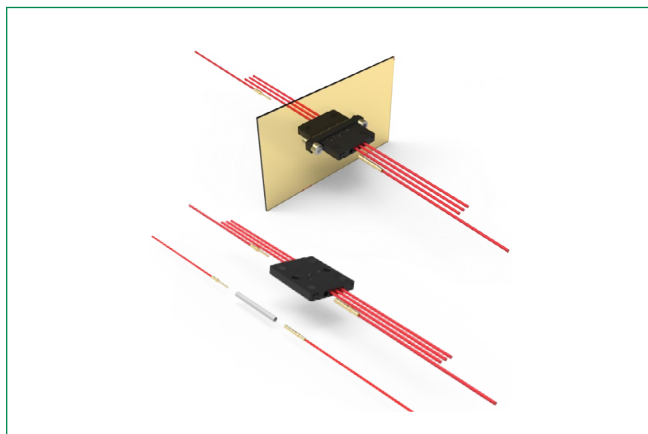


SpaceSplice® Connector Series

Wire Connecting Solution ESCC 3401/097

With removable crimp contacts ESCC 3401/005



Specifications

Quality Level	Exceeds ESA / ESCC: code 3401 (Flying model)
	Qualification reviewed every 2 years
Process Contact/ Cable Insertion	Cables crimping onto contacts with standard D*MA Crimping tool M22520/2-01 and locator M22520/2-08 (to be ordered separately)
	Wires cable installed by the end user
Test Retention	A dedicated tool is available to make the retention test of each contacts in the connectors
Process Contact/ Cable Extract	A dedicated tool M81969/39-01 is available to remove the contacts from the connectors (1 extract tool delivered per bag)
Packaging	SpaceSplice Connectors 1-way: 50 pcs per bag. One extract tool M81969/39-01 delivered per bag.
	SpaceSplice Connector 4-way: Individual packaging. One extract tool M81969/39-01 delivered par bag
	Traceability associated as per ESA/ESCC specifications

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 mΩ (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
Residual Magnetism Level (NMB)	<200 Gamma
Temperature Range	-55 to 125 °C
Radiation Resistance	>1x10 ⁶ Rads
Contact Retention Force	40 N max

Description

Designed for the rigors of space exploration, SpaceSplice® connectors is a state-of-the-art wire-to-wire connection system engineered to meet ESA/ESCC (3401/097 and 3401/005) standards. Developed for use in satellites, spacecraft, and launchers, this solution offers a lightweight, non-outgassing, and high-radiation-resistant alternative to traditional hand-splicing methods. Featuring removable crimp contacts, SpaceSplice connectors ensures precision connectivity in extreme environments, maintaining low residual magnetism and high electrical integrity. Its compact design supports critical space applications, providing an efficient, ESA-qualified solution for board-to-board, board-to-cable, and cable-to-cable connections. SpaceSplice connectors is the ultimate reliable, standardized choice for next-generation space missions.

Features & Benefits

- Removable D*MA Crimp Contacts — no need to replace entire harnesses.
- ESA/ESCC Qualified. Complies with ESCC 3401/097 and 3401/005 standards.
- Compact, Lightweight Design.
- Radiation & Temperature Resistant.
- Low Outgassing & Magnetic Signature.
- Flexible Wire Compatibility. Supports standard wire gauges AWG20 to AWG28.
- Modular Variants for Versatile Mounting. Available in 1-way and 4-way versions, with options for radial stackable or axial panel mount installation.
- Tooling & Packaging Support. Delivered with dedicated insertion/extraction tools and ESA-compliant packaging.

Applications

- Satellites
- Spacecraft
- Launchers

Materials & Finishes

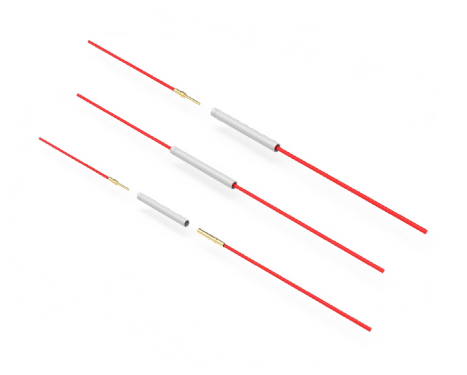
Component	Material	Finish
Insulator	Peek	UL-94-V0, 1 way - natural color 4 ways - black color
Retention Clip	Berylium Copper Alloy	Raw material
Socket Contacts	Copper Alloy	1.27 μm Gold over Copper underlay
Pin Contacts	Copper Alloy	1.27 μm Gold over Copper underlay

SpaceSplice® Connector Series

Wire Connecting Solution ESCC 3401/097

With removable crimp contacts ESCC 3401/005

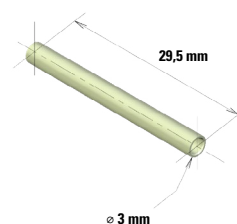
SpaceSplice Connectors 1-Way Wire-to-Wire Connecting Solution



Description

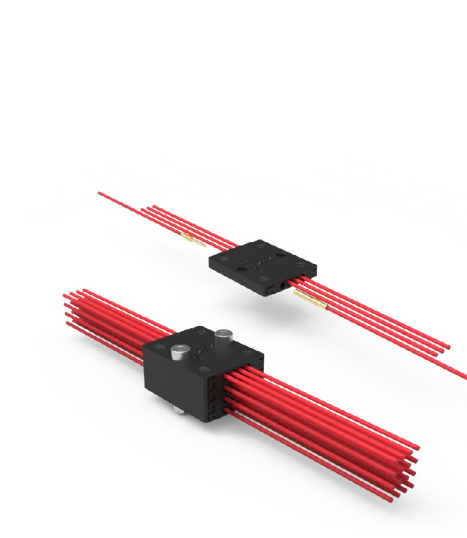
Part #	Mass	ESA Description
C115366-2776C	0.2 Grams	340109701B

Dimensions and Mass



Mass = 0.2 grams

SpaceSplice Connectors 4-Way Radial Fixing Variant, Stackable

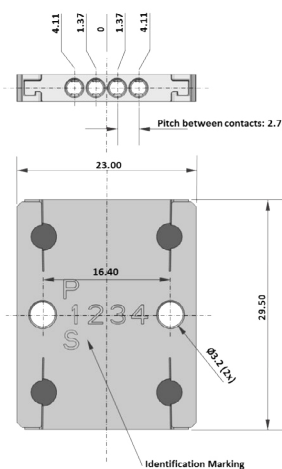


Note: Stacking configuration: 16 conductors

Description

Part #	Mass	ESA Description
C115366-3014C	3.5 Grams	340109702B 04RA3014

Dimensions and Mass



Mass = 3.5 grams



Torque value for Fixing screws

M3	1.18 N.m $\pm$ 0.02
M2	0.33 N.m $\pm$ 0.02
2-56 UNC-2A	0.46 N.m $\pm$ 0.02

SpaceSplice® Connector Series

Wire Connecting Solution ESCC 3401/097

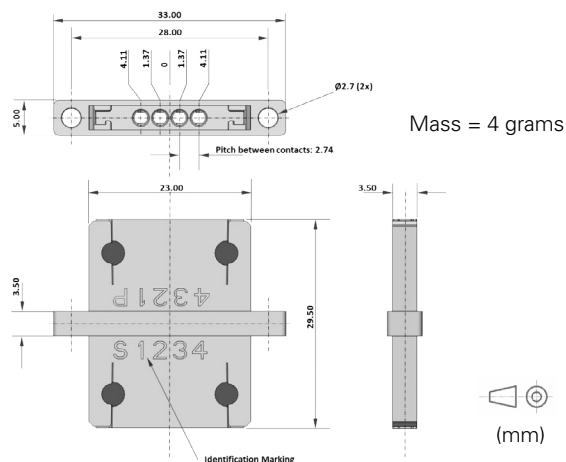
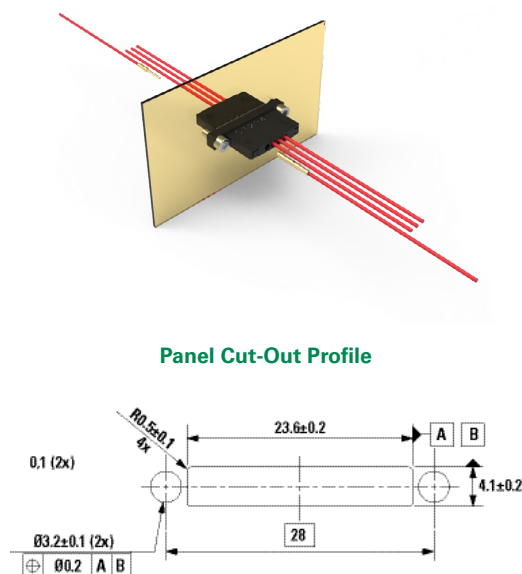
With removable crimp contacts ESCC 3401/005

SpaceSplice Connectors 4-Way Axial Fixing Variant, Panel Mount

Description

Part #	Mass	ESA Description
C115366-3015C	4 Grams	340109702B 04AA3015

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 SpaceSplice 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 mandatory.
- 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.

SpaceSplice® Connector Series

Wire Connecting Solution ESCC 3401/097

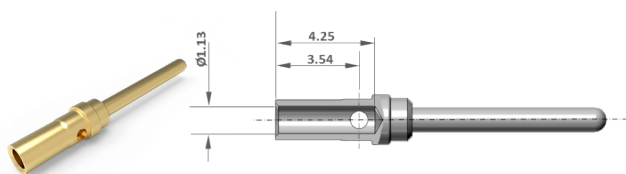
With removable crimp contacts ESCC 3401/005

Contact Sizes & Part Numbers

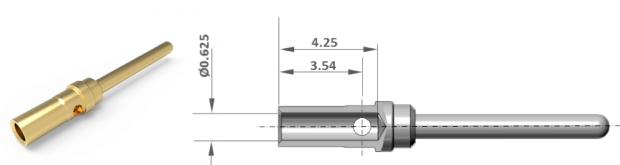
Part Number	Part	Size	Wire Size	ESA Description
C330-8996-101H	D*MA Contact Pin	20/20	AWG20, AWG22, AWG24	340100501B
C330-8997-101H	D*MA Contact Pin	20/26	AWG26, AWG28	340100503B
C031-8996-101H	D*MA Contact Socket	20/20	AWG20, AWG22, AWG24	340100502B
C031-8997-101H	D*MA Contact Socket	20/26	AWG26, AWG28	340100504B

Note: Measurements in Millimeters

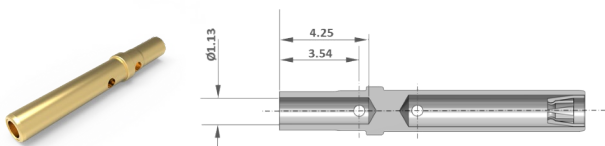
C330-8996-101H Dimensions



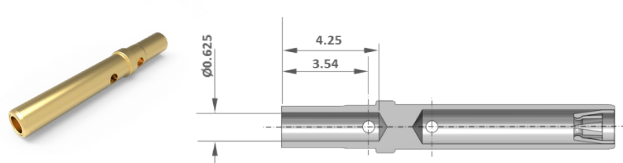
C330-8997-101H Dimensions



C031-8996-101H Dimensions



C031-8997-101H Dimensions



Note: Measurements in Millimeters

SpaceSplice® Connector Series

Wire Connecting Solution ESCC 3401/097

With removable crimp contacts ESCC 3401/005

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 ¹	SPLICE-TOOL-RETENTION-01	C115366-2852
 6-32 UNC-2A Compatible with OCETA OCE8	Contact Probe for Retention Tool Pull Test ²	SPLICE-TOOL-RETENTION-02	C115366-2853
 6-32 UNC-2A Compatible with DMC 250HT-3	Contact Probe for Retention Tool Push Test ¹	SPLICE-TOOL-RETENTION-03	C115366-3085
 6-32 UNC-2A Compatible with DMC 250HT-3	Contact Probe for Retention Tool Pull Test ²	SPLICE-TOOL-RETENTION-04	C115366-3086

Note:

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

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

Disclaimer Notice - Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at <http://www.littelfuse.com/disclaimer-electronics>.