

## BHTF HIGH TEMPERATURE FILL OPTION

### ALTERNATE FILL FOR DYNISCO STANDARD MELT PRESSURE TRANSDUCERS

#### DESCRIPTION

Dynisco melt pressure sensors with the new high-temperature fill offers an alternative where standard mercury fill is not allowed in processing. This new fill is usable in continuous high-temperature 325°C processes such as polymer production and extrusion, and able to handle peaks of 350°C over short periods.

#### FEATURES

- Pressure ranges 0-1k to 0-10k psi (0-70 bar to 0-700 bar)
- Series with accuracy 0.5% FSO BFSL
- 3.33mV/V signal output
- 2-, 3-, 4- amplified signal output
- 4-20mA, 1-6/11VDC, 0-5/10VDC
- Internal Shunt Calibration 80% FSO
- Zero and Span adjustment

#### AVAILABLE ON MODEL NUMBERS:

SPX-2, SPX-3, SPX-4, SPX-5, PT46X4, PT46X5, PT46X6, PT450, PT460, PT420A, PT467E, PT462E, PT460, MDA420, MDA460, MDT422

#### COMMON TECHNICAL DATA FOR TRANSDUCERS WITH OPTION BHTF

##### Available Pressure Ranges, BAR:

0-70, 0-100, 0-200, 0-350, 0-500, 0-700

##### Accuracy: 0.5% FSO BFSL

##### Reproducibility: $\pm 0.2\%$ FS

##### Overload Capacity: 2 x full range

##### Recommended Recalibration Cycle: Yearly

##### Material in Contact with the Medium:

DyMAX coated 15-5 PH stainless steel

##### Maximum Continuous Diaphragm Temperature: 325°C

##### Maximum Peak Diaphragm Temperature: 350°C

##### Zero-Shift from Temp. Fluctuations: $\pm 45$ psi / 100°C

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| FILL MATERIAL COMPARISON      | New Hg-Free Fill                | Food-Grade Oil                  | NaK                               | Mercury [Hg]                      | Vertex [Gen I]                  |
|-------------------------------|---------------------------------|---------------------------------|-----------------------------------|-----------------------------------|---------------------------------|
| MAXIMUM TEMPERATURE           | -20°C (-4°F) to 350°C (662°F)   | -20°C (-4°F) to 275°C (527°F)   | -10°C (14°F) to 530°C (986°F)     | -40°C (-40°F) to 400°C (752°F)    | -40°C (-40°F) to 400°C (752°F)  |
| ZERO TEMP. SHIFT PER 100°C    | 44 PSI<br>0.3 MPa<br>3 BAR      | 65 PSI<br>0.45 MPa<br>4.5 BAR   | 51 PSI<br>0.35 MPa<br>3.5 BAR     | 29 PSI<br>0.2 MPa<br>2 BAR        | 2% FS                           |
| MINIMUM AVAILABLE PRESSURE    | 1,000 PSI<br>7 MPa<br>70 BAR    | 1,000 PSI<br>7 MPa<br>70 BAR    | 500 PSI<br>3.5 MPa<br>35 BAR      | 250 PSI<br>1.75 MPa<br>17.5 BAR   | 250 PSI<br>1.75 MPa<br>17.5 BAR |
| MAXIMUM AVAILABLE PRESSURE    | 10,000 PSI<br>70 MPa<br>700 BAR | 10,000 PSI<br>70 MPa<br>700 BAR | 15,000 PSI<br>100 MPa<br>1000 BAR | 30,000 PSI<br>200 MPa<br>2000 BAR | 10,000 PSI<br>70 MPa<br>700 BAR |
| HAZARDOUS LOCATIONS           | ✓                               | ✓                               | ✗                                 | ✓                                 | ✓                               |
| REACH AND ROHS                | ✓                               | ✓                               | ✓                                 | ✗                                 | ✓                               |
| ATEX CERTIFICATION            | IS/Ex D                         | IS/Ex D                         | ✗                                 | IS/Ex D                           | IS                              |
| FDA APPROVAL                  | ✗                               | ✓                               | ✗                                 | ✗                                 | ✓                               |
| FORM FACTOR                   | Any                             | Any                             | Any                               | Any                               | Limited                         |
| LINEARITY [BFS], % FULL SCALE | 0.5%                            | 0.5%                            | 0.25% - 0.5%                      | 0.25%                             | 0.25%                           |
| MAXIMUM SNOOT / FLEX LENGTH   | 100cm                           | 100cm                           | 100cm                             | 175cm                             | 200cm                           |



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Refer to [www.dynisco.com](http://www.dynisco.com) for access to Operator Manual and other support documentation.

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