

# AS85049/23 and MS3189C 45° EMI/RFI Non-Environmental Backshell



AS85049

B

| CONNECTOR DESIGNATOR: |   |
|-----------------------|---|
| <b>A</b>              | AS50151 Series AS34001                                    |
|                       | MIL-DTL-26482 Series II                                   |
|                       | AS81703 Series III  |
|                       | MIL-DTL-83723 Series I & III                              |
|                       | 40M39569, DEF 5326-3, EN 2997                             |
|                       | EN 3646, ESC 10, ESC 11, LN 29504                         |
|                       | NFC93422 Series HE302<br>PAN 6432-1, PAN 6432-2, PATT 602 |

Basic Part Number     Dash Number (Table II)

M85049/23 - 21 N

Superseded Part Number

MS3189C 21 N

Basic Part No.

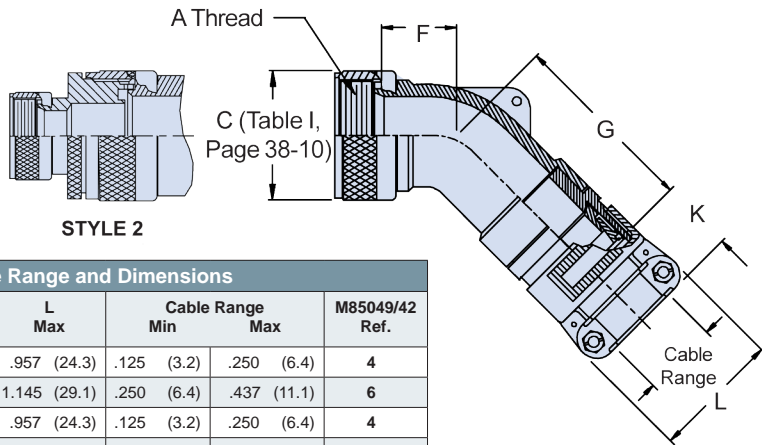
Dash No.

Finish  
(Material is Aluminum Only)

**A** = Cadmium Olive Drab over Nickel  
**C** = Cadmium Olive Drab  
**N** = Electroless Nickel

Finish / Material

**B** = Black Cadmium / Stainless Steel  
**N** = Electroless Nickel / Aluminum  
**S** = Passivated / Stainless Steel  
**W** = 1,000 Hr. Cadmium Olive Drab over Electroless Nickel / Aluminum  
**X** = Aluminum, Nickel Fluorocarbon Polymer  
**Z** = Aluminum, Zinc-Nickel, Black  
**XS** = Stainless Steel, Nickel Fluorocarbon Polymer  
**ZS** = Stainless Steel, Zinc-Nickel, Black



| TABLE II: Dash Number, Cable Range and Dimensions |            |              |              |              |              |             |              |                |
|---|------------|--------------|--------------|--------------|--------------|-------------|--------------|----------------|
| Dash No.  | Shell Size | F Max        | G Max        | K Ref.       | L Max        | Cable Range |              | M85049/42 Ref. |
|   |            |              |              |              |              | Min         | Max          |                |
| 1   | 3          | .687 (17.4)  | 1.915 (48.6) | 1.027 (26.1) | .957 (24.3)  | .125 (3.2)  | .250 (6.4)   | 4              |
| 2   | 3          | 1.500 (38.1) | 2.035 (51.7) | 1.027 (26.1) | 1.145 (29.1) | .250 (6.4)  | .437 (11.1)  | 6              |
| 3   | 8          | .625 (15.9)  | 1.307 (33.2) | 1.027 (26.1) | .957 (24.3)  | .125 (3.2)  | .250 (6.4)   | 4              |
| 4   | 10         | .687 (17.4)  | 1.975 (50.2) | 1.027 (26.1) | .957 (24.3)  | .125 (3.2)  | .312 (7.9)   | 4              |
| 5   | 10         | .687 (17.4)  | 1.370 (34.8) | 1.027 (26.1) | 1.145 (29.1) | .250 (6.4)  | .375 (9.5)   | 6              |
| 6   | 12         | .750 (19.1)  | 2.035 (51.7) | 1.027 (26.1) | .957 (24.3)  | .125 (3.2)  | .312 (7.9)   | 4              |
| 7   | 12         | .750 (19.1)  | 2.035 (51.7) | 1.027 (26.1) | 1.145 (29.1) | .250 (6.4)  | .437 (11.1)  | 6              |
| 8   | 12         | .750 (19.1)  | 2.035 (51.7) | 1.027 (26.1) | 1.332 (33.8) | .350 (8.9)  | .500 (12.7)  | 10             |
| 9   | 14         | .812 (20.6)  | 2.125 (54.0) | 1.027 (26.1) | 1.145 (29.1) | .250 (6.4)  | .437 (11.1)  | 6              |
| 10  | 14         | .812 (20.6)  | 1.780 (45.2) | 1.027 (26.1) | 1.332 (33.8) | .350 (8.9)  | .575 (14.6)  | 10             |
| 11  | 16         | .906 (23.0)  | 2.235 (56.8) | 1.027 (26.1) | 1.145 (29.1) | .250 (6.4)  | .437 (11.1)  | 6              |
| 12  | 16         | .906 (23.0)  | 1.875 (47.6) | 1.059 (26.9) | 1.551 (39.4) | .500 (12.7) | .700 (17.8)  | 12             |
| 13  | 18         | 1.093 (27.8) | 2.425 (61.6) | 1.027 (26.1) | 1.332 (33.8) | .350 (8.9)  | .625 (15.9)  | 10             |
| 14  | 18         | 1.093 (27.8) | 2.062 (52.4) | 1.156 (29.4) | 1.770 (45.0) | .625 (15.9) | .779 (19.8)  | 16             |
| 15  | 20         | 1.093 (27.8) | 2.425 (61.6) | 1.027 (26.1) | 1.332 (33.8) | .350 (8.9)  | .625 (15.9)  | 10             |
| 16  | 20         | 1.093 (27.8) | 2.062 (52.4) | 1.156 (29.4) | 1.770 (45.0) | .625 (15.9) | .904 (23.0)  | 16             |
| 17  | 22         | 1.188 (30.2) | 2.575 (65.4) | 1.059 (26.9) | 1.551 (39.4) | .500 (12.7) | .750 (19.1)  | 12             |
| 18  | 22         | 1.188 (30.2) | 2.218 (56.3) | 1.375 (34.9) | 2.113 (53.7) | .875 (22.2) | 1.029 (26.1) | 20             |
| 19  | 24         | 1.188 (30.2) | 2.575 (65.4) | 1.069 (27.2) | 1.551 (39.4) | .500 (12.7) | .750 (19.1)  | 12             |
| 20  | 24         | 1.188 (30.2) | 2.218 (56.3) | 1.375 (34.9) | 2.113 (53.7) | .875 (22.2) | 1.144 (29.1) | 20             |
| 21  | 28         | 1.312 (33.3) | 2.625 (66.7) | 1.156 (33.7) | 1.770 (45.0) | .625 (15.9) | .937 (23.8)  | 16             |

Continued on Page B-44

Dimensions in inches (millimeters) and are subject to change without notice.

- APPLICATION NOTES

  1. For complete dimensions see the applicable Military Specification.
  2. When maximum cable entry is exceeded, Style 2 will be supplied.
  3. Metric dimensions (mm) are in parentheses.
  4. Cable Range is defined as the accommodation range for the wire bundle or cable. Dimensions shown are not intended for inspection criteria.



# AS85049/23 and MS3189C 45° EMI/RFI Non-Environmental Backshell

TABLE II: Continued from Page B-43

| Dash No. | Shell Size | F Max        | G Max        | K Ref.       | L Max        | Cable Range  |              | M85049/42 Ref. |
|----------|------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|
|          |            |              |              |              |              | Min          | Max          |                |
| 22       | 28         | 1.312 (33.3) | 2.281 (57.9) | 1.500 (38.1) | 2.363 (60.0) | 1.000 (25.4) | 1.375 (34.9) | 24             |
| 23       | 32         | 1.375 (34.9) | 2.725 (69.2) | 1.156 (29.4) | 1.770 (45.0) | .625 (15.9)  | .937 (23.8)  | 16             |
| 24       | 32         | 1.375 (34.9) | 2.725 (69.2) | 1.375 (34.9) | 2.113 (53.7) | .875 (22.2)  | 1.250 (31.8) | 20             |
| 25       | 32         | 1.375 (34.9) | 2.500 (63.5) | 1.781 (45.2) | 2.770 (70.4) | 1.250 (31.8) | 1.625 (41.3) | 28             |
| 26       | 36         | 1.406 (35.7) | 2.815 (71.5) | 1.156 (29.4) | 1.770 (45.0) | .625 (15.9)  | .937 (23.8)  | 16             |
| 27       | 36         | 1.406 (35.7) | 2.815 (71.5) | 1.500 (38.1) | 2.363 (60.0) | 1.000 (25.4) | 1.375 (34.9) | 24             |
| 28       | 36         | 1.406 (35.7) | 2.469 (62.7) | 1.830 (46.5) | 3.020 (76.7) | 1.437 (36.5) | 1.840 (46.7) | 32             |
| 29       | 40         | 2.156 (54.8) | 2.815 (71.5) | 1.156 (29.4) | 1.770 (45.0) | .625 (15.9)  | .937 (23.8)  | 16             |
| 30       | 40         | 2.156 (54.8) | 2.815 (71.5) | 1.500 (38.1) | 2.363 (60.0) | 1.000 (25.4) | 1.375 (34.9) | 24             |
| 31       | 40         | 2.156 (54.8) | 2.469 (62.7) | 1.830 (46.5) | 3.020 (76.7) | 1.437 (36.5) | 1.875 (47.6) | 32             |
| 32       | 44         | 2.156 (54.8) | 2.815 (71.5) | 1.156 (29.4) | 1.770 (45.0) | .625 (15.9)  | .937 (23.8)  | 16             |
| 33       | 44         | 2.156 (54.8) | 2.815 (71.5) | 1.500 (38.1) | 2.363 (60.0) | 1.000 (25.4) | 1.375 (34.9) | 24             |
| 34       | 44         | 2.156 (54.8) | 2.469 (62.7) | 1.830 (46.5) | 3.020 (76.7) | 1.437 (36.5) | 1.875 (47.6) | 32             |
| 35       | 48         | 2.156 (54.8) | 2.815 (71.5) | 1.156 (29.4) | 1.770 (45.0) | .625 (15.9)  | .937 (23.8)  | 16             |
| 36       | 48         | 2.156 (54.8) | 2.815 (71.5) | 1.500 (38.1) | 2.363 (60.0) | 1.000 (25.4) | 1.375 (34.9) | 24             |
| 37       | 48         | 2.156 (54.8) | 2.469 (62.7) | 1.830 (46.5) | 3.020 (76.7) | 1.437 (36.5) | 1.875 (47.6) | 32             |
| 38       | 61         | 1.188 (30.2) | 2.575 (65.4) | 1.059 (26.9) | 1.551 (39.4) | .500 (12.7)  | .750 (19.1)  | 12             |
| 39       | 61         | 1.188 (30.2) | 2.218 (56.3) | 1.375 (34.9) | 2.113 (53.7) | .875 (22.2)  | 1.184 (30.1) | 20             |
| 40       | 16         | .906 (23.0)  | 2.235 (56.8) | 1.027 (26.1) | 1.332 (33.8) | .350 (8.9)   | .625 (15.9)  | 10             |
| 41       | 18         | 1.093 (27.8) | 2.425 (61.6) | 1.027 (26.1) | .957 (24.3)  | .125 (3.2)   | .312 (7.9)   | 4              |
| 42       | 18         | 1.093 (27.8) | 2.425 (61.6) | 1.027 (26.1) | 1.145 (29.1) | .250 (6.4)   | .437 (11.1)  | 6              |
| 43       | 20         | 1.093 (27.8) | 2.425 (61.6) | 1.027 (26.1) | 1.145 (29.1) | .250 (6.4)   | .437 (11.1)  | 6              |
| 44       | 22         | 1.188 (30.2) | 2.575 (65.4) | 1.027 (26.1) | .957 (24.3)  | .125 (3.2)   | .312 (7.9)   | 4              |
| 45       | 22         | 1.188 (30.2) | 2.575 (65.4) | 1.027 (26.1) | 1.145 (29.1) | .250 (6.4)   | .437 (11.1)  | 6              |
| 46       | 24         | 1.188 (30.2) | 2.575 (65.4) | 1.027 (26.1) | 1.332 (33.8) | .350 (8.9)   | .625 (15.9)  | 10             |
| 47       | 36         | 1.406 (35.7) | 2.815 (71.5) | 1.059 (26.9) | 1.551 (39.4) | .500 (12.7)  | .750 (19.1)  | 12             |
| 48       | 40         | 2.156 (54.8) | 2.815 (71.5) | 1.059 (26.9) | 1.551 (39.4) | .500 (12.7)  | .750 (19.1)  | 12             |
| 49*      | 10         | 1.500 (38.1) | 2.035 (51.7) | 1.027 (26.1) | 1.145 (29.1) | .250 (6.4)   | .437 (11.1)  | 6              |
| 50*      | 14         | 1.842 (46.8) | 2.425 (61.6) | 1.059 (26.9) | 1.551 (39.4) | .500 (12.7)  | .750 (19.1)  | 12             |
| 51*      | 16         | 1.938 (49.2) | 2.575 (65.4) | 1.156 (29.4) | 1.770 (45.0) | .625 (15.9)  | .937 (23.8)  | 16             |
| 52       | 18         | 1.093 (27.8) | 2.425 (61.6) | 1.059 (26.9) | 1.551 (39.4) | .500 (12.7)  | .750 (19.1)  | 12             |
| 53       | 61         | 1.188 (30.2) | 2.575 (65.4) | 1.156 (29.4) | 1.770 (45.0) | .625 (15.9)  | .937 (23.8)  | 16             |
| 54       | 20         | 1.093 (27.8) | 2.425 (61.6) | 1.059 (26.9) | 1.551 (39.4) | .500 (12.7)  | .750 (19.1)  | 12             |
| 55*      | 20         | 2.061 (52.3) | 2.625 (66.7) | 1.375 (34.9) | 2.113 (53.7) | .875 (22.2)  | 1.250 (31.8) | 20             |
| 56       | 22         | 1.188 (30.2) | 2.575 (65.4) | 1.027 (26.1) | 1.332 (33.8) | .350 (8.9)   | .625 (15.9)  | 10             |
| 57       | 22         | 1.188 (30.2) | 2.575 (65.4) | 1.156 (29.4) | 1.770 (45.0) | .625 (15.9)  | .937 (23.8)  | 16             |
| 58*      | 22         | 2.061 (52.3) | 2.625 (66.7) | 1.375 (34.9) | 2.113 (53.7) | .875 (22.2)  | 1.250 (31.8) | 20             |
| 59       | 24         | 1.188 (30.2) | 2.575 (65.4) | 1.156 (29.4) | 1.770 (45.0) | .625 (15.9)  | .937 (23.8)  | 16             |
| 60       | 28         | 1.312 (33.3) | 2.625 (66.7) | 1.059 (26.9) | 1.551 (39.4) | .500 (12.7)  | .750 (19.1)  | 12             |
| 61       | 28         | 1.312 (33.3) | 2.625 (66.7) | 1.375 (34.9) | 2.113 (53.7) | .875 (22.2)  | 1.250 (31.8) | 20             |
| 62       | 32         | 1.375 (34.9) | 2.725 (69.2) | 1.500 (38.1) | 2.363 (60.0) | 1.000 (25.4) | 1.375 (34.9) | 24             |
| 63       | 36         | 1.406 (35.7) | 2.815 (71.5) | 1.375 (34.9) | 2.113 (53.7) | .875 (22.2)  | 1.250 (31.8) | 20             |
| 64       | 36         | 1.406 (35.7) | 2.815 (71.5) | 1.781 (45.2) | 2.770 (70.4) | 1.250 (31.8) | 1.625 (41.3) | 28             |
| 65       | 40         | 2.156 (54.8) | 2.815 (71.5) | 1.375 (34.9) | 2.113 (53.7) | .875 (22.2)  | 1.250 (31.8) | 20             |
| 66       | 40         | 2.156 (54.8) | 2.815 (71.5) | 1.781 (45.2) | 2.770 (70.4) | 1.250 (31.8) | 1.625 (41.3) | 28             |
| 67       | 44         | 2.156 (54.8) | 2.815 (71.5) | 1.375 (34.9) | 2.113 (53.7) | .875 (22.2)  | 1.250 (31.8) | 20             |
| 68       | 44         | 2.156 (54.8) | 2.815 (71.5) | 1.781 (45.2) | 2.770 (70.4) | 1.250 (31.8) | 1.625 (41.3) | 28             |
| 69       | 48         | 2.156 (54.8) | 2.815 (71.5) | 1.375 (34.9) | 2.113 (53.7) | .875 (22.2)  | 1.250 (31.8) | 20             |
| 70       | 48         | 2.156 (54.8) | 2.815 (71.5) | 1.781 (45.2) | 2.770 (70.4) | 1.250 (31.8) | 1.625 (41.3) | 28             |
| 71*      | 12         | 1.684 (42.8) | 2.236 (56.8) | 1.027 (26.1) | 1.332 (33.8) | .350 (8.9)   | .625 (15.9)  | 10             |
| 72*      | 18         | 1.938 (49.2) | 2.575 (65.4) | 1.156 (29.4) | 1.770 (45.0) | .625 (15.9)  | .937 (23.8)  | 16             |
| 73*      | 24         | 2.061 (52.3) | 2.625 (66.7) | 1.375 (34.9) | 2.113 (53.7) | .875 (22.2)  | 1.250 (31.8) | 20             |
| 74       | 14         | .812 (20.6)  | 2.125 (54.0) | 1.027 (26.1) | .957 (24.3)  | .125 (3.2)   | .312 (7.9)   | 04             |
| 75       | 16         | .906 (23.0)  | 2.235 (56.8) | 1.027 (26.1) | .957 (24.3)  | .125 (3.2)   | .312 (7.9)   | 04             |

\* Denotes Style 2

Dimensions in inches (millimeters) and are subject to change without notice.