

Component Title:

WIRES AND CABLE, LIGHTWEIGHT, EXTRA THIN, FLUOROPOLYMER, INSULATED WIRES AND CABEL, LOW FREQUENCY, BASED ON TYPE LEW 600V, -200 TO +200°C according to Det. Spec. 3901/026

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Appl. No.

Executive Member:	DLR			Date:	24/02/202	21	373	;
submitted for Qualification	n Approval							1
RANGE OF COM	MPONENTS						COMPONE	
all		LEW		3901/026	-12	Lot#	6932808P	LF
				3901/026	-15	LEW Lot#	/ 21-20-C 6932823P	LF
2 Location of Ma Nordring1 91785 Pleinfeld Germany	anufacturing F	Plant	3	Generic: 39	901	ed for Qu	ualification	4
				J	n Lot			6
	Is	sue:	Rev. A					
	Ref No: Issue: Rev Date:	Rev. B		Name of Exec	utive Repres	entative	•	
y:								9
	01/10/2015 (Date)							
	(Bato)							
No □ Exp	olain							
⊠ No □		Failure ana available	lysis, DF	PA, NCCS	Yes		No 🗵	10
Date: 26/03	3/2020	(supply data	a)					
2 Date: 21/02/20	020							
		Ref Nos. ar	nd purpo	se:				
	submitted for Qualification RANGE OF COM all Location of Management of Management of Section 191785 Pleinfeld Germany 7 ed, provided in y: No □ Exp	RANGE OF COMPONENTS all Location of Manufacturing F Nordring1 91785 Pleinfeld Germany 7 Current PID Ref No: Issue: Rev Date: y: 01/10/2015 (Date) No □ Explain No □ Date: 26/03/2020	submitted for Qualification Approval RANGE OF COMPONENTS all LEW LEW LEW LEW LEW LEW LEW A provided in Series and series are series and series are series and series and series and series are series and series and series and series are series and series and series are series and series and series are series and series and series are series are series and series are series are series and series are series a	submitted for Qualification Approval RANGE OF COMPONENTS BASED ON all LEW LEW LEW 2 Location of Manufacturing Plant Nordring1 91785 Pleinfeld Germany 5 PID used for manufacturing Plant Ref No: PLFWI-15/06/2 Ref No: PLFWI-2906 Issue: Rev. A Date: 15/06/2 Ref No: PLFWI-2906 Issue: Rev. B Rev Date: 02/11/2020 y: 01/10/2015 (Date) No Explain Failure analysis, DF available (supply data) 2 Date: 26/03/2020	RANGE OF COMPONENTS	RANGE OF COMPONENTS	RANGE OF COMPONENTS	Submitted for Qualification Approval



Continuation of Boxes above: (Only non-confidential comments)

APPLICATION FOR ESCC QUALIFICATION APPROVAL

Component Title:

WIRES AND CABLE, LIGHTWEIGHT, EXTRA THIN, FLUOROPOLYMER, INSULATED WIRES AND CABEL, LOW FREQUENCY, BASED ON TYPE LEW 600V, -200 TO +200°C according to Det. Spec. 3901/026

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	signed hereby certifies on behalf of the ESCC Executive, that the above information		1
	propriate documentation has been evaluated; that full compliance to all ESCC literated in box 13th that the reports and data are swellable at the ESCC Evaputing		
	stated in box 13; that the reports and data are available at the ESCC Executive conent(s) listed herein.	1	
to the com	obliciti(s) listed fictorii.	Block galiges	
		0	
Date:	16/03/2021	Burak Gökgöz, DLR	_
		(Signature of the Executive Coordinator)	

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WIRES AND CABLE, LIGHTWEIGHT, EXTRA THIN, FLUOROPOLYMER, INSULATED WIRES AND CABEL, LOW FREQUENCY, BASED ON TYPE LEW 600V, -200 TO +200°C according to Det. Spec. 3901/026

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		Executive Me	ember: DLR	Date:	24/02/2021	373	
Non compli	ance to ESCC requirements:					13	13
No.:	Specification		Paragraph		Non compliance		
Additional t	asks required to achieve full con nce:	npliance for ES	SCC qualification or rationale for acceptability o	f		14	14
Executive N	Manager Disposition					15	15
Application Action / Ref		No 🗆		5.4	Digitally by Britta Date: 20 10:57:01	/ signed a Schade 021.03.30 I +02'00'	
Date:				B. Schade: h	Head of the Product and Safety Departme	Assurance	



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WIRES AND CABLE, LIGHTWEIGHT, EXTRA THIN, FLUOROPOLYMER, INSULATED WIRES AND CABEL, LOW FREQUENCY, BASED ON TYPE LEW 600V, -200 TO +200°C

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ANNEX 1: LIST OF TESTS DONE TO SUPPORT QUALIFICATION

Tests conducted in compliance with:

ESCC 3901 generic specification; Chart IV (for ESCC/QPL parts);

Or PID-TFD (for ESCC/QML parts)

Tests vehicle identification/description:

3901/026-12	LEW 21-26-C / Lot# 6932808PLF Quantity: 94m
3901/026-15	LEW 21-20-C / Lot# 6932823PLF Quantity: 79m

Detail Specification reference: ESCC 3901/26 Issue 1

Chart IV	Test	Tick when done	Conditions	Date Code	Tested Qty	N° of Rejects	Comments if not performed. Comments on Rejection
t ce 1	Accelerated Ageing		As specified in Table A of Detail Specification		2		
Test sequence 1	Wrap Test at Ambient Temperature	\boxtimes	As specified in Table A and B of Detail Specification		2		
U)	Voltage Test	\boxtimes	ESCC 3901 Para. 9.7 (a)		2		
Test quence 2	Cold Bend Test	\boxtimes	As specified in Table C of Detail Specification		2		
Test	Voltage Test		ESCC 3901 Para. 9.7 (a)		2		
nence 3	Resistance to Fluids	\boxtimes	ESCC 3901 Para. 9.21		2		Annex 2: JOLS8-ASLLAM-TRP-0008 Issue 1 Resistance to Fluids Test Report from ArianSpace
Test sequence	Wrap Test at Ambient Temperature		As specified in Table A and B of Detail Specification		2		
F	Voltage Test	\boxtimes	ESCC 3901 Para. 9.7 (a)		2		
Test sequence 4	Radiation Resistance		ESCC 3901 Para. 9.26		2		Annex 1: SL-LD-0045-1/19-2 Radiation Resistance Test Report von Seibersdorf Lab. 2,6 Mrad
Test s	Voltage Test		ESCC 3901 Para. 9.7 (a)		2		
5	Long-term Ageing Test	\boxtimes	ESCC 3901 Para. 9.28 and 9.12		2		
Test sequence 5	Wrap Test at Ambient Temperature		As specified in Table A and B of Detail Specification		2		
Se	Voltage Test	\boxtimes	ESCC 3901 Para. 9.7 (a)		2		
	Mechanical Properties of Conductor	\boxtimes	FED-STD-228-3211		2		
Other tests	Shrinkage	\boxtimes	ESCC 3901 Para. 9.15		2		
	Blocking		As specified in Table A and B of Detail Specification		2		
0	Cut-through Resistance	\boxtimes	As specified in Detail Specification		2		
	Notch Resistance	\boxtimes	As specified in Detail Specification		2		

Surface Resistance	\boxtimes	FED-STD-228-6041		2		
Abrasion Resistance		ESCC 3901 Para. 9.23		2		
Soldering Shrinkage	\boxtimes	ESCC 3901 Para. 9.24		2		
Solderability	\boxtimes	IEC 68-2-20		2		
Overload Resistance	\boxtimes	ESCC 3901 Para. 9.27		2		
Anthony and Brown Test	\boxtimes	ESA PSS-01-720		2		
	Abrasion Resistance Soldering Shrinkage Solderability Overload Resistance	Abrasion Resistance	Abrasion Resistance	Abrasion Resistance Soldering Shrinkage Solderability Description: Solderability Description: Solderability ESCC 3901 Para. 9.24 IEC 68-2-20 ESCC 3901 Para. 9.27 ESCC 3901 Para. 9.27 ESCC 3901 Para. 9.27	Abrasion Resistance	Abrasion Resistance ☑ ESCC 3901 Para. 9.23 2 Soldering Shrinkage ☑ ESCC 3901 Para. 9.24 2 Solderability ☑ IEC 68-2-20 2 Overload Resistance ☑ ESCC 3901 Para. 9.27 2 Anthony and Brown Test ☑ ESA PSS-01-720 2



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Executive Member: DLR Date: 24/02/2021

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NOTES ON THE COMPLETION OF THE APPLICATION FORM FOR ESCC QUALIFICATION APPROVAL

ENTRIES			

Form Heading

shall indicate:— the title of the component as given in its detail specification or the name of the series or family; — the entering

date; — the serial number and the suffix of the form.

Box 1

shall provide details given in table; in particular there shall be listed - the variants or range of variants; the range of components by using the ESCC code for values tolerances, etc.; the designation given in detail specification as 'based on'; ---under Test Vehicle enter either a cross or the specific characteristic capable to identify the component tested; — under component similar

enter a cross

Box 2 and 3

Manufacturer's name and location of plant where the components were manufactured and tested.

Box 4

Generic and detail specifications used during qualification program.

Box 5

Reference to test report(s) submitted in support of application.

Box 6

Enter details to identify the PID that was applicable at the time the qualification lot was manufactured.

Box 7

If the PID was evolved after qualification lot manufacture, adequate details of such evolution shall be provided together with

reasons for changes. Major changes shall be clearly marked.

Box 8

The box serves to identify the current PID and the Executive Representative that has verified it together with the date of this

ccurrence.

Box 9

This box can be completed only after a physical visit to the plant to confirm that the practices, procedures, materials, 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 10

Details entered shall be sufficient to evidence that an evaluation program according to ESCC Basic Specification No. 22600 has been performed and that the results thereof are summarized in the survey and test reports. If the evaluation program has not been carried out according to established ESCC documents, the applicant Executive Representative shall provide alternative data and declare its assessed degree of satisfactory compliance with the ESCC basic requirements. Reference shall be made to the reports on Destructive Physical Analysis (DPA), Failure Analysis and Non conformance (NCCS) issued during

the Evaluation and/or Qualification Phase.

Box 11

Enter the name of the Executive Coordinator and the signature.

Box 12

To be used when there is a need to expand any of the boxes from 1 through 10. Identify box affected and reference the Box 12 is the relevant Pay Pay 12 can be braken into 12c. 12b. etc. if cayonal Payer have to be expanded.

in the relevant Box. Box 12 can be broken into 12a, 12b, etc. if several Boxes have to be expanded.

Box 13

Fill table as requested.

Box 14

Fill in any additional tasks required to achieve full compliance.

Box 15

All Executive recommendations on the application itself, special conditions or restrictions, modifications of the QPL or ESCC QML entry, letters to the manufacturer, etc. shall be entered clearly in Box 15, signed by the ESA Representative.

(

Fill in Table as requested.

Box 16 Box 17

Confidential details of PID changes shall be provided.

Box 18

State noncompliance with reference to specification(s) and paragraph(s). To simplify reference in Box 18 each

nonconformance shall be sequentially numbered. If relevant state 'None'

Box 19

Any additional action deemed necessary by the Executive Representative 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 nonconformance.

Box 20

Additional Comments