

## PTFE INSULATED HIGH TEMPERATURE WIRE

**KEY FEATURES:** Operating temperature range  $-70^{\circ}\text{C}$  to  $250^{\circ}\text{C}$ . Excellent chemical resistance to oils, ozone, alkalis, acids, solvents, gasoline, aromatic hydrocarbons and alcohol. PTFE (polytetrafluoroethylene) insulated wire remains flexible at low temperatures. Surface can be treated for encapsulating or bonding. Full range of colors available.

**SIZE RANGE:** AWG #22 through #16 on 1,000 ft. spools. AWG #14 and #12 on 500 ft spools. AWG #22 through #18 supplied in drums up to 60,000 ft. with marked splices.

**APPLICATIONS:** Markel PTFE insulated wire is ideal for automotive oxygen and NOx sensors, gas igniters in ovens, dryers, outdoor warmers, gas lamps and mosquito killers, medical and scientific instruments, computers, aircraft, and marine systems subjected to harsh operating conditions.

**MILITARY SPECIFICATIONS:** Markel PTFE insulated wire meets or exceeds the requirements of MIL-W-16878/4, 5, 6, 23, 25, and 27.

**MATERIAL SPECIFICATIONS:** See last page of this catalog for insulation material specifications. Conductors are silver or nickel plated copper, copperweld, or stainless steel.



Oxygen Sensor Assembly

**COMMERCIAL SPECIFICATIONS:** Popular UL and CSA styles are listed below. Contact us for a complete listing of UL and CSA Styles available. Markel High Voltage Appliance Wire, rated at 25 KVDC per UL 758 is listed under UL 1911 and is commonly used for internal wiring of gas igniter systems. Minimum tensile strength: 4,000 psi ( $2,758\text{ N/cm}^2$ ) before and 3,400 psi ( $2,344\text{ N/cm}^2$ ) after heat aging 60 days at  $260\text{ C}^{\circ}$ . Elongation: 175% before and 149% after heat aging. Tensile and elongation measured at a speed of 20 +/-1 in/min or 500 +/-25 mm/min. Horizontal flame test applies. Conductor is nickel plated copper.

UL STYLE No.	WIRE SIZE RANGE	WALL THICKNESS	TEMP./VOLTAGE RATING
1199	22-16	.020	$200^{\circ}\text{C}$ / 600 VDC
1213	22-16	.008	$105^{\circ}\text{C}$
1577	22-16	.012	$200^{\circ}\text{C}$
1659	22-12	.020	$250^{\circ}\text{C}$ / 60 VDC
1716	22-12	.0055/.013	$150^{\circ}\text{C}$ / 150 VDC
1815	22-12	.013	$250^{\circ}\text{C}$ / 300 VDC
1911	22-12	.028	$250^{\circ}\text{C}$ / 25 KVDC
CSA	22-16	.010	$150^{\circ}\text{C}$ / 150 VDC
CSA	22-12	.020	$250^{\circ}\text{C}$ / 300 VDC
CSA	22-12	.030	$200^{\circ}\text{C}$ / 600 VDC

All materials of construction are warranted to meet specification and certified to be made from top quality resins without PFOA surfactant.