

SERIES 803 BAYONET-LOCK

Mighty Mouse Connectors and Cables



Shielded and Overmolded Harsh-Environment Cordsets

**SERIES 803 BAYONET-LOCK HARSH-ENVIRONMENT SHIELDED CORDSETS**



High-performance Mighty Mouse cordsets feature easy ordering and fast delivery. These fully shielded and watertight assemblies withstand abrasion, temperature extremes, and chemicals. Flexible overmolding provides rugged, watertight protection to wire and shield. Two styles are available: **Style 1** polyamide overmold and polyurethane cable jacket, and **Style 2** improved temperature range, high flexibility thermoplastic rubber overmold and cable jacket. Overmolded Mighty Mouse cordsets are suitable for military gear and other hostile environments where interconnect reliability and survivability is essential.

**Product Features**

- Single-ended or double-ended
- Rugged, watertight construction
- 100% electrically tested
- Flexible to -55°C. (Style 2)
- Stainless steel shield termination band
- Resistant to chemicals
- Withstands UV and ozone

**High-Speed Cordsets**

Controlled impedance twisted pair cordsets for Ethernet, USB, and other protocols are available. Please refer to Section M

**Harsh Environment Cordset Selection Guide**

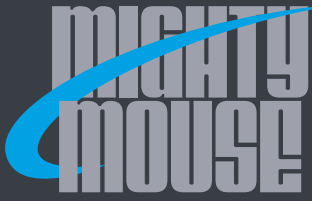
Property	Style 1 Polyurethane Jacket Polyamide Overmold	Style 2 Rubber Jacket Rubber Overmold
Cable jacket	Thermoplastic polyurethane (TPU), black	Thermoplastic elastomer (TPV), black
Overmold	Polyamide, black	Thermoplastic elastomer (TPV), black
Operating temperature	-30° C. to +105° C.	-55° C. to +135° C.
Flexibility	Good	Excellent
Water Resistance	Waterproof	Waterproof
Solvent Resistance, Cable Jacket	Excellent	Good
Solvent Resistance, Overmold	Fair <sup>(1)</sup>	Good
Weatherability	Excellent	Excellent
Abrasion Resistance	Excellent	Good
Flammability	Flame retardant UL 94 V-0	Flame retardant UL 94 HB
Low Smoke, Zero Halogen Cable Jacket	Yes	No

(1) Excellent resistance to most solvents, fuels, and oils; poor resistance to strong acids and bipolar solvents (alcohol)

**Specifications**

Cable jacket	Style 1: thermoplastic polyurethane, black, low-smoke, zero-halogen Style 2: thermoplastic elastomer, black
Overmold	Style 1: polyamide Style 2: thermoplastic elastomer, black
Cable shield	Tin-coated copper braid, 90% minimum coverage
Conductors	Silver coated stranded wire, TFE insulated, per M22759/11
Shield Termination	Band-Master™ ATS stainless steel shield termination band
Current rating	#23-5 amps, #20-7.5 amps, #16-13 amps, #12-23 amps
Test voltage (DWV)	#23 500 Vac, #20 500 Vac, #16 and #12 500 VAC sea level
Insulation resistance	200 Megohms minimum
Shielding effectiveness	50 dB minimum from 100MHz to 1000MHz.

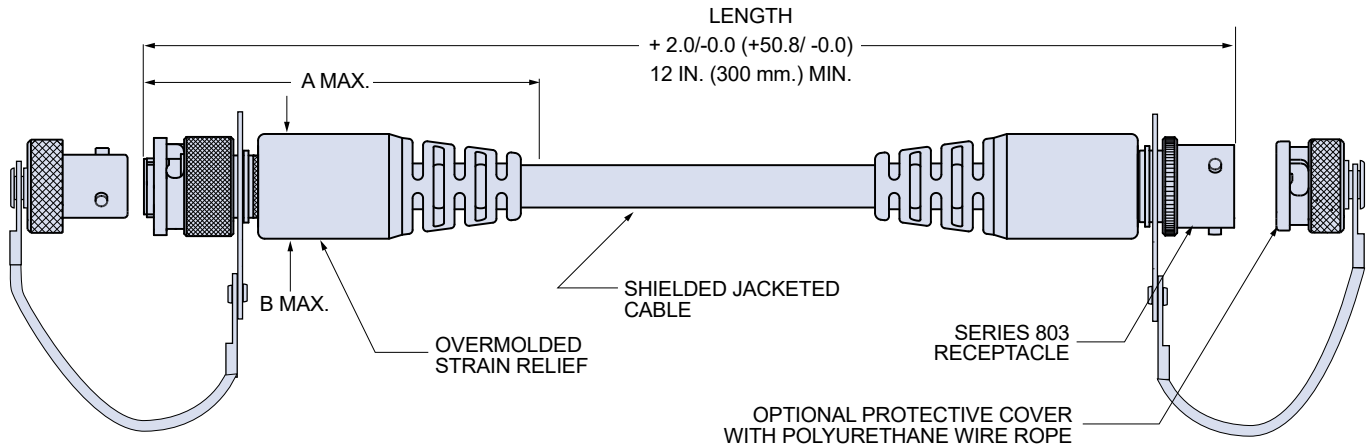
SERIES 803 BAYONET-LOCK



# SERIES 803 BAYONET-LOCK Mighty Mouse Connectors and Cables



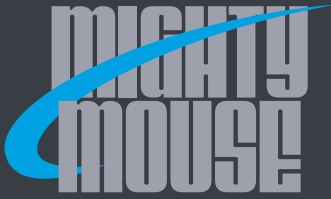
## Shielded and Overmolded Harsh-Environment Cordsets



Dimensions		
Shell Size	A Max.	B Max.
5	2.38	0.50
6	2.48	0.55
7	2.58	0.65
8	2.65	0.71
9	2.85	0.78
10	2.82	0.82
12	3.00	0.9
14	3.20	1.10

### NOTES

1. Double-ended cordsets are wired pin #1 to pin #1, #2 to #2, and so on.
2. Wires are silver-coated stranded copper with TFE insulation, 600V, in accordance with M22759/11.
3. Wire color is IAW MIL-STD-681 for cables containing 10 wires or less. For cable containing more than 10 wires, wire color is white.



SERIES 803 BAYONET-LOCK  
Mighty Mouse Connectors and Cables

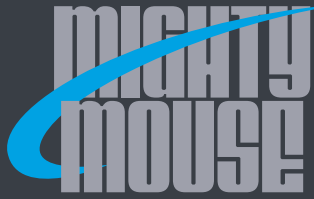


Shielded and Overmolded Harsh-Environment  
Cordsets

Series 803 Cordsets with #23 Contacts								
Sample Part Number								
803-009	-A	C	2	M	8-28	N	X	-36
Series	End A Connector	End B Connector	Wire Size	Shell Material / Finish	Insert Arr.	Protective Cover	Shell Key Pos.	Length
<b>803-009</b> <b>Style 1</b> Polyurethane Cable Jacket, Polyamide Overmold <b>803-030</b> <b>Style 2</b> Rubber Cable Jacket and Overmold	<b>-A</b> Plug, with Male Pin Contacts <b>-B</b> Plug, with Female Socket Contacts <b>-C</b> Receptacle, with Male Pin Contacts <b>-D</b> Receptacle, with Female Socket Contacts	<b>A</b> Plug, with Male Pin Contacts <b>B</b> Plug, with Female Socket Contacts <b>C</b> Receptacle, with Male Pin Contacts <b>D</b> Receptacle, with Female Socket Contacts <b>N</b> No Connector (Single-Ended)	<b>2</b> #22 AWG <b>4</b> #24 AWG	<b>M</b> Aluminum / Electroless Nickel <b>NF</b> Aluminum / Cadmium with OD Chromate <b>ZNU</b> Aluminum / Zinc-Nickel with Black Chromate <b>MT</b> Aluminum / Nickel-PTFE <b>Z1</b> Stainless Steel / Passivated	See page G-4 for insert arr.  Consult Factory for Combo Arr.	<b>P</b> Metal Protective Covers Included <b>N</b> No Covers Supplied	<b>N</b> Normal <b>X</b> Pos. X <b>Y</b> Pos. Y <b>Z</b> Pos. Z  See page G-7	Overall Length In Inches 12 Inch Min.

Series 803 Cordsets with #20HD Contacts								
Sample Part Number								
803-016	-A	C	0	M	8-28	N	X	-36
Series	End A Connector	End B Connector	Wire Size	Shell Material / Finish	Insert Arr.	Protective Cover	Shell Key Pos.	Length
<b>803-016</b> <b>Style 1</b> Polyurethane Cable Jacket, Polyamide Overmold <b>803-031</b> <b>Style 2</b> Rubber Cable Jacket and Overmold,	<b>-A</b> Plug, with Male Pin Contacts <b>-B</b> Plug, with Female Socket Contacts <b>-C</b> Receptacle, with Male Pin Contacts <b>-D</b> Receptacle, with Female Socket Contacts	<b>A</b> Plug, with Male Pin Contacts <b>B</b> Plug, with Female Socket Contacts <b>C</b> Receptacle, with Male Pin Contacts <b>D</b> Receptacle, with Female Socket Contacts <b>N</b> No Connector (Single-Ended)	<b>0</b> #20 AWG <b>2</b> #22 AWG	<b>M</b> Aluminum / Electroless Nickel <b>NF</b> Aluminum / Cadmium with OD Chromate <b>ZNU</b> Aluminum / Zinc-Nickel with Black Chromate <b>MT</b> Aluminum / Nickel-PTFE <b>Z1</b> Stainless Steel / Passivated	See page G-4 for insert arr.  Consult Factory for Combo Arr.	<b>P</b> Metal Protective Covers Included <b>N</b> No Covers Supplied	<b>N</b> Normal <b>X</b> Pos. X <b>Y</b> Pos. Y <b>Z</b> Pos. Z  See page G-7	Overall Length In Inches 12 Inch Min.

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Mighty Mouse Connectors and Cables

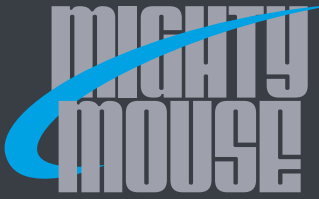


Shielded and Overmolded Harsh-Environment Cordsets

Series 803 Cordsets with #16 Contacts								
Sample Part Number								
803-013	-A	C	6	M	8-28	N	X	-36
Series	End A Connector	End B Connector	Wire Size	Shell Material/ Finish	Insert Arr.	Protective Cover	Shell Key Pos.	Length
<b>803-013</b> <b>Style 1</b> Polyurethane Cable Jacket, Polyamide Overmold	<b>-A</b> Plug, with Male Pin Contacts <b>-B</b> Plug, with Female Socket Contacts	<b>A</b> Plug, with Male Pin Contacts <b>B</b> Plug, with Female Socket Contacts <b>C</b> Receptacle, with Male Pin Contacts <b>D</b> Receptacle, with Female Socket Contacts <b>N</b> No Connector (Single-Ended)	<b>6</b> #16 AWG <b>8</b> #18 AWG	<b>M</b> Aluminum / Electroless Nickel <b>NF</b> Aluminum / Cadmium with OD Chromate <b>ZNU</b> Aluminum / Zinc-Nickel with Black Chromate <b>MT</b> Aluminum / Nickel-PTFE <b>Z1</b> Stainless Steel / Passivated	See page G-4 for insert arr.  Consult Factory for Combo Arr.	<b>P</b> Metal Protective Covers Included <b>N</b> No Covers Supplied	<b>N</b> Normal <b>X</b> Pos. X <b>Y</b> Pos. Y <b>Z</b> Pos. Z  See page G-7	Overall Length In Inches 12 Inch Min.

Series 803 Cordsets with #20HD Contacts								
Sample Part Number								
803-033	-A	C	0	M	8-28	N	X	-36
Series	End A Connector	End B Connector	Wire Size	Shell Material / Finish	Insert Arr.	Protective Cover	Shell Key Pos.	Length
<b>803-014</b> <b>Style 1</b> Polyurethane Cable Jacket, Polyamide Overmold, <b>803-033</b> <b>Style 2</b> Rubber Cable Jacket and Rubber Overmold,	<b>-A</b> Plug, with Male Pin Contacts <b>-B</b> Plug, with Female Socket Contacts <b>-C</b> Receptacle, with Male Pin Contacts <b>-D</b> Receptacle, with Female Socket Contacts	<b>A</b> Plug, with Male Pin Contacts <b>B</b> Plug, with Female Socket Contacts <b>C</b> Receptacle, with Male Pin Contacts <b>D</b> Receptacle, with Female Socket Contacts <b>N</b> No Connector (Single-Ended)	<b>0</b> #20 AWG <b>2</b> #22 AWG	<b>M</b> Aluminum / Electroless Nickel <b>NF</b> Aluminum / Cadmium with OD Chromate <b>ZNU</b> Aluminum / Zinc-Nickel with Black Chromate <b>MT</b> Aluminum / Nickel-PTFE <b>Z1</b> Stainless Steel / Passivated	See page G-4 for insert arr.  Consult Factory for Combo Arr.	<b>P</b> Metal Protective Covers Included <b>N</b> No Covers Supplied	<b>N</b> Normal <b>X</b> Pos. X <b>Y</b> Pos. Y <b>Z</b> Pos. Z  See page G-7	Overall Length In Inches 12 Inch Min.

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Mighty Mouse Connectors and Cables



Flexible, Lightweight Phantom Cable Cordsets

**SERIES 803 BAYONET-LOCK ULTRAFLEXIBLE “PHANTOM CABLE” CORDSETS**



Phantom Cable cordsets feature high-flex rubber-insulated wires, lightweight shield, and overbraided jackets for maximum flexibility, reduced size, and minimum weight. Flexible rubber overmold provides strain relief and environmental sealing. EMI shield options include high-strength, ultralightweight AmberStrand® nickel-coated composite braid, ArmorLite™ or lightweight, high flexibility tinned copper braid. Braid outer jackets are available with NOMEX®, HALAR® or PTFE-coated fiberglass.

**Product Features**

- Overbraided cable jacket for excellent flexibility
- Ultra-lightweight AmberStrand® EMI shield
- 100% electrically tested
- Flexible to -55°C.
- Stainless steel shield termination band

**Application Note**

Overbraided textile jackets are ideal for applications where flexibility and weight are important. However, water can penetrate through the jacket and cable shield. Dust and contamination can also become entrapped in the braid. Braided jackets are prone to fraying damage caused by snagging on velcro closures and MOLLE vests. Extruded cable jackets are recommended if debris entrapment, moisture ingress, or fraying damage are concerns.

**Braid Shield Selection Guide**

Property	AmberStrand®	ArmorLite®	Copper
Type	Nickel-coated high-strength super fiber	Micro-filament nickel-coated stainless steel	Tin-coated copper
Weight/ft. (0.5 in. ID)	3.7 grams	4.4 grams	22.3 grams
Operating Temp <sup>(1)</sup>	-65° C to +200° C	-80° C to +260° C	-80° C to +150° C
Coverage	90% min.	90% min.	90% min.
Flexibility	Excellent	Excellent	Good
Cost Comparison	\$\$\$	\$\$	\$

(1) Rubber wires and rubber overmold are rated for -55° C to +135° C.

**Jacket Selection Guide**

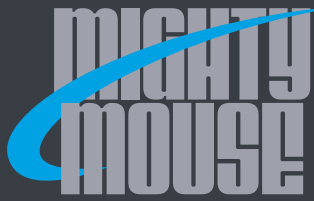
Property	NOMEX®	HALAR®	PTFE Coated Fiberglass
Color	Black or olive drab	Black	Tan
Operating Temp <sup>(1)</sup>	-55° C to +260° C	-73° C to +150° C	-75° C to +300° C
Chemical Resistance	Excellent	Excellent	Excellent
Flammability	Self-extinguishing, will not melt	Fire retardant UL VW-1	Self-extinguishing
Toxicity	Non-toxic	Non-toxic	Non-toxic
Flexibility	Excellent	Excellent	Excellent
Abrasion resistance	Excellent	Excellent	Excellent

(1) Rubber wires and rubber overmold are rated for -55° C to +135° C.

**Specifications**

Cable jacket	NOMEX®, HALAR® or PTFE-coated fiberglass
Temperature Range	-55° C to +135° C
Overmold	Thermoplastic elastomer, black
Cable shield	AmberStrand®, ArmorLite® or tinned copper, 90% minimum coverage
Conductors	Silver coated stranded wire, rubber insulation
Shield Termination	Band-Master™ ATS stainless steel shield termination band
Current rating	5 amps
Test voltage (DWV)	500 Vac
Insulation resistance	200 Megohms minimum
Shielding effectiveness	50 dB minimum from 100MHz to 1000MHz.

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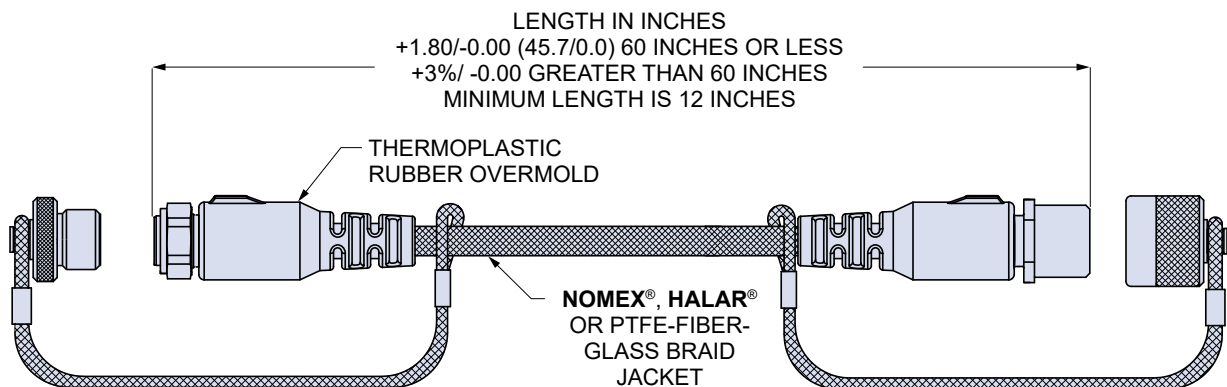
SERIES 803 BAYONET-LOCK

Mighty Mouse Connectors and Cables



Flexible, Lightweight Phantom Cable Cordsets

Series 803 "Phantom Cable" Cordsets size #12 thru #23 Contacts										
Sample Part Number										
803-027	-B	N	2	Z1	5-3	N	X	-60	C	N
Series	End A Connector	End B Connector	Wire Size	Shell Material/ Finish	Insert Arr.	Protective Cover	Shell Key Pos.	Length	Shield Option	Jacket Option
Size #23 Contacts 803-026 Phantom Cable Cordset	-A Plug, with Male Pin Contacts -B Plug, with Female Socket Contacts	A Plug, with Male Pin Contacts B Plug, with Female Socket Contacts C Rec. with Male Pin Contacts D Rec. with Female Socket Contacts N No Connector (Single-Ended)	Size #23 Contacts 4 #24 AWG 6 #26 AWG 8 #28 AWG	M Aluminum / Electroless Nickel NF Aluminum / Cadmium with OD Chromate ZNU Aluminum / Zinc-Nickel with Black Chromate MT Aluminum / Nickel-PTFE Z1 Stainless Steel / Passivated	See page G-4 for insert arr.  Consult Factory for Combo Arr.	P Metal Protective Covers Included N No Covers Supplied	N Normal X Pos. X Y Pos. Y Z Pos. Z  See page G-7	Overall Length In Inches 12 Inch Min.	A AmberStrand B ArmorLite C Tin-Coated Copper	D Nomex, Olive Drab N Nomex, Black H Halar (Monofil) P Peek (Monofil)
Size #20 HD Contacts 803-027 Phantom Cable Cordset	-C Rec. with Male Pin Contacts -D Rec. with Female Socket Contacts		Size #20 HD Contacts 0 #20 AWG 2 #22 AWG							
Size #16 Contacts 803-028 Phantom Cable Cordset			Size #16 Contacts 6 #16 AWG 8 #18 AWG							
Size #12 Contacts 803-029 Phantom Cable Cordset			Size #12 Contacts 2 #12 AWG 4 #14 AWG							



NOTES

- Double-ended cordsets are wired pin #1 to pin #1, #2 to #2, and so on.
- Wires are silver-coated stranded copper with TPE insulation, 600V, UL VW-1 rated.
- Wires are white with color stripe per MIL-STD-681. Wire #1 is WHT/BLK, wire #2 is WHT/BRN, etc.

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