Working direction

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Issue	■New	T-connector cost reduction trial and evaluation for supplier change of C-sleeve
	☐ Revised	C-sleeve の供給メーカー変更による外被把持コネクタの試作と評価

1. Introduction

This working direction instructs T-connector cost reduction trial and evaluation for supplier change of C-sleeve .
本作業指示書おいて、外被把持コネクタのコストダウンのため、C-sleeve の現地メーカー品を使用した試作品製造と評価項目を指示する。

2. Scope

This wroking direction is applied into below products as S-GAISHI-71-2186-3

KY-Termination connector S-LG
KY-Termination connector S-LM-R

3. Material and Parts

C-sleeve is changed following below item . As regards other material and components , basically this trial follows material & parts should follow components list of S-GAISHI-71-2186-3.

	LG		LM-R
C-sleeve supplier	SUMITEK	Hirota	SUMITEK
Q'ty	200	200	200

4. Evaluation

(1) Optical characteristics

			LG		LM-R
Item	Specification	total Q'ty	SUMITEC	HIROTA	SUMITEC
Insertion Loss	Refer to table 4 in S-GAISHI-71-2186-3	600	200	200	200
Return Loss	Refer to table 4 in S-GAISHI-71-2186-3	600	200	200	200

(2) Function Evaluation (Test spec : refer to IEC 60874-1 or JISC 5961)

				LG		LM-R
Item	Optical characterristics	Wavelength	total Q'ty	SUMITEC	HIROTA	SUMITEC
Pull test	When the connection of KY-Termination connector S「SC」-「」-「」 is tested with a puliing force of 10.0 N, the value of insertion loss variation before and after the test shall be 0.2 dB or less.Furthermore, there should be no harmful damage to the test sample after the test.	The measurement wavelength shall be any one point at 1.31±0.02μm and any one point at 1.55±0.02μm.	24	8	8	8
Bending test	When the connection part of KY-Termination connector S「SC」-「」-「」 is bent 10 times with a tensile force of 4.9 N, the value of insertion loss variation before and after the test shall be 0.2 dB or less.Furthermore, there should be no harmful damage to the test sample after the test.	The measurement wavelength shall be any one point at 1.31±0.02μm and any one point at 1.55±0.02μm.	24	8	8	8
Connecting and disconnnecting force	The Connecting and disconnnecting forces of KY-Termination connector S「SC」-「」-「」 and the SC connector plug in accordance with JISC 5973 shall satisfy 19.6 N or less.	—	24	8	8	8
Dulability	When KY-Termination connector S「SC」-「」-「」and the SC connector plug conforming to JISC 5973 are repeatedly tested 500 times while cleaning the ferrule end face every 10 times, the increase in light loss during and after the test shall be 0.2 dB or less compared to the value before the test. Furthermore, there should be no harmful damage to the test sample after the test.	The measurement wavelength shall be any one point at 1.31±0.02μm and any one point at 1.55±0.02μm.	24	8	8	8
Thermal Cycle Test	When KY-Termination connector S「SC」-「」-「」and the SC connector plug conforming to JISC 5973 is subjected to 10 cycles of heat cycling (6 hours/cycle) at -25 to +70°C, the increase in light loss during and after the test shall be 0.3 dB or less compared to the value before the test. The increase in optical loss during and after the test shall be 0.3 dB or less compared to the value before the test.Furthermore, there should be no harmful damage to the test sample after the test.	The measurement wavelength shall be any one point at 1.31±0.02μm and any one point at 1.55±0.02μm.	24	8	8	8
Thermal Humidity Cycling Test	When KY-Termination connector S「SC」-「」-「」 and the SC connector plug conforming to JISC 5973 is subjected to 10 cycles of temperature and humidity cycling (24 hours/cycle) from -10 to +25 to +65°C (93% RH at 65°C), the increase in optical loss during and after the test compared to the value before the test shall be 0.3 dB or less. Furthermore, there should be no harmful damage to the test sample after the test.	The measurement wavelength shall be any one point at 1.31±0.02μm and any one point at 1.55±0.02μm.	24	8	8	8

Thermal Age Test with high temprature	When the connection between KY-Termination connector S 「SC」 -「」 -「」 and the SC connector plug conforming to JISC 5973 is placed in an environment of +70°C for 240 hours, the increase in light loss during and after the test shall be 0.2 dB or less in comparison with the value before the test.Furthermore, there should be no harmful damage to the test sample after the test.	The measurement wavelength shall be any one point at 1.31±0.02μm and any one point at 1.55±0.02μm.	24	8	8	8
Thermal Age Test with low temprature	When the connection between KY-Termination connector S 「SC」 -「」 -「」 and the SC connector plug conforming to JISC 5973 is placed in an environment of -25°C for 240 hours, the increase in light loss during and after the test shall be 0.3 dB or less compared to the value before the test.Furthermore, there should be no harmful damage to the test sample after the test.	The measurement wavelength shall be any one point at 1.31±0.02μm and any one point at 1.55±0.02μm.	24	8	8	8

(3) Submission of report

Evaluation result should be reported to M.Matsunaga (mitsunori.matsunaga@jp.fujikura.com)

5. Trial sample production

FOV submit BOM for this trial to SG before starting production for approval.