9-Pin D-type Connection Accessories

- **Standard Voltage and Calibration Port Solutions**
- **Standard Voltage to 250V AC/400V, 5A**
- **Mating Connectors**
- **Connector Hoods**
- **Connector Blocks**
- **Cable Assemblies**
- **Guaranteed Compatibility**
- **9-Pin High Voltage Solutions are also Available**
  See Data Sheet 90-003HVD

The Standard Voltage 9-Pin D-Type connector is used on PXI and LXI switching products to provide a standard density, low pin count, 5A connector solution. It is also used as the Calibration Port connector for Precision resistor modules.

Connector to Connector cable assemblies provide a simple way of connecting the product to the user's remote matching connection. Connectors to unterminated solutions allow the user to connect directly to the product connector and wire directly into a remote UUT. Cable assemblies are offered in various lengths to match most user requirements.

For unterminated versions of cables we offer options based on the use of boot lace ferrules, tinned copper ends or simple cut ends to suit user termination requirements.

For users wishing to develop their own cabling solutions, we offer mating connectors and connector hoods which allow users to create either their own cable based solutions, or a PCB header solution. Connector Blocks directly terminate the module connector and convert the connection to arrays of screw terminal blocks, or users can select to use a remote breakout to terminate the cables at the end of a cable assembly.

Pickering Interfaces can manufacture custom connector accessories to suit any application, if you do not see what you need then contact your Pickering Interfaces sales office with information on your requirements and let us solve your connection problems.

Contents - Mating Accessories for Pickering Products

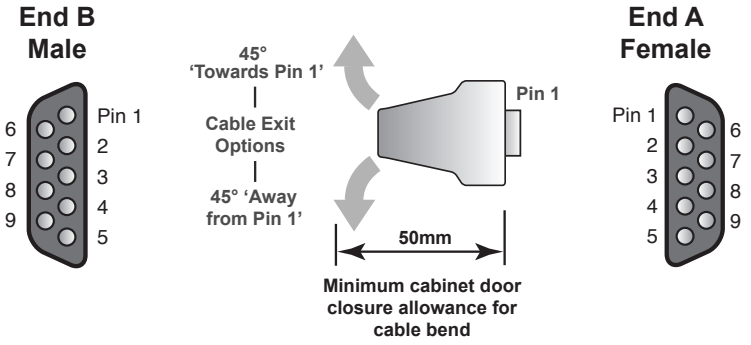
Please click on the page number to navigate to the data sheet page required. Return to this page via the C button.

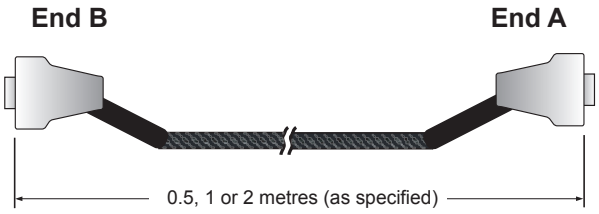
Contents - Additional Accessories

Although these items do not directly mate with Pickering Interfaces products customers may find them useful in the development of their own connection solutions.

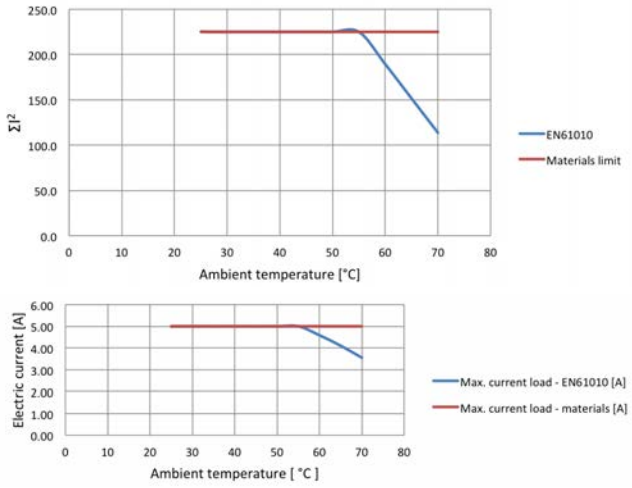
Standard Voltage 9-Pin D-Type Cable Assy - Male to Female

- High Specification Cable
- Highly Flexible Cable with Braided Sleeving
- 45 Degree Cable Exit
- Strain Relief
- Fully Screened Cable Construction





Characteristic Plots for 40-970-009-1m-MF



The top graph shows the permitted ΣI² versus ambient temperature in accordance with EN61010 for user exposure to surface temperature and a higher limit imposed by the materials used where the cable is not directly user accessible.

The bottom graph shows the allowed current versus temperature assuming ALL wires carry the same current. Higher currents to the cable rating are permitted on individual wires provided the ΣI² is complied with.

Technical Specification

Connector Type (End A):	9-Pin D-Subminiature
Gender	Female
Securing Method	4-40 UNC screwlocks, male
Connector Type (End B):	9-Pin D-Subminiature
Gender	Male
Securing Method	4-40 UNC screwlocks, male
Cable Assembly Rating:	
Maximum Current	5A
Maximum Voltage	250VAC/400VDC
Insulation Resistance	1000MOhm
Connectors:	
Contact Material	Gold plated copper alloy
Contact Resistance	<20mOhm
Cable Exit:	
Female Connectors	45° (Away from Pin 1)
Male Connectors	45° (Towards Pin 1)
Overall Size (Approx)	H32 x W15 x D46mm
Cable Type:	Individual wires, screened & sleeved
Conductor: Material	Tinned copper wire
Strands	19/0.18 (0.4mm², 21AWG)
Resistance	0.041Ω/m
Insulation	PFA
Outer Sleeve	Polyester
Screened Construction	Yes
Additional Braided Sleeve	Yes
Cable O/D	8mm
Minimum Bend Radius	25mm
Door Closure Allowance	50mm (see diagram)

Notes:
Other cable lengths can be supplied.

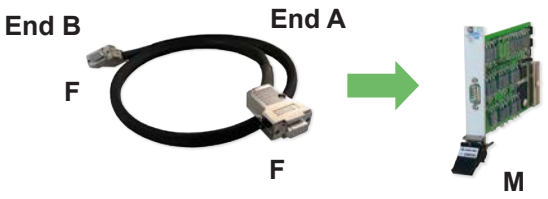
Product Order Codes

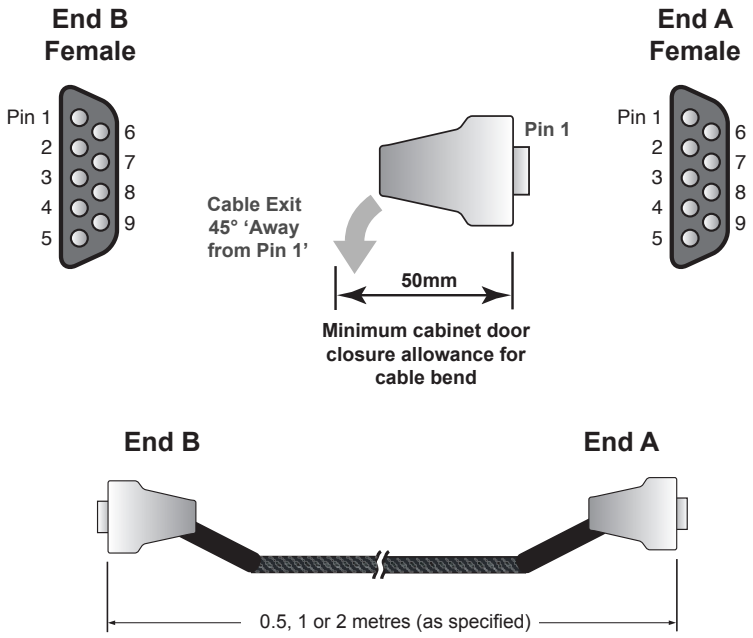
9-Pin D-Type Cable Assy, 5A, Male to Female

0.5m Long	**40-970-009-0.5m-MF**
1.0m Long	**40-970-009-1m-MF**
2.0m Long	**40-970-009-2m-MF**

Standard Voltage 9-Pin D-Type Cable Assy - Female to Female

- High Specification Cable
- Highly Flexible Cable with Braided Sleeving
- 45 Degree Cable Exit
- Strain Relief
- Fully Screened Cable Construction

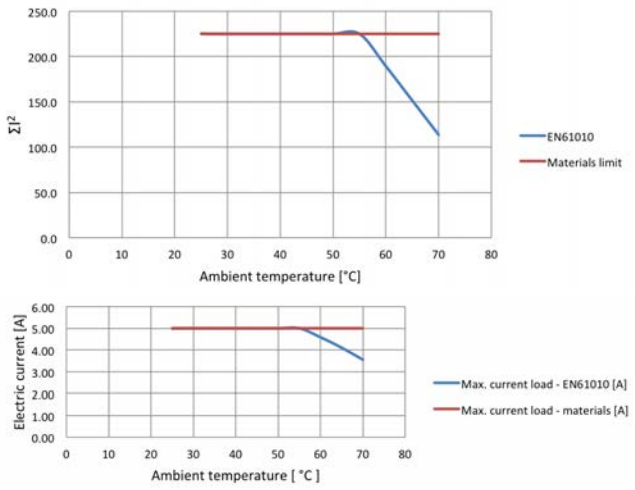




Technical Specification

Connector Type (End A):	9-Pin D-Subminiature
Gender	Female
Securing Method	4-40 UNC screwlocks, male
Connector Type (End B):	9-Pin D-Subminiature
Gender	Female
Securing Method	4-40 UNC screwlocks, male
Cable Assembly Rating:	
Maximum Current	5A
Maximum Voltage	250VAC/400VDC
Insulation Resistance	1000MOhm
Connectors:	
Contact Material	Gold plated copper alloy
Contact Resistance	<20mOhm
Cable Exit	45° (Away from Pin 1)
Overall Size (Approx)	H32 x W15 x D46mm
Cable Type:	Individual wires, screened & sleeved
Conductor: Material	Tinned copper wire
Strands	19/0.18 (0.4mm², 21AWG)
Resistance	0.041Ω/m
Insulation	PFA
Outer Sleeve	Polyester
Screened Construction	Yes
Additional Braided Sleeve	Yes
Cable O/D	8mm
Minimum Bend Radius	25mm
Door Closure Allowance	50mm (see diagram)
Notes: Other cable lengths can be supplied.	

Characteristic Plots for 40-970-009-1m-FF



The top graph shows the permitted ΣI² versus ambient temperature in accordance with EN61010 for user exposure to surface temperature and a higher limit imposed by the materials used where the cable is not directly user accessible.

The bottom graph shows the allowed current versus temperature assuming ALL wires carry the same current. Higher currents to the cable rating are permitted on individual wires provided the ΣI² is complied with.

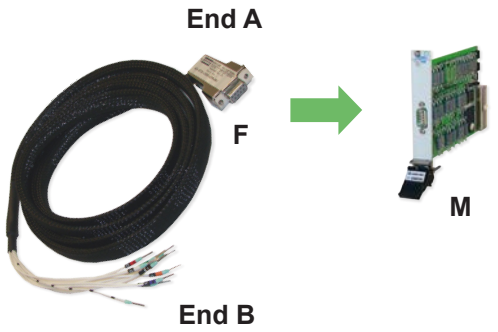
Product Order Codes

9-Pin D-Type Cable Assy, 5A, Female to Female

0.5m Long	**40-970-009-0.5m-FF**
1.0m Long	**40-970-009-1m-FF**
2.0m Long	**40-970-009-2m-FF**

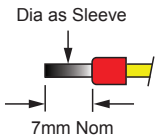
Standard Voltage 9-Pin D-Type Cable Assy - Female to Unterminated

- **High Specification Cable**
- **Highly Flexible Cable**
- **Fully Screened Cable Construction with Braided Sleeve and Strain Relief**
- **Fully Coded Markers to Ensure Easy Connection**
- **Boot Lace Ferrule Option to Prevent Wire Strand Breakage**



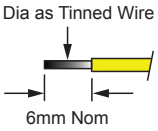
End B Options

Ferrules

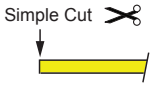


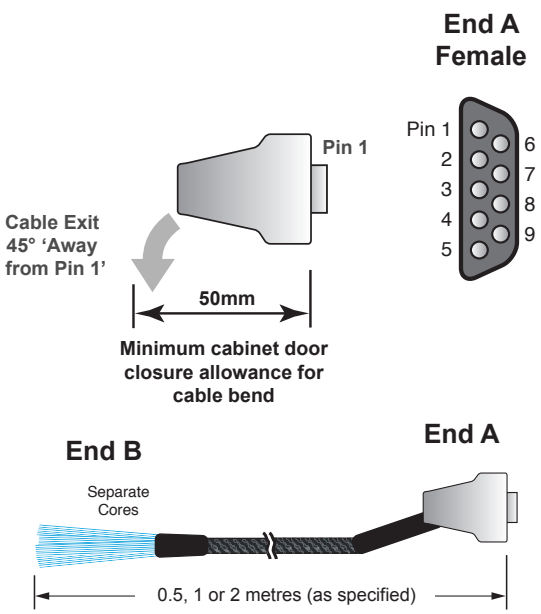
Soldered or Crimped Construction

Tinned End

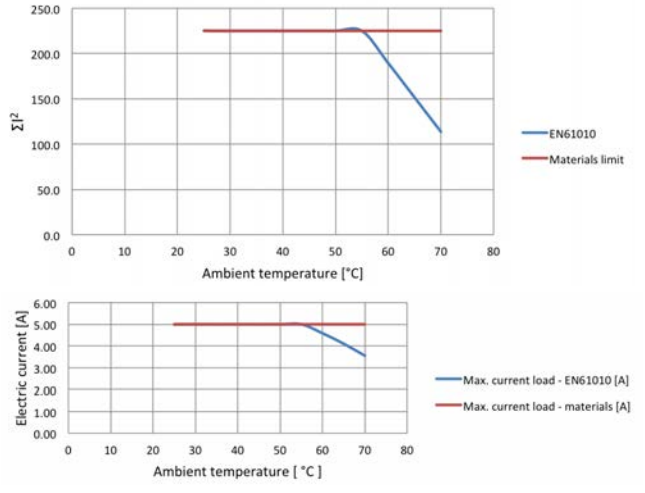


Cut End





Characteristic Plots for 40-972-009-1m-FU



The top graph shows the permitted ΣI^2 versus ambient temperature in accordance with EN61010 for user exposure to surface temperature and a higher limit imposed by the materials used where the cable is not directly user accessible.

The bottom graph shows the allowed current versus temperature assuming ALL wires carry the same current. Higher currents to the cable rating are permitted on individual wires provided the ΣI^2 is complied with.

Technical Specification

Connector Type (End A):	9-Pin D-Subminiature
Gender	Female
Securing Method	4-40 UNC screwlocks, male
Unterminated End (End B):	
Free Wire Length	130mm nominal
Individual Wire Labelling	To connector pins
Wire End Options	Ferrules, Tinned, Cut End
Cable Assembly Rating:	
Maximum Current	5A
Maximum Voltage	250VAC/400VDC
Insulation Resistance	1000MOhm
Connector:	
Contact Material	Gold plated copper alloy
Contact Resistance	<20mOhm
Cable Exit	45° (Away from Pin 1)
Overall Size (Approx)	H32 x W15 x D46mm
Cable Type:	Individual wires, screened & sleeved
Conductor: Material	Tinned copper wire
Strands	19/0.18 (0.4mm², 21AWG)
Resistance	0.041Ω/m
Insulation	PFA
Outer Sleeve	Polyester
Screened Construction	Yes
Additional Braided Sleeve	Yes
Cable O/D	8mm
Minimum Bend Radius	25mm
Door Closure Allowance	50mm (see diagram)

Notes:
- Other cable lengths can be supplied.
- Cable strain relief arrangements may be necessary and appropriate electrical safety precautions should be observed.

Product Order Codes

9-Pin D-Type Cable Assy, 5A, Boot Lace Ferrules,

Female to Unterminated, 0.5m Lg	**40-972-009-0.5m-FU**
Female to Unterminated, 1.0m Lg	**40-972-009-1m-FU**
Female to Unterminated, 2.0m Lg	**40-972-009-2m-fU**

Part numbers for other versions:

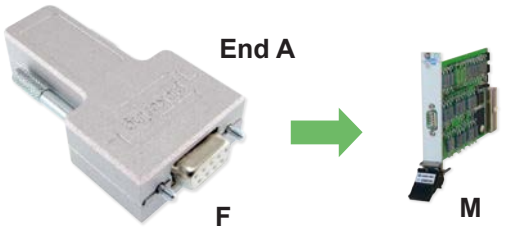
A009DF4-*-0A***

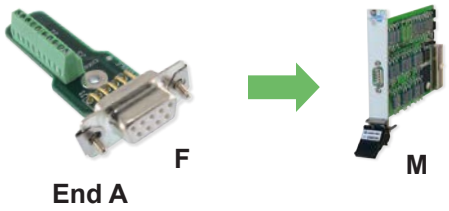
End B:
T = Tinned End
C = Cut End

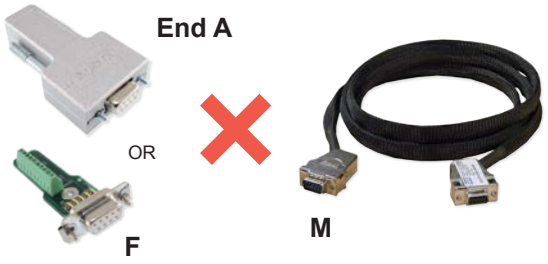
Cable Length:
050 = 0.5m
100 = 1.0m
200 = 2.0m

Standard Voltage 9-Pin D-Type Connector Block - Female

- **Connector and PCB Only or Connector, PCB and Backshell**
- **Male Screwlocks**
- **Cable Clamp in Backshell**
- **Easy to Use Rising Cage Screw Terminals**





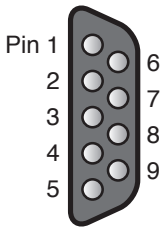


Connector blocks provide a convenient method of termination without the use of custom cabling. However, a higher resistance path, lower capacity ratings and lower voltage ratings are typical.

Suitable for use on the front of modules this connector block provides a simple method of connecting to 9-Pin D-Type connectors. The screw terminals use a rising cage clamp mechanism to minimize risk of copper strand breakage. PTFE cables are recommended for use with this connector block to maximise copper cross-sectional area and insulation properties. Connector blocks have higher losses than a cable connection and the breakdown voltage is controlled by clearances to the metal shell. The metal shell includes an internal insulation barrier under the carrier board.

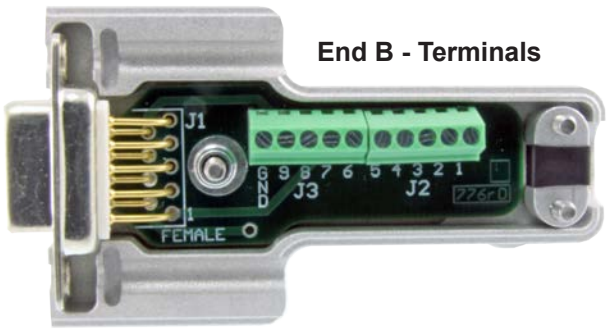
When the product is used without a backshell users should make their own cable strain relief arrangements and ensure appropriate electrical safety precautions are observed.

End A
Female



End A

End B - Terminals



Technical Specification

Connector Type (End A):	9-Pin D-Subminiature
Gender	Female
Securing Method:	
Product with Backshell	4-40 UNC screwlocks, male
Product without Backshell	4-40 UNC screwlocks, male
Wire Connection (End B):	
Gender	Female
Connection Method	Rising cage screw terminals
Connector Block Ratings:	
Maximum Current	5A
Maximum Voltage	200VDC
Cable Exit	Rear - 10 x 8.8mm
Overall Size (Approx)	H37.5 x W16.5 x D71mm
9-Pin D-Sub:	
Contact Material	Gold plated copper alloy
Contact Resistance	<20mOhm
Screw Terminals:	
Maximum Wire Size	20AWG
Recommended Insulation	PTFE
Additional Cable Clamp	Yes (in backshell)

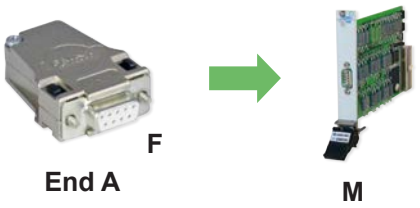
Product Order Codes

9-Pin D-Type Shielded Connector Block, 5A, Screw Terminal,

With Backshell, Female	**40-965-009-F**
Without Backshell, Female	**92-965-009-F**

Standard Voltage 9-Pin D-Type Connector - Female

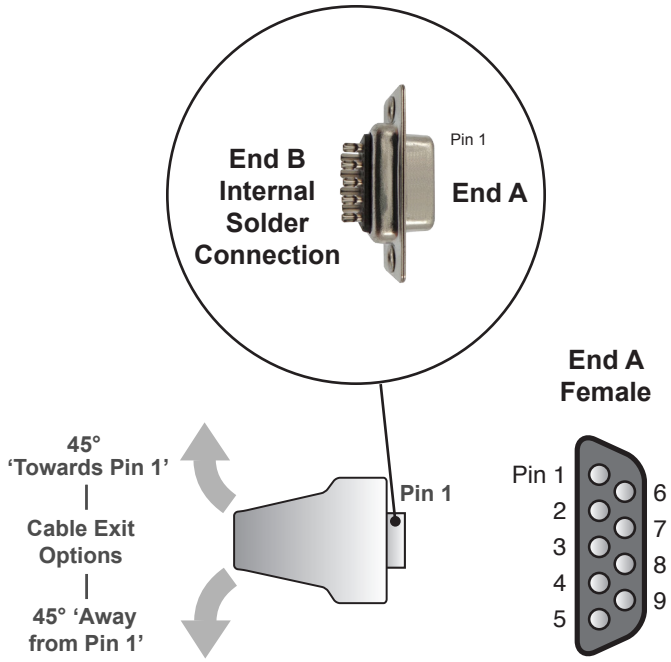
- **Connector only or Connector and Backshell**
- **Cable Clamp in Backshell**
- **Soldered Cable Termination**

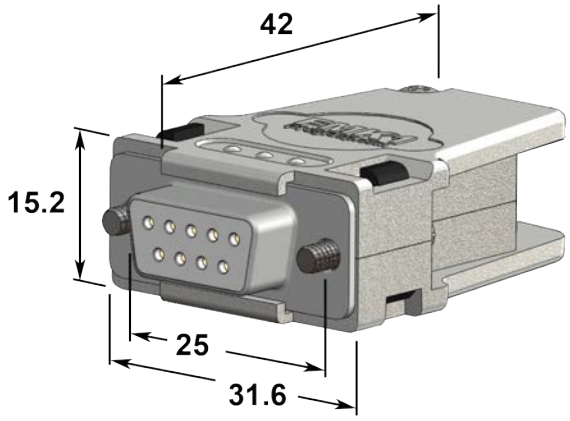


This accessory is designed to allow users to directly terminate with soldered connections to the connector.

Connector and shell are supplied separately to allow the user to determine the direction of the cable exit.

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 (End A):	9-Pin D-Subminiature
Gender	Female
Securing Method:	
Product with Backshell	4-40 UNC screwlocks, male
Product without Backshell	4-40 UNC screwlocks, male
Wire Connection (End B):	
Gender	Female
Connection Method	Solder bucket
Connector Ratings:	
Maximum Current	5A
Maximum Voltage	250VAC
Cable Exit:	45°
Cable Exit Size	15mm dia
Overall Size (Approx)	H32 x W15 x D46mm
9-Pin D-Sub:	
Contact Material	Gold plated copper alloy
Contact Resistance	<20mOhm
Wire Connection:	
Maximum Wire Size	20AWG
Recommended Insulation	PFA
Additional Cable Clamp	Yes (in backshell)

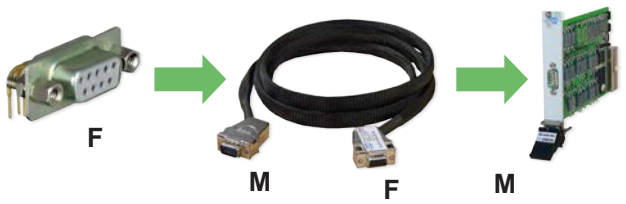
Product Order Codes

9-Pin D-Type Connector, 5A, Solder Bucket,

With Backshell, Female	**40-960-009-F**
Without Backshell, Female	**92-960-009-F**

Standard Voltage 9-Pin D-Type Connector - Female

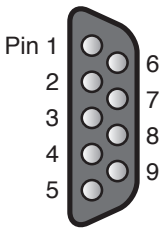
- **Right Angle PCB Mount**
- **Ideal for User Created Termination Solutions**

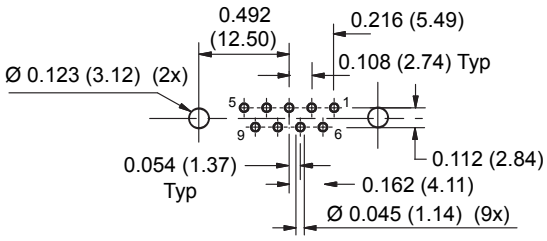


This accessory allows a user to create their own PCB based termination solution mounted on the end of a cable. Suitable cables for this product are contained elsewhere in this data sheet. Interfacing PCBs should be designed with suitable clearances for the voltage the application requires.

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

End A
Female





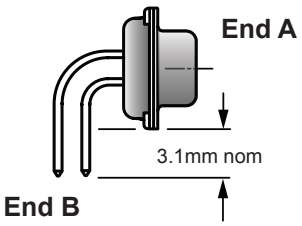
Mating Face of Connector this side of footprint

PCB Footprint of 9-Pin Right Angle Female Connector (Connector Side - Not to Scale)

Technical Specification

Connector Type (End A):	9-Pin D-Subminiature
Gender	Female
Securing Method	4-40 UNC screwlocks, female
PCB Connection (End B):	
Gender	Male
Connection Method	Solder
Mounting	Right angle PCB mount
Connector Ratings:	
Maximum Current	5A each pin
Maximum Voltage	250VAC
9-Pin D-Sub:	
Contact Material	Gold plated copper alloy
Contact Resistance	<20mOhm
PCB Legs:	
Effective Leg Length	3.1mm nom (See diagram)

Effective Leg Length

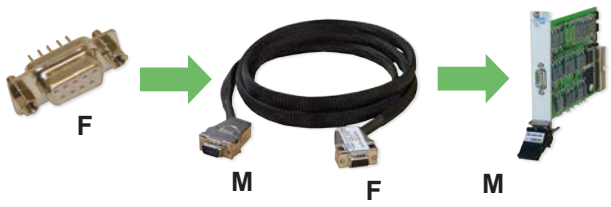


Product Order Codes

9-Pin D-Type Connector, 5A, Right Angle PCB Mount
Female **40-963-009-RF**

Standard Voltage 9-Pin D-Type Connector - Female

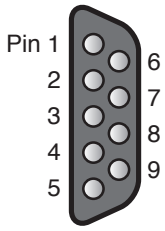
- **Straight PCB Mount**
- **Ideal for User Created Termination Solutions**

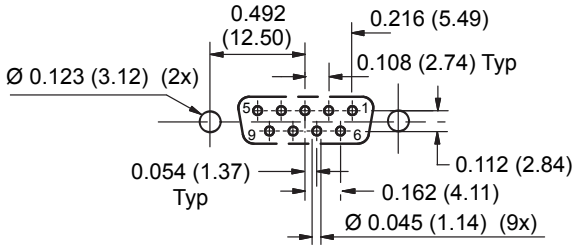


This accessory allows a user to create their own PCB based termination solution mounted on the end of a cable. Suitable cables for this product are contained elsewhere in this data sheet. Interfacing PCBs should be designed with suitable clearances for the voltage the application requires.

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

End A
Female

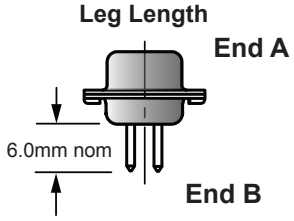




PCB Footprint of 9-Pin Straight Female Connector (Connector Side - Not to Scale)

Technical Specification

Connector Type (End A):	9-Pin D-Subminiature
Gender	Female
Securing Method	4-40 UNC screwlocks, female
PCB Connection (End B):	
Gender	Male
Connection Method	Solder
Mounting	Straight PCB mount
Connector Ratings:	
Maximum Current	5A each pin
Maximum Voltage	250VAC
9-Pin D-Sub:	
Contact Material	Gold plated copper alloy
Contact Resistance	<20mOhm
PCB Legs:	
Effective Leg Length	6.0mm nom (See diagram)

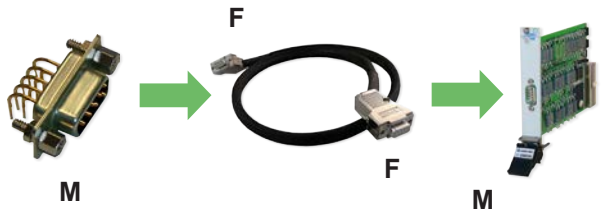


Product Order Codes

9-Pin D-Type Connector, 5A, Straight PCB Mount
Female **40-963-009-SF**

Standard Voltage 9-Pin D-Type Connector - Male

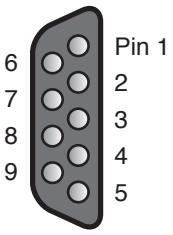
- **Right Angle PCB Mount**
- **Ideal for User Created Termination Solutions**

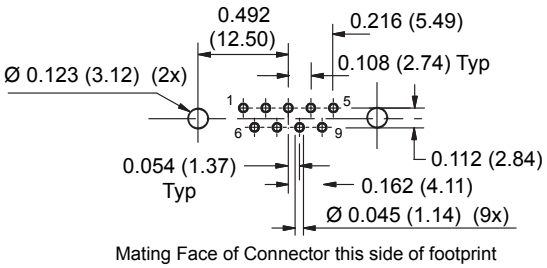


This accessory allows a user to create their own PCB based termination solution mounted on the end of a cable. Suitable cables for this product are contained elsewhere in this data sheet. Interfacing PCBs should be designed with suitable clearances for the voltage the application requires.

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

End A
Male



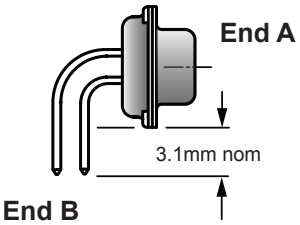


PCB Footprint of 9-Pin Right Angle Male Connector (Connector Side - Not to Scale)

Technical Specification

Connector Type (End A):	9-Pin D-Subminiature
Gender	Male
Securing Method	4-40 UNC screwlocks, female
PCB Connection (End B):	
Gender	Male
Connection Method	Solder
Mounting	Right angle PCB mount
Connector Ratings:	
Maximum Current	5A each pin
Maximum Voltage	250VAC
9-Pin D-Sub:	
Contact Material	Gold plated copper alloy
Contact Resistance	<20mOhm
PCB Legs:	
Effective Leg Length	3.1mm nom (See diagram)

Effective Leg Length



Product Order Codes

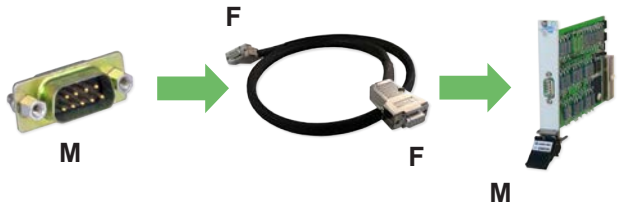
9-Pin D-Type Connector, 5A, Right Angle PCB Mount
Male **40-963-009-RM**

Standard Voltage 9-Pin D-Type Connector - Male

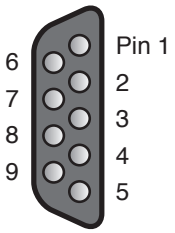
- **Straight PCB Mount**
- **Ideal for User Created Termination Solutions**

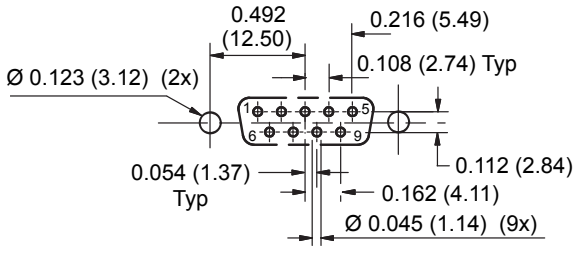
This accessory allows a user to create their own PCB based termination solution mounted on the end of a cable. Suitable cables for this product are contained elsewhere in this data sheet. Interfacing PCBs should be designed with suitable clearances for the voltage the application requires.

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



End A
Male

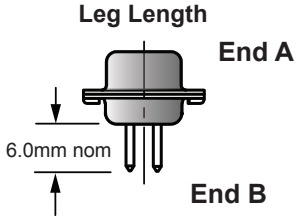




PCB Footprint of 9-Pin Straight Male Connector (Connector Side - Not to Scale)

Technical Specification

Connector Type (End A):	9-Pin D-Subminiature
Gender	Male
Securing Method	4-40 UNC screwlocks, female
PCB Connection (End B):	
Gender	Male
Connection Method	Solder
Mounting	Straight PCB mount
Connector Ratings:	
Maximum Current	5A each pin
Maximum Voltage	250VAC
9-Pin D-Sub:	
Contact Material	Gold plated copper alloy
Contact Resistance	<20mOhm
PCB Legs:	
Effective Leg Length	6.0mm nom (See diagram)



Product Order Codes

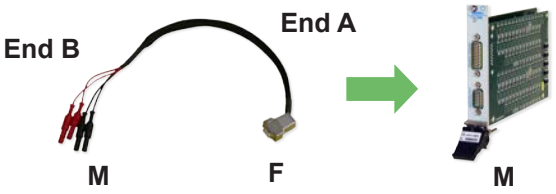
9-Pin D-Type Connector, 5A, Straight PCB Mount

Male	**40-963-009-SM**

Module Specific Calibration Port Cable - Precision Resistor Modules

- **High Specification Cable**
- **Stranded Hi-Flex PVC Cable**
- **Strain Relief**
- **Braided Sleeving**
- **Fully Screened Cable Construction**

The cable assembly is specifically designed to connect to the 9-Pin D-Type calibration port located on the front panel of Pickering Interfaces Module Part Numbers 40-260, 40-261, 40-262 and 40-265. Three product types are available.

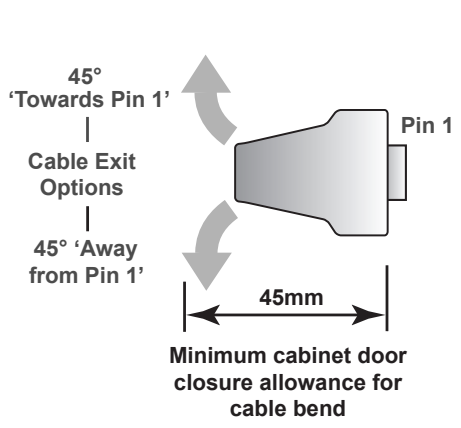


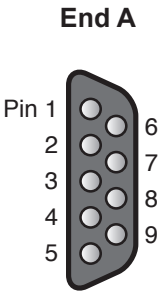
40-975-009-SL1

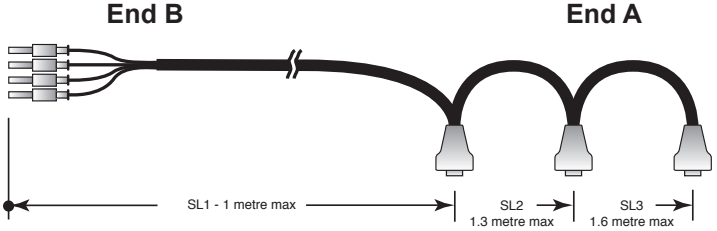
Other versions adjacent.

40-975-009-SL2

40-975-009-SL3







Technical Specification

Connector Type (End A):	9-Pin D-Subminiature
Gender	Female
Securing Method	4-40 UNC screwlocks, male
Contact Material	Gold plated copper alloy
Contact Resistance	<20mOhm
Cable Exit	45° (Away from Pin 1)
Overall Size (Approx)	H36 x W15 x D46mm
Connector Type (End B):	4 x 4mm DMM Bayonet Plug
Gender	Male
Securing Method	Push fit
Contact Material	Gold plated copper alloy
Contact Resistance	<20mOhm
Cable Exit	Rear
Overall Size (Approx)	50 x 8.5mm dia
Cable Assembly Rating:	
Maximum Current	5A
Maximum Voltage	750V
Insulation Resistance	1000MOhm
Cable Type:	Stranded Hi-Flex PVC
Conductor: Material	Tinned copper wire
Strands	259/0.07 (1.0mm^2, 17AWG)
Resistance	-
Insulation	PVC
Outer Sleeve	Polyester
Screened Construction	No
Additional Braided Sleeve	Yes
Cable O/D	8mm
Minimum Bend Radius	10mm
Door Closure Allowance	45mm (see diagram)

Notes:
Other cable lengths can be supplied.

Product Order Codes

1 x 9-Pin D-Type connector, Female to 4 x 4mm DMM Bayonet Plug	**40-975-009-SL1**
2 x 9-Pin D-Type connector, Female to 4 x 4mm DMM Bayonet Plug	**40-975-009-SL2**
3 x 9-Pin D-Type connector, Female to 4 x 4mm DMM Bayonet Plug	**40-975-009-SL3**

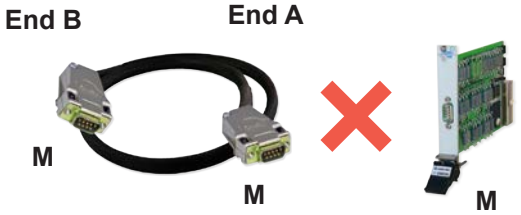
Additional
Connection Accessories

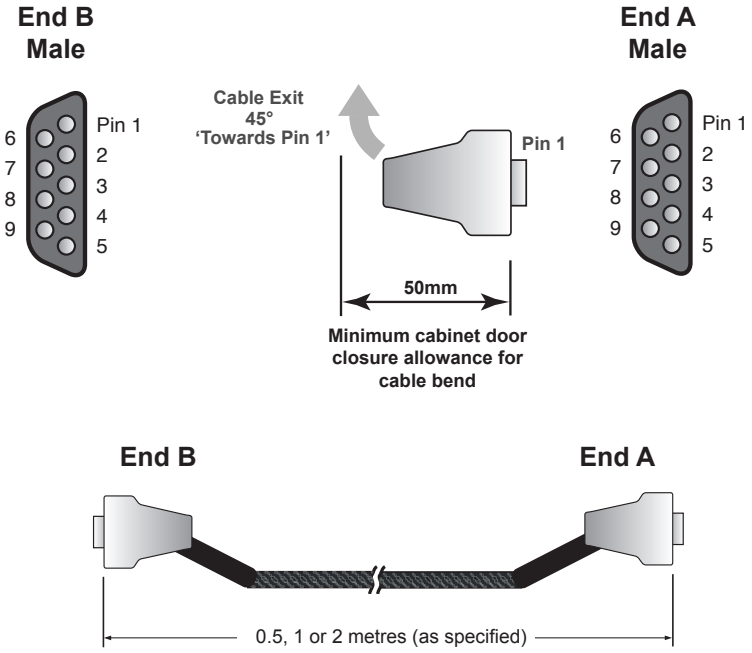
Although these items do not directly mate with Pickering Interfaces products customers may find them useful in the development of their own connection solutions.

Standard Voltage 9-Pin D-Type Cable Assy - Male to Male

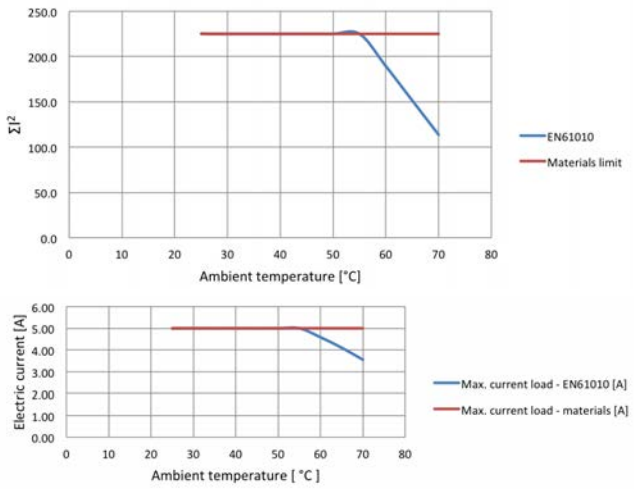
This Cable Assembly is Not Suitable for Connection to a Pickering Switching Product

- High Specification Cable
- Highly Flexible Cable with Braided Sleeving
- 45 Degree Cable Exit
- Strain Relief
- Fully Screened Cable Construction





Characteristic Plots for 40-970-009-1m-MM



The top graph shows the permitted ΣI² versus ambient temperature in accordance with EN61010 for user exposure to surface temperature and a higher limit imposed by the materials used where the cable is not directly user accessible.

The bottom graph shows the allowed current versus temperature assuming ALL wires carry the same current. Higher currents to the cable rating are permitted on individual wires provided the ΣI² is complied with.

Technical Specification

Connector Type (End A):	9-Pin D-Subminiature
Gender	Male
Securing Method	4-40 UNC screwlocks, male
Connector Type (End B):	9-Pin D-Subminiature
Gender	Male
Securing Method	4-40 UNC screwlocks, male
Cable Assembly Rating:	
Maximum Current	5A
Maximum Voltage	250VAC/400VDC
Insulation Resistance	1000MOhm
Connectors:	
Contact Material	Gold plated copper alloy
Contact Resistance	<20mOhm
Cable Exit	45° (Towards Pin 1)
Overall Size (Approx)	H32 x W15 x D46mm
Cable Type:	Individual wires, screened & sleeved
Conductor: Material	Tinned copper wire
Strands	19/0.18 (0.4mm², 21AWG)
Resistance	0.041Ω/m
Insulation	PFA
Outer Sleeve	Polyester
Screened Construction	Yes
Additional Braided Sleeve	Yes
Cable O/D	8mm
Minimum Bend Radius	25mm
Door Closure Allowance	50mm (see diagram)

Notes:
Other cable lengths can be supplied.

Product Order Codes

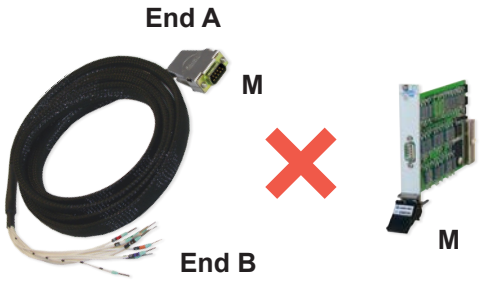
9-Pin D-Type Cable Assy, 5A, Male to Male

0.5m Long	**40-970-009-0.5m-MM**
1.0m Long	**40-970-009-1m-MM**
2.0m Long	**40-970-009-2m-MM**

Standard Voltage 9-Pin D-Type Cable Assy - Male to Unterminated

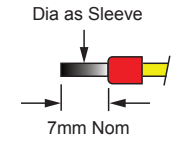
This Cable Assembly is Not Suitable for Connection to a Pickering Switching Product

- **High Specification and Highly Flexible Cable**
- **Fully Screened Cable Construction with Braided Sleeve and Strain Relief**
- **Fully Coded Markers to Ensure Easy Connection**
- **Boot Lace Ferrule Option to Prevent Wire Strand Breakage**



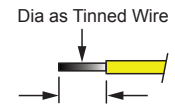
End B Options

Ferrules

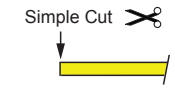


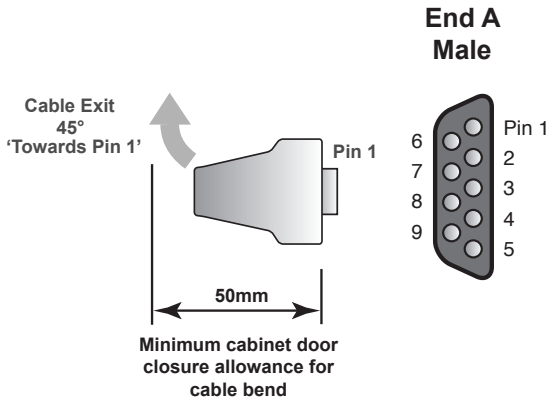
Soldered or Crimped Construction

Tinned End



Cut End



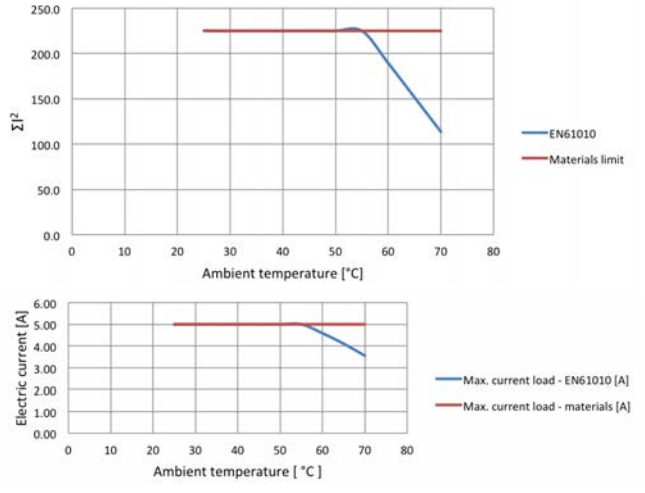


Technical Specification

Connector Type (End A):	9-Pin D-Subminiature
Gender	Male
Securing Method	4-40 UNC screwlocks, male
Unterminated End (End B):	
Free Wire Length	130mm nominal
Individual Wire Labelling	To connector pins
Wire End Options	Ferrules, Tinned, Cut End
Cable Assembly Rating:	
Maximum Current	5A
Maximum Voltage	250VAC/400VDC
Insulation Resistance	1000MOhm
Connector:	
Contact Material	Gold plated copper alloy
Contact Resistance	<20mOhm
Cable Exit	45° (Towards Pin 1)
Overall Size (Approx)	H32 x W15 x D46mm
Cable Type:	Individual wires, screened & sleeved
Conductor: Material	Tinned copper wire
Strands	19/0.18 (0.4mm², 21AWG)
Resistance	0.041Ω/m
Insulation	PFA
Outer Sleeve	Polyester
Screened Construction	Yes
Additional Braided Sleeve	Yes
Cable O/D	8mm
Minimum Bend Radius	25mm
Door Closure Allowance	50mm (see diagram)

Notes:
- Other cable lengths can be supplied.
- Cable strain relief arrangements may be necessary and appropriate electrical safety precautions should be observed.

Characteristic Plots for 40-972-009-1m



The top graph shows the permitted ΣI² versus ambient temperature in accordance with EN61010 for user exposure to surface temperature and a higher limit imposed by the materials used where the cable is not directly user accessible.

The bottom graph shows the allowed current versus temperature assuming ALL wires carry the same current. Higher currents to the cable rating are permitted on individual wires provided the ΣI² is complied with.

Product Order Codes

9-Pin D-Type Cable Assy, 5A, Boot Lace Ferrules,

Male to Unterminated, 0.5m Long	**40-972-009-0.5m-MU**
Male to Unterminated, 1.0m Long	**40-972-009-1m-MU**
Male to Unterminated, 2.0m Long	**40-972-009-2m-MU**

Part numbers for other versions:

A009DM5-*-0A***

End B:
T = Tinned End
C = Cut End

Cable Length:
050 = 0.5m
100 = 1.0m
200 = 2.0m

Standard Voltage 9-Pin D-Type Connector Block - Male

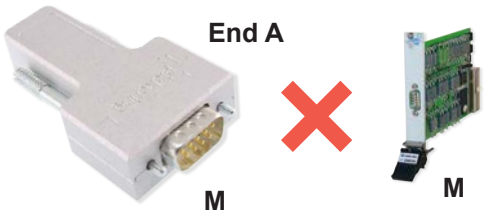
This Connector Block is Not Suitable for Connection to a Pickering Switching Product

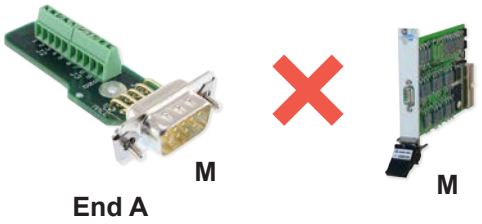
- **Connector and PCB Only or Connector, PCB and Backshell**
- **Male Screwlocks**
- **Cable Clamp in Backshell**
- **Easy to Use Rising Cage Screw Terminals**

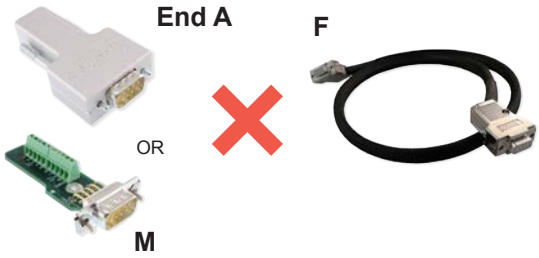
Connector blocks provide a convenient method of termination without the use of custom cabling. However, a higher resistance path, lower capacity ratings and lower voltage ratings are typical.

The screw terminals use a rising cage clamp mechanism to minimize risk of copper strand breakage. PTFE cables are recommended for use with this connector block to maximise copper cross-sectional area and insulation properties. Connector blocks have higher losses than a cable connection and the breakdown voltage is controlled by clearances to the metal shell. The metal shell includes an internal insulation barrier under the carrier board.

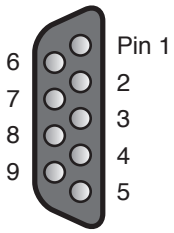
When the product is used without a backshell users should make their own cable strain relief arrangements and ensure appropriate electrical safety precautions are observed.

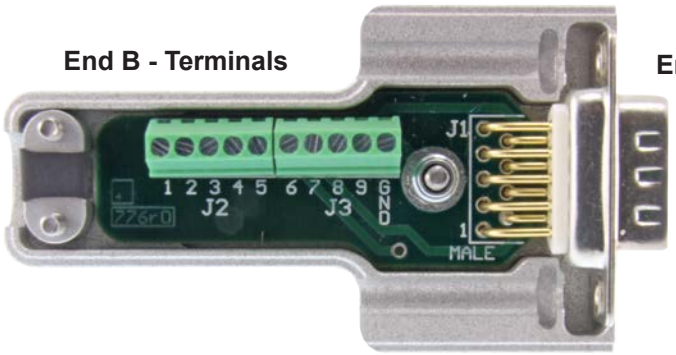






End A
Male





Technical Specification

Connector Type (End A):	9-Pin D-Subminiature
Gender	Male
Securing Method:	
Product with Backshell	4-40 UNC screwlocks, male
Product without Backshell	4-40 UNC screwlocks, male
Wire Connection (End B):	
Gender	Female
Connection Method	Rising cage screw terminals
Connector Block Ratings:	
Maximum Current	5A
Maximum Voltage	200VDC
Cable Exit	Rear - 10 x 8.8mm
Overall Size (Approx)	H37.5 x W16.5 x D71mm
9-Pin D-Sub:	
Contact Material	Gold plated copper alloy
Contact Resistance	<20mOhm
Screw Terminals:	
Maximum Wire Size	20AWG
Recommended Insulation	PTFE
Additional Cable Clamp	Yes (in backshell)

Product Order Codes

9-Pin D-Type Shielded Connector Block, 5A, Screw Terminal,

With Backshell, Male	**40-965-009-M**
Without Backshell, Male	**92-965-009-M**

Standard Voltage 9-Pin D-Type Connector - Male

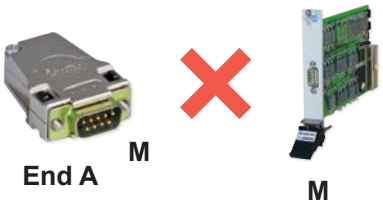
This Connector is Not Suitable for Connection to a Pickering Switching Product

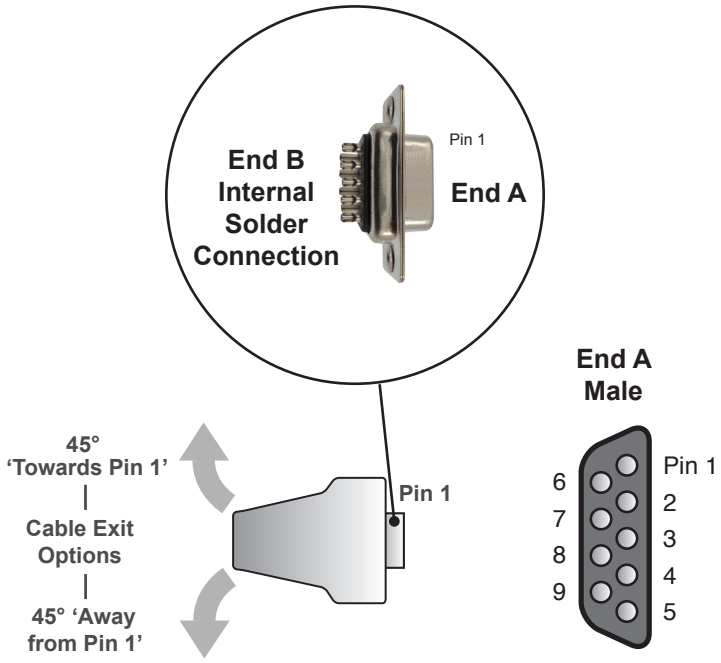
- **Connector only or Connector and Backshell**
- **Cable Clamp in Backshell**
- **Soldered Cable Termination**

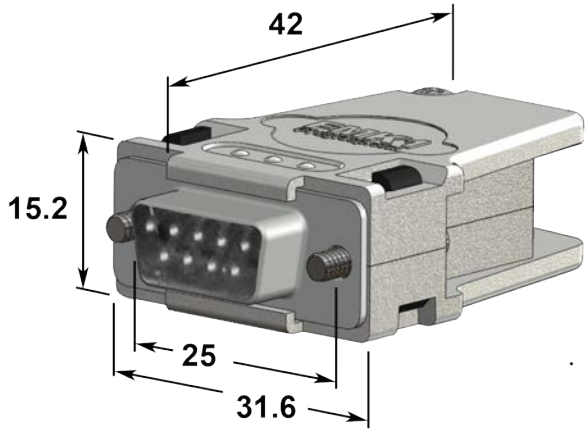
This accessory is designed to allow users to directly terminate with soldered connections to the connector.

Connector and shell are supplied separately to allow the user to determine the direction of the cable exit.

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 (End A):	9-Pin D-Subminiature
Gender	Male
Securing Method:	
Product with Backshell	4-40 UNC screwlocks, male
Product without Backshell	4-40 UNC screwlocks, male
Wire Connection (End B):	
Gender	Female
Connection Method	Solder bucket
Connector Ratings:	
Maximum Current	5A
Maximum Voltage	250VAC
Cable Exit:	45°
Cable Exit Size	15mm dia
Overall Size (Approx)	H32 x W15 x D46mm
9-Pin D-Sub:	
Contact Material	Gold plated copper alloy
Contact Resistance	<20mOhm
Wire Connection:	
Maximum Wire Size	20AWG
Recommended Insulation	PFA
Additional Cable Clamp	Yes (in backshell)

Product Order Codes

9-Pin D-Type Connector, 5A, Solder Bucket,

With Backshell, Male	**40-960-009-M**
Without Backshell, Male	**92-960-009-M**

Custom Termination

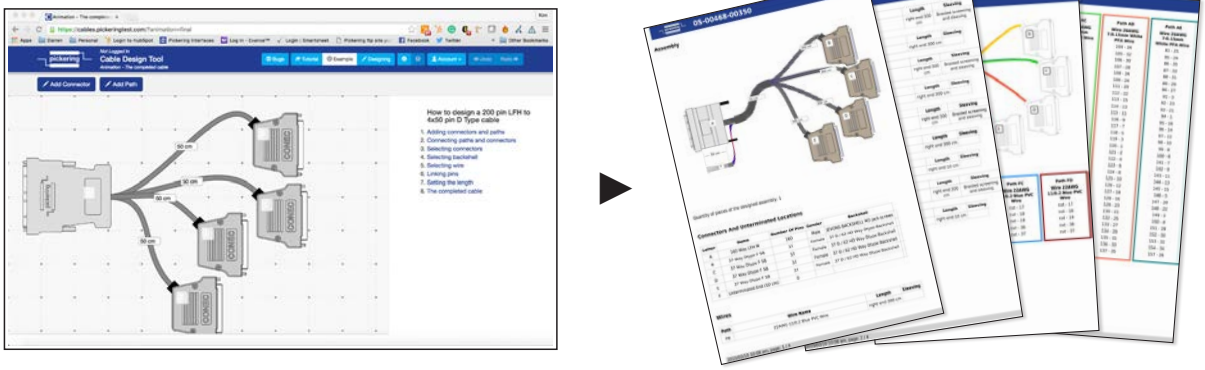
Pickering Interfaces are able to manufacture custom built cable assemblies and backshells that mate with all the connectors we use in our extensive product range and to provide connection solutions for third party products.

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 timescales to a minimum.

NEW - Pickering's Cable Design Tool



Go to **pickeringtest.com/cdt** to find out more.

Over the years, we have received many requests for customized cabling solutions that are often based on our standard cable assemblies but adjusted to match specific application requirements. To help with this, we have introduced our Cable Design Tool – a new graphically based web tool for cable design. We're excited about the features the software includes:

- Graphical design of customized cable assemblies
- Built-in library of standard cable sets to be used as the basis for customization or cables can just be defined from scratch
- The ability to store cable assemblies in the Cloud and develop over time
- Each cable design has a documentation pdf file detailing all of the specifications
- Very detailed design characteristics including the selection of connector types, wire type, pin definitions, pin and cable labeling, cable bundling, length selection, sleeving, comments, etc.
- Runs on popular browsers, Windows, Mac and Linux
- Fully supported on popular tablets: iPad and Android
- Built-in tutorials allow you to get quickly up to speed

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.

Appendix - Standard Voltage Part Number Listing

Cables: Standard Voltage 9-Pin D-Type Connector to Connector								
End 1		End 2		Product Order Code/Part Number			Mates With a Pickering Switching Product	Data Sheet Page
Gender	Cable Exit	Gender	Cable Exit	0.5m Long	1m Long	2m Long		
Male	45° Towards Pin 1	Female	45° Away from Pin 1	40-970-009-0.5m-MF	40-970-009-1m-MF	40-970-009-2m-MF	Yes (Female end)	4
Female	45° Away from Pin 1	Female	45° Away from Pin 1	40-970-009-0.5m-FF	40-970-009-1m-FF	40-970-009-2m-FF	Yes	5
Male	45° Towards Pin 1	Male	45° Towards Pin 1	40-970-009-0.5m-MM	40-970-009-1m-MM	40-970-009-2m-MM	No	15

Calibration Port Cable For Precision Resistor Modules: 9-Pin D-Type to 4 X 4Mm Bayonet Plug								
End 1		End 2		Product Order Code/Part Number			Mates With a Pickering Switching Product	Data Sheet Page
Gender	Cable Exit	Gender	Cable Exit	1m Long (Max)	1.3m Long (Max)	1.6m Long (Max)		
1 x Female	45° Away from Pin 1	4 x Male	Rear	40-975-009-SL1	-	-	Yes (Female end)	13
2 x Female				-	40-975-009-SL2	-		
3 x Female				-	-	40-970-009-SL3		

Cables: Standard Voltage 9-Pin D-Type Connector to Unterminated							
End 1		End 2 Unterminated Options	Product Order Code/Part Number			Mates with a Pickering Switching Product	Data Sheet Page
Gender	Cable Exit		0.5m Long	1m Long	2m Long		
Female	45° Away from Pin 1	Boot Lace Ferrules	40-972-009-0.5m-FU	40-972-009-1m-FU	40-972-009-2m-FU	Yes	6
		Cut End	A009DF4-C-0A050	A009DF4-C-0A100	A009DF4-C-0A200	Yes	
		Tinned Ends	A009DF4-T-0A050	A009DF4-T-0A100	A009DF4-T-0A200	Yes	
Male	45° Towards Pin 1	Boot Lace Ferrules	40-972-009-0.5m-MU	40-972-009-1m-MU	40-972-009-2m-MU	No	16
		Cut End	A009DM5-C-0A050	A009DM5-C-0A100	A009DM5-C-0A200	No	
		Tinned Ends	A009DM5-T-0A050	A009DM5-T-0A100	A009DM5-T-0A200	No	

Connector Blocks and Connectors: Standard Voltage 9-Pin D-Type						
Type	Gender	Cable Exit	Product Order Code/Part Number		Mates with a Pickering Switching Product	Data Sheet Page
			With Backshell	Without Backshell		
Connector Block	Female	Rear	40-965-009-F	92-965-009-F	Yes	7
	Male		40-965-009-M	92-965-009-M	No	17
Cable Connector	Female	45° Options	40-960-009-F	92-960-009-F	Yes	8
	Male	45° Options	40-960-009-M	92-960-009-M	No	18

Breakouts and PCB Connectors: Standard Voltage 9-Pin D-Type						
Type	Mount	Gender	Cable Exit	Product Order Code/Part Number	Mates with a Pickering Switching Product	Data Sheet Page
PCB Connector	Right Angle PCB Mount	Female	N/A	40-963-009-RF	No	9
		Male	N/A	40-963-009-RM	No	11
	Straight PCB Mount	Female	N/A	40-963-009-SF	No	10
		Male	N/A	40-963-009-SM	No	12

广州虹科电子科技有限公司（总部）
广州科学城科学大道99号科汇三街2-701 邮编 510663
电话：020-3874 3030；135 3349 1614
传真：020-3874 3233
sales@hkaco.com | support@hkaco.com
加关注
hkaco.com
上海 021-6728 2707；136 7167 1424 | 北京 010-5781 5040；187 1014 9603
西安 029-8187 3816；152 9185 3139 | 成都 028-6138 2617；136 8841 6951
沈阳 024-8376 9335；157 1053 7541 | 深圳 0755-22677441 | 武汉 027-8193 9100