8-Pin Power D-type Accessories

- Voltage to 350 VDC or 350 VAC Peak, 40 A
- Cable Assemblies
- Cable Connectors
- PCB 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.



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







Examples of Pickering PXI and LXI Products using 8-Pin Power D-type Connectors

Issue 11.4 April 2023



Cable Assemblies

| Description | | End 1 Gender & | End 2 Gender & | 2 Options | Cable Length | Product Order Code and Part Number | Data Sheet |
|------------------|--|-----------------------------------|-----------------------------------|---------------|---------------------|--|--|
| | | Cable Exit | Cable Exit | ole Exit | | and I all Namber | Page |
| O | Cable Assy, 8-Pin Power D-Type, 40 A | Male, 45° Towards Pin 1 | Female, 45° Away from Pin 1 | - | 0.5 m 1 m 2 m | 40-970-408-0.5m-MF 40-970-408-1m-MF 40-970-408-2m-MF | 5 |
| | Cable Assy, 8-Pin Power D-Type, 40 A, 4-Pin Partially Populated Version for 40-170 | Male, 45° Towards Pin 1 | Female, 45° Away from Pin 1 | - | 0.5 m 1 m 2 m | 40-970-404-0.5m-MF 40-970-404-1m-MF 40-970-404-2m-MF | 6 |
| | Cable Assy, 8-Pin Power D-Type, 40 A | Female, 45° Away from Pin 1 | Female, 45° Away from Pin 1 | - | 0.5 m 1 m 2 m | 40-970-408-0.5m-FF 40-970-408-1m-FF 40-970-408-2m-FF | 7 |
| | Cable Assy, 8-Pin Power D-Type, 40 A, 4-Pin Partially Populated Version for 40-170 | Female, 45° Away from Pin 1 | Female, 45° Away from Pin 1 | - | 0.5 m 1 m 2 m | 40-970-404-0.5m-FF 40-970-404-1m-FF 40-970-404-2m-FF | 8 |
| | Cable Assy, | Female, | | Ferrules | 0.5 m 1 m 2 m | A008PF4-F-5A050 A008PF4-F-5A100 A008PF4-F-5A200 A008PF4-T-5A050 | _ |
| | 8-Pin Power D-Type to Unterminated, 40 A 45° Away from Pin 1 | D-Type to 45° Away | NA | Tinned End | 1m 2 m | A008PF4-T-5A100 A008PF4-T-5A200 | 9 |
| | | | | | Cut End | 0.5 m 1 m 2 m | 40-972-408-0.5m-FU 40-972-408-1m-FU 40-972-408-2m-FU |
| | Cable Assy, | | | Ferrules | 0.5 m 1 m 2 m | A008PF4-F-6A050 A008PF4-F-6A100 A008PF4-F-6A200 | |
| | 8-Pin Power D-Type to Unterminated, 40 A, 4-Pin Partially Populated Version for 40-170 | 45° Away | NA | Tinned End | 0.5 m 1 m 2 m | A008PF4-T-6A050 A008PF4-T-6A100 A008PF4-T-6A200 | 10 |
| | | | | Cut End | 0.5 m 1 m 2 m | 40-972-404-0.5m-FU 40-972-404-1m-FU 40-972-404-2m-FU | |
| Note: Custom ler | ngths by quotation | | | | | | |

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

Female Connectors

| [| Description | Gender & Cable Exit | Туре | Product Order Code and Part Number | Page |
|--|---|------------------------|-----------------------|---------------------------------------|------|
| | Cable Connector | Female, | With Backshell | 40-960-008-F | 1.1 |
| · 00000000° | 8-Pin Power D-Type, 40 A, Solder Bucket | 45° Options | Without Backshell | 92-960-008-F | 11 |
| Cable Connector 8-Pin Power D-Type, 4-Pin Partially Populated Version for 40-170, 40 A, Solder Bucket Cable Connector Female, 45° Options | With Backshell | 40-960-004-F | 12 | | |
| | Version for 40-170, 40 A, | 45° Options | Without Backshell | 92-960-004-F | 12 |
| | PCB Connector 8-Pin Power D-Type, 20 A | Female | Right Angle PCB Mount | 40-963-008-RF | 13 |
| | PCB Connector 8-Pin Power D-Type, 4-Pin Partially Populated Version for 40-170, 20 A | | Right Angle PCB Mount | 40-963-004-RF | 14 |

Male PCB Connectors

| [| Description | Gender & Cable Exit | Туре | Product Order Code and Part Number | Page |
|---|---|------------------------|-----------------------|---------------------------------------|------|
| | PCB Connector 8-Pin Power D-Type, 20 A | | Right Angle PCB Mount | 40-963-008-RM | 15 |
| | PCB Connector 8-Pin Power D-Type, 4-Pin Partially Populated Version for 40-170, 20 A | Male | Right Angle PCB Mount | 40-963-004-RM | 16 |

90-012D

Additional Accessories

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

Cable Assemblies

| Description | | End 1 Gender & Cable Exit | End 2 Gender & Cable Exit | Options | Cable Length | Product Order Code and Part Number | Data Sheet Page |
|-----------------|--|---------------------------------|---------------------------------|---------------------|--|--|-----------------------|
| 0 | Cable Assy, 8-Pin Power D-Type, 40 A | Male, 45° Towards Pin 1 | Male, 45° Towards Pin 1 | - | 0.5 m 1 m 2 m | 40-970-408-0.5m-MM 40-970-408-1m-MM 40-970-408-2m-MM | 18 |
| | Cable Assy, 8-Pin Power D-Type to Unterminated, 40 A | | | Ferrules | 0.5 m 1 m 2 m | A008PM5-F-5A050 A008PM5-F-5A100 A008PM5-F-5A200 | |
| | | NA | Tinned End | 0.5 m 1 m 2 m | A008PM5-T-5A050 A008PM5-T-5A100 A008PM5-T-5A200 | 19 | |
| | | | Cut End | 0.5 m 1 m 2 m | 40-972-408-0.5m-MU 40-972-408-1m-MU 40-972-408-2m-MU | | |
| Note: Custom le | ngths by quotation | | | | | | |

Male Connectors

| С | Description | Gender & Cable Exit | Туре | Product Order Code and Part Number | Page |
|-----------------|--|-----------------------------|-------------------|---------------------------------------|------|
| Cable Connector | Male, | With Backshell 40-960-008-M | 20 | | |
| · Commence | 8-Pin Power D-Type, 40 A, Solder Bucket 45° Options | /ib" ()ntions | Without Backshell | 92-960-008-M | 20 |

Custom Termination

| Customization Possibilities | 21 |
|-----------------------------|----|
|-----------------------------|----|

Cable Assy - Male to Female

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

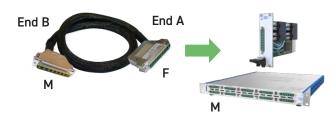
Technical Specification

| Connector Type (End A): Gender Securing Method | 8-Pin D-Subminiature Female 4-40 UNC screwlocks, male |
|---|--|
| Connector Type (End B): Gender Securing Method | 8-Pin D-Subminiature Male 4-40 UNC screwlocks, male |
| Maximum Current Maximum Voltage Insulation Resistance Connectors: | 40 A 350 VDC/350 VAC peak 1000 MOhm |
| Contact Material Contact Resistance Cable Exit: | Gold plated copper alloy 1.0 mOhm |
| Female Connectors Male Connectors Overall Size (Approx) Cable Type: | 45° (Away from Pin 1) 45° (Towards Pin 1) H71 x W16 x D55 mm Individual wires, screened & sleeved. Tri-rated |
| Conductor: Material Strands Resistance Insulation Outer Sleeve | Copper 56/0.3 (4 mm 2 csa, 12AWG), 4 mm 0/D 4.95 m Ω /m nominal PVC Polyester |
| Screened Construction | Yes (Cable screen connected to backshells) |
| Additional Braided Sleeve Cable O/D Minimum Bend Radius Door Closure Allowance | Yes 13 mm 25 mm 90 mm (see diagram) |

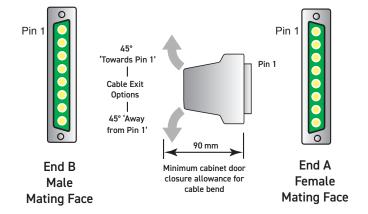


8-Pin Power D-Type Cable Assembly

Product Compatibility







Product Order Codes

8-Pin Power D-Type Cable Assy, 40 A, Male to Female, 0.5 m Long 40-970-408-0.5m-MF 1.0 m Long 40-970-408-1m-MF 2.0 m Long 40-970-408-2m-MF

Note: Other cable lengths can be supplied.

Cable Assy - Male to Female

- 4-Pin Version for High Power Relay Module 40-170
- High Specification, Highly Flexible Cable
- Fully Screened Cable Construction with Strain Relief
- 45 Degree Cable Exit

Technical Specification

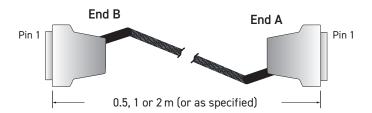
| Connector Type (End A): Gender Securing Method | 8-Pin D-Subminiature (4-Pin version) Female 4-40 UNC screwlocks, male |
|---|---|
| Connector Type (End B): Gender Securing Method | 8-Pin D-Subminiature (4-Pin version) Male 4-40 UNC screwlocks, male |
| Maximum Current Maximum Voltage Insulation Resistance Connectors: | 40 A 350 VDC/350 VAC peak 1000 MOhm |
| Contact Material Contact Resistance Cable Exit: | Gold plated copper alloy 1.0 mOhm |
| Female Connectors Male Connectors | 45° (Away from Pin 1) 45° (Towards Pin 1) H71 x W16 x D55 mm |
| Overall Size (Approx) Cable Type: | Individual wires, screened & sleeved. Tri-rated |
| Conductor: Material Strands Resistance Insulation | Copper 56/0.3 (4 mm 2 csa, 12AWG), 4 mm O/D 4.95 m Ω /m nominal PVC |
| Outer Sleeve Screened Construction | Polyester Yes (Cable screen connected to backshells) |
| Additional Braided Sleeve Cable O/D Minimum Bend Radius | Yes 13 mm 25 mm |
| Door Closure Allowance | 90 mm (see diagram) |

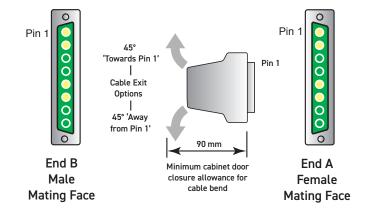


8-Pin Power D-Type Cable Assembly (4-Pin version)

Product Compatibility







Product Order Codes

4-Pin Version of 8-Pin Power D-Type Cable Assy, 40 A, Male to Female,

 0.5 m Long
 40-970-404-0.5m-MF

 1.0 m Long
 40-970-404-1m-MF

 2.0 m Long
 40-970-404-2m-MF

Note: Other cable lengths can be supplied.

Cable Assy - Female to Female

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

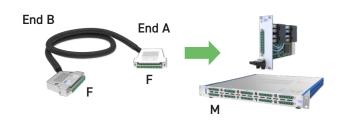
Technical Specification

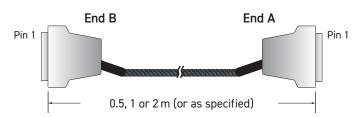
| Connector Type (End A): | 8-Pin D-Subminiature |
|--|--|
| Gender | Female |
| Securing Method | 4-40 UNC screwlocks, male |
| Connector Type (End B): | 8-Pin D-Subminiature |
| Gender | Female |
| Securing Method | 4-40 UNC screwlocks, male |
| Maximum Current Maximum Voltage Insulation Resistance Connectors: | 40 A 350 VDC/350 VAC peak 1000 MOhm |
| Contact Material Contact Resistance Cable Exit: Overall Size (Approx) Cable Type: | Gold plated copper alloy 1.0 m0hm 45° (Away from Pin 1) H71 x W16 x D55 mm Individual wires, screened & sleeved. Tri-rated |
| Conductor: Material Strands Resistance Insulation Outer Sleeve Screened Construction | Copper 56/0.3 (4 mm² csa, 12AWG), 4 mm O/D 4.95 mΩ/m nominal PVC Polyester Yes (Cable screen connected to backshells) |
| Additional Braided Sleeve | Yes |
| Cable O/D | 13 mm |
| Minimum Bend Radius | 25 mm |
| Door Closure Allowance | 90 mm (see diagram) |

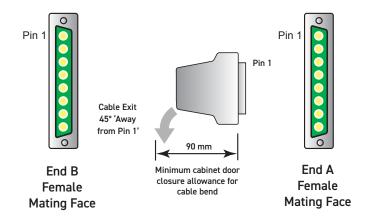


8-Pin Power D-Type Cable Assembly

Product Compatibility







Product Order Codes

8-Pin Power D-Type Cable Assy, 40 A, Female to Female, 0.5 m Long 40-970-408-0.5m-FF 1.0 m Long 40-970-408-1m-FF 2.0 m Long 40-970-408-2m-FF

Note: Other cable lengths can be supplied.

Cable Assy - Female to Female

- 4-Pin Version for High Power Relay Module 40-170
- High Specification, Highly Flexible Cable
- Fully Screened Cable Construction with Strain Relief
- 45 Degree Cable Exit

Technical Specification

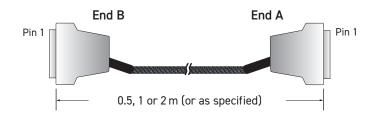
| Connector Type (End A): Gender Securing Method | 8-Pin D-Subminiature (4-Pin version) Female 4-40 UNC screwlocks, male |
|---|---|
| Connector Type (End B): Gender Securing Method | 8-Pin D-Subminiature (4-Pin version) Female 4-40 UNC screwlocks, male |
| Maximum Current Maximum Voltage Insulation Resistance Connectors: | 40 A 350 VDC/350 VAC peak 1000 MOhm |
| Contact Material Contact Resistance Cable Exit: Overall Size (Approx) | Gold plated copper alloy 1.0 mOhm 45° (Away from Pin 1) H71 x W16 x D55 mm |
| Cable Type: | Individual wires, screened & sleeved. Tri-rated |
| Conductor: Material Strands Resistance Insulation | Copper 56/0.3 (4 mm 2 csa, 12AWG), 4 mm O/D 4.95 m Ω /m nominal PVC |
| Outer Sleeve Screened Construction | Polyester Yes (Cable screen connected to backshells) |
| Additional Braided Sleeve Cable O/D Minimum Bend Radius Door Closure Allowance | Yes 13 mm 25 mm 90 mm (see diagram) |

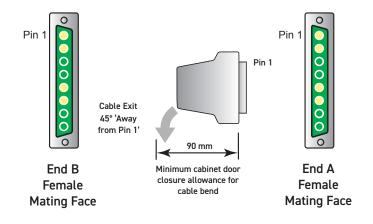


8-Pin Power D-Type Cable Assembly (4-Pin Version)

Product Compatibility







Product Order Codes

4-Pin Version of 8-Pin Power D-Type Cable Assy, 40 A,
Female to Female, 0.5 m Long
40-970-404-0.5m-FF
Female to Female, 1.0 m Long
40-970-404-1m-FF
Female to Female, 2.0 m Long
40-970-404-2m-FF

Note: Other cable lengths can be supplied.

Cable Assy - Female to Unterminated

- High Specification, Highly Flexible Cable
- Fully Screened Cable Construction with Strain Relief
- 45 Degree Cable Exit
- Fully Coded Markers to Ensure Easy Connection

Technical Specification

Cable O/D

Minimum Bend Radius

Door Closure Allowance

Connector Type (End A): 8-Pin D-Subminiature Gender Female 4-40 UNC screwlocks, male Securing Method Unterminated End (End B): Free Wire Length 130 mm nominal Individual Wire Labelling To connector pins. A white/black screen pigtail is also included Wire End Options Ferrules, Tinned, Cut End Maximum Current Maximum Voltage 350 VDC/350 VAC peak Insulation Resistance 1000 M0hm Connector: Contact Material Gold plated copper alloy Contact Resistance 1.0 m0hm 45° (Away from Pin 1) Cable Exit Overall Size (Approx) H71 x W16 x D55 mm Cable Type: Individual wires, screened & sleeved. Tri-rated Conductor: Material Copper Strands 56/0.3 (4 mm² csa, 12AWG), 4 mm O/D Resistance $4.95 \,\mathrm{m}\Omega/\mathrm{m}$ nominal Insulation **PVC** Outer Sleeve Polyester Screened Construction Yes (Cable screen connected to backshell) Additional Braided Sleeve Yes

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

13 mm

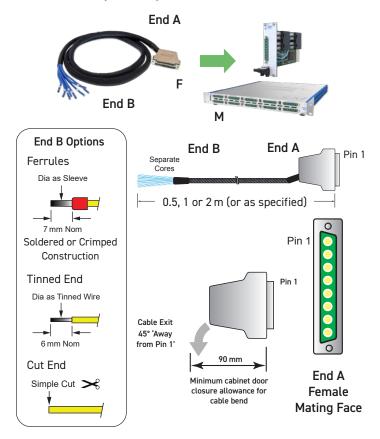
25 mm

90 mm (see diagram)



8-Pin Power D-Type Unterminated Cable Assembly

Product Compatibility



Product Order Codes

8-Pin Power D-Type Cable Assy, 40 A, Cut Wires,

Female to Unterminated, 0.5 m Long 40-972-408-0.5m-FU Female to Unterminated, 1.0 m Long 40-972-408-1m-FU Female to Unterminated, 2.0 m Long 40-972-408-2m-FU

Part numbers for other versions:



Note: Other cable lengths can be supplied.

Cable Assy - Female to Unterminated

- 4-Pin Version for High Power Relay Module 40-170
- High Specification, Highly Flexible Cable
- Fully Screened Cable Construction with Strain Relief
- 45 Degree Cable Exit
- Fully Coded Markers to Ensure Easy Connection

Technical Specification

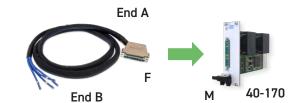
| Connector Type (End A): Gender Securing Method | 8-Pin D-Subminiature (4-Pin version) Female 4-40 UNC screwlocks, male |
|---|--|
| Unterminated End (End B): Free Wire Length Individual Wire Labelling Wire End Options | 130 mm nominal To connector pins. A white/black screen pigtail is also included Ferrules, Tinned, Cut End |
| Maximum Current Maximum Voltage Insulation Resistance Connector: | 40 A 350 VDC/350 VAC peak 1000 MOhm |
| Contact Material Contact Resistance Cable Exit | Gold plated copper alloy 1.0 m0hm 45° (Away from Pin 1) H71 x W16 x D55 mm |
| Overall Size (Approx) Cable Type: | Individual wires, screened & sleeved. Tri-rated |
| Conductor: Material Strands Resistance Insulation | Copper 56/0.3 (4 mm 2 csa, 12AWG), 4 mm 0/D 4.95 m Ω /m nominal PVC |
| Outer Sleeve Screened Construction | Polyester Yes (Cable screen connected to backshell) |
| Additional Braided Sleeve Cable O/D Minimum Bend Radius Door Closure Allowance | Yes 13 mm 25 mm 90 mm (see diagram) |

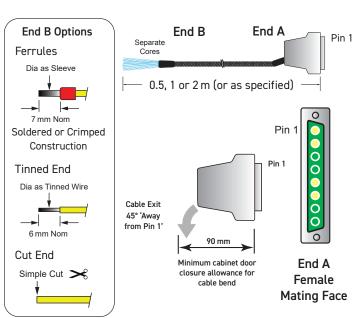
Note: When using this product please ensure appropriate electrical safety.



8-Pin Power D-Type Unterminated Cable Assembly (4-Pin Version)

Product Compatibility





Product Order Codes

8-Pin Power D-Type Cable Assy, 40 A, Cut Wires,

Female to Unterminated, 0.5 m Long 40-972-404-0.5m-FU Female to Unterminated, 1.0 m Long 40-972-404-1m-FU Female to Unterminated, 2.0 m Long 40-972-404-2m-FU

Part numbers for other versions:



Note: Other cable lengths can be supplied.

Cable 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: | 8-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 | Solder bucket. A backshell fixing is |
| | also provided for a cable screen |
| Connector Ratings: | |

Maximum Current 40 A

Maximum Voltage 350 VDC or 350 VAC peak

Cable Exit: 45°
Cable Exit Size 13 mm dia

Overall Size (Approx) H71 x W16 x D55 mm

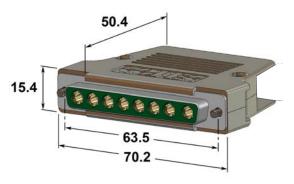
8-Pin D-Sub:

Contact Material Gold plated copper alloy

Contact Resistance 1.0 m0hm

Wire Connection:

Maximum Wire Size 12AWG
Recommended Insulation Tri-rated PVC
Additional Cable Clamp Yes (in backshell)

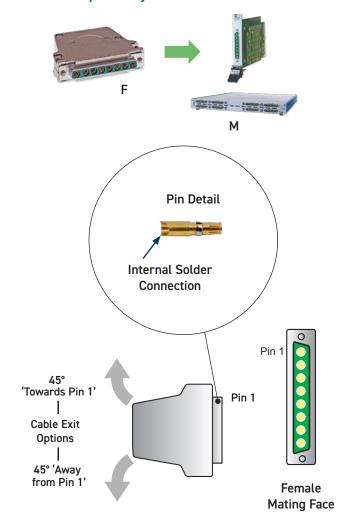


Connector Dimensions



8-Pin Power D-Type Cable Connector with Backshell

Product Compatibility



Product Order Codes

8-Pin Power D-Type Connector, 40 A, Solder Bucket,
With Backshell, Female 40-960-008-F
Without Backshell, Female 92-960-008-F

Cable Connector - Female

- 4-Pin Version for High Power Relay Module 40-170
- 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: Gender | 8-Pin D-Subminiature (4-Pin version) Female |
|---------------------------|--|
| Securing Method: | |
| Product with Backshell | 4-40 UNC screwlocks, male |
| Product without Backshell | 4-40 UNC screwlocks, male |
| Wire Connection | Solder bucket. A backshell fixing is |
| | also provided for a cable screen |
| Connector Ratings: | |
| Maximum Current | 40 A |
| Maximum Voltage | 350 VDC or 350 VAC peak |
| Cable Exit: | 45° |
| Cable Exit Size | 13 mm dia |
| Overall Size (Approx) | H71 x W16 x D55 mm |
| 8-Pin D-Sub: | |
| Contact Material | Gold plated copper alloy |
| Contact Resistance | 1.0 m0hm |
| Wire Connection: | |
| Maximum Wire Size | 12AWG |
| Recommended Insulation | Tri-rated PVC |
| Additional Cable Clamp | Yes (in backshell) |

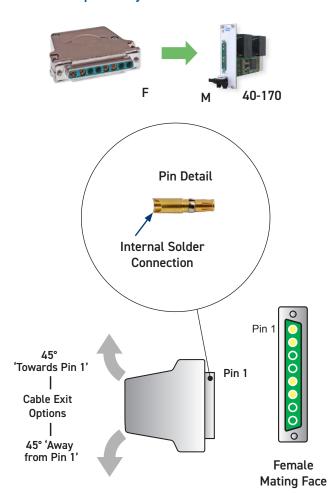


Connector Dimensions



8-Pin Power D-Type Cable Connector with Backshell (4-Pin Version)

Product Compatibility



Product Order Codes

4-Pin Version of 8-Pin Power D-Type Connector, 40 A, Solder Bucket,

With Backshell, Female 40-960-004-F Without Backshell, Female 92-960-004-F

PCB Connector, Right Angle - 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.

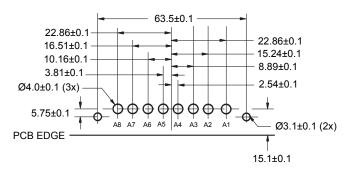
Note: This product is not suitable for directly mounting onto the front panel of a Pickering switching product.

Technical Specification

| Connector Type: | 8-Pin D-Subminiature |
|----------------------|-------------------------------|
| Gender | Female |
| Securing Method | 4-40 UNC screwlocks, female |
| PCB Mounting | Right angle PCB mount, solder |
| Connector Ratings: | |
| Maximum Current | 20 A each pin |
| Maximum Voltage | 250 V working |
| 8-Pin D-Sub: | |
| Contact Material | Gold plated copper alloy |
| Contact Resistance | 1m0hm (IEC60807-2) |
| PCB Legs: | |
| Effective Leg Length | 7.6 mm nom (See diagram) |



An Individual 40 A Female Contact

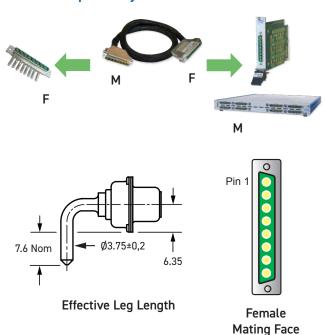


PCB Footprint of 8-Pin Right Angle Female Connector (Connector Side - Not to Scale)



8-Pin Power D-Type PCB Connector

Product Compatibility



Product Order Codes

8-Pin Power D-Type Connector, 20 A, Right Angle PCB Mount, Female 40-963-008-RF

Note: 8 off female socket contacts are supplied with the connector kit.

PCB Connector, Right Angle - Female

- 4-Pin Version for High Power Relay Module 40-170
- 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.

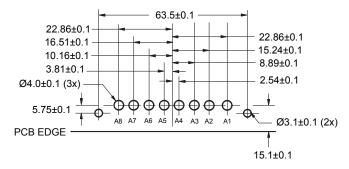
Note: This product is not suitable for directly mounting onto the front panel of a Pickering switching product.

Technical Specification

| Connector Type: Gender | 8-Pin D-Subminiature, (4-Pin Version) Female |
|---------------------------|---|
| Securing Method | 4-40 UNC screwlocks, female |
| PCB Mounting | Right angle PCB mount, solder |
| Connector Ratings: | |
| Maximum Current | 20 A each pin |
| Maximum Voltage | 250 V working |
| 8-Pin D-Sub: | 3 |
| Contact Material | Gold plated copper alloy |
| Contact Resistance | 1m0hm (IEC60807-2) |
| PCB Legs: | • • • • • • • • • • • • • • • • • • • |
| Effective Leg Length | 7.6 mm nom (See diagram) |



An Individual 40 A Female Contact

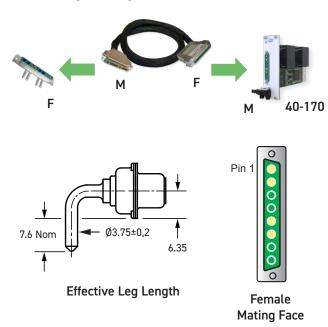


PCB Footprint of 8-Pin Right Angle Female Connector (Connector Side - Not to Scale)



8-Pin Power D-Type PCB Connector (4-Pin Version)

Product Compatibility



Product Order Codes

4-Pin Version of 8-Pin Power D-Type Connector, 20 A, Right Angle PCB Mount, Female 40-963-004-RF

Note: 4 off female socket contacts are supplied with the connector kit.

PCB Connector, Right Angle - 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.

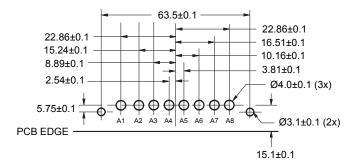
Note: This product is not suitable for directly mounting onto the front panel of a Pickering switching product.

Technical Specification

| Connector Type: Gender | 8-Pin D-Subminiature Male |
|---------------------------|-------------------------------|
| Securing Method | 4-40 UNC screwlocks, female |
| PCB Mounting | Right angle PCB mount, solder |
| Connector Ratings: | |
| Maximum Current | 20 A each pin |
| Maximum Voltage | 250 V working |
| 8-Pin D-Sub: | |
| Contact Material | Gold plated copper alloy |
| Contact Resistance | 1m0hm (IEC60807-2) |
| PCB Legs: | |
| Effective Leg Length | 7.6 mm nom (See diagram) |



An Individual 40 A Male Contact



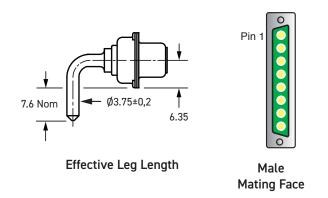
PCB Footprint of 8-Pin Right Angle Male Connector (Connector Side - Not to Scale)



8-Pin Power D-Type PCB Connector

Product Compatibility





Product Order Codes

8-Pin Power D-Type Connector, 20 A, Right Angle PCB Mount, Male 40-963-008-RM

Note: 8 off male contacts are supplied with the connector kit.

PCB Connector, Right Angle - Male

- 4-Pin Version for High Power Relay Module 40-170
- 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.

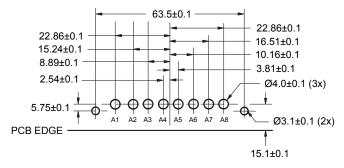
Note: This product is not suitable for directly mounting onto the front panel of a Pickering switching product.

Technical Specification

| Connector Type: Gender | 8-Pin D-Subminiature, (4-Pin version) Male |
|---------------------------|---|
| Securing Method | 4-40 UNC screwlocks, female |
| PCB Mounting | Right angle PCB mount, solder |
| Connector Ratings: | |
| Maximum Current | 20 A each pin |
| Maximum Voltage | 250 V working |
| 8-Pin D-Sub: | - |
| Contact Material | Gold plated copper alloy |
| Contact Resistance | 1m0hm (IEC60807-2) |
| PCB Legs: | |
| Effective Leg Length | 7.6 mm nom (See diagram) |



An Individual 40 A Male Contact



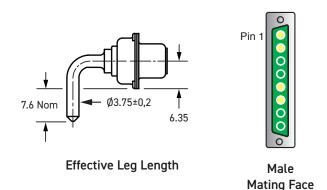
PCB Footprint of 8-Pin Right Angle Male Connector (Connector Side - Not to Scale)



8-Pin Power D-Type PCB Connector (4-Pin Version)

Product Compatibility





Product Order Codes

4-Pin Version of 8-Pin Power D-Type Connector, 20 A, Right Angle PCB Mount, Male 40-963-004-RM

Note: 4 off male contacts are supplied with the connector kit.

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.

Cable Assy - Male to Male

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

Technical Specification

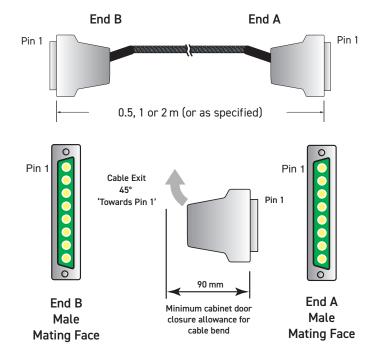
| Connector Type (End A): Gender Securing Method | 8-Pin D-Subminiature Male 4-40 UNC screwlocks, male |
|---|---|
| Connector Type (End B): Gender Securing Method | 8-Pin D-Subminiature Male 4-40 UNC screwlocks, male |
| Maximum Current Maximum Voltage Insulation Resistance Connectors: | 40 A 350 VDC/350 VAC peak 1000 M0hm |
| Contact Material Contact Resistance Cable Exit: | Gold plated copper alloy 1.0 mOhm 45° (Away from Pin 1) |
| Overall Size (Approx) Cable Type: | H71 x W16 x D55 mm Individual wires, screened & sleeved. Tri-rated |
| Conductor: Material Strands Resistance Insulation | Copper 56/0.3 (4 mm 2 csa, 12AWG), 4 mm 0/D 4.95 m Ω /m nominal PVC |
| Outer Sleeve Screened Construction | Polyester Yes (Cable screen connected to backshells) |
| Additional Braided Sleeve Cable O/D Minimum Bend Radius | Yes 13 mm 25 mm |
| Door Closure Allowance | 90 mm (see diagram) |
| ۰- ۱ | 01 01000.07.1101.01. |

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



8-Pin Power D-Type Cable Assembly

Product Compatibility



Product Order Codes

| 8-Pin Power D-Type Cable Assy, 40 A, Male to Male, | | |
|--|--------------------|--|
| 0.5 m Long | 40-970-408-0.5m-MM | |
| 1.0 m Long | 40-970-408-1m-MM | |
| 2.0 m Long | 40-970-408-2m-MM | |
| Note: Other cable lengths can be supplied. | | |

C

Cable Assy - Male to Unterminated

- High Specification, Highly Flexible Cable
- Fully Screened Cable Construction with Strain Relief
- 45 Degree Cable Exit
- Fully Coded Markers to Ensure Easy Connection

Technical Specification

Connector Type (End A): 8-Pin D-Subminiature Gender 4-40 UNC screwlocks, male Securing Method Unterminated End (End B): Free Wire Length 130 mm nominal Individual Wire Labelling To connector pins. A white/black screen pigtail is also included Wire End Options Ferrules, Tinned, Cut End Maximum Current 350 VDC/350 VAC peak Maximum Voltage 1000 M0hm Insulation Resistance Connector: Contact Material Gold plated copper alloy Contact Resistance 1.0 m0hm 45° (Away from Pin 1) Cable Exit Overall Size (Approx) H71 x W16 x D55 mm Cable Type: Individual wires, screened & sleeved. Tri-rated Conductor: Material Copper Strands 56/0.3 (4 mm² csa, 12AWG), 4 mm O/D Resistance $4.95 \,\mathrm{m}\Omega/\mathrm{m}$ nominal **PVC** Insulation Outer Sleeve Polyester Screened Construction Yes (Cable screen connected to backshell) Additional Braided Sleeve Cable O/D 13 mm Minimum Bend Radius 25 mm Door Closure Allowance 90 mm (see diagram)

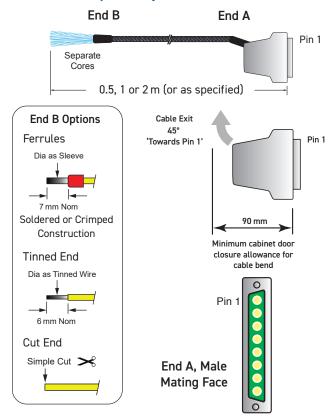
Note: When using this product please ensure appropriate electrical safety.

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



8-Pin Power D-Type Unterminated Cable Assembly

Product Compatibility



Product Order Codes

8-Pin Power D-Type Cable Assy, 40 A, Cut Wires,

Male to Unterminated, 0.5 m Long40-972-408-0.5m-MUMale to Unterminated, 1.0 m Long40-972-408-1m-MUMale to Unterminated, 2.0 m Long40-972-408-2m-MU

Part numbers for other versions:



Note: Other cable lengths can be supplied.

Cable Connector - Male

- Connector only or Connector and Backshell
- Male Screwlocks
- 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.

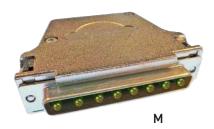
Technical Specification

| Connector Type: | 8-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 | Solder bucket. A backshell fixing is |
| | also provided for a cable screen |
| Connector Ratings: | |
| Maximum Current | 40 A |
| Maximum Voltage | 350 VDC or 350 VAC peak |
| Cable Exit: | 45° |
| Cable Exit Size | 13 mm dia |
| Overall Size (Approx) | H71 x W16 x D55 mm |
| 8-Pin D-Sub: | |
| Contact Material | Gold plated copper alloy |
| Contact Resistance | 1.0 m0hm |
| Wire Connection: | |
| Maximum Wire Size | 12AWG |
| Recommended Insulation | Tri-rated PVC |
| Additional Cable Clamp | Yes (in backshell) |

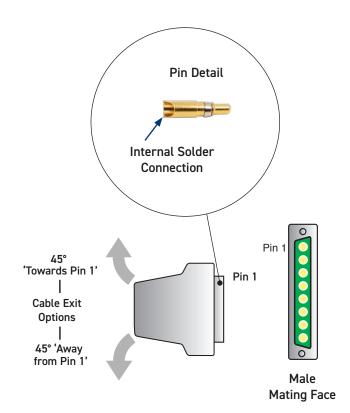


Connector Dimensions

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



8-Pin Power D-Type Cable Connector with Backshell



Product Order Codes

8-Pin Power D-Type Connector, 40 A, Solder Bucket,
With Backshell, Male
40-960-008-M
Without Backshell, Male
92-960-008-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.

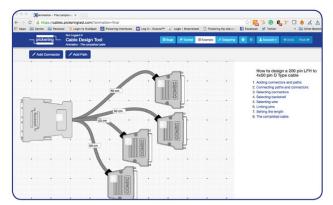
We offer a fast turn round of custom items to keep your ordering and integration time scales to a minimum.



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