

## 20-Pin GMCT Connector Accessories

- Voltage to 500VAC, 16A
- Mating Connectors
- Connector Hoods
- Cable Assemblies
- Guaranteed Compatibility

The 20-Pin GMCT connector is used on PXI switching products to provide a low density user connector solution.

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.

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.



### Sales Offices and Support

© Copyright (2019) Pickering Interfaces Ltd. All Rights Reserved

Pickering Interfaces Inc.  
Tel: +1 781 897 1710  
e-mail: ussales@pickeringtest.com

Pickering Interfaces Ltd.  
Tel: +44 (0)1255-687900  
e-mail: sales@pickeringtest.com

Pickering Interfaces GmbH  
Tel: +49 89 125 953 160  
e-mail: desales@pickeringtest.com

Pickering Interfaces S.r.l.  
Tel: +39 02 58 77 00  
e-mail: frsales@pickeringtest.com

Pickering Interfaces AB  
Tel: +46 340-69 06 69  
e-mail: ndsales@pickeringtest.com

Pickering Interfaces s.r.o.  
Tel: +420 558 987 613  
e-mail: desales@pickeringtest.com

Pickering Interfaces 品英仪器  
Tel: +86 4008-799-765  
e-mail: chinasales@pickeringtest.com







## Part Number Listing for all 20-Pin GMCT Connection Accessories



Cables: 20-Pin GMCT Connector to Connector									
Type	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		
16 Amp	Male	Rear	Female	Rear	40-970B-020-0.5m-MF	40-970B-020-1m-MF	40-970B-020-2m-MF	Yes (Female end)	5
	Female		Female		40-970B-020-0.5m-FF	40-970B-020-1m-FF	40-970B-020-2m-FF	Yes	7
	Male		Male		40-970B-020-0.5m-MM	40-970B-020-1m-MM	40-970B-020-2m-MM	No	14
10 Amp	Male	Rear	Female	Rear	A020GMR-020GFR-0B050	A020GMR-020GFR-0B100	A020GMR-020GFR-0B200	Yes (Female end)	6
	Female		Female		A020GFR-020GFR-0B050	A020GFR-020GFR-0B100	A020GFR-020GFR-0B200	Yes	8
	Male		Male		A020GMR-020GMR-0B050	A020GMR-020GMR-0B100	A020GMR-020GMR-0B200	No	15

	Cables: 20-Pin GMCT Connector to Untermated							
Type	End 1		End 2 Untermated 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		
16 Amp	Female	Rear	Boot Lace Ferrules	40-972C-020-0.5m-FU	40-972C-020-1m-FU	40-972C-020-2m-FU	Yes	9
			Tinned Ends	A020GFR-T-1B050	A020GFR-T-1B100	A020GFR-T-1B200	Yes	
			Cut End	A020GFR-C-1B050	A020GFR-C-1B100	A020GFR-C-1B200	Yes	
	Male	Rear	Boot Lace Ferrules	40-972C-020-0.5m-MU	40-972C-020-1m-MU	40-972C-020-2m-MU	No	16
			Tinned Ends	A020GMR-T-1B050	A020GMR-T-1B100	A020GMR-T-1B200	No	
			Cut End	A020GMR-C-1B050	A020GMR-C-1B100	A020GMR-C-1BS200	No	
10 Amp	Female	Rear	Boot Lace Ferrules	A020GFR-F-0C050	A020GFR-F-0C100	A020GFR-F-0C200	Yes	10
			Tinned Ends	A020GFR-T-0C050	A020GFR-T-0C100	A020GFR-T-0C200	Yes	
			Cut End	A020GFR-C-0C050	A020GFR-C-0C100	A020GFR-C-0C200	Yes	
	Male	Rear	Boot Lace Ferrules	A020GMR-F-0C050	A020GMR-F-0C100	A020GMR-F-0C200	No	17
			Tinned Ends	A020GMR-T-0C050	A020GMR-T-0C100	A020GMR-T-0C200	No	
			Cut End	A020GMR-C-0C050	A020GMR-C-0C100	A020GMR-C-0C200	No	

Cable Connectors: 20-Pin GMCT						
Type	Gender	Cable Exit	Product Order Code/Part Number		Mates with a Pickering Switching Product	Data Sheet Page
			With Backshell	Without Backshell		
16 Amp	Female	Rear	40-960-020-16A-F	92-960-020-16A-F	Yes	11
	Male		40-960-020-16A-M	92-960-020-16A-M	No	18
10 Amp	Female	Rear	40-960-020-10A-F	92-960-020-10A-F	Yes	12
	Male		40-960-020-10A-M	92-960-020-10A-M	No	19

## Contents - Mating Accessories For Pickering Products





Cable Assemblies				
View	Description	End 1	End 2	Page
	Cable Assy, 20-Pin GMCT, 16A, 0.5m, 1m and 2m Custom lengths by quotation	Male	Female	<a href="#">5</a>
	Cable Assy, 20-Pin GMCT, 10A, 0.5m, 1m and 2m Custom lengths by quotation			<a href="#">6</a>
	Cable Assy, 20-Pin GMCT, 16A, 0.5m, 1m and 2m Custom lengths by quotation	Female	Female	<a href="#">7</a>
	Cable Assy, 20-Pin GMCT, 10A, 0.5m, 1m and 2m Custom lengths by quotation			<a href="#">8</a>
	Cable Assy, 20-Pin GMCT to Unterminated, 16A, 0.5m, 1m and 2m Custom lengths by quotation	Female	Unterminated with Options	<a href="#">9</a>
	Cable Assy, 20-Pin GMCT to Unterminated, 10A, 0.5m, 1m and 2m Custom lengths by quotation			<a href="#">10</a>



Female Connectors				
View	Description	Type	Gender	Page
	Cable Connector 20-Pin GMCT, 16A, Solder Bucket	With or Without Backshell	Female	<a href="#">11</a>
	Cable Connector 20-Pin GMCT, 10A Solder Bucket	With or Without Backshell		<a href="#">12</a>

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

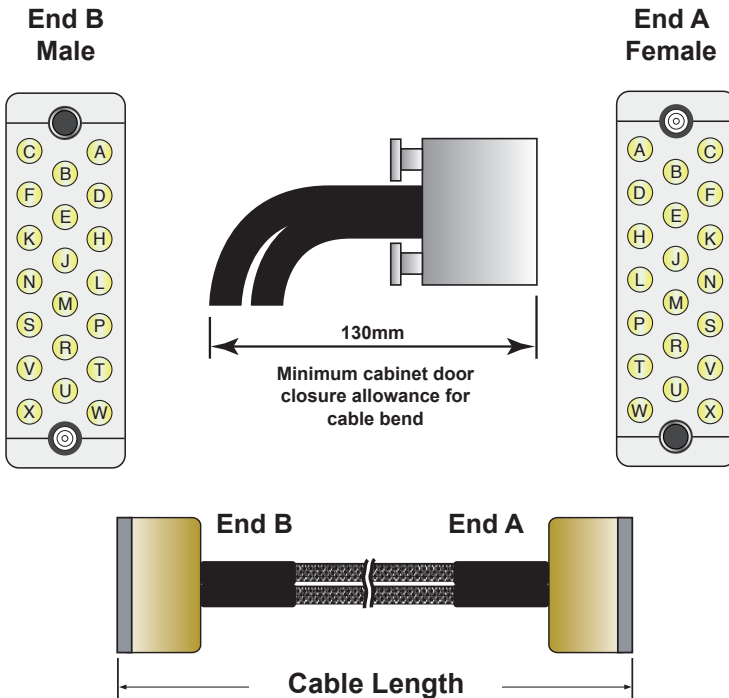
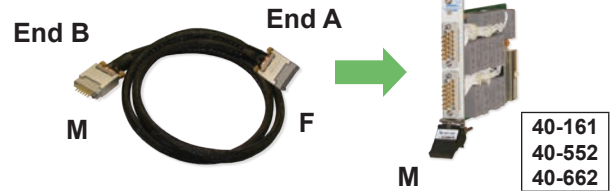
Although these items do not directly mate with Pickering Interfaces products customers may find them useful in the development of their own connection solutions.

Cable Assemblies				
View	Description	End 1	End 2	Page
	Cable Assy, 20-Pin GMCT, 16A, 0.5m, 1m and 2m Custom lengths by quotation	Male	Male	14
	Cable Assy, 20-Pin GMCT, 10A, 0.5m, 1m and 2m Custom lengths by quotation	Male	Male	15
	Cable Assy, 20-Pin GMCT to Underminated, 16A, 0.5m, 1m and 2m Custom lengths by quotation	Male	Underminated with Options	16
	Cable Assy, 20-Pin GMCT to Underminated, 10A, 0.5m, 1m and 2m Custom lengths by quotation	Male	Underminated with Options	17

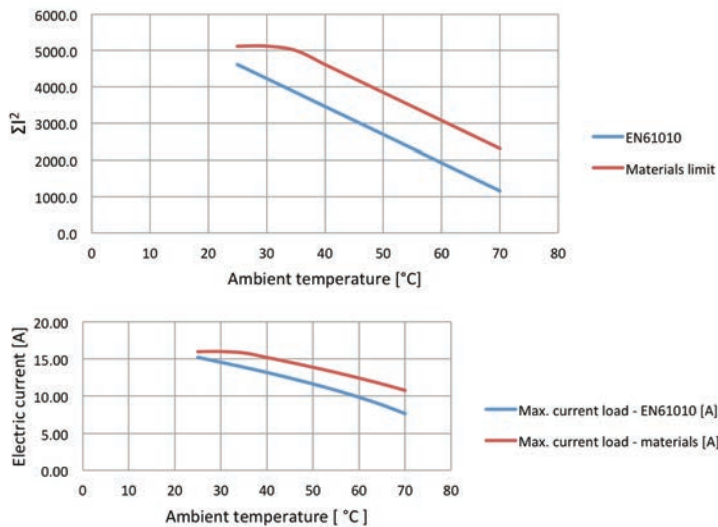
Male Connectors				
View	Description	Type	Gender	Page
	Cable Connector 20-Pin GMCT, 16A Solder Bucket	With or Without Backshell	Male	18
	Cable Connector 20-Pin GMCT, 10A Solder Bucket	With or Without Backshell		19

## 20-Pin GMCT Cable Assy, 16 Amp - Male to Female

- High Specification 16A Cable
- Highly Flexible Cable with Braided Sleeving
- Rear Cable Exit
- Strain Relief
- Fully Screened Cable Construction



Characteristic Plots for 40-970B-020-1m



The top graph shows the permitted  $\Sigma I^2$  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  $\Sigma I^2$  is complied with.

### Technical Specification

<b>Connector Type (End A):</b>	20-Pin GMCT
Gender	Female
Securing Method	6-32 UNC screwlocks
<b>Connector Type (End B):</b>	20-Pin GMCT
Gender	Male
Securing Method	6-32 UNC screwlocks
<b>Cable Assembly Rating:</b>	
Maximum Current	16A
Maximum Voltage	500VDC/500VAC
Insulation Resistance	1000MOhm
<b>Connectors:</b>	
Contact Material	Gold plated copper alloy
Contact Resistance	3mOhm
Cable Exit	Rear
Overall Size (Approx)	H40 x W20 x D62mm
<b>Cable Type:</b>	Individual wires, screened & sleeved
Conductor: Material	Copper wire
Strands	19/0.41 (2.5mm <sup>2</sup> , 14AWG)
Resistance	0.013Ω/m
Capacitance	120pF/m typical
Insulation	PFA 500V
Outer Sleeve	Polyester, Max temp 130°C
Screened Construction	Yes
Additional Braided Sleeve	Yes
Cable O/D	10mm
Minimum Bend Radius	25mm
Door Closure Allowance	130mm (see diagram)
<b>Notes:</b>	Other cable lengths can be supplied.

### Product Order Codes

20-Pin GMCT Cable Assy, 16A, Male to Female,

0.5m Long

40-970B-020-0.5m-MF

1.0m Long

40-970B-020-1m-MF

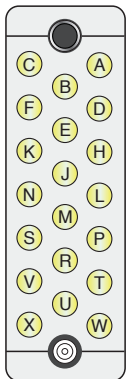
2.0m Long

40-970B-020-2m-MF

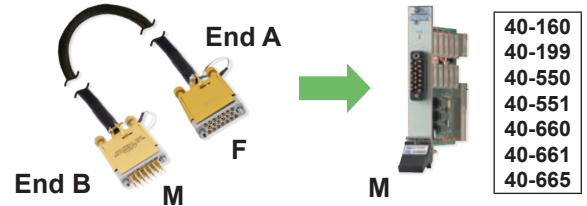
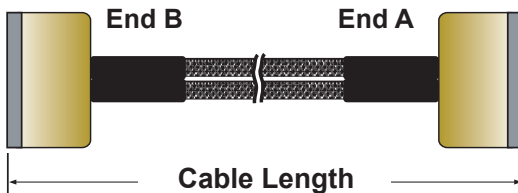
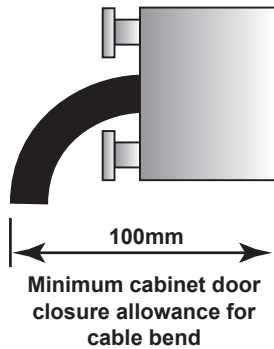
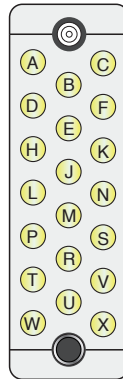
## 20-Pin GMCT Cable Assy, 10 Amp - Male to Female

- High Specification 10A Cable
- Highly Flexible Cable with Braided Sleeving
- Rear Cable Exit
- Strain Relief
- Fully Screened Cable Construction

End B  
Male



End A  
Female

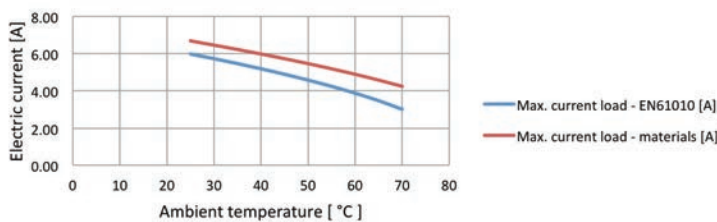
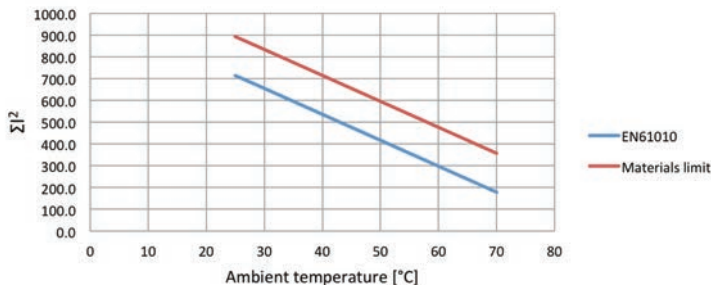


### Technical Specification

<b>Connector Type (End A):</b>	20-Pin GMCT
Gender	Female
Securing Method	6-32 UNC screwlocks
<b>Connector Type (End B):</b>	20-Pin GMCT
Gender	Male
Securing Method	6-32 UNC screwlocks
<b>Cable Assembly Rating:</b>	
Maximum Current	10A
Maximum Voltage	500VDC/500VAC
Insulation Resistance	1000MΩm
<b>Connectors:</b>	
Contact Material	Gold plated copper alloy
Contact Resistance	3mΩm
Cable Exit	Rear
Overall Size (Approx)	H40 x W20 x D62mm
<b>Cable Type:</b>	
Conductor: Material	Tinned copper wire
Strands	19/0.254 (1mm <sup>2</sup> , 18AWG)
Resistance	0.021Ω/m
Insulation	PFA, temp: -100 to +260 °C
Outer Sleeve	Polyester, Max temp 130°C
Screened Construction	Yes
Additional Braided Sleeve	Yes
Cable O/D	12mm nom
Minimum Bend Radius	25mm
Door Closure Allowance	100mm (see diagram)

**Notes:**  
Other cable lengths can be supplied.

### Characteristic Plots for 40-970-020-1m



The top graph shows the permitted  $\Sigma I^2$  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  $\Sigma I^2$  is complied with.

### Product Order Codes

20-Pin GMCT Cable Assy, 10A, Male to Female,

0.5m Long

A020GMR-020GFR-0B050

1.0m Long

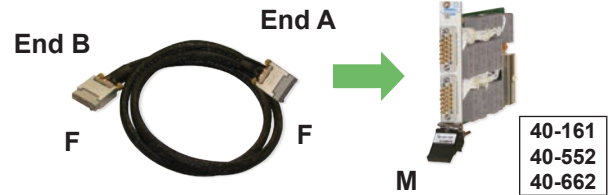
A020GMR-020GFR-0B100

2.0m Long

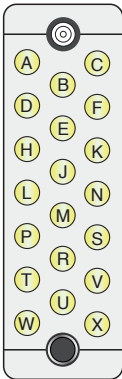
A020GMR-020GFR-0B200

## 20-Pin GMCT Cable Assy, 16 Amp - Female to Female

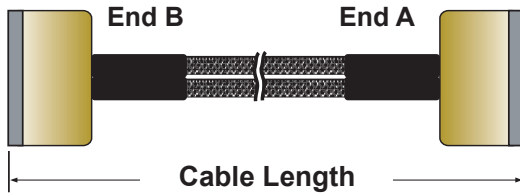
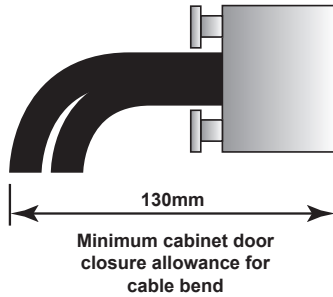
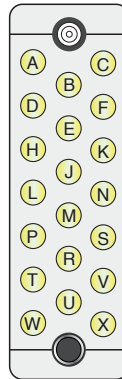
- High Specification 16A Cable
- Highly Flexible Cable with Braided Sleeving
- Rear Cable Exit
- Strain Relief
- Fully Screened Cable Construction



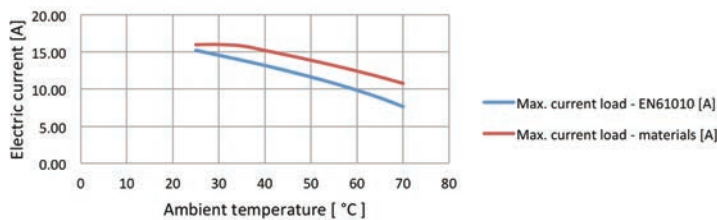
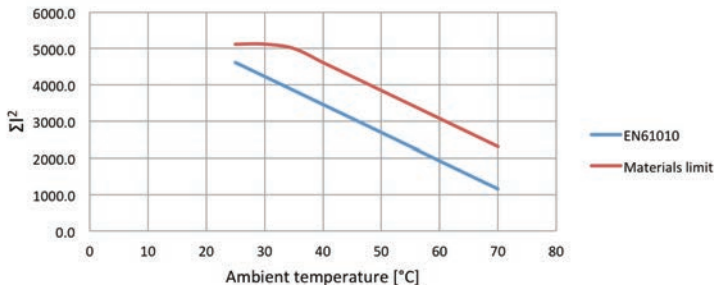
End B  
Female



End A  
Female



Characteristic Plots for 40-970B-020-1m



The top graph shows the permitted  $\Sigma I^2$  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  $\Sigma I^2$  is complied with.

### Technical Specification

<b>Connector Type (End A):</b>	20-Pin GMCT
Gender	Female
Securing Method	6-32 UNC screwlocks
<b>Connector Type (End B):</b>	20-Pin GMCT
Gender	Female
Securing Method	6-32 UNC screwlocks
<b>Cable Assembly Rating:</b>	
Maximum Current	16A
Maximum Voltage	500VDC/500VAC
Insulation Resistance	1000MOhm
<b>Connectors:</b>	
Contact Material	Gold plated copper alloy
Contact Resistance	3mOhm
Cable Exit	Rear
Overall Size (Approx)	H40 x W20 x D62mm
<b>Cable Type:</b>	Individual wires, screened & sleeved
Conductor: Material	Copper wire
Strands	19/0.41 (2.5mm <sup>2</sup> , 14AWG)
Resistance	0.013Ω/m
Capacitance	120pF/m typical
Insulation	PFA 500V
Outer Sleeve	Polyester, Max temp 130°C
Screened Construction	Yes
Additional Braided Sleeve	Yes
Cable O/D	10mm
Minimum Bend Radius	25mm
Door Closure Allowance	130mm (see diagram)
<b>Notes:</b>	Other cable lengths can be supplied.

### Product Order Codes

20-Pin GMCT Cable Assy, 16A, Female to Female,

0.5m Long

40-970B-020-0.5m-FF

1.0m Long

40-970B-020-1m-FF

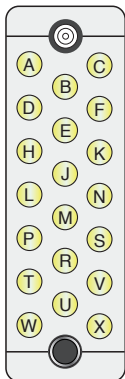
2.0m Long

40-970B-020-2m-FF

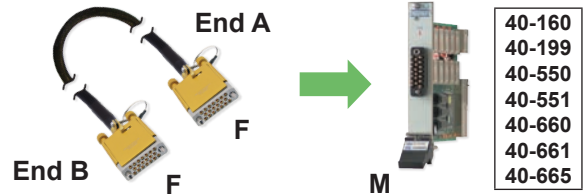
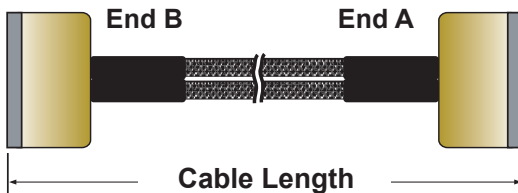
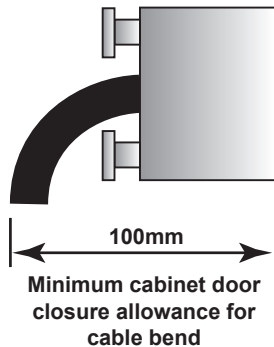
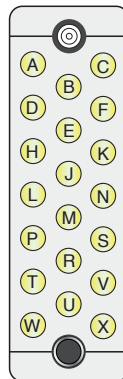
## 20-Pin GMCT Cable Assy, 10 Amp - Female to Female

- High Specification 10A Cable
- Highly Flexible Cable with Braided Sleaving
- Rear Cable Exit
- Strain Relief
- Fully Screened Cable Construction

End B  
Female



End A  
Female



40-160  
40-199  
40-550  
40-551  
40-660  
40-661  
40-665

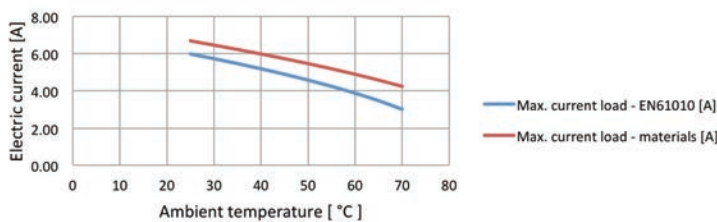
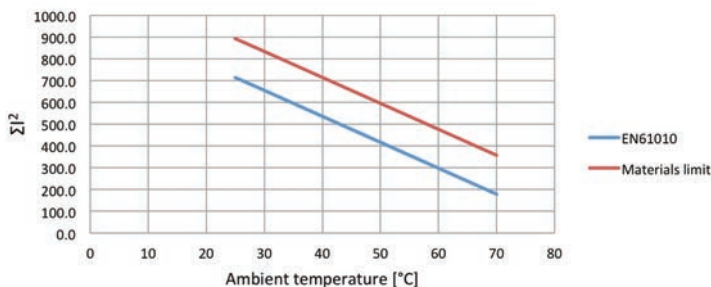


### Technical Specification

<b>Connector Type (End A):</b>	20-Pin GMCT
Gender	Female
Securing Method	6-32 UNC screwlocks
<b>Connector Type (End B):</b>	20-Pin GMCT
Gender	Female
Securing Method	6-32 UNC screwlocks
<b>Cable Assembly Rating:</b>	
Maximum Current	10A
Maximum Voltage	500VDC/500VAC
Insulation Resistance	1000MOhm
<b>Connectors:</b>	
Contact Material	Gold plated copper alloy
Contact Resistance	3mOhm
Cable Exit	Rear
Overall Size (Approx)	H40 x W20 x D62mm
<b>Cable Type:</b>	
Conductor: Material	Tinned copper wire
Strands	19/0.254 (1mm <sup>2</sup> , 18AWG)
Resistance	0.021Ω/m
Insulation	PFA, temp: -100 to +260 °C
Outer Sleeve	Polyester, Max temp 130°C
Screened Construction	Yes
Additional Braided Sleeve	Yes
Cable O/D	12mm nom
Minimum Bend Radius	25mm
Door Closure Allowance	100mm (see diagram)

**Notes:**  
Other cable lengths can be supplied.

### Characteristic Plots for 40-970-020-1m



The top graph shows the permitted  $\Sigma I^2$  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  $\Sigma I^2$  is complied with.

### Product Order Codes

20-Pin GMCT Cable Assy, 10A, Female to Female,

0.5m Long

A020GFR-020GFR-0B050

1.0m Long

A020GFR-020GFR-0B100

2.0m Long

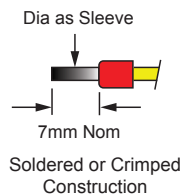
A020GFR-020GFR-0B200

## 20-Pin GMCT Cable Assy, 16A - Female to Underterminated

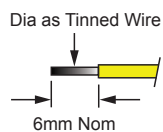
- High Specification 16A Cable
- Highly Flexible Cable
- Fully Screened Cable Construction with Braided Sleeve and Strain Relief
- Rear Cable Exit
- Fully Coded Markers to Ensure Easy Connection

### End B Options

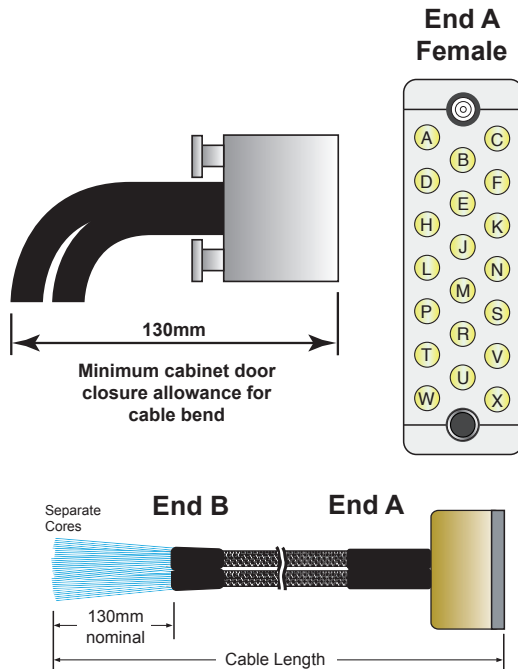
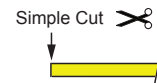
#### Ferrules



#### Tinned End

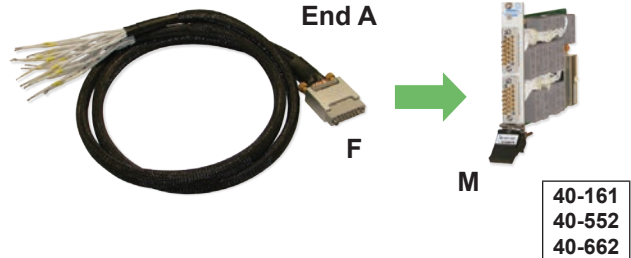


#### Cut End



End B

End A



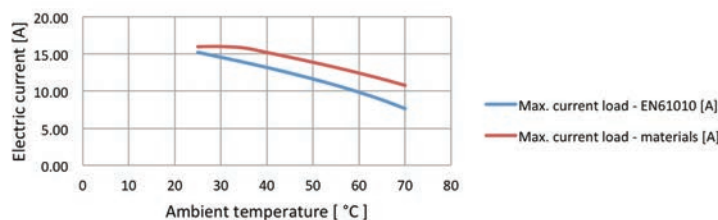
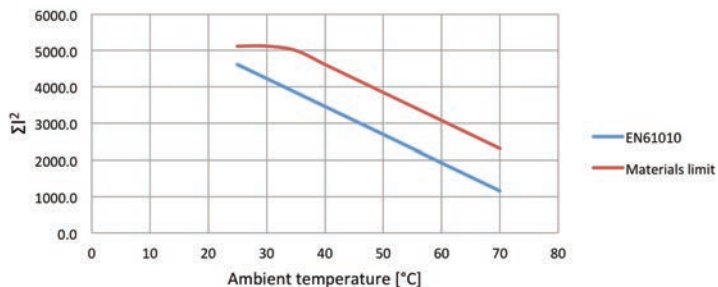
### Technical Specification

<b>Connector Type (End A):</b>	20-Pin GMCT
Gender	Female
Securing Method	6-32 UNC screwlocks
<b>Underterminated End (End B):</b>	
Free Wire Length	130mm nominal
Individual Wire Labelling	To connector pins
Wire End Options	Ferrules, Tinned, Cut End
<b>Cable Assembly Rating:</b>	
Maximum Current	16A
Maximum Voltage	500VDC/500VAC
Insulation Resistance	1000MΩ
<b>Connector:</b>	
Contact Material	Gold plated copper alloy
Contact Resistance	3mΩ
Cable Exit	Rear
Overall Size (Approx)	H40 x W20 x D62mm
<b>Cable Type:</b>	
Conductor: Material	Individual wires, screened & sleeved
Strands	Copper wire
Resistance	19/0.41 (2.5mm <sup>2</sup> , 14AWG)
Capacitance	0.013Q/m
Insulation	120pF/m typical
Outer Sleeve	PFA 500V
Screened Construction	Polyester, Max temp 130°C
Additional Braided Sleeve	Yes
Cable O/D	Yes
Minimum Bend Radius	10mm
Door Closure Allowance	25mm
	130mm (see diagram)

#### Notes:

- Please ensure appropriate electrical safety precautions are observed when using this product.
- Other cable lengths can be supplied.

### Characteristic Plots for 40-972B-020-1m



The top graph shows the permitted  $\Sigma I^2$  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  $\Sigma I^2$  is complied with.

### Product Order Codes

20-Pin GMCT Cable Assy, 16A, Boot Lace Ferrules,

Female to Underterminated, 0.5m Long

40-972C-020-0.5m-FU

Female to Underterminated, 1.0m Long

40-972C-020-1m-FU

Female to Underterminated, 2.0m Long

40-972C-020-2m-FU

### Part numbers for other versions:

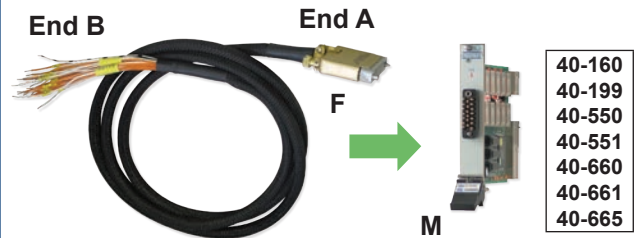
End B:  
T = Tinned End  
C = Cut End

A020GFR-1B\*\*\*

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

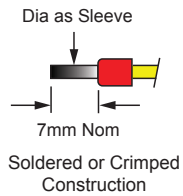
## 20-Pin GMCT Cable Assy, 10A - Female to Unterminated

- High Specification 10A Cable
- Highly Flexible Cable
- Fully Screened Cable Construction with Braided Sleeve and Strain Relief
- Rear Cable Exit
- Fully Coded Markers to Ensure Easy Connection

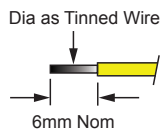


### End B Options

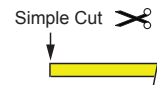
#### Ferrules



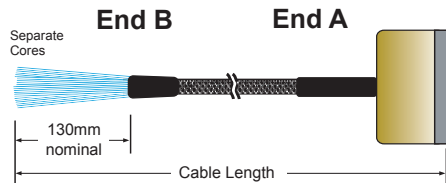
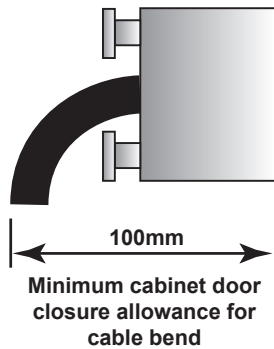
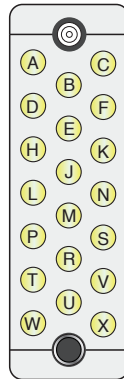
#### Tinned End



#### Cut End



### End A Female



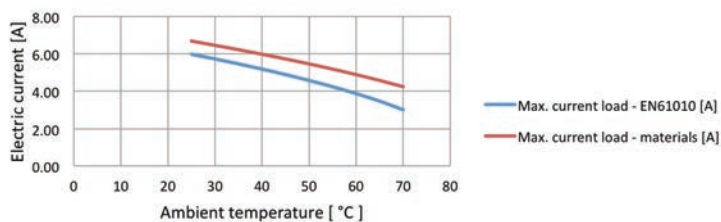
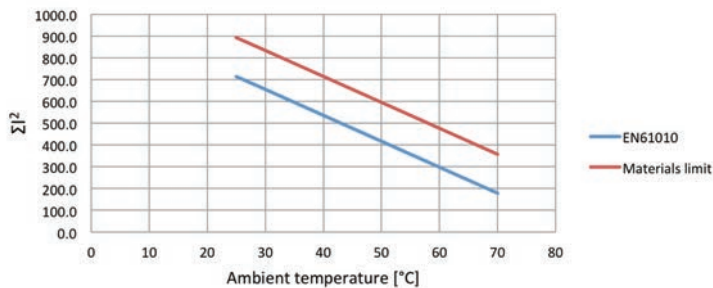
### Technical Specification

<b>Connector Type (End A):</b>	20-Pin GMCT
Gender	Female
Securing Method	6-32 UNC screwlocks
<b>Unterminated End (End B):</b>	
Free Wire Length	130mm nominal
Individual Wire Labelling	To connector pins
Wire End Options	Ferrules, Tinned, Cut End
<b>Cable Assembly Rating:</b>	
Maximum Current	10A
Maximum Voltage	500VDC/500VAC
Insulation Resistance	1000MOhm
<b>Connector:</b>	
Contact Material	Gold plated copper alloy
Contact Resistance	3mOhm
Cable Exit	Rear
Overall Size (Approx)	H40 x W20 x D62mm
<b>Cable Type:</b>	Individual wires, screened & sleeved
Conductor: Material	Tinned copper wire
Strands	19/0.254 (1mm <sup>2</sup> , 18AWG)
Resistance	0.021Ω/m
Insulation	PFA, temp: -100 to +260 °C
Outer Sleeve	Polyester, Max temp 130°C
Screened Construction	Yes
Additional Braided Sleeve	Yes
Cable O/D	12mm nom
Minimum Bend Radius	25mm
Door Closure Allowance	100mm (see diagram)

#### Notes:

- Please ensure appropriate electrical safety precautions are observed when using this product.
- Other cable lengths can be supplied.

### Characteristic Plots for 40-972A-020-1m



The top graph shows the permitted  $\Sigma I^2$  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  $\Sigma I^2$  is complied with.

### Product Order Codes

20-Pin GMCT Cable Assy, 10A, Boot Lace Ferrules,

Female to Unterminated, 0.5m Long

A020GFR-F-0C050

Female to Unterminated, 1.0m Long

A020GFR-F-0C100

Female to Unterminated, 2.0m Long

A020GFR-F-0C200

### Part numbers for other versions:

<b>End B:</b>	A020GFR-**-0C***	<b>Cable Length:</b>
T = Tinned End		050 = 0.5m
C = Cut End		100 = 1.0m
		200 = 2.0m

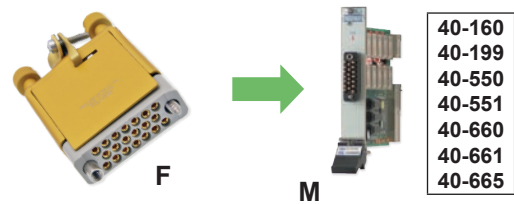


## 20-Pin GMCT Connector, 10 Amp - Female

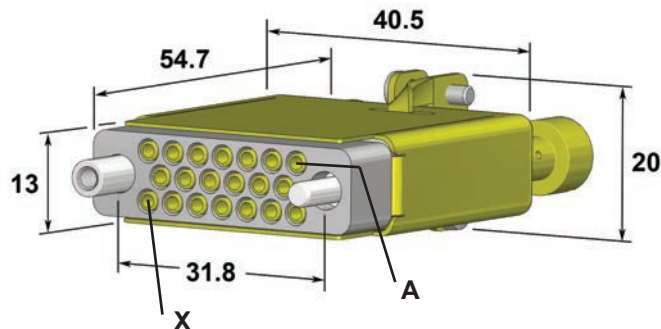
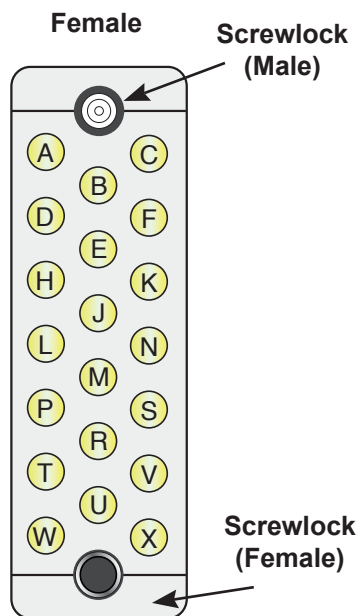
- Connector only or Connector and Backshell
- Cable Clamp in Backshell
- Soldered Cable Termination

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

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.



With Backshell



Female depicted

### Technical Specification

<b>Connector Type:</b> Gender Securing Method: Product with Backshell Product without Backshell Wire Connection	20-Pin GMCT Female  6-32 UNC screwlocks 6-32 UNC screwlocks Solder bucket
<b>Connector Ratings:</b> Maximum Current Maximum Voltage Cable Exit: Cable Exit Size Overall Size (Approx) <b>20-Pin GMCT:</b> Contact Material Contact Resistance <b>Wire Connection:</b> Maximum Wire Size Recommended Insulation Additional Cable Clamp	10A 500V AC Rear 11mm dia H40 x W20 x D62mm Gold plated copper alloy 3mOhm 16AWG PTFE Yes (in backshell)
<b>Notes:</b> The supplied connector includes 20 off 10A contacts of the appropriate gender.	

### Product Order Codes

20-Pin GMCT Connector, 10A, Solder Bucket,  
With Backshell, Female  
Without Backshell, Female

40-960-020-10A-F  
92-960-020-10A-F

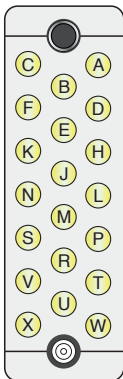
## **Additional Connection Accessories**

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

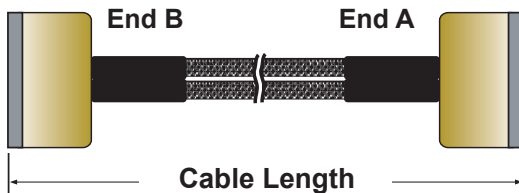
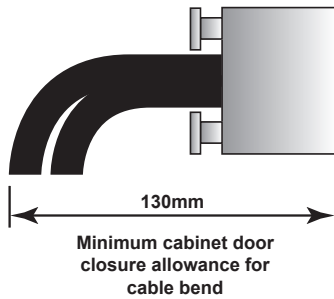
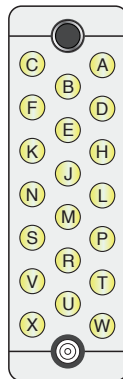
## 20-Pin GMCT Cable Assy, 16 Amp - Male to Male

- High Specification 16A Cable
- Highly Flexible Cable with Braided Sleaving
- Rear Cable Exit with Strain Relief
- Fully Screened Cable Construction

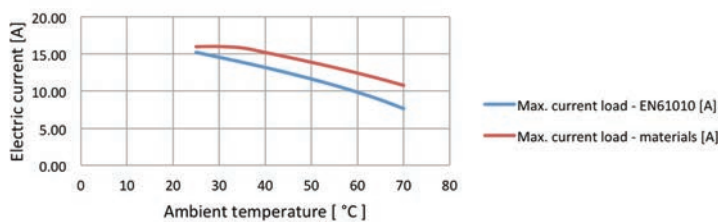
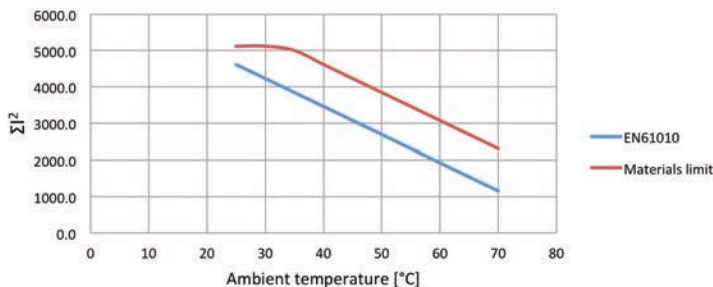
**End B  
Male**



**End A  
Male**



**Characteristic Plots for 40-970B-020-1m**



The top graph shows the permitted  $\Sigma I^2$  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  $\Sigma I^2$  is complied with.

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



### Technical Specification

<b>Connector Type (End A):</b>	20-Pin GMCT
Gender	Male
Securing Method	6-32 UNC screwlocks
<b>Connector Type (End B):</b>	20-Pin GMCT
Gender	Male
Securing Method	6-32 UNC screwlocks
<b>Cable Assembly Rating:</b>	
Maximum Current	16A
Maximum Voltage	500VDC/500VAC
Insulation Resistance	1000MOhm
<b>Connectors:</b>	
Contact Material	Gold plated copper alloy
Contact Resistance	3mOhm
Cable Exit	Rear
Overall Size (Approx)	H40 x W20 x D62mm
<b>Cable Type:</b>	
Conductor: Material	Copper wire
Strands	19/0.41 (2.5mm <sup>2</sup> , 14AWG)
Resistance	0.013Ω/m
Capacitance	120pF/m typical
Insulation	PFA 500V
Outer Sleeve	Polyester, Max temp 130°C
Screened Construction	Yes
Additional Braided Sleeve	Yes
Cable O/D	10mm
Minimum Bend Radius	25mm
Door Closure Allowance	130mm (see diagram)
<b>Notes:</b>	
Other cable lengths can be supplied.	

### Product Order Codes

**20-Pin GMCT Cable Assy, 16A, Male to Male,**

**0.5m Long**

**40-970B-020-0.5m-MM**

**1.0m Long**

**40-970B-020-1m-MM**

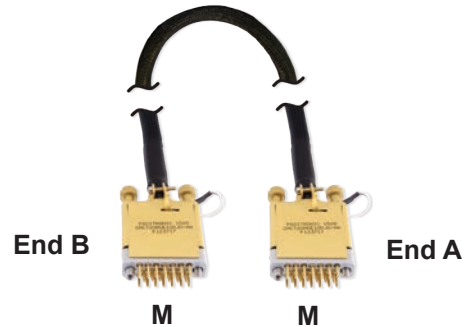
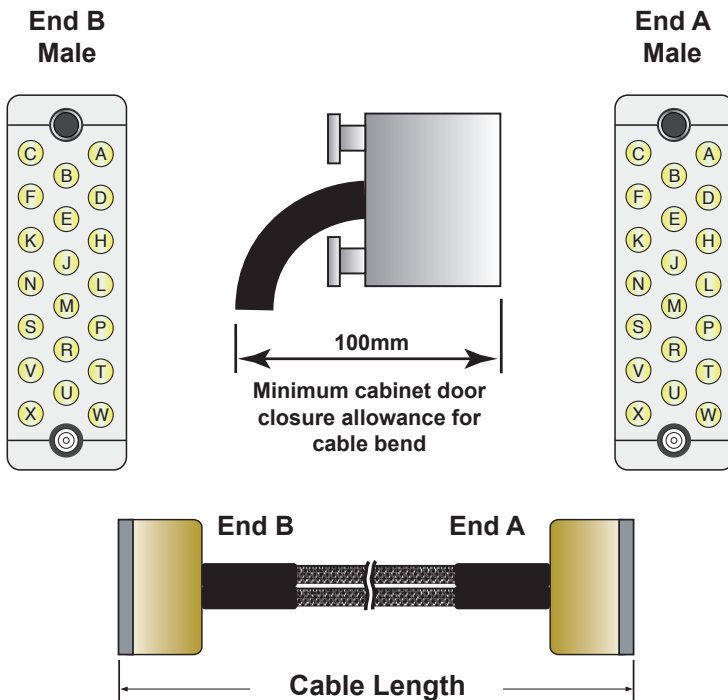
**2.0m Long**

**40-970B-020-2m-MM**

## 20-Pin GMCT Cable Assy, 10 Amp - Male to Male

- High Specification 10A Cable
- Highly Flexible Cable with Braided Sleeving
- Rear Cable Exit with Strain Relief
- Fully Screened Cable Construction

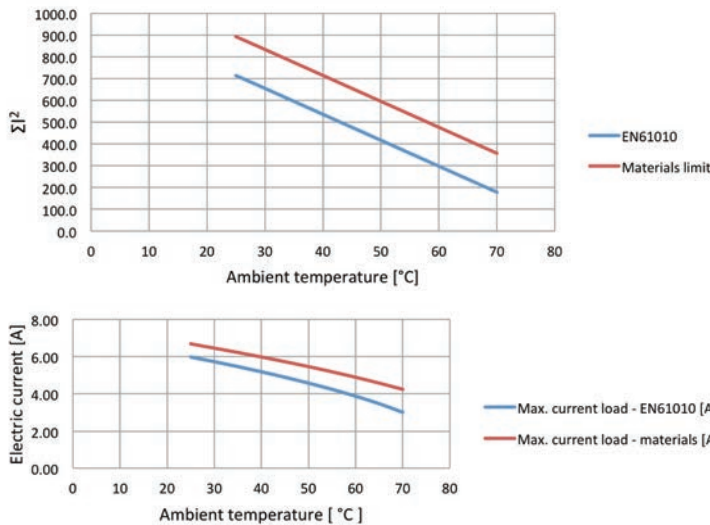
**This Cable Assembly is Not Suitable for Connection to a Pickering Switching Product**



### Technical Specification

<b>Connector Type (End A):</b>	20-Pin GMCT
Gender	Male
Securing Method	6-32 UNC screwlocks
<b>Connector Type (End B):</b>	20-Pin GMCT
Gender	Male
Securing Method	6-32 UNC screwlocks
<b>Cable Assembly Rating:</b>	
Maximum Current	10A
Maximum Voltage	500VDC/500VAC
Insulation Resistance	1000MOhm
<b>Connectors:</b>	
Contact Material	Gold plated copper alloy
Contact Resistance	3mOhm
Cable Exit	Rear
Overall Size (Approx)	H40 x W20 x D62mm
<b>Cable Type:</b>	
Conductor: Material	Tinned copper wire
Strands	19/0.254 (1mm <sup>2</sup> , 18AWG)
Resistance	0.021Ω/m
Insulation	PFA, temp: -100 to +260 °C
Outer Sleeve	Polyester, Max temp 130°C
Screened Construction	Yes
Additional Braided Sleeve	Yes
Cable O/D	12mm nom
Minimum Bend Radius	25mm
Door Closure Allowance	100mm (see diagram)
<b>Notes:</b>	
Other cable lengths can be supplied.	

### Characteristic Plots for 40-970-020-1m



The top graph shows the permitted  $\Sigma I^2$  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  $\Sigma I^2$  is complied with.

### Product Order Codes

20-Pin GMCT Cable Assy, 10A, Male to Male,

0.5m Long

1.0m Long

2.0m Long

**A020GMR-020GMR-0B050**

**A020GMR-020GMR-0B100**

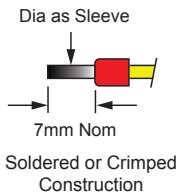
**A020GMR-020GMR-0B200**

## 20-Pin GMCT Cable Assy, 16A - Male to Underterminated

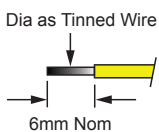
- High Specification and Highly Flexible 16A Cable
- Fully Screened Cable Construction with Braided Sleeve and Strain Relief
- Rear Cable Exit
- Fully Coded Markers to Ensure Easy Connection

### End B Options

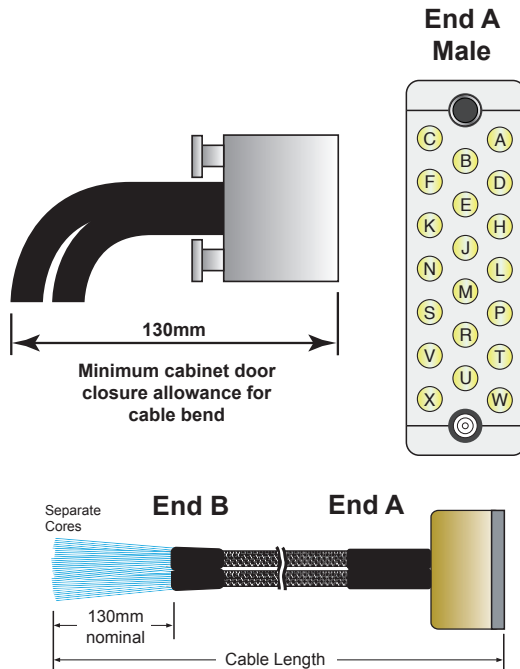
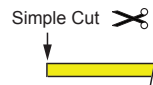
#### Ferrules



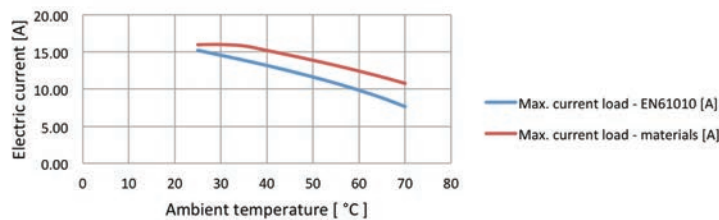
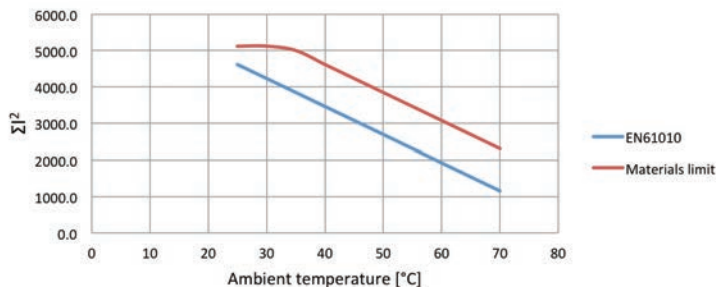
#### Tinned End



#### Cut End



### Characteristic Plots for 40-972B-020-1m



The top graph shows the permitted  $\Sigma I^2$  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  $\Sigma I^2$  is complied with.

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



### Technical Specification

<b>Connector Type (End A):</b>	20-Pin GMCT
Gender	Male
Securing Method	6-32 UNC screwlocks
<b>Underminated End (End B):</b>	
Free Wire Length	130mm nominal
Individual Wire Labelling	To connector pins
Wire End Options	Ferrules, Tinned, Cut End
<b>Cable Assembly Rating:</b>	
Maximum Current	16A
Maximum Voltage	500VDC/500VAC
Insulation Resistance	1000MΩ
<b>Connector:</b>	
Contact Material	Gold plated copper alloy
Contact Resistance	3mΩ
Cable Exit	Rear
Overall Size (Approx)	H40 x W20 x D62mm
<b>Cable Type:</b>	
Conductor: Material	Copper wire
Strands	19/0.41 (2.5mm <sup>2</sup> , 14AWG)
Resistance	0.013Ω/m
Capacitance	120pF/m typical
Insulation	PFA 500V
Outer Sleeve	Polyester, Max temp 130°C
Screened Construction	Yes
Additional Braided Sleeve	Yes
Cable O/D	10mm
Minimum Bend Radius	25mm
Door Closure Allowance	130mm (see diagram)

#### Notes:

- Please ensure appropriate electrical safety precautions are observed when using this product.
- Other cable lengths can be supplied.

### Product Order Codes

20-Pin GMCT Cable Assy, 16A, Boot Lace Ferrules,

Male to Underminated, 0.5m Long	40-972C-020-0.5m-MU
Male to Underminated, 1.0m Long	40-972C-020-1m-MU
Male to Underminated, 2.0m Long	40-972C-020-2m-MU

### Part numbers for other versions:

End B:  
T = Tinned End  
C = Cut End

A020GMR-1B\*\*\*

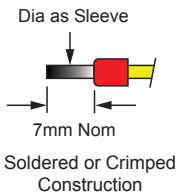
Cable Length:  
050 = 0.5m  
100 = 1.0m  
200 = 2.0m

## 20-Pin GMCT Cable Assy, 10A - Male to Untermated

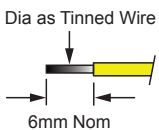
- High Specification & Highly Flexible 10A Cable
- Fully Screened Cable Construction with Braided Sleeve and Strain Relief
- Rear Cable Exit
- Fully Coded Markers to Ensure Easy Connection

### End B Options

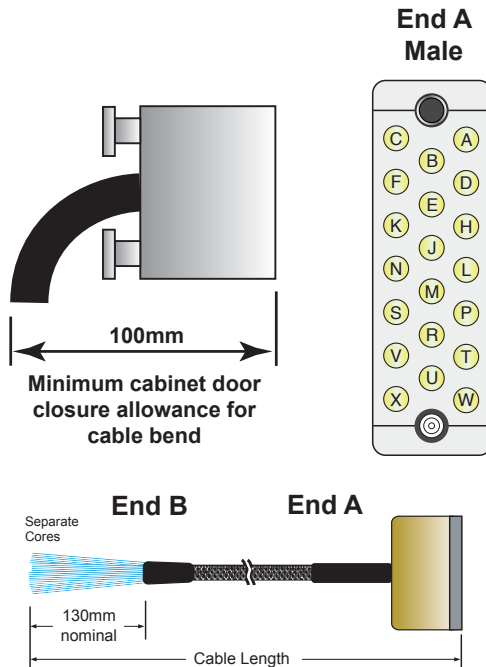
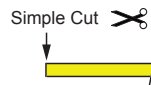
#### Ferrules



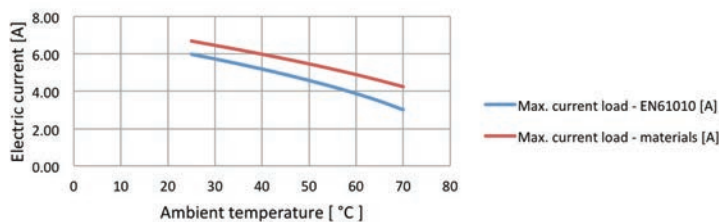
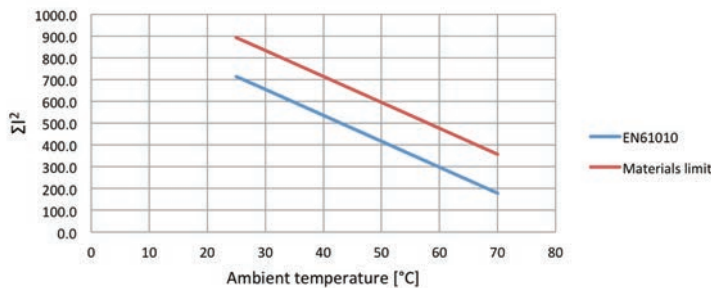
#### Tinned End



#### Cut End



### Characteristic Plots for 40-972A-020-1m



The top graph shows the permitted  $\Sigma I^2$  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  $\Sigma I^2$  is complied with.

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



### Technical Specification

<b>Connector Type (End A):</b>	20-Pin GMCT
<b>Gender</b>	Male
<b>Securing Method</b>	6-32 UNC screwlocks
<b>Untermated End (End B):</b>	
Free Wire Length	130mm nominal
Individual Wire Labelling	To connector pins
Wire End Options	Ferrules, Tinned, Cut End
<b>Cable Assembly Rating:</b>	
Maximum Current	10A
Maximum Voltage	500VDC/500VAC
Insulation Resistance	1000MΩ
<b>Connector:</b>	
Contact Material	Gold plated copper alloy
Contact Resistance	3mΩ
Cable Exit	Rear
Overall Size (Approx)	H40 x W20 x D62mm
<b>Cable Type:</b>	
Conductor: Material	Tinned copper wire
Strands	19/0.254 (1mm², 18AWG)
Resistance	0.021Ω/m
Insulation	PFA, temp: -100 to +260 °C
Outer Sleeve	Polyester, Max temp 130°C
Screened Construction	Yes
Additional Braided Sleeve	Yes
Cable O/D	10mm
Minimum Bend Radius	25mm
Door Closure Allowance	100mm (see diagram)

#### Notes:

- Please ensure appropriate electrical safety precautions are observed when using this product.
- Other cable lengths can be supplied.

### Product Order Codes

**20-Pin GMCT Cable Assy, 10A, Boot Lace Ferrules,**

**Male to Untermated, 0.5m Long**

**A020GMR-F-0C050**

**Male to Untermated, 1.0m Long**

**A020GMR-F-0C100**

**Male to Untermated, 2.0m Long**

**A020GMR-F-0C200**

### Part numbers for other versions:

**End B:**  
T = Tinned End  
C = Cut End

**A020GMR-\* -0C\*\*\***

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

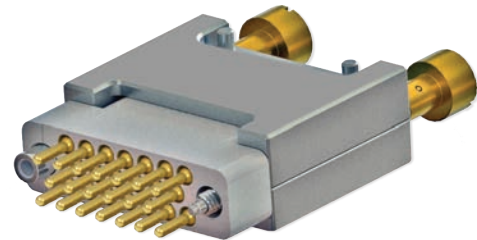
## 20-Pin GMCT Connector, 16 Amp - Male

- 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.

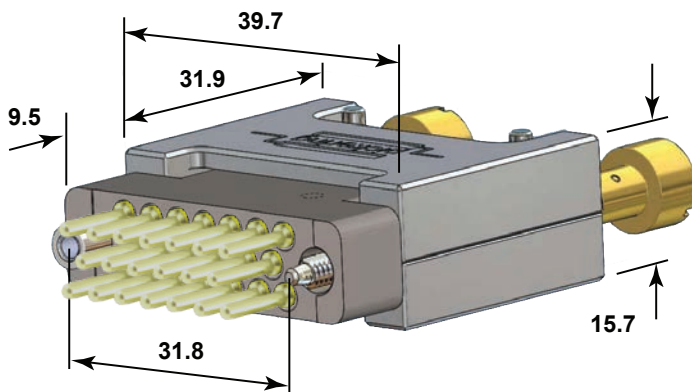
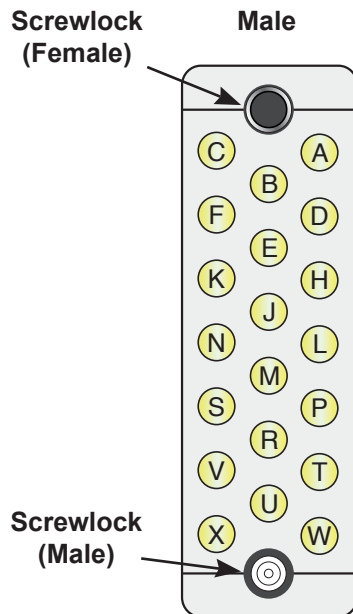
When the product is used without a backshell users should make their own cable strain relief arrangements and ensure appropriate electrical safety precautions are observed.

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



M

With Backshell



### Technical Specification

<b>Connector Type:</b>	20-Pin GMCT
Gender	Male
Securing Method:	
Product with Backshell	6-32 UNC screwlocks
Product without Backshell	6-32 UNC screwlocks
Wire Connection	Solder bucket
<b>Connector Ratings:</b>	
Maximum Current	16A
Maximum Voltage	500V AC
Cable Exit:	Rear
Cable Exit Size	20.4 x 12mm
Overall Size (Approx)	H40 x W16 x D56mm
<b>20-Pin GMCT:</b>	
Contact Material	Gold plated copper alloy
Contact Resistance	3mOhm
<b>Wire Connection:</b>	
Maximum Wire Size	14AWG
Recommended Insulation	PTFE
Additional Cable Clamp	Yes (in backshell)
<b>Notes:</b>	The supplied connector includes 20 off 16A contacts of the appropriate gender.

### Product Order Codes

20-Pin GMCT Connector, 16A, Solder Bucket,  
With Backshell, Male  
Without Backshell, Male

40-960-020-16A-M  
92-960-020-16A-M

## 20-Pin GMCT Connector, 10 Amp - Male

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

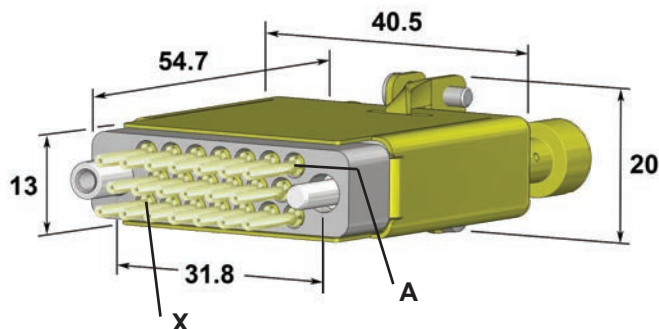
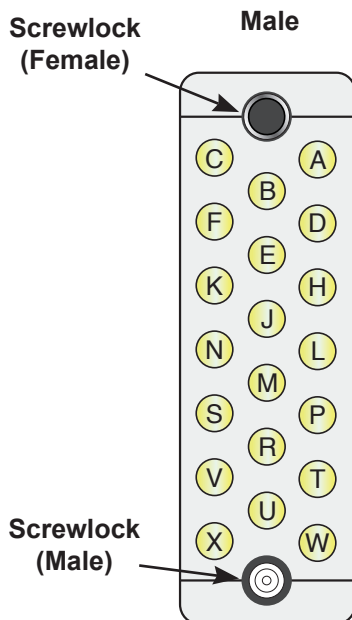
This accessory is designed to allow users to directly terminate with soldered connections to the connector.

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.

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



With Backshell M



### Technical Specification

<b>Connector Type:</b>	20-Pin GMCT
Gender	Male
Securing Method:	
Product with Backshell	6-32 UNC screwlocks
Product without Backshell	6-32 UNC screwlocks
Wire Connection	Solder bucket
<b>Connector Ratings:</b>	
Maximum Current	10A
Maximum Voltage	500V AC
Cable Exit:	Rear
Cable Exit Size	11mm dia
Overall Size (Approx)	H40 x W20 x D62mm
<b>20-Pin GMCT:</b>	
Contact Material	Gold plated copper alloy
Contact Resistance	3mOhm
<b>Wire Connection:</b>	
Maximum Wire Size	16AWG
Recommended Insulation	PTFE
Additional Cable Clamp	Yes (in backshell)
<b>Notes:</b>	
The supplied connector includes 20 off 10A contacts of the appropriate gender.	

### Product Order Codes

20-Pin GMCT Connector, 10A, Solder Bucket,

With Backshell, Male

Without Backshell, Male

40-960-020-10A-M

92-960-020-10A-M

## Custom Termination

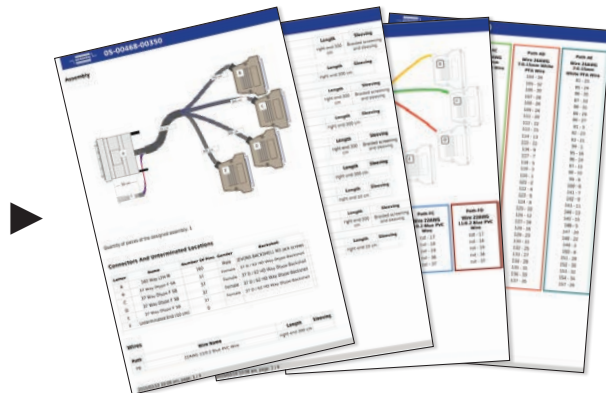
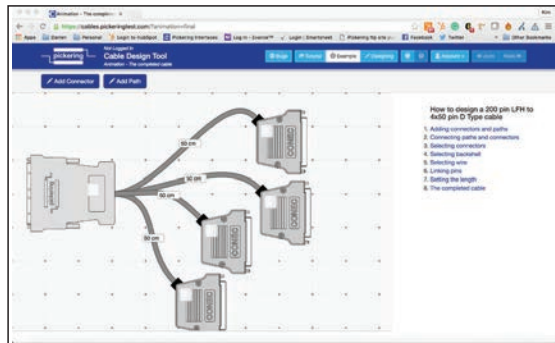
Pickering Interfaces are able to manufacture custom built cable assemblies and backshells that mate with all the connectors we use in our extensive product range and to provide connection solutions for third party products.

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](https://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.