

... A Vital Part of Connection World

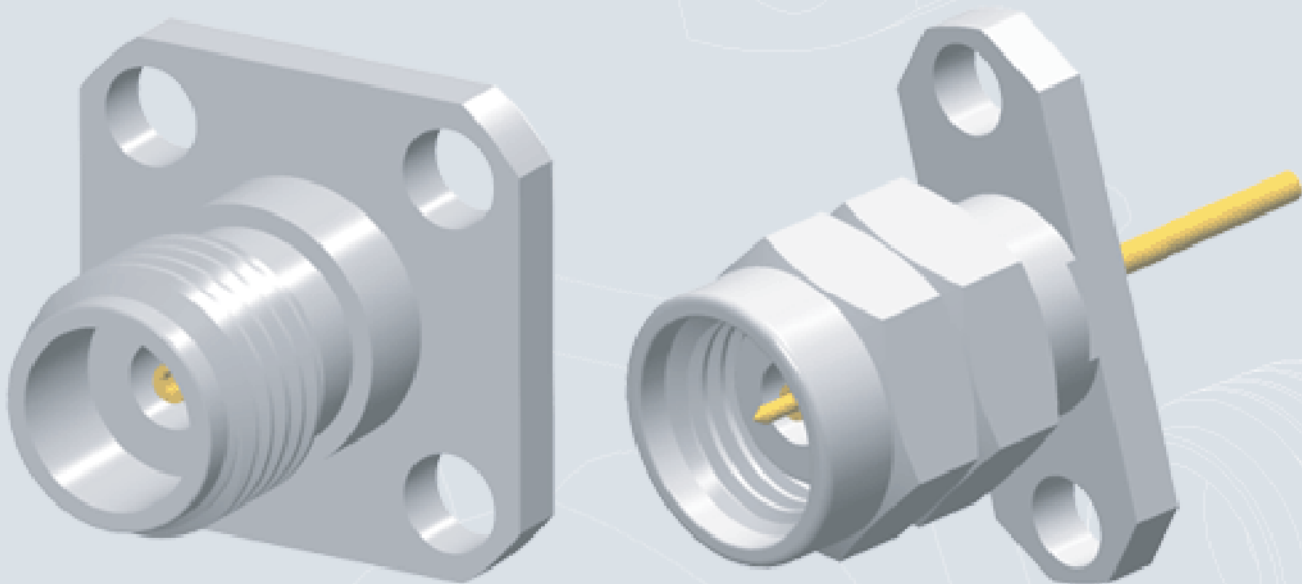


Receptacles With Accepts Pin

Receptacles, Metal Through The Wall

Receptacles, Insulator Through The Wall

Receptacles, Air Line Through The Wall



## 2.4MM CONNECTORS

# 2.4mm Precision Connectors



## DESCRIPTION

2.4mm connector is 50ohm precision connector designed to perform mode free to 50GHz. The outer coductor measures 2.4mm and the robust wall of the connector body is designed to engage before the center conductor, assuring a rugged, repeatable mating interface. The interface is air dielectric with the contact supported by a short dielectric bead. Cmptter offers 2.4mm connectors 2 holes, 4 holes, also for semi-rigid and low-loss flexible cable, receptacles and precision adapters which may be adapted for custom applications.

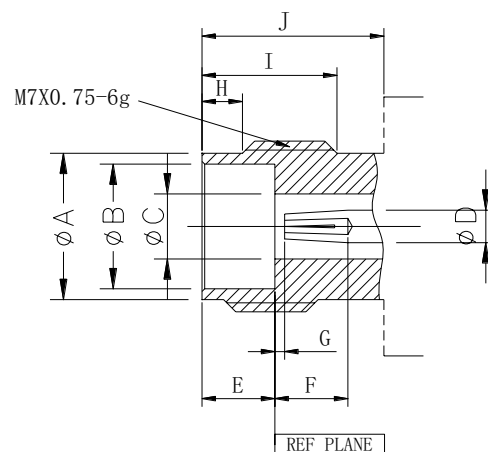
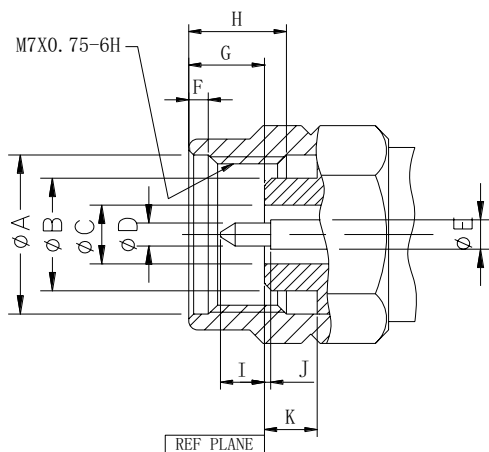
### 2.4mm Design Features

- Excellent performance up to 50GHz
- Low VSWR and insertion loss
- Rugged construction for reliability
- Mechanically compatible with 1.85mm connector series

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## 2.4mm INTERFACE



| 2.4mm Male |      |      |        |        |
|------------|------|------|--------|--------|
|            | mm   |      | Inch   |        |
|            | Min  | Max  | Min    | Max    |
| A          | 7.01 | 7.11 | 0.276  | 0.280  |
| B          | 4.72 | 4.75 | 0.186  | 0.187  |
| C          | 2.39 | 2.41 | 0.094  | 0.095  |
| D          | 0.50 | 0.52 | 0.0196 | 0.0206 |
| E          | 1.03 | 1.05 | 0.0405 | 0.0415 |
| F          | 0.51 | 0.76 | 0.020  | 0.030  |
| G          | 1.85 | 2.67 | 0.073  | 0.105  |
| H          | 4.37 | 4.65 | 0.172  | 0.183  |
| I          | 1.35 | 1.45 | 0.053  | 0.057  |
| J          | —    | 0.08 | —      | 0.003  |
| K          | 3.40 | 3.51 | 0.134  | 0.138  |

| 2.4mm Female |      |      |        |        |
|--------------|------|------|--------|--------|
|              | mm   |      | Inch   |        |
|              | Min  | Max  | Min    | Max    |
| A            | 5.79 | 5.89 | 0.228  | 0.232  |
| B            | 4.77 | 4.80 | 0.1878 | 0.1888 |
| C            | 2.39 | 2.41 | 0.094  | 0.095  |
| D            | 1.03 | 1.05 | 0.0406 | 0.0414 |
| E            | 3.00 | 3.10 | 0.118  | 0.122  |
| F            | 2.65 | —    | 0.1043 | —      |
| G            | —    | 0.08 | —      | 0.003  |
| H            | 1.37 | 1.63 | 0.054  | 0.064  |
| I            | 4.80 | 5.05 | 0.189  | 0.199  |
| J            | 6    | —    | 0.2362 | —      |

**Interface dimensions conformable to the standards: IEEE STD 287-2007**

# TECHNICAL DATA



| ELECTRICAL DATA                 |                                                                                  |
|---------------------------------|----------------------------------------------------------------------------------|
| Impedance                       | 50 Ohm                                                                           |
| Frequency range                 | DC — 50GHz                                                                       |
| Dielectric withstanding voltage | 750V                                                                             |
| Insulation resistance           | $\geq 3 \times 1000 \text{ M}\Omega$                                             |
| Contact resistance              | inter contact $\leq 3 \text{ m}\Omega$<br>out contact $\leq 2.0 \text{ m}\Omega$ |
| VSWR max.                       | 1.15 : 1                                                                         |

| MECHANICAL DATA     |                                    |
|---------------------|------------------------------------|
| Base material       |                                    |
| Centercontact       | Copper Beryllium Alloy, Gold-pated |
| Body                | Stainless Steel, Passivated        |
| Insulator           | PEI, PTFE                          |
| Durability(matings) | $\geq 500$                         |

| ENVIRONMENTAL     |                                                            |
|-------------------|------------------------------------------------------------|
| Temperature Range | -55 °C to + 165 °C                                         |
| Thermal shock     | MIL-STD-202, Method 107, Condition B                       |
| Corrosion         | Saltspray test acc.to MIL-STD-202, Method 101, Condition B |
| Vibration         | MIL-STD-202, Method 204, Condition D                       |

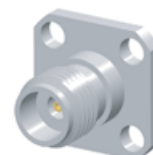
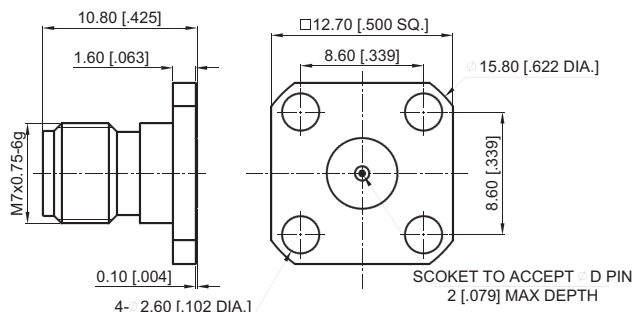
# RECEPTACLES WITH ACCEPTS PIN



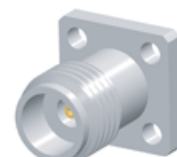
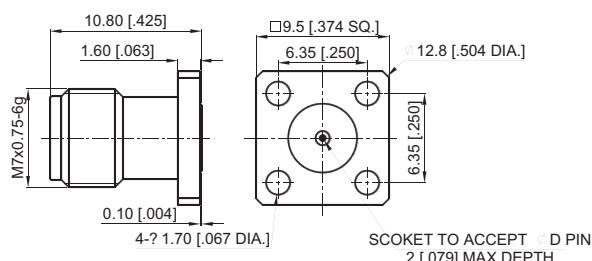
## Receptacles, jacks (female), Flange Mount



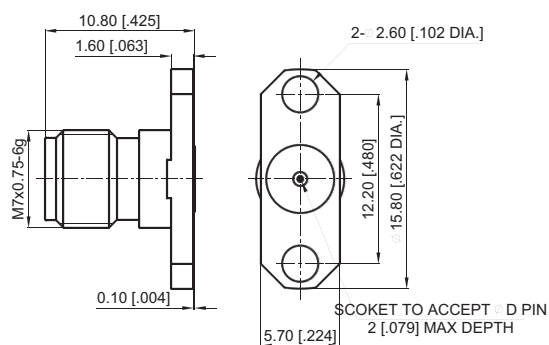
| Part Number    | Ø D PIN     |
|----------------|-------------|
| 97-02-9F5-001A | 0.23 [.009] |
| 97-02-9F5-001B | 0.30 [.012] |
| 97-02-9F5-001C | 0.51 [.020] |



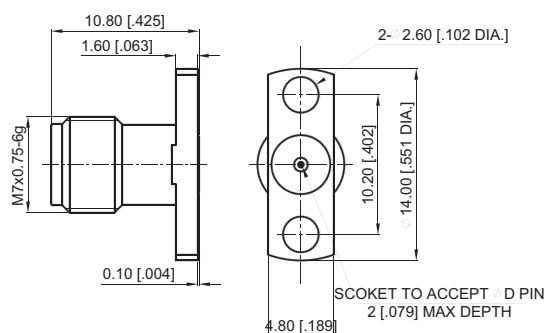
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|----------------|-------------|
| 97-02-9F5-002A | 0.23 [.009] |
| 97-02-9F5-002B | 0.30 [.012] |
| 97-02-9F5-002C | 0.51 [.020] |



| Part Number    | Ø D PIN     |
|----------------|-------------|
| 97-02-9E5-003A | 0.23 [.009] |
| 97-02-9E5-003B | 0.30 [.012] |
| 97-02-9E5-003C | 0.51 [.020] |



| Part Number    | Ø D PIN     |
|----------------|-------------|
| 97-02-9E5-004A | 0.23 [.009] |
| 97-02-9E5-004B | 0.30 [.012] |
| 97-02-9E5-004C | 0.51 [.020] |



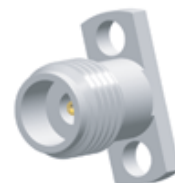
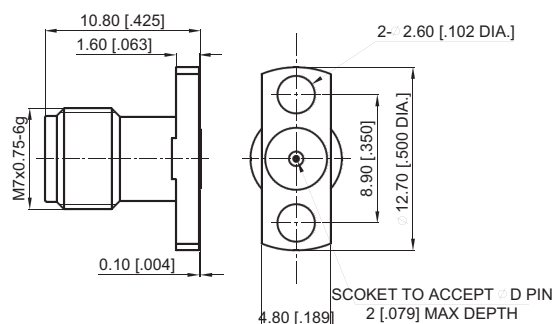
# RECEPTACLES WITH ACCEPTS PIN



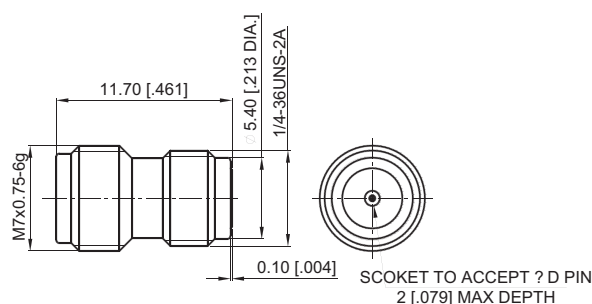
## Receptacles, jacks (female), Flange Mount



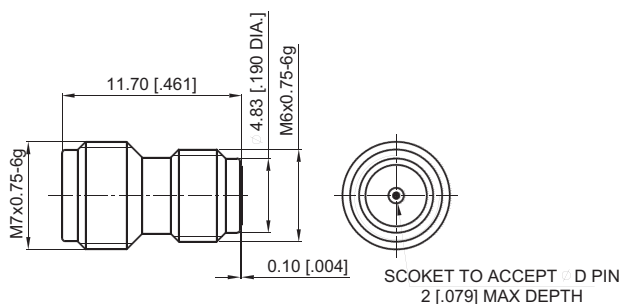
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|----------------|-------------|
| 97-02-9E5-005A | 0.23 [.009] |
| 97-02-9E5-005B | 0.30 [.012] |
| 97-02-9E5-005C | 0.51 [.020] |



| Part Number    | Ø D PIN     |
|----------------|-------------|
| 97-02-9A5-006A | 0.23 [.009] |
| 97-02-9A5-006B | 0.30 [.012] |
| 97-02-9A5-006C | 0.51 [.020] |

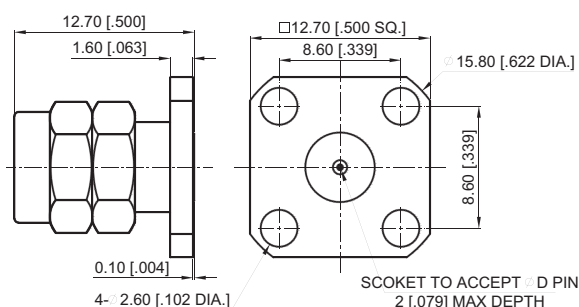


| Part Number    | Ø D PIN     |
|----------------|-------------|
| 97-02-9A5-007A | 0.23 [.009] |
| 97-02-9A5-007B | 0.30 [.012] |
| 97-02-9A5-007C | 0.51 [.020] |



## Receptacles, plugs (male), Flange Mount

| Part Number    | Ø D PIN     |
|----------------|-------------|
| 97-03-9F5-008A | 0.23 [.009] |
| 97-03-9F5-008B | 0.30 [.012] |
| 97-03-9F5-008C | 0.51 [.020] |



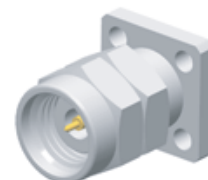
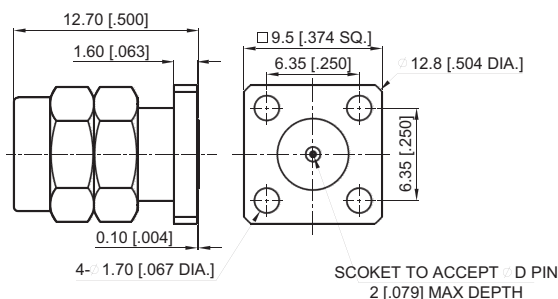
# RECEPTACLES WITH ACCEPTS PIN



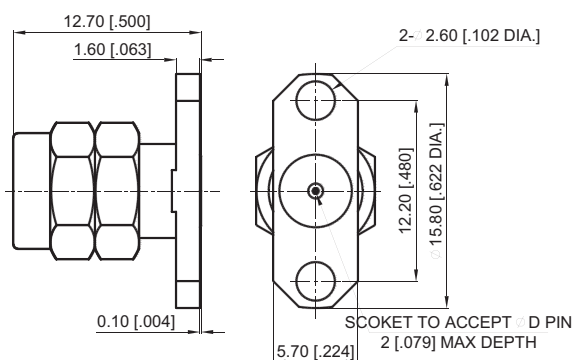
Receptacles, plugs (male), Flange Mount



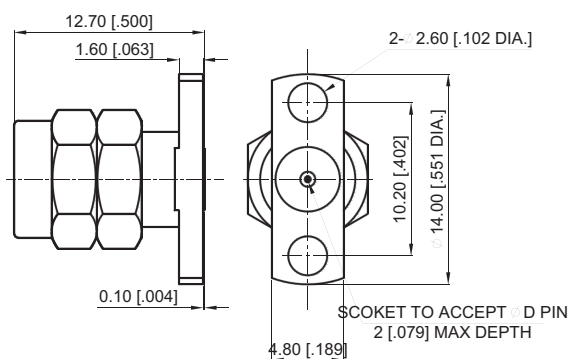
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|----------------|-------------|
| 97-03-9F5-009A | 0.23 [.009] |
| 97-03-9F5-009B | 0.30 [.012] |
| 97-03-9F5-009C | 0.51 [.020] |



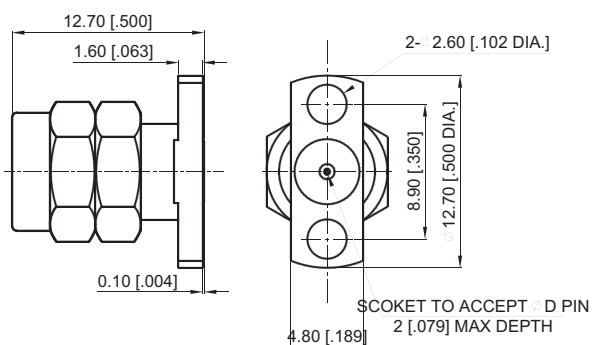
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|----------------|-------------|
| 97-03-9E5-010A | 0.23 [.009] |
| 97-03-9E5-010B | 0.30 [.012] |
| 97-03-9E5-010C | 0.51 [.020] |



| Part Number    | Ø D PIN     |
|----------------|-------------|
| 97-03-9E5-011A | 0.23 [.009] |
| 97-03-9E5-011B | 0.30 [.012] |
| 97-03-9E5-011C | 0.51 [.020] |



| Part Number    | Ø D PIN     |
|----------------|-------------|
| 97-03-9E5-012A | 0.23 [.009] |
| 97-03-9E5-012B | 0.30 [.012] |
| 97-03-9E5-012C | 0.51 [.020] |



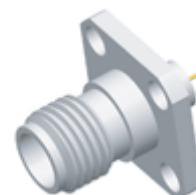
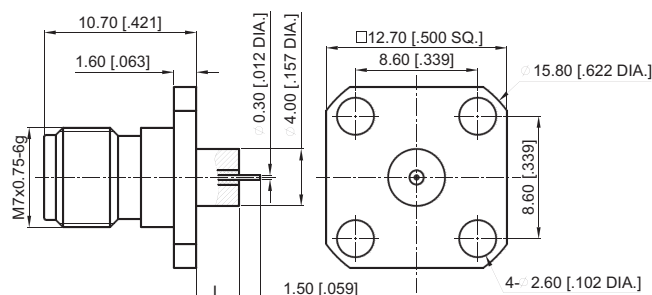
# RECEPTACLES, METAL THROUGH THE WALL



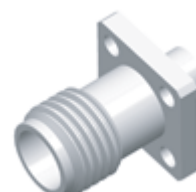
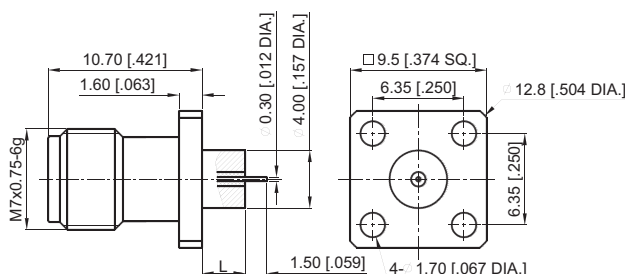
## Receptacles, jacks (female), Flange Mount



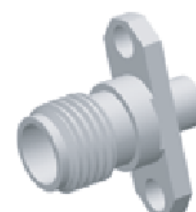
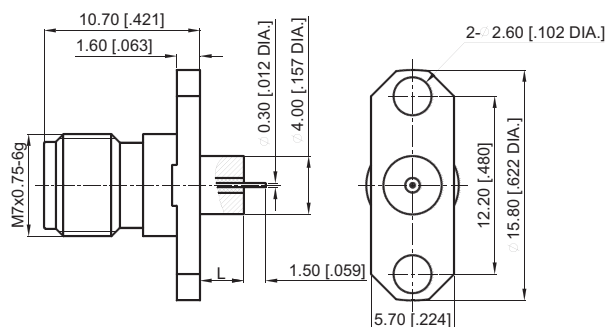
| Part Number    | L          |
|----------------|------------|
| 97-02-9F2-013A | 1.4 [.055] |
| 97-02-9F2-013B | 3 [.118]   |



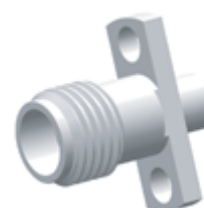
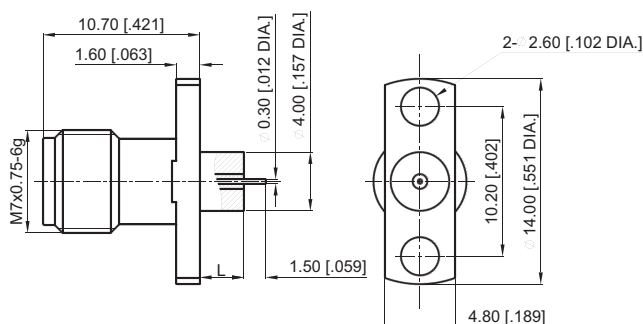
| Part Number    | L          |
|----------------|------------|
| 97-02-9F2-014A | 1.4 [.055] |
| 97-02-9F2-014B | 3 [.118]   |



| Part Number    | L          |
|----------------|------------|
| 97-02-9E2-015A | 1.4 [.055] |
| 97-02-9E2-015B | 3 [.118]   |



| Part Number    | L          |
|----------------|------------|
| 97-02-9E2-016A | 1.4 [.055] |
| 97-02-9E2-016B | 3 [.118]   |





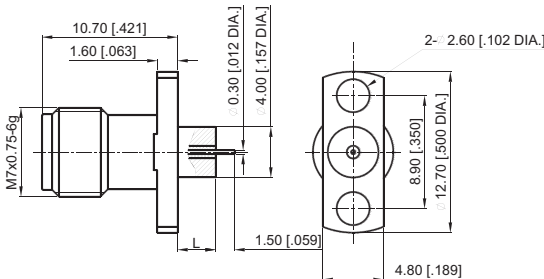
# RECEPTACLES, METAL THROUGH THE WALL



Receptacles, jacks (female), Flange Mount



| Part Number    | L          |
|----------------|------------|
| 97-02-9E2-017A | 1.4 [.055] |
| 97-02-9E2-017B | 3 [.118]   |

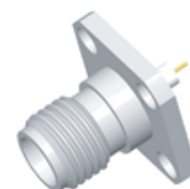
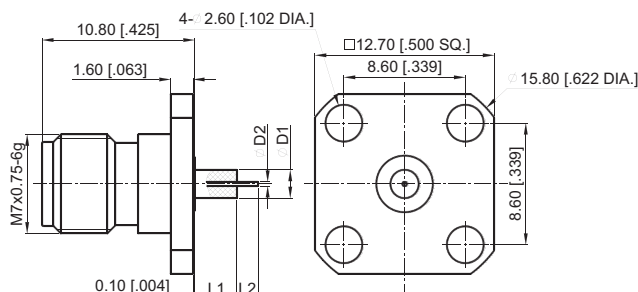


# RECEPTACLES, INSULATOR THROUGH THE WALL **CMP<sup>®</sup>TER**

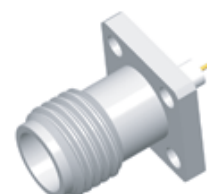
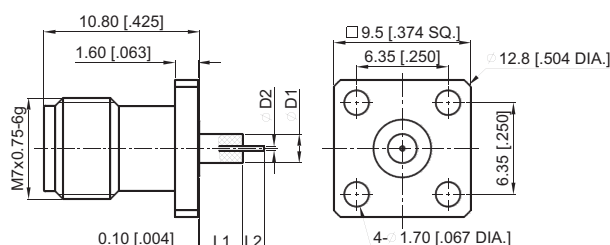
## Receptacles, jacks (female), Flange Mount



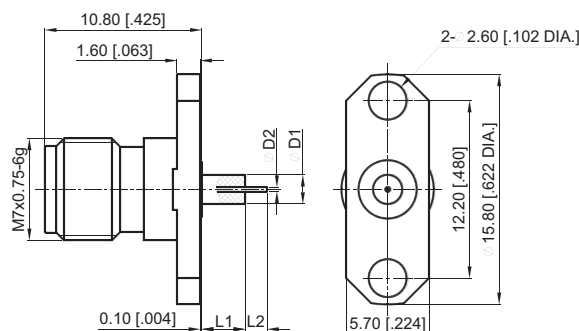
| Part Number    | D1          | D2          | L1          | L2          |
|----------------|-------------|-------------|-------------|-------------|
| 97-02-9F7-018A | 1.67 [.066] | 0.3 [.012]  | 1.4 [.055]  | 1.5 [.059]  |
| 97-02-9F7-018B | 1.67 [.066] | 0.3 [.012]  | 3 [.118]    | 1.5 [.059]  |
| 97-02-9F7-018C | 2 [.078]    | 0.61 [.024] | 6.35 [.250] | 1.27 [.005] |



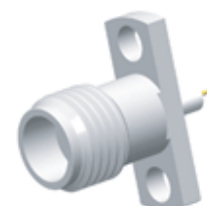
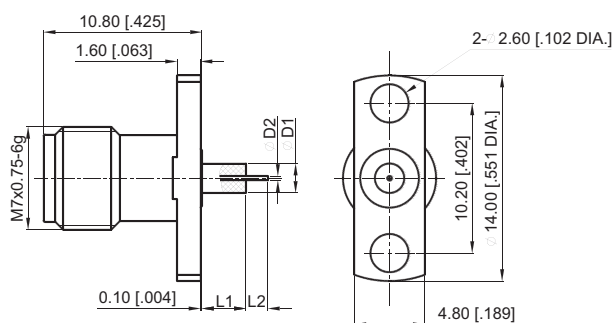
| Part Number    | D1          | D2          | L1          | L2          |
|----------------|-------------|-------------|-------------|-------------|
| 97-02-9F7-019A | 1.67 [.066] | 0.3 [.012]  | 1.4 [.055]  | 1.5 [.059]  |
| 97-02-9F7-019B | 1.67 [.066] | 0.3 [.012]  | 3 [.118]    | 1.5 [.059]  |
| 97-02-9F7-019C | 2 [.078]    | 0.61 [.024] | 6.35 [.250] | 1.27 [.005] |



| Part Number    | D1          | D2          | L1          | L2          |
|----------------|-------------|-------------|-------------|-------------|
| 97-02-9E7-020A | 1.67 [.066] | 0.3 [.012]  | 1.4 [.055]  | 1.5 [.059]  |
| 97-02-9E7-020B | 1.67 [.066] | 0.3 [.012]  | 3 [.118]    | 1.5 [.059]  |
| 97-02-9E7-020C | 2 [.078]    | 0.61 [.024] | 6.35 [.250] | 1.27 [.005] |



| Part Number    | D1          | D2          | L1          | L2          |
|----------------|-------------|-------------|-------------|-------------|
| 97-02-9E7-021A | 1.67 [.066] | 0.3 [.012]  | 1.4 [.055]  | 1.5 [.059]  |
| 97-02-9E7-021B | 1.67 [.066] | 0.3 [.012]  | 3 [.118]    | 1.5 [.059]  |
| 97-02-9E7-021C | 2 [.078]    | 0.61 [.024] | 6.35 [.250] | 1.27 [.005] |



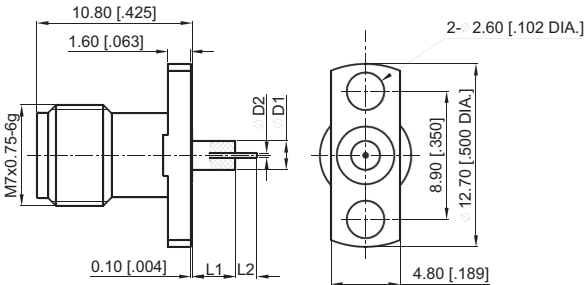
RECEPTACLES, INSULATOR THROUGH THE WALL



Receptacles, jacks (female), Flange Mount



| Part Number    | D1          | D2          | L1          | L2          |
|----------------|-------------|-------------|-------------|-------------|
| 97-02-9E7-022A | 1.67 [.066] | 0.3 [.012]  | 1.4 [.055]  | 1.5 [.059]  |
| 97-02-9E7-022B | 1.67 [.066] | 0.3 [.012]  | 3 [.118]    | 1.5 [.059]  |
| 97-02-9E7-022C | 2 [.078]    | 0.61 [.024] | 6.35 [.250] | 1.27 [.005] |



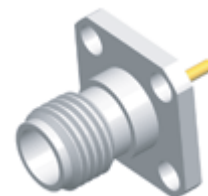
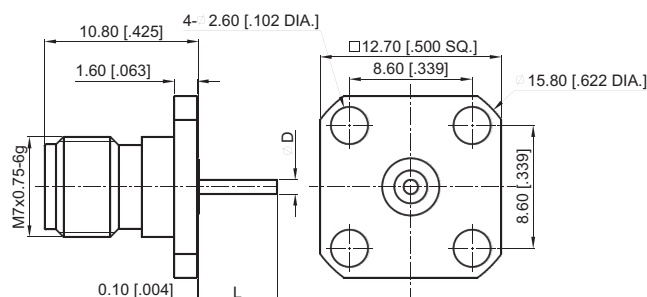
# RECEPTACLES, AIR LINE THROUGH THE WALL



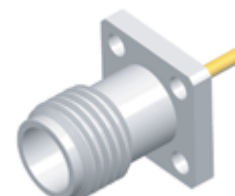
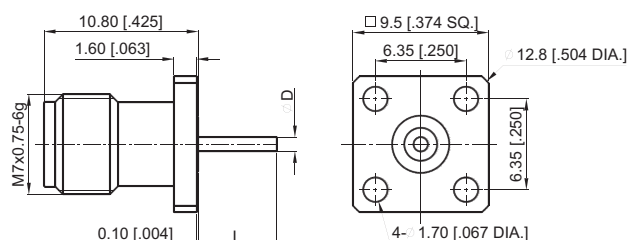
## Receptacles, jacks (female), Flange Mount



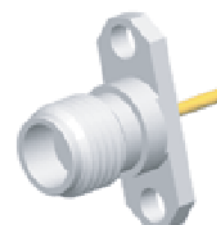
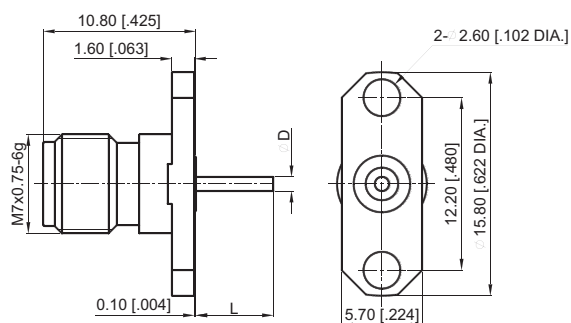
| Part Number    | D           | L           |
|----------------|-------------|-------------|
| 97-02-9F2-023A | 0.75 [.029] | 9 [.354]    |
| 97-02-9F2-023B | 0.86 [.034] | 8.75 [.344] |
| 97-02-9F2-023C | 1 [.040]    | 5.5 [.216]  |
| 97-02-9F2-023D | 1.04 [.041] | 6.34 [.250] |
| 97-02-9F2-023E | 1.2 [.047]  | 3 [.118]    |



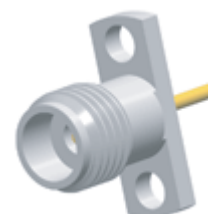
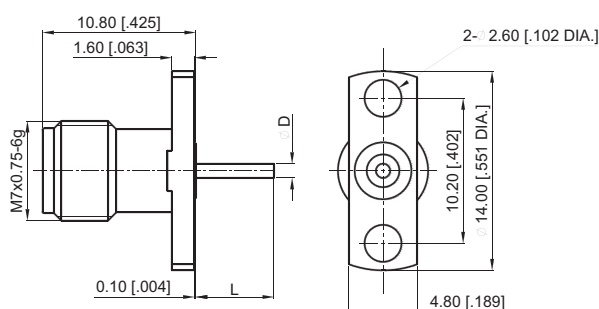
| Part Number    | D           | L           |
|----------------|-------------|-------------|
| 97-02-9F2-024A | 0.75 [.029] | 9 [.354]    |
| 97-02-9F2-024B | 0.86 [.034] | 8.75 [.344] |
| 97-02-9F2-024C | 1 [.040]    | 5.5 [.216]  |
| 97-02-9F2-024D | 1.04 [.041] | 6.34 [.250] |
| 97-02-9F2-024E | 1.2 [.047]  | 3 [.118]    |



| Part Number    | D           | L           |
|----------------|-------------|-------------|
| 97-02-9E2-025A | 0.75 [.029] | 9 [.354]    |
| 97-02-9E2-025B | 0.86 [.034] | 8.75 [.344] |
| 97-02-9E2-025C | 1 [.040]    | 5.5 [.216]  |
| 97-02-9E2-025D | 1.04 [.041] | 6.34 [.250] |
| 97-02-9E2-025E | 1.2 [.047]  | 3 [.118]    |



| Part Number    | D           | L           |
|----------------|-------------|-------------|
| 97-02-9E2-026A | 0.75 [.029] | 9 [.354]    |
| 97-02-9E2-026B | 0.86 [.034] | 8.75 [.344] |
| 97-02-9E2-026C | 1 [.040]    | 5.5 [.216]  |
| 97-02-9E2-026D | 1.04 [.041] | 6.34 [.250] |
| 97-02-9E2-026E | 1.2 [.047]  | 3 [.118]    |



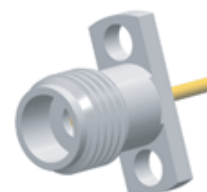
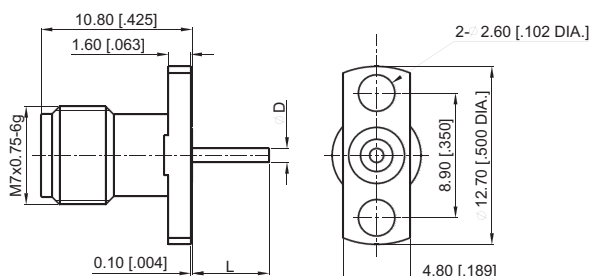
# RECEPTACLES, AIR LINE THROUGH THE WALL



## Receptacles, jacks (female), Flange Mount

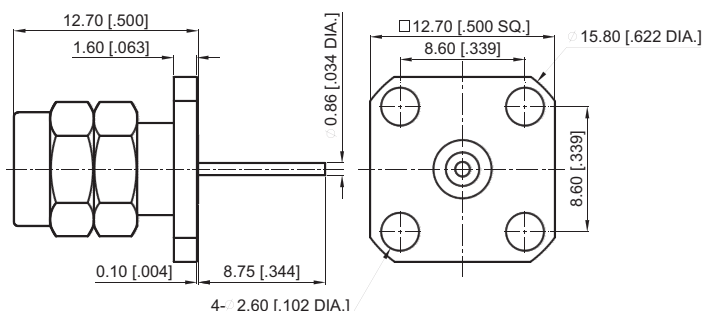


| Part Number    | D           | L           |
|----------------|-------------|-------------|
| 97-02-9E2-027A | 0.75 [.029] | 9 [.354]    |
| 97-02-9E2-027B | 0.86 [.034] | 8.75 [.344] |
| 97-02-9E2-027C | 1 [.040]    | 5.5 [.216]  |
| 97-02-9E2-027D | 1.04 [.041] | 6.34 [.250] |
| 97-02-9E2-027E | 1.2 [.047]  | 3 [.118]    |

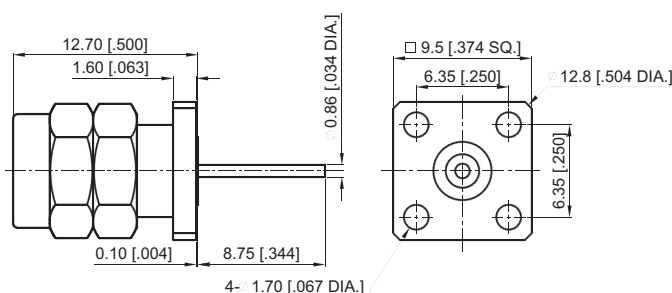


## Receptacles, plugs (male), Flange Mount

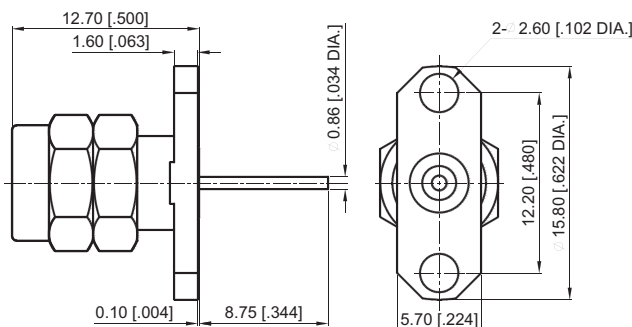
| Part Number   |
|---------------|
| 97-03-9F2-028 |



| Part Number   |
|---------------|
| 97-03-9F2-029 |



| Part Number   |
|---------------|
| 97-03-9E2-030 |



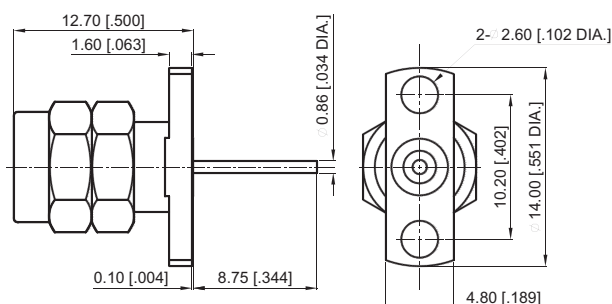
# RECEPTACLES, AIR LINE THROUGH THE WALL



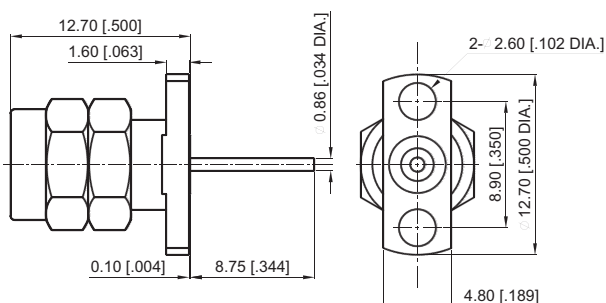
Receptacles, plugs (Male), Flange Mount

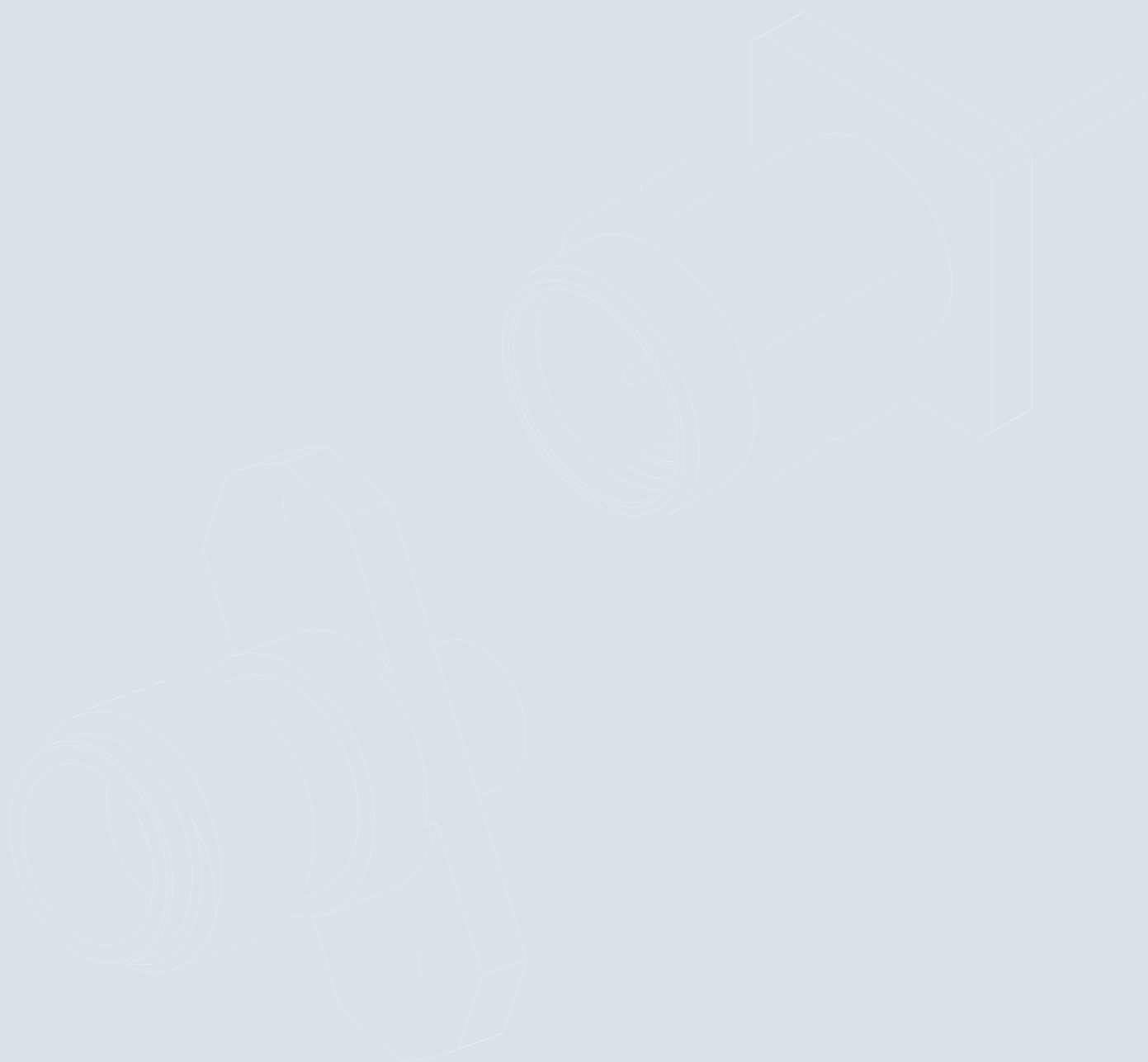


| Part Number   |
|---------------|
| 97-03-9E2-031 |



| Part Number   |
|---------------|
| 97-03-9E2-032 |





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