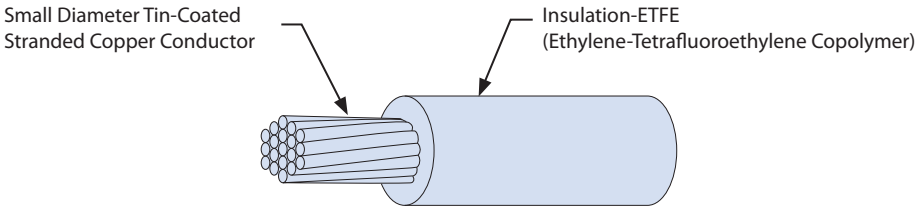
M22759/16
Tin Coated Copper Wire with Extruded ETFE Insulation

HOW TO ORDER			
Sample Part Number	**M22759/16**	**-22**	**-9**
Basic Part Number	**M22759/16**		
Wire Gage (AWG)	See Table I		
Wire Color	See Table II		



NOTES

1. Cable identified with manufacturer's name and part number.
2. Cable is sold in 1 foot increments. Specify desired length on purchase order.

Table II: Jacket and Stripe Color Codes

Color code	Color
0	Black
1	Brown
2	Red
3	Orange
4	Yellow
5	Green
6	Blue
7	Violet
8	Gray
9	White

Table I

Part Number	Wire Size (AWG)	Stranding (Number of strands x AWG gage of strands)	Diameter of stranded conductor (inches)		Finished Wire		
			min	max	Resistance at 20° C (68° F) (Ohms/ 1000 ft) max	Diameter (inches)	Weight (lbs/1000 ft) max
M22759/16-24-*	24	19 x 36	.023	.024	26.2	.045 ± .002	2.57
M22759/16-22-*	22	19 x 34	.029	.031	16.2	.052 ± .002	3.68
M22759/16-20-*	20	19 x 32	.037	.039	9.88	.060 ± .002	5.36
M22759/16-18-*	18	19 x 30	.046	.049	6.23	.071 ± .002	7.89
M22759/16-16-*	16	19 x 29	.052	.055	4.81	.079 ± .002	9.95
M22759/16-14-*	14	19 x 27	.065	.069	3.06	.093 ± .002	14.9
M22759/16-12-*	12	19 x 25	.084	.089	2.02	.114 ± .003	22.6
M22759/16-10-*	10	37 x 26	.106	.112	1.26	.139 ± .003	35.1
M22759/16-8-*	8	133 x 29	.158	.169	.701	.199 ± .003	63.5
M22759/16-6-*	6	133 x 27	.198	.212	.445	.250 ± .003	99.9
M22759/16-4-*	4	133 x 25	.250	.268	.280	.312 ± .004	157
M22759/16-2-*	2	665 x 30	.320	.340	.183	.388 ± .004	245
M22759/16-1-*	1	817 x 30	.360	.380	.149	.431 ± .005	314
M22759/16-0-*	0	1045 x 30	.395	.425	.116	.479 ± .006	391
M22759/16-00-*	00	1330 x 30	.440	.475	.091	.546 ± .007	504

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Table II: Test Data	
Temperature Rating	150° C (302° F) max conductor temperature
Voltage Rating	600 volts (rms) at sea level
Short Term Thermal Stability	7 hours at 230 ± 2° C (446 ± 3.6° F). Quality conformance test, group II; test procedures and requirements as in life cycle test except for time and temperature of oven exposure.
Spark Test of Primary Insulation	not required
Impulse Dielectric Test	100% test, 8.0 kilovolts (peak)
Insulation Resistance, Initial	24 AWG through 14 AWG: 5,000 megohms for 1000 ft (min) 12 AWG through 6: 3,000 megohms for 1000 ft (min) 4 AWG through 00: 2,000 megohms for 1000 ft (min)
Wrap Test	"wrap back" test required, no cracking. Oven temperature: 200 ± 2°C (392 ± 3.6° F)
Blocking	200 ± 2° C (392 ± 3.6°F)
Shrinkage	0.125 inch max at 200 ± 2° C (392 ± 3.6° F)
Wicking	no requirement
Low Temperature (Cold Bend)	bend temperature: -65° ± 2° C (-85 ± 3.6° F) dielectric test: 2,200 volts (rms), 60 Hz
Thermal Shock	oven temperature: 150 ± 2° C (302 ± 3.6° F) max change in measurement: 24 AWG through 12 AWG: 0.060 inch 10 AWG through 8 AWG: 0.100 inch 6 AWG through 00 AWG: 0.125 inch
Flammability	vertical flame test; 2 seconds (max) after-flame, 5.50 in (max) burn length. Post-flame dielectric test not required.
Life Cycle	oven temperature 200 ± 2° C (392 ± 3.6° F) dielectric test: 2,200 volts (rms), 60 Hz
Dielectric Test After Immersion	2,200 volts (rms), 60 Hz
Acid Resistance	no requirement
Conductor Strand Adhesion Requirements	shall be in accordance with 3.6.11 of MIL-W-22759
Abrasion Resistance After Immersion	no requirement
Humidity Resistance	after humidity exposure, wire shall meet the requirements for initial insulation resistance.
Surface Resistance	24 AWG through 12 AWG: 500 megohm-inches (min) initial and final readings 10 AWG through 00 AWG: no requirement
Smoke	200° C (392° F)
Color	in accordance with MIL-STD-104, class 1; white preferred
Color Striping or Banding Durability	125 cycles (250 strokes) minimum, 500 grams weight
Identification of Product	Required
Identification Durability	125 cycles (250 strokes) minimum, 500 grams weight
Wire Length Requirements	schedule A