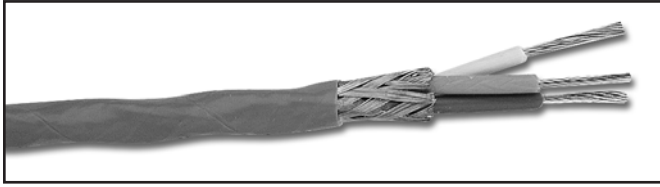


M27500 Cables—type JA (M25038/1 components)



Construction Details

Component wire conductor: 27% nickel-coated copper.

Component wire insulation:

Inner: Inorganic dielectric.

Outer: PTFE tape fluid barrier. (Also available with our unique **Seamless Wrap** PTFE tape; see page 2 for details.)

Shield: Nickel-plated copper braid, 85% coverage; other materials available.

Jacket: PTFE tape.

Colors: Color coded to M27500 (see page 67).

Certifications also available to NEMA WC27500.

M27500 JA cables are shielded and jacketed cables with PTFE (polytetrafluoroethylene) tape jackets, incorporating MIL-W-25038/1 wires.

These high-temperature component wires are insulated with an inorganic dielectric, a PTFE-coated fiberglass fluid barrier, and have a fused high-performance PTFE tape jacket.

These cables are available with our unique **Seamless Wrap** PTFE tape jacket (see page 2 for details).

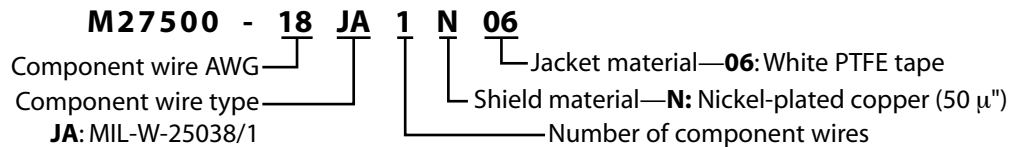
Performance:

Voltage rating: 600V.

Temperature rating: -55 to 260° C.

See page 55 for component wire dimensions.

Part Numbers:



Dimensions and Weight—1 Conductor Cables

Component Wire AWG (Stranding)	Shield Diameter	Jacket Diameter	Weight
12 (19/25)	.197 (5.00)	.219 (5.56)	50.9 (75.8)
14 (19/27)	.180 (4.57)	.202 (5.13)	40.0 (59.5)
16 (19/29)	.159 (4.04)	.181 (4.60)	32.1 (47.7)
18 (19/30)	.149 (3.78)	.171 (4.34)	27.3 (40.7)
20 (19/32)	.136 (3.45)	.158 (4.01)	23.9 (35.6)
22 (19/34)	.126 (3.20)	.148 (3.76)	20.7 (30.8)

Dimensions and Weight—2 Conductor Cables

Component Wire AWG (Stranding)	Shield Diameter	Jacket Diameter	Weight
12 (19/25)	.371 (9.42)	.399 (10.1)	100 (149)
14 (19/27)	.337 (8.56)	.365 (9.27)	77.9 (116)
16 (19/29)	.295 (7.49)	.318 (8.08)	60.0 (89.3)
18 (19/30)	.275 (6.99)	.298 (7.57)	50.5 (75.1)
20 (19/32)	.249 (6.32)	.272 (6.91)	43.2 (64.3)
22 (19/34)	.229 (5.82)	.252 (6.40)	35.9 (53.4)

Dimensions and Weight—3 Conductor Cables*

Component Wire AWG (Stranding)	Shield Diameter	Jacket Diameter	Weight
12 (19/25)	.402 (10.2)	.430 (10.9)	146 (217)
14 (19/27)	.361 (9.16)	.389 (9.87)	108 (161)
16 (19/29)	.315 (8.01)	.343 (8.72)	85.4 (127)
18 (19/30)	.294 (7.47)	.317 (8.05)	69.1 (103)
20 (19/32)	.266 (6.76)	.289 (7.34)	59.0 (87.8)
22 (19/34)	.244 (6.21)	.267 (6.79)	48.2 (71.8)

Dimensions and Weight—4 Conductor Cables

Component Wire AWG (Stranding)	Shield Diameter	Jacket Diameter	Weight
12 (19/25)	.447 (11.4)	.475 (12.1)	186 (277)
14 (19/27)	.406 (10.3)	.434 (11.0)	142 (211)
16 (19/29)	.351 (8.91)	.379 (9.62)	107 (159)
18 (19/30)	.327 (8.30)	.355 (9.01)	89.4 (133)
20 (19/32)	.295 (7.50)	.318 (8.09)	74.4 (111)
22 (19/34)	.271 (6.89)	.294 (7.47)	59.4 (88.4)

Dimensions in inches (mm). Weights in pounds/1000 feet (Kg/1000 M). All values are nominal. *Using factors from a circumscribed circle per M27500.

M27500 Cables—type JF (M25038/3 components)

M27500 JF cables are shielded and jacketed cables with PTFE (polytetrafluoroethylene) tape jackets, incorporating MIL-W-25038/3 wires.

These high-temperature component wires are insulated with an inorganic dielectric, a PTFE/polyimide tape fluid barrier, and have a fused high-performance PTFE tape jacket.

A non-polyimide version is also available.

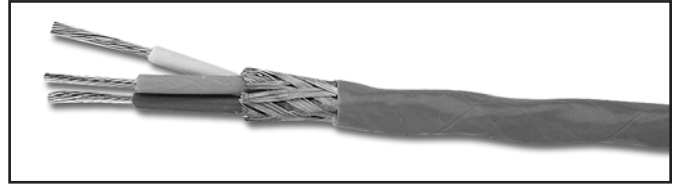
These cables are available with our unique **Seamless Wrap** PTFE tape jacket (see page 2 for details).

Performance:

Voltage rating: 600V.

Temperature rating: -55 to 260° C.

See page 56 for component wire dimensions.



Construction Details

Component wire conductor:

12–18 AWG: 27% nickel-coated copper.

20–22 AWG: 27% nickel-coated high-strength copper alloy.

Component wire insulation:

Inner: Inorganic dielectric.

Outer: PTFE/polyimide tape fluid barrier.

Component wire jacket:

Fused high-performance PTFE tape.

Shield: Nickel-plated copper braid, 85% coverage; other materials available.

Jacket: PTFE tape.

Colors: Color coded to M27500 (see page 67).

Certifications also available to NEMA WC27500.

Part Numbers:

M27500 - 18 JF 1 N 06

Component wire AWG—18

Component wire type—JF: MIL-W-25038/3

JF: MIL-W-25038/3

Jacket material—06: White PTFE tape

Shield material—N: Nickel-plated copper (50 μm)

Number of component wires—1

Dimensions and Weight—1 Conductor Cables

Component Wire AWG (Stranding)	Shield Diameter	Jacket Diameter	Weight
12 (19/25)	.157 (3.99)	.179 (4.55)	40.2 (59.8)
14 (19/27)	.139 (3.53)	.161 (4.09)	30.1 (44.8)
16 (19/29)	.121 (3.07)	.143 (3.63)	24.5 (36.5)
18 (19/30)	.109 (2.77)	.131 (3.33)	18.3 (27.2)
20 (19/32)	.099 (2.51)	.121 (3.07)	15.3 (22.8)
22 (19/34)	.071 (1.80)	.093 (2.36)	10.6 (15.7)

Dimensions and Weight—2 Conductor Cables

Component Wire AWG (Stranding)	Shield Diameter	Jacket Diameter	Weight
12 (19/25)	.291 (7.39)	.314 (8.00)	76.3 (114)
14 (19/27)	.255 (6.48)	.278 (7.06)	56.2 (83.6)
16 (19/29)	.219 (5.56)	.242 (6.15)	42.9 (63.9)
18 (19/30)	.195 (4.95)	.218 (5.54)	34.3 (51.0)
20 (19/32)	.175 (4.45)	.198 (5.03)	27.3 (40.6)
22 (19/34)	.129 (3.28)	.152 (3.86)	19.5 (29.0)

Dimensions and Weight—3 Conductor Cables*

Component Wire AWG (Stranding)	Shield Diameter	Jacket Diameter	Weight
12 (19/25)	.311 (7.90)	.339 (8.61)	110 (164)
14 (19/27)	.272 (6.92)	.295 (7.50)	77.9 (116)
16 (19/29)	.234 (5.94)	.257 (6.52)	56.9 (84.7)
18 (19/30)	.208 (5.28)	.231 (5.86)	46.4 (69.1)
20 (19/32)	.186 (4.73)	.209 (5.32)	36.6 (54.4)
22 (19/34)	.137 (3.48)	.160 (4.06)	26.2 (38.9)

Dimensions and Weight—4 Conductor Cables

Component Wire AWG (Stranding)	Shield Diameter	Jacket Diameter	Weight
12 (19/25)	.346 (8.79)	.374 (9.50)	140 (208)
14 (19/27)	.303 (7.69)	.331 (8.40)	101 (151)
16 (19/29)	.259 (6.58)	.282 (7.17)	71.5 (106)
18 (19/30)	.230 (5.85)	.253 (6.43)	58.2 (86.6)
20 (19/32)	.206 (5.24)	.229 (5.82)	45.2 (67.2)
22 (19/34)	.151 (3.83)	.174 (4.41)	32.1 (47.8)

Dimensions in inches (mm). Weights in pounds/1000 feet (Kg/1000 M). All values are nominal. *Using factors from a circumscribed circle per M27500.