

Wired Standard Profile Plastic Shell Connectors

Winchester Interconnect Micro offers Wired Standard Profile Plastic Shell Connectors, designed for versatility and reliable performance across a wide temperature range. These Micro-D Combo connectors support up to 10 coax or 65 signal positions, making them ideal for applications requiring both signal and power connections. Standard models operate from -55°C to 125°C , with high-temperature versions available up to 200°C (add HT) for extreme conditions. Built with precision materials, they deliver consistent electrical performance and mechanical strength.

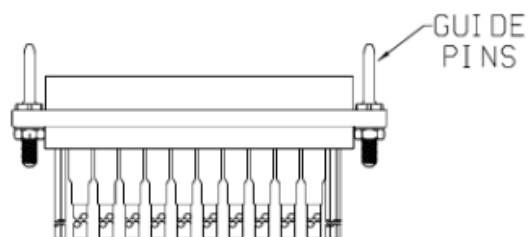
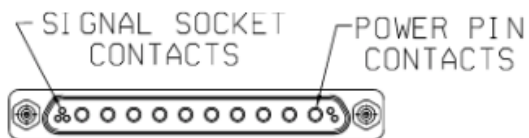
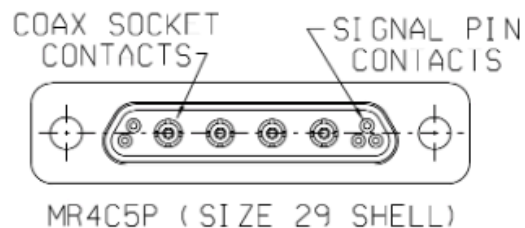
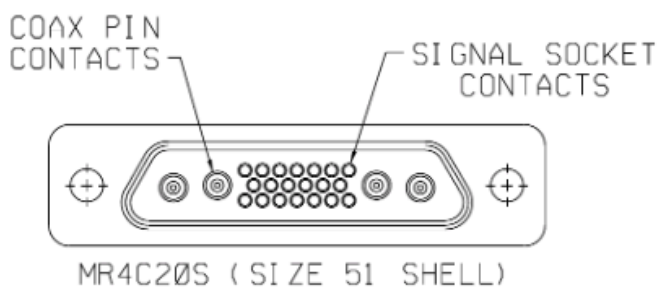
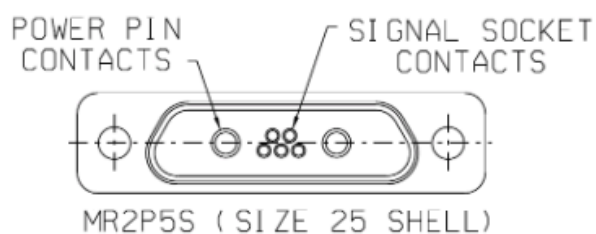
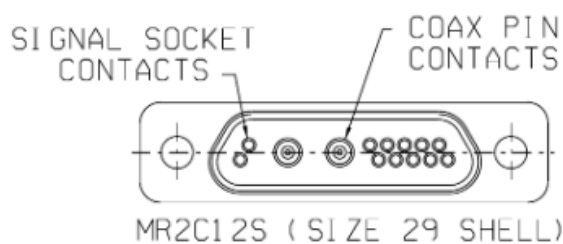
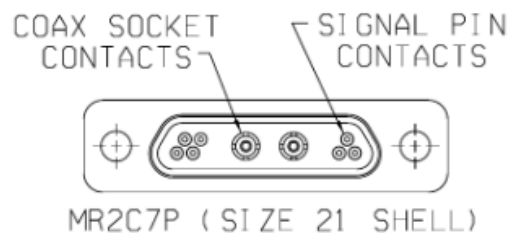
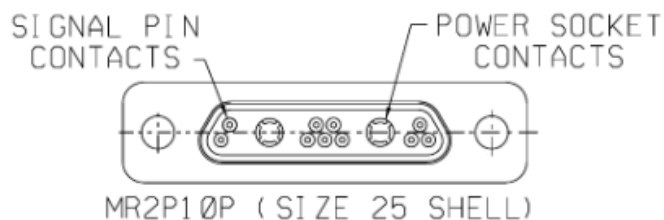


KEY FEATURES & BENEFITS

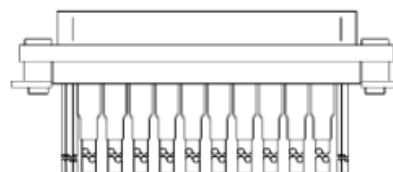
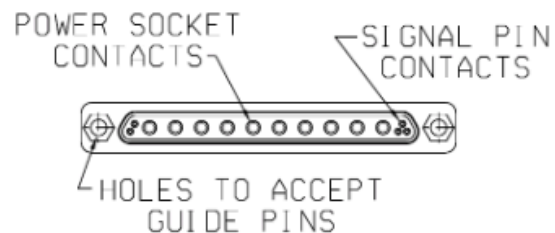
- Versatile Configurations – Supports up to 10 coax or 65 signal positions.
- Wide Operating Range – Standard models rated for -55°C to 125°C ; high-temp versions up to 200°C .
- Durable Contact Materials – Signal pins (C17200 Beryllium Copper), signal sockets (C21000 Brass Alloy), power pins (C3600 Brass), power sockets (C17300 Beryllium Copper), coax centers (C21000 Brass Alloy).
- Reliable Electrical Performance – Engineered for consistent conductivity and low resistance.
- Customizable Solutions – Configurable to meet unique project or environmental requirements.

Micro-D Combo Wired Plastic

DIMENSIONAL



MR10P5S (SIZE 65 SHELL)
WITH BLIND MATE
GUIDE PINS



MR10P5P (SIZE 65 SHELL)
WITH HOLES FOR
BLIND MATE

Micro-D Combo Wired Plastic

PERFORMANCE

Electrical Properties	
Contact Resistance	8 milliohm max contact only and 32 milliohms max with 6" length @ 2.5A.
Current Rating	3A max (Signal Contacts), 10A max Power Contacts
Dielectric Withstanding Voltage	600 VAC at sea level, 150 VAC at 70,000 feet. 1mA leakage current max for signal wire. 1300 VAC at sea level, 1mA leakage current max for power wire.
Insulation Resistance	500 VDC and 5000 Megohms min.
Impedance	Impedance Data (Coax) 37 ohm +/- 5%

Mechanical Properties	
Engaging Force	6 oz max. (Signal contacts only, no data for Power or Coax contacts)
Separation Force	.5 oz. min. (Signal contacts only, no data for Power or Coax contacts)
Mating/Unmating Force	10 oz x # of contacts max. (Signal contacts only, no data for Power or Coax contacts)
Vibration	EIA-364-28 Condition IV, 1 microsecond max discontinuity
Shock	EIA-364-27 Condition E, 1 microsecond max discontinuity
Durability	500 matings, passes Mating Force, CR, Eng and Sep Forces

Micro-D Combo Wired Plastic

MATERIALS

Materials and Finishes	
Signal Pin Contacts	C17200 Beryllium Copper per ASTM B194
Signal Socket Contacts	C21000 Brass Alloy per ASTM B36
Power Pin Contacts	C3600 Brass per ASTM B16
Power Socket Contacts	C17300 Beryllium Copper per ASTM B196
Coax Center Socket	C21000 Brass Alloy per ASTM B36
Coax Outer Socket	C17300 Beryllium Copper per ASTM B196
Coax Crimp Sleeve	C3600 Brass per ASTM B16
Coax Cener Pin	C17200 Beryllium Copper per ASTM B194
Coax Outer Pin	C3600 Brass per ASTM B16
Coax Dielectric	Liquid Crystal Polymer per GLCP-30F
Contact Plating	.000050 Thk Gold Plating per ASTM B488
Shell	Polyphenylene Sulfide (PPS) Per MIL-M-24519 GST-40F
Insulator Material	Polyphenylene Sulfide (PPS) Per MIL-M-24519 GST-40F
Hardware	Passivated Stainless Steel Per MIL-DTL-83513/05

Micro-D Combo Wired Plastic

HOW TO ORDER

Connector definition **

Connector Type
M = Metal Shell, Standard Profile
B = Plastic Shell, Standard Profile
(Combo connectors are not available in Low Profile versions)

Insulator Material
R = PPS or LCP

Integral EMI Shell
(Omit if EMI shell not required)
(Only available with standard profile metal shell (M))

Quantity of Coax and/or power contacts 1, 3
(Consult factory for available options)

Type of Power or Coax Contacts 1, 3, 4
P = Power contacts
C = Coax contacts
Gender of Power or Coax contacts is opposite of signal contact gender. (A connector with pin signal contacts (P or N designation) has female coax and/or power contacts)

Quantity of signal contacts 1
(Consult factory for available options)

Contact Type and Gender of Signal Contacts 1
P = Pin, Crimp Type
N = Pin, Solder Cup (26 & 24 AWG)
S = Socket, Crimp Type
T = Socket, Solder Cup (26 AWG)
TT = Socket, Solder Cup (24 AWG)

Hardware
0 = No Hardware
02 = Low Profile Hex Head Jackscrew (12 for size 100)
03 = High Profile Hex Head Jackscrew (13 for size 100)
05 = Low Profile Slotted Head Jackscrew (15 for size 100)
06 = High Profile Slotted Head Jackscrew (16 for size 100)
07 = Jackposts (17 for size 100)
22 = Captive Low Profile Hex Head Jackscrews
23 = Captive High Profile Hex Head Jackscrews
0T = Threaded Inserts (2-56) in Flange
0F = Float Mount hardware
0G = Guide pins
0GB = Guide Bushings
0R = Retractable Low Profile Jackscrew, Allen Head

Wire Gauge of Signal Leads (Omit for Solder Cup Contacts)
24, 26, 28, & 30 AWG
(25 AWG is available with type C solid wire)

Wire Type of Signal Leads (Omit for Solder Cup Contacts)
C = Solid Wire, Uninsulated Per A-A-59551
E = Stranded Wire, NEMA HP3 Type E
F = Stranded Wire Per NEMA HP3 Type ET
M = Stranded Wire per AS22759/11
U = Stranded Wire per AS22759/12
Y = Stranded Wire per AS22759/33
B = Stranded Wire, PVC Insulated (This wire is no longer used. Compromises maximum temperature and epoxy adhesion)

Wire Color (Insulated Wire) or Plating (Uninsulated Wire) (Omit for Solder Cup Contacts)
1 = All White
2 = All Yellow
3 = Pure Tin Plated (Uninsulated Wire) (RoHS Compliant)
4 = Gold Plated (Uninsulated Wire) (RoHS Compliant)
5 = Color Code per MIL-STD-681
6 = Color Code per MIL-STD-681, Repeat Solid Colors
L = Tin/Lead (minimum 3% Lead) plated (Uninsulated Wire) (Not RoHS Compliant) (Not Available with high temp (HT) connectors)

Connector definition **

Special designator - SPL is to be added to the end of the part number if the connector cannot be fully defined by the rest of the engineering number

Outer Covering
0 = None
1 = M23053/5 Shrink Tubing
2 = M23053/18 Shrink Tubing
3 = Nomex Braid
4 = Expando Plastic Braid

Inner Shield
0 = No Shield
1 = Tin Plated Copper
2 = Nickel Plated Copper
3 = Silver Plated Copper

Cable Exit Angle
1 = Straight
2 = 90° toward short row side
3 = 90° toward long row side
4 = 45° toward short row side
5 = 45° toward long row side

Temperature Rating (Omit for standard Temp, 125°C)
Blank = 125°C
HT = 200°C
LO = 4 Kelvin (only available with solder cup contacts)

Float Mount Hardware (Omit if float mounts not required)
(This designation is no longer used. Use 0F in hardware position to specify float mount hardware.)

Shell Plating or Material (Omit for plastic shell or cadmium plating)
Blank = Cadmium
S01 = Electroless Nickel
S02 = Chem Film
S03 = Black Anodized
S04 = Gold
S05 = Titanium
S06 = Olive-Drab Cadmium
S07 = Black Nickel
S08 = Nickel-PTFE
S09 = Stainless Steel, Passivated
S10 = Zinc Nickel

Panel Thickness (Omit if panel mounting not required) (Thickness in inches)
Available for .031, .047, .062, .080, .094, .125 thick panels
(Consult Factory for additional Panel Thicknesses)

Panel Mount Options (Omit if panel mounting not required)
(Only available on standard profile metal shells)
RPM = Rear Panel Mount
FPM = Front Panel Mount
RPMS = Rear Panel Mount, Sealed w/O-ring
FPMs = Front Panel Mount, Sealed w/O-ring
RPMSC = Rear Panel Mount, Sealed w/Conductive O-ring
FPMSC = Front Panel Mount, Sealed w/Conductive O-ring

Lead Length, All Leads (Omit for Solder Cup contacts)
XX.X = Length in Inches
MXX = Metric Length (CM)

Coax cable specification (required for coax contacts - omit for power contacts)
(RG178 and RG196 available, consult factory for other cable types)

Color Code of Power Leads (omit for coax contacts) 2
1 = All White
(Consult factory for other color codes)

Wire Type of Power Leads (Omit for coax contacts) 2
E = Wire per NEMA HP3
M = Wire per Mil-DTL-22759/11

Wire Gauge of Power Leads (Omit for coax contacts) 2
16, 18

1. Consult factory for available options
2. If lead specifications are omitted with power contacts, power contacts will be supplied with solder cups
3. Coax and power contacts can be combined by including both designators in the same connector by listing one after the other (i.e. 2C2P designates a connector with 2 coax and 2 power contacts)
4. Gender of Power or Coax contacts is opposite of signal contact gender. (A connector with pin signal contacts (P or N designation) has female coax and/or power contacts)

** For double ended assemblies, include connector definition for both ends separated by a forward slash (/)
Excludes Integral Shell assemblies (Option "E")