

付図. 2 作業指図書様式例

To : FOV

CC. :

No. EN-01212

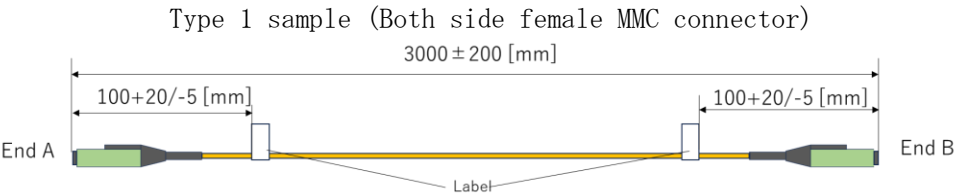
Working Direction / 作業指図書		Issued by 発行部門	Kokikai	
Product Group	MMC connector	Date of Issue 発行日	6 Sep. 2024	
Product Type 製品名	MMC connector patch cord	<input type="checkbox"/> Deadline 適用期間	31 Dec. 2024	
		<input type="checkbox"/> P/O 発注番号	T. B. D	
Title/件名		Approved by	Checked by	Written by
MMC connector with Aachen 16F cord LSZH trial making		S Takahashi	M. Hirose	Y. Watanabe

1. Purpose/目的

AFL make inquiry fiber assembly products which MMC connectors applied for.
In the past,CNC and FOV make trial MMC connectors sample.
But there are some issues to solve.
Besides, optical cord which will be applied for the products was not used by past trial making sample.
To organize the issues, CNC would like to make samples in FOV and CNC member investigate in FOV line by PO based on this WD.

2. Scope/適用範囲

Below two types of samples



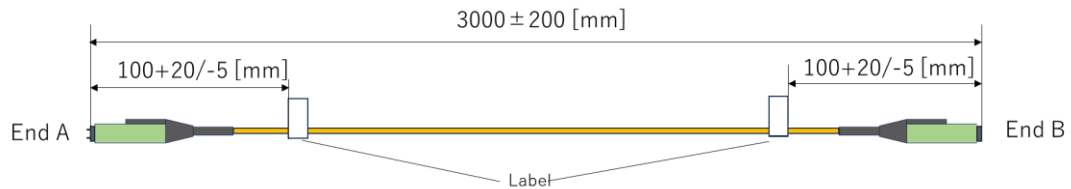
Product name: FMMC-FMMC with Aachen 16F optical cord LSZH
Qty: Refer to PO

Table 1 Materials of Typel sample

No.	Item	Drawing No. (*)	Material	Unit	Maker	Note
1	BOOT, PUSH/PULL,MMC/MDC, 44mm	CMMC2-085F3 / DRPT-11170(3)	PP	pcs	YUWA VN	Long boot ※CNC provide this time
2	Latch Release, MMC	CMMC2-005D3 / DRPT-11153(1)	ULTEM	pcs	YUWA VN	※CNC provide this time
3	Latch Body, MMC	CMMC2-008D3 / DRPT-11154(1)	ULTEM	pcs	YUWA VN	※CNC provide this time

4	Heat Shrink tbe (W3F2)	CMMC2-032C4 / DRPT-11155(1)	-	pcs	Sanki sangyo	※CNC provide this time
5	Crimp band, MMC	CMMC2-017E4 / DRPT-11150(3)	A2017BD	pcs	Sanwa technologies	※CNC provide this time
6	Connector Housing, MMC	CMMC2-001H3 / DRPT-11144(3)	ULTEM	pcs	YUWA VN	※CNC provide this time
7	Front Housing, MMC-B	CMMC2-070C3 / DRPT-11171(2)	ULTEM	pcs	YUWA VN	※CNC provide this time
8	Spring, 11N MMC-Pol (0.55, 5.8, 2.3)	CMMC2-060C4 / DRPT-11156(2)	SUS	pcs	Toei	※CNC provide this time
9	Female spacer, 16F, Pol-Spring	CMMC2-047B4 / DRPT-11157(1)	ULTEM	pcs	YUWA VN	※CNC provide this time
10	Housing Cap, MMC	CMMC2-003G3 / DRPT-11146(1)	SUS	pcs	YUWA VN	※CNC provide this time
11	Dust Cap, MMC-B	CMMC2-050D4 / DRPT-11151(2)	PC	pcs	YUWA VN	※CNC provide this time
12	Pre-Angled 1×16MMC-MT-GB-TP(10N) without Stamps	SPPU-11477(2)	PPS	pcs	FHO	※CNC provide this time
13	Micro Internal LSZH Cable, 16F, 2.4mm	C-11-S050-H016-0 2_Rev 1	-	-	Aachen	※FOV prepare for this material.

Type 2 sample (One side female MMC connector, another side male MMC connector)



Product name: FMMC-MMMC with Aachen 16F optical cord LSZH

Qty: Refer to P0

Table 2 Materials of Type2 sample

No	Item	Drawing No. (*)	Material	Unit	Maker	Note
1	BOOT, PUSH/PULL, MMC/MDC, 44mm	CMMC2-085F3 / DRPT-11170(3)	PP	pcs	YUWA VN	Long boot ※CNC provide this time
2	Latch Release, MMC	CMMC2-005D3 / DRPT-11153(1)	ULTEM	pcs	YUWA VN	※CNC provide this time
3	Latch Body, MMC	CMMC2-008D3 / DRPT-11154(1)	ULTEM	pcs	YUWA VN	※CNC provide this time
4	Heat Shrink tbe (W3F2)	CMMC2-032C4 / DRPT-11155(1)	-	pcs	Sanki sangyo	※CNC provide this time
5	Crimp band, MMC	CMMC2-017E4 / DRPT-11150(3)	A2017BD	pcs	Sanwa technologies	※CNC provide this time
6	Connector Housing, MMC	CMMC2-001H3 / DRPT-11144(3)	ULTEM	pcs	YUWA VN	※CNC provide this time
7	Front Housing, MMC-B	CMMC2-060C4 / DRPT-11156(2)	ULTEM	pcs	YUWA VN	※CNC provide this time
8	Spring, 11N MMC-Pol (0.55, 5.8, 2.3)	CMMC2-060C4 / DRPT-11156(2)	SUS	pcs	Toei	※CNC provide this time
9	Female spacer, 16F, Pol-Spring	CMMC2-047B4 / DRPT-11157(1)	ULTEM	pcs	YUWA VN	※CNC provide this time
10	Housing Cap, MMC	CMMC2-003G3 / DRPT-11146(1)	SUS	pcs	YUWA VN	※CNC provide this time
11	Dust Cap, MMC-B	CMMC2-050D4 / DRPT-11151(2)	PC	pcs	YUWA VN	※CNC provide this time

12	Pre-Angled 1×16MMC-MT-GB-TP(10N) without Stamps	'SPPU-11477(2)	PPS	pcs	FHO	※CNC provide this time
13	Guide Pin, MMC, 16F, Ball tip, S-B	CMMC2-073C4 / DRPT-11169(2)	SUS	Pcs	Sanwa needle	※CNC provide this time
14	Male spacer, 16F, Pol-Spring	'CMMC2-049D3 / DRPT-11158(1)	ULTEM	Pcs	Yuwa VN	※CNC provide this time
15	Micro Internal LSZH Cable, 16F, 2.4mm	C-11-S050-H016-0 2_Rev 1	-	-	Aachen	※FOV prepare for this material.

※MMC connector materials are shipped from CNC.

※FOV need to prepare for optical cord.

FOV already purchase optical cord C-11-S050-H016-02_Rev1 for EN-01198(2) working.

FOV can use the optical cord already purchased.

※FOV apply S/N by label. The position should be refer to sample structure image above.

S/N rule: X(A or B)YY(input year)MM(input month)DD(input date)xxx(consecutive number from 001)
e. g. ;A240924001

3. Details of work/指示詳細

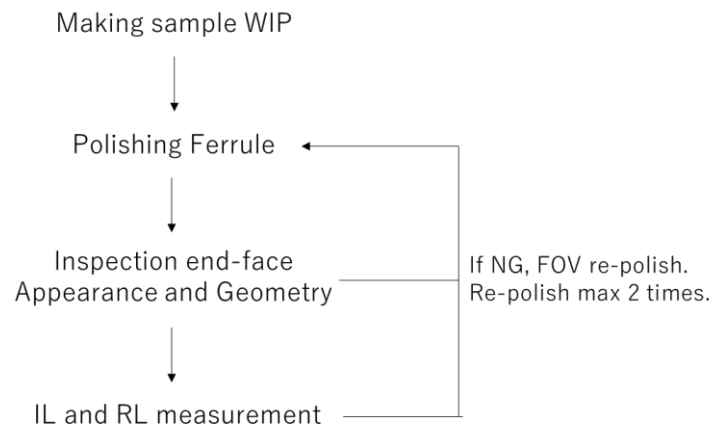


Image 1 Working flow schematic

End-face geometry criteria: JD-11-24-0025

TMT/MMC End face Geometry criteria for SM, 16f

JD-11-24-0025

1. Purpose

Define the specification for jumper assemblies containing TMT/MMC Connector

2. Endface geometry criteria (IEC basis)

The customer demands are below

Endface Geometry for 16MMC-SM : Refer to IEC61755-3-31ed1:2015

Measurement method for Endface Geometry : Refer to IEC61300-3-30

		Specification	
Item	Ref.	16MMC	
1 Fiber protrusion	H	1.5 μ m~3.5 μ m	
2 Difference in height between adjacent fibers	HA	No more than 0.15 μ m	
3 Radius of curvature of MT ferrule end face	RX	(Convex) 3000mm \leq (Concave) \geq 10000mm	
	RY	150mm \leq	
4 MT end face angle	SX	$-0.15^{\circ} \leq X \leq 0.15^{\circ}$	
	SY	$7.85^{\circ} \leq Y \leq 8.15^{\circ}$	
5 Core dip	CD	-	
6 Fiber tip spherical radius	RF	1.0mm \leq Ignore this specification when this value is not indicated in DAISI	
7 Minus Coplanarity	CF	$\leq 0.15\mu$ m	
8 Geometry limit	GL	-	

(Note : Definition of each inspection item is referred to IEC61755-3-31ed1:2015)

(Note : In case of DAISI-MT, Blink program latest version shall be used. Factory always check their revision information.)

(Note : In case of another machine used, the measurement program shall be used latest version.)

End-face appearance criteria: Refer to PNJHA-0038-40-54A Chap.2.
(FOV don't refer to PNJHA-0038-40-54A Chap.3 geometry criteria.)

Table 2 Visual requirements for angle polished connector, single mode fiber

Zone	Scratches	Defects	Contamination	Magnification
A :core	$\leq 3\mu\text{m}$ max 4pcs.	None	None	X400 min. Note4
B :cladding	No limit $\leq 5\mu\text{m}$ None $> 5\mu\text{m}$	No limit $< 2\mu\text{m}$	None	X400 min Note4
		5max. from $2\mu\text{m}$ to $5\mu\text{m}$		
		None $> 5\mu\text{m}$		
MT ferrule surface	No limit	No limit	None	X10

Note1 For scratches, the requirement refers to width

Note2 No visible subsurface cracks are allowed in the core and cladding zones.

Note3 All loose particles should be removed. If defects are non removable .it should be within the criteria above to be acceptable for use.

Note4 Microscope, capable of detecting $2\mu\text{m}$ width

In case of using ME2503

Min.magnification x400

Optical characteristics; *Measurement method need to be discussed with CNC PIC.

IL \leq 0.35dB

RL \geq 65dB

Wavelength: 1310nm, 1550nm

Packaging: FOV can apply FOV standard packaging.

4. Request of feedback/フィードバック要求項目（必要な場合は記入すること）

FOV ship all samples including NG.

FOV should submit Test Report including below items.

-End face geometry data

-Optical measurement result

-Ferrule length (If repolish)

※Before and after re-poshing data is also needed if re-polishing.

5. Inquiries/問合せ先

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Rev	Date	History	Reason	PIC
1	6 Sep. 2024	Original issue	-	Y. Watanabe