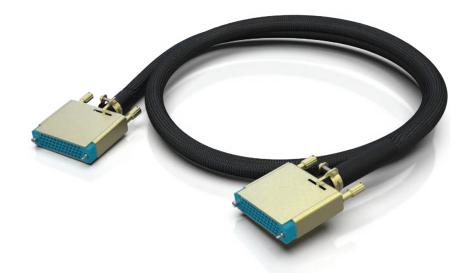
50-Pin SGMC Accessories

90-027D

- Standard Voltage to 250 V AC, 5 A
- Cable Assemblies
- Cable 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 and cable connectors.

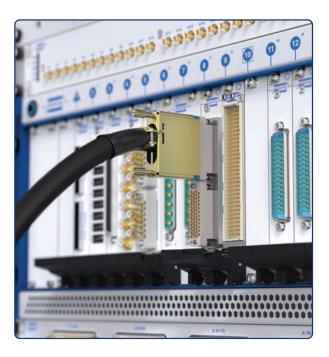
Cable Assemblies

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 Product using 50-Pin SGMC Connectors

Issue 1.2 June 2023

Cable Assemblies

Description		End 1	End 2		Cable Product Order Code		Data
		Gender & Cable Exit	Gender & Cable Exit	Options	Cable Length	and Part Number	Sheet Page
$\left(\begin{array}{c} \\ \\ \\ \end{array} \right)$	Cable Assy, 50-Pin SGMC, 5 A	Male, Rear	Female, Rear	-	0.5 m 1 m 2 m	A050FMR-050FFR-0A050 A050FMR-050FFR-0A100 A050FMR-050FFR-0A200	3
	Cable Assy, 50-Pin SGMC, 5 A	Female, Rear	Female, Rear	-	0.5 m 1 m 2 m	A050FFR-050FFR-0A050 A050FFR-050FFR-0A100 A050FFR-050FFR-0A200	4
	Cable Assy, 50-Pin SGMC to Female, Unterminated, Rear 5 A.			Ferrules	0.5 m 1 m 2 m	A050FFR-F-0A050 A050FFR-F-0A100 A050FFR-F-0A200	
		NA	Tinned End	0.5 m 1 m 2 m	A050FFR-T-0A050 A050FFR-T-0A100 A050FFR-T-0A200	5	
			Cut End	0.5 m 1 m 2 m	A050FFR-C-0A050 A050FFR-C-0A100 A050FFR-C-0A200		

Female Connectors

De	scription	Gender & Cable Exit	Туре	Product Order Code and Part Number	Page
t	Cable Connector	Female, Rear	With Backshell	C050FFR-1CP-0A	,
the second second	50-Pin SGMC, 5 A, Crimp		Without Backshell	C050FFX-1CP-0A	6

Custom Termination

Please click on the page number to navigate to the data sheet page required. Return to this page via the C button.

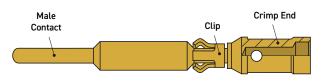
Cable Assy - Male to Female

90-027D

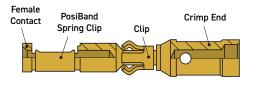
- High Specification 5 A Cable
- Highly Flexible Cable with Braided Sleeving
- Fully Screened Cable Construction with Strain Relief
- Rear Cable Exit

Technical Specification

50-Pin SGMC
Female
2-56 UNC screwlocks
50-Pin SGMC
Male
2-56 UNC screwlocks
5 A
250 V AC (rms)
1000 MOhm
Gold plated copper alloy
4 m0hm
Rear
H41.3 x W18.1 x D54.6 mm
Individual wires, screened & sleeved
Copper
19/0.18 (0.41 mm², 21AWG)
0.041Ω/m
PFA
Polyester
Yes (Cable screen connected to
backshells)
Yes
12 mm
25 mm
60 mm (see diagram)





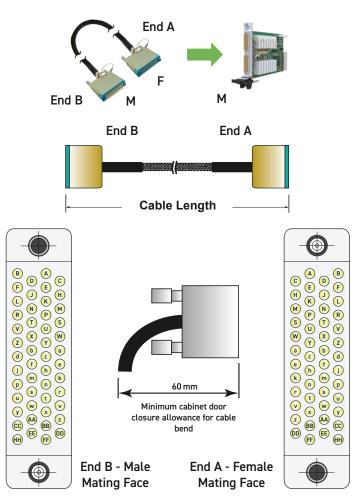


Female Contact



50-Pin SGMC Cable Assembly

Product Compatibility



Product Order Codes

50-Pin SGMC Cable Assy, 5 A, Male to Female, Rear Cable Exit,			
0.5 m Long	A050FMR-050FFR-0A050		
1.0 m Long	A050FMR-050FFR-0A100		
2.0 m Long	A050FMR-050FFR-0A200		

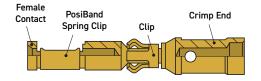
Cable Assy - Female to Female

90-027D

- High Specification 5 A Cable
- Highly Flexible Cable with Braided Sleeving
- Fully Screened Cable Construction with Strain Relief
- Rear Cable Exit

Technical Specification

	·
Connector Type (End A):	50-Pin SGMC
Gender	Female
Securing Method	2-56 UNC screwlocks
Connector Type (End B):	50-Pin SGMC
Gender	Female
Securing Method	2-56 UNC screwlocks
Maximum Current	5 A
Maximum Voltage	250 V AC (rms)
Insulation Resistance	1000 MOhm
Connectors:	
Contact Material	Gold plated copper alloy
Contact Resistance	4 m0hm
Cable Exit	Rear
Overall Size (Approx)	H41.3 x W18.1 x D54.6 mm
Cable Type:	Individual wires, screened & sleeved
Conductor: Material	Copper
Strands	19/0.18 (0.41 mm², 21AWG)
Resistance	0.041Ω/m
Insulation	PFA
Outer Sleeve	Polyester
Screened Construction	Yes (Cable screen connected to
	backshells)
Additional Braided Sleeve	Yes
Cable O/D	12 mm
Minimum Bend Radius	25 mm
Door Closure Allowance	60 mm (see diagram)

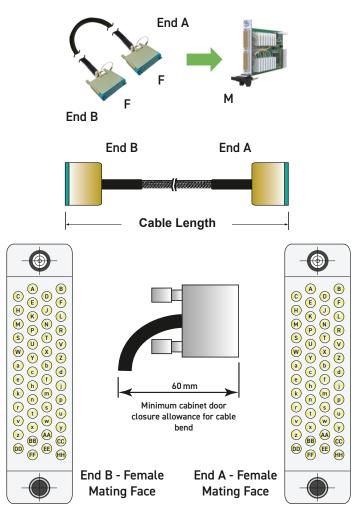


Female Contact



50-Pin SGMC Cable Assembly

Product Compatibility



Product Order Codes

50-Pin SGMC Cable Assy, 5 A, Female to Female, Rear CableExit,...0.5 m LongA050FFR-050FFR-0A0501.0 m LongA050FFR-050FFR-0A1002.0 m LongA050FFR-050FFR-0A200

Cable Assy - Female to Unterminated

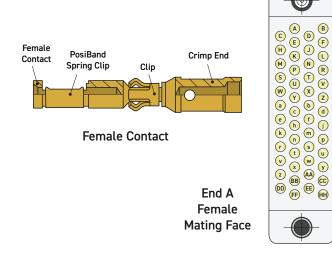
90-027D

- High Specification 5 A Cable
- Highly Flexible Cable with Braided Sleeving
- Fully Screened Cable Construction with Strain Relief
- Fully Coded Markers to Ensure Easy Connection

Technical Specification

Connector Type (End A):	50-Pin SGMC
Gender	Female
Securing Method	2-56 UNC screwlocks
Unterminated End (End B):	Ferrules, Tinned, Cut End
Wire End Options	130mm nominal
Free Wire Length	To connector pins. A white/black screen
Individual Wire Labelling	pigtail is included
Maximum Current Maximum Voltage Insulation Resistance Connector:	5 A 250 V AC (rms) 1000 MOhm
Contact Material	Gold plated copper alloy
Contact Resistance	4 mOhm
Cable Exit	Rear
Overall Size (Approx)	H41.3 x W18.1 x D54.6 mm
Cable Type:	Individual wires, screened & sleeved
Conductor: Material	Copper
Strands	19/0.18 (0.41 mm², 21AWG)
Resistance	0.041Ω/m
Insulation	PFA
Outer Sleeve	Polyactor
Screened Construction	Polyester Yes (Cable screen connected to backshell)
Additional Braided Sleeve	Yes
Cable O/D	12mm
Minimum Bend Radius	25mm
Door Closure Allowance	60mm (see diagram)

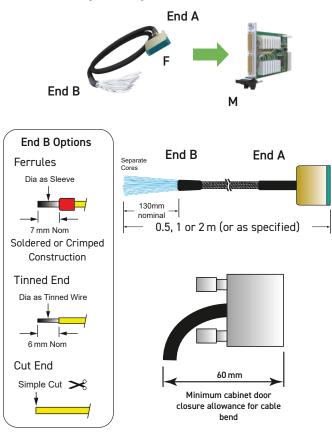
Note: When using this product please ensure appropriate electrical safety.





50-Pin SGMC Unterminated Cable Assembly

Product Compatibility



Product Order Codes

50-Pin SGMC Cable Assy, 5 A, Female to Unterminated,			
Ferrules, 0.5 m Long	A050FFR-F-0A050		
Ferrules, 1.0 m Long	A050FFR-F-0A100		
Ferrules, 2.0 m Long	A050FFR-F-0A200		
Tinned End, 0.5 m Long	A050FFR-T-0A050		
Tinned End, 1.0 m Long	A050FFR-T-0A100		
Tinned End, 2.0 m Long	A050FFR-T-0A200		
Cut End, 0.5 m Long	A050FFR-C-0A050		
Cut End, 1.0 m Long	A050FFR-C-0A100		
Cut End, 2.0 m Long	A050FFR-C-0A200		

Cable Connector - Female

90-027D

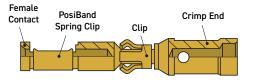
- 5 A Connector only or Connector and Backshell
- Cable Clamp in Backshell
- Soldered Cable Termination

This accessory is designed to allow users to directly terminate with soldered connections to the connector.

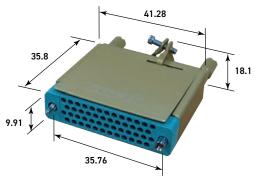
When the product is used without a backshell users should make their own cable strain relief arrangements and ensure appropriate electrical safety precautions are observed.

Technical Specification

Connector Type:	50-Pin SGMC
Gender	Female
Securing Method:	
Product with Backshell	2-56 UNC screwlocks
Product without Backshell	2-56UNC screwlocks
Wire Connection	Crimp
Cable Screen Connection	Connector shell / Screwlock
Connector Ratings:	
Maximum Current	5 A
Maximum Voltage	250 V AC (rms)
Cable Exit:	Rear
Cable Exit Size	25.4 x 9.9 mm
Overall Size (Approx)	H41.3 x W18.1 x D54.6 mm
20-Pin GMCT:	
Contact Material	Gold plated copper alloy
Contact Resistance	4 m0hm
Wire Connection:	
Maximum Wire Size	22AWG
Recommended Insulation	PTFE
Additional Cable Clamp	Yes (in backshell)



Female Contact

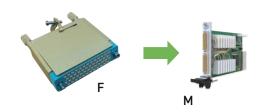


Connector Dimensions



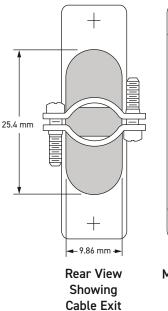
50-Pin SGMC Cable Connector with Backshell

Product Compatibility



n

t



B Screwlock (Male) ø Screwlock × (Female) BB EE

Female Mating Face

Product Order Codes

50-Pin SGMC Connector, 5 A, Crimp Pin,			
With Backshell, Female	C050FFR-1CP-0A		
Without Backshell, Female	C050FFX-1CP-0A		
Note: The supplied connector kit includes 50 off contacts of the			
appropriate gender.			

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.

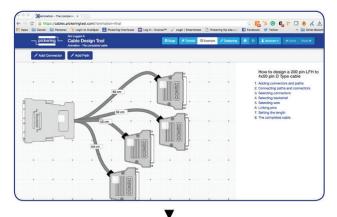
We offer a fast turn round of custom items to keep your ordering and integration time scales to a minimum.



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