

100-Pin 1.27 mm Pitch Micro-D Accessories (SCSI) 90-019D

- Cable Assemblies
- Mating Connectors
- Guaranteed Compatibility

Simple Connection

Pickering connection solutions provide a simple way of connecting to a user's device under test or remote connection. The products include cable assemblies, cable connectors, and pcb connectors.

Cable Assemblies

Cable assemblies are offered in connector to connector, and connector to unterminated versions. There are 3 termination options for the unterminated cables - ferrules, tinned copper or simple cut end.



Custom Design Needs



Pickering Interfaces can manufacture custom connector accessories to suit any application. If you do not see what you need in this data sheet contact your Pickering Interfaces sales office with information on your requirements or consider using our free online Cable Design Tool.

Using our Cable Design Tool, you can graphically design your own custom cable assembly. Once completed and submitted, our engineers will generate a quote for your cable requirements. See pickeringtest.com/cdt

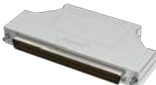




Example of a Pickering PXI and BRIC Products using 100-Pin 1.27 mm Pitch Micro-D Connectors

Cable Assemblies

Description		End 1	End 2		Cable Length	Product Order Code and Part Number	Data Sheet Page
		Gender & Cable Exit	Gender & Cable Exit	Options			
	Cable Assy, 100-Pin 1.27 mm Pitch Micro-D, 1A	Male, Rear Exit (2-56 UNC Screwlocks, Male)	Male, Rear Exit (2-56 UNC Screwlocks, Male)	-	0.5 m 1 m 2 m	A100SMR-100SMR-9B050 A100SMR-100SMR-9B100 A100SMR-100SMR-9B200	4
	Cable Assy, 100-Pin 1.27 mm Pitch Micro-D to Underterminated, 1A	Male, Rear Exit (2-56 UNC Screwlocks, Male)	NA	Ferrules	0.5 m 1 m 2 m	A100SMR-F-9B050 A100SMR-F-9B100 A100SMR-F-9B200	6
				Tinned End	0.5 m 1 m 2 m	A100SMR-T-9B050 A100SMR-T-9B100 A100SMR-T-9B200	
				Cut End	0.5 m 1 m 2 m	A100SMR-C-9B050 A100SMR-C-9B100 A100SMR-C-9B200	
Note: Custom lengths by quotation. Max length 5 m.							

Connectors

Description		Gender & Cable Exit	Type	Product Order Code and Part Number	Page
	Cable Connector, 100-Pin 1.27 mm Micro-D, 1A, IDC for Ribbon Cable.	Male, Rear Exit (2-56 UNC Screwlocks, Male)	With Backshell	C100SMR-1CR-6A	8
	Cable Connector, 100-Pin 1.27 mm Micro-D, 1A, IDC for Discrete Wire.	Male, Rear Exit (2-56 UNC Screwlocks, Male)	With Backshell	C100SMR-1CW-6A	9
	PCB Connector, 100-Pin 1.27 mm Micro-D, 1A	Female, (2-56 UNC Screwlocks, Female)	Right Angle PCB Mount	C100SFX-1PR-5A	10
			Straight PCB Mount	C100SFX-1PS-5A	11

Please click on the page number to navigate to the data sheet page required. Return to this page via the [C](#) button.

Appendix

Details of recent part number changes.....	12
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Custom Termination

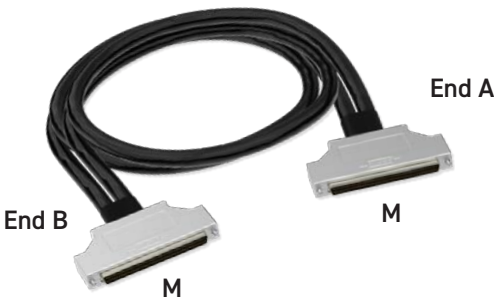
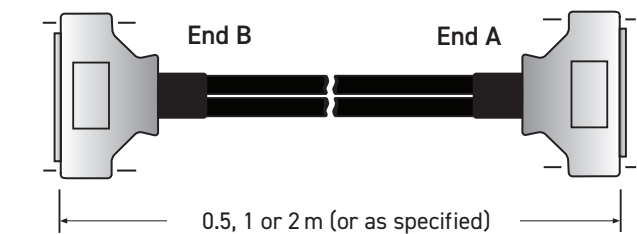
Customization possibilities	14
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- High Specification, Highly Flexible Cable
- Fully Screened Cable Construction with Strain Relief
- 2-56 UNC Screwlocks

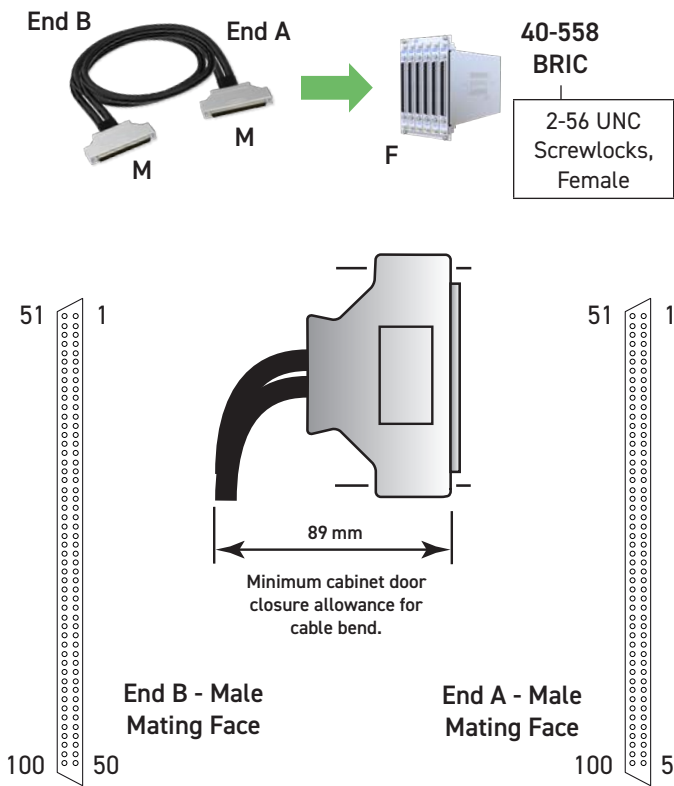
Technical Specification

Connector Type (End A):	100-Pin 1.27 mm Pitch Micro-D
Gender	Male
Securing Method	2-56 UNC screwlocks, male
Connector Type (End B):	100-Pin 1.27 mm Pitch Micro-D
Gender	Male
Securing Method	2-56 UNC screwlocks, male
Maximum Current	1 A
Maximum Voltage	150 V
Insulation Resistance	Cable 1x10 ¹⁰ Ohm/3 m
Connectors:	
Contact Material	Gold plated copper alloy
Contact Resistance	<35 mOhm
Cable Exit	Rear
Overall Size (Approx)	H83 x W11.3 x D43 mm
Cable Type:	2 off identified x 50-Pin twisted pair
Conductor: Material	Tinned stranded copper
Strands	7/36 (28AWG, 0.38 mm O/D)
Insulation	PVC
Outer Sleeve	PVC
Screened Construction	Dual shielded
	Cable screenS connected to backshells
Additional Braided Sleeve	No
Cable O/D	8.1 mm
Minimum Bend Radius	25 mm
Door Closure Allowance	89 mm (see diagram)



100-Pin Micro-D Cable Assy - Male to Male

Product Compatibility



Note: Wiring Schedule information can be found on the following page.

Product Order Codes

100-Pin 1.27 mm Pitch Micro-D Cable Assy, 1A, 2-56 UNC, Male to Male, 0.5 m Long	A100SMR-100SMR-9B050
Male to Male, 1.0 m Long	A100SMR-100SMR-9B100
Male to Male, 2.0 m Long	A100SMR-100SMR-9B200

Note: Other cable lengths can be supplied. Max length 5 m.

100-Pin 1.27 mm Pitch Micro-D Cable Assy - Male to Male (A100SMR-100SMR-9B***)

End B					End A				
Wire Color	Pin		Pin	Wire Color	Wire Color	Pin		Pin	Wire Color
Red/Black	51	●	1	Black/Red	Red/Black	51	●	1	Black/Red
White/Black	52	●	2	Black/White	White/Black	52	●	2	Black/White
Green/Black	53	●	3	Black/Green	Green/Black	53	●	3	Black/Green
Blue/Black	54	●	4	Black/Blue	Blue/Black	54	●	4	Black/Blue
Yellow/Black	55	●	5	Black/Yellow	Yellow/Black	55	●	5	Black/Yellow
Brown/Black	56	●	6	Black/Brown	Brown/Black	56	●	6	Black/Brown
Orange/Black	57	●	7	Black/Orange	Orange/Black	57	●	7	Black/Orange
White/Red	58	●	8	Red/White	White/Red	58	●	8	Red/White
Green/Red	59	●	9	Red/Green	Green/Red	59	●	9	Red/Green
Blue/Red	60	●	10	Red/Blue	Blue/Red	60	●	10	Red/Blue
Yellow/Red	61	●	11	Red/Yellow	Yellow/Red	61	●	11	Red/Yellow
Brown/Red	62	●	12	Red/Brown	Brown/Red	62	●	12	Red/Brown
Orange/Red	63	●	13	Red/Orange	Orange/Red	63	●	13	Red/Orange
White/Green	64	●	14	Green/White	White/Green	64	●	14	Green/White
Blue/Green	65	●	15	Green/Blue	Blue/Green	65	●	15	Green/Blue
Yellow/Green	66	●	16	Green/Yellow	Yellow/Green	66	●	16	Green/Yellow
Brown/Green	67	●	17	Green/Brown	Brown/Green	67	●	17	Green/Brown
Orange/Green	68	●	18	Green/Orange	Orange/Green	68	●	18	Green/Orange
Blue/White	69	●	19	White/Blue	Blue/White	69	●	19	White/Blue
Yellow/White	70	●	20	White/Yellow	Yellow/White	70	●	20	White/Yellow
Brown/White	71	●	21	White/Brown	Brown/White	71	●	21	White/Brown
Orange/White	72	●	22	White/Orange	Orange/White	72	●	22	White/Orange
Yellow/Blue	73	●	23	Blue/Yellow	Yellow/Blue	73	●	23	Blue/Yellow
Brown/Blue	74	●	24	Blue/Brown	Brown/Blue	74	●	24	Blue/Brown
Orange/Blue	75	●	25	Blue/Orange	Orange/Blue	75	●	25	Blue/Orange
Red/Black	76	●	26	Black/Red	Red/Black	76	●	26	Black/Red
White/Black	77	●	27	Black/White	White/Black	77	●	27	Black/White
Green/Black	78	●	28	Black/Green	Green/Black	78	●	28	Black/Green
Blue/Black	79	●	29	Black/Blue	Blue/Black	79	●	29	Black/Blue
Yellow/Black	80	●	30	Black/Yellow	Yellow/Black	80	●	30	Black/Yellow
Brown/Black	81	●	31	Black/Brown	Brown/Black	81	●	31	Black/Brown
Orange/Black	82	●	32	Black/Orange	Orange/Black	82	●	32	Black/Orange
White/Red	83	●	33	Red/White	White/Red	83	●	33	Red/White
Green/Red	84	●	34	Red/Green	Green/Red	84	●	34	Red/Green
Blue/Red	85	●	35	Red/Blue	Blue/Red	85	●	35	Red/Blue
Yellow/Red	86	●	36	Red/Yellow	Yellow/Red	86	●	36	Red/Yellow
Brown/Red	87	●	37	Red/Brown	Brown/Red	87	●	37	Red/Brown
Orange/Red	88	●	38	Red/Orange	Orange/Red	88	●	38	Red/Orange
White/Green	89	●	39	Green/White	White/Green	89	●	39	Green/White
Blue/Green	90	●	40	Green/Blue	Blue/Green	90	●	40	Green/Blue
Yellow/Green	91	●	41	Green/Yellow	Yellow/Green	91	●	41	Green/Yellow
Brown/Green	92	●	42	Green/Brown	Brown/Green	92	●	42	Green/Brown
Orange/Green	93	●	43	Green/Orange	Orange/Green	93	●	43	Green/Orange
Blue/White	94	●	44	White/Blue	Blue/White	94	●	44	White/Blue
Yellow/White	95	●	45	White/Yellow	Yellow/White	95	●	45	White/Yellow
Brown/White	96	●	46	White/Brown	Brown/White	96	●	46	White/Brown
Orange/White	97	●	47	White/Orange	Orange/White	97	●	47	White/Orange
Yellow/Blue	98	●	48	Blue/Yellow	Yellow/Blue	98	●	48	Blue/Yellow
Brown/Blue	99	●	49	Blue/Brown	Brown/Blue	99	●	49	Blue/Brown
Orange/Blue	100	●	50	Blue/Orange	Orange/Blue	100	●	50	Blue/Orange

100-Pin 1.27 mm Pitch Micro-D Male Connector
(Mating Face)

100-Pin 1.27 mm Pitch Micro-D Male Connector
(Mating Face)

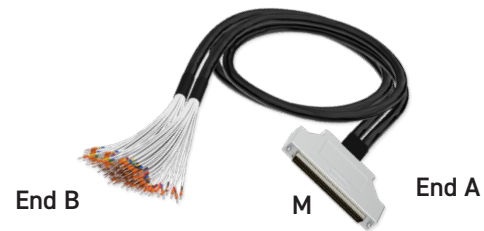
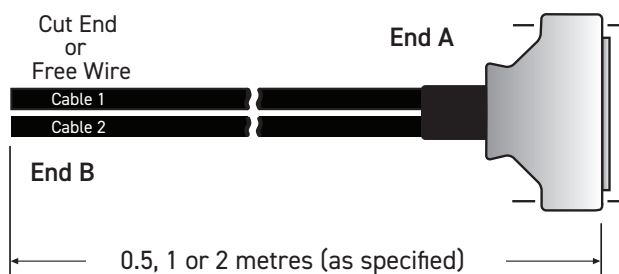
Note 1. The cable screens are connected to the connector backshells

- High Specification, Highly Flexible Cable
- Fully Screened Cable Construction with Strain Relief
- 2-56 UNC Screwlocks
- Wires Color Coded to Ensure Easy Connection

Technical Specification

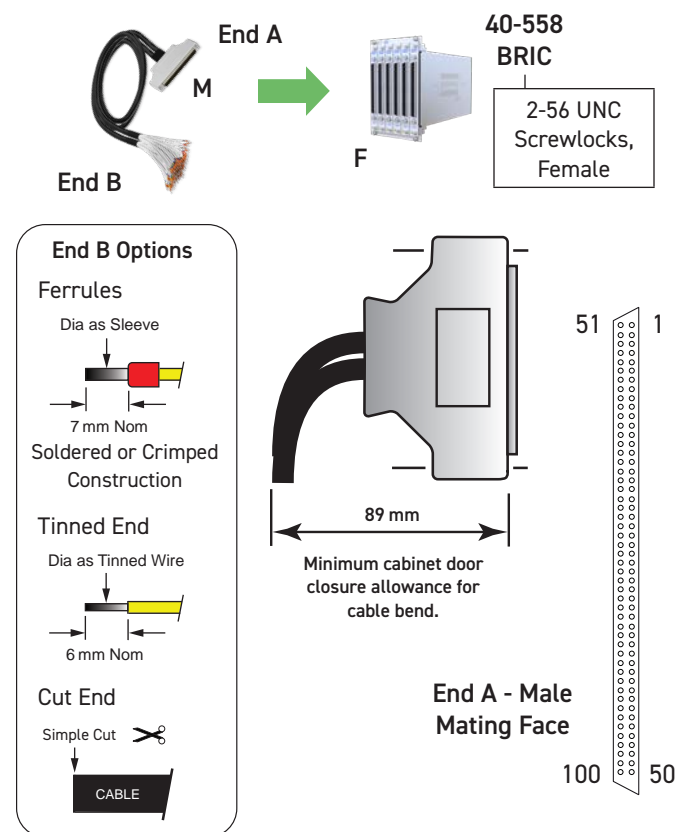
Connector Type (End A):	100-Pin 1.27 mm Pitch Micro-D
Gender & Securing Method	Male, 2-56 UNC screwlocks (male)
Unterminated End (End B):	
Wire End Options	Ferrules, Tinned, Cut End
Free Wire Length	130 mm nominal (Not Cut End)
Individual Wire Labelling	To connector pins. White/black screen pigtailed are included for Ferrule/Tinned versions
Maximum Current	1A
Maximum Voltage	150 V
Insulation Resistance	Cable 1×10^{10} Ohm/3 m
Connector:	
Contact Material	Gold plated copper alloy
Contact Resistance	<35 mOhm
Cable Exit	Rear
Overall Size (Approx)	H83 x W11.3 x D43 mm
Cable Type:	2 off identified x 50-Pin twisted pair
Conductor: Material	Tinned stranded copper
Strands	7/36 (28AWG, 0.38 mm O/D)
Insulation	PVC
Outer Sleeve	PVC
Screened Construction	Dual shielded
	Cable screen connected to backshell
Additional Braided Sleeve	No
Cable O/D	8.1 mm
Minimum Bend Radius	25 mm
Door Closure Allowance	89 mm (see diagram)

Note: When using this product please ensure appropriate electrical safety.



100-Pin Micro-D Cable Assy - Male to Unterminated

Product Compatibility

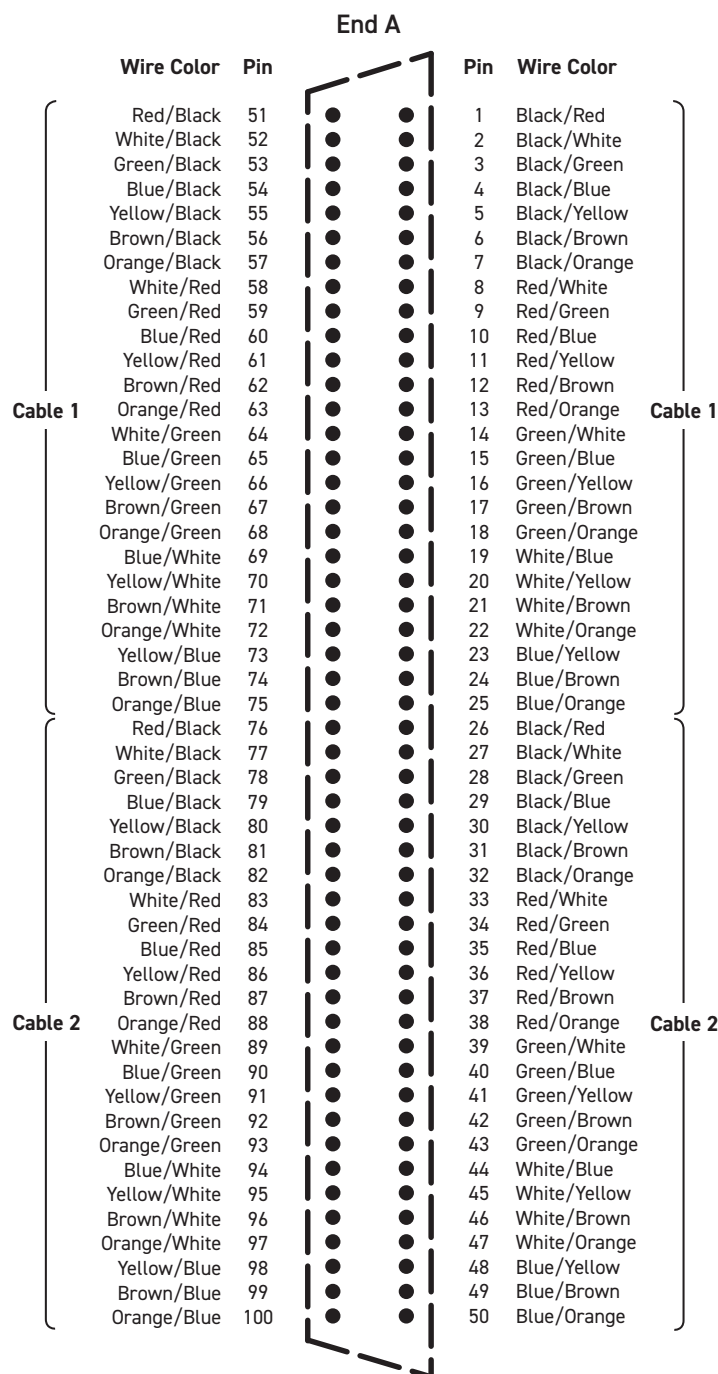


Note: Wiring Schedule information can be found on the following page.

Product Order Codes

100-Pin 1.27 mm Pitch Micro-D to Unterminated Cable Assy, 1A, 2-56 UNC Screwlocks, Male to Uterm, Ferrules, 0.5 m Long	A100SMR-F-9B050
Male to Uterm, Ferrules, 1.0 m Long	A100SMR-F-9B100
Male to Uterm, Ferrules, 2.0 m Long	A100SMR-F-9B200
Male to Uterm, Tinned, 0.5 m Long	A100SMR-T-9B050
Male to Uterm, Tinned, 1.0 m Long	A100SMR-T-9B100
Male to Uterm, Tinned, 2.0 m Long	A100SMR-T-9B200
Male to Uterm, Cut End, 0.5 m Long	A100SMR-C-9B050
Male to Uterm, Cut End, 1.0 m Long	A100SMR-C-9B100
Male to Uterm, Cut End, 2.0 m Long	A100SMR-C-9B200

100-Pin 1.27 mm Pitch Micro-D Cable Assy - Male to Unterminated (A100SMR-*-9B***)



**100-Pin 1.27 mm Pitch Micro-D Male Connector
(Mating Face)**

- Note 1.** The cable screens are connected to the connector backshell
- Note 2.** White/black insulated screen pigtailed are included at the Unterminated End for Ferrule/Tinned versions

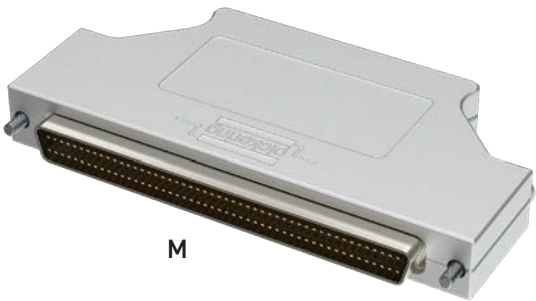
- Connector and Backshell
- IDC Connection for Ribbon Cable
- 2-56 UNC Screwlocks
- Cable Clamp in Backshell

This accessory is designed to allow users to directly terminate a cable to the connector.

It is difficult to terminate cable to the 100-Pin 1.27 mm Pitch Micro-D because of the high density and fine pitch. Pickering Interfaces recommends the use of purchased cable assemblies for applications where most or all of the contacts are in use.

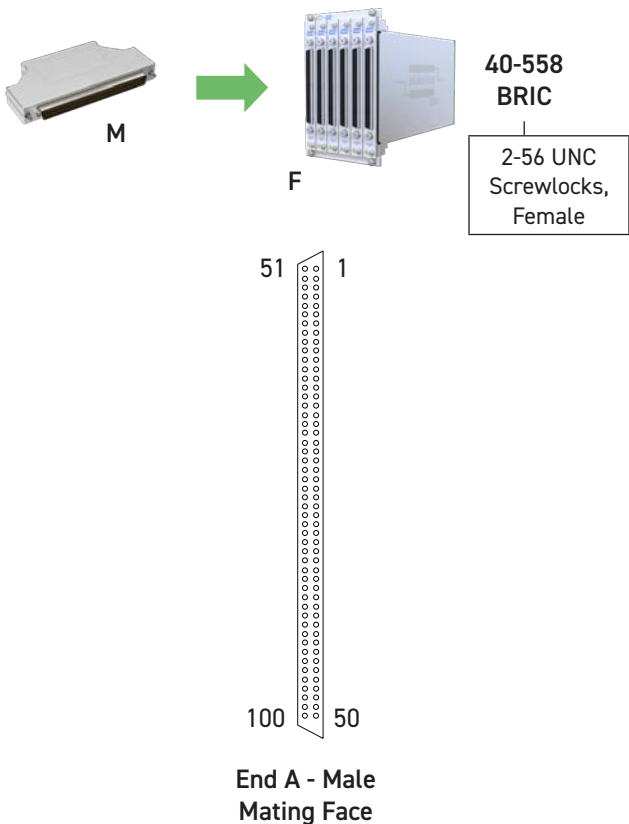
Technical Specification

Connector Type:	100-Pin 1.27 mm pitch Micro-D
Gender	Male
Securing Method	2-56 UNC screwlocks, male
Wire Connection	IDC for ribbon cable
Cable Screen Connection	Solder ring terminal
Connector Ratings:	
Maximum Current	1A
Maximum Voltage	250 VAC
Cable Exit	Rear
Cable Exit Size	7.4 x 27 mm
Overall Size (Approx)	H83 x W11.3 x D43 mm
100-Pin Micro-D:	
Contact Material	Gold plated copper alloy
Contact Resistance	<35 mOhm
IDC Connection:	
Maximum Wire Size	28AWG
Recommended Cable	Ribbon cable, multicore round & flat, 0.635 mm pitch
Additional Cable Clamp	Yes (in backshell)



100-Pin Micro-D Connector

Product Compatibility



Product Order Codes

100-Pin 1.27 mm Pitch Micro-D Connector, 1A, IDC for Ribbon Cable, 2-56 UNC Screwlocks, With Backshell, Male [C100SMR-1CR-6A](#)

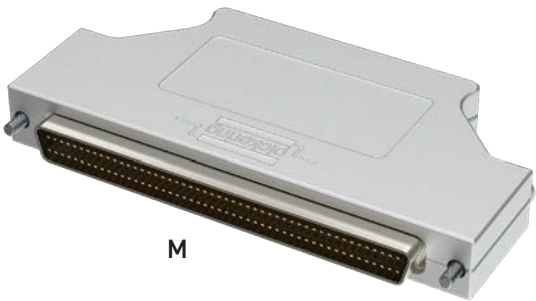
- Connector and Backshell
- IDC Connection for Discrete Wire
- 2-56 UNC Screwlocks
- Cable Clamp in Backshell

This accessory is designed to allow users to directly terminate a cable to the connector.

It is difficult to terminate cable to the 100-Pin 1.27 mm Pitch Micro-D because of the high density and fine pitch. Pickering Interfaces recommends the use of purchased cable assemblies for applications where most or all of the contacts are in use.

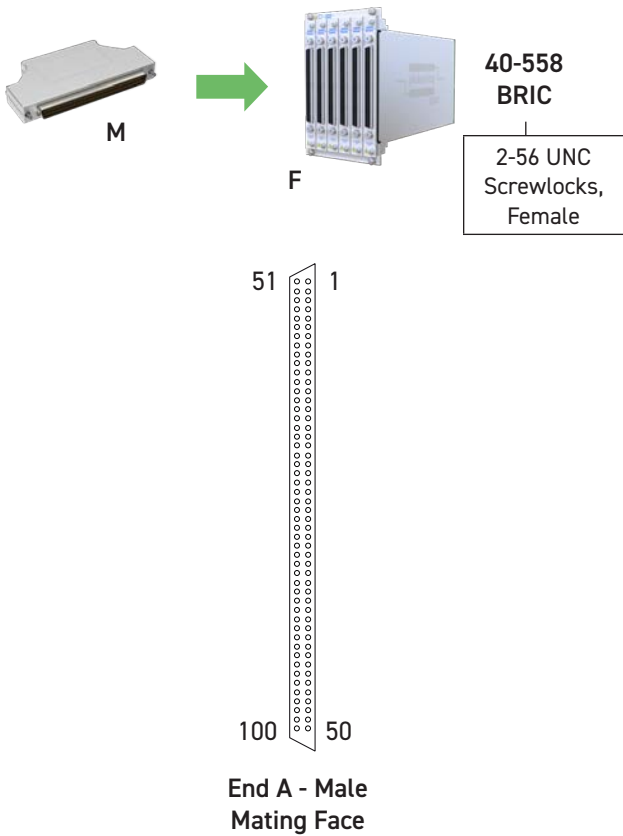
Technical Specification

Connector Type:	100-Pin 1.27 mm pitch Micro-D
Gender	Male
Securing Method	2-56 UNC screwlocks, male
Wire Connection	IDC for discrete wire
Cable Screen Connection	Solder ring terminal
Connector Ratings:	
Maximum Current	1A
Maximum Voltage	250 VAC
Cable Exit	Rear
Cable Exit Size	7.4 x 27 mm
Overall Size (Approx)	H83 x W11.3 x D43 mm
100-Pin Micro-D:	
Contact Material	Gold plated copper alloy
Contact Resistance	<35 mOhm
IDC Connection:	
Maximum Wire Size	28AWG
Recommended Cable	Multicore or single core
Additional Cable Clamp	Yes (in backshell)



100-Pin Micro-D Connector

Product Compatibility



Product Order Codes

100-Pin 1.27 mm Pitch Micro-D Connector, 1A, IDC for Discrete Wire, 2-56 UNC Screwlocks, With Backshell, Male

C100SMR-1CW-6A

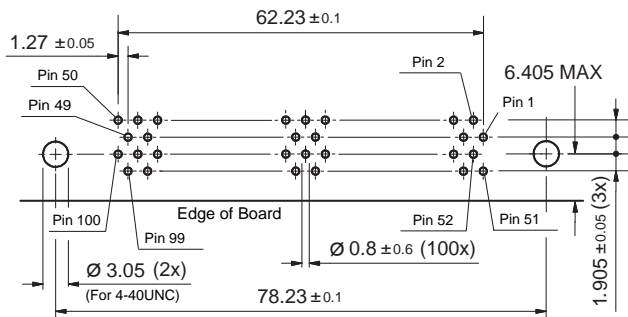
- Right Angle PCB Mount
- 2-56 UNC Screwlocks (Female)
- Ideal for User Created Termination Solutions

This accessory allows a user to create their own PCB based termination solution mounted on the end of a cable. Suitable cables for this product are contained elsewhere in this data sheet. Interfacing PCBs should be designed with suitable clearances for the voltage the application requires.

Note: This product is not suitable for directly mounting onto the front panel of a Pickering switching product.

Technical Specification

Connector Type:	100-Pin 1.27 mm pitch Micro-D
Gender	Female
Securing Method	2-56 UNC screwlocks, female
PCB Mounting	Right angle PCB mount, solder, PCB 1.6 mm thick
Connector Ratings:	
Maximum Current	1A each pin
Maximum Voltage	250 VAC
100-Pin Micro-D:	
Contact Material	Gold plated copper alloy
Contact Resistance	<35 mOhm
PCB Legs:	
Leg Length	3.17 mm nom (See diagram)

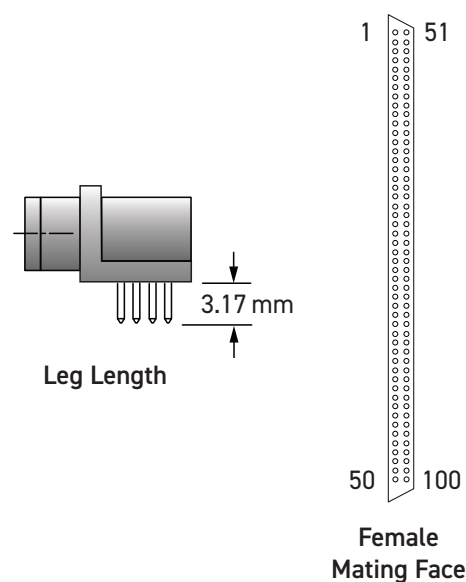
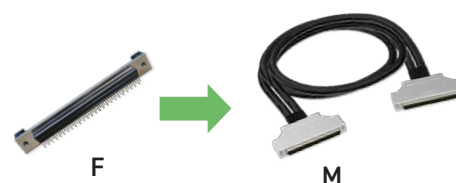


PCB Footprint of 100-Pin Right Angle Female Connector
(Connector Side - Not to Scale)



100-Pin Micro-D PCB Connector

Product Compatibility



Product Order Codes

100-Pin 1.27 mm Pitch Micro-D Connector, 1A, Right Angle
PCB Mount, Female [C100SFX-1PR-5A](#)

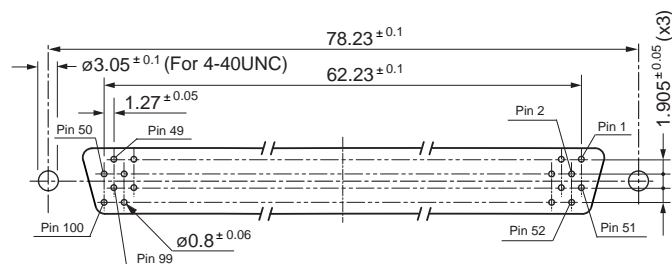
- Straight PCB Mount
- 2-56 UNC Screwlocks (Female)
- Ideal for User Created Termination Solutions

This accessory allows a user to create their own PCB based termination solution mounted on the end of a cable. Suitable cables for this product are contained elsewhere in this data sheet. Interfacing PCBs should be designed with suitable clearances for the voltage the application requires.

Note: This product is not suitable for directly mounting onto the front panel of a Pickering switching product.

Technical Specification

Connector Type:	100-Pin 1.27 mm pitch Micro-D
Gender	Female
Securing Method	2-56 UNC screwlocks, female
PCB Mounting	Straight PCB mount, solder, PCB 1.6 mm thick
Connector Ratings:	
Maximum Current	1A each pin
Maximum Voltage	250 VAC
100-Pin Micro-D:	
Contact Material	Gold plated copper alloy
Contact Resistance	<35 mOhm
PCB Legs:	
Leg Length	3.4 mm nom (See diagram)

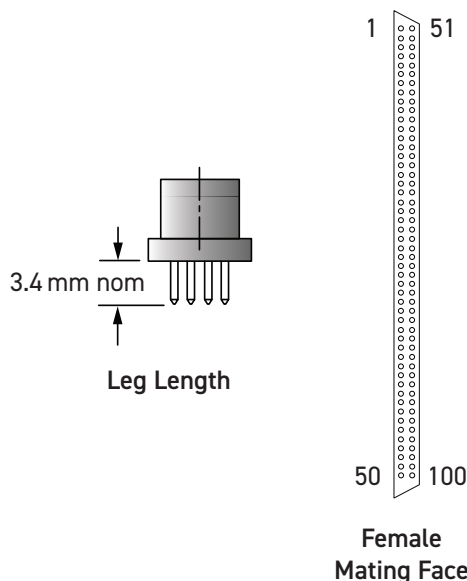
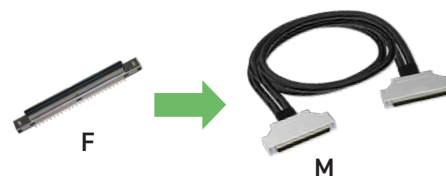


PCB Footprint of 100-Pin Straight Female Connector
(Connector Side - Not to Scale)



100-Pin Micro-D PCB Connector

Product Compatibility



Product Order Codes

100-Pin 1.27 mm Pitch Micro-D Connector, 1A, Straight PCB Mount, Female **C100SFX-1PS-5A**

Appendix

This appendix gives details of recent part number changes.



ECN1805 Dated 22nd December 2022

This Change Note covered the removal of the Male to Female cable assembly A100SMR-100SFR-9B*** due to the unavailability/obsolescence of the female connector. Additionally all products in the Additional products section were removed from the data sheet. These products were only listed, some included a female connector, and the data sheet did not contain specification information.

All products formerly in the data sheet may remain available as custom products.

ECN1758 Dated 11th August 2022, ECN1772 Dated 13th September 2022

These Change Notes covered changes to the cable type used within most of the cable assemblies listed in the data sheet. The existing cable had become obsolete. Items that changed (and are still in the data sheet), along with their corresponding updated part numbers, are detailed below:

Product changes in data sheet order		Data Sheet 90-019D Issue 6.2 Apr 2022	Data Sheet 90-019D Issue 7.0 Aug 2022 & Issue 7.1 Oct 2022
		Product Part Numbers	Product Part Numbers
	Cable Assy, 100-Pin 1.27 mm Pitch Micro-D, Male to Female, and Male to Male (2-56 UNC Screwlocks)	A100SMR-100SMR-9A***	A100SMR-100SMR-9B***
	Cable Assy, 100-Pin 1.27 mm Pitch Micro-D Male to Unterminated (2-56 UNC Screwlocks), Ferrules, Tinned End & Cut End	A100SMR-F-9A*** A100SMR-T-9A*** A100SMR-C-9A***	A100SMR-F-9B*** A100SMR-T-9B*** A100SMR-C-9B***

Custom Termination

Pickering Interfaces are able to manufacture custom built cable assemblies and backshells that mate with all the connectors we use in our extensive product range and to provide connection solutions for third party products.

We are able to model and manufacture cable assemblies and other termination arrangements to user notes and drawings, and to deal with simple and complex assemblies, and both small and high volume orders.

All products are designed to ensure easy and problem free connection.

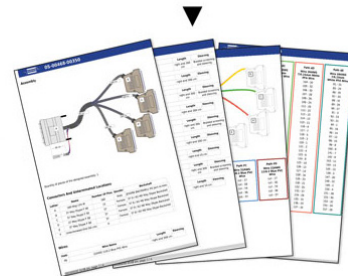
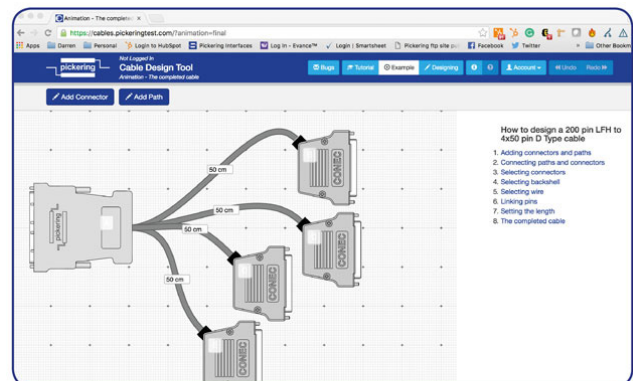
We offer a fast turn round of custom items to keep your ordering and integration time scales to a minimum.



Pickering's Cable Design Tool

Our Cable Design Tool is an online tool that allows you to define a cable assembly to exactly meet your requirements.

- Graphical design of customized cable assemblies
- Built-in library of standard cable sets can be used as the basis for customization, or cables can be defined from scratch
- The ability to store cable assemblies in the Cloud and develop them over time
- Each cable design has a PDF documentation file detailing all the specifications
- Allows detailed design including; connector types, wire type, pin definitions, pin & cable labelling, cable bundling, length selection, sleeving, comments, etc.
- Add your own connectors and wires
- Fully supported on major tablet operating systems



Because the Cable Design Tool is a web-based tool, we will continually update it to better accommodate your requirements and features. Your data is not trapped; complete details of the design are always available to the user at any time via the documentation or spreadsheet file. Once a cable is designed, you can submit it to us for quotation.

For more information visit: pickeringtest.com/cdt