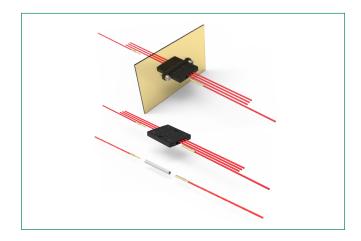
# AeroSplice® Connectors Series Wire-to-Wire Connecting Solution



### **Specifications**

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Quality Level	Exceeds the requirement of MIL-DTL-24308		
Process: Contact Crimping and	Cables crimping onto contacts with standard Crimping tool M22520/2-01 and locator M22520/2-08 (to be ordered separately).		
Cable Insertion	Wires cable installed by the end user.		
Process: Contact and Cable Insertion and Extraction	Tool M81969/39-01 with plastic tip is available to insert and extract the AeroSplice connectors from the contact (1 extract tool is delivered per bag).		
Packaging and Traceability	AeroSplice connectors 1-way: 50 pcs per bag. One insertion/extraction tool (M81969/39-01) is delivered per bag.		
	AeroSplice connectors 4-way: Individual packaging. One insertion/extraction tool (M81969/39-01) is delivered per bag.		
	Traceability associated as per MIL-DTL-24308 requirement.		

#### **Electrical & Mechanical Characteristics**

Characteristic	Specification	
Working Voltage - 1 way (sea level)	300 Vrms	
Working Voltage - 4 way (sea level)	250 Vrms	
Rated Current	7.5 A	
Contact Resistance	5 m $\Omega$ (rated current)	
Insulation Resistance at 500 V DC	5000 MΩ min	
Voltage Proof - 1 way	1250 Vrms / 2.0mA	
Voltage Proof - 4 ways	1000 Vrms / 2.0mA	
Temperature Range	-55°C to 125°C	
Contact Retention Force	40 N min	

# **Description**

AeroSplice® connectors, designed for ease of use, enable secure wire-to-wire connection using removable contact technology. They offer a reliable and efficient alternative to the traditional hand splicing process by replacing it with a standardized method that saves time and effort. AeroSplice connectors support a range of wire gauges, reducing costs and ensuring only the necessary wires are used. Engineered to exceed MIL-DTL-24308 quality standards, they are ideal for various wiring applications in aerospace and defense.

# **Features & Benefits**

- Exceeds MIL-DTL-24308 specifications, ensuring it is suited for demanding aerospace and military applications
- Eliminates traditional manual splicing, enabling fast and consistent wiring assembly that can reduce installation and inspection time by more than 60%
- The reconnect-able design with removable crimp contacts allows for easy repairs and maintenance
- Engineered to withstand high vibration, extreme temperatures, and harsh condition
- Supports a wide range of standard in place of common wire gauges (AWG20 to AWG28), offering flexibility for diverse wiring configurations

# **Applications**

- Aircraft systems
- Defense equipment
- Mission-Critical Infrastructure
- MRO (Maintenance, Repair, and Overhaul)
- Industrial systems

## **Materials & Finishes**

Component	Material	Finish
Insulator	PEEK	UL 94 V-0 flammability, 1-way - natural color 4-way - black color
Retention Clip	Berylium Copper Alloy	Raw material
Socket Contacts	Copper Alloy	1.27 µm Gold over Copper underlay
Pin Contacts	Copper Alloy	1.27 µm Gold over Copper underlay



# AeroSplice® Connectors Series Wire-to-Wire Connecting Solution



# **Description**



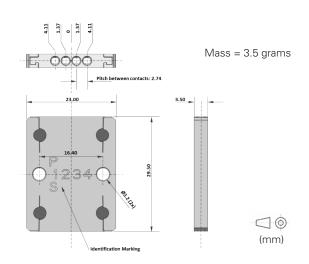


#### **AeroSplice Connectors 4-Way Radial Fixing Variant, Stackable**

### **Description**

Part #	Description	
C115376-0001	AEROSPLICE-4W-R-FR059	

#### **Dimensions and Mass**



### Torque value for Fixing screws

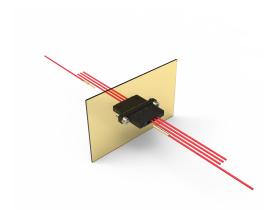
M3	1.18 N.m ±0.02		
M2	0.33 N.m ±0.02		
2-56 UNC-2A	0.46 N.m ±0.02		



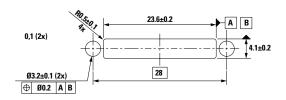
Note: Stacking configuration: 16 conductors

# AeroSplice® Connectors Series Wire-to-Wire Connecting Solution

#### **AeroSplice Connectors 4-Way Axial Fixing Variant, Panel Mount**



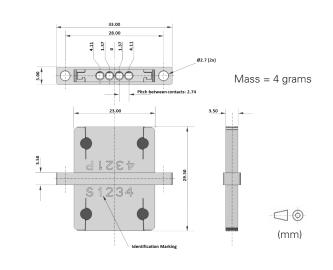
#### **Panel Cut-Out Profile**



### **Description**

Part #	Description	
C115376-0002	AEROSPLICE-4W-A-FR059	

#### **Dimensions and Mass**



M2	0.33 N.m ±0.02	
2-56 UNC-2A	0.46 N.m ±0.02	

#### **Usage Explanation Wire-to-Wire Connecting Solution**

- Purpose: To crimp pin and socket removable crimp contact, certified to AS39029.
- Manually install the contacts into AeroSplice connectors or use the insertion/extraction tool (M81969/39-01).
- For the installation of contacts wired with AWG26/28 (without shrinkable tube), the insertion/extraction tool (M81969/39-01)) is
- If using different wire sizes on each contact side, insert the contact with the smallest wire size first to perform the retention test by pushing them together.



# AeroSplice® Connectors Series Wire-to-Wire Connecting Solution

#### **Contact Sizes & Part Numbers**

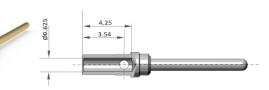
Part Number	Contact Type	Size	Wire Size	Description
C330-5291-037B	Contact Pin	20/20	AWG20, AWG22, AWG24	AS39029/64-369
C330-8997-101D	Contact Pin	20/26	AWG26, AWG28	330-8997-101-FR022
C031-1007-042B	Contact Socket	20/20	AWG20, AWG22, AWG24	AS39029/63-368
C031-8997-101D	Contact Socket	20/26	AWG26, AWG28	031-8997-101-FR022

Note: Measurements in Millimeters

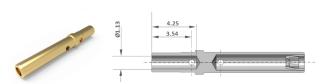
#### C330-5291-037B Dimensions



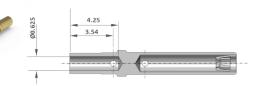
#### C330-8997-101D Dimensions



#### **C031-1007-042B Dimensions**



#### C031-8997-101D Dimensions



#### **Accessories & Tools**

Accessory Image	Accessory Name	Description	Part #
	Crimping Tool	M22520/2-01	C995-0001-584
	Locator	M22520/2-08	C995-0001-604
	Insertion/Extraction Tool	M81969/39-01	C980-2000-426
6-32 UNC-2A Compatible with OCETA OCE8	Contact Probe for Retention Tool Push Test <sup>1</sup>	SPLICE-TOOL-RETENTION-01	C115366-2852
6-32 UNC-2A Compatible with OCETA OCE8	Contact Probe for Retention Tool Pull Test <sup>2</sup>	SPLICE-TOOL-RETENTION-02	C115366-2853

1. Push test recommended value: All wire size: 20N max

2. Pull test recommended value: AWG20, 22, 24, 26: 20N max AWG28: 10N max

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