

**SERIES 500-125**

# **Meta-Loc Quick-Release Backshells**

**“SAY GOODBYE TO JACKSCREWS FOREVER!”**



# Meta-Loc™

## The quick-lock, quick-release backshell for rectangular connectors

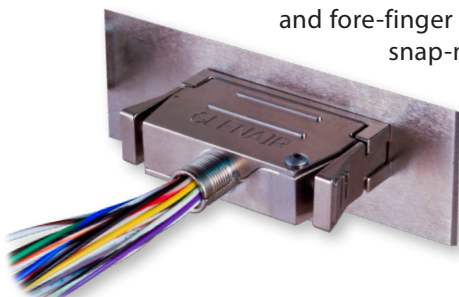
*Quickly convert jackscrew and jackpost-equipped connectors to quick-release mating for high mate/demate cycle applications*

**M**eta-Loc is designed for high-reliability applications, such as laboratory testbeds or in-flight entertainment and communications systems (IFEC), that depend on fast mating and demating of military / aerospace-grade rectangular connectors. Meta-Loc is an easy-to-install, quick-release backshell plug adapter and receptacle mounting bracket that revolutionizes quick-release mating and demating. Available today for all M83513 QPL and commercial equivalent Micro-D connectors, Meta-Loc is also scalable to larger form-factor rectangulars such as Glenair Series 79 Micro-Crimp and Series 28 HiPer-D (M24308 intermateable). The versatile two-piece clamshell design of the (non-environmental) plug adapter installs in just seconds—even on pre-wired pigtail assemblies. The panel mount component utilizes the same mounting screws as the connector, and is equally easy to install. Raised thumb and fore-finger grips on the plug adapter facilitate secure snap-mating of connector halves. Side-actuated

release levers provide the perfect degree of locking performance without significant widening of the overall connector package. And unlike other latch-and-lock type connector solutions, Meta-Loc is an easy retrofit to existing electrical wire interconnect systems.



- Compatible with all standard Micro-D plugs and receptacles
- Fast installation
- Snap-lock, two finger release
- EMI shielded, environmentally sealed, and PCB solutions
- Front and rear panel mounting
- Rugged, durable resistance to vibration, shock, and demating forces
- Low profile and ultra lightweight

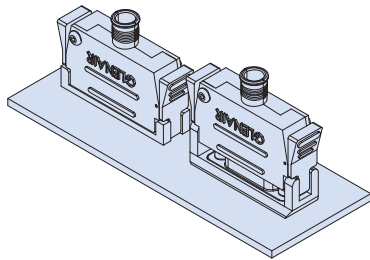


# SERIES 500 Meta-Loc

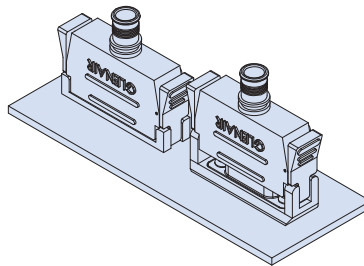
The quick-lock, quick-release solution  
for rectangular connectors



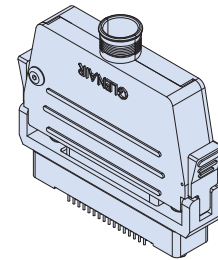
## META-LOC BACKSHELL CONFIGURATIONS



**500-124**  
Non-environmental, EMI  
Easy-to-assemble and retrofit  
"clamshell" design  
Rear- and front-mount configurations



**500-125**  
Environmental, EMI/RFI  
Rear- and front-mount configurations  
(installable during normal wire-to-  
connector termination)



**500-126**  
Non-environmental, EMI  
PCB-mount configuration with easy-to-  
assemble and retrofit "clamshell" design

## META-LOC FEATURES

EMI non-environmental version  
features integrated banding porch.  
EMI/environmental version features  
banding porch/boot groove



Accommodates panel  
thicknesses from .031" to  
.094" (front mount) and  
.031" to .094" (rear mount)

Facilitates cable  
entry sizes from  
.110" to .390"

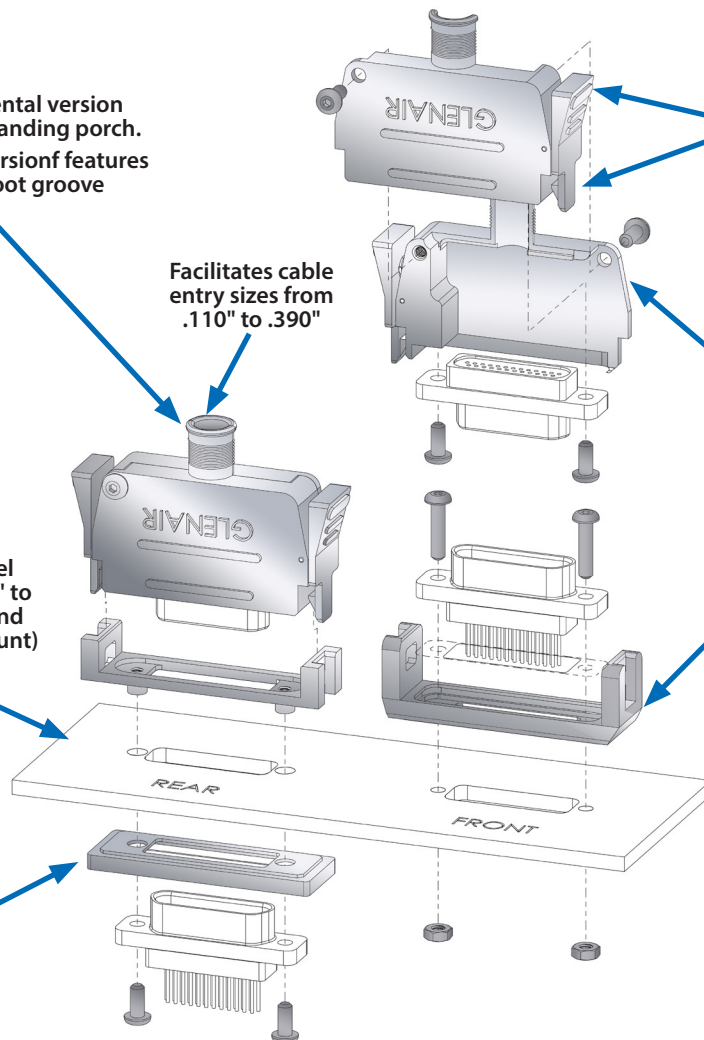
Raised thumb and fore-finger grips  
on the plug adapter facilitate secure  
snap-mating.

Side-actuated release levers for  
secure locking without significant  
widening of the connector package.

2-piece "clamshell" design facilitates  
quick conversion of connectors and  
easy installation even on prewired  
pigtail assemblies.

Easy-to-install front panel mount  
component utilizes the same  
mounting screws as the connector

Rear panel mount  
configuration



For more information  
contact Glenair at  
**818-247-6000** or  
visit our website at  
[www.glenair.com](http://www.glenair.com)  
U.S. CAGE code 06324

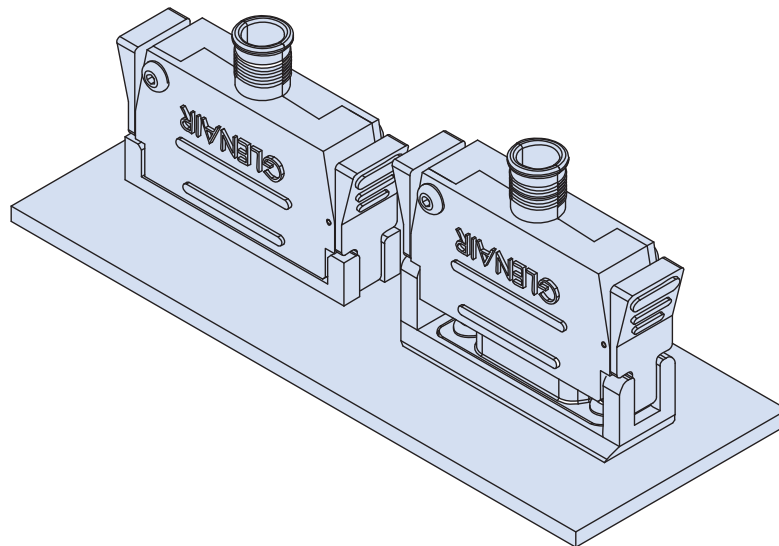
# SERIES 500 Meta-Loc



## The quick-lock, quick-release backshell for rectangular connectors

### 500-124 NON-ENVIRONMENTAL EMI CLAMSHELL PLUG ADAPTER AND RECEPTACLE MOUNT

Meta-Loc™ - How To Order								
Sample Part Number	500	-124	M	21	07	R	4	B
Product Series	Micro-D backshells and accessories*							
Basic No.	-124 = Non-environmental EMI Meta-Loc clamshell plug adapter and receptacle mount							
Material / Finish	M = Aluminum / Electroless nickel NF = Aluminum / Cad/O.D. Z2 = Aluminum / Gold							
Shell Size	09, 15, 21, 25, 31, 37, 51, 100							
Cable Entry Size	See Table II							
Front / Rear Mount	F = Front mount R = Rear mount							
Panel Thickness	For Rear Mount connectors: 1 = .031 (0.8) 2 = .047 (1.2) 3 = .062 (1.6) 4 = .094 (2.4) 5 = .080 (2.0) For Front Mount connectors: 0 = .031 - .094 (0.8 - 2.4)							
Band Option	B = supplied with band Omit for none							
*for use with M83513/01, /02, /03, /04 or commercial equivalent MWDM connectors								



#### NOTES

1. Banding platform knurled or ribbed, manufacturer's option
2. For use with M83513/01, /02, /03, /04 or commercial equivalent MWDM connectors
3. Material/Finish:  
Adapter mount latch - Al alloy / see How To Order for finish options  
Hardware - CRES / passivate

# SERIES 500 Meta-Loc

The quick-lock, quick-release backshell for rectangular connectors

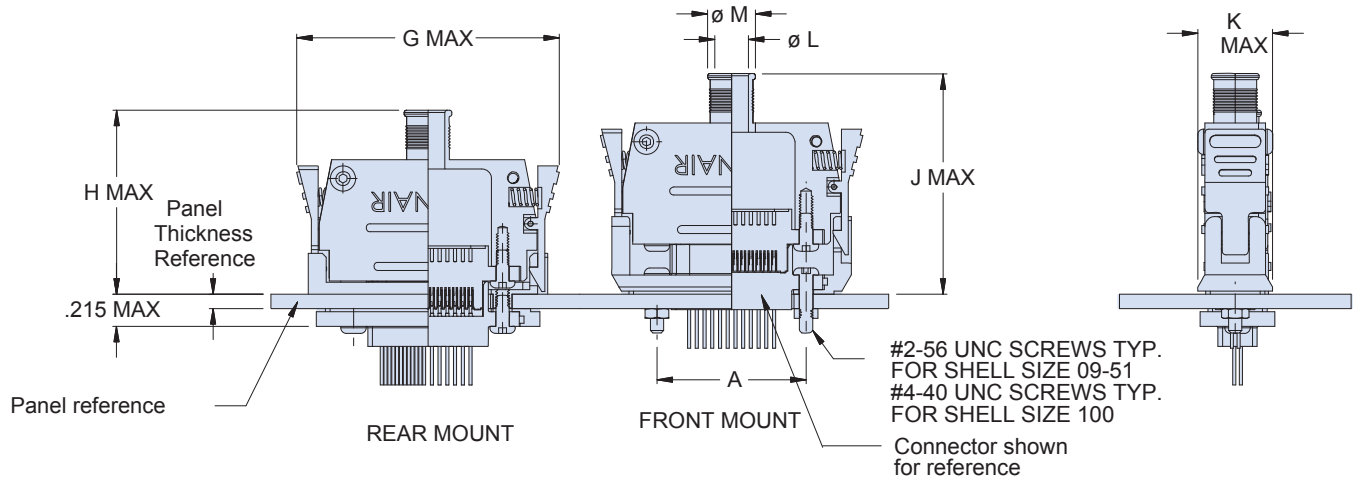
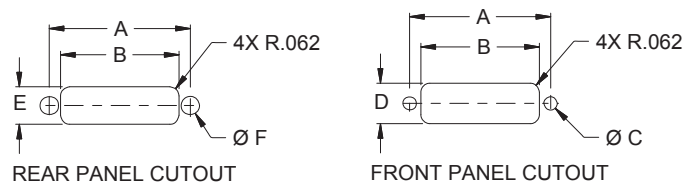


Table I - Dimensions																					
Shell Size	A		B		C		D		E		F		G Max		H Max		J Max		K Max		Max Entry
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	
9	.568	14.43	.412	10.46	.093	2.36	.279	7.09	.261	6.63	.128	3.25	1.335	33.91	1.221	31.01	1.459	37.06	.53	13.46	8
	.562	14.27	.408	10.36	.089	2.26	.275	6.99	.551	6.37	.124	3.15									
15	.718	18.24	.562	14.27	.093	2.36	.279	7.09	.261	6.63	.128	3.25	1.485	37.72	1.221	31.01	1.459	37.06	.53	13.46	8
	.712	18.08	.558	14.17	.089	2.26	.275	6.99	.551	6.37	.124	3.15									
21	.868	22.05	.712	18.08	.093	2.36	.279	7.09	.261	6.63	.128	3.25	1.635	41.53	1.221	31.01	1.459	37.06	.53	13.46	8
	.862	21.89	.708	17.98	.089	2.26	.275	6.99	.551	6.37	.124	3.15									
25	.968	24.59	.812	20.62	.093	2.36	.279	7.09	.261	6.63	.128	3.25	1.735	44.07	1.221	31.01	1.459	37.06	.53	13.46	8
	.962	24.43	.808	20.52	.089	2.26	.275	6.99	.551	6.37	.124	3.15									
31	1.118	28.40	.962	24.43	.093	2.36	.279	7.09	.261	6.63	.128	3.25	1.885	47.88	1.328	33.74	1.566	39.79	.53	13.46	9
	1.112	28.24	.958	24.33	.089	2.26	.275	6.99	.551	6.37	.124	3.15									
37	1.268	32.21	1.112	28.24	.093	2.36	.279	7.09	.261	6.63	.128	3.25	2.035	51.69	1.436	36.47	1.674	42.51	.53	13.46	9
	1.262	32.05	1.108	28.14	.089	2.26	.275	6.99	.551	6.37	.124	3.15									
51	1.218	30.94	1.062	26.97	.093	2.36	.319	8.10	.305	7.75	.128	3.25	1.985	50.42	1.400	35.56	1.638	41.60	.57	15.50	10
	1.212	30.78	1.058	26.87	.089	2.26	.315	8.00	.295	7.49	.124	3.15									
100	1.830	45.80	1.457	37.01	.122	3.10	.365	9.27	.343	10.44	.149	3.78	2.720	69.09	1.819	46.20	2.057	52.24	.61	15.60	12
	1.797	45.64	1.453	36.91	.118	3.00	.361	9.17	.333	10.18	.145	3.68									

Table II - Cable Entry				
Cable Entry	Ø L		Ø M Max	
	in.	mm	in.	mm
04	.140	3.58	.296	7.5
	.110	2.82		
05	.171	4.38	.327	8.3
	.141	4.62		
06	.203	5.12	.359	9.1
	.173	4.42		
07	.234	5.98	.390	9.9
	.204	5.22		
08	.265	6.78	.421	10.7
	.235	6.02		
09	.296	7.48	.452	11.5
	.266	6.72		
10	.327	8.28	.484	12.3
	.297	7.52		
11	.359	9.08	.515	13.1
	.329	8.32		
12	.390	9.88	.546	13.7
	.360	9.12		



# SERIES 500 Meta-Loc

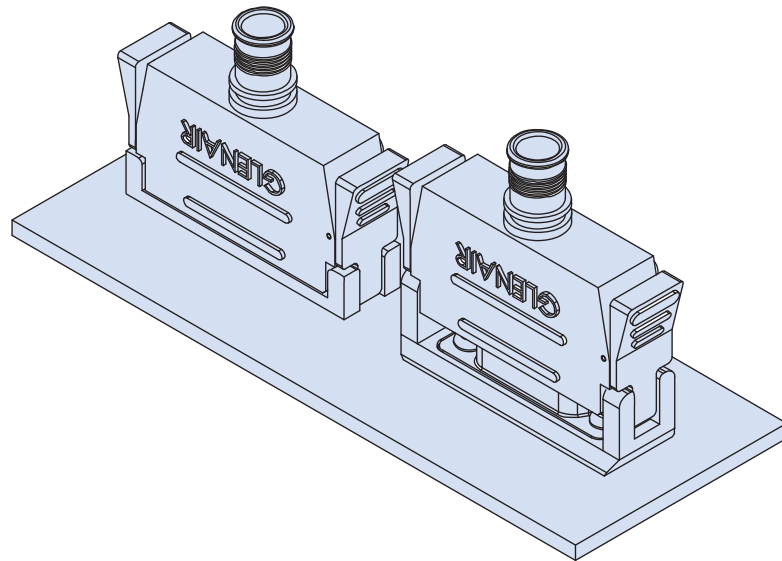


## The quick-lock, quick-release backshell for rectangular connectors

### 500-125 EMI/ENVIRONMENTAL ONE-PIECE PLUG ADAPTER AND RECEPTACLE MOUNT

Meta-Loc™ - How To Order									
Sample Part Number	500	-125	M	21	07	R	4	B	T
Product Series	Micro-D backshells and accessories*								
Basic No.	-125 = EMI/environmental Meta-Loc plug adapter and receptacle mount								
Material / Finish	M = Aluminum / Electroless nickel NF = Aluminum / Cad/O.D. Z2 = Aluminum / Gold								
Shell Size	09, 15, 21, 25, 31, 37, 51, 100								
Cable Entry Size	See Table II								
Front / Rear Mount	F = Front mount R = Rear mount								
Panel Thickness	For Rear Mount connectors: 1 = .031 (0.8) 2 = .047 (1.2) 3 = .062 (1.6) 4 = .094 (2.4) 5 = .080 (2.0) For Front Mount connectors: 0 = .031 - .094 (0.8 - 2.4)								
Band Option	B = supplied with band Omit for none								
Boot Option	T = supplied with boot Omit for none								

\*for use with M83513/01, /02, /03, /04 or commercial equivalent MWDM connectors



#### NOTES

1. Banding platform knurled or ribbed, manufacturer's option
2. For use with M83513/01, /02, /03, /04 or commercial equivalent MWDM connectors
3. Material/Finish:  
Adapter mount latch - Al alloy / see How To Order for finish options  
Hardware - CRES / passivate  
O-ring/gasket - Silicon

# SERIES 500 Meta-Loc

The quick-lock, quick-release backshell for rectangular connectors

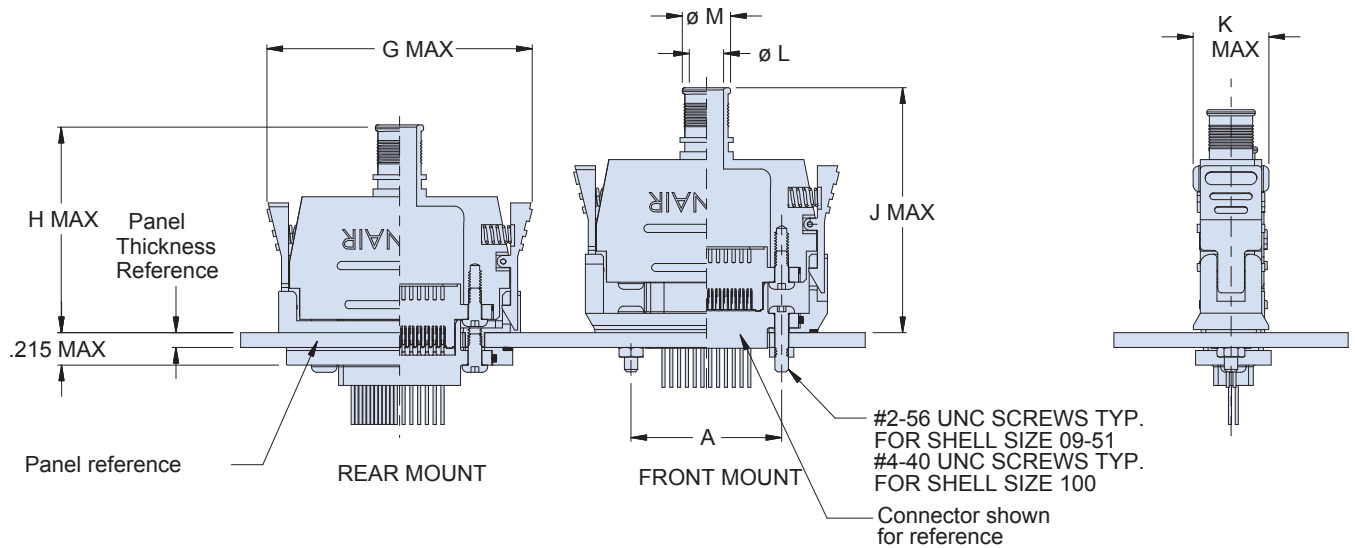
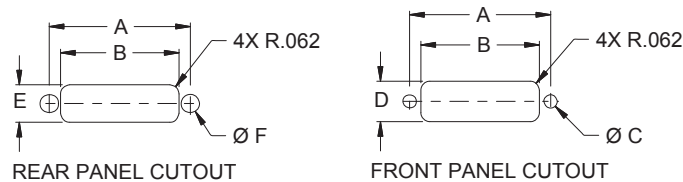


Table I - Dimensions

Shell Size	A		B		C		D		E		F		G Max		H Max		J Max		K Max		Max Entry
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm			
9	.568	14.43	.412	10.46	.093	2.36	.279	7.09	.261	6.63	.128	3.25	1.335	33.91	1.361	34.57	1.599	40.61	.53	13.46	8
	.562	14.27	.408	10.36	.089	2.26	.275	6.99	.551	6.37	.124	3.15									
15	.718	18.24	.562	14.27	.093	2.36	.279	7.09	.261	6.63	.128	3.25	1.485	37.72	1.361	34.57	1.599	40.61	.53	13.46	8
	.712	18.08	.558	14.17	.089	2.26	.275	6.99	.551	6.37	.124	3.15									
21	.868	22.05	.712	18.08	.093	2.36	.279	7.09	.261	6.63	.128	3.25	1.635	41.53	1.361	34.57	1.599	40.61	.53	13.46	8
	.862	21.89	.708	17.98	.089	2.26	.275	6.99	.551	6.37	.124	3.15									
25	.968	24.59	.812	20.62	.093	2.36	.279	7.09	.261	6.63	.128	3.25	1.735	44.07	1.361	34.57	1.599	40.61	.53	13.46	8
	.962	24.43	.808	20.52	.089	2.26	.275	6.99	.551	6.37	.124	3.15									
31	1.118	28.40	.962	24.43	.093	2.36	.279	7.09	.261	6.63	.128	3.25	1.885	47.88	1.468	37.3	1.706	43.34	.53	13.46	9
	1.112	28.24	.958	24.33	.089	2.26	.275	6.99	.551	6.37	.124	3.15									
37	1.268	32.21	1.112	28.24	.093	2.36	.279	7.09	.261	6.63	.128	3.25	2.035	51.69	1.576	40.02	1.814	46.07	.53	13.46	9
	1.262	32.05	1.108	28.14	.089	2.26	.275	6.99	.551	6.37	.124	3.15									
51	1.218	30.94	1.062	26.97	.093	2.36	.319	8.10	.305	7.75	.128	3.25	1.985	50.42	1.540	39.11	1.778	45.16	.57	15.50	10
	1.212	30.78	1.058	26.87	.089	2.26	.315	8.00	.295	7.49	.124	3.15									
100	1.830	45.80	1.457	37.01	.122	3.10	.365	9.27	.343	10.44	.149	3.78	2.720	69.09	1.959	49.75	2.197	55.80	.61	15.60	12
	1.797	45.64	1.453	36.91	.118	3.00	.361	9.17	.333	10.18	.145	3.68									

Table II - Cable Entry

Cable Entry	Ø L		Ø M Max	
	in.	mm	in.	mm
04	.140	3.58	.296	7.5
	.110	2.82		
05	.171	4.38	.327	8.3
	.141	4.62		
06	.203	5.12	.359	9.1
	.173	4.42		
07	.234	5.98	.390	9.9
	.204	5.22		
08	.265	6.78	.421	10.7
	.235	6.02		
09	.296	7.48	.452	11.5
	.266	6.72		
10	.327	8.28	.484	12.3
	.297	7.52		
11	.359	9.08	.515	13.1
	.329	8.32		
12	.390	9.88	.546	13.7
	.360	9.12		



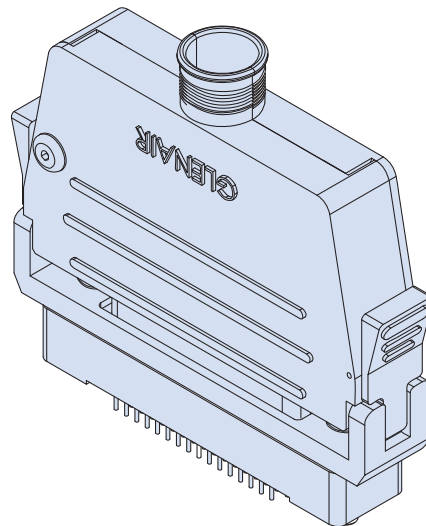
# SERIES 500 Meta-Loc



## The quick-lock, quick-release backshell for rectangular connectors

### 500-126 NON-ENVIRONMENTAL EMI PLUG ADAPTER AND PCB RECEPTACLE MOUNT

Meta-Loc™ - How To Order							
Sample Part Number	500	-125	M	21	07	B	-M
Product Series	Micro-D backshells and accessories*						
Basic No.	-126 = Non-environmental EMI Meta-Loc plug adapter and PCB receptacle mount						
Material / Finish	M = Aluminum / Electroless nickel NF = Aluminum / Cad/O.D. Z2 = Aluminum / Gold						
Shell Size	09, 15, 21, 25, 31, 37, 51, 100						
Cable Entry Size	See Table II. Omit for Mount-Only (M) option						
Band Option	B = supplied with band Omit for none						
Mount / Backshell option	-M = Mount only -E Backshell enclosure only Omit for backshell and mount						
*for use with M83513/01, /02, /03, /04 or commercial equivalent MWDM connectors							



#### NOTES

1. Banding platform knurled or ribbed, manufacturer's option
2. For use with M83513/01, /02, /03, /04 or commercial equivalent MWDM connectors
3. Material/Finish:  
Adapter mount latch - Al alloy / see How To Order for finish options  
Hardware - CRES / passivate
4. Recommended for use with low insertion force contacts.



# SERIES 500 Meta-Loc

The quick-lock, quick-release backshell  
for rectangular connectors

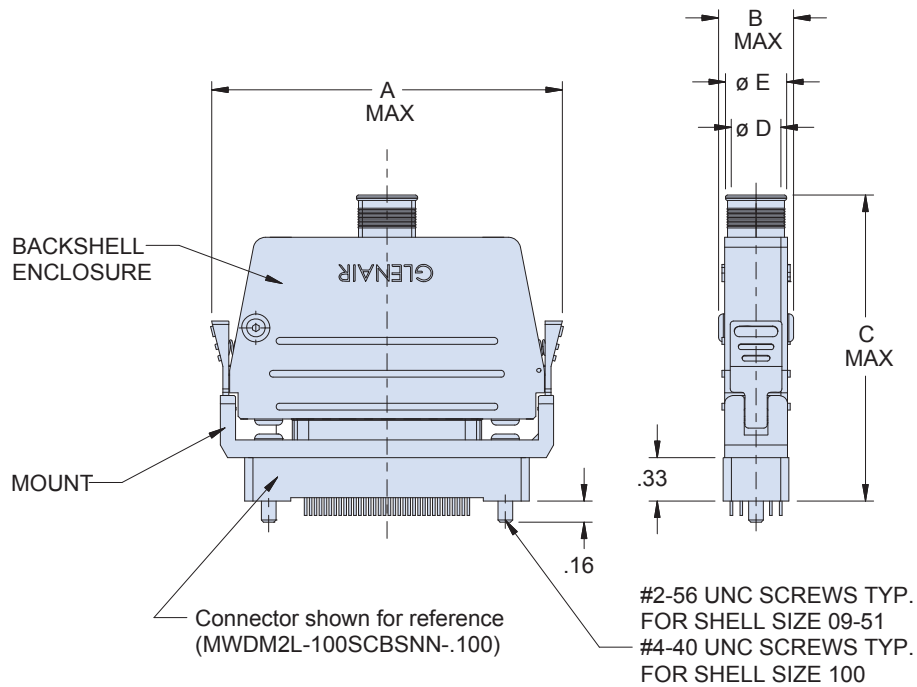


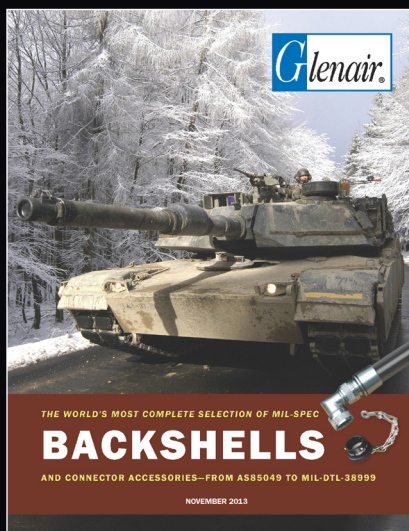
Table I - Dimensions						
Shell Size	A Max		B Max		C Max	
	in.	mm	in.	mm	in.	mm
9	1.335	33.91	.53	13.46	1.459	37.06
15	1.485	37.72	.53	13.46	1.459	37.06
21	1.635	41.53	.53	13.46	1.459	37.06
25	1.735	44.07	.53	13.46	1.459	37.06
31	1.885	47.88	.53	13.46	1.566	39.79
37	2.035	51.69	.53	13.46	1.674	42.51
51	1.985	50.42	.571	15.50	1.638	41.60
100	2.720	69.09	.614	15.60	2.057	52.24

Table II - Cable Entry				
Cable Entry	Ø L		Ø E	
	in.	mm	in.	mm
04	.140	3.58	.296	7.5
	.110	2.82		
05	.171	4.38	.327	8.3
	.141	4.62		
06	.203	5.12	.359	9.1
	.173	4.42		
07	.234	5.98	.390	9.9
	.204	5.22		
08	.265	6.78	.421	10.7
	.235	6.02		
09	.296	7.48	.452	11.5
	.266	6.72		
10	.327	8.28	.484	12.3
	.297	7.52		
11	.359	9.08	.515	13.1
	.329	8.32		
12	.390	9.88	.546	13.7
	.360	9.12		

ALSO AVAILABLE FROM GLENAIR

# CONNECTOR BACKSHELLS AND ACCESSORIES

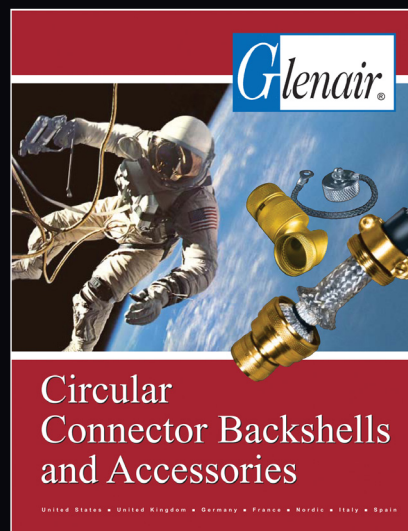
environmental sealing · wire management · strain relief · EMC shield termination



**Glenair.**

THE WORLD'S MOST COMPLETE SELECTION OF MIL-SPEC  
**BACKSHELLS**  
AND CONNECTOR ACCESSORIES—FROM AS85049 TO MIL-DTL-38999

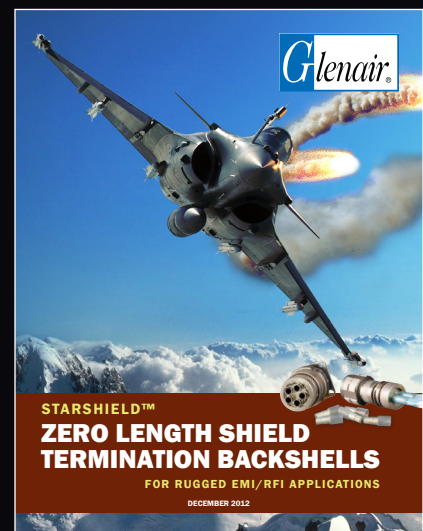
NOVEMBER 2013



**Glenair.**

**Circular  
Connector Backshells  
and Accessories**

United States • United Kingdom • Germany • France • Nordic • Italy • Spain



**Glenair.**

**STARSHIELD™  
ZERO LENGTH SHIELD  
TERMINATION BACKSHELLS**  
FOR RUGGED EMI/RFI APPLICATIONS

DECEMBER 2012



**Glenair.**

ENVIRONMENTALLY SEALED  
**RF Connector Protective  
Covers and Accessories**  
FOR MIL-PRF-39012 AND OTHER MIL/AERO RF CONNECTORS

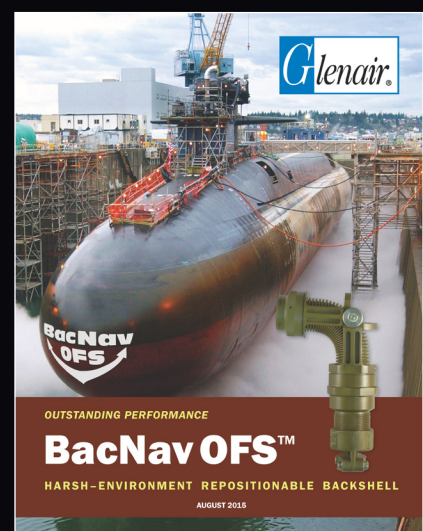
AUGUST 2013



**Glenair.**

**Composite Thermoplastic  
Connectors and Accessories**  
*Plus Composite Enclosures, Conduit Systems,  
Braided Shielding, Assembly Tools and More!*

United States • United Kingdom • Germany • France • Nordic • Italy • Spain • Japan



**Glenair.**

OUTSTANDING PERFORMANCE  
**BacNav OFS™**  
HARSH-ENVIRONMENT REPOSITIONABLE BACKSHELL

AUGUST 2015

## LIGHTWEIGHT COMPOSITE THERMOPLASTIC BACKSHELLS AND ACCESSORIES



Band-in-a-Can  
EMI/RFI composite  
backshell



Composite EMI/RFI  
backshell with attached  
lightweight braid



Swing-Arm Flex with  
drop-in wire shield  
adapter



Split-shell low profile  
composite banding  
backshells

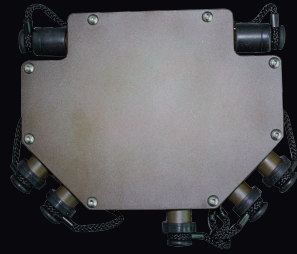


Composite bulkhead  
feed-thru with hybrid wire  
sealing grommet

## LIGHTWEIGHT COMPOSITE EMI/RFI ENVIRONMENTAL JUNCTION BOXES



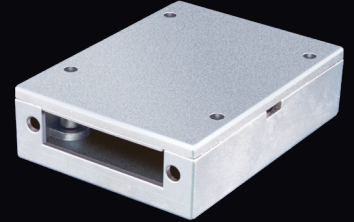
Modular junction box with  
feed-thru fittings and caps



Custom connectorized  
low-profile composite data hub



Heavy-duty composite  
cable/equipment bay

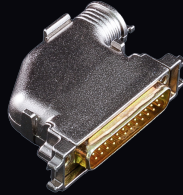


Ultra small form-factor  
miniature enclosure

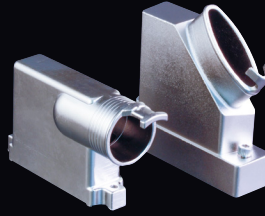
## M24308 D-SUB SOLUTIONS: HIGH PERFORMANCE, RUGGEDIZED D-SUBMINIATURE PRODUCTS



Split-shell D-subminiature  
composite backshell



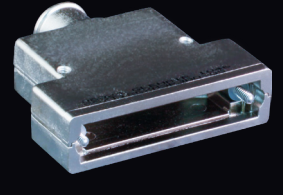
Split-shell M24308  
composite backshell



Composite D-subminiature  
backshells

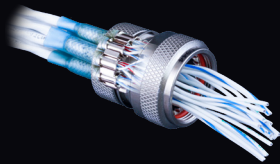


Flex-D composite  
M24308 backshell



M24308 EMI/RFI  
backshell

## BACKSHELL AND CONNECTOR ACCESSORY INNOVATION SHOWCASE



StarShield™ zero-length  
shield termination  
backshell



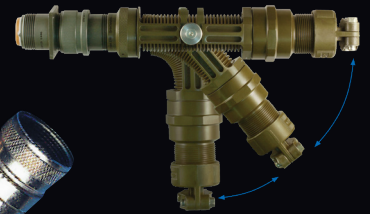
Spring-loaded “flop-lid”  
protective cover



Space-grade  
Qwik Clamp backshell



Ultra low-profile  
backshell



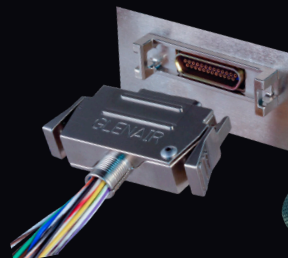
BacNav OFS™  
repositionable EMI/EMP  
backshell



Backshell  
connector saver



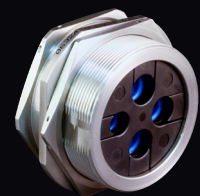
Self-locking,  
anti-decoupling  
protective covers



Meta-Loc series  
quick-lock, quick-release  
backshells



Mil-grade RF protective  
covers and accessories



Pressure-barrier  
firewall feed-thrus



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**Glenair, Inc.**

1211 Air Way • Glendale, California • 91201-2497

Telephone: 818-247-6000 • Fax: 818-500-9912 • sales@glenair.com

**www.glenair.com**

**Glenair Power  
Products Group**

860 N. Main Street Extension  
Wallingford, CT  
06492

Telephone:  
203-741-1115  
Facsimile:  
203-741-0053  
sales@glenair.com

**Glenair UK Ltd**

40 Lower Oakham Way  
Oakham Business Park  
P.O. Box 37, Mansfield  
Notts, NG18 5BY England

Telephone:  
+44-1623-638100  
Facsimile:  
+44-1623-638111  
sales@glenair.co.uk

**Glenair Microway Systems**

7000 North Lawndale Avenue  
Lincolnwood, IL  
60712

Telephone:  
847-679-8833  
Facsimile:  
847-679-8849

**Glenair Nordic AB**

Gustav III : S Boulevard 46  
SE-169 27 Solna  
Sweden

Telephone:  
+46-8-50550000  
sales@glenair.se

**Glenair Electric GmbH**

Schaberweg 28  
61348 Bad Homburg  
Germany

Telephone:  
06172 / 68 16 0  
Facsimile:  
06172 / 68 16 90  
info@glenair.de

**Glenair Iberica**

C/ La Vega, 16  
45612 Velada  
Spain

Telephone:  
+34-925-89-29-88  
Facsimile:  
+34-925-89-29-87  
sales@glenair.es

**Glenair Italia S.p.A.**

Via Del Lavoro, 7  
40057 Quarto Inferiore –  
Granarolo dell'Emilia  
Bologna, Italy

Telephone:  
+39-051-782811  
Facsimile:  
+39-051-782259  
info@glenair.it

**Glenair France SARL**

7, Avenue Parmentier  
Immeuble Central Parc #2  
31200 Toulouse  
France

Telephone:  
+33-5-34-40-97-40  
Facsimile:  
+33-5-61-47-86-10  
sales@glenair.fr

**Glenair Korea**

B-1304 Gunpo IT Valley  
148 Gosan-Ro, Gunpo-Si  
Kyunggi-Do, Korea  
435-733

Telephone:  
+82-31-8068-1090  
Facsimile:  
+82-31-8068-1092  
sales@glenair.kr

