

FUJIKURA FIBER OPTICS VIETNAM LTD.**MAGETSUYO WITH SC AND SC SHUTTER HOUSING****OPERATION PROCEDURE: 4-OP-333**

Version: 30

Page: 1/27

**I. Purpose**

This document guides for manufacturing of Magetsuyo with cord 3.0 mm Products.

II. Application

The content of operation procedure is applied for Magetsuyo with cord 3.0 mm products following Fujikura standard. The content is shown as bellow:

No	Process
1	Cutting and aging
2	Laser marking
3	Parts Insertion
4	Ferrule Assembly
5	Polishing
6	Housing
7	Loss Inspection
8	Length check
9	Final Endface
10	Label & Final Packing
11	Test report

This procedure has a connection with Production, Quality assurance and planning function.

III. Reference Documents

- Customer specification

No	Specification
1	PNJHC-1005-25-01AK HC-1005-001\$002
2	PNJHC-1005-25-02Y HC-1005-002\$002
3	HC-1071-006#8\$001
4	PNJHC-1005-25-03AK HC-1005-003\$003
5	PNJHC-1143-25-01B HC-1143-001\$001
6	PNJHC-1005-25-04J
7	PNJHC-1071-25-03J
8	PNJHC-1093-25-01
9	PNJHC-1071-25-02A
10	PNJHC-1071-25-05
11	PNJHC-1137-25-01B
12	PNJHC-1137-25-02
13	PNJHC-1138-25-01B
14	PNJHC-1138-25-02
15	PNJHC-1189-25-01A

- Other reference doc:

QC flow chart: 4-QC-333

Purchase Specification No.: (Refer to Table-1)

Checked by: Nguyen Thanh Ban Date: Follow EIC	Approved by: Nguyen Trung Kien Date: Follow EIC
Prepared by: MyNTH and checked by: Duc TNM Date: 30-Sep-2024	Originator: Dinh Tan Tien Date: 27 Apr 2011

IV. Term Definition

FOV: Fujikura Fiber Optics Vietnam Ltd.
 [SCS]: SC shutter
 [SC]: SC connector (no shutter)
 [SPC]/ [APC]: Polishing condition
 [length]: The length of product.
 [MAGETSUYO3] : Ultra Flexible Cable 3mm type

V. Traceability control:

The requirement of traceability record for each produce shall follow the 9-PR-013 Data traceability procedure.

Type of record	Items	Record
Quality control items	Refer to QC flow chart 4-QC-333	Related check sheet
Identification & trace-ability record	4M information (if any): -Material lot# -Machine/Tool-Jig control number -Operator code -Manufacturing/inspecting date	

VI. Content

1. Cutting and aging

1.1 Process Specification

1.1.1 Cutting

a. For cord cutting length

$$L_{\text{cord}} = [\text{length}] \text{ m} + 0.1\text{m} \pm 10 \text{ mm}$$

b. For nylon tube cutting length

Product Specification	Nylon tube cutting length
PNJHC-1005-25-01AK HC-1005-001\$001	$L_{\text{tube}} = 35 \pm 1 \text{ mm}$
PNJHC-1005-25-02Y HC-1005-002\$001	
PNJHC-1005-25-03AK HC-1005-003\$003	
PNJHC-1005-25-04J	
PNJHC-1071-25-03J	
PNJHC-1143-25-01A	
PNJHC-1093-25-01	
PNJHC-1189-25-01A	$L_{\text{tube}} = 25 \pm 1 \text{ mm}$
PNJHC-1071-25-02A	
PNJHC-1071-25-05	
PNJHC-1137-25-01B	
PNJHC-1138-25-01B	
PNJHC-1137-25-02	$L_{\text{tube}} = 13 \pm 1 \text{ mm}$
PNJHC-1138-25-02	
PNJHC-0923-25-04A	

1.2 Aging

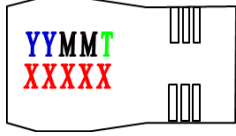


Product specification	Material	Aging condition
PNJHC-1143-25-01B HC-1143-001\$001	NAT-00105	@ 70 °C x 48 hours
PNJHC-0923-25-04A	JBT-04021A	@ 60 °C x 48 hours

1.3 Process conditions

- Cutting cord:
 - o When start machine:
 - + Measure 3 pcs if change roller status
 - + Measure 1 pc if not change roller status.
 - o When stop machine: measure 1 pc (last pc of cutting lot).
- Cutting Nylon tube: Use cutting machine to cut nylon tube; use ruler to measure length of 3 pcs when machine stop or re-start.

2. Laser marking

2.1 Process Specification

Product Specification	Laser marking position	Content
PNJHC-1005-25-01AK (HC-1005-001\$001)		YYMM: Year and month of manufacturing T: Type of product (A: 1.5m, B: 3m, C: 5m, E: 2m; F: 10m, G: 4m, L: 6m, M: 7m, N: 1m, Q: 15m) XXXXX: ordinal number within 1 month - Laser can't be read clearly is NG - Laser marking condition will control by Laser software
PNJHC-1005-25-02Y (HC-1005-002\$001)		
PNJHC-1005-25-03AK (HC-1005-003\$003)		
PNJHC-1005-25-04J		
PNJHC-1071-25-03J		
PNJHC-1189-25-01A		
PNJHC-1093-25-01		YYMM: Year and month of manufacturing T: Type of product (A: 1.5m, B: 3m, C: 5m, E: 2m; F: 10m, G: 4m, L: 6m, M: 7m, N: 1m) XXXXX: ordinal number within 1 month - Laser marking condition will control by Laser software
PNJHC-1071-25-02A		YYMM: Year and month of manufacturing T: Type of product (H: 0.5m; I: 1m; J: 1.5m; K: 2M) XXXXX: ordinal number within 1 month - Laser marking condition will control by Laser software
HC-1071-006#8\$001		
PNJHC-1071-25-05		

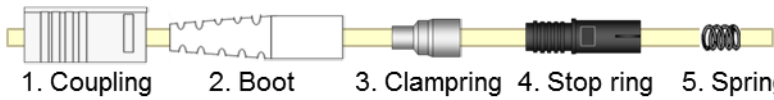
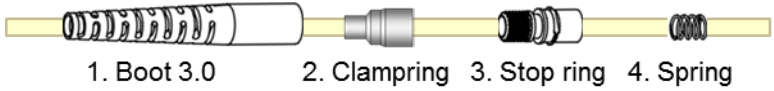
2.2 Process condition

- The laser condition will control by Laser software

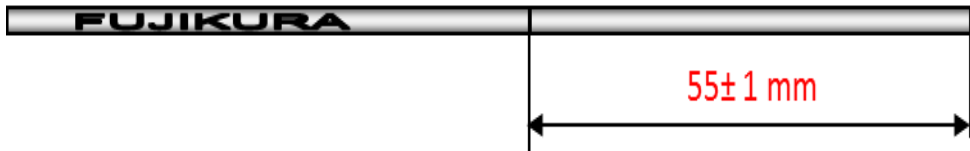

3. Parts Insertion

3.1 Process specification

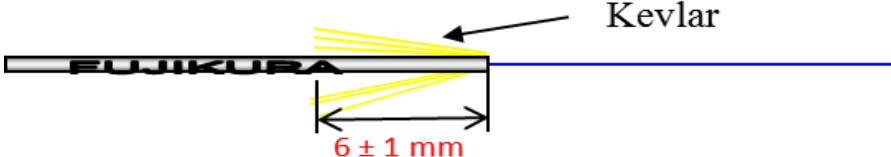
a. The housing parts and order of parts insertion are shown in table below

Connector type	Order of parts insertion
SC shutter	 1. Coupling 2. Boot 3. Clampring 4. Stop ring 5. Spring
SC no shutter	 1. Boot 3.0 2. Clampring 3. Stop ring 4. Spring

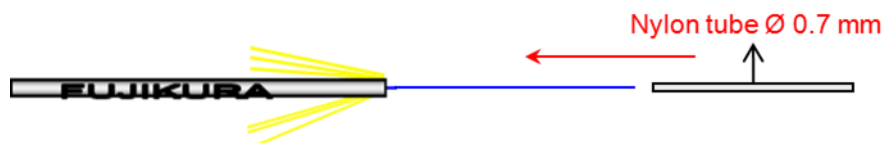
b. Strip cord

Connector type	Cord stripping length
SC shutter	 $55 \pm 1 \text{ mm}$
SC no shutter	 $43 \pm 1 \text{ mm}$

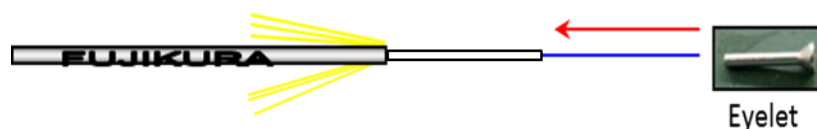
c. Cut Kevlar:

Connector type	Kevlar cutting length
SC shutter	 $6 \pm 1 \text{ mm}$
SC no shutter	

d. Insert the nylon tube



e. Insert the eyelet into cord until eyelet head touch to jacket edge



Note: Kevlar should be divided to two equal parts before insert eyelet. Do not make fiber broken when insert eyelet.

3.2 Process conditions

Items	Conditions
Part insertion	Part insertion jig
Serial no and Laser serial No on Rear Tsunami	Visual (First serial number/batch 6)
Remove jacket	Auto stripping cord machine (Figure 3.1) or stripping tool (figure 3.2)
Cut kevlar	Kevlar cutting nipper
Insert eyelet	Manual

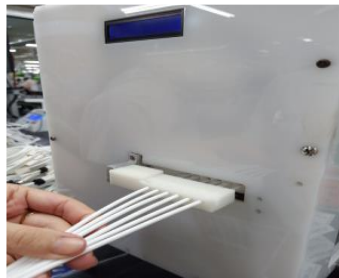


Figure 3.1 Auto stripping cord



Figure 3.2 Stripping tool

4. Ferrule Assembly

Refer to 4-OP-500: Adhesive mixing

Refer to 4-OP-503: Ferrule assembly

5. Polishing

Refer to 4-OP-528: SC polishing for SPC/ AdPC / UPC, Refer to 4-OP-533: SC polishing for APC

Interferometer and end face specification

Product Specification	Fiber height	Radius of Curvature	Apex Offset	Polishing	End face specification
PNJHC-1005-25-01AK HC-1005-001\$002	-50~+100nm	10~25mm	$\leq 50\mu\text{m}$	SPC	
PNJHC-1005-25-02Y HC-1005-002\$002					
PNJHC-1005-25-03AK HC-1005-003\$003					
PNJHC-0923-25-04A					
PNJHC-1005-25-04J	-50~+50nm	10~25mm	$\leq 50\mu\text{m}$	SPC	
PNJHC-1189-25-01A	-50~+50nm	5~12mm		APC	
PNJHC-1071-25-03J	-50~+50nm	5~12mm	$\leq 50\mu\text{m}$	APC	
PNJHC-1093-25-01	-50~+50nm	10~25mm	$\leq 50\mu\text{m}$	SPC	
PNJHC-1071-25-02A	-50~+50nm	7~12mm	$\leq 50\mu\text{m}$	APC	
HC-1071-006#8\$001					
PNJHC-1071-25-05					
PNJHC-1143-25-01A	-50~+100nm	10~25mm	$\leq 50\mu\text{m}$	SPC	PNJHA-0038-40-46 (NEC)
PNJHC-1137-25-01B	-50~+50nm	10~25mm	$\leq 50\mu\text{m}$		

Product Specification	Fiber height	Radius of Curvature	Apex Offset	Polishing	End face specification
PNJHC-1137-25-02	-50~+50 n m	10~25mm	$\leq 50\mu\text{m}$		
PNJHC-1138-25-01B	-50~+50 n m	10~25mm	$\leq 50\mu\text{m}$	SPC	
		7~12mm		APC	

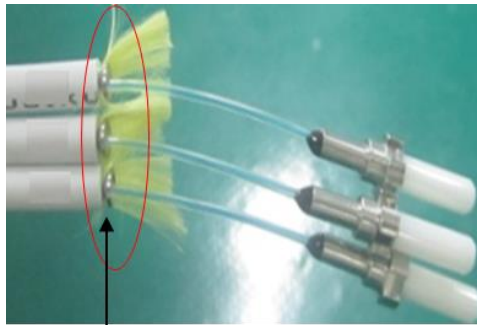
6. Housing

6.1 Process specification

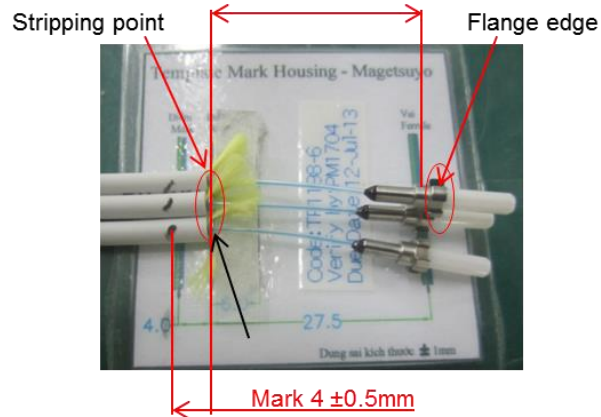
- a. Checking eyelet position flange edge position and check marking

For SC shutter = $27.5 \pm 0.5\text{mm}$

For SC no shutter = $15.5 \pm 0.5\text{mm}$

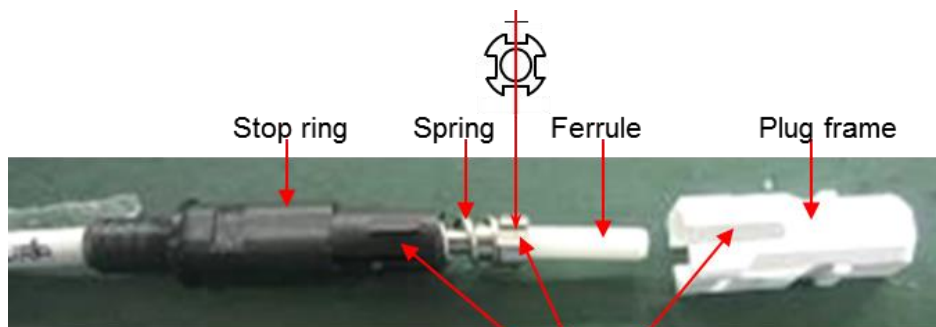


Eyelet is located close with stripping point



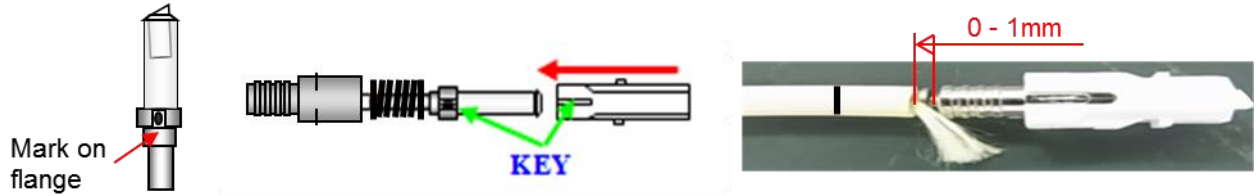
- b. Insert stop ring, spring and ferrule into Plug frame, the side of plug frame must be upper side

- For SC/SPC/UPC



Key up at same direction

- For SC/APC



- c. After insert stop ring on plug frame, pull Kevlar out of stop ring. Make Kevlar become cycle. Push the clamp ring up to keep Kevlar with stop ring.



Kevlar



Kevlar in cycle sharp



Marking must be at end of clamping

- d. Crimping

Use crimping machine (figure 6.1). Crimp one time on big ring of clamp ring in hole 2 (Figure 6.2).



Figure 6.1



Figure 6.2

Second: Crimp on small ring of clamp-ring in hole 1 (Figure 6.3).

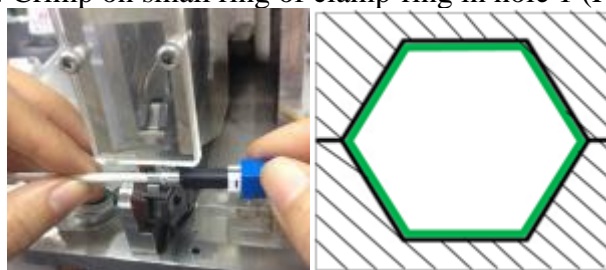


Figure 6.3

- e. Check the mark at the end of clamp-ring as criteria below



Mark is at end of clamping: **OK**



Mark is inside clamping: **NG**

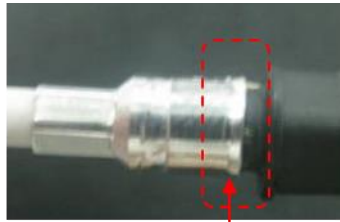


Mark is > 1 mm far from clamping: **NG**

- f. Check clamp-ring after crimping every 1000 times crimp



No crack: **OK**



Not crimp close with head of crimp ring: **NG**

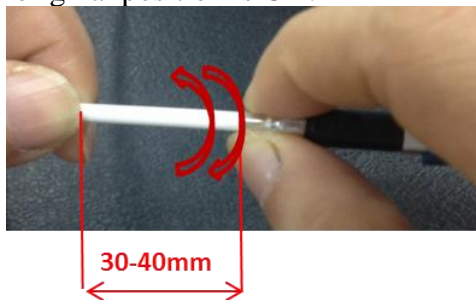


Small ring had hexagon shape: **OK**



Small ring is not crimped tightly: **NG**

- g. Check cord rotation: One hand hold cord from end of clamp-ring 30~40 mm, other hand hold the small ring and twist clamp-ring 2 direction with 45°. Connector return to original position is OK.



- h. Push boot to cover clamp-ring.



SC Shutter housing



SC housing

- i. Prepare shutter function

- In case use Pin with protrude: Spec LGC-SPH303-6a

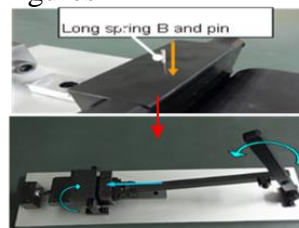
Assemble the long spring B with Pin by pin assembly tool. Insert the long spring B-pin on Knob from thin side as below figures



Insert pin to long spring B



Pin must lock spring B

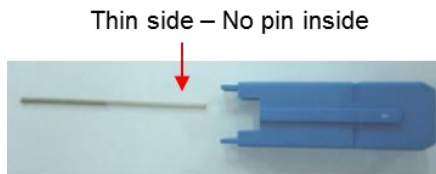
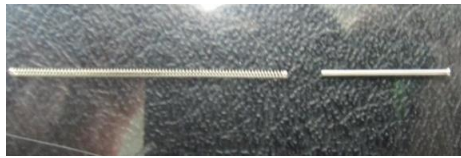


Note: After assembly pin:

- + Spring B fold bend is NG, smooth bend is good.
- + Spring B at end side opened (relax) is NG.
- + Pin must lock the spring B with spec 1~3.5 turns

- In case uses Pin no protrude: Spec LGC-SPH303-6b

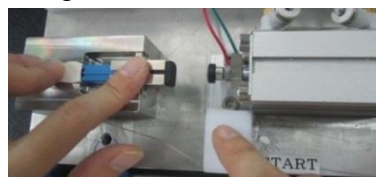
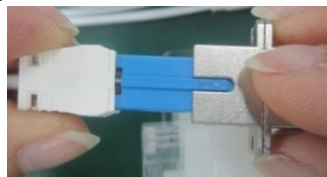
Insert Pin into the long spring B. Insert the long spring B-pin on the Front Tsunami at thin side as below figures



j. Housing

- For SC shutter connector

Assembly the front and rear Tsunami together



- For SC/APC connector and SC/SPC/UPC connector:

Insert coupling to plug frame and check to confirm coupling sliding smoothly.



SC/APC housing



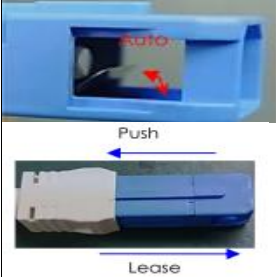
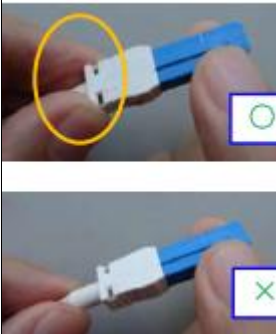
SC/SPC/UPC housing

k. Shutter function and connector appearance checking

Table 6.1.a Appearance Criteria for the connector of Magetsuyo products

No	Defect mode	Criteria 1	Criteria 2
1	Scratch	Width < 1mm & Length < 5mm : OK	Deep < 1/2 material thickness : OK
2	Dent	< 2m m ² : OK	No effect function : OK
3	Hard dirt	< 1m m ² : OK	> 4 dots / 1 surface are NG
4	Light dirt	Any is OK	
5	Mixed other materials	Any can not be accepted(NG)	
6	Burr	< 2m m ² : OK	No effect function : OK
7	Color dot	< 1m m ² : OK	> 4 dots / 1 surface are NG
8	Weld line	Width < 1mm & Length < 5mm : OK	No effect function : OK
9	Long spring bending	Smooth bend: OK	Folding bend : NG

Table 6.1.b Shutter function checking

No	Checking items		Description	Judgment	Process	Method	Samp
1	Shutter function	Shutter function: Hold boot (Rear TSUMAMI) and move back the knob (front TSUMAMI) and lease. Shutter can be returned automatically + Original position: Closed (as figure) + Pushed position: Shutter opens		Any abnormal in movement caused by shutter can't be accepted.	Housing	Visual	All
2		Shutter function: Hold the head of the boot and move the front tsunami backward and forward. (This is aimed to prevent the rear tsunami from moving during the checking. If the rear tsunami moves, the long spring B may pop out.)		Any abnormal in movement caused by coupling or knob can't be Accepted.	Housing	Visual	All

6.2 Process Condition:

Items	Conditions
Crimp clamp ring	Crimping tool
Insert pin into spring	Pin assembly tool
Separate Kevlar around the cord	Toothpick
Distance from stripping point to flange edge	Template or ruler
Marking cord	Template or ruler
Cord rotation	Manual
Position of clamp-ring with marking point	Visual
Connector appearance	Visual
Shutter function	Manual

7. Loss Inspection

7.1 Process specification

Refer to **4-OP-506** to inspect the loss of product. The specification is showed below:

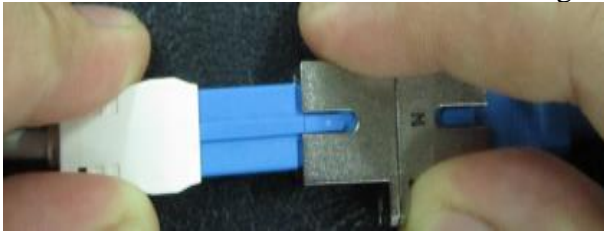
Product Specification	Wavelength	Insertion loss	Return loss	Remark
PNJHC-1005-25-01AK HC-1005-001\$001	1550 nm	≤ 0.58 dB (Total)	≥ 44 dB (total)	
PNJHC-1005-25-02Y HC-1005-002\$001				
PNJHC-1005-25-03AK HC-1005-003\$003				
PNJHC-1005-25-04J	1310 nm	≤ 0.8 dB (Total)	≥ 50 dB (connector)	UPC
	1550 nm		≥ 60 dB (connector)	APC
PNJHC-1071-25-03J	1310 nm 1550 nm	≤ 0.5 dB (connector)	≥ 60 dB (connector)	
PNJHC-1093-25-01	1310 nm	≤ 0.3 dB (connector)	≥ 45 dB (connector)	
PNJHC-1071-25-02A PNJHC-1071-25-05	1310 nm	≤ 0.3 dB (connector)	≥ 60 dB (connector)	
PNJHC-1143-25-01A	1310 nm 1550 nm	≤ 0.4 dB (connector)	≥ 42 dB (connector)	
PNJHC-1137-25-01B	1310 nm	≤ 0.3 dB (connector)	≥ 40 dB (connector)	
PNJHC-1137-25-02	1310nm	≤ 0.3 dB (connector)	≥ 40 dB (connector)	
PNJHC-1138-25-01B	1310 nm 1550 nm	≤ 0.3 dB (connector)	≥ 40 dB	UPC
			≥ 60 dB	APC
PNJHC-0923-25-04A	1310 nm 1550 nm	≤ 0.3 dB (connector)	≥ 50 dB	
PNJHC-1189-25-01A	1310 nm	≤ 0.8 dB (connector)	≥ 40 dB	UPC
	1550 nm		≥ 60 dB	APC

Loss Systems used for each kind of product length:

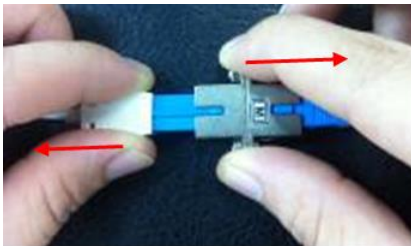
	BR5 machine	MS12 machine
Diagram		
Remark	BR5 measure the RL include the fiber reflection	MS12 measure the RL at connector surface
Before	Apply: PNJHC-1071-25-03*, for all length	-
After	Apply: PNJHC-1071-25-03*, for 0.5 to 5M length Optional: can apply for length over 5M if pass the RL	PNJHC-1071-25-03*, for length over 5M

a. Note 1:

- Measuring loss for SC- Shutter, hold the Rear Tsunami when insert on adapter. Do not hold the Front Tsunami because of damage of shutter when connection with adapter.



- After measuring Loss inspection, pull the Rear Tsunami straightly out of Adapter. Take note: Do not hold the Front Tsunami when pull out Rear Tsunami caused by risk out Rear Tsunami come out of Front Tsunami.



Pull Rear Tsunami straightly out off Adapter: **OK**



Keep Front Tsunami when pull Rear Tsunami out off Adapter: **NG**

b. Note 2:

- Check have shutter inside or not:



7.2 Process condition

Measuring of loss IL, RL: Loss system

Measuring method: first, the master connector shall be inserted an adapter. Second, the product's connector shall be inserted an adapter and mated with master connector.

Control master cord end face: End face system.

Items	Conditions
Shutter function/Knob moving	Manual

8. Length check

Check total length of product that specification required (refer to spec) by OTDR machine, Jig/ruler:

- Product with total length is less than 1.5m (can not measure by OTDR machine)
 - + QC measure length 100% by Jig/ruler
- Product with total length is more than 1.5m (can measure by OTDR machine)
 - + QC check sampling at first, end of roll and machine stop & re-start
- For reworked product: QC check length 100% by OTDR machine, Jig/ruler

a- Process Specification:

Items	Specifications
Total length	Check total length of product that specification required (refer to spec)

b- Process Condition:

Items	Conditions
Total Length	Machine, jig/ruler

9. Final endface

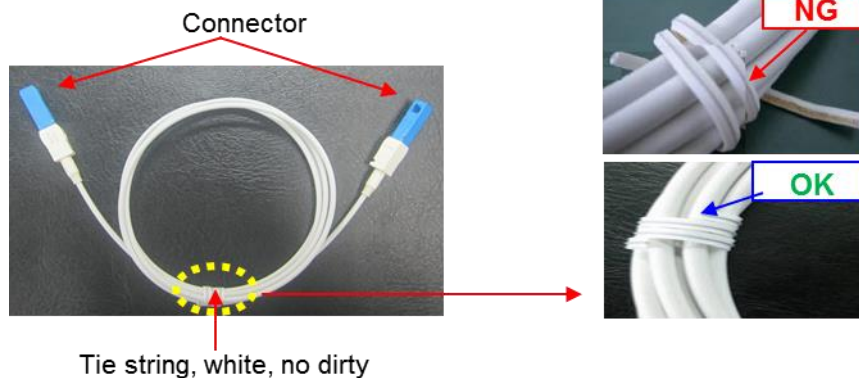
Refer to **4-OP-0397** for all operations.

Follow NTT end face specification PNJHA-0038-40-59

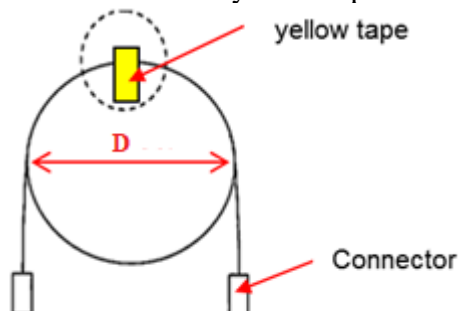
10. Label & Final packing:

10.1. Individual packing

Cord winding

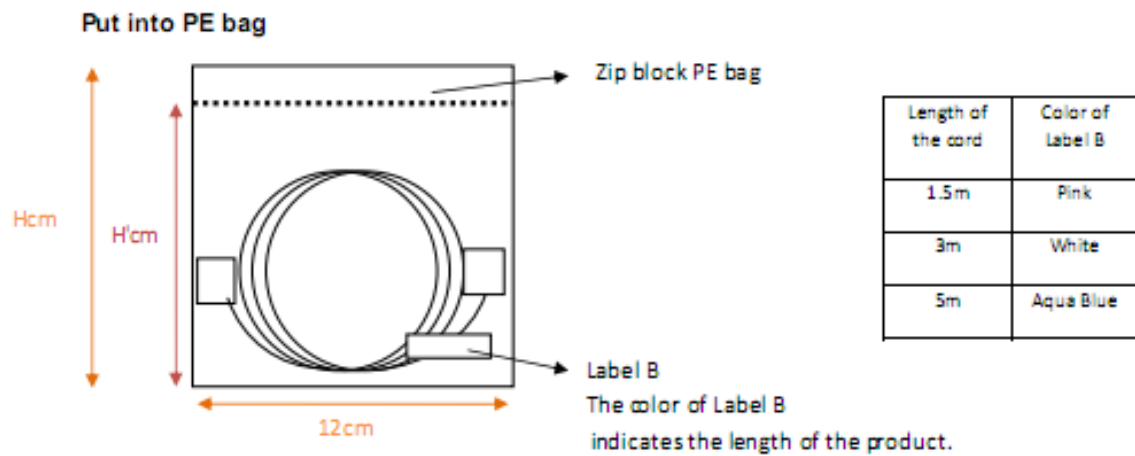


- Fix the coil with yellow tape at one Place, avoiding connectors.



Put product into zip lock bag

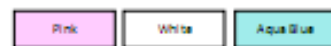
➤ **For PNJHC-1005-25-01AK (HC-1005-001\$002)**



Length	H	H'
$\leq 3(m)$	16(cm)	14(cm)
$3(m) <, \leq 10(m)$	18(cm)	16.5(cm)
$10(m) <$	18(cm) or bigger	16.5(cm) or bigger

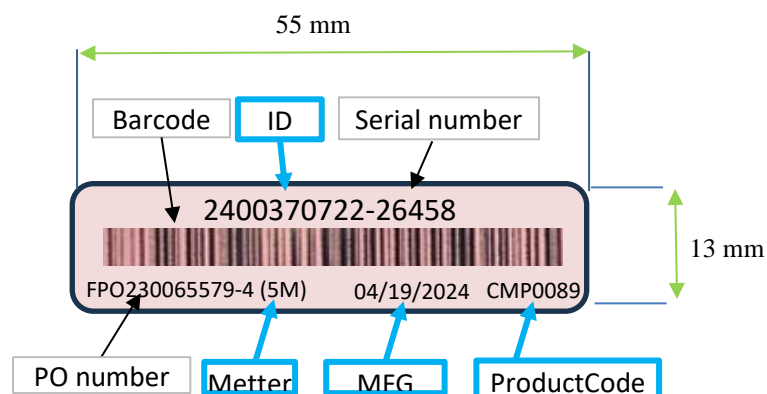
*For $10(m) < \text{Length}$, the width 12(cm) or bigger is acceptable.

Figure 5.2 Packing for one product



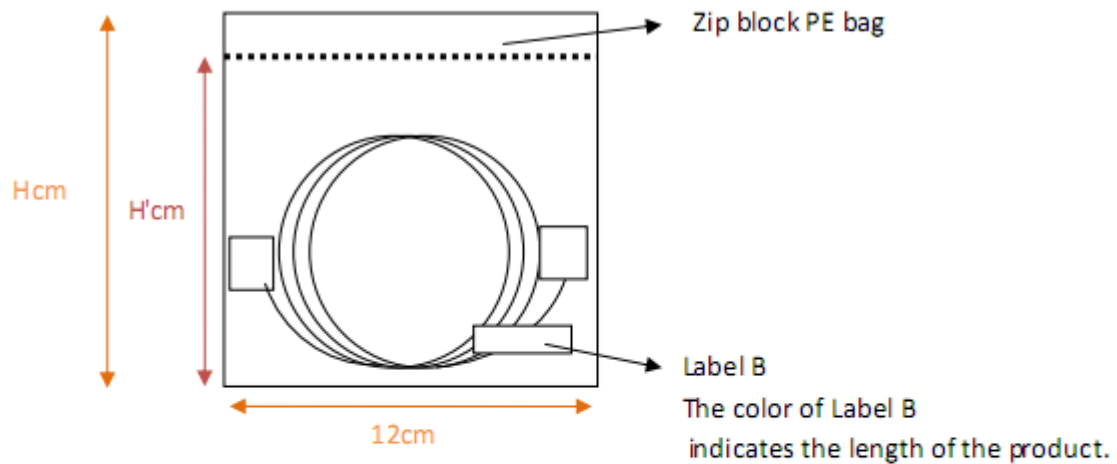
※The color of Label B must exactly match the color on the left side.

Size of Label B and content:



➤ For PNJHC-1005-25-03AK (HC-1005-003\$003)

Put into PE bag



Length	H	H'
$\leq 3(\text{m})$	16(cm)	14(cm)
$3(\text{m}) <, \leq 10(\text{m})$	18(cm)	16.5(cm)
$10(\text{m}) <$	18(cm) or bigger	16.5(cm) or bigger

*For $10(\text{m}) < \text{Length}$, the width 12(cm) or bigger is acceptable.



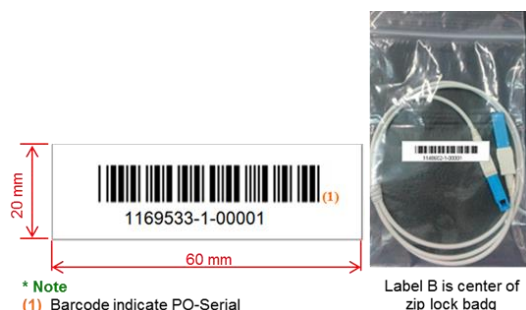
* Note
(1) Barcode indicate PO-Serial



Label B is center of
zip lock badg

For product length is more than 20M, winding cord is 180~200mm, use zip lock bag: 250mm x 250mm

➤ **For PNJHC-1071-25-03J**

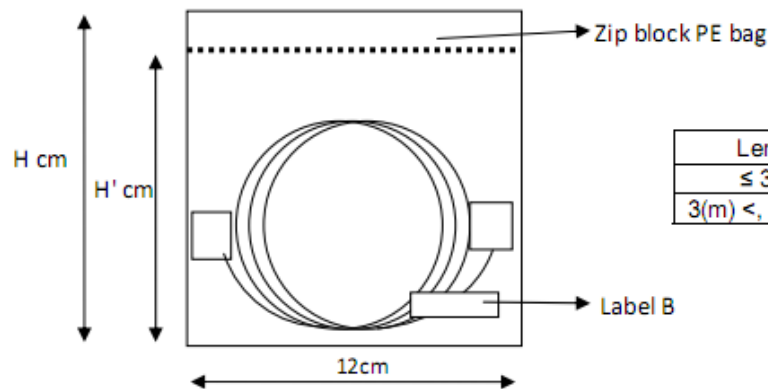


* Note
(1) Barcode indicate PO-Serial

Label B is center of
zip lock badg

Put into PE bag

For 0.5~10m products



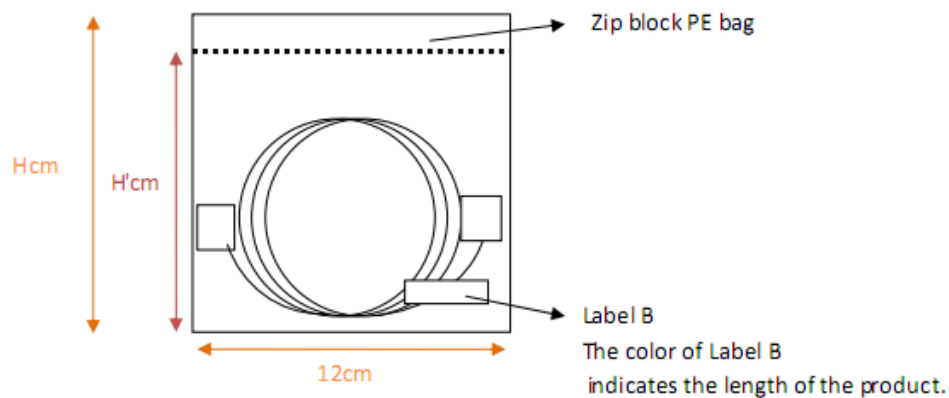
Length	H	H'
$\leq 3(m)$	16(cm)	14(cm)
$3(m) <, \leq 10(m)$	18cm)	16.5(cm)

For $\geq 15m$ products

Similar type of zip block PE bag which can contain the product.

➤ **For PNJHC-1005-25-04J**

Put into PE bag

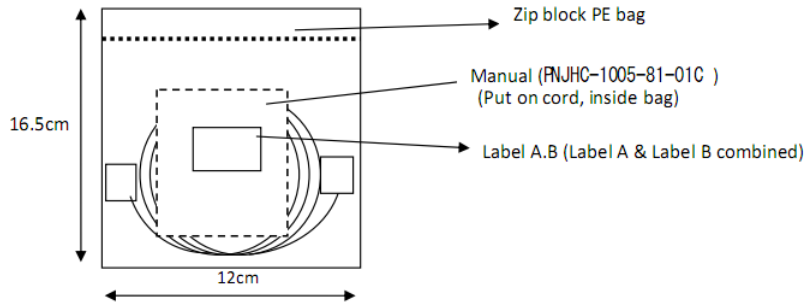


Length	H	H'
$\leq 3(m)$	16(cm)	14(cm)
$3(m) <, \leq 10(m)$	18(cm)	16.5(cm)
$10(m) <$	18(cm) or bigger	16.5(cm) or bigger

*For $10(m) < \text{Length}$, the width 12(cm) or bigger is acceptable.



➤ **For PNJHC-1005-25-02Y (HC-1005-002\$001)**

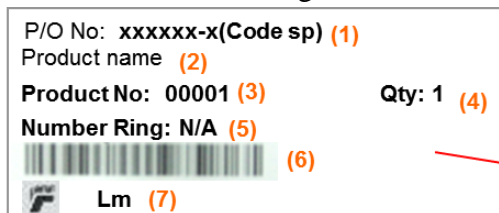


Label A & B:

- (1) : Product name
- (2): Barcode indicate NTT product code
- (3): NTT product code:
5M => 21360406
1.5M => 21360389
- (4): Barcode indicate PO-serial

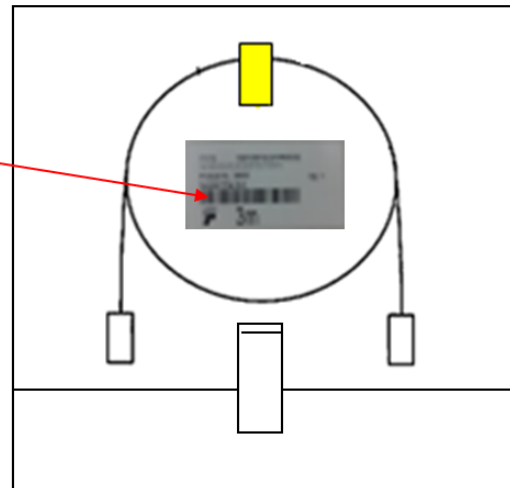
➤ **For PNJHC-1071-25-02A, PNJHC-1143-25-01A**

Put the cord in a PE Bag. Indicate the followings on the PE Bag.



*** Label information**

- (1) PO Number + Product code
- (2) Product name
- (3) Serial
- (4) Quantity
- (5) Numbering ring: not show (N/A)
- (6) Barcode: PO--Serial/quantity
eg: 1248099-1--00001/1
- (7) Product length



10.2. Packing product into box:

a. Inner box:



Put pad and air bubble to the bottom



Put partition pad and air bubble to the bottom



Put product to each cell



Put air bubble and pad



Finish packing for inner box

Note: Apply air bubble on up and down side of carton box.

➤ For **PNJHC-1005-25-01AK** (HC-1005-001\$002)

30



Put air bubble and pad to the bottom



Put partition board on the carton to create 8 cells



Put product on the carton (25 product for each cell, no need in order of serial)



Put air bubble and pad to the top

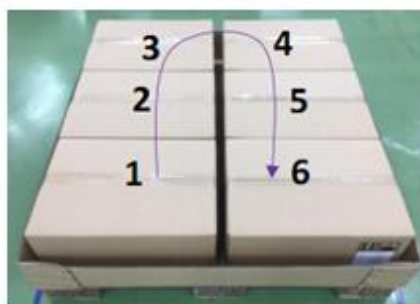


Finish packing inner box

- Packing to pallet: put inner box to pallet as Quantity of inner box/ outer box as table 11.1



B1. Prepare pallet



B2. Put 6 boxes as order above



B3. Put the next 6 boxes on the next layer as order above



B4. Put the next 6 boxes on the next layer as order above



B5. Put the next 6 boxes on the next layer as order above



B6. Put the next 6 boxes on the next layer as order above



B7. Wrapping by wrapp film to fix the boxes.



B8. Put cover carton and belt



Note: No wrapping at the foot of pallet

- For PNJHC-1071-25-02A, PNJHC-1143-25-01 (HC-1143-001\$001)
- Packing to inner box
Put the PE bags into box with shock adsorbing materials



Put pad and air bubble to the bottom



Put product to inner box, label up



Put Air bubble and pad to top and close the box

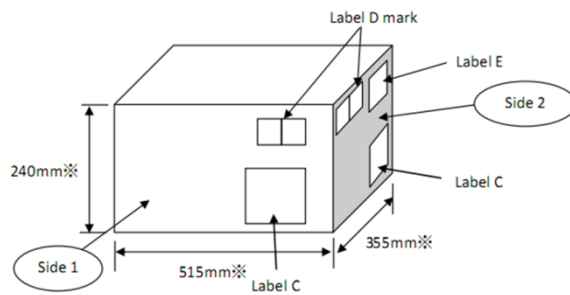
- Packing to outer box: put the inner box to outer box as layout in column g of table 11.1



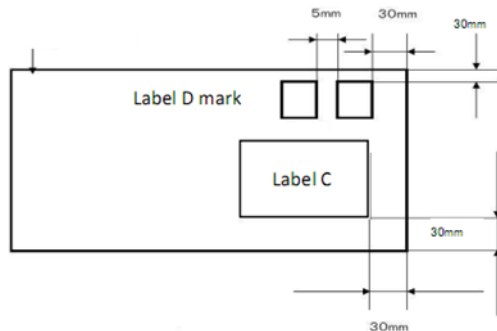
Put the outer label and warning label

b. Layout for carton box

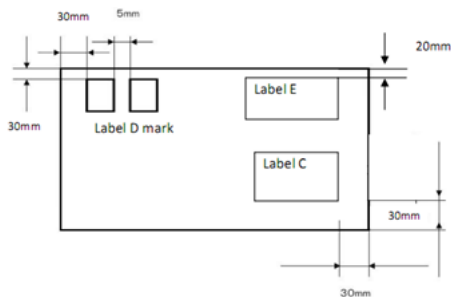
- For spec: PNJHC-1005-25-01AK (HC-1005-001\$002)



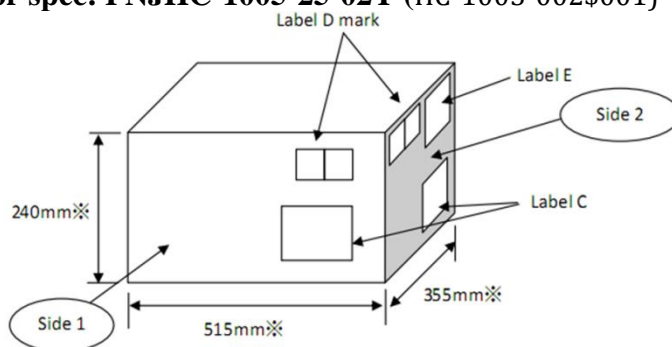
Layout carton side 1:



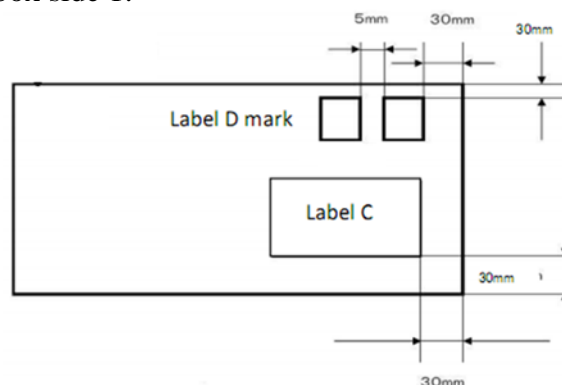
Layout carton side 2:



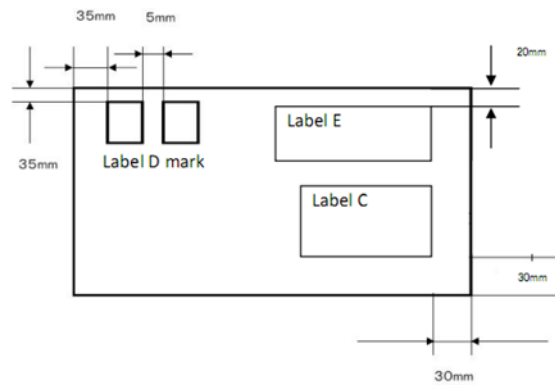
➤ **For spec: PNJHC-1005-25-02Y (HC-1005-002\$001)**



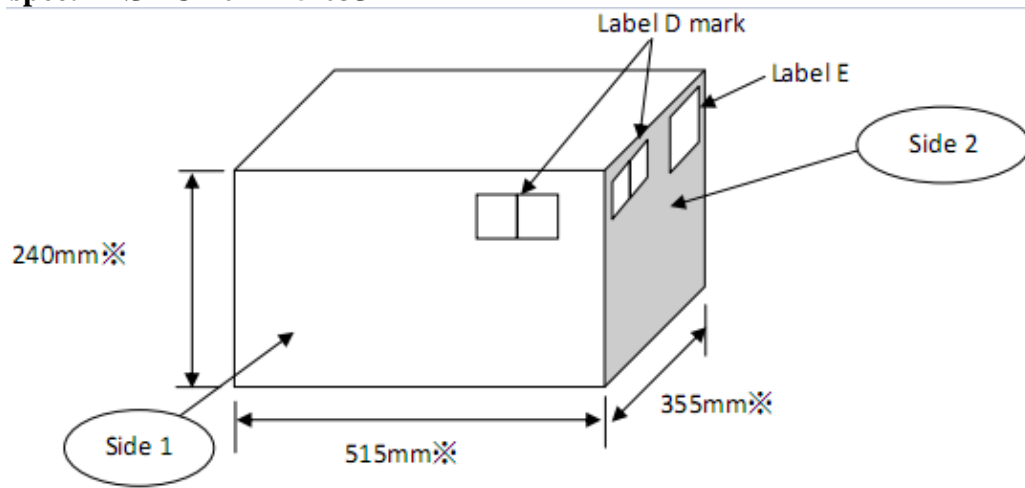
Layout of carton box side 1:



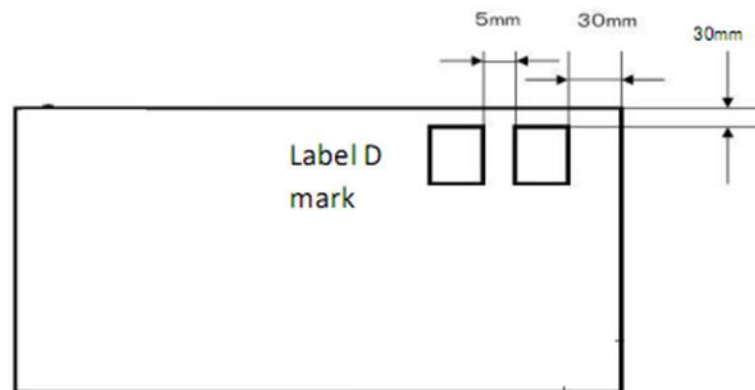
Layout of carton box side 2:



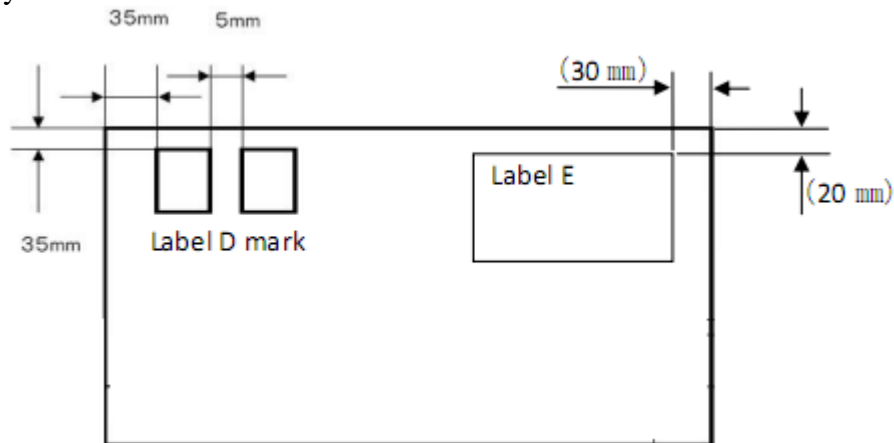
➤ For spec: PNJHC-1071-25-03J



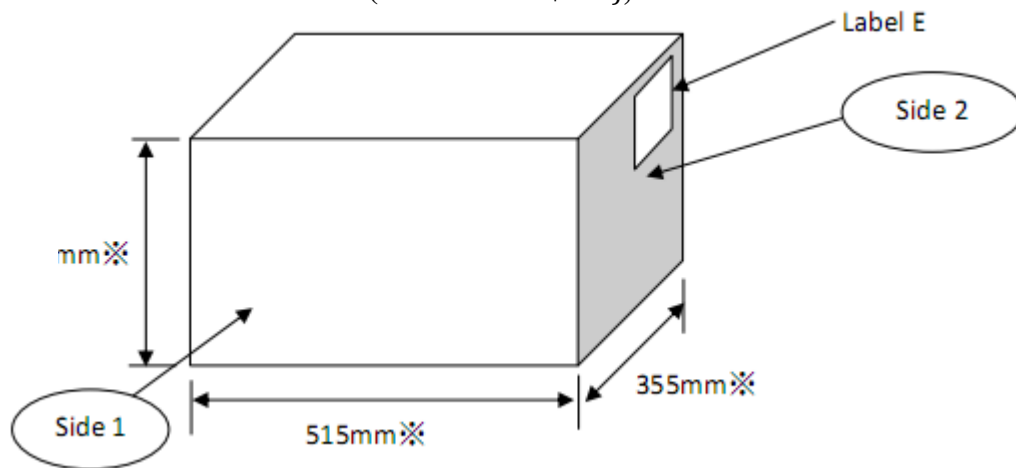
Layout of carton box side 1:



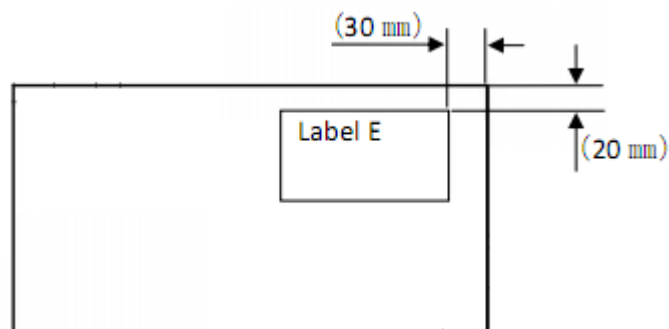
Layout of carton box side 2:



➤ For PNJHC-1005-25-03AK (HC-1005-003\$003), PNJHC-1005-25-04J

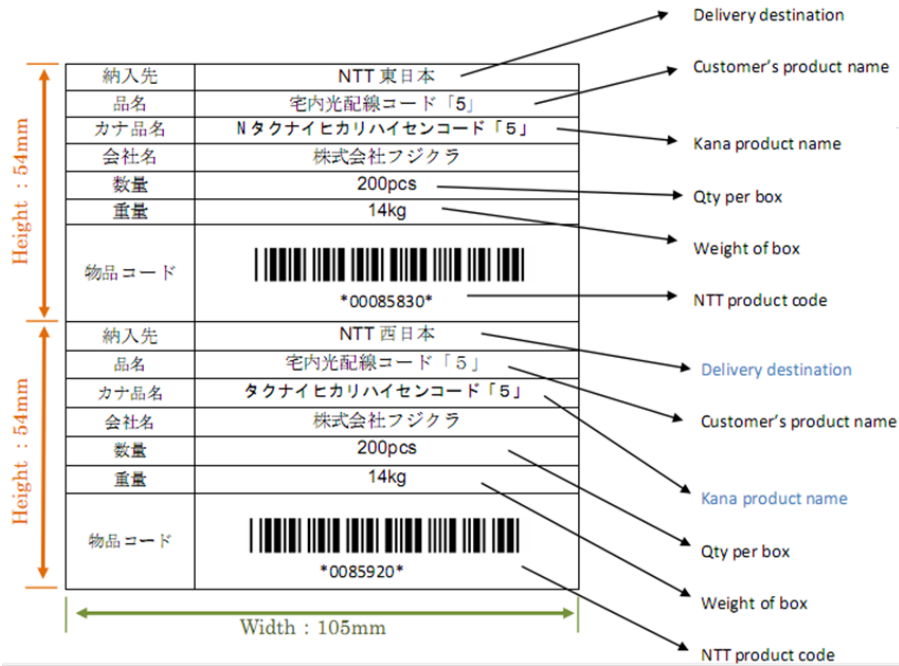


Layout of carton box side 2:



c. Label C format (for inner box)

➤ For spec: PNJHC-1005-25-01AK (HC-1005-001\$002)



Product Specification	Product length	Customer	NTT product code
PNJHC-1005-25-01AF	1.5 M	NTT East	00085810
	3 M		00085820
	5 M		00085830
	1.5 M	NTT West	00085900
	3 M		00085910
	5 M		00085920

➤ For spec: PNJHC-1005-25-02Y

品名	宅内光配線コード「5」	Customer's product name
会社名	株式会社フジクラ	Qty per box
数量	200pcs	Weight of box
重量	14kg	NTT product code
物品コード	*21360406*	



Customer's product name	Length
宅内光配線コード「1.5」	1.5m
宅内光配線コード「3」	3m
宅内光配線コード「5」	5m
宅内光配線コード「10」	10m

FUJIKURA FIBER OPTICS VIETNAM LTD.**MAGETSUYO WITH SC AND SHUTTER HOUSING****OPERATION PROCEDURE: 4-OP-333**

Version: 30

Page: 24/27

d. Label E format


受注番号 Entry No.				発注番号 Control No.	1679995-1 (1)
品目CD Product Code	PNJHC-1005-25-01-011			管理CD Stock Code	
品名 Product Name	FSCS-2PS-SPC-1.5M-MAGETSUYO3(BIS-B) (2)				
客先品名 Customer's Product Name	_____ (3)				
数量 Quantity	(4) 200 PC	条長 Length			
製造年月 Manufacturing Date	(5) 2016 年 4 月	Month	(6) 53 / 90	個口 Box No.	
					(7)

Note:

- (1) Po number as actual plan
- (2) Product name
- (3) Product name by japanese
- (4) Quantity per inner box
- (5) Manufacturing date (QCS output date of PO)
- (6) Box no
- (7) Logo of Fujikura & Barcode

e. Outer box/pallet label (shipping label)

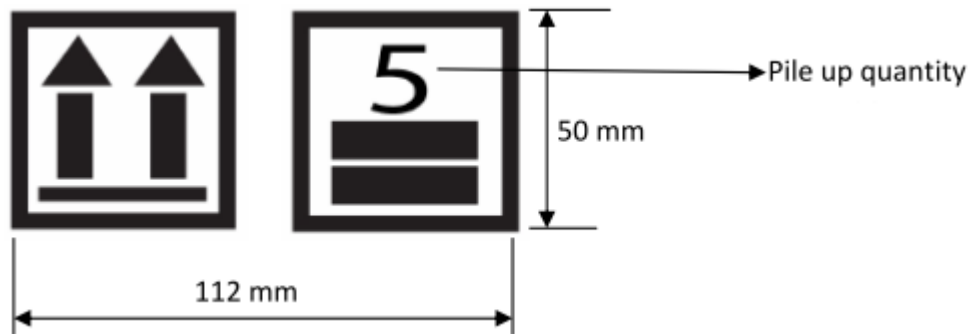
- For PNJHC-1005-25-01AK (HC-1005-001\$002), PNJHC-1005-25-02Y (HC-1005-002\$001), PNJHC-1071-25-02A

CUSTOMER: FUJIKURA LTD. (1)			
Publication No.:			
P/O No.: 1133918-5 (2)			
C/No.:		(3) MFG date 13-May-2011	
PRODUCT NAME		QUANTITY (PCS)	
FSC-2PS-SPC-2.5M-SR15E-SMC10/125-S (4)		200 (5)	
DIMENSION (mm): (6) L 600 W 297 H 501			
Net WT 4.75 Kg		Gross WT 9.25 Kg (7)	
MADE IN VIETNAM		 1/4	

Note:

- (1) Customer name
- (2) PO number as actual plan
- (3) Manufacturing date
- (4) Product name in customer specification
- (5) Quantity of product in outer box
- (6) Outer box size
- (7) Gross weight

f. Mark D format



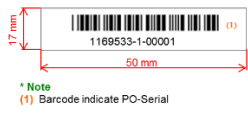

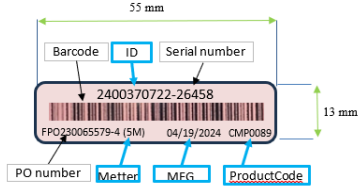

Inspection for BARCODE

Confirm to be able to read BARCODE by BARCODE reader.

11. Test report:

- Shall be provided as printed matters (send with products) or electronic test data in Excel format.
- P/O number and Fujikura Mfg. number will be recorded.
- Product type & Specification number: the specific product type and Specification number will be recorded.
- Serial number and Optical Data: Serial number and Optical data of each product shall be recorded in test report.
- Product length: The length of one product per lot will be recorded in test report.
- Appearance: Must be confirmed the judgment in test report.
- End face: Must be confirmed the judgment in test report.
- Refer to Purchase Specification of this product for more detail.

REVISION HISTORY

Date	Person in charge	Version	Content		Reason	Change Requester
			Old description	New description		
30 th Sep 2024	MyNTH	30	<p>11.1. Individual packing</p>  <p>11.2. Packing product into box: a. Inner box:</p>  <p>Put product to each cell</p>	<p>11.1. Individual packing</p>  <p>11.2. Packing product into box: a. Inner box:</p>  <p>Put product on the carton (25 product for each cell, no need in order of serial)</p>	<p>Change to new dimension and content of label B</p> <p>Change the control of arrangement of product into each cells</p> <p>(Follow 4M: 9-PR-0014-9-FO-0001-9-RC-0013)</p>	Manager BanNT DucTNM
9-Jul-24	TanNDD ThuTT MyNTH	29	<p>-PNJHC-1005-25-01AJ</p> <p>- PNJHC-1005-25-02X</p> <p>-PNJHC-1005-25-03AF</p> <p>-PNJHC-1143-25-01A</p>	<p>Add Obligator spec</p> <p>- PNJHC-1005-25-01AK HC-1005-001\$001</p> <p>- PNJHC-1005-25-02Y HC-1005-002\$001</p> <p>- HC-1005-003\$003</p> <p>-PNJHC-1143-25-01B HC-1143-001\$001</p>	Updated Spec, add Obligator spec	Manager Tien DT DucTNM
			Item 1.1.1.a: L cord = [length] m + 0.1m ± 5 mm	Item 1.1.1.a: L cord = [length] m + 0.1m ± 10 mm	Relax cutting tolerance	
			Item 1.3: Cutting cord: Use cutting machine to cut cord; use ruler to measure length of 3 pcs when machine stop or re-start.	Item 1.3: Cutting cord: o When start machine: + Measure 3 pcs if change roller status + Measure 1 pc if not change roller status o When stop machine: measure 1 pc(last pc of cutting lot)	Improve the accuracy of Cutting machine	
			Item 2.2: Use laser marker machine to apply laser marking.	Item 2.2: The laser condition will control by Laser software	Apply Laser software	
			Item 3.2:	Item 3.2:	Add new Striping machine	

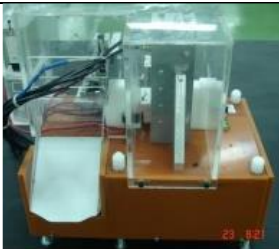

FUJIKURA FIBER OPTICS VIETNAM LTD.

MAGETSUYO WITH SC AND SHUTTER HOUSING

OPERATION PROCEDURE: 4-OP-333

Version: 30

Page: 27/27

9-Jul-24	TanNDD ThuTT MyNTH	29				Manager Tien DT DucTNM
			Item 7.1: Spec Loss for PNJHC-1005-25-.... WL: 1310 & 1550 IL \leq 0.8 dB (Total) RL \geq 40 dB (total)	Item 7.1: Spec Loss for PNJHC-1005-25-.... WL: 1550 IL \leq 0.58 dB (Total) RL \geq 44 dB (total)	Adapt JEHC-58-14-0016	
			8. QCS length & Appearance 1	8. QAE length check Add new requirement: For reworked product: QC check length 100% by OTDR machine, Jig/ruler	Update follow 4M: 4-Pr-007-4-Fo-001-9-RC-0402	
			10. QCS Appearance 2 and Individual Packing	9. Remove appearance checking	Follow 9-PR-0014-9-FO-0001-9-RC-0012	
			11. Label & Final packing:	11. Label & Final packing:	- Add new spec	
			Housing process: -	Housing process: Add connector appearance and shutter function checking	Follow 9-PR-0014-9-FO-0001-9-RC-0012	
19 Oct 17	Dat TB	28	11.1.b. Packing to pallet -Wrapping film at the foot pallet.	11.1.b. Packing to pallet -Make clear about package method (change picture) -Eliminate wrapping Film at the foot pallet item.	- Document review -Update follow 4M: 4-PR-007-4-FO-001-4-RC-0232	Asst. Manager Ban NT
16 Aug 17	Hai CT	27	- PNJHC-1005-25-01AH - PNJHC-1005-25-03AE - PNJHC-1005-25-02W	- PNJHC-1005-25-01AJ - PNJHC-1005-25-03AF - PNJHC-1005-25-02X	- Update spec	Ban NT
11 Jan 17	Hai CT	26	8.1.2 Appearance: -Turn cord 90° for 2 sides to ensure cord fixed inside housing 8.2.Appearance: -Cord rotation	8.1.2 Appearance: -Cancel 8.2.Appearance: -Cancel	-Updated follow 4M: 4-PR-007-4-FO-001-9-RC-0094.	Tien DT