safe:</b><br>Ex ic IIC T4 Gc<br>FISCO Field Device (Only for FF Option)<br>Ex ic IIC T4 Gc              | 4-20 mA / DE/<br>HART/<br>Foundation<br>Fieldbus | Note 2  | -50°C TO 85°C                          |
|   |                      | <b>Enclosure:</b> IP66/ IP67                                                                                                     | All                                              | All     | -                                      |
| F | INMETRO<br>Brazil    | <b>Flameproof:</b><br>Ex db IIC T6..T5 Ga/Gb<br>Ex tb IIIC T95°C...T120°C Db                                                     | All                                              | Note 1  | T5: -50°C TO 85°C<br>T6: -50°C TO 65°C |
|   |                      | <b>Intrinsically Safe:</b><br>Ex ia IIC T4 Ga<br><br>FISCO Field Device (Only for FF Option)<br>Ex ia IIC T4 Ga; Ex ic IIC T4 Gc | 4-20 mA / DE/<br>HART                            | Note 2a | -50°C TO 70°C                          |
|   |                      |                                                                                                                                  | Foundation<br>Fieldbus                           | Note 2b | -50°C TO 70°C                          |
|   |                      | <b>Zone 2, Increase Safety:</b><br>II 3 G Ex ec IIC T4 Gc                                                                        | 4-20 mA / DE/<br>HART/<br>Foundation<br>Fieldbus | Note 1  | -50°C TO 85°C                          |
|   |                      | <b>Zone 2, Intrinsically Safe:</b><br>Ex ic IIC T4 Gc<br>FISCO Field Device (Only for FF Option)<br>Ex ic IIC T4 Gc              | 4-20 mA / DE/<br>HART/<br>Foundation<br>Fieldbus | Note 2  | -50°C TO 85°C                          |
|   |                      | <b>Enclosure :</b> IP 66/67                                                                                                      | All                                              | All     | -                                      |
| G | NEPSI<br>CHINA       | <b>Flameproof:</b><br>Ex db IIC T6..T5 Ga/Gb<br>Ex tb IIIC T 95°C Db                                                             | All                                              | Note 1  | T5: -50°C TO 85°C<br>T6: -50°C TO 65°C |
|   |                      | <b>Intrinsically Safe:</b><br>Ex ia IIC T4 Ga<br><br>FISCO Field Device (Only for FF Option)<br>Ex ia IIC T4 Ga; Ex ic IIC T4 Gc | 4-20 mA / DE/<br>HART                            | Note 2  | -50°C TO 70°C                          |
|   |                      |                                                                                                                                  | Foundation<br>Fieldbus                           | Note 2  | -50°C TO 70°C                          |
|   |                      | <b>Zone 2, Increase Safety:</b><br>II 3 G Ex ec IIC T4 Gc                                                                        | 4-20 mA / DE/<br>HART/<br>Foundation<br>Fieldbus | Note 1  | -50°C TO 85°C                          |
|   |                      | <b>Zone 2, Intrinsically Safe:</b><br>Ex ic IIC T4 Gc<br>FISCO Field Device (Only for FF Option)<br>Ex ic IIC T4 Gc              | 4-20 mA / DE/<br>HART/<br>Foundation<br>Fieldbus | Note 2  | -50°C TO 85°C                          |
|   |                      | <b>Enclosure :</b> IP 66/67                                                                                                      | All                                              | All     | -                                      |

|   |                                             |                                                                                                                              |                                                  |        |                                                             |
|---|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|--------|-------------------------------------------------------------|
| H | KOSHA<br>Korea                              | <b>Flameproof :</b><br>Ex d IIC T4, T5, T6<br>Ex tD A21 IP66/IP67 T95°C...T120°C                                             | All                                              | Note 1 | T4: -50°C TO 85°C<br>T5: -50°C TO 85°C<br>T6: -50°C TO 65°C |
|   |                                             | <b>Intrinsically Safe:</b><br>Ex ia IIC T4                                                                                   | 4-20 mA /<br>DE/ HART                            | Note 2 | Ta= -50 °C to 70°C                                          |
|   |                                             |                                                                                                                              | Foundation<br>Fieldbus                           | Note 2 | Ta= -50 °C to 70°C                                          |
|   |                                             | <b>Enclosure:</b> IP66/ IP67                                                                                                 | All                                              | All    | -                                                           |
| I | EAC<br>Russia, Belarus<br>and<br>Kazakhstan | <b>Flameproof:</b><br>Ga/Gb Ex d IIC T6..T5<br>Ex tb IIIC Db T 85°C                                                          | All                                              | Note 1 | T5: -50°C TO 85°C<br>T6: -50°C TO 65°C                      |
|   |                                             | <b>Intrinsically Safe:</b><br>Ga Ex ia IIC T4 X<br>FISCO Field Device<br>(Only for FF Option)<br>Ga Ex ia IIC T4 X           | 4-20 mA /<br>DE/ HART                            | Note 2 | -50°C TO 70°C                                               |
|   |                                             |                                                                                                                              | Foundation<br>Fieldbus                           | Note 2 | -50°C TO 70°C                                               |
|   |                                             | <b>Zone 2, Non Sparking:</b><br>2 Ex nA IIC T4 Gc X                                                                          | 4-20 mA /<br>DE/ HART/<br>Foundation<br>Fieldbus | Note 1 | -50°C TO 85°C                                               |
|   |                                             | <b>Zone 2, Intrinsically Safe:</b><br>Ga Ex ic IIC T4 X<br>FISCO Field Device<br>(Only for FF Option)<br>2 Ex ic IIC T4 Gc X | 4-20 mA /<br>DE/ HART/<br>Foundation<br>Fieldbus | Note 2 | -50°C TO 85°C                                               |
|   |                                             | <b>Enclosure :</b> IP 66/67                                                                                                  | All                                              | All    |                                                             |
| J | CCoE<br>INDIA                               | <b>Flameproof:</b><br>Ex d IIC T6..T5 Ga/Gb                                                                                  | All                                              | Note 1 | T5: -50°C TO 85°C<br>T6: -50°C TO 65°C                      |
|   |                                             | <b>Intrinsically Safe:</b><br>Ex ia IIC T4 Ga<br>FISCO Field Device (Only for FF Option)<br>Ex ia IIC T4 Ga; Ex ic IIC T4 Gc | 4-20 mA / DE/<br>HART                            | Note 2 | -50°C TO 70°C                                               |
|   |                                             |                                                                                                                              | Foundation<br>Fieldbus                           | Note 2 | -50°C TO 70°C                                               |
|   |                                             | <b>Non Sparking</b><br>Ex nA IIC T4 Gc                                                                                       | 4-20 mA / DE/<br>HART/<br>Foundation<br>Fieldbus | Note 1 | -50°C TO 85°C                                               |
|   |                                             | <b>Enclosure:</b> IP66/ IP67                                                                                                 | All                                              | All    | -                                                           |
| K | UATR<br>UKRAINE                             | <b>Flameproof:</b><br>II 1/2 G Ex db IIC T6..T5 Ga/Gb<br>II 2 D Ex tb IIIC T95°C...T120°C Db                                 | All                                              | Note 1 | T5: -50°C TO 85°C<br>T6: -50°C TO 65°C                      |
|   |                                             | <b>Intrinsically Safe:</b><br>II 1 G Ex ia IIC T4 Ga<br>FISCO Field Device (Only for FF Option)<br>II 1 G Ex ia IIC T4 Ga    | 4-20 mA / DE/<br>HART                            | Note 2 | -50°C TO 70°C                                               |
|   |                                             |                                                                                                                              | Foundation<br>Fieldbus                           | Note 2 | -50°C TO 70°C                                               |
|   |                                             | <b>Enclosure:</b> IP66/ IP67                                                                                                 | All                                              | All    | -                                                           |

1. Operating Parameters:

Current = 4-20 mA Normal

$$= 30 \text{ mA (FF)}$$

#### a. Analog/DE/HART Entity Values

$$P_i = 0.9W$$

Transmitter with Terminal Block Revision E or Later

$$P_i = 0.9W$$

Note: Transmitter with Terminal Block Revision E or later

The revision is on the label that is on the module. There will be two lines of text on the label:

- First is the Module Part #: 50049839-001 or 50049839-002
- Second line has the supplier information, along with the REVISION:

XXXXXXXX-XXXX. THE "X" is production related. THE POSITION of the "E" IS THE REVISION

### b. Foundation Fieldbus Entity Values

$$P_i = 1W$$

Transmitter with Terminal Block Revision E or Later

$$P_i = 1 \text{ W}$$

## FISCO Field Device

 $P_i = 5.32 \text{ W}$ 

Note: Transmitter with Terminal Block Revision For later

The revision is on the label that is on the module. There will be two lines of text on the label:

- First is the Module Part #: 50049839-003 or 50049839-004
- Second line has the supplier information, along with the REVISION:

XXXXXXXX-EXXXX. THE "X" IS PRODUCTION RELATED. THE POSITION OF THE "E" IS THE REVISION.

### Approval Certifications: (Continued)

|                              |                                                                                                                                                                                                                                                                                                                                                                                                                      |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Marine Certificates</b>   | <p>This certificate defines the certifications covered for the ST 800 Pressure Transmitter family of products, including the SMV 800 Smart Multivariable Transmitter. It represents the compilation of the five certificates Honeywell currently has covering the certification of these products into marine applications.</p> <p>For SmartLine Pressure Transmitter and SMV800 Smart Multivariable Transmitter</p> |
|                              | <p><b>American Bureau of Shipping (ABS)</b> - 2009 Steel Vessel Rules 1-1-4/3.7, 4-6-2/5.15, 4-8-3/13 &amp; 13.5, 4-8-4/27.5.1, 4-9-7/13. Certificate number: 04-HS417416-PDA</p>                                                                                                                                                                                                                                    |
|                              | <p><b>Bureau Veritas (BV)</b> - Product Code: 389:1H. Certificate number: 12660/B0 BV</p>                                                                                                                                                                                                                                                                                                                            |
|                              | <p><b>Det Norske Veritas (DNV)</b> - Location Classes: Temperature D, Humidity B, Vibration A, EMC B, Enclosure C. For salt spray exposure; enclosure of 316 SST or 2-part epoxy protection with 316 SST bolts to be applied. Certificate number: A-11476</p>                                                                                                                                                        |
|                              | <p><b>Korean Register of Shipping (KR)</b> - Certificate number: LOX17743-AE001</p>                                                                                                                                                                                                                                                                                                                                  |
|                              | <p><b>Lloyd's Register (LR)</b> - Certificate number: 02/60001(E1) &amp; (E2)</p>                                                                                                                                                                                                                                                                                                                                    |
|                              |                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>SIL 2/3 Certification</b> | <p>IEC 61508 SIL 2 for non-redundant use and SIL 3 for redundant use according to EXIDA and TÜV Nord Sys Tec GmbH &amp; Co. KG under the following standards: IEC61508-1: 2010; IEC 61508-2: 2010; IEC61508-3: 2010.</p>                                                                                                                                                                                             |

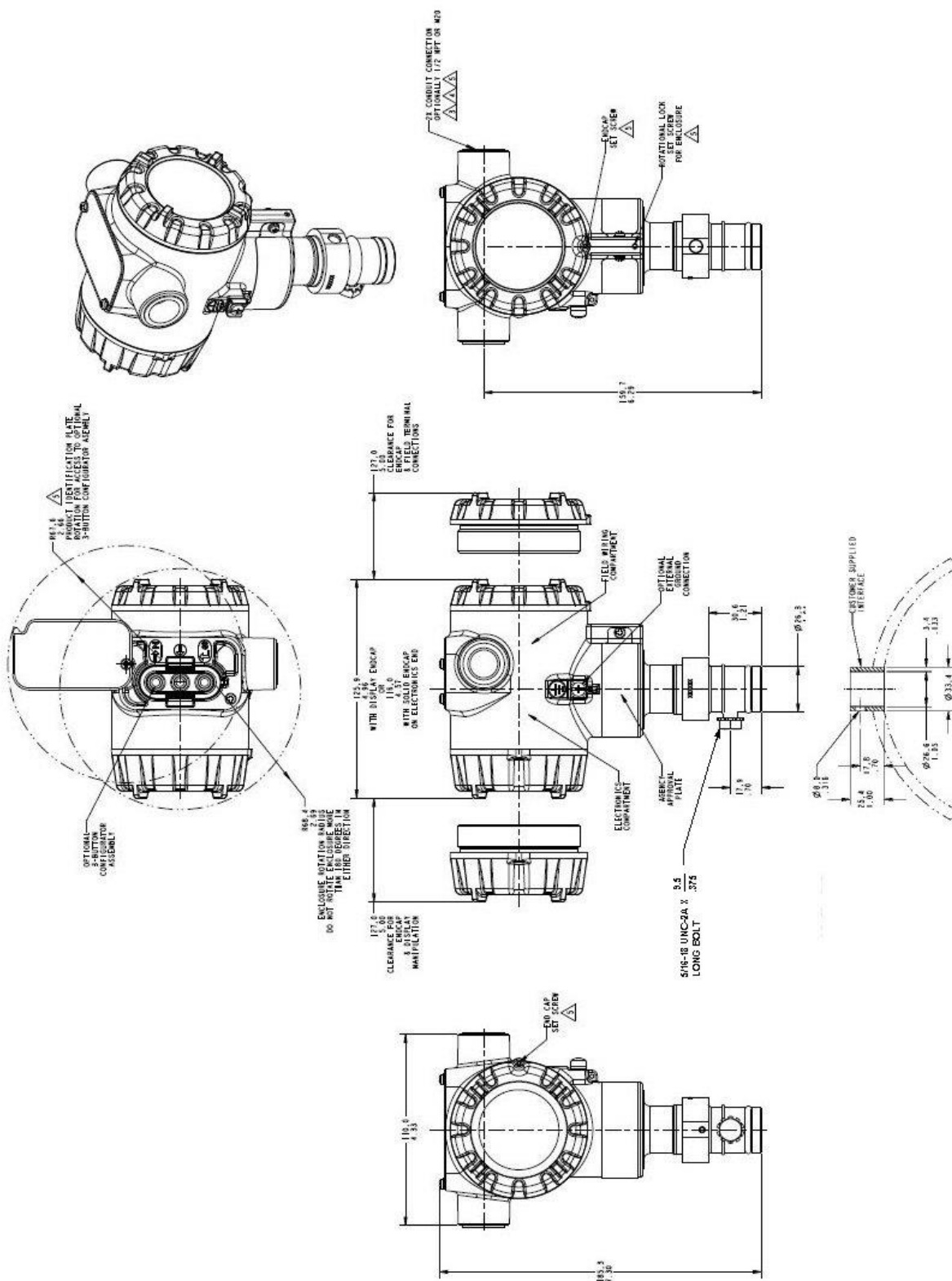
## Other Certification Options

## Materials

- NACE MRO175, MRO103, ISO15156

### Dimension (Inline Design)

**Reference Dimensions:**  $\frac{\text{millimeters}}{\text{inches}}$



### Figure 3 Typical dimensions of STG73P

## Model Selection Guide

Model Selection Guides are subject to change and are inserted into the specifications as guidance only.

### Model STG73P Flush Mount Pressure Transmitter

Model Selection Guide

34-ST-16-113 Issue 23

**Instructions:** Make selections from all Tables using column below the proper arrow. Asterisk indicates availability. Letter (a) refers to restrictions highlighted in the restrictions table. Tables delimited with dashes.

**List Price:** Price equals the sum of prices for all selections made.

Key  
STG73P - I - II - III - IV - V - VI - VII - VIII - IX  
0 0 0 0

| KEY NUMBER  | URL/Max Span | LRL          | Min Span  | Units     |
|-------------|--------------|--------------|-----------|-----------|
| Flush Mount | 100 (7.0)    | -14.7 (-1.0) | 1.0 (0.7) | psi (bar) |

| Selection | Availability |
|-----------|--------------|
| STG73P    | ↓            |

| TABLE I                        | METER BODY SELECTIONS                                          |                                 |
|--------------------------------|----------------------------------------------------------------|---------------------------------|
| Interface & Diaphragm Material | Process Interface Material                                     | Barrier Diaphragm Material      |
|                                | 316L Stainless Steel                                           | Hastelloy® C - 276 <sup>1</sup> |
| b. Fill Fluid                  | Silicone 200                                                   |                                 |
| c. Process Connection          | 1" Slip in with locking screw (sleeve optional see table VIII) |                                 |
| d. Bolt/Nuts Materials         | None                                                           |                                 |
| e. Vent/Drain                  | None                                                           |                                 |
| f. Gasket/Seal                 | Viton O-ring                                                   |                                 |

<sup>1</sup> Hastelloy® C-276 or UNS N10276

|   |   |
|---|---|
| F | * |
| 1 | * |
| 1 | * |
| 0 | * |
| 0 | * |
| B | * |

| TABLE II                 | Meter Body & Connection Orientation |
|--------------------------|-------------------------------------|
| Head/Connect Orientation | None                                |

|   |   |
|---|---|
| 0 | * |
|---|---|

| TABLE III | AGENCY APPROVALS                                                                          |
|-----------|-------------------------------------------------------------------------------------------|
| Approvals | No Approvals Required                                                                     |
|           | <FM> Explosion proof, Intrinsically Safe, Non-incendive, & Dustproof                      |
|           | CSA Explosion proof, Intrinsically Safe, Non-incendive, & Dustproof                       |
|           | ATEX Explosion proof, Intrinsically Safe & Non-incendive                                  |
|           | IECEX Explosion proof, Intrinsically Safe & Non-incendive                                 |
|           | SAEx Explosion proof, Intrinsically Safe & Non-incendive                                  |
|           | INMETRO Explosion proof, Intrinsically Safe & Non-incendive                               |
|           | NEPSI Explosion proof, Intrinsically Safe & Non-incendive                                 |
|           | KOSHA Explosion proof, Intrinsically Safe & Non-incendive                                 |
|           | EAC Customs Union (Russia,Belarus,Kazakhstan) Ex Approval Flame proof, Intrinsically Safe |
|           | CCoE Explosion proof, Intrinsically Safe & Non-incendive                                  |
|           | UATR Flameproof, Intrinsically Safe & Dustproof                                           |

|   |   |
|---|---|
| 0 | * |
| A | * |
| B | * |
| C | * |
| D | * |
| E | * |
| F | * |
| G | * |
| H | * |
| I | * |
| J | * |
| K | * |

| TABLE IV                                         | TRANSMITTER ELECTRONICS SELECTIONS |            |                      |
|--------------------------------------------------|------------------------------------|------------|----------------------|
| a. Electronic Housing Material & Connection Type | Material                           | Connection | Lightning Protection |
|                                                  | Polyester Powder Coated Aluminum   | 1/2 NPT    | None                 |
|                                                  | Polyester Powder Coated Aluminum   | M20        | None                 |
|                                                  | Polyester Powder Coated Aluminum   | 1/2 NPT    | Yes                  |
|                                                  | Polyester Powder Coated Aluminum   | M20        | Yes                  |
|                                                  | 316 Stainless Steel (Grade CF8M)   | 1/2 NPT    | None                 |
|                                                  | 316 Stainless Steel (Grade CF8M)   | M20        | None                 |
|                                                  | 316 Stainless Steel (Grade CF8M)   | 1/2 NPT    | Yes                  |
|                                                  | 316 Stainless Steel (Grade CF8M)   | M20        | Yes                  |

|   |   |
|---|---|
| A | * |
| B | * |
| C | * |
| D | * |
| E | * |
| F | * |
| G | * |
| H | * |

|                     |               |  |                  |  |
|---------------------|---------------|--|------------------|--|
| b. Output/ Protocol | Analog Output |  | Digital Protocol |  |
|                     | 4-20mA dc     |  | HART Protocol    |  |
|                     | 4-20mA dc     |  | DE Protocol      |  |

|   |   |
|---|---|
| H | * |
| D | * |

|                                  |                                                 |                                 |                            |
|----------------------------------|-------------------------------------------------|---------------------------------|----------------------------|
| c. Customer Interface Selections | Indicator                                       | Ext Zero, Span & Config Buttons | Languages                  |
|                                  | None                                            | None                            | None                       |
|                                  | None                                            | Yes (Zero/Span Only)            | None                       |
|                                  | Advanced                                        | None                            | EN, GE, FR, IT, SP, RU, TU |
|                                  | Advanced                                        | Yes                             | EN, GR, FR, IT, SP, RU, TU |
|                                  | Advanced                                        | None                            | EN, CH, JP                 |
|                                  | Advanced                                        | Yes                             | EN, CH, JP                 |
|                                  | Standard (w/internal Zero, Span & Conf Buttons) | None                            | EN, RU                     |
|                                  | Standard (w/internal Zero, Span & Conf Buttons) | Yes                             | EN, RU                     |

|   |   |
|---|---|
| 0 | * |
| A | * |
| D | * |
| E | * |
| H | * |
| J | * |
| S | u |
| T | u |

| TABLE V                                            | CONFIGURATION SELECTIONS                                                    |                            |                                              |
|----------------------------------------------------|-----------------------------------------------------------------------------|----------------------------|----------------------------------------------|
| a. Application Software                            | Diagnostics                                                                 |                            |                                              |
|                                                    | Standard Diagnostics                                                        |                            |                                              |
| b. Output Limit, Failsafe & Write Protect Settings | Write Protect                                                               | Fail Mode                  | High & Low Output Limits <sup>3</sup>        |
|                                                    | Disabled                                                                    | High> 21.0mA <sub>dc</sub> | Honeywell Std (3.8 - 20.8 mA <sub>dc</sub> ) |
|                                                    | Disabled                                                                    | Low< 3.6mA <sub>dc</sub>   | Honeywell Std (3.8 - 20.8 mA <sub>dc</sub> ) |
|                                                    | Enabled                                                                     | High> 21.0mA <sub>dc</sub> | Honeywell Std (3.8 - 20.8 mA <sub>dc</sub> ) |
|                                                    | Enabled                                                                     | Low< 3.6mA <sub>dc</sub>   | Honeywell Std (3.8 - 20.8 mA <sub>dc</sub> ) |
| c. General Configuration                           | General Configuration                                                       |                            |                                              |
|                                                    | Factory Standard<br>Custom Configuration (Unit Data Required from customer) |                            |                                              |

<sup>3</sup> NAMUR Output Limits are configurable by customer

| TABLE VI                 | CALIBRATION & ACCURACY SELECTIONS |                             |                    |
|--------------------------|-----------------------------------|-----------------------------|--------------------|
| Accuracy and Calibration | Accuracy                          | Calibrated Range            | Calibration Qty    |
|                          | Standard                          | Factory Standard            | Single Calibration |
|                          | Standard                          | Custom (Unit Data Required) | Single Calibration |

| TABLE VII                               | ACCESSORY SELECTIONS                                                                                                                                       |  |  |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| a. Mounting Bracket                     | None (Not required with Flush Mount Unit)                                                                                                                  |  |  |
| b. Customer Tag                         | Customer Tag Type                                                                                                                                          |  |  |
|                                         | No customer tag                                                                                                                                            |  |  |
|                                         | One Wired Stainless Steel Tag (Up to 4 lines 26 char/line)<br>Two Wired Stainless Steel Tag (Up to 4 lines 26 char/line)                                   |  |  |
| c. Unassembled Conduit Plugs & Adapters | Unassembled Conduit Plugs & Adapters                                                                                                                       |  |  |
|                                         | No Conduit Plugs or Adapters Required                                                                                                                      |  |  |
|                                         | 1/2 NPT Male to 3/4 NPT Female 316 SS Certified Conduit Adapter                                                                                            |  |  |
|                                         | 1/2 NPT 316 SS Certified Conduit Plug                                                                                                                      |  |  |
|                                         | M20 316 SS Certified Conduit Plug                                                                                                                          |  |  |
|                                         | Minifast <sup>®</sup> 4 pin (1/2 NPT) (not suitable for X-Proof applications)<br>Minifast <sup>®</sup> 4 pin (M20) (not suitable for X-Proof applications) |  |  |

| TABLE VIII                | OTHER Certifications & Options: (String in sequence comma delimited (XX, XX, XX,...)) |  |  |
|---------------------------|---------------------------------------------------------------------------------------|--|--|
| Certifications & Warranty | No additional options                                                                 |  |  |
|                           | NACE MR0175; MR0103; ISO15156 (FC33338) Process wetted parts only                     |  |  |
|                           | NACE MR0175; MR0103; ISO15156 (FC33339) Process wetted and non-wetted parts           |  |  |
|                           | Marine (DNV, ABS, BV, KR, LR) (FC33340)                                               |  |  |
|                           | EN10204 Type 3.1 Material Traceability (FC33341)                                      |  |  |
|                           | Certificate of Conformance (F3391)                                                    |  |  |
|                           | Calibration Test Report & Certificate of Conformance (F3399)                          |  |  |
|                           | Certificate of Origin (F0195)                                                         |  |  |
|                           | FMEDA (SIL 2/3) Certification (FC33337)                                               |  |  |
|                           | Calibration Fixture (w/1/4" NPT port)                                                 |  |  |
|                           | PMI Certification <sup>1</sup>                                                        |  |  |
|                           | 316L Stainless 1" Mounting Sleeve (requires customer installation to process piping)  |  |  |
|                           | Extended Warranty Additional 1 year                                                   |  |  |
|                           | Extended Warranty Additional 2 years                                                  |  |  |
|                           | Extended Warranty Additional 3 years                                                  |  |  |
|                           | Extended Warranty Additional 4 years                                                  |  |  |

| TABLE IX | Manufacturing Specials |  |  |
|----------|------------------------|--|--|
| Factory  | Factory Identification |  |  |

|        |   |
|--------|---|
| STG73P |   |
| 1 _ _  | * |
| _ 1 _  | * |
| _ 2 _  | * |
| _ 3 _  | * |
| _ 4 _  | * |
| _ _ S  | * |
| _ _ C  | * |

|   |   |
|---|---|
| A | * |
| B | * |

|         |   |
|---------|---|
| 0 _ _ _ | * |
|---------|---|

|         |   |
|---------|---|
| _ 0 _ _ | * |
| _ 1 _ _ | * |
| _ 2 _ _ | * |

|        |   |
|--------|---|
| _ _ A0 | * |
| _ _ A2 | n |
| _ _ A6 | n |
| _ _ A7 | m |
| _ _ A8 | n |
| _ _ A9 | m |

|    |   |   |
|----|---|---|
| 00 | * | b |
| FG | * |   |
| F7 | * |   |
| MT | d | b |
| FX | * |   |
| F3 | * |   |
| F1 | * | b |
| F5 | * |   |
| FE | j |   |
| CF | * | b |
| PM | * |   |
| MS | * |   |
| 01 | * | b |
| 02 | * |   |
| 03 | * |   |
| 04 | * |   |

|         |   |
|---------|---|
| 0 0 0 0 | * |
|---------|---|

**RESTRICTIONS**

| Restriction Letter | Available Only with                    |              | Not Available with |              |
|--------------------|----------------------------------------|--------------|--------------------|--------------|
|                    | Table                                  | Selection(s) | Table              | Selection(s) |
| b                  | Select Only one option from this group |              |                    |              |
| d                  | Iva                                    | C,D,G,H      |                    |              |
| j                  | IV b                                   | H            | Vb                 | 1,2          |
| m                  | IV a                                   | B,D,F,H      |                    |              |
| n                  | IV a                                   | A,C,E,G      |                    |              |
| u                  | IV b                                   | H            |                    |              |

<sup>1</sup> The PM option is available on all Smartline Pressure Transmitter process wetted parts such as process heads, flanges, bushings and vent plugs except plated carbon steel process heads and flanges. PM option information is also available on diaphragms except STG and STA in-line construction pressure transmitters.

**FIELD INSTALLABLE ACCESSORY KITS**

| Description                                                                     | Kit Number   | Price  |
|---------------------------------------------------------------------------------|--------------|--------|
| Integrally Mounted Basic Indicator Kit (Compatible with all Electronic Modules) | 50049911-501 | Note P |
| Terminal Strip w/Lightning Protection Kit for HART or DE Modules                | 50075472-532 | Note P |
| Terminal Strip w/Lightning Protection Kit for FFB Module                        | 50075472-534 | Note P |
| Terminal Strip w/o Lightning Protection for HART or DE Modules                  | 50075472-531 | Note P |
| Terminal Strip w/o Lightning Protection FFB Module                              | 50075472-533 | Note P |
| HART Electronics Module                                                         | 50049849-501 | Note P |
| HART Electronics Module w/connection for external configuration buttons         | 50049849-502 | Note P |
| DE Electronics Module                                                           | 50049849-503 | Note P |
| DE Electronics Module w/connection for external configuration buttons           | 50049849-504 | Note P |
| FFB Electronics Module Kit                                                      | 50049849-509 | Note P |
| FFB Electronics Module w/connection for external configuration buttons          | 50049849-510 | Note P |
| Standard Display Module                                                         | 50126003-501 | Note P |

Note P - For part number pricing please refer to WEB Channel

**PRODUCT MANUALS**

| Description                                                          | Part Number |
|----------------------------------------------------------------------|-------------|
| ST 700 SmartLine Transmitter User Manual - English                   | 34-ST-25-44 |
| ST 700 SmartLine Transmitter HART/DE Communications Manual - English | 34-ST-25-47 |
| ST 700 SmartLine Transmitter Safety Manual - English                 | 34-ST-25-37 |
| ST700 SmartLine Transmitter Foundation Fieldbus Manual - English     | 34-ST-25-48 |
| ST 700 SmartLine Transmitter Function Block Manual - English         | 34-ST-25-49 |

All product documentation is available at [www.process.honeywell.com](http://www.process.honeywell.com).



## Sales and Service

For application assistance, current specifications, ordering, pricing, and name of the nearest Authorized Distributor, contact one of the offices below.

### ASIA PACIFIC

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Phone: + 800 12026455 or  
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FAX: +(61) 7-3840 6481  
Toll Free 1300-36-39-36  
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1300-36-04-70

#### China – PRC - Shanghai

Honeywell China Inc.  
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#### Singapore

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Fax: +(822) 792 9015

### EMEA

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+44 (0) 1202645583

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[FP-Sales-Apps@Honeywell.com](mailto:FP-Sales-Apps@Honeywell.com)

or

(TAC)

[hfs-tac-support@honeywell.com](mailto:hfs-tac-support@honeywell.com)

#### Web

Knowledge Base search  
engine <http://bit.ly/2N5Vldi>

### AMERICAS

Honeywell Process Solutions,  
Phone: (TAC) (800) 423-9883  
or (215) 641-3610  
(Sales) 1-800-343-0228

#### Email: (Sales)

[FP-Sales-Apps@Honeywell.com](mailto:FP-Sales-Apps@Honeywell.com)

or

(TAC)

[hfs-tac-support@honeywell.com](mailto:hfs-tac-support@honeywell.com)

#### Web

Knowledge Base search  
engine <http://bit.ly/2N5Vldi>

*Specifications are subject to change without notice.*

### For more information

To learn more about SmartLine Transmitters,  
visit [www.process.honeywell.com](http://www.process.honeywell.com)  
Or contact your Honeywell Account Manager

### Process Solutions

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The Honeywell logo, consisting of the word "Honeywell" in a bold, red, sans-serif font.

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