




ESCC		APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL				Page 1
		Component Title: Polyimide insulated wires and cables, low frequency, 600V, -200 to +200°C, based on type SPL - ESCC Detail Specification No. 3901/019 AND Polyimide insulated shielded cables with drain wire, low frequency, 600V, -200 to +200°C, based on type SPLD - ESCC Detail Specification No. 3901/021				Appl. No.
		Executive Member: German Space Agency at DLR		Date: 19/07/2024		380A
Components (including series and families) submitted for Extension of Qualification Approval:						1
ESCC COMPONENT NO.	VARIANTS	RANGE OF COMPONENTS	BASED ON	TEST VEHICLE / S	COMPONENT SIMILAR	
3901/019	01 to 94		SPL	3901/019-61B		
3901/021	01 to 41		SPLD	3901/019-61B	ESCC3901/019 similar to ESCC3901/021, only difference drain wire	
Component Manufacturer W.L. Gore & Associates GmbH		Location of Manufacturing Plant(s) Nordring 1 91785 Pleinfeld Germany		Date of original qualification approval: Date: 01/11/1994 01/02/1996 Certificate Ref No. 229M and 219N merged into 380		
ESCC Specifications used for Maintenance of qualification testing: Generic: ESCC3901 Issue: 3 Detail(s): ESCC3901/019 Issue: 4 ESCC3901/021 Issue: 5		Deviations to LVT testing and Detail Specification used: No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> (supply details in Box 15) Deviation from current Specifications: No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> (Supply details)		Qualification Extension Report reference and date: T.D.R.-No.: 10206-5 from 09.04.2024		
Summary of procurement or equivalent test results during current validity period in support of this application (those to ESCC listed first)						8
Project Name	Testing Level	LAT	Date code	Quantity Delivered		
Various See Appendix: Order list of space products Confidential						
PID changes since start of qualification		Current PID Verified by: Burak Gökgöz, German Space Agency at DLR		Name of Executive Representative		
None <input type="checkbox"/> Minor* <input checked="" type="checkbox"/> Major* <input type="checkbox"/> *Provide details in box: see annex 2 / confidential		Ref No: PLFWI-1491 Issue: Rev. I Rev Date: 04/04/2024		Date: 03/05/2024		
Current Manufacturing facilities surveyed by: Burak Gökgöz, German Space Agency at DLR on 05/05/2022						11
(Name of Executive Representative) (Date)						
Satisfactory: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Explain						
Report Reference: REF GORE-AUD-DLR-2022						

	<p style="text-align: center;">APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL</p> <p>Component title: Polyimide insulated wires and cables, low frequency, 600V, -200 to +200°C, based on type SPL - ESCC Detail Specification No. 3901/019 AND Polyimide insulated shielded cables with drain wire, low frequency, 600V, -200 to +200°C, based on type SPLD - ESCC Detail Specification No. 3901/021</p> <p>Executive Member: German Space Agency at DLR Date: 19/07/2024</p>	<p>Page 2</p> <p>Appl. No.</p> <p>380A</p>
<p>Failure Analysis, DPA, NCCS available: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (Supply data)</p> <p>Ref. No's and purposes: NCCS: NC1DSPL401</p>		12
<p>The undersigned hereby certifies on behalf of the ESCC Executive - that the above information is correct; - that the appropriate documentation has been evaluated; - that full compliance to all ESCC requirements is evidence (except as stated in box 15;) - that the reports and data are available at the ESCC Executive and therefore applies on behalf of DLR as the responsible Executive Member for ESCC qualification status to be extended to the component(s) listed herein.</p> <div style="text-align: right; margin-top: 20px;">  <p>Burak Goekgoez</p> <p><small>Digital signiert von Burak Goekgoez DN: C=DE, S=Nordrhein-Westfalen, L=Koeln, O=Deutsches Zentrum fuer Luft- und Raumfahrt e.V. (DLR), SN=Goekgoez, G=Burak, CN=Burak Goekgoez Grund: Ich bin der Verfasser dieses Dokuments Ort: Bonn Datum: 2024.07.19 09:40:14+02'00' Foxit PDF Editor Version: 13.1.2</small></p> <p>i.A. Burak Gökgöz, DLR</p> <p>(Signature of the Executive Coordinator)</p> </div> <p>Date: 03/05/2024</p>		13
<p>Continuation of Boxes above:</p>		14



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Non compliance to ESCC requirements:

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No.:	Specification	Paragraph	Non compliance
NC1DS PL401	ESCC3901/019 ESCC3901/021	ESCC3901 Para. 9.18 Cut through resistance	During LAT 1 for MoQ of ESCC3901/019+021, the specified value for cut through resistance (ESCC3901/019, §9.18) of the finalized product was not reached. A minimum mean value of 313.92N (32kg) is specified, only 293,86N was measured. The investigated variant is SPL21-20C or ESCC3901/019 Var. 61

Additional tasks required to achieve full compliance for ESCC qualification or rationale for acceptability of noncompliance:

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No technical issue detected, instead specified values in ESCC3901/019+021 have been deemed to be too harsh and should be relaxed. DCR1662 issued to change cut through resistance values for AWG20 and AWG22 to align values.

Executive Manager Disposition


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Application Approval: Yes No

Action / Remarks:

Date:

B. Schade: Head of the Product Assurance and Safety Department

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NOTES ON THE COMPLETION OF THE APPLICATION FORM FOR ESCC QUALIFICATION EXTENSION APPROVAL		
ENTRIES Form heading	shall indicate: - the title of the component as given in its detail specification or the name of the series, family; - the Executive Member; - the entering date; - the certificate number and its sequential suffix.	
Box 1	shall provide details given in the table; in particular there shall be listed: - the variants or range of variants; - the range of components (the ESCC code is recommended to indicate the values or values range, the tolerance, the voltage, etc); the designation given in the detail specification as 'base on'; - under Test Vehicle enter either an ESCC code or the specific characteristic capable of identifying the component tested (e.g., voltage of coil for a relay); - under component similar enter a cross if relevant.	
Box 2; 3 and 4	As per QPL entry; otherwise, an explanation of the changes must be supplied.	
Box 5	Will show the ESCC Generic and Detail specifications, including issue number and revision letter, current at the time the tests reported were performed. If the specifications are different from those current on the date of the application, see Box 6.	
Box 6	Will show the deviations from the Generic and Detail Specifications listed in Box 5, in particular deviations from testing. In case of deviations this must be listed in Box 15. In case the referenced specification in Box 5 have currently a different issue and/or revision indicate also whether the test data deviates or not from such current documents.	
Box 7	Must reference the report(s) supplied in support of the application.	
Box 8	Should provide the details of procurement to the full ESCC System, documentation of all of which should already have been delivered to the ESCC Executive under the terms of the relevant Generic Specification. An appropriate table has been drawn in this box.	
Box 9	If the PID evolved after the Original Qualification or after the last Extension of Qualification, adequate details of such evolution shall be provided together with the reasons for the changes. Major changes shall be clearly marked.	
Box 10	Identify the current PID issue status, date and actual date of verification. The date of verification of the current PID should be arranged as close as possible to the required date of extension.	
Box 11	This box can be completed only after a physical visit to the plant to confirm that no unexplained changes occurred and that the practices, procedures, material, etc. used in manufacturing the components are as described in the PID. This survey shall be carried out in accordance with the requirements of ESCC Basic Specification No. 20200 and its findings shall be recorded.	
Box 12	Provide details of, or reference to, any Destructive Physical Analysis (DPA) and Failure Analysis reports as well as any Nonconformance(s) (NCCS) occurred during the qualification validity period, stating if established corrective action have produced satisfactory results.	
Box 13	Enter only the name of the Executive Member (i.e., CNES, DLR, ESTEC, etc.) and the signature of the responsible Executive Coordinator.	
Box 14	To be used when there is a need to expand any of the boxes from 1 through 12. Identify box affected and reference the Box 14 in the relevant Box. Box 14 can be broken into 14a, 14b, etc. if several boxes have to be expanded.	
Box 15	Fill in Table as requested.	
Box 16	Any additional action deemed necessary by the Executive Member to bring the submitted data to a standard likely to be accepted by the ESCC Executive should be listed herein or the reason(s) to accept the noncompliance.	
Box 17	All Executive Manager recommendations on the application itself, special conditions or restrictions, modifications of the QPL or QML entry, letters to the manufacturer, etc. shall be entered clearly in Box 19, signed by the representative for ESA, and dated.	
Box 18	Fill in Table as requested.	
Box 19	Confidential Details of PID changes including those of a confidential nature, shall be provided.	
Box 20	State noncompliance with reference to specification(s) and paragraph(s). To simplify reference in Box 16 each nonconformance shall be sequentially numbered. If relevant state 'None'.	
Box 21	Any additional action deemed necessary by the Executive Member to bring the submitted data to a standard likely to be accepted by the ESCC Executive should be listed herein or the reason(s) to accept the noncompliance.	
Box 22	Additional Comments.	