



SERIES 800 UN THREAD MATING Mighty Mouse Connectors and Cables



Series 800 Mighty Mouse Overmolded 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** features low smoke, zero halogen polyamide overmold, and polyurethane cable jacket. **Style 2** features improved temperature operating range and highly flexible 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

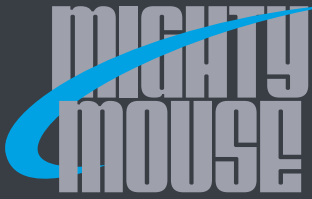
Harsh Environment Cordset Selection Guide

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 ⁽¹⁾	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

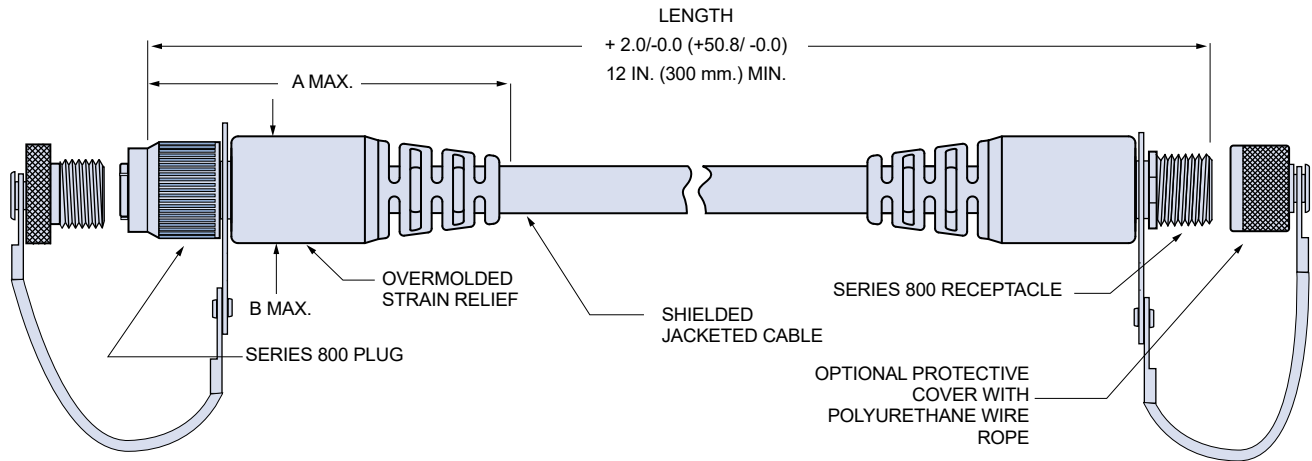
Cable jacket	Style 1: thermoplastic polyurethane, black, low-smoke, zero-halogen Style 2: thermoplastic elastomer, black
Overmold	Style 1: polyamide Style 2: thermoplastic elastomer, black
Cable shield	Tin-coated copper braid, 90% minimum coverage
Conductors	Silver coated stranded wire, TFE insulated, 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)	#23–750 Vac, #20–1000 vac, #16 and #12–1800 VAC sea level
Insulation resistance	200 Megohms minimum
Shielding effectiveness	50 dB minimum from 100MHz to 1000MHz.



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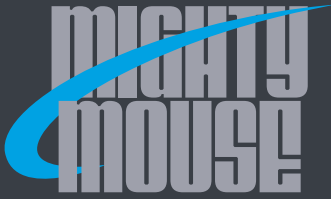
Series 800 Mighty Mouse Overmolded Cordsets



Dimensions				
Shell Size	A Max.		B Max.	
	In.	mm.	In.	mm.
5	2.30	12.70	0.50	12.70
6	2.40	13.97	0.55	13.97
7	2.50	16.51	0.65	16.51
8	2.55	18.03	0.71	18.03
9	2.75	19.81	0.78	19.81
10	2.71	20.83	0.82	20.83
12	2.90	22.86	0.9	22.86

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 white.



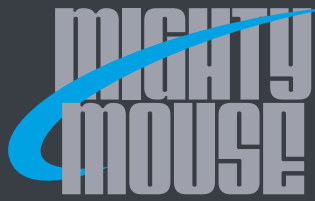
SERIES 800 UN THREAD MATING
Mighty Mouse Connectors and Cables
 Series 800 Mighty Mouse
 Overmolded Cordsets



Series 800 Cordsets with #23 Contacts									
Sample Part Number									
800-034	-A	C	K	2	M	8-28	N	X	-36
Series	End A Connector	End B Connector	Plug Style	Wire Size	Shell Material/ Finish	Insert Arr.	Protective Cover	Shell Key Pos.	Length
800-034 Style 1 Polyurethane Cable Jacket, Polyamide Overmold	-A Plug, with Male Pin Contacts	A Plug, with Male Pin Contacts	K Round Knurled Coupling Nut	2 #22 AWG	M Aluminum / Electroless Nickel	See Cont. Arr. Page D-4	P Metal Protective Covers Included	N Normal	Overall Length In Inches 12 Inch Min.
800-056 Style 2 Rubber Cable Jacket and Rubber Overmold, #23 Contacts	-B Plug, with Female Socket Contacts	B Plug, with Female Socket Contacts	KL Round Knurled Coupling Nut, Self-Locking	4 #24 AWG	NF Aluminum / Cadmium with OD Chromate	Consult Factory for Combo Arr.	N No Covers Supplied	X Pos. X Y Pos. Y Z Pos. Z	
	-C Receptacle, with Male Pin Contacts	C Receptacle, with Male Pin Contacts	H Hex Coupling Nut		ZNU Aluminum / Zinc-Nickel with Black Chromate			See page D-7	
	-D Receptacle, with Female Socket Contacts	D Receptacle, with Female Socket Contacts	HL Hex Coupling Nut, Self-Locking		MT Aluminum / Nickel-PTFE				
		N No Connector (Single-Ended)	N Receptacle Cable		Z1 Stainless Steel / Passivated				

Series 800 Cordsets with #20HD Contacts									
Sample Part Number									
800-041	-A	C	K	0	M	8-28	N	X	-36
Series	End A Connector	End B Connector	Plug Style	Wire Size	Shell Material / Finish	Insert Arr.	Protective Cover	Shell Key Pos.	Length
800-041 Style 1 Polyurethane Cable Jacket, Polyamide Overmold, #20HD Contacts	-A Plug, with Male Pin Contacts	A Plug, with Male Pin Contacts	K Round Knurled Coupling Nut	0 #20 AWG	M Aluminum / Electroless Nickel	See Cont. Arr. page D-4	P Metal Protective Covers Included	N Normal	Overall Length In Inches 12 Inch Min.
800-057 Style 2 Rubber Cable Jacket and Rubber Overmold,	-B Plug, with Female Socket Contacts	B Plug, with Female Socket Contacts	KL Round Knurled Coupling Nut, Self-Locking	2 #22 AWG	NF Aluminum / Cadmium with OD Chromate	Consult Factory for Combo Arr.	N No Covers Supplied	X Pos. X Y Pos. Y Z Pos. Z	
	-C Receptacle, with Male Pin Contacts	C Receptacle, with Male Pin Contacts	H Hex Coupling Nut		ZNU Aluminum / Zinc-Nickel with Black Chromate			See page D-7	
	-D Receptacle, with Female Socket Contacts	D Receptacle, with Female Socket Contacts	HL Hex Coupling Nut, Self-Locking		MT Aluminum / Nickel-PTFE				
		N No Connector (Single-Ended)	N Receptacle Cable		Z1 Stainless Steel / Passivated				

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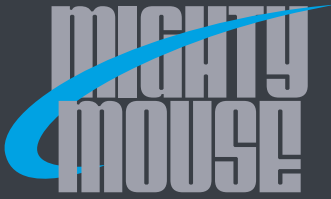


Series 800 Mighty Mouse Overmolded Cordsets

Series 800 Cordsets with #16 Power Contacts									
Sample Part Number									
800-038	-A	C	K	6	M	8-2	N	X	-36
Series	End A Connector	End B Connector	Plug Style	Wire Size	Shell Material/ Finish	Insert Arr.	Protective Cover	Shell Key Pos.	Length
800-038 Style 1 Polyurethane Cable Jacket, Polyamide Overmold, #16 Contacts	-A Plug, with Male Pin Contacts	A Plug, with Male Pin Contacts	K Round Knurled Coupling Nut	6 #16 AWG	M Aluminum / Electroless Nickel	See Cont. Arr. Page D-4	P Metal Protective Covers Included	N Normal	Overall Length In Inches
800-058 Style 2 Rubber Cable Jacket and Rubber Overmold, #16 Contacts	-B Plug, with Female Socket Contacts	B Plug, with Female Socket Contacts	KL Round Knurled Coupling Nut, Self-Locking	8 #18 AWG	NF Aluminum / Cadmium with OD Chromate	Consult Factory for Combo Arr.	N No Covers Supplied	X Pos. X Y Pos. Y Z Pos. Z	12 Inch Min.
	-C Receptacle, with Male Pin Contacts	C Receptacle, with Male Pin Contacts	H Hex Coupling Nut		ZNU Aluminum / Zinc-Nickel with Black Chromate			See page D-7	
	-D Receptacle, with Female Socket Contacts	D Receptacle, with Female Socket Contacts	HL Hex Coupling Nut, Self-Locking		MT Aluminum / Nickel-PTFE				
		N No Connector (Single-Ended)	N Receptacle Cable		Z1 Stainless Steel / Passivated				

Series 800 Cordsets with #12 Power Contacts									
Sample Part Number									
800-039	-A	C	K	2	M	8-2	N	X	-36
Series	End A Connector	End B Connector	Plug Style	Wire Size	Shell Material / Finish	Insert Arr.	Protective Cover	Shell Key Pos.	Length
800-039 Style 1 Polyurethane Cable Jacket, Polyamide Overmold, #12 Contacts	-A Plug, with Male Pin Contacts	A Plug, with Male Pin Contacts	K Round Knurled Coupling Nut	2 #12 AWG	M Aluminum / Electroless Nickel	See Cont. Arr. Page D-4	P Metal Protective Covers Included	N Normal	Overall Length In Inches
800-059 Style 2 Rubber Cable Jacket and Rubber Overmold, #12 Contacts	-B Plug, with Female Socket Contacts	B Plug, with Female Socket Contacts	KL Round Knurled Coupling Nut, Self-Locking	4 #14 AWG	NF Aluminum / Cadmium with OD Chromate	Consult Factory for Combo Arr.	N No Covers Supplied	X Pos. X Y Pos. Y Z Pos. Z	12 Inch Min.
	-C Receptacle, with Male Pin Contacts	C Receptacle, with Male Pin Contacts	H Hex Coupling Nut		ZNU Aluminum / Zinc-Nickel with Black Chromate			See page D-7	
	-D Receptacle, with Female Socket Contacts	D Receptacle, with Female Socket Contacts	HL Hex Coupling Nut, Self-Locking		MT Aluminum / Nickel-PTFE				
		N No Connector (Single-Ended)	N Receptacle Cable		Z1 Stainless Steel / Passivated				

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Flexible, Lightweight 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. Available for all Mighty Mouse layouts with size #23 contacts, these cordsets are available with #24 through #28 AWG wire. EMI shield options include high-strength, ultralightweight **AmberStrand**, nickel-coated composite braid **ArmorLite** or lightweight, highly flexible 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 ⁽¹⁾	-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.

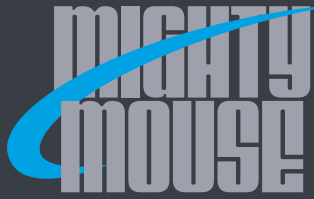
Jacket Selection Guide

Property	NOMEX®	HALAR®	PTFE Coated Fiberglass
Color	Black or olive drab	Black	Tan
Operating Temp ⁽¹⁾	-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.

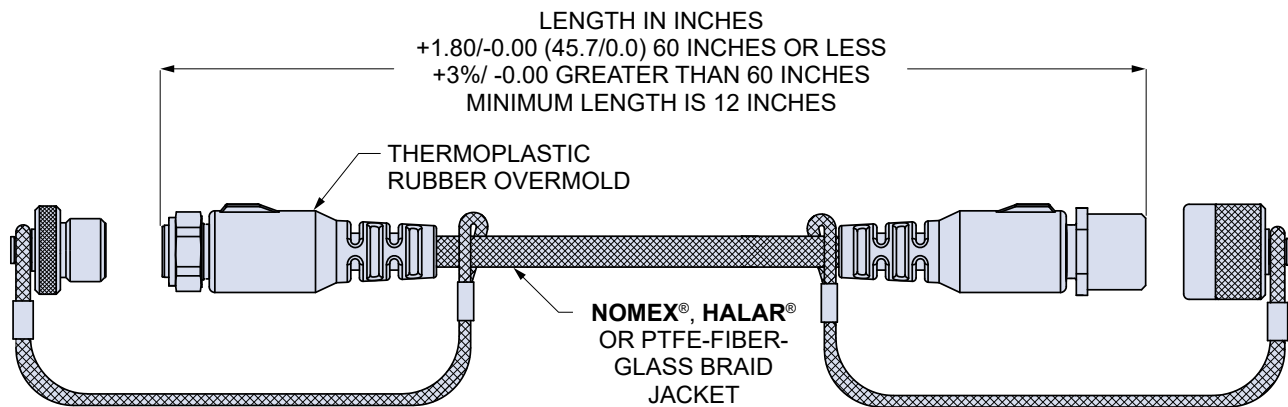


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Flexible, Lightweight Phantom Cable Cordsets

Series 800 "Phantom Cable" Cordsets size #12 thru #23 Contacts										
Sample Part Number										
800-053	-B	N	0	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 800-052 Phantom Cable Cordset	-A Plug, with Male Pin Contacts	A Plug, with Male Pin Contacts	Size #23 Contacts 2 #22 AWG 4 #24 AWG	M Aluminum / Electroless Nickel	See Cont. Arr. Page D-4	P Metal Protective Covers Included	N Normal X Pos. X	Overall Length In Inches 12 Inch Min.	A AmberStrand	N Nomex
	-B Plug, with Female Socket Contacts	B Plug, with Female Socket Contacts	Size #20 HD Contacts 0 #20 AWG 2 #22 AWG	NF Aluminum / Cadmium with OD Chromate	Consult Factory for Combo Arr.	N No Covers Supplied	Y Pos. Y Z Pos. Z See page D-7		B ArmorLite	H Halar (Monofil)
Size #16 Contacts 800-054 Phantom Cable Cordset	-C Rec. with Male Pin Contacts	C Rec. with Male Pin Contacts	Size #16 Contacts 6 #16 AWG 8 #18 AWG	ZNU Aluminum / Zinc-Nickel with Black Chromate					C Tin-Coated Copper	P Peek (Monofil)
		D Rec. with Female Socket Contacts	Size #12 Contacts 2 #12 AWG 4 #14 AWG	MT Aluminum / Nickel-PTFE						
Size #12 Contacts 800-055 Phantom Cable Cordset	-D Rec. with Female Socket Contacts	D Rec. with Female Socket Contacts								
		N No Connector (Single-Ended)								



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 TPE insulation, 600V, UL VW-1 rated.
3. Wires are white with color stripe per MIL-STD-681. Wire #1 is WHT/BLK, wire #2 is WHT/BRN, etc.