

WHEN ORDERING SPECIFY ESSENTIAL INFORMATION.

AS7018PD1000Z4A1C1A1AG1 ← EXAMPLE OF MODEL NO.

REVISIONS

REV	DESCRIPTION	DATE	ECO	DR	APPD
F	MAJOR REVISION OF MODEL NO. MAKEUP	07-19-16	2456372	WAB	RJB

AS701 BASE MODEL NUMBER:

PROBE DIAMETER & NUMBER ELEMENTS

6.000mm [.236]		6.350mm [.250]		4.788mm [.188]		5.461mm [.215]	
SIMPLEX	DUPLEX	SIMPLEX	DUPLEX	SIMPLEX	DUPLEX	SIMPLEX	DUPLEX
AS700	AS701	AS720	AS721	AS740	AS741	AS760	AS761

8 FITTING CODE:

SEE FITTING CODE TABLE.

FITTING CODE TABLE (SEE PAGE 2 & 3 FOR FITTING EXAMPLES):

PD SENSING ELEMENT:

SEE SENSING ELEMENT TABLE.

1000 INSERTION DEPTH **IN MILLIMETERS:**

MIN INSERTION DEPTH = 27mm [1.06];
MAX INSERTION DEPTH = 3000mm [118.11].

Z NUMBER OF LEADS PER ELEMENT AND LEAD COLORS:

MINCO U.S. LEAD COLORS

Y = 2 LEADS PER ELEMENT;

Z = 3 LEADS PER ELEMENT;

X = 4 LEADS PER ELEMENT;

IEC/EN 60751 LEAD COLORS

V = 2 LEADS PER ELEMENT (DUPLEX ONLY);

W = 3 LEADS PER ELEMENT;

U = 4 LEADS PER ELEMENT (DUPLEX ONLY).

4 CONDUIT THREAD:

3 = 1/2 - 14 NPT (PER ANSI/ASTM B1.20.1);

4 = 3/4 - 14 NPT (PER ANSI/ASTM B1.20.1);

5 = M20 X 1.5 (PER ISO 965).

A CONNECTION HEAD:

A = ALUMINUM (IP65, NEMA 3 & 4);

S = STAINLESS STEEL (IP66, NEMA 3, 4, 4X);

I = ALUMINUM WITH INDICATOR, EPOXY COATED (IP66, NEM.

1 EXTENSION LENGTH:

0 = NO EXTENSION;

1 = 1/2 NPT NIPPLE/UNION, 1.8" (46mm) LONG (FG537);

2 = 1/2 NPT NIPPLE/UNION, 2.6" (66mm) LONG (FG579L20);

3 = 1/2 NPT NIPPLE/UNION, 3.6" (91mm) LONG (FG579L30);

4 = 1/2 NPT NIPPLE/UNION, 4.6" (117mm) LONG (FG579L40);

5 = 1/2 NPT NIPPLE/UNION, 5.6" (142mm) LONG (FG579L50);

6 = 1/2 NPT NIPPLE/UNION, 6.6" (168mm) LONG (FG579L60);

7 = 1/2 NPT NIPPLE/UNION, 7.6" (193mm) LONG (FG579L70);

8 = 1/2 NPT NIPPLE/UNION, 8.6" (218mm) LONG (FG579L80);

9 = 1/2 NPT NIPPLE/UNION, 9.6" (244mm) LONG (FG579L90).

C1 THERMOWELL MOUNTING TYPE & MOUNTING SIZE:

C1 = 2" RF FLANGE TYPE, 300# TAPERED;

X0 = NO THERMOWELL.

SEE THERMOWELL TABLE.

A THERMOWELL MATERIAL:

X = NO THERMOWELL;

A = TYPE 316/316L SST;

B = TYPE 304 SST.

CONTACT FACTORY FOR COMPLETE LIST.

TO ORDER ASSEMBLY WITHOUT TRANSMITTER, STOP HERE.

TO ORDER WITH TRANSMITTER, SPECIFY FROM THE FOLLOWING.

1 TRANSMITTER MODEL (SINGLE TRANSMITTER

AVAILABLE ON DUPLEX MODELS):

0 = TT111 (MINIATURE, 2-LEAD ONLY);

1 = TT518 (HOCKEY PUCK, 3-LEAD ONLY);

4 = TT211 (MINIATURE, 2-LEAD ONLY);

5 = TT246** (HOCKEY PUCK, 3-LEAD ONLY, VOLTAGE OUTPUT);

6 = TT520 (HOCKEY PUCK, PROGRAMMABLE);

7 = TT521 (HOCKEY PUCK, HART PROGRAMMABLE);

8 = TT522** (HOCKEY PUCK, PROFIBUS/FIELDBUS PROGRAMMABLE).

**NOT FOR USE WITH I=ALUMINUM WITH INDICATOR HEAD OPTION.

AG TRANSMITTER TEMPERATURE CODE (NOT NEEDED IF TT522 IS SPECIFIED):

AG = -17.8°C TO 260°C (0°F TO 500°F).

CONTACT FACTORY FOR COMPLETE LIST.

1 TRANSMITTER CALIBRATION (NOT NEEDED IF TT522 IS SPECIFIED):

1 = CALIBRATION TO NOMINAL;

2 = MATCH CALIBRATED TO 0.75% TOTAL SYSTEM ACCURACY

(NOT AVAILABLE WITH DUPLEX MODELS).

CONTACT FACTORY FOR COMPLETE LIST.

PROCESS THREAD AND FITTING TYPE			AVAILABLE DIA			
CODE	PROCESS THREAD	FITTING TYPE	6.350 [.250]	6.000 [.236]	4.788 [.188]	5.461 [.215]
4	1/2 NPT	ADJUSTABLE SPRING-LOADED	•	•	•	•
6	G1/2*	ADJUSTABLE SPRING-LOADED	•	•	•	•
8	1/2 NPT	FIXED SPRING-LOADED	•	•		

*G1/2 THREADS NOT FOR USE WITH EXTENSION FITTINGS OR THERMOWELLS.

SENSING ELEMENT TABLE:

ELEMENT TYPE		AVAILABLE LEAD CONFIGURATIONS					
		Y	Z	X	V	W	U
CA	10 OHM ±.2% COPPER, 1.42743 TCR (SIMPLEX)		•				
CC	10 OHM ±.5% COPPER, 1.42743 TCR (DUPLEX)		•				
NA	120 OHM ±.5% NICKEL, 1.67196 TCR	•	•	•			
NB	100 OHM ±.22% NICKEL, 1.61800 TCR (DIN 43760)	•	•	•			
PA	100 OHM ±.5% PLATINUM, 1.39261 TCR	•	•				
PE	100 OHM ±.5% PLATINUM, 1.38500 TCR	•	•				
PM	100 OHM ±.06% PLATINUM, 1.38500 TCR (EN 60751, CLASS A)	•	•	•	•	•	•
PD	100 OHM ±.12% PLATINUM, 1.38500 TCR (EN 60751, CLASS B)	•	•	•	•	•	•
PF	1000 OHM ±.12% PLATINUM, 1.38500 TCR	•	•	•	•	•	•
PW	1000 OHM ±.12% PLATINUM, 1.37500 TCR	•	•	•			
PG	500 OHM ±.12% PLATINUM, 1.38500 TCR	•	•	•			

ANY REVISION TO THIS DOCUMENT MUST BE REVIEWED BY THE Ex AUTHORIZED PERSON. SEE EI 1218 FOR DETAILS.

THERMOWELL TABLE:

	A	B	C	D	E	F	G	H	J	K	X
	1" RF FLANGE	1.5" RF FLANGE	2" RF FLANGE	3" RF FLANGE	1" RTJ FLANGE	1.5" RTJ FLANGE	2" RTJ FLANGE	3" RTJ FLANGE	THREADED STEPPED	THREADED TAPERED	NONE
0	150# TAPERED								1/2 NPT	1/2 NPT	NO THERMOWELL
1	300# TAPERED								3/4 NPT	3/4 NPT	
2	600# TAPERED								1 NPT	1 NPT	
3	900#/1500# TAPERED								G1/2	G1/2	
4	2500# TAPERED										
5	150# STRAIGHT										
6	300# STRAIGHT										
7	600# STRAIGHT										
8	900#/1500# STRAIGHT										
9	2500# STRAIGHT										

METRIC

UNLESS OTHERWISE SPECIFIED DIMENSIONS AND TOLERANCES IN MILLIMETERS DIMENSIONS IN [] ARE IN INCHES

ONE PLACE (.0) ±0.51 [±.020]
TWO PLACE (.00) ±0.25 [±.010]
ANGLES:

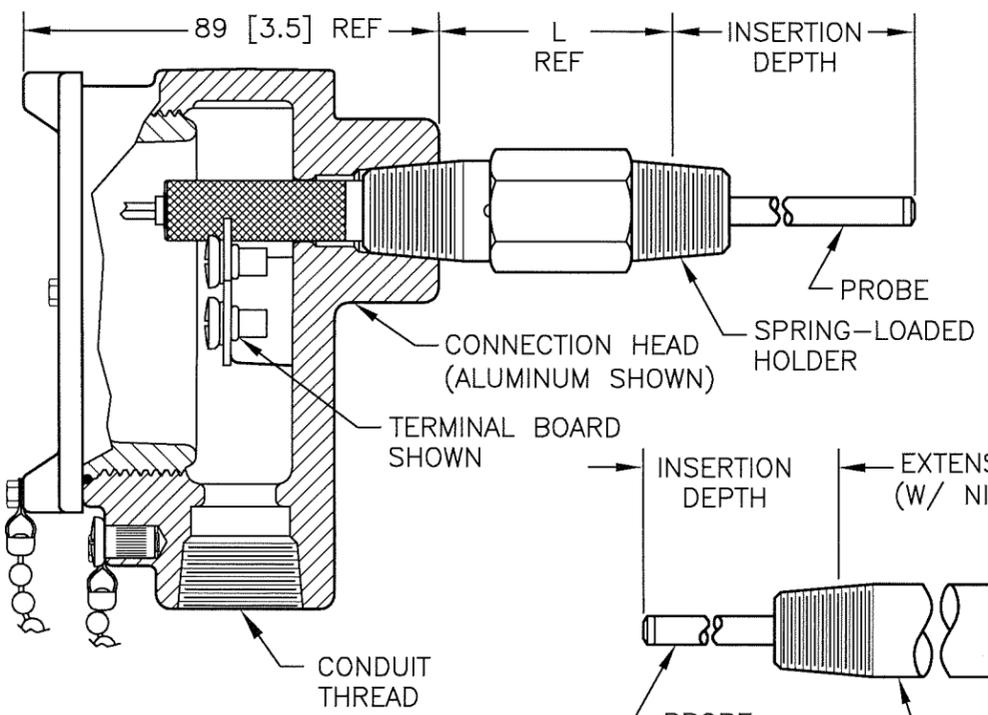
MATERIAL:

FINISH:

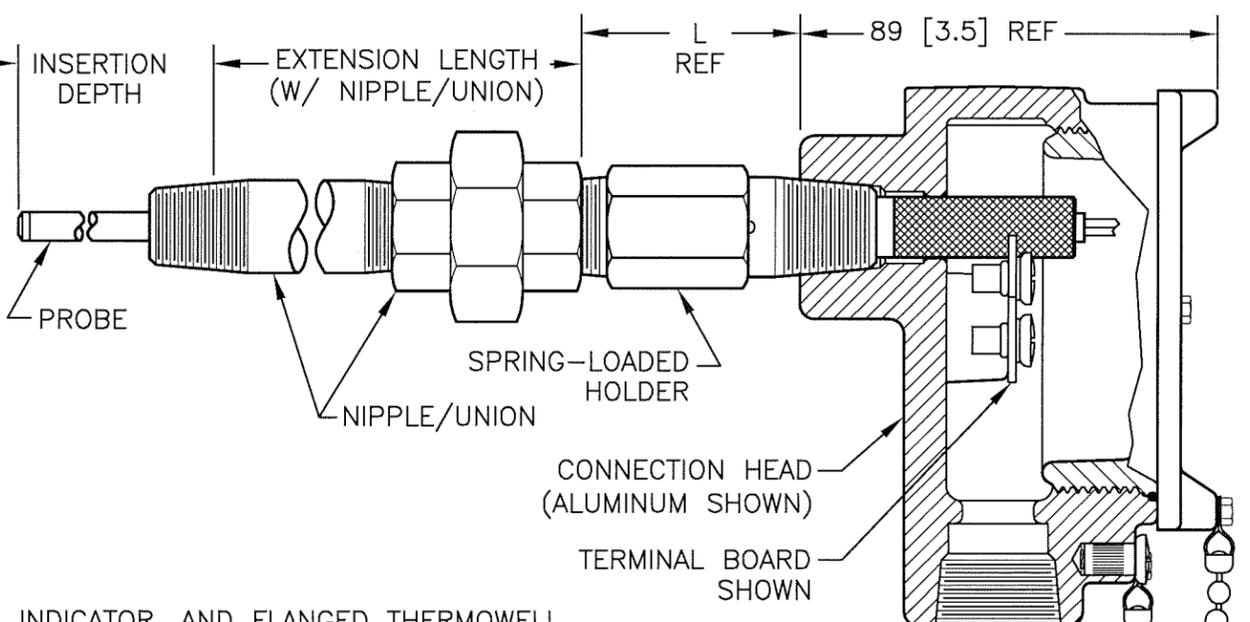
INITIALS	DATE	ITEM	REQD	INVENTORY NO	MATERIAL DESCRIPTION
DR EDG	01-15-03	TITLE:			<p>MINCO</p> <p>www.minco.com</p> <p>COMPANY CONFIDENTIAL PROPRIETARY INFORMATION OF MINCO PRODUCTS, INC. DO NOT DUPLICATE</p> <p>AS700/AS701/AS720/ AS721/AS740/AS741/ AS760/AS761</p> <p>REF: TAB0106</p>
CHK DES	03-05-03	RESISTANCE THERMOMETER, TIP-SENSITIVE/ WEATHERPROOF CONNECTION HEAD			
APP		EXPLOSIONPROOF/FLAMEPROOF ASSEMBLY			
ENGR DLW	03-06-03	FM/CSA APPROVED			
QA					
PRD					REV F
NEXT ASSY	PROD CODE 425				CAGE IDENT. 09359
USED ON	INIT. ORDER	INVENTORY NO	SCALE NONE	DWG SIZE B	SHEET 1 OF 3

REVISIONS					
REV	DESCRIPTION	DATE	ECO	DR	APPD

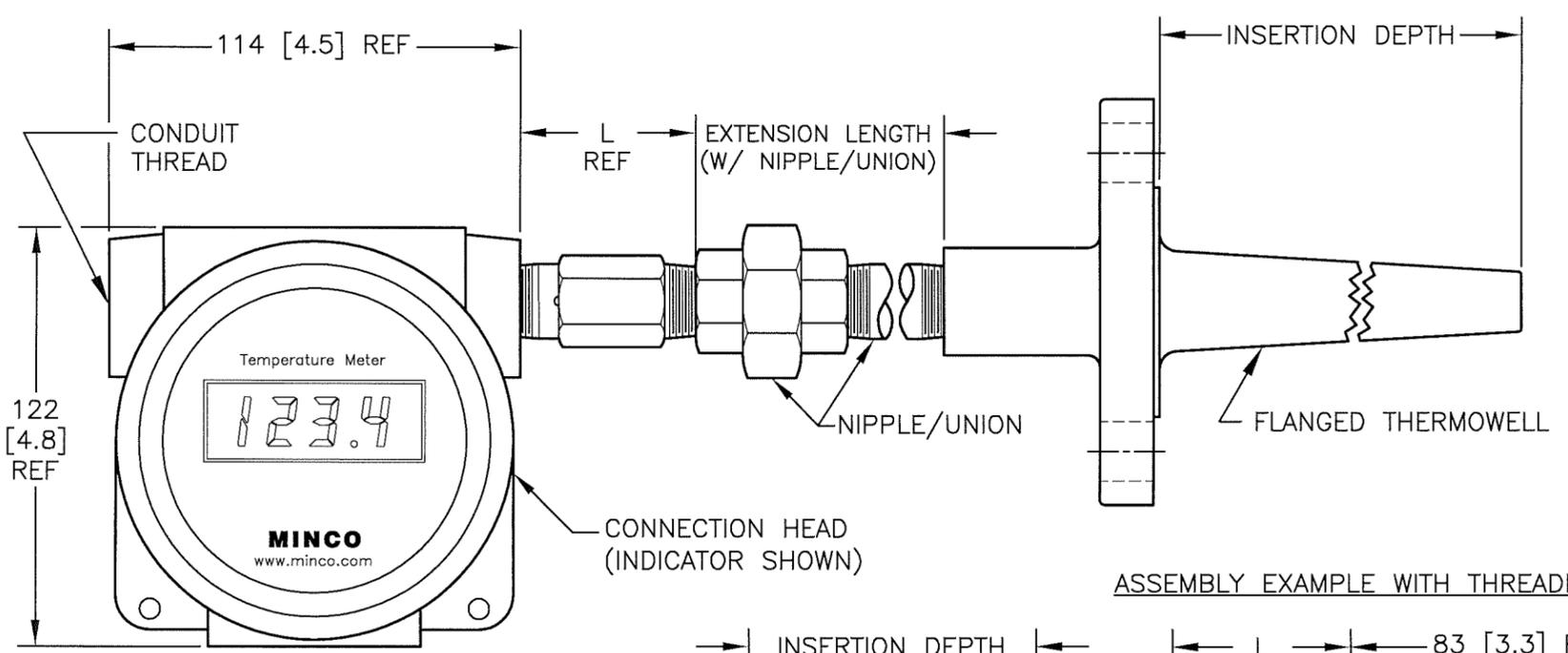
ASSEMBLY EXAMPLE WITH NO EXTENSION/THERMOWELL



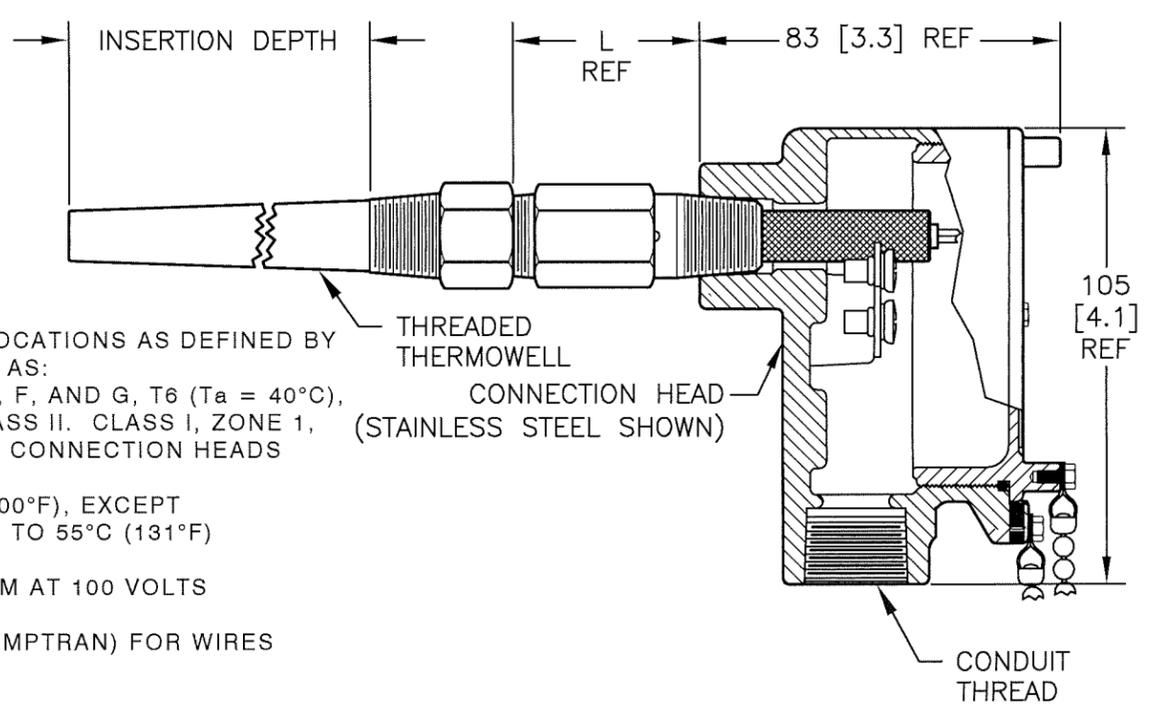
ASSEMBLY EXAMPLE WITH EXTENSION



ASSEMBLY EXAMPLE WITH EXTENSION, INDICATOR, AND FLANGED THERMOWELL



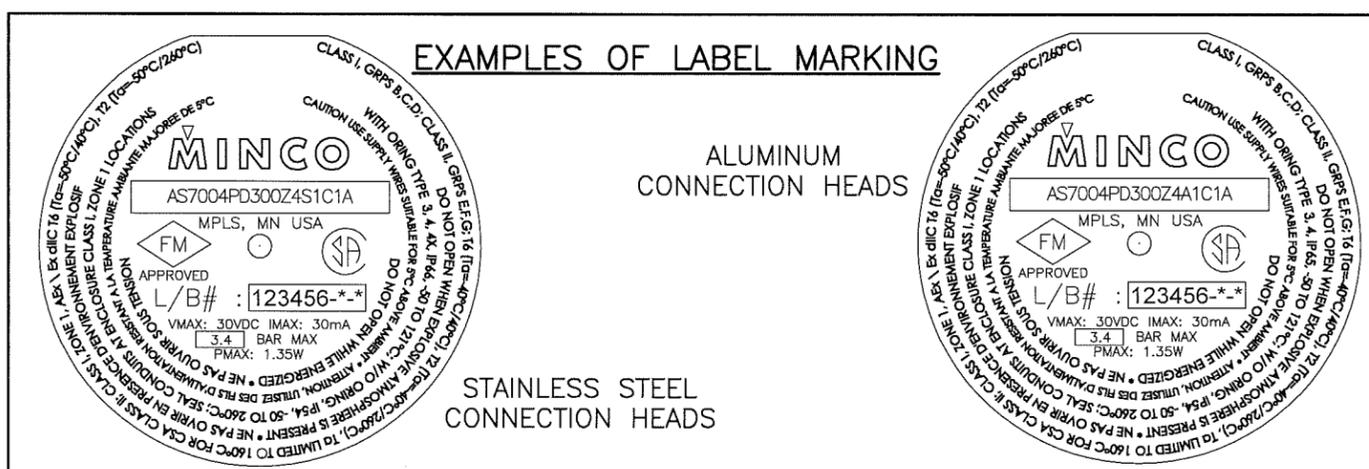
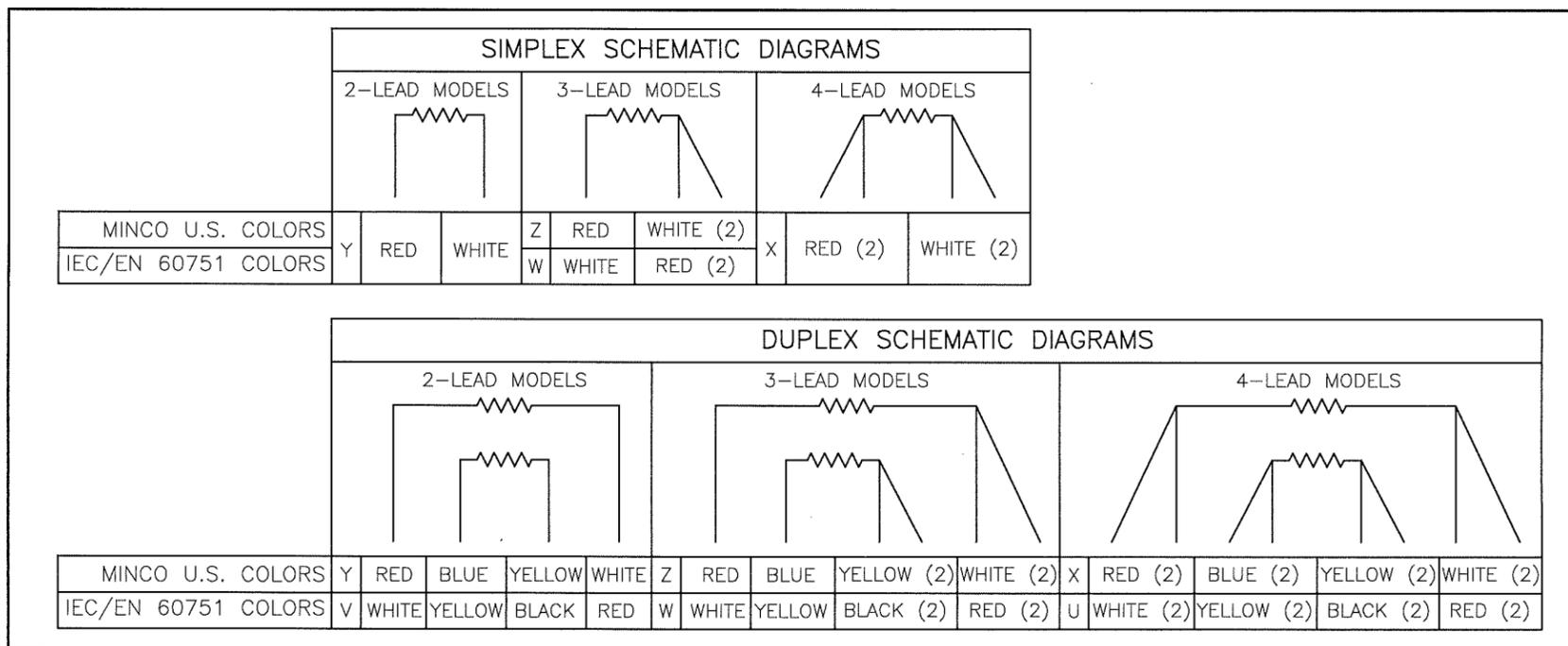
ASSEMBLY EXAMPLE WITH THREADED THERMOWELL



1. ASSEMBLY IS SUITABLE FOR USE IN HAZARDOUS LOCATIONS AS DEFINED BY THE NATIONAL AND CANADIAN ELECTRICAL CODES AS: CLASS I, GROUPS B, C, AND D; CLASS II GROUPS E, F, AND G, T6 (Ta = 40°C), T2 (Ta = 260°C), Ta LIMITED TO 160°C FOR CSA CLASS II. CLASS I, ZONE 1, AEx\Ex d IIC T6 (Ta = 40°C), T2 (Ta = 260°C). T1196 CONNECTION HEADS LIMITED TO T6 (Ta = -20°C TO 40°C).
2. TEMPERATURE RANGE: -50°C TO 260°C (-58°F TO 500°F), EXCEPT NB NICKEL ELEMENTS TO 250°C (482°F), REDUCING TO 55°C (131°F) FOR CONNECTION HEAD.
3. INSULATION RESISTANCE: 1000 MEGOHMS MINIMUM AT 100 VOLTS DC, LEADS TO PROBE CASE.
4. CONNECTION: TERMINAL BOARD (OR OPTIONAL TEMPTRAN) FOR WIRES UP TO AWG #14.
5. SEE SHEET 1 FOR MODEL NUMBER MAKEUP.

METRIC		INITIALS	DATE	ITEM	REQD	INVENTORY NO	MATERIAL DESCRIPTION		
UNLESS OTHERWISE SPECIFIED DIMENSIONS AND TOLERANCES IN MILLIMETERS DIMENSIONS IN [] ARE IN INCHES		DR	EDG	01-15-03			MINCO www.minco.com COMPANY CONFIDENTIAL PROPRIETARY INFORMATION OF MINCO PRODUCTS, INC. DO NOT DUPLICATE AS700/AS701/AS720/ AS721/AS740/AS741/ AS760/AS761 REF: TAB0106 REV F		
ONE PLACE (.0)	±0.51 [±.020]	CHK	DES	03-05-03					
TWO PLACE (.00)	±0.25 [±.010]	APP							
ANGLES:		ENGR	DLW	03-06-03					
MATERIAL:		QA							
FINISH:		PRD					SCALE NONE DWG SIZE B		
		NEXT ASSY	PROD CODE	INVENTORY NO	SCALE	DWG SIZE	CAGE IDENT. 09359 SHEET 2 OF 3		
		USED ON	INIT. ORDER	NO	NONE	B			

REVISIONS					
REV	DESCRIPTION	DATE	ECO	DR	APPD



FITTING TYPE	SKETCH	PROCESS THREAD	LENGTH L	PRESSURE RATING
FIXED SPRING-LOADED		1/2 NPT	32mm [1.3]	NONE
		G1/2	N/A	
SPRING-LOADED RELEASE KNOB*		1/2 NPT	53mm [2.1]	3.4 BAR [50 PSI]
		G1/2	51mm [2.0]	

*ADJUSTABLE SPRING-LOADED RELEASE KNOB TYPE IS EQUIPPED WITH TWO O-RING SEALS. IT HAS A WEEP HOLE BETWEEN THE PRIMARY AND SECONDARY O-RING SEALS TO INDICATE FAILURE OF THE PRIMARY SEAL.

METRIC UNLESS OTHERWISE SPECIFIED DIMENSIONS AND TOLERANCES IN MILLIMETERS DIMENSIONS IN [] ARE IN INCHES ONE PLACE (.0) ±0.51 [±.020] TWO PLACE (.00) ±0.25 [±.010] ANGLES: MATERIAL: FINISH:	INITIALS	DATE	ITEM	REQD	INVENTORY NO	MATERIAL DESCRIPTION <div style="text-align: center;"> www.minco.com COMPANY CONFIDENTIAL PROPRIETARY INFORMATION OF MINCO PRODUCTS, INC. DO NOT DUPLICATE AS700/AS701/AS720/ AS721/AS740/AS741/ AS760/AS761 </div>	REV								
	DR	EDG	01-15-03	TITLE:			RESISTANCE THERMOMETER, TIP-SENSITIVE/ WEATHERPROOF CONNECTION HEAD EXPLOSIONPROOF/FLAMEPROOF ASSEMBLY FM/CSA APPROVED REF: TAB0106	F							
	CHK	DES	03-05-03												
	APP														
	ENGR	DLW	03-06-03												
	QA														
	PRD														
	NEXT ASSY	PROD CODE													
	USED ON	INIT. ORDER	INVENTORY NO	SCALE	NONE	DWG SIZE	B	⊕	⊖	CAGE IDENT.	09359	SHEET	3	OF	3