

QPL QUALIFIED

COMPAERO
India Pvt. Ltd.

M85049 PRODUCT RANGE



SOME OF THE FIELDS WHERE M85049 BACKSHELLS ARE USED



MILITARY

Military Vehicles: Providing rugged protection for wiring and connectors in land-based military vehicles, armored personnel carriers, and tanks, ensuring functionality in extreme terrains and under combat conditions.

Communication Systems: Protecting connectors in military communication equipment, ensuring clear and reliable signals in any environment.

Field Equipment: Shielding electronics and connectors used in the field, whether in combat zones or remote operations, from harsh weather, dust, moisture, and vibration.



AEROSPACE

Aircraft Wiring Systems: Providing secure connections in high-vibration environments, ensuring operational safety and reliability in commercial, military, and private aircraft.

Satellite Systems: Offering protection against the harsh conditions of space, including temperature fluctuations, radiation, and the vacuum of space.

Avionics: Shielding sensitive electronics from electromagnetic interference (EMI) while maintaining reliable electrical connections in complex avionics systems.



DEFENSE

Radar and Missile Systems: Offering mechanical protection and shielding for high-precision military systems, including radar, sonar, and missile guidance systems.

Combat Electronics: Providing secure connections for electrical systems on fighter jets, naval vessels, and defense infrastructure.

Unmanned Systems (UAVs/Robots): Protecting sensitive electronics in unmanned aerial vehicles (UAVs), robots, and drones used for surveillance, reconnaissance, and tactical operations.

COMPAERO INDIA M85049 BACKSHELL RANGE



BACKNUT (PAGES 9 TO 13)

The Backnut is a cost-effective solution that ensures proper compression of the connector sealing grommet, preventing deformation. It provides strong grommet retention for crimp connectors, ensuring that the contacts and grommet remain securely in place when terminated with wire bundles. This lightweight alternative to heavy backshells is ideal for applications where space and weight are critical while maintaining reliable sealing performance.



SHRINK BOOT ADAPTER (PAGES 14 TO 17)

The Shrink Boot Adapter offers robust environmental protection for connector wire terminations in harsh conditions, including military and industrial applications. It is particularly effective for unshielded cables terminated with heat shrink boots. Featuring a specialized groove to secure the boot lip, it ensures a firm grip while providing adequate space for cable looping. The adapter enhances strain relief and simplifies future repairs, making it a practical and reliable choice for demanding environments.



BAND LOCK ADAPTER (PAGES 18 TO 25)

Designed for comprehensive shielding and environmental protection, the Band Lock with Shrink Boot Adapter accommodates both heat-activated and cold-shrink boot shapes. It provides a full 360° shield termination, ensuring optimal electrical performance. Available in various cabling chamber lengths and exit diameters, it allows flexible cable routing. A high-quality tempered band is used to secure the shielding, which can be easily installed using a specialized assembly tool. The backshell can be sealed with a straight or right-angled heat shrink molded piece, offering enhanced durability and ease of maintenance.



PRE-SHIELDED BAND LOCK ADAPTER (PAGES 26 TO 31)

This adapter simplifies assembly by incorporating a pre-cut shielding braid, which seamlessly overlaps with the cable braid for effective 360° shielding. Designed to accept a heat shrink boot, it provides reliable environmental sealing and EMI protection. The integrated braid minimizes installation time and ensures a secure connection, making it an efficient choice for high-performance applications. The combination of shielding and strain relief enhances cable longevity and simplifies field repairs.

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Military Standard Backshells

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EXCELLENCE IN EVERY CONNECTION...

At Compaero India, reliability is crucial for mission-critical interconnect solutions. Our AS85049 qualified MIL-Spec products are essential in systems where failure is not an option. We provide a diverse selection of QPL Qualified backshells, showcasing precision engineering and excellence. Each product is designed, manufactured, and tested to meet AS85049 standards for optimal performance in defense and aerospace applications.

Choose Compaero India for MIL-Spec products that ensure top quality and responsive service when performance matters most.

Shown on the right is a Shield Termination Boot Accommodation Adapter, featuring Olive Drab Cadmium - Electroless Nickel Selective Plating with Polysulfide Sealant Strips.



EXAMPLE: M85049/115-17TW05-6

For Connectors: MIL-DTL-38999 Series III & IV

Pre-attached Shield Termination (RFI/EMI),
Boot Accommodation
Profile : Straight
Coupling mechanism : Non-self locking
Finish : Cadmium - Olive Drab over Electroless Nickel



EXAMPLE: M85049/84N16Z02

For Connectors: AS50151 Crimp, MIL-DTL-26482 Series 2, AS81703 Series 3 & MIL-DTL-83723 Series III

Shield Termination, Boot Accommodation
Profile : 90° Angled
Coupling mechanism : Non-detent self-locking
Finish : Zinc Nickel over Electroless Nickel, Black Color



EXAMPLE: M85049/86-16N03

For Connectors: MIL-DTL-38999, Series I & II

Shield Termination, Boot Accommodation
Profile : 45° Angled
Coupling mechanism : Detented self-locking
Finish : Electroless Nickel

MILITARY STANDARD BACKSHELLS PART AND PAGE NUMBER INDEX

AS85049 SPECIFICATION NUMBER	PART IDENTIFICATION NUMBER	MILITARY PART NUMBER SUPERSEDED	DESCRIPTION	CONNECTOR INTERFACE	PAGE NO.
AS85049/14	M85049/14- M85049/14 N M85049/14 S	MIL-C-85049/14	E Nut E Nut, Non-Detent, Self Locking E Nut, Detented, Self-Locking	MIL-DTL-38999, Ser. III & IV EN3645	9
AS85049/27	M85049/27- M85049/27 N M85049/27 S	MIL-DTL-38999/1	E Nut E Nut, Non-Detent, Self-Locking E Nut, Detented, Self-Locking	MIL-DTL-38999 Series I & II	10
AS85049/31	M85049/31- M85049/31 N M85049/31 S	MS3416	E Nut E Nut, Non-Detent, Self-Locking E Nut, Detented, Self Locking	AS50151; MIL-DTL-26482, Series 2; AS81703 Series 3; MIL-DTL-83723, Series III	12
AS85049/60	M85049/60-1 M85049/60-2G	MS3158 MS3416	Straight Shrink Boot Adapter Straight Shrink Boot Adapter	AS50151; MIL-DTL-26482, Series 2; AS81703 Series 3; MIL-DTL-83723, Series III	14 & 15
AS85049/62	M85049/62	M38999/2	Straight Shrink Boot Adapter	MIL-DTL-38999 Ser. I & II	16
AS85049/69	M85049/69	MIL-C-85049/69	Straight Shrink Boot Adapter	MIL-DTL-38999 Ser. III & IV EN3645	17
AS85049/82 AS85049/83 AS85049/84	M85049/82 M85049/83 M85049/84	MIL-C-85049/82 MIL-C-85049/83 MIL-C-85049/84	Straight Banding Backshell 45° Banding Backshell 90° Banding Backshell	AS50151; MIL-DTL-26482, Series 2; AS81703 Series 3; MIL-DTL-83723, Series III	18
AS85049/85 AS85049/86 AS85049/87	M85049/85 M85049/86 M85049/87	MIL-C-85049/85 MIL-C-85049/86 MIL-C-85049/87	Straight Banding Backshell 45° Banding Backshell 90° Banding Backshell	MIL-DTL-38999 Series I & II	20
AS85049/88 AS85049/89 AS85049/90	M85049/88 M85049/89 M85049/90	MIL-C-85049/88 MIL-C-85049/89 MIL-C-85049/90	Straight Banding Backshell 45° Banding Backshell 90° Banding Backshell	MIL-DTL-38999 Ser. III & IV EN3645	24
AS85049/109	M85049/109	88064	Straight Shield Sock Shrink Boot Adapter with Detented or Non-Detent Self-Locking or Non-Self Locking Coupling Nut	AS50151; MIL-DTL-26482, Series 2; AS81703 Series 3; MIL-DTL-83723, Series III	26
AS85049/111	M85049/111	89018	90° Shield Sock Shrink Boot Adapter with Optional Self-Locking Coupling Nut	AS50151; MIL-DTL-26482, Series 2; AS81703 Series 3; MIL-DTL-83723, Series III	26
AS85049/112	M85049/112	89014	Straight Shield Sock Shrink Boot Adapter with Optional Self-Locking Coupling Nut	MIL-DTL-38999 Series I & II	28
AS85049/114	M85049/114	89016	90° Shield Sock Shrink Boot Adapter with De- tented or Non-Detent Self-Locking Coupling Nut	MIL-DTL-38999 Series I & II	28
AS85049/115	M85049/115	89013	Straight Shield Sock Shrink Boot Adapter with Optional Self-Locking Coupling Nut	MIL-DTL-38999 Ser. III & IV EN3645	30
AS85049/117	M85049/117	89020	90° Shield Sock Shrink Boot Adapter with Optional Self-Locking Coupling Nut	MIL-DTL-38999 Ser. III & IV EN3645	30

MIL FINISH CODE	BASE MATERIAL OF ADAPTER BODY AND COUPLING NUT	FINISH DESCRIPTION
A	Aluminum Alloy	Black Anodize, in accordance with Class 2 of MIL-A-8625, Type II, -65° to +175° C [500 Hour Salt Spray]
W	Aluminum Alloy	Cadmium, Olive Drab over suitable underplate, -65° to +175° C (Not for use in space application) [1000 Hour Salt Spray]
N	Aluminum Alloy	Electroless Nickel, in accordance with AMS-C-26074 or AMS2404, -65° to +200° C (Not for Navy use) [96 Hour Salt Spray]
Z	Aluminum Alloy	Zinc Nickel in accordance with ASTM B84 or AMS2417 over suitable underplate. Color will be Black, Conductive and Non-Reflective. Final finish will be electrically Conductive, -65° to +175° C. (Not for use in space application) [1000 Hour Salt Spray]
P	Aluminum Alloy	Cadmium, Olive Drab over electroless nickel, with Polysulfide sealant strips, (Selective Plating), -65° to +175° C. (Not for use in space application) [96 Hour Salt Spray]
ZP	Aluminum Alloy	Zinc Nickel over electroless nickel, with Polysulfide sealant strips, (Selective Plating), -65° to +175° C. (Not for use in space application) [96 Hour Salt Spray]

Please note that the colours shown above are for illustrative purposes only-actual finish color may vary.

The below figures are provided to support operators already trained in the installation of heat shrinkable products and harnessing components. They identify the recommended torque values to be used when installing adapters onto circular electrical connectors, to consistently tighten adapters in a controlled manner.

For any questions or further instructions please contact us and we will be happy to assist you.

Connector Accessories onto Connector Threads

SHELL SIZE	MIL-DTL-26500 MIL-DTL-81511 MIL-DTL-26482 S1 MIL-DTL-38999 S1/S2 MIL-DTL 5015 Solder		MIL-DTL-26482 S2 MIL-DTL-28840 MIL-DTL-83723 MIL-DTL-22992 MIL-DTL-5015 Crimp MIL-DTL-38999 S3/S4	
	in-lb	Nm	in-lb	Nm
08/09	30 - 40	3.4 - 4.5	51 - 61	5.8 - 6.9
10/11	30 - 40	3.4 - 4.5	71 - 81	8.0 - 9.2
12/13	35 - 45	4.0 - 5.1	103 - 113	11.6 - 12.8
14/15	35 - 45	4.0 - 5.1	111 - 121	12.5 - 13.7
16/17	35 - 45	4.0 - 5.1	111 - 121	12.5 - 13.7
18/19	35 - 45	4.0 - 5.1	111 - 121	12.5 - 13.7
20/21	75 - 85	8.5 - 9.6	131 - 141	14.8 - 15.9
22/23	75 - 85	8.5 - 9.6	131 - 141	14.8 - 15.9
24/25	75 - 85	8.5 - 9.6	131 - 141	14.8 - 15.9
28	115 - 125	13.0 - 14.1	143 - 153	16.2 - 17.3
32	115 - 125	13.0 - 14.1	143 - 153	16.2 - 17.3
36	115 - 125	13.0 - 14.1	143 - 153	16.2 - 17.3
40	155 - 165	17.5 - 18.6	159 - 169	18.0 - 19.1
44	155 - 165	17.5 - 18.6	159 - 169	18.0 - 19.1
48	155 - 165	17.5 - 18.6	159 - 169	18.0 - 19.1

Cable Clamps onto Backshells

CLAMP-SIZE	TORQUE VALUES	
	in-lb	Nm
01	35 - 40	4.0 - 4.5
02	35 - 40	4.0 - 4.5
03	35 - 55	4.0 - 6.2
04	35 - 55	4.0 - 6.2
05	35 - 55	4.0 - 6.2
06	40 - 60	4.5 - 6.8
07	40 - 60	4.5 - 6.8
08	40 - 60	4.5 - 6.8
09	80 - 100	9.0 - 11.3
10	80 - 100	9.0 - 11.3
11	80 - 100	9.0 - 11.3
12	80 - 100	9.0 - 11.3

Cable Clamp Hardware

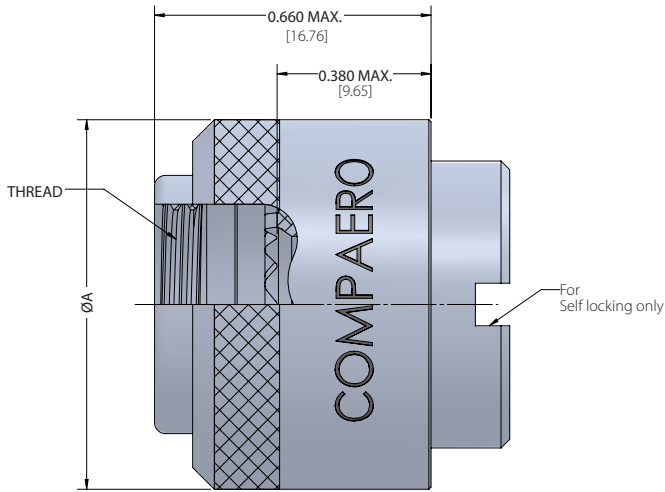
THREAD-SIZE	TORQUE VALUES	
	in-lb	Nm
2-56	1.5 - 2.5	0.2 - 0.3
4-40	3.5 - 4.5	0.4 - 0.5
6-32	5.0 - 7.0	0.6 - 0.8
8-32	7.0 - 9.0	0.8 - 1.0
10-32	9.0 - 11.0	1.0 - 1.2
1/4-20	11.0 - 13.0	1.2 - 1.5

BACKNUT

For Connectors: MIL-DTL-38999 Series III & IV



Self-locking



Non-Self locking

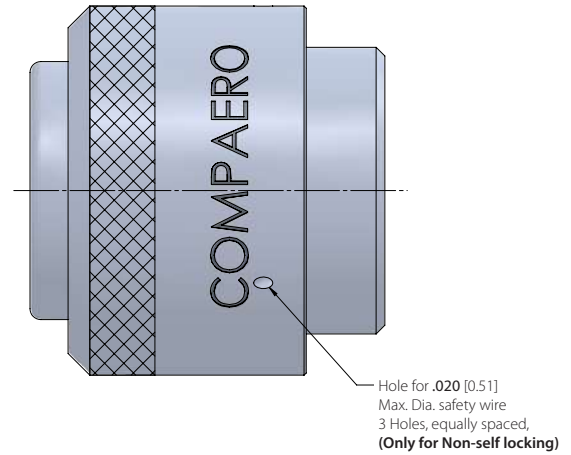


Table 1 Shell Sizes

SHELL SIZE	THREAD	ØA MAX.	
		in	mm
9	M12X1.0-6H	0.858	21.80
11	M15X1.0-6H	0.984	25.00
13	M18X1.0-6H	1.157	29.39
15	M22X1.0-6H	1.279	32.49
17	M25X1.0-6H	1.406	35.71
19	M28X1.0-6H	1.516	38.50
21	M31X1.0-6H	1.642	41.71
23	M34X1.0-6H	1.768	44.91
25	M37X1.0-6H	1.889	47.98



Metric equivalents are given for general information only and are based upon 1.00 inch = 25.4 mm.

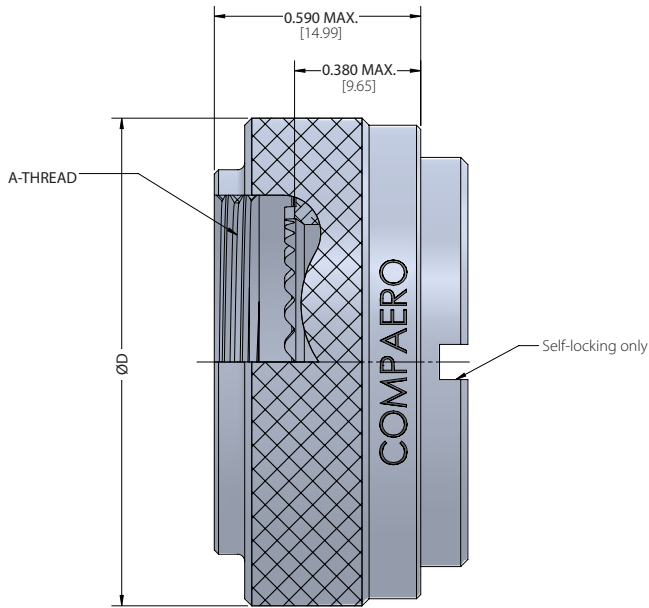
M85049/14 S 11 W



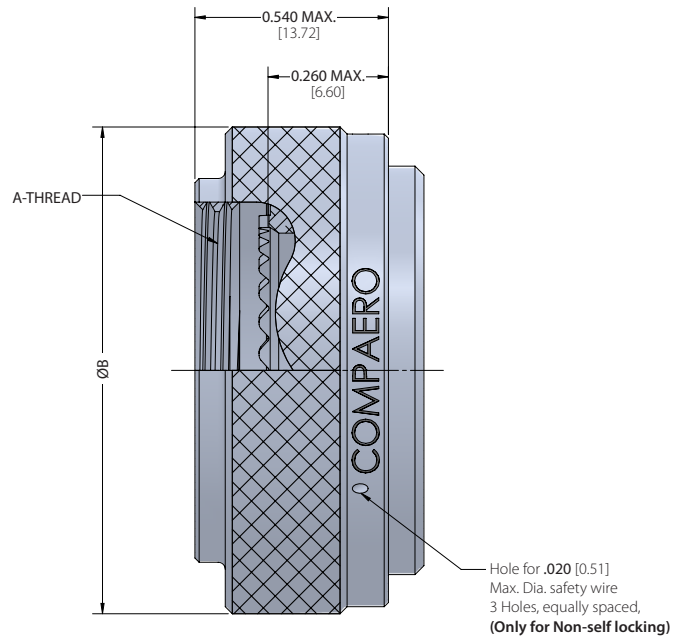
inches [millimeters]

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Self-locking



Non-Self locking



M85049/ 27 S 10 W

Basic Part Number

Configuration

"-" (DASH) Non-self locking
 "S" Detented self-locking
 "N" Non detent self-locking

Material & Finish

Applicable finishes: W, N & Z
 See page 7 for details.

Shell Size

See table 1 for self locking
 See table 2 for non-self locking

Note: This accessory will not accommodate connectors using size 8, 4, or 0 contacts



Table 1 Shell Sizes for Self-locking

SHELL SIZE	A-THREAD UNEF-2B	ØD MAX.	
		in	mm
8	0.4375-28	0.859	21.82
10	0.5625-24	0.984	24.99
12	0.6875-24	1.156	29.36
14	0.8125-20	1.281	32.54
16	0.9375-20	1.406	35.71
18	1.0625-18	1.516	38.51
20	1.1875-18	1.641	41.68
22	1.3125-18	1.766	44.86
24	1.4375-18	1.891	48.03

Table 2 Shell Sizes for Non Self-locking

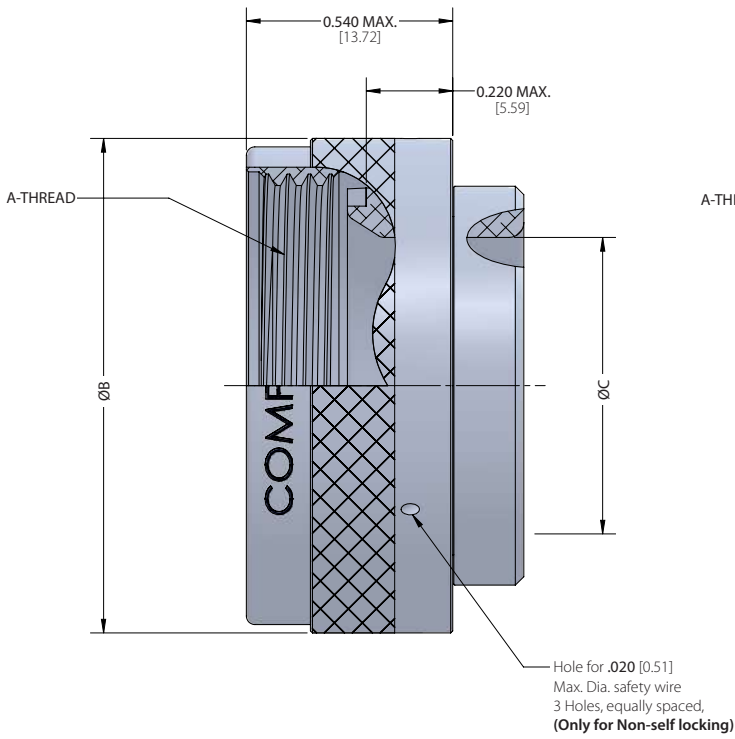
SHELL SIZE	A-THREAD UNEF-2B	ØB MAX.	
		in	mm
8	0.4375-28	0.75	19.10
10	0.5625-24	0.85	21.60
12	0.6875-24	1.00	25.40
14	0.8125-20	1.10	27.90
16	0.9375-20	1.25	31.80
18	1.0625-18	1.40	35.60
20	1.1875-18	1.50	38.10
22	1.3125-18	1.65	41.90
24	1.4375-18	1.75	44.50

Metric equivalents are given for general information only and are based upon 1.00 inch = 25.4 mm.

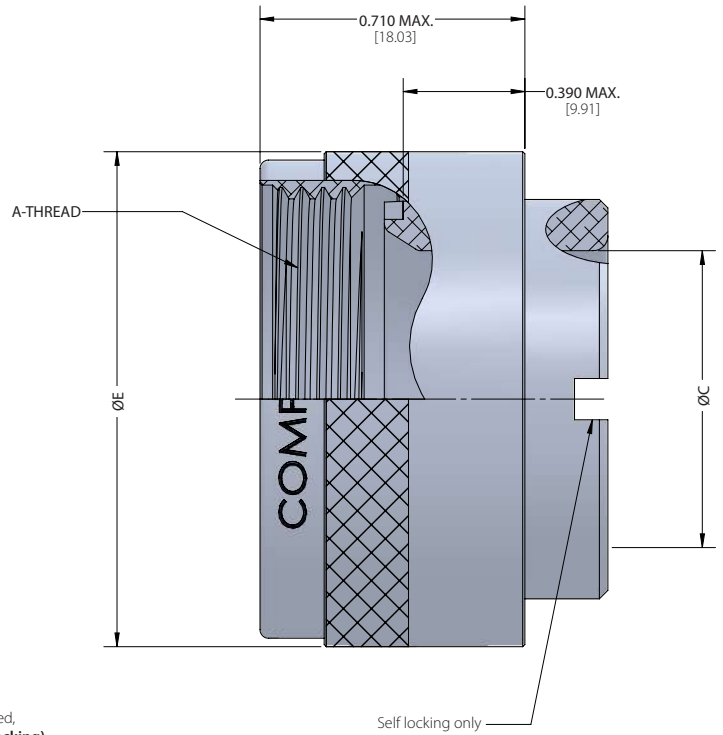
BACKNUT

For Connectors: MIL-DTL-5015 Crimp, MIL-DTL-26482 Series 2, AS81703 Series 3 & MIL-DTL-83723 Series III

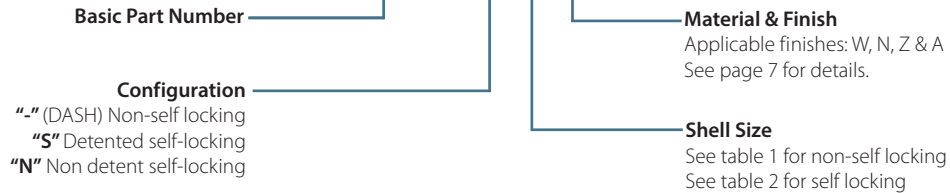
Non-Self locking



Self-locking



M85049/31 S 10 W



BACKNUT

For Connectors: MIL-DTL-5015 Crimp, MIL-DTL-26482 Series 2, AS81703 Series 3 & MIL-DTL-83723 Series III



Table 1 Shell Sizes for Non-self locking

SHELL SIZE	A-THREAD RIGHT HAND (CLASS 2B)	ØB MAX.		ØC MAX.	
		in	mm	in	mm
8	0.500-20 UNF	0.617	15.67	0.270	6.86
10	0.625-24 UNEF	0.734	18.64	0.375	9.53
12	0.750-20 UNEF	0.858	21.79	0.511	12.98
14	0.875-20 UNEF	0.984	24.99	0.585	14.86
16	1.000-20 UNEF	1.112	28.24	0.710	18.03
18	1.0625-18 UNEF	1.218	30.94	0.789	20.05
20	1.1875-18 UNEF	1.345	34.16	0.914	23.22
22	1.3125-18 UNEF	1.468	37.29	1.039	26.39
24	1.4375-18 UNEF	1.593	40.46	1.154	29.31

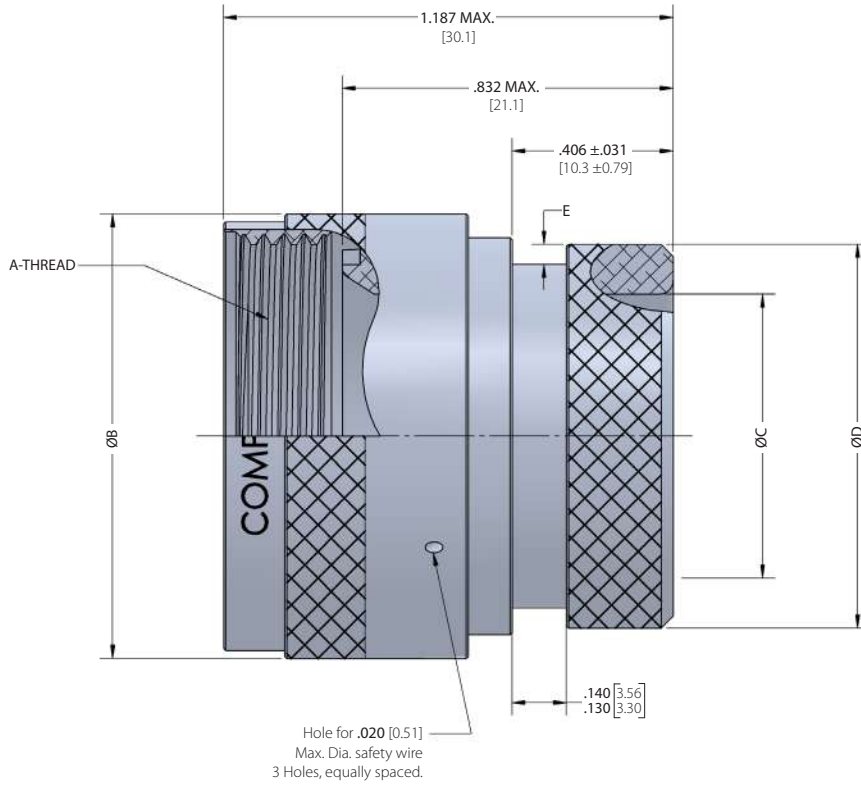
Table 2 Shell Sizes for Self-locking

SHELL SIZE	A-THREAD RIGHT HAND (CLASS 2B)	ØE MAX.		ØC MAX.	
		in	mm	in	mm
8	0.500-20 UNF	0.885	22.48	0.270	6.86
10	0.625-24 UNEF	1.010	25.65	0.375	9.53
12	0.750-20 UNEF	1.135	28.83	0.511	12.98
14	0.875-20 UNEF	1.260	32.00	0.585	14.86
16	1.000-20 UNEF	1.385	35.18	0.710	18.03
18	1.0625-18 UNEF	1.510	38.35	0.789	20.05
20	1.1875-18 UNEF	1.635	41.53	0.914	23.22
22	1.3125-18 UNEF	1.760	44.70	1.039	26.39
24	1.4375-18 UNEF	1.885	47.88	1.154	29.31

Metric equivalents are given for general information only and are based upon 1.00 inch = 25.4 mm.

SHRINK BOOT ADAPTER

For Connectors: AS50151 Crimp, AS95234, MIL-DTL-26482 Series 2,
AS81703 Series 3 & MIL-DTL-83723 Series III
Non-Self locking - Standard Version



M85049/60-1 W 10

Basic Part Number

Shell Size
See table 1

Material & Finish

Applicable finishes: W, N, Z & A
See page 7 for details.

Table 1 Shell Sizes

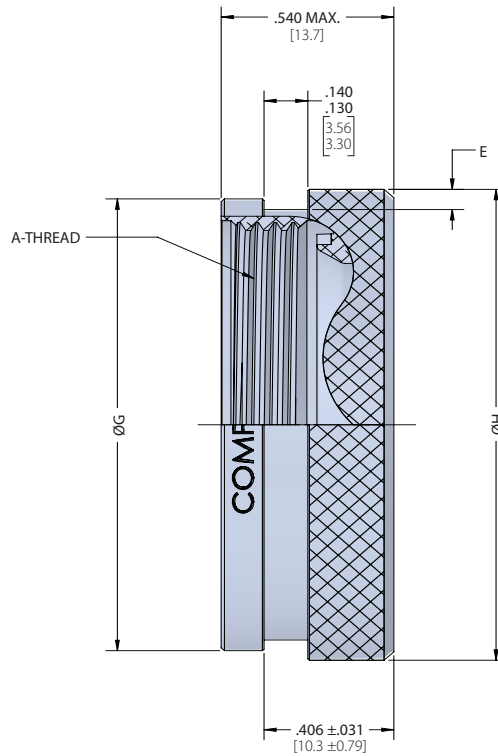
SHELL SIZE	A - THREAD RIGHT HAND (CLASS 2B)	ØB		ØC MIN.		ØD		E	
		+0.00 -.045	+0.00 -1.14	in	mm	+0.00 -.020	+0.00 -.51	+0.08 -.000	+0.20 -.000
		in	mm			in	mm	in	mm
8	0.500-20 UNF	0.617	15.7	0.250	6.4	0.533	13.5	0.044	1.1
10	0.625-24 UNEF	0.734	18.6	0.355	9.0	0.605	15.4	0.044	1.1
12	0.750-20 UNEF	0.858	21.8	0.491	12.5	0.774	19.7	0.044	1.1
14	0.875-20 UNEF	0.984	25.0	0.565	14.4	0.838	21.3	0.044	1.1
16	1.000-20 UNEF	1.112	28.2	0.690	17.5	0.963	24.5	0.044	1.1
18	1.0625-18 UNEF	1.218	30.9	0.769	19.5	1.042	26.5	0.044	1.1
20	1.1875-18 UNEF	1.345	34.2	0.894	22.7	1.217	30.9	0.069	1.8
22	1.3125-18 UNEF	1.468	37.3	1.019	25.9	1.355	34.4	0.069	1.8
24	1.4375-18 UNEF	1.593	40.5	1.134	28.8	1.443	36.7	0.069	1.8



Metric equivalents are given for general information only and are based upon 1.00 inch = 25.4 mm.

SHRINK BOOT ADAPTER

For Connectors: AS50151 Crimp, AS95234, MIL-DTL-26482 Series 2,
AS81703 Series 3 & MIL-DTL-83723 Series III
Non-self locking - Short Version



M85049/60-2G 10 W

Basic Part Number

Shell Size

See table 1

Material & Finish

Applicable finishes: W, N, Z & A
See page 7 for details.

Table 1 Shell Sizes

SHELL SIZE	A - THREAD RIGHT HAND (CLASS 2B)	ØG		ØH		E	
		+0.000	+0.000	+0.000	+0.000	+0.008	+0.20
		-0.020	-0.51	-0.045	-1.14	-0.000	-0.000
		in	mm	in	mm	in	mm
8	0.500-20 UNF	0.657	16.7	0.688	17.5	0.044	1.1
10	0.625-24 UNEF	0.774	19.7	0.803	20.4	0.044	1.1
12	0.750-20 UNEF	0.898	22.8	0.938	23.8	0.044	1.1
14	0.875-20 UNEF	1.024	26.0	1.063	27.0	0.044	1.1
16	1.000-20 UNEF	1.152	29.3	1.238	31.4	0.069	1.8
18	1.0625-18 UNEF	1.243	31.6	1.310	33.3	0.069	1.8
20	1.1875-18 UNEF	1.370	34.8	1.436	36.5	0.069	1.8
22	1.3125-18 UNEF	1.443	36.7	1.560	39.6	0.069	1.8
24	1.4375-18 UNEF	1.618	41.1	1.686	42.8	0.069	1.8



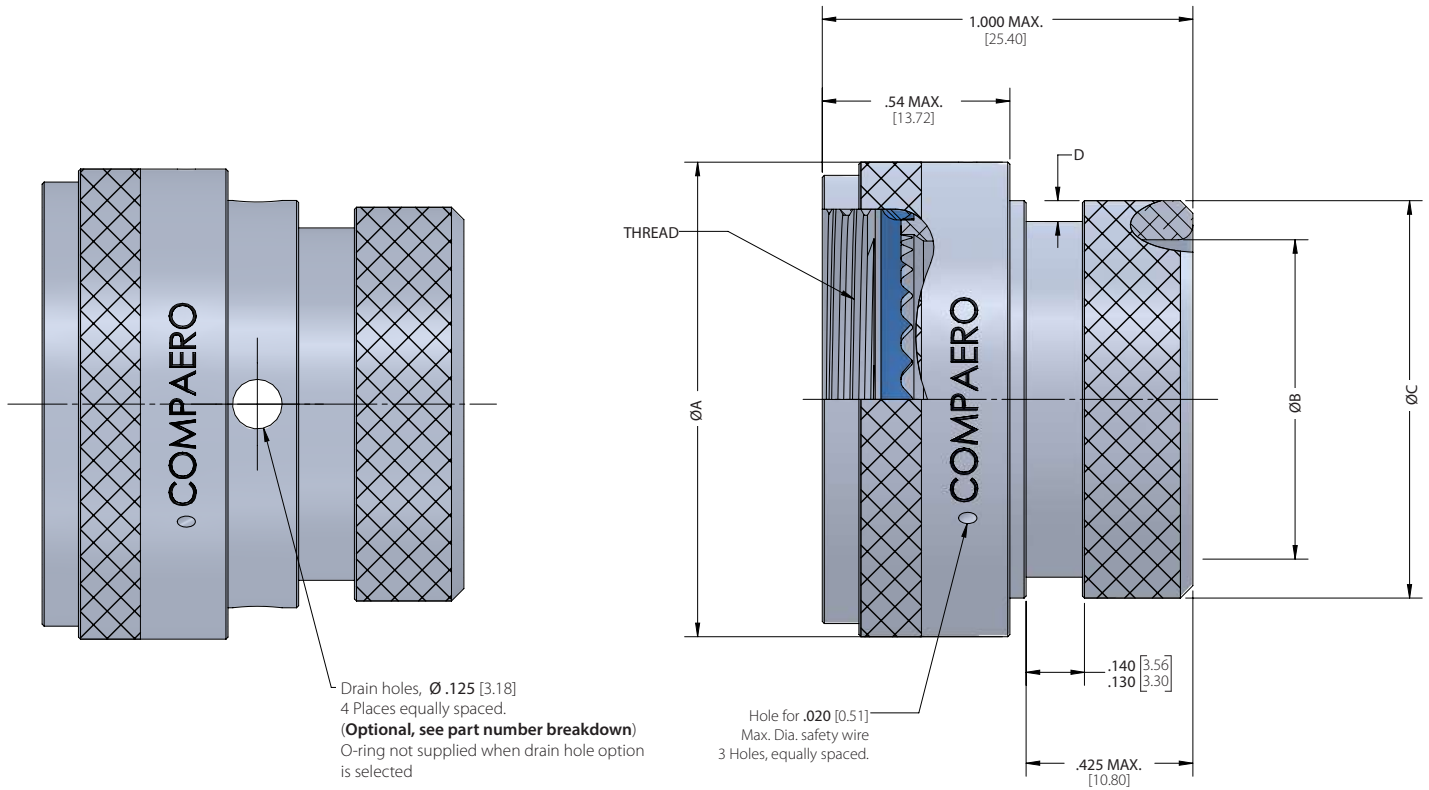
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inches [millimeters]

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SHRINK BOOT ADAPTER

For Connectors: MIL-DTL-38999 Series I and II
Non-Self locking



Drain holes, Ø .125 [3.18]
4 Places equally spaced.
(Optional, see part number breakdown)
O-ring not supplied when drain hole option is selected

Hole for .020 [0.51]
Max. Dia. safety wire
3 Holes, equally spaced.

M85049/62 -10 W D

Basic Part Number

Shell Size
See table 1

Drain Hole Option
Omit for no drain hole

Material & Finish
Applicable finishes: W, N, Z & A
See page 7 for details.

Table 1 Shell Sizes

SHELL SIZE	THREAD UNEF-2B	ØA MAX.		D		ØB MIN.		ØC MAX.	
				+0.008 -0.000	+0.20 -0.00				
		in	mm	in	mm	in	mm	in	mm
08	0.4375-28	0.75	19.05	0.044	1.12	0.250	6.35	0.533	13.54
10	0.5625-24	0.85	21.59	0.044	1.12	0.375	9.53	0.605	15.37
12	0.6875-24	1.00	25.40	0.044	1.12	0.500	12.70	0.774	19.66
14	0.8125-20	1.10	27.94	0.044	1.12	0.625	15.88	0.838	21.29
16	0.9375-20	1.25	31.75	0.044	1.12	0.750	19.05	0.963	24.46
18	1.0625-18	1.40	35.56	0.044	1.12	0.812	20.62	1.042	26.47
20	1.1875-18	1.50	38.10	0.069	1.75	0.937	23.80	1.217	30.91
22	1.3125-18	1.65	41.91	0.069	1.75	1.062	26.97	1.355	34.42
24	1.4375-18	1.75	44.45	0.069	1.75	1.188	30.18	1.443	36.65

Metric equivalents are given for general information only and are based upon 1.00 inch = 25.4 mm.

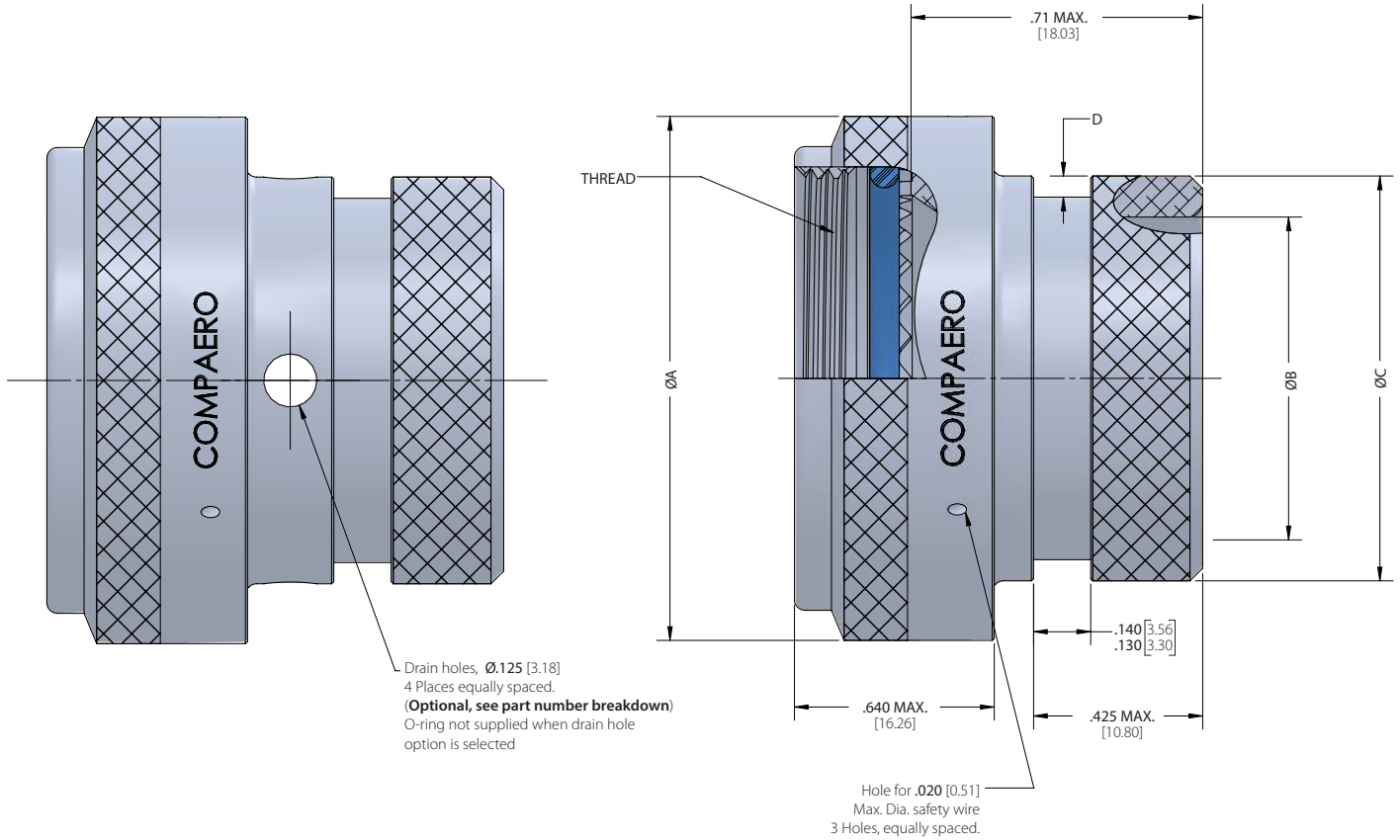


inches [millimeters]

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SHRINK BOOT ADAPTER

For Connectors: MIL-DTL-38999 Series III and IV
Non-Self locking



M85049/69 -11 W D

Basic Part Number

Drain Hole Option
Omit for no drain hole

Shell Size
See table 1

Material & Finish
Applicable finishes: W, N, Z & A
See page 7 for details.

Table 1 Shell Sizes

SHELL SIZE	THREAD	$\varnothing A \text{ MAX.}$		$\varnothing B \text{ MIN.}$		$\varnothing C \text{ MAX.}$		D	
		in	mm	in	mm	in	mm	+.008	+ .20
								-.000	-.00
9	M12X1.0-6H	0.75	19.1	0.250	6.35	0.533	13.54	0.044	1.12
11	M15X1.0-6H	0.85	21.6	0.375	9.52	0.605	15.37	0.044	1.12
13	M18X1.0-6H	1.00	25.4	0.500	12.70	0.774	19.66	0.044	1.12
15	M22X1.0-6H	1.15	29.2	0.625	15.88	0.838	21.29	0.044	1.12
17	M25X1.0-6H	1.25	31.8	0.750	19.05	0.963	24.46	0.044	1.12
19	M28X1.0-6H	1.40	35.6	0.812	20.62	1.042	26.47	0.044	1.12
21	M31X1.0-6H	1.55	39.4	0.937	23.80	1.217	30.91	0.069	1.75
23	M34X1.0-6H	1.65	41.9	1.062	26.97	1.355	34.42	0.069	1.75
25	M37X1.0-6H	1.85	47.0	1.188	30.18	1.443	36.65	0.069	1.75



Metric equivalents are given for general information only and are based upon 1.00 inch = 25.4 mm.

inches [millimeters]

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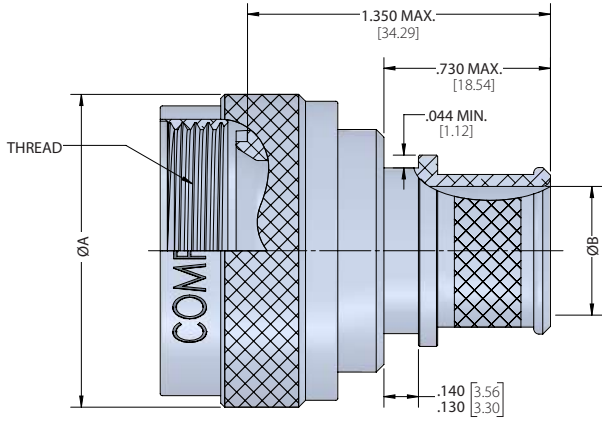
SALES@COMPAEROINDIA.COM

BAND LOCK ADAPTERS

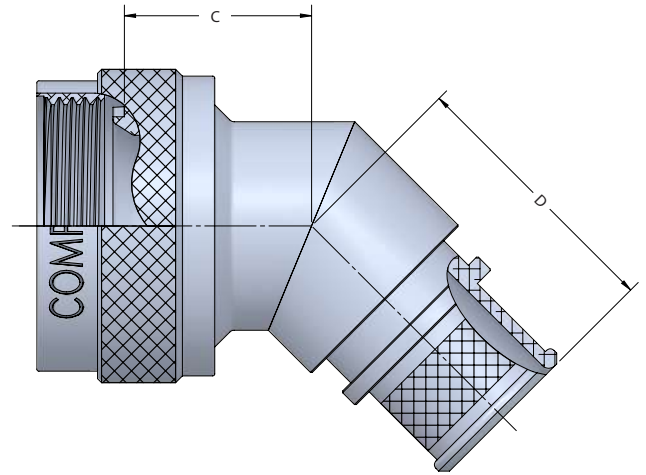
For Connectors: AS50151 Crimp, MIL-DTL-26482 Series 2,
AS81703 Series 3 & MIL-DTL-83723 Series III
Self-locking, Boot Accommodation



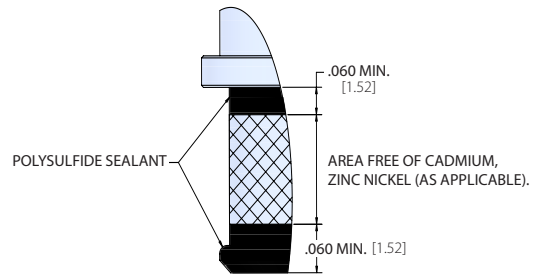
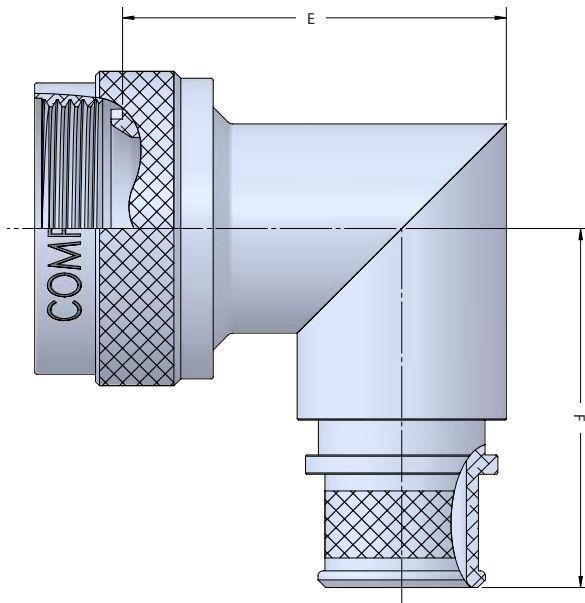
Straight



45° Angled



90° Angled



Polysulfide Option

For MIL Finish Codes : P & ZP

M85049/82 - 08 P 03

Basic Part Number

- M85049/82 - Straight
- M85049/83 - 45° Angled
- M85049/84 - 90° Angled

Configuration

- "-" (DASH) Detented self-locking
- "N" Non detent self-locking

Entry Size

See table 1

Material & Finish

Applicable finishes: W, N, Z, P & ZP
See page 7 for details.

Shell Size

See table 1

BAND LOCK ADAPTERS

For Connectors: AS50151 Crimp, MIL-DTL-26482 Series 2,
AS81703 Series 3 & MIL-DTL-83723 Series III
Self-locking, Boot Accommodation



Table 1 Shell & Entry Sizes

SHELL SIZE	RIGHT HAND THREAD CLASS 2B	ØA MAX.		C MAX.		D MAX.		E MAX.		F MAX.		ENTRY SIZE	ØB	
		in	mm	in	mm	in	mm	in	mm	in	mm		± .010	± 0.25
													in	mm
08	0.500-20 UNF	0.885	22.48	0.87	22.10	1.16	29.46	1.188	30.18	1.417	35.99	02	N/A	N/A
												03	0.250	6.35
10	0.625-24 UNEF	1.010	25.65	0.89	22.61	1.18	29.97	1.281	32.54	1.480	37.59	02	N/A	N/A
												03	0.312	7.92
12	0.750-20 UNEF	1.135	28.83	0.92	23.37	1.20	30.48	1.406	35.71	1.542	39.17	02	0.312	7.92
												03	0.438	11.13
14	0.875-20 UNEF	1.260	32.00	0.94	23.88	1.22	30.99	1.531	38.89	1.605	40.77	02	0.438	11.13
												03	0.562	14.27
16	1.000-20 UNEF	1.385	35.18	0.96	24.38	1.25	31.75	1.656	42.06	1.667	42.34	02	0.500	12.70
												03	0.625	15.88
18	1.0625-18 UNEF	1.510	38.35	0.98	24.89	1.26	32.00	1.718	43.64	1.730	43.94	02	0.625	15.88
												03	0.750	19.05
20	1.1875-18 UNEF	1.635	41.53	1.00	25.40	1.29	32.77	1.844	46.84	1.792	45.52	02	0.625	15.88
												03	0.812	20.62
22	1.3125-18 UNEF	1.760	44.70	1.03	26.16	1.31	33.27	1.938	49.23	1.850	46.99	02	0.688	17.48
												03	0.938	23.83
24	1.4375-18 UNEF	1.885	47.88	1.05	26.67	1.34	34.04	2.093	53.16	1.917	48.69	02	0.750	19.05
												03	1.000	25.40

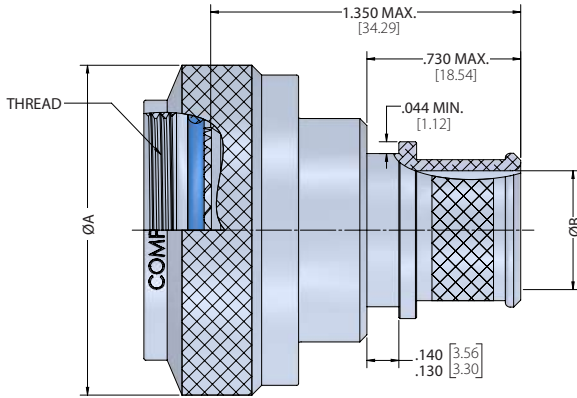
Metric equivalents are given for general information only and are based upon 1.00 inch = 25.4 mm.

BAND LOCK ADAPTERS

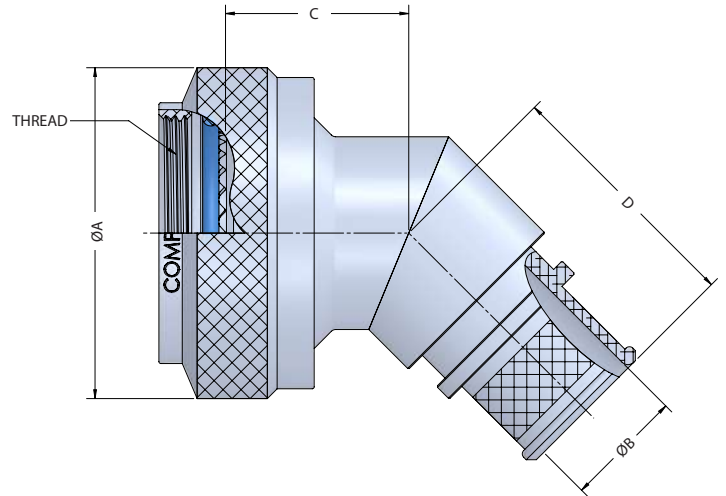
For Connectors: MIL-DTL-38999, Series I & II
Self-locking, Boot Accommodation



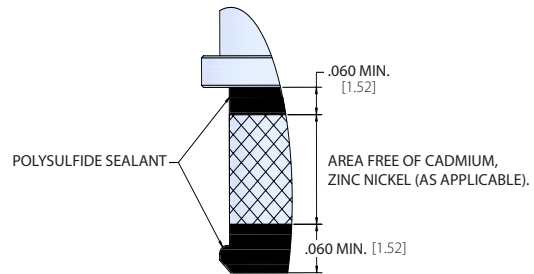
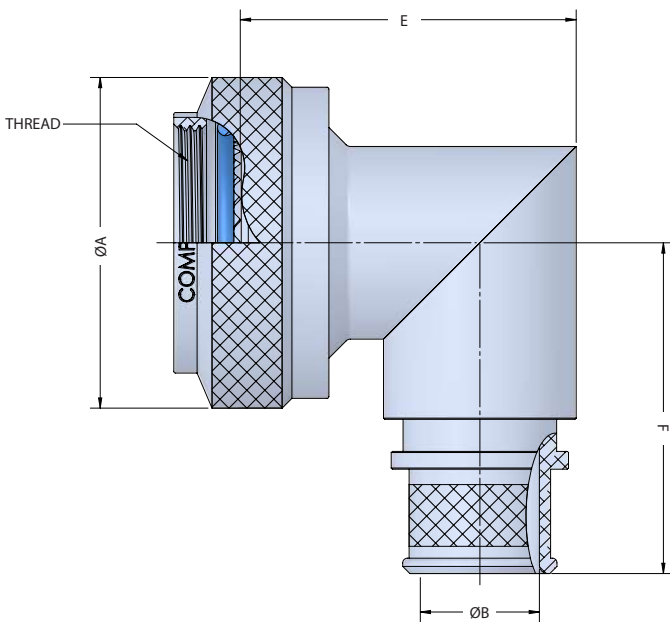
Straight



45° Angled



90° Angled



Polysulfide Option

For MIL Finish Codes : P & ZP

M85049/85 - 08 P 02

Basic Part Number

M85049/85 - Straight
M85049/86 - 45° Angled
M85049/87 - 90° Angled

Configuration

"-" (DASH) Detented self-locking
"N" Non detent self-locking

Entry Size

See table 1, 2 or 3 according to the Backshell Style.

Material & Finish

Applicable finishes: W, N, Z, P & ZP
See page 7 for details.

Shell Size

See table 1, 2 or 3 according to the Backshell Style.

BAND LOCK ADAPTERS

For Connectors: MIL-DTL-38999, Series I & II
Self-locking, Boot Accommodation



Table 1 Shell & Entry Sizes for Backshell Style - 85

SHELL SIZE	THREAD UNEF CLASS 2B	ØA MAX.		ENTRY SIZE	ØB	
		in	mm		± .010	± 0.25
					in	mm
08	0.4375-28	0.859	21.82	01	N/A	N/A
				02	0.250	6.35
10	0.5625-24	0.986	25.04	01	N/A	N/A
				02	0.312	7.92
12	0.6875-24	1.156	29.36	01	0.312	7.92
				02	0.438	11.13
14	0.8125-20	1.281	32.54	01	0.438	11.13
				02	0.562	14.27
16	0.9375-20	1.406	35.71	01	0.500	12.70
				02	0.625	15.88
18	1.0625-18	1.516	38.51	01	0.625	15.88
				02	0.750	19.05
20	1.1875-18	1.641	41.68	01	0.625	15.88
				02	0.812	20.62
22	1.3125-18	1.766	44.86	01	0.688	17.48
				02	0.938	23.83
24	1.4375-18	1.891	48.03	01	0.750	19.05
				02	1.000	25.40

Metric equivalents are given for general information only and are based upon 1.00 inch = 25.4 mm.

BAND LOCK ADAPTERS

For Connectors: MIL-DTL-38999, Series I & II
Self-locking, Boot Accommodation



Table 2 Shell & Entry Sizes for Backshell Style - 86

SHELL SIZE	THREAD UNEF CLASS 2B	ØA MAX.		C MAX.		D MAX.		ENTRY SIZE	ØB	
		in	mm	in	mm	in	mm		± .010	±0.25
									in	mm
08	0.4375-28	0.859	21.82	0.87	22.10	1.16	29.46	02	N/A	N/A
								03	0.250	6.35
10	0.5625-24	0.984	24.99	0.90	22.86	1.19	30.23	02	N/A	N/A
								03	0.312	7.92
12	0.6875-24	1.156	29.36	0.92	23.37	1.21	30.73	02	0.312	7.92
								03	0.438	11.13
14	0.8125-20	1.281	32.54	0.95	24.13	1.24	31.50	02	0.438	11.13
								03	0.562	14.27
16	0.9375-20	1.406	35.71	0.98	24.89	1.26	32.00	02	0.500	12.70
								03	0.625	15.88
18	1.0625-18	1.516	38.51	0.98	24.89	1.27	32.26	02	0.625	15.88
								03	0.750	19.05
20	1.1875-18	1.641	41.68	1.01	25.65	1.30	33.02	02	0.625	15.88
								03	0.812	20.62
22	1.3125-18	1.766	44.86	1.04	26.42	1.33	33.78	02	0.688	17.48
								03	0.938	23.83
24	1.4375-18	1.891	48.03	1.07	27.18	1.35	34.29	02	0.750	19.05
								03	1.000	25.40

Metric equivalents are given for general information only and are based upon 1.00 inch = 25.4 mm.

BAND LOCK ADAPTERS

For Connectors: MIL-DTL-38999, Series I & II
Self-locking, Boot Accommodation



Table 3 Shell & Entry Sizes for backshell style - 87

SHELL SIZE	THREAD UNEF CLASS 2B	ØA MAX.		E MAX.		F MAX.		ENTRY SIZE	ØB	
		± .010	± 0.25						± .010	± 0.25
		in	mm	in	mm	in	mm		in	mm
08	0.4375-28	0.858	21.8	1.375	34.9	1.417	36.0	02	N/A	N/A
								03	0.250	6.4
10	0.5625-24	0.984	25.0	1.437	36.5	1.480	37.6	02	N/A	N/A
								03	0.312	7.9
12	0.6875-24	1.157	29.4	1.562	39.7	1.553	39.4	02	0.312	7.9
								03	0.438	11.1
14	0.8125-20	1.279	32.5	1.687	42.8	1.614	41.0	02	0.438	11.1
								03	0.562	14.3
16	0.9375-20	1.406	35.7	1.750	44.5	1.678	42.6	02	0.500	12.7
								03	0.625	15.9
18	1.0625-18	1.516	38.5	1.875	47.6	1.733	44.0	02	0.625	15.9
								03	0.750	19.1
20	1.1875-18	1.642	41.7	1.938	49.2	1.796	45.6	02	0.625	15.9
								03	0.812	20.6
22	1.3125-18	1.768	49.9	2.062	52.4	1.859	47.2	02	0.688	17.5
								03	0.938	23.8
24	1.4375-18	1.889	48.0	2.125	54.0	1.919	48.7	02	0.750	19.1
								03	1.000	25.4

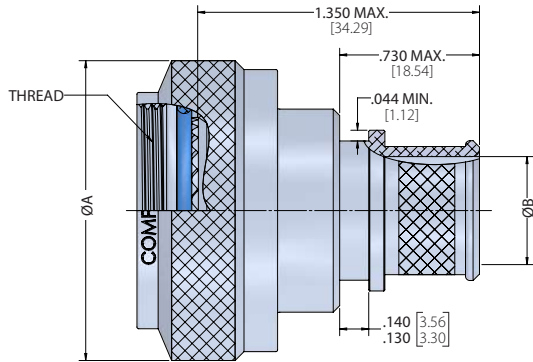
Metric equivalents are given for general information only and are based upon 1.00 inch = 25.4 mm.

BAND LOCK ADAPTERS

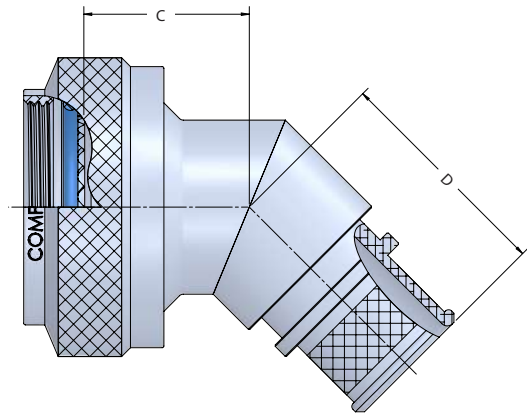
For Connectors: MIL-DTL-38999, Series III & IV
Self-locking, Boot Accommodation



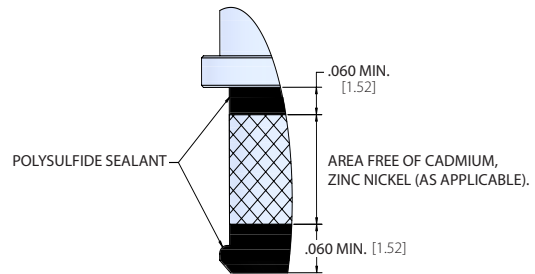
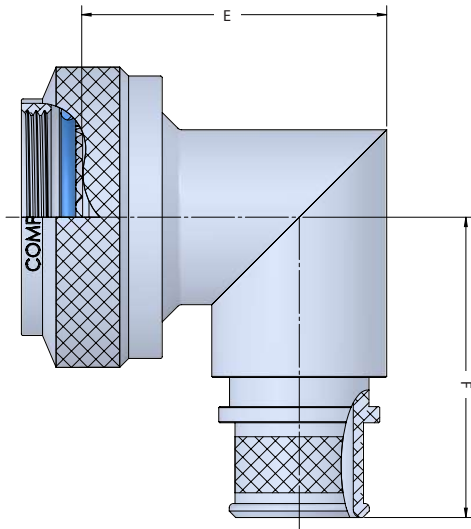
Straight



45° Angled



90° Angled



Polysulfide Option

For MIL Finish Codes : P & ZP

M85049/88 - 9 P 03

- Basic Part Number**
 - M85049/88 - Straight
 - M85049/89 - 45° Angled
 - M85049/90 - 90° Angled
- Configuration**
 - "-" (DASH) Detented self-locking
 - "N" Non detent self-locking
- Entry Size**
 - See table 1
- Material & Finish**
 - Applicable finishes: W, N, Z, P & ZP
 - See page 7 for details.
- Shell Size**
 - See table 1

BAND LOCK ADAPTERS

For Connectors: MIL-DTL-38999, Series III & IV
Self-locking, Boot Accommodation



Table 1 Shell & Entry Sizes

SHELL SIZE	THREAD	ØA MAX.		C MAX.		D MAX.		E MAX.		F MAX.		ENTRY SIZE	ØB	
		in	mm	in	mm	in	mm	in	mm	in	mm		+0.025	+0.64
													-0.010	-0.25
													in	mm
9	M12X1.0-6H	0.858	21.80	1.01	25.7	1.16	29.5	1.375	34.93	1.417	35.99	02	N/A	N/A
												03	0.250	6.40
11	M15X1.0-6H	0.984	25.00	1.03	26.2	1.19	30.2	1.437	36.50	1.480	37.59	02	N/A	N/A
												03	0.312	7.92
13	M18X1.0-6H	1.157	29.40	1.06	26.9	1.21	30.7	1.562	39.67	1.553	39.45	02	0.312	7.92
												03	0.438	11.13
15	M22X1.0-6H	1.279	32.50	1.08	27.4	1.24	31.5	1.687	42.85	1.614	41.00	02	0.438	11.13
												03	0.562	14.30
17	M25X1.0-6H	1.406	35.71	1.11	28.2	1.26	32.0	1.750	44.45	1.678	42.62	02	0.500	12.70
												03	0.625	15.90
19	M28X1.0-6H	1.516	38.51	1.12	28.4	1.27	32.3	1.875	47.63	1.773	45.03	02	0.625	15.90
												03	0.750	19.10
21	M31X1.0-6H	1.642	41.71	1.15	29.2	1.30	33.0	1.938	49.23	1.796	45.62	02	0.625	15.90
												03	0.812	20.62
23	M34X1.0-6H	1.768	44.91	1.17	29.7	1.33	33.8	2.062	52.37	1.859	47.22	02	0.688	17.50
												03	0.938	23.83
25	M37X1.0-6H	1.889	48.00	1.20	30.5	1.35	34.3	2.125	53.98	1.919	48.74	02	0.750	19.10
												03	1.000	25.40

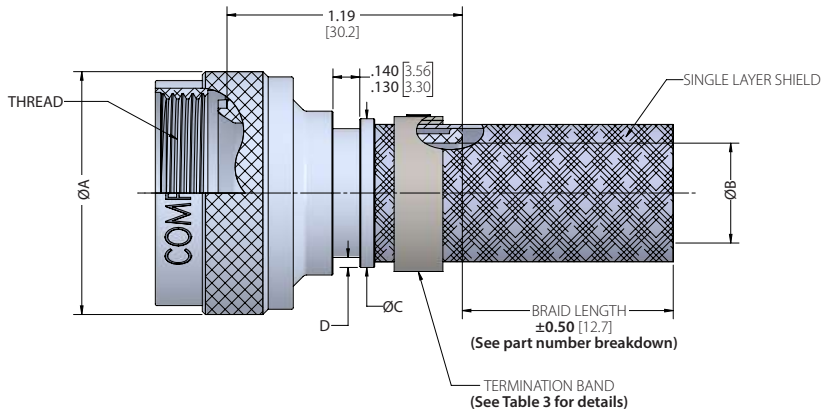
Metric equivalents are given for general information only and are based upon 1.00 inch = 25.4 mm.

PRE-SHIELDED BAND LOCK ADAPTERS

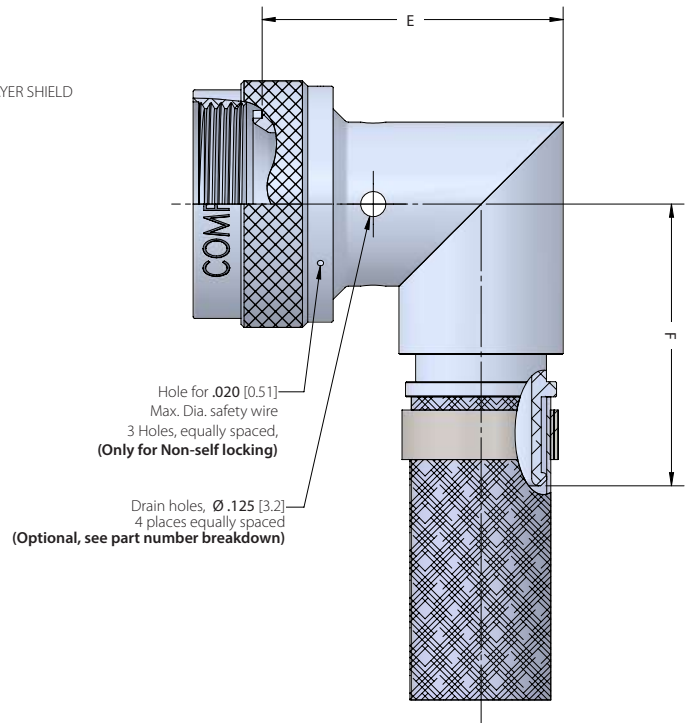
For Connectors: MIL-DTL-83723 Series III, AS50151 Crimp, AS95234 ,
AS81703 Series III & MIL-DTL-26482 Series II
Boot Accommodation



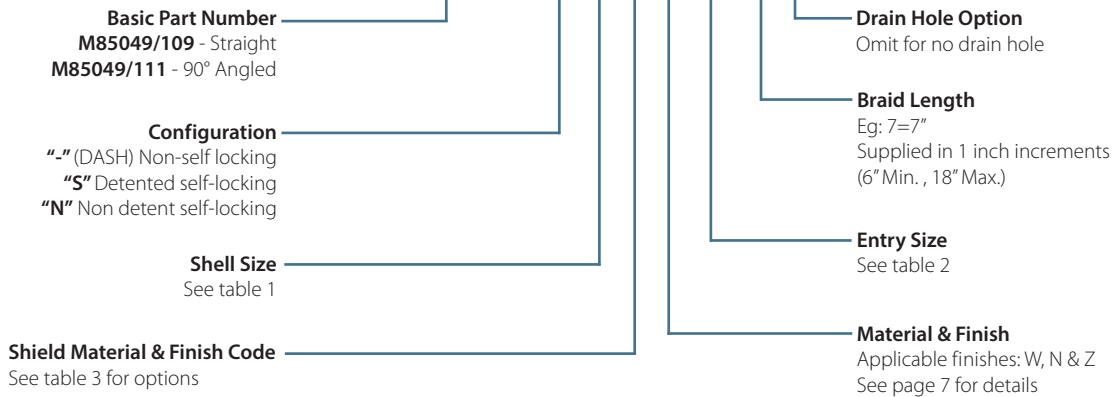
Straight



90° Angled



M85049/109 S 10 T W 03 -6 D



PRE-SHIELDED BAND LOCK ADAPTERS

For Connectors: MIL-DTL-83723 Series III, AS50151 Crimp, AS95234 ,
AS81703 Series III & MIL-DTL-26482 Series II
Boot Accommodation



Table 1 Shell Sizes

SHELL SIZE	ALLOWABLE CABLE ENTRY SIZE (See table 2)	RIGHT HAND THREAD (CLASS 2B)	ØA MAX.		E MAX.		F MAX.	
			in	mm	in	mm	in	mm
08	01	0.500-20 UNF	0.885	22.48	1.120	28.45	1.730	43.94
10	01-03	0.625-24 UNEF	1.010	25.65	1.250	31.75	1.850	46.99
12	01-05	0.750-20 UNEF	1.135	28.83	1.380	35.05	1.870	47.50
14	02-06	0.875-20 UNEF	1.260	32.00	1.440	36.58	1.940	49.28
16	04-08	1.000-20 UNEF	1.385	35.18	1.560	39.62	2.030	51.56
18	05-09	1.0625-18 UNEF	1.510	38.35	1.750	44.45	2.200	55.88
20	07-11	1.1875-18 UNEF	1.635	41.53	1.750	44.45	2.200	55.88
22	09-13	1.3125-18 UNEF	1.760	44.70	2.000	50.80	2.310	58.67
24	11-14	1.4375-18 UNEF	1.885	47.88	2.000	50.80	2.310	58.67

Table 2 Entry Sizes

ENTRY SIZE	ØB		D		ØC MAX.	
	± .020	± 0.51	+0.008 -0.000	+0.20 -0.00		
	in	mm	in	mm	in	mm
01	0.250	6.35	0.044	1.12	0.560	14.22
02	0.312	7.92	0.044	1.12	0.630	16.00
03	0.375	9.53	0.044	1.12	0.690	17.53
04	0.438	11.13	0.044	1.12	0.750	19.05
05	0.500	12.70	0.044	1.12	0.820	20.83
06	0.562	14.27	0.044	1.12	0.890	22.61
07	0.625	15.88	0.044	1.12	0.950	24.13
08	0.688	17.48	0.044	1.12	1.020	25.91
09	0.750	19.05	0.069	1.75	1.070	27.18
10	0.812	20.62	0.069	1.75	1.130	28.70
11	0.875	22.23	0.069	1.75	1.190	30.23
12	0.938	23.83	0.069	1.75	1.260	32.00
13	1.000	25.40	0.069	1.75	1.320	33.53
14	1.125	28.58	0.069	1.75	1.470	37.34

Metric equivalents are given for general information only and are based upon 1.00 inch = 25.4 mm.



Table 3 Shield & Band Details

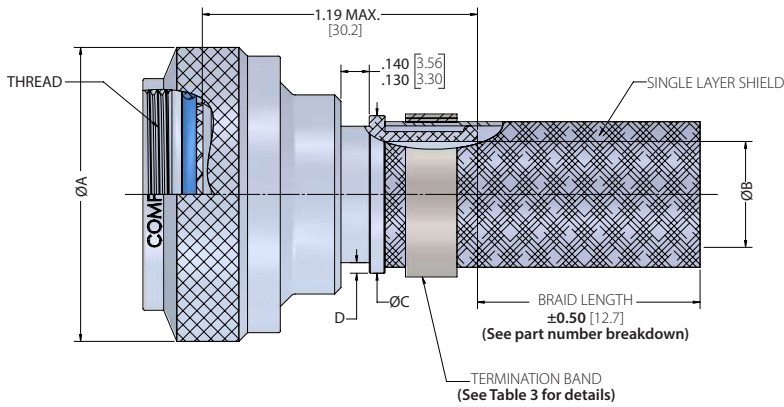
ITEM	FINISH CODE	BASE MATERIAL	FINISH DESCRIPTION
Shield	T	Copper	Tin
	K	Copper	Nickel
Band	N/A	Stainless steel	Passivated

PRE-SHIELDED BAND LOCK ADAPTERS

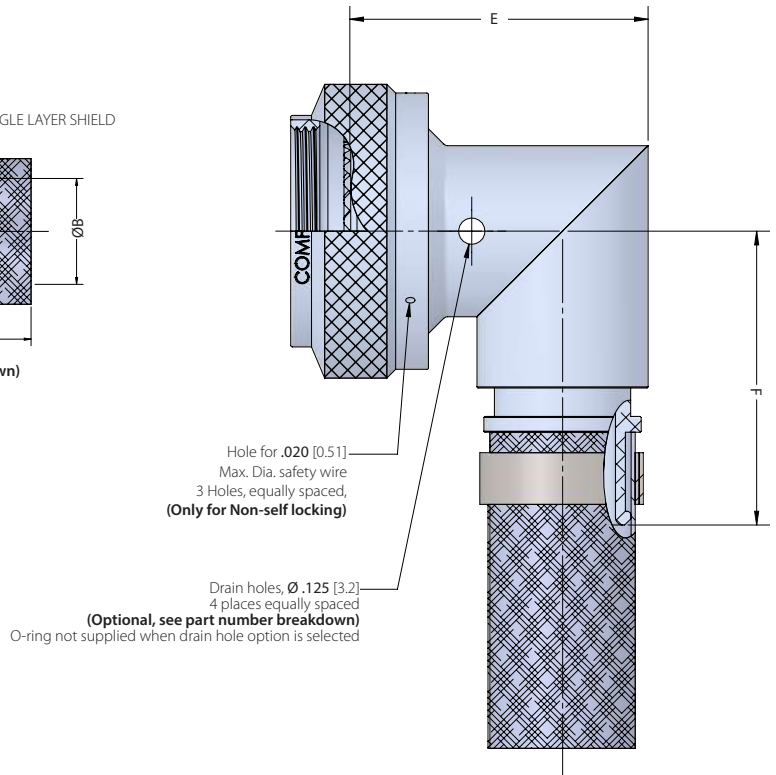
For Connectors: MIL-DTL-38999 Series I & II
Boot Accommodation



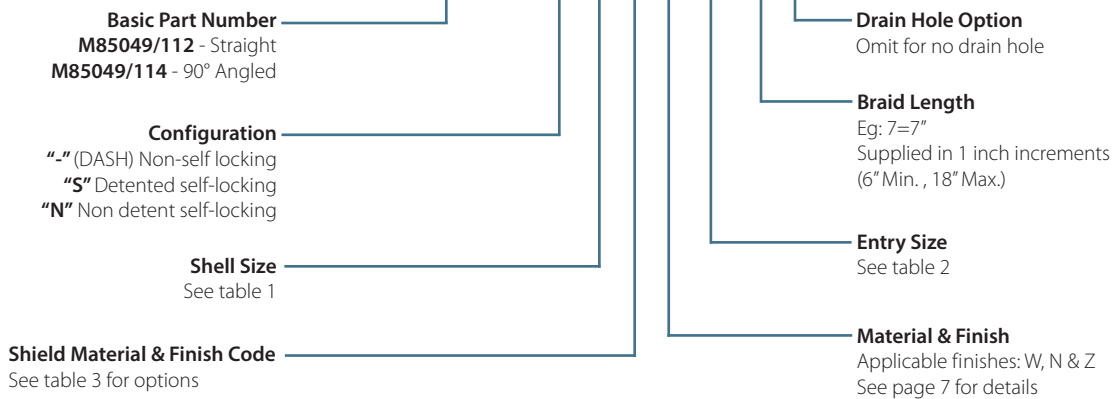
Straight



90° Angled



M85049/112 S 10 T W 03 -6 D



PRE-SHIELDED BAND LOCK ADAPTERS

For Connectors: MIL-DTL-38999 Series I & II
Boot Accommodation



Table 1 Shell Sizes

SHELL SIZE	ALLOWABLE CABLE ENTRY SIZE (See table 2)	THREAD UNEF-2B	ØA MAX.		E MAX.		F MAX.	
			in	mm	in	mm	in	mm
08	01	0.4375-28	0.858	21.79	1.070	27.18	1.730	43.94
10	01-03	0.5625-24	0.984	24.99	1.190	30.23	1.850	46.99
12	01-05	0.6875-24	1.157	29.39	1.320	33.53	1.870	47.50
14	03-07	0.8125-20	1.279	32.49	1.440	36.58	1.940	49.28
16	05-09	0.9375-20	1.406	35.71	1.570	39.88	2.030	51.56
18	06-10	1.0625-18	1.516	38.51	1.750	44.45	2.200	55.88
20	08-12	1.1875-18	1.642	41.71	1.750	44.45	2.200	55.88
22	09-13	1.3125-18	1.768	44.91	2.000	50.80	2.310	58.67
24	10-14	1.4375-18	1.889	47.98	2.000	50.80	2.310	58.67

Table 2 Entry Sizes

ENTRY SIZE	ØB		D		ØC MAX.	
	±.020	±0.51	+0.008 -0.000	+0.20 -0.00		
	in	mm	in	mm	in	mm
01	0.250	6.35	0.044	1.12	0.560	14.22
02	0.312	7.92	0.044	1.12	0.630	16.00
03	0.375	9.53	0.044	1.12	0.690	17.53
04	0.438	11.13	0.044	1.12	0.750	19.05
05	0.500	12.70	0.044	1.12	0.820	20.83
06	0.562	14.27	0.044	1.12	0.890	22.61
07	0.625	15.88	0.044	1.12	0.950	24.13
08	0.688	17.48	0.044	1.12	1.020	25.91
09	0.750	19.05	0.069	1.75	1.070	27.18
10	0.812	20.62	0.069	1.75	1.130	28.70
11	0.875	22.23	0.069	1.75	1.190	30.23
12	0.938	23.83	0.069	1.75	1.260	32.00
13	1.000	25.40	0.069	1.75	1.320	33.53
14	1.125	28.58	0.069	1.75	1.470	37.34



Table 3 Shield & Band Details

ITEM	FINISH CODE	BASE MATERIAL	FINISH DESCRIPTION
Shield	T	Copper	Tin
	K	Copper	Nickel
Band	N/A	Stainless steel	Passivated

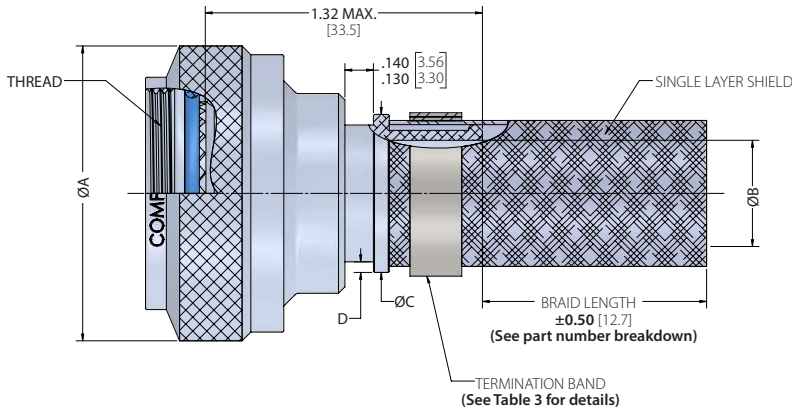
Metric equivalents are given for general information only and are based upon 1.00 inch = 25.4 mm.

PRE-SHIELDED BAND LOCK ADAPTERS

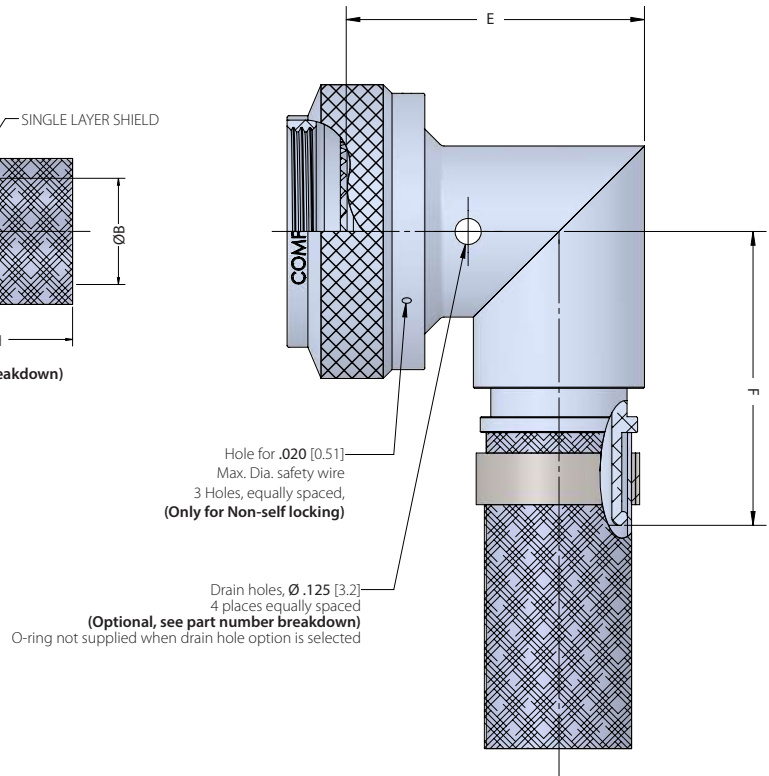
For Connectors: MIL-DTL-38999 Series III & IV
Boot Accommodation



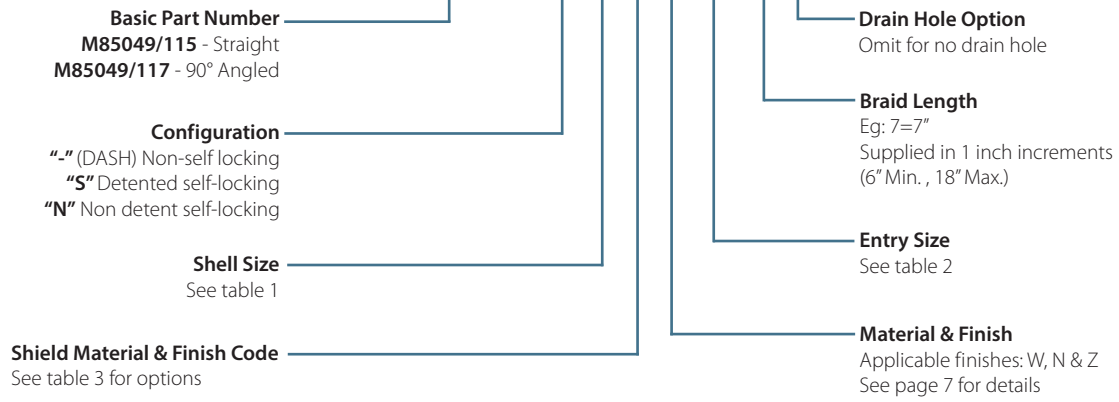
Straight



90° Angled



M85049/115 S 11 T W 03 -6 D



PRE-SHIELDED BAND LOCK ADAPTERS

For Connectors: MIL-DTL-38999 Series III & IV
Boot Accommodation



Table 1 Shell Sizes

SHELL SIZE	ALLOWABLE CABLE ENTRY SIZE (See table 2)	THREAD	ØA MAX.		E MAX.		F MAX.	
			in	mm	in	mm	in	mm
09	01	M12X1.0-6H	0.858	21.79	0.875	22.23	1.730	43.94
11	01-03	M15X1.0-6H	0.984	24.99	1.000	25.40	1.850	46.99
13	01-05	M18X1.0-6H	1.157	29.39	1.125	28.58	1.870	47.50
15	03-07	M22X1.0-6H	1.279	32.49	1.312	33.32	1.940	49.28
17	05-09	M25X1.0-6H	1.406	35.71	1.500	38.10	2.030	51.56
19	06-10	M28X1.0-6H	1.516	38.51	1.750	44.45	2.200	55.88
21	08-12	M31X1.0-6H	1.642	41.71	1.750	44.45	2.200	55.88
23	09-13	M34X1.0-6H	1.768	44.91	2.000	50.80	2.310	58.67
25	10-14	M37X1.0-6H	1.889	47.98	2.000	50.80	2.310	58.67

Table 2 Entry Sizes

ENTRY SIZE	ØB		D		ØC MAX.	
	± .020	± 0.51	+0.008 -0.000	+0.20 -0.00		
	in	mm	in	mm	in	mm
01	0.250	6.35	0.044	1.12	0.560	14.22
02	0.312	7.92	0.044	1.12	0.630	16.00
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ITEM	FINISH CODE	BASE MATERIAL	FINISH DESCRIPTION
Shield	T	Copper	Tin
	K	Copper	Nickel
Band	N/A	Stainless steel	Passivated



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