The CSA approved Model 577066 temperature transmitter measures resistance changes as a function of temperature. Using a three wire 100 ohm platinum RTD sensor, the temperature is proportionally converted to a 4 to 20 mA output current. The transmitter is housed in an explosion-proof conduit enclosure. A fitting on the enclosure allows a variety of RTD probe and thermowell lengths to be attached for close-couple mounting.

TECHNICAL SPECIFICATIONS

INPUT RANGE:
-300 To +900 °F 100 ohm Platinum
50 °F Span Minimum (30 °F Optional)

OUTPUT RANGE:
4 To 20 mAdc

ACCURACY:
± 0.25% Of Span With .1% RTD Probe

SUPPLY VOLTAGE:
24 Vdc Nominal (12 To 36 Vdc), Reverse Polarity Protected

COMPLIANCE VOLTAGE EFFECT:
.005% Of Span Over 12 To 36 Vdc Range

MAX LOAD RESISTANCE:
R_max = (V_supply - 12V)/20 mA, Typical:
600 ohm @ 24 Vdc.

LINEARIZATION OF PLATINUM CURVE:
Typically Within .1% Of Span Input To Output

OPERATING TEMPERATURE RANGE:
-20 TO +140 °F

STABILITY:
Zero -.01%/°F; Span -.01%/°F

FEATURES

- CSA Approvals:
  Intrinsically Safe for Hazardous Locations: CL I GR A,B,C,D
  CL II GR E,F,G CL III
- Two Wire Operation
- Excellent Repeatability
- Long Term Stability

TRANSMITTER HOUSING:
Copper Free Aluminum (K-27) Painted Blue Polane

ZERO AND SPAN ADJUSTMENT:
±20% Of Span Typical

PROCESS CONNECTION:
1/2” NPT Standard
NOTES:
1. 100 OHM PLATINUM SENSOR, DIN 43760 a=0.003850 OHM/OHM/DEG C
   WITH 316 STAINLESS STEEL SHEATH.
2. ISOLATION 100 MEGOHMS @ 100 VDC.
3. TEMPERATURE RANGE:
   ELEMENT: 750 DEG F (400 DEG C) CONTINUOUS,
   1022 DEG F (550 DEG C) MAXIMUM.
   EXTENSION WIRE, LIMITED TO 221 DEG F (105 DEG C)
4. EXPLOSION PROOF HOUSING NEMA 7/9,
   COPPER FREE ALUMINUM, SHERWIN WILLIAMS
   NITRO BLUEPOLE FINISH.
5. WELLS ARE 304 STAINLESS STEEL.
6. RESPONSE TIME: STEP CHANGE 25 DEG C TO 100 DEG C IN STILL
   WATER MEDIA WITH 2" IMMERSION.
   50% 25 SEC. 55 SEC.
   90% 90 SEC. 175 SEC.
   100% 210 SEC. 410 SEC.