

# SERIES 805 TRIPLE-START ACME THREAD Mighty Mouse Connectors and Cables



## 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

| Harsh Environment Cordset Selection Guide  |  |   |
|--|--|---|
| Property   | Style 1<br>Polyurethane Jacket<br>Polyamide Overmold | Style 2<br>Rubber Jacket<br>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) |  |   |

### High-Speed Cordsets

Controlled impedance twisted pair cordsets for Ethernet, USB and other protocols are available. Please refer to Section M

| Specifications          |  |
|-------------------------|--|
| Cable jacket            | Style 1: thermoplastic polyurethane, black, low-smoke, zero-halogen<br>Style 2: thermoplastic elastomer, black |
| Overmold                | Style 1: polyamide<br>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.  |

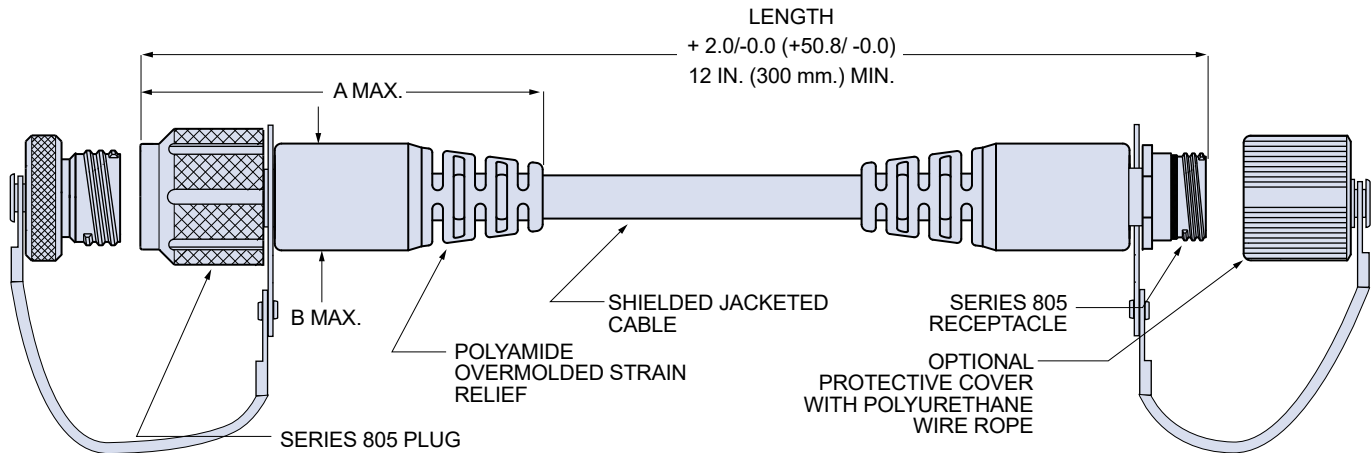
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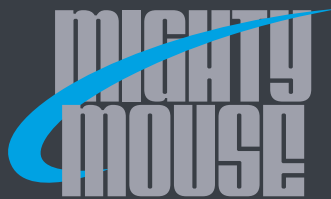
## Shielded Overmolded Harsh Environment Cordsets



| Dimensions |        |       |        |       |
|------------|--------|-------|--------|-------|
| Shell Size | A Max. |       | B Max. |       |
|            | 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   | 71.12 | 0.65   | 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.



# SERIES 805 TRIPLE-START ACME THREAD Mighty Mouse Connectors and Cables

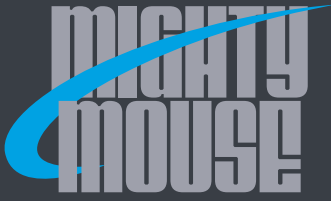


## Shielded Overmolded Harsh Environment Cordsets

| Series 805 Cordsets with #23 Contacts   |   |   |  |   |                                |  |  |   |
|---|---|---|--|---|--------------------------------|--|--|---|
| Sample Part Number  |   |   |  |   |                                |  |  |   |
| 805-009   | -A  | C   | 2  | M   | 8-28                           | N  | A  | -36   |
| Series  | End A Connector   | End B Connector   | Wire Size                                  | Shell Material/<br>Finish   | Insert Arr.                    | Protective<br>Cover  | Shell Key<br>Pos.  | Length                                      |
| <b>805-009</b><br>Style 1<br>Polyurethane<br>Cable Jacket,<br>Polyamide<br>Overmold | <b>-A</b><br>Plug, with Male<br>Pin Contacts<br><b>-B</b><br>Plug, with Female<br>Socket Contacts                   | <b>A</b><br>Plug, with Male<br>Pin Contacts<br><b>B</b><br>Plug, with Female<br>Socket Contacts   | <b>2</b><br>#22 AWG<br><b>4</b><br>#24 AWG | <b>M</b><br>Aluminum /<br>Electroless Nickel<br><b>NF</b><br>Aluminum /<br>Cadmium with OD<br>Chromate<br><b>ZNU</b><br>Aluminum / Zinc-<br>Nickel with Black<br>Chromate<br><b>MT</b><br>Aluminum /<br>Nickel-PTFE<br><b>Z1</b><br>Stainless Steel /<br>Passivated | See Insert<br>Arr. page<br>J-6 | <b>P</b><br>Metal<br>Protective<br>Covers<br>Included<br><b>N</b><br>No Covers<br>Supplied | <b>A</b><br>Normal<br><b>B</b><br>Pos. B<br><b>C</b><br>Pos. C<br><b>D</b><br>Pos. D<br><b>E</b><br>Pos. E<br><b>F</b><br>Pos. F<br><br>See key<br>positions on<br>page J-11 | Overall Length<br>In Inches<br>12 Inch Min. |
| <b>805-062</b><br>Style 2 Rubber<br>Cable Jacket<br>and Overmold                    | <b>-C</b><br>Receptacle,<br>with Male Pin<br>Contacts<br><b>-D</b><br>Receptacle, with<br>Female Socket<br>Contacts | <b>C</b><br>Receptacle,<br>with Male Pin<br>Contacts<br><b>D</b><br>Receptacle, with<br>Female Socket<br>Contacts<br><b>N</b><br>No Connector<br>(Single-Ended) |  |   |                                |  |  |   |

| Series 805 Cordsets with #20HD Contacts   |  |   |  |   |                                |  |  |   |
|---|--|---|--|---|--------------------------------|--|--|---|
| Sample Part Number  |  |   |  |   |                                |  |  |   |
| 805-063   | -A   | C   | 0  | M   | 8-28                           | N  | A  | -36   |
| Series  | End A Connector  | End B Connector   | Wire Size                                  | Shell Material /<br>Finish  | Insert Arr.                    | Protective<br>Cover  | Shell Key<br>Pos.  | Length                                      |
| <b>805-018</b><br>Style 1<br>Polyurethane<br>Cable Jacket,<br>Polyamide<br>Overmold | <b>-A</b><br>Plug, with Male<br>Pin Contacts<br><b>-B</b><br>Plug, with Female<br>Socket Contacts                | <b>A</b><br>Plug, with Male<br>Pin Contacts<br><b>B</b><br>Plug, with<br>Female Socket<br>Contacts  | <b>0</b><br>#20 AWG<br><b>2</b><br>#22 AWG | <b>M</b><br>Aluminum /<br>Electroless Nickel<br><b>NF</b><br>Aluminum /<br>Cadmium with OD<br>Chromate<br><b>ZNU</b><br>Aluminum / Zinc-<br>Nickel with Black<br>Chromate<br><b>MT</b><br>Aluminum /<br>Nickel-PTFE<br><b>Z1</b><br>Stainless Steel /<br>Passivated | See Insert<br>Arr. page<br>J-6 | <b>P</b><br>Metal<br>Protective<br>Covers<br>Included<br><b>N</b><br>No Covers<br>Supplied | <b>A</b><br>Normal<br><b>B</b><br>Pos. B<br><b>C</b><br>Pos. C<br><b>D</b><br>Pos. D<br><b>E</b><br>Pos. E<br><b>F</b><br>Pos. F<br><br>See key<br>positions on<br>page J-11 | Overall Length<br>In Inches<br>12 Inch Min. |
| <b>805-063</b><br>Style 2<br>Rubber Cable<br>Jacket and<br>Overmold,                | <b>-C</b><br>Receptacle, with<br>Male Pin Contacts<br><b>-D</b><br>Receptacle, with<br>Female Socket<br>Contacts | <b>C</b><br>Receptacle,<br>with Male Pin<br>Contacts<br><b>D</b><br>Receptacle, with<br>Female Socket<br>Contacts<br><b>N</b><br>No Connector<br>(Single-Ended) |  |   |                                |  |  |   |

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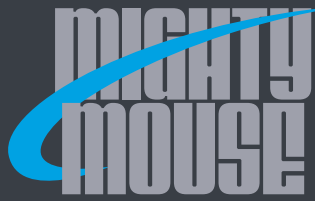


## Shielded Overmolded Harsh Environment Cordsets

| Series 805 Cordsets with #16 Contacts   |   |   |  |   |  |  |  |   |
|---|---|---|--|---|--|--|--|---|
| Sample Part Number  |   |   |  |   |  |  |  |   |
| 805-015   | -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                                      |
| <b>805-015</b><br>Style 1<br>Polyurethane<br>Cable Jacket,<br>Polyamide<br>Overmold | <b>-A</b><br>Plug, with Male<br>Pin Contacts<br><b>-B</b><br>Plug, with Female<br>Socket Contacts                   | <b>A</b><br>Plug, with Male<br>Pin Contacts<br><b>B</b><br>Plug, with Female<br>Socket Contacts   | <b>6</b><br>#16 AWG<br><b>8</b><br>#18 AWG | <b>M</b><br>Aluminum /<br>Electroless Nickel<br><b>NF</b><br>Aluminum /<br>Cadmium with OD<br>Chromate<br><b>ZNU</b><br>Aluminum / Zinc-<br>Nickel with Black<br>Chromate<br><b>MT</b><br>Aluminum /<br>Nickel-PTFE<br><b>Z1</b><br>Stainless Steel /<br>Passivated | Available in<br>Shell Sizes <b>8</b><br>Thru <b>19</b><br><br>See Cont.<br>Arr. Page J-6 | <b>P</b><br>Metal<br>Protective<br>Covers<br>Included<br><b>N</b><br>No Covers<br>Supplied | <b>A</b><br>Normal<br><b>B</b><br>Pos. B<br><b>C</b><br>Pos. C<br><b>D</b><br>Pos. D<br><b>E</b><br>Pos. E<br><b>F</b><br>Pos. F<br><br>See key<br>positions on<br>page J-11 | Overall Length<br>In Inches<br>12 Inch Min. |
| <b>805-064</b><br>Style 2 Rubber<br>Cable Jacket<br>and Overmold                    | <b>-C</b><br>Receptacle,<br>with Male Pin<br>Contacts<br><b>-D</b><br>Receptacle, with<br>Female Socket<br>Contacts | <b>C</b><br>Receptacle,<br>with Male Pin<br>Contacts<br><b>D</b><br>Receptacle, with<br>Female Socket<br>Contacts<br><b>N</b><br>No Connector<br>(Single-Ended) |  |   |  |  |  |   |

| Series 805 Cordsets with #12 Contacts   |  |   |  |   |   |  |  |   |
|---|--|---|--|---|---|--|--|---|
| Sample Part Number  |  |   |  |   |   |  |  |   |
| 805-065   | -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                                      |
| <b>805-016</b><br>Style 1<br>Polyurethane<br>Cable Jacket,<br>Polyamide<br>Overmold | <b>-A</b><br>Plug, with Male<br>Pin Contacts<br><b>-B</b><br>Plug, with Female<br>Socket Contacts                | <b>A</b><br>Plug, with Male<br>Pin Contacts<br><b>B</b><br>Plug, with<br>Female Socket<br>Contacts  | <b>2</b><br>#12 AWG<br><b>4</b><br>#14 AWG | <b>M</b><br>Aluminum /<br>Electroless Nickel<br><b>NF</b><br>Aluminum /<br>Cadmium with OD<br>Chromate<br><b>ZNU</b><br>Aluminum / Zinc-<br>Nickel with Black<br>Chromate<br><b>MT</b><br>Aluminum /<br>Nickel-PTFE<br><b>Z1</b><br>Stainless Steel /<br>Passivated | Available in<br>Shell Sizes <b>8</b><br>Thru <b>19</b><br><br>See Cont.<br>Arr. Page<br>J-6 | <b>P</b><br>Metal<br>Protective<br>Covers<br>Included<br><b>N</b><br>No Covers<br>Supplied | <b>A</b><br>Normal<br><b>B</b><br>Pos. B<br><b>C</b><br>Pos. C<br><b>D</b><br>Pos. D<br><b>E</b><br>Pos. E<br><b>F</b><br>Pos. F<br><br>See key<br>positions on<br>page J-11 | Overall Length<br>In Inches<br>12 Inch Min. |
| <b>805-065</b><br>Style 2<br>Rubber Cable<br>Jacket and<br>Overmold,                | <b>-C</b><br>Receptacle, with<br>Male Pin Contacts<br><b>-D</b><br>Receptacle, with<br>Female Socket<br>Contacts | <b>C</b><br>Receptacle,<br>with Male Pin<br>Contacts<br><b>D</b><br>Receptacle, with<br>Female Socket<br>Contacts<br><b>N</b><br>No Connector<br>(Single-Ended) |  |   |   |  |  |   |

SERIES 805 TRIPLE-START ACME THREAD



# SERIES 805 TRIPLE-START ACME THREAD Mighty Mouse Connectors and Cables



## 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            |
| 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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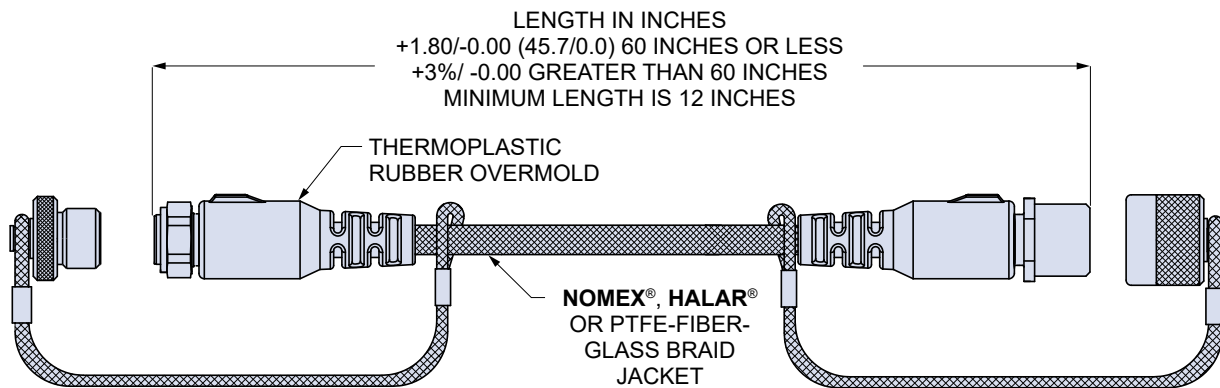
# SERIES 805 TRIPLE-START ACME THREAD Mighty Mouse Connectors and Cables



## Flexible, Lightweight Shielded Phantom Cable Cordsets

Series 805 "Phantom Cable" Cordsets size #12 thru #23 Contacts

| Sample Part Number                                       |  |   |   |  |   |  |  |  |  |  |
|--|--|---|---|--|---|--|--|--|--|--|
| 805-057  | -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 Position   | Length                                   | Shield Option  | Jacket Option  |
| Size #23 Contacts<br>805-057<br>Phantom Cable Cordset    | -A<br>Plug, with Male Pin Contacts     | A<br>Plug, with Male Pin Contacts   | Size #23 Contacts<br>4<br>#24 AWG<br>6<br>#26 AWG<br>8<br>#28 AWG | M<br>Aluminum / Electroless Nickel<br>NF<br>Aluminum / Cadmium with OD Chromate<br>ZNU<br>Aluminum / Zinc-Nickel with Black Chromate<br>MT<br>Aluminum / Nickel-PTFE<br>Z1<br>Stainless Steel / Passivated | Available in Shell Sizes 8 Thru 19<br>See Cont. Arr. Page J-6 | P<br>Metal Protective Covers Included<br>N<br>No Covers Supplied | A<br>Normal<br>B<br>Pos. B<br>C<br>Pos. C<br>D<br>Pos. D<br>E<br>Pos. E<br>F<br>Pos. F | Overall Length In Inches<br>12 Inch Min. | A<br>AmberStrand<br>B<br>ArmorLite<br>C<br>Tin-Coated Copper | D<br>Nomex, Olive Drab<br>N<br>Nomex, Black<br>H<br>Halar (Monofil)<br>P<br>Peek (Monofil) |
| Size #20 HD Contacts<br>805-058<br>Phantom Cable Cordset | -C<br>Rec. with Male Pin Contacts      | C<br>Rec. with Male Pin Contacts  | Size #20 HD Contacts<br>0<br>#20 AWG<br>2<br>#22 AWG              |  |   |  |  |  |  |  |
| Size #16 Contacts<br>805-059<br>Phantom Cable Cordset    | -D<br>Rec. with Female Socket Contacts | D<br>Rec. with Female Socket Contacts<br>N<br>No Connector (Single-Ended) | Size #16 Contacts<br>6<br>#16 AWG<br>8<br>#18 AWG                 |  |   |  |  |  |  |  |
| Size #12 Contacts<br>805-060<br>Phantom Cable Cordset    |  |   | Size #12 Contacts<br>2<br>#12 AWG<br>4<br>#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.