



〒225-0011

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**VIEW WITH A23 TRANSITION AND 40E WIRE**

**VIEW WITH A22 TRANSITION AND 30T WIRE**

*M*	THERMOCOUPLE MATERIAL
K	CHROMEL/ALUMEL
S	Pt10Rh/Pt
E	CHROMEL/CONSTANTAN
(OTHERS AVAILABLE)	

SEE LEADWIRE TABLE, ANSI COLOR CODE (RED NEGATIVE)

**NOTES:**

- The TCS-015-"M"-L-"T"-W"-Z"-11051 coaxial surface thermocouple will provide microsecond response time metal wall surface temperature measurements when properly installed flush in metal wall surface. In many cases the surface temperature history may be used to compute fast response heat transfer rates. Other units may be supplied with a backside thermocouple for steady state heat transfer rate computations.
- The type of leadwire offered is determined by the size of the transition and the temperature limits of the wire insulation. Select the desired available leadwire from the table. The wires are ANSI color coded or labeled for polarity. The transitions for enameled or teflon insulated wire are epoxy potted (220°C) and are ceramic potted (530°C limit of wire insulation) for the fiberglass insulated wires. Other models are available with SST sheathed, MgO insulated leadwire with ceramic potted transition (980°C).
- The type S thermocouples use type SX leadwire (220°C maximum recommended) unless precious metal leads are specified. All leadwire combinations may not be available for type S.
- To order specify the following in the Part Number:
  - \*M\* - The thermocouple material designation
  - \*L\* - The length (Inches) of the 0.015" section (Range: 0-3", .50" std.)
  - \*T\* - The code for transition size, from table
  - \*W\* - The code for leadwire construction, from table
  - \*Z\* - The length (Inches) of flexible leadwire (36" STD)

Example: A \*M\*=K (chromel/alumel) thermocouple with \*L\*=.50, \*T\*=A22 (0.052 X .25long)  
 \*W\*=40T (40AWG teflon singles), \*Z\*=36" is  
 P/N: TCS-015-K-50-A22-40T-36-11051

- See MEDTHERM Bulletin 500 for further descriptive information on MEDTHERM coaxial microsecond response surface thermocouples.

TRANSITION			LEADWIRE, INSULATION (THK. W/ INSULATION)									
*T*	0"D*	*Y*	40E	40T	40GG	36T	36TD	36GG	30T	30TD	30GG	
A2	.125	.25	0	0	0	0	0	0	0	0	0	
A21	.052	.10	0	0	0	0	0	X	0	X	X	
A22	.052	.25	0	0	0	0	0	X	0	X	X	
A23	.014	.10	0	X	X	X	X	X	X	X	X	
A24	.042	.10	0	0	0	0	0	X	0	X	X	
A25	.062	.20	0	0	0	0	0	0	0	0	X	
A26	.032	.10	0	X	X	X	X	X	X	X	X	

TRANSITION		40 AVG ENAMEL 220°C (0087), NOT COLOR CODED	40 AVG TEFLON SINGLES (0013), 220°C	40 AVG GLASS (GLASS DUPLEX (0327), 530°C	36 AVG TEFLON SINGLES (0016), 220°C	36 AVG TEFLON DUPLEX (0260), 220°C	30 AVG GLASS (GLASS SINGLES (0427), 530°C	30 AVG TEFLON DUPLEX (0237), 220°C	30 AVG GLASS (GLASS DUPLEX (0227), 530°C
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□ = Optional, X = Not Available

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		
FRACTIONS ± 1/32	DECIMALS 2PL ± .02 3PL ± .005	ANGLES ± 1°
MATERIAL NOTED		
FINISH		

**ULTRAMINIATURE 0.015 COAXIAL SURFACE THERMOCOUPLE MICROSECOND RESPONSE**

TCS-015-"M"-L-"T"-W"-Z"-11051

<b>MEDTHERM CORPORATION</b>	
POST OFFICE BOX 412 HUNTSVILLE, ALABAMA 35804	
SCALE: ORIG. DWG 5/6/66 CAD DWG 11/23/94 DR. <i>GM</i>	DES. CHK. APP. <i>DF</i>
DWG SIZE <b>B 11051</b>	SHEET OF