



# AS85049/51 and MS3418 90° Strain Relief Self-Locking or Non-Self-Locking

## CONNECTOR DESIGNATOR:

**A**

AS50151 Series AS34001 Crimp,  
MIL-DTL-26482 Series II,  
SAE-AS1703 Crimp Series III,  
MIL-DTL-83723 Series I & III

Basic  
Part Number

**M85049/51**

Dash No.

**S****10****W**

**FOR NEW DESIGN  
USE AS85049/120**

## Superseded PART NUMBER

**MS3418-10 C**

Basic  
Part No.  
(Non-Self-  
Locking)

Dash  
No.

Metal and Finish Designator

A = Aluminum 1000 Hour Cadmium Olive  
Drab over Electroless Nickel  
C = Aluminum, Cadmium Olive Drab  
G = Aluminum Black Anodize  
N = Aluminum, Electroless Nickel

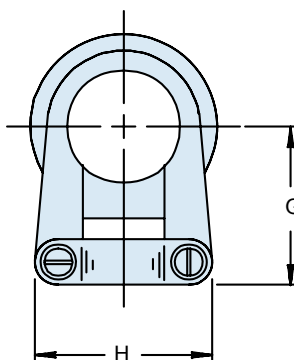
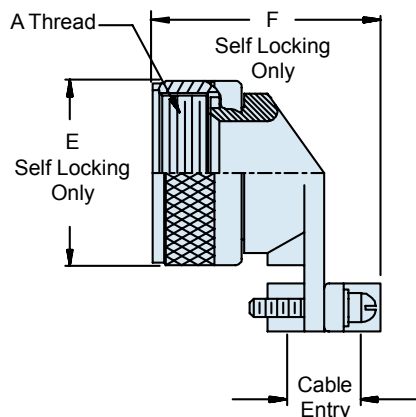
**S** = Self-Locking  
**-1** = Non-Self-Locking  
**N** = Non-Detented

## Material and Finish Designator

**A** = Aluminum, Black Anodize  
**N** = Aluminum, Electroless Nickel  
**W** = Aluminum, 1000 Hour Cadmium  
Olive Drab over Electroless Nickel

## APPLICATION NOTES

1. Assembly to be identified with manufacturer's name and part number, space permitting.
2. Cable Entry is defined as the accommodation entry for the wire bundle or cable.
3. Dimensions are not intended for inspection criteria.
4. For complete dimensions, see the applicable Military Specification.
5. Metric dimensions (mm) are in parentheses.



**TABLE I: Shell Size, Cable Entry and Backshell Dimensions**

| Dash No. | A Thread Class 2B | Ø E Max Self-Locking |        | F Max Self-Locking |        | G ±.062 (1.6) |        | H Max |        | Cable Entry |        |       |        |
|----------|-------------------|----------------------|--------|--------------------|--------|---------------|--------|-------|--------|-------------|--------|-------|--------|
|          |                   |                      |        |                    |        |               |        |       |        | Min         |        | Max   |        |
| 3*+      | .562 - 24 UNEF    | -                    | -      | -                  | -      | .777          | (19.7) | .782  | (19.9) | .125        | (3.2)  | .204  | (5.2)  |
| 8        | .500 - 20 UNF     | .885                 | (22.5) | 1.257              | (31.9) | .746          | (18.9) | .782  | (19.9) | .125        | (3.2)  | .204  | (5.2)  |
| 10       | .625 - 24 UNEF    | 1.010                | (25.7) | 1.339              | (34.0) | .805          | (20.4) | .862  | (21.9) | .187        | (4.7)  | .286  | (7.3)  |
| 12       | .750 - 20 UNEF    | 1.135                | (28.8) | 1.532              | (38.9) | .867          | (22.0) | .968  | (24.6) | .291        | (7.4)  | .416  | (10.6) |
| 14       | .875 - 20 UNEF    | 1.260                | (32.0) | 1.592              | (40.4) | .930          | (23.6) | 1.003 | (25.5) | .351        | (8.9)  | .476  | (12.1) |
| 16       | 1.000 - 20 UNEF   | 1.385                | (35.2) | 1.741              | (44.2) | .994          | (25.2) | 1.061 | (26.9) | .501        | (12.7) | .626  | (15.9) |
| 18       | 1.062 - 18 UNEF   | 1.510                | (38.4) | 1.853              | (47.1) | 1.171         | (29.7) | 1.394 | (35.4) | .518        | (13.2) | .706  | (17.9) |
| 20       | 1.188 - 18 UNEF   | 1.635                | (41.5) | 1.978              | (50.2) | 1.234         | (31.2) | 1.466 | (37.2) | .581        | (14.8) | .831  | (21.1) |
| 22       | 1.313 - 18 UNEF   | 1.760                | (44.7) | 2.108              | (53.5) | 1.296         | (32.9) | 1.572 | (39.9) | .644        | (16.4) | .956  | (24.3) |
| 24       | 1.438 - 18 UNEF   | 1.885                | (47.9) | 2.228              | (56.6) | 1.358         | (34.5) | 1.698 | (43.1) | .706        | (17.9) | 1.081 | (27.5) |
| 28+      | 1.750 - 18 UNS    | 2.135                | (54.2) | 2.528              | (64.2) | 1.572         | (39.9) | 1.790 | (45.5) | .750        | (19.1) | 1.187 | (30.1) |
| 32+      | 2.000 - 18 UNS    | 2.395                | (60.8) | 2.591              | (65.8) | 1.797         | (45.6) | 2.035 | (51.7) | .875        | (22.2) | 1.250 | (31.8) |
| 36+      | 2.250 - 16 UN     | 2.635                | (66.9) | 2.716              | (69.0) | 1.922         | (48.8) | 2.386 | (60.6) | .938        | (23.8) | 1.375 | (34.9) |
| 40+      | 2.500 - 16 UN     | 2.885                | (73.3) | 2.841              | (72.2) | 2.047         | (52.0) | 2.566 | (65.2) | .938        | (23.8) | 1.500 | (38.1) |
| 44+      | 2.750 - 16 UN     | 3.135                | (79.6) | 3.091              | (78.5) | 2.296         | (58.3) | 2.860 | (72.6) | 1.188       | (30.2) | 1.750 | (44.5) |
| 48+      | 3.000 - 16 UN     | 3.385                | (86.0) | 3.216              | (81.7) | 2.421         | (61.5) | 3.344 | (84.9) | 1.312       | (33.3) | 1.875 | (47.6) |
| 61*+     | 1.500 - 18 UNEF   | -                    | -      | -                  | -      | 1.388         | (35.3) | 1.775 | (45.1) | .706        | (17.9) | 1.081 | (27.5) |

\* Not Available in Self Locking + Not Available under M83723/15A