



Shielded Cordsets, General Information

Series 805 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 (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 s	olvents, fuels, and oils; poor resist	ance to strong acids and bipolar		

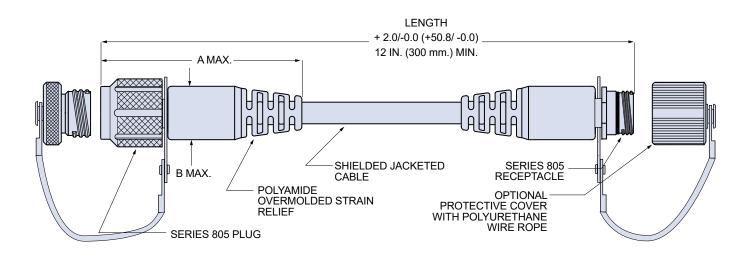
 Excellent resistance to most solvents, fuels, and oils; poor resistance to strong acids and bipolar solvents (alcohol)

	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)	500 Vac
Insulation resistance	200 Megohms minimum
Shielding effectiveness	50 dB minimum from 100MHz to 1000MHz.





Shielded Overmolded Harsh Environment Cordsets



	Dimensions									
Shell	AN	lax.	B Max.							
Size	In.	mm.	In.	mm.						
8	2.62	66.55	0.5	12.70						
9	2.70	68.58	0.55	13.97						
10	2.80	2.80 71.12		16.51						
11	2.80	71.12	0.65	16.51						
12	2.90	73.66	0.71	18.03						
15	3.10	78.74	0.82	20.83						
18	3.42	86.87	1.1	27.94						
19	3.42	86.87	1.1	27.94						

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.





Shielded Overmolded Harsh Environment Cordsets

	Series 805 Cordsets with #23 Contacts								
Sample Part Number									
805-009 -A C				Μ	8-28	N	Α	-36	
Series	End A Connector	End B Connector	Wire Size	Shell Material/ Finish	Insert Arr.	Protective Cover	Shell Key Pos.	Length	
805-009 Style 1 Polyurethane Cable Jacket, Polyamide Overmold 805-062 Style 2 Rubber Cable Jacket and Overmold	-A Plug, with Male Pin Contacts -B Plug, with Female Socket Contacts -C Receptacle, with Male Pin Contacts -D Receptacle, with Female Socket Contacts	A Plug, with Male Pin Contacts B Plug, with Female Socket Contacts C Receptacle, with Male Pin Contacts D Receptacle, with Female Socket Contacts N No Connector (Single-Ended)	2 #22 AWG 4 #24 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 Insert Arr. page J-6	P Metal Protective Covers Included N No Covers Supplied	A Normal B Pos. B C Pos. C D Pos. C D Pos. D E Pos. E F Pos. F See key positions on page J-11	Overall Length In Inches 12 Inch Min.	

Series 805 Cordsets with #20HD Contacts									
Sample Part Number									
-A	С	0	м	8-28	N	Α	-36		
nd A Connector	End B Connector	Wire Size	Shell Material / Finish	Insert Arr.	Protective Cover	Shell Key Pos.	Length		
A lug, with Male in Contacts J lug, with Female ocket Contacts eceptacle, with hale Pin Contacts eceptacle, with emale Socket ontacts	A Plug, with Male Pin Contacts B Plug, with Female Socket Contacts C Receptacle, with Male Pin Contacts D Receptacle, with Female Socket Contacts N	0 #20 AWG 2 #22 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 /	See Insert Arr. page J-6	P Metal Protective Covers Included N No Covers Supplied	A Normal B Pos. B C Pos. C D Pos. C D Pos. D E Pos. E F Pos. F See key positions on page J-11	Overall Length In Inches 12 Inch Min.		
	nd A Connector ug, with Male n Contacts ug, with Female ocket Contacts eceptacle, with ale Pin Contacts eceptacle, with male Socket	-ACInd A ConnectorEnd B ConnectorAug, with Male n ContactsPlug, with Male Pin Contactsaug, with Female pocket ContactsPlug, with Male Pin Contactsbocket ContactsPlug, with Female Socket Contactsceceptacle, with male Socket pontactsCReceptacle, with male Socket ContactsCReceptacle, with male Socket ContactsDReceptacle, with Female Socket ContactsDReceptacle, with ContactsCReceptacle, Wit	-AC0nd A ConnectorEnd B ConnectorWire Sizeaug, with Male n ContactsPlug, with Male Pin Contacts0aug, with Female bocket ContactsPlug, with Male Pin Contacts#20 AWG 2aug, with Female bocket ContactsPlug, with Female Socket Contacts#22 AWGceceptacle, with ale Pin ContactsCReceptacle, with Male Pin ContactsPin Contactsceceptacle, with male Socket pontactsDReceptacle, with Female Socket ContactsDNNNNN	-AC0Mnd A ConnectorEnd B ConnectorWire SizeShell Material / Finishaug, with Male n ContactsPlug, with Male Pin Contacts#20 AWGAluminum / Electroless Nickelaug, with Female pocket ContactsPlug, with Female Socket Contacts#22 AWGNFPlug, with receptacle, with male Socket DntactsCZNUAcceptacle, with male SocketCZNUAuminum / ContactsContactsNTAuminum / ContactsCNITAuminum / ContactsNITAuminum / ContactsNITAuminum / ContactsNITAuminum / SocketNITAuminum / SocketNickel-PTFEContactsNAuminum / SocketStainless Steel /	-AC0M8-28nd A ConnectorEnd B ConnectorWire SizeShell Material / FinishInsert Arr.aug, with Male n ContactsPlug, with Male Pin Contacts0MSee Insert Aluminum / Electroless Nickelaug, with Female pocket ContactsPlug, with Female Socket Contacts#20 AWG #22 AWGAluminum / Cadmium with OD ChromateSee Insert Arr. page J-6aug, with Female pocket ContactsPlug, with Female Socket Contacts#22 AWGNF Aluminum / Cadmium with OD Chromateaug point Contacts point actsCZNU Aluminum / Zinc- Nickel with Black ChromateAluminum / Zinc- Nickel with Black ChromateD male Socket 	-AC0M8-28Nnd A ConnectorEnd B ConnectorWire SizeShell Material / FinishInsert Arr.Protective Coveraug, with Male n ContactsPlug, with Male Pin Contacts0MSee Insert Aluminum / Electroless Nickel H22 AWGPaug, with Female ocket ContactsPlug, with Female Socket Contacts#20 AWG #22 AWGAluminum / Aluminum / Cadmium with OD ChromateSee Insert Arr. page J-6Paug, with Female ocket ContactsPlug, with Female Socket ContactsNF Aluminum / Cadmium with OD ChromateNN No Covers Suppliedaug with Female seceptacle, with male Socket ContactsCTNN No No Coversaug with Seeptacle, with male Socket ContactsCTNN No Coversaug with Male Pin ContactsNNo CoversNo Suppliedaug with Male Pin ContactsDMT Aluminum / Nickel with Black ChromateNT Aluminum / Nickel-PTFE Z1 Stainless Steel /N	-AC0M8-28NAnd A ConnectorEnd B ConnectorWire SizeShell Material / FinishInsert Arr.Protective CoverShell Key Pos.aug, with Male n ContactsA0MSee Insert Aluminum / Electroless NickelPAnug, with Female ocket ContactsB#22 AWGAluminum / Electroless NickelSee Insert Aluminum / Electroless NickelPANormal protective CoversPos. B#22 AWGNFAluminum / Cadmium with OD ChromateNPos. CContactsCZNUAluminum / Cadmium with OD ChromateNPos. CNContactsCZNUAluminum / Zinc- Nickel with Black ContactsNPos. DDReceptacle, with male Socket ContactsMT Aluminum / Nickel-PTFE ContactsMT Aluminum / See key positions on page J-11F		





Shielded Overmolded Harsh Environment Cordsets

		-	Series 805	Cordsets with #16 Co	ontacts					
	Sample Part Number									
805-015	-A	С	6	Μ	8-28	N	Α	-36		
Series	End A Connector	End B Connector	Wire Size	Shell Material/ Finish	Insert Arr.	Protective Cover	Shell Key Pos.	Length		
805-015 Style 1 Polyurethane Cable Jacket, Polyamide Overmold 805-064 Style 2 Rubber Cable Jacket and Overmold	-A Plug, with Male Pin Contacts -B Plug, with Female Socket Contacts -C Receptacle, with Male Pin Contacts -D Receptacle, with Female Socket Contacts	A Plug, with Male Pin Contacts B Plug, with Female Socket Contacts C Receptacle, with Male Pin Contacts D Receptacle, with Female Socket Contacts N No Connector (Single-Ended)	6 #16 AWG 8 #18 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	Available in Shell Sizes 8 Thru 19 See Cont. Arr. Page J-6	P Metal Protective Covers Included N No Covers Supplied	A Normal B Pos. B C Pos. C D Pos. C D Pos. D E Pos. E F Pos. F See key positions on page J-11	Overall Length In Inches 12 Inch Min.		

	Series 805 Cordsets with #12 Contacts								
Sample Part Number									
805-065	-A	С	2	м	8-28	N	Α	-36	
Series	End A Connector	End B Connector	Wire Size	Shell Material / Finish	Insert Arr.	Protective Cover	Shell Key Pos.	Length	
805-016	-A	Α	2	Μ	Available in	Р	Α	Overall Length	
Style 1	Plug, with Male	Plug, with Male	#12 AWG	Aluminum /	Shell Sizes 8	Metal	Normal	In Inches	
Polyurethane	Pin Contacts	Pin Contacts	4	Electroless Nickel	Thru 19	Protective	В	12 Inch Min.	
Cable Jacket,	-В	В	#14 AWG	NF		Covers	Pos. B		
Polyamide	Plug, with Female	Plug, with		Aluminum /	See Cont.	Included	С		
Overmold	Socket Contacts	Female Socket		Cadmium with OD	Arr. Page	Ν	Pos. C		
805-065	- C	Contacts		Chromate	J-6	No Covers	D		
Style 2	Receptacle, with	C		ZNU		Supplied	Pos. D		
Rubber Cable	Male Pin Contacts			Aluminum / Zinc-			E		
Jacket and	-D	with Male Pin		Nickel with Black			Pos. E		
Overmold,	Receptacle, with	Contacts		Chromate			F		
	Female Socket	D		MT			Pos. F		
	Contacts	Receptacle, with		Aluminum /					
		Female Socket		Nickel-PTFE			See key		
		Contacts		Z1			positions on		
		N		Stainless Steel /			page J-11		
		No Connector		Passivated					
		(Single-Ended)							





Flexible, Lightweight Shielded Phantom Cable Cordsets

Series 805 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							
Туре	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	\$\$\$	\$\$	\$							
(0.0.1)			1250 6							

(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) Rubb	er wires and rubber overn	nold are rated for -55° C to	o +135° C.						

(1)	Rubbe	r wires and	rubber	overmol	d are	rated f	or -55	° C to	+135°	C.

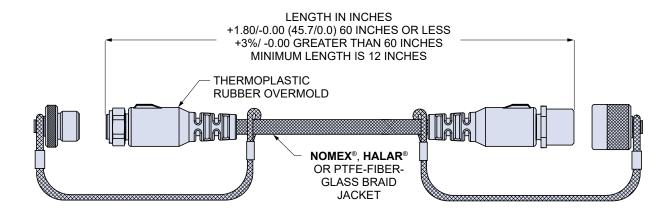
	Specifications
Cable jacket	NOMEX [®] , HALAR [®] or PTFE-coated fiberglass
Temperature Range	-55° C to +135° C
Overmold	Thermoplastic elastomer, black
Cable shield	AmberStrand®, ArmorLite® or tinned copper, 90% minimum coverage
Conductors	Silver coated stranded wire, rubber insulation
Shield Termination	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.





Flexible, Lightweight Shielded Phantom Cable Cordsets

		2	Series 805 "I	Phantom Cable"	Cordsets s	ize #12 thru #2	23 Contacts			
				Sampl	e Part Numl	ber				
805-057	-В	N	2	Z1	5-3	N	Α	-60	С	N
Series	End A Connector	End B Connector	Wire Size	Shell Material/ Finish	Insert Arr.	Protective Cover	Shell Key Position	Length	Shield Option	Jacket Option
Size #23 Contacts 805-057 Phantom Cable Cordset	-A Plug, with Male Pin Contacts -B Plug, with Female Socket	A Plug, with Male Pin Contacts B Plug, with Female Socket	Size #23 Contacts 4 #24 AWG 6 #26 AWG 8 #28 AWG	M Aluminum / Electroless Nickel NF Aluminum / Cadmium with OD Chromate	Available in Shell Sizes 8 Thru 19 See Cont. Arr. Page J-6	P Metal Protective Covers Included N No Covers Supplied	A Normal B Pos. B C Pos. C D	Overall Length In Inches 12 Inch Min.	A AmberStrand B ArmorLite C Tin-Coated Copper	D Nomex, Olive Drab N Nomex, Black H Halar
Size #20 HD Contacts 805-058 Phantom Cable Cordset Size #16 Contacts 805-059 Phantom Cable Cordset	Contacts -C Rec. with Male Pin Contacts -D Rec. with Female Socket Contacts	Contacts C Rec. with Male Pin Contacts D Rec. with Female Socket Contacts N No Connector (Single- Ended)	Size #20 HD Contacts 0 #20 AWG 2 #22 AWG Size #16 Contacts 6 #16 AWG 8 #18 AWG	ZNU Aluminum / Zinc-Nickel with Black Chromate MT Aluminum / Nickel-PTFE Z1 Stainless Steel / Passivated			Pos. D E Pos. E F Pos. F See key positions on page J-11			(Monofil) P Peek (Monofil)
Size #12 Contacts 805-060 Phantom Cable Cordset			Size #12 Contacts 2 #12 AWG 4 #14 AWG							



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. 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.