SPACE SPLICE SERIES



Wire Connecting Solution ESCC 3401/097 With removable D*MA crimp contacts ESCC 3401/005

Features and Benefits

- · Replacement of manual splices by standard solution
- Compliant with ESA/ESCC specifications
- Easy to use
- Removable D*MA crimp type contacts standard
- · Compact format and designed to accept the most popular cable gauges
- Non-outgassing
- Low residual magnetism
- High radiation and temperature resisntace (PEEK material)

Typical Applications

- Space equipment
- Satellites harnesses and payloads
- Avionics/ Military

Specification

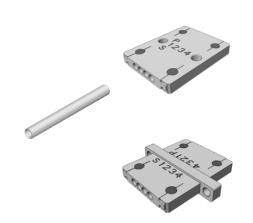
- High performance wires to wires connectors ESA qualified, for space applications.
- Compliant to ESCC specifications 3401/097 Connectors and 3401/005 Removable Crimp Contacts.
- Suitable for use in Space, and high performance military/ aerospace applications: Board to Board, Board to Cable or Cable to Cable applications.
- Removable contacts (D*MA technology).
- Cable sizes: AWG20, AWG22, AWG24, AWG26 and AWG28.
- 1 way and 4 ways connections available.
- 4 ways variants:
 - Radial fixing mount (Stackable)
 - Axil fixing for panel mount

Electrical & Mechanical Characteristics

| CHARACTERISTIC | SPECIFICATION | |
|--------------------------------------|------------------------------|--|
| Working Voltage - 1 way (sea level) | 300 Vrms | |
| Working Voltage - 4 ways (sea level) | 250 Vrms | |
| Rated Current | 7.5 A | |
| Contact Resistance | 5 m Ω (rated current) | |
| Insulation Resistance at 500 V DC | 50 MΩ min | |
| Voltage Proof - 1 way | 1250 Vrms /2.0mA | |
| Voltage Proof - 4 ways | 1000 Vrms /2.0mA | |
| Residual Magnetism Level (NMB) | <200 Gama | |
| Temperature Range | -55/+125 °C | |
| Radiation Resistance | >1x10 ⁶ Rads | |
| Contact Retention Force | 40 N max | |

MATERIALS & FINISHES

| COMPONENT | MATERIAL | FINISH |
|-----------------|-----------------------|-----------------------------------|
| Insulator | PEEK | UL-94-V0, natural 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 |



Quality Level

- ESA / ESCC: code 3401 (Flying model).
- Qualification reviewed every 2 years.

Process Contact and 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 and Cable Extraction

 A dedicated tool M81969/39-01 is available to remove the contacts from the connectors (1 extract tool delivered per bag).

Packaging

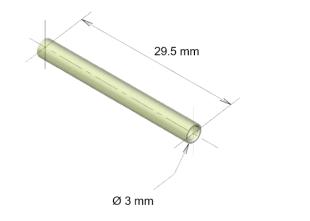
- Space Splice 1 way: 50 pcs per bag. One extract tool M81969/39-01 delivered per bag.
- Space Splice 4 ways: Individual packaging. One extract tool M81969/39-01 delivered par bag.
- Traceability associated as per ESA/ESCC specifications.



PART NUMBER - DESCRIPTION

Part Number: C115366-2776C ESA/ESCC Description: 340109701B

DIMENSIONS & WEIGHT



Mass: 0.2 gr

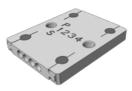
USE EXPLANATION

Wires to wires connecting solution



- For insertion of contacts wired with AWG26/28 (without shrinkable tube), the use of insertion tool is mandatory
- If different wire sizes are used on each contact side, insert contact with smallest wire size first to perform retnetion test by pushing



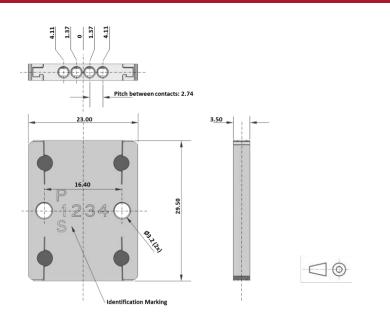


Mass: 3.5 gr

PART NUMBER - DESCRIPTION

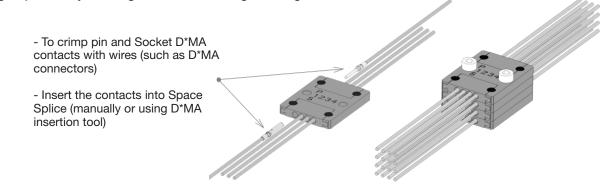
Part Number: C115366-3014C ESA/ESCC Description: 340109702B 04RA3014

DIMENSIONS & WEIGHT



USE EXPLANATION

Wires to wires connecting solution Floating or possibility of fixing the insulator using 2 through holes Possibility of Stacking Products



- For insertion of contacts wired with AWG26/28 (without shrinkable tube), the use of insertion tool is mandatory

- If different wire sizes are used on each contact side, insert contact with smallest wire size first to perform retnetion test by pushing

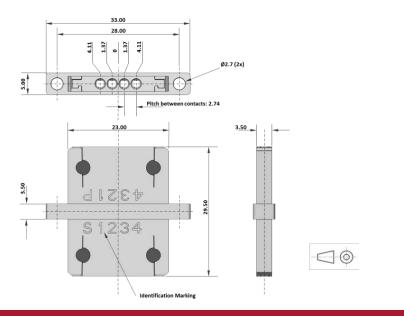


Mass: 4 gr

PART NUMBER - DESCRIPTION

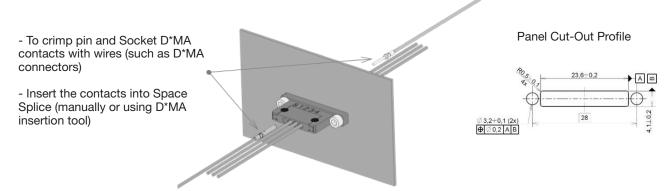
Part Number: C115366-3015C ESA/ESCC Description: 340109702B 04AA3015

DIMENSIONS & WEIGHT



USE EXPLANATION

Wires to wires connecting solution Use to pass through panels



- For insertion of contacts wired with AWG26/28 (without shrinkable tube), the use of insertion tool is mandatory

- If different wire sizes are used on each contact side, insert contact with smallest wire size first to perform retnetion test by pushing



D*MA Contact Pin - Size 20/20 (wire size AWG20, AWG22, AWG24)

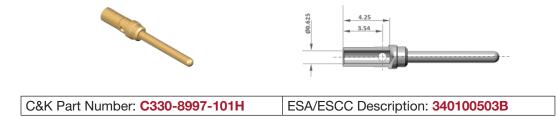




C&K Part Number: C330-8996-101H

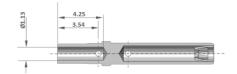
ESA/ESCC Description: 340100501B

D*MA Contact Pin - Size 20/26 (wire size AWG26, AWG28)



D*MA Contact Socket - Size 20/20 (wire size AWG20, AWG22, AWG24)



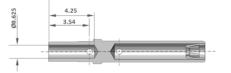


C&K Part Number: C031-8996-101H

ESA/ESCC Description: 340100502B

D*MA Contact Socket - Size 20/26 (wire size AWG26, AWG28)





C&K Part Number: C031-8997-101H

ESA/ESCC Description: 340100504B



ACCESSORIES

| Crimping Tool | | DESCRIPTION | C&K PART NUMBER |
|---|--|--------------------------|-----------------|
| | | M22520/2-01 | C995-0001-584 |
| Locator | | DESCRIPTION | C&K PART NUMBER |
| | | M22520/2-08 | C995-0001-604 |
| Insertion / Extraction Tool | | DESCRIPTION | C&K PART NUMBER |
| | | M81969/39-01 | C980-2000-426 |
| All Space Splice: Contact Probe for Retention Tool - Push Test | | DESCRIPTION | C&K PART NUMBER |
| ← 6-32 UNC-2A Compatible with OCETA OCE8 | Push test recommended value: All wire size: 20N max | SPLICE-TOOL-RETENTION-01 | C115366-2852 |
| Space Splice 1 way only: Contact Probe for Retention Tool - Pull Test | | DESCRIPTION | C&K PART NUMBER |
| ← 6-32 UNC-2A Compatible with OCETA OCE8 | Pull test recommended value: AWG20, 22, 24, 26: 20N max AWG28: 10N max | SPLICE-TOOL-RETENTION-02 | C115366-2853 |



HDS ESCC Space Splice - July 2021