

M27500 Cables—types NG and NH (M81381/19, /20 components)

M27500 NG and NH cables are shielded and jacketed cables with a jacket of FEP/polyimide tape, incorporating MIL-DTL-81381/19 or /20 wires.

These component wires have a light-weight insulation of FEP/polyimide/FEP tape with an outer coating of modified aromatic polyimide.

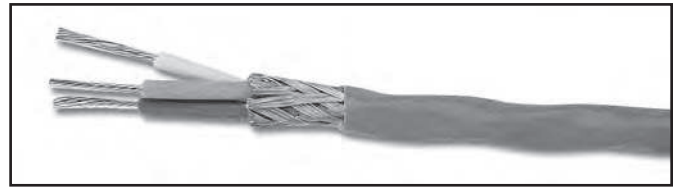
The component wires have silver- or nickel-plated high-strength copper alloy conductors.

Performance:

Voltage rating: 600V.

Temperature rating: -55 to 200° C.

See page 63 for component wire dimensions.



Construction Details

Component wire conductor:

/19 component wires: Silver-plated high-strength copper alloy;

/20 component wires: Nickel-plated high-strength copper alloy.

Component wire insulation:

FEP/polyimide/FEP tape with modified aromatic polyimide coating.

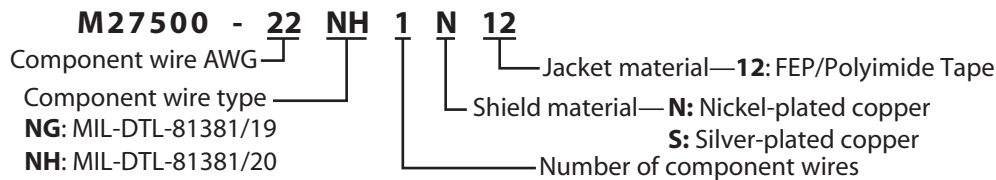
Shield: Nickel- or silver-plated copper braid, 85% coverage.

Jacket: Natural polyimide/FEP tape, wrapped and heat sealed, with polyimide outer surface.

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

Certifications also available to NEMA WC27500.

Part Numbers:



Dimensions and Weight—1 Conductor Cables

Component Wire AWG (Stranding)	Shield Diameter	Jacket Diameter	Weight
20 (19/32)	.064 (1.63)	.073 (1.85)	7.53 (11.2)
22 (19/34)	.056 (1.42)	.065 (1.64)	5.71 (8.49)
24 (19/36)	.050 (1.27)	.059 (1.49)	4.79 (7.12)
26 (19/38)	.045 (1.14)	.054 (1.36)	4.14 (6.16)

Dimensions and Weight—2 Conductor Cables

Component Wire AWG (Stranding)	Shield Diameter	Jacket Diameter	Weight
20 (19/32)	.112 (2.84)	.121 (3.06)	13.8 (20.6)
22 (19/34)	.096 (2.44)	.105 (2.66)	9.93 (14.8)
24 (19/36)	.084 (2.13)	.093 (2.35)	7.84 (11.7)
26 (19/38)	.074 (1.88)	.083 (2.10)	5.90 (8.78)

Dimensions and Weight—3 Conductor Cables*

Component Wire AWG (Stranding)	Shield Diameter	Jacket Diameter	Weight
20 (19/32)	.119 (3.03)	.128 (3.25)	19.0 (28.2)
22 (19/34)	.102 (2.59)	.111 (2.81)	13.4 (19.9)
24 (19/36)	.089 (2.26)	.098 (2.48)	9.96 (14.8)
26 (19/38)	.078 (1.99)	.087 (2.21)	7.80 (11.6)

Dimensions and Weight—4 Conductor Cables

Component Wire AWG (Stranding)	Shield Diameter	Jacket Diameter	Weight
20 (19/32)	.132 (3.34)	.140 (3.56)	24.1 (35.9)
22 (19/34)	.112 (2.85)	.121 (3.07)	16.9 (25.2)
24 (19/36)	.098 (2.49)	.107 (2.71)	12.5 (18.7)
26 (19/38)	.086 (2.18)	.095 (2.40)	9.92 (14.8)

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

