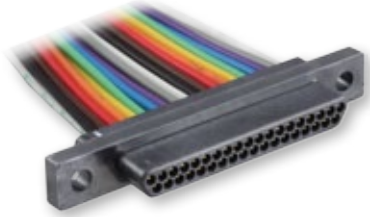


# Low Profile Metal and Plastic Shell Micro-D MWDL Plastic Shell Insulated Wire Pigtails



Micro-D  
Double and  
Triple Row

## Low Profile MWDL Plastic Shell Micro-D with Insulated Wire Termination



MWDL-37P-6K7-18B

All-Plastic MWDL connectors are supplied with stranded mil spec hookup wire. Contacts are crimped to wire and potted with epoxy. Pin contacts are gold-plated high performance TwistPin type and are recessed into insulator to prevent damage. Socket contacts are gold plated, machined copper alloy. Glass-filled high temperature LCP thermoplastic connector body. M22759/11 standard wire, or M22959/33 lightweight, high strength space grade wire. Meets performance requirements of MIL-DTL-83513. Available with 9 to 51 contacts. 3 A., 600 Vac, -55°C to +150°C.

### HOW TO ORDER

#### Sample Part Number

| MWDL  | -37  | P   | -6   | K   | 5   | -18   | M   |
|---|--|---|--|---|---|---|---|
| Series  | No. of Contacts                              | Contact Type  | Wire Gage (AWG)  | Wire Type   | Wire Color Code   | Wire Length (Inches)  | Mounting Hardware   |
| <b>MWDL</b><br>Low Profile Plastic Shell<br>Micro-D | -9<br>-15<br>-21<br>-25<br>-31<br>-37<br>-51 | <b>P</b><br>Pin<br>Contacts<br><br><b>S</b><br>Socket<br>Contacts | -4<br>#24<br><br>-6<br>#26<br><br>-8<br>#28<br><br>-0<br>#30 | <b>K</b><br>Standard Wire<br><br>Extruded PTFE<br>per M22759/11,<br>Silver-Plated<br>Conductors<br>(#30 AWG not<br>available)<br><br><b>J</b><br>Space Grade<br>Wire<br><br>High Strength,<br>Lightweight,<br>Crosslinked<br>Modified ETFE<br>per M22759/33,<br>Silver-Plated<br>Conductors | <b>1</b><br>White<br><br><b>5</b><br>Color-Coded per<br>MIL-STD-681<br><br>Wires 1-10 are solid<br>color, 11-up are<br>striped.<br><br><b>7</b><br>10 Color Repeat<br>Wires are solid color<br>per MIL-STD-681<br>color code system.<br>Wires #1, #11, #21<br>are black, wires #2,<br>#12, #22 are brown,<br>and so on. | Wire<br>Length In<br>Inches<br><br>Example:<br><br><b>-18</b><br>18 inches<br><br>6, 12 and<br>18 are<br>frequently<br>used<br>lengths. | <b>B</b><br><b>M</b><br><b>M1</b><br><b>S</b><br><b>S1</b><br><b>P</b><br><br>See<br>Mounting<br>Hardware<br>Table<br>Below |

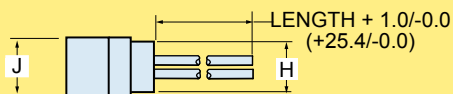
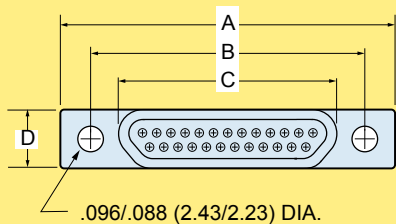
### MOUNTING HARDWARE

| B         | P                 | M                           | M1                                       | S                            | S1  |
|-----------|-------------------|-----------------------------|--|------------------------------|---|
|           |                   |                             |  |                              |   |
| Thru-Hole | Jackpost<br>#2-56 | Hex Head Jackscrew<br>#2-56 | Hex Head<br>Jackscrew, Extended<br>#2-56 | Slot Head Jackscrew<br>#2-56 | Slot Head Jackscrew,<br>Extended<br>#2-56 |

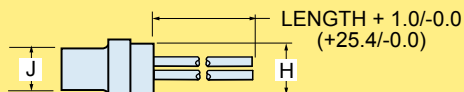
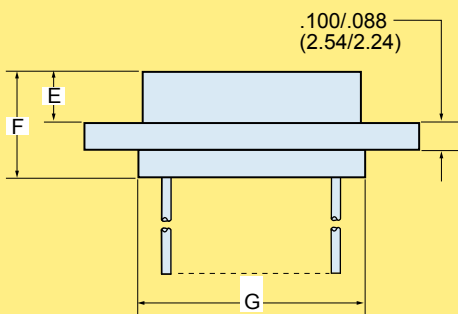


# Low Profile Metal and Plastic Shell Micro-D MWDL Plastic Shell Insulated Wire Pigtails

## MWDL INSULATED WIRE PIGTAIL DIMENSIONS



SOCKET CONNECTOR



PIN CONNECTOR

| Layout | A Max. |       | B          |            | C Max. |       | D Max. |      | E Max. |      | F Max. |       | G Max. |       | H Max. |      | J Max. |      |
|--------|--------|-------|------------|------------|--------|-------|--------|------|--------|------|--------|-------|--------|-------|--------|------|--------|------|
|        | In.    | mm.   | In. ± .003 | mm. ± 0.08 | In.    | mm.   | In.    | mm.  | In.    | mm.  | In.    | mm.   | In.    | mm.   | In.    | mm.  | In.    | mm.  |
| 9P     | .788   | 20.02 | .565       | 14.35      | .292   | 7.42  | .218   | 5.54 | .202   | 5.13 | .395   | 10.03 | .408   | 10.36 | .173   | 4.39 | .134   | 3.40 |
| 9S     | .788   | 20.02 | .565       | 14.35      | .380   | 9.65  | .218   | 5.54 | .185   | 4.70 | .375   | 9.53  | .408   | 10.36 | .173   | 4.39 | .218   | 5.54 |
| 15P    | .938   | 23.83 | .715       | 18.16      | .442   | 11.23 | .218   | 5.54 | .202   | 5.13 | .395   | 10.03 | .558   | 14.17 | .173   | 4.39 | .134   | 3.40 |
| 15S    | .938   | 23.83 | .715       | 18.16      | .530   | 13.46 | .218   | 5.54 | .185   | 4.70 | .375   | 9.53  | .558   | 14.17 | .173   | 4.39 | .218   | 5.64 |
| 21P    | 1.088  | 27.64 | .865       | 21.97      | .592   | 15.04 | .218   | 5.54 | .202   | 5.13 | .395   | 10.03 | .708   | 17.98 | .173   | 4.39 | .134   | 3.40 |
| 21S    | 1.080  | 27.64 | .865       | 21.97      | .680   | 17.27 | .218   | 5.54 | .185   | 4.70 | .375   | 9.53  | .708   | 17.98 | .173   | 4.39 | .218   | 5.64 |
| 25P    | 1.188  | 30.18 | .965       | 24.51      | .692   | 17.58 | .218   | 5.54 | .202   | 5.13 | .395   | 10.03 | .808   | 20.52 | .173   | 4.39 | .134   | 3.40 |
| 25S    | 1.185  | 30.18 | .965       | 24.51      | .780   | 19.81 | .218   | 5.54 | .185   | 4.70 | .375   | 9.53  | .808   | 20.52 | .173   | 4.39 | .218   | 5.64 |
| 31P    | 1.338  | 33.99 | 1.115      | 28.32      | .842   | 21.39 | .218   | 5.54 | .202   | 5.13 | .395   | 10.03 | .958   | 24.33 | .173   | 4.39 | .134   | 3.40 |
| 31S    | 1.338  | 33.99 | 1.115      | 28.32      | .930   | 23.62 | .218   | 5.54 | .185   | 4.70 | .375   | 9.53  | .958   | 24.33 | .173   | 4.39 | .218   | 5.64 |
| 37P    | 1.488  | 37.80 | 1.265      | 32.13      | .992   | 25.20 | .218   | 5.54 | .202   | 5.13 | .395   | 10.03 | 1.108  | 28.14 | .173   | 4.39 | .134   | 3.40 |
| 37S    | 1.488  | 37.80 | 1.265      | 32.13      | 1.080  | 27.43 | .218   | 5.54 | .185   | 4.70 | .375   | 9.53  | 1.108  | 28.14 | .173   | 4.39 | .218   | 5.64 |
| 51P    | 1.438  | 36.53 | 1.215      | 30.86      | .942   | 23.93 | .260   | 6.60 | .202   | 5.13 | .395   | 10.03 | 1.058  | 26.87 | .220   | 5.59 | .177   | 4.50 |
| 51S    | 1.438  | 36.53 | 1.215      | 30.86      | 1.030  | 26.16 | .260   | 6.60 | .185   | 4.70 | .375   | 9.53  | 1.058  | 26.87 | .220   | 5.59 | .260   | 6.60 |

### PERFORMANCE SPECIFICATIONS

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

### MATERIALS AND FINISHES

|                |  |
|----------------|--|
| Connector Body | Liquid Crystal Polymer (LCP), Glass-filled |
| Pin Contact    | Beryllium Copper, Gold over Nickel Plating |
| Socket Contact | Copper Alloy, Gold Over Nickel Plating     |
| Hardware       | 300 Series Stainless Steel                 |
| Encapsulant    | Epoxy                                      |