

- 2 Amps to 200 VDC
- Cable Assemblies
- Cable Connectors
- Guaranteed Compatibility



Simple Connection

Pickering connection solutions provide a simple way of connecting to a user's device under test or remote connection. The products include cable assemblies and cable connectors.

Cable Assemblies

Cable assemblies are offered in connector to connector, and connector to unterminated versions. There are 3 termination options for the unterminated cables - ferrules, tinned copper or simple cut end.



Custom Design Needs

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




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



An example of a Pickering PXI Product using a 500-Pin SEARAY Connector


SEARAY is a trademark of Samtec, Inc.

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, 500-Pin SEARAY (250-Port Version), 2 A	Male, Rear	Male, Rear	-	0.5 m 1 m 2 m	A500RMR-500RMR-5C050 A500RMR-500RMR-5C100 A500RMR-500RMR-5C200	4
	Cable Assy, 500-Pin SEARAY (250-Port Version) to Unterminated, 2 A	Male, Rear	NA	Ferrules	0.5 m 1 m 2 m	A500RMR-F-5C050 A500RMR-F-5C100 A500RMR-F-5C200	5
				Tinned End	0.5 m 1 m 2 m	A500RMR-T-5C050 A500RMR-T-5C100 A500RMR-T-5C200	
				Cut End	0.5 m 1 m 2 m	A500RMR-C-5C050 A500RMR-C-5C100 A500RMR-C-5C200	
	Cable Assy, 500-Pin SEARAY (250-Port Version) to 5 x 50-Pin D-Type, 2 A	Male, Rear	Female, 45° Away from Pin 1	-	0.5 m 1 m 2 m	A500RMR-05F050D5C050 A500RMR-05F050D5C100 A500RMR-05F050D5C200	7

Note: Custom lengths by quotation

Connectors



Description		Gender & Cable Exit	Type	Product Order Code and Part Number	Page
	Cable Connector, 500-Pin SEARAY (250-Port Version), 2 A, Soldered Connection	Male, Rear	With Backshell	C500RMR-4SB-5C	9
			Without Backshell	C500RMX-4SB-5C	

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

Additional Accessories

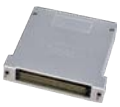
Although the items below do not directly mate with Pickering Interfaces products, customers may find them useful in the development of their own connection solutions.

Cable Assemblies

Description		End 1	End 2		Cable Length	Product Order Code and Part Number	Data Sheet Page
		Gender & Cable Exit	Gender & Cable Exit	Options			
	Cable Assy, 500-Pin SEARAY (500-Port Version), 1A	Male, Rear	Male, Rear	-	0.5 m 1 m 2 m	A500RMR-500RMR-1B050 A500RMR-500RMR-1B100 A500RMR-500RMR-1B200	12
	Cable Assy, 500-Pin SEARAY (500-Port Version) to Unterminated, 1A	Male, Rear	NA	Ferrules	0.5 m 1 m 2 m	A500RMR-F-1B050 A500RMR-F-1B100 A500RMR-F-1B200	13
				Tinned End	0.5 m 1 m 2 m	A500RMR-T-1B050 A500RMR-T-1B100 A500RMR-T-1B200	
				Cut End	0.5 m 1 m 2 m	A500RMR-C-1B050 A500RMR-C-1B100 A500RMR-C-1B200	

Note: Custom lengths by quotation

Connectors

Description		Gender & Cable Exit	Type	Product Order Code and Part Number	Page
	Cable Connector, 500-Pin SEARAY (500-Port Version), 1A, Soldered Connection	Male, Rear	With Backshell	C500RMR-4SB-1B	14
			Without Backshell	C500RMX-4SB-1B	

Appendix

Details of recent part number changes..... 16

Custom Termination

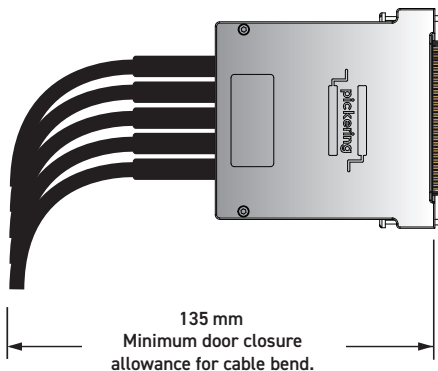
Customization Possibilities 18

- 250-Port High Specification Cable
- 5 Wire Bundles to Improve Flexibility
- Strain Relief
- Fully Screened Cable Construction

The male connector of this cable assembly is suitable for direct connection to Pickering Interfaces products using the 500-Pin SEARAY connector. Screwlocks are provided to secure the cable assembly to a mating product.

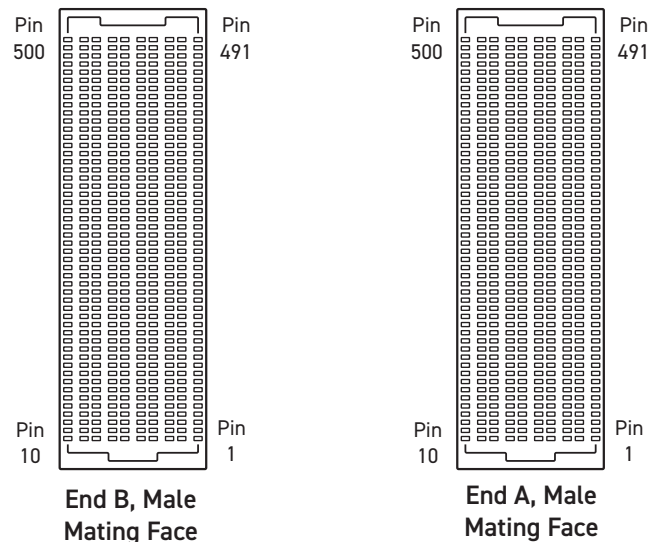
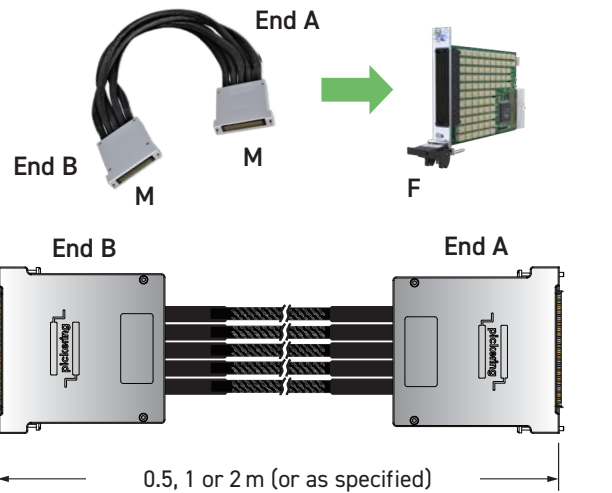
Technical Specification

Connector Type (End A):	500-Pin SEARAY (250-Port Version)
Gender	Male
Securing Method	M2.5 screwlocks, male
Connector Type (End B):	500-Pin SEARAY (250-Port Version)
Gender	Male
Securing Method	M2.5 screwlocks, male
Maximum Current	2 A
Maximum Voltage	200 VDC
Insulation Resistance	1000 MOhm
Connectors:	
Contact Material	Gold plated copper alloy
Contact Resistance	<20 mOhm
Cable Exit:	Rear
Overall Size (Approx)	H97.7 x W19.9 x D99.5 mm
Cable Type:	5 bundles of Individual wires, screened & sleeved.
Conductor: Material	Tinned copper
Strands	7/0.15 mm (26AWG),
Resistance	0.2 Ω/m
Insulation	PFA
Outer Sleeve	-
Screened Construction	Yes (Cable screens connected to backshells)
Additional Braided Sleeve	Yes
Cable O/D	10 mm (Individual Cables)
Minimum Bend Radius	25 mm
Door Closure Allowance	135 mm (see diagram)



500-Pin SEARAY Cable Assembly

Product Compatibility



Product Order Codes

500-Pin SEARAY Cable Assy (250-Port Version), 2 A, Male to Male, 0.5 m Long	A500RMR-500RMR-5C050
1.0 m Long	A500RMR-500RMR-5C100
2.0 m Long	A500RMR-500RMR-5C200

Note: Other cable lengths can be supplied.

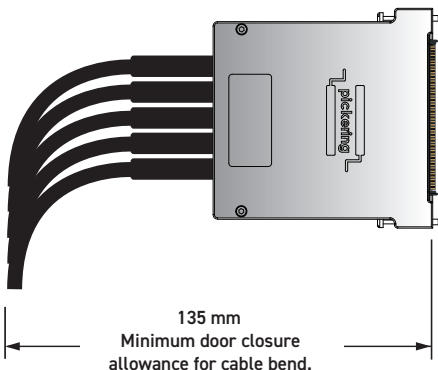
- 250-Port High Specification Cable
- 5 Wire Bundles to Improve Flexibility
- Fully Screened Cable Construction with Strain Relief
- Fully Coded to Ensure Easy Connection

The male SEARAY connector of this cable assembly is suitable for direct connection to Pickering Interfaces products. Unterminated connections are provided at the other end of the cable for a variety of applications. Screwlocks enable the SEARAY connector to be secured to its mating product.

When using this product please ensure appropriate electrical safety precautions are observed.

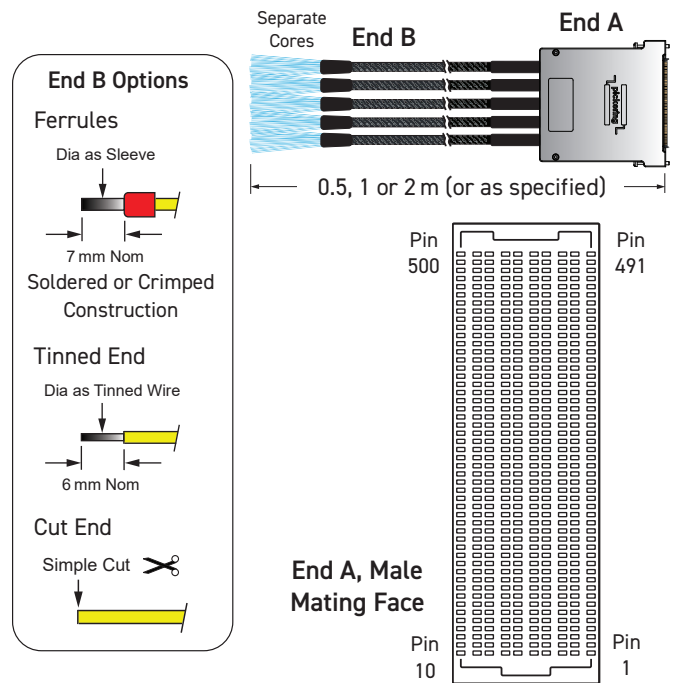
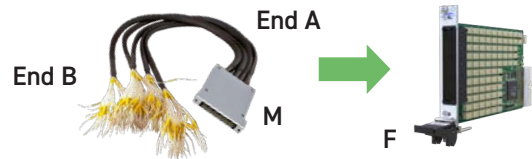
Technical Specification

Connector Type (End A):	500-Pin SEARAY (250-Port Version)
Gender	Male
Securing Method	M2.5 screwlocks, male
Unterminated End (End B):	
Free Wire Length	130 mm nominal
Individual Wire Labelling	To connector pins. White/black screen pigtails are also included
Wire End Options	Ferrules, Tinned, Cut End
Maximum Current	2 A
Maximum Voltage	200 VDC
Insulation Resistance	1000 MOhm
Connector:	
Contact Material	Gold plated copper alloy
Contact Resistance	<20 mOhm
Cable Exit	Rear
Overall Size (Approx)	H97.7 x W19.9 x D99.5 mm
Cable Type:	5 bundles of Individual wires, screened & sleeved
Conductor: Material	Tinned copper
Strands	7/0.15 mm (26AWG)
Resistance	0.2 Ω/m
Insulation	PFA
Outer Sleeve	-
Screened Construction	Yes (Cable screens connected to backshell)
Additional Braided Sleeve	Yes
Cable O/D	10 mm (Individual Cables)
Minimum Bend Radius	25 mm
Door Closure Allowance	135 mm (see diagram)



500-Pin SEARAY Unterminated Cable Assembly

Product Compatibility



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

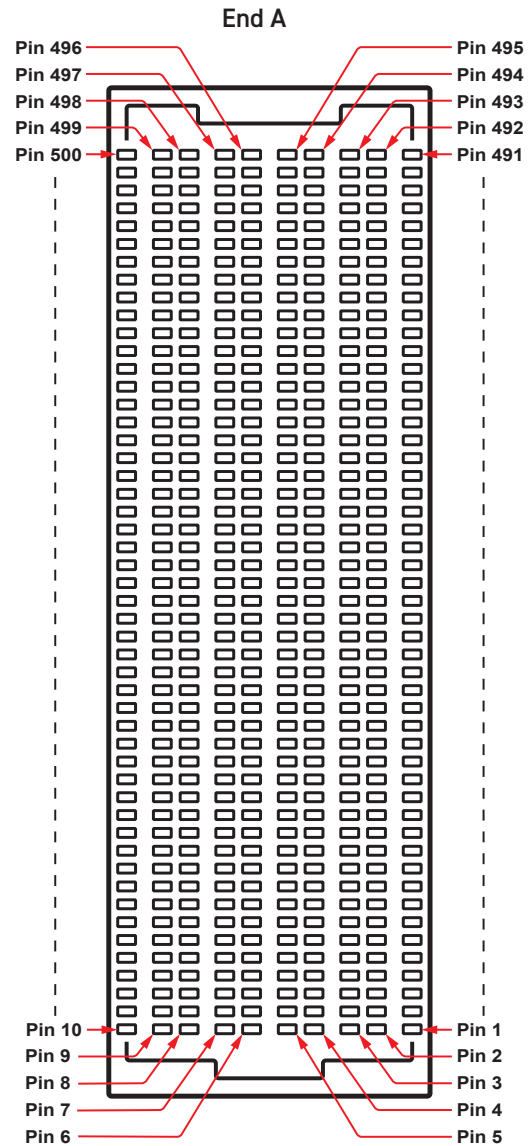
Product Order Codes

500-Pin SEARAY (250-Port Version) Cable Assy, 2 A,	
Male to Unterm, Ferrules, 0.5 m Lg	A500RMR-F-5C050
Male to Unterm, Ferrules, 1.0 m Lg	A500RMR-F-5C100
Male to Unterm, Ferrules, 2.0 m Lg	A500RMR-F-5C200
Male to Unterm, Tinned End, 0.5 m Lg	A500RMR-T-5C050
Male to Unterm, Tinned End, 1.0 m Lg	A500RMR-T-5C100
Male to Unterm, Tinned End, 2.0 m Lg	A500RMR-T-5C200
Male to Unterm, Cut End, 0.5 m Lg	A500RMR-C-5C050
Male to Unterm, Cut End, 1.0 m Lg	A500RMR-C-5C100
Male to Unterm, Cut End, 2.0 m Lg	A500RMR-C-5C200

Note: Other cable lengths can be supplied.

500-Pin SEARAY (250-Port version), Male to Unterminated A500RMR-*-5C***

Pin Connections / Wire labelling				
Pins	Pins	Pins	Pins	Pins
491 & 492	493 & 494	495 & 496	497 & 498	499 & 500
481 & 482	483 & 484	485 & 486	487 & 488	489 & 490
471 & 472	473 & 474	475 & 476	477 & 478	479 & 480
461 & 462	463 & 464	465 & 466	467 & 468	469 & 470
451 & 452	453 & 454	455 & 456	457 & 458	459 & 460
441 & 442	443 & 444	445 & 446	447 & 448	449 & 450
431 & 432	433 & 434	435 & 436	437 & 438	439 & 440
421 & 422	423 & 424	425 & 426	427 & 428	429 & 430
411 & 412	413 & 414	415 & 416	417 & 418	419 & 420
401 & 402	403 & 404	405 & 406	407 & 408	409 & 410
391 & 392	393 & 394	395 & 396	397 & 398	399 & 400
381 & 382	383 & 384	385 & 386	387 & 388	389 & 390
371 & 372	373 & 374	375 & 376	377 & 378	379 & 380
361 & 362	363 & 364	365 & 366	367 & 368	369 & 370
351 & 352	353 & 354	355 & 356	357 & 358	359 & 360
341 & 342	343 & 344	345 & 346	347 & 348	349 & 350
331 & 332	333 & 334	335 & 336	337 & 338	339 & 340
321 & 322	323 & 324	325 & 326	327 & 328	329 & 330
311 & 312	313 & 314	315 & 316	317 & 318	319 & 320
301 & 302	303 & 304	305 & 306	307 & 308	309 & 310
291 & 292	293 & 294	295 & 296	297 & 298	299 & 300
281 & 282	283 & 284	285 & 286	287 & 288	289 & 290
271 & 272	273 & 274	275 & 276	277 & 278	279 & 280
261 & 262	263 & 264	265 & 266	267 & 268	269 & 270
251 & 252	253 & 254	255 & 256	257 & 258	259 & 260
241 & 242	243 & 244	245 & 246	247 & 248	249 & 250
231 & 232	233 & 234	235 & 236	237 & 238	239 & 240
221 & 222	223 & 224	225 & 226	227 & 228	229 & 230
211 & 212	213 & 214	215 & 216	217 & 218	219 & 220
201 & 202	203 & 204	205 & 206	207 & 208	209 & 210
191 & 192	193 & 194	195 & 196	197 & 198	199 & 200
181 & 182	183 & 184	185 & 186	187 & 188	189 & 190
171 & 172	173 & 174	175 & 176	177 & 178	179 & 180
161 & 162	163 & 164	165 & 166	167 & 168	169 & 170
151 & 152	153 & 154	155 & 156	157 & 158	159 & 160
141 & 142	143 & 144	145 & 146	147 & 148	149 & 150
131 & 132	133 & 134	135 & 136	137 & 138	139 & 140
121 & 122	123 & 124	125 & 126	127 & 128	129 & 130
111 & 112	113 & 114	115 & 116	117 & 118	119 & 120
101 & 102	103 & 104	105 & 106	107 & 108	109 & 110
91 & 92	93 & 94	95 & 96	97 & 98	99 & 100
81 & 82	83 & 84	85 & 86	87 & 88	89 & 90
71 & 72	73 & 74	75 & 76	77 & 78	79 & 80
61 & 62	63 & 64	65 & 66	67 & 68	69 & 70
51 & 52	53 & 54	55 & 56	57 & 58	59 & 60
41 & 42	43 & 44	45 & 46	47 & 48	49 & 50
31 & 32	33 & 34	35 & 36	37 & 38	39 & 40
21 & 22	23 & 24	25 & 26	27 & 28	29 & 30
11 & 12	13 & 14	15 & 16	17 & 18	19 & 20
1 & 2	3 & 4	5 & 6	7 & 8	9 & 10



**Male SEARAY Connector
(viewed from the mating face)**

Notes:

1. Adjacent pins are connected together to provide the 2 Amp current rating
2. Individual wires are labelled with the two relevant pin numbers at End B
3. Cable screens are connected to the connector backshell at End A
4. White/black screen pigtailed are included for each cable at End B

- 250-Port High Specification Cable
- Highly Flexible Cable with Braided Sleeve
- Strain Relief
- Fully Screened Cable Construction

The male SEARAY connector of this cable assembly is suitable for direct connection to Pickering Interfaces products. Five 50-Pin D-Type connectors allow an interface to other devices. Screwlocks are provided at both ends to secure the cable assembly to mating products.

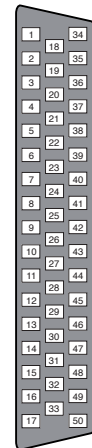
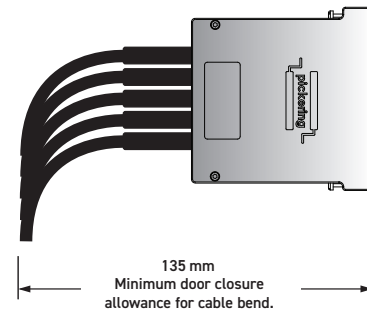
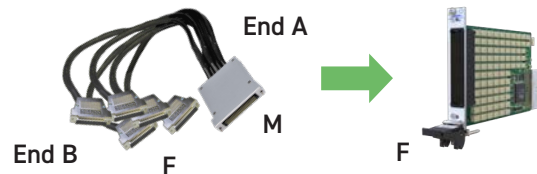
Technical Specification

Connector Type (End A):	500-Pin SEARAY (250-Port Version)
Gender	Male
Securing Method	M2.5 screwlocks, male
Connector Type (End B):	5 x 50-Pin D-Subminiature
Gender	Female
Securing Method	4-40 UNC screwlocks, male
Maximum Current	2 A
Maximum Voltage	200 VDC
Insulation Resistance	1000 MOhm
SEARAY Connector:	
Contact Material	Gold plated copper alloy
Contact Resistance	<20 mOhm
Cable Exit:	Rear
Overall Size (Approx)	H97.7 x W19.9 x D99.5 mm
50-Pin Connectors:	
Contact Material	Gold plated copper alloy
Contact Resistance	20 mOhm
Cable Exit:	45° (Away from Pin 1)
Overall Size (Approx)	H68 x W18.5 x D55 mm
Cable Type:	5 bundles of individual wires, screened & sleeved
Conductor: Material	Tinned copper
Strands	7/0.15 mm (26AWG)
Resistance	0.2 Ω/m
Insulation	PFA
Outer Sleeve	-
Screened Construction	Yes (Cable screens connected to backshells)
Additional Braided Sleeve	Yes
Cable O/D	10 mm (Individual Cables)
Minimum Bend Radius	25 mm
Door Closure Allowance	135 mm (see diagram)

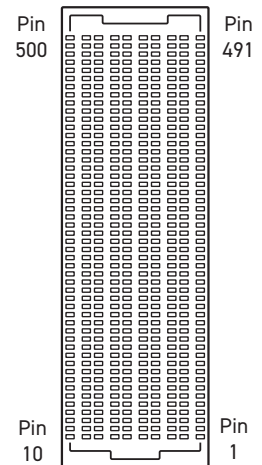


500-Pin SEARAY to 5 x 50-Pin D-Type Cable Assy

Product Compatibility



End B, 50-Pin D-Type, Female Mating Face



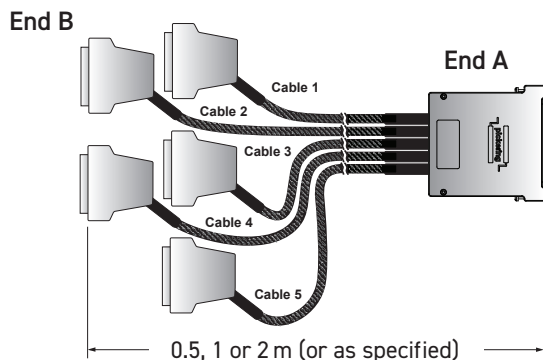
End A, Male Mating Face

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

Product Order Codes

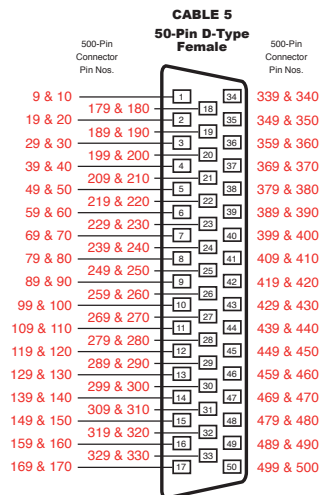
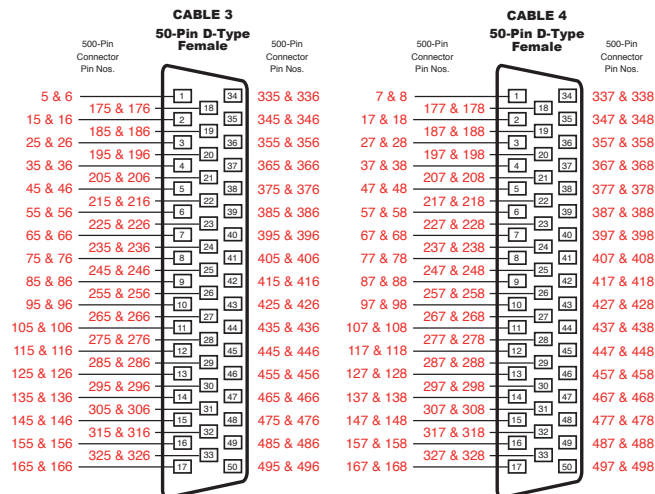
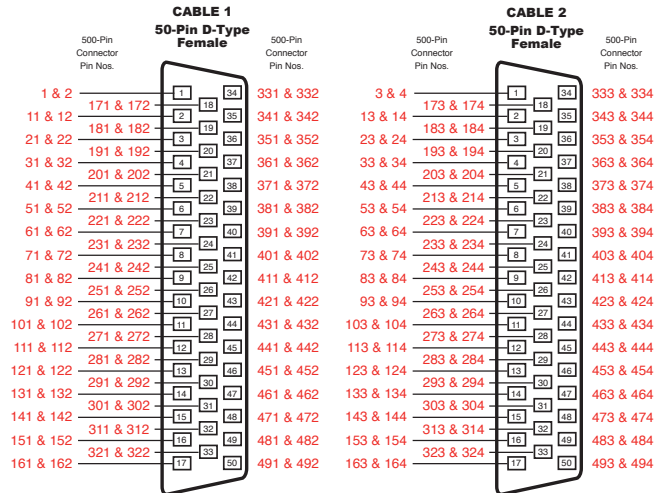
500-Pin (250-Port) SEARAY to 5 x 50-Pin D-Type Cable Assy, 2 A, Male to Female, 0.5 m Long	A500RMR-05F050D5C050
Male to Female, 1.0 m Long	A500RMR-05F050D5C100
Male to Female, 2.0 m Long	A500RMR-05F050D5C200

Note: Other cable lengths can be supplied.



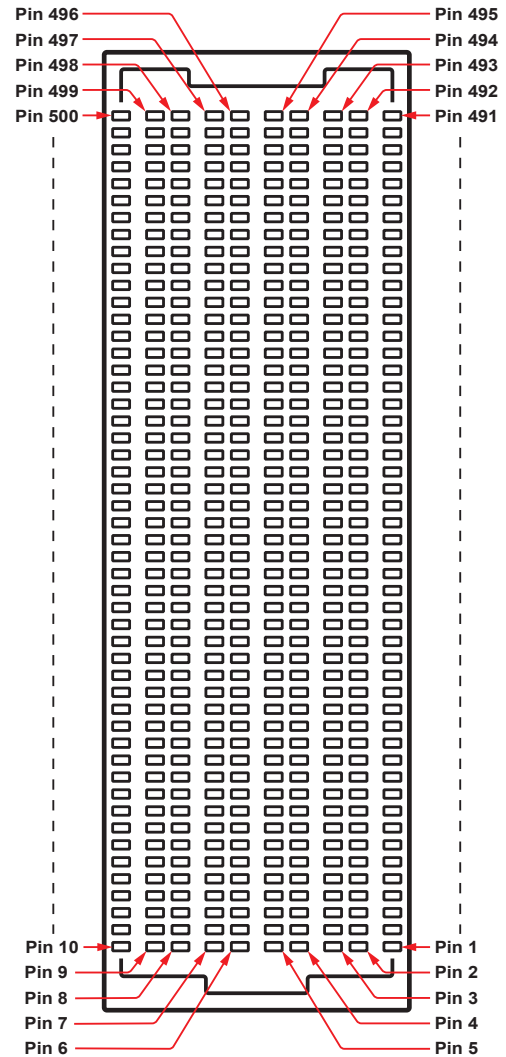
500-Pin SEARAY (250-Port version), Male to 5 x 50-Pin D-Type, Female A500RMR-05F050D5C***

End B



Mating faces detailed

End A



Male SEARAY Connector
(viewed from the mating face)

Notes:

1. Adjacent pins are connected together at End A to provide the 2 Amp current rating
2. Cable screens are connected to the connector backshells

- 500-Pin (250-Port) Connector
- Connector only or Connector and Backshell
- Soldered Cable Termination

This accessory is designed to allow users to directly terminate a cable via soldered PCB connections to the 500-Pin SEARAY connector. Pickering Interfaces recommend the use of purchased cable assemblies for applications where most or all of the contacts are in use.

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

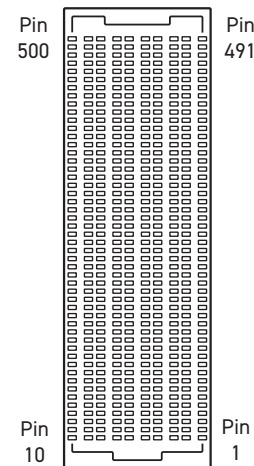
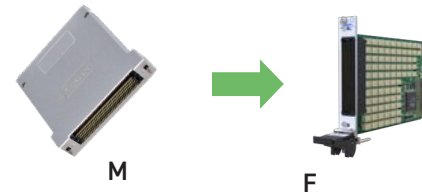
Technical Specification

Connector Type:	500-Pin SEARAY (250-Port Version)
Gender	Male
Securing Method:	
Product with Backshell	M2.5 screwlocks, male
Product without Backshell	Push fit
Wire Connection	Solder to PCB pads
Cable Screen Connection	Solder ring terminal
Connector Ratings:	
Maximum Current	2 A
Maximum Voltage	200 VDC
Cable Exit:	Rear
Cable Exit Size	72 x 13.1 mm
Overall Size (Approx)	H97.7 x W19.9 x D99.5 mm
500-Pin SEARAY:	
Contact Material	Gold plated copper alloy
Contact Resistance	<20 mOhm
Wire Connection:	
Maximum Wire Size	26AWG
Recommended Insulation	PFA
Additional Cable Clamp	Yes (in backshell)



500-Pin SEARAY Cable Connector with Backshell

Product Compatibility



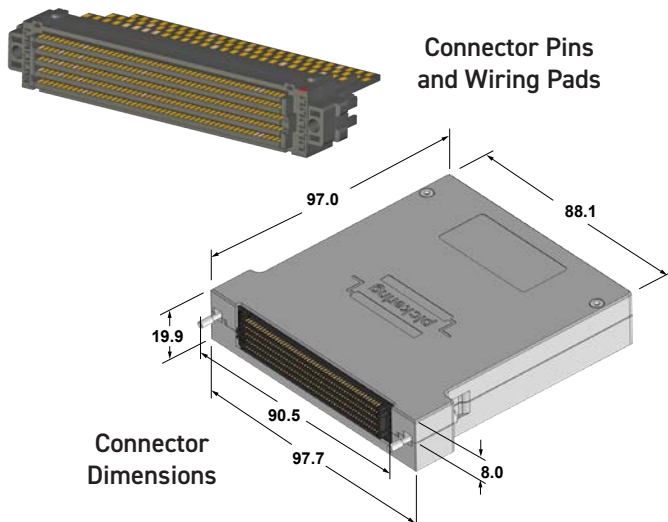
Male Mating Face

Note: Pin-Out information can be found on the following page.

Product Order Codes

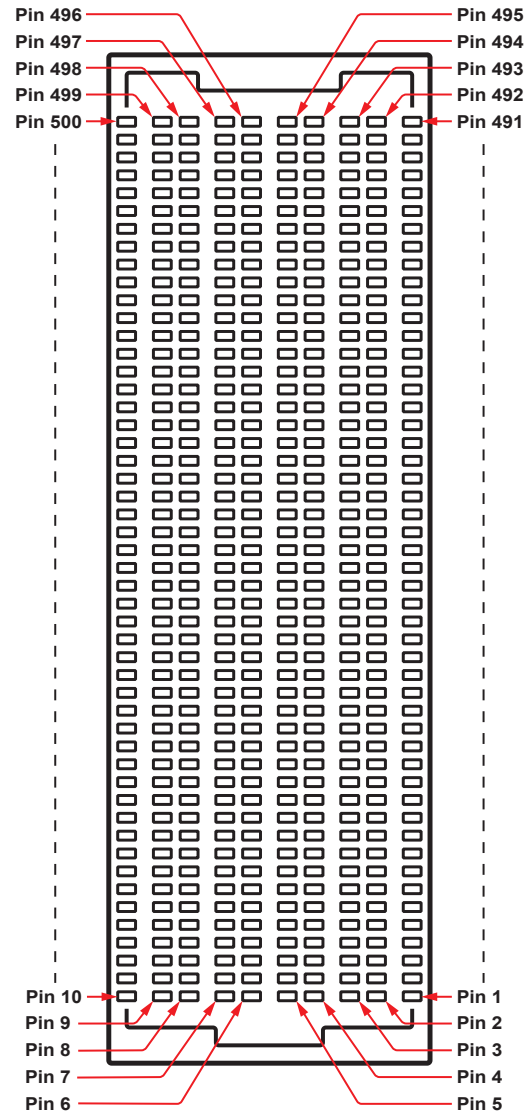
- 500-Pin SEARAY Connector (250-Port Version), 2 A, With Backshell, Male [C500RMR-4SB-5C](#)
- Without Backshell, Male [C500RMX-4SB-5C](#)

Note: The connector is provided in kit form for ease of assembly.



500-Pin SEARAY (250-Port version), Male C500RM*-4SB-5C

Pin Connections				
Pins	Pins	Pins	Pins	Pins
491 & 492	493 & 494	495 & 496	497 & 498	499 & 500
481 & 482	483 & 484	485 & 486	487 & 488	489 & 490
471 & 472	473 & 474	475 & 476	477 & 478	479 & 480
461 & 462	463 & 464	465 & 466	467 & 468	469 & 470
451 & 452	453 & 454	455 & 456	457 & 458	459 & 460
441 & 442	443 & 444	445 & 446	447 & 448	449 & 450
431 & 432	433 & 434	435 & 436	437 & 438	439 & 440
421 & 422	423 & 424	425 & 426	427 & 428	429 & 430
411 & 412	413 & 414	415 & 416	417 & 418	419 & 420
401 & 402	403 & 404	405 & 406	407 & 408	409 & 410
391 & 392	393 & 394	395 & 396	397 & 398	399 & 400
381 & 382	383 & 384	385 & 386	387 & 388	389 & 390
371 & 372	373 & 374	375 & 376	377 & 378	379 & 380
361 & 362	363 & 364	365 & 366	367 & 368	369 & 370
351 & 352	353 & 354	355 & 356	357 & 358	359 & 360
341 & 342	343 & 344	345 & 346	347 & 348	349 & 350
331 & 332	333 & 334	335 & 336	337 & 338	339 & 340
321 & 322	323 & 324	325 & 326	327 & 328	329 & 330
311 & 312	313 & 314	315 & 316	317 & 318	319 & 320
301 & 302	303 & 304	305 & 306	307 & 308	309 & 310
291 & 292	293 & 294	295 & 296	297 & 298	299 & 300
281 & 282	283 & 284	285 & 286	287 & 288	289 & 290
271 & 272	273 & 274	275 & 276	277 & 278	279 & 280
261 & 262	263 & 264	265 & 266	267 & 268	269 & 270
251 & 252	253 & 254	255 & 256	257 & 258	259 & 260
241 & 242	243 & 244	245 & 246	247 & 248	249 & 250
231 & 232	233 & 234	235 & 236	237 & 238	239 & 240
221 & 222	223 & 224	225 & 226	227 & 228	229 & 230
211 & 212	213 & 214	215 & 216	217 & 218	219 & 220
201 & 202	203 & 204	205 & 206	207 & 208	209 & 210
191 & 192	193 & 194	195 & 196	197 & 198	199 & 200
181 & 182	183 & 184	185 & 186	187 & 188	189 & 190
171 & 172	173 & 174	175 & 176	177 & 178	179 & 180
161 & 162	163 & 164	165 & 166	167 & 168	169 & 170
151 & 152	153 & 154	155 & 156	157 & 158	159 & 160
141 & 142	143 & 144	145 & 146	147 & 148	149 & 150
131 & 132	133 & 134	135 & 136	137 & 138	139 & 140
121 & 122	123 & 124	125 & 126	127 & 128	129 & 130
111 & 112	113 & 114	115 & 116	117 & 118	119 & 120
101 & 102	103 & 104	105 & 106	107 & 108	109 & 110
91 & 92	93 & 94	95 & 96	97 & 98	99 & 100
81 & 82	83 & 84	85 & 86	87 & 88	89 & 90
71 & 72	73 & 74	75 & 76	77 & 78	79 & 80
61 & 62	63 & 64	65 & 66	67 & 68	69 & 70
51 & 52	53 & 54	55 & 56	57 & 58	59 & 60
41 & 42	43 & 44	45 & 46	47 & 48	49 & 50
31 & 32	33 & 34	35 & 36	37 & 38	39 & 40
21 & 22	23 & 24	25 & 26	27 & 28	29 & 30
11 & 12	13 & 14	15 & 16	17 & 18	19 & 20
1 & 2	3 & 4	5 & 6	7 & 8	9 & 10



Male SEARAY Connector
(viewed from the mating face)

Note: Adjacent pins are connected together to provide the 2 Amp current rating.

Additional Connection Accessories

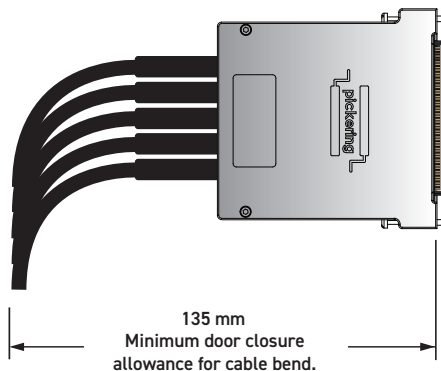
Although these items do not directly mate with Pickering Interfaces products customers may find them useful in the development of their own connection solutions.

- 500-Port High Specification Cable
- 5 Wire Bundles to Improve Flexibility
- Strain Relief
- Fully Screened Cable Construction

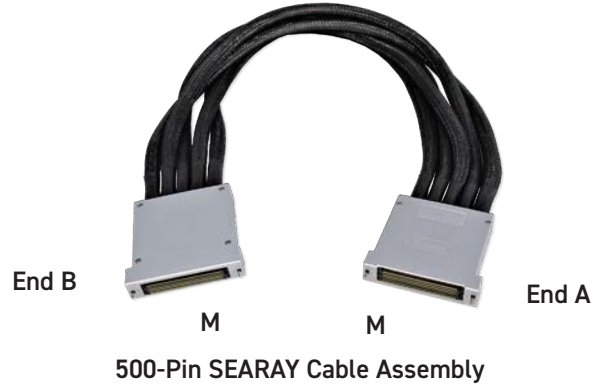
The male connector of this cable assembly is suitable for direct connection to Pickering Interfaces products using the 500-Pin SEARAY connector. Screwlocks are provided to secure the cable assembly to a mating product.

Technical Specification

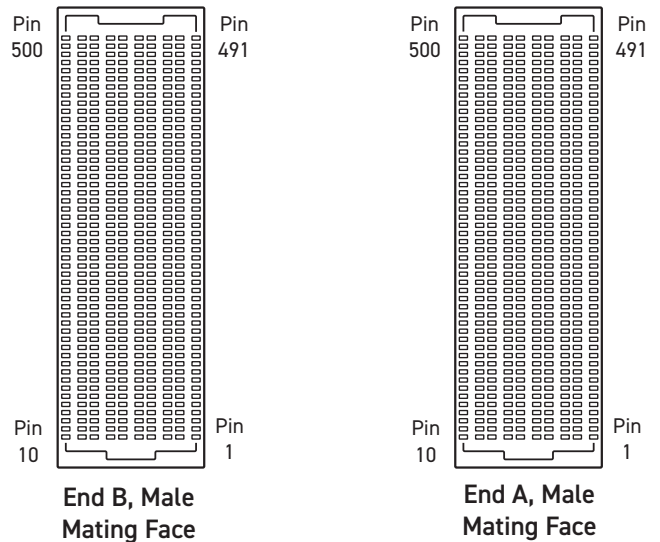
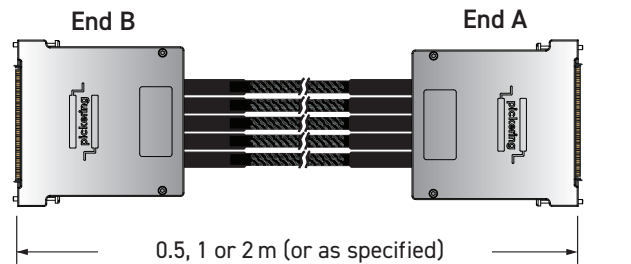
Connector Type (End A):	500-Pin SEARAY (500-Port Version)
Gender	Male
Securing Method	M2.5 screwlocks, male
Connector Type (End B):	500-Pin SEARAY (500-Port Version)
Gender	Male
Securing Method	M2.5 screwlocks, male
Maximum Current	1A
Maximum Voltage	200 VDC
Insulation Resistance	1000 MOhm
Connectors:	
Contact Material	Gold plated copper alloy
Contact Resistance	<20 mOhm
Cable Exit:	Rear
Overall Size (Approx)	H97.7 x W19.9 x D99.5 mm
Cable Type:	5 bundles of individual wires, screened & sleeved
Conductor: Material	Tinned copper
Strands	7/0.15 mm (26AWG)
Resistance	0.2 Ω/m
Insulation	PFA
Outer Sleeve	-
Screened Construction	Yes (Cable screens connected to backshells)
Additional Braided Sleeve	Yes
Cable O/D	10 mm (Individual Cables)
Minimum Bend Radius	25 mm
Door Closure Allowance	135 mm (see diagram)



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



Product Compatibility



Product Order Codes

500-Pin SEARAY Cable Assy (500-Port Version), 1A, Male to Male, 0.5 m Long	A500RMR-500RMR-1B050
1.0 m Long	A500RMR-500RMR-1B100
2.0 m Long	A500RMR-500RMR-1B200

Note: Other cable lengths can be supplied.

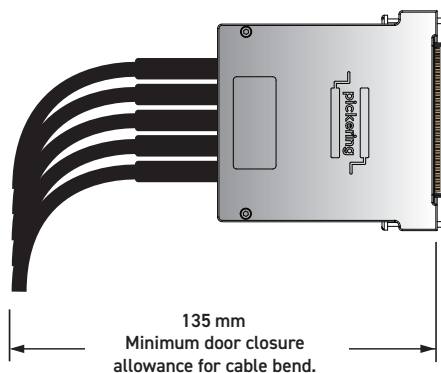
- 500-Port High Specification Cable
- 5 Wire Bundles to Improve Flexibility
- Fully Screened Cable Construction with Strain Relief
- Fully Coded to Ensure Easy Connection

The male SEARAY connector of this cable assembly is suitable for direct connection to Pickering Interfaces products. Unterminated connections are provided at the other end of the cable for a variety of applications. Screwlocks enable the SEARAY connector to be secured to its mating product.

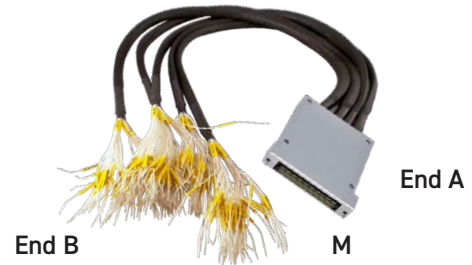
When using this product please ensure appropriate electrical safety precautions are observed.

Technical Specification

Connector Type (End A):	500-Pin SEARAY (500-Port Version)
Gender	Male
Securing Method	M2.5 screwlocks, male
Unterminated End (End B):	
Free Wire Length	130 mm nominal
Individual Wire Labelling	To connector pins. White/black screen pigtails are also included
Wire End Options	Ferrules, Tinned, Cut End
Maximum Current	1A
Maximum Voltage	200 VDC
Insulation Resistance	1000 MOhm
Connector:	
Contact Material	Gold plated copper alloy
Contact Resistance	<20 mOhm
Cable Exit	Rear
Overall Size (Approx)	H97.7 x W19.9 x D99.5 mm
Cable Type:	5 bundles of Individual wires, screened & sleeved
Conductor: Material	Tinned copper
Strands	7/0.15 mm (26AWG)
Resistance	0.2 Ω/m
Insulation	PFA
Outer Sleeve	-
Screened Construction	Yes (Cable screens connected to backshell)
Additional Braided Sleeve	Yes
Cable O/D	10 mm (Individual Cables)
Minimum Bend Radius	25 mm
Door Closure Allowance	135 mm (see diagram)

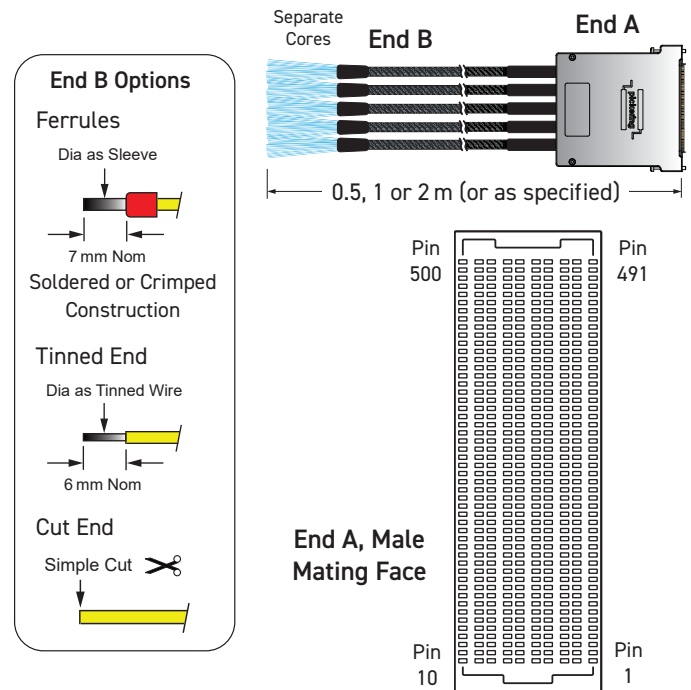


This Cable Assembly is Not Suitable for Connection to a Pickering Switching Product



500-Pin SEARAY Unterminated Cable Assembly

Product Compatibility



Product Order Codes

500-Pin SEARAY (500-Port Version) Cable Assy, 1A, Male to Unterm, Ferrules, 0.5 m Lg	A500RMR-F-1B050
Male to Unterm, Ferrules, 1.0 m Lg	A500RMR-F-1B100
Male to Unterm, Ferrules, 2.0 m Lg	A500RMR-F-1B200
Male to Unterm, Tinned End, 0.5 m Lg	A500RMR-T-1B050
Male to Unterm, Tinned End, 1.0 m Lg	A500RMR-T-1B100
Male to Unterm, Tinned End, 2.0 m Lg	A500RMR-T-1B200
Male to Unterm, Cut End, 0.5 m Lg	A500RMR-C-1B050
Male to Unterm, Cut End, 1.0 m Lg	A500RMR-C-1B100
Male to Unterm, Cut End, 2.0 m Lg	A500RMR-C-1B200

Note: Other cable lengths can be supplied.

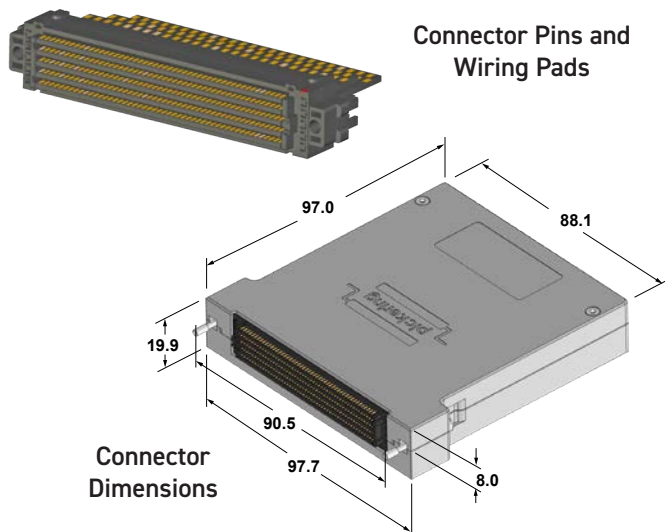
- 500-Pin (500-Port) Connector
- Connector only or Connector and Backshell
- Soldered Cable Termination

This accessory is designed to allow users to directly terminate a cable via soldered PCB connections to the 500-Pin SEARAY connector. Pickering Interfaces recommend the use of purchased cable assemblies for applications where most or all of the contacts are in use.

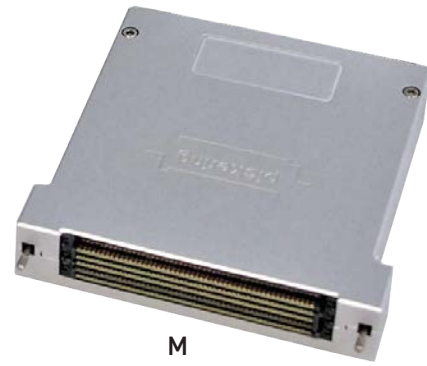
When this product is used without a backshell users should make their own cable strain relief arrangements and ensure that appropriate electrical safety precautions are observed.

Technical Specification

Connector Type:	500-Pin SEARAY (500-Port Version)
Gender	Male
Securing Method:	
Product with Backshell	M2.5 screwlocks, male
Product without Backshell	Push fit
Wire Connection	Solder to PCB pads.
Cable Screen Connection	Solder ring terminal
Connector Ratings:	
Maximum Current	1A
Maximum Voltage	200 VDC
Cable Exit:	Rear
Cable Exit Size	72 x 13.1 mm
Overall Size (Approx)	H97.7 x W19.9 x D99.5 mm
500-Pin SEARAY:	
Contact Material	Gold plated copper alloy
Contact Resistance	<20 mOhm
Wire Connection:	
Maximum Wire Size	26AWG
Recommended Insulation	PFA
Additional Cable Clamp	Yes (in backshell)

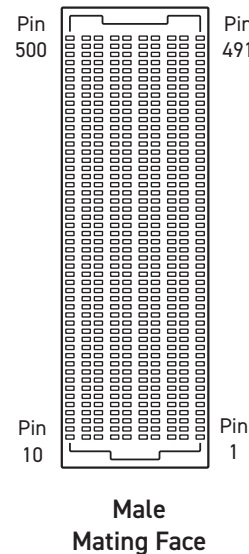


This Connector is Not Suitable for Connection to a Pickering Switching Product



500-Pin SEARAY Cable Connector with Backshell

Product Compatibility



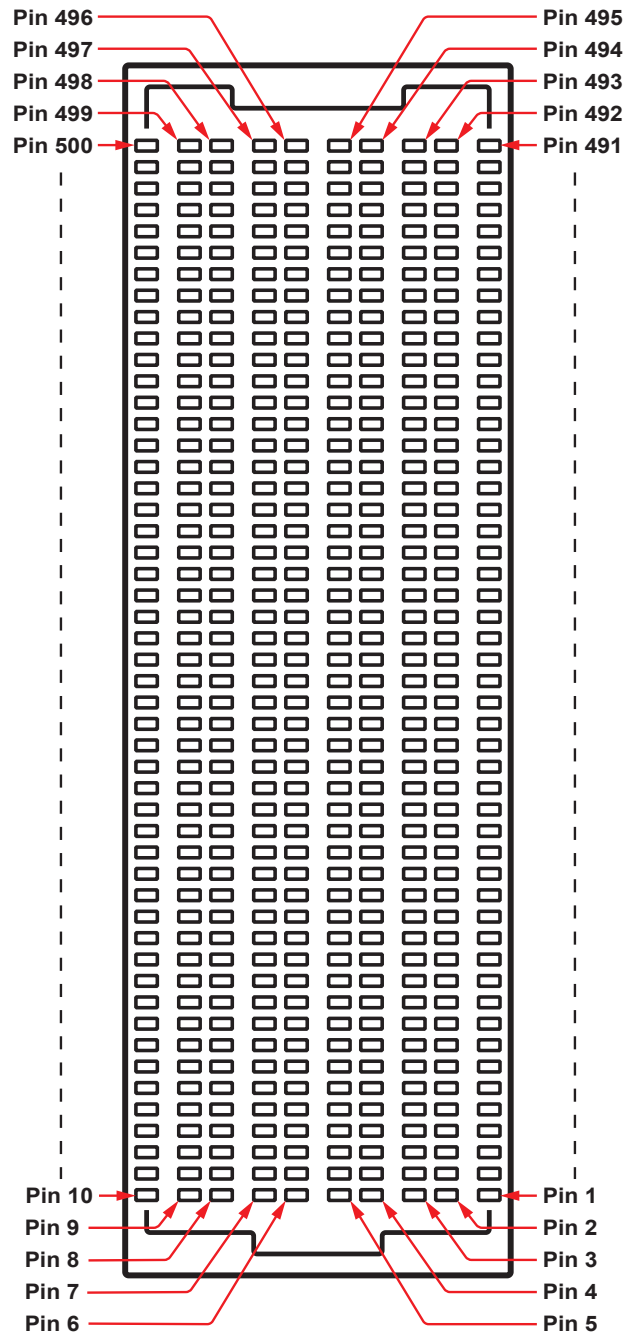
Note: Pin-Out information can be found on the following page.

Product Order Codes

500-Pin SEARAY Connector (500-Port Version), 1A,
 With Backshell, Male **C500RMR-4SB-1B**
 Without Backshell, Male **C500RMX-4SB-1B**

Note: The connector is provided in kit form for ease of assembly.

500-Pin SEARAY (500-Port version), Male
C500RM*-4SB-1B



Male SEARAY Connector
(viewed from the mating face)



Appendix

This appendix gives details of recent part number changes.

ECN1699 (25th March 2022), ECN1705 (6th April 2022), & ECN1711 (28th April 2022)

These Change Notes covered changes to the components and assembly method of the cables and connectors. Soldering the cable wires directly to the pcb's has proved more efficient and a single backshell is now used for both 250-Port and 500-Port versions. Further cable screening details were added to the data sheet and part numbers were changed.

Items that changed and the corresponding updated part numbers are detailed below:

Product changes in data sheet order		Data Sheet 90-021D Issue 3.1 Dec 2020	Data Sheet 90-021D Issue 4.0 Apr 2022
		Product Part Numbers	Product Part Numbers
	Cable Assy, 500-Pin SEARAY (250-Port Version), 2 A.	A500RMR-500RMR-4B***	A500RMR-500RMR-5C***
	Cable Assy, 500-Pin SEARAY (250-Port Version) to Unterminated, 2 A.	A500RMR-*-4B***	A500RMR-*-5C
	Cable Assy, 500-Pin SEARAY (250-Port Version) to 5 x 50-Pin D-Type, 2 A.	A500RMR-05F050D4B***	A500RMR-05F050D5C***
	Cable Connector, 500-Pin SEARAY (250-Port Version), 2 A, Soldered Connection.	C500RM*-4SB-4B	C500RM*-4SB-5C
	Cable Assy, 500-Pin SEARAY (500-Port Version), 1 A.	A500RMR-500RMR-0A***	A500RMR-500RMR-1B***
	Cable Assy, 500-Pin SEARAY (500-Port Version) to Unterminated, 1 A.	A500RMR-F-0A***	A500RMR-F-1B***
	Cable Connector, 500-Pin SEARAY (500-Port Version), 1 A.	C500RM*-4SB-0A	C500RM*-4SB-1B

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.

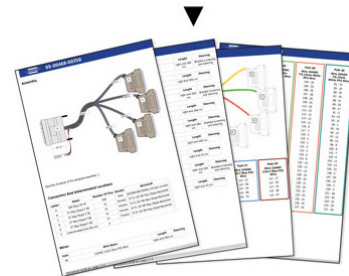
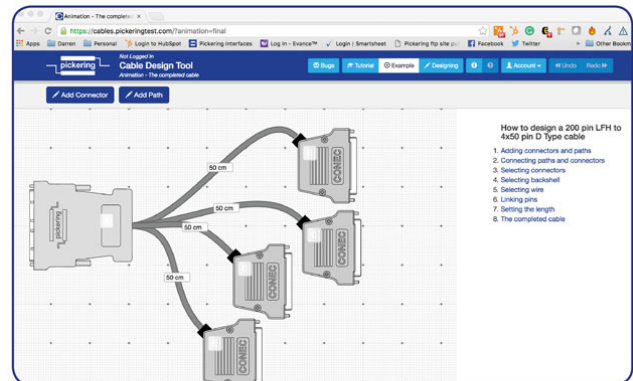
We offer a fast turn round of custom items to keep your ordering and integration time scales to a minimum.



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