

# PT46X5 Pressure Sensors

*IDEAL FOR GENERAL PURPOSE  
MELT PRESSURE MEASUREMENTS*



## Description

The PT46X5 Series transmitter is a  $\pm 0.5\%$  sensor ideal for general purpose melt pressure measurements requiring simple installation, repeatability and reliability. The PT46X5 transmitters provide the industry standard 0 - 5 Vdc amplified signal designed to work with DCS and PLCs, 1 - 6 Vdc outputs are also available. The PT46X5 comes equipped with zero and span pots to adapt the transmitter to process conditions. Optional thermocouple or RTD configurations are available to provide melt temperature. The PT46X5 features a 1/2-20 UNF thread for installation in standard transducer mounting holes and can be supplied with a variety of electrical connections.

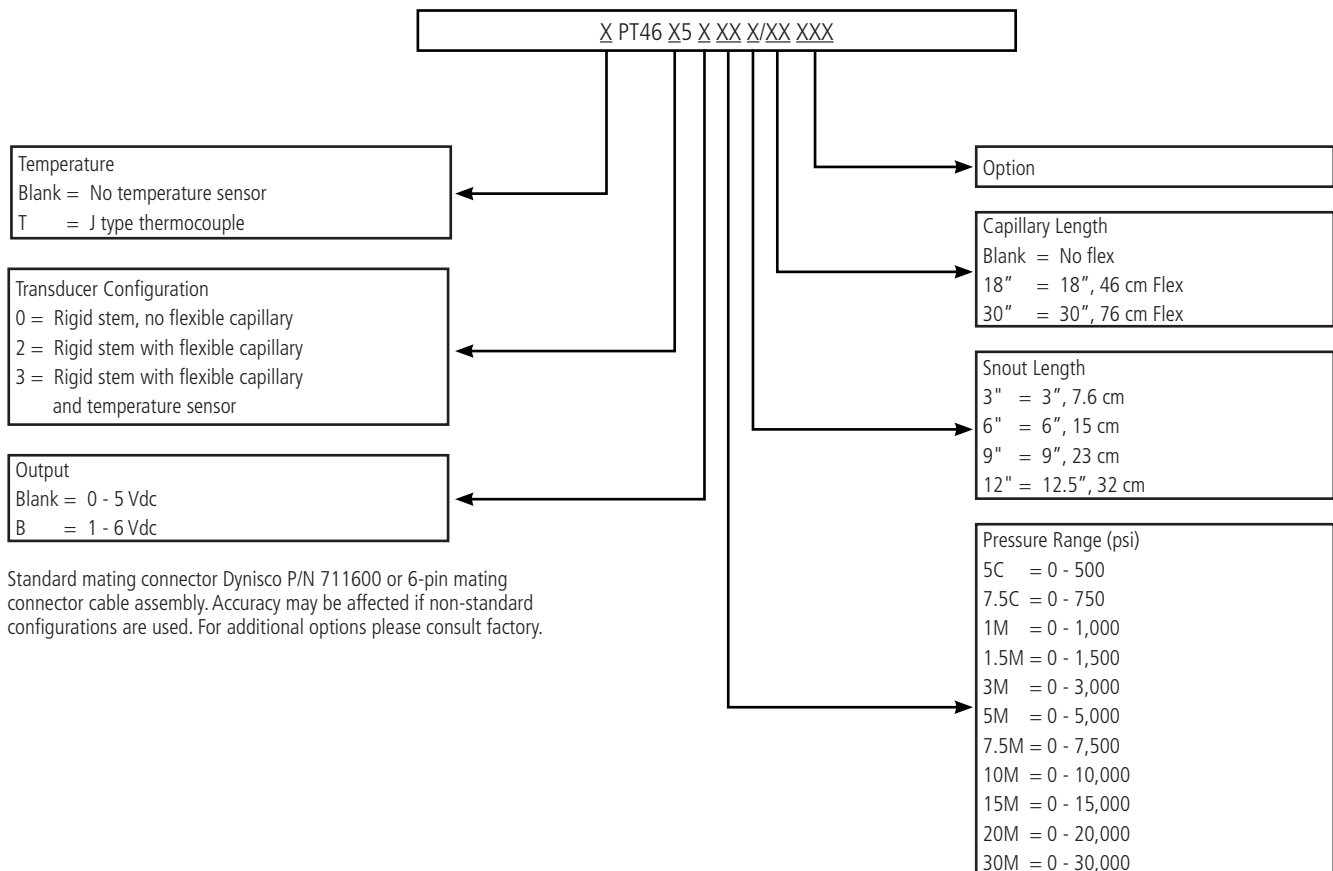
## Features

- Adjustable zero and span
- Accuracy better than  $\pm 0.5\%$
- DyMax® coated stainless steel wetted parts
- 0 - 5 Vdc and 1 - 6 Vdc outputs
- 0 - 500 to 0 - 30,000 psi
- Internal 80% shunt calibrations

| Performance Characteristics                |  |
|--|--|
| <b>Outputs:</b>                            |  |
| PT46X5:                                    | 0 - 5 Vdc  |
| PT46X5B:                                   | 1 - 6 Vdc  |
| <b>Input Voltage:</b>                      | 11 - 36 Vdc  |
| <b>Accuracy:</b>                           | ±0.5% FSO combined error (Including Linearity, Repeatability & Hysteresis) |
| <b>Repeatability:</b>                      | ±0.2% FSO  |
| <b>Configuration:</b>                      | Four-arm bonded foil Wheatstone bridge strain gage                         |
| <b>Load Resistance:</b>                    | 2,000 Ohms minimum   |
| <b>Over Pressure:</b>                      | 2X FSO or 35,000 psi, (whichever is less)                                  |
| <b>Zero Balance Adjustment Range:</b>      | ±15%   |
| <b>Span Adjustment Range:</b>              | ±15%   |
| <b>Internal Shunt Calibration (R-Cal):</b> | 80% FSO ±0.5%  |

| Temperature & Mechanical Characteristics       |                                       |
|--|---------------------------------------|
| <b>Max Diaphragm Temperature:</b>              | 750°F (400°C)                         |
| <b>Zero Shift (due to temperature change):</b> | 25 psi/100°F Typical (45 psi/100°C)   |
| <b>Electronics Operating Temperature:</b>      | -20° to 185°F (-29° to 85°C)          |
| <b>Zero Shift (due to temperature change):</b> | ± 0.05% FS/°F max (± 0.10% FS/°C max) |
| <b>Span Shift (due to temperature change):</b> | ± 0.02% FS/°F max (± 0.04% FS/°C max) |
| <b>Mounting Torque:</b>                        | 500 inch/lbs. max                     |
| <b>Standard Wetted Parts:</b>                  | Dymax® coated 15-5 PH SST             |

## Ordering Guide for PT46X5 Series



# Dimensions

