

WHEN ORDERING SPECIFY SENSING ELEMENT, CASE LENGTH, NUMBER OF LEADS, LEAD LENGTH, AND LEAD COVERING.

S153PA120Z60A ← EXAMPLE OF MODEL NUMBER

S153 SPECIFICATIONS DRAWING NUMBER.

PA SENSING ELEMENT:

CA = COPPER;
NA = NICKEL;
PA = 100 OHM, .00392 PLATINUM;
PD = 100 OHM $\pm 1\%$, .00385 PLATINUM; ⑧
PE = 100 OHM $\pm 5\%$, .00385 PLATINUM.

120 CASE LENGTH A IN .1" INCREMENTS (120 = 12.0").
MINIMUM A = 27 (2.7") [69];
30 (3.0") [75] NA ELEMENT MODELS;
27 (2.7") [69] FOR STAINLESS STEEL BRAID MODELS;
32 (3.2") [81] FOR STAINLESS STEEL BRAID WITH NA
ELEMENT MODELS.
MAXIMUM A = 480 (48.0") [1219].
LONGER LENGTHS AVAILABLE ON SPECIAL ORDER.

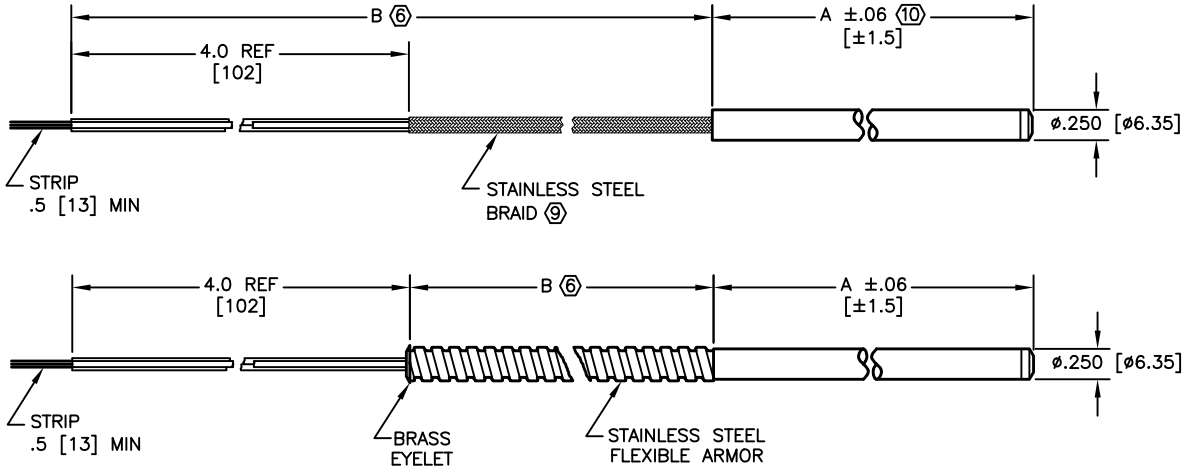
Z NUMBER OF LEADS:

Y = 2 LEADS (NOT AVAILABLE WITH CA ELEMENT MODELS);
Z = 3 LEADS;
X = 4 LEADS.

60 LEAD LENGTH B IN INCHES.

A LEAD COVERING:

A = STAINLESS STEEL FLEXIBLE ARMOR;
S = STAINLESS STEEL BRAID. ⑨
IF UNSPECIFIED, OPTION A (ARMOR) WILL BE USED.



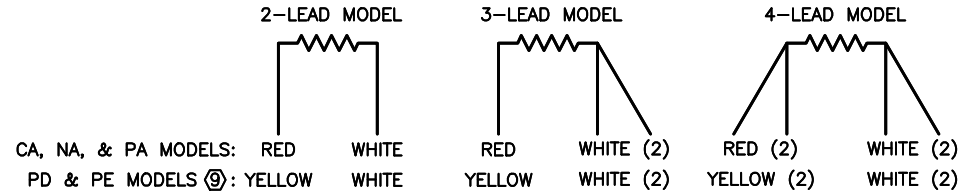
- ELEMENT: COPPER, NICKEL, OR PLATINUM.
- RESISTANCE (EXCLUDING LEADWIRE RESISTANCE):
CA COPPER: 10.00 OHMS $\pm 20\%$ (10.02/9.98) AT 25°C (77°F), R/T TABLES
#16-9 (°C) AND #17-9 (°F);
NA NICKEL: 120.0 OHMS $\pm 5\%$ (120.6/119.4) AT 0°C (32°F), R/T TABLES
#7-120 (°C) AND #8-120 (°F);
PA PLATINUM: 100.0 OHMS $\pm 5\%$ (100.5/99.5) AT 0°C (32°F), R/T TABLES
#1-100 (°C) AND #2-100 (°F);
PD PLATINUM: 100.0 OHMS $\pm 1\%$ (100.1/99.9) AT 0°C (32°F), R/T TABLES
#5-100 (°C) AND #6-100 (°F);
PE PLATINUM: 100.0 OHMS $\pm 5\%$ (100.5/99.5) AT 0°C (32°F), R/T TABLES
#5-100 (°C) AND #6-100 (°F).
- TEMPERATURE RANGE: -50°C TO 260°C (-58°F TO 500°F).
- INSULATION RESISTANCE: 1000 MEGOHMS MINIMUM AT 500 VOLTS DC, LEADS TO PROBE CASE.
- LEADS: AWG #22, STRANDED, TFE INSULATED. SEE MODEL NUMBER MAKEUP, ABOVE, FOR LEAD COVERING OPTIONS.

- ⑥ TOLERANCE ON LEAD LENGTH:
71" [1803] AND UNDER: $\pm 2/-0$ [$\pm 51/-0$];
72" TO 119" [1829 TO 3023]: $\pm 4/-0$ [$\pm 102/-0$];
120" [3048] AND OVER: $\pm 6/-0$ [$\pm 152/-0$].
7. CASE: STAINLESS STEEL, COPPER ALLOY TIP.
- ⑧ THE PD ELEMENT RESISTANCE THERMOMETER WILL MEET THE RESISTANCE-TEMPERATURE RELATIONSHIP AND TOLERANCES SPECIFIED IN EN 60751 (IEC 751), CLASS B.
- ⑨ ALL MODELS ORDERED WITH STAINLESS STEEL BRAID WILL HAVE RED AND WHITE LEADWIRE COLORS.
- ⑩ MODELS WITH STAINLESS STEEL BRAID: CASE MAY BE CUT TO SHORTER LENGTH (USE CARE NOT TO DAMAGE LEADWIRE INSULATION). MINIMUM A FOR CUT-OFF CASE IS 27 (2.7") [69], EXCEPT 32 (3.2") [81] FOR STAINLESS STEEL BRAID WITH NA ELEMENT MODELS.

REVISIONS

REV	DESCRIPTION	DATE	ECO	DR	APPD
D	MINIMUM CASE LENGTH WAS 2.8" [71]	02-02-99	33091	WAB	DLW
E	ADDED STAINLESS STEEL BRAID OPTION	02-02-99	39361	WAB	DLW
F	MINIMUM CASE LENGTH WAS 2.2 [56], ADDED 3.0 [75] MINIMUM CASE LENGTH FOR NA ELEMENT MODELS	10-04-04	41774	WAB	DLW

SCHEMATIC DIAGRAMS



UNLESS OTHERWISE SPECIFIED DIMENSIONS AND TOLERANCES IN INCHES DIMENSIONS IN [] ARE IN MILLIMETERS ONE PLACE (.0) ±.020 [±0.51] TWO PLACE (.00) ±.010 [±0.25] THREE PLACE (.000) ±.005 [±0.13] ANGLES:			INITIALS	DATE	ITEM	RECD	PART/STOCK NO	MATERIAL DESCRIPTION				
MATERIAL:			DR	WAB	07-09-97	TITLE: RESISTANCE THERMOMETER PROBE TYPE, TIP-SENSITIVE S153 SERIES			 www.minco.com COMPANY CONFIDENTIAL PROPRIETARY INFORMATION OF MINCO PRODUCTS, INC. DO NOT DUPLICATE			
			CHK	RJB	01-11-96							
			APP	JAB	04-16-92							
			ENGR	DLW	01-24-96							
FINISH:			QA			CGP Transferred 3/11/05 LRS			S153			REV F
			PRD									
			NEXT ASSY	CATEGORY 5-								
			USED ON	INIT. JOB	STOCK NO	SCALE	NONE	DWG SIZE B			CAGE IDENT. 09359	SHEET 1 OF 1