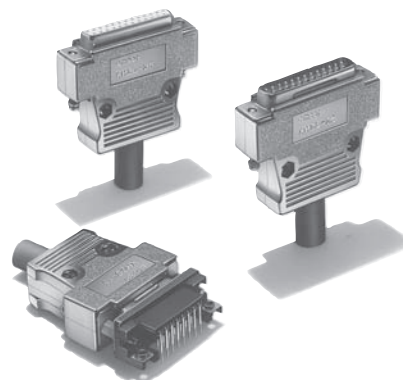


### D-sub Connectors Are Ideal for Office Automation Interfacing.

- Shielded against EMI.
- A new line of multi-hole, ferrite-core Connectors (XM3B-F) offers space-saving design and superior noise protection at high frequency.
- Fitted in a rugged, compact metal shell.
- Many kinds of standard Anchors and grounding fixtures available.
- The XM3 conform to UL standards (No. E103202)

RoHS Compliant



### Terminology

#### ● Shielded connector

Connector having a structure that can be grounded.

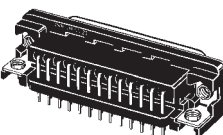
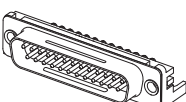
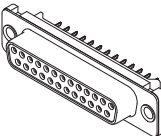
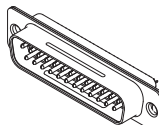
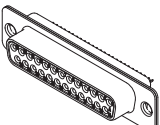
#### ● Beating

A processing technique that ensures the contact amongst the shells by beating a part of the shell.

#### ● Shell

Refers to the case covering the connector. Here, the shell refers to the metal parts attached to the mating end.

### Connectors

| Model          | XM3B                                                                                                                          | XM3B-F                                                                                                                                            |                                                                                                                         |                                                                                                                            |
|----------------|-------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Appearance     | <br>Sockets with right-angle DIP terminals | <br>Sockets with right-angle DIP terminals (with ferrite core) |                                                                                                                         |                                                                                                                            |
| Reference page | 3 to 4                                                                                                                        | 5                                                                                                                                                 |                                                                                                                         |                                                                                                                            |
| Model          | XM3C                                                                                                                          | XM3F                                                                                                                                              | XM3A                                                                                                                    | XM3D                                                                                                                       |
| Appearance     | <br>Plugs with right-angle DIP terminals   | <br>Sockets with straight DIP terminals                        | <br>Plugs with solder-cup terminals | <br>Sockets with solder-cup terminals |
| Reference page | 6 to 7                                                                                                                        | 8                                                                                                                                                 | 9                                                                                                                       |                                                                                                                            |

## ■ Ratings and Characteristics

|                               |       |                                                                                         |                          |
|-------------------------------|-------|-----------------------------------------------------------------------------------------|--------------------------|
| Item                          | Model | XM3A<br>XM3B<br>XM3B-F<br>All XM3C models except for those with 37 pins<br>XM3D<br>XM3F | XM3C models with 37 pins |
| Rated current                 |       | 5 A                                                                                     | 3 A                      |
| Rated voltage                 |       | 300 VAC                                                                                 |                          |
| Contact resistance            |       | 15 mΩ max. (at 20 mVDC, 100 mA max.)                                                    |                          |
| Insulation resistance         |       | 1,000 MΩ min. (at 500 V DC)                                                             |                          |
| Dielectric strength           |       | 1,000 VAC for 1 min (leakage current: 1 mA max.)                                        |                          |
| Insertion durability          |       | 200 times                                                                               |                          |
| Ambient operating temperature |       | -55 to 105°C (with no condensation or icing)                                            |                          |

## ■ Materials and Finish

| Item     |            | Model                                    | XM3B                 | XM3B-F | XM3C                                    | XM3F                            | XM3A                           | XM3D                                     |
|----------|------------|------------------------------------------|----------------------|--------|-----------------------------------------|---------------------------------|--------------------------------|------------------------------------------|
| Housing  |            |                                          | PBT (UL94 V-0)/black |        |                                         |                                 | PBT (UL94 V-0)/Milky white     |                                          |
| Contacts | Mating end | Phosphor bronze/nickel base, gold plated |                      |        |                                         | Bronze/nickel base, gold plated |                                | Phosphor bronze/nickel base, gold plated |
|          | Terminals  | Phosphor bronze/nickel base, tin plated  |                      |        | Phosphor bronze/nickel base, tin plated |                                 | Bronze/nickel base, tin plated | Phosphor bronze/nickel base, tin plated  |
| Shell    |            |                                          | Steel/nickel plated  |        |                                         |                                 |                                |                                          |

## ■ Applicable Wires

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

# XM3B Sockets with Right-angle DIP Terminals

## ■ Model Number Legend

XM3B-    22-        
                  1          2 3 4

- 1. Number of contacts**  
09: 9 contacts  
15: 15 contacts  
25: 25 contacts  
37: 37 contacts

**2. Anchor specifications**  
1: With Anchor 2  
5: No anchors

**3. Anchor screw specifications**  
1: M2.6 × 0.45 metric screws  
3: #4-40 UNC inch screws  
0: No anchors

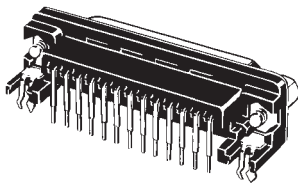
**4. Grounding Fixture**  
1: Tap Hole Grounding Fixture  
2: Lock Pin Grounding Fixture
- Note:** Anchors and Grounding Fixtures are not supplied if 2, 3, and 4 are blank.

## ■ Dimensions

(unit: mm)

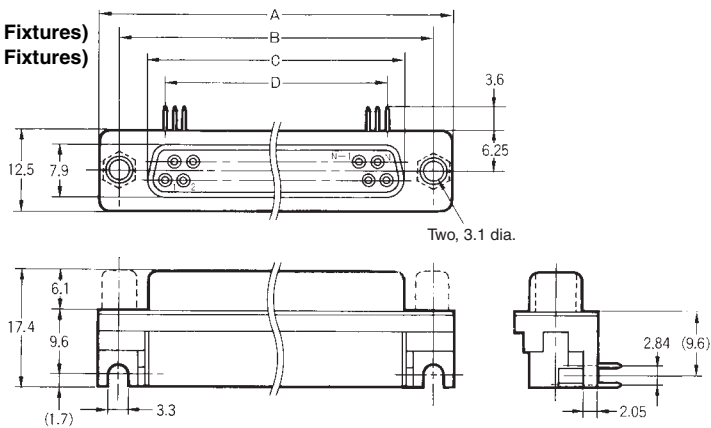
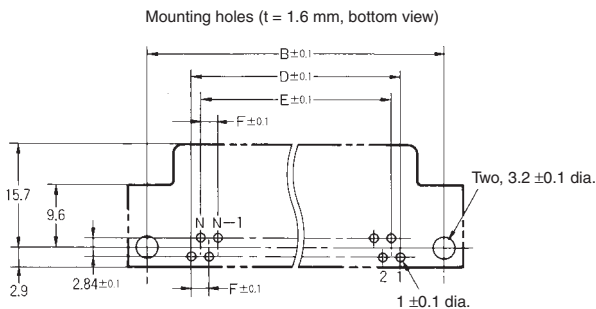
- XM3B-    22 (No anchors, no grounding fixtures)  
XM3B-    22-501 (No anchors, Tap Hole Grounding Fixtures)  
XM3B-    22-111 (With Anchor 2 (See note 1.), Tap Hole Grounding Fixtures)  
XM3B-    22-131 (With Anchor 2 (See note 2.), Tap Hole Grounding Fixtures)  
XM3B-    22-502 (No anchors, Lock Pin Grounding Fixtures)  
XM3B-    22-112 (With Anchor 2 (See note 1.), Lock Pin Grounding Fixtures)  
XM3B-    22-132 (With Anchor 2 (See note 2.), Lock Pin Grounding Fixtures)

- Note:** 1. Metric screws (M2.6 × 0.45)  
2. Inch screws (#4-40 UNC)



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

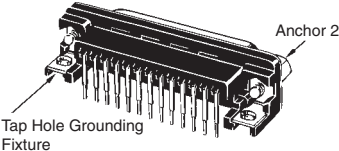
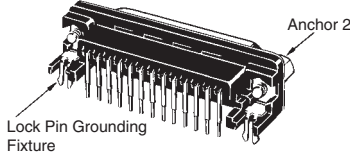
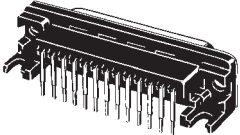
**Note:** XM3B Sockets were manufactured in accordance with JIS X 5101. Terminal pitches are a mixed arrangement of 2.77- and 2.74-mm contacts on 25- and 37-contact models as specified in the JIS standard. A pitch of 2.76 mm is recommended for the mounting holes because of the more advanced numerical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



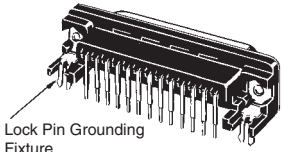
## Dimensions

| No. of contacts | Dimensions (mm) |       |       |       |       |      |
|-----------------|-----------------|-------|-------|-------|-------|------|
|                 | 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 |

## ■ Ordering Information

|                 | Anchor 2 and<br>Tap Hole Grounding Fixtures                                       | Anchor 2 and<br>Lock Pin Grounding Fixtures                                        | No anchors or<br>grounding fixtures<br>(See note 1.)                                |
|-----------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Appearance      |  |  |  |
| Accessories     | XM2Z-0011 Anchor 2 (M2.6 × 0.45 metric screws)                                    |                                                                                    | ----                                                                                |
| No. of contacts | XM2Z-0061<br>Tap Hole Grounding Fixtures                                          | XM2Z-0062<br>Lock Pin Grounding Fixtures                                           | ----                                                                                |
| 9               | XM3B-0922-111                                                                     | XM3B-0922-112                                                                      | XM3B-0922                                                                           |
| 15              | XM3B-1522-111                                                                     | XM3B-1522-112                                                                      | XM3B-1522                                                                           |
| 25              | XM3B-2522-111                                                                     | XM3B-2522-112                                                                      | XM3B-2522                                                                           |
| 37              | XM3B-3722-111                                                                     | XM3B-3722-112                                                                      | XM3B-3722                                                                           |
| Accessories     | XM2Z-0013 Anchor 2 (#4-40 UNC inch screws)                                        |                                                                                    |                                                                                     |
| No. of contacts | XM2Z-0061<br>Tap Hole Grounding Fixtures                                          | XM2Z-0062<br>Lock Pin Grounding Fixtures                                           |                                                                                     |
| 9               | XM3B-0922-131                                                                     | XM3B-0922-132                                                                      |                                                                                     |
| 15              | XM3B-1522-131                                                                     | XM3B-1522-132                                                                      |                                                                                     |
| 25              | XM3B-2522-131                                                                     | XM3B-2522-132                                                                      |                                                                                     |
| 37              | XM3B-3722-131                                                                     | XM3B-3722-132                                                                      |                                                                                     |

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

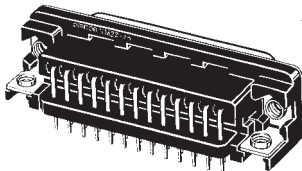
- Note:** 1. Use the XM3B-□□22 (No anchors or grounding fixtures) in combination with suitable Anchors and Grounding Fixtures.  
2. Two M3 × 0.5 Tap Hole Grounding Fixtures and an M3 × 0.5 Lock Pin Grounding Fixture for the Anchor side are provided.  
3. For other models with Anchors or Grounding Fixtures, contact your OMRON representative. For accessories, refer to *Accessories (Sold Separately)* in the XM2/XM3 datasheet.

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

## ■ Dimensions

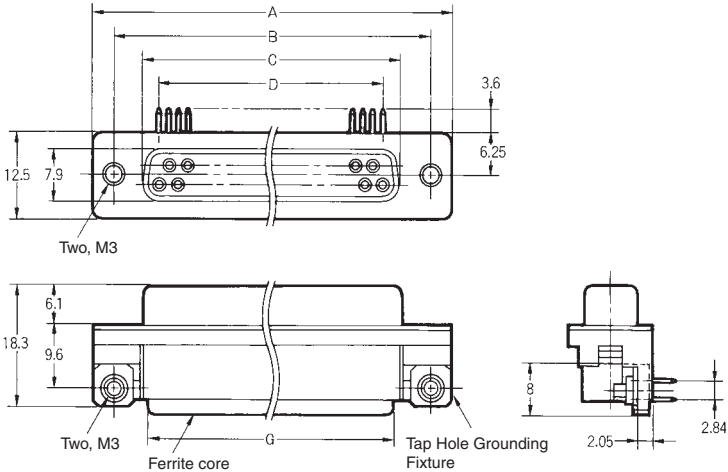
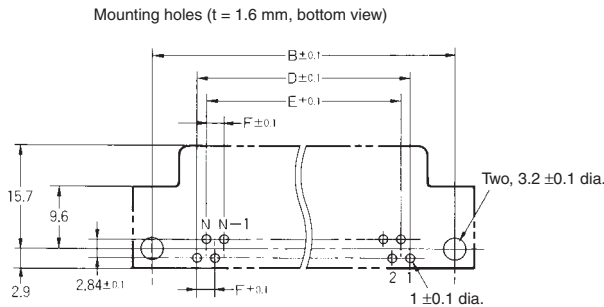
(unit: mm)

Sockets with Right-angle DIP Terminals  
XM3B-□□22-501F  
(With Tap Hole Grounding Fixtures)



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

**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.



## Dimensions

| No. of contacts | Dimensions (mm) |       |       |       |       |      |      |
|-----------------|-----------------|-------|-------|-------|-------|------|------|
|                 | 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 |

## ■ Ordering Information

| Appearance      | Tap Hole Grounding Fixtures              |
|-----------------|------------------------------------------|
|                 | <br>Tap Hole Grounding Fixture           |
| 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

## Model Number Legend

XM3C-    22-        

1        2 3 4

### 1. Number of contacts

09: 9 contacts  
15: 15 contacts  
25: 25 contacts  
37: 37 contacts

### 2. Anchor specifications

1: With Anchor 2  
5: No anchors

### 3. Anchor screw specifications

1: M2.6 × 0.45 metric screws  
3: Inch screws  
0: No anchors

### 4. Grounding Fixture

1: Tap Hole Grounding Fixture  
2: Lock Pin Grounding Fixture

**Note:** Anchors and Grounding Fixtures are not supplied if 2, 3, and 4 are blank.

## Dimensions

(unit: mm)

### DIP Terminals

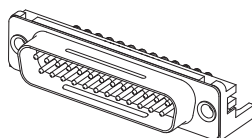
XM3C-    22 (No Anchors or Grounding Fixtures)

XM3C-    22-501 (No Anchors, with Tap Hole Grounding Fixtures)

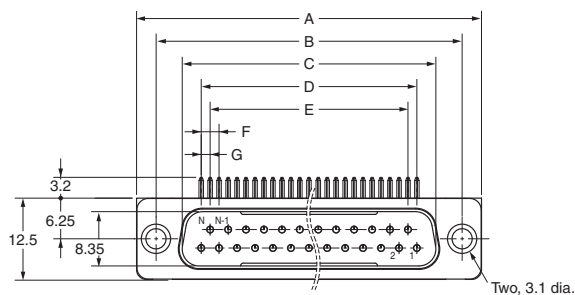
XM3C-    22-502 (No Anchors, with Lock Pin Grounding Fixtures)

XM3C-    22-111 (With Anchor 2 and Tap Hole Grounding Fixtures)

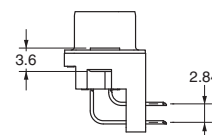
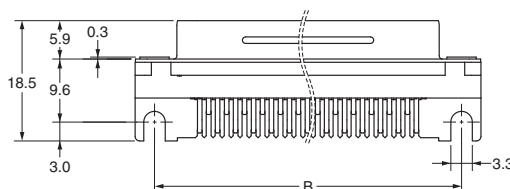
XM3C-    22-112 (With Anchor 2 and Lock Pin Grounding Fixtures)



25-contact model shown above.  
(No Anchor or Grounding Fixtures)

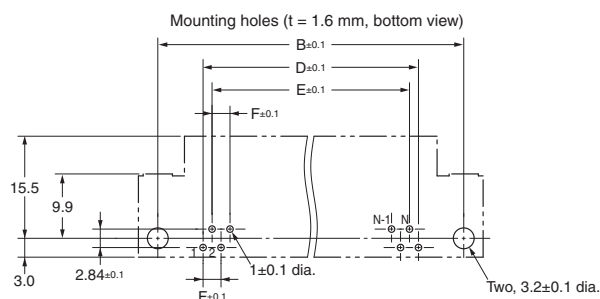


**Note:** XM3C Terminals were manufactured in accordance with JIS X 5101. Terminal pitches are a mixed arrangement of 2.77- and 2.74-mm contacts on 25- and 37-contact models as specified in the JIS standard. A pitch of 2.76 mm is recommended for the mounting holes because of the more advanced numerical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

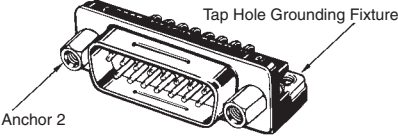
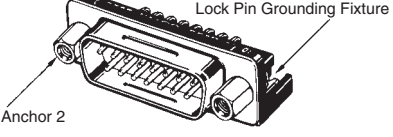
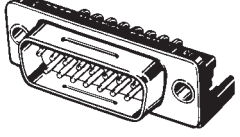


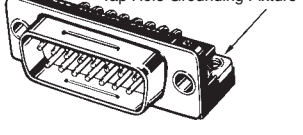
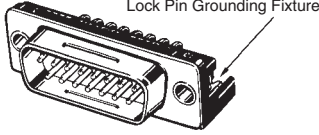
### Dimensions

| No. of contacts | A    | B     | C     | D     | E     | F    | G    |
|-----------------|------|-------|-------|-------|-------|------|------|
| 9               | 30.8 | 24.99 | 16.91 | 10.96 | 8.22  | 2.74 | 1.37 |
| 15              | 39.1 | 33.32 | 25.25 | 19.18 | 16.44 | 2.74 | 1.37 |
| 25              | 53.0 | 47.04 | 38.96 | 33.12 | 30.36 | 2.76 | 1.38 |
| 37              | 69.3 | 63.50 | 55.42 | 49.68 | 46.92 | 2.76 | 1.38 |



## ■ Ordering Information

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

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

**Note:** The XM3C-□□22-111/-112 with Anchor 2 (M2.6 × 0.45) and Grounding Fixtures as well as the XM3C-□□22-501/-502 with Grounding Fixtures and no Anchor are available as standard models. Two M3 × 0.5 Tap Hole Grounding Fixtures and an M3 × 0.5 Lock Pin Grounding Fixture for the Anchor side are provided.  
Contact your OMRON representative for other anchor and grounding fixture specifications. See Accessories (Sold Separately) of XM2/XM3 for details on accessories.  
Tap Hole Grounding Fixtures and Lock Pin Grounding Fixtures are not sold separately.

# XM3F Sockets with Straight DIP Terminals

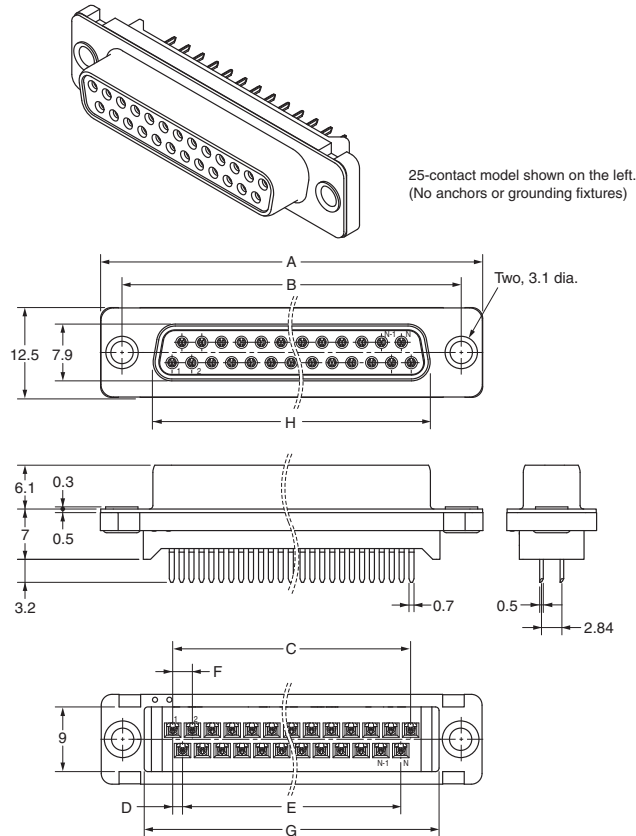
## ■ Dimensions

(unit: mm)

### Straight DIP Terminals

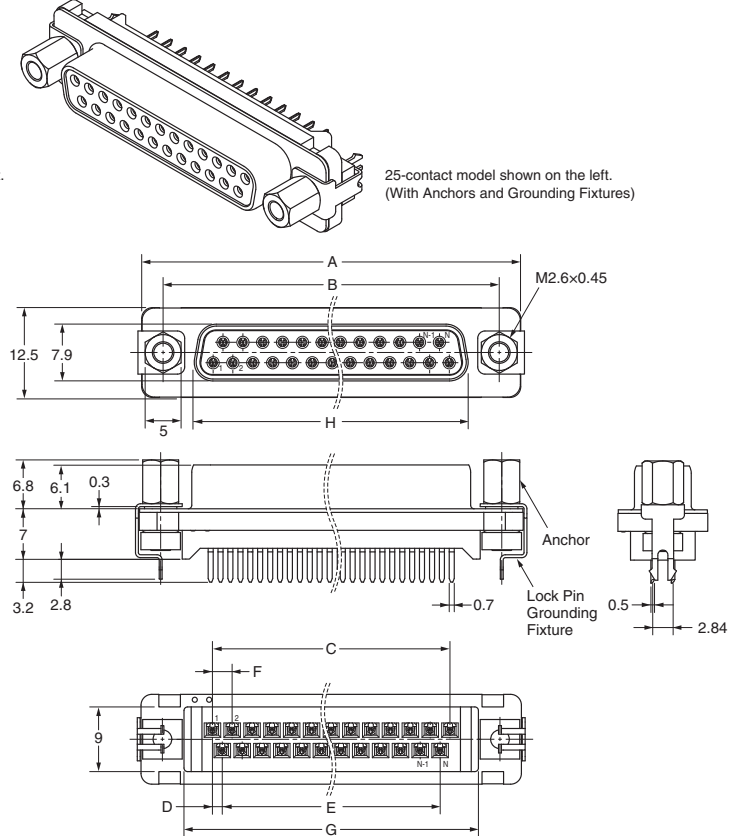
XM3F-□□20

(No Anchor or Grounding Fixtures)



XM3F-□□20-112

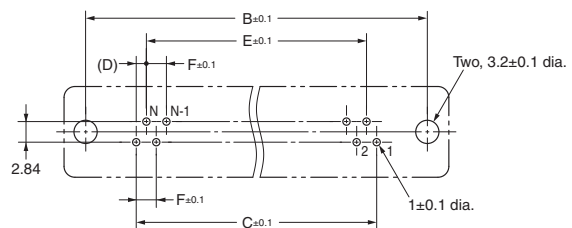
(With Anchor and Lock Pin Grounding Fixtures)



### Dimensions

| 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 |

Mounting holes (t = 1.6 mm, bottom view)



## ■ Ordering Information

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

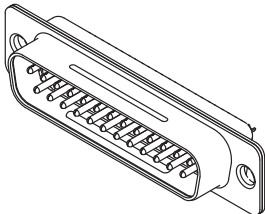
# XM3A Plugs with Solder-cup Terminals

# XM3D Sockets with Solder-cup Terminals

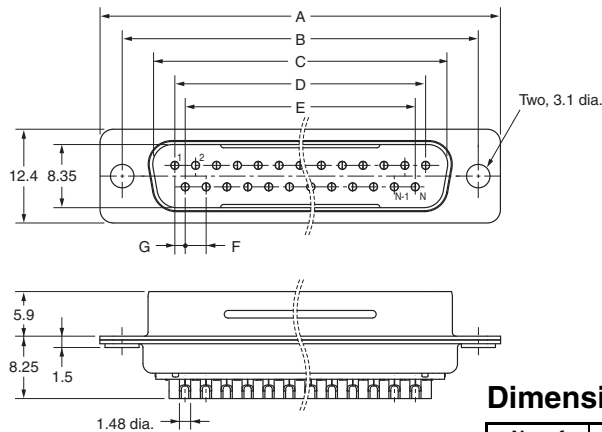
## ■ Dimensions

(unit: mm)

XM3A-□□21  
Plugs/Solder-cup Terminals



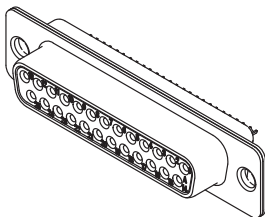
Note: 25-contact model shown above.



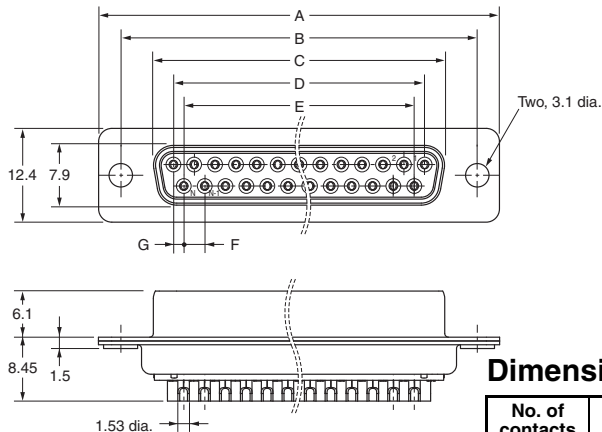
Dimensions (XM3A)

| 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  
Sockets, Solder-cup Terminals



Note: 25-contact model shown above.



Dimensions (XM3D)

| 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 |

- Application examples provided in this document are for reference only. In actual applications, confirm equipment functions and safety before using the product.
- Consult your OMRON representative before using the product under conditions which are not described in the manual or applying the product to nuclear control systems, railroad systems, aviation systems, vehicles, combustion systems, medical equipment, amusement machines, safety equipment, and other systems or equipment that may have a serious influence on lives and property if used improperly. Make sure that the ratings and performance characteristics of the product provide a margin of safety for the system or equipment, and be sure to provide the system or equipment with double safety mechanisms.

**Note: Do not use this document to operate the Unit.**