

SERIES 801 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

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

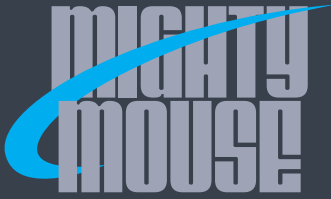
(1) Excellent resistance to most solvents, fuels, and oils; poor resistance to strong acids and bipolar solvents (alcohol)

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.

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.

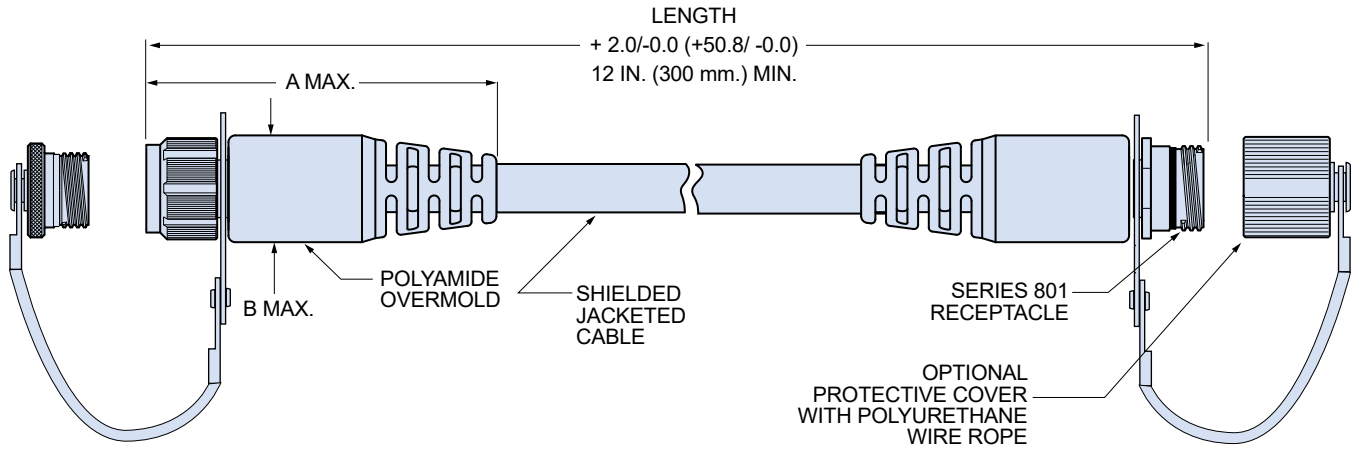
SERIES 801 DOUBLE-START MATING



SERIES 801 DOUBLE-START ACME THREAD
Mighty Mouse Connectors and Cables

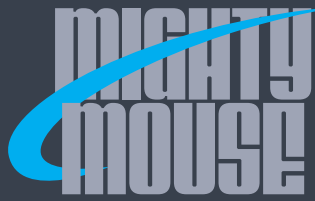


Overmolded Harsh Environment Cordsets



Dimensions				
Shell Size	A Max.		B Max.	
	In.	mm.	In.	mm.
5	2.31	58.67	0.50	12.70
6	2.4	60.96	0.55	13.97
7	2.5	63.50	0.65	16.51
8	2.52	64.01	0.71	18.03
9	2.8	71.12	0.78	19.81
10	2.75	69.85	0.82	20.83
11	2.85	72.39	0.87	22.10
13	3.1	78.74	0.90	22.86
16	3.4	86.36	1.10	27.94
17	3.4	86.36	1.20	30.48

SERIES 801 DOUBLE-START MATING



SERIES 801 DOUBLE-START ACME THREAD

Mighty Mouse Connectors and Cables

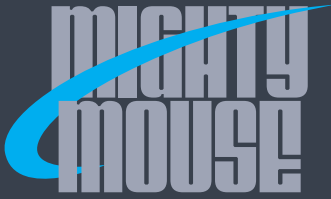


Overmolded Harsh Environment Cordsets

Series 801 Cordsets with #23 Contacts								
Sample Part Number								
801-026	-A	C	4	M	8-28	N	A	-36
Series	End A Connector	End B Connector	Wire Size	Shell Material/ Finish	Insert Arr.	Protective Cover	Shell Key Pos.	Length
801-026 Style 1 Polyurethane Cable Jacket, Polyamide Overmold #23 Contacts	-A Plug, with Male Pin Contacts	A Plug, with Male Pin Contacts	2 #22 AWG	M Aluminum / Electroless Nickel	See Cont. Arr. Page E-7	P Metal Protective Covers Included N No Covers Supplied	A Normal B Pos. B C Pos. C D Pos. D E Pos. E F Pos. F See page E-11	Overall Length In Inches 12 Inch Min.
	-B Plug, with Female Socket Contacts	B Plug, with Female Socket Contacts	4 #24 AWG	NF Aluminum / Cadmium with OD Chromate	Consult Factory for Combo Arr.			
	-C Receptacle, with Male Pin Contacts	C Receptacle, with Male Pin Contacts		ZNU Aluminum / Zinc- Nickel with Black Chromate				
801-070 Style 2 Rubber Cable Jacket and Rubber Overmold #23 Contacts	-D Receptacle, with Female Socket Contacts	D Receptacle, with Female Socket Contacts		MT Aluminum / Nickel-PTFE				
		N No Connector (Single-Ended)		Z1 Stainless Steel / Passivated				

Series 801 Cordsets with #20HD Contacts								
Sample Part Number								
801-034	-A	C	0	M	8-28	N	A	-36
Series	End A Connector	End B Connector	Wire Size	Shell Material / Finish	Insert Arr.	Protective Cover	Shell Key Pos.	Length
801-034 Style 1 Polyurethane Cable Jacket, Polyamide Overmold #20HD Contacts	-A Plug, with Male Pin Contacts	A Plug, with Male Pin Contacts	0 #20 AWG	M Aluminum / Electroless Nickel	See Cont. Arr. Page E-7	P Metal Protective Covers Included N No Covers Supplied	A Normal B Pos. B C Pos. C D Pos. D E Pos. E F Pos. F See page E-11	Overall Length In Inches 12 Inch Min.
	-B Plug, with Female Socket Contacts	B Plug, with Female Socket Contacts	2 #22 AWG	NF Aluminum / Cadmium with OD Chromate	Consult Factory for Combo Arr.			
	-C Receptacle, with Male Pin Contacts	C Receptacle, with Male Pin Contacts		ZNU Aluminum / Zinc- Nickel with Black Chromate				
801-071 Style 2 Rubber Cable Jacket and Rubber Overmold #20HD Contacts	-D Receptacle, with Female Socket Contacts	D Receptacle, with Female Socket Contacts		MT Aluminum / Nickel-PTFE				
		N No Connector (Single-Ended)		Z1 Stainless Steel / Passivated				

SERIES 801 DOUBLE-START MATING



SERIES 801 DOUBLE-START ACME THREAD

Mighty Mouse Connectors and Cables

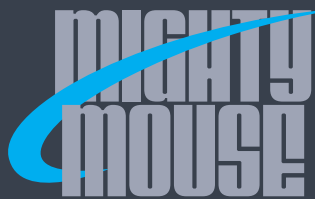


Overmolded Harsh Environment Cordsets

Series 801 Cordsets with #16 Power Contacts								
Sample Part Number								
801-031	-A	C	6	M	8-28	N	A	-36
Series	End A Connector	End B Connector	Wire Size	Shell Material / Finish	Insert Arr.	Protective Cover	Shell Key Pos.	Length
801-031 Style 1 Polyurethane Cable Jacket, Polyamide Overmold #16 contacts	-A Plug, with Male Pin Contacts	A Plug, with Male Pin Contacts	6 #16 AWG	M Aluminum / Electroless Nickel	See Cont. Arr. Page E-7	P Metal Protective Covers Included	A Normal	Overall Length In Inches 12 Inch Min.
	-B Plug, with Female Socket Contacts	B Plug, with Female Socket Contacts	8 #18 AWG	NF Aluminum / Cadmium with OD Chromate	Consult Factory for Combo Arr.	N No Covers Supplied	B Pos. B	
801-072 Style 2 Rubber Cable Jacket and Rubber Overmold #16 Contacts	-C Receptacle, with Male Pin Contacts	C Receptacle, with Male Pin Contacts		ZNU Aluminum / Zinc-Nickel with Black Chromate			C Pos. C	
	-D Receptacle, with Female Socket Contacts	D Receptacle, with Female Socket Contacts		MT Aluminum / Nickel-PTFE			D Pos. D	
		N No Connector (Single-Ended)		Z1 Stainless Steel / Passivated			E Pos. E F Pos. F	
							See page E-11	

Series 801 Cordsets with #12 Power Contacts								
Sample Part Number								
801-032	-A	C	2	M	8-28	N	A	-36
Series	End A Connector	End B Connector	Wire Size	Shell Material / Finish	Insert Arr.	Protective Cover	Shell Key Pos.	Length
801-032 Style 1 Polyurethane Cable Jacket, Polyamide Overmold #12 contacts	-A Plug, with Male Pin Contacts	A Plug, with Male Pin Contacts	2 #12 AWG	M Aluminum / Electroless Nickel	See Cont. Arr. Page E-7	P Metal Protective Covers Included	A Normal	Overall Length In Inches 12 Inch Min.
	-B Plug, with Female Socket Contacts	B Plug, with Female Socket Contacts	4 #14 AWG	NF Aluminum / Cadmium with OD Chromate	Consult Factory for Combo Arr.	N No Covers Supplied	B Pos. B	
801-073 Style 2 Rubber Cable Jacket and Rubber Overmold #12 Contacts	-C Receptacle, with Male Pin Contacts	C Receptacle, with Male Pin Contacts		ZNU Aluminum / Zinc-Nickel with Black Chromate			C Pos. C	
	-D Receptacle, with Female Socket Contacts	D Receptacle, with Female Socket Contacts		MT Aluminum / Nickel-PTFE			D Pos. D	
		N No Connector (Single-Ended)		Z1 Stainless Steel / Passivated			E Pos. E F Pos. F	
							See page E-11	

SERIES 801 DOUBLE-START MATING



SERIES 801 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

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

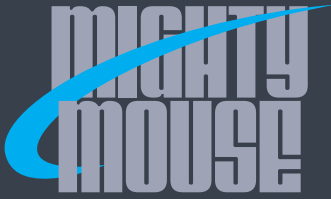
(1) Rubber wires and rubber overmold are rated for -55° C to +135° C.

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.

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.

SERIES 801 DOUBLE-START MATING



SERIES 801 DOUBLE-START ACME THREAD Mighty Mouse Connectors and Cables



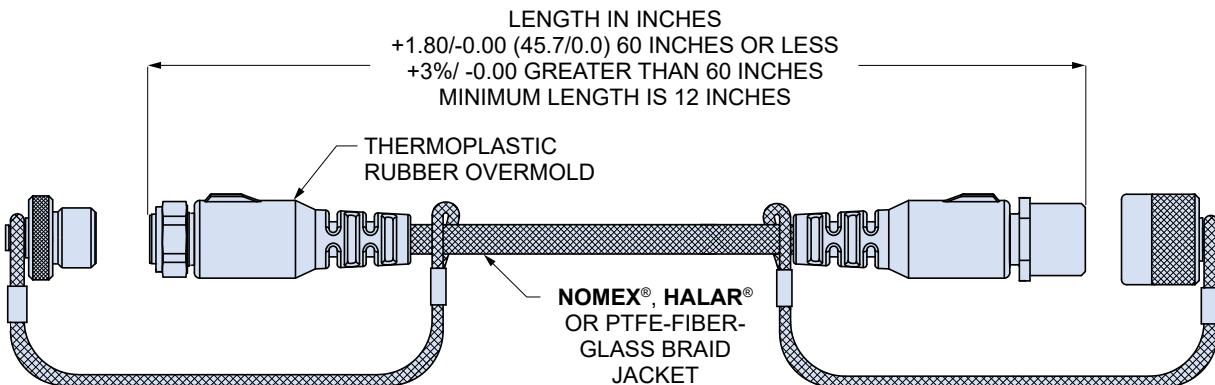
Flexible, Lightweight Phantom Cable Cordsets

Series 801 "Phantom Cable" Cordsets size #12 thru #23 Contacts

Sample Part Number

801-065	-B	N	2	Z1	5-3	N	A	-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 801-065 Phantom Cable Cordset	-A Plug, with Male Pin Contacts -B Plug, with Female Socket Contacts -C Rec. with Male Pin Contacts -D Rec. 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 Size #20 HD Contacts 0 #20 AWG 2 #22 AWG Size #16 Contacts 6 #16 AWG 8 #18 AWG Size #12 Contacts 2 #12 AWG 4 #14 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 Cont. Arr. Page E-7 Consult Factory for Combo Arr.	P Metal Protective Covers Included N No Covers Supplied	A Normal B Pos. B C Pos. C D Pos. D E Pos. E F Pos. F See page E-11	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, Black) P PTFE-Glass (Natural/ Tan)
Size #16 Contacts 801-067 Phantom Cable Cordset										
Size #12 Contacts 801-068 Phantom Cable Cordset										

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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.