200-Pin LFH Accessories

90-002D

- 150 VDC, 1A
- Cable Assemblies
- Connector Blocks
- Cable and 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, connector blocks and pcb connectors.

Cable Assemblies

Cable assemblies are offered in connector to connector, and connector to unterminated versions. The unterminated cables are offered with tinned ends.

Connector Blocks

Connector Blocks convert the 200-pin LFH connections to an array of screw terminals. The customer can then interface to other devices using his own wiring.

An Example of a PXI Product using 200-Pin LFH Connectors

Custom Design Needs

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

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

An Example of a Populated Pickering PXI Chassis

Note: PXI Chassis

Due to constraints on the connector design some connector backshells slightly overlap the adjacent module when fitted, and it may be necessary to remove the connector to take out the card on the immediate left.

Cable Assemblies

Description		End 1	End 2		Cable Length	Product Order Code and Part Number	Data Sheet Page
		Gender & Cable Exit	Gender & Cable Exit	Options			
	Cable Assy, 200-Pin LFH, 1A	Male, Rear Cable Exit, 4-40 UNC Screwlocks (Male)	Female, Rear Cable Exit, 4-40 UNC Screwlocks (Male)	-	0.5 m 1 m 2 m	A200LMR-200LFR-6B050 A200LMR-200LFR-6B100 A200LMR-200LFR-6B200	6
		Male, Rear Cable Exit, 4-40 UNC Screwlocks (Male)	Male, Rear Cable Exit, 4-40 UNC Screwlocks (Male)	-	0.5 m 1 m 2 m	40-970B-200-0.5m-MM 40-970B-200-1m-MM 40-970B-200-2m-MM	7
	Extender Cable Assy, 200-Pin LFH, 1A	Male, Rear Cable Exit, 4-40 UNC Screwlocks (Male)	Female, Rear Cable Exit, 4-40 UNC Screwlocks (Female)	-	0.5 m 1 m 2 m	A200LMR-200LFR-5B050 A200LMR-200LFR-5B100 A200LMR-200LFR-5B200	8
	Extender Cable Assy, 200-Pin LFH, 1A	Male, 90 ° Exit (Towards Pin 1), 4-40 UNC Screwlocks (Male)	Female, Rear Cable Exit, 4-40 UNC Screwlocks (Female)	-	0.5 m 1 m 2 m	A200LMB-200LFR-5B050 A200LMB-200LFR-5B100 A200LMB-200LFR-5B200	9
	Cable Assy, 200-Pin LFH to Unterminated, 1A	Male, Rear Cable Exit, 4-40 UNC Screwlocks (Male)	Unterminated	Tinned End	0.5 m 1 m 2 m	40-972B-200-0.5m-MU 40-972B-200-1m-MU 40-972B-200-2m-MU	10
	Cable Assy, 200-Pin LFH to 50-Pin Ribbon, 1A	Male, Rear Cable Exit, 4-40 UNC Screwlocks (Male)	4 x 50-Pin Ribbon, Female, (Push Fit)	-	0.5 m 1 m 2 m	40-971B-200-0.5m-MF 40-971B-200-1m-MF 40-971B-200-2m-MF	12
			4 x 50-Pin Ribbon, Male,(Latches)	-	0.5 m 1 m 2 m	40-971B-200-0.5m-MM 40-971B-200-1m-MM 40-971B-200-2m-MM	14
	Cable Assy, 200-Pin LFH, to 50-Pin D-Type, 1A	Male, Rear Cable Exit, 4-40 UNC Screwlocks (Male)	4 x 50-Pin D-Sub, Male, 45 ° Exit, (4-40 UNC, Male)	-	0.5 m 1 m 2 m	40-971B-200D-0.5m-MM 40-971B-200D-1m-MM 40-971B-200D-2m-MM	16
			4 x 50-Pin D-Sub, Female, 45 ° Exit, (4-40 UNC, Male)	-	0.5 m 1 m 2 m	40-971B-200D-0.5m-MF 40-971B-200D-1m-MF 40-971B-200D-2m-MF	
		Male, 90 ° Exit (Away from Pin 1), 4-40 UNC Screwlocks (Male)	4 x 50-Pin D-Sub, Female, 45 ° Exit, (4-40 UNC, Male)	-	0.5 m 1 m 2 m	A200LMB-04F050D5B050 A200LMB-04F050D5B100 A200LMB-04F050D5B200	19
Note: Custom lengths by quotation. Max length 5 m.							

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

Male Connector Blocks/Connectors

PCB Connectors

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	End 2		Cable Length	Product Order Code and Part Number	Data Sheet Page
		Type	Type	Options			
	Cable Assy, 200-Pin LFH, 1A	Female, Rear Cable Exit, 4-40 UNC Screwlocks (Male)	Female, Rear Cable Exit, 4-40 UNC Screwlocks (Male)	-	0.5 m 1 m 2 m	A200LFR-200LFR-6B050 A200LFR-200LFR-6B100 A200LFR-200LFR-6B200	30
		Female, Rear Cable Exit, 4-40 UNC Screwlocks (Female)	Female, Rear Cable Exit, 4-40 UNC Screwlocks (Female)	-	0.5 m 1 m 2 m	40-970B-200-0.5m-FF 40-970B-200-1m-FF 40-970B-200-2m-FF	31
	Cable Assy, 200-Pin LFH to Unterminated, 1A	Female, Rear Cable Exit, 4-40 UNC Screwlocks (Female)	Unterminated	Tinned End	0.5 m 1 m 2 m	40-972B-200-0.5m-FU 40-972B-200-1m-FU 40-972B-200-2m-FU	32
	Cable Assy, 200-Pin LFH, 1A, to 50-Pin Ribbon	Female, Rear Cable Exit, 4-40 UNC Screwlocks (Female)	4 x 50-Pin Ribbon, Female, Push Fit		0.5 m 1 m 2 m	40-971B-200-0.5m-FF 40-971B-200-1m-FF 40-971B-200-2m-FF	34
			4 x 50-Pin Ribbon, Male, Latches		0.5 m 1 m 2 m	40-971B-200-0.5m-FM 40-971B-200-1m-FM 40-971B-200-2m-FM	36
Note: Custom lengths by quotation. Max length 5 m.							

Connector Blocks/Connectors

Description		Type	Options	Product Order Code and Part Number	Page
	Connector Block, 200-Pin LFH, 1A, Screw Terminal	Female, Rear Cable Exit, 4-40 UNC Screwlocks (Female)	With Backshell	B200LFR-2F-5B	38
			Without Backshell	B200LFX-2F-5B	
	Cable Connector 200-Pin LFH, 1A, Solder Pin	Male, Rear Cable Exit, M3 Screwlocks (Male)	With Backshell	40-961A-200-M3-M	39
	Cable Connector 200-Pin LFH, 1A, Solder to PCB	Female, Rear Cable Exit, 4-40 UNC Screwlocks (Male)	With Backshell	C200LFR-2SP-5A	40
			Without Backshell	C200LFX-2SP-5A	
	Cable Connector 200-Pin LFH, 1A, Solder to PCB	Female, Rear Cable Exit, 4-40 UNC or M3 Screwlocks (Female)	With Backshell (4-40 UNC)	40-961A-200-F	41
			Without Backshell (4-40 UNC)	92-961-200-F	
			With Backshell (M3)	40-961A-200-M3-F	

Cable Assy - Male to Female

- High Specification, Highly Flexible Cable
- Fully Screened Cable Construction with Strain Relief
- End B is Suitable for Connecting to PCB Mount Connectors and Breakouts

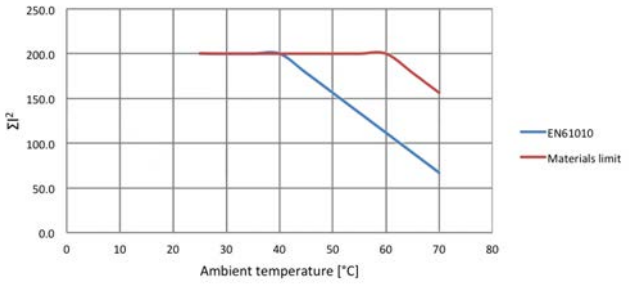
Female with Male Screwlocks — Male with Male Screwlocks

200-Pin LFH Cable Assy

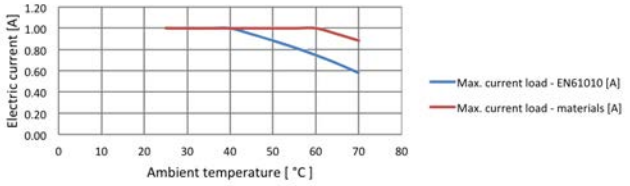
Technical Specification

Connector Type (End A): Gender & Securing Method	200-Pin LFH Male, 4-40 UNC screwlocks (male)
Connector Type (End B): Gender & Securing Method	200-Pin LFH Female, 4-40 UNC screwlocks (male)
Maximum Current	1A
Maximum Voltage	150 VDC
Insulation Resistance	1000 MOhm
Connectors:	
Contact Material	Gold over nickel
Contact Resistance	<20 mOhm
Cable Exit	Rear
Overall Size (Approx) Male Female	H87 x W18 x D84 mm H92 x W18 x D84.7 mm
Cable Type:	4 off identified x 50-wire cable, finishing as ribbon on 1.27 mm pitch Red marking on ribbon edge denotes pin 1
Conductor: Material & Strands Resistance Insulation	Tinned Copper, 7/36 (28AWG) 0.2 Ω/m PVC
Outer Sleeve	PVC
Screened Construction	Dual shielded Cable screens connected to backshells
Additional Braided Sleeve	No
Cable O/D	10 mm (Individual cables)
Minimum Bend Radius	25 mm
Door Closure Allowance	140 mm (see diagram)

Characteristic Plots for A200LMR-200LFR-6B100

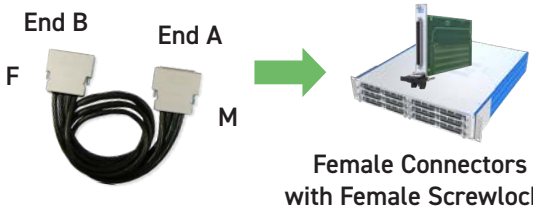


The graph shows the permitted ΣI^2 versus ambient temperature in accordance with EN61010 for user exposure to surface temperature and a higher limit imposed by the materials used where the cable is not directly user accessible.

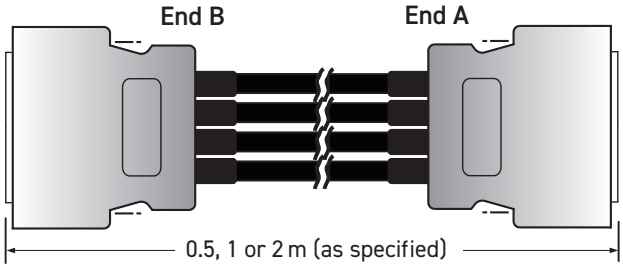


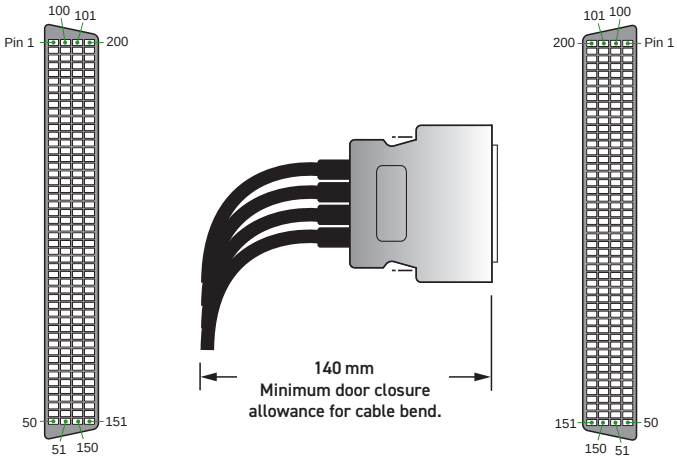
The graph shows the allowed current versus temperature assuming ALL wires carry the same current. Higher currents to the cable rating are permitted on individual wires provided the ΣI^2 is complied with.

Product Compatibility



Female Connectors with Female Screwlocks





End B - Female Mating Face — **End A - Male Mating Face**

Product Order Codes

200-Pin LFH Cable Assy, 1A, Male to Female,	
0.5 m Long	A200LMR-200LFR-6B050
1.0 m Long	A200LMR-200LFR-6B100
2.0 m Long	A200LMR-200LFR-6B200

Note: Other cable lengths can be supplied in multiples of 0.5 m Max length 5 m.

Cable Assy - Male to Male

90-002D

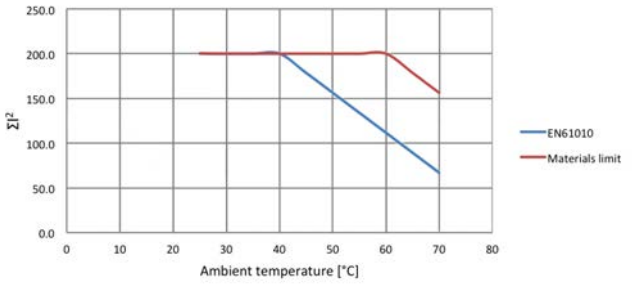
- High Specification, Highly Flexible Cable
- Fully Screened Cable Construction with Strain Relief
- End B is Suitable for Connecting to Another Module, or for Connection to a Female Connector with 4-40 UNC Female Screwlocks

200-Pin LFH Cable Assy

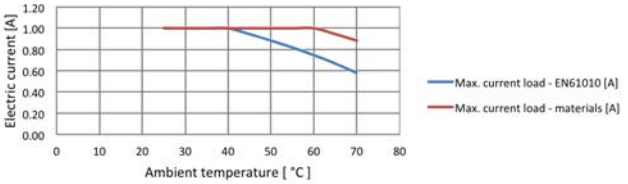
Technical Specification

Connector Type (End A): Gender & Securing Method	200-Pin LFH Male, 4-40 UNC screwlocks (male)
Connector Type (End B): Gender & Securing Method	200-Pin LFH Male, 4-40 UNC screwlocks (male)
Maximum Current	1A
Maximum Voltage	150 VDC
Insulation Resistance	1000 MOhm
Connectors:	
Contact Material	Gold over nickel
Contact Resistance	<20 mOhm
Cable Exit	Rear
Overall Size (Approx)	H87 x W18 x D84 mm
Cable Type:	4 off identified x 50-wire cable, finishing as ribbon on 1.27 mm pitch Red marking on ribbon edge denotes pin 1
Conductor: Material & Strands	Tinned Copper, 7/36 (28AWG)
Resistance	0.2 Ω/m
Insulation	PVC
Outer Sleeve	PVC
Screened Construction	Dual shielded Cable screens connected to backshells
Additional Braided Sleeve	No
Cable O/D	10 mm (Individual cables)
Minimum Bend Radius	25 mm
Door Closure Allowance	140 mm (see diagram)

Characteristic Plots for 40-970B-200-1m

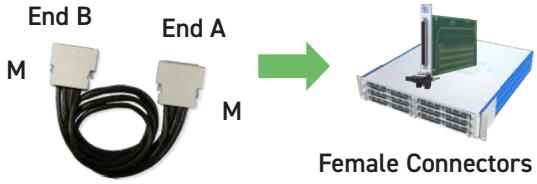


The graph shows the permitted ΣI^2 versus ambient temperature in accordance with EN61010 for user exposure to surface temperature and a higher limit imposed by the materials used where the cable is not directly user accessible.

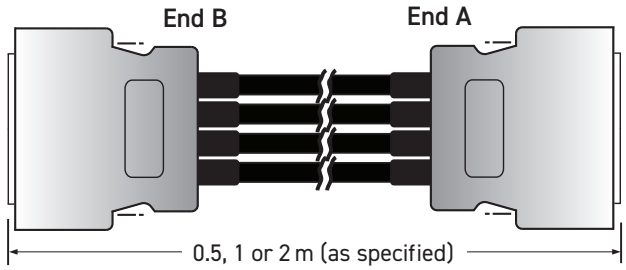


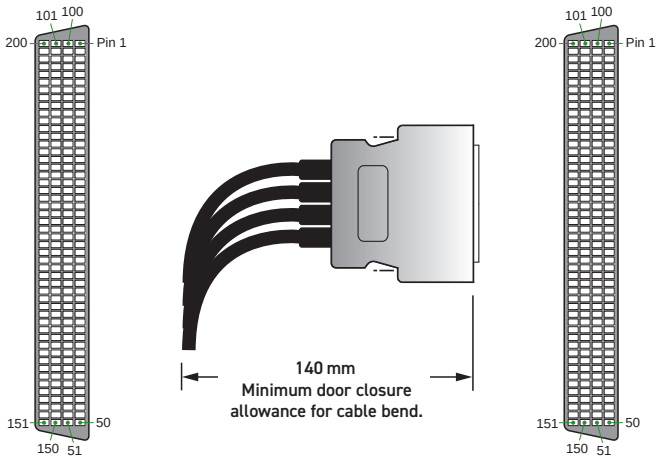
The graph shows the allowed current versus temperature assuming ALL wires carry the same current. Higher currents to the cable rating are permitted on individual wires provided the ΣI^2 is complied with.

Product Compatibility



Female Connectors with Female Screwlocks





End B - Male Mating Face

End A - Male Mating Face

Product Order Codes

200-Pin LFH Cable Assy, 1A, Male to Male,	
0.5 m Long	40-970B-200-0.5m-MM
1.0 m Long	40-970B-200-1m-MM
2.0 m Long	40-970B-200-2m-MM

Note: Other cable lengths can be supplied in multiples of 0.5 m. Max length 5 m.

Extender Cable Assy - Male to Female

90-002D

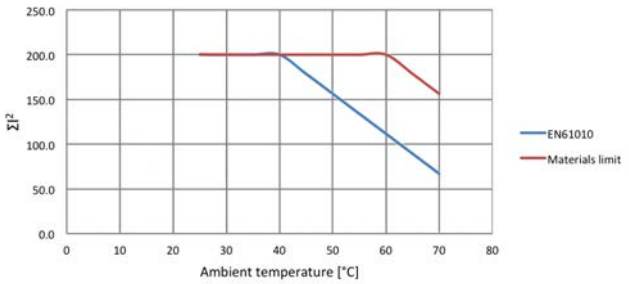
- High Specification, Highly Flexible Cable
- Fully Screened Cable Construction with Strain Relief
- End B is Suitable for Connection to Another Cable

200-Pin LFH Extender Cable Assy

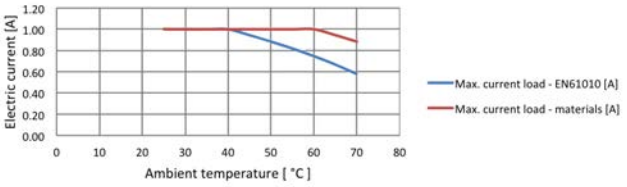
Technical Specification

Connector Type (End A): Gender & Securing Method	200-Pin LFH Male, 4-40 UNC screwlocks (male)
Connector Type (End B): Gender & Securing Method	200-Pin LFH Female, 4-40 UNC screwlocks (female)
Maximum Current	1A
Maximum Voltage	150 VDC
Insulation Resistance	1000 MOhm
Connectors:	
Contact Material	Gold over nickel
Contact Resistance	<20 mOhm
Cable Exit	Rear
Overall Size (Approx) Male Female	H87 x W18 x D84 mm H97 x W18 x D84.7 mm
Cable Type:	4 off identified x 50-wire cable, finishing as ribbon on 1.27 mm pitch Red marking on ribbon edge denotes pin 1
Conductor: Material & Strands Resistance Insulation	Tinned Copper, 7/36 (28AWG) 0.2 Ω/m PVC
Outer Sleeve	PVC
Screened Construction	Dual shielded Cable screens connected to backshells
Additional Braided Sleeve	No
Cable O/D	10 mm (Individual cables)
Minimum Bend Radius	25 mm
Door Closure Allowance	140 mm (see diagram)

Characteristic Plots for A200LMR-200LFR-5B100

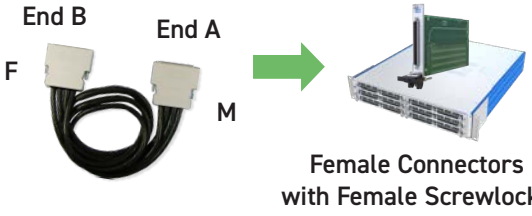


The graph shows the permitted ΣI² versus ambient temperature in accordance with EN61010 for user exposure to surface temperature and a higher limit imposed by the materials used where the cable is not directly user accessible.

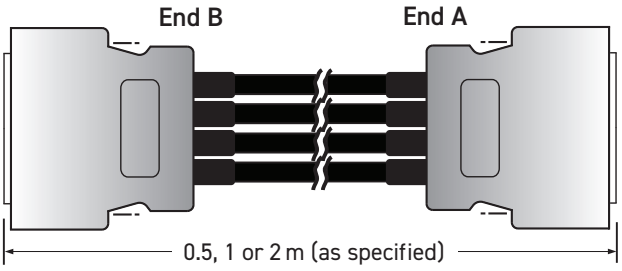


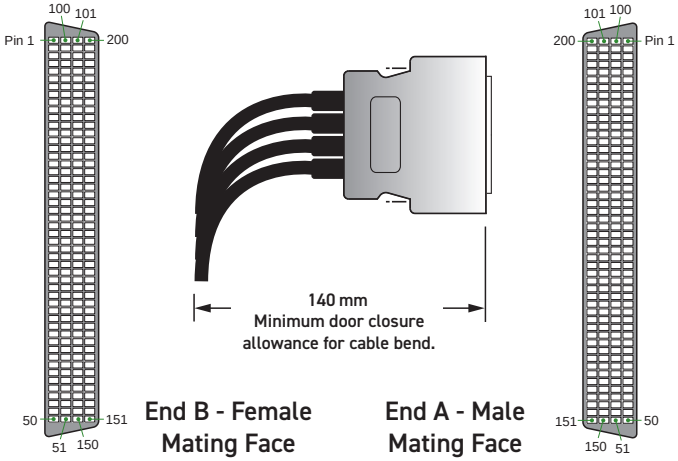
The graph shows the allowed current versus temperature assuming ALL wires carry the same current. Higher currents to the cable rating are permitted on individual wires provided the ΣI² is complied with.

Product Compatibility



Female Connectors with Female Screwlocks





Note: 200-Pin female cable connectors with female screwlocks only connect to a Pickering 200-Pin male cable connector with male screwlocks and to a 200-Pin male connector block.

Product Order Codes

200-Pin LFH Extender Cable Assy, 1A, Male to Female,	
0.5 m Long	A200LMR-200LFR-5B050
1.0 m Long	A200LMR-200LFR-5B100
2.0 m Long	A200LMR-200LFR-5B200

Note: Other cable lengths can be supplied in multiples of 0.5 m. Max length 5 m.

Extender Cable Assy - Male to Female

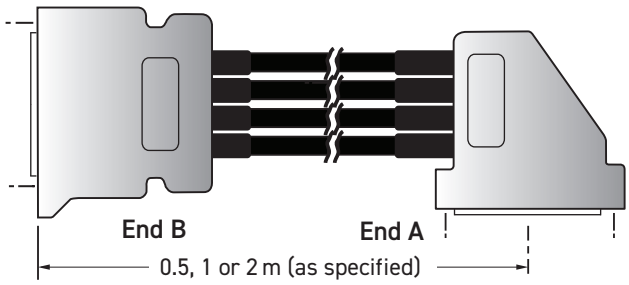
90-002D

- High Specification, Highly Flexible Cable
- Male Connector with Bottom Cable Exit
- Fully Screened Cable Construction with Strain Relief

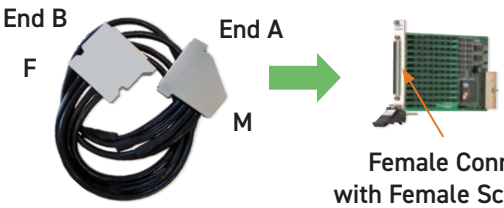
200-Pin LFH Extender Cable Assy

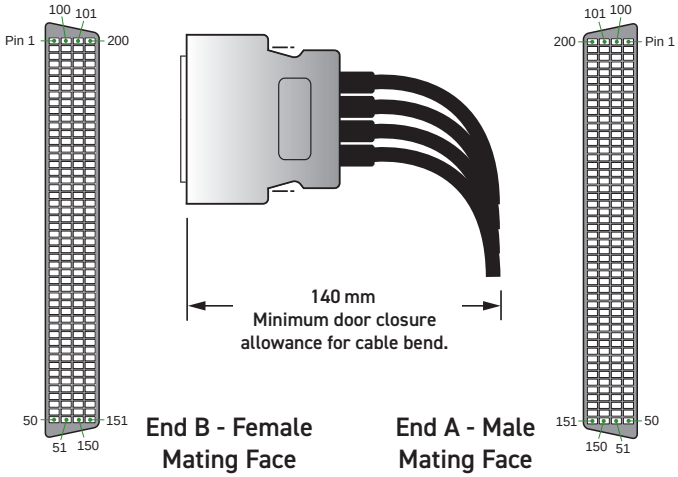
Technical Specification

Connector Type (End A): Gender & Securing Method	200-Pin LFH Male, 4-40 UNC screwlocks (male)
Connector Type (End B): Gender & Securing Method	200-Pin LFH Female, 4-40 UNC screwlocks (female)
Maximum Current	1 A
Maximum Voltage	150 VDC
Insulation Resistance	1000 MOhm
Connectors:	
Contact Material	Gold over nickel
Contact Resistance	<20 mOhm
Cable Exit: Male	90 ° (Towards Pin 1)
Female	Rear
Overall Size (Approx): Male	H87 x W18 x D80 mm
Female	H97 x W18 x D84.7 mm
Cable Type:	4 off identified x 50-pin twisted pair
Conductor: Material	Tinned stranded copper, 7/36 (28AWG)
Strands	7/36 (28AWG, 0.38 mm O/D)
Insulation	PVC
Outer Sleeve	PVC
Screened Construction	Dual shielded Cable screens connected to backshells
Additional Braided Sleeve	No
Cable O/D	8.1 mm (Individual cables)
Minimum Bend Radius	25 mm
Door Closure Allowance	End A: 80 mm (Connector) End B: 140 mm (see diagram)



Product Compatibility





Note: The female end of this extender cable allows the fitting of a 200-Pin male cable connector with male screwlocks and a 200-Pin male connector block.

Product Order Codes

200-Pin LFH Extender Cable Assy, 1 A, Male to Female,	
0.5 m Long	A200LMB-200LFR-5B050
1.0 m Long	A200LMB-200LFR-5B100
2.0 m Long	A200LMB-200LFR-5B200

Note: Other cable lengths can be supplied in multiples of 0.5 m. Max length 5 m

Cable Assy - Male to Unterminated

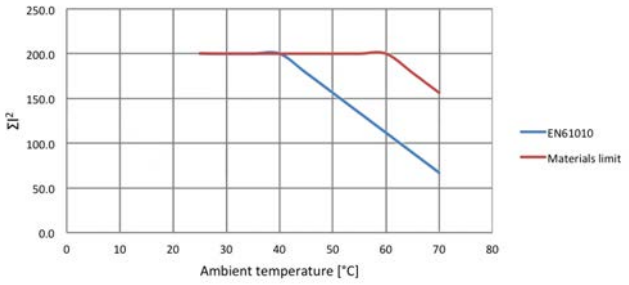
- High Specification, Highly Flexible Cable
- Fully Screened Cable Construction with Strain Relief
- Color Coded to Ensure Easy Connection

200-Pin LFH Unterminated Cable Assy

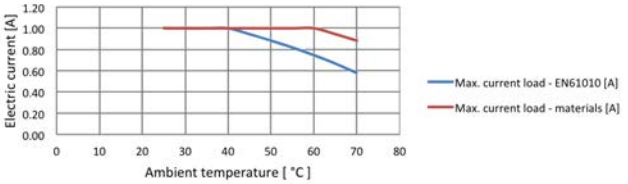
Technical Specification

Connector Type (End A): Gender & Securing Method	200-Pin LFH Male, 4-40 UNC screwlocks (male)
Unterminated End (End B): Free Wire Length Individual Wire Labelling 50-Pin Ribbon Contacts	4 x 50-Pin Unterminated Tinned contacts only Red marking on ribbon edge denotes pin 1 of individual 50-pin cables. Flying white/ black screen pigtails are also included 6mm min tinned copper
Maximum Current Maximum Voltage Insulation Resistance Connector: Contact Material Contact Resistance Cable Exit Overall Size (Approx) Cable Type: Conductor: Material & Strands Resistance Insulation Outer Sleeve Screened Construction Additional Braided Sleeve Cable O/D Minimum Bend Radius Door Closure Allowance	1A 150 VDC 1000 MOhm Gold over nickel <20 mOhm Rear H87 x W18 x D84 mm 4 off identified x 50-wire cable, finishing as ribbon on 1.27 mm pitch. Red marking on ribbon edge denotes pin 1 Tinned Copper, 7/36 (28AWG) 0.2 Ω/m PVC PVC Dual shielded Cable screens connected to backshells No 10 mm (Individual cables) 25 mm 140 mm (see diagram)

Characteristic Plots for 40-972B-200-1m

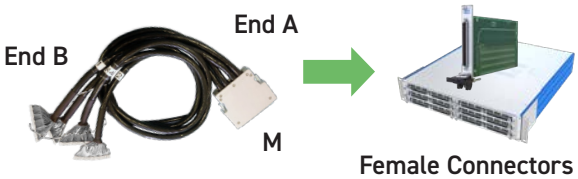


The graph shows the permitted ΣI² versus ambient temperature in accordance with EN61010 for user exposure to surface temperature and a higher limit imposed by the materials used where the cable is not directly user accessible.

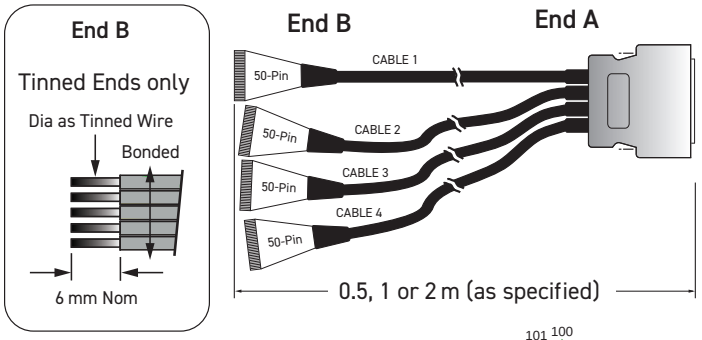


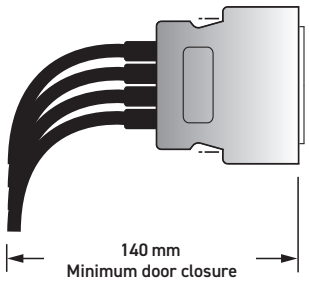
The graph shows the allowed current versus temperature assuming ALL wires carry the same current. Higher currents to the cable rating are permitted on individual wires provided the ΣI² is complied with.

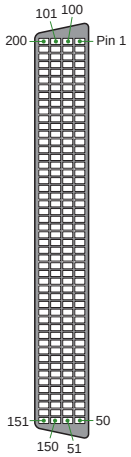
Product Compatibility



Female Connectors with Female Screwlocks







End A - Male Mating Face

Wiring Schedule information can be found on the following page.

Product Order Codes

200-Pin LFH Cable Assy, 1A, Male to Unterminated,Tinned Ends, 0.5 m Long	40-972B-200-0.5m-MU
1.0 m Long	40-972B-200-1m-MU
2.0 m Long	40-972B-200-2m-MU

Note: Other cable lengths can be supplied in multiples of 0.5 m. Max length 5 m.

200-Pin LFH Cable Assy Male to Unterminated
40-972B-200-*m-MU

End B

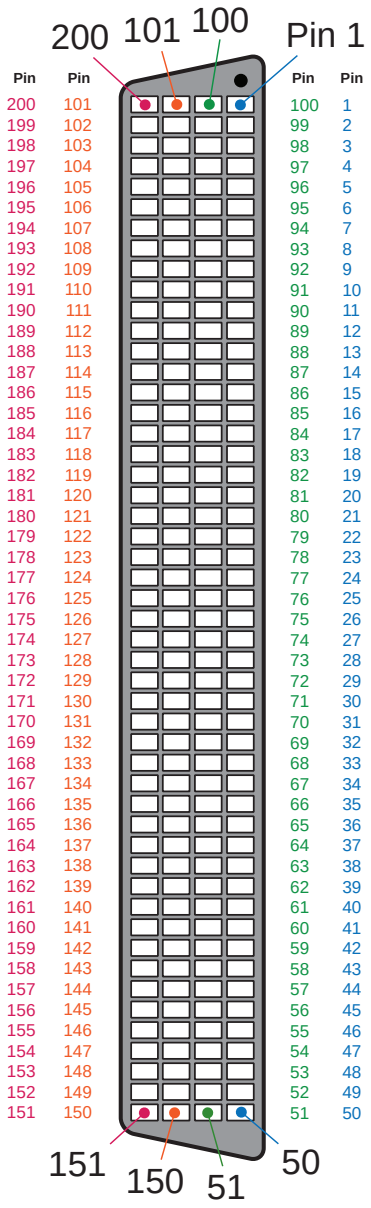
200-Pin LFH Connector Wiring (Cable 1)			
Pin	Wire Color	Pin	Wire Color
2	Grey	1	Grey - Red Stripe
4	Grey	3	Grey
6	Grey	5	Grey
8	Grey	7	Grey
10	Grey	9	Grey
12	Grey	11	Grey
14	Grey	13	Grey
16	Grey	15	Grey
18	Grey	17	Grey
20	Grey	19	Grey
22	Grey	21	Grey
24	Grey	23	Grey
26	Grey	25	Grey
28	Grey	27	Grey
30	Grey	29	Grey
32	Grey	31	Grey
34	Grey	33	Grey
36	Grey	35	Grey
38	Grey	37	Grey
40	Grey	39	Grey
42	Grey	41	Grey
44	Grey	43	Grey
46	Grey	45	Grey
48	Grey	47	Grey
50	Grey	49	Grey

200-Pin LFH Connector Wiring (Cable 2)			
Pin	Wire Color	Pin	Wire Color
52	Grey	51	Grey - Red Stripe
54	Grey	53	Grey
56	Grey	55	Grey
58	Grey	57	Grey
60	Grey	59	Grey
62	Grey	61	Grey
64	Grey	63	Grey
66	Grey	65	Grey
68	Grey	67	Grey
70	Grey	69	Grey
72	Grey	71	Grey
74	Grey	73	Grey
76	Grey	75	Grey
78	Grey	77	Grey
80	Grey	79	Grey
82	Grey	81	Grey
84	Grey	83	Grey
86	Grey	85	Grey
88	Grey	87	Grey
90	Grey	89	Grey
92	Grey	91	Grey
94	Grey	93	Grey
96	Grey	95	Grey
98	Grey	97	Grey
100	Grey	99	Grey

200-Pin LFH Connector Wiring (Cable 3)			
Pin	Wire Color	Pin	Wire Color
102	Grey	101	Grey - Red Stripe
104	Grey	103	Grey
106	Grey	105	Grey
108	Grey	107	Grey
110	Grey	109	Grey
112	Grey	111	Grey
114	Grey	113	Grey
116	Grey	115	Grey
118	Grey	117	Grey
120	Grey	119	Grey
122	Grey	121	Grey
124	Grey	123	Grey
126	Grey	125	Grey
128	Grey	127	Grey
130	Grey	129	Grey
132	Grey	131	Grey
134	Grey	133	Grey
136	Grey	135	Grey
138	Grey	137	Grey
140	Grey	139	Grey
142	Grey	141	Grey
144	Grey	143	Grey
146	Grey	145	Grey
148	Grey	147	Grey
150	Grey	149	Grey

200-Pin LFH Connector Wiring (Cable 4)			
Pin	Wire Color	Pin	Wire Color
152	Grey	151	Grey - Red Stripe
154	Grey	153	Grey
156	Grey	155	Grey
158	Grey	157	Grey
160	Grey	159	Grey
162	Grey	161	Grey
164	Grey	163	Grey
166	Grey	165	Grey
168	Grey	167	Grey
170	Grey	169	Grey
172	Grey	171	Grey
174	Grey	173	Grey
176	Grey	175	Grey
178	Grey	177	Grey
180	Grey	179	Grey
182	Grey	181	Grey
184	Grey	183	Grey
186	Grey	185	Grey
188	Grey	187	Grey
190	Grey	189	Grey
192	Grey	191	Grey
194	Grey	193	Grey
196	Grey	195	Grey
198	Grey	197	Grey
200	Grey	199	Grey

End A



200-Pin LFH Male Connector (Mating Face)

Note 1. The cable screens are connected to the connector backshell at End A
2. A flying white/black insulated screen pigtail is included at End B for each cable

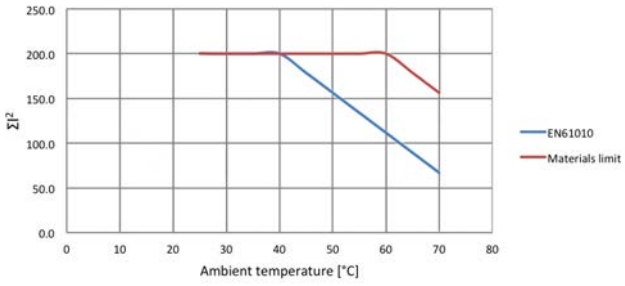
Cable Assy - Male to 4 x 50-Pin Ribbon (Female) 90-002D

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

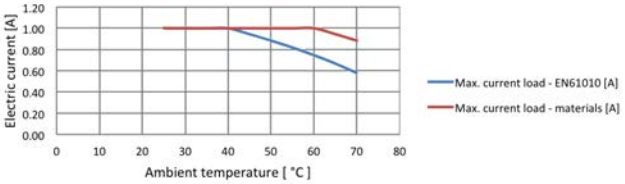
Technical Specification

Connector Type (End A): Gender & Securing Method	200-Pin LFH Male, 4-40 UNC screwlocks (male)
Connector Type (End B): Gender & Securing Method Individual Wire Labelling	4 off x 50-Pin ribbon, 0.1" (2.54 mm) pitch Female, Push fit Red marking on ribbon edge denotes pin 1 of individual 50-pin cables. Flying white/black screen pigtails are also included
Maximum Current Maximum Voltage Insulation Resistance Connector (End A): Contact Material Contact Resistance Cable Exit Overall Size (Approx) Connector (End B): Contact Material Contact Resistance Cable Exit Overall Size (Approx) Cable Type: Conductor: Material & Strands Resistance Insulation Outer Sleeve Screened Construction Additional Braided Sleeve Cable O/D Minimum Bend Radius Door Closure Allowance	1A 150 VDC 1000 MOhm Gold over nickel <20 mOhm Rear H87 x W18 x D84 mm Phosphor bronze/Au flash <20 mOhm Side H17 x W68 x D6 mm 4 off identified x 50-wire cable, finishing as ribbon on 1.27 mm pitch. Red marking on ribbon edge denotes pin 1 Tinned Copper, 7/36 (28AWG) 0.2 Ω/m PVC PVC Dual shielded (Screen/backshell connection) No 10 mm (Individual cables) 25 mm 140 mm (see diagram)

Characteristic Plots for 40-971B-200-1m



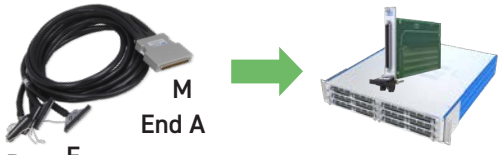
The graph shows the permitted ΣI^2 versus ambient temperature in accordance with EN61010 for user exposure to surface temperature and a higher limit imposed by the materials used where the cable is not directly user accessible.



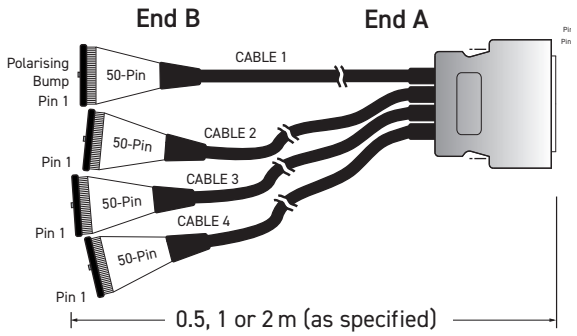
The graph shows the allowed current versus temperature assuming ALL wires carry the same current. Higher currents to the cable rating are permitted on individual wires provided the ΣI^2 is complied with.

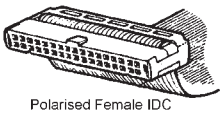
200-Pin LFH Cable Assy

Product Compatibility



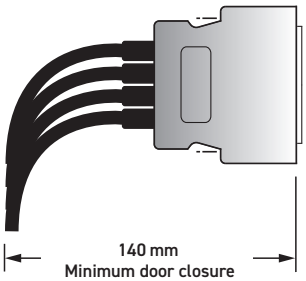
Female Connectors with Female Screwlocks

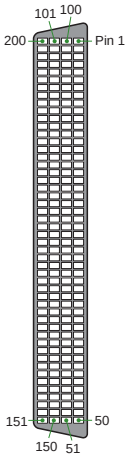




Polarised Female IDC

End B Mating Face





End A - Male Mating Face

Wiring Schedule information can be found on the following page.

Product Order Codes

200-Pin LFH Cable Assy, 1A, Male to 50-Pin Ribbon, Female,	
0.5 m Long	40-971B-200-0.5m-MF
1.0 m Long	40-971B-200-1m-MF
2.0 m Long	40-971B-200-2m-MF

Note: Mating IDC products are available on data sht 90-004D.
Other cable lengths can be supplied in multiples of 0.5 m.
Max length 5 m.

200-Pin LFH (Male) to 4 x 50-Pin IDC (Female)
40-971B-200-*m-MF

End B

200-Pin Connector Pin No.	CABLE 1		200-Pin Connector Pin No.
2	2	1	1
4	4	3	3
6	6	5	5
8	8	7	7
10	10	9	9
12	12	11	11
14	14	13	13
16	16	15	15
18	18	17	17
20	20	19	19
22	22	21	21
24	24	23	23
26	26	25	25
28	28	27	27
30	30	29	29
32	32	31	31
34	34	33	33
36	36	35	35
38	38	37	37
40	40	39	39
42	42	41	41
44	44	43	43
46	46	45	45
48	48	47	47
50	50	49	49

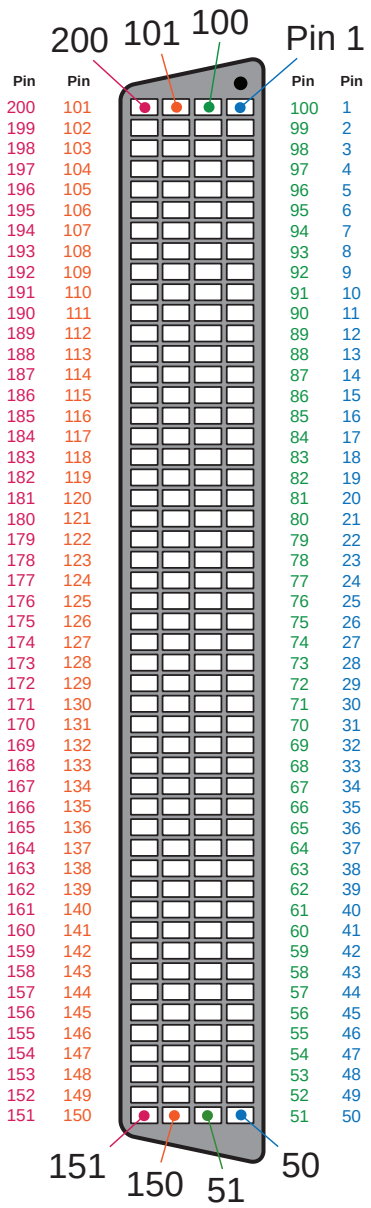
200-Pin Connector Pin No.	CABLE 2		200-Pin Connector Pin No.
52	2	1	51
54	4	3	53
56	6	5	55
58	8	7	57
60	10	9	59
62	12	11	61
64	14	13	63
66	16	15	65
68	18	17	67
70	20	19	69
72	22	21	71
74	24	23	73
76	26	25	75
78	28	27	77
80	30	29	79
82	32	31	81
84	34	33	83
86	36	35	85
88	38	37	87
90	40	39	89
92	42	41	91
94	44	43	93
96	46	45	95
98	48	47	97
100	50	49	99

200-Pin Connector Pin No.	CABLE 3		200-Pin Connector Pin No.
102	2	1	101
104	4	3	103
106	6	5	105
108	8	7	107
110	10	9	109
112	12	11	111
114	14	13	113
116	16	15	115
118	18	17	117
120	20	19	119
122	22	21	121
124	24	23	123
126	26	25	125
128	28	27	127
130	30	29	129
132	32	31	131
134	34	33	133
136	36	35	135
138	38	37	137
140	40	39	139
142	42	41	141
144	44	43	143
146	46	45	145
148	48	47	147
150	50	49	149

200-Pin Connector Pin No.	CABLE 4		200-Pin Connector Pin No.
152	2	1	151
154	4	3	153
156	6	5	155
158	8	7	157
160	10	9	159
162	12	11	161
164	14	13	163
166	16	15	165
168	18	17	167
170	20	19	169
172	22	21	171
174	24	23	173
176	26	25	175
178	28	27	177
180	30	29	179
182	32	31	181
184	34	33	183
186	36	35	185
188	38	37	187
190	40	39	189
192	42	41	191
194	44	43	193
196	46	45	195
198	48	47	197
200	50	49	199

50-Pin IDC Female Connectors (Mating Face)

End A



Pin	Pin		Pin	Pin
200	101		100	1
199	102		99	2
198	103		98	3
197	104		97	4
196	105		96	5
195	106		95	6
194	107		94	7
193	108		93	8
192	109		92	9
191	110		91	10
190	111		90	11
189	112		89	12
188	113		88	13
187	114		87	14
186	115		86	15
185	116		85	16
184	117		84	17
183	118		83	18
182	119		82	19
181	120		81	20
180	121		80	21
179	122		79	22
178	123		78	23
177	124		77	24
176	125		76	25
175	126		75	26
174	127		74	27
173	128		73	28
172	129		72	29
171	130		71	30
170	131		70	31
169	132		69	32
168	133		68	33
167	134		67	34
166	135		66	35
165	136		65	36
164	137		64	37
163	138		63	38
162	139		62	39
161	140		61	40
160	141		60	41
159	142		59	42
158	143		58	43
157	144		57	44
156	145		56	45
155	146		55	46
154	147		54	47
153	148		53	48
152	149		52	49
151	150		51	50

200-Pin LFH Male Connector (Mating Face)

Note 1. The cable screens are connected to the connector backshell at End A
2. A flying white/black insulated screen pigtail is included at End B for each cable

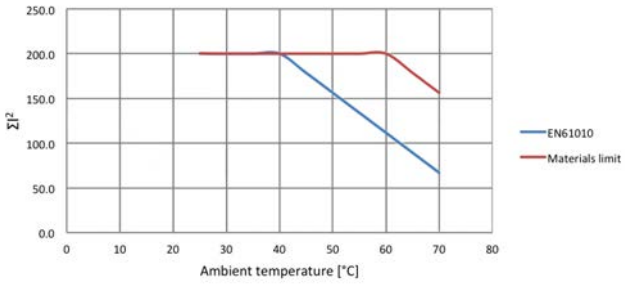
Cable Assy - Male to 4 x 50-Pin Ribbon (Male) 90-002D

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

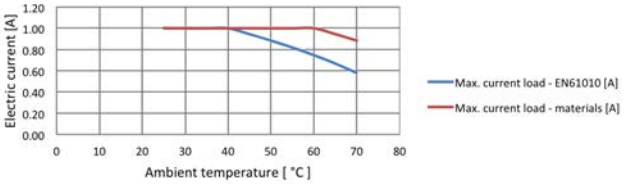
Technical Specification

Connector Type (End A): Gender & Securing Method	200-Pin LFH Male, 4-40 UNC screwlocks (male)
Connector Type (End B): Gender & Securing Method Individual Wire Labelling	4 off x 50-Pin ribbon, 0.1" (2.54 mm) pitch Male, Latches Red marking on ribbon edge denotes pin 1 of individual 50-pin cable. Flying white/ black screen pigtails are also included
Maximum Current Maximum Voltage Insulation Resistance Connector (End A): Contact Material Contact Resistance Cable Exit Overall Size (Approx) Connector (End B): Contact Material Contact Resistance Cable Exit Overall Size (Approx) Cable Type: Conductor: Material & Strands Resistance Insulation Outer Sleeve Screened Construction Additional Braided Sleeve Cable O/D Minimum Bend Radius Door Closure Allowance	1A 150 VDC 1000 MOhm Gold over nickel <20 mOhm Rear H87 x W18 x D84 mm Cu alloy/selective Au flash <20 mOhm Side H30.4 x W82.3 x D8 mm 4 off identified x 50-wire cable, finishing as ribbon on 1.27 mm pitch. Red marking on ribbon edge denotes pin 1 Tinned Copper, 7/36 (28AWG) 0.2 Ω/m PVC PVC Dual shielded (Screen/backshell connection) No 10 mm (Individual cables) 25 mm 140 mm (see diagram)

Characteristic Plots for 40-971B-200-1m



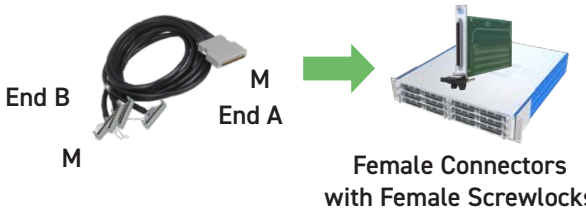
The graph shows the permitted ΣI^2 versus ambient temperature in accordance with EN61010 for user exposure to surface temperature and a higher limit imposed by the materials used where the cable is not directly user accessible.



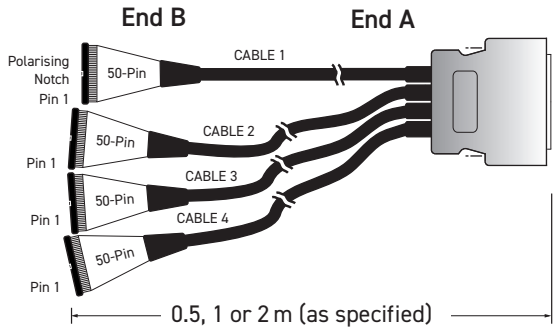
The graph shows the allowed current versus temperature assuming ALL wires carry the same current. Higher currents to the cable rating are permitted on individual wires provided the ΣI^2 is complied with.

200-Pin LFH Cable Assy

Product Compatibility

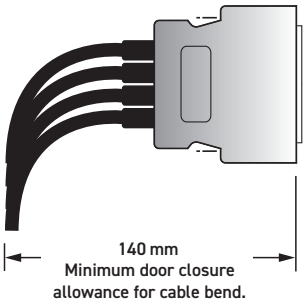


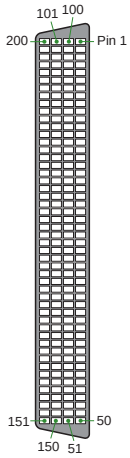
Female Connectors with Female Screwlocks



End B

50-Pin Male IDC connector





End A - Male Mating Face

Wiring Schedule information can be found on the following page.

Product Order Codes

200-Pin LFH Cable Assy, 1A, Male to 50-Pin Ribbon, Male,	
0.5 m Long	40-971B-200-0.5m-MM
1.0 m Long	40-971B-200-1m-MM
2.0 m Long	40-971B-200-2m-MM

Note: Mating IDC products are available on data sht 90-004D.
Other cable lengths can be supplied in multiples of 0.5 m.
Max length 5 m.

200-Pin LFH (Male) to 4 x 50-Pin IDC (Male)
40-971B-200-*m-MM

End B

200-Pin Connector Pin No.		CABLE 1	200-Pin Connector Pin No.	
1	1		2	2
3	3		4	4
5	5		6	6
7	7		8	8
9	9		10	10
11	11		12	12
13	13		14	14
15	15		16	16
17	17		18	18
19	19		20	20
21	21		22	22
23	23		24	24
25	25		26	26
27	27		28	28
29	29		30	30
31	31		32	32
33	33		34	34
35	35		36	36
37	37		38	38
39	39		40	40
41	41		42	42
43	43		44	44
45	45		46	46
47	47		48	48
49	49		50	50

200-Pin Connector Pin No.		CABLE 2	200-Pin Connector Pin No.	
51	1		2	52
53	3		4	54
55	5		6	56
57	7		8	58
59	9		10	60
61	11		12	62
63	13		14	64
65	15		16	66
67	17		18	68
69	19		20	70
71	21		22	72
73	23		24	74
75	25		26	76
77	27		28	78
79	29		30	80
81	31		32	82
83	33		34	84
85	35		36	86
87	37		38	88
89	39		40	90
91	41		42	92
93	43		44	94
95	45		46	96
97	47		48	98
99	49		50	100

200-Pin Connector Pin No.		CABLE 3	200-Pin Connector Pin No.	
101	1		2	102
103	3		4	104
105	5		6	106
107	7		8	108
109	9		10	110
111	11		12	112
113	13		14	114
115	15		16	116
117	17		18	118
119	19		20	120
121	21		22	122
123	23		24	124
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127	27		28	128
129	29		30	130
131	31		32	132
133	33		34	134
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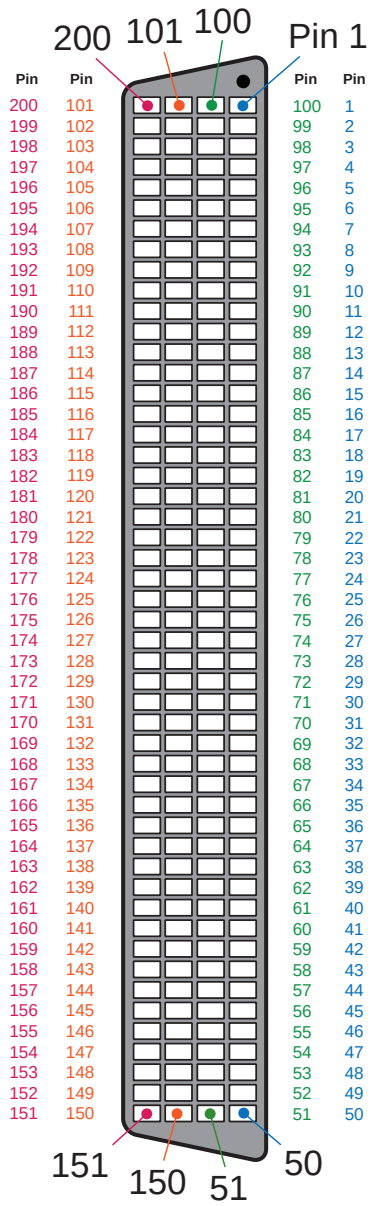
137	37		38	138
139	39		40	140
141	41		42	142
143	43		44	144
145	45		46	146
147	47		48	148
149	49		50	150

200-Pin Connector Pin No.		CABLE 4	200-Pin Connector Pin No.	
151	1		2	152
153	3		4	154
155	5		6	156
157	7		8	158
159	9		10	160
161	11		12	162
163	13		14	164
165	15		16	166
167	17		18	168
169	19		20	170
171	21		22	172
173	23		24	174
175	25		26	176
177	27		28	178
179	29		30	180
181	31		32	182
183	33		34	184
185	35		36	186
187	37		38	188
189	39		40	190
191	41		42	192
193	43		44	194
195	45		46	196
197	47		48	198
199	49		50	200

50-Pin IDC Male Connectors (Mating Face)

End A



Pin	Pin		Pin	Pin
200	101		100	1
199	102		99	2
198	103		98	3
197	104		97	4
196	105		96	5
195	106		95	6
194	107		94	7
193	108		93	8
192	109		92	9
191	110		91	10
190	111		90	11
189	112		89	12
188	113		88	13
187	114		87	14
186	115		86	15
185	116		85	16
184	117		84	17
183	118		83	18
182	119		82	19
181	120		81	20
180	121		80	21
179	122		79	22
178	123		78	23
177	124		77	24
176	125		76	25
175	126		75	26
174	127		74	27
173	128		73	28
172	129		72	29
171	130		71	30
170	131		70	31
169	132		69	32
168	133		68	33
167	134		67	34
166	135		66	35
165	136		65	36
164	137		64	37
163	138		63	38
162	139		62	39
161	140		61	40
160	141		60	41
159	142		59	42
158	143		58	43
157	144		57	44
156	145		56	45
155	146		55	46
154	147		54	47
153	148		53	48
152	149		52	49
151	150		51	50

200-Pin LFH Male Connector (Mating Face)

Note 1. The cable screens are connected to the connector backshell at End A
2. A flying white/black insulated screen pigtail is included at End B for each cable

Cable Assy - Male to 4 x 50-Pin D-Type

90-002D

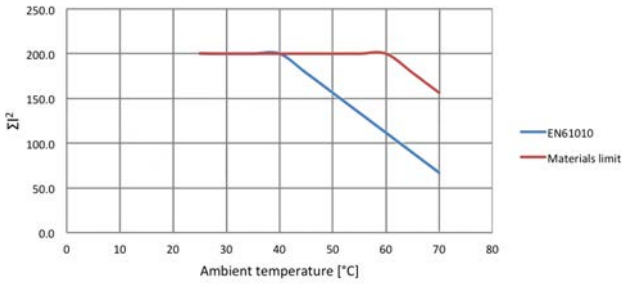
- High Specification, Highly Flexible Cable
- Can be used with Pickering 50-Pin D-Type Breakouts. See 90-005D

200-Pin LFH Cable Assy

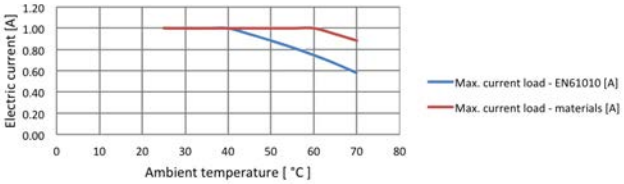
Technical Specification

Connector Type (End A): Gender & Securing Method	200-Pin LFH Male, 4-40 UNC screwlocks (male)
Connector Type (End B): Gender & Securing Method	4 off x 50-Pin D-Sub Male or female, 4-40 UNC screwlocks (male)
Maximum Current	1A
Maximum Voltage	150 VDC
Insulation Resistance	1000 MOhm
Connector (End A):	
Contact Material	Gold over nickel
Contact Resistance	<20 mOhm
Cable Exit	Rear
Overall Size (Approx)	H87 x W18 x D84 mm
Connectors (End B):	
Contact Material	Gold/Copper
Contact Resistance	<20 mOhm
Cable Exit	45 °
Overall Size (Approx)	H68 x W18.5 x D55 mm
Cable Type:	4 off identified x 50-wire cable, finishing as ribbon on 1.27 mm pitch. Red marking on ribbon edge denotes pin 1
Conductor: Material & Strands	Tinned Copper, 7/36 (28AWG)
Resistance	0.2 Ω/m
Insulation	PVC
Outer Sleeve	PVC
Screened Construction	Dual shielded Cable screens connected to backshells
Additional Braided Sleeve	No
Cable O/D	10 mm (Individual cables)
Minimum Bend Radius	25 mm
Door Closure Allowance	140 mm (see diagram)

Characteristic Plots for 40-971B-200D-1m

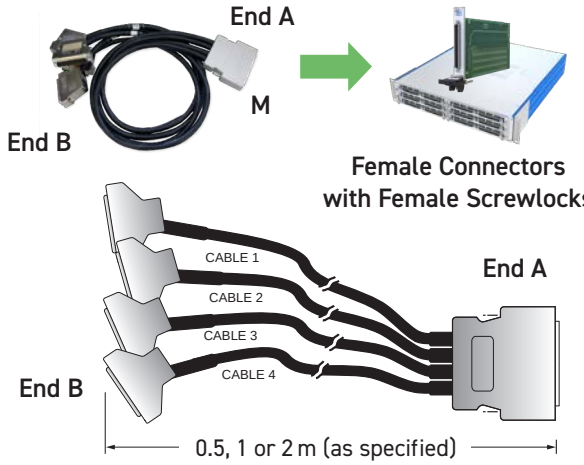


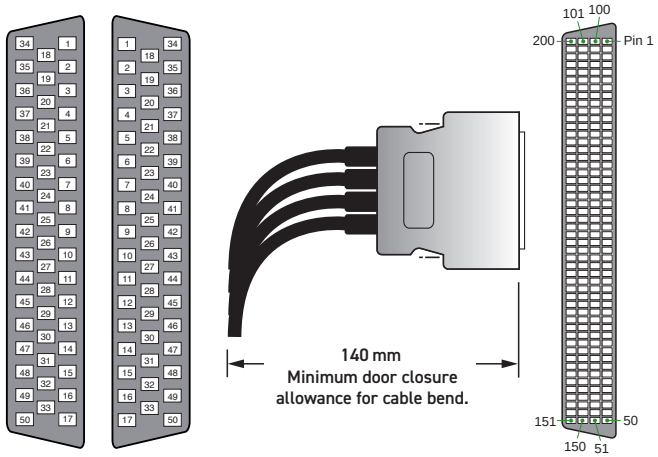
The graph shows the permitted ΣI^2 versus ambient temperature in accordance with EN61010 for user exposure to surface temperature and a higher limit imposed by the materials used where the cable is not directly user accessible.



The 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.

Product Compatibility





Wiring Schedule information can be found on the following pages.

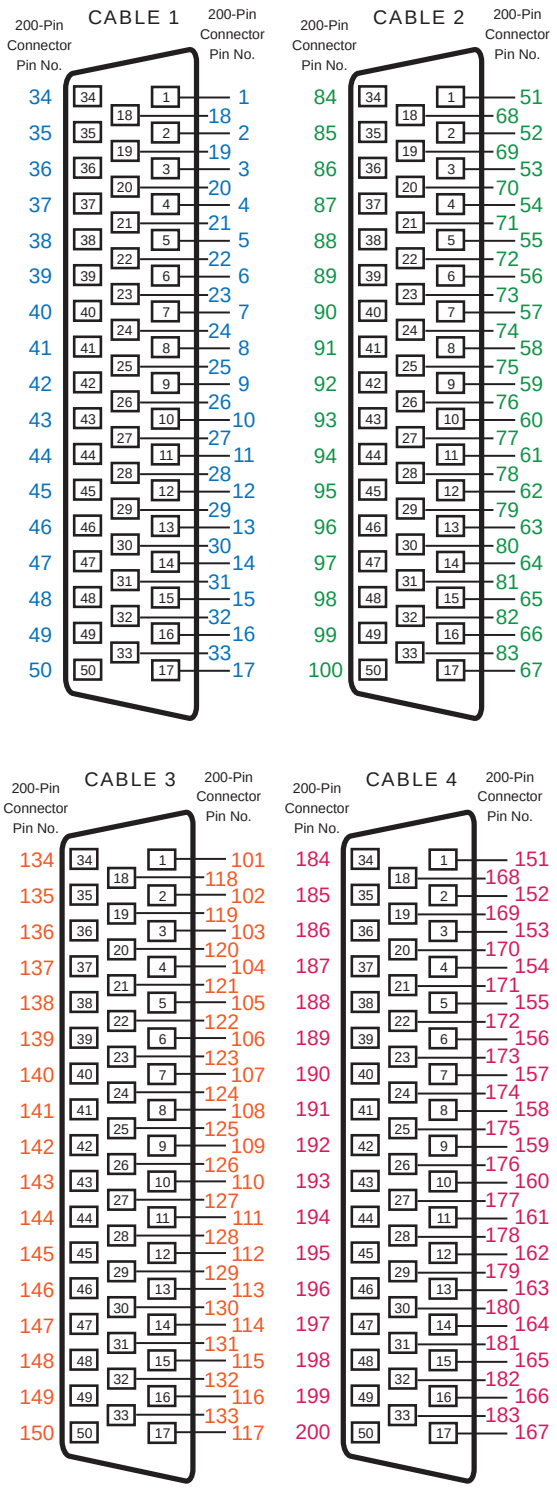
Product Order Codes

200-Pin LFH Cable Assy, 1A, Male to 50-Pin D-Type, Male,	
0.5 m Long	40-971B-200D-0.5m-MM
1.0 m Long	40-971B-200D-1m-MM
2.0 m Long	40-971B-200D-2m-MM
200-Pin LFH Cable Assy, 1A, Male to 50-Pin D-Type, Female,	
0.5 m Long	40-971B-200D-0.5m-MF
1.0 m Long	40-971B-200D-1m-MF
2.0 m Long	40-971B-200D-2m-MF

Note: Mating IDC products are available on data sht 90-005D. Other cable lengths can be supplied in multiples of 0.5 m. Max length 5 m.

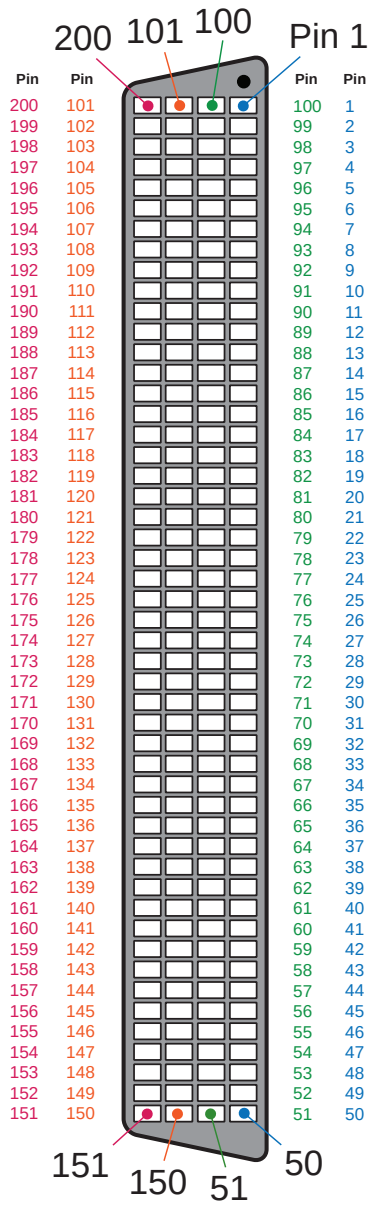
200-Pin LFH (Male) to 4 x 50-Pin D-Type (Male)
40-971B-200D-*m-MM

End B



50-Pin D-Type Male Connectors (Mating Face)

End A

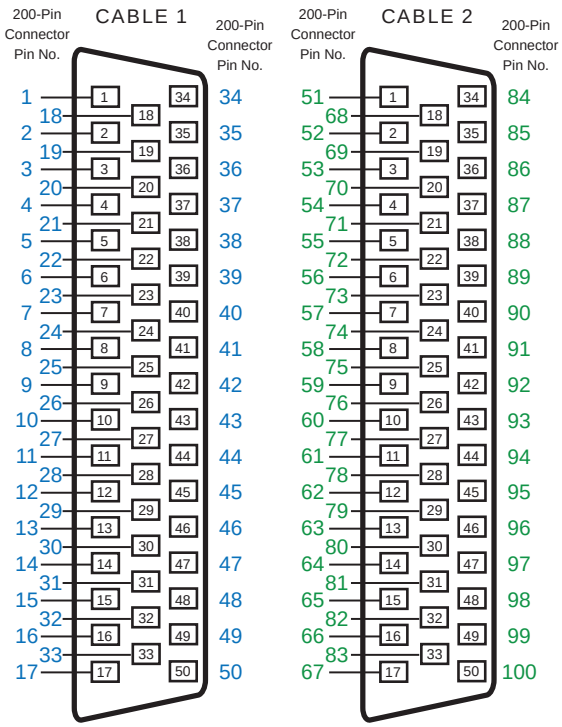


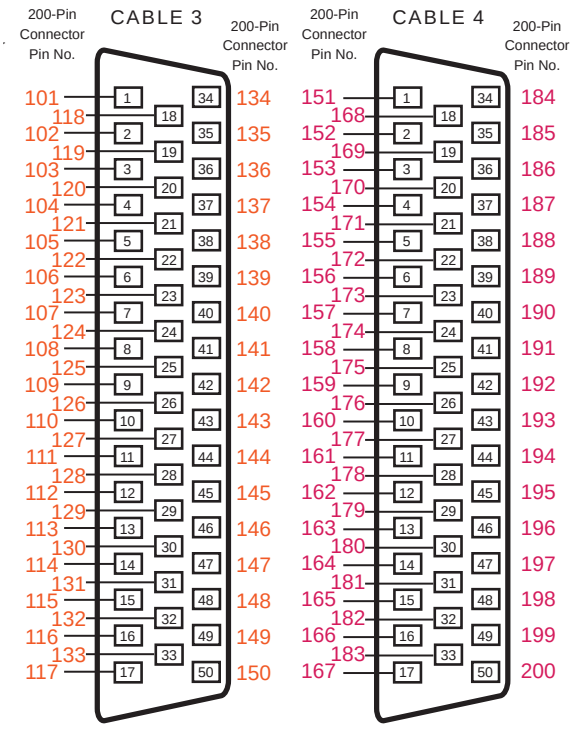
200-Pin LFH Male Connector (Mating Face)

Note. The cable screens are connected to the connector backshells

200-Pin LFH (Male) to 4 x 50-Pin D-Type (Female)
40-971B-200D-*m-MF

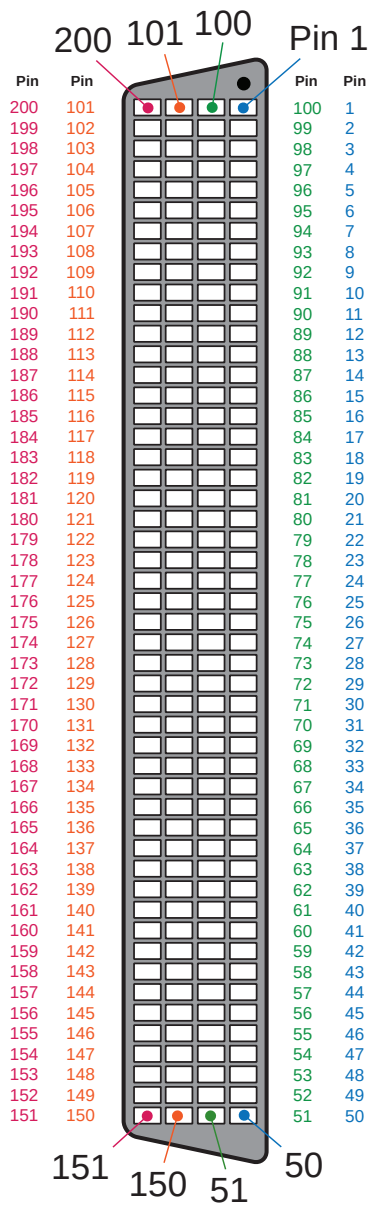
End B





50-Pin D-Type Female Connectors (Mating Face)

End A



200-Pin LFH Male Connector (Mating Face)

Note. The cable screens are connected to the connector backshells

Cable Assy - Male to 4 x 50-Pin D-Type

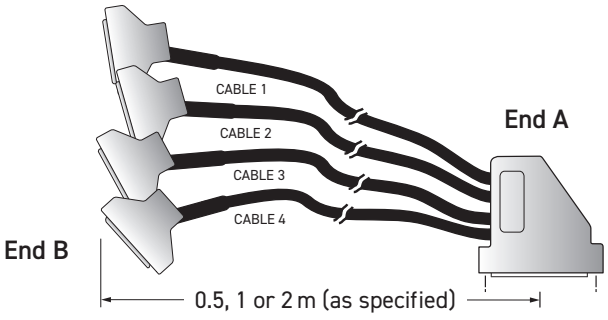
90-002D

- High Specification, Highly Flexible Cable
- Can be used with Pickering 50-Pin D-Type Breakouts. See 90-005D

200-Pin LFH Cable Assy

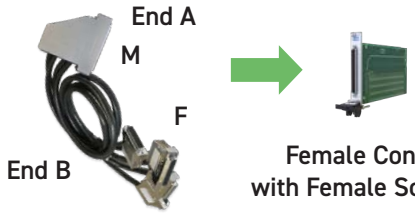
Technical Specification

Connector Type (End A): Gender & Securing Method	200-Pin LFH Male, 4-40 UNC screwlocks (male)
Connector Type (End B): Gender & Securing Method	4 off x 50-Pin D-Sub Female, 4-40 UNC screwlocks (male)
Maximum Current	1A
Maximum Voltage	150 VDC
Insulation Resistance	1000 MOhm
Connector (End A):	
Contact Material	Gold over nickel
Contact Resistance	<20 mOhm
Cable Exit	90 ° (Away from Pin 1)
Overall Size (Approx)	H86.6 x W17 x D83.5 mm
Connectors (End B):	
Contact Material	Gold/Copper
Contact Resistance	<20 mOhm
Cable Exit	45 °
Overall Size (Approx)	H68 x W18.5 x D55 mm
Cable Type:	4 off identified x 50-pin twisted pair
Conductor: Material	Tinned stranded copper, 7/36 (28AWG)
Strands	7/36 (28AWG, 0.38 mm O/D)
Insulation	PVC
Outer Sleeve	PVC
Screened Construction	Dual shielded Cable screens connected to backshells
Additional Braided Sleeve	No
Cable O/D	8.1 mm (Individual cables)
Minimum Bend Radius	25 mm
Door Closure Allowance	80 mm (see diagram)

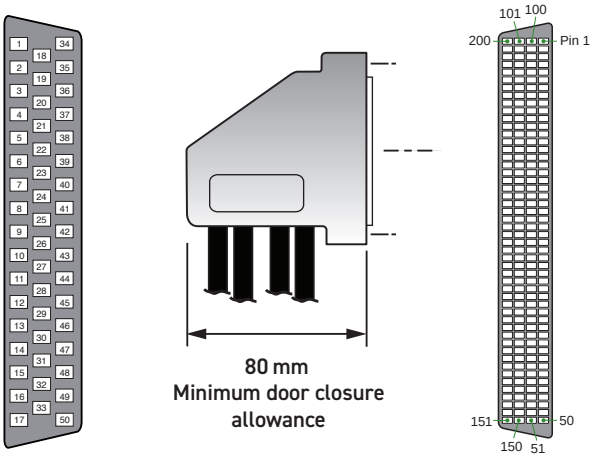


A Mating Male Breakout 40-967-050-M Converting a 50-Pin D-Type Connection to Screw Terminals

Product Compatibility



Female Connector with Female Screwlocks



Female End B Mating Face

End A - Male Mating Face

Wiring Schedule information can be found on the following page.

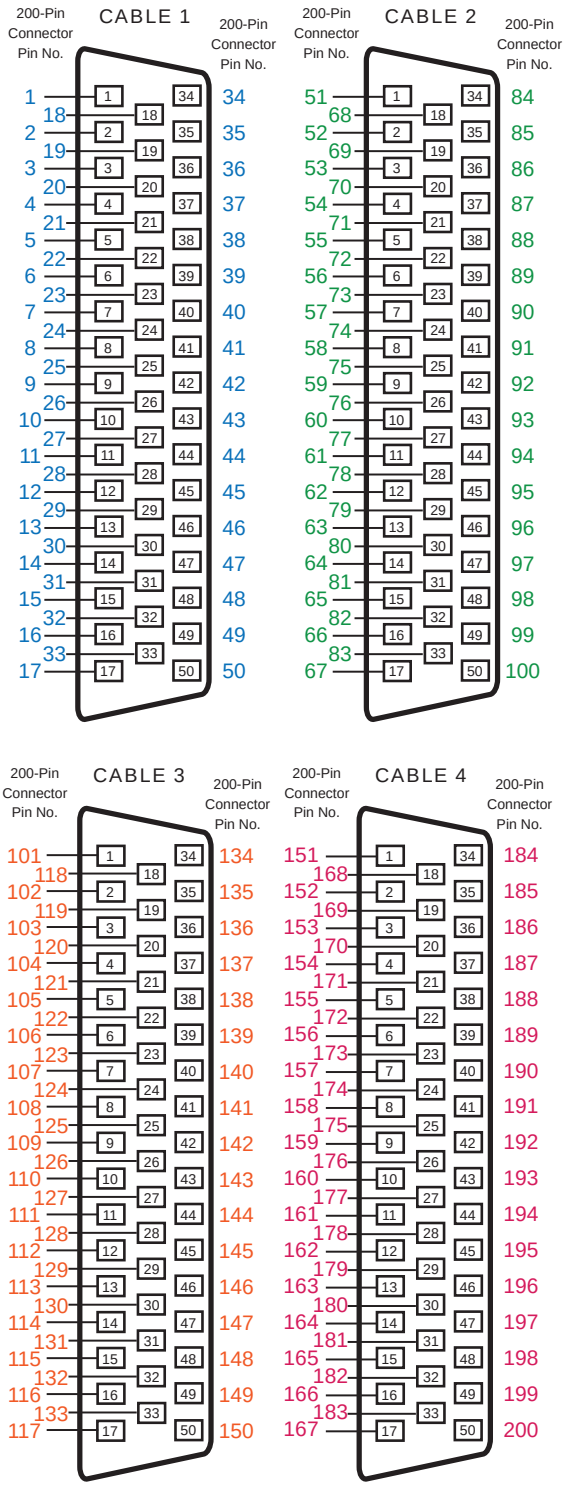
Product Order Codes

200-Pin LFH Cable Assy, 1A, Male to 50-Pin D-Type, Female,	
0.5 m Long	A200LMB-04F050D5B050
1.0 m Long	A200LMB-04F050D5B100
2.0 m Long	A200LMB-04F050D5B200

Note: Mating IDC products are available on data sht 90-005D. Other cable lengths can be supplied in multiples of 0.5 m. Max length 5 m.

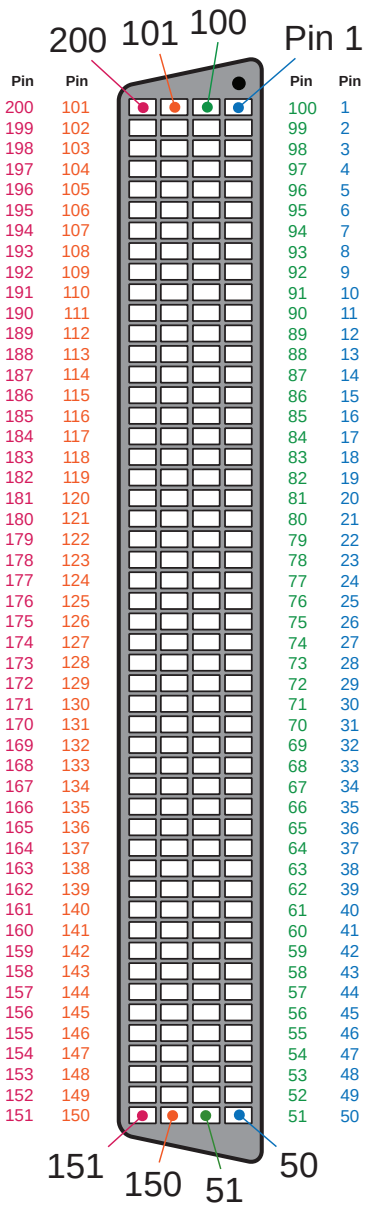
200-Pin LFH (Male) to 4 x 50-Pin D-Type (Female)
A200LMB-04F050D5B***

End B



50-Pin D-Type Female Connectors (Mating Face)

End A



200-Pin LFH Male Connector (Mating Face)

Note. The cable screens are connected to the connector backshells

PXI Connector Block - Male

90-002D

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

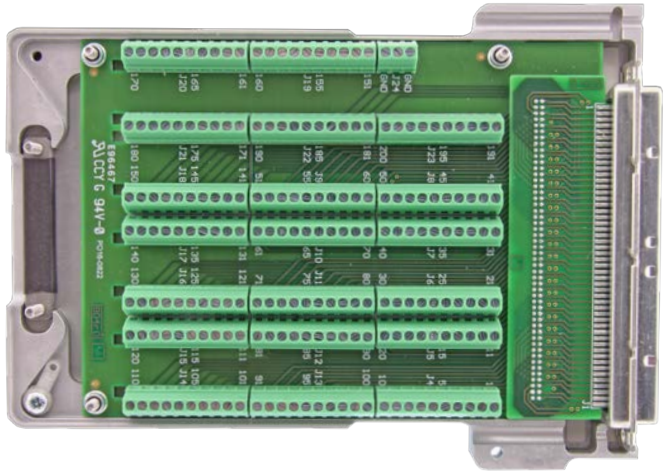
Connector blocks provide a convenient method of termination without the use of custom cabling. However, a higher resistance path, lower capacity ratings and lower voltage ratings are typical.

The screw terminals use a rising cage clamp mechanism to minimize risk of copper strand breakage. PTFE/PFA cables are recommended for use with this connector block to maximise copper cross-sectional area and insulation properties. The breakdown voltage of the connector block is controlled by clearances to the metal shell.

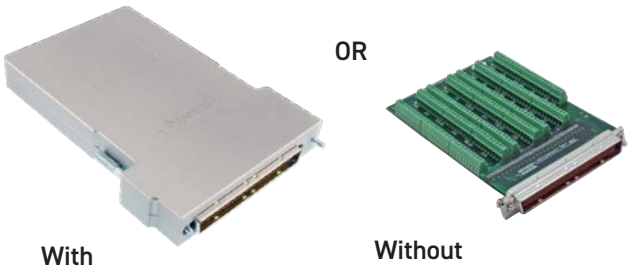
This PXI connector block will not fit to PCI cards, to 65 series modules, or to cables with male screwlocks. Connector blocks supplied without a backshell do not include cable strain relief.

Technical Specification

Connector Type:	200-Pin LFH
Gender	Male
Securing Method:	
Product with Backshell	4-40 UNC screwlocks, male
Product without Backshell	4-40 UNC screwlocks, male
Wire Connection	Rising cage screw terminals Screen (GND) connections are provided
Connector Block Ratings:	
Maximum Current	1A
Maximum Voltage	150 VDC
Cable Exit	Rear - 32 x 11mm
Overall Size (Approx)	H98.5 x W18.1 x D138 mm
200-Pin LFH:	
Contact Material	Gold over nickel
Contact Resistance	<20 mOhm
Screw Terminals:	
Maximum Wire Size	20AWG
Recommended Insulation	PTFE/PFA
Additional Cable Clamp	Yes (in backshell)

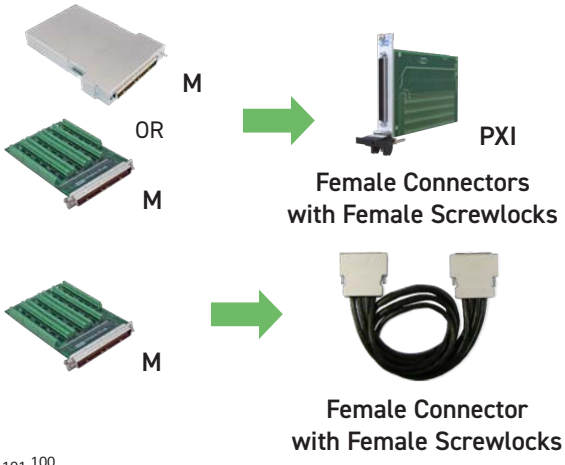


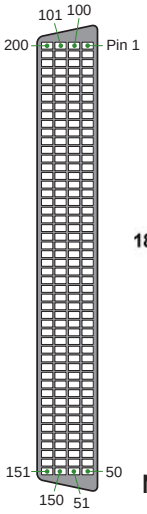
Internal View with PCB Legend



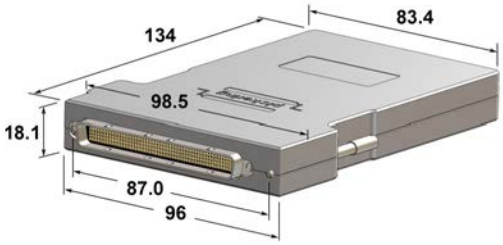
200-Pin LFH PXI Connector Block

Product Compatibility





Male Mating Face



Connector Block Dimensions

Product Order Codes

200-Pin LFH PXI Connector Block, 1A, Screw Terminal,	
With Backshell, Male	40-965-200-M
Without Backshell, Male	92-965-200-M

Note: Due to its screwlock offset and size, this connector block can only be used with PXI cards.

PCI Connector Block - Male

90-002D

- Mates to PCI Module Panel Connector
- Cable Clamp in Backshell
- Easy to Use Rising Cage Screw Terminals

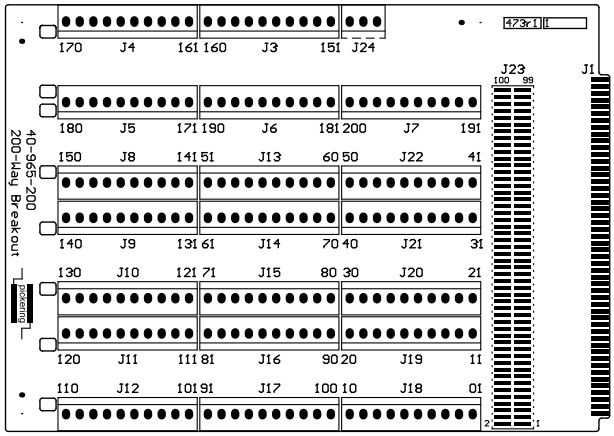
Connector blocks provide a convenient method of termination without the use of custom cabling. However, a higher resistance path, lower capacity ratings and lower voltage ratings are typical.

Suitable for use on the front of PCI modules this connector block provides a simple method of connecting to high density 200-Pin LFH connectors. The screw terminals use a rising cage screw clamp mechanism to minimize risk of copper strand breakage. PTFE/PFA cables are recommended for use with this connector block to maximise copper cross sectional area and insulation properties.

This PCI connector block is not recommended for use with PXI cards or 65 Series modules. It uses male screwlocks and will not mate to Pickering cables.

Technical Specification

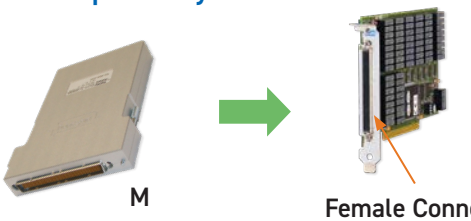
Connector Type:	200-Pin LFH
Gender	Male
Securing Method:	4-40 UNC screwlocks, male
Wire Connection	Rising cage screw terminals.
Cable Screen Connection	Solder ring terminal
Connector Block Ratings:	
Maximum Current	1A
Maximum Voltage	150 VDC
Cable Exit	Rear - 32 x 11mm
Overall Size (Approx)	H96 x W18 x D138 mm
200-Pin LFH:	
Contact Material	Gold over nickel
Contact Resistance	<20 mOhm
Screw Terminals:	
Maximum Wire Size	20AWG
Recommended Insulation	PTFE/PFA
Additional Cable Clamp	Yes (in backshell)

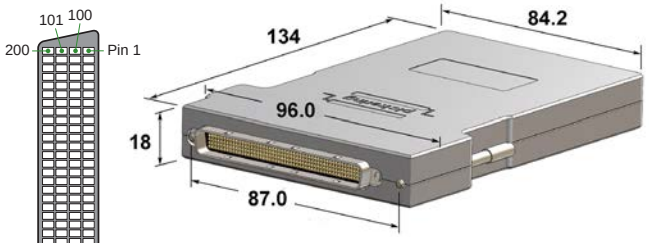


PCB Legend

200-Pin LFH PCI Connector Block

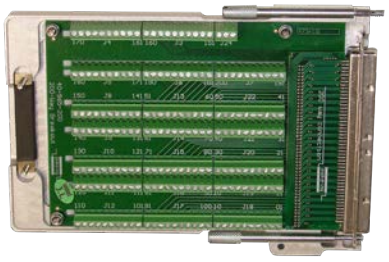
Product Compatibility





Male
Mating Face

Connector Block Dimensions



Internal View

Product Order Codes

200-Pin LFH PCI Connector Block, 1A, Screw Terminal, Male with Backshell and Screwlocks	50-965-200-M

Note: Due to its screwlock offset and size, this connector block can only be used with PCI cards.

Cable Connector - Male

90-002D

- 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 200-Pin LFH connector. It is difficult to terminate a cable to the 200-Pin LFH because of the high density and fine pitch. Pickering Interfaces recommend the use of purchased cable assemblies for applications where most or all of the contacts are in use.

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.

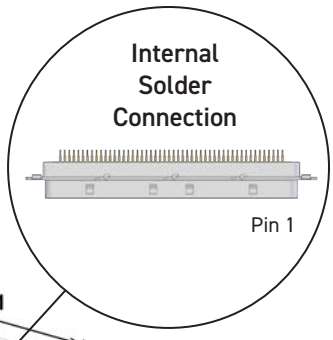
200-Pin LFH Cable Connector

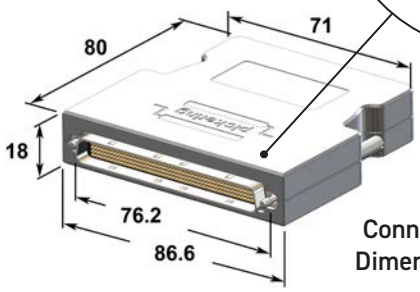
Technical Specification

Connector Type:	200-Pin LFH
Gender	Male
Securing Method:	
Product with Backshell	4-40 UNC screwlocks, male
Product without Backshell	4-40 UNC screwlocks, male
Wire Connection	Solder pin
Cable Screen Connection	Solder ring terminal
Connector Ratings:	
Maximum Current	1A
Maximum Voltage	150 VAC
Cable Exit:	Dual rear exit
Cable Exit Size	Each exit: 4.8 x 24 mm
Overall Size (Approx)	H87 x W18 x D84 mm
200-Pin LFH:	
Contact Material	Gold over nickel
Contact Resistance	<20 mOhm
Wire Connection:	
Maximum Wire Size	28AWG
Recommended Insulation	50-Pin twisted pair ribbon cable, 1.27 mm pitch
Additional Cable Clamp	Yes (in backshell)

50-Pin Connector Strip

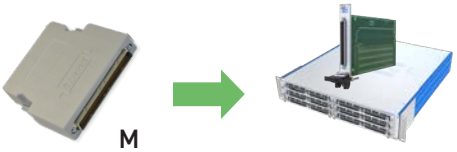
4 x 50-Pin Strips are included with the connector kit





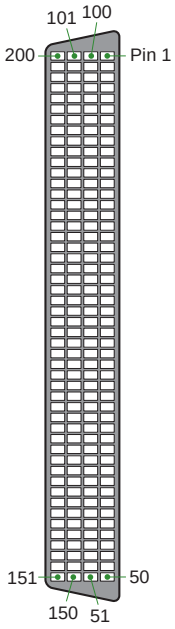
Connector Dimensions

Product Compatibility



M

Female Connectors with Female Screwlocks



Male Mating Face

Product Order Codes

200-Pin LFH Connector, 1A, Solder Pin,	
With Backshell, Male	40-961A-200-M
Without Backshell, Male	92-961-200-M

Note: This connector is supplied in kit form.

- Connector and Backshell
- Bottom Cable Exit
- Cable Clamp in Backshell
- Soldered Cable Termination

This accessory is designed to allow users to directly terminate with soldered connections to the 200-Pin LFH connector. It is difficult to terminate a cable to the 200-Pin LFH because of the high density and fine pitch. Pickering Interfaces recommend the use of purchased cable assemblies for applications where most or all of the contacts are in use.

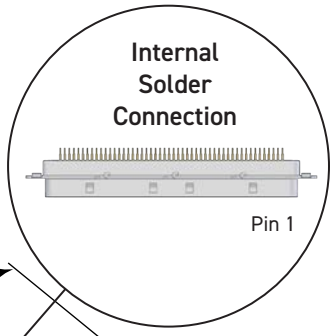
200-Pin LFH Cable Connector

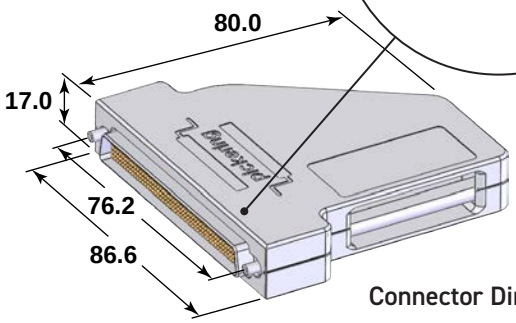
Technical Specification

Connector Type:	200-Pin LFH
Gender	Male
Securing Method:	
Product with Backshell	4-40 UNC screwlocks, male
Wire Connection	Solder pin
Cable Screen Connection	Solder ring terminal
Connector Ratings:	
Maximum Current	1A
Maximum Voltage	150 VAC
Cable Exit:	90° (Towards Pin 1)
Cable Exit Size	38 x 13 mm
Overall Size (Approx)	H86.6 x W17 x D83.5 mm
200-Pin LFH:	
Contact Material	Gold over nickel
Contact Resistance	<20 mOhm
Wire Connection:	
Maximum Wire Size	28AWG
Recommended Insulation	50-Pin twisted pair ribbon cable, 1.27 mm pitch
Additional Cable Clamp	Yes (in backshell)

50-Pin Connector Strip

4 x 50-Pin Strips are included with the connector kit



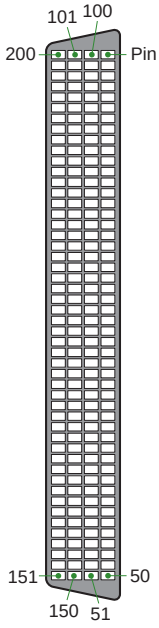


Connector Dimensions

Product Compatibility

M

Female Connector with Female Screwlocks



Male Mating Face

Product Order Codes

200-Pin LFH Connector, 1A, Solder Pin, With Backshell, Male	C200LMB-2SP-5A

Note: This connector is supplied in kit form.

- 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.

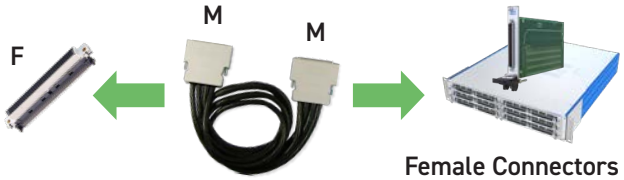
Note: This product is not suitable for directly mounting onto the front panel of a Pickering switching product.

Technical Specification

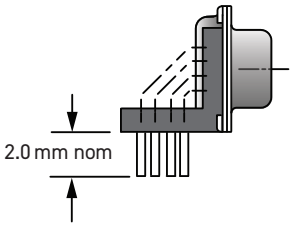
Connector Type:	200-Pin LFH
Gender	Female
Securing Method	4-40 UNC screwlocks, female
PCB Mounting	Right angle PCB mount, solder
Connector Ratings:	
Maximum Current	1A each pin
Maximum Voltage	150 VDC
200-Pin LFH:	
Contact Material	Gold over nickel
Contact Resistance	<20 mOhm
PCB Legs:	
Effective Leg Length	2.0 mm nom (See diagram)

200-Pin LFH PCB Connector

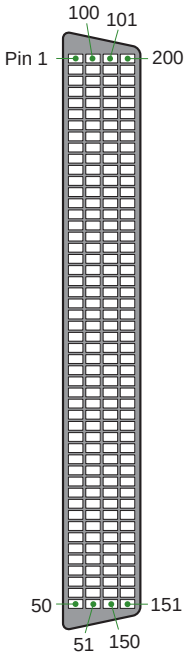
Product Compatibility



Female Connectors with Female Screwlocks



Leg Length



End B - Female Mating Face

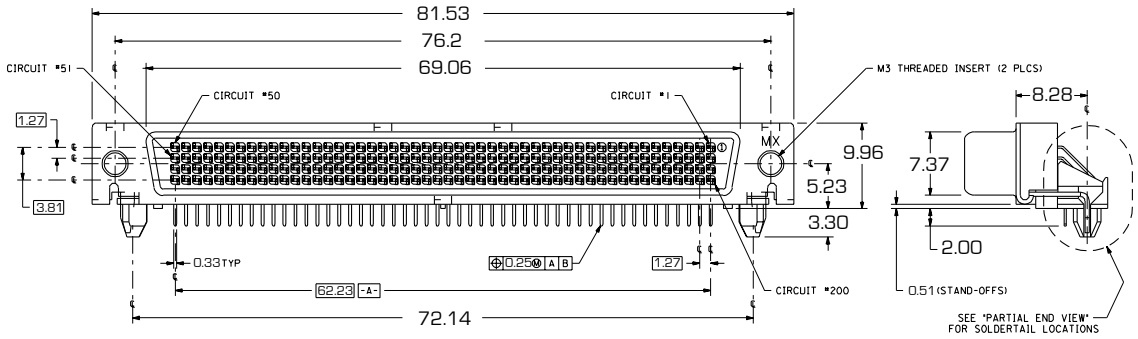
Note: PCB Footprint information can be found on the following page.

Product Order Codes

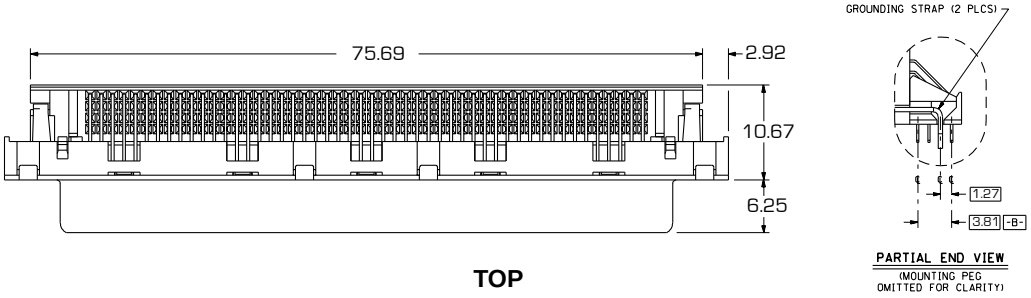
200-Pin LFH Connector, 1A, Right Angle PCB Mount, Female	40-963-200-RF

Note: The kit includes 4-40 UNC screwlocks that will fit into the M3 threaded holes.

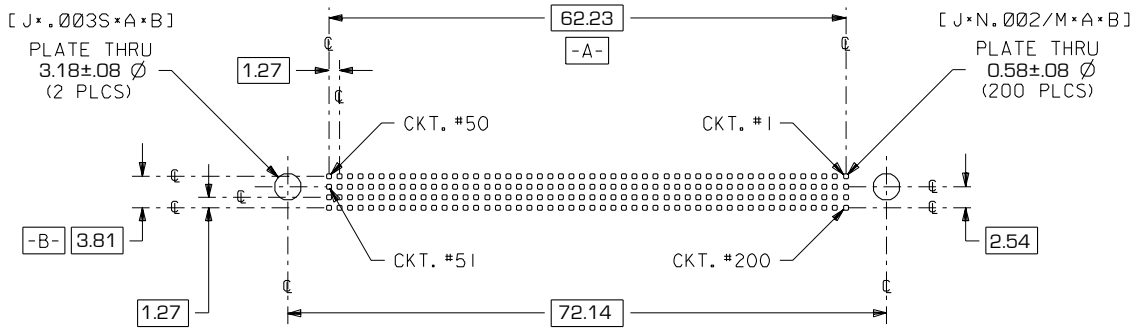
PCB Connector Dimensions, Footprint and Panel Cut-Out
40-963-200-RF



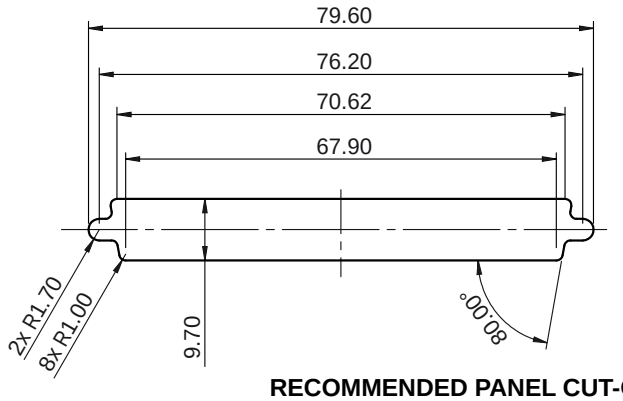
FRONT AND SIDE



TOP



P.C. BOARD MOUNTING DIMENSIONS CONNECTOR SIDE
RECOMMENDED P.C.BOARD THICKNESS 1.6mm



RECOMMENDED PANEL CUT-OUT DIMENSIONS
(for connector mounted behind panel)

DIMENSIONS IN mm

- Straight PCB Mount
- Ideal for User Created Termination Solutions
- Supplied in Kit Form with Assembly Instructions

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.

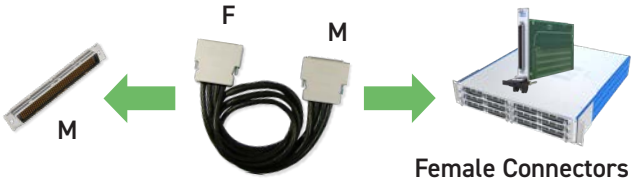
Note: This product is not suitable for directly mounting onto the front panel of a Pickering switching product.

Technical Specification

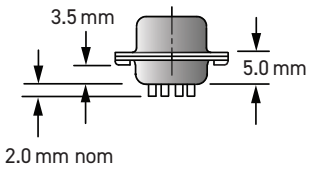
Connector Type:	200-Pin LFH
Gender	Male
Securing Method	4-40 UNC screwlocks, female
PCB Mounting	Straight PCB mount, solder
Connector Ratings:	
Maximum Current	1 A each pin
Maximum Voltage	150 VAC
200-Pin LFH:	
Contact Material	Gold over nickel
Contact Resistance	<20 mOhm
PCB Legs:	
Leg Length	2.0 mm nom (See diagram)

200-Pin LFH PCB Connector

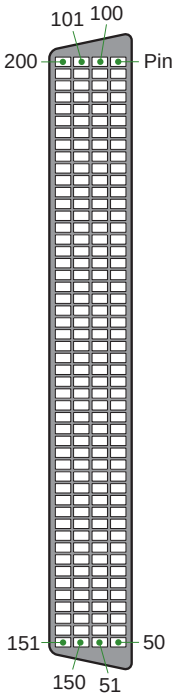
Product Compatibility



Female Connectors with Female Screwlocks



Leg Length



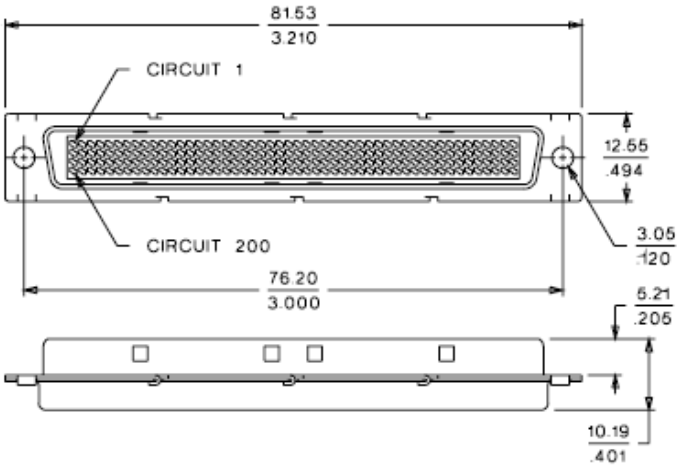
Male Mating Face

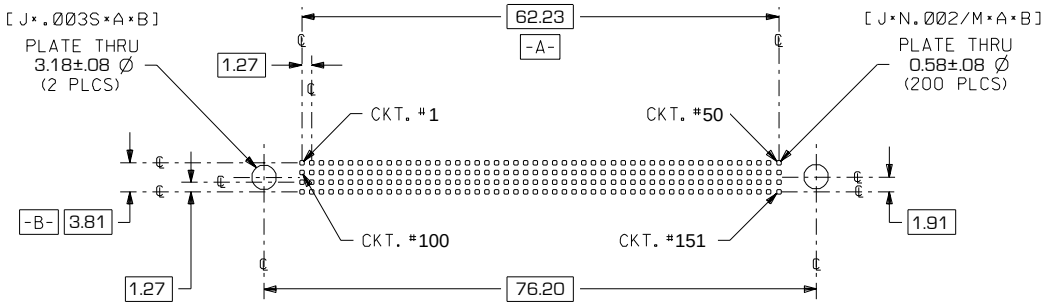
Note: PCB Footprint information can be found on the following page.

Product Order Codes

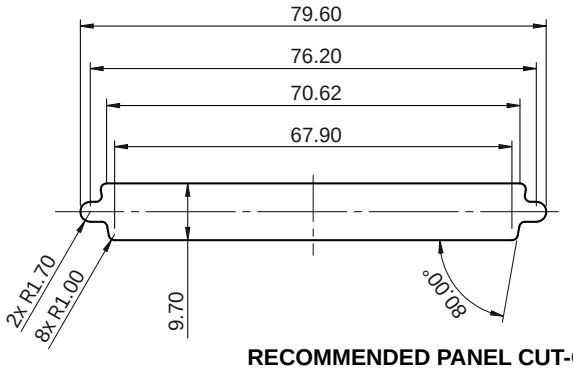
200-Pin LFH Connector, 1 A, Straight PCB Mount, Male	40-963-200-SM

PCB Connector Dimensions, Footprint and Panel Cut-Out
40-963-200-SM



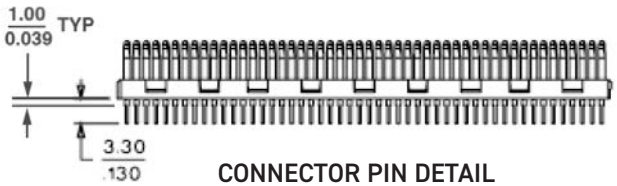


P.C. BOARD MOUNTING DIMENSIONS CONNECTOR SIDE
RECOMMENDED P.C.BOARD THICKNESS 1.6mm



DIMENSIONS IN mm

RECOMMENDED PANEL CUT-OUT DIMENSIONS
(for connector mounted behind panel)



CONNECTOR PIN DETAIL

Additional Connection Accessories

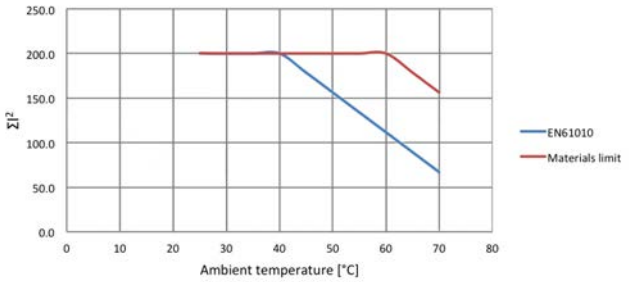
Although these items do not directly mate with Pickering Interfaces products customers may find them useful in the development of their own connection solutions.

- High Specification, Highly Flexible Cable
- Fully Screened Cable Construction with Strain Relief
- Connectors include Male Screwlocks

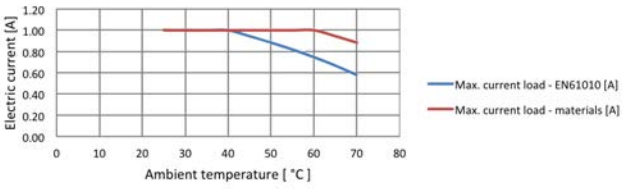
Technical Specification

Connector Type (End A): Gender & Securing Method	200-Pin LFH Female, 4-40 UNC screwlocks (male)
Connector Type (End B): Gender & Securing Method	200-Pin LFH Female, 4-40 UNC screwlocks (male)
Maximum Current	1A
Maximum Voltage	150 VDC
Insulation Resistance	1000 MOhm
Connectors:	
Contact Material	Gold over nickel
Contact Resistance	<20 mOhm
Cable Exit	Rear
Overall Size (Approx) Female	H92 x W18 x D84 mm
Cable Type:	4 off identified x 50-wire cable, finishing as ribbon on 1.27 mm pitch. Red marking on ribbon edge denotes pin 1
Conductor: Material & Strands	Tinned Copper, 7/36 (28AWG)
Resistance	0.2 Ω/m
Insulation	PVC
Outer Sleeve	PVC
Screened Construction	Dual shielded Cable screens connected to backshells
Additional Braided Sleeve	No
Cable O/D	10 mm (Individual cables)
Minimum Bend Radius	25 mm
Door Closure Allowance	140 mm (see diagram)

Characteristic Plots for A200LFR-200LFR-6B100



The 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.



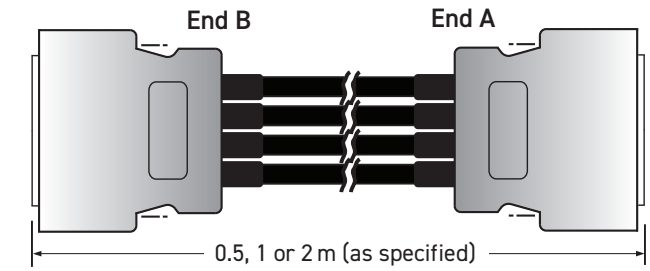
The graph shows the allowed current versus temperature assuming ALL wires carry the same current. Higher currents to the cable rating are permitted on individual wires provided the ΣI^2 is complied with.

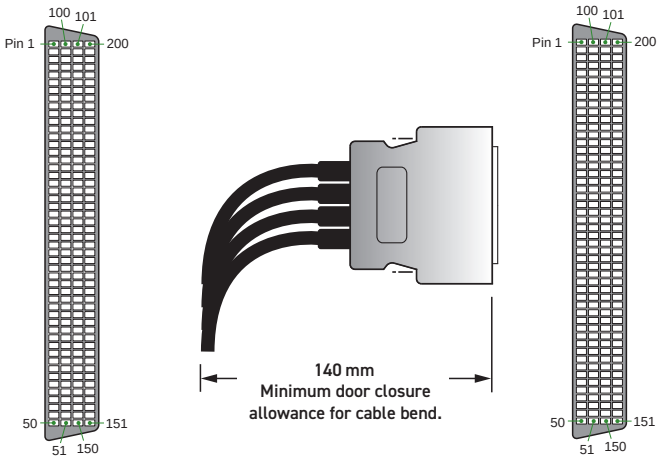
This Cable Assembly is Not Suitable for Connection to a Pickering Switching Product

Female with Male Screwlocks — Female with Male Screwlocks

200-Pin LFH Cable Assy

Product Compatibility





End B - Female Mating Face — **End A - Female Mating Face**

Product Order Codes

200-Pin LFH Cable Assy, 1A, Female to Female,	
0.5 m Long	A200LFR-200LFR-6B050
1.0 m Long	A200LFR-200LFR-6B100
2.0 m Long	A200LFR-200LFR-6B200

Note: 1. The Female gender **Will Not Mate** with a Pickering Module.
2. Other cable lengths can be supplied in multiples of 0.5 m. Max length 5 m.

Cable Assy - Female to Female

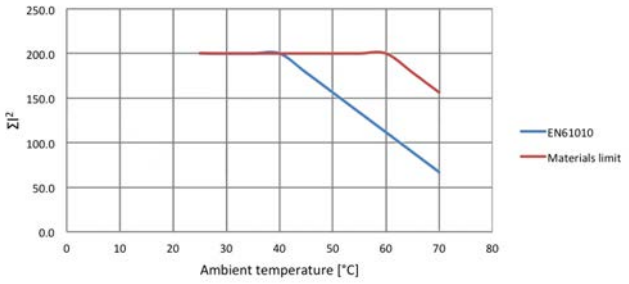
90-002D

- High Specification, Highly Flexible Cable
- Fully Screened Cable Construction with Strain Relief
- Connectors include Female Screwlocks

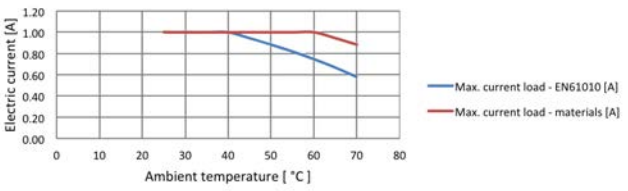
Technical Specification

Connector Type (End A): Gender & Securing Method	200-Pin LFH Female, 4-40 UNC screwlocks (female)
Connector Type (End B): Gender & Securing Method	200-Pin LFH Female, 4-40 UNC screwlocks (female)
Maximum Current	1A
Maximum Voltage	150 VDC
Insulation Resistance	1000 MOhm
Connectors:	
Contact Material	Gold over nickel
Contact Resistance	<20 mOhm
Cable Exit	Rear
Overall Size (Approx) Female	H92 x W18 x D84.7 mm
Cable Type:	4 off identified x 50-wire cable, finishing as ribbon on 1.27 mm pitch. Red marking on ribbon edge denotes pin 1
Conductor: Material & Strands	Tinned Copper, 7/36 (28AWG)
Resistance	0.2 Ω/m
Insulation	PVC
Outer Sleeve	PVC
Screened Construction	Dual shielded Cable screens connected to backshells
Additional Braided Sleeve	No
Cable O/D	10 mm (Individual cables)
Minimum Bend Radius	25 mm
Door Closure Allowance	140 mm (see diagram)

Characteristic Plots for 40-970B-200-1m



The 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.

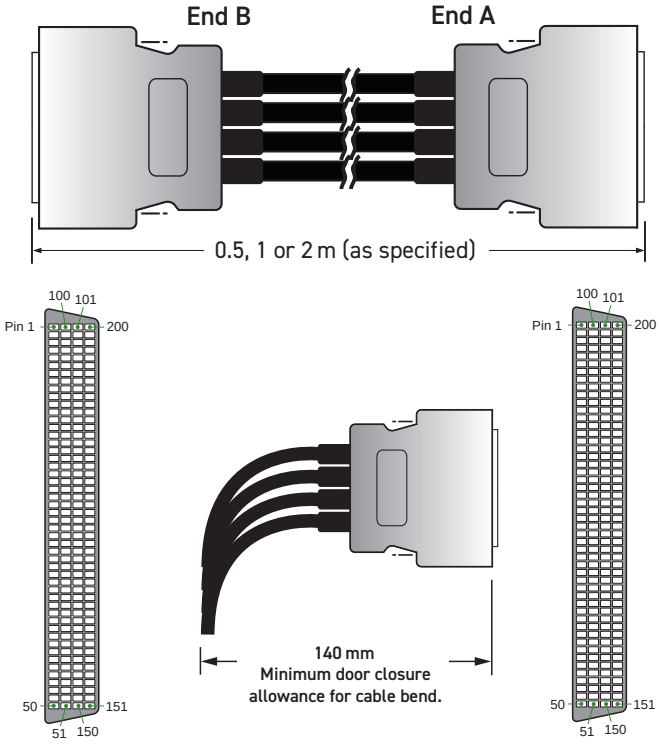


The graph shows the allowed current versus temperature assuming ALL wires carry the same current. Higher currents to the cable rating are permitted on individual wires provided the ΣI^2 is complied with.

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

200-Pin LFH Cable Assy

Product Compatibility



End B - Female Mating Face

End A - Female Mating Face

Note: 200-Pin female cable connectors with female screwlocks only connect to a Pickering 200-Pin male cable connector with male screwlocks and to a 200-Pin male connector block.

Product Order Codes

200-Pin LFH Cable Assy, 1A, Female to Female,	
0.5 m Long	40-970B-200-0.5m-FF
1.0 m Long	40-970B-200-1m-FF
2.0 m Long	40-970B-200-2m-FF

Note: 1. The Female gender **Will Not Mate** with a Pickering Module.
2. Other cable lengths can be supplied in multiples of 0.5 m. Max length 5 m.

Cable Assy - Male to Unterminated

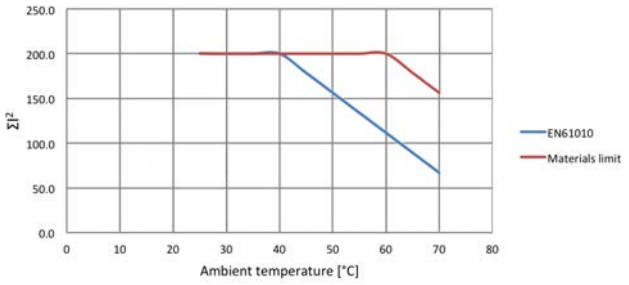
90-002D

- High Specification, Highly Flexible Cable
- Fully Screened Cable Construction with Strain Relief
- Color Coded to Ensure Easy Connection

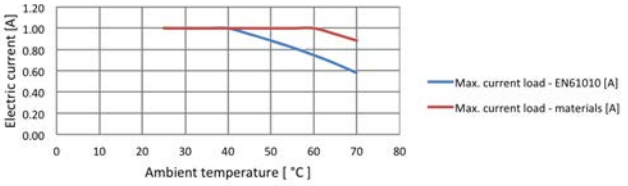
Technical Specification

Connector Type (End A):	200-Pin LFH
Gender & Securing Method	Female, 4-40 UNC screwlocks (female)
Unterminated End (End B):	4 x 50-Pin Unterminated
Free Wire Length	Tinned contacts only
Individual Wire Labelling	Red marking on ribbon edge denotes pin 1 of individual 50-pin cable. Flying white/ black screen pigtails are also included
50-Pin Ribbon Contacts	6mm min tinned copper
Maximum Current	1A
Maximum Voltage	150 VDC
Insulation Resistance	1000 MOhm
Connector:	
Contact Material	Gold over nickel
Contact Resistance	<20 mOhm
Cable Exit	Rear
Overall Size (Approx)	H92 x W18 x D84.7 mm
Cable Type:	4 off identified x 50-wire cable, finishing as ribbon on 1.27mm pitch. Red marking on ribbon edge denotes pin 1
Conductor: Material & Strands	Tinned Copper, 7/36 (28AWG)
Resistance	0.2 Ω/m
Insulation	PVC
Outer Sleeve	PVC
Screened Construction	Dual shielded (Screen/Backshell connection)
Additional Braided Sleeve	No
Cable O/D	10 mm (Individual cables)
Minimum Bend Radius	25 mm
Door Closure Allowance	140 mm (see diagram)

Characteristic Plots for 40-972B-200-1m



The 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.

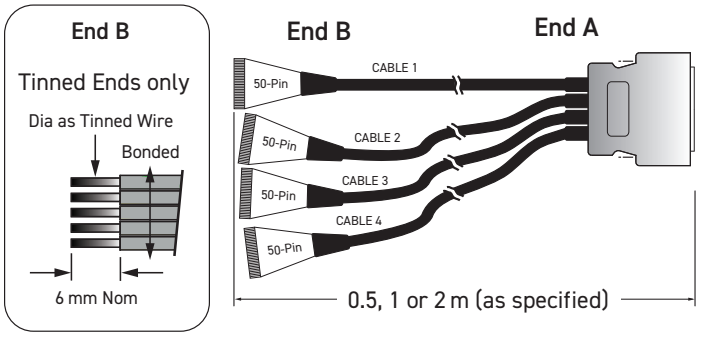


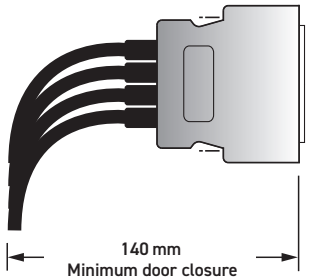
The graph shows the allowed current versus temperature assuming ALL wires carry the same current. Higher currents to the cable rating are permitted on individual wires provided the ΣI^2 is complied with.

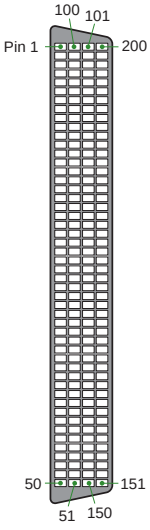
This Cable Assembly is Not Suitable for Connection to a Pickering Switching Product

200-Pin LFH Cable Assy

Product Compatibility







End A - Female Mating Face

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

Product Order Codes

200-Pin LFH Cable Assy, 1A, Female to Unterminated, Tinned Ends, 0.5 m Long	40-972B-200-0.5m-FU
1.0 m Long	40-972B-200-1m-FU
2.0 m Long	40-972B-200-2m-FU

Note: 1. The Female gender **Will Not Mate** with a Pickering Module.
2. Other cable lengths can be supplied in multiples of 0.5 m. Max length 5 m.

200-Pin LFH Cable Assy Female to Unterminated
40-972B-200-*m-FU

End B

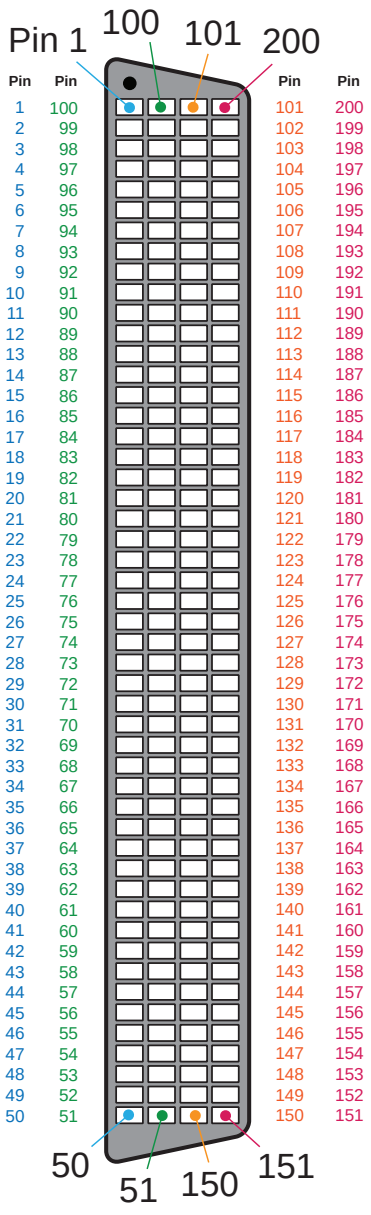
200-Pin LFH Connector Wiring (Cable 1)			
Pin	Wire Color	Pin	Wire Color
2	Grey	1	Grey - Red Stripe
4	Grey	3	Grey
6	Grey	5	Grey
8	Grey	7	Grey
10	Grey	9	Grey
12	Grey	11	Grey
14	Grey	13	Grey
16	Grey	15	Grey
18	Grey	17	Grey
20	Grey	19	Grey
22	Grey	21	Grey
24	Grey	23	Grey
26	Grey	25	Grey
28	Grey	27	Grey
30	Grey	29	Grey
32	Grey	31	Grey
34	Grey	33	Grey
36	Grey	35	Grey
38	Grey	37	Grey
40	Grey	39	Grey
42	Grey	41	Grey
44	Grey	43	Grey
46	Grey	45	Grey
48	Grey	47	Grey
50	Grey	49	Grey

200-Pin LFH Connector Wiring (Cable 2)			
Pin	Wire Color	Pin	Wire Color
52	Grey	51	Grey - Red Stripe
54	Grey	53	Grey
56	Grey	55	Grey
58	Grey	57	Grey
60	Grey	59	Grey
62	Grey	61	Grey
64	Grey	63	Grey
66	Grey	65	Grey
68	Grey	67	Grey
70	Grey	69	Grey
72	Grey	71	Grey
74	Grey	73	Grey
76	Grey	75	Grey
78	Grey	77	Grey
80	Grey	79	Grey
82	Grey	81	Grey
84	Grey	83	Grey
86	Grey	85	Grey
88	Grey	87	Grey
90	Grey	89	Grey
92	Grey	91	Grey
94	Grey	93	Grey
96	Grey	95	Grey
98	Grey	97	Grey
100	Grey	99	Grey

200-Pin LFH Connector Wiring (Cable 3)			
Pin	Wire Color	Pin	Wire Color
102	Grey	101	Grey - Red Stripe
104	Grey	103	Grey
106	Grey	105	Grey
108	Grey	107	Grey
110	Grey	109	Grey
112	Grey	111	Grey
114	Grey	113	Grey
116	Grey	115	Grey
118	Grey	117	Grey
120	Grey	119	Grey
122	Grey	121	Grey
124	Grey	123	Grey
126	Grey	125	Grey
128	Grey	127	Grey
130	Grey	129	Grey
132	Grey	131	Grey
134	Grey	133	Grey
136	Grey	135	Grey
138	Grey	137	Grey
140	Grey	139	Grey
142	Grey	141	Grey
144	Grey	143	Grey
146	Grey	145	Grey
148	Grey	147	Grey
150	Grey	149	Grey

200-Pin LFH Connector Wiring (Cable 4)			
Pin	Wire Color	Pin	Wire Color
152	Grey	151	Grey - Red Stripe
154	Grey	153	Grey
156	Grey	155	Grey
158	Grey	157	Grey
160	Grey	159	Grey
162	Grey	161	Grey
164	Grey	163	Grey
166	Grey	165	Grey
168	Grey	167	Grey
170	Grey	169	Grey
172	Grey	171	Grey
174	Grey	173	Grey
176	Grey	175	Grey
178	Grey	177	Grey
180	Grey	179	Grey
182	Grey	181	Grey
184	Grey	183	Grey
186	Grey	185	Grey
188	Grey	187	Grey
190	Grey	189	Grey
192	Grey	191	Grey
194	Grey	193	Grey
196	Grey	195	Grey
198	Grey	197	Grey
200	Grey	199	Grey

End A



200-Pin LFH Female Connector (Mating Face)

Note 1. The cable screens are connected to the connector backshell at End A
2. A flying white/black insulated screen pigtail is included at End B for each cable

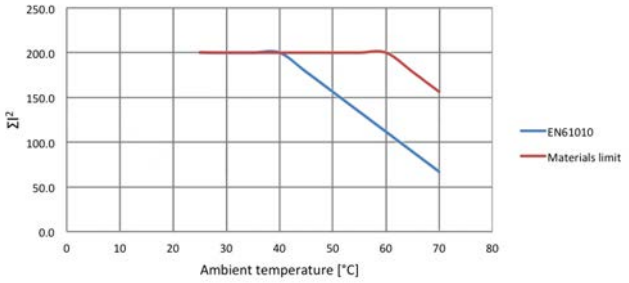
Cable Assy - Female to 4 x 50-Pin Ribbon (Female) 90-002D

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

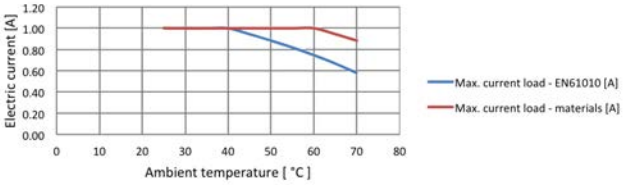
Technical Specification

Connector Type (End A): Gender & Securing Method	200-Pin LFH Female, 4-40 UNC screwlocks (female)
Connector Type (End B): Gender & Securing Method Individual Wire Labelling	4 off x 50-Pin ribbon, 0.1" (2.54 mm) pitch Female, Push fit Red marking on ribbon edge denotes pin 1 of individual 50-pin cable. Flying white/black screen pigtails are also included
Maximum Current	1A
Maximum Voltage	150 VDC
Insulation Resistance	1000 MOhm
Connector (End A):	
Contact Material	Gold over nickel
Contact Resistance	<20 mOhm
Cable Exit	Rear
Overall Size (Approx)	H92 x W18 x D84.7 mm
Connector (End B):	
Contact Material	Phosphor bronze/Au flash
Contact Resistance	<20 mOhm
Cable Exit	Side
Overall Size (Approx)	H17 x W68 x D6 mm
Cable Type:	4 off identified x 50-wire cable, finishing as ribbon on 1.27 mm pitch. Red marking on ribbon edge denotes pin 1
Conductor: Material & Strands Resistance Insulation	Tinned Copper, 7/36 (28AWG) 0.2 Ω/m PVC
Outer Sleeve	PVC
Screened Construction	Dual shielded (Screen/Backshell connection)
Additional Braided Sleeve	No
Cable O/D	10 mm (Individual cables)
Minimum Bend Radius	25 mm
Door Closure Allowance	140 mm (see diagram)

Characteristic Plots for 40-971B-200-1m



The 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.

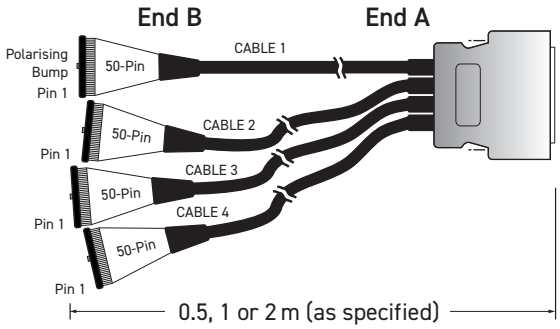


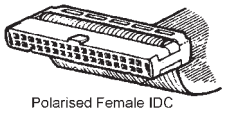
The graph shows the allowed current versus temperature assuming ALL wires carry the same current. Higher currents to the cable rating are permitted on individual wires provided the ΣI^2 is complied with.

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

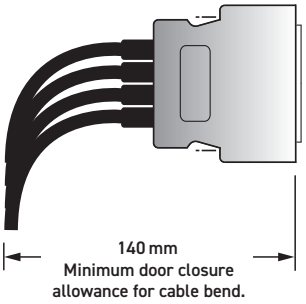
200-Pin LFH Cable Assy

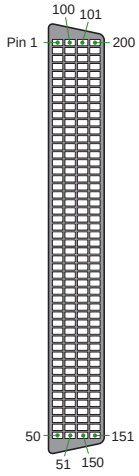
Product Compatibility





End B Mating Face





End A - Female Mating Face

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

Product Order Codes

200-Pin LFH Cable Assy, 1A, Female to 50-Pin Ribbon, Female,	
0.5 m Long	40-971B-200-0.5m-FF
1.0 m Long	40-971B-200-1m-FF
2.0 m Long	40-971B-200-2m-FF

Note: 1. The Female gender **Will Not Mate** with a Pickering Module.
2. Mating IDC products are available on data sht 90-004D.
3. Other cable lengths can be supplied in multiples of 0.5 m. Max length 5 m.

200-Pin LFH (Female) to 4 x 50-Pin IDC (Female)
40-971B-200-*m-FF

End B

200-Pin Connector Pin No.	CABLE 1		200-Pin Connector Pin No.
2	2	1	1
4	4	3	3
6	6	5	5
8	8	7	7
10	10	9	9
12	12	11	11
14	14	13	13
16	16	15	15
18	18	17	17
20	20	19	19
22	22	21	21
24	24	23	23
26	26	25	25
28	28	27	27
30	30	29	29
32	32	31	31
34	34	33	33
36	36	35	35
38	38	37	37
40	40	39	39
42	42	41	41
44	44	43	43
46	46	45	45
48	48	47	47
50	50	49	49

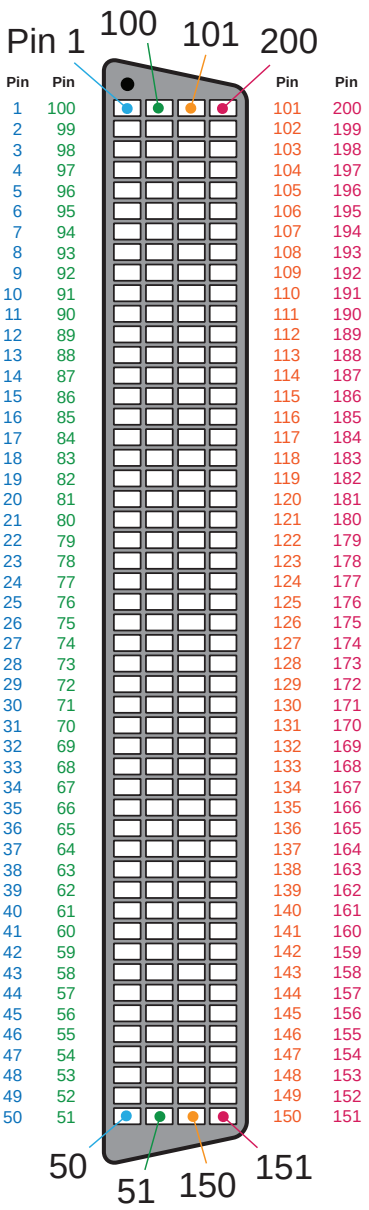
200-Pin Connector Pin No.	CABLE 2		200-Pin Connector Pin No.
52	2	1	51
54	4	3	53
56	6	5	55
58	8	7	57
60	10	9	59
62	12	11	61
64	14	13	63
66	16	15	65
68	18	17	67
70	20	19	69
72	22	21	71
74	24	23	73
76	26	25	75
78	28	27	77
80	30	29	79
82	32	31	81
84	34	33	83
86	36	35	85
88	38	37	87
90	40	39	89
92	42	41	91
94	44	43	93
96	46	45	95
98	48	47	97
100	50	49	99

200-Pin Connector Pin No.	CABLE 3		200-Pin Connector Pin No.
102	2	1	101
104	4	3	103
106	6	5	105
108	8	7	107
110	10	9	109
112	12	11	111
114	14	13	113
116	16	15	115
118	18	17	117
120	20	19	119
122	22	21	121
124	24	23	123
126	26	25	125
128	28	27	127
130	30	29	129
132	32	31	131
134	34	33	133
136	36	35	135
138	38	37	137
140	40	39	139
142	42	41	141
144	44	43	143
146	46	45	145
148	48	47	147
150	50	49	149

200-Pin Connector Pin No.	CABLE 4		200-Pin Connector Pin No.
152	2	1	151
154	4	3	153
156	6	5	155
158	8	7	157
160	10	9	159
162	12	11	161
164	14	13	163
166	16	15	165
168	18	17	167
170	20	19	169
172	22	21	171
174	24	23	173
176	26	25	175
178	28	27	177
180	30	29	179
182	32	31	181
184	34	33	183
186	36	35	185
188	38	37	187
190	40	39	189
192	42	41	191
194	44	43	193
196	46	45	195
198	48	47	197
200	50	49	199

50-Pin IDC Female Connectors (Mating Face)

End A



Pin	Pin	Pin	Pin
1	100	101	200
2	99	102	199
3	98	103	198
4	97	104	197
5	96	105	196
6	95	106	195
7	94	107	194
8	93	108	193
9	92	109	192
10	91	110	191
11	90	111	190
12	89	112	189
13	88	113	188
14	87	114	187
15	86	115	186
16	85	116	185
17	84	117	184
18	83	118	183
19	82	119	182
20	81	120	181
21	80	121	180
22	79	122	179
23	78	123	178
24	77	124	177
25	76	125	176
26	75	126	175
27	74	127	174
28	73	128	173
29	72	129	172
30	71	130	171
31	70	131	170
32	69	132	169
33	68	133	168
34	67	134	167
35	66	135	166
36	65	136	165
37	64	137	164
38	63	138	163
39	62	139	162
40	61	140	161
41	60	141	160
42	59	142	159
43	58	143	158
44	57	144	157
45	56	145	156
46	55	146	155
47	54	147	154
48	53	148	153
49	52	149	152
50	51	150	151

200-Pin LFH Female Connector (Mating Face)

Note 1. The cable screens are connected to the connector backshell at End A
2. A flying white/black insulated screen pigtail is included at End B for each cable

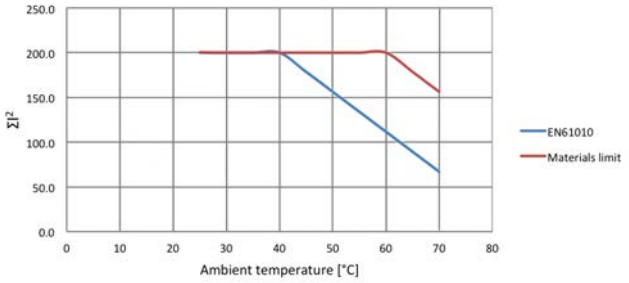
Cable Assy - Female to 4 x 50-Pin Ribbon (Male) 90-002D

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

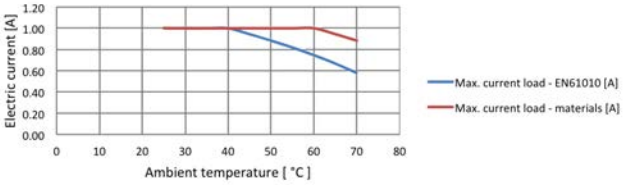
Technical Specification

Connector Type (End A): Gender & Securing Method	200-Pin LFH Female, 4-40 UNC screwlocks (female)
Connector Type (End B): Gender & Securing Method Individual Wire Labelling	4 off x 50-Pin ribbon, 0.1" (2.54 mm) pitch Male, Latches Red marking on ribbon edge denotes pin 1 of individual 50-pin cable. Flying white/ black screen pigtails are also included
Maximum Current Maximum Voltage Insulation Resistance Connector (End A): Contact Material Contact Resistance Cable Exit Overall Size (Approx) Connector (End B): Contact Material Contact Resistance Cable Exit Overall Size (Approx) Cable Type: Conductor: Material & Strands Resistance Insulation Outer Sleeve Screened Construction Additional Braided Sleeve Cable O/D Minimum Bend Radius Door Closure Allowance	1A 150 VDC 1000 MOhm Gold over nickel <20 mOhm Rear H92 x W18 x D84.7 mm Cu alloy/selective Au flash <20 mOhm Side H30.4 x W82.3 x D8 mm 4 off identified x 50-wire cable, finishing as ribbon on 1.27 mm pitch. Red marking on ribbon edge denotes pin 1 Tinned Copper, 7/36 (28AWG) 0.2 Ω/m PVC PVC Dual shielded (Screen/Backshell connection) No 10 mm (Individual cables) 25 mm 140 mm (see diagram)

Characteristic Plots for 40-971B-200-1m



The 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.

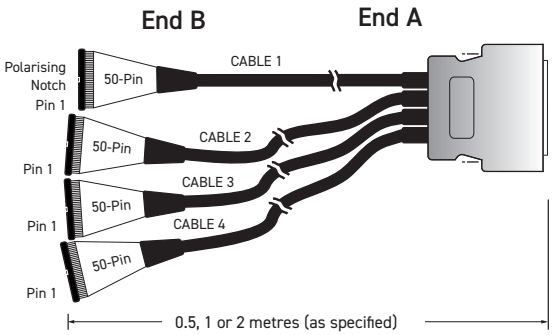


The graph shows the allowed current versus temperature assuming ALL wires carry the same current. Higher currents to the cable rating are permitted on individual wires provided the ΣI^2 is complied with.

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

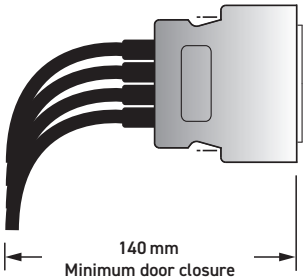
200-Pin LFH Cable Assy

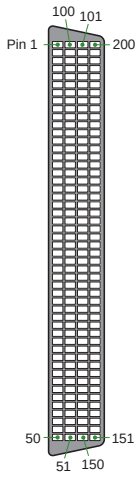
Product Compatibility



End B

50-Pin Male IDC connector





End A - Female Mating Face

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

Product Order Codes

200-Pin LFH Cable Assy, 1A, Female to 50-Pin Ribbon, Male,	
0.5 m Long	40-971B-200-0.5m-FM
1.0 m Long	40-971B-200-1m-FM
2.0 m Long	40-971B-200-2m-FM

Note: 1. The Female gender **Will Not Mate** with a Pickering Module.
2. Mating IDC products are available on data sht 90-004D.
3. Other cable lengths can be supplied in multiples of 0.5 m. Max length 5 m.

200-Pin LFH (Female) to 4 x 50-Pin IDC (Male)
40-971B-200-*m-FM

End B

200-Pin Connector Pin No.	CABLE 1	200-Pin Connector Pin No.
1	1	2
3	3	4
5	5	6
7	7	8
9	9	10
11	11	12
13	13	14
15	15	16
17	17	18
19	19	20
21	21	22
23	23	24
25	25	26
27	27	28
29	29	30
31	31	32
33	33	34
35	35	36
37	37	38
39	39	40
41	41	42
43	43	44
45	45	46
47	47	48
49	49	50

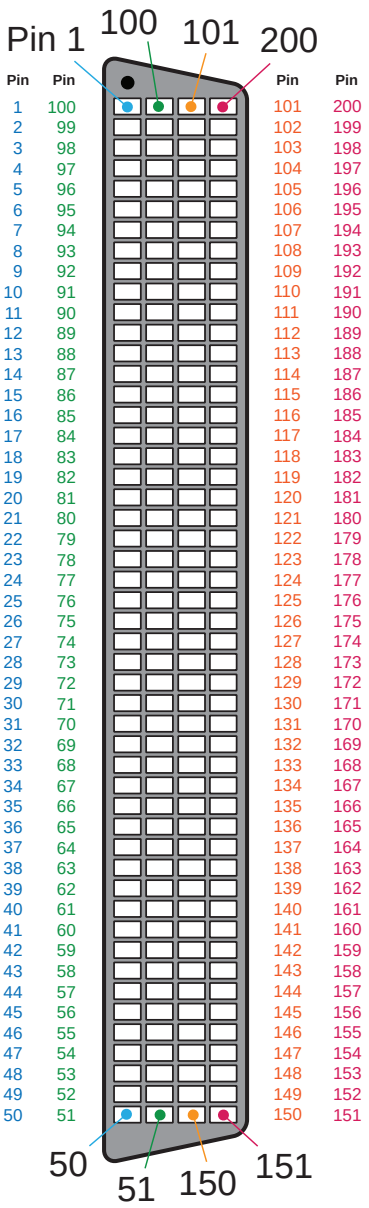
200-Pin Connector Pin No.	CABLE 2	200-Pin Connector Pin No.
51	1	2	52
53	3	4	54
55	5	6	56
57	7	8	58
59	9	10	60
61	11	12	62
63	13	14	64
65	15	16	66
67	17	18	68
69	19	20	70
71	21	22	72
73	23	24	74
75	25	26	76
77	27	28	78
79	29	30	80
81	31	32	82
83	33	34	84
85	35	36	86
87	37	38	88
89	39	40	90
91	41	42	92
93	43	44	94
95	45	46	96
97	47	48	98
99	49	50	100

200-Pin Connector Pin No.	CABLE 3	200-Pin Connector Pin No.
101	1	2	102
103	3	4	104
105	5	6	106
107	7	8	108
109	9	10	110
111	11	12	112
113	13	14	114
115	15	16	116
117	17	18	118
119	19	20	120
121	21	22	122
123	23	24	124
125	25	26	126
127	27	28	128
129	29	30	130
131	31	32	132
133	33	34	134
135	35	36	136
137	37	38	138
139	39	40	140
141	41	42	142
143	43	44	144
145	45	46	146
147	47	48	148
149	49	50	150

200-Pin Connector Pin No.	CABLE 4	200-Pin Connector Pin No.
151	1	2	152
153	3	4	154
155	5	6	156
157	7	8	158
159	9	10	160
161	11	12	162
163	13	14	164
165	15	16	166
167	17	18	168
169	19	20	170
171	21	22	172
173	23	24	174
175	25	26	176
177	27	28	178
179	29	30	180
181	31	32	182
183	33	34	184
185	35	36	186
187	37	38	188
189	39	40	190
191	41	42	192
193	43	44	194
195	45	46	196
197	47	48	198
199	49	50	200

50-Pin IDC Male Connectors (Mating Face)

End A



Pin	Pin	Pin	Pin
1	100	101	200
2	99	102	199
3	98	103	198
4	97	104	197
5	96	105	196
6	95	106	195
7	94	107	194
8	93	108	193
9	92	109	192
10	91	110	191
11	90	111	190
12	89	112	189
13	88	113	188
14	87	114	187
15	86	115	186
16	85	116	185
17	84	117	184
18	83	118	183
19	82	119	182
20	81	120	181
21	80	121	180
22	79	122	179
23	78	123	178
24	77	124	177
25	76	125	176
26	75	126	175
27	74	127	174
28	73	128	173
29	72	129	172
30	71	130	171
31	70	131	170
32	69	132	169
33	68	133	168
34	67	134	167
35	66	135	166
36	65	136	165
37	64	137	164
38	63	138	163
39	62	139	162
40	61	140	161
41	60	141	160
42	59	142	159
43	58	143	158
44	57	144	157
45	56	145	156
46	55	146	155
47	54	147	154
48	53	148	153
49	52	149	152
50	51	150	151

200-Pin LFH Female Connector (Mating Face)

Note 1. The cable screens are connected to the connector backshell at End A
2. A flying white/black insulated screen pigtail is included at End B for each cable

Connector Block - Female

90-002D

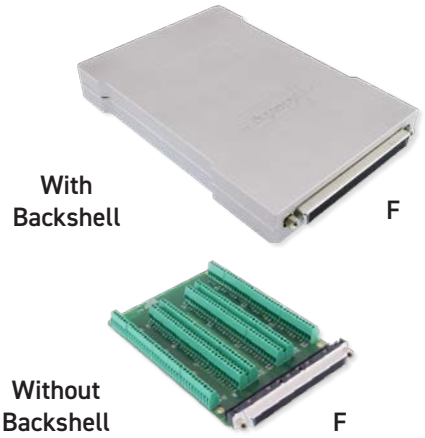
- Connector & PCB Only or Connector, PCB & Backshell
- Female Screwlocks
- Easy to Use Rising Cage Screw Terminals

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/PFA cables are recommended for use with this connector block to maximise copper cross-sectional area and insulation properties. The breakdown voltage of the connector block is controlled by clearances to the metal shell.

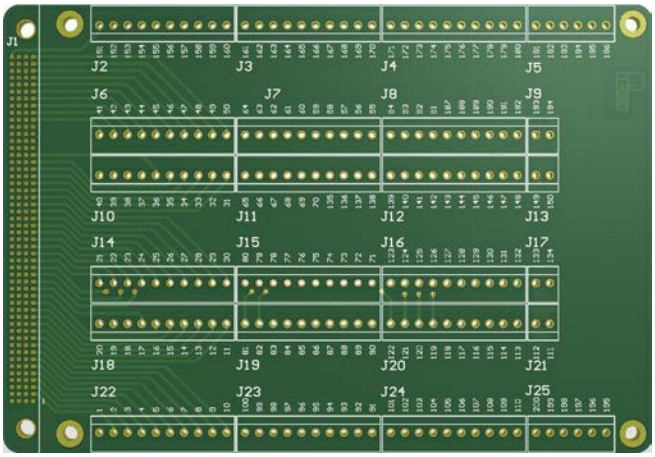
The connector block without a backshell can be mated to Pickering 200-Pin LFH cables. Connector blocks supplied without a backshell do not include cable strain relief.

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



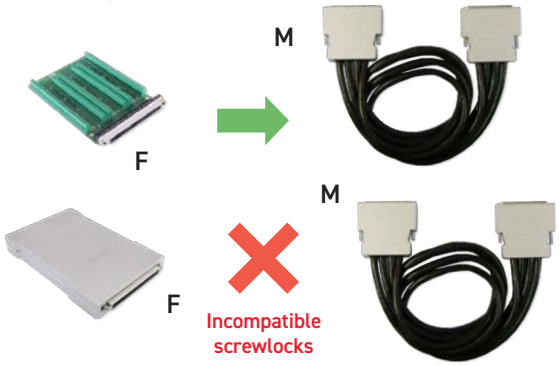
Technical Specification

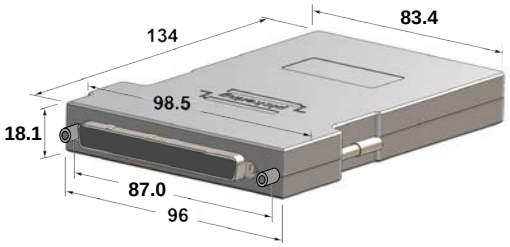
Connector Type:	200-Pin LFH
Gender	Female
Securing Method:	
Product with Backshell	4-40 UNC screwlocks, female
Product without Backshell	4-40 UNC screwlocks, female
Wire Connection	Rising cage screw terminals
Cable Screen Connection	Solder ring terminal
Connector Block Ratings:	
Maximum Current	1A
Maximum Voltage	150 VDC
Cable Exit	Rear - 32 x 11mm
Overall Size (Approx)	H98.5 x W18.1 x D138 mm
200-Pin LFH:	
Contact Material	Gold over nickel
Contact Resistance	<20 mOhm
Screw Terminals:	
Maximum Wire Size	20AWG
Recommended Insulation	PTFE/PFA
Additional Cable Clamp	Yes (in backshell)



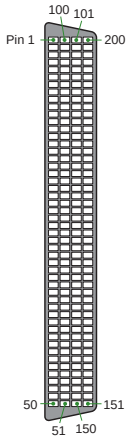
PCB Legend

Product Compatibility





Connector Block Dimensions



Female Mating Face

Product Order Codes

200-Pin LFH Connector Block, 1A, Screw Terminal,	
With Backshell, Female	B200LFR-2F-5B
Without Backshell, Female	B200LFX-2F-5B

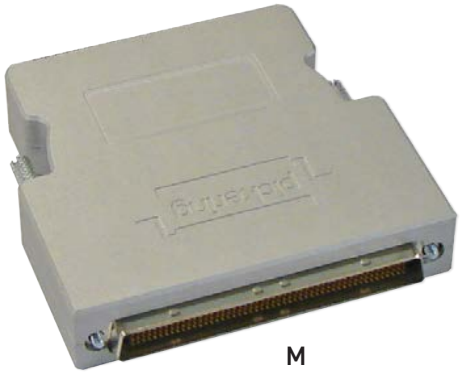
Note: The Female gender **Will Not Mate** with a Pickering Module.

- Connector and Backshell
- Cable Clamp in Backshell
- Soldered Cable Termination
- M3 Screwlocks (Male)

This accessory is designed to allow users to directly terminate with soldered connections to the 200-Pin LFH connector. It is difficult to terminate a cable to the 200-Pin LFH because of the high density and fine pitch. Pickering Interfaces recommend the use of purchased cable assemblies for applications where most or all of the contacts are in use.

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

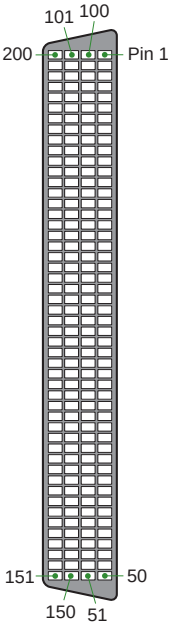
This Connector is Not Suitable for Connection to a Pickering Switching Product



M

Technical Specification

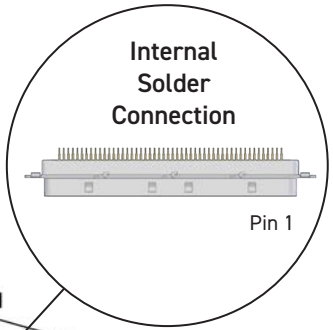
Connector Type:	200-Pin LFH
Gender	Male
Securing Method:l	M3 screwlocks, male
Wire Connection	Solder pin
Cable Screen Connection	Solder ring terminal
Connector Ratings:	
Maximum Current	1A
Maximum Voltage	150 VAC
Cable Exit:	Dual rear exit
Cable Exit Size	Each exit: 4.8 x 24 mm
Overall Size (Approx)	H87 x W18 x D84 mm
200-Pin LFH:	
Contact Material	Gold over nickel
Contact Resistance	<20 mOhm
Wire Connection:	
Maximum Wire Size	28AWG
Recommended Insulation	50-Pin twisted pair ribbon cable, 1.27 mm pitch
Additional Cable Clamp	Yes (in backshell)

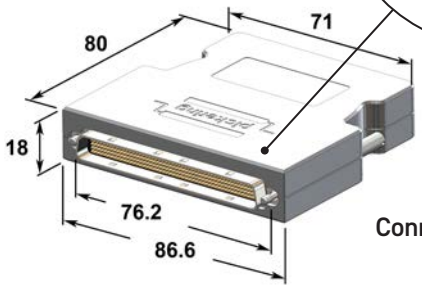


Male
Mating Face

50-Pin Connector Strip

4 x 50-Pin Strips are included with the connector kit





Connector Dimensions

Product Order Codes

200-Pin LFH Connector, 1A, Solder Pin, with Backshell, Male with M3 Screwlocks	40-961A-200-M3-M

Note: 1. The Female gender **Will Not Mate** with a Pickering Module.
2. This connector is supplied in kit form.

Cable Connector - Female

90-002D

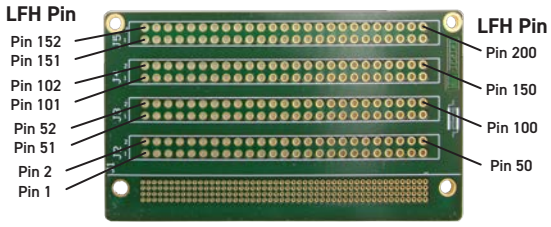
- Connector only or Connector and Backshell
- Cable Clamp in Backshell
- Soldered Cable Termination
- 4-40 UNC Screwlocks (Male)

This accessory is designed to allow users to terminate a cable with soldered connections to a PCB. Pickering Interfaces recommend the use of purchased cable assemblies for applications where most or all of the contacts are in use.

If this 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

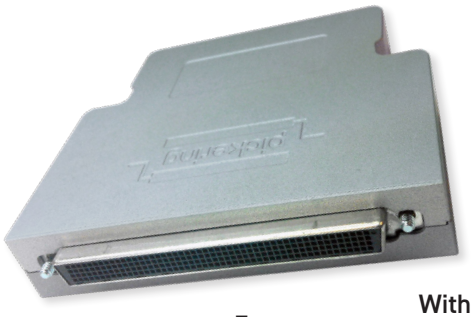
Connector Type:	200-Pin LFH
Gender	Female
Securing Method:l	
Product with Backshell	4-40 UNC screwlocks, male
Product without Backshell	4-40 UNC screwlocks, male
Wire Connection	Solder to PCB
Cable Screen Connection	Solder ring terminal
Connector Ratings:	
Maximum Current	1A
Maximum Voltage	150 VAC
Cable Exit:	Dual rear exit
Cable Exit Size	635 mm^2
Overall Size (Approx)	H92 x W18 x D84.7 mm
200-Pin LFH:	
Contact Material	Gold over nickel
Contact Resistance	<20 mOhm
Wire Connection:	
Maximum Wire Size	28AWG
Recommended Insulation	PVC
Additional Cable Clamp	Yes (in backshell)



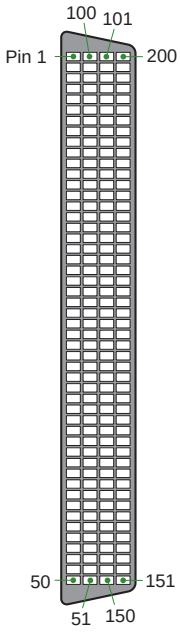
Soldered Connections

Connector Dimensions

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



F — With Backshell



Female Mating Face

Product Order Codes

200-Pin LFH Connector, 1A, with Backshell,	
Female with 4-40 UNC Male Screwlocks	C200LFR-2SP-5A
Female without Backshell	C200LFX-2SP-5A

Note: 1. The Female gender **Will Not Mate** with a Pickering Module.
2. This connector is supplied in kit form.

Cable Connector - Female

90-002D

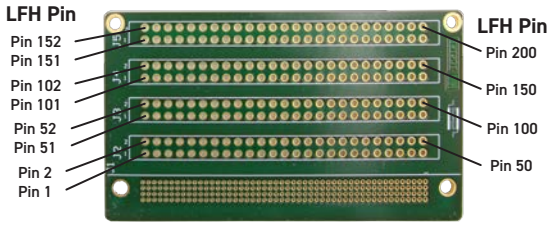
- Connector only or Connector and Backshell
- Cable Clamp in Backshell
- Soldered Cable Termination
- Female 4-40 UNC or M3 Screwlocks

This accessory is designed to allow users to terminate a cable with soldered connections to a PCB. Pickering Interfaces recommend the use of purchased cable assemblies for applications where most or all of the contacts are in use.

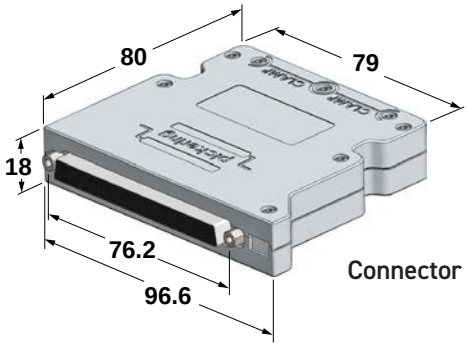
If this product is used without a backshell users should make their own cable strain relief arrangements and ensure appropriate electrical safety precautions are observed.

Technical Specification

Connector Type:	200-Pin LFH
Gender	Female
Securing Method:	
Product with Backshell	4-40 UNC or M3 screwlocks, female
Product without Backshell	4-40 UNC screwlocks, female
Wire Connection	Solder to PCB
Cable Screen Connection	Solder ring terminal
Connector Ratings:	
Maximum Current	1A
Maximum Voltage	150 VAC
Cable Exit:	Dual rear exit
Cable Exit Size	611 mm^2
Overall Size (Approx)	H97 x W18 x D84.7 mm
200-Pin LFH:	
Contact Material	Gold over nickel
Contact Resistance	<20 mOhm
Wire Connection:	
Maximum Wire Size	28AWG
Recommended Insulation	PVC
Additional Cable Clamp	Yes (in backshell)



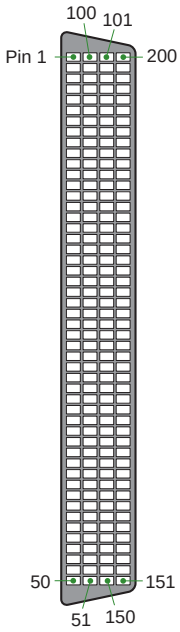
Soldered Connections



Connector Dimensions

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

F With Backshell



Female Mating Face

Product Order Codes

200-Pin LFH Connector, 1A, with Backshell, Female, 4-40 UNC Female Screwlocks	40-961A-200-F
Female , M3 Female Screwlocks	40-961A-200-M3-F
Female without Backshell	92-961-200-F

Note: 1. The Female gender **Will Not Mate** with a Pickering Module.
2. This connector is supplied in kit form.

Appendix 1

This appendix gives details of mating products in other Pickering data sheets.

Mating Products

Products in this Data Sheet		Mating Products		Data Sheet
	40-971B-200-*m-MF 40-971B-200-*m-FF Cable Assy, 200-Pin LFH to 50-Pin Ribbon, 1A,		40-967-550-M Breakout with DIN Rail Mount, 50-Pin IDC, 1A, Screw Terminal, Male	Please see Data Sheet 90-004D, 50-Pin IDC Accessories
			40-961-550-M Cable Connector, 50-Pin IDC for Ribbon Cable, 1A, Male	
			40-963-550-SM PCB Connector 50-Pin IDC, 1A, Male	
	40-971B-200-*m-MM 40-971B-200-*m-FM Cable Assy, 200-Pin LFH to 50-Pin Ribbon, 1A,		40-961-550-F Cable Connector 50-Pin IDC for Ribbon Cable, 1A, Female	
	40-971B-200D-*m-MF Cable Assy, 200-Pin LFH, to 50-Pin D-Type, 1A		40-967-050-M Breakout with DIN Rail Mount, 50-Pin D-Type, 5 A, Screw Terminal, Male	Please see Data Sheet 90-005D, 50-Pin D-Type Accessories
			40-963-050-RM PCB Connector 50-Pin D-Type, 5 A, Right Angle PCB Mount, Male	
			40-963-050-SM PCB Connector 50-Pin D-Type, 5 A, Straight PCB Mount, Male	
	40-971B-200D-*m-MM A200LMB-04F050D5B*** Cable Assy, 200-Pin LFH, to 50-Pin D-Type, 1A		40-967-050-F Breakout with DIN Rail Mount, 50-Pin D-Type, 5 A, Screw Terminal, Female	
			40-963-050-RF PCB Connector 50-Pin D-Type, 5 A, Right Angle PCB Mount, Female	
			40-963-050-SF PCB Connector 50-Pin D-Type, 5 A, Straight PCB Mount, Female	

Appendix 2

This appendix gives details of recent part number changes.

ECN1639 Dated 28th October 2021

This Change Note covered changes to the wire type used within the cable assemblies. The existing wire had become unavailable. Items that changed and the corresponding updated part numbers are detailed below:

Product changes in data sheet order		Data Sheet 90-002D Issue 11.4 Jul 2021	Data Sheet 90-002D Issue 11.5 Nov 2021
		Product Part Numbers	Product Part Numbers
	Cable Assy, 200-Pin LFH, 1A Male to Female, Male Screwlocks	A200LMR-200LFR-6A***	A200LMR-200LFR-6B***
	Cable Assy, 200-Pin LFH, 1A Male to Male, Male Screwlocks	40-970A-200-*m-MM	40-970B-200-*m-MM
	Extender Cable Assy, 200-Pin LFH, 1A Male to Female	A200LMR-200LFR-5A***	A200LMR-200LFR-5B***
	Extender Cable Assy, 200-Pin LFH, 1A Male (90° Cable Exit) to Female	A200LMB-200LFR-5A***	A200LMB-200LFR-5B***
	Cable Assy, 200-Pin LFH, 1A Male to Unterminated, Male Screwlocks	40-972A-200-*m-MU	40-972B-200-*m-MU
	Cable Assy, 200-Pin LFH, 1A Male to 4 x 50-Pin Ribbon, Female	40-971A-200-*m-MF	40-971B-200-*m-MF
	Cable Assy, 200-Pin LFH, 1A Male to 4 x 50-Pin Ribbon,Male	40-971A-200-*m-MM	40-971B-200-*m-MM
	Cable Assy, 200-Pin LFH, 1A Male to 4 x 50-Pin 50-Pin D-Sub,,Male	40-971A-200D-*m-MM	40-971B-200D-*m-MM
	Cable Assy, 200-Pin LFH, 1A Male to 4 x 50-Pin 50-Pin D-Sub,,Female	40-971A-200D-*m-MF	40-971B-200D-*m-MF
	Cable Assy, 200-Pin LFH, 1A Male (90° Cable Exit) to 4 x 50-Pin 50-Pin D-Sub,,Female	A200LMB-04F050D5A***	A200LMB-04F050D5B***
	Cable Assy, 200-Pin LFH, 1A Female to Female, Male Screwlocks	A200LFR-200LFR-6A***	A200LFR-200LFR-6B***
	Cable Assy, 200-Pin LFH, 1A Female to Female, Female Screwlocks	40-970A-200-*m-FF	40-970B-200-*m-FF
	Cable Assy, 200-Pin LFH, 1A Female to Unterminated, Female Screwlocks	40-972A-200-*m-FU	40-972B-200-*m-FU
	Cable Assy, 200-Pin LFH, 1A Female to 4 x 50-Pin Ribbon, Female	40-971A-200-*m-FF	40-971B-200-*m-FF
	Cable Assy, 200-Pin LFH, 1A Female to 4 x 50-Pin Ribbon, Male	40-971A-200-*m-FM	40-971B-200-*m-FM

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.

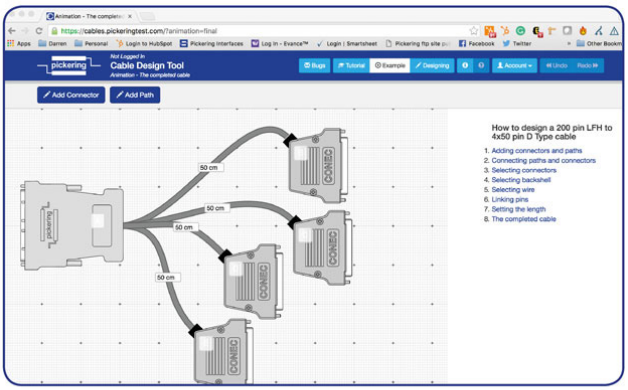
All products are designed to ensure easy and problem free connection.

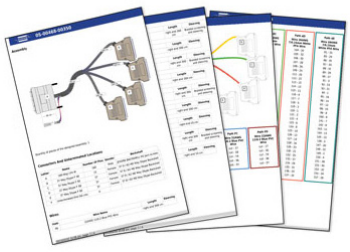
We offer a fast turn round of custom items to keep your ordering and integration time scales to a minimum.

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