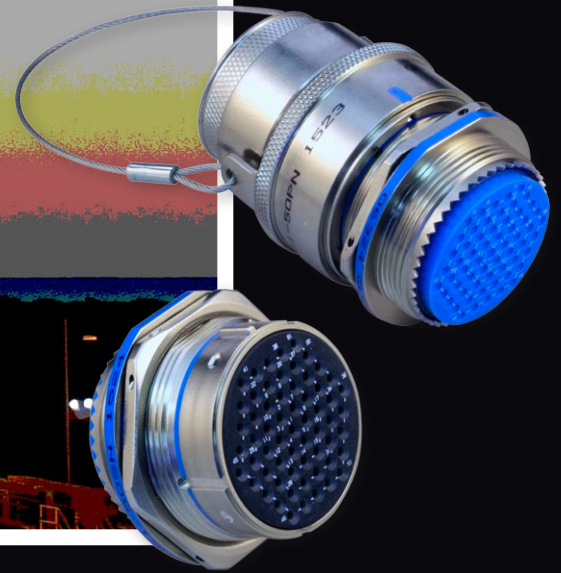




INTERMATEABLE • INTERMOUNTABLE • IAW

SAE/AS81703 Series 3

HIGH SHOCK AND VIBRATION QUICK-RELEASE CONNECTORS

JULY 2016



QUICK-RELEASE AS81703 Series 3 Type Connectors

Ideal for high shock / high vibration environments including military space and defense applications such as missile and payload deployment, the AS81703 provides jam-free, push-on, pull-off operation. Glenair's AS81703 Series 3 type connector series is intermateable and intermountable with currently available AS81703 mil-spec and commercial connectors, and offers several enhancements to the standard design: an integrated band porch for shield termination, 360° saw teeth for rear-end accessory clocking, and a red full-mate indicator stripe. The AS81703 Series 3 type connector is ideally suited for droppable stores, umbilical connect, rocket launch, and other extreme vibration and shock environments where rugged and reliable lanyard-release and push-pull mating is a must. Nineteen contact arrangements are available, including hybrid signal/power layouts, and a full complement of backshells and connector accessories is offered—with Glenair's high availability and quick delivery.



◀ Rack-and-panel plug with spring-assisted push-pull mating

- Intermateable and intermountable with available AS81703 connectors
- Signal, power, and high-speed shielded contact arrangements
- Reliable fail-safe axial-pull lanyard equipped coupling
- Instant disconnect for critical quick-release systems
- Available integrated band porch for easy shield termination
- 360° saw teeth for accessory clocking
- Red full-mate indicator stripe
- Blind mate and rack-and-panel versions available
- Available backshells and accessories IAW AS81703
- Polarization keying for mis-mate prevention

SERIES 253-020 AS81703 Series 3 Type Connectors

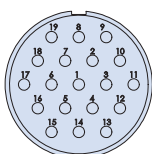


Table of contents / selection guide



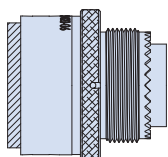
**Connector specifications, How-to-order,
General information and Test report summary**

pages 2–3



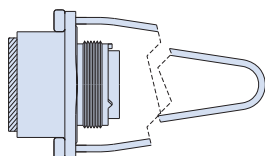
Contact arrangements

pages 4–5



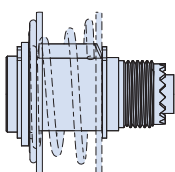
**253-020-06
Straight plug**

page 6



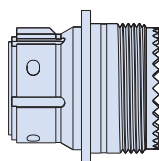
**253-020-08
Lanyard-release plug**

page 7



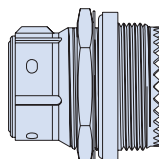
**253-020-09
Rack-and-panel plug**

page 8



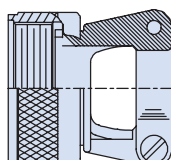
**253-020-00
Wall-mount receptacle**

page 9



**253-020-07
Jam-nut receptacle**

page 10



Backshells and accessories

page 11

SERIES 253-020 AS81703 Series 3 Type Connectors



How to order

How To Order							
Sample Part Number	253-020	-	06	ME	19-7	P	N
Basic Part Number	AS81703 Series 3 type connector						
Rear Option	- = Accessory threads B = Band porch (consult factory)						
Connector Style (and AS cross-ref)	00 = Sq. flange mount receptacle AS34241 type (MS3424) 06 = Straight plug AS34671 type (MS3467) 07 = Jam nut mount receptacle AS34641 type (MS3464) 08 = Lanyard release plug MS3468 type (no SAE equivalent) 09 = Rack & panel plug AS34461 type (MS3446)						
Material / Finish	See Table I						
Shell Size / Insert Arrangement	See Table II, diagrams on pgs. 4-5						
Contact Styles	P = Pin insert A = Pin insert less contacts S = Socket insert B = Socket insert less contacts						
Insert Clocking Positions	N, W, X, Y, B, C (See Table III)						
Lanyard Ring Mod. Code (-08 Receptacle Only)	Omit = Standard Lanyard Ring 812 = Lanyard Ring Rotated 90° from Master Keyway						

Table I - Material and Finish			
Code	Mil Class	Material	Finish
C	-	Aluminum Alloy	Black Anodize
ME	E		Electroless Nickel
NF	L		O.D. Cadmium over Electroless Nickel
MT	-		Nickel-PTFE
ZR	-		Zinc-Nickel/Black (Tri-Valent CR)

Table II: Contact Arrangements			
Contact Arrangement	Contact Size & Quantity		
	#20	#16	#12
3-50	3		
7-50	7		
12-6	6		
12-50	12		
19-4			12
19-7			7
19-12		12	
19-50	19		
27-2		14	
27-3	14	2	
27-5		19	
27-8		6	4
27-11	12		
27-50	27		
37-2		24	
37-3			12
37-50	37		
61-42	29	4	8
61-50	61		

Insert Rotation and Insert Clocking Rotation	
	AS81703 Series 3 type connectors feature locksmith key/keyways. Plug connector keyways and receptacle connector keys are fixed for all sizes and contact arrangements. Alternate Insert Clocking is specified in the part number. Pin inserts are rotated clockwise, Socket inserts rotated counter-clockwise relative to the master key/keyway, to the positions indicated in the table below.

Table III: Clocking Positions						
Contact Arrangement	Alternate Insert Clocking Positions					
	N	W	X	Y	B	C
3-50	0°			75°		
7-50	0°				150°	
12-6	0°	25°	45°	80°	150°	220°
12-50	0°	15°	50°	75°	150°	225°
19-4	0°			22° 30'	135°	247° 30'
19-7	0°			75°	150°	225°
19-12	0°	25°	50°	75°	150°	225°
19-50	0°			75°	150°	225°
27-2	0°	25°	50°	75°	150°	225°
27-3	0°	25°	50°	75°	150°	225°
27-5	0°			75°	150°	225°
27-8	0°	25°	50°	75°	150°	225°
27-11	0°	25°	50°	75°	150°	225°
27-50	0°	25°	50°	75°	150°	225°
37-2	0°	25°	145°	227° 30'		
37-3	0°	20°	70°			
37-50	0°	25°	50°	75°	150°	225°
61-42	0°		67° 30'			
61-50	0°			75°	150°	225°

General information / test report summary

Validation Test Summary. Tested IAW AS81703							
Test	Requirement						Result
Magnetic Permeability	Relative Magnetic Permeability: ≤ 2.0 Mu						Pass
Maintenance Aging and Contact Forces	Insertion Force: ≤ 15 lbs.• Removal Force: ≤ 10 lbs.						Pass
Gage Location and Retention	Axial Displacement of the Test Gages: ≤ 0.012						Pass
Operating Forces	Shell Size	Max Engagement force (lb)	Measured Engagement force (lb)	Min Disengagement force (lb)	Max Disengagement force (lb)	Measured Disengagement force (lb)	Pass
	12	34	15.2	2	34	3.80	
			16.8			4.05	
	19	38	16.2	3	38	6.75	
			15.8			8.06	
	37	44	19.7	6	44	7.56	
			20.1			7.72	
Insulation Resistance, Room Temperature	Insulation resistance shall be >10,000 megohms						Pass
Dielectric Withstanding Voltage	No evidence of breakdown or flashover. Leakage Current ≤ 5 mA						Pass
	Condition		Service Rating I	Service Rating II			
	Sea Level		600 V AC	1000 V AC			
	70,000 ft.		300 V AC	450 V AC			
Thermal Shock	Low Temperature: -55° ± 3°C • High Temperature: Class L 175° ± 3°C ; Class E, 200° ± 3°C. 5 cycles, 2 hour minimum soak. No damage detrimental to the connector						Pass
Insert Retention	Inserts shall not be dislocated from the specified insert position as shown on the applicable MS drawing when an effective pressure differential of 75 lbs.f/in² is applied						Pass
Vibration	10 to 2,000 Hz and return to 10 Hz in 20 minutes. 12 cycles in 4 hours for X,Y, and Z Axes. Total 12 hrs. Amplitude of 0.06" double amplitude or 20g, whichever is less. Support wires 8" both ends. Electrical load 100 mA max, open circuit <5V. Maximum initial R not to exceed 3 Ohms on individual loops. All samples measured no discontinuity on any axis.						Pass
Shock	15g peak value, half-sine pulse, 11ms duration. One shock each direction on 3 major axes.Mated connectors shall not be damaged and there shall be no loosening of parts. All samples measured no discontinuity on any axis.						Pass
Insulation Resistance, Elevated Temperature	After an exposure for 1000 hours at 200°C, the insulation resistance shall be greater than 500 megohms, unmated condition						Pass
Moisture Resistance	10 cycles, low temperature subcycle 5 cycles. Initial and final mated insulation resistance measured >100Mohms for all samples at 25°, 500V, 12s.						Pass
Insulation Resistance	Unmated, 500V, 120x, 10,000 megohms						Pass
Contact Resistance	#24 AWG wires crimped to size 20 contacts. Test current 3A, maximum mV drop 45 mV						Pass
Contact Retention	Axial load: 15 lb. Duration: 5 sec min. Rate: approx. 1lb/sec. Initial load of 2 lb before measuring contact displacement. Force applied in the direction tending to dislodge the contacts toward the rear of the connector. Displacement shall not exceed 0.012"						Pass
Magnetic Permeability	Relative magnetic permeability of connector assemblies < 2.0 Mu						Pass
Durability	500 mating cycles with no mechanical or electrical defects detrimental to operation						Pass
Salt Spray	Unmated, 48 hours, 20% salt concentration. No exposure of basic metal due to corrosion which will affect performance.						Pass
Fluid Immersion, Lubricating Oil	Unmated connectors immersed in MIL-PRF-7808 oil, 20 hours.						Pass
Contact Glenair for complete validation test reports: GT-15-93 (AS81703, series 3, class E) and GT-15-94 (AS81703, series 3, class L).							

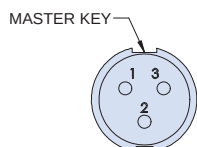
MATERIALS/FINISHES

Shells, Jam Nuts, Lockwashers - Aluminum alloy

Insulators - High-grade rigid dielectric

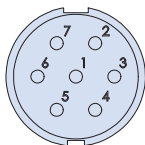
O-Rings, Grommets, Peripheral Seals - Fluorosilicone or equivalent

Contact arrangements (pin face shown)



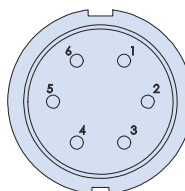
3-50

3X SIZE 20 CONTACT



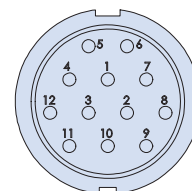
7-50

7X SIZE 20 CONTACT



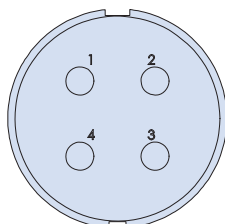
12-6

6X SIZE 20 CONTACT



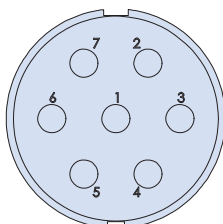
12-50

12X SIZE 20 CONTACT



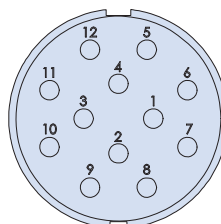
19-4

4X SIZE 12 CONTACT



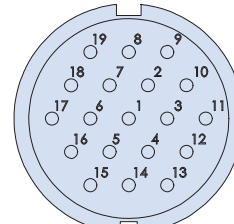
19-7

7X SIZE 12 CONTACT



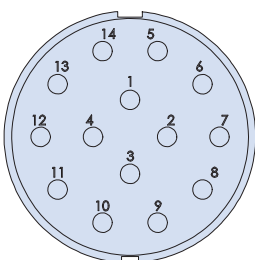
19-12

12 SIZE 16 CONTACT



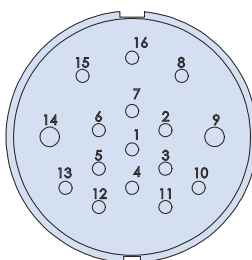
19-50

19X SIZE 20 CONTACT



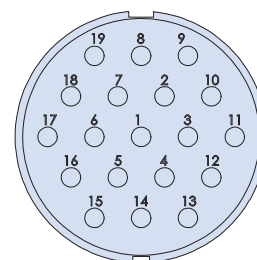
27-2

14X SIZE 16 CONTACT



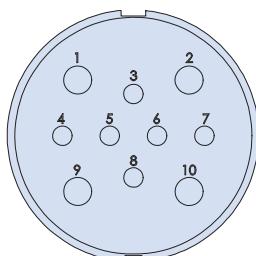
27-3

2X SIZE 16 CONTACT
14X SIZE 20 CONTACT



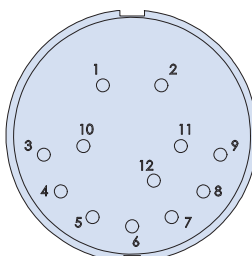
27-5

19X SIZE 16 CONTACT



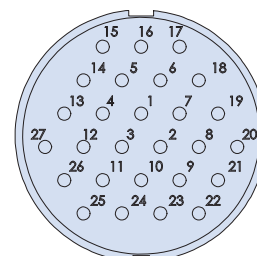
27-8

6X SIZE 16 CONTACT
4X SIZE 12 CONTACT



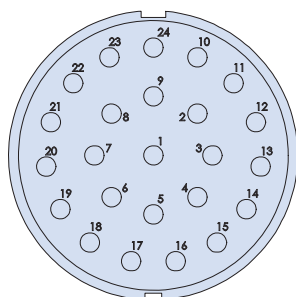
27-11

12X SIZE 20 CONTACT



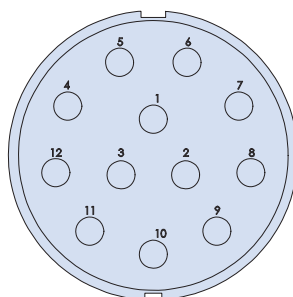
27-50

27X SIZE 20 CONTACT



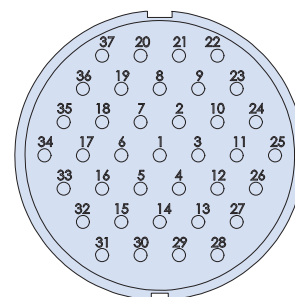
37-2

24X SIZE 16 CONTACT



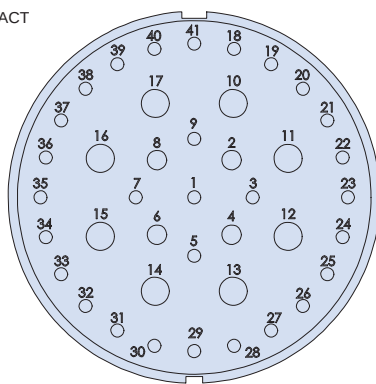
37-3

12X SIZE 12 CONTACT



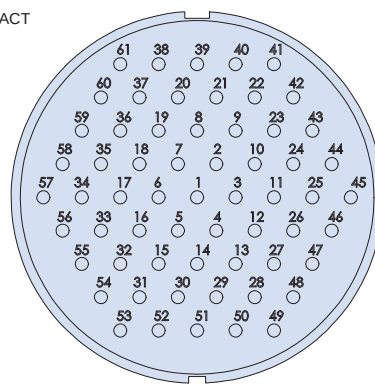
37-50

37X SIZE 20 CONTACT



61-42

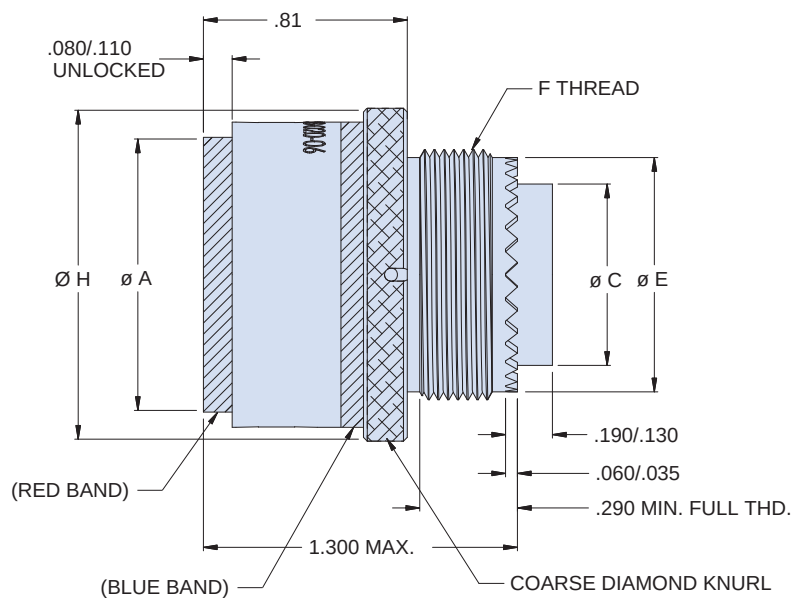
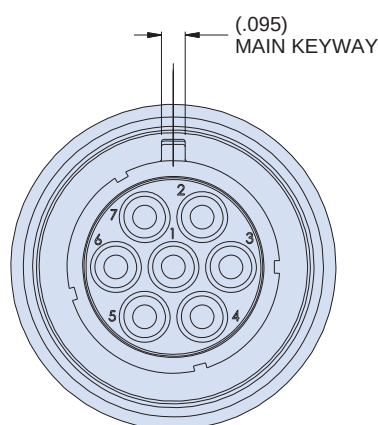
4X SIZE 16 CONTACT
29X SIZE 20 CONTACT
8X SIZE 12 CONTACTS



61-50

61X SIZE 20 CONTACT

How To Order							
Sample Part Number	253-020	-	06	ME	19-7	P	N
Basic Part Number	AS81703 Series 3 type connector						
Rear Option	- = Accessory threads B = Band porch (consult factory)						
Connector Style	06 = Straight plug AS34671 type (MS3467)						
Material / Finish	C = Al Alloy/Black Anodize ME = Al Alloy/Electroless Nickel NF = Al Alloy/Cad O.D. Over Electroless Nickel MT = Al Alloy/Nickel-PTFE ZR = Al Alloy/Zinc-Nickel Black						
Shell Size / Insert Arrangement	See Table II pg. 2, diagrams on pgs. 4-5						
Contact Styles	P = Pin insert A = Pin insert less contacts S = Socket insert B = Socket insert less contacts						
Insert Clocking Positions	N, W, X, Y, B, C (See Table III pg. 2)						



-06 Plug Dimensions									
Shell Size	Ø A		Ø C Max.		Ø E Max.		F Thd.	H	
	In. ± .02	mm ± .5	In.	mm	In.	mm		In. ± .025	mm ± .6
3	.657	16.7	.351	8.9	.509	12.9	5⁄16-24 UNEF-2A	.925	23.5
7	.795	20.2	.531	13.5	.687	17.4	3⁄4-20 UNEF-2A	1.062	27.0
12	.945	24.0	.665	16.9	.812	20.6	7⁄8-20 UNEF-2A	1.172	29.8
19	1.090	27.7	.790	20.1	.937	23.8	1-20 UNEF-2A	1.328	33.7
27	1.230	31.2	.869	22.1	.992	25.2	1 1⁄16-18 UNEF-2A	1.475	37.5
37	1.350	34.3	.994	25.2	1.117	28.4	1 3⁄16-18 UNEF-2A	1.610	40.9
61	1.620	41.1	1.280	32.5	1.427	36.2	1 1⁄2-18 UNEF-2A	1.890	48.0

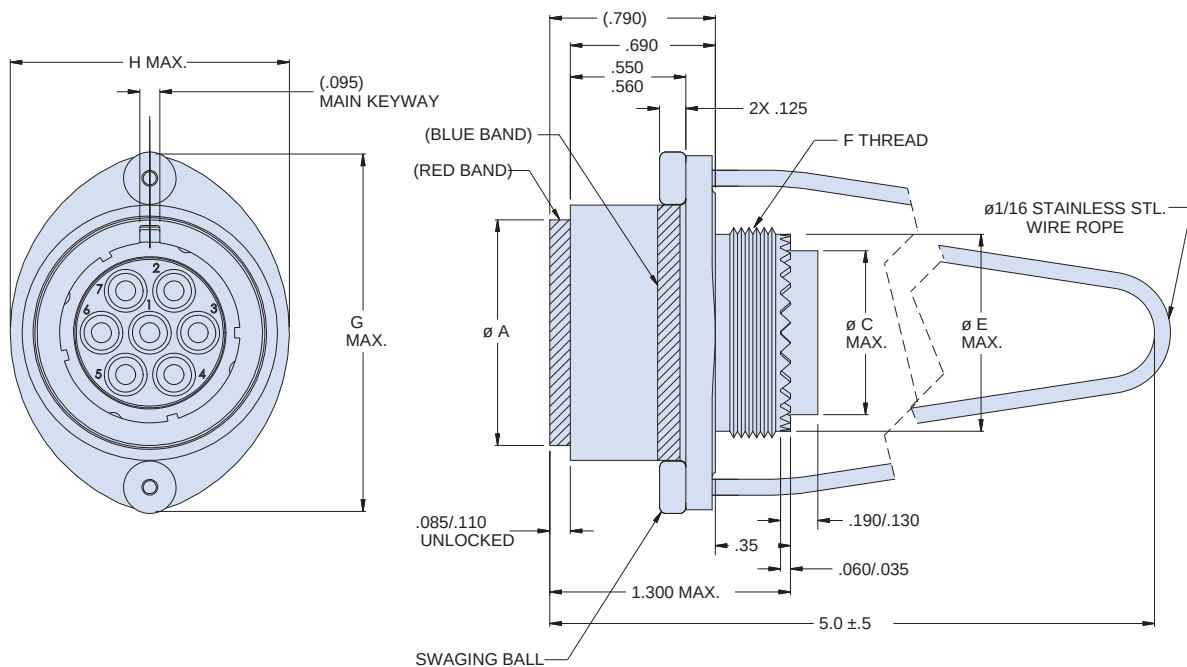
AS81703 SERIES 3 TYPE CONNECTORS

Lanyard-release plug

253-020-08

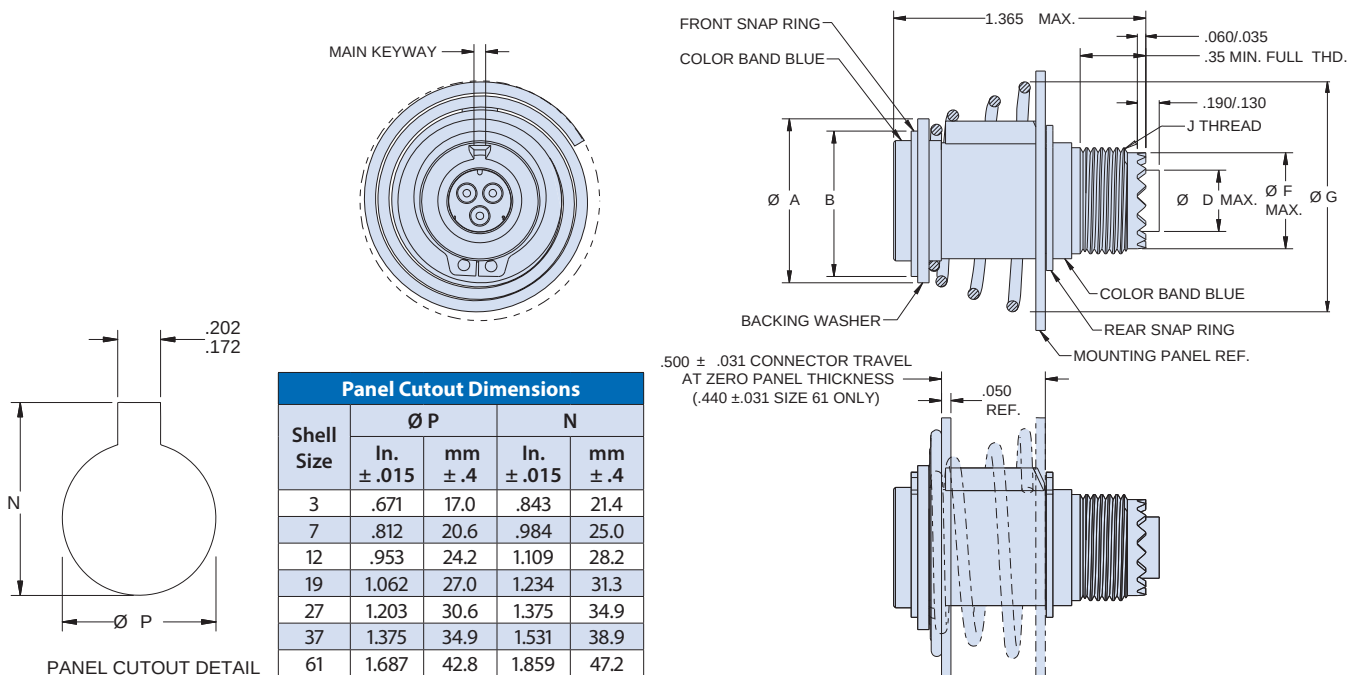


How To Order									
Sample Part Number	253-020	-	08	ME	19-7	P	N		
Basic Part Number	AS81703 Series 3 type connector								
Rear Option	- = Accessory threads B = Band porch (consult factory)								
Connector Style	08 = Lanyard release plug MS3468 type (no SAE equivalent)								
Material / Finish	C = Al Alloy/Black Anodize ME = Al Alloy/Electroless Nickel MT = Al Alloy/Nickel-PTFE NF = Al Alloy/Cad O.D. Over Electroless Nickel ZR = Al Alloy/Zinc-Nickel Black								
Shell Size / Insert Arrangement	See Table II pg. 2, diagrams on pgs. 4-5								
Contact Styles	P = Pin insert S = Socket insert A = Pin insert less contacts B = Socket insert less contacts								
Insert Clocking Positions	N, W, X, Y, B, C (See Table III pg. 2)								
Lanyard Ring Mod. Code	Omit = Standard Lanyard Ring 812 = Lanyard Ring Rotated 90° from Master Keyway								



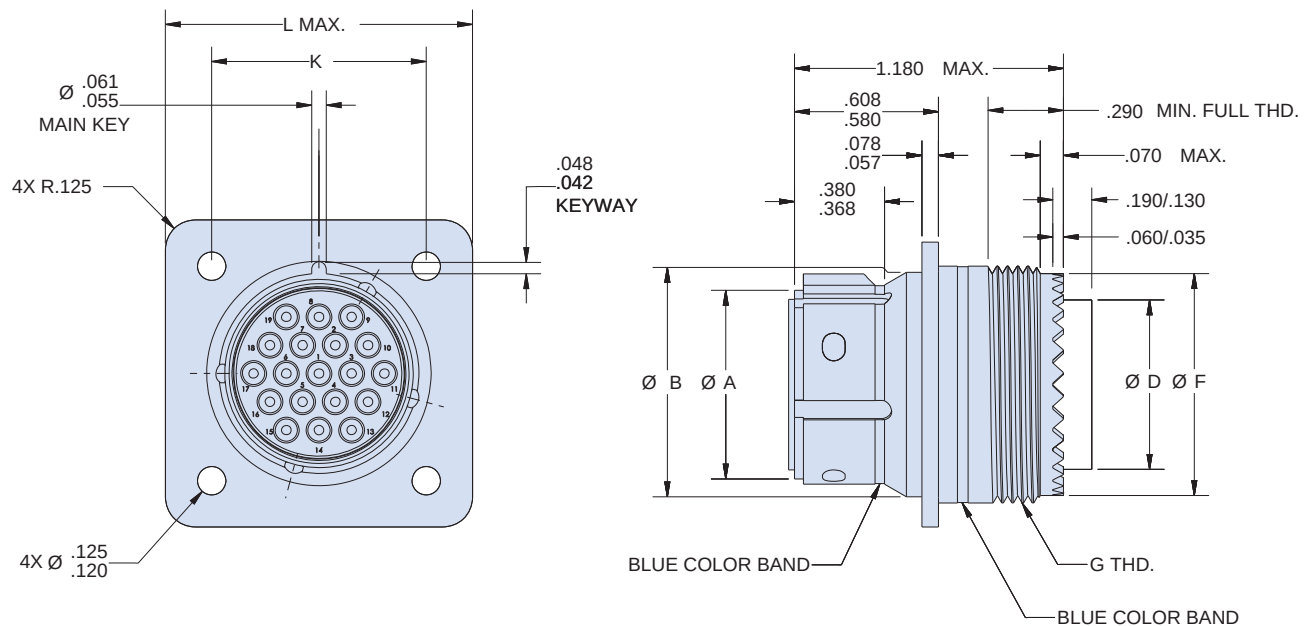
-08 Lanyard-Release Plug Dimensions											
Shell Size	Ø A		Ø C Max.		Ø E Max.		F Thd.	G Max.		H Max.	
	In.	mm	In.	mm	In.	mm		In.	mm	In.	mm
3	.657 .648	16.7 16.5	.351	8.9	.509	12.9	¼-24 UNEF-2A	1.261	32.0	.925	23.5
7	.793 .782	20.1 19.9	.531	13.5	.687	17.4	¾-20 UNEF-2A	1.411	35.8	1.062	27.0
12	.942 .932	23.9 23.7	.665	16.9	.812	20.6	7/8-20 UNEF-2A	1.531	38.9	1.172	29.8
19	1.073 1.063	27.3 27.0	.790	20.1	.937	23.8	1-20 UNEF-2A	1.681	42.7	1.328	33.7
27	1.226 1.216	31.1 30.9	.869	22.1	.992	25.2	1 1/16-18 UNEF-2A	1.826	46.4	1.475	37.5
37	1.348 1.338	34.2 34.0	.994	25.2	1.117	28.4	1 3/16-18 UNEF-2A	1.915	48.6	1.610	40.9
61	1.614 1.604	41.0 40.7	1.280	32.5	1.427	36.2	1 1/2-18 UNEF-2A	2.235	56.8	1.890	48.0

How To Order							
Sample Part Number	253-020	-	09	ME	19-7	P	N
Basic Part Number	AS81703 Series 3 type connector						
Rear Option	- = Accessory threads B = Band porch (consult factory)						
Connector Style	09 = Rack & panel plug AS34461 type (MS3446)						
Material / Finish	C = Al Alloy/Black Anodize ME = Al Alloy/Electroless Nickel MT = Al Alloy/Nickel-PTFE NF = Al Alloy/Cad O.D. Over Electroless Nickel ZR = Al Alloy/Zinc-Nickel Black						
Shell Size / Insert Arrangement	See Table II pg. 2, diagrams on pgs. 4-5						
Contact Styles	P = Pin insert S = Socket insert A = Pin insert less contacts B = Socket insert less contacts						
Insert Clocking Positions	N, W, X, Y, B, C (See Table III pg. 2)						



-09 Rack-and-Panel Plug Dimensions												
Shell Size	Ø A		Ø B Max.		Ø D Max.		Ø F Max.		Ø G Max.		J Thd.	Spring force when mated (lbs-in.)
	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm		
3	.891 .869	22.6 22.1	.800	20.3	.351	8.9	.509	12.9	1.225	31.1	9/16-24 UNEF-2A	16 – 20
7	1.172 1.150	29.8 29.2	.990	25.1	.531	13.5	.687	17.4	1.356	34.4	3/4-20 UNEF-2A	16 – 20
12	1.263 1.241	32.1 31.5	1.190	30.2	.665	16.9	.812	20.6	1.575	40.0	7/8-20 UNEF-2A	30 – 35
19	1.391 1.369	35.3 34.8	1.320	33.5	.790	20.1	.937	23.8	1.715	43.6	1-20 UNEF-2A	40 – 50
27	1.529 1.507	38.8 38.3	1.475	37.5	.869	22.1	.992	25.2	1.860	47.2	1 1/16-18 UNEF-2A	43 – 50
37	1.816 1.794	46.1 45.6	1.655	42.0	.994	25.2	1.117	28.4	2.120	53.8	1 3/16-18 UNEF-2A	45 – 53
61	2.150 2.118	54.6 53.8	2.025	51.4	1.280	32.5	1.427	36.2	2.850	72.4	1 1/2-18 UNEF-2A	75 – 80

How To Order							
Sample Part Number	253-020	-	00	ME	19-7	P	N
Basic Part Number	AS81703 Series 3 type connector						
Rear Option	- = Accessory threads B = Band porch (consult factory)						
Connector Style	00 = Sq. flange mount receptacle AS34241 type (MS3424)						
Material / Finish	C = Al Alloy/Black Anodize ME = Al Alloy/Electroless Nickel NF = Al Alloy/Cad O.D. Over Electroless Nickel MT = Al Alloy/Nickel-PTFE ZR = Al Alloy/Zinc-Nickel Black						
Shell Size / Insert Arrangement	See Table II pg. 2, diagrams on pgs. 4-5						
Contact Styles	P = Pin insert A = Pin insert less contacts S = Socket insert B = Socket insert less contacts						
Insert Clocking Positions	N, W, X, Y, B, C (See Table III pg. 2)						



-00 Wall Mount Receptacle Dimensions													
Shell Size	Ø A		Ø B		Ø D Max.		Ø F Max.		G Thd.	K		L Max.	
	In.	mm	In. ±.003	mm ±.1	In.	mm	In.	mm		In.	mm	In.	mm
3	.441 .431	11.2 10.9	.573	14.6	.351	8.9	.509	12.9	9/16-24 UNEF-2A	.625	15.9	.896	22.8
7	.576 .566	14.6 14.4	.686	17.4	.531	13.5	.687	17.4	3/4-20 UNEF-2A	.719	18.3	1.021	25.9
12	.710 .700	18.0 17.8	.823	20.9	.665	16.9	.812	20.6	7/8-20 UNEF-2A	.812	20.6	1.114	28.3
19	.849 .839	21.6 21.3	.948	24.1	.790	20.1	.937	23.8	1-20 UNEF-2A	.906	23.0	1.208	30.7
27	1.004 .994	25.5 25.2	1.132	28.8	.869	22.1	.992	25.2	1 1/16-18 UNEF-2A	.968	24.6	1.302	33.1
37	1.126 1.116	28.6 28.3	1.261	32.0	.994	25.2	1.117	28.4	1 3/16-18 UNEF-2A	1.187	30.1	1.458	37.0
61	1.414 1.404	35.9 35.7	1.573	40.0	1.280	32.5	1.427	36.2	1 1/2-18 UNEF-2A	1.438	36.5	1.797	45.6

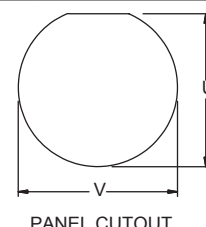
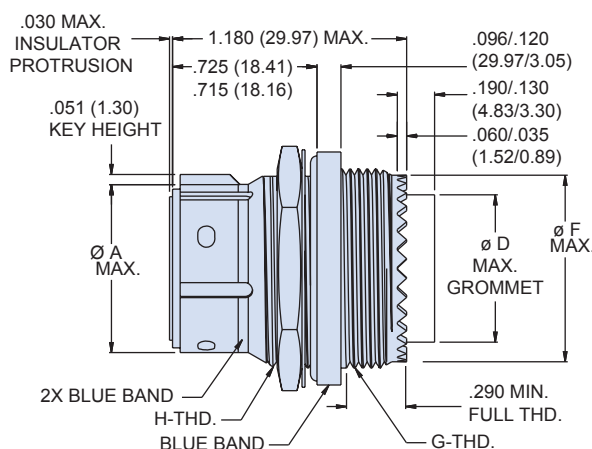
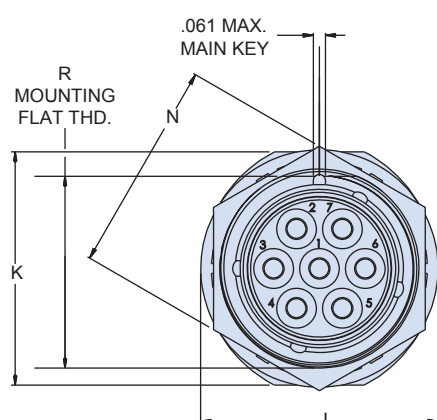
AS81703 SERIES 3 TYPE CONNECTORS

Jam nut receptacle

253-020-07



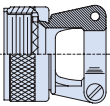
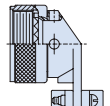
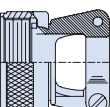
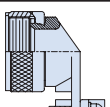
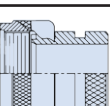
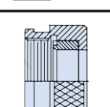
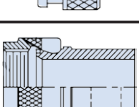
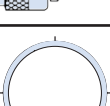
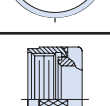
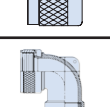
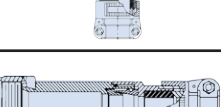
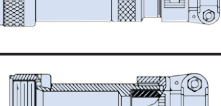
How To Order							
Sample Part Number	253-020	-	07	ME	19-7	P	N
Basic Part Number	AS81703 Series 3 type connector						
Rear Option	- = Accessory threads B = Band porch (consult factory)						
Connector Style	07 = Jam nut receptacle AS34461 type (MS3446)						
Material / Finish	C = Al Alloy/Black Anodize ME = Al Alloy/Electroless Nickel MT = Al Alloy/Nickel-PTFE NF = Al Alloy/Cad O.D. Over Electroless Nickel ZR = Al Alloy/Zinc-Nickel Black						
Shell Size / Insert Arrangement	See Table II pg. 2, diagrams on pgs. 4-5						
Contact Styles	P = Pin insert S = Socket insert A = Pin insert less contacts B = Socket insert less contacts						
Insert Clocking Positions	N, W, X, Y, B, C (See Table III pg. 2)						



Panel Cutout				
Shell Size	U		V	
	In.	mm	In.	mm
3	.538	13.7	.577	14.7
	.534	13.6	.567	14.4
7	.665	16.9	.701	17.8
	.661	16.8	.696	17.7
12	.788	20.0	.826	21.0
	.784	19.9	.816	20.7
19	.973	24.7	1.013	25.7
	.969	24.6	1.003	25.5
27	1.099	27.9	1.138	28.9
	1.095	27.8	1.128	28.7
37	1.224	31.1	1.263	32.1
	1.220	31.0	1.253	31.8
61	1.471	37.4	1.514	38.5
	1.467	37.3	1.504	38.2

-07 Jam Nut Receptacle Dimensions																
Shell Size	Ø A		Ø D Max.		Ø F Max.		G Thd.	H Thd.	K		L		R		N Mounting Nut	
	In.	mm	In.	mm	In.	mm			In.	mm	In.	mm	In.	mm	In.	mm
3	.441 .431	11.2 10.9	.351	8.9	.509	12.9	5/16-24 UNEF-2A	5/16-24 UNEF-2A	.765 .735	19.4 18.7	.765 .735	19.4 18.7	.523	13.3	.625	15.9
7	.576 .566	14.6 14.4	.531	13.5	.687	17.4	3/4-20 UNEF-2A	11/16-24 UNEF-2A	.890 .860	22.6 21.8	.890 .860	22.6 21.8	.655	16.6	.812	20.6
12	.710 .700	18.0 17.8	.665	16.9	.812	20.6	7/8-20 UNEF-2A	13/16-20 UNEF-2A	1.077 1.047	27.4 26.6	1.077 1.047	27.4 26.6	.778	19.8	.937	23.8
19	.849 .839	21.6 21.3	.790	20.1	.937	23.8	1-20 UNEF-2A	1-20 UNEF-2A	1.171 1.141	29.7 29.0	1.202 1.172	30.5 29.8	.963	24.5	1.062	27.0
27	1.004 .994	25.5 25.2	.869	22.1	.992	25.2	1 1/16-18 UNEF-2A	1 1/8-18 UNEF-2A	1.327 1.297	33.7 32.9	1.327 1.297	33.7 32.9	1.089	27.7	1.250	31.8
37	1.126 1.116	28.6 28.3	.994	25.2	1.117	28.4	1 3/16-18 UNEF-2A	1 1/4-18 UNEF-2A	1.450 1.445	36.8 36.7	1.515 1.485	38.5 37.7	1.214	30.8	1.375	34.9
61	1.414 1.404	35.9 35.7	1.280	32.5	1.427	36.2	1 1/2-18 UNEF-2A	1 1/2-18 UNEF-2A	1.864 1.834	47.3 46.6	1.890 1.860	48.0 47.2	1.463	37.2	1.688 + .015	42.9 ± .4

Selection guide

	Straight strain relief AS85049/118	page 12
	90° strain relief AS85049/120	page 13
	Straight strain relief AS85049/52	page 14
	90° strain relief AS85049/51	page 15
	Straight shrink boot adapter AS85049/60-1	page 16
	Straight shrink boot adapter AS85049/60-2G	page 17
	Straight crimp ring backshell and crimp ring AS85049/26-1 and MS3419	page 18
	Backshell Crimp Ring AS85049/26-2	page 19
	E-Nut (Self-Locking and Non-Self-Locking) AS85049/31, MS3416 and MIL-DTL-85723/15N	page 20
	90° Environmental Backshell AS85049/9 and MS3188B	page 21
	Straight EMI/RFI Environmental Backshell AS85049/10 and MS3437A	page 22
	Straight Environmental Backshell AS85049/11 and MS3437B	page 23

BACKSHELLS AND ACCESSORIES FOR AS81703 SERIES 3 TYPE CONNECTORS

Straight Strain Relief



AS85049/118

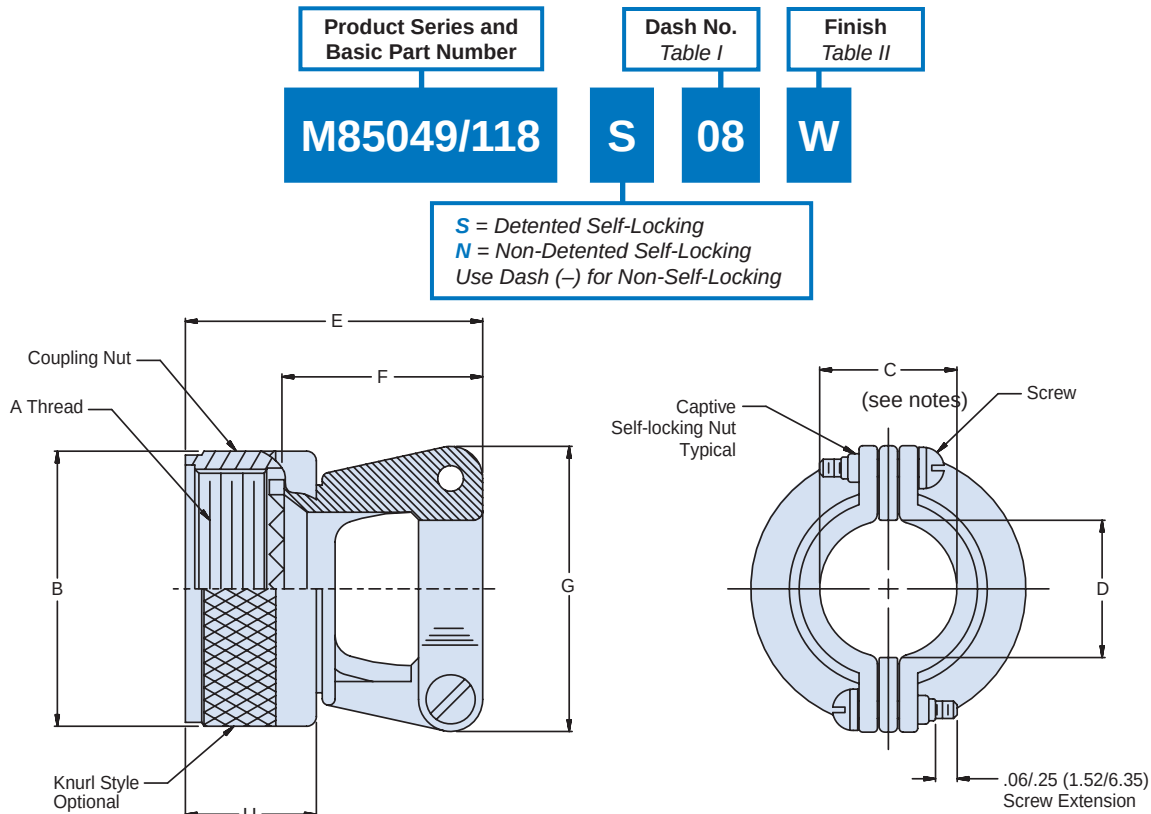


TABLE I: Dash Number, Shell Size, Thread and Dimensions

Dash No.	Screw Size	Shell Size	A Thread Class 2B	B Dia Max	C Dim $\pm .031$ (0.8)	D Min	E Max Length	F Dim	G Dim Max	H Dim Max
03	4-40	3	9/16-24 UNEF	.95 (24.1)	.219 (5.6)	.22 (5.6)	1.14 (29.0)	.77 (19.6) .51 (13.0)	.88 (22.4)	.710 (18.00)
12	4-40	7	3/4-20 UNEF	1.14 (29.0)	.344 (8.7)	.35 (8.9)	1.38 (35.1)	1.01 (25.7) .76 (19.3)	1.12 (28.4)	.710 (18.00)
14	4-40	12	7/8-20 UNEF	1.26 (32.0)	.460 (11.7)	.47 (11.9)	1.38 (35.1)	1.01 (25.7) .76 (19.3)	1.19 (30.3)	.710 (18.00)
16	4-40	19	1-20 UNEF	1.39 (35.3)	.545 (13.8)	.55 (14.0)	1.50 (38.1)	1.13 (28.7) .88 (22.4)	1.44 (36.6)	.710 (18.00)
18	6-32	27	1 1/16-18 UNEF	1.51 (38.4)	.615 (15.6)	.62 (15.7)	1.75 (44.5)	1.38 (35.1) 1.13 (28.7)	1.56 (39.6)	.710 (18.00)
20	6-32	37	1 3/16-18 UNEF	1.64 (41.7)	.698 (17.7)	.70 (17.8)	1.88 (47.8)	1.51 (38.4) 1.25 (31.8)	1.69 (42.9)	.710 (18.00)
61	8-32	61	1 1/2-18 UNEF	1.95 (49.5)	.850 (21.6)	.85 (21.6)	2.13 (54.1)	1.76 (44.7) 1.51 (38.5)	1.88 (47.8)	.710 (18.0)

TABLE II: Material and Finish

Sym.	Material	Finish
A	Aluminum Alloy	Black Anodize
N		Electroless Nickel
W		Cadmium, Olive Drab
X		Nickel Fluorocarbon Polymer
Z		Zinc Nickel

NOTES

- Glenair Series 600 Backshell Assembly Tools are recommended for assembly/installation.
- Cable entry is measured with saddle bars closed and bottomed on clamp ears.
- Material/Finish:
Clamp body, coupling nut, saddles - Al alloy or 300 Series SST/See Table II.
Clamp screws and lock nuts - CRES/Passivated, Silver plate optional.
Anti-rotation device - Corrosion resistant material

BACKSHELLS AND ACCESSORIES FOR AS81703 SERIES 3 TYPE CONNECTORS

90° Strain Relief

AS85049/120

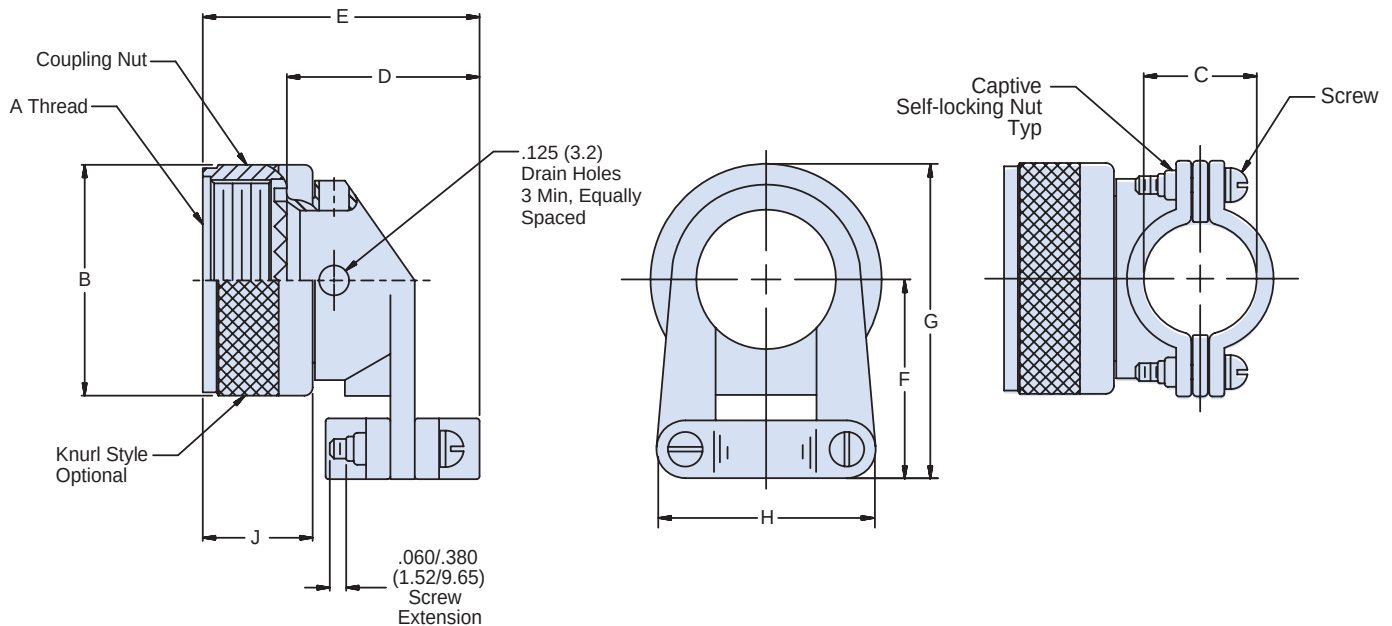
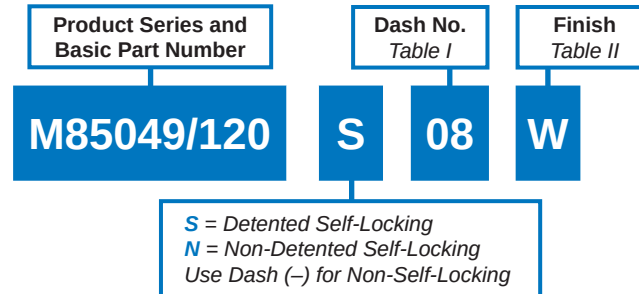


TABLE I: Dash Number, Shell Size, Thread and Dimensions

Dash No.	Screw Size	Shell Size	A Thread Class 2B	B Dia Max	C Dim $\pm .031$ (0.8)	D Max	E Max Length	F Dim Max	G Dim Max	H Dim Max	J Dim Max
03	4-40	3	9/16-24 UNEF	.95 (24.1)	.219 (5.6)	.93 (23.6)	1.29 (32.8)	.84 (21.3)	1.32 (33.5)	.88 (22.4)	.710 (18.0)
12	4-40	7	3/4-20 UNEF	1.14 (29.0)	.344 (8.7)	1.21 (30.7)	1.57 (39.9)	.93 (23.6)	1.50 (38.1)	1.12 (28.4)	.710 (18.0)
14	4-40	12	7/8-20 UNEF	1.26 (32.0)	.460 (11.7)	1.27 (32.3)	1.63 (41.4)	1.00 (25.4)	1.62 (41.4)	1.19 (30.2)	.710 (18.0)
16	4-40	19	1-20 UNEF	1.39 (35.3)	.545 (13.8)	1.42 (36.1)	1.78 (45.2)	1.06 (26.9)	1.75 (44.5)	1.44 (36.6)	.710 (18.0)
18	6-32	27	1 1/16-18 UNEF	1.51 (38.4)	.615 (15.6)	1.53 (38.9)	1.89 (48.0)	1.23 (31.2)	1.99 (50.5)	1.56 (39.6)	.710 (18.0)
20	6-32	37	1 3/16-18 UNEF	1.64 (41.7)	.698 (17.7)	1.65 (41.9)	2.01 (51.1)	1.30 (33.0)	2.07 (52.6)	1.69 (42.9)	.710 (18.0)
61	8-32	61	1 1/2-18 UNEF	1.95 (49.5)	.850 (21.6)	1.90 (48.3)	2.26 (57.4)	1.45 (36.8)	2.43 (61.7)	1.88 (47.8)	.710 (18.0)

TABLE II: Material and Finish

Sym.	Material	Finish
A	Aluminum Alloy	Black Anodize
N		Electroless Nickel
W		Cadmium, Olive Drab
X		Nickel Fluorocarbon Polymer
Z		Zinc Nickel

NOTES

- Glenair Series 600 Backshell Assembly Tools are recommended for assembly and installation.
- Cable entry is measured with saddle bars closed and bottomed on clamp ears.
- Material/Finish:
 Clamp body, coupling nut, saddles - Al alloy or 300 Series SST/See Table II.
 Clamp screws and lock nuts - CRES/Passivated, Silver plate optional.
 Anti-rotation device - Corrosion resistant material

BACKSHELLS AND ACCESSORIES FOR AS81703 SERIES 3 TYPE CONNECTORS

Straight Strain Relief



AS85049/52

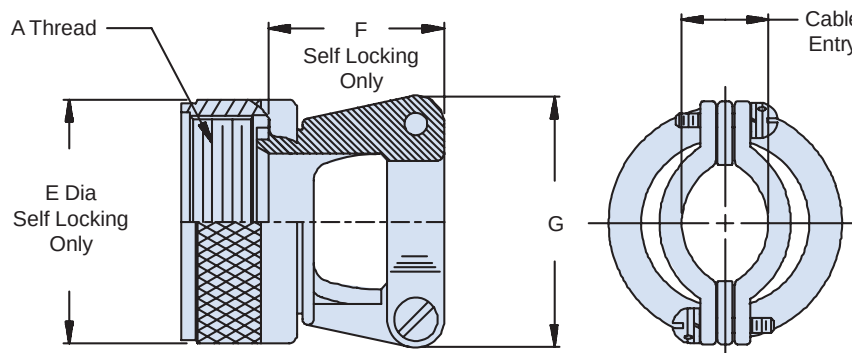
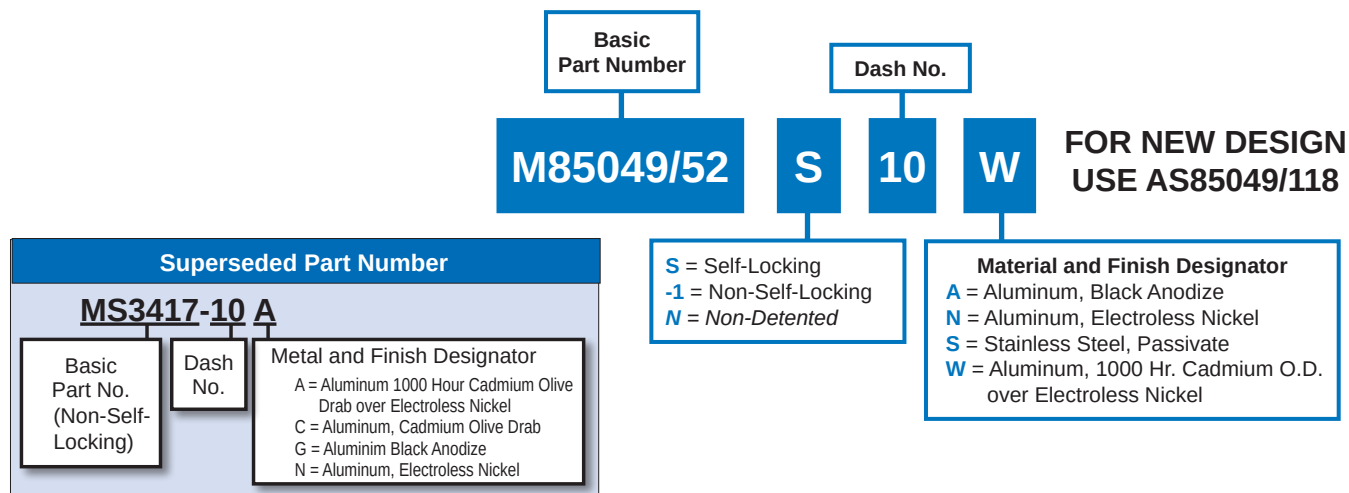


TABLE I: Shell Size, Cable Entry and Backshell Dimensions

TABLE I: Shell Size, Cable Entry and Backshell Dimensions												
Dash No.	Shell Size	A Thread Class 2B	Ø E Max Self-Locking		F Max Self-Locking		G Max		Cable Entry			
									Min		Max	
03*	3	.562 - 24 UNEF	-	-	-	-	.782	(19.9)	.125	(3.2)	.204	(5.2)
12	7	.750 - 20 UNEF	1.135	(28.8)	.98	(24.9)	1.003	(24.6)	.291	(7.4)	.416	(10.6)
14	12	.875 - 20 UNEF	1.260	(32.0)	.98	(24.9)	1.061	(25.5)	.351	(8.9)	.476	(12.1)
16	19	1.000 - 20 UNEF	1.385	(35.2)	1.10	(27.9)	1.234	(26.9)	.501	(12.7)	.626	(15.9)
18	27	1.062 - 18 UNEF	1.510	(38.4)	1.35	(34.3)	1.466	(35.4)	.518	(13.2)	.706	(17.9)
20	37	1.188 - 18 UNEF	1.635	(41.5)	1.98	(50.3)	1.572	(37.2)	.581	(14.8)	.831	(21.1)
61*	61	1.500 - 18 UNEF	-	-	-	-	1.775	(45.1)	.706	(17.9)	1.081	(27.5)
* Not Available in Self Locking												

* Not Available in Self Locking

NOTES

1. Cable Entry is defined as the accommodation entry for the wire bundle or cable.
2. Dimensions are not intended for inspection criteria.
3. For complete dimensions, see the applicable Military Specification.

BACKSHELLS AND ACCESSORIES FOR AS81703 SERIES 3 TYPE CONNECTORS

90° Strain Relief

AS85049/51

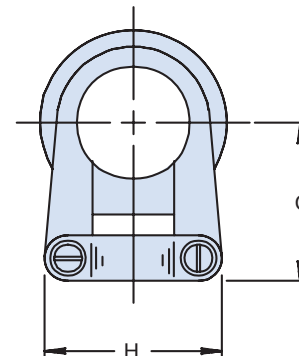
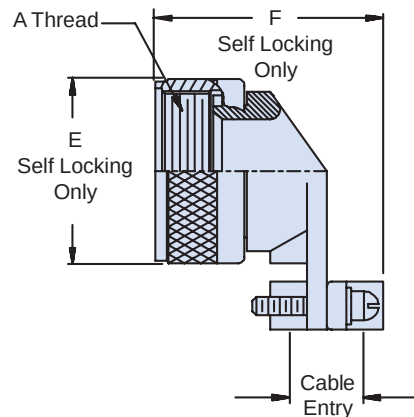
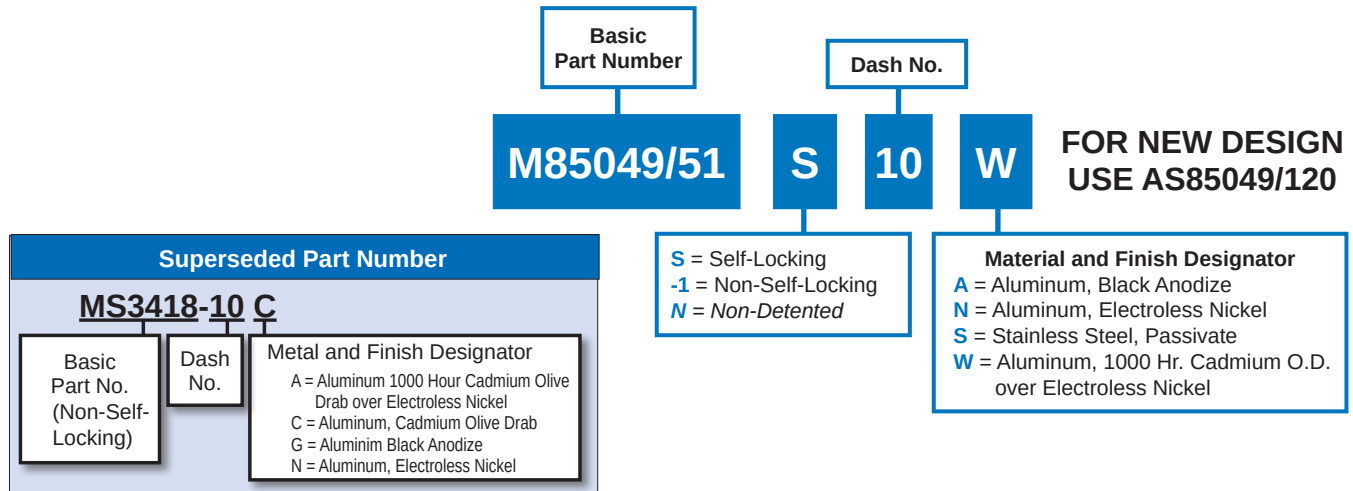


TABLE I: Shell Size, Cable Entry and Backshell Dimensions

Dash No.	Shell Size	A Thread Class 2B	Ø E Max Self-Locking	F Max Self-Locking	G		H Max	Cable Entry			
					±.062	(1.6)		Min		Max	
3*	3	.562 - 24 UNEF	-	-	-	-	.777 (19.7)	.782 (19.9)	.125 (3.2)	.204 (5.2)	
12	7	.750 - 20 UNEF	1.135 (28.8)	1.532 (38.9)	.867 (22.0)	.968 (24.6)	.291 (7.4)	.416 (10.6)			
14	12	.875 - 20 UNEF	1.260 (32.0)	1.592 (40.4)	.930 (23.6)	1.003 (25.5)	.351 (8.9)	.476 (12.1)			
16	19	1.000 - 20 UNEF	1.385 (35.2)	1.741 (44.2)	.994 (25.2)	1.061 (26.9)	.501 (12.7)	.626 (15.9)			
18	27	1.062 - 18 UNEF	1.510 (38.4)	1.853 (47.1)	1.171 (29.7)	1.394 (35.4)	.518 (13.2)	.706 (17.9)			
20	37	1.188 - 18 UNEF	1.635 (41.5)	1.978 (50.2)	1.234 (31.2)	1.466 (37.2)	.581 (14.8)	.831 (21.1)			
61*	61	1.500 - 18 UNEF	-	-	-	1.388 (35.3)	1.775 (45.1)	.706 (17.9)	1.081 (27.5)		

* Not Available in Self Locking

NOTES

1. Cable Entry is defined as the accommodation entry for the wire bundle or cable.
2. Dimensions are not intended for inspection criteria.
3. For complete dimensions, see the applicable Military Specification.

Straight Shrink Boot Adapter

AS85049/60-1

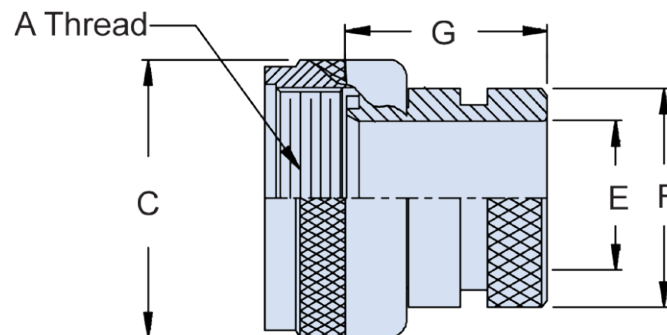
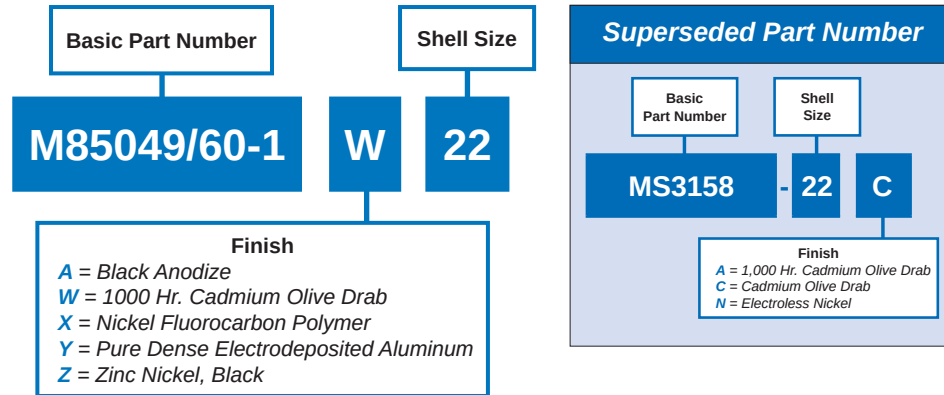


TABLE I: Shell Size, Thread and Dimensions

Dash No.	Shell Size	A Thread Class 2B	C Dia Max +.000 (0.0) -.045 (1.14)	E Min Dia	F Dia +.000 (0.0) -.020 (0.5)	G Max
3	3	.562 - 24 UNEF	.670 (17.0)	.250 (6.4)	.533 (13.5)	.832 (21.1)
12	7	.750 - 20 UNEF	.860 (21.8)	.491 (12.5)	.774 (19.7)	.832 (21.1)
14	12	.875 - 20 UNEF	.980 (24.9)	.565 (14.4)	.838 (21.3)	.832 (21.1)
16	19	1.000 - 20 UNEF	1.110 (28.2)	.690 (17.5)	.963 (24.5)	.832 (21.1)
18	27	1.062 - 18 UNEF	1.220 (31.0)	.769 (19.5)	1.042 (26.5)	.832 (21.1)
20	37	1.188 - 18 UNEF	1.350 (34.3)	.894 (22.7)	1.217 (30.9)	.832 (21.1)
61	61	1.500 - 18 UNEF	1.650 (41.9)	1.174 (29.8)	1.529 (38.8)	.832 (21.1)

NOTE

1. For complete dimensions see the applicable Military Specification.

Straight Shrink Boot Adapter

AS85049/60-2G

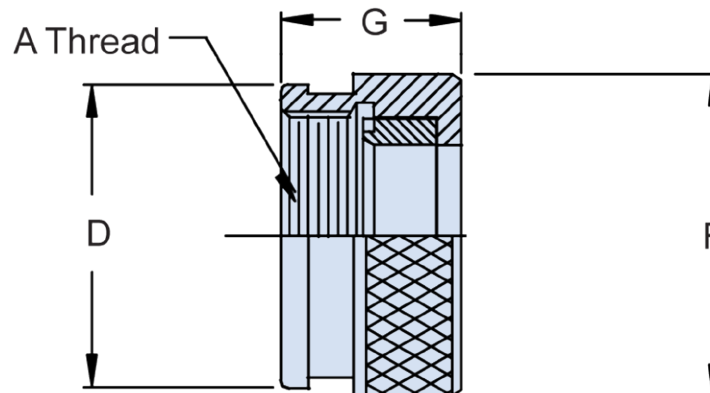
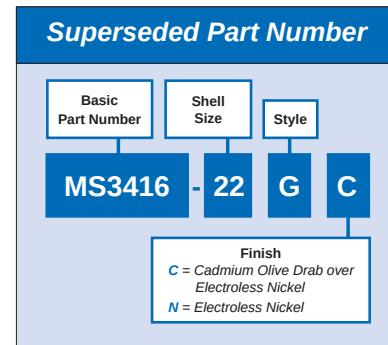
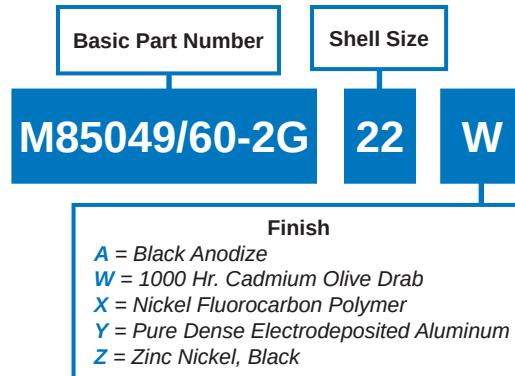


TABLE I: Shell Size, Thread and Dimensions					
Dash No.	Shell Size	A Thread Class 2B	D Dia +.000 (0.0) -.020 (0.5)	F Dia +.000 (0.0) -.045 (1.1)	G Max
3	3	.562 - 24 UNEF	.709 (18.0)	.750 (19.1)	.540 (13.7)
12	7	.750 - 20 UNEF	.898 (22.8)	.938 (23.8)	.540 (13.7)
14	12	.875 - 20 UNEF	1.024 (26.0)	1.063 (27.0)	.540 (13.7)
16	19	1.000 - 20 UNEF	1.152 (29.3)	1.238 (31.4)	.540 (13.7)
18	27	1.062 - 18 UNEF	1.243 (31.6)	1.310 (33.3)	.540 (13.7)
20	37	1.188 - 18 UNEF	1.370 (34.8)	1.436 (36.5)	.540 (13.7)
61	61	1.500 - 18 UNEF	1.653 (42.0)	1.748 (44.4)	.540 (13.7)

NOTE

1. For complete dimensions see the applicable Military Specification.

Straight Crimp Ring Backshell and Crimp Ring

AS85049/26-1 and MS3419

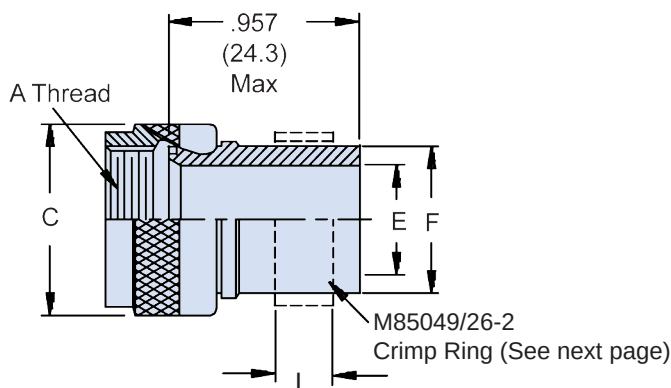
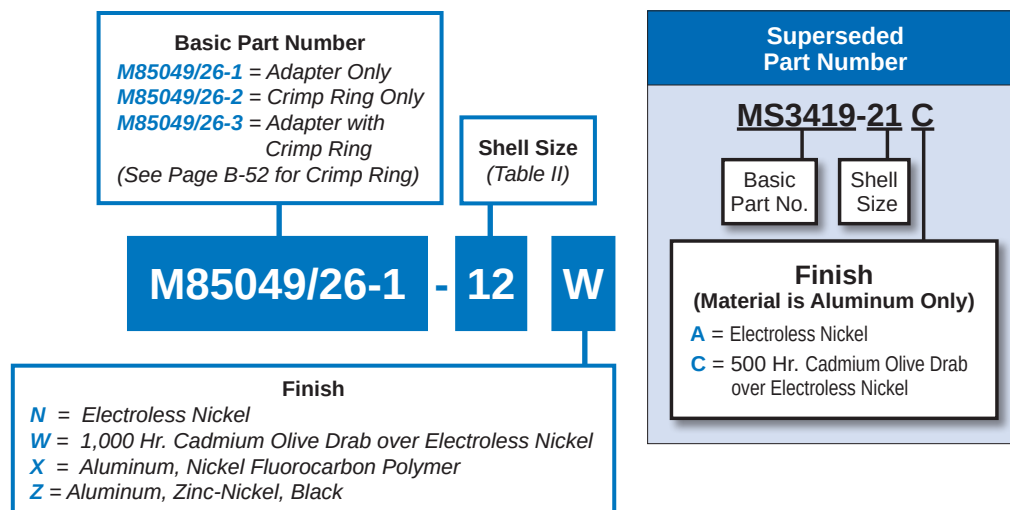


TABLE I: Adapter Shell Size, Thread, and Dimensions					
Dash No.	Shell Size	A Thread Class 2B	C Dia Max	E Dia	F Dia
3	3	.562 - 24 UNEF	.670 (17.0)	.250 (6.4)	.337 (8.6)
12	7	.750 - 20 UNEF	.860 (21.8)	.420 (10.7)	.500 (12.7)
14	12	.875 - 20 UNEF	.980 (24.9)	.540 (13.7)	.620 (15.7)
16	19	1.000 - 20 UNEF	1.110 (28.2)	.670 (17.0)	.750 (19.1)
18	27	1.062 - 18 UNEF	1.220 (31.0)	.789 (20.0)	.880 (22.4)
20	37	1.188 - 18 UNEF	1.350 (34.3)	.914 (23.2)	1.000 (25.4)
61	61	1.500 - 18 UNEF	1.650 (41.9)	1.210 (30.7)	1.359 (34.5)

NOTES

- For complete dimensions see the applicable Military Specification.
- Metric dimensions (mm) are in parentheses.

Backshell Crimp Ring

AS85049/26-2

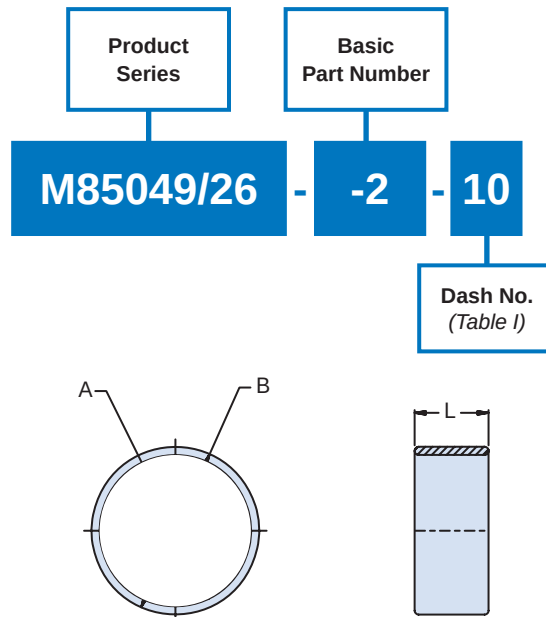


TABLE I: Shell Size, Thread, Cable Entry and Dimensions								
Dash No.	Shell Size	Color Code	A Dia		B Dia		L Dim ± .020 (0.5)	Installing Die Cat. No. (See Note 2)
			Min	Max	Min	Max		
8	3	GREEN	.400 (10.2)	.410 (10.4)	.448 (11.4)	.458 (11.6)	.250 (6.4)	GS405
12	7	RED	.585 (14.9)	.595 (15.1)	.660 (16.8)	.680 (17.3)	.440 (11.2)	GS590
14	12	BLUE	.705 (17.9)	.715 (18.2)	.780 (19.8)	.800 (20.3)	.440 (11.2)	GS710
16	19	GREY	.835 (21.2)	.845 (21.5)	.910 (23.1)	.930 (23.6)	.440 (11.2)	GS840
18	27	BROWN	1.005 (25.5)	1.015 (25.8)	1.080 (27.4)	1.100 (27.9)	.440 (11.2)	GS1010
20	37	GREEN	1.125 (28.6)	1.135 (28.8)	1.200 (30.5)	1.220 (31.0)	.440 (11.2)	GS1130
61	61	PURPLE	1.435 (36.4)	1.445 (36.7)	1.510 (38.4)	1.530 (38.9)	.440 (11.2)	GS1440

NOTES

1. Assembly identified with manufacturer's name and part number, space permitting.
2. Crimp tool shall be the Thomas and Betts Installing Head catalog number 13640 or equivalent (see Table I).
3. The installing dies (Thomas and Betts Cat. No.--See Table I) shall be used with the Thomas and Betts Installing head Catalog Number 13640 or an equivalent tool.
4. Material/Finish: Copper/Tin Plate.
5. Metric dimensions (mm) are in parentheses.

BACKSHELLS AND ACCESSORIES FOR AS81703 SERIES 3 TYPE CONNECTORS



E-Nut (Self-Locking and Non-Self-Locking)

AS85049/31, MS3416 and MIL-DTL-85723/15N

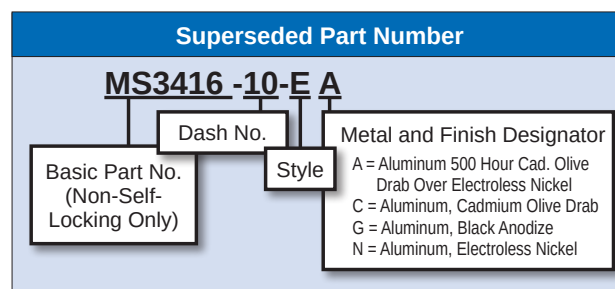
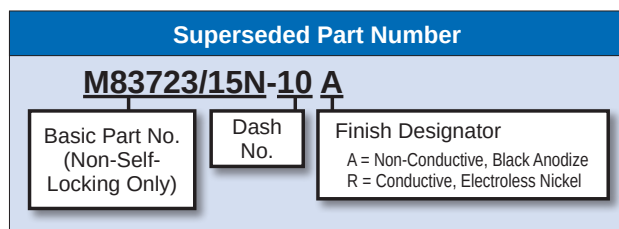
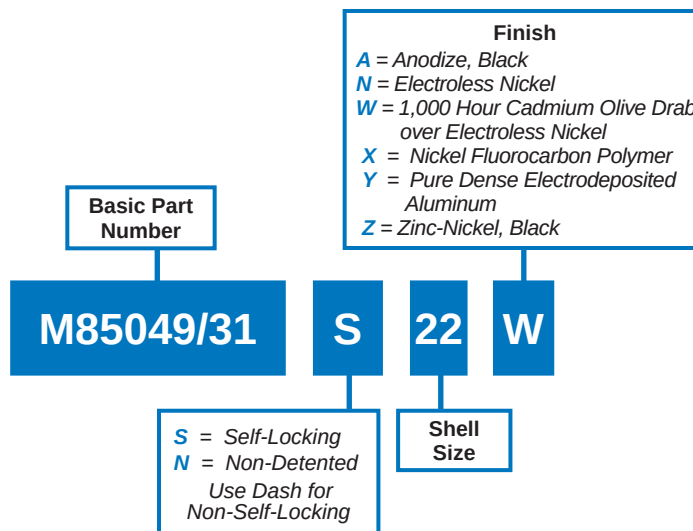
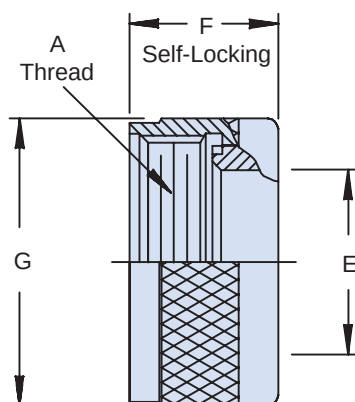


TABLE I: Shell Size, Thread and Dimensions					
Shell Size	A Thread Class 2B	Ø E Max	F Max	Ø G Max	
3	.562 - 24 UNEF	.270 (6.9)	--	--	
7	.750 - 20 UNEF	.511 (13.0)	.710 (18.0)	1.135 (28.8)	
12	.875 - 20 UNEF	.585 (14.9)	.710 (18.0)	1.260 (32.0)	
19	1.000 - 20 UNEF	.710 (18.0)	.710 (18.0)	1.385 (35.2)	
27	1.062 - 18 UNEF	.789 (20.0)	.710 (18.0)	1.510 (38.4)	
37	1.188 - 18 UNEF	.914 (23.2)	.710 (18.0)	1.635 (41.5)	
61	1.500 - 18 UNEF	1.194 (30.3)	--	--	

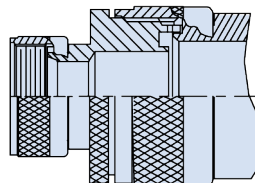
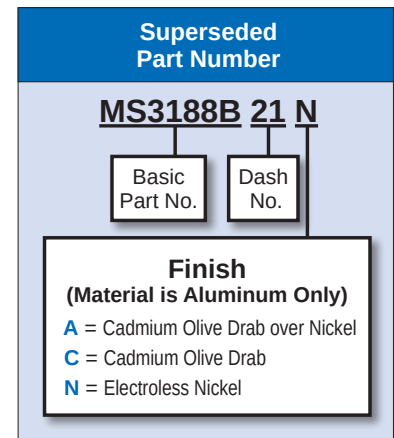
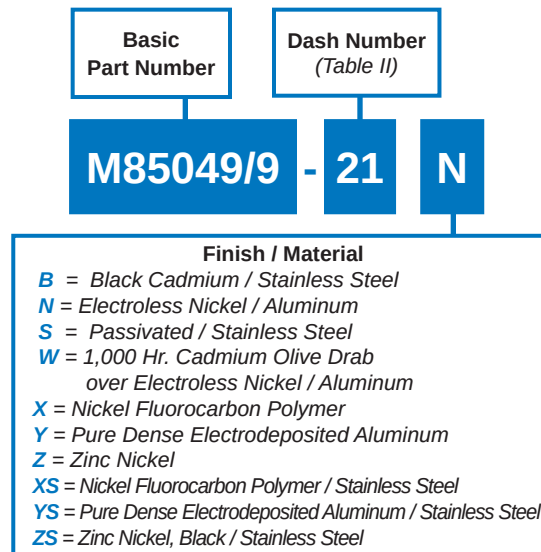
NOTES

- For complete dimensions see the applicable Military Specification.
- Metric dimensions (mm) are in parentheses.

BACKSHELLS AND ACCESSORIES FOR AS81703 SERIES 3 TYPE CONNECTORS

90° Environmental Backshell

AS85049/9 and MS3188B



STYLE 2

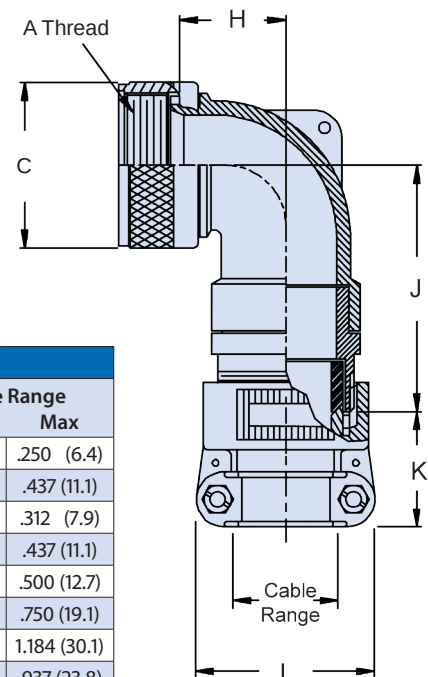


TABLE II: Dash Number and Cable Range								
Dash No.	Shell Size	A Thread Ref	C Dia Max	H Max	J Max	K Ref.	L Max	Cable Range Min Max
1	03	9/16-24 UNEF	.98 (24.9)	.761 (19.3)	1.862 (47.3)	1.027 (26.1)	.957 (24.3)	.125 (3.2) .250 (6.4)
2	03			1.511 (38.4)	1.382 (35.1)	1.027 (26.1)	1.145 (29.1)	.250 (6.4) .437 (11.1)
6	12	7/8-20 UNEF	1.28 (32.5)	.766 (19.5)	2.002 (50.9)	1.027 (26.1)	.957 (24.3)	.125 (3.2) .312 (7.9)
7	12			.766 (19.5)	2.002 (50.9)	1.027 (26.1)	1.145 (29.1)	.250 (6.4) .437 (11.1)
8	12			.766 (19.5)	1.397 (35.5)	1.027 (26.1)	1.332 (33.8)	.350 (8.9) .500 (12.7)
38	61	1-1/2-18 UNEF	1.89 (48.0)	1.291 (32.8)	2.442 (62.0)	1.059 (26.9)	1.551 (39.4)	.500 (12.7) .750 (19.1)
39	61			1.291 (32.8)	2.087 (53.0)	1.375 (34.9)	2.113 (53.7)	.875 (22.2) 1.184 (30.1)
53	61			1.291 (32.8)	2.087 (53.0)	1.156 (29.4)	1.770 (45.0)	.625 (15.9) .937 (23.8)

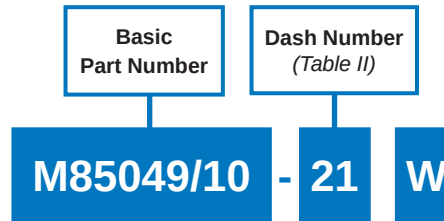
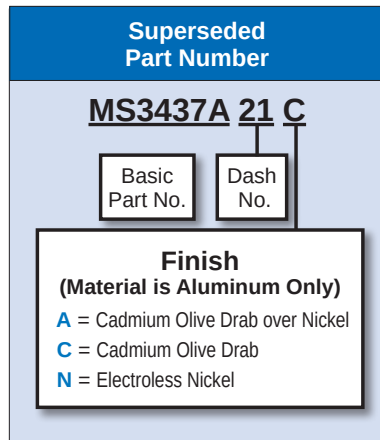
NOTES

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

BACKSHELLS AND ACCESSORIES FOR AS81703 SERIES 3 TYPE CONNECTORS

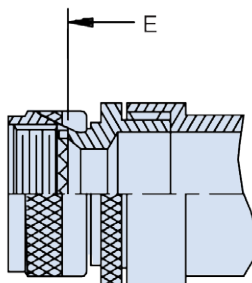
Straight EMI/RFI Environmental Backshell

AS85049/10 and MS3437A

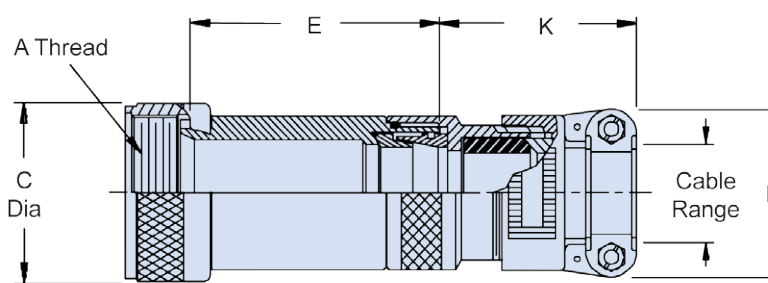


Finish / Material

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



STYLE 2



STYLE 1

TABLE I: Shell Size and Dimensions

Dash No.	Shell Size	A Thread Class 2B	C Dia Max
3	3	.562 - 24 UNEF	.67 (17.0)
12	7	.750 - 20 UNEF	.86 (21.8)
14	12	.875 - 20 UNEF	.98 (24.9)
16	19	1.000 - 20 UNEF	1.11 (28.2)
18	27	1.062 - 18 UNEF	1.22 (31.0)
20	37	1.188 - 18 UNEF	1.34 (34.0)
61	61	1.500 - 18 UNEF	1.65 (41.9)

TABLE II: Dash No., Style, Shell Size, Dimensions and Cable Range

Dash No.	Shell Size	Style	E Max	K Ref	L Max	Cable Range Min	Cable Range Max
01	3	1	2.125 (54.0)	1.544 (39.2)	.957 (24.3)	.125(3.2)	.250(6.4)
02	3	1	3.125 (79.4)	1.544 (39.2)	.957 (24.3)	.125(3.2)	.250(6.4)
03	3	2	2.875 (73.0)	1.544 (39.2)	1.145 (29.1)	.250(6.4)	.437 (11.1)
04	3	2	3.875 (98.4)	1.544 (39.2)	1.145 (29.1)	.250(6.4)	.437 (11.1)
13	12	1	2.125 (54.0)	1.544 (39.2)	1.145 (29.1)	.250(6.4)	.437 (11.1)
14	12	1	3.125 (79.4)	1.544 (39.2)	1.145 (29.1)	.250(6.4)	.437 (11.1)
15	12	2	2.875 (73.0)	1.844 (46.8)	1.332 (33.8)	.350(8.9)	.625 (15.9)
16	12	2	3.875 (98.4)	1.844 (46.8)	1.332 (33.8)	.350(8.9)	.625 (15.9)
103	61	1	3.125 (79.4)	1.916 (48.7)	1.551 (39.4)	.500 (12.7)	.750 (19.1)
104	61	1	4.125 (104.8)	1.916 (48.7)	1.551 (39.4)	.500 (12.7)	.750 (19.1)
105	61	1	3.125 (79.4)	2.000 (50.8)	1.770 (45.0)	.625 (15.9)	.937 (23.8)
106	61	1	4.125 (104.8)	2.000 (50.8)	1.770 (45.0)	.625 (15.9)	.937 (23.8)
107	61	2	3.875 (98.4)	2.230 (56.6)	2.113 (53.7)	.875 (22.2)	1.250 (31.8)
108	61	2	4.875 (123.8)	2.230 (56.6)	2.113 (53.7)	.875 (22.2)	1.250 (31.8)
109	61	2	3.875 (98.4)	2.024 (51.4)	2.363 (60.0)	1.000 (25.4)	1.375 (34.9)
110	61	2	4.875 (123.8)	2.024 (51.4)	2.363 (60.0)	1.000 (25.4)	1.375 (34.9)
111	12	1	2.125 (54.0)	1.844 (46.8)	1.332 (33.8)	.350 (8.9)	.500 (12.7)
114	12	1	2.125 (54.0)	1.544 (39.2)	.957 (24.3)	.125 (3.2)	.312 (7.9)
115	12	1	3.125 (79.4)	1.544 (39.2)	.957 (24.3)	.125 (3.2)	.312 (7.9)
138	12	1	2.125 (54.0)	1.844 (46.8)	1.332 (33.8)	.350 (8.9)	.500 (12.7)
139	12	1	3.125 (79.4)	1.844 (46.8)	1.332 (33.8)	.350 (8.9)	.500 (12.7)

NOTES

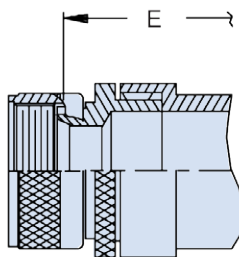
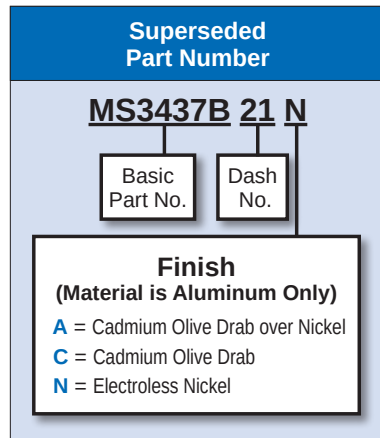
- For complete dimensions see the applicable Military Specification.
- Metric dimensions (mm) are in parentheses.
- Cable Range is defined as the accommodation range for the wire bundle or cable. Dimensions shown are not intended for inspection criteria.

BACKSHELLS AND ACCESSORIES FOR AS81703 SERIES 3 TYPE CONNECTORS

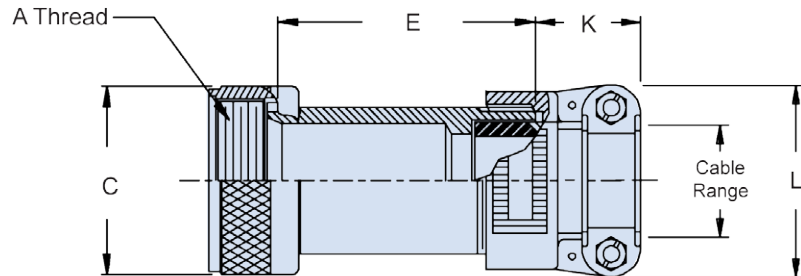
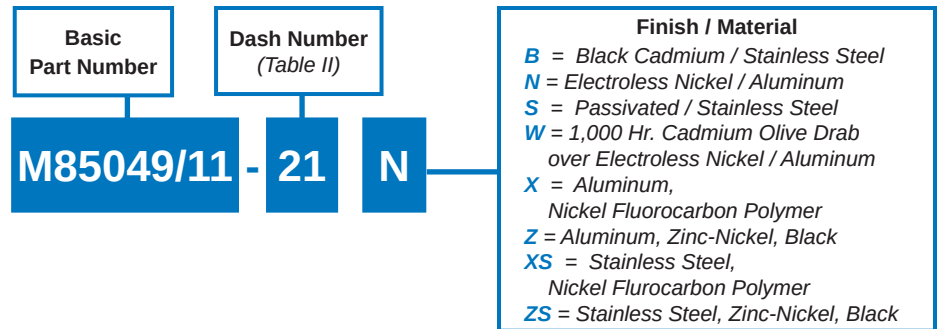
Straight Environmental Backshell



AS85049/11 and MS3437B



STYLE 2



STYLE 1

TABLE I: Shell Size and Dimensions			
Dash No.	Shell Size	A Thread Class 2B	C Dia Max
3	3	.562 - 24 UNEF	.67 (17.0)
12	7	.750 - 20 UNEF	.86 (21.8)
14	12	.875 - 20 UNEF	.98 (24.9)
16	19	1.000 - 20 UNEF	1.11 (28.2)
18	27	1.062 - 18 UNEF	1.22 (31.0)
20	37	1.188 - 18 UNEF	1.34 (34.0)
61	61	1.500 - 18 UNEF	1.65 (41.9)

TABLE II: Dash No., Style, Shell Size, Dimensions and Cable Range							
Dash No.	Shell Size	Style	E Max	K Ref	L Max	Cable Range	
						Min	Max
01	3	1	2.125 (54.0)	1.027 (26.1)	.957 (24.3)	.125(3.2)	.250(6.4)
02	3	1	3.125 (79.4)	1.027 (26.1)	.957 (24.3)	.125(3.2)	.250(6.4)
03	3	2	2.875 (73.0)	1.027 (26.1)	1.145 (29.1)	.250(6.4)	.437 (11.1)
04	3	2	3.875 (98.4)	1.027 (26.1)	1.145 (29.1)	.250(6.4)	.437 (11.1)
13	12	1	2.125 (54.0)	1.027 (26.1)	1.145 (29.1)	.250(6.4)	.437 (11.1)
14	12	1	3.125 (79.4)	1.027 (26.1)	1.145 (29.1)	.250(6.4)	.437 (11.1)
15	12	2	2.875 (73.0)	1.027 (26.1)	1.332 (33.8)	.350(8.9)	.625 (15.9)
16	12	2	3.875 (98.4)	1.027 (26.1)	1.332 (33.8)	.350(8.9)	.625 (15.9)
103	61	1	3.125 (79.4)	1.059 (26.9)	1.551 (39.4)	.500 (12.7)	.750 (19.1)
104	61	1	4.125 (104.8)	1.059 (26.1)	1.551 (39.4)	.500 (12.7)	.750 (19.1)
105	61	1	3.125 (79.4)	1.156 (29.4)	1.770 (45.0)	.625 (15.9)	.937 (23.8)
106	61	1	4.125 (104.8)	1.156 (29.4)	1.770 (45.0)	.625 (15.9)	.937 (23.8)
107	61	2	3.875 (98.4)	1.375 (34.9)	2.113 (53.7)	.875 (22.2)	1.250 (31.8)
108	61	2	4.875 (123.8)	1.375 (34.9)	2.113 (53.7)	.875 (22.2)	1.250 (31.8)
109	61	2	3.875 (98.4)	1.500 (38.1)	2.363 (60.0)	1.000 (25.4)	1.375 (34.9)
110	61	2	4.875 (123.8)	1.500 (38.1)	2.363 (60.0)	1.000 (25.4)	1.375 (34.9)
111	12	1	2.125 (54.0)	1.027 (26.1)	1.332 (33.8)	.350 (8.9)	.500 (12.7)
114	12	1	2.125 (54.0)	1.027 (26.1)	.957 (24.3)	.125 (3.2)	.312 (7.9)
115	12	1	3.125 (79.4)	1.027 (26.1)	.957 (24.3)	.125 (3.2)	.312 (7.9)
138	12	1	2.125 (54.0)	1.027 (26.1)	1.332 (33.8)	.350 (8.9)	.500 (12.7)
139	12	1	3.125 (79.4)	1.027 (26.1)	1.332 (33.8)	.350 (8.9)	.500 (12.7)

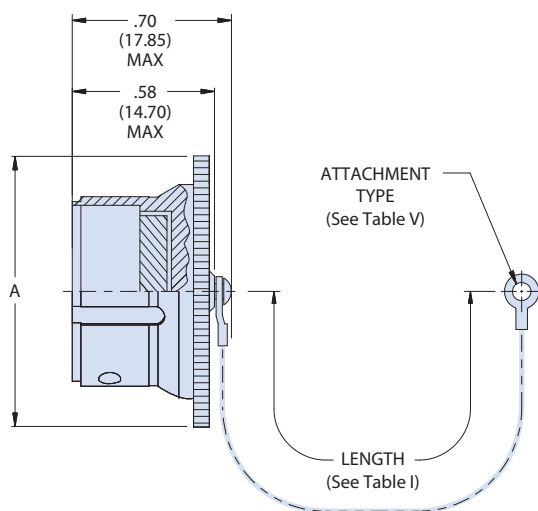
NOTES

- For complete dimensions see the applicable Military Specification.
- Metric dimensions (mm) are in parentheses.
- Cable Range is defined as the accommodation range for the wire bundle or cable. Dimensions shown are not intended for inspection criteria.

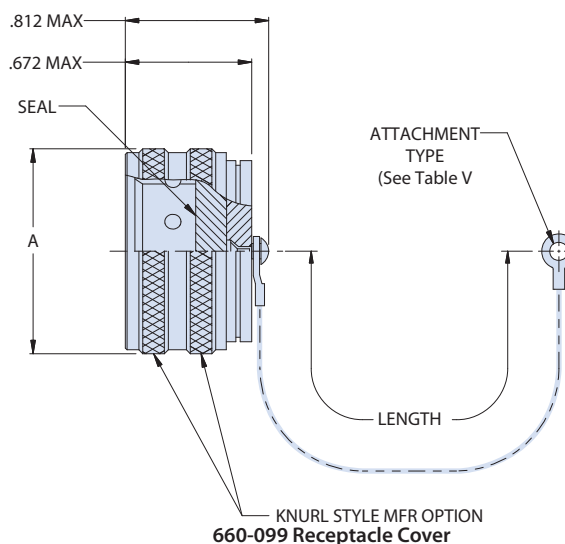
Protective Covers

660-067 Plug Cover • 660-099 Receptacle Cover

How To Order								
Sample Part Number	660	-099	M	12		R	5	-04
Basic Part Number	660 = Protective cover for AS							
Connector Style	-067 = Plug Cover -099 = Receptacle Cover							
Material / Finish	B = Cadmium O.D. J = Gold Iridite over Cad Plate over Nickel M = Electroless Nickel N = Cad Plate Olive Drab over Nickel NF = Al Alloy/Cad O.D. Over Electroless Nickel (500 Hr. Salt Spray) T = Cad Plate / Bright Dip over Nickel C = Anodize Black (per AMS-A-8625 Type II Class 2)							
Shell Size	See Table I							
Contact Type	A = Socket Contacts B = Pin Contacts (Applicable to -067 Plug Cover only. Omit for receptacle cover)							
Attachment Type	Table III							
Attachment Length	In Inches. Note "Length Max" Table I for Plug Covers							
Ring Style Dash No.	Table IV, V							



660-067 Plug Cover



660-099 Receptacle Cover

NOTES

1. Equivalent Drawing No. DBASC76-*
2. Metric dimensions (mm) are in parentheses.

MATERIAL/FINISH

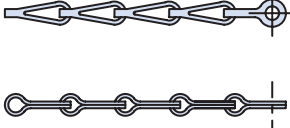
Cover - Aluminum Alloy / see Table II
 Lockwasher, Nut, Rings, Rivets, Screw, Wire Rope Terminals - CRES / Passivate
 Seal - Silicone (Plug Cover) Neoprene Sponge (Receptacle Cover)

BACKSHELLS AND ACCESSORIES FOR AS81703 SERIES 3 TYPE CONNECTORS



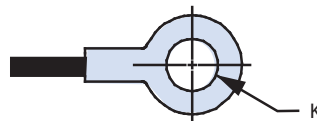
Protective Covers

660-067 Plug Cover • 660-099 Receptacle Cover

Available Lanyard Types		
		
Bead Chain (Type D)	Sash Chain (Type S)	Wire or Nylon Rope (Types F, G, H, K, R, T, U)

Lanyard Code	
Code	Description
D	Bead Chain, CRES, Passivated with Terminal
E	Link Chain, CRES, Passivated, with Clevis Terminal
F	Wire Rope, Nylon Jacket with Terminal
G	Nylon Rope
H	Wire Rope, Teflon Jacket with Terminal
N	No Lanyard
R	Wire Rope, PVC Jacket with Terminal
S	#8 Sash Chain, CRES, Passivated
T	Wire Rope, No Jacket, with Terminal
U	Wire Rope, Polyurethane Jacket with Terminal

ATTACHMENT RING



SOLID RING

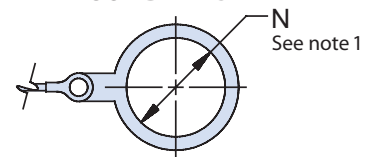


Table IV	
Dash No	K Dia ±.010 (0.25)
01	.140 (3.56)
02	.182 (4.62)
03	.191 (4.85)
04	.197 (5.00)
05	.167 (4.24)
06	.125 (3.18)
07	.218 (5.54)
09	.156 (3.96)

Table III	
Dash No	N Dia ±.015 (0.4)
100	.391 (9.9)
101	.516 (13.1)
102	.583 (14.8)
103	.641 (16.3)
104	.708 (18.0)
105	.766 (19.5)
205	.788 (20.0)
106	.896 (22.2)
206	.907 (23.0)
107	1.016 (25.8)
207	1.025 (26.0)
108	1.141 (29.0)
308	1.188 (30.18)
208	1.203 (30.6)
109	1.266 (32.2)
209	1.312 (33.32)
110	1.391 (35.3)
210	1.438 (36.53)
111	1.521 (38.63)
211	1.536 (39.01)
112	1.641 (41.68)
113	1.766 (44.86)
213	1.812 (46.02)
114	1.891 (48.03)
214	1.938 (49.23)
115	2.078 (52.78)
116	2.406 (61.11)
117	2.510 (63.75)

Table I: Shell Size, Attachment Length

Size	A Max (Plug)	Attachment Length Max (Plug)	B Max (Receptacle)
3	.73 (18.50)	3.11 (79.00)	.796 (20.2)
7	.90 (22.80)	3.74 (95.00)	.933 (23.7)
12	1.07 (27.20)	3.74 (95.00)	1.140 (29.0)
19	1.20 (30.60)	3.74 (95.00)	1.228 (31.2)
27	1.36 (34.55)	3.74 (95.00)	1.383 (35.1)
37	1.49 (37.85)	4.37 (111.00)	1.513 (38.4)
61	1.83 (46.45)	4.37 (111.00)	1.829 (46.5)



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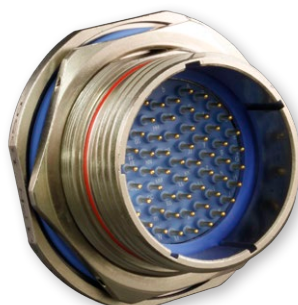
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D38999/26 Plug



D38999/24 Jam nut receptacle



D38999/20 Wall mount receptacle

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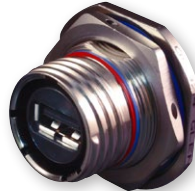
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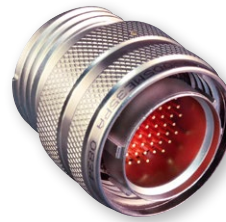


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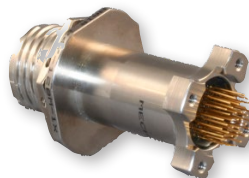
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