



Micro-D Metal Shell MWDM Back-To-Back Unshielded Cable Assemblies

B



Save Time and Money With Back-To-Back Cables– These Micro-D connectors feature crimp wire terminations and epoxy encapsulation. The installed cost is lower than terminating solder cup connectors.

100% Certified– all back-to-back assemblies are 100% checked for continuity, resistance, voltage and insulation resistance.

Hardware Note– if jackposts are required on one end and jackscrews on the other, use hardware designator “B” (no hardware installed), and order hardware kits separately.

HOW TO ORDER BACK-TO-BACK UNSHIELDED CABLES

| Series | Shell Material and Finish | Insulator Material | Contact Layout | Connect or Type | Wire Gage (AWG) | Wire Type | Wire Color | Total Length Inches | Hardware |
|---------------------------|------------------------------|--|---|--|--|---|---|--|--|
| MWDM | Aluminum Shell | L – LCP 30% Glass-Filled Liquid Crystal Polymer | 9 15 21 25 31 37 51 51-2 67 69 100 | GP – Pin (Plug) Connector Both Ends GS – Socket (Receptacle) Connector Both Ends CS – Pin Connector to Socket Connector | 4 – #24 6 – #26 8 – #28 0 – #30 | K – M22759/11 600 Vrms Teflon (TFE) J – M22759/33 600 Vrms Modified Cross-Linked Tefzel® (ETFE) E – NEMA HP3-EB 600 Vrms Type E M16878/4 (TFE) (replaced by M22759/11 for mil spec applications) | 1 – White 2 – Yellow 7 – Ten Color Repeating 5 – Color-Coded Stripes Per MIL-STD-681 (Striped wire not available on 67, 69 or 100 pin connectors or for #28, #30 AWG) 7 – Ten Color Repeating | 18 Total Length In Inches. “18” Specifies 18 Inches (2” Min. for 2 row, 3” Min. for 3 row, 4” Min. for 4 row) | B P M M1 S S1 L K |
| | Stainless Steel Shell | | | | | | | | |
| Sample Part Number | | | | | | | | | |
| MWDM | 1 | L – | 25 | GP – | 6 | K | 7 – | 18 | B |

MICRO-D MOUNTING HARDWARE

| B | P | M | M1 | S | S1 | L | K |
|---|---|---|---|--|--|--|--|
| | | | | | | | |
| Thru-Hole Order Hardware Separately | Jackpost Removable Includes Nut and Washer | Jackscrew Hex Head Removable E-ring | Jackscrew Hex Head Removable E-ring Extended | Jackscrew Slot Head Removable E-ring | Jackscrew Slot Head Removable E-ring Extended | Jackscrew Hex Head Non- Removable | Jackscrew Slot Head Non- Removable Extended |

Micro-D Metal Shell MWDM Back-To-Back Unshielded Cable Assemblies



PERFORMANCE SPECIFICATIONS

| | |
|---------------------------|-------------------------------|
| Current Rating | 3 AMP |
| DWV | 600 VAC Sea level |
| Insulation Resistance | 5000 Megohms Minimum |
| Contact Resistance | 8 Milliohms Maximum |
| Low Level Contact Resist. | 32 Milliohms Maximum |
| Magnetic Permeability | 2 μ Maximum |
| Operating Temperature | -55° C. to +150° C. |
| Shock, Vibration | 50 g., 20g. |
| Mating Force | (10 Ounces) X (# of Contacts) |

MATERIALS AND FINISHES

| | |
|------------------|---|
| Connector Shell | Aluminum Alloy 6061 or Stainless Steel, 300 Series, passivated. See Ordering Info for Plating Options |
| Insulator | Liquid Crystal Polymer (LCP) |
| Interfacial Seal | Fluorosilicone Rubber, Blue |
| Pin Contact | Beryllium Copper Gold over Nickel Plating |
| Socket Contact | Copper Alloy Gold Over Nickel Plating |
| Hardware | 300 Series Stainless Steel |
| Encapsulant | Epoxy Resin Hysol EE4215 |



DIMENSIONS

| Layout | A Max. | | B | | C Max. | | D Max. | | E Max. | | F | | G Max. | | H Max. | | J Max. | |
|--------|--------|-------|----------------|----------------|--------|-------|--------|------|--------|-------|----------------|----------------|--------|-------|--------|-------|--------|------|
| | In. | mm. | In. \pm .003 | mm. \pm 0.08 | In. | mm. | In. | mm. | In. | mm. | In. \pm .003 | mm. \pm 0.08 | In. | mm. | In. | mm. | In. | mm. |
| 9P | .785 | 19.94 | .565 | 14.35 | .333 | 8.46 | .184 | 4.67 | .308 | 7.82 | .183 | 4.65 | .416 | 10.57 | .400 | 10.16 | .270 | 6.86 |
| 9S | .785 | 19.94 | .565 | 14.35 | .400 | 10.16 | .250 | 6.35 | .308 | 7.82 | .195 | 4.95 | .429 | 10.90 | .400 | 10.16 | .270 | 6.86 |
| 15P | .935 | 23.75 | .715 | 18.16 | .483 | 12.27 | .184 | 4.67 | .308 | 7.82 | .183 | 4.65 | .416 | 10.57 | .550 | 13.97 | .270 | 6.86 |
| 15S | .935 | 23.75 | .715 | 18.16 | .551 | 14.00 | .250 | 6.35 | .308 | 7.82 | .195 | 4.95 | .429 | 10.90 | .550 | 13.97 | .270 | 6.86 |
| 21P | 1.085 | 27.56 | .865 | 21.97 | .633 | 16.08 | .184 | 4.67 | .308 | 7.82 | .183 | 4.65 | .416 | 10.57 | .700 | 17.78 | .270 | 6.86 |
| 21S | 1.085 | 27.56 | .865 | 21.97 | .701 | 17.81 | .250 | 6.35 | .308 | 7.82 | .195 | 4.95 | .429 | 10.90 | .700 | 17.78 | .270 | 6.86 |
| 25P | 1.185 | 30.01 | .965 | 24.51 | .733 | 18.62 | .184 | 4.67 | .308 | 7.82 | .183 | 4.65 | .416 | 10.57 | .800 | 20.32 | .270 | 6.86 |
| 25S | 1.185 | 30.01 | .965 | 24.51 | .801 | 20.35 | .250 | 6.35 | .308 | 7.82 | .195 | 4.95 | .429 | 10.90 | .800 | 20.32 | .270 | 6.86 |
| 31P | 1.335 | 33.91 | 1.115 | 28.32 | .883 | 22.43 | .184 | 4.67 | .308 | 7.82 | .183 | 4.65 | .416 | 10.57 | .950 | 24.13 | .270 | 6.86 |
| 31S | 1.335 | 33.91 | 1.115 | 28.32 | .951 | 24.16 | .250 | 6.35 | .308 | 7.82 | .195 | 4.95 | .429 | 10.90 | .950 | 24.13 | .270 | 6.86 |
| 37P | 1.485 | 37.72 | 1.265 | 32.13 | 1.033 | 26.24 | .184 | 4.67 | .308 | 7.82 | .183 | 4.65 | .416 | 10.57 | 1.100 | 27.94 | .270 | 6.86 |
| 37S | 1.485 | 37.72 | 1.265 | 32.13 | 1.101 | 27.96 | .250 | 6.35 | .308 | 7.82 | .195 | 4.95 | .429 | 10.90 | 1.100 | 27.94 | .270 | 6.86 |
| 51P | 1.435 | 36.45 | 1.215 | 30.86 | .983 | 24.97 | .228 | 5.79 | .351 | 8.92 | .183 | 4.65 | .416 | 10.57 | 1.050 | 26.67 | .310 | 7.87 |
| 51S | 1.435 | 36.45 | 1.215 | 30.86 | 1.051 | 26.70 | .296 | 7.52 | .351 | 8.92 | .195 | 4.95 | .429 | 10.90 | 1.050 | 26.67 | .310 | 7.87 |
| 51-2P | 1.835 | 46.61 | 1.615 | 41.02 | 1.384 | 35.15 | .184 | 4.67 | .310 | 7.87 | .183 | 4.65 | .416 | 10.57 | 1.450 | 36.83 | .270 | 6.86 |
| 51-2S | 1.835 | 46.61 | 1.615 | 41.02 | 1.450 | 36.83 | .250 | 6.35 | .310 | 7.87 | .195 | 4.95 | .429 | 10.90 | 1.450 | 36.83 | .270 | 6.86 |
| 67P | 2.235 | 56.77 | 2.015 | 51.18 | 1.784 | 45.31 | .184 | 4.67 | .310 | 7.87 | .183 | 4.65 | .416 | 10.57 | 1.850 | 36.83 | .270 | 6.86 |
| 67S | 2.235 | 56.77 | 2.015 | 51.18 | 1.850 | 46.99 | .250 | 6.35 | .310 | 7.87 | .195 | 4.95 | .429 | 10.90 | 1.850 | 36.83 | .270 | 6.86 |
| 69P | 1.735 | 44.07 | 1.515 | 38.48 | 1.284 | 32.61 | .228 | 5.79 | .351 | 8.92 | .183 | 4.65 | .416 | 10.57 | 1.350 | 34.29 | .310 | 7.87 |
| 69S | 1.735 | 44.07 | 1.515 | 38.48 | 1.350 | 34.29 | .296 | 7.52 | .351 | 8.92 | .195 | 4.95 | .429 | 10.90 | 1.350 | 34.29 | .310 | 7.87 |
| 100P | 2.170 | 55.12 | 1.800 | 45.72 | 1.383 | 35.13 | .270 | 6.86 | .394 | 10.01 | .183 | 4.65 | .416 | 10.57 | 1.442 | 36.63 | .360 | 9.14 |
| 100S | 2.170 | 55.12 | 1.800 | 45.72 | 1.451 | 36.86 | .333 | 8.46 | .394 | 10.01 | .195 | 4.95 | .429 | 10.90 | 1.442 | 36.63 | .360 | 9.14 |