STT 3000 Smart Temperature Transmitter
Series STT170
STT171, STT173, STT17H, STT17F, STT17C

OVERVIEW
The Honeywell STT170 series of programmable temperature transmitters provides cost effective solutions for temperature monitoring applications. Compared to direct-wired temperature sensor monitoring points, the STT170 series of transmitters delivers increased accuracy, safety and reliability while also reducing wiring costs. These transmitters automatically linearize the temperature output signal bounded by the upper range value and lower range value established by the user. In addition, the user can program high or low limit alarms to activate in the case of sensor failure.

STT171 FEATURES
• Analog 4-20 mA output
• RTD or Ohm input
• DIN form B headmount
• NAMUR NE43 sensor error response
• Configurable using STT17C configuration tool and PC

STT173 FEATURES
• Analog 4-20 mA output
• RTD, T/C, Ohm or mV input
• DIN form B headmount
• NAMUR NE43 sensor error response
• Configurable using STT17C configuration tool and PC
• Galvanic isolation

STT17H FEATURES
• HART™/4-20 mA output
• RTD, T/C, Ohm or mV input
• Single or dual (difference or average) sensor input
• DIN form B headmount
• HART Multidrop capable
• NAMUR NE43 sensor error response
• Configurable using STT17C configuration tool and PC or HART field communicator
• Galvanic isolation

STT17F FEATURES
• FOUNDATION™ fieldbus protocol
• RTD, T/C, Ohm or mV input
• Single or dual (difference, average or redundant) sensor input
• DIN form B headmount
• Function blocks: 2 analogue, 1 PID
• FISCO certified
• Basic or LAS capability
• Galvanic isolation

HART is a registered trademark of the HART Communication Foundation.
FOUNDATION is a registered trademark of the Fieldbus Foundation.
### Dimensions (all models)

- **Diameter:** 44 mm
- **Height:** 20.2 mm
- **Width:** 33 mm
- **Height:** 6.6 mm

### Wiring

#### STT171

**Input:**
- RTD, 2-wire
- RTD, 3-wire
- Resistance, 2-wire
- Resistance, 3-wire

**Output:**
- 2-wire installation

#### STT173

**Input:**
- RTD, 2-wire
- RTD, 3-wire
- RTD, 4-wire
- TC, Internal CJC
- TC, External CJC
- mV
- Resistance, 2-wire
- Resistance, 3-wire
- Resistance, 4-wire

**Output:**
- 2-wire installation
Wiring

**STT17H**

**Input:**
- RTD, 2-wire
- RTD, 3-wire
- RTD, 4-wire
- TC, internal CJC
- mV, Resistance, 2-wire
- Resistance, 3-wire
- TC, difference or average with internal CJC
- TC, difference or average with external CJC
- Resistance, 4-wire
- mV, difference or average

**Output:**
- 2-wire installation
- 1 2

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**STT17F**

**Input:**
- RTD, 2-wire
- RTD, 3-wire
- RTD, 4-wire
- 2X RTD, 2-wire
- 2X RTD, 3-wire
- 2X RTD, 4-wire
- TC, internal CJC
- TC, 2-wire external CJC
- TC, 3-wire external CJC
- 2x TC, difference or average with internal CJC
- 2x TC, difference or average with external CJC
- mV, 2-wire
- mV, 3-wire
- Potmeter, 3-wire
- Potmeter, cable compensation
- Two 3-wire potmeters
- Connections with two sensors can be configured for 2 measurements, difference, average, or redundancy

**Output:**
- Bus termination
- 1 2
- Bus connection
- Foundation
- Segment coupler
STT17C Configuration tool

The STT17C configures the STT171, STT173 and STT17H. The intuitive graphical user interface of the STT17C virtually eliminates the need for operator training after installation on a PC. The STT17C includes all software and transmitter interface hardware necessary to configure the STT171, STT173 and STT17H in non-hazardous work environments.

WARNING: The STT17C is not approved for use in Hazardous work environments.

System Requirements:
Windows® 98SE, ME, 2000 and XP with the following recommendations:
- Memory: 16 MB
- Display resolution: 800 x 600
- Hard disk space: 12 MB

Windows is a registered trademark of Microsoft Corporation
STT171-BS Specifications

<table>
<thead>
<tr>
<th>Sensor Type</th>
<th>Basic Accuracy*</th>
<th>Rated Range</th>
<th>Standards</th>
<th>Minimum Span**</th>
<th>Temperature Effects per 1.0°C (1.8°F) Change in Ambient Temperature***</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fixed</td>
<td>% of Span</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>°C</td>
<td>°F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pt100</td>
<td>0.3°C (0.54°F)</td>
<td>± 0.1</td>
<td>-200 to 850</td>
<td>25°C (45°F)</td>
<td>0.01°C (0.018°F) ± 0.01</td>
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<tr>
<td></td>
<td>-328 to 1562</td>
<td></td>
<td>IEC60751</td>
<td>0.01°C (0.018°F) ± 0.01</td>
<td></td>
</tr>
<tr>
<td>Ni100</td>
<td>0.3°C (0.54°F)</td>
<td>± 0.1</td>
<td>-60 to 250</td>
<td>25°C (45°F)</td>
<td>0.01°C (0.018°F) ± 0.01</td>
</tr>
<tr>
<td></td>
<td>-76 to 482</td>
<td></td>
<td>DIN 43760</td>
<td>0.01°C (0.018°F) ± 0.01</td>
<td></td>
</tr>
<tr>
<td>Ω</td>
<td>0.2 Ω</td>
<td>± 0.1</td>
<td>0 to 10000</td>
<td>30 Ω</td>
<td>20 mΩ ± 0.01</td>
</tr>
</tbody>
</table>

*whichever is greater, Total Reference Accuracy = Basic Accuracy
**or 50% of upper range value, whichever is greater
***reference temperature 25°C

OPERATING CONDITIONS
Ambient temperature, rated: -40 to 85°C (-40 to 185°F)
Humidity: 0 to 95% RH (non-cond.)
Vibration: Max 4g over 25 to 100Hz

ELECTRICAL INPUT SPECIFICATIONS
Supply voltage: 8 to 30 VDC
Power supply voltage effect: ≤ 0.005% of span per VDC
Warm-up time: 5 min
Response time (programmable): 0.33 to 60 sec

CURRENT OUTPUT SPECIFICATIONS
Signal output range: 4 to 20 mA
Update time: 135 msec
Load resistance: 5(V supply - 8) / 0.023 A or 0 to 870 Ω

ALARM LEVELS
Programmable: 3.5 to 4 mA downslope 20 to 23 mA upslope
NAMUR NE43 Upscale: 23 mA
NAMUR NE43 Downscale: 3.5 mA

APPROVALS
Observed Authority requirements:
EMC 2004/108/EC
ATEX 94/9/EC
FM, ASCN
CSA, CAN / CSA

Ex / I.S. approval:
KEMA 06 ATEX 0042 X

Ex ia IIC T4...T6
Max. amb. Temperature for T4: 85°C
Max. amb. Temperature for T6: 60°C

Entity, FM Installation Drawing No:
NI, CL I, DIV 2, Grp. A-D, T4...T6
Ex ia IIC

Entity, Installation Drawing No:
50016324

Ex / I.S. data:

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<tr>
<th>Uo (max)</th>
<th>Io (max)</th>
<th>Po (max)</th>
<th>Lo (max)</th>
<th>Co (max)</th>
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<td>30 VDC</td>
<td>120 mADC</td>
<td>0.84 W</td>
<td>10 μH</td>
<td>1.0 nF</td>
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<td>27 VDC</td>
<td>7 mADC</td>
<td>45 m W</td>
<td>35 mH</td>
<td>90 nF</td>
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</table>
### STT173-BS Specifications

#### Sensor Types

<table>
<thead>
<tr>
<th>Type</th>
<th>Basic Accuracy*</th>
<th>Rated Range</th>
<th>Standards</th>
<th>Minimum Span**</th>
<th>Temperature Effects per 1.0°C (1.8°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pt100</td>
<td>0.2°C (0.36°F)</td>
<td>± 0.1</td>
<td>-200 to +850</td>
<td>IEC60751</td>
<td>25°C (45°F)</td>
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<td>Nt100</td>
<td>0.2°C (0.36°F)</td>
<td>± 0.1</td>
<td>-60 to +250</td>
<td>DIN 43760</td>
<td>25°C (45°F)</td>
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<tr>
<td>B</td>
<td>2°C (3.6°F)</td>
<td>± 0.1</td>
<td>+400 to +1820</td>
<td>IEC584</td>
<td>200°C (360°F)</td>
</tr>
<tr>
<td>E</td>
<td>1°C (1.8°F)</td>
<td>± 0.1</td>
<td>-100 to +1000</td>
<td>IEC584</td>
<td>50°C (90°F)</td>
</tr>
<tr>
<td>J</td>
<td>1°C (1.8°F)</td>
<td>± 0.1</td>
<td>-100 to +1200</td>
<td>IEC584</td>
<td>50°C (90°F)</td>
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<td>K</td>
<td>1°C (1.8°F)</td>
<td>± 0.1</td>
<td>-180 to +1372</td>
<td>IEC584</td>
<td>50°C (90°F)</td>
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<td>± 0.1</td>
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<td>200°C (360°F)</td>
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<td>0 to +2300</td>
<td>ASTM E988-90</td>
<td>200°C (360°F)</td>
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<td>Ω</td>
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<td>± 0.1</td>
<td>0 to 5000 Ω</td>
<td>30 Ω</td>
<td>10 Ω</td>
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<tr>
<td>mV</td>
<td>0.1 mV</td>
<td>± 0.1</td>
<td>-12 to 800 mV</td>
<td>5 mV</td>
<td>1 μV</td>
</tr>
</tbody>
</table>

*whichever is greater; Total Reference Accuracy = Basic Accuracy + CJ Accuracy (T/C only)

**or 50% of upper range value, whichever is greater

***reference temperature 24°C

### OPERATING CONDITIONS

- Ambient temperature, rated: -40 to 85°C (-40 to 185°F)
- Humidity: 0 to 95% RH (non-cond.)
- Vibration: Max 4g over 25 to 100Hz
- Cold junction accuracy: ±1.0°C

### ELECTRICAL INPUT SPECIFICATIONS

- Supply voltage: 7.2 to 30 VDC
- Power supply voltage effect: ≤ 0.005% of span per VDC
- Warm-up time: 5 min
- Response time (programmable): 1 to 60 sec
- Galvanic isolation: 1500 VAC

### CURRENT OUTPUT SPECIFICATIONS

- Signal output range: 4 to 20 mA
- Load resistance (Ω): ≤ (V supply - 7.2) / 0.023 A
- Update time: 440 msec

### ALARM LEVELS

- Programmable, NAMUR NE43 Upscale: 23 mA
- Programmable, NAMUR NE43 Downscale: 3.5 mA

### APPROVALS

- Observed Authority requirements:
  - Standard: Emc 2004/108/EC
  - ATEX 94/9/EC
  - EN 50014, EN 50020
  - FM, ASCN: 3600, 3611, 3610
  - CSA, CAN / CSA: C22.2 No. 157, E60079-11
  - UL 913

### Ex / I.S. Data:

- Max. amb. Temperature for T4: 85°C
- Max. amb. Temperature for T6: 60°C
- Applicable in zone: 0, 1, 2, 20, 21 and 22
- FM, applicable in: IS, CL I, DIV 1, Grp. A-D, T4...T6

### Entity, FM Installation Drawing No.

- FM: IS, CL I, DIV 1, Grp. A-D, T4...T6
- CSA, applicable in: C22.2 No. 157, E60079-11
- Ex ia IIC, AEx ia IIC

### Entity, Installation Drawing No.

- Ex ia IIC, AEx ia IIC

### Other Data:

- Uo (max): 9.6 VDC
- Io (max): 25 mADC
- Po (max): 60 m W
- Lo (max): 33 mH
- Co (max): 3.6 μF
### STT17H-BS Specifications

<table>
<thead>
<tr>
<th>Sensor Type</th>
<th>Basic Accuracy*</th>
<th>Rated Range</th>
<th>Standards</th>
<th>Temperature Effects per 1.0°C (1.8°F) Change in Ambient Temperature***</th>
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<tbody>
<tr>
<td></td>
<td>Fixed % of Span</td>
<td>°C</td>
<td>°F</td>
<td>Fixed % of Span</td>
</tr>
<tr>
<td>Pt100</td>
<td>0.2°C (0.36°F)</td>
<td>± 0.1</td>
<td>-200 to +850</td>
<td>-328 to +1562</td>
</tr>
<tr>
<td>Pt1000</td>
<td>0.2°C (0.36°F)</td>
<td>± 0.1</td>
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<td>-328 to +1562</td>
</tr>
<tr>
<td>Ni100</td>
<td>0.3°C (0.54°F)</td>
<td>± 0.1</td>
<td>-60 to +250</td>
<td>76 to +482</td>
</tr>
<tr>
<td>B</td>
<td>1°C (1.8°F)</td>
<td>± 0.1</td>
<td>+400 to +1820</td>
<td>+752 to +3308</td>
</tr>
<tr>
<td>E</td>
<td>0.5°C (0.9°F)</td>
<td>± 0.1</td>
<td>-100 to +1000</td>
<td>-148 to +1832</td>
</tr>
<tr>
<td>J</td>
<td>0.5°C (0.9°F)</td>
<td>± 0.1</td>
<td>-100 to +1200</td>
<td>-148 to +2192</td>
</tr>
<tr>
<td>K</td>
<td>0.5°C (0.9°F)</td>
<td>± 0.1</td>
<td>-180 to +1372</td>
<td>-192 to +2502</td>
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<tr>
<td>L</td>
<td>0.5°C (0.9°F)</td>
<td>± 0.1</td>
<td>-100 to +900</td>
<td>-148 to +1652</td>
</tr>
<tr>
<td>N</td>
<td>0.5°C (0.9°F)</td>
<td>± 0.1</td>
<td>-180 to +1300</td>
<td>-292 to +2372</td>
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<tr>
<td>R</td>
<td>1°C (1.8°F)</td>
<td>± 0.1</td>
<td>-50 to +1760</td>
<td>-58 to +3200</td>
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<tr>
<td>S</td>
<td>1°C (1.8°F)</td>
<td>± 0.1</td>
<td>-50 to +1760</td>
<td>-58 to +3200</td>
</tr>
<tr>
<td>T</td>
<td>0.5°C (0.9°F)</td>
<td>± 0.1</td>
<td>-200 to +400</td>
<td>-328 to +752</td>
</tr>
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<td>U</td>
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<td>± 0.1</td>
<td>-200 to +600</td>
<td>-328 to +1112</td>
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<td>W3</td>
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<td>± 0.1</td>
<td>0 to +2300</td>
<td>+32 to +4172</td>
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<tr>
<td>W5</td>
<td>1°C (1.8°F)</td>
<td>± 0.1</td>
<td>0 to +2300</td>
<td>+32 to +4172</td>
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<tr>
<td>Ω</td>
<td>0.1 Ω</td>
<td>± 0.1</td>
<td>0 to 7000 Ω</td>
<td>0 to 800 mV</td>
</tr>
<tr>
<td>mV</td>
<td>10 μV</td>
<td>± 0.1</td>
<td>-800 to 800 mV</td>
<td>0 to 7000 Ω</td>
</tr>
</tbody>
</table>

*whichever is greater, Total Reference Accuracy = Basic Accuracy + CJ Accuracy (T/C only)

**or 50% of upper range value, whichever is greater

***reference temperature 24°C

### OPERATING CONDITIONS

**Ambient temperature, rated**............. -40 to 85°C (-40 to 185°F)

**Humidity**...........................................0 to 95% RH (non-cond.)

**Vibration**...........................................Max 4g over 25 to 100Hz

**Cold junction accuracy**.................. ±1.0°C

### ELECTRICAL INPUT SPECIFICATIONS

**Supply Voltage**.......................... 8 to 30 VDC

**Warm-up time**................................. 30 sec

**Response time (programmable)**......... 1 to 60 sec

**Galvanic isolation**.......................... 1500 VAC

### CURRENT OUTPUT SPECIFICATIONS

**Signal output range**........................... 4 to 20 mA

**Load resistance (Ω)**.......................... ≤ (V supply - 8) / 0.023 A

**Update time**................................. 440 msec

**Load resistance (Ω)**.......................... ≤ (V supply - 8) / 0.023 A

**Update time**................................. 440 msec

### ALARM LEVELS

**Programmable**.................................... 3.5 to 4 mA downscale

**NAMUR NE43 Upscale**......................... 20 to 23 mA upscale

**NAMUR NE43 Downscale**....................... 3.5 mA

### APPROVALS

**Observed Authority requirements:**......

- **EMC 2004/108/EC**
- **EN 61326**
- **ATEX 94/9/EC**
- **EN 50014, EN 50020, EN 50281-1-1, EN 50284**
- **UL 913**
- **KEMA 06 ATEX 0044 X**
- **II 1 GD, T80°C…T105°C**
- **Ni, CL I, DIV 2, Grp. A-D, T4…T6**
- **FS, applicable in**.............................. IS, CL I, DIV 1, Grp. A-D, T4…T6
- **CE, applicable in**.............................. IS, CL I, DIV 1, Grp. A-D, T4…T6
- **NI, CL I, DIV 2, Grp. A-D, T4…T6**
- **II 1 GD, T80°C…T105°C**
- **Ni, CL I, DIV 2, Grp. A-D, T4…T6**
- **KEMA 06 ATEX 0044 X**
- **II 1 GD, T80°C…T105°C**
- **Ni, CL I, DIV 2, Grp. A-D, T4…T6**
- **KEMA 06 ATEX 0044 X**
- **II 1 GD, T80°C…T105°C**
- **Ni, CL I, DIV 2, Grp. A-D, T4…T6**

**Ui (max)**.................................. 30 VDC

**Ii (max)**.................................. 120 mA

**Pi (max)**.................................. 0.84 W

**Li (max)**.................................. 10 μH

**Ci (max)**.................................. 1.0 nF

**Uo (max)**.................................. 9.6 VDC

**Io (max)**.................................. 28 mA

**Po (max)**.................................. 67 mW

**Lo (max)**.................................. 33 mH

**Co (max)**.................................. 3.5 μF
**STT17H-BN Specification**

<table>
<thead>
<tr>
<th>Sensor Type</th>
<th>Basic Accuracy</th>
<th>Rated Range °C</th>
<th>Standards</th>
<th>Minimum Span</th>
<th>Temperature Effects per 1.0°C (1.8°F)</th>
<th>Change in Ambient Temperature***</th>
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<td>IEC60751</td>
<td>±0.01</td>
</tr>
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<td>Pt1000</td>
<td>0.2°C (0.36°F)</td>
<td>± 0.1</td>
<td>-200 to +850</td>
<td>-328 to +1562</td>
<td>IEC60751</td>
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<tr>
<td>Ni100</td>
<td>0.3°C (0.54°F)</td>
<td>± 0.1</td>
<td>-60 to +250</td>
<td>-76 to +482</td>
<td>DIN 43760</td>
<td>±0.01</td>
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<tr>
<td>B</td>
<td>1°C (1.8°F)</td>
<td>± 0.1</td>
<td>+400 to +1820</td>
<td>+752 to +3308</td>
<td>IEC584</td>
<td>±0.2°C (0.36°F)</td>
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<tr>
<td>E</td>
<td>0.5°C (0.9°F)</td>
<td>± 0.1</td>
<td>-100 to +1000</td>
<td>-148 to +1832</td>
<td>IEC584</td>
<td>±0.05°C (0.9°F)</td>
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<tr>
<td>J</td>
<td>0.5°C (0.9°F)</td>
<td>± 0.1</td>
<td>-100 to +1200</td>
<td>-148 to +2192</td>
<td>IEC584</td>
<td>±0.05°C (0.9°F)</td>
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<tr>
<td>K</td>
<td>0.5°C (0.9°F)</td>
<td>± 0.1</td>
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<td>-192 to +2502</td>
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<td>L</td>
<td>0.5°C (0.9°F)</td>
<td>± 0.1</td>
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<td>IEC584</td>
<td>±0.05°C (0.9°F)</td>
</tr>
<tr>
<td>R</td>
<td>1°C (1.8°F)</td>
<td>± 0.1</td>
<td>-50 to +1780</td>
<td>-88 to +3200</td>
<td>IEC584</td>
<td>±0.2°C (0.36°F)</td>
</tr>
<tr>
<td>S</td>
<td>1°C (1.8°F)</td>
<td>± 0.1</td>
<td>-50 to +1780</td>
<td>-88 to +3200</td>
<td>IEC584</td>
<td>±0.2°C (0.36°F)</td>
</tr>
<tr>
<td>T</td>
<td>0.5°C (0.9°F)</td>
<td>± 0.1</td>
<td>-200 to +400</td>
<td>-328 to +752</td>
<td>IEC584</td>
<td>±0.05°C (0.9°F)</td>
</tr>
<tr>
<td>U</td>
<td>0.5°C (0.9°F)</td>
<td>± 0.1</td>
<td>-200 to +600</td>
<td>-329 to +1112</td>
<td>DIN 43710</td>
<td>±0.05°C (0.9°F)</td>
</tr>
<tr>
<td>W3</td>
<td>1°C (1.8°F)</td>
<td>± 0.1</td>
<td>0 to +2300</td>
<td>+32 to +4172</td>
<td>ASTM E988-90</td>
<td>±0.2°C (0.36°F)</td>
</tr>
<tr>
<td>W5</td>
<td>1°C (1.8°F)</td>
<td>± 0.1</td>
<td>0 to +2300</td>
<td>+32 to +4172</td>
<td>ASTM E988-90</td>
<td>±0.2°C (0.36°F)</td>
</tr>
<tr>
<td>Ω</td>
<td>0.1 Ω</td>
<td>± 0.1</td>
<td>0 to 7000 Ω</td>
<td></td>
<td>25 Ω</td>
<td>5 mΩ</td>
</tr>
<tr>
<td>mV</td>
<td>10 μV</td>
<td>± 0.1</td>
<td>-800 to 800 mV</td>
<td></td>
<td>5 mV</td>
<td>0.5 μV</td>
</tr>
</tbody>
</table>

*whichever is greater, Total Reference Accuracy = Basic Accuracy + CJ Accuracy (T/C only)  
**for 50% of upper range value, whichever is greater  
***reference temperature 24°C

### OPERATING CONDITIONS

- Ambient temperature, rated: -40 to 85°C (-40 to 185°F)
- Humidity: 0 to 95% RH (non-cond.)
- Vibration: Max 4g over 25 to 100Hz
- Cold junction accuracy: ±1.0°C

### ELECTRICAL INPUT SPECIFICATIONS

- Supply Voltage: 8 to 35 VDC
- Power supply voltage effect: ≤ 0.005% of span per VDC
- Warm-up time: 30 sec
- Response time (programmable): 1 to 60 sec
- Galvanic isolation: 1500 VAC

### CURRENT OUTPUT SPECIFICATIONS

- Signal output range: 4 to 20 mA
- Update time: 440 msec
- Load resistance (Ω): (V supply - 8) / 0.023 A
- Vmax: 35V

### ALARM LEVELS

- Programmable: 3.5 to 4 mA downscale
- NAMUR NE43 Upscale: 23 mA
- NAMUR NE43 Downscale: 3.5 mA

### APPROVALS

- Observed Authority requirements: Standard:
  - EN 61326
  - EN 60079-0, EN 60079-15

- Ex / I.S. approval:
  - KEMA 06 ATEX 0043 X: II 3 GD, T80°C...T105°C
  - EEx nA [L] IIC T4...T6

- Applicable in zone: 2
- Max. amb. Temperature for T4: 85°C
- Max. amb. Temperature for T6: 60°C

---

*whichever is greater, Total Reference Accuracy = Basic Accuracy + CJ Accuracy (T/C only)  
**for 50% of upper range value, whichever is greater  
***reference temperature 24°C
### STT17F-BS Specifications

#### Operating Conditions
- Ambient temperature, rated: -40 to 85°C (-40 to 185°F)
- Humidity: 0 to 95% RH (non-cond.)
- Vibration: Max 4g over 25 to 100Hz
- Cold junction accuracy: ±0.5°C

#### Electrical Input Specifications
- Supply Voltage: 9 to 30 VDC
- Consumption: < 11 mA
- Warm-up time: 30 sec
- Response time (programmable): 1 to 60 sec
- Galvanic isolation: 1500 VAC
- Update time: < 400 msec
- Execution time, PID controller: < 200 msec
- Execution time, analogue input: < 50 msec

#### Output Specifications
- Foundation Fieldbus connection:
  - Foundation Fieldbus version: ITK 4.6
  - Foundation F. capability: Basic or LAS
  - Foundation F. function blocks: 2 analogue and 1 PID

#### Ex / I.S. data:

<table>
<thead>
<tr>
<th>Class I, Zone 0, EEx ia IIC, Entity/FISCO</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>IS, Class I, Division 1, Group A, B, C, D, Entity/FISCO</td>
<td>IS, Class I, Division 2, Group A, B, C, D, Entity/FISCO</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sensor Type</th>
<th>Basic Accuracy*</th>
<th>Rated Range</th>
<th>Temperature Effects per 1.0°C (1.8°F) Change in Ambient Temperature**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fixed % of reading</td>
<td>°C</td>
<td>°F</td>
</tr>
<tr>
<td>Pt100</td>
<td>0.2°C (0.36°F) ± 0.1</td>
<td>-200 to +850</td>
<td>-328 to +1562</td>
</tr>
<tr>
<td>Pt1000</td>
<td>0.2°C (0.36°F) ± 0.1</td>
<td>-200 to +850</td>
<td>-328 to +1562</td>
</tr>
<tr>
<td>Ni100</td>
<td>0.3°C (0.54°F) ± 0.1</td>
<td>-60 to +250</td>
<td>-76 to +482</td>
</tr>
<tr>
<td>Cu10</td>
<td>1.3°C (2.3°F) ± 0.1</td>
<td>-50 to +200</td>
<td>-58 to +392</td>
</tr>
<tr>
<td>B</td>
<td>1°C (1.8°F) ± 0.1</td>
<td>+400 to +1820</td>
<td>+752 to +3308</td>
</tr>
<tr>
<td>E</td>
<td>0.5°C (0.9°F) ± 0.1</td>
<td>-100 to +1000</td>
<td>-148 to +1832</td>
</tr>
<tr>
<td>J</td>
<td>0.5°C (0.9°F) ± 0.1</td>
<td>-100 to +1200</td>
<td>-148 to +2192</td>
</tr>
<tr>
<td>K</td>
<td>0.5°C (0.9°F) ± 0.1</td>
<td>-180 to +1372</td>
<td>-192 to +2502</td>
</tr>
<tr>
<td>L</td>
<td>0.5°C (0.9°F) ± 0.1</td>
<td>-200 to +900</td>
<td>-328 to +1652</td>
</tr>
<tr>
<td>N</td>
<td>0.5°C (0.9°F) ± 0.1</td>
<td>-180 to +1300</td>
<td>-192 to +2372</td>
</tr>
<tr>
<td>R</td>
<td>1°C (1.8°F) ± 0.1</td>
<td>-50 to +1760</td>
<td>-58 to +3200</td>
</tr>
<tr>
<td>S</td>
<td>1°C (1.8°F) ± 0.1</td>
<td>-50 to +1760</td>
<td>-58 to +3200</td>
</tr>
<tr>
<td>T</td>
<td>0.5°C (0.9°F) ± 0.1</td>
<td>-200 to +400</td>
<td>-328 to +752</td>
</tr>
<tr>
<td>U</td>
<td>0.5°C (0.9°F) ± 0.1</td>
<td>-200 to +600</td>
<td>-328 to +1112</td>
</tr>
<tr>
<td>W3</td>
<td>1°C (1.8°F) ± 0.1</td>
<td>0 to +2300</td>
<td>+32 to +4172</td>
</tr>
<tr>
<td>W5</td>
<td>1°C (1.8°F) ± 0.1</td>
<td>0 to +2300</td>
<td>+32 to +4172</td>
</tr>
<tr>
<td></td>
<td>0.05 Ω ± 0.1</td>
<td>0 to 10000 Ω</td>
<td>2 mΩ</td>
</tr>
<tr>
<td>mV</td>
<td>10 μV ± 0.1</td>
<td>-800 to 800 mV</td>
<td>-800 to 800 mV</td>
</tr>
</tbody>
</table>

* whichever is greater; Total Reference Accuracy = Basic Accuracy + CJ Accuracy (T/C only)
** reference temperature 23°C

Ex / I.S. approvals:
- KEMA 06 ATEX 0046
- FM, CAN / CSA
  - 3600, 3611, 3610
- CAN / CSA
  - E60079-0, E60079-11,
  - E60079-15, UL913, UL1604

Ex I.S. data:

<table>
<thead>
<tr>
<th>Class I, Zone 0</th>
<th>EEx ia IIC, Entity/FISCO</th>
<th>Unit</th>
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<tbody>
<tr>
<td>IS, Class I, Division 1, Group A, B, C, D, Entity/FISCO</td>
<td>IS, Class I, Division 2, Group A, B, C, D, Entity/FISCO</td>
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</table>

<table>
<thead>
<tr>
<th>Barrier where Po &lt; 0.84 W</th>
<th>Barrier where Po &lt; 1.3 W</th>
<th>Suitable for FISCO systems</th>
<th>Suitable for FISCO systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>UI</td>
<td>30 VDC</td>
<td>30 VDC</td>
<td>17.5 VDC</td>
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<tr>
<td>li</td>
<td>250 mADC</td>
<td>300 mADC</td>
<td>250 mADC</td>
</tr>
<tr>
<td>Pi</td>
<td>0.84 W</td>
<td>1.3 W</td>
<td>2.0 W</td>
</tr>
<tr>
<td>Li</td>
<td>1 μH</td>
<td>1 μH</td>
<td>1 μH</td>
</tr>
<tr>
<td>CI</td>
<td>2.0 nF</td>
<td>2.0 nF</td>
<td>2.0 nF</td>
</tr>
<tr>
<td>T1...T4</td>
<td>Tamb. &lt; 85°C</td>
<td>Tamb. &lt; 75°C</td>
<td>Tamb. &lt; 85°C</td>
</tr>
<tr>
<td>T5</td>
<td>Tamb. &lt; 70°C</td>
<td>Tamb. &lt; 65°C</td>
<td>Tamb. &lt; 60°C</td>
</tr>
<tr>
<td>T6</td>
<td>Tamb. &lt; 60°C</td>
<td>Tamb. &lt; 55°C</td>
<td>Tamb. &lt; 55°C</td>
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<table>
<thead>
<tr>
<th>Class I, Zone 1</th>
<th>EEx ia IIC, Entity/FISCO</th>
<th>Unit</th>
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<tbody>
<tr>
<td>IS, Class I, Division 0</td>
<td>EEx ia IIC, Entity/FISCO</td>
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</table>

<table>
<thead>
<tr>
<th>Barrier where Po &lt; 5.32 W</th>
<th>FISCO segment coupler</th>
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<tbody>
<tr>
<td>UI</td>
<td>30 VDC</td>
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<td>li</td>
<td>250 mADC</td>
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<tr>
<td>Pi</td>
<td>5.32 W</td>
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<tr>
<td>Li</td>
<td>1 μH</td>
</tr>
<tr>
<td>CI</td>
<td>2.0 nF</td>
</tr>
<tr>
<td>T1...T4</td>
<td>Tamb. &lt; 85°C</td>
</tr>
<tr>
<td>T5</td>
<td>Tamb. &lt; 70°C</td>
</tr>
<tr>
<td>T6</td>
<td>Tamb. &lt; 60°C</td>
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### STT17F-BN Specifications

<table>
<thead>
<tr>
<th>Sensor Type</th>
<th>Basic Accuracy*</th>
<th>Rated Range</th>
<th>Standards</th>
<th>Temperature Effects per 1.0°C (1.8°F) Change in Ambient Temperature**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fixed % of reading</td>
<td>°C</td>
<td>°F</td>
<td>Fixed % of reading</td>
</tr>
<tr>
<td>Pt100</td>
<td>0.2°C (0.36°F) ± 0.1</td>
<td>-200 to +850</td>
<td>-328 to +1562</td>
<td>IEC60751</td>
</tr>
<tr>
<td>Pt1000</td>
<td>0.2°C (0.36°F) ± 0.1</td>
<td>-200 to +850</td>
<td>-328 to +1562</td>
<td>IEC60751</td>
</tr>
<tr>
<td>Ni100</td>
<td>0.3°C (0.54°F) ± 0.1</td>
<td>-60 to +250</td>
<td>-76 to +482</td>
<td>DIN 43760</td>
</tr>
<tr>
<td>Cu10</td>
<td>1.3°C (2.3°F) ± 0.1</td>
<td>-50 to +200</td>
<td>-58 to +392</td>
<td>α = 0.00427</td>
</tr>
<tr>
<td>B</td>
<td>1°C (1.8°F) ± 0.1</td>
<td>+400 to +1820</td>
<td>+752 to +3308</td>
<td>IEC854</td>
</tr>
<tr>
<td>E</td>
<td>0.5°C (0.9°F) ± 0.1</td>
<td>-100 to +1000</td>
<td>-148 to +1832</td>
<td>IEC854</td>
</tr>
<tr>
<td>J</td>
<td>0.5°C (0.9°F) ± 0.1</td>
<td>-100 to +1200</td>
<td>-148 to +2192</td>
<td>IEC854</td>
</tr>
<tr>
<td>K</td>
<td>0.5°C (0.9°F) ± 0.1</td>
<td>-180 to +1372</td>
<td>-192 to +2502</td>
<td>IEC854</td>
</tr>
<tr>
<td>L</td>
<td>0.5°C (0.9°F) ± 0.1</td>
<td>-200 to +900</td>
<td>-328 to +1652</td>
<td>DIN 43710</td>
</tr>
<tr>
<td>N</td>
<td>0.5°C (0.9°F) ± 0.1</td>
<td>-180 to +1300</td>
<td>-292 to +2372</td>
<td>IEC854</td>
</tr>
<tr>
<td>R</td>
<td>1°C (1.8°F) ± 0.1</td>
<td>-50 to +1760</td>
<td>-58 to +3200</td>
<td>IEC854</td>
</tr>
<tr>
<td>S</td>
<td>1°C (1.8°F) ± 0.1</td>
<td>-50 to +1760</td>
<td>-58 to +3200</td>
<td>IEC854</td>
</tr>
<tr>
<td>T</td>
<td>0.5°C (0.9°F) ± 0.1</td>
<td>-200 to +400</td>
<td>-328 to +752</td>
<td>IEC854</td>
</tr>
<tr>
<td>U</td>
<td>0.5°C (0.9°F) ± 0.1</td>
<td>-200 to +600</td>
<td>-328 to +1112</td>
<td>DIN 43710</td>
</tr>
<tr>
<td>W3</td>
<td>1°C (1.8°F) ± 0.1</td>
<td>0 to +2300</td>
<td>+32 to +4172</td>
<td>ASTM E988-90</td>
</tr>
<tr>
<td>W5</td>
<td>1°C (1.8°F) ± 0.1</td>
<td>0 to +2300</td>
<td>+32 to +4172</td>
<td>ASTM E988-90</td>
</tr>
<tr>
<td>mV</td>
<td>0.05 Ω ± 0.1</td>
<td>0 to 10000</td>
<td>2 mΩ ± 0.1</td>
<td>2 mV ± 0.1</td>
</tr>
<tr>
<td>Vmax</td>
<td>0.05 Ω ± 0.1</td>
<td>0 to 10000</td>
<td>2 mΩ ± 0.1</td>
<td>2 mV ± 0.1</td>
</tr>
<tr>
<td>Li</td>
<td>2.0 nF</td>
<td>0.05oC (0.09oF)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cl</td>
<td>2.0 nF</td>
<td>0.05oC (0.09oF)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*whichever is greater; Total Reference Accuracy = Basic Accuracy + CJ Accuracy (T/C only)

** reference temperature 24°C

### OPERATING CONDITIONS
- Ambient temperature, rated.................. -40 to 85°C (-40 to 185°F)
- Humidity........................................ 0 to 95% RH (non-cond.)
- Vibration........................................ Max 4g over 25 to 100Hz
- Cold junction accuracy........................ ±0.5°C
- Reference temperature........................ 20 to 25°C

### ELECTRICAL INPUT SPECIFICATIONS
- Supply Voltage.................................. 9 to 32 VDC
- Consumption......................................< 11 mA
- Warm-up time..................................... 30 sec
- Response time (programmable).................. 1 to 60 sec
- Galvanic isolation................................ 1500 VAC
- Update time...................................... < 400 msec
- Execution time, PID controller............... < 200 msec
- Execution time, analogue input............... < 50 msec

### OUTPUT SPECIFICATIONS
- Foundation Fieldbus connection:
  - Foundation Fieldbus version................. ITK 4.6
  - Foundation F. capability.................... Basic or LAS
  - Foundation F. function blocks............... 2 analogue and 1 PID

### APPROVALS
- Observed Authority requirements: Standard: EMC 2004/108/EC
- Emission and immunity EN 61326
- ATEX 94/9/EC.................................. EN 60079-0, EN 60079-15
- FM, ASCN........................................ 3600, 3611
- CSA, CAN / CSA................................. C22.2 No. 142, No. 213
- CAN / CSA....................................... E60079-0, E60079-15, UL1604
- Ex / I.S. approval:
  - KEMA 06 ATEX 0045 X............................. II 3 G
  - Applicable in zone............................ 2
- FM, applicable in................................ Ni, CL I, DIV 2, Grp. A-D, T4…T6
- FNICO
- Entity, FM Installation Drawing No.......... 50016325
- CSA, applicable in............................. CL I, DIV 2, Grp. A-D, T4…T6
- CL I, Zone 2, FNICO
- Ex nA IIC, AEx nA IIC
- Entity, CSA, Installation Drawing No........ 50016325
- Applicable in zone............................ 2
- Max. amb. Temperature for T4.................. 85°C
- Max. amb. Temperature for T6.................. 60°C
- Vmax............................................. 32V
- Li.................................................. 1 μH
- Cl.................................................. 2.0 nF
STT171 Custom Configuration Data Sheet

Customer P.O. Number __________________________________________________________
Line Item _____________________________________________________________________
Model Number ________________________________________________________________
Tag Number (max 15 char) _______________________________________________________
Honeywell Sales Order Number _________________________________________________

Sensor Type:
□ Pt100
□ Ni100
□ Ohms

Output Values:

<table>
<thead>
<tr>
<th>4 mA Value:</th>
<th>20 mA Value:</th>
<th>Response time:</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ ________ °C</td>
<td>□ ________ °C</td>
<td>______ (0.33 – 60 sec)</td>
</tr>
<tr>
<td>□ ________ °F</td>
<td>□ ________ °F</td>
<td></td>
</tr>
<tr>
<td>□ ________ Ohms</td>
<td>□ ________ Ohms</td>
<td></td>
</tr>
</tbody>
</table>

Output Limits:
□ Span (4 to 20 mA)
□ Max (3.5 to 23 mA)
□ Specify Low ______ mA, High ______ mA
□ NAMUR NE 43 (3.8 to 20.5 mA)

Sensor Error Action:
□ Off
□ Specify ______ mA
□ NAMUR NE 43 upscale (23 mA)
□ NAMUR NE 43 downscale (3.5 mA)
STT173 Custom Configuration Data Sheet

Customer P.O. Number __________________________________________________________

Line Item _____________________________________________________________________

Model Number  ________________________________________________________________

Tag Number (max 15 char) _______________________________________________________

Honeywell Sales Order Number __________________________________________________

Sensor Type:

- □ Pt100
- □ Ni100
- □ Type B T/C
- □ Type E T/C
- □ Type J T/C
- □ Type K T/C
- □ Type L T/C
- □ Type N T/C
- □ Type R T/C
- □ Type S T/C
- □ Type T T/C
- □ Type U T/C
- □ Type W3 T/C
- □ Type W5 T/C

Cold Junction Compensation:

- □ Internal
- □ External / Pt100
- □ External / Ni100

Wiring:

- □ 2-wire
- □ 3-wire
- □ 4-wire

□ Ohms

□ mV

Output Values:

- 4 mA Value:
  - □ _________ °C
  - □ _________ °F
  - □ _________ mV
  - □ _________ Ohms

- 20 mA Value:
  - □ _________ °C
  - □ _________ mV
  - □ _________ Ohms

- Response time:
  - _______ (1 – 60 sec)

Output Limits:

- □ Span (4 to 20 mA)
- □ Max (3.5 to 23 mA)
- □ Specify Low ______ mA, High _____ mA
- □ NAMUR NE 43 (3.8 to 20.5 mA)

Sensor Error Action:

- □ Off
- □ Specify _____ mA
- □ NAMUR NE 43 upscale (23 mA)
- □ NAMUR NE 43 downscale (3.5 mA)
STT17H Custom Configuration Data Sheet

Customer P.O. Number __________________________________________________________

Line Item _____________________________________________________________________

Model Number ________________________________________________________________

Tag Number (max 15 char) _______________________________________________________

Honeywell Sales Order Number __________________________________________________

Sensor Input:

□ Single Sensor

□ Duplex Sensor (Average)

□ Duplex Sensor (Differential)

Sensor Type:

□ Pt100

□ Ni100

□ Type B T/C

□ Type E T/C

□ Type J T/C

□ Type K T/C

 carved

□ External / Pt100

□ External / Ni100

□ 2-wire

□ 3-wire

□ 4-wire

□ Type L T/C

□ Type N T/C

□ Type R T/C

□ Type S T/C

□ Type T T/C

□ Type U T/C

□ Type W3 T/C

□ Type W5 T/C

Cold Junction Compensation:

□ Internal

□ External / Pt100

□ External / Ni100

Output Values:

4 mA Value:     20 mA Value:   Response time:

□ __________ °C  □ __________ °C  _______ (1 – 60 sec)

□ __________ °F  □ __________ °

□ __________ mV  □ __________ mV

□ __________ Ohms  □ __________ Ohms

Output Limits:

□ Span (4 to 20 mA)

□ Max (3.5 to 23 mA)

□ Specify Low ______ mA, High _____ mA

□ NAMUR NE 43 (3.8 to 20.5 mA)

Sensor Error Action:

□ Off

□ Specify _____ mA

□ NAMUR NE 43 upscale (23 mA)

□ NAMUR NE 43 downscale (3.5 mA)
STTF Custom Configuration Data Sheet

Customer P.O. Number __________________________________________________________

Line Item _____________________________________________________________________

Model Number  ________________________________________________________________

Tag Number (max 15 char) _______________________________________________________

Honeywell Sales Order Number __________________________________________________

TRANSDUCER BLOCK PARAMETERS

Temperature Units  Sensor Input

☐ °C  ☐ Single Sensor

☐ °F  ☐ Duplex Sensor (Average)

☐ mV  ☐ Duplex Sensor (Differential #1 - #2)

☐ Ohms

Sensor Type (Sensor 1, Sensor 2):--

☐ Pt100  ☐ Type B T/C

☐ Ni100  ☐ Type E T/C

☐ Pt500  ☐ Type J T/C

☐ Pt1000 ☐ Type K T/C

☐ Ni100  ☐ Type L T/C

☐ Cu10   ☐ Type N T/C

☐ 2-wire ☐ Type R T/C

☐ 3-wire ☐ Type S T/C

☐ 4-wire ☐ Type T T/C

☐ Ohms

Sensor Error Detection:

Sensor #1

☐ Lead breakage and short circuit detection disable

☐ Lead breakage and short circuit enable

☐ Lead breakage detection enable, short circuit detection disable

☐ Lead breakage detection disable, short circuit detection enable

Sensor #2

☐ Lead breakage and short circuit detection disable

☐ Lead breakage and short circuit enable

☐ Lead breakage detection enable, short circuit detection disable

☐ Lead breakage detection disable, short circuit detection enable
Model Selection Guide
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Instructions
- Choose Availability column based on Key Number.
- A dot (.) denotes unrestricted availability.
- Select the desired Key Number based on the desired communications protocol.
- Select options and approvals from Tables.

<table>
<thead>
<tr>
<th>Key Number</th>
<th>Description</th>
<th>Selection</th>
<th>Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>STT17...</td>
<td>4-20mA Output, RTD input</td>
<td>STT171</td>
<td>V</td>
</tr>
<tr>
<td></td>
<td>4-20mA Output, universal input</td>
<td>STT173</td>
<td>V</td>
</tr>
<tr>
<td></td>
<td>HART Protocol, 4-20mA output</td>
<td>STT17H</td>
<td>V</td>
</tr>
<tr>
<td></td>
<td>Digital output, Foundation Fieldbus protocol</td>
<td>STT17F</td>
<td>V</td>
</tr>
<tr>
<td></td>
<td>Configuration tool for STT171, 173 and 17H</td>
<td>STT17C</td>
<td>V</td>
</tr>
</tbody>
</table>

Table I - Safety Approvals

<table>
<thead>
<tr>
<th>Approval Body</th>
<th>Approval Type</th>
<th>Location or Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>No approval body certifications included</td>
<td>DD</td>
</tr>
<tr>
<td>FM, CSA, ATEX</td>
<td>Intrinsic Safe ENTITY Non-incendive</td>
<td>BS</td>
</tr>
<tr>
<td></td>
<td>Intrinsically Safe ENTITY Non-incendive</td>
<td>BS</td>
</tr>
<tr>
<td></td>
<td>Intrinsically Safe Zone 0/1 Non-incendive</td>
<td>Ex II 1 GD, Ex ia IIC, T4, T6</td>
</tr>
<tr>
<td></td>
<td>Intrinsically Safe Zone 2 Non-incendive</td>
<td>Ex II 2 (1) GD, T4, T6</td>
</tr>
<tr>
<td>FM Approval</td>
<td>Intrinsically Safe ENTITY Non-incendive</td>
<td>IG</td>
</tr>
<tr>
<td></td>
<td>Intrinsically Safe ENTITY Non-incendive</td>
<td>IG</td>
</tr>
<tr>
<td></td>
<td>Intrinsically Safe Zone 0/1 Non-incendive</td>
<td>Ex II 1 GD, Ex ia IIC, T4, T6</td>
</tr>
<tr>
<td></td>
<td>Intrinsically Safe Zone 2 Non-incendive</td>
<td>Ex II 2 (1) GD, T4, T6</td>
</tr>
<tr>
<td>CSA</td>
<td>Intrinsically Safe ENTITY Non-incendive</td>
<td>2G</td>
</tr>
<tr>
<td></td>
<td>Intrinsically Safe ENTITY Non-incendive</td>
<td>2G</td>
</tr>
<tr>
<td></td>
<td>Intrinsically Safe Zone 0/1 Non-incendive</td>
<td>Ex II 1 GD, Ex ia IIC, T4, T6</td>
</tr>
<tr>
<td></td>
<td>Intrinsically Safe Zone 2 Non-incendive</td>
<td>Ex II 2 (1) GD, T4, T6</td>
</tr>
<tr>
<td>ATEX</td>
<td>Intrinsically Safe ENTITY Non-incendive</td>
<td>3G</td>
</tr>
<tr>
<td></td>
<td>Intrinsically Safe Zone 0/1 Non-incendive</td>
<td>Ex II 1 GD, Ex ia IIC, T4, T6</td>
</tr>
<tr>
<td></td>
<td>Intrinsically Safe Zone 2 Non-incendive</td>
<td>Ex II 2 (1) GD, T4, T6</td>
</tr>
</tbody>
</table>

* Ex II 1 GD or II 2 (1) GD allows for installation in potentially explosive atmospheres caused by the presence of combustible dusts only when mounted in a metal enclosure of form E according to DIN 43729 (Head-Mount enclosure) that provides a degree of protection.

TABLE II - No Option

<table>
<thead>
<tr>
<th>No Option</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>

TABLE III - Configuration & Certificates

<table>
<thead>
<tr>
<th>Configuration</th>
<th>None - Factory Default Configuration Supplied</th>
<th>0 - -</th>
<th>*</th>
<th>*</th>
<th>*</th>
<th>*</th>
<th>*</th>
<th>*</th>
<th>*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Custom Transmitter Configuration with Printed Report **</td>
<td>T - -</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Calibration</td>
<td>Custom Transmitter Calibration with Printed Report **</td>
<td>C - -</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Optional Certificates</td>
<td>No Option</td>
<td>0 - -</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Certificate of Conformance/Origin</td>
<td>-- 0</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Certificate of Conformance/Origin</td>
<td>-- 0</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>
### Model Selection Guide, (34-ST-16-01)cont.

**TABLE IV - Transmitter Housing and Integral Meters** *(Reference EN-0032 for details)*

<table>
<thead>
<tr>
<th>Housing / Field Mount</th>
<th>Selection</th>
<th>Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Housing Supplied</td>
<td>E___</td>
<td>0___ *___ *___ *___ *___</td>
</tr>
<tr>
<td>Aluminum with Beige Epoy Coating</td>
<td>T___</td>
<td>d___ d___ d___</td>
</tr>
<tr>
<td>315 Stainless Steel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head Mount</td>
<td>C___</td>
<td>g___ g___ g___ g___</td>
</tr>
<tr>
<td>Cable/Conduit Entry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Applicable - No Housing Supplied</td>
<td><em>0</em></td>
<td>*___ *___ *___ *___</td>
</tr>
<tr>
<td>M20 x 1.5 Cable/Conduit Entry</td>
<td><em>M</em></td>
<td>*___ *___ *___ *___</td>
</tr>
<tr>
<td>Integral Meter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Integral Meter Supplied</td>
<td><em>-</em></td>
<td>*___ *___ *___ *___</td>
</tr>
<tr>
<td>E___ Meter for Field Mount Housing</td>
<td><em>-</em></td>
<td>e___ e___ e___ e___</td>
</tr>
</tbody>
</table>

**TABLE V - Optional Equipment**

<table>
<thead>
<tr>
<th>Mounting / M20 adaptors</th>
<th>Selection</th>
<th>Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>No mounting bracket</td>
<td>D___</td>
<td><em>0</em> *___ *___ *___ *___</td>
</tr>
<tr>
<td>Carbon steel pipe mounting bracket for 2&quot; pipe</td>
<td>M___</td>
<td>e___ e___ e___</td>
</tr>
<tr>
<td>Stainless Steel mounting bracket for 2&quot; pipe</td>
<td>S___</td>
<td>e___ e___ e___</td>
</tr>
<tr>
<td>Spring loading mounting set</td>
<td>L___</td>
<td>f___ f___ f___ f___</td>
</tr>
<tr>
<td>DIN rail mounting clip (top hat or G rail)</td>
<td>D___</td>
<td>f___ f___ f___</td>
</tr>
<tr>
<td>1 adaptor for M20 x 1.5 wiring entry</td>
<td><em>1</em></td>
<td>*___ *___ *___ *___</td>
</tr>
<tr>
<td>2 adaptors for M20 x 1.5 wiring entry</td>
<td><em>2</em></td>
<td>*___ *___ *___ *___</td>
</tr>
<tr>
<td>3/4&quot;NPT adaptors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 adaptor for 3/4&quot;NPT wiring entry</td>
<td>9_</td>
<td>*___ *___ *___ *___</td>
</tr>
<tr>
<td>Lightning Protection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No lightning protection supplied</td>
<td><em>-</em></td>
<td>*___ *___ *___ *___</td>
</tr>
<tr>
<td>Externally Mountable to Field Mount Housing</td>
<td><em>-</em></td>
<td>e___ e___ e___ e___</td>
</tr>
<tr>
<td>Internal lightning protection</td>
<td><em>-</em></td>
<td>*___ *___ *___ *___</td>
</tr>
</tbody>
</table>

**TABLE VI - Additional Features**

<table>
<thead>
<tr>
<th>No Selection</th>
<th>Selection</th>
<th>Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td></td>
<td>*___ *___ *___ *___</td>
</tr>
<tr>
<td>Optional Extended Warranty</td>
<td>W1</td>
<td>*___ *___ *___</td>
</tr>
<tr>
<td>316 SS Wired-on Customer I.D. Tag (4 lines, 28 chars. per line, customer specified information)</td>
<td>TG</td>
<td>*___ *___ *___</td>
</tr>
<tr>
<td>316 SS Wired-on Customer I.D. Tag (blank)</td>
<td>TB</td>
<td>*___ *___ *___</td>
</tr>
<tr>
<td>Operator's Manual</td>
<td>M1</td>
<td>*___ *___</td>
</tr>
<tr>
<td>STT17 Version; English, French, German Language</td>
<td>M3</td>
<td>*___ *___</td>
</tr>
<tr>
<td>STT17H Version; English, French, German Language</td>
<td>MF</td>
<td>*___ *___</td>
</tr>
</tbody>
</table>

**RESTRICTIONS**

<table>
<thead>
<tr>
<th>Restriction Letters</th>
<th>Available Only With</th>
<th>Not Available With</th>
</tr>
</thead>
<tbody>
<tr>
<td>b</td>
<td>VI</td>
<td>Selection</td>
</tr>
<tr>
<td>d</td>
<td>IV</td>
<td>Selection</td>
</tr>
<tr>
<td>e</td>
<td>IV</td>
<td>E___ or T___</td>
</tr>
<tr>
<td>f</td>
<td>IV</td>
<td>0___</td>
</tr>
<tr>
<td>g</td>
<td>IV</td>
<td>CE</td>
</tr>
</tbody>
</table>

**ACCESSORIES**

<table>
<thead>
<tr>
<th>DIN rail clip</th>
<th>Part Number</th>
<th>Selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>50017850-001</td>
<td>*___ *___ *___</td>
<td></td>
</tr>
</tbody>
</table>

**If Custom Configuration option "T" or the Custom Calibration option "C" is ordered, the configuration or calibration information required must be entered as a note on the order. Any of the following elements can be included, based on the selected option:

(STT17, STT17I, STT17H) Tag Number, CJC, Sensor Type, Sensor Wiring, Temperature Units, UR/LR, Output Limits, Sensor Error Action, Response Time,

(STT17F) Tag Number, Sensor Type, UR/LR, Burnout - High or Low, Response Time

**Refer to Part Price List (PPL) or ICOM for pricing.**
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