

UL 10109; CSA 300V wire—200° C, Tefzel® 750 insulation

UL 10109, CSA 300V wires are insulated with an extruded modified copolymer of ETFE (ethylene Tetrafluoroethylene).

These wires are ideal replacements for older wire constructions with silicone rubber insulation and treated glass braid. They feature improved handling and performance characteristics, thinner size, and lighter weight than identically-rated silicone rubber constructions.

Performance:

Voltage rating: 300V.

Temperature rating: 200° C.



Construction Details

Insulation: Extruded modified copolymer of ETFE, .006" (.15 mm) minimum wall thickness.

Conductor: Silver-plated copper.

Colors: Available in 10 standard colors (see page 92).

Identification: Surface printed as required by UL or CSA.

Options: Bare copper, nickel-plated copper, or tin-plated copper conductor*.

* For tin-plated conductors, the 200° C temperature rating applies only to wires with individual strand diameters .015" (26 AWG) or larger. For wires with smaller strand diameters, the temperature rating is 150° C.

Ordering Information: Specify Thermax part number, UL style, and color.

To order with optional conductor materials:

For bare copper conductor, change **MCF** in Thermax part number to **MCFP**.

For nickel-plated copper conductor, change **MCF** in Thermax part number to **MCFN**.

For tin-plated copper conductor, change **MCF** in Thermax part number to **MCFZ**.

Dimensions, Weights, and Resistance—UL 10109; CSA 300V wires

AWG Size	Stranding	Conductor Diameter	Insulation Diameter	Weight	Maximum Resistance	Thermax P/N
8	133/29	.162 (4.11)	.216 (5.49)	66.0 (98.4)	.658 (2.16)	8-MCF200-13329-UL
10	37/.0167	.113 (2.87)	.137 (3.48)	34.5 (51.3)	1.19 (3.90)	10-MCF200-37/0167-UL/CSA
10	37/26*	.109 (2.77)	.133 (3.38)	31.4 (46.7)	1.19 (3.90)	10-MCF200-3726-UL
12	19/.0186	.088 (2.24)	.112 (2.84)	22.1 (32.9)	1.81 (5.94)	12-MCF200-19/0186-UL/CSA
12	19/25*	.084 (2.13)	.108 (2.74)	20.2 (30.1)	1.81 (5.94)	12-MCF200-1925-UL
14	19/.0147	.070 (1.78)	.090 (2.29)	13.9 (20.7)	2.87 (9.41)	14-MCF200-19/0147-UL/CSA
14	19/27*	.067 (1.69)	.086 (2.18)	12.9 (19.2)	2.88 (9.45)	14-MCF200-1927-UL
16	19/.0117	.056 (1.42)	.076 (1.93)	9.14 (13.6)	4.52 (14.8)	16-MCF200-19/0117-UL/CSA
16	19/29*	.053 (1.35)	.072 (1.83)	8.39 (12.5)	4.52 (14.8)	16-MCF200-1929-UL
18	19/30	.047 (1.19)	.064 (1.63)	6.94 (10.3)	5.79 (19.0)	18-MCF200-1930-UL/CSA
18	7/26	.048 (1.21)	.065 (1.65)	6.78 (10.1)	6.01 (19.7)	18-MCF200-726-UL/CSA
18	SOLID	.040 (1.02)	.057 (1.45)	5.89 (8.77)	6.39 (20.9)	18-MCF200-118-UL/CSA
20	19/32	.038 (.955)	.055 (1.40)	4.62 (6.88)	9.10 (29.8)	20-MCF200-1932-UL/CSA
20	7/28	.038 (.960)	.055 (1.40)	4.49 (6.68)	9.56 (31.4)	20-MCF200-728-UL/CSA
20	SOLID	.032 (.813)	.049 (1.24)	3.99 (5.94)	10.3 (33.8)	20-MCF200-120-UL/CSA
22	19/34	.030 (.752)	.047 (1.19)	3.07 (4.57)	14.8 (48.5)	22-MCF200-1934-UL/CSA
22	7/30	.030 (.762)	.047 (1.19)	3.02 (4.49)	15.2 (49.9)	22-MCF200-730-UL/CSA
22	SOLID	.025 (.643)	.042 (1.07)	2.67 (3.97)	16.5 (54.1)	22-MCF200-122-UL/CSA
24	19/36	.024 (.597)	.041 (1.04)	2.10 (3.13)	23.6 (77.4)	24-MCF200-1936-UL/CSA
24	7/32	.024 (.610)	.041 (1.04)	2.09 (3.11)	23.9 (78.4)	24-MCF200-732-UL/CSA
24	SOLID	.020 (.511)	.037 (.940)	1.84 (2.74)	25.7 (84.3)	24-MCF200-124-UL/CSA

Dimensions in inches (mm). Weights in pounds/1000 feet (Kg/1000 M). Resistance in Ω/1,000 feet (Ω/Km), @20° C.

All values are nominal unless otherwise indicated. * CSA allows these strandings for electronic use only.