



FM APPROVED MELT PRESSURE TRANSMITTER WITH 4-20 mA OUTPUT

1/2-14 NPT
conduit
fitting

MODEL 0140W



MODEL 0140W

The 0140W converts applied pressure at the point of measurement to a proportional voltage output signal. They utilize high sensitivity, semiconductor strain gages for optimum performance. An amplifier converts the strain gage signal to a 4-20 mA output. The small capillary tube filled with a special medium isolates the amplifier from potential thermal damage. The rigid stem makes installation fast and easy.

MODEL 0141W



MODEL 0141W

The 0141W offers all the advantages of Model 0140W, but incorporates an 18-inch flexible capillary tubing with a stainless steel armored jacket between the amplifier housing and the stem.

These transmitters are designed for applications requiring further thermal isolation or where installation would be otherwise difficult or impractical.

MODEL 0142W



MODEL 0142W

The 0142W provides simultaneous measurement of pressure and temperature at a single point.

Only one mounting hole is required for installation. The thermocouple or optional RTD is protected from process hazards and can be replaced without interrupting the pressure signal. Pressure performance is identical to Models 0140W and 0141W.

FEATURES

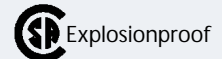
The ISI 0140W Series Melt Pressure Transmitter entire amplifier/sensor assembly is packaged in an all metal welded enclosure with a conduit cable fitting. This metal enclosure is completely sealed from the atmosphere, and is approved to meet hazardous area requirements.

- Factory mutual approved for Class I, Div.1, Groups B, C, D
- High level output 2-wire, 4-20 mA
- Better than 0.5% combined error
- Fluid filled system for temperature stability
- Armoloy coated diaphragm
- Other diaphragms available

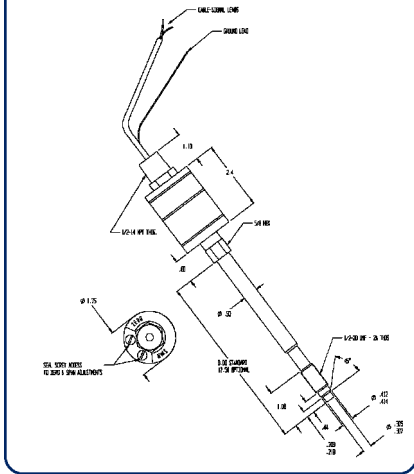
APPROVALS



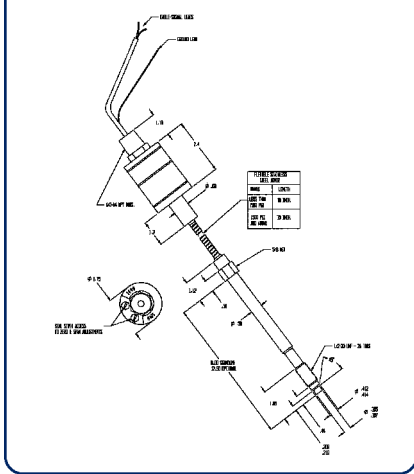
NEMA 4/IP65



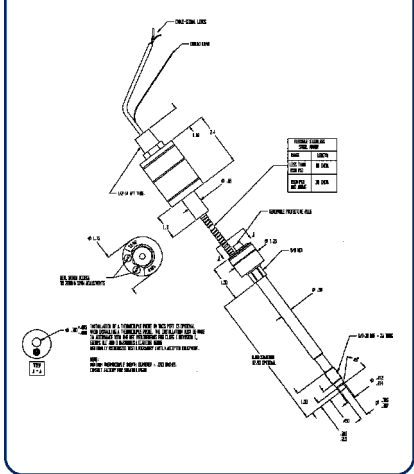
MODEL 0140W



MODEL 0141W



MODEL 0142W



DEVICE SPECIFICATIONS

MECHANICAL RANGES

| | | | | | |
|---------|------|---------|-------|----------|-------|
| PSIG | BAR | PSIG | BAR | PSIG | BAR |
| 0-500 | 0-35 | 0-1,500 | 0-100 | 0-7,500 | 0-500 |
| 0-750 | 0-50 | 0-3,000 | 0-200 | 0-10,000 | 0-700 |
| 0-1,000 | 0-70 | 0-5,000 | 0-350 | | |

Combined Error/Error Band $\pm 0.5\%$ of full scale output
 $\pm 1.0\%$ of full scale output for ranges 0-1000 PSIG and below

Repeatability $\pm 0.1\%$ of full scale output

Overload Capability For ranges up to and including 5,000 PSIG: 3 times full scale output
 For ranges above 5,000 PSIG: 2 times full scale output

Mounting Torque 500 inch-pounds maximum (120 inch-pound recommended)

Diaphragm Material 15-5PH stainless steel (Armoloy coated)

ELECTRICAL

Output 4-20 mA

Input Voltage 18-36 Vdc (24 Vdc recommended)

Zero Balance $\pm 25\%$ full scale output

Load Resistance 1200 maximum at 36 Vdc
 600 maximum at 24 Vdc

Regulation No change in output up to rated load and rated voltage, e.g. 1200 ohms at 36 Vdc

TEMPERATURE EFFECTS ON AMPLIFIER HOUSING

Maximum Temperature 185°F or 85°C

Compensated Temperature Range 0°F to 150°F or -18°C to 65°C

Zero Shift 2.0%/100°F or 2.0%/100°C

Sensitivity Shift 1.0%/100°F or 2.0%/100°C

TEMPERATURE ON DIAPHRAGM

Maximum Temperature 750°F or 400°C

Zero Shift 15 PSIG/100°F or 27 PSIG/100°C

CONNECTIONS

Mounting 1/2-20 UNF thread (standard)
 M18x1.5 (also available) 0140W/0141W only

Electrical 1/2-14 NPT conduit fitting

FM Approved Diaphragms M109: Hastalloy diaphragm threads for corrosive environments
 M261: Inconel diaphragm with proprietary coating for abrasive environments

ORDERING GUIDE

MELT PRESSURE TRANSMITTER

When ordering, specify: ISI Model, Code #, Stem Length and Flex Length*

Example: ISI 0140W-5.0T-6 or 0141W-5.0T-6/18

| ISI MODEL | PRESSURE RANGE | | | STEM LENGTH** | FLEX LENGTH** | |
|-----------|----------------|--------|-------|---------------|---------------|--------|
| | PSIG | CODE # | BAR | | | |
| ISI 0140W | 0-500 | 0.50 T | 0-35 | 0.35 CB | 6 = 6 in. | 18 in. |
| | 0-750 | 0.75 T | 0-50 | 0.50 CB | | |
| | 0-1,000 | 1.0 T | 0-75 | 0.75CB | | |
| ISI 0141W | 0-1,500 | 1.5 T | 0-100 | 1.0 CB | 12 =12.5 in. | 24 in. |
| | 0-3,000 | 3.0 T | 0-200 | 2.0 CB | | |
| | 0-5,000 | 5.0 T | 0-350 | 3.5 CB | | |
| ISI 0142W | 0-7,500 | 7.5 T | 0-500 | 5.0 CB | | 30 in. |
| | 0-10,000 | 10.0 T | 0-700 | 7.0 CB | | |

*(0141W and 0142W version only) **(other lengths available)