



**Hoskins® Alloys 405 and 426*
(Type C Extension Wire)**

Alloys 405 and 426 were developed by Hoskins Manufacturing Company for use as compensating extension wires for the tungsten 5% rhenium vs. tungsten 26% rhenium (W5Re/W26Re) thermocouple. They are stable, base metal compositions with excellent ductility and very good resistance to oxidation over their entire temperature range of use. They are supplied as bare wires in matched pairs whose combined emf falls within the guaranteed emf limits over the specified range.

The use of these compensating extension wires offers three significant advantages when used with W5Re/W26Re thermocouples:

- Substantial reduction in wire costs where a long lead wire is required.
- Increased resistance to breakage by flexing, vibration or mechanical loading in service.
- Good resistance to oxidation over the recommended temperature range.

Physical Property Data

Thermocouple Type	W5Re	vs.	W26Re
Recommended Extension Wire	405		426
Approximate Melting Point	2550F		2500°F
	(1400°C)		(1370°C)
Specific Gravity	8.60		8.90
Density (lb./in ³)	.310		.320
(g/cm ³)	8.6		8.9
Nominal Resistivity (Ω•mil ² /ft.)	180		200
(μΩ/cm ³)	29.9		33.2
Magnetic Response	Mag.		Mag.

Accuracy Guarantee

Temperature Range	32°F to 1600°F (0°C to 870°C)
Tolerance	±0.11mv.

* Manufactured and sold exclusively by
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