



TEMPERATURE TRANSMITTER MODEL 571006

The 571006 linearized thermocouple transmitter measures thermocouple voltages as a function of temperature and provides a linearized 4 to 20MADC output loop signal. The transmitter is housed in an explosion-proof enclosure, certified to NEMA 4/7/9, CL 1, GR-B, C, & D; CL 2, GR-E & G and provides two 1/2 inch NPT wiring ports. The enclosure is constructed of copper-free aluminum and is finished in safety-blue epoxy. The spring loaded thermocouple sensor is integrally mounted, permitting close-coupled mounting at the point of measurement.

TECHNICAL SPECIFICATIONS

INPUT RANGE:

T/C Type "J" 0 to 1300 Degrees F Max.

T/C Type "K" 0 to 2400 Degrees F Max.

T/C Type "T" 0 to 700 Degrees F Max.

T/C Type "E" 0 to 1800 Degrees F Max.

"K" Type Thermocouple Standard

All ANSI Types Available

INPUT SPAN:

5 Millivolt Min.

OUTPUT:

4 to 20MADC into 600 Ohms @ 24VDC

ACCURACY:

+/-0.2 % of Span

LINEARITY:

Type "J" (Iron-Constantan)

0 to 400 Degrees F +/-0.15% Nominal

400 to 800 Degrees F +/-0.02% Nominal

800 to 1300 Degrees F +/-0.20% Nominal

Type "K" (Chromel-Alumel)

0 to 800 Degrees F +/-0.09% Nominal

800 to 1600 Degrees F +/-0.11% Nominal

1600 to 2400 Degrees F +/-0.20% Nominal

Type "T" (Copper-Constantan)

200 to 400 Degrees F +/-0.19% Nominal

300 to 600 Degrees F +/-0.20% Nominal

400 to 700 Degrees F +/-0.18% Nominal

Type "E" (Chromel-Constantan)

200 to 400 Degrees F +/-0.14% Nominal

400 to 800 Degrees F +/-0.10% Nominal

800 to 1800 Degrees F +/-0.14% Nominal

POWER:

12to 36 Volts DC, 24 Volts DC Nominal

COMPENSATED TEMPERATURE RANGE:

-20 to + 140 Degrees F

ZERO AND SPAN EFFECT:

Less than .02% per Degree F

ZERO AND SPAN ADJUSTMENT:

+/- 20% of Span Typical

ENCLOSURE:

NEMA 4/7/9 Gasketed Housing

CL-1, GR-B, C, D; CL-2, GR-E and G

Two 1/2 Inch NPT Wiring Ports

Copper-Free Aluminum

"Safety Blue". Epoxy Finish

WIRING CONNECTIONS:

4 Position, Box Clamp Terminal Block with

(4) #18 Flying Leads

EMI/RFI IMMUNITY:

Less Than 0.8% of Span at 10V/M

Per SAMA: 2 ac: 0.8% 2ac: 1.25%

Ref: Standard PMC 33.1-1987

TEMPERATURE TRANSMITTER



MODEL 571006

STANDARD MODELS

571006-	..U..	=	1.5"	-304SS
571006-	..U..	=	2.5"	-304SS
571006-	..U..	=	4.5"	-304SS
571006-	..U..	=	7.5"	-304SS
571006-	..U..	=	10.5"	-304SS
571006-	..U..	=	13.5"	-304SS
571006-	..U..	=	16.5"	-304SS
571006-	..U..	=	22.5"	-304SS

1/2-Inch NPT Process Connection

Standard

Optional 3/4 and 1 Inch Process

Connections

Optional 316 SS Thermowell

FEATURES

Spring Loaded T/C

Sensor Linearized

Output

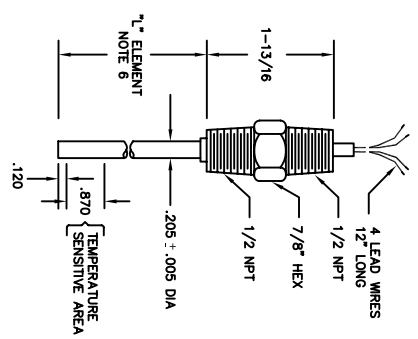
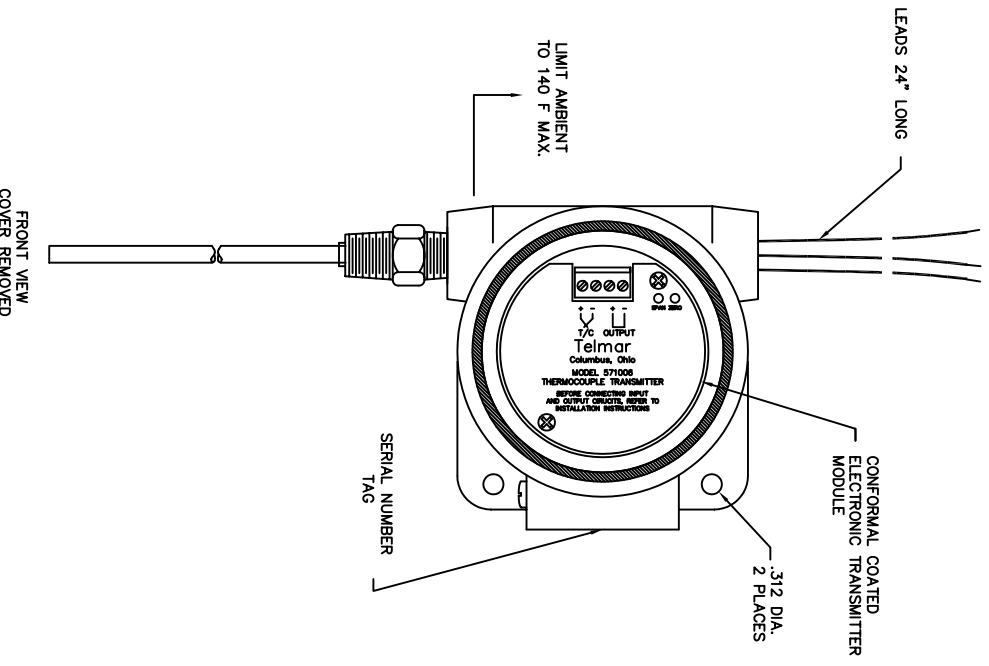
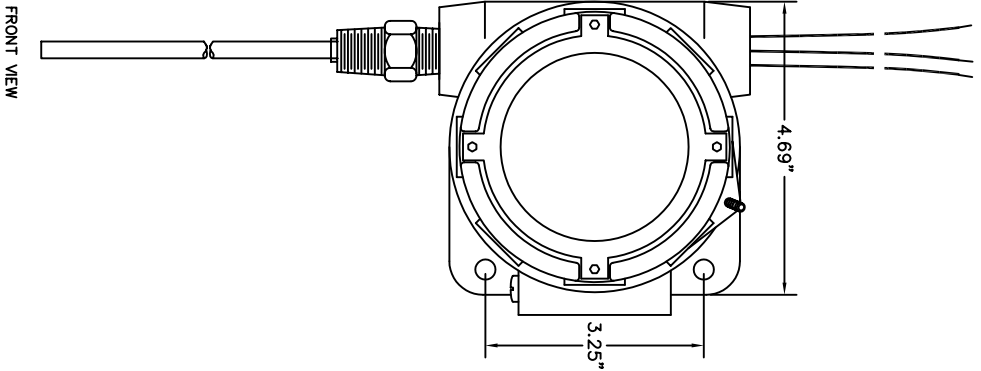
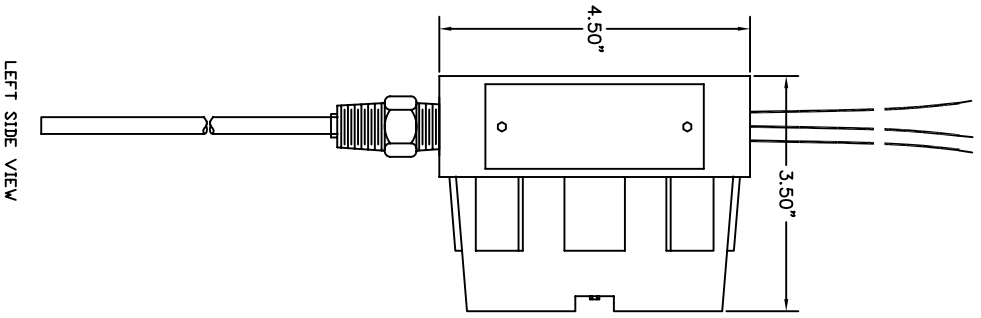
Epoxy Finish

Group "B" Housing

1/2" Digital Display

Selectable F or C

Display



- NOTES:
1. THERMOCOUPLE: PER CUSTOMER SPECIFICATION.
 2. ISOLATION 100M OHMS @ 500 VDC.
 3. TEMPERATURE RANGE: LIMITED TO N.I.S.T. SPECIFICATIONS
EXTENSION WIRES: LIMITED TO 400 F(204 C).
EXPLOSION PROOF HOUSING NEMA 4/7/9, COPPER FREE ALUMINUM.
FINISH: DRY POWDER COAT--SAFETY BLUE.

5. RESPONSE TIME: STEP CHANGE 25° C TO 100° C IN STILL WATER MEDIA WITH 2" IMMERSION.
% F.S. THERMOCOUPLE ONLY THERMOCOUPLE & WELL
50% 4 SEC.
90% 5 SEC.
100% 8 SEC.
18 SEC.
50 SEC.
125 SEC.
6. "L" DIMENSION PER CUSTOMER SPECIFICATION.

DWG. NO. SD-D-0174A
REVISIONS
A BRAUN 02/28/97 RML

DWG. NO. SD-D-0174A

<p>DATE: 02/28/97 DRAWN BY: J. BRAUN CHECKED BY: J. BRAUN APPROVED BY: J. BRAUN</p>	<p>PROJECT OR ORDER NUMBER: 571001 T/C</p>	<p>COMPANY: Columbus Drive 43230</p>
<p>FILE NAME: E:\00000231.DWG</p>	<p>TITLE: TRANSMITTER</p>	<p>SCALE: 1"=1"</p>
<p>DATE: 02/28/97</p>	<p>DESIGNER: J. BRAUN</p>	<p>DATE: 02/28/97</p>
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