

"A" Series MIL-Style Connector Kits Product Manual

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## Introduction

This document contains information on the operation, installation and maintenance of the A-style series of connector kits.

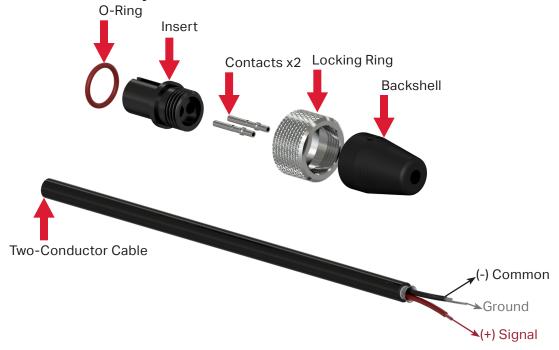


Figure 1. 2-Conductor Connector Kit Materials

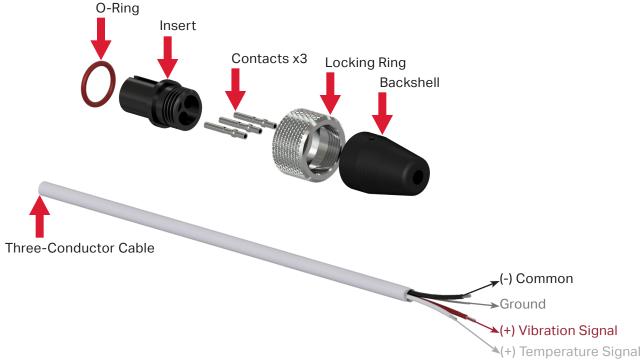


Figure 2. 3-Conductor Connector Kits Materials



Part #	Connector Kit Parts	Material	Max Temp.	Connector Kit Parts #	Compatible Cables
		Polycarbonate, 316L Stainless Steel Locking	250 °F (121 °C)	CK-A2A-175	CB102 CB110
		Ring		CK-A2A-190	CB111
				CK-A2A-245	CB103
A2A	CK-A2A			CK-A2A-250	CB802 CB806 CB810 CB811
	SICAZA			CK-A2A-270	CB206
				CK-A2A-303	CB602 CB606 CB611
	A CKP-A2A	Polycarbonate, Polycarbonate	250 °F (121 °C)	CKP-A2A-175	CB102 CB110
		Locking Ring		CKP-A2A-190	CB111
				CKP-A2A-245	CB103
A2A				CKP-A2A-250	CB802 CB806 CB810 CB811
				CKP-A2A-270	CB206
				CKP-A2A-303	CB602 CB606 CB611
		Nylon, 316L Stainless Steel Locking Ring	250 °F (121 °C)	CK-A2N-175	CB102 CB110
				CK-A2N-190	CB111
				CK-A2N-245	CB103
A2N				CK-A2N-250	CB802 CB806 CB810 CB811
	CK-A2N			CK-A2N-270	CB206
				CK-A2A-303	CB602 CB606 CB611
		Polyphenylene Sulfide (PPS), 316L Stainless Steel Locking Ring	392 °F (200 °C)	CK-A2R-175	CB102
				CK-A2R-190	CB111
A2R				CK-A2R-250	CB802 CB806 CB811
				CK-A2R-270	CB206
				CK-A2R-303	CB606 CB611

Table 1. 2-Conductor Product Selection Guide



Part #	Connector Kit Parts	Material	Max Temp.	Connector Kit Parts #	Compatible Cables
		Polyphenylene Sulfide (PPS), PPS Locking Ring	392 °F (200 °C)	CK-A2S-175	CB102
				CK-A2S-190	CB111
A2S				CK-A2S-250	CB802 CB806 CB811
	CK-A2S			CK-A2S-270	CB206
	GN-A25			CK-A2S-310	CB606 CB611

Table 1. 2-Conductor Product Selection Guide



Part #	Connector Kit Parts	Material	Max Temp.	Connector Kit Parts #	Compatible Cables
	CK-A3A	Polycarbonate, 316L Stainless Steel Locking Ring	250 °F (121 °C)	CK-A3A-175	CB112
				CK-A3A-250	CB812
A3A				CK-A3A-270	CB212
				CK-A3A-310	CB612
	CK-A3N	Nylon, 316L Stainless Steel Locking Ring	250 °F (121 °C)	CK-A3N-175	CB112
A3N				CK-A3N-250	CB812
ASIN				CK-A3N-270	CB212
				CK-A3N-310	CB612
	CK-A3R	Polyphenylene Sulfide (PPS), 316L Stainless Steel Locking Ring	392 °F (200 °C)	CK-A3R-175	CB112
A3R				CK-A3R-250	CB812
ASK				CK-A3R-270	CB212
				CK-A3R-310	CB612
	CK-A3S	Polyphenylene Sulfide (PPS), PPS Locking Ring	392 °F (200 °C)	CK-A3S-175	CB112
A3S				CK-A3S-250	CB812
A35				CK-A3S-270	CB212
				CK-A3S-310	CB612

Table 2. 3-Conductor Product Selection Guide



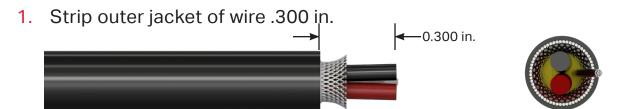
Recommended Tool: CB926-1A



Recommended Epoxy: MH109-3D



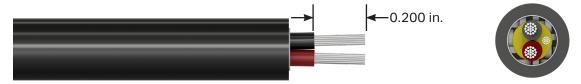
### **ASSEMBLY FOR CK-A2X SERIES**



2. Cut off shield and drain wire (for twisted shielded pair wires only).



3. Strip the insulation of two conductor wires back .200 in.



4. Crimp conductor wires into contact sockets. CTC's CB926-1A crimp tool makes crimping fast and easy and can lead to significant time savings when installing a large volume of connector kits. Adjusting the green depth knob to the desired length allows the depth of the contacts to be set manually to ensure a crimp at the correct location every time. Suggested depth for the "A" Series is 0.52 in.



5. Slide backshell and knurled ring onto the cable.





6. Attach O-ring to the front of the insert.



- 7. Using a fine-tipped punch, gently press each contact into the appropriate position on the insert.
  - a. Install accelerometer red (+) wire into the insert socket for Pin A.
  - b. Install accelerometer black (-) wire into insert socket for Pin B.



8. Slide the knurled ring over the threaded section of the insert until the metal step inside the ring catches on the plastic lip of the insert.



Thread the backshell onto the insert.





- 10. Place the assembled connector body horizontally with the two small epoxy injection holes level and facing upward.
- 11. Mix epoxy. Using a syringe, fill the backshell with epoxy through one of the small injection holes until epoxy begins to seep from the other.



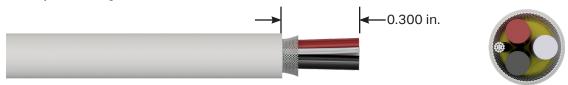
- 12. Keep the connector in a horizontal position, allowing the epoxy to set and vent any trapped air, refilling as needed, for approximately six hours.
- 13. Allow the epoxy to cure for 24 hours at room temperature. Place a piece of masking tape over the two epoxy holes to prevent leakage and hang the connector vertically with the insert facing downward. This will ensure epoxy encapsulates the cable evenly, especially if the cable diameter is smaller than the backshell opening.





### **ASSEMBLY FOR CK-A3X SERIES**

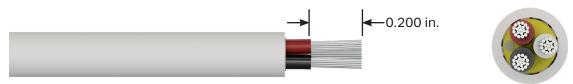
1. Strip outer jacket of wire .300 in.



2. Cut off shield and drain wire (for twisted shielded pair wires only).



3. Strip the insulation of three conductor wires back .200 in.



4. Crimp conductor wires into contact sockets. CTC's CB926-1A crimp tool makes crimping fast and easy and can lead to significant time savings when installing a large volume of connector kits. Adjusting the green depth knob to the desired length allows the depth of the contacts to be set manually to ensure a crimp at the correct location every time. Suggested depth for the "A" Series is 0.52 in.



5. Slide backshell and knurled ring onto the cable.

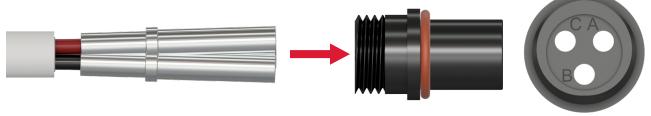




6. Attach O-ring to the front of the insert.



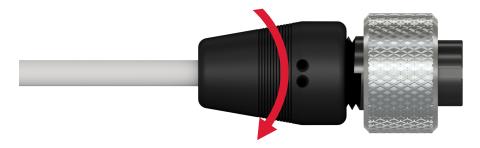
- 7. Using a fine-tipped punch, gently press each contact into the appropriate position on the insert.
  - a. Install accelerometer red (+) wire into the insert socket for Pin A.
  - b. Install accelerometer black (-) wire into insert socket for Pin B.
  - c. Install accelerometer white (+) wire into the insert socket for Pin C.



8. Slide the knurled ring over the threaded section of the insert until the metal step inside the ring catches on the plastic lip of the insert.



9. Thread the backshell onto the insert.





- 10. Place the assembled connector body horizontally with the two small epoxy injection holes level and facing upward.
- 11. Mix epoxy. Using a syringe, fill the backshell with epoxy through one of the small injection holes until epoxy begins to seep from the other.



- 12. Keep the connector in a horizontal position, allowing the epoxy to set and vent any trapped air, refilling as needed, for approximately six hours.
- 13. Allow the epoxy to cure for 24 hours at room temperature. Place a piece of masking tape over the two epoxy holes to prevent leakage and hang the connector vertically with the insert facing downward. This will ensure epoxy encapsulates the cable evenly, especially if the cable diameter is smaller than the backshell opening.





## **MAINTENANCE**

Once the product has been installed, minimal maintenance will be required. Basic visual checks to ensure integrity should be made periodically.

#### General

There are no customer-replaceable parts. The product has been designed for trouble-free service under normal operating conditions.

### WARRANTY & REFUND

### Warranty

All CTC products are backed by our unconditional lifetime warranty. If any CTC product should ever fail, we will repair or replace it at no charge.

#### Refund

All stock products can be returned for a 25% restocking fee if returned in new condition within 90 days of shipment. Stock products qualify for free cancellation if your order is cancelled within 24 hours of purchase. Build to order products qualify for a 50% refund if returned in new condition within 90 days of shipment. Custom products are quoted and built specifically to the requirements of the customer, which may include completely custom product designs or private labeled versions of standard products for OEM customers. Custom products ordered are non-cancellable, non-returnable and non-refundable.

