



High Performance Backshells and Caps

SUNBANK products define the standard for highly reliable, environment resisting, electrically passive components. We offer a full range of backshells and caps in different materials and platings.

Highest reliability ■ Qualified according to:
· AS85049
· MIL-DTL-38999
· MS27501/MS27502

Designed for a wide range of qualified products ■ Available for most of the standard connectors known on the market.

Many plating options ■ High corrosion resistance and electrical continuity properties.

M85049 Backshells / D38999 & MS27 Protective Caps

Overview

| Backshell style | Connector type | AS85049 Series |
|--|--|---|
| Cable clamp strain relief  | MIL-DTL-38999 Series III & IV EN3645 | AS85049/38 - see p.03 |
| | MIL-DTL-27599 MIL-DTL-38999 Series I & II | AS85049/49-2 - see p.05 |
| | MIL-DTL-5015 crimp MIL-DTL-26482 Series 2 AS81703 Series 3 MIL-DTL-83723 Series 1 & 3 | AS85049/43 - see p.04 AS85049/51 - see p.06 AS85049/52 - see p.07 |
| One arm strain relief  | MIL-DTL-5015 crimp MIL-DTL-26482 Series 2 AS81703 Series 3 MIL-DTL-83723 Series 1 & 3 | AS85049/53 - see p.08 AS85049/54 - see p.08 AS85049/55 - see p.08 |
| Shrink boot adapter  | MIL-DTL-5015 crimp MIL-DTL-26482 Series 2 AS81703 Series 3 MIL-DTL-83723 Series 1 & 3 | AS85049/60-1 - see p.09 |
| | MIL-DTL-27599 MIL-DTL-38999 Series I & II | AS85049/62 - see p.10 |
| | MIL-DTL-38999 Series III & IV EN3645 | AS85049/69 - see p.11 |
| Banding backshell with self-locking  | MIL-DTL-5015 crimp MIL-DTL-26482 Series 2 AS81703 Series 3 MIL-DTL-83723 Series 1 & 3 | AS85049/82 - see p.12 AS85049/83 - see p.12 AS85049/84 - see p.12 |
| | MIL-DTL-27599 MIL-DTL-38999 Series I & II | AS85049/85 - see p.13 AS85049/86 - see p.13 AS85049/87 - see p.13 |
| | MIL-DTL-38999 Series III & IV EN3645 | AS85049/88 - see p.14 AS85049/89 - see p.14 AS85049/90 - see p.14 |
| Shield support ring  | All | AS85049/93 - see p.15 |

| Cap style | Connector type | Series |
|---|--------------------------|-------------------|
| Screw mating  | MIL-DTL-38999 Series III | D38999 - see p.16 |
| Bayonet mating  | MIL-DTL-38999 Series I | MS27 - see p.17 |

M85049 Backshells

AS85049/38 Series - Cable clamp strain relief

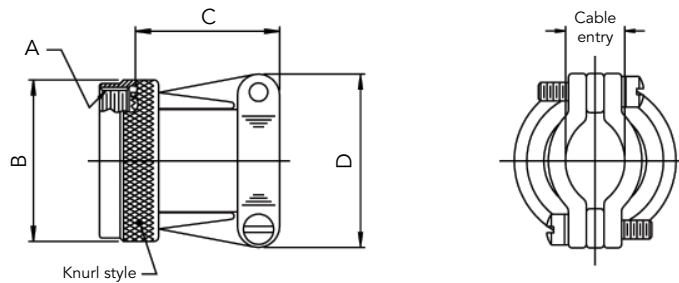
For connectors:

- MIL-DTL-38999 Series III & IV
- EN3645

Ordering information

| | | | | |
|---|-----------|---|----|---|
| Basic Series | M85049/38 | S | 11 | N |
| Self-locking option | | | | |
| S: Self-locking, detented - utilizes an audible detented anti-decoupling device. | | | | |
| N: Self-locking, non detented - utilizes an internal captivated anti-decoupling device (Self-Seating) with no audible clicking mechanism. | | | | |
| - : Non self locking | | | | |
| Shell size | | | | |
| 9, 11, 13, 15, 16, 17, 19, 21, 23, 25 | | | | |
| Material and plating | | | | |
| A: Aluminum, black anodize | | | | |
| N: Aluminum, electroless nickel | | | | |
| S: Stainless steel, passivated | | | | |
| W: Aluminum, olive drab cadmium over electroless nickel, 500 hours salt spray | | | | |

Dimensions



| Shell size | A Thread Class 2B | B Max Self-locking only | | C Max Self-locking only | | D Max | | Cable entry Min | | Cable entry Max | |
|------------|----------------------|----------------------------|-------|----------------------------|---------|-------|-------|--------------------|-------|--------------------|-------|
| | | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm |
| 9 | M12X1-6H | 0.858 | 21.79 | 0.91 | 23.11 | 0.85 | 21.60 | 0.098 | 2.49 | 0.234 | 5.94 |
| 11 | M15X1-6H | 0.984 | 24.99 | 0.91 | 23.11 | 0.90 | 22.90 | 0.153 | 3.89 | 0.234 | 5.94 |
| 13 | M18X1-6H | 1.157 | 29.39 | 1.01 | 25.65 | 1.10 | 27.90 | 0.19 | 4.83 | 0.328 | 8.33 |
| 15 | M22X1-6H | 1.279 | 32.49 | 1.06 | 26.92 | 1.15 | 29.20 | 0.26 | 6.60 | 0.457 | 11.61 |
| 17 | M25X1-6H | 1.406 | 35.71 | 1.16 | 29.46 | 1.30 | 33.00 | 0.283 | 7.19 | 0.614 | 15.60 |
| 19 | M28X1-6H | 1.516 | 38.51 | 1.41 | (35.81) | 1.50 | 38.10 | 0.325 | 8.26 | 0.634 | 16.10 |
| 21 | M31X1-6H | 1.642 | 41.71 | 1.51 | 38.35 | 1.60 | 40.60 | 0.343 | 8.71 | 0.698 | 17.73 |
| 23 | M34X1-6H | 1.768 | 44.91 | 1.66 | 42.16 | 1.70 | 43.20 | 0.381 | 9.68 | 0.823 | 20.90 |
| 25 | M37X1-6H | 1.889 | 47.98 | 1.76 | 44.70 | 1.80 | 45.70 | 0.418 | 10.62 | 0.853 | 21.67 |

Note: All dimensions are in inches and millimeters (inch/mm). For complete dimensions, see the applicable Military Specification. Cable entry is defined as the envelope area of the cable or wire bundle. It is not intended for inspection criteria.

M85049 Backshells

AS85049/43 Series - 45° cable clamp strain relief

For connectors:

MIL-DTL-5015 crimp

MIL-DTL-26482 Series 2

AS81703 Series 3

MIL-DTL-83723 Series 1 & 3

Ordering information

| | | | | |
|---|-----------|---|----|---|
| Basic Series | M85049/43 | - | 10 | N |
| Self-locking option - : Non self locking | | | | |
| Shell size 3, 8, 10, 12, 14, 16, 18, 20, 22, 24, 28, 32, 36, 40, 44, 48, 61 | | | | |
| Material and plating N: Aluminum, electroless nickel W: Aluminum, olive drab cadmium over electroless nickel, 1000 hours salt spray | | | | |

Dimensions



| Shell size | A Thread Class 2B | B Max | | C Max closed | | D Max | | Cable entry Min | | Cable entry Max | |
|------------|-------------------|-------|-------|--------------|-------|-------|-------|-----------------|-------|-----------------|-------|
| | | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm |
| 3 | 0.562 - 24 UNEF | 0.669 | 16.99 | 1.160 | 29.46 | 0.772 | 19.61 | 0.125 | 3.20 | 0.204 | 5.20 |
| 8 | 0.500 - 20 UNF | 0.885 | 22.50 | 1.650 | 41.91 | 0.772 | 19.61 | 0.125 | 3.20 | 0.204 | 5.20 |
| 10 | 0.625 - 24 UNEF | 1.010 | 25.70 | 1.694 | 43.03 | 0.803 | 20.40 | 0.187 | 4.70 | 0.286 | 7.30 |
| 12 | 0.750 - 20 UNEF | 1.135 | 28.80 | 1.768 | 44.91 | 0.866 | 21.00 | 0.291 | 7.40 | 0.416 | 10.60 |
| 14 | 0.875 - 20 UNEF | 1.260 | 32.00 | 1.840 | 46.74 | 0.928 | 23.57 | 0.351 | 8.90 | 0.476 | 12.10 |
| 16 | 1.000 - 20 UNEF | 1.385 | 35.20 | 1.916 | 48.67 | 0.991 | 25.17 | 0.501 | 12.70 | 0.625 | 15.90 |
| 18 | 1.062 - 18 UNEF | 1.570 | 39.88 | 2.034 | 51.66 | 1.110 | 28.19 | 0.518 | 13.20 | 0.706 | 17.90 |
| 20 | 1.188 - 18 UNEF | 1.635 | 41.50 | 2.078 | 52.78 | 1.172 | 29.77 | 0.581 | 14.80 | 0.831 | 21.10 |
| 22 | 1.313 - 18 UNEF | 1.760 | 44.70 | 2.122 | 53.90 | 1.235 | 31.37 | 0.644 | 16.40 | 0.956 | 24.30 |
| 24 | 1.438 - 18 UNEF | 1.885 | 47.90 | 2.166 | 55.02 | 1.297 | 32.94 | 0.706 | 17.90 | 1.081 | 27.50 |
| 28 | 1.750 - 18 UNS | 2.135 | 54.20 | 2.461 | 62.51 | 1.543 | 39.19 | 0.750 | 19.10 | 1.187 | 30.10 |
| 32 | 2.000 - 18 UNS | 2.315 | 58.80 | 2.549 | 64.75 | 1.668 | 42.37 | 0.875 | 22.20 | 1.250 | 31.80 |
| 36 | 2.250 - 16 UN | 2.635 | 66.90 | 2.595 | 65.91 | 1.793 | 45.54 | 0.938 | 23.80 | 1.375 | 34.90 |
| 40 | 2.500 - 16 UN | 2.885 | 73.30 | 2.599 | 66.01 | 1.918 | 48.72 | 0.938 | 23.80 | 1.500 | 38.10 |
| 44 | 2.750 - 16 UN | 3.135 | 79.60 | 2.860 | 72.64 | 2.132 | 54.15 | 1.188 | 30.20 | 1.750 | 44.50 |
| 48 | 3.000 - 16 UN | 3.385 | 86.00 | 2.918 | 74.12 | 2.257 | 57.33 | 1.312 | 33.30 | 1.875 | 47.60 |
| 61 | 1.500 - 18 UNEF | 1.653 | 41.99 | 1.676 | 42.57 | 1.204 | 30.58 | 0.706 | 17.90 | 1.081 | 27.50 |

Note: All dimensions are in inches and millimeters (inch/mm). For complete dimensions, see the applicable Military Specification. Cable entry is defined as the envelope area of the cable or wire bundle. It is not intended for inspection criteria.

M85049 Backshells

AS85049/49-2 Series - Cable clamp strain relief

For connectors:

MIL-DTL-27599

MIL-DTL-38999 Series I & II

Ordering information

| | | | | |
|---|-------------|---|----|---|
| Basic Series | M85049/49-2 | S | 10 | N |
| Self-locking option | | | | |
| S: Self-locking, detented - utilizes an audible detented anti-decoupling device. | | | | |
| N: Self-locking, non detented - utilizes an internal captivated anti-decoupling device (Self-Seating) with no audible clicking mechanism. | | | | |
| - : Non self locking | | | | |
| Shell size | | | | |
| 8, 10, 12, 14, 16, 18, 20, 22, 24 | | | | |
| Material and plating | | | | |
| A: Aluminum, black anodize | | | | |
| N: Aluminum, electroless nickel | | | | |
| S: Stainless steel, passivated | | | | |
| W: Aluminum, olive drab cadmium over electroless nickel, 1000 hours salt spray | | | | |

Dimensions



| Shell size | A Thread Class 2B | B Max Self-locking only | | C Max Self-locking only | | D Max | | Cable entry Min | | Cable entry Max | |
|------------|-------------------|-------------------------|-------|-------------------------|-------|-------|-------|-----------------|-------|-----------------|-------|
| | | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm |
| 8 | 0.438-28 UNEF | 0.858 | 21.80 | 0.91 | 23.10 | 0.85 | 21.60 | 0.098 | 2.50 | 0.234 | 5.90 |
| 10 | 0.562-24 UNEF | 0.984 | 25.00 | 0.91 | 23.10 | 0.90 | 22.90 | 0.153 | 3.90 | 0.234 | 5.90 |
| 12 | 0.688-24 UNEF | 1.157 | 29.40 | 1.01 | 25.70 | 1.10 | 27.90 | 0.19 | 4.80 | 0.328 | 8.30 |
| 14 | 0.812-20 UNEF | 1.279 | 32.50 | 1.06 | 26.90 | 1.15 | 29.20 | 0.26 | 6.60 | 0.457 | 11.60 |
| 16 | 0.938-20 UNEF | 1.406 | 35.70 | 1.16 | 29.50 | 1.30 | 33.00 | 0.283 | 7.20 | 0.614 | 15.60 |
| 18 | 1.062-18 UNEF | 1.516 | 38.50 | 1.41 | 35.80 | 1.50 | 38.10 | 0.325 | 8.30 | 0.634 | 16.10 |
| 20 | 1.188-18 UNEF | 1.642 | 41.70 | 1.51 | 38.40 | 1.60 | 40.60 | 0.343 | 8.70 | 0.698 | 17.70 |
| 22 | 1.312-18 UNEF | 1.768 | 44.90 | 1.66 | 42.20 | 1.70 | 43.20 | 0.381 | 9.70 | 0.823 | 20.90 |
| 24 | 1.438-18 UNEF | 1.889 | 48.00 | 1.76 | 44.70 | 1.80 | 45.70 | 0.418 | 10.60 | 0.853 | 21.70 |

Note: All dimensions are in inches and millimeters (inch/mm). For complete dimensions, see the applicable Military Specification. Cable entry is defined as the envelope area of the cable or wire bundle. It is not intended for inspection criteria.

M85049 Backshells

AS85049/51 Series - 90° cable clamp strain relief

For connectors:

MIL-DTL-5015 crimp

MIL-DTL-26482 Series 2

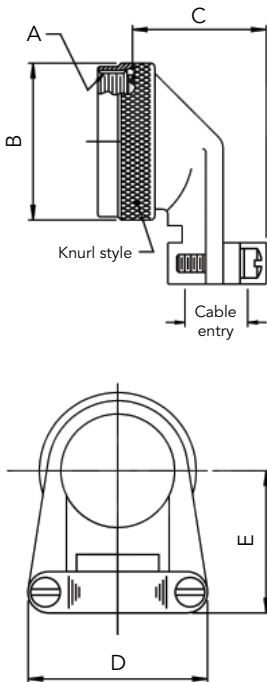
AS81703 Series 3

MIL-DTL-83723 Series 1 & 3

Ordering information

| | | | | |
|---|------------|---|----|---|
| Basic Series | AS85049/51 | S | 10 | N |
| Self-locking option | | | | |
| S: Self-locking, detented - utilizes an audible detented anti-decoupling device. | | | | |
| N: Self-locking, non detented - utilizes an internal captivated anti-decoupling device (Self-Seating) with no audible clicking mechanism. | | | | |
| -1: Non self locking | | | | |
| Shell size | | | | |
| 3, 8, 10, 12, 14, 16, 18, 20, 22, 24, 28, 32, 36, 40, 44, 48, 61 | | | | |
| Material and plating | | | | |
| A: Aluminum, black anodize | | | | |
| N: Aluminum, electroless nickel | | | | |
| W: Aluminum, olive drab cadmium over electroless nickel, 1000 hours salt spray | | | | |

Dimensions



| Shell size | A Thread Class 2B | B Max Self-locking only | | C Max Self-locking only | | D Max | | E ± 0.062 / 1.6 | | Cable entry Min | | Cable entry Max | |
|------------|-------------------|-------------------------------|-------|-------------------------|-------|-------|-------|-----------------|-------|-----------------|-------|-----------------|-------|
| | | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm |
| 3 | 0.562 - 24 UNEF | Not available in self-locking | | 0.782 | 19.90 | 0.777 | 19.70 | 0.125 | 3.20 | 0.204 | 5.20 | | |
| 8 | 0.500 - 20 UNF | 0.885 | 22.50 | 1.257 | 31.90 | 0.782 | 19.90 | 0.746 | 18.90 | 0.125 | 3.20 | 0.204 | 5.20 |
| 10 | 0.625 - 24 UNEF | 1.010 | 25.70 | 1.339 | 34.00 | 0.862 | 21.90 | 0.805 | 20.40 | 0.187 | 4.70 | 0.286 | 7.30 |
| 12 | 0.750 - 20 UNEF | 1.135 | 28.80 | 1.532 | 38.90 | 0.968 | 24.60 | 0.867 | 22.00 | 0.291 | 7.40 | 0.416 | 10.60 |
| 14 | 0.875 - 20 UNEF | 1.26 | 32.00 | 1.592 | 40.40 | 1.003 | 25.50 | 0.930 | 23.60 | 0.351 | 8.90 | 0.476 | 12.10 |
| 16 | 1.000 - 20 UNEF | 1.385 | 35.20 | 1.741 | 44.20 | 1.061 | 26.90 | 0.994 | 25.20 | 0.501 | 12.70 | 0.626 | 15.90 |
| 18 | 1.062 - 18 UNEF | 1.510 | 38.40 | 1.853 | 47.10 | 1.394 | 35.40 | 1.171 | 29.70 | 0.518 | 13.20 | 0.706 | 17.90 |
| 20 | 1.188 - 18 UNEF | 1.635 | 41.50 | 1.978 | 50.20 | 1.466 | 37.20 | 1.234 | 31.20 | 0.581 | 14.80 | 0.831 | 21.10 |
| 22 | 1.313 - 18 UNEF | 1.760 | 44.70 | 2.108 | 53.50 | 1.572 | 39.90 | 1.296 | 32.90 | 0.644 | 16.40 | 0.956 | 24.30 |
| 24 | 1.438 - 18 UNEF | 1.885 | 47.90 | 2.228 | 56.60 | 1.698 | 43.10 | 1.358 | 34.50 | 0.706 | 17.90 | 1.081 | 27.50 |
| 28 | 1.750 - 18 UNS | 2.135 | 54.20 | 2.528 | 64.20 | 1.790 | 45.50 | 1.572 | 39.90 | 0.750 | 19.10 | 1.187 | 30.10 |
| 32 | 2.000 - 18 UNS | 2.395 | 60.80 | 2.591 | 65.80 | 2.035 | 51.70 | 1.797 | 45.60 | 0.875 | 22.20 | 1.250 | 31.80 |
| 36 | 2.250 - 16 UN | 2.635 | 66.90 | 2.716 | 69.00 | 2.386 | 60.60 | 1.922 | 48.80 | 0.938 | 23.80 | 1.375 | 34.90 |
| 40 | 2.500 - 16 UN | 2.885 | 73.30 | 2.841 | 72.20 | 2.566 | 65.20 | 2.047 | 52.00 | 0.938 | 23.80 | 1.500 | 38.10 |
| 44 | 2.750 - 16 UN | 3.135 | 79.60 | 3.091 | 78.50 | 2.86 | 72.60 | 2.296 | 58.30 | 1.188 | 30.20 | 1.750 | 44.50 |
| 48 | 3.000 - 16 UN | 3.385 | 86.00 | 3.216 | 81.70 | 3.344 | 84.90 | 2.421 | 61.50 | 1.312 | 33.30 | 1.875 | 47.60 |
| 61 | 1.500 - 18 UNEF | Not available in self-locking | | 1.775 | 45.10 | 1.388 | 35.30 | 0.706 | 17.90 | 1.081 | 27.50 | | |

Note: All dimensions are in inches and millimeters (inch/mm). For complete dimensions, see the applicable Military Specification. Cable entry is defined as the envelope area of the cable or wire bundle. It is not intended for inspection criteria.

M85049 Backshells

AS85049/52 Series - Straight cable clamp strain relief

For connectors:

MIL-DTL-5015 crimp

MIL-DTL-26482 Series 2

AS81703 Series 3

MIL-DTL-83723 Series 1 & 3

Ordering information

| | | | | |
|---|------------|---|----|---|
| Basic Series | AS85049/52 | S | 10 | N |
| Self-locking option | | | | |
| S: Self-locking, detented - utilizes an audible detented anti-decoupling device. | | | | |
| N: Self-locking, non detented - utilizes an internal captivated anti-decoupling device (Self-Seating) with no audible clicking mechanism. | | | | |
| -1: Non self locking | | | | |
| Shell size | | | | |
| 3, 8, 10, 12, 14, 16, 18, 20, 22, 24, 28, 32, 36, 40, 44, 48, 61 | | | | |
| Material and plating | | | | |
| A: Aluminum, black anodize | | | | |
| N: Aluminum, electroless nickel | | | | |
| W: Aluminum, olive drab cadmium over electroless nickel, 1000 hours salt spray | | | | |

Dimensions



| Shell size | A Thread Class 2B | B Max Self-locking only | | C Max Self-locking only | | D Max | | Cable entry Min | | Cable entry Max | |
|------------|-------------------|-------------------------------|-------|-------------------------|-------|-------|-------|-----------------|-------|-----------------|-------|
| | | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm |
| 3 | 0.562 - 24 UNEF | Not available in self-locking | | | | 0.782 | 19.90 | 0.125 | 3.20 | 0.204 | 5.20 |
| 8 | 0.500 - 20 UNF | 0.885 | 22.50 | 0.73 | 18.50 | 0.782 | 19.90 | 0.125 | 3.20 | 0.204 | 5.20 |
| 10 | 0.625 - 24 UNEF | 1.010 | 25.70 | 0.85 | 21.60 | 0.862 | 21.90 | 0.187 | 4.70 | 0.286 | 7.30 |
| 12 | 0.750 - 20 UNEF | 1.135 | 28.80 | 0.98 | 24.90 | 0.968 | 24.60 | 0.291 | 7.40 | 0.416 | 10.60 |
| 14 | 0.875 - 20 UNEF | 1.26 | 32.00 | 0.98 | 24.90 | 1.003 | 25.50 | 0.351 | 8.90 | 0.476 | 12.10 |
| 16 | 1.000 - 20 UNEF | 1.385 | 35.20 | 1.10 | 27.90 | 1.061 | 26.90 | 0.501 | 12.70 | 0.626 | 15.90 |
| 18 | 1.062 - 18 UNEF | 1.510 | 38.40 | 1.35 | 34.30 | 1.394 | 35.40 | 0.518 | 13.20 | 0.706 | 17.90 |
| 20 | 1.188 - 18 UNEF | 1.635 | 41.50 | 1.48 | 37.60 | 1.466 | 37.20 | 0.581 | 14.80 | 0.831 | 21.10 |
| 22 | 1.313 - 18 UNEF | 1.760 | 44.70 | 1.60 | 40.60 | 1.572 | 39.90 | 0.644 | 16.40 | 0.956 | 24.30 |
| 24 | 1.438 - 18 UNEF | 1.885 | 47.90 | 1.73 | 43.90 | 1.698 | 43.10 | 0.706 | 17.90 | 1.081 | 27.50 |
| 28 | 1.750 - 18 UNS | 2.135 | 54.20 | 1.88 | 47.80 | 1.790 | 45.50 | 0.750 | 19.10 | 1.187 | 30.10 |
| 32 | 2.000 - 18 UNS | 2.395 | 60.80 | 2.13 | 54.10 | 2.035 | 51.70 | 0.875 | 22.20 | 1.250 | 31.80 |
| 36 | 2.250 - 16 UN | 2.635 | 66.90 | 2.44 | 62.00 | 2.386 | 60.60 | 0.938 | 23.80 | 1.375 | 34.90 |
| 40 | 2.500 - 16 UN | 2.885 | 73.30 | 2.63 | 66.80 | 2.566 | 65.20 | 0.938 | 23.80 | 1.500 | 38.10 |
| 44 | 2.750 - 16 UN | 3.135 | 79.60 | 3.00 | 76.20 | 2.86 | 72.60 | 1.188 | 30.20 | 1.750 | 44.50 |
| 48 | 3.000 - 16 UN | 3.385 | 86.00 | 3.40 | 86.40 | 3.344 | 84.90 | 1.312 | 33.30 | 1.875 | 47.60 |
| 61 | 1.500 - 18 UNEF | Not available in self-locking | | | | 1.775 | 45.10 | 0.706 | 17.90 | 1.081 | 27.50 |

Note: All dimensions are in inches and millimeters (inch/mm). For complete dimensions, see the applicable Military Specification. Cable entry is defined as the envelope area of the cable or wire bundle. It is not intended for inspection criteria.

M85049 Backshells

AS85049/53, 54, 55 Series - One arm strain relief

For connectors:

MIL-DTL-5015 crimp

MIL-DTL-26482 Series 2

AS81703 Series 3

MIL-DTL-83723 Series 1 & 3

Ordering information

| | | | | | |
|--|----------|----|---|----|---|
| Basic Series | AS85049/ | 53 | - | 10 | N |
| Angle | | | | | |
| 53: Straight | | | | | |
| 54: 45° | | | | | |
| 55: 90° | | | | | |
| Self-locking option | | | | | |
| - : Non self locking | | | | | |
| Shell size | | | | | |
| 3, 8, 10, 12, 14, 16, 18, 20, 22, 24, 28 | | | | | |
| Material and plating | | | | | |
| A: Aluminum, black anodize | | | | | |
| N: Aluminum, electroless nickel | | | | | |
| W: Aluminum, olive drab cadmium over electroless nickel, 1000 hours salt spray | | | | | |

Dimensions



For new design use:
M85049/43 (45°),
M85049/51 (90°) and
M85049/52 (straight)

| Shell size | A Thread Class 2B | B Max | | C Max | | D Max | | E Max | | F Max | | Cable entry | | | |
|------------|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------|-------|-------|-------|
| | | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | | |
| 3 | 0.562 - 24 UNEF | 0.780 | 19.80 | 0.954 | 24.00 | 1.232 | 31.30 | 0.730 | 18.50 | 1.290 | 32.80 | 0.260 | 6.60 | | |
| 8 | 0.500 - 20 UNF | 0.660 | 16.80 | | | | | | | | | 0.260 | 6.60 | | |
| 10 | 0.625 - 24 UNEF | 0.780 | 19.80 | | | | | | | | | 0.365 | 9.30 | | |
| 12 | 0.750 - 20 UNEF | 0.940 | 23.90 | 1.204 | 30.60 | 1.482 | 37.60 | 0.750 | 19.10 | 1.620 | 41.10 | 0.501 | 12.70 | | |
| 14 | 0.875 - 20 UNEF | 1.050 | 26.70 | | | | | | | 1.660 | 42.20 | 0.575 | 14.60 | | |
| 16 | 1.000 - 20 UNEF | 1.240 | 31.50 | | | | | | | 1.720 | 43.70 | 0.700 | 17.80 | | |
| 18 | 1.062 - 18 UNEF | 1.380 | 35.10 | 1.310 | 33.30 | 1.469 | 37.30 | 0.750 | 19.10 | 1.790 | 45.50 | 0.779 | 19.80 | | |
| 20 | 1.188 - 18 UNEF | 1.500 | 38.10 | | | | | | | 1.430 | 36.30 | 1.850 | 47.00 | 0.904 | 23.00 |
| 22 | 1.313 - 18 UNEF | 1.630 | 41.40 | | | | | | | 1.560 | 39.60 | 1.910 | 48.50 | 1.029 | 26.10 |
| 24 | 1.438 - 18 UNEF | 1.750 | 44.50 | 1.560 | 39.60 | 1.469 | 37.30 | 0.750 | 19.10 | 1.910 | 48.50 | 1.144 | 29.10 | | |
| 28 | 1.750 - 18 UNS | 1.970 | 50.00 | | | | | | | 2.060 | 52.30 | 1.379 | 35.00 | | |

Note: All dimensions are in inches and millimeters (inch/mm). For complete dimensions, see the applicable Military Specification. Cable entry is defined as the envelope area of the cable or wire bundle. It is not intended for inspection criteria.

M85049 Backshells

AS85049/60-1 Series - Shrink boot adapter

For connectors:

MIL-DTL-5015 crimp

MIL-DTL-26482 Series 2

AS81703 Series 3

MIL-DTL-83723 Series 1 & 3

Ordering information

| | | | |
|--|-------------|---|----|
| Basic Series | M85049/60-1 | N | 10 |
| Material and plating | | | |
| A: Aluminum, black anodize | | | |
| N: Aluminum, electroless nickel | | | |
| W: Aluminum, olive drab cadmium over electroless nickel, 1000 hours salt spray | | | |
| Shell size | | | |
| 3, 8, 10, 12, 14, 16, 18, 20, 22, 24, 28, 32, 36, 40, 44, 48, 61 | | | |

Dimensions



| Shell size | A Thread Class 2B | B Max | | C Max | | D Max | | Cable entry | |
|------------|-------------------|-------|-------|-------|-------|-------|-------|-------------|-------|
| | | inch | mm | inch | mm | inch | mm | inch | mm |
| 3 | 0.562 - 24 UNEF | 0.670 | 17.00 | 0.832 | 21.10 | 0.533 | 13.50 | 0.250 | 6.40 |
| 8 | 0.500 - 20 UNF | 0.620 | 15.70 | | | 0.533 | 13.50 | 0.250 | 6.40 |
| 10 | 0.625 - 24 UNEF | 0.740 | 18.80 | | | 0.605 | 15.40 | 0.355 | 9.00 |
| 12 | 0.750 - 20 UNEF | 0.860 | 21.80 | | | 0.774 | 19.70 | 0.491 | 12.50 |
| 14 | 0.875 - 20 UNEF | 0.980 | 24.90 | | | 0.838 | 21.30 | 0.565 | 14.40 |
| 16 | 1.000 - 20 UNEF | 1.110 | 28.20 | | | 0.963 | 24.50 | 0.690 | 17.50 |
| 18 | 1.062 - 18 UNEF | 1.220 | 31.00 | | | 1.042 | 26.50 | 0.769 | 19.50 |
| 20 | 1.188 - 18 UNEF | 1.350 | 34.30 | | | 1.217 | 30.90 | 0.894 | 22.70 |
| 22 | 1.313 - 18 UNEF | 1.470 | 37.30 | | | 1.355 | 34.40 | 1.019 | 25.90 |
| 24 | 1.438 - 18 UNEF | 1.590 | 40.40 | | | 1.443 | 36.70 | 1.134 | 28.80 |
| 28 | 1.750 - 18 UNS | 1.970 | 50.00 | 0.994 | 25.30 | 1.709 | 43.40 | 1.369 | 34.80 |
| 32 | 2.000 - 18 UNS | 2.220 | 56.40 | | | 1.919 | 48.70 | 1.615 | 41.00 |
| 36 | 2.250 - 16 UN | 2.470 | 62.70 | | | 2.169 | 55.10 | 1.830 | 46.50 |
| 40 | 2.500 - 16 UN | 2.720 | 69.10 | | | 2.402 | 61.00 | 2.045 | 51.90 |
| 44 | 2.750 - 16 UN | 2.970 | 75.40 | | | 2.657 | 67.50 | 2.300 | 58.40 |
| 48 | 3.000 - 16 UN | 3.220 | 81.80 | | | 2.907 | 73.80 | 2.550 | 64.80 |
| 61 | 1.500 - 18 UNEF | 1.650 | 41.90 | 0.832 | 21.10 | 1.529 | 38.80 | 1.174 | 29.80 |

Note: All dimensions are in inches and millimeters (inch/mm). For complete dimensions, see the applicable Military Specification. Cable entry is defined as the envelope area of the cable or wire bundle. It is not intended for inspection criteria.

M85049 Backshells

AS85049/62 Series - Shrink boot adapter

For connectors:

MIL-DTL-27599

MIL-DTL-38999 Series I & II

Ordering information

| | | | | |
|--|-----------|----|---|---|
| Basic Series | M85049/62 | 10 | N | D |
| Shell size 8, 10, 12, 14, 16, 18, 20, 22, 24 | | | | |
| Material and plating A: Aluminum, black anodize N: Aluminum, electroless nickel S: Stainless steel, passivated W: Aluminum, olive drab cadmium over electroless nickel, 1000 hours salt spray | | | | |
| Drain hole D: with drain hole empty: without drain hole | | | | |

Dimensions



| Shell size | A Thread Class 2B | B Max | | C Max | | D Max | | Cable entry | |
|------------|-------------------|-------|-------|-------|-------|-------|-------|-------------|-------|
| | | inch | mm | inch | mm | inch | mm | inch | mm |
| 8 | 0.438 - 28 UNEF | 0.750 | 19.10 | 1.000 | 25.40 | 0.533 | 13.50 | 0.250 | 6.40 |
| 10 | 0.562 - 24 UNEF | 0.850 | 21.60 | | | 0.605 | 15.40 | 0.375 | 9.50 |
| 12 | 0.688 - 24 UNEF | 1.000 | 25.40 | | | 0.774 | 19.70 | 0.500 | 12.70 |
| 14 | 0.813 - 20 UNEF | 1.100 | 27.90 | | | 0.838 | 21.30 | 0.625 | 15.90 |
| 16 | 0.938 - 20 UNEF | 1.250 | 31.80 | | | 0.963 | 24.50 | 0.750 | 19.10 |
| 18 | 1.063 - 18 UNEF | 1.400 | 35.60 | | | 1.042 | 26.50 | 0.812 | 20.60 |
| 20 | 1.188 - 18 UNEF | 1.500 | 38.10 | | | 1.217 | 30.90 | 0.937 | 23.80 |
| 22 | 1.313 - 18 UNEF | 1.650 | 41.90 | | | 1.355 | 34.40 | 1.062 | 27.00 |
| 24 | 1.438 - 18 UNEF | 1.750 | 44.50 | | | 1.443 | 36.70 | 1.188 | 30.20 |

Note: All dimensions are in inches and millimeters (inch/mm). For complete dimensions, see the applicable Military Specification. Cable entry is defined as the envelope area of the cable or wire bundle. It is not intended for inspection criteria.

M85049 Backshells

AS85049/69 Series - Shrink boot adapter

For connectors:

MIL-DTL-38999 Series III & IV

EN3645

Ordering information

| | | | |
|----------------------|--|----|---|
| Basic Series | M85049/69 | 11 | N |
| Shell size | 9, 11, 13, 15, 17, 19, 21, 23, 25 | | |
| Material and plating | <p>A: Aluminum, black anodize</p> <p>N: Aluminum, electroless nickel</p> <p>S: Stainless steel, passivated</p> <p>W: Aluminum, olive drab cadmium over electroless nickel, 1000 hours salt spray</p> | | |
| Drain hole | <p>D: with drain hole</p> <p>empty: without drain hole</p> | | |

Dimensions



| Shell size | A Thread Class 2B | B Max | | C Max | | D Max | | Cable entry | |
|------------|-------------------|-------|-------|-------|-------|-------|-------|-------------|-------|
| | | inch | mm | inch | mm | inch | mm | inch | mm |
| 9 | M12 X 1 - 6H | 0.750 | 19.10 | 0.710 | 18.00 | 0.533 | 13.50 | 0.250 | 6.40 |
| 11 | M15 X 1 - 6H | 0.850 | 21.60 | | | 0.605 | 15.40 | 0.375 | 9.50 |
| 13 | M18 X 1 - 6H | 1.000 | 25.40 | | | 0.774 | 19.70 | 0.500 | 12.70 |
| 15 | M22 X 1 - 6H | 1.150 | 29.20 | | | 0.838 | 21.30 | 0.625 | 15.90 |
| 17 | M25 X 1 - 6H | 1.250 | 31.80 | | | 0.963 | 24.50 | 0.750 | 19.10 |
| 19 | M28 X 1 - 6H | 1.400 | 35.60 | | | 1.042 | 26.50 | 0.812 | 20.60 |
| 21 | M31 X 1 - 6H | 1.500 | 38.10 | | | 1.217 | 30.90 | 0.938 | 23.80 |
| 23 | M34 X 1 - 6H | 1.650 | 41.90 | | | 1.355 | 34.40 | 1.062 | 27.00 |
| 25 | M37 X 1 - 6H | 1.785 | 47.00 | | | 1.443 | 36.70 | 1.188 | 30.20 |

Note: All dimensions are in inches and millimeters (inch/mm). For complete dimensions, see the applicable Military Specification. Cable entry is defined as the envelope area of the cable or wire bundle. It is not intended for inspection criteria.

M85049 Backshells

AS85049/82, 83, 84 Series - Banding backshell with self-locking

For connectors:

MIL-DTL-5015 crimp

MIL-DTL-26482 Series 2

AS81703 Series 3

MIL-DTL-83723 Series 1 & 3

Ordering information

| | | | | | | |
|---|----------|----|---|----|---|----|
| Basic Series | AS85049/ | 82 | - | 10 | N | 02 |
| Angle | | | | | | |
| 82: Straight | | | | | | |
| 83: 45° | | | | | | |
| 84: 90° (size 28 not qualified for AS85049/84) | | | | | | |
| Self-locking option | | | | | | |
| - : Detended | | | | | | |
| N: Non detended | | | | | | |
| Shell size: 8, 10, 12, 14, 16, 18, 20, 22, 24, 28 (size 28 not qualified for AS85049/84) | | | | | | |
| Material and plating | | | | | | |
| N: Aluminum, electroless nickel | | | | | | |
| P: Aluminum, olive drab cadmium over electroless nickel with polysulfide sealant strips | | | | | | |
| W: Aluminum, olive drab cadmium over electroless nickel, 1000 hours salt spray | | | | | | |
| Entry size (see table below): 02, 03 | | | | | | |

Dimensions



| Shell size | A Thread Class 2B | B Max | | C Max | | D Max | | E Max | | F Max | | Cable entry Size 02 ±0.01/0.30 | | Cable entry Size 03 ±0.01/0.30 | |
|------------|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------------------|-------|--------------------------------|-------|
| | | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm |
| 8 | 0.500 - 20 UNF | 0.886 | 22.40 | 0.870 | 22.10 | 1.160 | 29.50 | 1.188 | 30.20 | 1.417 | 36.00 | N/A | N/A | 0.250 | 6.40 |
| 10 | 0.625 - 24 UNEF | 1.010 | 25.70 | 0.890 | 22.60 | 1.180 | 30.00 | 1.281 | 32.50 | 1.480 | 37.60 | N/A | N/A | 0.312 | 7.90 |
| 12 | 0.750 - 20 UNEF | 1.130 | 28.70 | 0.920 | 23.40 | 1.200 | 30.50 | 1.406 | 35.70 | 1.542 | 39.20 | 0.312 | 7.90 | 0.438 | 11.10 |
| 14 | 0.875 - 20 UNEF | 1.260 | 32.00 | 0.940 | 23.90 | 1.220 | 31.00 | 1.531 | 38.90 | 1.605 | 40.80 | 0.438 | 11.10 | 0.562 | 14.30 |
| 16 | 1.000 - 20 UNEF | 1.386 | 35.10 | 0.960 | 24.40 | 1.250 | 31.80 | 1.656 | 42.10 | 1.667 | 42.30 | 0.500 | 12.70 | 0.625 | 15.90 |
| 18 | 1.062 - 18 UNEF | 1.510 | 38.40 | 0.980 | 24.90 | 1.260 | 32.00 | 1.718 | 43.60 | 1.730 | 43.90 | 0.625 | 15.90 | 0.750 | 19.10 |
| 20 | 1.188 - 18 UNEF | 1.636 | 41.40 | 1.000 | 25.40 | 1.290 | 32.80 | 1.844 | 46.80 | 1.792 | 45.50 | 0.625 | 15.90 | 0.812 | 20.60 |
| 22 | 1.313 - 18 UNEF | 1.760 | 44.70 | 1.030 | 26.20 | 1.310 | 33.30 | 1.938 | 49.20 | 1.850 | 47.00 | 0.688 | 17.50 | 0.938 | 23.80 |
| 24 | 1.438 - 18 UNEF | 1.886 | 47.80 | 1.050 | 26.70 | 1.340 | 34.00 | 2.093 | 53.20 | 1.917 | 48.70 | 0.750 | 19.10 | 1.000 | 25.40 |
| 28 | 1.750 - 18 UNS | 2.136 | 54.10 | 1.100 | 27.90 | 1.380 | 35.10 | 2.531 | 64.30 | 2.042 | 51.90 | 0.875 | 22.20 | 1.125 | 28.60 |

Note: All dimensions are in inches and millimeters (inch/mm). For complete dimensions, see the applicable Military Specification. Cable entry is defined as the envelope area of the cable or wire bundle. It is not intended for inspection criteria.

M85049 Backshells

AS85049/85, 86, 87 Series - Banding backshell with self-locking

For connectors:

MIL-DTL-27599

MIL-DTL-38999 Series I & II

Ordering information

| | | | | | | |
|---|----------|----|---|----|---|----|
| Basic Series | AS85049/ | 85 | - | 10 | N | 02 |
| Angle | | | | | | |
| 85: Straight | | | | | | |
| 86: 45° | | | | | | |
| 87: 90° | | | | | | |
| Self-locking option | | | | | | |
| - : Detended | | | | | | |
| N: Non detended | | | | | | |
| Shell size: 8, 10, 12, 14, 16, 18, 20, 22, 24 | | | | | | |
| Material and plating | | | | | | |
| N: Aluminum, electroless nickel | | | | | | |
| P: Aluminum, olive drab cadmium over electroless nickel with polysulfide sealant strips | | | | | | |
| W: Aluminum, olive drab cadmium over electroless nickel, 1000 hours salt spray | | | | | | |
| Entry size (see table below): 02, 03 | | | | | | |

Dimensions



| Shell size | A Thread Class 2B | B Max | | C Max | | D Max | | E Max | | F Max | | Cable entry for AS85049/85, Straight version | | | | Cable entry for AS85049/86 and AS85049/87, 45° & 90° | | | |
|------------|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|-------|---------|-------|--|-------|---------|-------|
| | | | | | | | | | | | | Size 01 | | Size 02 | | Size 02 | | Size 03 | |
| | | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm |
| 8 | 0.438-28 UNEF | 0.860 | 21.80 | 0.870 | 22.10 | 1.160 | 29.50 | 1.375 | 34.90 | 1.417 | 36.00 | N/A | N/A | 0.250 | 6.40 | N/A | N/A | 0.250 | 6.40 |
| 10 | 0.562-24 UNEF | 0.990 | 25.10 | 0.900 | 22.90 | 1.190 | 30.20 | 1.437 | 36.50 | 1.480 | 37.60 | N/A | N/A | 0.312 | 7.90 | N/A | N/A | 0.312 | 7.90 |
| 12 | 0.688-24 UNEF | 1.160 | 29.50 | 0.920 | 23.40 | 1.210 | 30.70 | 1.562 | 39.70 | 1.553 | 39.40 | 0.312 | 7.90 | 0.438 | 11.10 | 0.312 | 7.90 | 0.438 | 11.10 |
| 14 | 0.812-20 UNEF | 1.280 | 32.50 | 0.950 | 24.10 | 1.240 | 31.50 | 1.687 | 42.80 | 1.614 | 41.00 | 0.438 | 11.10 | 0.562 | 14.30 | 0.438 | 11.10 | 0.562 | 14.30 |
| 16 | 0.938-20 UNEF | 1.410 | 35.80 | 0.980 | 24.90 | 1.260 | 32.00 | 1.750 | 44.50 | 1.678 | 42.60 | 0.500 | 12.70 | 0.625 | 15.90 | 0.500 | 12.70 | 0.625 | 15.90 |
| 18 | 1.062-18 UNEF | 1.520 | 38.60 | 0.980 | 24.90 | 1.270 | 32.30 | 1.875 | 47.60 | 1.733 | 44.00 | 0.625 | 15.90 | 0.750 | 19.10 | 0.625 | 15.90 | 0.750 | 19.10 |
| 20 | 1.188-18 UNEF | 1.640 | 41.70 | 1.010 | 25.70 | 1.300 | 33.00 | 1.938 | 49.20 | 1.796 | 45.60 | 0.625 | 15.90 | 0.812 | 20.60 | 0.625 | 15.90 | 0.812 | 20.60 |
| 22 | 1.312-18 UNEF | 1.770 | 45.00 | 1.040 | 26.40 | 1.330 | 33.80 | 2.062 | 52.40 | 1.859 | 47.20 | 0.688 | 17.50 | 0.938 | 23.80 | 0.688 | 17.50 | 0.938 | 23.80 |
| 24 | 1.438-18 UNEF | 1.890 | 48.00 | 1.070 | 27.20 | 1.350 | 34.30 | 2.125 | 54.00 | 1.919 | 48.70 | 0.750 | 19.10 | 1.000 | 25.40 | 0.750 | 19.10 | 1.000 | 25.40 |

Note: All dimensions are in inches and millimeters (inch/mm). For complete dimensions, see the applicable Military Specification. Cable entry is defined as the envelope area of the cable or wire bundle. It is not intended for inspection criteria.

M85049 Backshells

AS85049/88, 89, 90 Series - Banding backshell with self-locking

For connectors:

MIL-DTL-38999 Series III & IV

EN3645

Ordering information

| | | | | | | |
|---|----------|----|---|----|---|----|
| Basic Series | AS85049/ | 88 | - | 11 | N | 02 |
| Angle | | | | | | |
| 88: Straight | | | | | | |
| 89: 45° | | | | | | |
| 90: 90° | | | | | | |
| Self-locking option | | | | | | |
| - : Detended | | | | | | |
| N: Non detended | | | | | | |
| Shell size: 9, 11, 13, 15, 17, 19, 21, 23, 25 | | | | | | |
| Material and plating | | | | | | |
| N: Aluminum, electroless nickel | | | | | | |
| P: Aluminum, olive drab cadmium over electroless nickel with polysulfide sealant strips | | | | | | |
| W: Aluminum, olive drab cadmium over electroless nickel, 1000 hours salt spray | | | | | | |
| Entry size (see table below): 02, 03 | | | | | | |

Dimensions



| Shell size | A Thread Class 2B | B Max | | C Max | | D Max | | E Max | | F Max | | Cable entry Size 02 | | Cable entry Size 03 | |
|------------|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------------|-------|---------------------|-------|
| | | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm |
| 9 | M12X1-6H | 0.860 | 21.80 | 1.010 | 25.70 | 1.160 | 29.50 | 1.375 | 34.90 | 1.417 | 36.00 | N/A | N/A | 0.250 | 6.40 |
| 11 | M15X1-6H | 0.990 | 25.10 | 1.030 | 26.20 | 1.190 | 30.20 | 1.437 | 36.50 | 1.480 | 37.60 | N/A | N/A | 0.312 | 7.90 |
| 13 | M18X1-6H | 1.160 | 29.50 | 1.060 | 26.90 | 1.210 | 30.70 | 1.562 | 39.70 | 1.553 | 39.40 | 0.312 | 7.90 | 0.438 | 11.10 |
| 15 | M22X1-6H | 1.280 | 32.50 | 1.080 | 27.40 | 1.240 | 31.50 | 1.687 | 42.80 | 1.614 | 41.00 | 0.438 | 11.10 | 0.562 | 14.30 |
| 17 | M25X1-6H | 1.410 | 35.80 | 1.110 | 28.20 | 1.260 | 32.00 | 1.750 | 44.50 | 1.678 | 42.60 | 0.500 | 12.70 | 0.625 | 15.90 |
| 19 | M28X1-6H | 1.520 | 38.60 | 1.120 | 28.40 | 1.270 | 32.30 | 1.875 | 47.60 | 1.733 | 44.00 | 0.625 | 15.90 | 0.750 | 19.10 |
| 21 | M31X1-6H | 1.640 | 41.70 | 1.150 | 29.20 | 1.300 | 33.00 | 1.938 | 49.20 | 1.796 | 45.60 | 0.625 | 15.90 | 0.812 | 20.60 |
| 23 | M34X1-6H | 1.770 | 45.00 | 1.170 | 29.70 | 1.330 | 33.80 | 2.062 | 52.40 | 1.859 | 47.20 | 0.688 | 17.50 | 0.938 | 23.80 |
| 25 | M37X1-6H | 1.890 | 48.00 | 1.200 | 30.50 | 1.350 | 34.30 | 2.125 | 54.00 | 1.919 | 48.70 | 0.750 | 19.10 | 1.000 | 25.40 |

Note: All dimensions are in inches and millimeters (inch/mm). For complete dimensions, see the applicable Military Specification. Cable entry is defined as the envelope area of the cable or wire bundle. It is not intended for inspection criteria.

M85049 Backshells

M85049/93 Series - Shield support ring

For **ALL** connectors.

Ordering information

| | | |
|--------------|---|----|
| Basic Series | M85049/93 | 10 |
| Dash number | 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28 | |

Dimensions



| Dash number | X | | Y | | Z | |
|-------------|------|-------|-------|-------|------|-------|
| | inch | mm | inch | mm | inch | mm |
| 4 | 0.25 | 6.40 | 0.404 | 10.30 | 0.36 | 9.10 |
| 6 | 0.38 | 9.70 | 0.529 | 13.40 | 0.49 | 12.40 |
| 8 | 0.50 | 12.70 | 0.654 | 16.60 | 0.61 | 15.50 |
| 10 | 0.63 | 16.00 | 0.779 | 19.80 | 0.74 | 18.80 |
| 12 | 0.75 | 19.10 | 0.904 | 23.00 | 0.86 | 21.80 |
| 14 | 0.88 | 22.40 | 1.029 | 26.10 | 0.99 | 25.10 |
| 16 | 1.00 | 25.40 | 1.154 | 29.30 | 1.11 | 28.20 |
| 18 | 1.13 | 28.70 | 1.279 | 32.50 | 1.24 | 31.50 |
| 20 | 1.25 | 21.80 | 1.404 | 35.70 | 1.36 | 34.50 |
| 22 | 1.38 | 35.10 | 1.529 | 38.90 | 1.49 | 37.80 |
| 24 | 1.50 | 38.10 | 1.654 | 42.00 | 1.61 | 40.90 |
| 26 | 1.63 | 41.40 | 1.779 | 45.20 | 1.74 | 44.20 |
| 28 | 1.75 | 44.50 | 1.904 | 48.60 | 1.86 | 47.20 |

Note: All dimensions are in inches and millimeters (inch/mm). For complete dimensions, see the applicable Military Specification.

Protective Caps

MS27501/MS27502 Series - Protective caps for plug and receptacle

For connectors:
MIL-DTL-38999 Series I

Ordering information

| | | | | | |
|---|-------------|------------|----------|-----------|----------|
| Basic Series | MS27 | 501 | B | 11 | N |
| Cap type | | | | | |
| 501: Cap for plug | | | | | |
| 502: Cap for receptacle | | | | | |
| Material and plating | | | | | |
| B: Aluminum, olive drab cadmium, 500 hours salt spray | | | | | |
| C: Aluminum, black anodize | | | | | |
| F: Aluminum, electroless nickel | | | | | |
| Shell size: 9, 11, 13, 15, 17, 19, 21, 23, 25 | | | | | |
| Style | | | | | |
| A: Without chain | | | | | |
| C: Chain with eyelet | | | | | |
| N: Chain with ring (MS27502 only) | | | | | |
| Chain length (in inches/mm) | | | | | |
| empty: Standard chain length, see table below (C Max) | | | | | |
| L: 5.0/127.0 | | | | | |
| M: 6.0/152.4 (MS27501 only) | | | | | |
| N: 7.0/177.8 (MS27501 only) | | | | | |

Dimensions

Cap for plug Type 501



Cap for receptacle Type 502



| Size | ØA Max | | ØB Max | | C Max | | ØD Min | |
|------|--------|-------|--------|-------|-------|--------|--------|-------|
| | inch | mm | inch | mm | inch | mm | inch | mm |
| 9 | 0.82 | 20.80 | 0.82 | 20.80 | 3.00 | 76.20 | 0.70 | 17.80 |
| 11 | 0.94 | 23.90 | 0.94 | 23.90 | | | 0.84 | 21.30 |
| 13 | 1.07 | 27.20 | 1.10 | 27.90 | 3.50 | 88.90 | 1.01 | 25.70 |
| 15 | 1.19 | 30.20 | 1.22 | 31.00 | | | 1.14 | 29.00 |
| 17 | 1.35 | 33.50 | 1.34 | 34.00 | | | 1.26 | 32.00 |
| 19 | 1.44 | 36.60 | 1.46 | 37.10 | 4.00 | 101.60 | 1.39 | 35.30 |
| 21 | 1.57 | 39.90 | 1.58 | 40.10 | | | 1.51 | 38.40 |
| 23 | 1.69 | 42.90 | 1.70 | 43.20 | | | 1.64 | 41.70 |
| 25 | 1.82 | 46.20 | 1.83 | 46.50 | | | 1.76 | 44.70 |

Note: All dimensions are in inches and millimeters (inch/mm).

Protective Caps

D38999 Series - Protective caps for plug and receptacle

For connectors:
MIL-DTL-38999 Series III

Ordering information

| | | | | | |
|-----------------------------|--|----|---|----|---|
| Basic Series | D38999/ | 32 | W | 11 | N |
| Cap type | 32: Cap for plug 33: Cap for receptacle | | | | |
| Material and plating | W: Aluminum, olive drab cadmium F: Aluminum, nickel Z: Aluminum, black zinc nickel | | | | |
| Shell size: | 9, 11, 13, 15, 17, 19, 21, 23, 25 | | | | |
| Style | N: With stainless steel rope and ring R: With stainless steel rope and eyelet | | | | |

Dimensions

Cap for plug Type 32



Cap for receptacle Type 33



| Size | ØA Max | | ØB Max | | C Max | | ØD | | ØE | | Thread: Stub ACME 2A/2B modified 60° |
|------|--------|-------|--------|-------|-------|--------|-------|-------|-------|-------|--------------------------------------|
| | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | |
| 9 | 0.889 | 22.60 | 0.898 | 22.80 | 3.31 | 84.00 | 0.591 | 15.00 | 0.724 | 18.40 | 0.6250-0.1P-0.3L-TS |
| 11 | 1.016 | 25.80 | 1.043 | 26.50 | | | 0.724 | 18.40 | 0.913 | 23.20 | 0.7500-0.1P-0.3L-TS |
| 13 | 1.181 | 30.00 | 1.181 | 30.00 | 3.90 | 99.00 | 0.913 | 23.20 | 1.043 | 26.50 | 0.8750-0.1P-0.3L-TS |
| 15 | 1.299 | 33.00 | 1.252 | 31.80 | | | 0.913 | 23.20 | 1.193 | 30.30 | 1.0000-0.1P-0.3L-TS |
| 17 | 1.437 | 36.50 | 1.449 | 36.80 | | | 1.043 | 26.50 | 1.283 | 32.60 | 1.1875-0.1P-0.3L-TS |
| 19 | 1.543 | 39.20 | 1.528 | 38.80 | 4.49 | 114.00 | 1.193 | 30.30 | 1.437 | 36.50 | 1.2500-0.1P-0.3L-TS |
| 21 | 1.673 | 42.50 | 1.646 | 41.80 | | | 1.283 | 32.60 | 1.547 | 39.30 | 1.3750-0.1P-0.3L-TS |
| 23 | 1.803 | 45.80 | 1.764 | 44.80 | | | 1.437 | 36.50 | 1.689 | 42.90 | 1.5000-0.1P-0.3L-TS |
| 25 | 1.925 | 48.90 | 1.921 | 48.80 | | | 1.547 | 39.30 | 1.772 | 45.00 | 1.6250-0.1P-0.3L-TS |

Note: All dimensions are in inches and millimeters (inch/mm).

For further information contact us at sunbank.sales@esterline.com
or visit our web site www.sunbankcorp.com