

AS85049/7 and MS3189B 45° Environmental Backshell



AS85049

B

CONNECTOR DESIGNATOR:

| | |
|----------|---|
| A | 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 PAN 6432-1, PAN 6432-2, PATT 602 |



APPLICATION NOTES

- For complete dimensions see the applicable Military Specification.
- Metric dimensions (mm) are in parentheses.
- When maximum cable entry is exceeded, Style 2 will be supplied.
- Cable Range is defined as the accommodation range for the wire bundle or cable. Dimensions shown are not intended for inspection criteria.
- Approximate chain lengths: Dash No. 01-12 = 5.0 (127.0); Dash No. 13-29 = 6.0 (152.4).

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 = Nickel Fluorocarbon Polymer / Aluminum
Y = Pure Dense Electrodeposited Aluminum / Aluminum
Z = Zinc Nickel, Black / Aluminum
XS = Nickel Fluorocarbon Polymer / Stainless Steel
YS = Pure Dense Electrodeposited Aluminum / Stainless Steel
ZS = Zinc Nickel, Black / Stainless Steel



STYLE 2

TABLE II: Dash Number and Cable Range

| Dash No. | Shell Size | F Max | G ± .125 (3.2) | K Ref. | L Max | Cable Range Min | Cable Range Max | M85049/42 Ref. |
|----------|------------|--------------|----------------|--------------|--------------|-----------------|-----------------|----------------|
| 1 | 03 | .688 (17.5) | 1.852 (47.0) | 1.027 (26.1) | .957 (24.3) | .125 (3.2) | .250 (6.4) | 4 |
| 2 | 03 | 1.500 (38.1) | 1.972 (50.1) | 1.027 (26.1) | 1.145 (29.1) | .250 (6.4) | .437 (11.1) | 6 |
| 3 | 08 | .625 (15.9) | 1.244 (31.6) | 1.027 (26.1) | .957 (24.3) | .125 (3.2) | .250 (6.4) | 4 |
| 4 | 10 | .688 (17.5) | 1.912 (48.6) | 1.027 (26.1) | .957 (24.3) | .125 (3.2) | .312 (7.9) | 4 |
| 5 | 10 | .688 (17.5) | 1.307 (33.2) | 1.027 (26.1) | 1.145 (29.1) | .250 (6.4) | .375 (9.5) | 6 |
| 6 | 12 | .750 (19.1) | 1.972 (50.1) | 1.027 (26.1) | .957 (24.3) | .125 (3.2) | .312 (7.9) | 4 |
| 7 | 12 | .750 (19.1) | 1.972 (50.1) | 1.027 (26.1) | 1.145 (29.1) | .250 (6.4) | .437 (11.1) | 6 |
| 8 | 12 | .750 (19.1) | 1.972 (50.1) | 1.027 (26.1) | 1.332 (33.8) | .350 (8.9) | .500 (12.7) | 10 |
| 9 | 14 | .812 (20.6) | 2.062 (52.4) | 1.027 (26.1) | 1.145 (29.1) | .250 (6.4) | .437 (11.1) | 6 |
| 10 | 14 | .812 (20.6) | 1.717 (43.6) | 1.027 (26.1) | 1.332 (33.8) | .350 (8.9) | .575 (14.6) | 10 |
| 11 | 16 | .906 (23.0) | 2.172 (55.2) | 1.027 (26.1) | 1.145 (29.1) | .250 (6.4) | .437 (11.1) | 6 |
| 12 | 16 | .906 (23.0) | 1.812 (46.0) | 1.059 (26.9) | 1.551 (39.4) | .500 (12.7) | .700 (17.8) | 12 |
| 13 | 18 | 1.093 (27.8) | 2.362 (60.0) | 1.027 (26.1) | 1.332 (33.8) | .350 (8.9) | .625 (15.9) | 10 |
| 14 | 18 | 1.093 (27.8) | 2.000 (50.8) | 1.156 (29.4) | 1.770 (45.0) | .625 (15.9) | .779 (19.8) | 16 |
| 15 | 20 | 1.093 (27.8) | 2.362 (60.0) | 1.027 (26.1) | 1.332 (33.8) | .350 (8.9) | .625 (15.9) | 10 |
| 16 | 20 | 1.093 (27.8) | 2.000 (50.8) | 1.156 (29.4) | 1.770 (45.0) | .625 (15.9) | .904 (23.0) | 16 |
| 17 | 22 | 1.188 (30.2) | 2.512 (63.8) | 1.059 (26.9) | 1.551 (39.4) | .500 (12.7) | .750 (19.1) | 12 |
| 18 | 22 | 1.188 (30.2) | 2.155 (54.7) | 1.375 (34.9) | 2.113 (53.7) | .875 (22.2) | 1.029 (26.1) | 20 |
| 19 | 24 | 1.188 (30.2) | 2.512 (63.8) | 1.059 (26.9) | 1.551 (39.4) | .500 (12.7) | .750 (19.1) | 12 |
| 20 | 24 | 1.188 (30.2) | 2.093 (53.2) | 1.375 (34.9) | 2.113 (53.7) | .875 (22.2) | 1.144 (29.1) | 20 |
| 21 | 28 | 1.312 (33.3) | 2.500 (63.5) | 1.156 (33.7) | 1.770 (45.0) | .625 (15.9) | .937 (23.8) | 16 |

Table Continued on Page B-22

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



AS85049/7 and MS3189B 45° Environmental Backshell

TABLE II: Dash Number and Cable Range (Continued From Page B-21)

| Dash No. | Shell Size | F Max | G ± .125 (3.2) | K Ref. | L Max | Cable Range | | M85049/42 Ref. |
|----------|------------|--------------|----------------|--------------|--------------|--------------|--------------|----------------|
| | | | | | | Min | Max | |
| 22 | 28 | 1.312 (33.3) | 2.218 (56.3) | 1.500 (38.1) | 2.363 (60.0) | 1.000 (25.4) | 1.375 (34.9) | 24 |
| 23 | 32 | 1.375 (34.9) | 2.662 (67.6) | 1.156 (29.4) | 1.770 (45.0) | .625 (15.9) | .937 (23.8) | 16 |
| 24 | 32 | 1.375 (34.9) | 2.662 (67.6) | 1.375 (34.9) | 2.113 (53.7) | .875 (22.2) | 1.250 (31.8) | 20 |
| 25 | 32 | 1.375 (34.9) | 2.312 (58.7) | 1.781 (45.2) | 2.770 (70.4) | 1.250 (31.8) | 1.625 (41.3) | 28 |
| 26 | 36 | 1.406 (35.7) | 2.752 (69.9) | 1.156 (29.4) | 1.770 (45.0) | .625 (15.9) | .937 (23.8) | 16 |
| 27 | 36 | 1.406 (35.7) | 2.752 (69.9) | 1.500 (38.1) | 2.363 (60.0) | 1.000 (25.4) | 1.375 (34.9) | 24 |
| 28 | 36 | 1.406 (35.7) | 2.406 (61.1) | 1.830 (46.5) | 3.020 (76.7) | 1.437 (36.5) | 1.840 (46.7) | 32 |
| 29 | 40 | 2.156 (54.8) | 2.752 (69.9) | 1.156 (29.4) | 1.770 (45.0) | .625 (15.9) | .937 (23.8) | 16 |
| 30 | 40 | 2.156 (54.8) | 2.752 (69.9) | 1.500 (38.1) | 2.363 (60.0) | 1.000 (25.4) | 1.375 (34.9) | 24 |
| 31 | 40 | 2.156 (54.8) | 2.406 (61.1) | 1.830 (46.5) | 3.020 (76.7) | 1.437 (36.5) | 1.875 (47.6) | 32 |
| 32 | 44 | 2.156 (54.8) | 2.752 (69.9) | 1.156 (29.4) | 1.770 (45.0) | .625 (15.9) | .937 (23.8) | 16 |
| 33 | 44 | 2.156 (54.8) | 2.752 (69.9) | 1.500 (38.1) | 2.363 (60.0) | 1.000 (25.4) | 1.375 (34.9) | 24 |
| 34 | 44 | 2.156 (54.8) | 2.406 (61.1) | 1.830 (46.5) | 3.020 (76.7) | 1.437 (36.5) | 1.875 (47.6) | 32 |
| 35 | 48 | 2.156 (54.8) | 2.752 (69.9) | 1.156 (29.4) | 1.770 (45.0) | .625 (15.9) | .937 (23.8) | 16 |
| 36 | 48 | 2.156 (54.8) | 2.752 (69.9) | 1.500 (38.1) | 2.363 (60.0) | 1.000 (25.4) | 1.375 (34.9) | 24 |
| 37 | 48 | 2.156 (54.8) | 2.406 (61.1) | 1.830 (46.5) | 3.020 (76.7) | 1.437 (36.5) | 1.875 (47.6) | 32 |
| 38 | 61 | 1.188 (30.2) | 2.512 (63.8) | 1.059 (26.9) | 1.551 (39.4) | .500 (12.7) | .750 (19.1) | 12 |
| 39 | 61 | 1.188 (30.2) | 2.155 (54.7) | 1.375 (34.9) | 2.113 (53.7) | .875 (22.2) | 1.184 (30.1) | 20 |
| 40 | 16 | .906 (23.0) | 2.172 (55.2) | 1.027 (26.1) | 1.332 (33.8) | .350 (8.9) | .625 (15.9) | 10 |
| 41 | 18 | 1.093 (27.8) | 2.362 (60.0) | 1.027 (26.1) | .957 (24.3) | .125 (3.2) | .312 (7.9) | 4 |
| 42 | 18 | 1.093 (27.8) | 2.362 (60.0) | 1.027 (26.1) | 1.145 (29.1) | .250 (6.4) | .437 (11.1) | 6 |
| 43 | 20 | 1.093 (27.8) | 2.362 (60.0) | 1.027 (26.1) | 1.145 (29.1) | .250 (6.4) | .437 (11.1) | 6 |
| 44 | 22 | 1.188 (30.2) | 2.512 (63.8) | 1.027 (26.1) | .957 (24.3) | .125 (3.2) | .312 (7.9) | 4 |
| 45 | 22 | 1.188 (30.2) | 2.512 (63.8) | 1.027 (26.1) | 1.145 (29.1) | .250 (6.4) | .437 (11.1) | 6 |
| 46 | 24 | 1.188 (30.2) | 2.512 (63.8) | 1.027 (26.1) | 1.332 (33.8) | .350 (8.9) | .625 (15.9) | 10 |
| 47 | 36 | 1.406 (35.7) | 2.752 (69.9) | 1.059 (26.9) | 1.551 (39.4) | .500 (12.7) | .750 (19.1) | 12 |
| 48 | 40 | 2.156 (54.8) | 2.752 (69.9) | 1.059 (26.9) | 1.551 (39.4) | .500 (12.7) | .750 (19.1) | 12 |
| 49* | 10 | 1.500 (38.1) | 1.972 (50.1) | 1.027 (26.1) | 1.145 (29.1) | .250 (6.4) | .437 (11.1) | 6 |
| 50* | 14 | 1.842 (46.8) | 2.362 (60.0) | 1.059 (26.9) | 1.551 (39.4) | .500 (12.7) | .750 (19.1) | 12 |
| 51* | 16 | 1.938 (49.2) | 2.512 (63.8) | 1.156 (29.4) | 1.770 (45.0) | .625 (15.9) | .937 (23.8) | 16 |
| 52 | 18 | 1.093 (27.8) | 2.362 (60.0) | 1.059 (26.9) | 1.551 (39.4) | .500 (12.7) | .750 (19.1) | 12 |
| 53 | 61 | 1.188 (30.2) | 2.512 (63.8) | 1.156 (29.4) | 1.770 (45.0) | .625 (15.9) | .937 (23.8) | 16 |
| 54 | 20 | 1.093 (27.8) | 2.362 (60.0) | 1.059 (26.9) | 1.551 (39.4) | .500 (12.7) | .750 (19.1) | 12 |
| 55* | 20 | 2.061 (52.3) | 2.562 (65.1) | 1.375 (34.9) | 2.113 (53.7) | .875 (22.2) | 1.250 (31.8) | 20 |
| 56 | 22 | 1.188 (30.2) | 2.512 (63.8) | 1.027 (26.1) | 1.332 (33.8) | .350 (8.9) | .625 (15.9) | 10 |
| 57 | 22 | 1.188 (30.2) | 2.512 (63.8) | 1.156 (29.4) | 1.770 (45.0) | .625 (15.9) | .937 (23.8) | 16 |
| 58* | 22 | 2.061 (52.3) | 2.562 (65.1) | 1.375 (34.9) | 2.113 (53.7) | .875 (22.2) | 1.250 (31.8) | 20 |
| 59 | 24 | 1.188 (30.2) | 2.512 (63.8) | 1.156 (29.4) | 1.770 (45.0) | .625 (15.9) | .937 (23.8) | 16 |
| 60 | 28 | 1.312 (33.3) | 2.562 (65.1) | 1.059 (26.9) | 1.551 (39.4) | .500 (12.7) | .750 (19.1) | 12 |
| 61 | 28 | 1.312 (33.3) | 2.562 (65.1) | 1.375 (34.9) | 2.113 (53.7) | .875 (22.2) | 1.250 (31.8) | 20 |
| 62 | 32 | 1.375 (34.9) | 2.662 (67.6) | 1.500 (38.1) | 2.363 (60.0) | 1.000 (25.4) | 1.375 (34.9) | 24 |
| 63 | 36 | 1.406 (35.7) | 2.752 (69.9) | 1.375 (34.9) | 2.113 (53.7) | .875 (22.2) | 1.250 (31.8) | 20 |
| 64 | 36 | 1.406 (35.7) | 2.752 (69.9) | 1.781 (45.2) | 2.770 (70.4) | 1.250 (31.8) | 1.625 (41.3) | 28 |
| 65 | 40 | 2.156 (54.8) | 2.752 (69.9) | 1.375 (34.9) | 2.113 (53.7) | .875 (22.2) | 1.250 (31.8) | 20 |
| 66 | 40 | 2.156 (54.8) | 2.752 (69.9) | 1.781 (45.2) | 2.770 (70.4) | 1.250 (31.8) | 1.625 (41.3) | 28 |
| 67 | 44 | 2.156 (54.8) | 2.752 (69.9) | 1.375 (34.9) | 2.113 (53.7) | .875 (22.2) | 1.250 (31.8) | 20 |
| 68 | 44 | 2.156 (54.8) | 2.752 (69.9) | 1.781 (45.2) | 2.770 (70.4) | 1.250 (31.8) | 1.625 (41.3) | 28 |
| 69 | 48 | 2.156 (54.8) | 2.752 (69.9) | 1.375 (34.9) | 2.113 (53.7) | .875 (22.2) | 1.250 (31.8) | 20 |
| 70 | 48 | 2.156 (54.8) | 2.752 (69.9) | 1.781 (45.2) | 2.770 (70.4) | 1.250 (31.8) | 1.625 (41.3) | 28 |
| 71* | 12 | 1.654 (42.0) | 2.173 (55.2) | 1.027 (26.1) | 1.332 (33.8) | .350 (8.9) | .625 (15.9) | 10 |
| 72* | 18 | 1.938 (49.2) | 2.512 (63.8) | 1.156 (29.4) | 1.770 (45.0) | .625 (15.9) | .937 (23.8) | 16 |
| 73* | 24 | 2.061 (52.3) | 2.562 (65.1) | 1.375 (34.9) | 2.113 (53.7) | .875 (22.2) | 1.250 (31.8) | 20 |
| 74 | 14 | .812 (20.6) | 2.062 (52.4) | 1.027 (26.1) | .957 (24.3) | .125 (3.2) | .312 (7.9) | 4 |
| 75 | 16 | .906 (23.0) | 2.172 (55.2) | 1.027 (26.1) | .957 (24.3) | .125 (3.2) | .312 (7.9) | 4 |

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