

Series 803 Ultraflexible “Phantom Cable” Cordsets



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.

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.

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.

Dimensions in Inches (millimeters) are subject to change without notice.

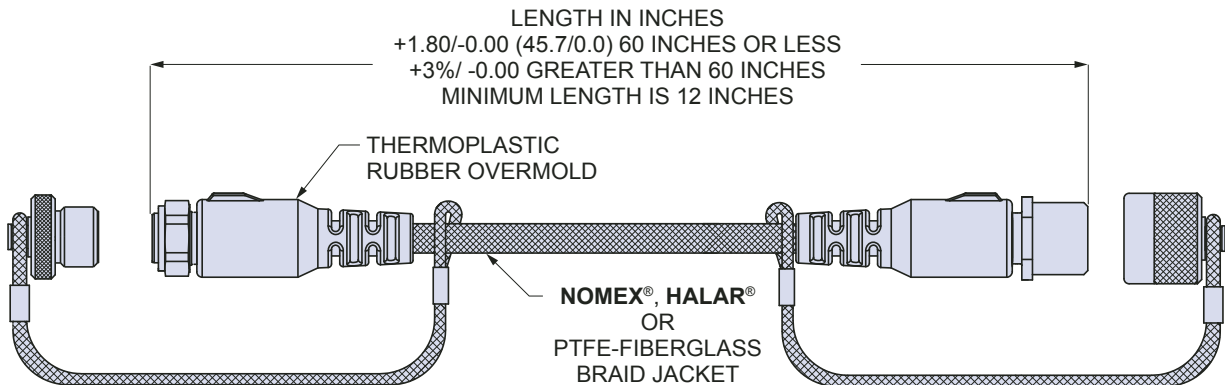
Series 803 Mighty Mouse with 1/4 Turn Bayonet Coupling Flexible, Lightweight Phantom Cable Cordsets

803-026, 803-027, 803-028, 803-029 Ordering Information



Series 803

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	A Plug, with Male Pin Contacts	Size #23 Contacts 4 #24 AWG	M Aluminum / Electroless Nickel	See page F-2 for insert arr.	P Metal Protective Covers Included	N Normal Pos. X	Overall Length In 12 Inch Min.	A Amberstrand	D Nomex, Olive Drab
	-B Plug, with Female Socket Contacts	B Plug, with Female Socket Contacts	6 #26 AWG	NF Aluminum / Cadmium with OD Chromate	Consult Factory for Combo Arr.	N No Covers Supplied	Y Pos. Y		B Armorlite	N Nomex, Black
	-C Rec. with Male Pin Contacts	C Rec. with Male Pin Contacts	Size #20 HD Contacts 0 #20 AWG	ZNU Aluminum / Zinc-Nickel with Black Chromate			See page F-3		C Tin-Coated Copper	H Halar (Monofil)
Size #20 HD Contacts 803-027 Phantom Cable Cordset	-D Rec. with Female Socket Contacts	D Rec. with Female Socket Contacts	2 #22 AWG	MT Aluminum / Nickel-PTFE						P Peek (Monofil)
Size #16 Contacts 803-028 Phantom Cable Cordset		N No Connector (Single-Ended)	Size #16 Contacts 6 #16 AWG	Z1 Stainless Steel / Passivated						
			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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