

# Type E Cables—MIL-W-16878/4 components



## Construction Details

### Component wire conductor:

Silver- or nickel-plated copper.

### Component wire insulation:

Extruded PTFE.

### Shield:

Silver-plated copper braid, 85% coverage.

### Jacket:

Extruded FEP or PTFE tape.

### Colors:

Component wires color coded to MIL-STD-104;

Jacket colors: White preferred; also available in

10 basic colors (see page 26).

**Type E cables** are shielded and jacketed cables with extruded FEP or PTFE tape jackets, incorporating MIL-W-16878/4 wires. These component wires are insulated with extruded PTFE, and have either silver-plated copper or nickel-plated copper conductors.

Cables with PTFE jackets are available with our unique **Seamless Wrap** PTFE tape (see page 2 for details).

## Performance:

### Voltage rating:

600V.

### Temperature ratings:

Silver-plated conductors and either jacket: -55 to 200° C.

Nickel-plated conductors and PTFE jacket: -55 to 260° C.

Nickel-plated conductors and and FEP jacket: -55 to 200° C.

**See page 27 for component wire dimensions.**

## Part Numbers:

**10** - **TE** - **3726** **(3)** **SXE**

Component wire AWG  
 Component wire—  
**TE:** Silver-plated copper  
**TEN:** Nickel-plated copper

Jacket material—**STJ**: PTFE tape; **SXE**: extruded FEP

Number of component wires

Component wire stranding (see tables)

## Dimensions and Weight—1 Conductor Cables

Component Wire AWG	Stranding	Shield Diameter	Jacket Diameter	Weight
10	37/26	.161 (4.09)	.185 (4.70)	51.1 (76.0)
12	19/25	.125 (3.18)	.147 (3.73)	34.9 (51.9)
14	19/27	.115 (2.92)	.137 (3.48)	25.2 (37.5)
16	19/29	.100 (2.54)	.122 (3.10)	18.0 (26.8)
18	19/30	.090 (2.29)	.110 (2.79)	15.7 (23.4)
20	19/32	.080 (2.03)	.100 (2.54)	11.8 (17.6)
22	19/34	.072 (1.83)	.092 (2.34)	9.69 (14.4)
24	19/36	.066 (1.68)	.086 (2.18)	8.55 (12.7)
26	19/38	.056 (1.42)	.076 (1.93)	6.30 (9.37)
28	7/36	.052 (1.32)	.072 (1.83)	5.14 (7.65)
30	7/38	.049 (1.24)	.069 (1.75)	4.78 (7.11)
32	7/40	.047 (1.19)	.067 (1.70)	4.49 (6.68)

## Dimensions and Weight—2 Conductor Cables

Component Wire AWG	Stranding	Shield Diameter	Jacket Diameter	Weight
10	37/26	.299 (7.59)	.329 (8.36)	98.0 (146)
12	19/25	.227 (5.77)	.251 (6.38)	66.5 (99.0)
14	19/27	.207 (5.26)	.231 (5.87)	46.5 (69.2)
16	19/29	.177 (4.50)	.199 (5.05)	33.4 (49.7)
18	19/30	.157 (3.99)	.179 (4.55)	27.8 (41.4)
20	19/32	.137 (3.48)	.159 (3.04)	21.3 (31.7)
22	19/34	.121 (3.07)	.143 (3.63)	16.5 (24.6)
24	19/36	.109 (2.77)	.131 (3.33)	13.8 (20.5)
26	19/38	.099 (2.51)	.121 (3.07)	11.7 (17.4)
28	7/36	.091 (2.31)	.113 (2.87)	9.56 (14.2)
30	7/38	.085 (2.16)	.107 (2.72)	8.73 (13.0)
32	7/40	.081 (2.06)	.103 (2.62)	6.71 (10.0)

## Dimensions and Weight—3 Conductor Cables

Component Wire AWG	Stranding	Shield Diameter	Jacket Diameter	Weight
10	37/26	.325 (8.25)	.357 (9.06)	140 (208)
12	19/25	.247 (6.28)	.273 (6.94)	94.0 (140)
14	19/27	.221 (5.61)	.245 (6.22)	64.3 (95.7)
16	19/29	.189 (4.79)	.213 (5.40)	46.1 (68.6)
18	19/30	.167 (4.24)	.189 (4.80)	37.7 (56.1)
20	19/32	.146 (3.70)	.168 (4.26)	28.2 (42.0)
22	19/34	.128 (3.26)	.150 (3.82)	21.6 (32.1)
24	19/36	.115 (2.93)	.137 (3.49)	17.3 (25.7)
26	19/38	.105 (2.66)	.127 (3.22)	14.8 (22.0)
28	7/36	.096 (2.44)	.118 (3.00)	11.8 (17.6)
30	7/38	.090 (2.28)	.112 (2.84)	10.5 (15.6)
32	7/40	.085 (2.17)	.107 (2.73)	9.36 (13.9)

## Dimensions and Weight—4 Conductor Cables

Component Wire AWG	Stranding	Shield Diameter	Jacket Diameter	Weight
10	37/26	.361 (9.16)	.393 (9.97)	180 (268)
12	19/25	.274 (6.96)	.302 (7.67)	122 (182)
14	19/27	.250 (6.34)	.276 (7.00)	82.7 (123)
16	19/29	.209 (5.30)	.235 (5.96)	58.1 (86.5)
18	19/30	.184 (4.69)	.206 (5.24)	47.3 (70.4)
20	19/32	.160 (4.07)	.182 (4.63)	35.0 (52.1)
22	19/34	.141 (3.58)	.163 (4.14)	26.3 (39.1)
24	19/36	.127 (3.22)	.149 (3.78)	21.2 (31.5)
26	19/38	.115 (2.91)	.137 (3.47)	17.8 (26.5)
28	7/36	.105 (2.67)	.127 (3.22)	14.1 (21.0)
30	7/38	.098 (2.48)	.120 (3.04)	12.6 (18.7)
32	7/40	.093 (2.36)	.115 (2.92)	11.5 (17.1)

Dimensions in inches (mm). Weights in pounds/1000 feet (Kg/1000 M). • All values nominal unless otherwise indicated. • Dimensions calculated using a circumscribed circle.

