

3M™ Pleated Foil I/O Cable Assemblies

MDR Version



- Mates with standard 3M MDR Boardmount Headers
- Pleated copper foil provides a 360 degree shield

Overmolded Assemblies

- Available in 68, 80 and 100 Positions
- Molded-in strain relief
- Can utilize either #4-40 or M2.5 thumbscrews
- Supplied as a complete assembly only

Metal Shell Assemblies

- Metal shells available in 20, 26, 36, 40, 50, 68, 80 and 100 Positions
- Offer quick release feature on 20 to 68 position for ease of installation
- 68, 80 and 100 positions available with thumbscrews
- RoHS* compliant

Date Modified: April 12, 2007

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Physical

- (Connector)** Technical Specification: See TS-0423 for .050" Mini D-Ribbon (MDR)
- (Cable)** Construction: 0.025" Pleated Foil Shielded, 30 AWG (solid), TPE Primary
- 50 Ohm Technical Specifications: See TS-0285 for 90101 - Gray PVC Jacket
See TS-0402 for 90201 - Gray TPE Cover
See TS-0876 for 93101 - Low Skew, Gray PVC Jacket
- 75 Ohm Technical Specifications: See TS-0451 for 90111 - Gray PVC Jacket
See TS-0598 for 90211 - Gray TPE Cover
- (Shells)** Overmolded: 68, 80 and 100 positions, thumbscrews
Glass Reinforced Polyester (PBT) - Gray
- Metal: See TS-0655 - 20, 26, 36 and 40 position, latching
See TS-0396 - 50 position, latching
See TS-0355 - 68 position, latching
See TS-0666 - 68, 80 and 100 position, thumbscrew
- (Jackscrews)** Material: Steel
Plating: Nickel on #4-40
Zinc Trivalent Black on M2.5

Electrical

- Voltage Rating: 30 V
Impedance: See Pleated Foil Cable (PFC) Specifications

Environmental

Temperature Rating: 75°C maximum

*"RoHS Compliant 2005/95/EC" means that the product or part ("Product") does not contain any of the substances in excess of the maximum concentration values in EU Directive 2002/95/EC, as amended by Commission Decision 2005/618/EC, unless the substance is in an application that is exempt under EU RoHS. This information represents 3M's knowledge and belief, which may be based in whole or in part on information provided by third party suppliers to 3M.

UL File No.: E86982 In the event any product is proven not to conform with 3M's Regulatory Information Appendix, then 3M's entire liability and Buyer's exclusive remedy will be in accordance with the Warranty stated below.

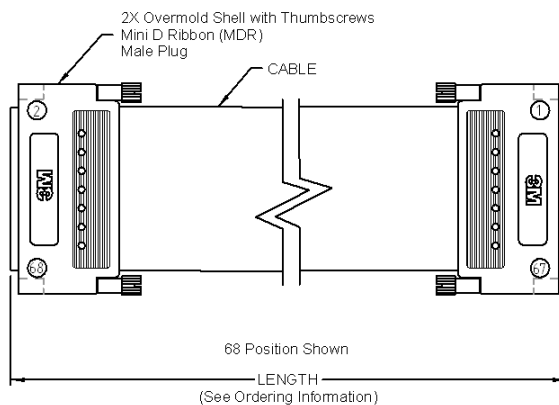
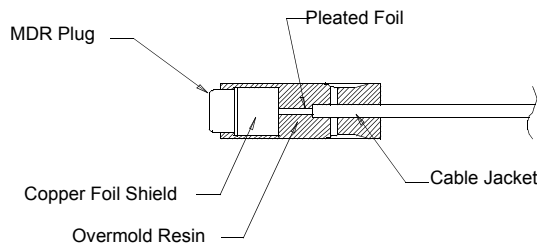
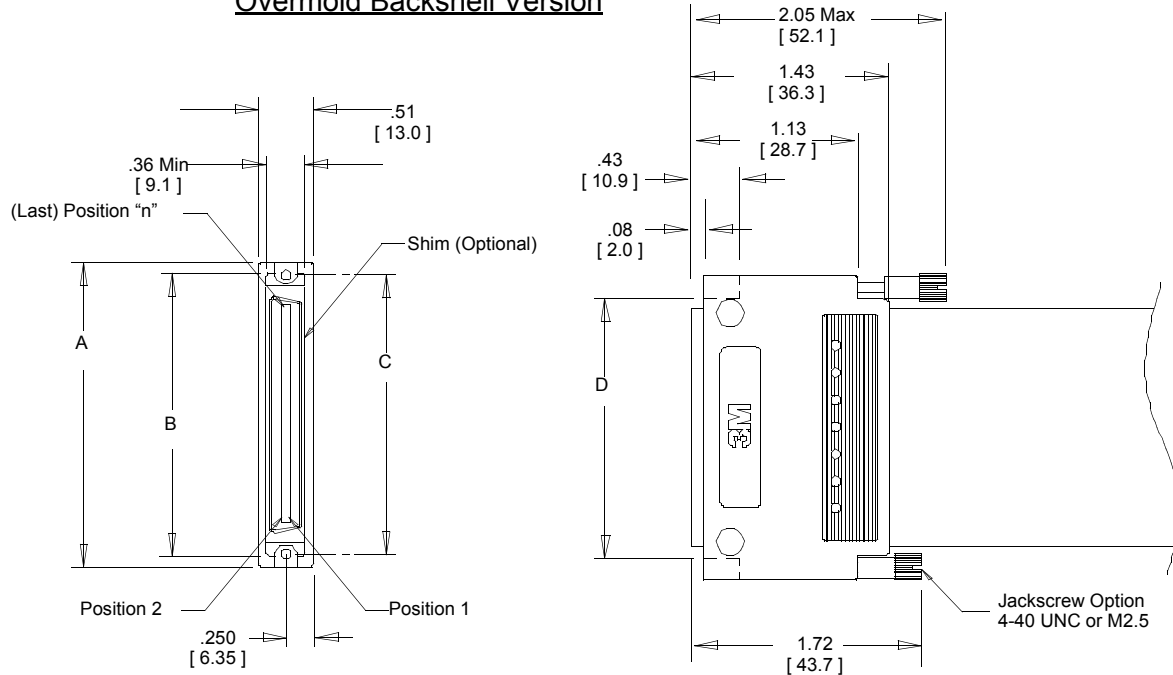
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Overmolded Shell w/ Thumbscrews				
Contact Quantity	Dimension A	Dimension B	Dimension C	Dimension D
68	2.52 [64.0]	2.32 [58.9]	2.22 [56.4]	2.11 [53.6]
80	2.81 [71.4]	2.61 [66.3]	2.58 [65.5]	2.41 [61.2]
100	3.32 [84.3]	3.12 [79.2]	3.08 [78.2]	2.91 [73.9]

Assembly Tolerances
 Length and Tolerance
 <36": ±1"
 36" to 120": ±2"
 120" to 240": ±4"
 >240": ±6"
 Minimum Length: 8" [203 mm]

Overmold Backshell Version



Inch
[mm]

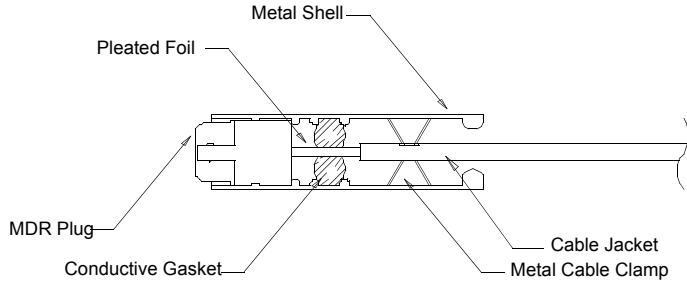
Tolerance Unless Noted			
	.0	.00	.000
inch	±.1	±.01	±.005

[] Dimensions for Reference Only

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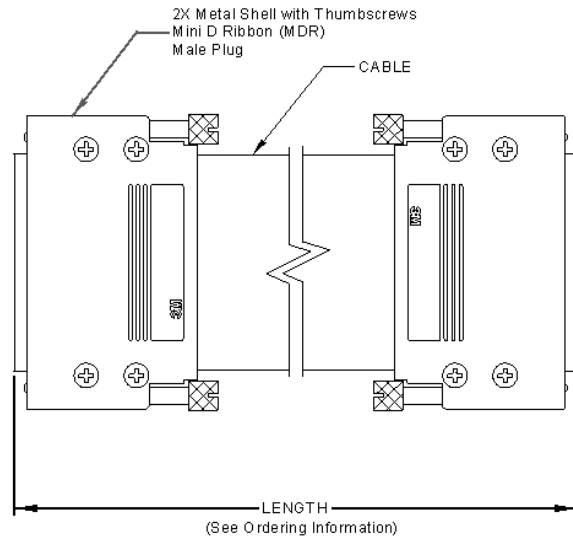
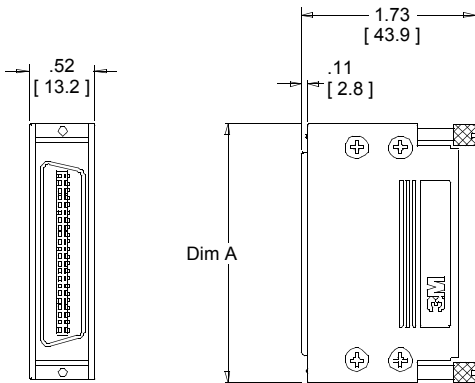
MDR Version



Assembly Tolerances	
Length and Tolerance	
<36"	±1"
36" to 120"	±2"
120" to 240"	±4"
>240"	±6"
Minimum Length:	
68-100 Position:	8" [203 mm]

Metal Backshell with Thumbscrews Version

Metal Shell with Thumbscrews	
Contact Quantity	Dimension A
68	2.52 [64.0]
80	2.82 [71.6]
100	3.32 [84.3]



Note: There are two connector terminations available for Metal Shell Versions (see ordering information).

1. MS = Standard Connection for GSGSG, with Signals on wires 2, 4, 6, (etc.) places all the Grounds in the lower (Circle) row of the connector and all the signals in the upper (Triangle) row of the connector.
2. LS = Low Crosstalk Connection for GSGSG, with signals on wires 2, 4, 6, (etc.) places a GSGSG pattern on both the lower (Circle) and upper (Triangle) rows of the connector.
3. Metal junction shells come with either 2 or 4 screws, see individual tech sheet for details.

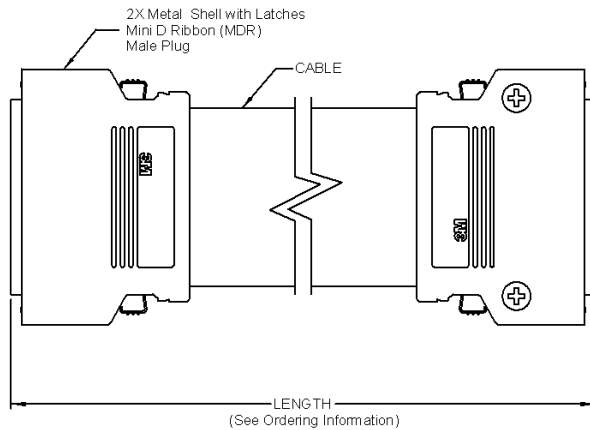
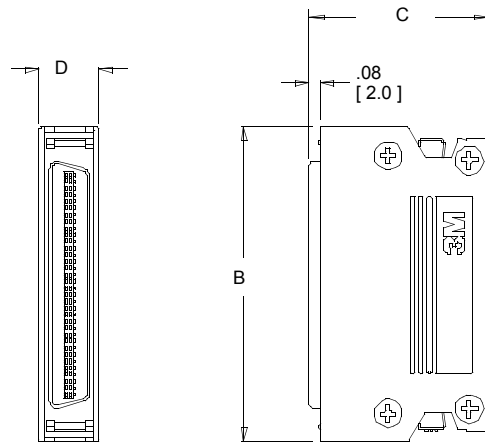
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3M™ Pleated Foil I/O Cable Assemblies

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Metal Shell with Latches			
Contact Quantity	Dimension B	Dimension C	Dimension D
20	1.17 [29.7]	1.55 [39.4]	.42 [10.7]
26	1.31 [33.3]	1.50 [38.1]	
36	1.57 [39.9]		
40	1.67 [42.4]		
50	1.93 [49.0]	1.35 [34.3]	.46 [11.7]
68	2.37 [60.2]		

Metal Backshell with Latching Version



Tolerance Unless Noted			
	.0	.00	.000
inch	±.1	±.01	±.005

[] Dimensions for Reference Only

Assembly Tolerances
 Length and Tolerance
 <36": ±1"
 36" to 120": ±2"
 120" to 240": ±4"
 >240": ±6"
 Minimum Length:
 20-50 Position: 6" [152 mm]
 68-100 Position: 8" [203 mm]

	50 Ohm, PVC Jacket, 90101/XX	50 Ohm, TPE Cover, 90201/XX	50 Ohm, PVC Jacket Low Skew, 93101/XX	75 Ohm, PVC Jacket, 90111/XX	75 Ohm, TPE Cover, 90211/XX
Over Molded or Metal Backshell with Thumbscrews	X	X	X	X	X
68 - 100 position					
Metal Backshell with Latches	X	X			X
20 - 68 position					

Ordering Information

XX-XXXXXG-XXX-XX-XXX.X

Body Type
 OM=Overmold
 LS=Metal Shell, Low Crosstalk Connection
 MS=Metal Shell, Standard Connection

Cable Impedance and Jacket Type
 50 Ω
 90101= Thick Jacket
 90201= Thin Cover
 93101= Thick Jacket, Low Skew
 75 Ω
 90111= Thick Jacket
 90211= Thin Cover

Conductor/
 Contact Quantity
 (See Table)

Length in Inches
 Minimum lengths, 6" [152 mm] for 20 - 50 position cables, and 8" [203 mm] for 68 - 100 position cables

Jackscrew
 4=4-40 Thread
 M=M2.5 Thread
 L=Latch
 Shim
 N=No Shim (Overmold Only)
 S=Shim (Overmold Only)
 O=Placeholder (metal shell only)

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Minimum 10%
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