

# D-Subminiature Assembly

## Shielded 9-Position and 15-Position

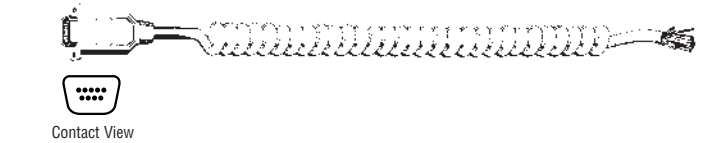
Part No.	No. of Cond.	Length of Body				Length of Tail				Conductors AWG (stranding) [Dia. in mm]	Shield		Insulation Thickness		Jacket Thickness		Nominal OD	
		Retracted		Extended		Connector End		Other End			Type	Drain Wire	Inch	mm	Inch	mm	Inch	mm
		Inch	mm	Inch	mm	Inch	mm	Inch	mm									

**9-Position Shielded D-Sub • Male Straight Handle One End • For keyboard-to-CRT use where 9-pin retractile is desired**

**Foil Shield (General Purpose) • Retractable • Polypropylene Insulation • Black Polyurethane Jacket**

49911A	9	18	457	90	2286	6	152	18	457	26 (19x38) Tinned Copper [.53]	Overall Foil	20 (42x36)	.006	.15	.065	1.65	.250	6.35
--------	---	----	-----	----	------	---	-----	----	-----	--------------------------------	--------------	------------	------	-----	------	------	------	------

Polyurethane jacket provides superior retractile properties at a reasonable cost. Molded handles are 100% shielded to assist in FCC compliance and guard against EMI/RFI. All connectors are tin-plated with detents for a positive ground connection. The end opposite the connector is stripped. Jack screw retention on male connector. 30V 60°C, UL AWM Style 20197



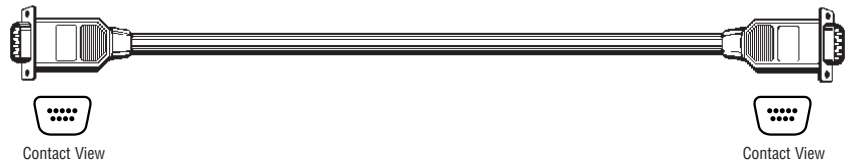
Part No.	No. of Cond.	Standard Lengths		Gender	UL NEC/ (C)UL CEC Type	Conductors AWG (stranding) [Dia. in mm]	Shield		Insulation Thickness		Jacket Thickness		Nominal OD	
		Ft.	m				Type	Drain Wire	Inch	mm	Inch	mm	Inch	mm

**9-Position Shielded D-Sub • Straight Handle Both Ends • For RS-449 applications**

**Foil Shield (General Purpose) • Semi-rigid PVC Insulation • Chrome PVC Jacket**

49900A	9	5	1.5	Male/Male	NEC: CM	24 (7x32) Tinned Copper [.61]	Overall Foil	24 (7x32)	.010	.25	.032	.81	.244	6.20
49901A	9	10	3.0	Male/Male										
49902A	9	25	7.6	Male/Male										
49905A	9	5	1.5	Male/Female										
49906A	9	10	3.0	Male/Female										
49907A	9	25	7.6	Male/Female										

Molded handles are 100% shielded to assist in FCC compliance and guard against EMI/RFI. All connectors tin-plated and male connectors have detents for positive ground connection. Wiring is point-to-point with the shield to connector shell. Jack screw retention on both connectors. 300V 80°C, UL AWM Style 2464

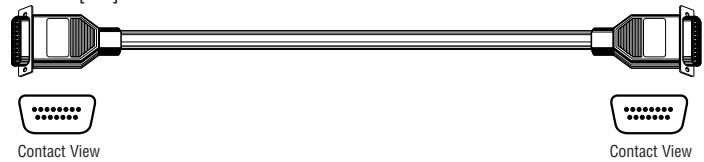


**15-Position Shielded D-Sub • Straight Handle Both Ends • For any 15-pin application exposed to high-noise environment**

**Foil Shield (General Purpose) • Semi-rigid PVC Insulation • Chrome PVC Jacket**

49721A	15	10	3.0	Male/Male	NEC: CM	24 (7x32) Tinned Copper [.61]	Overall Foil	24 (7x32)	.010	.25	.032	.81	.284	7.21
49725A	15	5	1.5	Male/Female										
49726A	15	10	3.0	Male/Female										

Molded handles are 100% shielded to assist in FCC compliance and guard against EMI/RFI. All connectors tin-plated and male connectors have detents for positive ground connection. Wiring is point-to-point with the shield to connector shell. Jack screw retention on both connectors. 300V 80°C, UL AWM Style 2464



**Foil plus Braid Shield (Super Shield) • Semi-rigid PVC Insulation • Chrome PVC Jacket**

49740A	15	5	1.5	Male/Male	NEC: CM	24 (7x32) Tinned Copper [.61]	Overall Foil + 65% Braid	None	.010	.25	.035	.89	.300	7.62
49745A	15	5	1.5	Male/Female										
49746A	15	10	3.0	Male/Female										
49747A	15	25	7.6	Male/Female										

Molded handles are 100% shielded to assist in FCC compliance and guard against EMI/RFI. All connectors tin-plated and male connectors have detents for positive ground connection. Wiring is point-to-point with the shield to connector shell. Jack screw retention on both connectors. 300V 80°C, UL AWM Style 2464



# D-Subminiature Assembly

## Shielded 25-Position

Part No.	No. of Cond.	Standard Lengths		Gender	UL NEC/ (C)UL CEC Type	Conductors AWG (stranding) [Dia. in mm]	Shield		Insulation Thickness		Jacket Thickness		Nominal OD	
		Ft.	m				Type	Drain Wire	Inch	mm	Inch	mm	Inch	mm

**25-Position Shielded D-Sub** • Straight Handle Both Ends • For RS-232 applications

**Foil Shield (General Purpose) • Semi-rigid PVC Insulation • Chrome PVC Jacket**

<b>49668A</b>	25	5	1.5	Male/Male	NEC:	24	Overall	24 (7x32)	.010	.25	.032	.81	.339	8.61
<b>49669A</b>	25	10	3.0	Male/Male	CM	(7x32)	Foil							
<b>49673A</b>	25	5	1.5	Male/Female		Tinned Copper								
<b>49674A</b>	25	10	3.0	Male/Female		[.61]								
<b>49675A</b>	25	25	7.6	Male/Female										
<b>49676A</b>	25	50	15.2	Male/Female										

Molded handles are 100% shielded to guard against EMI/RFI where indicated. All connectors are tin-plated and male connectors have detents to allow for a positive shield to ground connection. Wiring is point-to-point with shield to connector shell. Jack screw retention on both connectors.

300V 80°C, UL AWM Style 2464

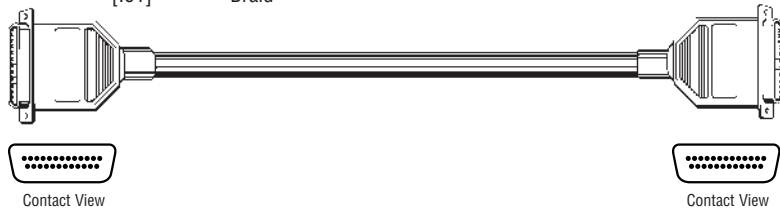


**Foil plus Braid Shield (Super Shield) • Semi-rigid PVC Insulation • Chrome PVC Jacket**

<b>49615A</b>	25	5	1.5	Male/Female	NEC:	24	Overall							
<b>49616A</b>	25	10	3.0	Male/Female	CM	(7x32)	Foil							
<b>49617A</b>	25	25	7.6	Male/Female		Tinned Copper	+ 65%							
						[.61]	Braid							

Molded handles are 100% shielded to guard against EMI/RFI where indicated. All connectors are tin-plated and male connectors have detents to allow for a positive shield to ground connection. Wiring is point-to-point with shield to connector shell. Jack screw retention on both connectors.

300V 80°C, UL AWM Style 2464



## D-Subminiature Assembly

Unshielded 25-Position, Shielded 37-Position and 50-Position

Part No.	No. of Cond.	Standard Lengths		Gender	UL NEC/ (C)UL CEC Type	Conductors AWG (stranding) [Dia. in mm]	Shield		Insulation Thickness		Jacket Thickness		Nominal OD	
		Ft.	m				Type	Drain Wire	Inch	mm	Inch	mm	Inch	mm

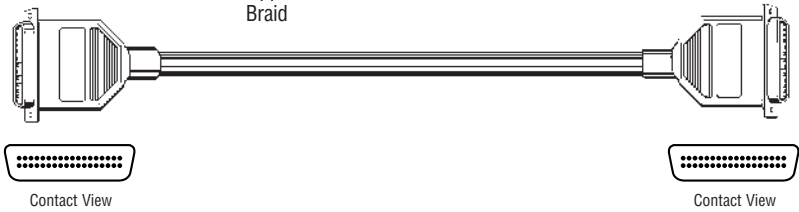
**37-Position Shielded D-Sub** • Straight Handle Both Ends • For RS-449 applications where assembly is exposed to high noise environment

**Foil plus Braid Shield (Super Shield) • Semi-rigid PVC Insulation • Chrome PVC Jacket**

49950A	36	5	1.5	Male/Male	NEC: 24	Overall	None	.010	.25	.045	1.14	.480	12.19
49951A	36	10	3.0	Male/Male	CM (7x32)	Foil							
49952A	36	25	7.6	Male/Male	Tinned Copper	+ 65%							
49955A	36	5	1.5	Male/Female	[.61]	Tinned							
49956A	36	10	3.0	Male/Female	18 Pairs	Copper							
49957A	36	25	7.6	Male/Female		Braid							

Molded handles are 100% shielded to assist in FCC compliance and guard against EMI/RFI. All connectors are tin-plated and male connectors have detents to allow for a positive shield to ground connection. Wiring is point-to-point with shield to connector shell and pin #1. Jack screw retention on both connectors.

300V 80°C, UL AWM Style 2464



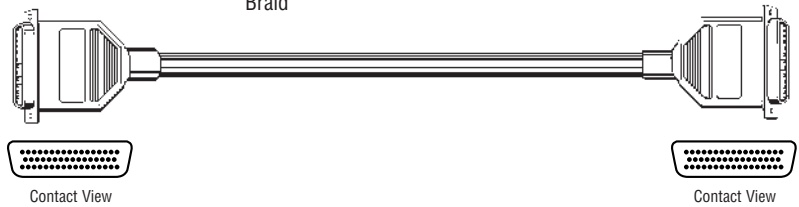
**50-Position Shielded D-Sub** • Straight Handle Both Ends • For high-density applications where assembly is exposed to high noise environment

**Foil plus Braid Shield (General Purpose) • Polyethylene Insulation • Chrome PVC Jacket**

49760A	50	5	1.5	Male/Male	NEC: 26	Overall	22 (7x30)	.010	.25	.049	1.24	.535	13.59
49761A	50	10	3.0	Male/Male	CM (7x34)	Foil							
49765A	50	5	1.5	Male/Female	Tinned Copper	+ 91%							
49766A	50	10	3.0	Male/Female	[.48]	Tinned							
					25 Pairs	Copper							
						Braid							

Molded handles are 100% shielded to guard against EMI/RFI and assist in FCC compliance. All connectors are tin-plated and male connectors have detents to allow for a positive shield to ground connection. Wiring is point-to-point with shield to connector shell. Jack screw retention on both connectors.

30V 80°C, UL AWM Style 2919



# SCSI Cable Assembly

SCSI-1 and SCSI-2

Shielded Straight and Right-Angled Handles

Part No.	No. of Cond.	Standard Lengths		Gender	UL NEC/ (C)UL CEC Type	Conductors AWG (stranding) [Dia. in mm]	Shield		Insulation Thickness		Jacket Thickness		Nominal OD	
		Ft.	m				Type	Drain Wire	Inch	mm	Inch	mm	Inch	mm

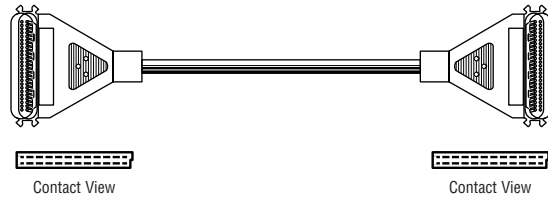
**SCSI-1 Assemblies (26 AWG) • Shielded Straight Handles • For SCSI (Small Computer Systems Interface) applications**

**Foil plus Braid Shield (Super Shield) • Polyethylene Insulation • Chrome PVC Jacket**

<b>49802A</b>	50	16.4	5	Male/Male	NEC: CM	26 (7x34) Tinned Copper [.48] 25 Pairs	Overall Foil + 90% Braid	22 (7x30) TC	.01	.254	.049	1.245	.535	13.589
---------------	----	------	---	-----------	---------	--	--------------------------	--------------	-----	------	------	-------	------	--------

Molded handles are 100% shielded to guard against EMI/RFI and assist in FCC compliance. These assemblies have tin-plated connectors and can be used in single-ended or differential configurations. Wiring is per SCSI standard.

30V 80°C, UL AWM Style 2919



# GPIOB (General Purpose Interface Bus) Assembly

## Unshielded and Shielded Connectors

Part No.	No. of Cond.	Standard Lengths		Gender	UL NEC/ (C)UL CEC Type	Conductors AWG (stranding)	Shield		Insulation Thickness		Jacket Thickness		Nominal OD	
		Ft.	m				Type	Drain Wire	Inch	mm	Inch	mm	Inch	mm

**Unshielded GPIOB • Molded PVC Connector • For use with electronic equipment that is IEEE-488 compatible**

**Foil plus Braid Shield (Super Shield) • Semi-rigid PVC Insulation • Gull Gray PVC Jacket**

49642	23	3.3	1	Male/Female Each End	NEC: CM	6 Pairs: 26 (7x34) TC 10 Singles: 26 (7x34) TC 1 Single: 24 (7x32) TC	Overall Foil + 90% Braid	26 (7x34)	.010	.25	.035	.89	.350	8.89
49643	23	6.6	2	Male/Female Each End										
49645	23	26.2	8	Male/Female Each End										

Molded connector is male/female design for easy stacking and comes with molded-in metric jack screws.  
300V 80°C, UL AWM Style 2464



**Shielded GPIOB • Die Cast Connector • For use with electronic equipment that is IEEE-488 compatible**

**Foil plus Braid Shield (Super Shield) • Semi-rigid PVC Insulation • Gull Gray PVC Jacket**

49635	23	3.3	1	Male/Female Each End	NEC: CM	6 Pairs: 26 (7x34) TC 10 Singles: 26 (7x34) TC 1 Single: 24 (7x32) TC	Overall Foil + 90% Braid	26 (7x34)	.010	.25	.035	.89	.350	8.89
49636	23	6.6	2	Male/Female Each End										
49637	23	9.8	3	Male/Female Each End										

Die cast connector is male/female design for easy stacking and comes with molded-in metric jack screws.  
300V 80°C, UL AWM Style 2464



**Shielded GPIOB • Molded PVC Connector • For use with electronic equipment that is IEEE-488 compatible**

**Foil plus Braid Shield (Super Shield) • Semi-rigid PVC Insulation • Gull Gray PVC Jacket**

49733	23	1.6	.5	Male/Female Each End	NEC: CM	6 Pairs: 26 (7x34) TC 10 Singles: 26 (7x34) TC 1 Single: 24 (7x32) TC	Overall Foil + 90% Braid	26 (7x34)	.010	.25	.035	.89	.350	8.89
49734	23	3.3	1	Male/Female Each End										
49735	23	6.6	2	Male/Female Each End										
49736	23	9.8	3	Male/Female Each End										
49737	23	13.1	4	Male/Female Each End										

Molded connector is male/female design for easy stacking and comes with molded-in metric jack screws.  
300V 80°C, UL AWM Style 2464



TC = Tinned Copper

# DIN\* Cable Assembly

## Shielded 3-Position, 5-Position and 8-Position

Part No.	No. of Cond.	Standard Lengths		UL NEC/ (C)UL CEC Type	Conductors AWG (stranding) [Dia. in mm]	Shield		Insulation Thickness		Jacket Thickness		Nominal OD	
		Ft.	m			Type	Drain Wire	Inch	mm	Inch	mm	Inch	mm

**5-Position Shielded DIN** • Straight Handle One End • Used where a shielded conductor is desired and as a low cost alternative to a D-Sub

**Foil Shield (General Purpose) • PVC Insulation • Black PVC Jacket**

<b>49152A</b>	5	10	3.0	NEC: CM	26 (19x38) Tinned Copper [.51]	Overall Foil	26 (19x38)	.014	.36	.053	1.35	.251	6.38
---------------	---	----	-----	---------	--------------------------------	--------------	------------	------	-----	------	------	------	------

Foil shielded for moderate-noise environments.  
Outer jacket stripped 1 inch.  
300V 80°C, UL AWM Style 2464. Packaged: B-25, S-25



**Foil plus Braid Shield (Super Shield) • PVC Insulation • Black PVC Jacket**

<b>49153A</b>	5	10	3.0	NEC: CM	26 (19x38) Tinned Copper [.51]	Overall Foil + 90% Tinned Copper Braid	26 (19x38)	.014	.36	.037	.94	.231	5.87
---------------	---	----	-----	---------	--------------------------------	--	------------	------	-----	------	-----	------	------

Foil and braid shielded for high-noise environments.  
Outer jacket stripped 1 inch.  
300V 80°C, UL AWM Style 2464. Packaged: B-25, S-25



**8-Position Shielded DIN** • Straight Handle One End • Used where a shielded conductor is desired and as a low cost alternative to a D-Sub

**Foil Shield (General Purpose) • PVC Insulation • Black PVC Jacket**

<b>49154A</b>	8	10	3.0	NEC: CM	26 (19x38) Tinned Copper [.51]	Overall Foil	26 (19x38)	.014	.36	.052	1.32	.266	6.76
---------------	---	----	-----	---------	--------------------------------	--------------	------------	------	-----	------	------	------	------

Foil shielded for moderate-noise environments.  
Outer jacket stripped 1 inch.  
300V 80°C, UL AWM Style 2464. Packaged: B-25, S-25



\*DIN Standard (Deutsche Industries Norm)

# DIN\* Cable Assembly

## Shielded 5-Position and 8-Position Retractable

Part No.	No. of Cond.	Length of Body				Length of Tail				Conductors AWG (stranding) [Dia. in mm]	Shield		Insulation Thickness		Jacket Thickness		Nominal OD	
		Retracted		Extended		Connector End		Other End			Type	Drain Wire	Inch	mm	Inch	mm	Inch	mm
		Inch	mm	Inch	mm	Inch	mm	Inch	mm									

**5-Position Shielded DIN • Straight Handle • Standard friction-fit connectors mate easily with many microcomputer keyboard ports**

**Foil plus Serve Shield (Super Shield) • Retractable • PVC Insulation • Black PVC Jacket**

<b>49103A</b>	5	14.5	368.3	72.5	1841.5	12	304.8	18	457.20	26 (19x38)	Foil + 95% Tinned Copper Serve [51]	26 (19x38)	.014	.36	.058	1.47	.260	6.60
---------------	---	------	-------	------	--------	----	-------	----	--------	------------	-------------------------------------	------------	------	-----	------	------	------	------

Shielded connectors maintain shield integrity and assist in FCC compliance. Utilizes 26 AWG conductor for low voltage drop. Ideal for higher noise situations. 300V 80°C, UL AWM Style 2464. Packaged: S-25



NEC: CM

### DIN Pin Configurations • Face Views



\*\*Available by special order

\*DIN Standard (Deutsche Industries Norm)

# Modular Keyboard Assemblies

4-Position, 6-Position and 8-Position with Retractable Cables  
Unshielded or Shielded Modular Plugs

Part No.	No. of Cond.	Length of Cord						Conductors AWG (stranding) [Dia. in mm]	Shield		Insulation Thickness		Jacket Thickness		Nominal OD	
		Body Retracted		Body Extended		Tail Length			Type	Drain Wire	Inch	mm	Inch	mm	Inch	mm
		Inch	mm	Inch	mm	Inch	mm									

**4-Position Modular Plugs** • Used to rapidly interconnect electronic computers and business machines

**Unshielded (General Purpose) • Retractable • Polypropylene Insulation • Black or CRT White Polyurethane Jacket**

<b>49440</b>	4	15	381	67.5	1714.50	1	25.40	26 (19x38) Tinned Copper [.51]	None	None	.006	.15	.030	.76	.093	2.36
Positive locking latch prevents connector from vibrating loose. Polarized connector prevents improper insertion. No tools required for installation.															x	x
30V 60°C, UL AWM Style 20197. Packaged: B-25, S-25															.198	5.03

**6-Position Modular Plugs** • Used to rapidly interconnect electronic computers and business machines

**Unshielded (General Purpose) • Retractable • Polypropylene Insulation • Black Polyurethane Jacket**

<b>49441</b>	6	15	381	67.5	1714.50	1	25.40	26 (19x38) Tinned Copper [.51]	None	None	.006	.15	.030	.76	.093	2.36
Positive locking latch prevents connector from vibrating loose. Polarized connector prevents improper insertion. No tools required for installation.															x	x
30V 60°C, UL AWM Style 20197. Packaged: B-25, S-25															.258	6.55

**8-Position Modular Plugs** • Used to rapidly interconnect electronic computers and business machines

**Unshielded (General Purpose) • Retractable • Polypropylene Insulation • Black or CRT White Polyurethane Jacket**

<b>49442</b>	8	15	381	67.5	1714.50	1	25.40	26 (19x38) Tinned Copper [.51]	None	None	.006	.15	.030	.76	.100	2.54
Positive locking latch prevents connector from vibrating loose. Polarized connector prevents improper insertion. No tools required for installation.															x	x
30V 60°C, UL AWM Style 20197. Packaged: B-25, S-25															.314	7.98

**Foil Shield\* • Retractable • Polypropylene Insulation • Black Polyurethane Jacket**

<b>49402</b>	7	15	381	67.5	1714.50	1	25.40	26 (19x38) Tinned Copper [.51]	Foil	26 (19x38)	.006	.15	.030	.76	.100	2.54
Positive locking latch prevents connector from vibrating loose. Polarized connector prevents improper insertion. No tools required for installation. A longitudinal aluminum/polyester shield protects against ESD and EMI.															x	x
30V 60°C, UL AWM Style 20197. Packaged: S-25															.314	7.98



Contact View



Contact View

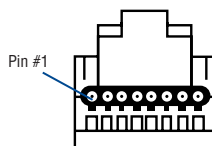
## Modular Plug Wiring Schemes

Cross wiring is standard on non-shielded constructions

1.....	4
2.....	3
3.....	2
4.....	1

Straight wiring is standard on shielded constructions

1.....	1
2.....	2
3.....	3
4.....	4



\*In shielded versions, the drain wire is always the highest numbered position in the connector.



# Parallel Interface Assembly

Part No.	No. of Cond.	Standard Lengths		Gender	UL NEC/ (C)UL CEC Type	Conductors AWG (stranding) [Dia. in mm]	Shield		Insulation Thickness		Jacket Thickness		Nominal OD	
		Ft.	m				Type	Drain Wire	Inch	mm	Inch	mm	Inch	mm

**Parallel Interface Assemblies** • Centronics/D-Sub Connectors • For computer-printer parallel interface

**Shielded • Foil plus Braid Shield (Super Shield) • Semi-rigid PVC Insulation • Chrome PVC Jacket**

**49502A**    25    10    3.0    Male/Male    NEC: 24    Overall    None    .010    .25    .040    1.02    .370    9.40

CM    (7x32)    Foil    Tinned Copper    + 65%    Tinned Copper    Braid

Universal 36-position ribbon connector (Centronics compatible) on one end and a 25-position D-Subminiature connector (IBM PC and PC-XT compatible) on the other. Molded handles are 100% shielded to guard against EMI/RFI and assist in FCC compliance.

300V 80°C, UL AWM Style 2464

