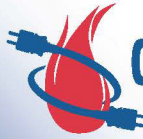


# Noble Metal Thermocouples



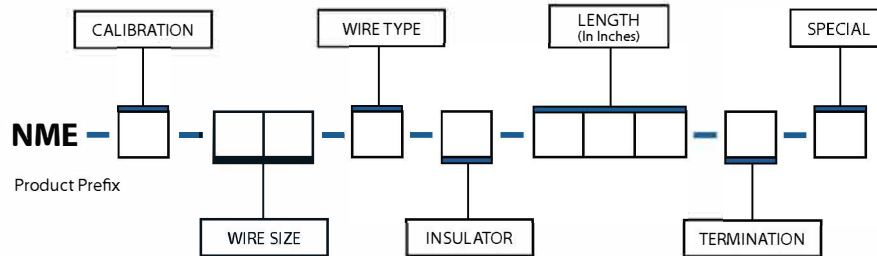
**CLEVELAND ELECTRIC LABORATORIES**  
Thermocouples & Sensing Solutions since 1920



Noble Metal Thermocouples are available in a wide variety of configurations. Once a specific application is identified, the thermocouple can be built to order for peak performance. Available in single or multi-point assemblies, this series of products will perform well in applications of extreme temperatures, as high as 4200°F. For information on material selection parameters for Protection Tubes and other components, please refer to the appropriate pages.

## Noble Metal Elements (NME)

- Temperatures up to 4200°F
- Platinum / Rhodium elements in Standard, Reference, and Certified materials
- Type **S** and **R** used for short periods up to 3100°F, continuously up to 2700°F
- Type **B** for temperature up to 3100°F
- Type **C** and Tungsten/Rhenium elements up to 4200°F
- Platinel II is used up to 2300°F

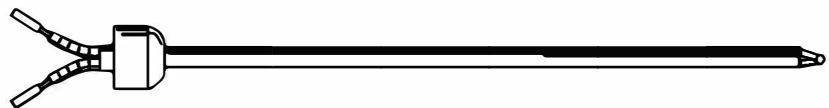


Use Specification Codes below to assemble a complete Ordering Number.

## Specifications/Codes

CALIBRATION	WIRE SIZE	WIRE TYPE	INSULATOR	LENGTH	TERMINATION	SPECIAL
<b>S</b> - Pt-Pt 10% Rh	<b>30</b> - .010	<b>1</b> - Standard	<b>1</b> - Bare	Specify from <b>000"</b> to <b>999"</b>	<b>1</b> - Copper Tips	<b>0</b> - None
<b>R</b> - Pt-Pt 13% Rh	<b>28</b> - .013	<b>2</b> - Reference Grade	<b>2</b> - .125 OD Mullite		<b>2</b> - Knife Clips/Glass Sleeveing	<b>C</b> - Lot Certification
	<b>27</b> - .014	<b>3</b> - Stabilized	<b>4</b> - .187 OD Mullite		<b>3</b> - Fish Spine Beads Only	<b>D</b> - Dual Element
<b>B</b> - Pt 6% Rh-Pt 30% Rh			<b>A</b> - .187 OD Mullite w/Collar		<b>4</b> - Fish Spine Beads/CU Tips	<b>E</b> - Individual Certification
<b>C</b> - W 5% Re-W 26% Re	<b>26</b> - .016		<b>E</b> - .200 OD Mullite		<b>5</b> - Fiber Glass Sleeve Only	<b>X</b> - Special (Consult Factory)
<b>F</b> - Platinel	<b>24</b> - .020		<b>G</b> - .200 OD Mullite w/Collar		<b>6</b> - Bare Ends Only	<b>2</b> - Dual Element Lot Certified
	<b>23</b> - .023		<b>6</b> - .250 OD Mullite		<b>7</b> - Mini Plug w/Tube Adapter	
<b>G</b> - Gold			<b>C</b> - .250 OD Mullite w/Collar		<b>8</b> - Mini Plug w/Cable Clamps	
<b>L</b> - Silver	<b>22</b> - .025		<b>3</b> - .125 OD Alumina		<b>A</b> - SHX Alumina Plug	
	<b>21</b> - .028		<b>5</b> - .187 OD Alumina		<b>B</b> - NHX Alumina Plug	
	<b>20</b> - .032		<b>B</b> - .187 OD Alumina w/Collar		<b>H</b> - Hi-Temp. Mini Plug	
			<b>F</b> - .200 OD Alumina		<b>P</b> - Hi-Temp. Plug w/Tube Adapter	
	<b>18</b> - .040		<b>H</b> - .200 OD Alumina w/Collar		<b>G</b> - Male Plug (400 deg) Tube Adaptor	
	<b>15</b> - .060		<b>7</b> - .250 OD Alumina		<b>J</b> - HiTemp Jack/Tube Adaptor	
	<b>14</b> - .064		<b>D</b> - .250 OD Alumina w/Collar			
	<b>XX</b> - Other		<b>S</b> - 1/16" OD Spaghetti			
			<b>9</b> - 1/16" OD Alumina Ins.			
			<b>8</b> - .150 OD x 1" Alumina			
			<b>M</b> - .156 Alumina w/Collar			
			<b>T</b> - Ceramic Braid-Twist			
			<b>U</b> - Special Insulator			

Type S  
.020" dia. wire size  
standard grade thermocouple wire type  
in a 3/16" mullite insulator with collar  
fish spine beads with copper tips, 18" length



**NME - S - 24 - 1 - A - 018 - 4 - 0**

Example Ordering Number