

製品仕様書
Product Specification

3M 印
MDR
ノンシールドシェル 60° アングルタイプ
キット
103XX-45X0-XXX(-F), 103XX-55X0-XXX(-F)
103XX-46X0-XXX(-F), 103XX-56X0-XXX(-F)
部品
106XX-4500-XXX, 106XX-5500-XXX
106XX-4600-XXX, 106XX-5600-XXX
3342-XX
10600-L0F0-X

3M Brand
MDR
Non-Shielded Shell 60° Angle Type
Kit
103XX-45X0-XXX(-F), 103XX-55X0-XXX(-F)
103XX-46X0-XXX(-F), 103XX-56X0-XXX(-F)
Parts
106XX-4500-XXX, 106XX-5500-XXX
106XX-4600-XXX, 106XX-5600-XXX
3342-XX
10600-L0F0-X

以下の改定を行う。但し、これによる仕様書の変更は実施しない。

1. 新計量法試行により、単位系をSI単位系に改定。
 - ()内の数値は参考値。改定行右端に「新計量改定」と明示。
2. 表紙記述の部門名変更

This specification was revised due to the requirement described below.

1. Using unit was changed to SI unit, because new measurement law came into operation in Japan.
 - () is reference value. "Revised by new measurement law" is described at right side of the revised lines.
2. Division name described in the cover page was changed.

11,Jan.,1999

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SUMITOMO 3M LIMITED



TECHNICAL DEPARTMENT
ELECTRONIC & EH&P PRODUCTS DIVISION

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1. FUNCTION

This Shell Kit can fix with the MDR Plug Connector (101XX series), and it can reliably mate with the MDR Receptacle Connector (102XX series).

The Cable Clamp of this Shell Kit holds the cable, and the Cable Clamp with Groundplate holds the cable and grounds the shield of the cable to the Shroud of the Plug Connector.

The direction of the cable exit has 60 degrees for vertical line.

The Shell Body is made of plastic, so not considered for E.M.I.

Locking methods for the Receptacle Connector are as follows. The value in () is reference

I. Jack Screw L30 Type

- Two Jack Screws fasten the Shell to the Receptacle, when the Receptacle is not mounted on the Panel.
- A Spring Washer and a Plain Washer for positioning are attached.
- Total length : 30 mm.
- Recommended tightening torque: $0.20 \pm 0.05 \text{ N} \cdot \text{m}$ ($2.0 \pm 0.5 \text{ Kgf} \cdot \text{cm}$)

REVISED BY NEW
MEASUREMENT LAW

II. Jack Screw L26 Type

- Two Jack Screws fasten the Shell to the Receptacle, when the Receptacle is mounted on the Panel by two Jack Socket Screws.
- A Spring Washer and a Plain Washer for positioning are attached.
- Total length : 26 mm.
- Recommended tightening torque: $0.20 \pm 0.05 \text{ N} \cdot \text{m}$ ($2.0 \pm 0.5 \text{ Kgf} \cdot \text{cm}$)

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III. Latch Type

- Two Latches are used, and been able to open and shut easy by one hand.
- Holding Force refers to "5. QUALITY PERFORMANCE".

IV. Jack Screw with Stopper Type

- Two Jack Screws fasten the Shell to the Receptacle, when the Receptacle is not mounted on the Panel.
- With installed Stopper for the prevention of over tightening.
- A plastic C Ring for positioning is attached.
- Total length : 30 mm.
- Recommended tightening torque: $0.44 \pm 0.05 \text{ N} \cdot \text{m}$ ($4.5 \pm 0.5 \text{ Kgf} \cdot \text{cm}$)

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V. Combined use Type

- On one side the Latch is used, and on the other side the Jack Screw with Stopper is used.

2. COMPATIBLE OBJECTS

2-1 COMPATIBLE PLUG CONNECTORS

PLUG CONNECTOR

MDR Solder Plug Connector	:	101 XX-3000 XX
MDR Wire Mount Plug Connector	:	101 XX-6000 XX

RECEPTACLE CONNECTOR

MDR Wire Mount Receptacle Connector	:	102 XX-02X0 XX
MDR Board Mount Receptacle Connector (Right Angle)	:	102 XX-52XX XX
MDR Board Mount Receptacle Connector (Straight)	:	102 XX-62XX XX

2-2 COMPATIBLE CABLES

Cable Overall Diameter

103XX-X5X0-XXX	:	ϕ 7.0 mm Min. ,	ϕ 8.0 mm Max.
103XX-X6X0-XXX	:	ϕ 11.0 mm Min. ,	ϕ 12.0 mm Max. ※

※ In 103XX-X6X0-XXX, if the cable (ϕ 4~ ϕ 9) which is thinner than recommended cable will be used, the Compression Insert of 3M brand product should be used.
(Refer to JNPS-0173)

2-3 COMPATIBLE PANELS

Panel Thickness : 2.0 mm MAX. (including with the Thickness of washer)

However, in case of the use of the Jack Screw L26 Type in combination with the Jack Socket Screw (Refer to JNPS-0205), Panel Thickness is only 1.6mm. (Including with the Thickness of Washer)

3. RELATED SPECIFICATION DRAWINGS

See JNPD-0192

4. APPLICATION

4-1 PRODUCT NUMBERING INFORMATION

4-1-1 SHELL KIT

103 XX-X X X 0-X X X (-X)

SUFFIX

F : COMBINATION TYPE WITH LATCH

COLOR

8 : BLACK (STANDARD PRODUCT)
ANOTHER COLOR SHOULD BE SPECIFIED BY AGREEMENT WITH CUSTOMER.

LOGO MARK

0 : 3M LOGO MARKING 1 : NO MARKING
ANOTHER LOGO MARK SHOULD BE SPECIFIED BY AGREEMENT WITH CUSTOMER.

POLARIZING KEY (only 20 pos.)

0 : NO KEY
M : 1 NOSE TYPE M
N : 1 NOSE TYPE N
P : 1 NOSE TYPE P
Q : 1 NOSE TYPE Q
R : 1 NOSE TYPE R
S : 1 NOSE TYPE S

CABLE CLAMP TYPE

0 : SCREW LOCK TYPE

LOCKING METHOD FOR RECEPTACLE

A : JACK SCREW L30 TYPE (M2.6)
K : JACK SCREW L26 TYPE (M2.6)
F : LATCH TYPE
S : JACK SCREW with STOPPER TYPE (M2.6)

CABLE EXIT DIRECTION

5 : 60 ° ANGLE TYPE for φ 8
6 : 60 ° ANGLE TYPE for φ 12

GROUNDPLATE OF CABLE CLAMP

4 : NOTHING
5 : ATTACHED

INDICATION OF CONTACT QTY

XX : XX Pos.
20, 36, 40Pos.

PRODUCT SERIES NAME

103 : MDR SHELL KIT SYSTEM

4-1-2 SHELL PARTS

106 XX-X X 0 0-X X X

COLOR

8 : BLACK (STANDARD PRODUCT)
ANOTHER COLOR SHOULD BE SPECIFIED
BY AGREEMENT WITH CUSTOMER.

LOGO MARK

0 : 3M LOGO MARKING 1 : NO MARKING
ANOTHER LOGO MARK SHOULD BE SPECIFIED
BY AGREEMENT WITH CUSTOMER.

POLARIZING KEY (only 20 pos.)

0 : NO KEY
M : 1 NOSE TYPE M
N : 1 NOSE TYPE N
P : 1 NOSE TYPE P
Q : 1 NOSE TYPE Q
R : 1 NOSE TYPE R
S : 1 NOSE TYPE S

CABLE EXIT DIRECTION

5 : 60° ANGLE TYPE for ϕ 8
6 : 60° ANGLE TYPE for ϕ 12

GROUNDPLATE OF CABLE CLAMP

4 : NOTHING
5 : ATTACHED

INDICATION OF CONTACT QTY

XX : XX Pos.
20, 36, 40Pos.

PRODUCT SERIES NAME

106 : 106 SERIES

4-1-3 JACK SCREW

3342 - XX

SHAPE

20 : L30 M2.6 × 30
 22 : L26 M2.6 × 26
 26 : WITH STOPPER M2.6 × 30

PRODUCTSERIES NAME

3342 : JACK SCREW

4-1-4 LATCH

106 00 - L 0 F 0 - X

COLOR

8 : BLACK (STANDARD PRODUCT)
 SAME COLOR WITH THE SHELL

SHAPE

F : FOR NON-SHIELDED SHELL

L : LATCH

INDICATION OF CONTACT QTY

00 : ALL Pos.

PRODUCT SERIES NAME

106 : 106 SERIES

5. QUALITY PERFORMANCE

5-1 APPLIED TEMPERATURE

-55°C~85°C

5-2 PHYSICAL SPECIFICATIONS The value in () is reference

TEST DESCRIPTION	REQUIREMENT	TEST CONDITION	RELATED STANDARD
LATCH RETENTION FORCE (ONLY LATCH TYPE)	DIRECTION X : 98.0N (10 kgf) DIRECTION Y : 78.4 N (8 kgf) DIRECTION Z : 39.2N (4 kgf)	TENSILE SPEED : 20 mm/min. (REFER TO JNTM-0016)	———

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6. PACKAGE & IDENTIFY

In this Products, Shell parts and Locking parts are packed separately. Shell parts are packed with the Plastic Tray and the Carton Box for transit. And Locking parts are packed with the Polyethylene Bag and the Carton Box for transit.

The Carton box are identified the Catalog Number, Quantity, Marker name and Lot Number.

7. STORAGE

This products shall be Stored in a room. Ambient Temperature 5~35°C and Ambient Humidity 40~70%.

関連仕様図類／RELATED SPECIFICATION DRAWINGS

§ 1. 適用製品番号／Product No. …………… 103XX-46X0-XXX (-F), 103XX-56X0-XXX (-F)
 10340-45X0-0XX (-F), 10340-55X0-0XX (-F),
 106XX-4600-XXX, 106XX-5600-XXX
 10640-4500-0XX, 10640-5500-0XX
 10600-L0F0-X, 3342-XX

§ 2. 関連仕様書／Related specification …………… JNPS-0192

§ 3. 製品仕様図面／Drawing list for product specification

DWG No.	TITLE	DESCRIPTION
4U-0010-0636-0	103XX-45X0-XXX(-F), 103XX-55X0-XXX(-F) DRAWING LIST	
4U-0010-0651-9	103XX-45X0-XXX(-F), 103XX-55X0-XXX(-F) TABLE OF PARTS COMPOSITION	
3U-0010-0941-5	MDR NON-SHIELDED SHELL KIT 60° ANGLE TYPE 10320-X6A0-0XX 20P	ASS'Y
3U-0010-0943-1	MDR NON-SHIELDED SHELL KIT 60° ANGLE TYPE 10320-X6K0-0XX 20P	ASS'Y
3U-0010-0945-6	MDR NON-SHIELDED SHELL KIT 60° ANGLE TYPE 10320-X5F0-0XX 20P	ASS'Y
3U-0010-0947-2	MDR NON-SHIELDED SHELL KIT 60° ANGLE TYPE 10320-X6S0-0XX 20P	ASS'Y
3U-0010-0949-8	MDR NON-SHIELDED SHELL KIT 60° ANGLE TYPE 10320-X6S0-0XX-F 20P	ASS'Y
2U-0010-0244-5	MDR NON-SHIELDED SHELL KIT 60° ANGLE TYPE 10320-X6A0-XXX 20P	ASS'Y
2U-0010-0245-2	MDR NON-SHIELDED SHELL KIT 60° ANGLE TYPE 10320-X6K0-XXX 20P	ASS'Y
2U-0010-0246-0	MDR NON-SHIELDED SHELL KIT 60° ANGLE TYPE 10320-X5F0-XXX 20P	ASS'Y
2U-0010-0247-8	MDR NON-SHIELDED SHELL KIT 60° ANGLE TYPE 10320-X6S0-XXX 20P	ASS'Y
2U-0010-0248-6	MDR NON-SHIELDED SHELL KIT 60° ANGLE TYPE 10320-X6S0-XXX-F 20P	ASS'Y
3U-0010-0942-3	MDR NON-SHIELDED SHELL KIT 60° ANGLE TYPE 10336-X6A0-0XX 36P	ASS'Y
3U-0010-0944-9	MDR NON-SHIELDED SHELL KIT 60° ANGLE TYPE 10336-X6K0-0XX 36P	ASS'Y
3U-0010-0946-4	MDR NON-SHIELDED SHELL KIT 60° ANGLE TYPE 10336-X5F0-0XX 36P	ASS'Y
3U-0010-0948-0	MDR NON-SHIELDED SHELL KIT 60° ANGLE TYPE 10336-X6S0-0XX 36P	ASS'Y
3U-0010-0950-6	MDR NON-SHIELDED SHELL KIT 60° ANGLE TYPE 10336-X6S0-0XX-F 36P	ASS'Y
3U-0010-0907-6	MDR NON-SHIELDED SHELL KIT 60° ANGLE TYPE 10340-X5A0-0XX 40P	ASS'Y
3U-0010-0910-0	MDR NON-SHIELDED SHELL KIT 60° ANGLE TYPE 10340-X5K0-0XX 40P	ASS'Y
3U-0010-0908-4	MDR NON-SHIELDED SHELL KIT 60° ANGLE TYPE 10340-X5F0-0XX 40P	ASS'Y
3U-0010-0930-8	MDR NON-SHIELDED SHELL KIT 60° ANGLE TYPE 10340-X5S0-0XX 40P	ASS'Y
3U-0010-0909-2	MDR NON-SHIELDED SHELL KIT 60° ANGLE TYPE 10340-X5S0-0XX-F 40P	ASS'Y
3U-0010-0937-3	MDR NON-SHIELDED SHELL KIT R/A SHELL SUB A'SSY 10620-X600-0XX 20P	
2U-0010-0242-9	MDR NON-SHIELDED SHELL KIT R/A SHELL SUB A'SSY 10620-X600- XXX 20P	
3U-0010-0938-1	MDR NON-SHIELDED SHELL KIT R/A SHELL SUB A'SSY 10636-X600- 0XX 36P	

DWG No.	TITLE	DESCRIPTION
3U-0010-0911-8	MDR NON-SHIELDED SHELL KIT R/A SHELL SUB A'SSY 10640-X500-0XX 40P	
3U-0010-0912-6	MDR NON-SHIELDED SHELL KIT CABLE CLAMP SUB A'SSY ϕ 8	ϕ 8
3U-0010-0940-7	MDR NON-SHIELDED SHELL KIT CABLE CLAMP SUB A'SSY ϕ 12	ϕ 12
4U-0010-0614-7	MDR NON-SHIELDED SHELL KIT LATCH SUB A'SSY 10600-LOF0-X	
4U-0010-0615-4	MDR NON-SHIELDED SHELL KIT JACK SCREW L30 M2.6 \times 30 3342-20	
4U-0010-0629-5	MDR NON-SHIELDED SHELL KIT JACK SCREW L26 M2.6 \times 25 3342-22	
4U-0010-0649-3	MDR NON-SHIELDED SHELL KIT JACK SCREW WITH STOPPER M2.6 3342-22	

§ 4. 推奨パネルカット / Recommended panel cut

DWG No.	TITLE	DESCRIPTION
4U-0010-0173-4	MDR CONN.RECOMMENDED PANEL CUT OUT	
3U-0010-0832-6	MDR CONN.RECOMMENDED PANEL CUT OUT POLA-KEY TYPE M, N, P, Q, R, S	

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