

# Thermocouple Wire

## Fine Diameter Tungsten-Rhenium



- ✓ Matched Pairs
- ✓ Calibrated Accuracy Guaranteed
- ✓ Melting Point in Excess of 2315°C



See Page A-79 for  
Ceramic Bead Insulators

Tungsten-Rhenium thermocouple alloy combinations were developed to meet the need for measuring ultra-high temperatures in the 2315°C range.

OMEGA makes available two widely used Tungsten-Rhenium thermocouple alloy combinations:

#### Type C:

Tungsten 5% Rhenium (+) vs.  
Tungsten 26% Rhenium (-)

#### Type D:

Tungsten 3% Rhenium (+) vs.  
Tungsten 25% Rhenium (-)

In order to guarantee the limits of error, OMEGA sells Tungsten-Rhenium thermocouple wire only in matched pairs by the double 300 mm. Because of the inherent brittleness of unalloyed Tungsten, Rhenium has been added to the positive leg of types C and D to improve handling characteristics.

Both thermocouple combinations can be used to 2315°C in hydrogen or inert gas atmospheres and in a vacuum. They undergo rapid deterioration under oxidising conditions and should not be used in air or atmospheres containing oxygen.

Available from stock; other wire sizes and large quantities available by quotation. Consult Sales Department

### Uninsulated Refractory Metal Thermocouple Wire

To Order (Specify Model Number)		STOCKED FOR IMMEDIATE DELIVERY		
Symbol	Material	Wire Dia. (mm)	Model Number	Price/Double 300 mm
<b>C*</b>	Tungsten 5% Re vs. Tungsten 26% Re	0.076	<b>W5W26-003</b>	<b>£18.00</b>
		0.13	<b>W5W26-005</b>	<b>9.80</b>
		0.25	<b>W5W26-010</b>	<b>18.75</b>
		0.38	<b>W5W26-015</b>	<b>37.50</b>
		0.5	<b>W5W26-020</b>	<b>49.00</b>
<b>D*</b>	Tungsten 3% Re vs. Tungsten 25% Re	0.13	<b>W3W25-005</b>	<b>9.80</b>
		0.25	<b>W3W25-010</b>	<b>18.75</b>
		0.38	<b>W3W25-015</b>	<b>37.50</b>
		0.5	<b>W3W25-020</b>	<b>49.00</b>

\* Not an official symbol or standard designation

\*\* Sold only as matched pairs. A double 300 mm is 300 mm of positive and 300mm of matched negative wire.

### Extension Grade Wire

#### Uninsulated Lead Wire For Tungsten-Rhenium Thermocouples

To Order (Specify Model Number)		Maximum Temperature		Wire Dia. mm	Price/Double 300 mm	
Symbol	Thermocouple Used With	Model Number	°F			°C
<b>CX*</b>	W5%Re vs W26%Re	<b>EX-C-010</b>	1600	871	0.25	<b>£0.30</b>
		<b>EX-C-020</b>	1600	871	0.5	<b>0.55</b>

\* Not an official symbol or standard designation

Insulated Extension Grade Wire Also Available, See Page G-22