

SERIES 804 QDC PUSH-PULL

Mighty Mouse Connectors and Cables



Quick Disconnect, Harsh Environment Overmolded Cordsets

Series 804 Harsh Environment Shielded Cordsets



Overmolded Cordset

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

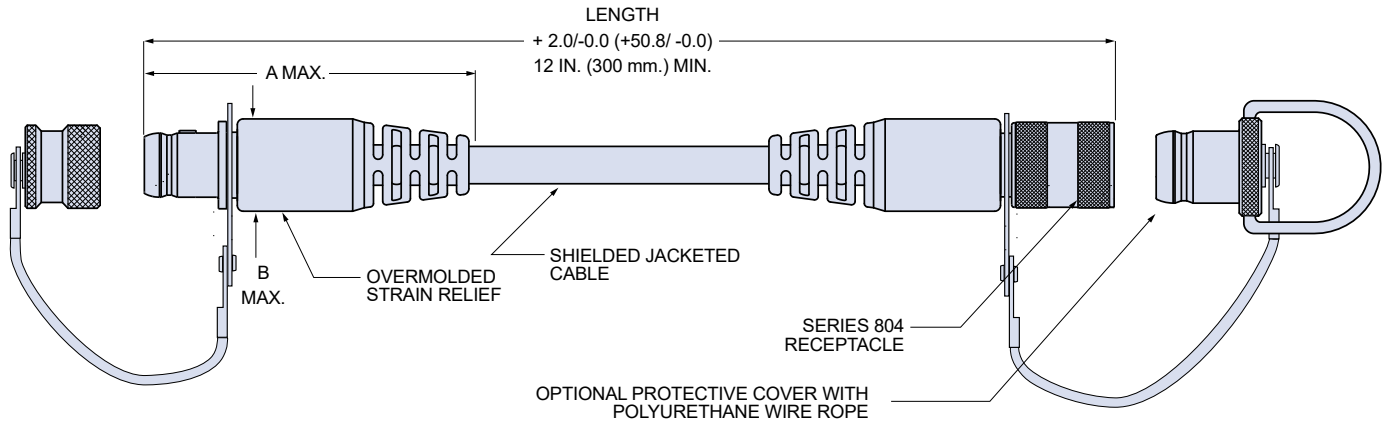
Specifications

| | |
|-------------------------|--|
| 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. |

SERIES 804 QDC PUSH-PULL



SERIES 804 QDC PUSH-PULL
Mighty Mouse Connectors and Cables
 Quick Disconnect, Harsh Environment
 Overmolded Cordsets

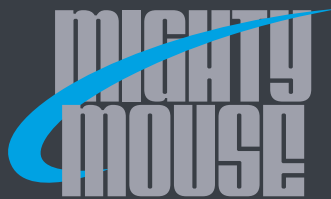


| Dimensions | | |
|------------|-------------|-------------|
| Shell Size | A Max. | B Max. |
| 5 | 2.46 (0.10) | 0.50 (0.02) |
| 6 | 2.56 (0.10) | 0.56 (0.02) |
| 7 | 2.64 (0.10) | 0.63 (0.02) |
| 8 | 2.70 (0.11) | 0.68 (0.03) |
| 9 | 2.90 (0.11) | 0.73 (0.03) |
| 10 | 2.95 (0.12) | 0.81 (0.03) |
| 11 | 3.0 (0.12) | 0.90 (0.04) |
| 12 | 3.10 (0.12) | 0.92 (0.04) |
| 14 | 3.20 (0.13) | 1.05 (0.04) |

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 804 QDC PUSH-PULL



SERIES 804 QDC PUSH-PULL

Mighty Mouse Connectors and Cables



Quick Disconnect, Harsh Environment Overmolded Cordsets

| Series 804 Cordsets with #23 Contacts | | | | | | | | |
|---|--|---|--|--|----------------------------|--|---|--|
| Sample Part Number | | | | | | | | |
| 804-015 | -A | C | 2 | M | 7-10 | P | A | -72 |
| Series | End A Connector | End B Connector | Wire Size | Shell Material/ Finish | Insert Arr. | Protective Cover | Shell Key Pos. | Length |
| 804-015 Style 1 Polyurethane Cable Jacket, Polyamide Overmold 804-062 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 Arrgmt page H-5 | P Metal Protective Covers Included N No Covers Supplied | Omit Single Master Key A Pos. A (Normal) B Pos. B C Pos. C D Pos. D E Pos. E F Pos. F See page H-9 | Overall Length In Inches 12 Inch Min. |

| Series 804 Cordsets with #20HD Contacts | | | | | | | | |
|---|--|---|--|--|----------------------------|--|---|--|
| Sample Part Number | | | | | | | | |
| 804-022 | -A | C | 0 | M | 8-28 | N | A | -72 |
| Series | End A Connector | End B Connector | Wire Size | Shell Material / Finish | Insert Arr. | Protective Cover | Shell Key Pos. | Length |
| 804-022 Style 1 Polyurethane Cable Jacket, Polyamide Overmold 804-063 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) | 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/ Passivated | See Insert Arrgmt page H-5 | P Metal Protective Covers Included N No Covers Supplied | Omit Single Master Key A Pos. A (Normal) B Pos. B C Pos. C D Pos. D E Pos. E F Pos. F See page H-9 | Overall Length In Inches 12 Inch Min. |

SERIES 804 QDC PUSH-PULL



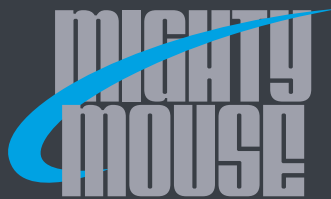
SERIES 804 QDC PUSH-PULL
Mighty Mouse Connectors and Cables
 Quick Disconnect, Harsh Environment
 Overmolded Cordsets



| Series 804 Cordsets with #16 Contacts | | | | | | | | |
|---|---|--|--------------|--|-----------------------------|--|---------------------------|--|
| Sample Part Number | | | | | | | | |
| 804-018 | -A | C | 2 | M | | N | A | -72 |
| Series | End A Connector | End B Connector | Wire Size | Shell Material/ Finish | Insert Arr. | Protective Cover | Shell Key Pos. | Length |
| 804-018 Style 1 Polyurethane Cable Jacket, Polyamide Overmold 804-064 Style 2 Rubber Cable Jacket and Overmold | -A Plug, with Male Pin Contacts | A Plug, with Male Pin Contacts | 6 #16 AWG | M Aluminum/ Electroless Nickel | See Insert Arrgmnt page H-5 | P Metal Protective Covers Included N No Covers Supplied | Omit Single Master Key | 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 | | | A Pos. A (Normal) | |
| | -C Receptacle, with Male Pin Contacts | C Receptacle, with Male Pin Contacts | | ZNU Aluminum/ Zinc-Nickel with Black Chromate | | | B Pos. B | |
| | -D Receptacle, with Female Socket Contacts | D Receptacle, with Female Socket Contacts | | MT Aluminum/ Nickel-PTFE | | | C Pos. C | |
| | | N No Connector (Single-Ended) | | Z1 Stainless Steel/ Passivated | | | D Pos. D | |
| | | | | | | | E Pos. E | |
| | | | | | | | F Pos. F | |
| | | | | | | | See page H-9 | |

| Series 804 Cordsets with #12 Contacts | | | | | | | | |
|---|---|--|--------------|--|-----------------------------|--|---------------------------|--|
| Sample Part Number | | | | | | | | |
| 804-019 | -A | C | 0 | M | | N | A | -72 |
| Series | End A Connector | End B Connector | Wire Size | Shell Material/ Finish | Insert Arr. | Protective Cover | Shell Key Pos. | Length |
| 804-019 Style 1 Polyurethane Cable Jacket, Polyamide Overmold 804-065 Style 2 Rubber Cable Jacket and Overmold | -A Plug, with Male Pin Contacts | A Plug, with Male Pin Contacts | 2 #12 AWG | M Aluminum/ Electroless Nickel | See Insert Arrgmnt page H-5 | P Metal Protective Covers Included N No Covers Supplied | Omit Single Master Key | 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 | | | A Pos. A (Normal) | |
| | -C Receptacle, with Male Pin Contacts | C Receptacle, with Male Pin Contacts | | ZNU Aluminum/ Zinc-Nickel with Black Chromate | | | B Pos. B | |
| | -D Receptacle, with Female Socket Contacts | D Receptacle, with Female Socket Contacts | | MT Aluminum/ Nickel-PTFE | | | C Pos. C | |
| | | N No Connector (Single-Ended) | | Z1 Stainless Steel/ Passivated | | | D Pos. D | |
| | | | | | | | E Pos. E | |
| | | | | | | | F Pos. F | |
| | | | | | | | See page H-9 | |

SERIES 804 QDC PUSH-PULL



SERIES 804 QDC PUSH-PULL

Mighty Mouse Connectors and Cables



Quick Disconnect, Flexible, Lightweight Phantom Cable Cordsets

Series 804 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 ⁽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. |

SERIES 804 QDC PUSH-PULL

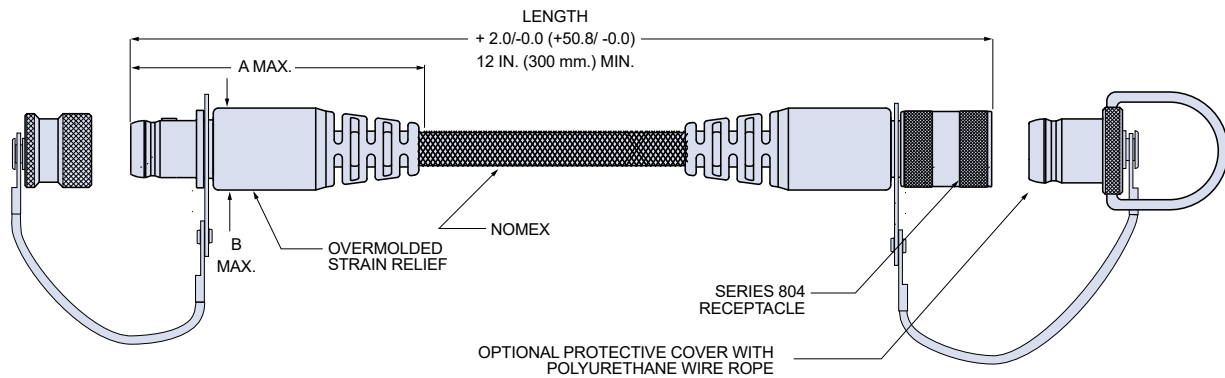


SERIES 804 QDC PUSH-PULL Mighty Mouse Connectors and Cables



Quick Disconnect, Flexible, Lightweight Phantom Cable Cordsets

| Series 804 "Phantom Cable" Cordsets size #12, #16, #20 and #23 Contacts | | | | | | | | | | |
|---|---|--|--|---|----------------------------|--|----------------------------------|---------------------------------------|-------------------------------|---------------------------------------|
| Sample Part Number | | | | | | | | | | |
| 804-058 | -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 804-058 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 Insert Argmnt page H-5 | P Metal Protective Covers Included | Omit Single Master Key | Overall Length In Inches 12 Inch Min. | A AmberStrand | N Nomex, Black |
| | -B Plug, with Female Socket Contacts | B Plug, with Female Socket Contacts | 6 #26 AWG | NF Aluminum/ Cadmium with OD Chromate | | N No Covers Supplied | A Pos. A (Normal) | | B ArmorLite | H Halar (Monofil) |
| | | | 8 #28 AWG | | | | B Pos. B | | C Tin-Coated Copper | P PTFE-Glass (Natural/ Tan) |
| Size #20 HD Contacts 804-059 Phantom Cable Cordset | -C Receptacle with Male Pin Contacts | C Receptacle with Male Pin Contacts | Size #20 HD Contacts 0 #20 AWG | ZNU Aluminum/ Zinc-Nickel with Black Chromate | | | C Pos. C | | | |
| | -D Receptacle with Female Socket Contacts | D Receptacle with Female Socket Contacts | 2 #22 AWG | MT Aluminum/ Nickel-PTFE | | | D Pos. D | | | |
| Size #16 Contacts 804-060 Phantom Cable Cordset | | N No Connector (Single-Ended) | Size #16 Contacts 6 #16 AWG | Z1 Stainless Steel/ Passivated | | | E Pos. E | | | |
| | | | 8 #18 AWG | | | | F Pos. F | See page H-9 | | |
| Size #12 Contacts 804-061 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.