MT SERIES
(Outdated connector)

Features

The MT connector series has a 4 mm terminal pitch between terminal poles.
This series consists of a 2.3mm type (2.3mm, 6.6mm, and 7.7mm types for the hybrid model) classified according to terminal size, supporting use in a variety of control circuits and low power circuits.

● These connectors can be directly secured to a support on the car body.

In case of purchasing the subject parts, please contact our sales office.
Some part may not be in production.
## Structure / 構造

### Connector M
- Housing M
- Terminal M

### Connector F
- Housing F
- Terminal F

## Terminal (mm)

<table>
<thead>
<tr>
<th>Connector</th>
<th>Cable size (mm²)</th>
<th>Cable overall diameter (mm)</th>
<th>Material</th>
<th>Surface treatment</th>
<th>Thickness (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connector M</td>
<td>0.3~0.5</td>
<td>1.5~2.0</td>
<td>Brass</td>
<td>Gold-plated</td>
<td>0.3</td>
</tr>
<tr>
<td>Connector M</td>
<td>0.3~0.5</td>
<td>1.5~2.0</td>
<td>Brass</td>
<td>Gold-plated</td>
<td>0.3</td>
</tr>
<tr>
<td>Connector M</td>
<td>0.3~0.5</td>
<td>1.5~2.0</td>
<td>Brass</td>
<td>Tin-plated Snメキ</td>
<td>0.3</td>
</tr>
<tr>
<td>Connector M</td>
<td>0.3~0.5</td>
<td>1.5~2.0</td>
<td>Brass</td>
<td>Tin-plated Snメキ</td>
<td>0.3</td>
</tr>
<tr>
<td>Connector F</td>
<td>0.3~0.5</td>
<td>1.5~2.0</td>
<td>Brass</td>
<td>Gold-plated</td>
<td>0.25</td>
</tr>
<tr>
<td>Connector F</td>
<td>0.3~0.5</td>
<td>1.5~2.0</td>
<td>Brass</td>
<td>Gold-plated</td>
<td>0.25</td>
</tr>
<tr>
<td>Connector F</td>
<td>0.3~0.5</td>
<td>1.5~2.0</td>
<td>Brass</td>
<td>Tin-plated Snメキ</td>
<td>0.25</td>
</tr>
<tr>
<td>Connector F</td>
<td>0.3~0.5</td>
<td>1.5~2.0</td>
<td>Brass</td>
<td>Tin-plated Snメキ</td>
<td>0.25</td>
</tr>
</tbody>
</table>

## INTERLOCKING TYPE
Connection is disengaged by releasing the locking arm provided in the housing.

日本語版:
ハウジングに設けられたロッキングアームでロックを解除することによりコネクタの離脱を行うタイプです。
MT SERIES

090/STANDARD

Cable size (mm²)
0.5～1.25

Cable overall diameter (mm)
1.6～2.9

Material
Brass

Surface treatment
Tin-plated Snメッキ

Thickness (mm)
0.3

M(8230-4282)

Cable size (mm²)
2.0

Cable overall diameter (mm)
2.5

Material
Brass

Surface treatment
Tin-plated Snメッキ

Thickness (mm)
0.3

M(8230-4392)

Cable size (mm²)
2.0

Cable overall diameter (mm)
2.5

Material
Heat-resistant copper alloy

Surface treatment
Tin-plated Snメッキ

Thickness (mm)
0.25

F(8240-4422)

Cable size (mm²)
2.0

Cable overall diameter (mm)
2.5

Material
Heat-resistant copper alloy

Surface treatment
Tin-plated Snメッキ

Thickness (mm)
0.25

F(8240-4652)

Housing (mm)

Material
66 Nylon（P.B.T.）

Color
Natural

Ref: Terminal part No.
N-02

M(6240-1004)

Ref: Terminal part No.
F(6240-5002)

Ref: Terminal part No.
F(6244-5061)

Ref: Terminal part No.
N-02

"M(6240-1004)"

"F(6240-5002)"

"F(6244-5061)"

2way

4way

6way

Heat-resistant copper alloy=耐熱銅合金

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MT SERIES

Housing (mm)

Material: 66 Nylon (F.P.B.T.)
Color: Natural

<table>
<thead>
<tr>
<th>Housing (mm)</th>
<th>Ref. Terminal part No.</th>
<th>Material</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>8way</td>
<td>M(6240-1081)</td>
<td>66 Nylon</td>
<td>Natural</td>
</tr>
<tr>
<td></td>
<td>F(6240-5081)</td>
<td>P.B.T.</td>
<td></td>
</tr>
<tr>
<td>10way</td>
<td>M(6240-1101)</td>
<td>66 Nylon</td>
<td>Natural</td>
</tr>
<tr>
<td></td>
<td>F(6240-5101)</td>
<td>P.B.T.</td>
<td></td>
</tr>
<tr>
<td>12way</td>
<td>M(6240-1131)</td>
<td>66 Nylon</td>
<td>Natural</td>
</tr>
<tr>
<td></td>
<td>F(6240-5131)</td>
<td>P.B.T.</td>
<td></td>
</tr>
<tr>
<td>13way</td>
<td>M(6240-1101)</td>
<td>66 Nylon</td>
<td>Natural</td>
</tr>
<tr>
<td></td>
<td>F(6240-5101)</td>
<td>P.B.T.</td>
<td></td>
</tr>
<tr>
<td>14way</td>
<td>M(6240-1131)</td>
<td>66 Nylon</td>
<td>Natural</td>
</tr>
<tr>
<td></td>
<td>F(6240-5131)</td>
<td>P.B.T.</td>
<td></td>
</tr>
<tr>
<td>16way</td>
<td>M(6240-1131)</td>
<td>66 Nylon</td>
<td>Natural</td>
</tr>
<tr>
<td></td>
<td>F(6240-5131)</td>
<td>P.B.T.</td>
<td></td>
</tr>
</tbody>
</table>

8way

M(6240-1081) 14.8 23.9 35.4
F(6240-5081) 12 21.1 20.4

10way

M(6240-1101) 14.8 27.9 35.4
F(6240-5101) 12 25.1 20.4

12way

M(6240-1131) 20.4 24.5 37.7
F(6240-5131) 17 21.1 20.4

13way

M(6240-1131) 20.4 24.5 37.7
F(6240-5131) 17 21.1 20.4

14way

M(6240-1131) 20.4 24.5 37.7
F(6240-5131) 17 21.1 20.4

16way

M(6240-1131) 20.4 24.5 37.7
F(6240-5131) 17 21.1 20.4
**SEMI-LOCKING TYPE**
Simplified locking mechanism allows quick disconnection without release operation.

**Structure／構造**

![Diagram of Connector M and Connector F](image)

**Housing (mm)**

- **Material**: 66 Nylon
- **Color**: Natural

<table>
<thead>
<tr>
<th>Ref. Terminal part No.</th>
<th>1way</th>
</tr>
</thead>
<tbody>
<tr>
<td>M(6242-1011)</td>
<td></td>
</tr>
<tr>
<td>7.6</td>
<td>33.3</td>
</tr>
<tr>
<td>8.3</td>
<td></td>
</tr>
</tbody>
</table>

**Note**
With clamp for 7mm dia.

**Plate thickness range for clamp**

- M(6243-1011)
  - Plate thickness range for clamp:
    - t=0.7～1.6

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MT SERIES

2way

M(6243-1021)

Plate thickness range for clamp:
- t = 0.7 to 1.6

3way

M(6240-1016)

Plate thickness range for clamp:
- t = 1.6 to 3.2

6way

M(6240-1001)

Plate thickness range for clamp:
- t = 3.2 to 4.0

M(6240-1003)

Plate thickness range for clamp:
- t = 4.0 to 5.0

3way

M(6242-1031)

Plate thickness range for clamp:
- t = 5.0 to 6.2

F(6242-5031)

Plate thickness range for clamp:
- t = 6.2 to 7.6

6way

M(6242-1061)

Plate thickness range for clamp:
- t = 7.6 to 9.0

F(6242-5061)

Plate thickness range for clamp:
- t = 9.0 to 10.2

F(6240-5001)

Plate thickness range for clamp:
- t = 10.2 to 11.6

Note

With clamp for 7mm dia.
- φ7用クリップ付

Ref: Terminal part No.
- ターミナル部品番号

N-02

Sumitomo Wiring Systems, Ltd.
### Terminal (mm)

- **Ref:** 090 Terminal List (Page N-02)
- **Terminal part number for 250 and 305 type connector:** Please inquire details. (Vary depending on wire sizes)

#### 250

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Code</th>
<th>Cable size (mm²)</th>
<th>Cable overall diameter (mm)</th>
<th>Material</th>
<th>Surface treatment</th>
<th>Thickness (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MT SERIES</td>
<td>M(8230-4040)</td>
<td>0.5～2.0</td>
<td>1.6～3.1</td>
<td>Brass</td>
<td>Anti-Corrosion treatment</td>
<td>0.4</td>
</tr>
<tr>
<td></td>
<td>M(8230-4042)</td>
<td>0.85～2.0</td>
<td>2.4～3.1</td>
<td>Brass</td>
<td>Anti-Corrosion treatment</td>
<td>0.8</td>
</tr>
</tbody>
</table>

#### 305

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Code</th>
<th>Cable size (mm²)</th>
<th>Cable overall diameter (mm)</th>
<th>Material</th>
<th>Surface treatment</th>
<th>Thickness (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MT SERIES</td>
<td>F(8240-4140)</td>
<td>0.5～2.0</td>
<td>1.6～3.1</td>
<td>Brass</td>
<td>Anti-Corrosion treatment</td>
<td>0.32</td>
</tr>
<tr>
<td></td>
<td>F(8240-4182)</td>
<td>0.85～2.0</td>
<td>2.4～3.1</td>
<td>Brass</td>
<td>Anti-Corrosion treatment</td>
<td>0.4</td>
</tr>
</tbody>
</table>

### Housing (mm)

- **Material:** 66 Nylon
- **Color:** Natural
- **No. of way:** ( ) corresponds to 090, 250, 305, in order from left to right.
- **Inner number:** ( ) refers to 090, 250, 305, in order from left to right.

#### Housing Dimensions

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Code</th>
<th>Terminal part number</th>
</tr>
</thead>
<tbody>
<tr>
<td>MT SERIES</td>
<td>F(6245-0121)</td>
<td>N-02</td>
</tr>
<tr>
<td></td>
<td>F(6245-0131)</td>
<td>N-02</td>
</tr>
</tbody>
</table>

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**Important Notes:**
- 090 terminals are N-02 type.
- 250 and 305 terminals differ based on wire size. Please inquire for details.

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**Images:**
- Terminal illustrations for M(8230-4040) and M(8230-4042)
- Terminal illustrations for F(8240-4140) and F(8240-4182)
- Housing images for F(6245-0121) and F(6245-0131)
MT SERIES

INTERLOCKING TYPE: For 8 • 10 • 13 • 16 • 20 way
SEMI-LOCKING TYPE: For 12 way

Note) The dimensions as shown here are reference dimensions and detail dimensions for mounting portion of the mating support are specified in the official drawing. Please contact our sales staff.