



**SERIES 77**  
**Metal Shrink Boot Adapters**  
**Adapter Reference Guide**  
**Material Selection and Finish**



Connector Designator Reference		
Designator	Specification	Series
A	MIL-DTL-5015	MS3400
	MIL-DTL-26482	2
	AS81703	3
	MIL-DTL-83723	I & III
	40M39569	
	DEF 5326-3	
	EN 2997, 3646	
	ESC 10, 11	
	LN 29504	
	NFC93422	HE302
PAN 6432-1, -2		
PATT 602		
B	MIL-DTL-5015	MS3100
C	MIL-C-22992	MS173XX
D	MIL-DTL-26482	I
E	MIL-DTL-26500 Aluminum	
F	MIL-DTL-38999	I & II
	40M38277	
	PAN 6433-1	
	PATT 614	
	PATT 616	
NFC93422	HE308, 9	
G	MIL-C-28840	
H	MIL-DTL-38999	III & IV
	EN3645	
J	MIL-C-81511 VG95329	1,2,3&4
K	MIL-DTL-83723	II
L	EN3372	
	JN 1003	
	LN 29729	
	NFC93422	HE306
	PAN 6433-2	
	PATT 615	
S	VG 96912	
	PATT 105	
	PATT 603	
	PATT 608	

The following standard materials are used for the majority of Glenair adapters and connector accessories. However, adapter components are not limited to those items listed, but are representative of the elements used in Glenair's general accessory products. Contact Glenair for applicable specifications on items not listed below.

Standard Materials - Adapters and Accessories		
Component	Material	Specification
Machined components: such as adapter bodies, fabricated elbows, protective covers, rotatable couplers, dummy stowage receptacles, lock nuts, G-spring support rings, EMI ground rings, grommet followers, etc.	Aluminum	QQ-A-200, 225 ASTMB211, 221
Die cast components: such as angular adapters, strain relief adapters, strain relief bodies, strain relief saddles, special EMI ground rings, etc.	Aluminum	ASTM B179 ASTM B85
Adapters or strain reliefs: available in optional corrosion resisting steel; and hardware: such as screws, washers, rivets, wire rope, sash chain, band straps, etc.	Corrosion Resisting Steel	ASTM A581, 582 ASTM A276
Elastomeric seals: such as O-rings, cable jacket seals, grommets, etc.	Silicone	ZZ-R-765
Anti-friction and thrust washers	PTFE	
Anti-rotation device	Corrosion Resistant Material	

Metal adapter Plating Codes	
Sym	Material and Finish
B	Aluminum, Cadmium Plated, Olive Drab
C*	Aluminum, Black Anodize
M	Aluminum, Electroless Nickel
MT	Aluminum, Nickel-PTFE
NF	Aluminum, Cadmium, Olive Drab Over Electroless Nickel
Z1	Stainless Steel, Passivated
ZR	Aluminum, Zinc-nickel, black

\*Non-Conductive finish — not suitable for EMI or grounding applications.

**NOTES**

On all length callouts, tolerance is  $\pm .060$  unless otherwise specified.

Unless otherwise specified, the following other dimensional tolerances will apply:

.xx =  $\pm .03$  (0.8)      Lengths =  $\pm .060$  (1.52)

.xxx =  $\pm .015$  (0.4)      Angles =  $\pm 5^\circ$





# SERIES 77 Composite Shrink Boot Adapters



## Adapter Reference Guide

### Table I - Connector Designator Interface Dimensions

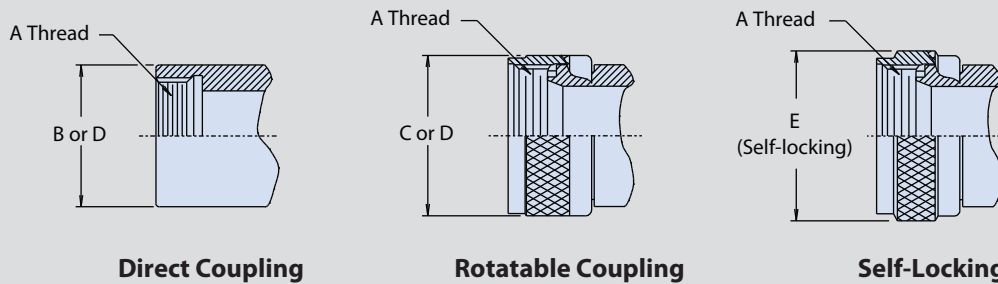


Table I - Adapter Interface Dimensions

Connector Designator**															A Thread*	B DIA MAX	C DIA MAX	D DIA MAX	E DIA MAX
A	C*	D	E	F	G	H	J	K	L	S	REFERENCE								
--	--	08	08	08 [9]	--	--	--	08	08	08	7/16 - 28 UNEF	.590 (15.)	.650 (16.5)	.770 (19.6)	.690 (17.5)				
--	--	--	--	--	--	09 [A]	--	--	--	--	M12 x 1 - 6H	.650 (16.5)	.770 (19.6)	--	.940 (24.8)				
08	--	--	--	--	--	--	--	--	--	--	1/2 - 20 UNF	.650 (16.5)	.650 (16.5)	--	.690 (17.5)				
--	--	--	--	--	--	--	08 [A]	10	--	--	1/2 - 28 UNEF	.650 (16.5)	.770 (19.6)	.770 (19.6)	--				
03	--	10	10	10 [11]	--	--	--	11	10	10	9/16 - 24 UNEF	.720 (18.3)	.770 (19.6)	.890 (22.6)	.820 (20.8)				
--	--	--	--	--	--	11 [B]	--	--	--	--	M15 x 1 - 6H	.770 (19.6)	.820 (20.8)	--	1.060 (26.9)				
10	--	--	--	--	--	--	--	12 [13]	--	--	5/8 - 24 UNEF	.770 (19.6)	.770 (19.6)	.890 (22.6)	.820 (20.8)				
--	--	--	--	--	--	--	10 [B]	--	--	--	5/8 - 28 UN	.770 (19.6)	.890 (22.6)	--	--				
--	--	12	--	12 [13]	--	--	--	--	12	12	11/16 - 24 UNEF	.840 (21.3)	.890 (22.6)	1.020 (25.9)	.940 (23.8)				
--	--	--	--	--	--	13 [C]	--	--	--	--	M18 x 1 - 6H	.890 (22.6)	.940 (23.9)	--	1.170 (29.7)				
[7]	12	--	12	--	11 [A]	--	--	14 [15]	--	--	3/4 - 20 UNEF	.970 (24.6)	.940 (23.9)	1.020 (25.9)	.940 (23.8)				
--	--	14	14	14 [15]	--	--	--	--	14	14	13/16 - 20 UNEF	.970 (24.6)	1.020 (29.2)	1.150 (29.2)	1.060 (26.9)				
--	--	--	--	--	--	15 [D]	--	--	--	--	M22 x 1 - 6H	1.030 (26.2)	1.070 (26.2)	--	1.290 (32.7)				
[12]	14	--	--	--	13 [B]	--	--	16 [17]	--	--	7/8 - 20 UNEF	1.090 (27.7)	1.020 (25.9)	1.150 (29.2)	1.060 (26.9)				
--	--	--	--	--	--	--	14 [D]	--	--	--	7/8 - 28 UN	1.030 (26.2)	1.150 (29.2)	--	--				
--	--	16	16	16 [17]	--	--	--	--	16	16	15/16 - 20 UNEF	1.090 (27.7)	1.150 (29.2)	1.260 (32.0)	1.170 (29.7)				
--	--	--	--	--	--	17 [E]	--	--	--	--	M25 x 1 - 6H	1.150 (29.2)	1.210 (30.7)	--	1.420 (36.1)				
[19]	16	--	--	--	15 [C]	--	--	18	--	--	1 - 20 UNEF	1.220 (29.2)	1.210 (30.7)	1.230 (31.2)	1.170 (29.7)				
--	--	--	--	--	--	--	16 [E]	--	--	--	1 - 28 UN	1.150 (29.2)	1.360 (34.5)	--	--				
[27]	--	18	18	18 [19]	--	--	--	--	18	18	11/16 - 18 UNEF	1.220 (31.0)	1.230 (31.2)	1.400 (35.6)	1.290 (32.7)				
--	--	--	--	--	--	19 [F]	--	--	--	--	M28 x 1 - 6H	1.280 (32.5)	1.360 (34.5)	--	1.540 (39.1)				
--	18	--	--	--	17 [D]	--	--	20	--	--	11/8 - 18 UNEF	1.340 (34.0)	1.360 (34.5)	1.360 (34.5)	--				
--	--	--	--	--	--	--	18 [F]	--	--	--	11/8 - 28 UN	1.280 (32.5)	1.480 (37.6)	--	--				
[37]	--	20	20	20 [21]	--	--	--	--	20	20	13/16 - 18 UNEF	1.340 (34.0)	1.360 (34.5)	1.530 (38.9)	1.420 (36.0)				
--	--	--	--	--	--	21 [G]	--	--	--	--	M31 x 1 - 6H	1.410 (35.8)	1.480 (37.6)	--	1.670 (42.4)				

\* Code C, MIL-C-22992, Left-Hand Thread. \*\*Connector designations depicted thus [ ] are for reference only and are not to be used in part number development.



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Adapter Reference Guide

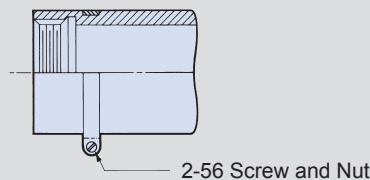
Table I - Connector Designator Interface Dimensions

Table I - Adapter Interface Dimensions															
Connector Designator**											A Thread*				
A	C*	D	E	F	G	H	J	K	L	S	REFERENCE	B DIA MAX	C DIA MAX	D DIA MAX	E DIA MAX
--	20	--	--	--	19 [E]	--	--	22	--	--	11/4 - 18 UNEF	1.470 (37.3)	1.530 (38.9)	1.480 (37.6)	--
--	--	--	--	--	--	--	20 [G]	--	--	--	11.4 - 28 UN	1.410 (35.8)	1.600 (40.6)	--	--
22	--	22	22	22 [23]	--	--	--	--	22	22	15/16 - 18 UNEF	1.470 (37.3)	1.480 (37.6)	1.600 (40.6)	1.540 (39.1)
--	--	--	--	--	--	23 [H]	--	--	--	--	M34 x 1 - 6H	1.530 (38.9)	1.600 (40.6)	--	2.010 (51.1)
--	22	--	--	--	--	--	--	24	--	--	13/8 - 18 UNEF	1.590 (40.4)	--	1.600 (40.6)	--
--	--	--	--	--	--	--	22 [H]	--	--	--	13/8 - 28 UN	1.530 (38.9)	1.730 (43.9)	--	--
24	--	24	24	24 [25]	23 [F]	--	--	--	24	24	17/16 - 18 UNEF	1.590 (40.4)	1.730 (43.9)	1.940 (49.3)	1.660 (42.2)
--	--	--	--	--	--	25 [J]	--	--	--	--	M37 x 1 - 6H	1.660 (42.2)	1.700 (43.2)	--	2.120 (53.8)
61	--	--	--	--	--	--	--	--	--	--	11/2 - 18 UNEF	1.660 (42.2)	1.670 (42.4)	--	--
--	--	--	--	--	--	--	24 [J]	--	--	--	11/2 - 28 UN	1.660 (42.2)	1.940 (49.3)	--	--
--	--	--	--	--	25 [G]	--	--	--	--	--	19/16 - UNEF	--	1.820 (46.2)	--	--
--	24	--	--	--	--	--	--	28	--	--	15/8 - UNEF	1.840 (46.7)	--	1.940 (49.3)	--
28	--	--	--	--	--	--	--	--	--	--	13/4 - 18 UNS	1.970 (50.0)	1.970 (50.0)	--	2.010 (51.1)
--	28	--	--	--	29 [H]	--	--	32	--	--	17/8 - 16 UN	2.090 (53.1)	2.190 (55.6)	2.190 (55.6)	--
32	--	--	--	--	--	--	--	--	--	--	2 - 18 UNS	2.280 (57.9)	2.220 (56.4)	--	2.260 (57.4)
--	32	--	--	--	33 [J]	--	--	--	--	--	2 1/16 - 16 UNS	2.340 (59.4)	2.440 (62.0)	2.440 (62.0)	--
--	--	--	--	--	--	--	--	36	--	--	2 1/8 - 16 UN	2.340 (59.4)	--	2.440 (62.0)	--
36	--	--	--	--	--	--	--	--	--	--	2 1/4 - 16 UN	2.530 (64.3)	2.47 (62.7)	--	2.530 (64.3)
--	36	--	--	--	--	--	--	--	--	--	2 5/16 - 16 UNS	2.590 (65.8)	--	2.690 (68.3)	--
--	--	--	--	--	--	--	--	40	--	--	2 3/8 - 16 UN	2.590 (65.8)	--	2.690 (68.3)	--
40	--	--	--	--	--	--	--	--	--	--	2 1/2 - 16 UN	2.780 (70.6)	2.720 (69.1)	--	3.040 (77.2)
--	40	--	--	--	--	--	--	--	--	--	2 5/8 - 16 UN	2.910 (73.9)	--	2.930 (74.4)	--
44	--	--	--	--	--	--	--	--	--	--	2 3/4 - 16 UN	3.030 (77.0)	2.970 (75.4)	--	--
--	44	--	--	--	--	--	--	--	--	--	2 7/8 - 16 UN	3.160 (80.3)	--	--	--
48	--	--	--	--	--	--	--	--	--	--	3 - 16 UN	3.220 (81.8)	3.220 (81.8)	--	--
--	48	--	--	--	--	--	--	--	--	--	3 1/16 - 16 UN	3.410 (86.6)	--	--	--

\* Code C, MIL-C-22992, Left-Hand Thread. \*\*Connector designations depicted thus [ ] are for reference only and are not to be used in part number development.

**BODY STRAP**

Glenair offers an optional stainless steel body strap for attaching protective covers as illustrated. To specify body strap, add suffix letter C to the end of the part number. For example 360A5001M1610M6C.



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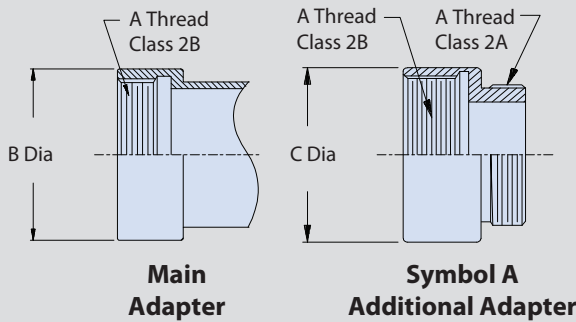


SERIES 77

# Metal Shrink Boot Adapters



## Adapter Reference Guide - MIL-DTL-5015 Connector Designator "B" (MS3100) Interface Dimensions



**NOTES:**

1. If the specific manufacturer is not known, order symbol A and corresponding dash number, for MS universal fit.
2. Symbol A mates with all connectors for each shell size.
3. Additional transition adapters may be supplied with symbol A for each shell size, as noted.

MS3100 Series Manufacturer Designations

Dash Number	Shell Size	Connector Manufacturer Desig	See Note 1	A Thread Class 2B	B Dia Max	C Dia Max
01	8S	A	1	7/16-28 UNEF	.656 (16.7)	.625 (15.9)
02	8S	J, M, N,	2	7/16-28 UNEF	.656 (16.7)	.625 (15.9)
03	8S	L	3	3/8-32 UNEF	.607 (15.4)	.562 (14.3)
04	8S	H	3	7/16-27 UNS	.656 (16.7)	.625 (15.9)
05	10S	A	1	1/2-28 UNEF	.724 (18.4)	.687 (17.4)
06	10S	H, J, L, N	2	1/2-28 UNEF	.724 (18.4)	.687 (17.4)
07	10S	M	3	9/16-24 UNEF	.724 (18.4)	.687 (17.4)
08	10SL	A	1	9/16-24 UNEF	.724 (18.4)	.687 (17.4)
09	10SL	M, N	2	9/16-24 UNEF	.724 (18.4)	.687 (17.4)
10	10SL	H, J, L	3	5/8-24 UNEF	.848 (21.5)	.812 (20.6)
11	12, 12S	A	1	5/8-24 UNEF	.848 (21.5)	.812 (20.6)
12	12, 12S	L, N	2	5/8-24 UNEF	.848 (21.5)	.812 (20.6)
13	12, 12S	H, J, M	3	11/16-24 UNEF	.848 (21.5)	.812 (20.6)
14	12SL, 14, 14S	A	2	3/4-20 UNEF	.974 (24.7)	.937 (23.8)
15	16, 16S	A	2	7/8-20 UNEF	1.102 (28.0)	1.062 (27.0)
16	18	A	2	1-20 UNEF	1.220 (31.0)	1.187 (30.1)
17	20	A	1	1 1/8-18 UNEF	1.343 (34.1)	1.312 (34.1)
18	20	H, L, M, N	2	1 1/8-18 UNEF	1.343 (34.1)	1.312 (33.3)
19	20	J	3	1 1/8-24 UNS	1.343 (34.1)	1.312 (33.3)
20	22	A	2	1 1/4-18 UNEF	1.343 (34.1)	1.437 (36.5)
21	24	A	2	1 3/8-18 UNEF	1.468 (37.3)	1.562 (39.7)
22	28	A	2	1 5/8-18 UNEF	1.593 (40.5)	1.812 (46.0)
23	32	A	1	1 7/8-16 UN	2.125 (54.0)	2.062 (52.4)
24	32	L, M, N	2	1 7/8-16 UN	2.125 (54.0)	2.062 (52.4)
25	32	H, J	3	1 29/32-18 UNS	2.125 (54.0)	2.062 (52.4)
26	36	A	1	2 1/8-16 UN	2.375 (60.3)	2.312 (58.7)
27	36	M, N	2	2 1/8-16 UN	2.375 (60.3)	2.312 (58.7)
28	36	L	3	2 1/16-16 UNS	2.375 (60.3)	2.312 (58.7)
29	36	J	3	2 1/16-20 UNEF	2.375 (60.3)	1.312 (33.3)
30	36	H	3	2 1/8-18 UNS	2.375 (60.3)	2.312 (58.7)

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# SERIES 77 Metal Shrink Boot Adapters



## Adapter Reference Guide - Connector Designator "B" Ordering Information for MIL-DTL-5015

MS3100 Series Manufacturer Designations						
Dash Number	Shell Size	Connector Manufacturer Desig	See Note 1	A Thread Class 2B	B Dia Max	C Dia Max
31	40	A	1	2 3/8 - 16 UN	2.625 (66.7)	2.562 (65.1)
32	40	H, M, N	2	2 3/8 - 16 UN	2.625 (66.7)	2.562 (65.1)
33	40	L	3	2 5/16 - 16 UNS	2.625 (66.7)	2.562 (65.1)
34	44	A	2	2 5/8 - 16 UN	2.906 (73.8)	2.875 (73.0)
35	48	A	1	2 7/8 - 16 UN	3.156 (80.2)	3.125 (79.4)
36	48	H	2	2 7/8 - 16 UN	3.156 (80.2)	3.125 (79.4)
37	48	N	3	2 13/16 - 18 UNS	3.156 (80.2)	3.125 (79.4)

### How to Order Adapters for MIL-DTL-5015 (MS3100 Series) Connectors

The threads and interface dimensions on MIL-DTL-5015 solder-type connectors are unfortunately not standardized from one manufacturer to the next. As a result, there is limited interchangeability in many shell sizes and service classes amongst available MS3100 Series products. When ordering adapters for 5015 connectors it is therefore necessary to treat each connector manufacturer's product separately to ensure optimum compatibility of the adapter-to-connector interface. This is accomplished in two steps: (1) Use the connector designator "B" in the normal place in the part number to indicate to the factory that a MIL-DTL-5015 (MS3100 Series) connector is being used; and (2) Use an additional connector manufacturer symbol, as shown in the part number development example below, to indicate whose MIL-DTL-5015 product you are using. Connector manufacturer symbols for 5015 products are shown in the table below and pertinent connector fitting interface information is given on page F-6.

Please Note: For proper use of Glenair adapters with MS3100 Series connectors, discard all rear hardware, including wire seal grommets, normally supplied with the connector. (This information does not apply to endbell extenders commonly supplied with MS3100A Series connectors.)

How to Order										
Sample Part Number	310	B	S	004	B	17	10	E	6	A
Product Series	310									
Connector Designator (MS3100 Series)	B									
Angular Function	H = 45° (Die Cast) J = 90° (Die Cast) S = Straight									
Basic Part Number	004									
Finish Symbol	B									
Dash Number	See Shrink Boot Adapter Selection and Reference Guide Table 1. Note: Do not use shell size, as dash number does not always correspond to shell size.									
Cable Entry Code	If available enter dash number of code									
Strain Relief Style	If option available									
Length	Applies to straight only and is measured in 1/2 inch (12.7) increments									
Connector Manufacturer Symbol	See 5015 Connector Manufacturer Symbols table to the right									

MIL-DTL-5015 Connector Designator Reference			
Symbol	Mfr	Connector Series	Class
A	All	MS3100, 01, 06	A/E/F/R
H	Amphenol	MS3100, 01, 06 97 Series Blue Insert	A
J		MS3100, 01, 06	E/F/R
L	Amphenol/ BCO	MS3100, 01, 06 10-214,10-720 10-721,10-726	A/E/F/R
M	Cannon	MS3100, 01, 06	A
N	Cannon	MS3100, 01, 063 CA00, 01, 06	E/F/R

