



APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL

Component Title: Optical Fibre Cable Assemblies based on type mini AVIM

Appl. No.

Executive Member: ESA

Date: 13/04/2021

355A

Components (including series and families) submitted for Qualification Approval

1

ESCC COMPONENT NO.	VARIANTS	RANGE OF COMPONENTS	BASED ON	TEST VEHICLE / S	COMPONENT SIMILAR
3420/001	01	Optical fiber cable assembly SM and PM fiber, acrylate coated, PEEK loose tube	PM fiber 9/125/250 at 1550nm	342000101-01P-M8P-M8P-6000	
3420/001	02	Mating Adapter with Square flange	5219572	342000102	

Component Manufacturer Diamond SA	2	Location of Manufacturing Plant Via dei Patrizi 5 CH-6616 Losone	3	ESCC Specification used for Maintenance of Qualification testing Generic: 3420 Issue: 1 Detail/s: 3420/001 Issue: 4	4
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Qualification Extension Report Reference and date: STS0333 Laboratory, Report 3642 Date: 01/03/2021	5	Original qualification approval Date: 30/10/2018 Certificate Ref No.: 355	6
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PID changes since start of qualification None <input type="checkbox"/> Minor* <input checked="" type="checkbox"/> Major* <input type="checkbox"/> (* Details not published, provided in confidential annex 2.)	7	Current PID Verified by <u>ESA</u> Ref No: PID_342000101 Issue: 01 Date: 13/04/2021	8
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Current Manufacturing facilities surveyed by: ESA	9	13/12/2017
(Name of Executive Responsible Agency) ESCC-AUD-DIAM2017-1		(Date)
Report Reference		
Satisfactory: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Explain Findings from report were addressed		

Summary of procurement or equivalent test results during current validity period in support of this application (those to ESCC listed first) See annex	10	11
		Failure analysis, DPA, NCCS available (supply data) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Ref Nos. and purpose:



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Page 2

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355A

11

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 13; that the reports and data are available at the ESCC Executive and therefore applies for ESCC qualification status to be given to the component(s) listed herein.

Date:

Digitally signed by Anastasia Pesce

Date: 2021.05.28 13:47:59 +02'00'

Date: 2021.05.28 13:47:
(Signature of the Executive Coordinator)

12

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



APPLICATION FOR ESCC QUALIFICATION APPROVAL

Component Title: Optical Fibre Cable Assemblies based on type mini AVIM

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Date: 13/04/2021

Page 3

Appl. No.

355A

Non compliance to ESCC requirements:

13

No.:	Specification	Paragraph	Non compliance

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

14

Executive Manager Disposition

15

Application Approval: Yes No

Action / Remarks:

Date:

SH 821 Digitally signed by
Britta Schade
Date: 2021.05.31
08:19:52 +02'00'

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



APPLICATION FOR ESCC QUALIFICATION APPROVAL

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Date: 13/04/2021

Page 4

Appl. No.

355A

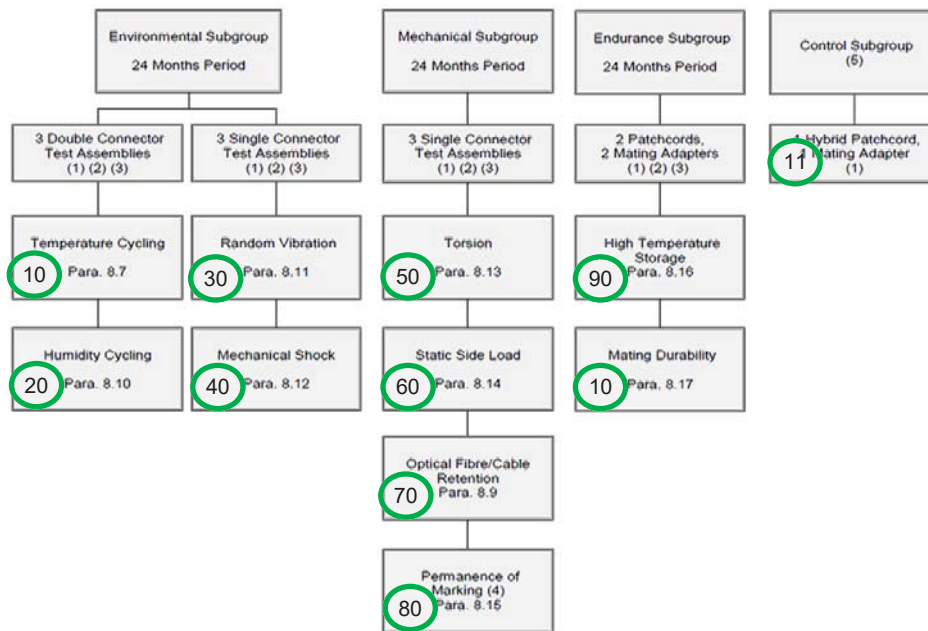
ANNEX 1: LIST OF TESTS DONE TO SUPPORT QUALIFICATION

16

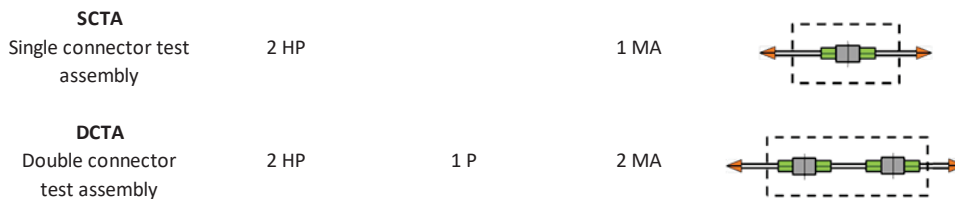
Tests conducted in compliance with:

ESCC 3420 generic specification; Chart F4 and ESCC Detail 3420/001

Tests vehicle identification/description:



Quantity of component for Qualification - Length of fiber



Subgroup	Hybrid Patchcords	Patchcords	Mating adapter	SM CG Patchcord
Environmental	12	6	12	2
Mechanical	6		3	
Endurance	2		2	1
Control	1			
Total	20	6	17	3

Detail Specification reference:

Chart F4	Test	Tick when done	Conditions	Date Code	Tested Qty	No. of Rejects	Comments if not performed. Comments on Rejection
Environmental Subgroup 24 Month Period	Temperature Cycling	<input checked="" type="checkbox"/>	IEC 61300-2-22				
	Humidity Cycling	<input checked="" type="checkbox"/>	IEC 61300-2-46				
	Random Vibration	<input checked="" type="checkbox"/>	IEC 60068-2-64				
	Mechanical Shock	<input checked="" type="checkbox"/>	IEC 60068-2-27				
Mechanical Subgroup 24 Months Period	Torsion	<input checked="" type="checkbox"/>	IEC 61300-2-5				
	Static Slide Load	<input checked="" type="checkbox"/>	IEC 61300-2-42				
	Optical Fibre/Cable Retention	<input checked="" type="checkbox"/>	IEC 61300-2-4				
	Permanence of Marking	<input type="checkbox"/>	ESCC Basic Specification No. 24800				
Endurance Subgroup 24 Months Period	High Temperature Storage	<input checked="" type="checkbox"/>	IEC 61300-2-18				
	Mating Durability	<input checked="" type="checkbox"/>	IEC 61300-2-2				
Additional Tests	Insertion Loss	<input checked="" type="checkbox"/>	IEC 61300-3-4				
	Return Loss	<input checked="" type="checkbox"/>	IEC 61300-3-6				
	Rapid depressurization	<input checked="" type="checkbox"/>	MIL-STD-810G, method 500.5				
	Dust	<input checked="" type="checkbox"/>	IEC-61300-2-27 IEC- 60068-2-13				
	Radiation	<input checked="" type="checkbox"/>	ESCC22900				Only Var 1, Var 2,3,4, to be conducted
	Polarisation extinction ratio	<input checked="" type="checkbox"/>	Diamond SA				



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Page 7

Appl. No.

355A

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 occurrence.
- 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 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.
- Box 16** Fill in Table as requested.
- 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