



**estec**

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France

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For the attention of Mr. O. Masson

Your ref.            71Srev1  
Our ref.             ESA-TECQES-CE-017588

Noordwijk, 25 February 2020  
**Subject: ESCC Qualification Certificate for Connectors**

Dear Sir,

We are pleased to inform you that, based on a review of the Lot Acceptance Test Report by the ESCC Executive, your plant in Dole, France remains qualified for the supply of Connectors, Electrical, Solder and Wire Wrap Contacts, Rectangular receptacle and Plug, based on Type D\*M.

Please note that, as specified in the relevant Certificate, the qualification status of the subject devices will be valid until September 2021.

If after this date, you wish to maintain the qualification status, you are required to notify your ESCC Executive Representative (ie. CNES, Toulouse) by letter, copying the ESCC Executive Secretariat (address above, Attention TEC-QES), 2 months before the actual expiry date. At the same time, you should then provide ESCC Executive Representative with the following documents:

- Certificate of Compliance.
- List of agreed changes – if any – in manufacturing processes and/or materials used.
- List of hi-rel components supplied by your above mentioned plant during the preceding period (including the identification of the procurement testing level).
- Test evidence.

Upon receipt of these items and after investigation into your customers' experience regarding delivery times and quality of components supplied for European space projects, your ESCC Executive Representative will forward to the ESCC Executive an application for extension of Qualification Approval.

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The ESCC Executive will:

- (a) if its findings are satisfactory immediately extend the qualification period by 2 years
- (b) if the situation is not satisfactory define the actions required to achieve a maintenance of qualification status.

Please be reminded that it is not permitted to mark components for space application with the ESA symbol after the qualification validity period has expired.

Yours faithfully,

A handwritten signature in black ink, appearing to read "B. Schade".

B. Schade  
Head of the Product Assurance  
and Safety Department

Encl.

cc.  
J.P. Bussenot, CNES, Toulouse  
A. Pesce, ESA, TEC-QES

6.2 CONNECTORS (02)

6.2.1 Multipin, Solder Contacts

CONNECTORS, ELECTRICAL, SOLDER AND WIRE WRAP CONTACTS, RECTANGULAR RECEPTACLE AND PLUG, BASED ON TYPE D*M				71Srev1
Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date
Generic ESCC 3401 Detail ESCC	C&K Components Dole France	Qualification	CNES	Feb 1981
Remarks				
3401/001, 3401/004, 3401/022, 3401/040, 3401/072, 3401/080				
Qualified range:				
Shell Size:	E, A, B, C, D, F			
Range of Contacts:	9, 15, 25, 37 and 50 size 20 contacts for standard density layout 3W3 to 8W8, 5W1 to 47W1 combined contact arrangements 15, 26, 44, 62, 78 and 104 size 22 contacts for high density layout			
Mounting Type:	Blank: standard mounting holes; Y: floating mount; E: captive nuts			
Range of Connectors:	3401/001: Variants 01 & 02			
Range of Contacts:	3401/004: Variants 01 to 25; 3401/022: 01 to 59 and 65 to 97; 3401/040: 01 to 17; 3401/080: 01 3401/072: Variants 05 to 39, 46 to 65 and 72 to 82			
Termination type:	solder bucket, straight PCB, 90° PCB, wire wrap			
Coaxial contact arrangements:	3401/004 variants 01 to 25			
Power contact arrangements:	3401/040 variants 01 to 17			
Gold-plated non-magnetic coating				
Operating Temperature Range (°C): -55 to +125				



European Space Agency  
Agence spatiale européenne

## Certificate of Qualification No. 71Srev1

This is to certify that C&K Components, Dole, France has been qualified by ESA for the supply of Connectors, Electrical, Solder and Wire Wrap Contacts, Rectangular receptacle and Plug, based on Type D\*M for use in ESA space programmes, according to ESCC Generic Specification 3401 and associated Detail Specifications (see QPL) as recommended by the Space Components Steering Board.

This certificate is valid until September 2021.

A handwritten signature in dark ink, appearing to be "G. M. Dole", is written over the printed name of the Head of the Product Assurance and Safety Department.

Head of the Product Assurance  
and Safety Department

Date  
25 February 2020