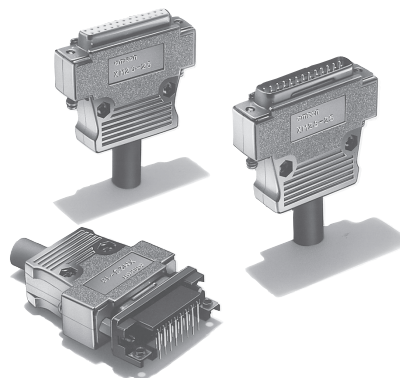


# D-sub Connectors

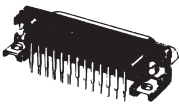
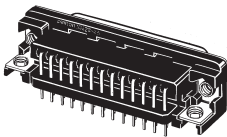
## XM3/XM2S

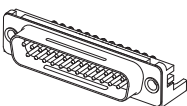
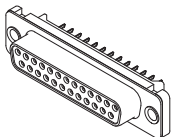
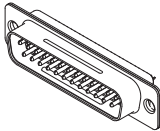
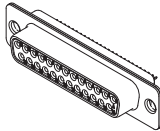
### The D-sub Connector are Ideal for Office Automation Interfacing

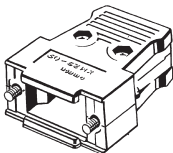
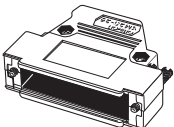
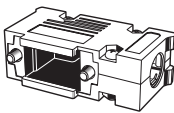
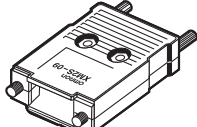
- Shielded against EMI.
- Multi-hole, ferrite-core Connectors (XM3B-F) offers space-saving design and superior noise protection at high frequency.
- Rugged, compact, metallized plastic hood (XM2S) provides excellent noise protection.
- Conforms to UL standards. (No. E103202)  
(XM2S hoods and other models not included.)
- Available with many kinds of standard Anchors and grounding fixtures.
- RoHS Compliant.



## Connectors and Hoods

| Model      | XM3B                                                                               | XM3B-F                                                                              |
|------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Type       | Sockets with Right-angle DIP Terminals                                             | Sockets with Right-angle DIP Terminals and ferrite core                             |
| Appearance |  |  |

| Model      | XM3C                                                                                | XM3F                                                                                | XM3A                                                                                  | XM3D                                                                                  |
|------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Type       | Plugs with Right-angle DIP Terminals                                                | Sockets with Straight DIP Terminals                                                 | Plugs with Solder Cup Terminals                                                       | Sockets with Solder Cup Terminals                                                     |
| Appearance |  |  |  |  |

| Model      | XM2S                                                                                |                                                                                                                                                                          | XM2S-E                                                                                |
|------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Type       | Straight Cable Connection<br>Metallized Plastic                                     | Right Angle Cable Connection<br>Metallized Plastic for 9 and 25 terminal models                                                                                          | Straight Cable Connection,<br>with ESD Production for 9 terminal models               |
| Appearance |  |   |  |

## ■ Ratings and Characteristics

|                               | XM3A, XM3B, XM3B-F,<br>XM3C (except 37 terminal models),<br>XM3D, XM3F                       | XM3C - 37 terminal models | XM2S, XM2S-E<br>(Hoods) |
|-------------------------------|----------------------------------------------------------------------------------------------|---------------------------|-------------------------|
| Rated current                 | 5 A                                                                                          | 3 A                       | ---                     |
| Rated voltage                 | 300 VAC                                                                                      |                           |                         |
| Contact resistance            | 15 mΩ max. (at 20 mV, 100 mA max.)                                                           |                           |                         |
| Insulation resistance         | 1,000 MΩ min. (at 500 VDC)                                                                   |                           |                         |
| Dielectric strength           | 1,000 VAC for 1 min. (leakage current: 1 mA max.)                                            |                           |                         |
| Total insertion force         | Number of terminals x 3.33 N max.                                                            |                           |                         |
| Removal force                 | 0.29 N min. (for gauge diameter of 0.99 mm)                                                  |                           |                         |
| Insertion Durability          | 200 times                                                                                    |                           |                         |
| Ambient operating temperature | –55°C to 105°C (with no icing)                                                               |                           | –25°C to 85°C           |
| Shield performance            | Mounted in panel: 25 dB min. (30 to 900 MHz)<br>Mounted on board: 20 dB min. (30 to 900 MHz) |                           | ---                     |

## ■ Materials and Finish

### Connectors

|          |            | XM3B                                                | XM3B-F | XM3C                                             | XM3F | XM3A                                                   | XM3D                                                |
|----------|------------|-----------------------------------------------------|--------|--------------------------------------------------|------|--------------------------------------------------------|-----------------------------------------------------|
| Housing  |            | Fiber-glass reinforced PBT resin (UL94V-0)/black    |        |                                                  |      | Fiber-glass reinforced PBT resin (UL94V-0)/Milky white |                                                     |
| Contacts | Mating End | Phosphor Bronze / Nickel base, gold plated (0.4 μm) |        |                                                  |      | Bronze / Nickel base, gold plated (0.4 μm)             | Phosphor Bronze / Nickel base, gold plated (0.4 μm) |
|          | Terminals  | Phosphor Bronze / Nickel base, tin plated (2 μm)    |        | Phosphor Bronze / Nickel base, tin plated (3 μm) |      | Bronze / Nickel base, tin plated (3 μm)                | Phosphor Bronze / Nickel base, tin plated (3 μm)    |
| Shell    |            | Steel.<br>Nickel plated                             |        |                                                  |      |                                                        |                                                     |

### Hoods

|                          | XM2S                             |                              | XM2S-E                                           |
|--------------------------|----------------------------------|------------------------------|--------------------------------------------------|
|                          | Straight Connecting Cable        | Right-angle Connecting Cable | Straight Connecting Cable with ESD Protection    |
| Housing                  | ABS resin / nickel plated        |                              | ABS resin                                        |
| Cable clamp              | Steel / nickel plated            |                              |                                                  |
| Lock screw (Driver type) | Steel / nickel plated            | ---                          | ---                                              |
| Lock screw (Jackscrew)   | Brass / nickel plated (See note) | Brass / nickel plated        | Fiber-glass reinforced polyamide (UL94V-0)/black |

**Note:** Jackscrews (thumbscrews) for the straight, non-ESD version of the XM2S hood are sold separately. See “Accessories” section of this datasheet.

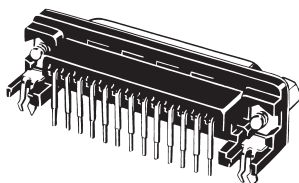
## ■ Applicable Wires

The applicable wires for solder cup terminals are AWG 22 to 28 (solid or stranded).

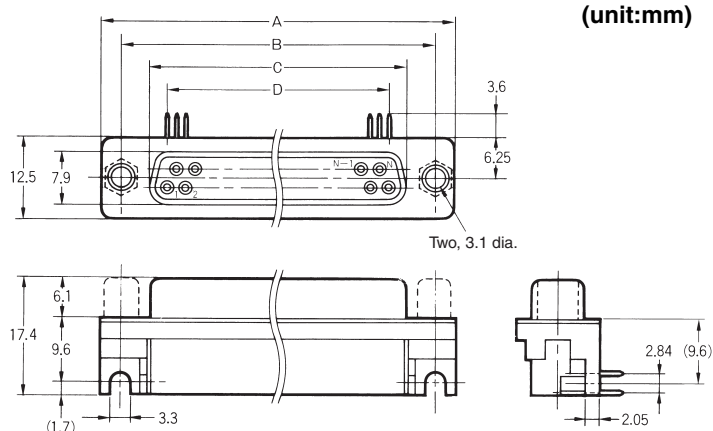
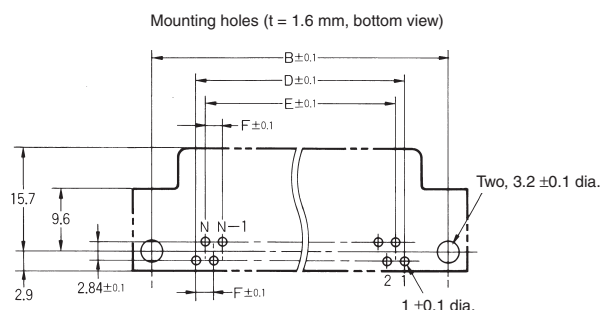
# XM3B Sockets with Right-angle DIP Terminals

## Dimensions

XM3B-□□22-□□□



25-contact model shown above.  
(With anchor 2, Lock Pin, Grounding Fixtures)

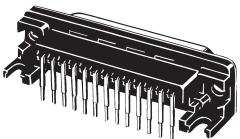
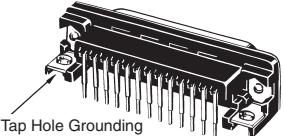
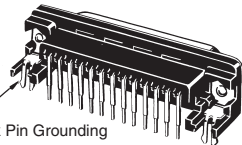


| No. of contacts | A    | B     | C     | D     | E     | F    |
|-----------------|------|-------|-------|-------|-------|------|
| 9               | 30.8 | 24.99 | 16.30 | 10.96 | 8.22  | 2.74 |
| 15              | 39.1 | 33.32 | 24.65 | 19.18 | 16.44 | 2.74 |
| 25              | 53.0 | 47.04 | 38.35 | 33.12 | 30.36 | 2.76 |
| 37              | 69.3 | 63.50 | 54.80 | 49.68 | 46.92 | 2.76 |

**Note:** XM3B Sockets were manufactured in accordance with JIS X 5101. Terminal pitches are a mixed arrangement of 2.77 and 2.74 mm contacts on 25 and 37 contact models as specified in the JIS standard. A pitch of 2.76 mm is recommended for the mounting holes because of the more advanced numerical control available today. This is sufficient to avoid any problems.

## Ordering Information

| Appearance      | <br>Tap Hole Grounding Fixture<br>Anchor 2                                                                 |               | <br>Lock Pin Grounding Fixture<br>Anchor 2                                                                 |               |
|-----------------|------------------------------------------------------------------------------------------------------------|---------------|------------------------------------------------------------------------------------------------------------|---------------|
| Accessories     | <b>XM2Z-0011 Anchor 2 (M2.6 × 0.45 metric screws)</b><br><b>XM2Z-0013 Anchor 2 (#4-40 UNC inch screws)</b> |               | <b>XM2Z-0011 Anchor 2 (M2.6 × 0.45 metric screws)</b><br><b>XM2Z-0013 Anchor 2 (#4-40 UNC inch screws)</b> |               |
| No. of contacts | <b>XM2Z-0061 Tap Hole Grounding Fixtures</b>                                                               |               | <b>XM2Z-0062 Lock Pin Grounding Fixtures</b>                                                               |               |
| 9               | XM3B-0922-111                                                                                              | XM3B-0922-131 | XM3B-0922-112                                                                                              | XM3B-0922-132 |
| 15              | XM3B-1522-111                                                                                              | XM3B-1522-131 | XM3B-1522-112                                                                                              | XM3B-1522-132 |
| 25              | XM3B-2522-111                                                                                              | XM3B-2522-131 | XM3B-2522-112                                                                                              | XM3B-2522-132 |
| 37              | XM3B-3722-111                                                                                              | XM3B-3722-131 | XM3B-3722-112                                                                                              | XM3B-3722-132 |

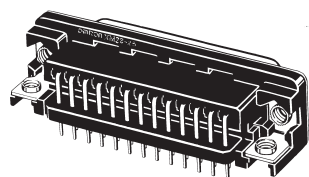
|                 |                                                                                     |                                                                                      |                                                                                       |
|-----------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Appearance      |  |  |  |
| Accessories     | No anchors                                                                          |                                                                                      |                                                                                       |
| No. of contacts | ---                                                                                 | XM2Z-0061<br>Tap Hole Grounding Fixtures                                             | XM2Z-0062<br>Lock Pin Grounding Fixtures                                              |
| 9               | XM3B-0922                                                                           | XM3B-0922-501                                                                        | XM3B-0922-502                                                                         |
| 15              | XM3B-1522                                                                           | XM3B-1522-501                                                                        | XM3B-1522-502                                                                         |
| 25              | XM3B-2522                                                                           | XM3B-2522-501                                                                        | XM3B-2522-502                                                                         |
| 37              | XM3B-3722                                                                           | XM3B-3722-501                                                                        | XM3B-3722-502                                                                         |

**Note:** 1. Use the XM3B-□□22 (No anchors or grounding fixtures) in combination with suitable Anchors and Grounding Fixtures.  
2. Two M3 x 0.5 Tap Hole Grounding Fixtures and an M3 x 0.5 Lock Pin Grounding Fixture for the Anchor Side are provided.

# XM3B-F Sockets with Right-angle DIP Terminals and Ferrite Cores

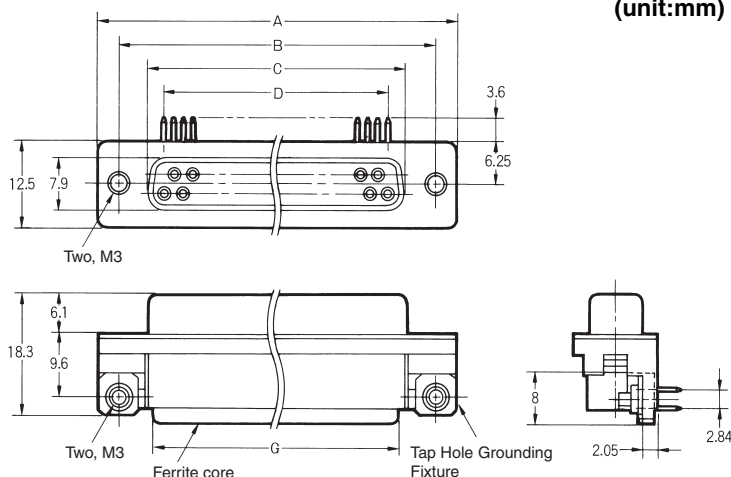
## Dimensions

XM3B-□□22-501F

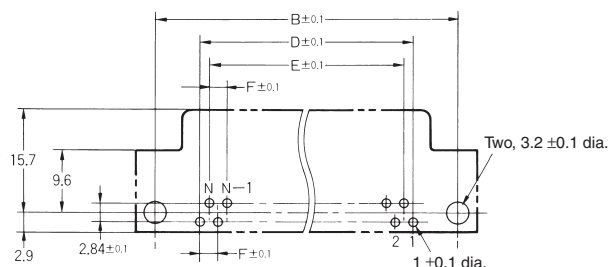


25-contact model shown above.  
(With Tap Hole Grounding Fixtures)

(unit:mm)



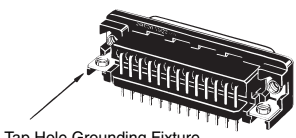
Mounting holes (t = 1.6 mm, bottom view)



| No. of contacts | A    | B     | C     | D     | E     | F    | G    |
|-----------------|------|-------|-------|-------|-------|------|------|
| 9               | 30.8 | 24.99 | 16.30 | 10.96 | 8.22  | 2.74 | 14.3 |
| 15              | 39.1 | 33.32 | 24.65 | 19.18 | 16.44 | 2.74 | 22.0 |
| 25              | 53.0 | 47.04 | 38.35 | 33.12 | 30.36 | 2.76 | 36.5 |
| 37              | 69.3 | 63.50 | 54.80 | 49.68 | 46.92 | 2.76 | 53.3 |

**Note:** XM3B Sockets were manufactured in accordance with JIS X 5101. Terminal pitches are a mixed arrangement of 2.77 and 2.74 mm contacts on 25 and 37 contact models as specified in the JIS standard. A pitch of 2.76 mm is recommended for the mounting holes because of the more advanced numerical control available today. This is sufficient to avoid any problems.

## Ordering Information

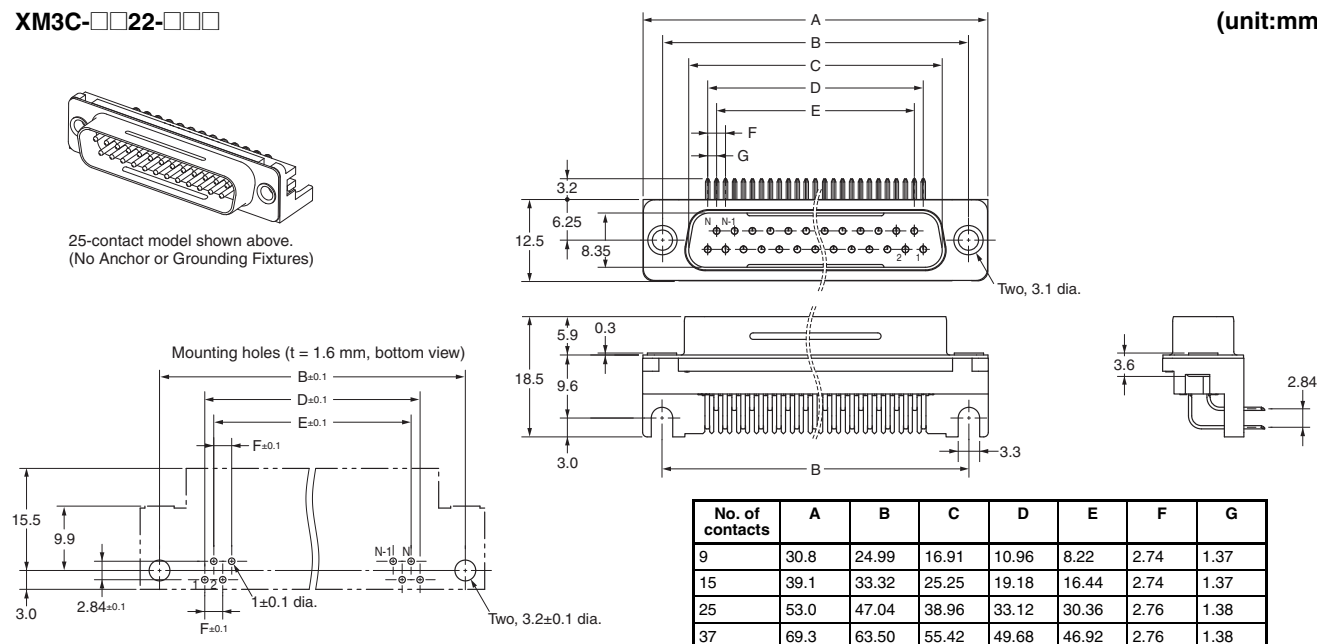
|                 |                                                                                     |
|-----------------|-------------------------------------------------------------------------------------|
| Appearance      |  |
| Accessories     | XM2Z-0061<br>Tap Hole Grounding Fixtures                                            |
| No. of contacts |                                                                                     |
| 9               | XM3B-0922-501F                                                                      |
| 15              | XM3B-1522-501F                                                                      |
| 25              | XM3B-2522-501F                                                                      |
| 37              | XM3B-3722-501F                                                                      |

# XM3C Plugs with Right-angle DIP Terminals

## Dimensions

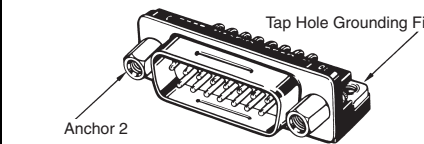
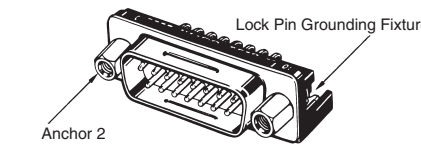
XM3C-□□22-□□□

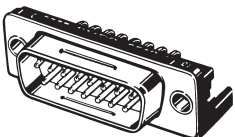
(unit:mm)



**Note:** XM3C Sockets were manufactured in accordance with JIS X 5101. Terminal pitches are a mixed arrangement of 2.77 and 2.74 mm contacts on 25 and 37 contact models as specified in the JIS standard. A pitch of 2.76 mm is recommended for the mounting holes because of the more advanced numerical control available today. This is sufficient to avoid any problems.

## Ordering Information

|                 |                                                                                     |  |                                                                                      |  |
|-----------------|-------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------|--|
| Appearance      |  |  |  |  |
|                 | Accessories                                                                         |  |                                                                                      |  |
| No. of contacts | XM2Z-0011 Anchor 2<br>(M2.6 × 0.45 metric screws)                                   |  |                                                                                      |  |
|                 | Tap Hole Grounding Fixtures                                                         |  | Lock Pin Grounding Fixtures                                                          |  |
| 9               | XM3C-0922-111                                                                       |  | XM3C-0922-112                                                                        |  |
| 15              | XM3C-1522-111                                                                       |  | XM3C-1522-112                                                                        |  |
| 25              | XM3C-2522-111                                                                       |  | XM3C-2522-112                                                                        |  |
| 37              | XM3C-3722-111                                                                       |  | XM3C-3722-112                                                                        |  |

|                 |                                                                                     |                                                                                      |                                                                                       |
|-----------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Appearance      |  |  |  |
| Accessories     | No anchors                                                                          |                                                                                      |                                                                                       |
| No. of contacts | ---                                                                                 | Tap Hole Grounding Fixtures                                                          | Lock Pin Grounding Fixtures                                                           |
| 9               | XM3C-0922                                                                           | XM3C-0922-501                                                                        | XM3C-0922-502                                                                         |
| 15              | XM3C-1522                                                                           | XM3C-1522-501                                                                        | XM3C-1522-502                                                                         |
| 25              | XM3C-2522                                                                           | XM3C-2522-501                                                                        | XM3C-2522-502                                                                         |
| 37              | XM3C-3722                                                                           | XM3C-3722-501                                                                        | XM3C-3722-502                                                                         |

**Note:** 1. Use the XM3C-□□22 (No anchors or grounding fixtures) in combination with suitable Anchors and Grounding Fixtures.  
 2. Two M3 x 0.5 Tap Hole Grounding Fixtures and an M3 x 0.5 Lock Pin Grounding Fixture for the Anchor Side are provided.  
 3. XM3C-□□22-□3□ versions with Inch Screws are also available.

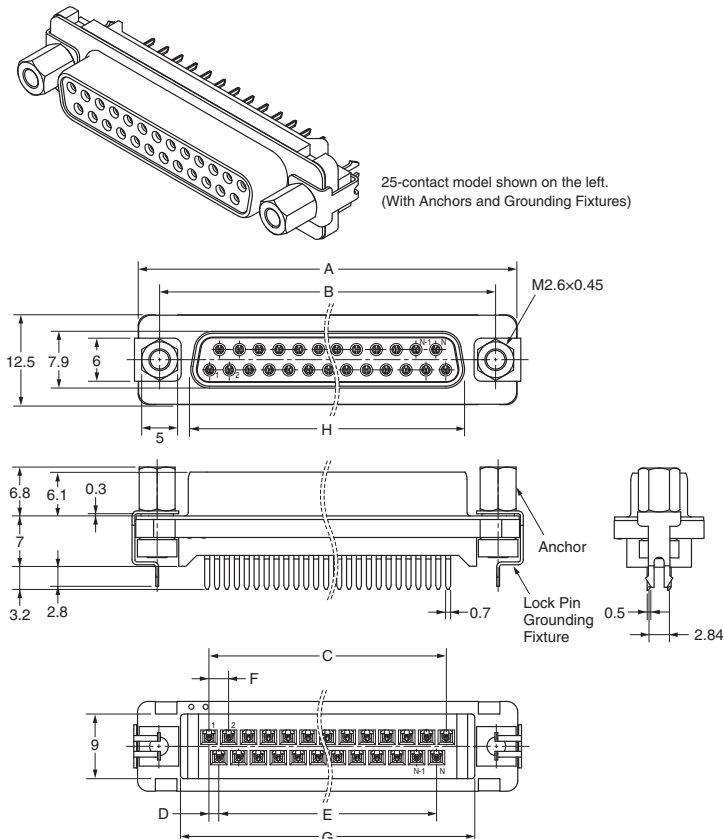
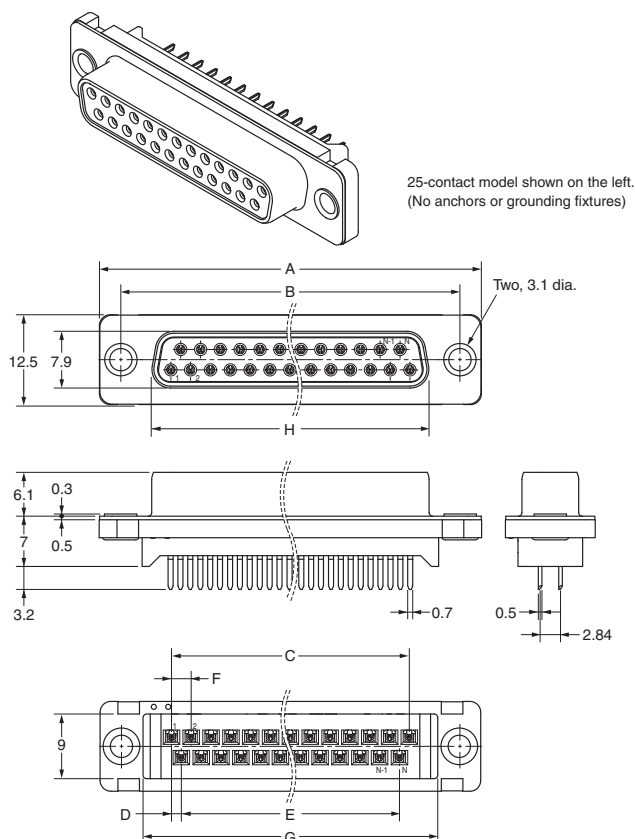
# XM3F Sockets with Straight DIP Terminals

## Dimensions

XM3F-□□20

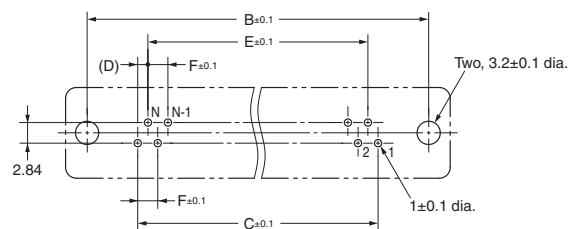
XM3F-□□20-112

(unit:mm)



Mounting holes (t = 1.6 mm, bottom view)

| No. of contacts | A    | B     | C     | D    | E     | F    | G     | H     |
|-----------------|------|-------|-------|------|-------|------|-------|-------|
| 9               | 30.7 | 24.99 | 10.98 | 1.37 | 8.22  | 2.74 | 19.00 | 16.33 |
| 15              | 39.0 | 33.32 | 19.20 | 1.37 | 16.44 | 2.74 | 27.12 | 24.66 |
| 25              | 52.9 | 47.04 | 33.12 | 1.38 | 30.36 | 2.76 | 41.04 | 38.38 |
| 37              | 69.2 | 63.50 | 49.68 | 1.38 | 46.92 | 2.76 | 57.60 | 54.84 |



## Ordering Information

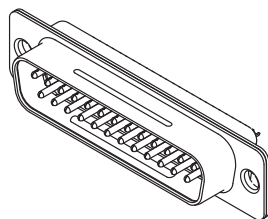
| Appearance      |                                  |                                         |
|-----------------|----------------------------------|-----------------------------------------|
| No. of contacts | No anchors or Grounding Fixtures | Anchors and Lock Pin Grounding Fixtures |
| 9               | XM3F-0920                        | XM3F-0920-112                           |
| 15              | XM3F-1520                        | XM3F-1520-112                           |
| 25              | XM3F-2520                        | XM3F-2520-112                           |
| 37              | XM3F-3720                        | XM3F-3720-112                           |

# **XM3A Plugs with Solder-cup Terminals** **XM3D Sockets with Solder-cup Terminals**

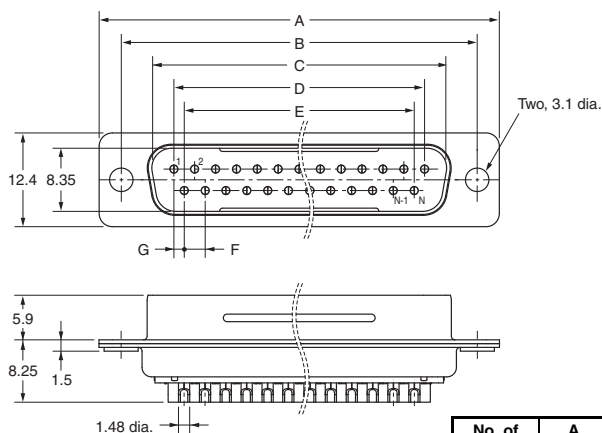
## **Dimensions**

XM3A-□□21

(unit:mm)

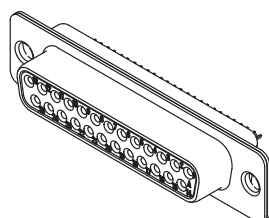


Note: 25-contact model shown above.

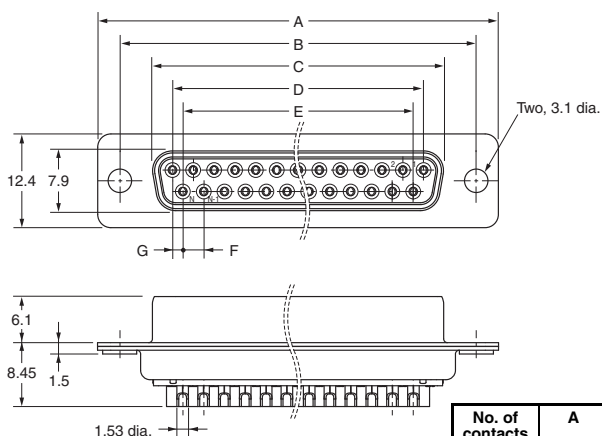


| No. of contacts | A    | B     | C     | D     | E     | F    | G    |
|-----------------|------|-------|-------|-------|-------|------|------|
| 9               | 30.7 | 24.99 | 16.91 | 10.96 | 8.22  | 2.74 | 1.37 |
| 15              | 39.0 | 33.32 | 25.25 | 19.18 | 16.44 | 2.74 | 1.37 |
| 25              | 52.9 | 47.04 | 38.96 | 33.12 | 30.36 | 2.76 | 1.38 |
| 37              | 69.2 | 63.50 | 55.42 | 49.68 | 46.92 | 2.76 | 1.38 |

XM3D-□□21



Note: 25-contact model shown above.



| No. of contacts | A    | B     | C     | D     | E     | F    | G    |
|-----------------|------|-------|-------|-------|-------|------|------|
| 9               | 30.7 | 24.99 | 16.33 | 10.96 | 8.22  | 2.74 | 1.37 |
| 15              | 39.0 | 33.32 | 24.66 | 19.18 | 16.44 | 2.74 | 1.37 |
| 25              | 52.9 | 47.04 | 38.38 | 33.12 | 30.36 | 2.76 | 1.38 |
| 37              | 69.2 | 63.50 | 54.84 | 49.68 | 46.92 | 2.76 | 1.38 |

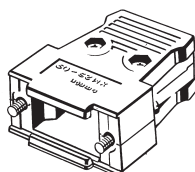
## **Ordering Information**

| Appearance      | Plugs     | Sockets   |
|-----------------|-----------|-----------|
|                 |           |           |
| No. of contacts |           |           |
| 9               | XM3A-0921 | XM3D-0921 |
| 15              | XM3A-1521 | XM3D-1521 |
| 25              | XM3A-2521 | XM3D-2521 |
| 37              | XM3A-3721 | XM3D-3721 |

# XM2S / XM2S-E Straight and Right Angle Hoods

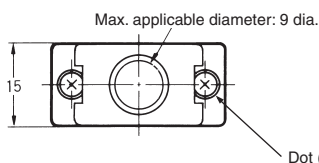
## Dimensions

**9-contact Hood with Straight Connecting Cable**  
XM2S-091□

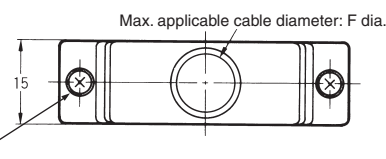


(unit:mm)

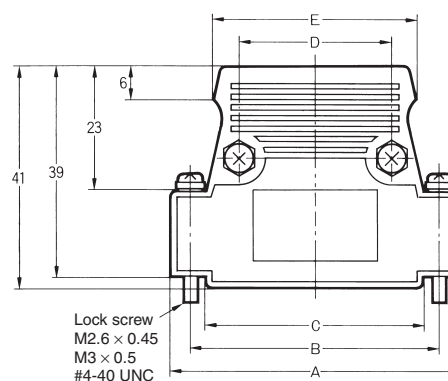
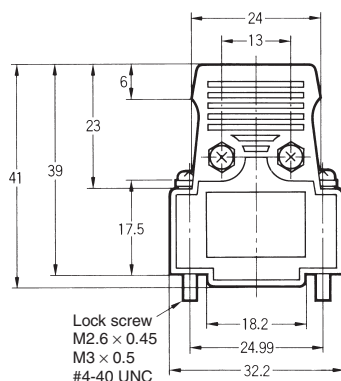
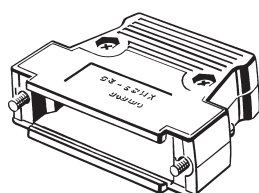
**9-contact Hood**



**15, 25 and 37-Contact Hoods**



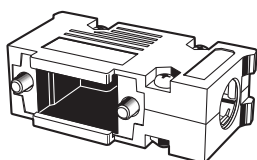
**15, 25 and 37-contact Hood with Straight Connecting Cable**  
XM2S-□□1□



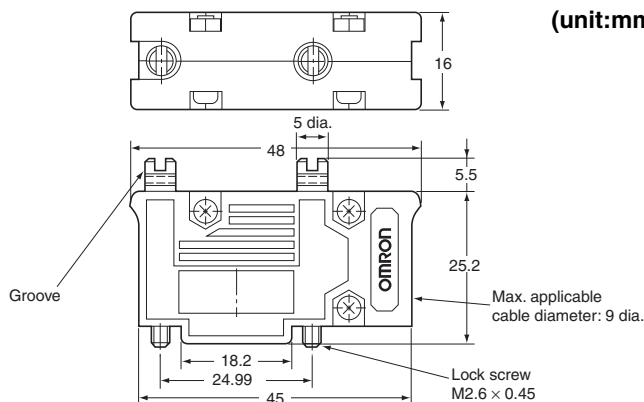
| Dot Shape |       |        |
|-----------|-------|--------|
| No dot    | 1 dot | 2 dots |
|           |       |        |

| No. of contacts | A    | B     | C    | D  | E  | F  |
|-----------------|------|-------|------|----|----|----|
| 15              | 40.5 | 33.32 | 26.5 | 19 | 30 | 10 |
| 25              | 54.0 | 47.04 | 40   | 29 | 38 | 11 |
| 37              | 70.5 | 63.50 | 57   | 42 | 50 | 13 |

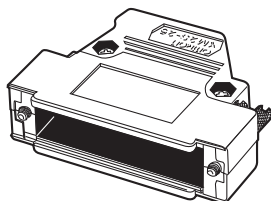
**9-contact Hood with Right-angle Connecting Cable**  
XM2S-092□



(unit:mm)

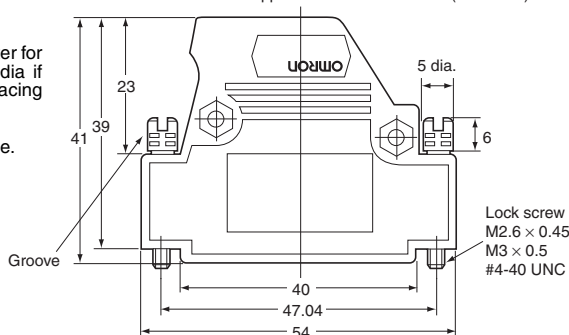
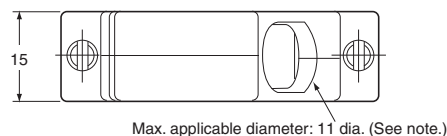


**25-contact Hood with Right-angle Connecting Cable**  
XM2S-252□



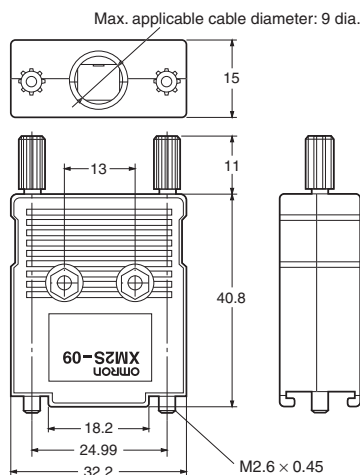
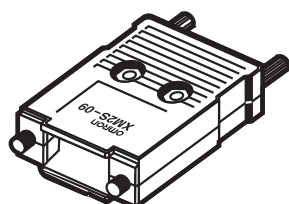
**Note:** The maximum applicable cable diameter for the 25-contact right-angle hood is 9 dia if the cable clamp supplied is mounted facing the rear.

Do not use a cable bushing in this case.



| Groove Shape |          |           |
|--------------|----------|-----------|
| No Groove    | 1 Groove | 2 Grooves |
|              |          |           |

**9-contact Hood  
with Straight Connecting Cable  
and ESD Protection  
XM2S-0911-E**



(unit:mm)

**Note:** Jackscrews (thumbscrews) for the straight, non-ESD version of the XM2S hood are sold separately. See “Accessories” section of this datasheet.

## Ordering Information

### Straight hoods

| Lock screw            |          | M2.6 x 0.45 metric screws<br>(No dot) | M3 x 0.5 metric screws<br>(1 dot) | #4-40 UNC inch screws<br>(2 dots) |
|-----------------------|----------|---------------------------------------|-----------------------------------|-----------------------------------|
| Applicable<br>Anchors | Anchor 1 | XM2Z-0001                             | XM2Z-0002                         | XM2Z-0003                         |
|                       | Anchor 2 | XM2Z-0011                             | XM2Z-0012                         | XM2Z-0013                         |
|                       | Anchor 3 | XM2Z-0021                             | XM2Z-0022                         | XM2Z-0023                         |
| No. of contacts       |          |                                       |                                   |                                   |
| 9                     |          | XM2S-0911                             | XM2S-0912                         | XM2S-0913                         |
| 15                    |          | XM2S-1511                             | XM2S-1512                         | XM2S-1513                         |
| 25                    |          | XM2S-2511                             | XM2S-2512                         | XM2S-2513                         |
| 37                    |          | XM2S-3711                             | XM2S-3712                         | XM2S-3713                         |

\*Jackscrews(thumbscrews) for the straight hoods without ESD protection are sold separately. See XM2Z-007□ (Anchor 5) in the Accessories section of this datasheet.

### Right-angle hoods

| Lock screw            |                          | M2.6 x 0.45 metric screws<br>(No groove) | M3 x 0.5 metric screws<br>(1 groove) | #4-40 UNC inch screws<br>(2 groove) |
|-----------------------|--------------------------|------------------------------------------|--------------------------------------|-------------------------------------|
| Applicable<br>Anchors | Anchor 1<br>(See Note 3) | XM2Z-0001                                | XM2Z-0002                            | XM2Z-0003                           |
|                       | Anchor 2                 | XM2Z-0011                                | XM2Z-0012                            | XM2Z-0013                           |
|                       | Anchor 3                 | XM2Z-0021                                | XM2Z-0022                            | XM2Z-0023                           |
| No. of contacts       |                          |                                          |                                      |                                     |
| 9                     |                          | XM2S-0921                                | XM2S-0922                            | XM2S-0923                           |
| 25                    |                          | XM2S-2521                                | XM2S-2522                            | XM2S-2523                           |

\*Jackscrews (thumbscrews) for the right-angle hoods are standard, supplied with the hoods.

### Straight hood with ESD Protection

| Lock screw            |          | M2.6 x 0.45 metric screws<br>(No groove) |
|-----------------------|----------|------------------------------------------|
| Applicable<br>Anchors | Anchor 1 | XM2Z-0001                                |
|                       | Anchor 2 | XM2Z-0011                                |
|                       | Anchor 3 | XM2Z-0021                                |
| No. of contacts       |          |                                          |
| 9                     |          | XM2S-0911-E                              |

\*Overmolded Jackscrews (thumbscrews) for the straight hoods with ESD protection are standard, supplied with the hoods.

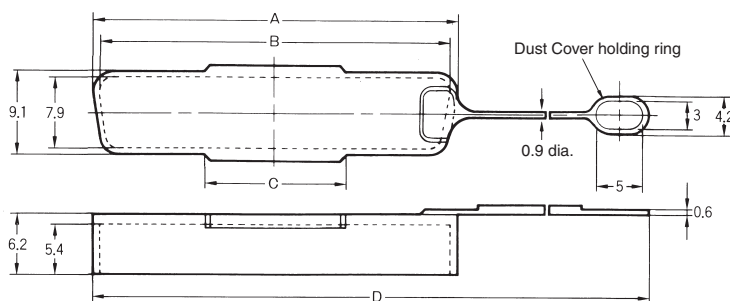
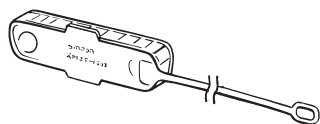
- Note:**
1. The cable bushing, cable clamp, shielded tape and assorted screws are supplied with all hoods
  2. Lock screws are attached to the Hood. Select D-sub Connectors with Anchors or Grounding Fixtures that fit the lock screw of the hood.
  3. Anchor 1 cannot be used with the 9 Contact Right-angle Hoods.

# Accessories for XM3 (Sold Separately)

## ■ XM2T Dust Covers for Sockets

With Retaining Ring

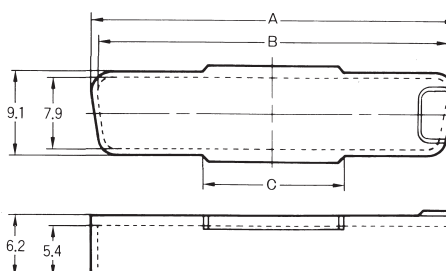
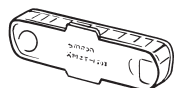
XM2T-□□01



| No. of contacts | A    | B    | C  | D   | Model     |
|-----------------|------|------|----|-----|-----------|
| 9               | 17.7 | 16.3 | 8  | 68  | XM2T-0901 |
| 15              | 26.1 | 24.7 | 10 | 77  | XM2T-1501 |
| 25              | 39.8 | 38.4 | 15 | 120 | XM2T-2501 |
| 37              | 56.2 | 54.8 | 18 | 135 | XM2T-3701 |

Without Retaining Ring

XM2T-□□01-0



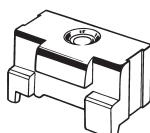
| XM2T Rating and Material |                 |
|--------------------------|-----------------|
| Operating Temperature    | -25°C to 85°C   |
| Material                 | Polyamide resin |

| No. of contacts | A    | B    | C  | Model       |
|-----------------|------|------|----|-------------|
| 9               | 17.7 | 16.3 | 8  | XM2T-0901-0 |
| 15              | 26.1 | 24.7 | 10 | XM2T-1501-0 |
| 25              | 39.8 | 38.4 | 15 | XM2T-2501-0 |
| 37              | 56.2 | 54.8 | 18 | XM2T-3701-0 |

## ■ XM2Z Anchors

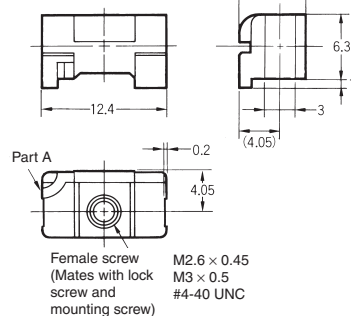
Anchor 1 (Rectangular)

XM2Z-000□



Materials and Finish  
Zinc die-cast/nickel plated

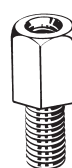
| Thread Type              | Model     |
|--------------------------|-----------|
| M2.6 x 0.45 metric screw | XM2Z-0001 |
| M3 x 0.5 metric screws   | XM2Z-0002 |
| #4-40 UNC inch screws    | XM2Z-0003 |



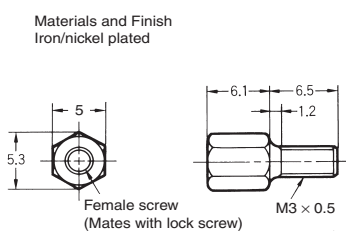
Note: When using a Dust Cover, secure the holding ring at part A.

Anchor 2 (Hexagonal)

XM2Z-001□



| Thread Type              | Model     |
|--------------------------|-----------|
| M2.6 x 0.45 metric screw | XM2Z-0011 |
| M3 x 0.5 metric screws   | XM2Z-0012 |
| #4-40 UNC inch screws    | XM2Z-0013 |

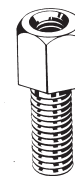


Female screw  
(Mates with lock screw)

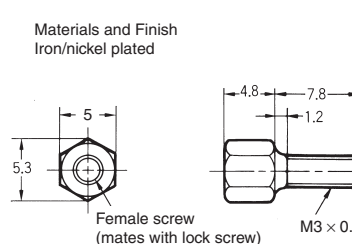
M3 x 0.5

Anchor 3 (Hexagonal)

XM2Z-002□



| Thread Type              | Model     |
|--------------------------|-----------|
| M2.6 x 0.45 metric screw | XM2Z-0021 |
| M3 x 0.5 metric screws   | XM2Z-0022 |
| #4-40 UNC inch screws    | XM2Z-0023 |



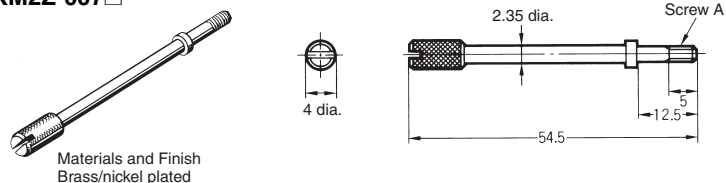
Female screw  
(mates with lock screw)

M3 x 0.5

Note: Anchor 3 is used for panel mounting connectors. Applicable cable panel thickness is 0.6 to 1.3 mm.

Note: 2 anchors are necessary per connector. Anchors are not packaged in pairs.

## Anchor 5 XM2Z-007

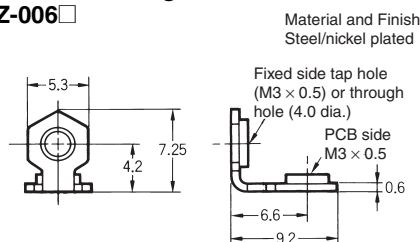


**Note:** Anchor 5 is for use only with the Straight Connecting XM2S hoods, to provide a Thumbscrew feature. 2 anchors are necessary per connector. Anchors are not packaged in pairs.

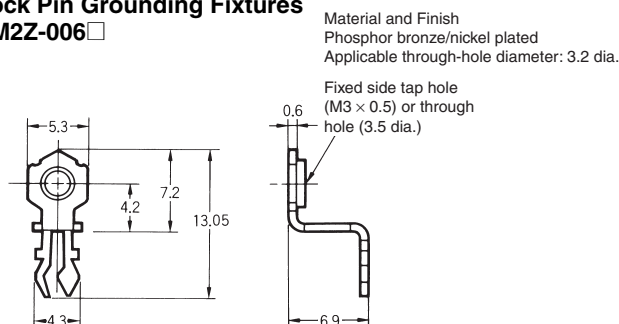
| Thread Type (A)          | Number of Grooves | Groove Shape | Model     |
|--------------------------|-------------------|--------------|-----------|
| M2.6 x 0.45 metric screw | None              |              | XM2Z-0071 |
| M3 x 0.5 metric screws   | 1                 |              | XM2Z-0072 |
| #4-40 UNC inch screws    | 2                 |              | XM2Z-0073 |

## ■ XM2Z Grounding Fixtures for XM3B

### Tap Hole Grounding Fixtures XM2Z-006



### Lock Pin Grounding Fixtures XM2Z-006



| Thread Type              | Tap Hole Grounding Fixtures | Lock Pin Grounding Fixtures |
|--------------------------|-----------------------------|-----------------------------|
| Fixed-side tap holes     | XM2Z-0061                   | XM2Z-0062                   |
| Fixed-side through holes | XM2Z-0063                   | XM2Z-0064                   |

**Note:** 2 Grounding Fixtures are necessary per connector. Grounding Fixtures are not packaged in pairs.

## Assembly Information

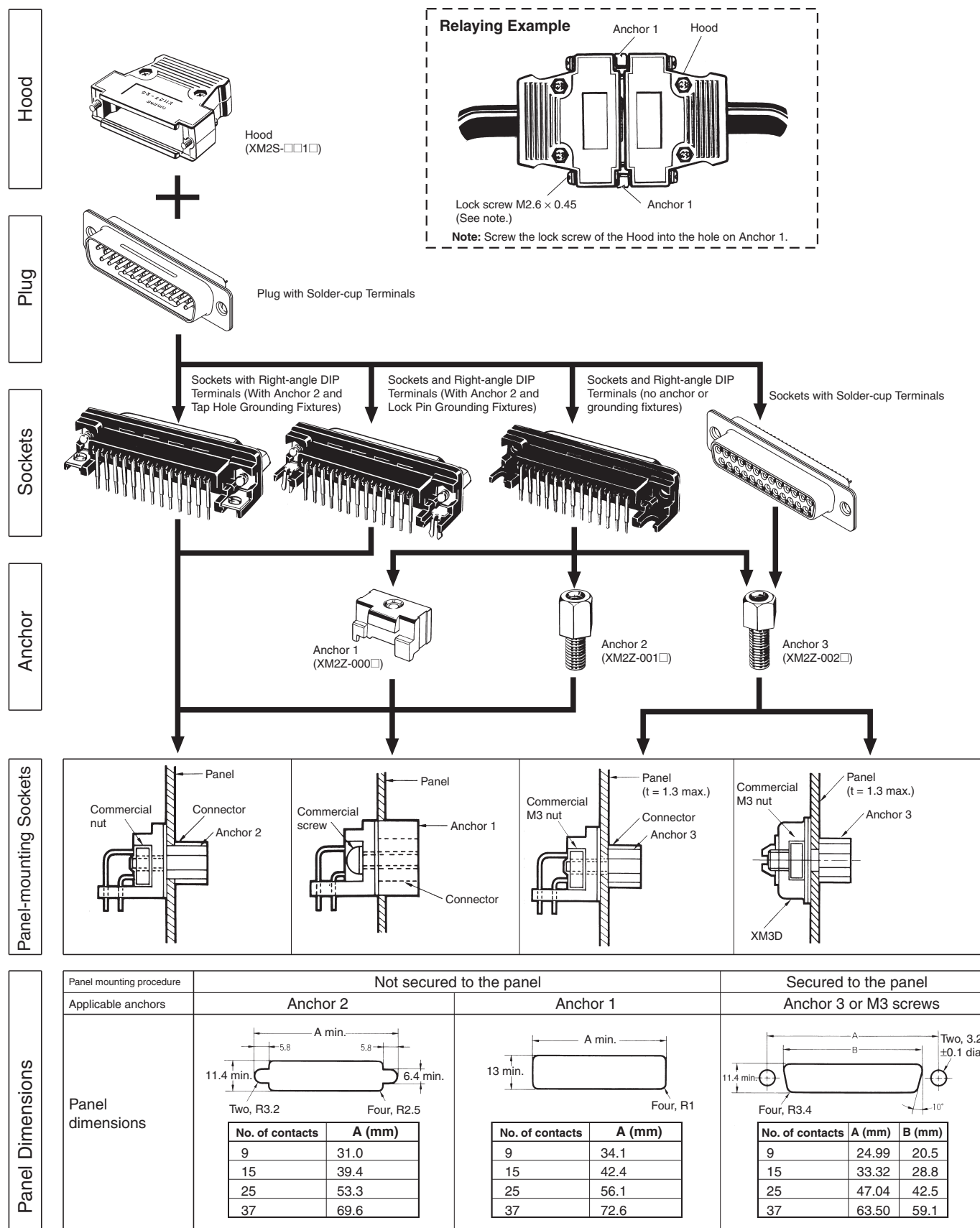
### ■ Anchors and Grounding Fixtures

|                                                                                          |                                                                                                                                                           |                                                                                                                                                                 |
|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Anchor 2 and 3</p> <p><b>Note:</b> Use Grounding Fixtures XM2Z-0061 or XM2Z-0062.</p> | <p>Anchor 1</p> <p><b>Note:</b> 1. Use Grounding Fixtures XM2Z-0063 or XM2Z-0064.<br/>2. Use a 6-mm screw that mates with the male screw on Anchor 1.</p> | <p>Without Anchor</p> <p><b>Note:</b> Always use a screw without an Anchor. A grounding Fixture (fixed-side tap) can be used in place of the hexagonal nut.</p> |
|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|

### ■ Combination of Hexagonal Anchors for each connector (in post installation)

| Type                | Model          | Without Panel Insertion | With Panel Insertion | Commercially available nut |
|---------------------|----------------|-------------------------|----------------------|----------------------------|
| DIP L type socket   | XM3B-□□22      | XM2Z-001□               | XM2Z-002□            | Necessary                  |
|                     | XM3B-□□22-501□ |                         |                      | Not Necessary              |
|                     | XM3B-□□22-502  |                         |                      |                            |
| DIP L type plug     | XM3C-□□22      | XM2Z-001□               | XM2Z-002□            | Necessary                  |
|                     | XM3C-□□22-501  |                         |                      | Not Necessary              |
|                     | XM3C-□□22-502  |                         |                      |                            |
| DIP straight socket | XM3F-□□20      | XM2Z-001□               | XM2Z-002□            | Necessary                  |

# Combination Examples



**Note:** 1. 2 Anchors are required per connector. Anchors are not packaged in pairs

2. Applicable panel thickness is 1.3 mm max.

# Precautions

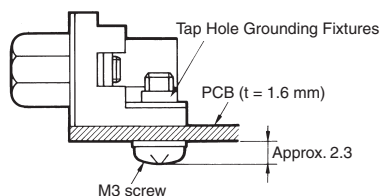
## Correct Use

### Grounding

To ground, create copper foil around the connector attachment hole on the board, assemble the connector and grounding fixture, and dip in solder as shown below.

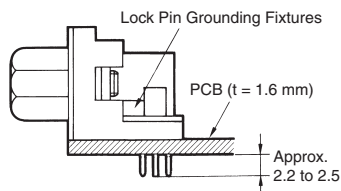
#### Tap Hole Grounding Fixtures

Insert the connector into the PCB, tighten the screws, and then dip-solder the connector terminals to the board.



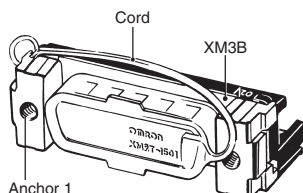
#### Lock Pin Grounding Fixtures

Insert the connector into the PCB and then simultaneously dip-solder the connector terminals and lock pin to the board.

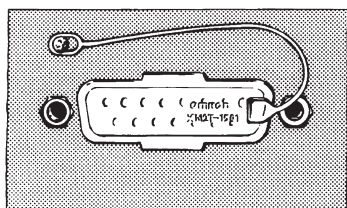


### Attaching the Dust Cover

To attach the cord to the connector, use Anchor 1 and secure it as shown below.



To attach the cord to a panel, drill an M3 hole in the panel and secure the cord to it with an M3 screw. If the cord is not required, cut it off. Use a commercially available M3 screw.



### Tightening Clamp Screws

Use the following torques when tightening cable clamp to hood.

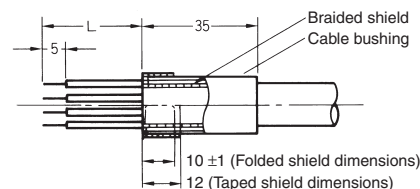
#### Terminal Screw Tightening Torque (N·m)

| 9 Contacts | 15 Contacts | 25 Contacts | 37 Contacts |
|------------|-------------|-------------|-------------|
| 0.25       | 0.44        | 0.49        |             |

### Shielded Cable Preparation

Refer to the following diagram when soldering shielded cable to the connector when using a hood.

| No. of Contacts | L (mm) |
|-----------------|--------|
| 9               | 25     |
| 15              | 35     |
| 25              | 40     |
| 37              | 45     |

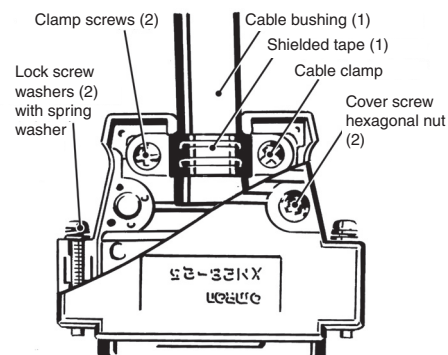


1. Fold the unravelled braided shield back over the cable bushing
2. Wrap tape around the folded shield.

### Shield Effects

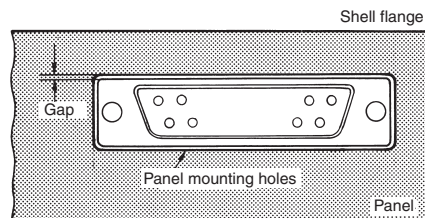
When connecting the braided cable shield to a connector hood, use the cable clamp to clamp all the braids at once through the shielded tape.

Mate the lock screw washer and spring washer outside the connector when assembling the hood.



Keep the shell flange of the connector as far away from the metal panel as possible to maximize the shield effect with a connector mounted to a panel.

The ground wire for the connector will fall into the shell (external metal covering) with solder-cup terminals, so connect the ground wire to the panel or to ground on the board.



### XM3A/XM3D Connector Insertion and Removal

Grasp the connector or the hood cover when inserting and removing the connector. Never try to remove the connector by pulling the cable.

### Soldering - Automated Soldering Conditions. (Jet Flow) (XM3B, XM3C and XM3F)

1. Soldering temperature: 250 ± 5°C
2. Continuous soldering time: Within 5 s