

MIL-W-16878/11 (Type K) equivalent wire—extruded FEP insulation

MIL-W-16878/11 (type K) equivalent wires have extruded FEP insulation (medium wall thickness) for high-temperature applications. These wires have tin-plated copper conductors for economy. MIL-spec versions (silver-plated conductors) are also available.

For heavy-wall (type KK) versions of these wires, see M16878/12 equivalent (following page); for thin-wall (type KT) versions, see M16878/13 equivalent (page 32).

Performance:

Voltage rating: 600V.

Temperature rating: Tin-plated conductor: -55 to 150° C;
Silver-plated conductor: -55 to 200° C;
Nickel-plated conductor: -55 to 200° C.

Ordering Information: Specify Thermax part number and color.

To order with optional conductor materials:

For silver-plated copper conductor, change **DXZ** in Thermax part number to **DX**.

For silver-plated high-strength copper conductor, change **DXZ** in Thermax part number to **DXTF**.

For nickel-plated copper conductor, change **DXZ** in Thermax part number to **DXN**.

For nickel-plated high-strength copper conductor, change **DXZ** in Thermax part number to **DXTFN**.



Construction Details

Insulation: Extruded FEP, wall thickness .010 (.25 mm).

Conductor: Tin-plated copper.

Colors: Color coded to MIL-STD-104 (See page 26).

Options: Silver- or nickel-plated copper conductor; silver or nickel-plated high-strength copper alloy conductor; sodium naphthalene etched insulation for bondability. Also available to NEMA HP-4-K.

Dimensions, Resistance, and Weights—M16878/11 equivalent—tin plated conductor

AWG Size	Stranding	Conductor Diameter	Insulation Diameter		Weight	Maximum Resistance	Thermax P/N
			Minimum	Maximum			
8	133/29	.162 (4.11)	.185 (4.70)	.199 (5.05)	63.6 (9.46)	.658 (2.16)	8-DXZ-13329
10	37/26	.108 (2.74)	.127 (3.23)	.141 (3.58)	33.1 (4.93)	1.26 (4.13)	10-DXZ-3726
12	19/25	.084 (2.13)	.107 (2.72)	.121 (3.07)	23.7 (3.53)	1.92 (6.30)	12-DXZ-1925
14	19/27	.067 (1.70)	.088 (2.24)	.102 (2.59)	15.5 (2.31)	3.06 (10.0)	14-DXZ-1927
16	19/29	.053 (1.35)	.073 (1.85)	.087 (2.21)	10.1 (1.50)	4.81 (15.8)	16-DXZ-1929
18	19/30	.047 (1.19)	.064 (1.63)	.074 (1.88)	7.74 (1.15)	6.23 (20.4)	18-DXZ-1930
18	7/26	.048 (1.22)	.064 (1.63)	.074 (1.88)	7.70 (1.15)	6.70 (22.0)	18-DXZ-726
20	19/32	.038 (.97)	.054 (1.37)	.062 (1.57)	5.08 (.756)	9.88 (32.4)	20-DXZ-1932
20	7/28	.038 (.97)	.054 (1.37)	.062 (1.57)	5.97 (.740)	10.7 (35.1)	20-DXZ-728
20	SOLID	.032 (.81)	.048 (1.22)	.056 (1.42)	4.18 (.622)	10.9 (35.1)	20-DXZ-120
22	19/34	.030 (.76)	.046 (1.17)	.054 (1.37)	3.42 (.509)	16.2 (53.1)	22-DXZ-1934
22	7/30	.030 (.76)	.046 (1.17)	.054 (1.37)	3.33 (.496)	17.1 (56.1)	22-DXZ-730
22	SOLID	.025 (.64)	.041 (1.04)	.050 (1.27)	2.92 (.435)	17.7 (58.1)	22-DXZ-122
24	19/36	.024 (.61)	.040 (1.02)	.048 (1.22)	2.39 (.356)	26.2 (85.9)	24-DXZ-1936
24	7/32	.024 (.61)	.040 (1.02)	.048 (1.22)	2.35 (.350)	27.0 (88.6)	24-DXZ-732
24	SOLID	.020 (.51)	.036 (.91)	.044 (1.12)	2.12 (.315)	27.8 (91.2)	24-DXZ-124
26	19/38	.019 (.48)	.035 (.89)	.043 (1.09)	1.70 (.253)	41.3 (135)	26-DXZ-1938
26	7/34	.019 (.48)	.035 (.89)	.043 (1.09)	1.66 (.247)	43.3 (142)	26-DXZ-734
26	SOLID	.016 (.41)	.032 (.81)	.040 (1.02)	1.55 (.231)	45.3 (149)	26-DXZ-126
28	7/36	.015 (.38)	.031 (.79)	.039 (.99)	1.22 (.182)	68.6 (225)	28-DXZ-736
28	SOLID	.013 (.33)	.029 (.74)	.037 (.94)	1.17 (.174)	71.6 (235)	28-DXZ-128
30	7/38	.012 (.31)	.028 (.71)	.036 (.91)	.930 (.138)	114 (374)	30-DXZ-738
30	SOLID	.010 (.25)	.026 (.66)	.034 (.86)	.900 (.134)	116 (380)	30-DXZ-130
32	7/40	.009 (.23)	.026 (.66)	.034 (.86)	.700 (.104)	189 (620)	32-DXZ-740
32	SOLID	.008 (.20)	.024 (.61)	.032 (.81)	.730 (.109)	178 (584)	32-DXZ-132

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.

