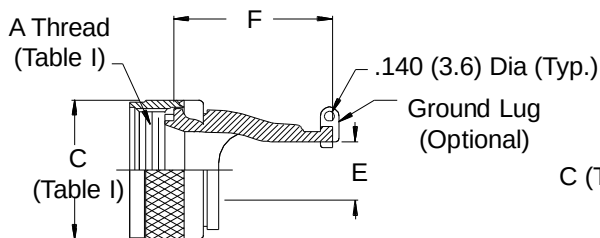
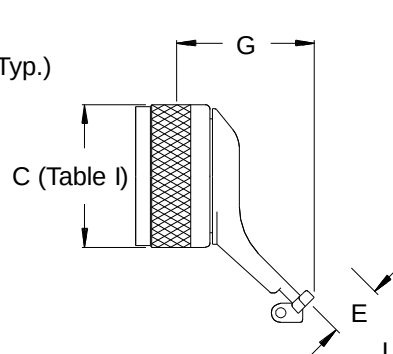
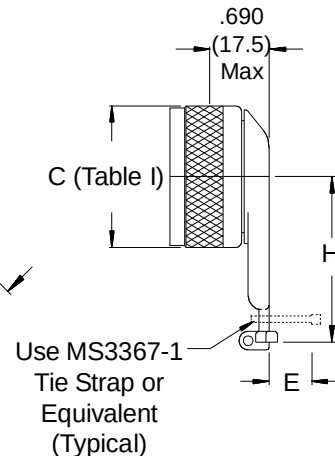


**CONNECTOR  
DESIGNATOR  
A**

Product Series — **450**  
 Connector Designator — **A**  
 Angle and Profile — **S**  
 A = 90°  
 B = 45°  
 S = Straight

— **001** — Basic Part Number  
 — **M** — Finish (Table II)  
 — **16** — Shell Size (Table I)  
 — **G** — Ground Lug (Omit for none)


**STRAIGHT  
ROTATABLE COUPLING**

**45°  
ROTATABLE COUPLING**

**90°  
ROTATABLE COUPLING**

See inside back cover fold-out or pages 13 and 14 for Tables I and II.

| TABLE III: DIMENSIONS |               |        |              |       |        |       |        |
|-----------------------|---------------|--------|--------------|-------|--------|-------|--------|
| Shell Size            | E Cable Entry |        | F Max        | G Max |        | H Max |        |
| 08                    | .260          | (6.6)  | .866 (22.0)  | 1.066 | (27.1) | .890  | (22.6) |
| 10                    | .365          | (9.3)  | .866 (22.0)  | 1.066 | (27.1) | .950  | (24.1) |
| 12                    | .501          | (12.7) | .926 (23.5)  | 1.066 | (27.1) | 1.010 | (25.7) |
| 14                    | .575          | (14.6) | 1.106 (28.1) | 1.188 | (30.2) | 1.330 | (33.8) |
| 16                    | .700          | (17.8) | 1.106 (28.1) | 1.226 | (31.1) | 1.390 | (35.3) |
| 18                    | .779          | (19.8) | 1.176 (29.9) | 1.226 | (31.1) | 1.460 | (37.1) |
| 20                    | .904          | (23.0) | 1.306 (33.2) | 1.226 | (31.1) | 1.510 | (38.4) |
| 22                    | 1.029         | (26.1) | 1.426 (36.2) | 1.226 | (31.1) | 1.510 | (38.4) |
| 24                    | 1.144         | (29.1) | 1.556 (39.5) | 1.226 | (31.1) | 1.640 | (41.7) |

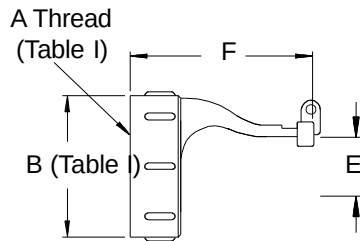
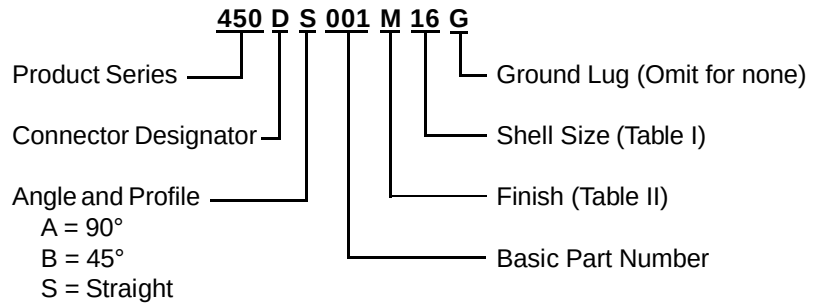
1. Cable Entry is defined as the accommodation entry for the wire bundle or cable. Dimensions are not intended for inspection criteria.
2. Metric dimensions (mm) are indicated in parentheses.

**450-001**  
**Qwik-Ty® Strain Relief - Connector Designator D**  
 Direct Coupling (Straight)  
 Rotatable Coupling (45° and 90° Elbows)

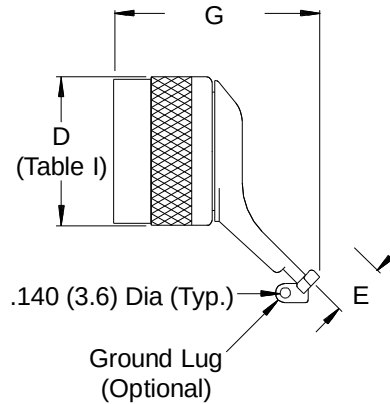


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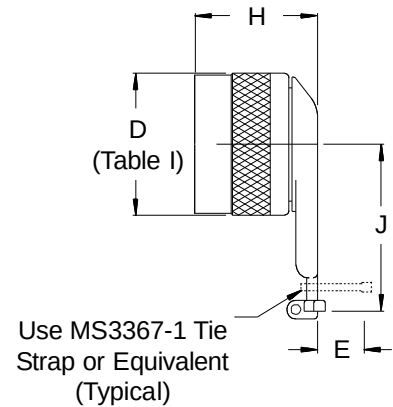
**CONNECTOR  
DESIGNATOR  
D**



**STRAIGHT  
DIRECT COUPLING**



**45°  
ROTATABLE COUPLING**



**90°  
ROTATABLE COUPLING**

See inside back cover fold-out or pages 13 and 14 for Tables I and II.

| TABLE III: DIMENSIONS |               |              |              |              |              |  |  |  |
|-----------------------|---------------|--------------|--------------|--------------|--------------|--|--|--|
| Shell Size            | E Cable Entry | F Max        | G Max        | H Max        | J Max        |  |  |  |
| 08                    | .275 (7.0)    | 1.400 (35.6) | 1.850 (47.0) | 1.240 (31.5) | .880 (22.4)  |  |  |  |
| 10                    | .402 (10.2)   | 1.400 (35.6) | 1.850 (47.0) | 1.240 (31.5) | .940 (23.9)  |  |  |  |
| 12                    | .516 (13.1)   | 1.400 (35.6) | 1.850 (47.0) | 1.240 (31.5) | 1.000 (25.4) |  |  |  |
| 14                    | .651 (16.5)   | 1.610 (40.9) | 2.350 (59.7) | 1.230 (31.2) | 1.320 (33.5) |  |  |  |
| 16                    | .766 (19.5)   | 1.610 (40.9) | 2.350 (59.7) | 1.230 (31.2) | 1.380 (35.1) |  |  |  |
| 18                    | .872 (22.1)   | 1.610 (40.9) | 2.440 (62.0) | 1.260 (32.0) | 1.460 (37.1) |  |  |  |
| 20                    | .997 (25.3)   | 1.680 (42.7) | 2.510 (63.8) | 1.260 (32.0) | 1.510 (38.4) |  |  |  |
| 22                    | 1.125 (28.6)  | 1.680 (42.7) | 2.510 (63.8) | 1.260 (32.0) | 1.560 (39.6) |  |  |  |
| 24                    | 1.247 (31.7)  | 1.770 (45.0) | 2.650 (67.3) | 1.260 (32.0) | 1.630 (41.4) |  |  |  |

1. Cable Entry is defined as the accommodation entry for the wire bundle or cable. Dimensions are not intended for inspection criteria.
2. Metric dimensions (mm) are indicated in parentheses.

# 450-001 and 450-002

## Qwik-Ty® Strain Relief - Connector Designator E

### Direct Coupling (Straight)

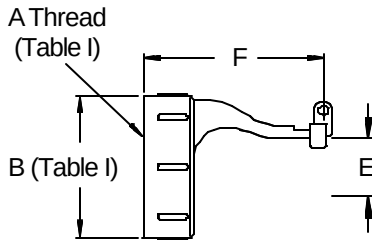
### Rotatable Coupling (Straight, 45° and 90° Elbows)

## CONNECTOR DESIGNATOR E

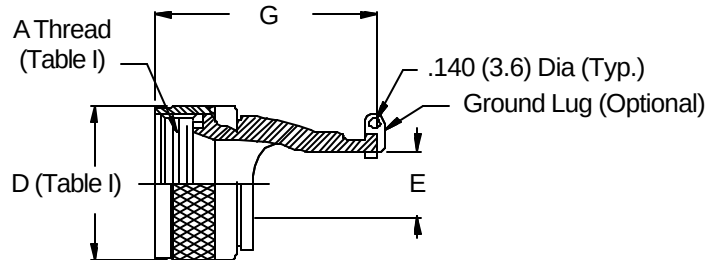
450 E S 001 M 16 G

Product Series — 450  
Connector Designator — E  
Angle and Profile — S  
A = 90°, B = 45°  
S = Straight

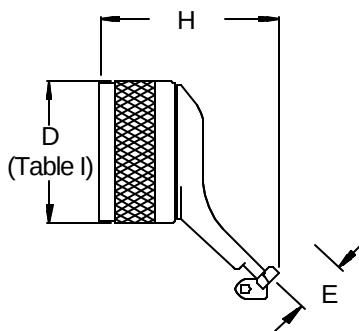
Ground Lug (Omit for none)  
Shell Size (Table I)  
Finish (Table II)  
Basic Part Number  
001, 002



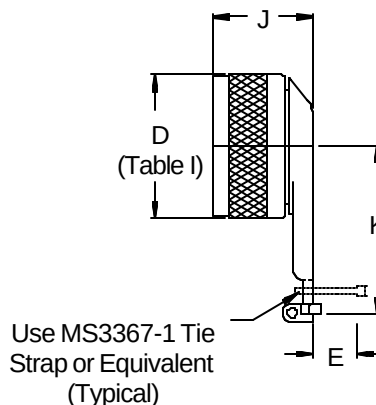
**450ES001**  
**STRAIGHT DIRECT COUPLING**



**450ES002**  
**STRAIGHT ROTATABLE COUPLING**



**450EB001**  
**45° ROTATABLE COUPLING**



**450EA001**  
**90° ROTATABLE COUPLING**

See inside back cover fold-out or pages 13 and 14 for Tables I and II.

| TABLE III: DIMENSIONS |               |              |              |              |              |  |
|-----------------------|---------------|--------------|--------------|--------------|--------------|--|
| Shell Size            | E Cable Entry | F Max        | G Max        | H Max        | J Max        |  |
| 08                    | .250 (6.4)    | .866 (22.0)  | 1.066 (27.1) | 1.320 (33.5) | .890 (22.6)  |  |
| 10                    | .382 (9.7)    | .866 (22.0)  | 1.066 (27.1) | 1.440 (36.6) | .950 (24.1)  |  |
| 12                    | .500 (12.7)   | .925 (23.5)  | 1.066 (27.1) | 1.580 (40.1) | 1.010 (25.7) |  |
| 14                    | .630 (16.0)   | 1.102 (28.0) | 1.188 (30.2) | 1.600 (40.6) | 1.330 (33.8) |  |
| 16                    | .750 (19.1)   | 1.102 (28.0) | 1.224 (31.1) | 1.600 (40.6) | 1.390 (35.3) |  |
| 18                    | .838 (21.3)   | 1.177 (29.9) | 1.224 (31.1) | 1.630 (41.4) | 1.460 (37.1) |  |
| 20                    | .968 (24.6)   | 1.307 (33.2) | 1.224 (31.1) | 1.630 (41.4) | 1.510 (38.4) |  |
| 22                    | 1.090 (27.7)  | 1.425 (36.2) | 1.224 (31.1) | 1.630 (41.4) | 1.510 (38.4) |  |
| 24                    | 1.220 (31.0)  | 1.555 (39.5) | 1.224 (31.1) | 1.630 (41.4) | 1.640 (41.7) |  |

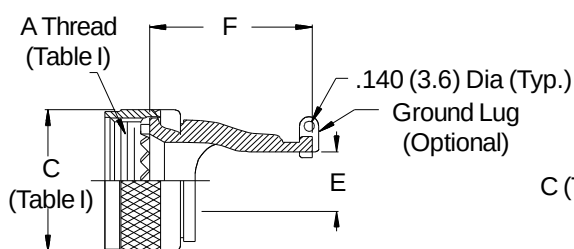
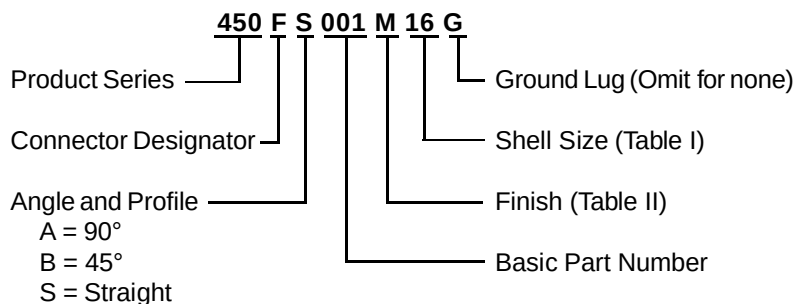
1. Cable Entry is defined as the accommodation entry for the wire bundle or cable. Dimensions are not intended for inspection criteria.
2. Metric dimensions (mm) are indicated in parentheses.

**450-001**  
**Qwik-Ty® Strain Relief - Connector Designator F**  
 Rotatable Coupling (Straight, 45° and 90° Elbows)

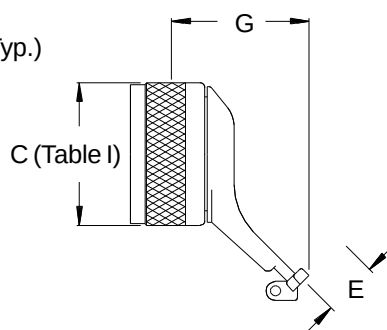


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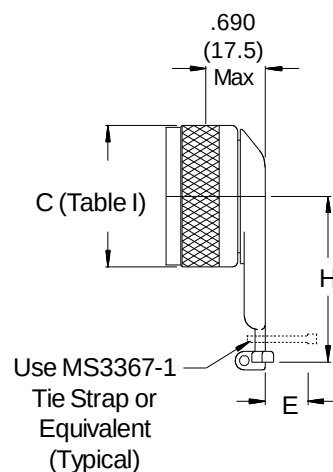
**CONNECTOR  
 DESIGNATOR  
 F**



**STRAIGHT  
 ROTATABLE COUPLING**



**45°  
 ROTATABLE COUPLING**



**90°  
 ROTATABLE COUPLING**

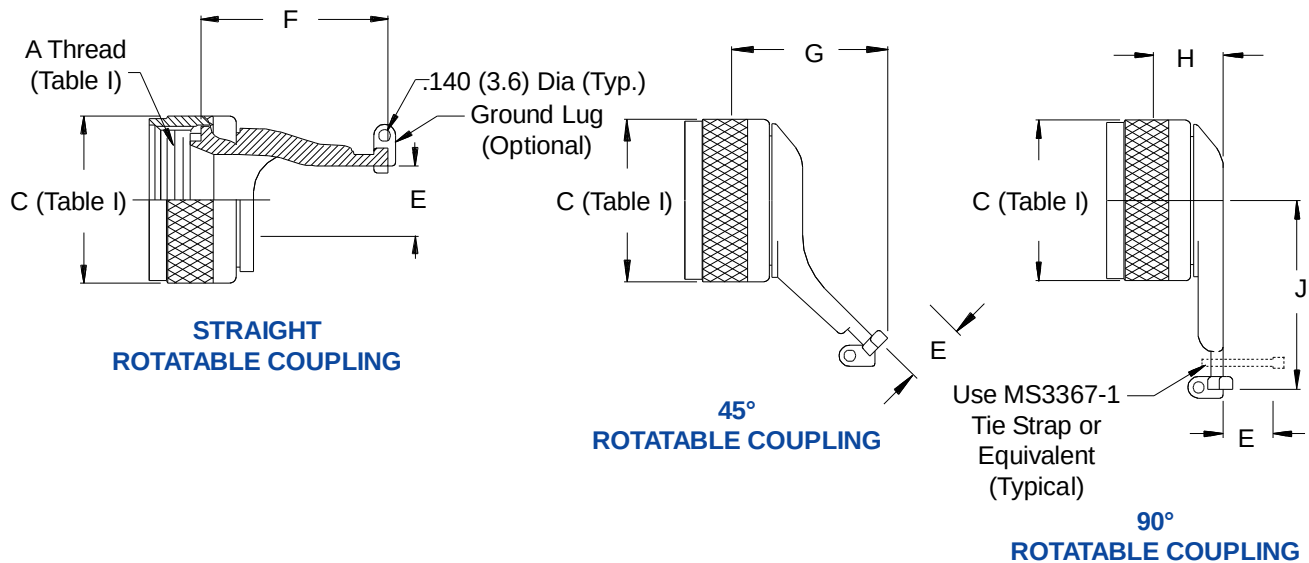
See inside back cover fold-out or pages 13 and 14 for Tables I and II.

| TABLE III: DIMENSIONS |               |              |              |              |  |  |
|-----------------------|---------------|--------------|--------------|--------------|--|--|
| Shell Size            | E Cable Entry | F Max        | G Max        | H Max        |  |  |
| 08                    | .264 (6.7)    | .866 (22.0)  | 1.066 (27.1) | .890 (22.6)  |  |  |
| 10                    | .392 (10.0)   | .866 (22.0)  | 1.066 (27.1) | .950 (24.1)  |  |  |
| 12                    | .506 (12.9)   | .926 (23.5)  | 1.066 (27.1) | 1.010 (25.7) |  |  |
| 14                    | .631 (16.0)   | 1.106 (28.1) | 1.188 (30.2) | 1.330 (33.8) |  |  |
| 16                    | .756 (19.2)   | 1.106 (28.1) | 1.226 (31.1) | 1.390 (35.3) |  |  |
| 18                    | .845 (21.5)   | 1.176 (29.9) | 1.226 (31.1) | 1.460 (37.1) |  |  |
| 20                    | .970 (24.6)   | 1.306 (33.2) | 1.226 (31.1) | 1.510 (38.4) |  |  |
| 22                    | 1.095 (27.8)  | 1.426 (36.2) | 1.226 (31.1) | 1.510 (38.4) |  |  |
| 24                    | 1.220 (31.0)  | 1.556 (39.5) | 1.226 (31.1) | 1.640 (41.7) |  |  |

1. Cable Entry is defined as the accommodation entry for the wire bundle or cable. Dimensions are not intended for inspection criteria.
2. Metric dimensions (mm) are indicated in parentheses.

**CONNECTOR  
DESIGNATOR  
H**

Product Series — 450 H S 001 M 17 G  
 Connector Designator —  
 Angle and Profile —  
   A = 90°  
   B = 45°  
   S = Straight  
 Ground Lug (Omit for none)  
 Shell Size (Table I)  
 Finish (Table II)  
 Basic Part Number



See inside back cover fold-out or pages 13 and 14 for Tables I and II.

| TABLE III: DIMENSIONS |               |              |              |             |              |  |
|-----------------------|---------------|--------------|--------------|-------------|--------------|--|
| Shell Size            | E Cable Entry | F Max        | G Max        | H Max       | J Max        |  |
| 09                    | .250 (6.4)    | .866 (22.0)  | 1.066 (27.1) | .406 (10.3) | .889 (22.6)  |  |
| 11                    | .382 (9.7)    | .866 (22.0)  | 1.066 (27.1) | .406 (10.3) | .948 (24.1)  |  |
| 13                    | .500 (12.7)   | .925 (23.5)  | 1.066 (27.1) | .406 (10.3) | 1.070 (27.2) |  |
| 15                    | .630 (16.0)   | 1.102 (28.0) | 1.188 (30.2) | .438 (11.1) | 1.330 (33.8) |  |
| 17                    | .750 (19.1)   | 1.102 (28.0) | 1.224 (31.1) | .438 (11.1) | 1.389 (35.3) |  |
| 19                    | .838 (21.3)   | 1.177 (29.9) | 1.224 (31.1) | .438 (11.1) | 1.480 (37.6) |  |
| 21                    | .968 (24.6)   | 1.307 (33.2) | 1.224 (31.1) | .438 (11.1) | 1.661 (42.2) |  |
| 23                    | 1.090 (27.7)  | 1.425 (36.2) | 1.224 (31.1) | .438 (11.1) | 1.850 (47.0) |  |
| 25                    | 1.220 (31.0)  | 1.555 (39.5) | 1.224 (31.1) | .438 (11.1) | 1.909 (48.5) |  |

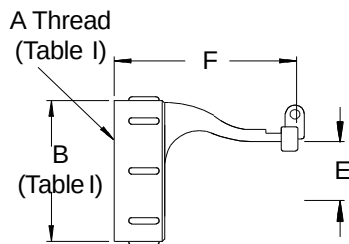
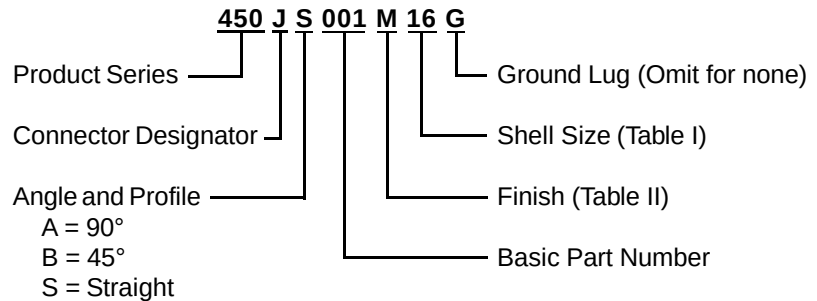
1. Cable Entry is defined as the accommodation entry for the wire bundle or cable. Dimensions are not intended for inspection criteria.
2. Metric dimensions (mm) are indicated in parentheses.

**450-001**  
**Qwik-Ty® Strain Relief - Connector Designator J**  
 Direct Coupling (Straight)  
 Rotatable Coupling (45° and 90° Elbows)

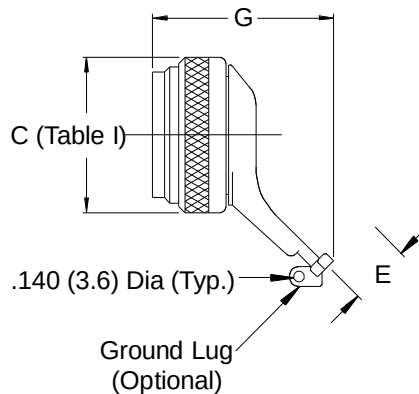


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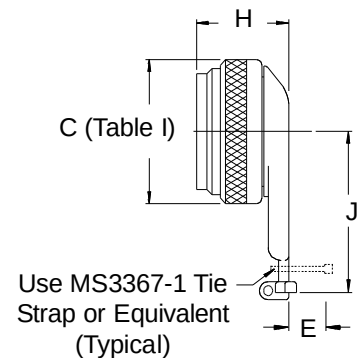
**CONNECTOR  
DESIGNATOR**  
**J**



**STRAIGHT  
DIRECT COUPLING**



**45°  
ROTATABLE COUPLING**



**90°  
ROTATABLE COUPLING**

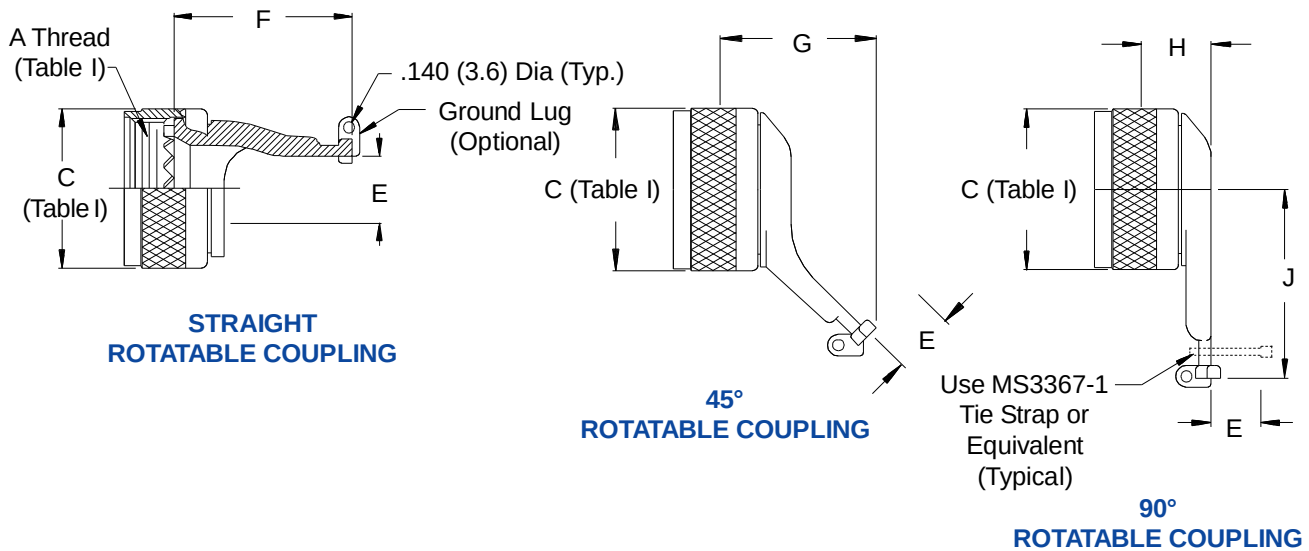
See inside back cover fold-out or pages 13 and 14 for Tables I and II.

| TABLE III: DIMENSIONS |               |              |              |             |              |  |  |
|-----------------------|---------------|--------------|--------------|-------------|--------------|--|--|
| Shell Size            | E Cable Entry | F Max        | G Max        | H Max       | J Max        |  |  |
| 08                    | .375 (9.5)    | 1.250 (31.8) | 1.630 (41.4) | .750 (19.1) | .940 (23.9)  |  |  |
| 10                    | .500 (12.7)   | 1.250 (31.8) | 1.670 (42.4) | .750 (19.1) | 1.000 (25.4) |  |  |
| 14                    | .750 (19.1)   | 1.500 (38.1) | 2.200 (55.9) | .750 (19.1) | 1.380 (35.1) |  |  |
| 16                    | .875 (22.2)   | 1.500 (38.1) | 2.270 (57.7) | .780 (19.8) | 1.460 (37.1) |  |  |
| 18                    | 1.000 (25.4)  | 1.500 (38.1) | 2.330 (59.2) | .780 (19.8) | 1.510 (38.4) |  |  |
| 20                    | 1.125 (28.6)  | 1.500 (38.1) | 2.410 (61.2) | .810 (20.6) | 1.560 (39.6) |  |  |
| 22                    | 1.250 (31.8)  | 1.500 (38.1) | 2.550 (64.8) | .810 (20.6) | 1.630 (41.4) |  |  |
| 24                    | 1.375 (34.9)  | 1.500 (38.1) | 2.590 (65.8) | .810 (20.6) | 1.710 (43.4) |  |  |

1. Cable Entry is defined as the accommodation entry for the wire bundle or cable. Dimensions are not intended for inspection criteria.
2. Metric dimensions (mm) are indicated in parentheses.

**CONNECTOR  
DESIGNATOR**
**L**

Product Series **450**  
 Connector Designator **L**  
 Angle and Profile **S**  
     A = 90°  
     B = 45°  
     S = Straight  
 Basic Part Number **001**  
 Finish (Table II) **M**  
 Shell Size (Table I) **16**  
 Ground Lug (Omit for none) **G**



See inside back cover fold-out or pages 13 and 14 for Tables I and II.

| TABLE III: DIMENSIONS |                  |              |              |             |              |  |
|-----------------------|------------------|--------------|--------------|-------------|--------------|--|
| Shell Size            | E<br>Cable Entry | F<br>Max     | G<br>Max     | H<br>Max    | J<br>Max     |  |
| 08                    | .269 (6.8)       | .866 (22.0)  | 1.066 (27.1) | .464 (11.8) | .890 (22.6)  |  |
| 10                    | .397 (10.1)      | .866 (22.0)  | 1.066 (27.1) | .496 (12.6) | .950 (24.1)  |  |
| 12                    | .511 (13.0)      | .926 (23.5)  | 1.066 (27.1) | .535 (13.6) | 1.070 (27.2) |  |
| 14                    | .636 (16.2)      | 1.106 (28.1) | 1.188 (30.2) | .574 (14.6) | 1.330 (33.8) |  |
| 16                    | .761 (19.3)      | 1.106 (28.1) | 1.224 (31.1) | .590 (15.0) | 1.390 (35.3) |  |
| 18                    | .850 (21.6)      | 1.176 (29.9) | 1.224 (31.1) | .685 (17.4) | 1.480 (37.6) |  |
| 20                    | .975 (24.8)      | 1.306 (33.2) | 1.224 (31.1) | .685 (17.4) | 1.660 (42.2) |  |
| 22                    | 1.100 (27.9)     | 1.426 (36.2) | 1.224 (31.1) | .716 (18.2) | 1.850 (47.0) |  |
| 24                    | 1.225 (31.1)     | 1.556 (39.5) | 1.224 (31.1) | .755 (19.2) | 1.910 (48.5) |  |

1. Cable Entry is defined as the accommodation entry for the wire bundle or cable. Dimensions are not intended for inspection criteria.
2. Metric dimensions (mm) are indicated in parentheses.