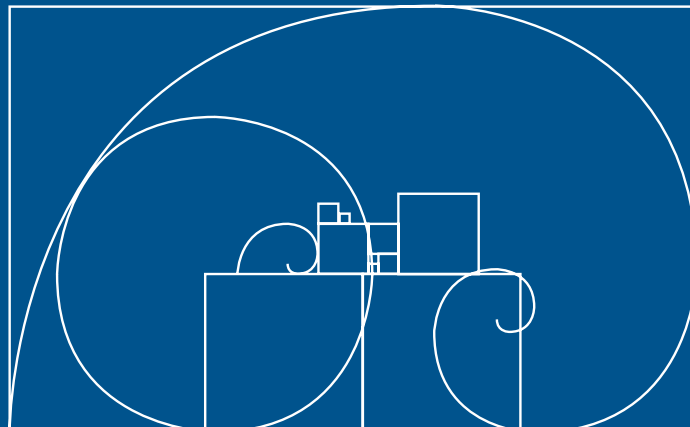


CYLINDRICAL

C48 Series/MIL-C-26500

Accessories & Application Tooling

Boeing: BACC45 / BACC63 Series



Cinch

FEATURES

- **Qualified to MIL-C-26500.**
- **Styles qualified to Boeing BACC45 Series.**
- **Styles qualified to Boeing BACC63 Series.**
- **Power Contact Sizes: 20, 16, and 12.**
- **Coax Contacts Available: Size 12 and 8.**
- **Contacts: Crimp - Front release.**
- **Optional Fixed Contacts: PC Termination.**
- **Coupling Styles: Bayonet and Threaded.**
- **Environmentally Sealed.**

MATERIALS

Shell: Aluminum, stainless-steel options available
Finish: Aluminum - Anodize, optional electroless nickel / cadmium over nickel
Rubber: Silicone / fluorosilicone
Dielectric: Glass-filled epoxy

ENVIRONMENTAL

Temperature Extremes: +200°C / 392°F to -55°C / -65°F
Ozone Resistance: 0.015% by volume
Temperature Life: Internal 238°C for 1,000 hours
Moisture Resistance: 1,000 megohms minimum / MIL-STD-202, Method 106
Thermal Shock: -55°C (-67°F) to 260°C (500°F)

ELECTRICAL

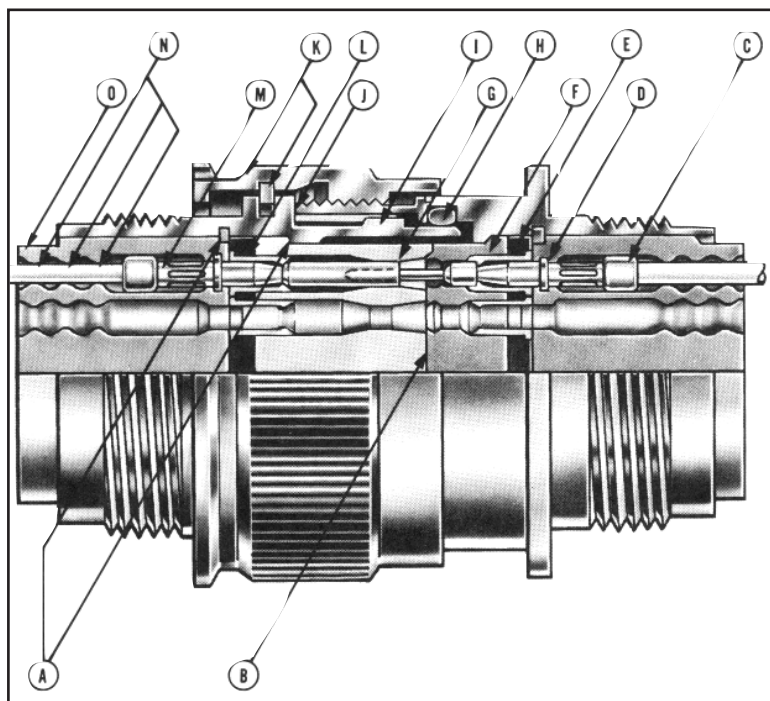
Dielectric Strength: 1,500 volts VAC RMS
Current Rating (Test): Size 20 7.5 Amps D.C.
Size 16 13.0 Amps D.C.
Size 12 23.0 Amps D.C.
Insulation Resistance: 5,000 megohms minimum

MECHANICAL

Contact Retention: Size 20 - 20 lb. minimum
Size 16 - 25 lb. minimum
Size 12 - 30 lb. minimum
Durability: Threaded - 200 mating cycles
Bayonet - 500 mating cycles
Vibration: Std - 20 g's; 12 hours (Synasoidal)
MMB / Self-Lock - 39.6 g's RMS, 48 hours (Random)
Shock: 50 g's

GENERAL DESCRIPTION

The C48 Series describes a family of connectors qualified to MIL-C-26500. While maintaining the MIL-C-26500 mating interface, this product has also been expanded to include qualifications to numerous Boeing specifications to satisfy general purpose requirements and unique product challenges for shielding, environmental sealing, fluid resistance, and vibration.



Design Features

- A. Positive Location Captivated Insert (Mechanical Interlock)
- B. Insert Face Seal
- C. Pin Contact, MIL-C-39029/31
- D. Contact Pressuring Seal
- E. Anti-Deflection Disc
- F. Resilient Pin Insert
- G. Insert Rim Seal
- H. Dynamic "O" Ring Shell Seal
- I. Five-Key Shell Polarization
- J. Metal-to-Metal Shoulder
- K. Bayonet or Threaded Coupling, Permanent Captivation
- L. Contact Retention Clip
- M. Socket Contact, MIL-C-39029/32
- N. Wire Sealing Risers
- O. Grommet

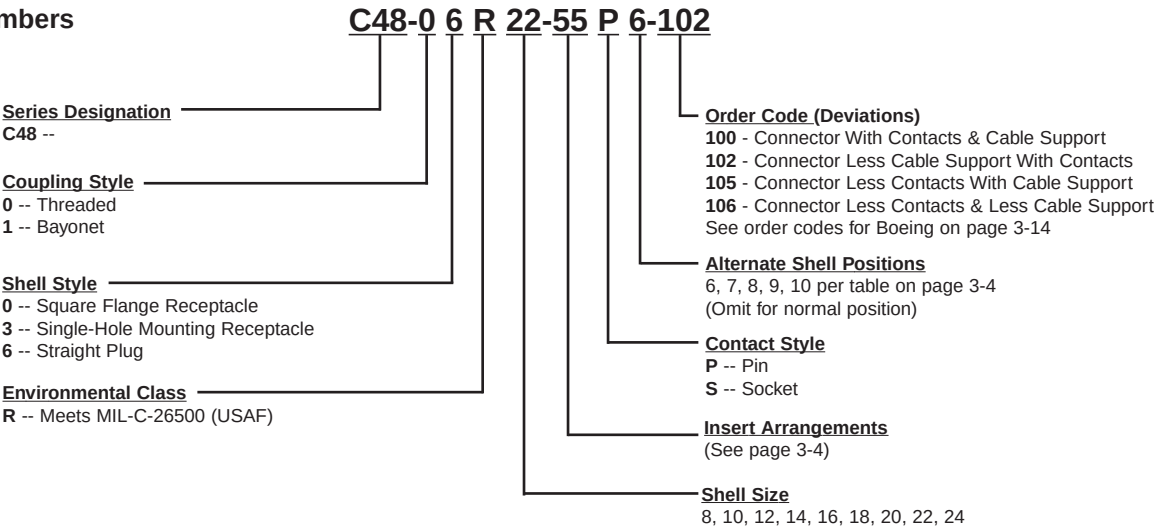
The expanded Cinch C48 product family offers numerous product options qualified to Boeing high-performance requirements and product solutions developed for alternate termination styles/low-profile packaging.

Product Description

Cinch Series

- | | |
|--|--------------------------------------|
| • Threaded non-decoupling design | CN0966 |
| • High-vibration bayonet plug with metal-to-metal bottoming shells | C0909
CN1020 |
| • Connectors for shell grounding / shielding effectiveness, non-rotating accessory teeth, and advanced fluid-resistance elastomers | CN0966
CN0967
CN1020
CN1021 |
| • Firewall Conformance | CN0966
CN0967 |
| • Low-profile connectors - crimp - removable contacts | CN0915 |
| • Low-profile connectors - fixed contacts / alternate termination styles | CN0942
CN0944 |

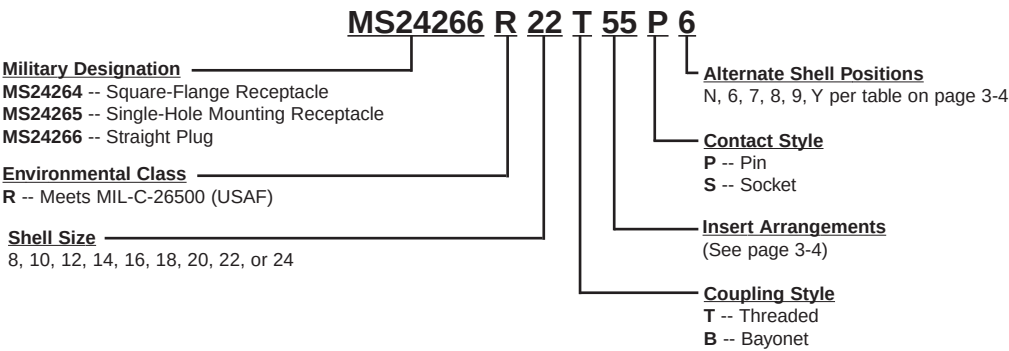
Cinch Numbers



Military Standard Part Numbers

You can use MS* as well as C48 Series part numbers when ordering C48 Series connectors.

*MS part numbers are supplied less cable support. If cable support is desired, it must be ordered separately.



Part numbers for the contacts and assembly tools are listed on page 3-12.

C48 Series

Inserts Available
(Showing Front Face
of Socket Inserts)

Cinch

Shell Size-8

2#20 contacts
Insert 8-2(Y)

3#20 contacts
Insert 8-3(Y)

Shell Size-10

2#20 contacts
Insert 10-2(Y)

2#16 contacts
Insert 10-20

5#20 contacts
Insert 10-5(Y)

Shell Size-12

3#16 contacts
Insert 12-3

12#20 contacts
Insert 12-12(Y)

Shell Size-14

2#16 contacts
1#2 shielded contact
Insert 14-3

4#12 contacts
Insert 14-4†

7#16 contacts
Insert 14-7

9#20 contacts
3#16 contacts
Insert 14-12(Y)

15#20 contacts
Insert 14-15(Y)

Shell Size-16

10#16 contacts
Insert 16-10

24#20 contacts
Insert 16-24(Y)

Shell Size-18

8#12 contacts
Insert 18-8†

10#16 contacts
1#2 shielded contact
Insert 18-11

14#16 contacts
Insert 18-14

31#20 contacts
Insert 18-31(Y)

Shell Size-20

16#16 contacts
Insert 20-16

19#20 contacts
6#12 contacts
Insert 20-25†(Y)

24#20 contacts
4#12 contacts
Insert 20-28†(Y)

37#20 contacts
2#16 contacts
Insert 20-39(Y)

41#20 contacts
Insert 20-41(Y)

Shell Size-22

12#12 contacts
Insert 22-12†

19#16 contacts
Insert 22-19

26#20 contacts
6#12 contacts
Insert 22-32†(Y)

55#20 contacts
Insert 22-55(Y)

Shell Size-24

23#20 contacts
20#16 contacts
Insert 24-43(Y)

2#12 contacts
55#20 contacts
Insert 24-57†(Y)

61#20 contacts
Insert 24-61(Y)

29 #16 contacts
Insert 24-29

30 #16 contacts
Insert 24-30

Shell Size-28

42 #16 contacts
Insert 28-42

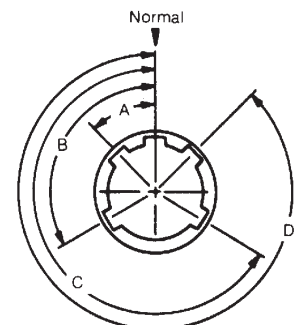
**CN096X
CN102X
Series
Only**

Alternate Shell Positions (Front face of receptacle shown)

NOTE: Alternate positions 6 through Y incorporate special shell polarizing key and keyways. All inserts remain in the normal position.

Positions	For Connector Size 8 and 10				For Connector Size 12, 14, 16, 18, 20, 22, 24, and 28			
	A	B	C	D	A	B	C	D
Normal (N)	105°	140°	215°	265°	105°	140°	215°	265°
6	102°	132°	248°	320°	18°	149°	192°	259°
7	80°	118°	230°	312°	92°	152°	222°	342°
8	35°	140°	205°	275°	84°	152°	204°	334°
9	64°	155°	234°	304°	24°	135°	199°	240°
10 or Y*	25°	115°	220°	270°	98°	152°	268°	338°

*Not available in Size 8 Connector. See individual part number systems.



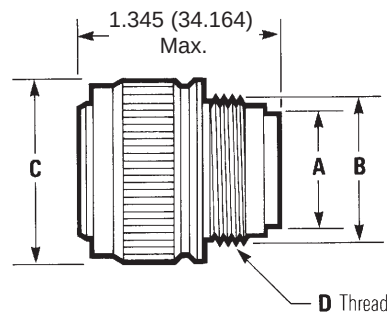
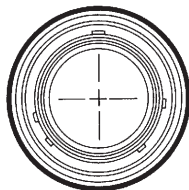
† = #1 shielded contact is interchangeable with #12 power contact.
(Y) = Available in Boeing Insert Style.

C48 Series Plug Connectors



Threaded Coupling

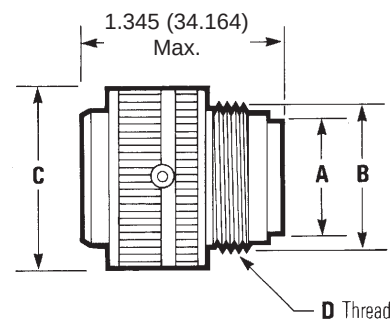
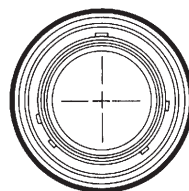
C48-06RXX-XXXX
MS24266RXXTXXXX
BACC45FS¹



3

Bayonet Coupling

C48-16RXX-XXXX
MS24266RXXBXXXX
BACC45FT¹



Dimensions

Shell Size	A. Dia.		B. Dia.		C. Max.		D. Thread UNEF-2A
	in	mm	in	mm	in	mm	
8	.328	8.331	.437	11.100	.776	19.712	.437-28
10	.420	10.668	.562	14.275	.906	23.013	.562-24
12	.580	14.732	.750	19.050	1.078	27.381	.750-20
14	.664	16.866	.812	20.625	1.141	28.982	.812-20
16	.769	19.533	.938	23.825	1.266	32.157	.937-20
18	.902	22.911	1.062	26.975	1.375	34.925	1.062-18
20	1.033	26.238	1.182	30.023	1.510	38.354	1.187-18
22	1.152	29.261	1.312	33.325	1.625	41.275	1.312-18
24	1.282	32.253	1.432	36.373	1.760	44.704	1.437-18

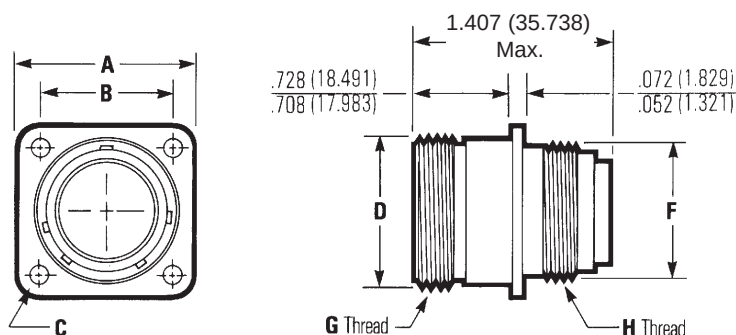
¹Boeing Specifications, see page 3-14.

C48 Series Receptacle Connectors



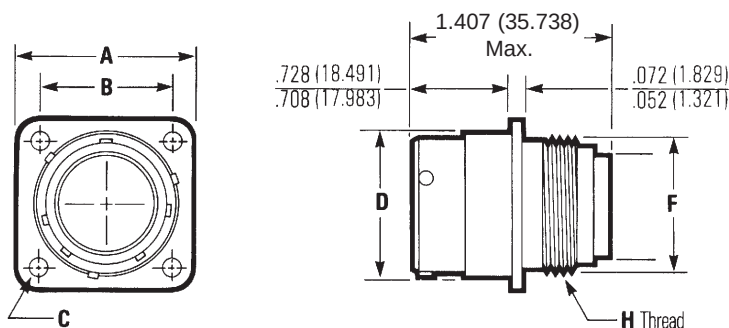
Square Flange, Threaded Coupling

C48-OORXX-XXXX
MS24264RXXTXXX
BACC45FM¹



Square Flange, Bayonet Coupling

C48-1ORXX-XXXX
MS24264RXXBXXX
BACC45FN¹



Dimensions

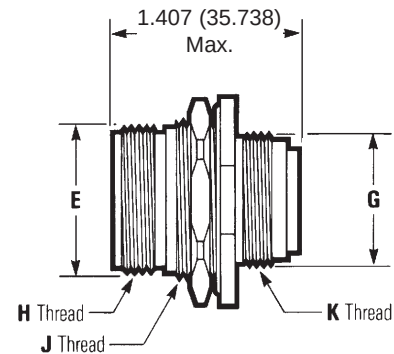
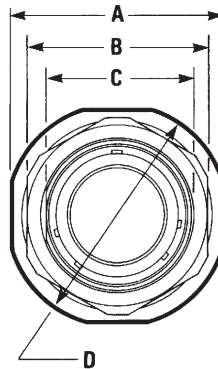
Shell	A ±.005 (.127)		B ±.005 (.127)		C Max. Dia.		D Max.		F Max.		G Thread	H Thread	J Min.		K Min.	
Size	in	mm	in	mm	in	mm	in	mm	in	mm	UNEF-2A	UNEF-2A	in	mm	in	mm
8	.812	20.625	.594	15.088	.125	3.175	.561	14.250	.437	11.100	.562-24	.437-28	.620	15.748	.447	11.354
10	.937	23.800	.719	18.263	.125	3.175	.696	17.679	.562	14.275	.687-24	.562-24	.748	18.999	.572	14.529
12	1.031	26.188	.812	20.625	.125	3.175	.875	22.225	.750	19.050	.875-20	.750-20	.913	23.190	.760	19.304
14	1.125	28.575	.906	23.013	.125	3.175	.935	23.749	.812	20.625	.937-20	.812-20	.980	24.892	.822	20.879
16	1.250	31.750	.969	24.613	.125	3.175	1.062	26.975	.938	23.825	1.062-18	.937-20	1.107	28.119	.948	24.079
18	1.343	34.112	1.062	26.975	.125	3.175	1.187	30.150	1.062	26.975	1.187-18	1.062-18	1.209	30.709	1.072	27.229
20	1.437	36.500	1.156	29.363	.125	3.175	1.312	33.325	1.182	30.023	1.312-18	1.187-18	1.337	33.960	1.192	30.277
22	1.562	39.675	1.250	31.750	.125	3.175	1.437	36.500	1.312	33.325	1.437-18	1.312-18	1.452	36.881	1.322	33.579
24	1.703	43.256	1.375	34.925	.154	3.912	1.562	39.675	1.432	36.373	1.562-18	1.437-18	1.577	40.056	1.442	36.627

¹ = Boeing specifications, see page 3-14.

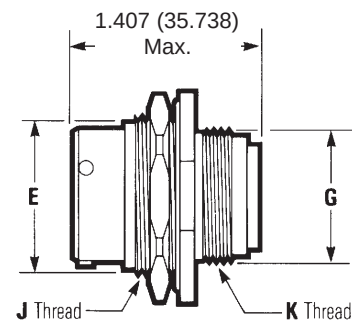
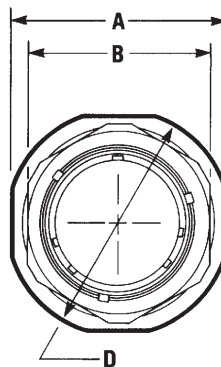
C48 Series Receptacle Connectors



**Single-Hole Mount,
Threaded Coupling**
C48-03RXX-XXXX
MS24265RXXTXXX



**Single-Hole Mount,
Bayonet Coupling**
C48-13RXX-XXXX
MS24265RXXBXXX



Dimensions

Shell	A ±.005 (.127)		B Max. Hex		C ±.003 (.076)		D Max.		E Max. Dia.		G Max.		H Thread	J Thread	K Thread
Size	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	UNEF-2A	UNEF-2A	UNEF-2A
8	.979	24.867	.828	21.031	.593	15.062	1.068	27.127	.561	14.249	.437	11.100	.562-24	.625-20*	.437-28
10	1.104	28.042	.953	24.206	.718	18.237	1.192	30.277	.696	17.678	.562	14.275	.687-24	.750-20	.562-24
12	1.291	32.791	1.140	28.956	.905	22.987	1.380	35.052	.875	22.225	.750	19.050	.875-20	.937-20	.750-20
14	1.391	35.331	1.250	31.750	.968	24.587	1.505	38.227	.935	23.749	.812	20.625	.937-20	1.000-20	.812-20
16	1.516	38.506	1.329	33.757	1.093	27.762	1.630	41.402	1.062	26.975	.938	23.825	1.062-18	1.125-20*	.937-20
18	1.641	41.681	1.455	36.957	1.217	30.912	1.740	44.196	1.187	30.150	1.062	26.975	1.187-18	1.250-20*	1.062-18
20	1.766	44.856	1.642	41.707	1.342	34.087	1.860	47.244	1.312	33.325	1.182	30.023	1.312-18	1.375-18	1.187-18
22	1.954	49.632	1.705	43.307	1.467	37.262	2.040	51.816	1.437	36.500	1.312	33.325	1.437-18	1.500-20*	1.312-18
24	2.079	52.807	1.892	48.057	1.592	40.437	2.160	54.864	1.562	39.675	1.432	36.373	1.562-18	1.625-18	1.437-18

* Thread: UN-2A

NOTES:

Contact factory for information about Boeing specifications.

For mounting hole dimensions and jam nut torques, see page 3-20.

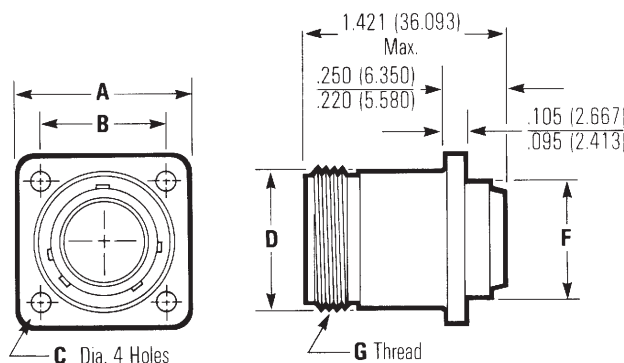
C48/CN0915 Series

Limited Wiring Space Receptacle Connectors

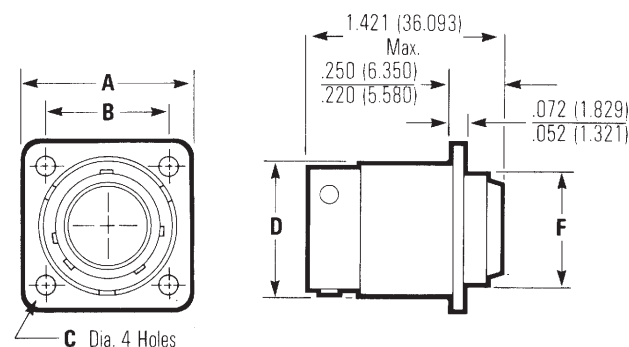
Crimp Removal Contacts



**Square-Flange,
Threaded Coupling**
CN0915B-XXXXXXX-XXX



**Square-Flange,
Bayonet Coupling**
CN0915A-XXXXXXX-XXX



Dimensions

Shell Size	A ±.0045 (.114)		B ±.005 (.127)		C ±.004 (.102)		D Max.		F ±.0015 (.038)		G Thread
	in	mm	in	mm	in	mm	in	mm	in	mm	UNE-F-2A
8	.812	20.625	.594	15.088	.121	3.073	.561	14.250	.497	12.624	.562-24
10	.937	23.800	.719	18.263	.121	3.073	.696	17.679	.503	15.799	.687-24
12	1.031	26.187	.812	20.625	.121	3.073	.875	22.225	.745	18.923	.875-20
14	1.125	28.575	.906	23.012	.121	3.073	.935	23.749	.871	22.123	.937-20
16	1.150	29.210	.969	24.613	.121	3.073	1.062	26.975	.995	25.273	1.062-18
18	1.343	35.382	1.062	26.975	.121	3.073	1.187	30.150	1.058	26.873	1.187-18
20	1.437	36.500	1.156	29.362	.121	3.073	1.312	33.325	1.184	30.074	1.312-18
22	1.562	39.675	1.250	31.750	.121	3.073	1.437	36.500	1.307	33.198	1.437-18
24	1.703	43.256	1.375	34.925	.154	3.912	1.562	39.675	1.432	36.373	1.562-18

Ordering Information¹

Series Designation	CN0915	A	10	A	05	P	N	-	000	Order Code
Series Modification		A - Bayonet Coupling								000 - Less Contacts
Shell Size										200 - Gold-Plated Contacts
Environmental Class										* See below
										Shell Position
										N, 6, 7, 8, 9, 10 (See page 3-4)
										Contact Style
										P - Pin
										S - Socket
										Insert Arrangement
										(See page 3-4)

NOTES:

- For other modifications, classes, etc., contact factory.
- For mounting hole dimensions, see page 3-20.
- Uses CRIM-LOK contacts. See page 3-12.
- Former order code - 100 designated rhodium plated contacts

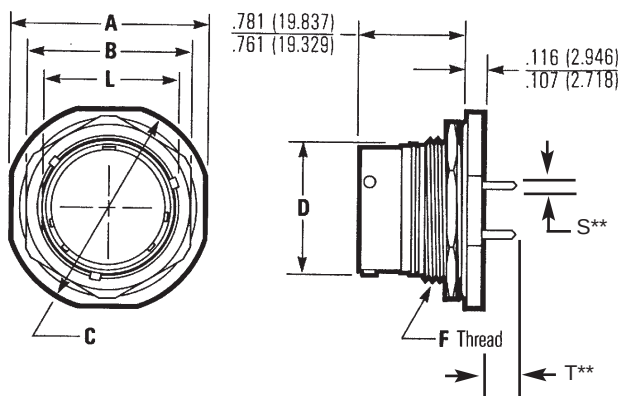
CN0942/CN0944 Series (C48 Family)

Short Receptacle Connectors

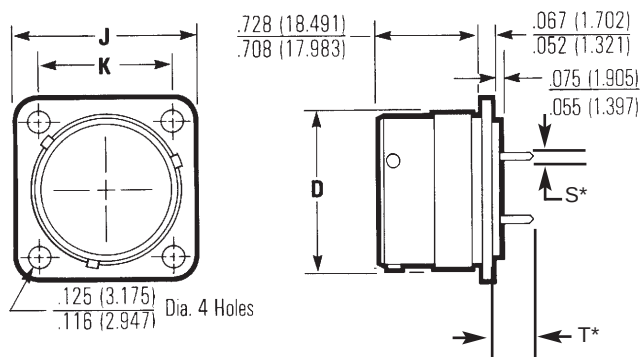
Non-Removable Contacts



**Single-Hole Mount,
Bayonet Coupling**
CN0942D XXXXXXXXXX
CN0944D XXXXXXXXXX



**Square Flange,
Bayonet Coupling**
CN0942B XXXXXXXXXX
CN0944B XXXXXXXXXX



Dimensions

Shell	A Max.		B Max.		C Max.		D Max.		F Thread	J ±.005 (.127)		K ±.005 (.127)		L ±.003 (.176)	
Size	in	mm	in	mm	in	mm	in	mm	UNEF-2A	in	mm	in	mm	in	mm
8	.984	24.994	.828	21.031	1.068	27.127	.561	14.250	.625-20*	.812	20.625	.594	15.088	.593	15.062
10	1.109	28.169	.953	24.206	1.192	30.277	.696	17.679	.750-20	.937	23.800	.719	18.263	.718	18.237
12	1.296	32.919	1.140	28.956	1.380	35.052	.875	22.225	.937-20	1.031	26.188	.812	20.625	.905	22.987
14	1.396	35.459	1.250	31.750	1.505	38.227	.935	23.749	1.000-20	1.125	28.575	.906	23.013	.968	24.587
16	1.521	38.634	1.329	33.757	1.630	41.402	1.062	26.975	1.125-20*	1.250	31.750	.969	24.613	1.093	27.762
18	1.646	41.809	1.455	36.957	1.740	44.196	1.187	30.150	1.250-20*	1.343	34.112	1.062	26.975	1.217	30.912
20	1.771	44.984	1.642	41.707	1.860	47.244	1.312	33.325	1.375-18	1.437	36.500	1.156	29.363	1.342	34.087
22	1.959	49.759	1.705	43.307	2.040	51.816	1.437	36.500	1.500-20*	1.562	39.675	1.250	31.750	1.467	37.262
24	2.084	52.934	1.892	48.057	2.160	54.864	1.562	39.675	1.625-18	1.703	43.256	1.375	34.925	1.592	40.437

* Th'd: UN-2A

** See "S" and "T" dimensions on page 3-10.

CN0942/CN0944 Series (C48 Family)

Short Receptacle Connectors

Non-Removable Contacts



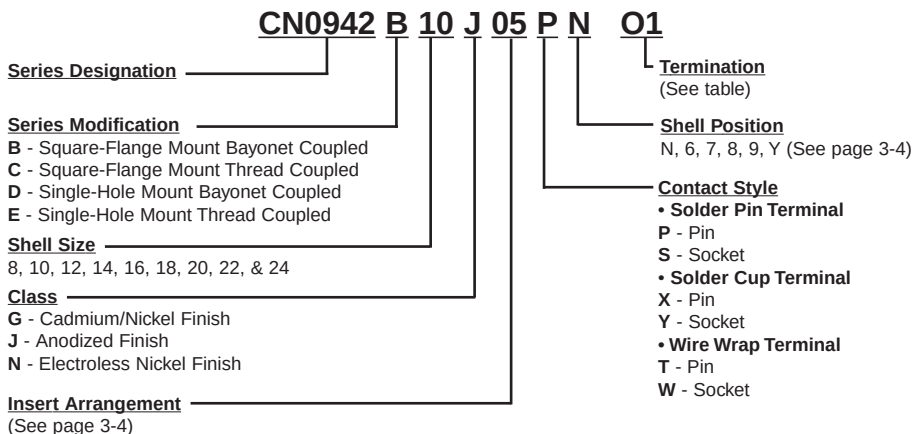
CN0942 Series: Fluorosilicone Inserts

Ordering Information¹

Termination Designator	Contact Style	Termination T Min.	Termination S ± .002
01*	P & S	.250	.025
02*	X & Y	.230	N/A
03**	P & S	.144	.025
04**	X & Y	.124	N/A
06*	T & W	.900	.025

* Applies to CN0942B/CN0942C.

** Applies to CN0942D/CN0942E.



NOTES:

¹ For other modifications, class, etc., consult factory.
 For mounting hole dimensions, see page 3-20.

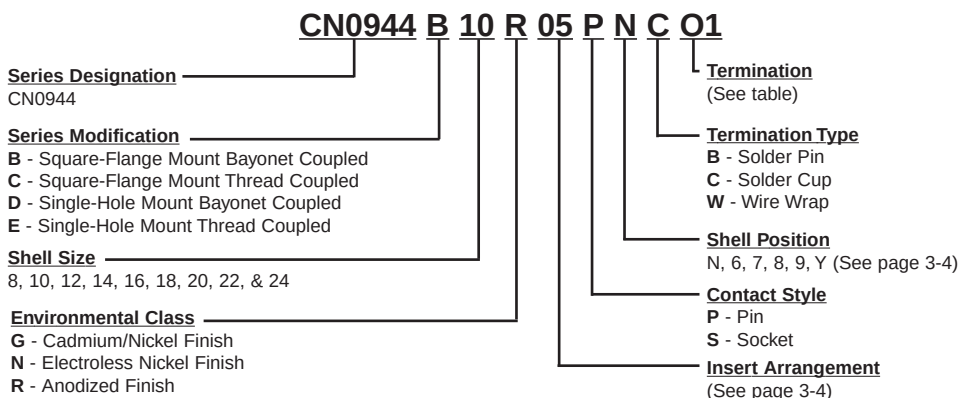
CN0944 Series: Neoprene Inserts

Ordering Information¹

Termination Designator	Term Type	Termination T Min.	Termination S ± .002
01*	B	.250	.025
02*	C	.230	N/A
03**	B	.144	.025
04**	C	.124	N/A
06*	W	.900	.025

* Applies to CN0944B/CN0944C.

** Applies to CN0944D/CN0944E.

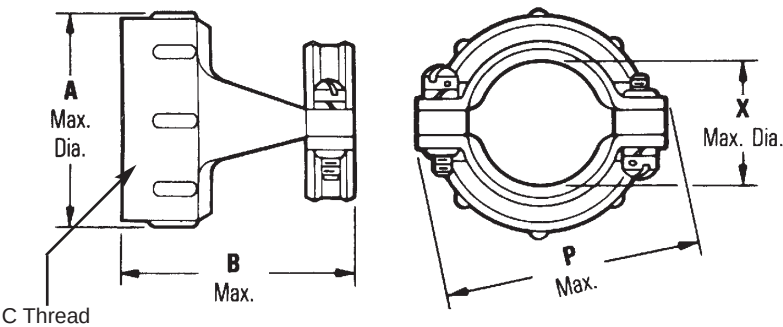


NOTES:

¹ For other modifications, class, etc., consult factory.
 For mounting hole dimensions, see page 3-20.

Cable Support Assembly

Cable clamps support cable or wire at the plug or receptacle and prevent twisting and pulling.



Dimensions

Size	Cinch Part No.	MS	A		B		X		C Th'd UNEF-2B	P	
			Max. Dia.		±.015 (.381)		I.D.			Max.	
			in	mm	in	mm	in	mm		in	mm
8	C48-2840	MS27291-13	.606	15.393	.935	23.749	.186	4.725	.437-28	.789	20.042
10	C48-2341	MS27291-1	.731	18.568	.935	23.749	.270	6.858	.562-24	.914	23.216
12	C48-2342	MS27291-2	.919	23.343	.935	23.749	.400	10.160	.750-20	1.026	26.061
14	C48-2343	MS27291-3	.981	24.918	1.170	29.718	.460	11.684	.812-20	1.090	27.686
16	C48-2344	MS27291-4	1.106	28.093	1.170	29.718	.610	15.494	.937-20	1.250	31.750
18	C48-2345	MS27291-5	1.231	31.268	1.170	29.718	.690	17.526	1.062-18	1.358	34.493
20	C48-2643	MS27291-14	1.356	34.443	1.170	29.718	.816	20.728	1.187-18	1.481	37.619
22	C48-2346	MS27291-6	1.481	37.618	1.170	29.718	.940	23.876	1.312-18	1.604	40.742
24	C48-2644	MS27291-15	1.606	40.793	1.170	29.178	1.066	27.078	1.437-18	1.729	43.919

Contacts

When you order Cinch C48 Series connectors with contacts, the contact package contains enough contacts to complete the insert arrangement plus two spares. The package also includes sealing plugs for 15% of the contacts in the inserts, minimum of three. To provide proper sealing, insert unwired contacts and sealing plugs in all unused holes. (Use a #12 contact for a #1 shielded hole.) To order contacts and sealing plugs separately use the part numbers in the table below.

Contact Size	Max. Wire Size AWG	Current Rating Amps	Cinch Part No.		MS Part No.	
			Pin	Socket	Pin	Socket
No. 20	24	3.0				
	22	5.0	CN0900-253	CN0900-255	M39029/31-241	M39029/32-260
	20	7.5				
No. 16	18	16				
	16	22	CN0900-252	CN0900-254	M39029/31-229	M39029/32-248
	14	32				
No. 12	12	41	CN0900-256	CN0900-257	M32029/31-235	M39029/32-254
	**	3	C48-1226-02	C48-1227-02	--	--
No. 1* (Shielded)	****	1	C48-1226-54	C48-1227-54	--	--
	*****	1	C48-1226-55	C48-1227-55	--	--
No. 2 (Shielded)	***	7.5	C48-2187-02	C48-2188-02	--	--

* Fits into No. 12 power contact cavity.

** Accommodates cables RG174/U, RG179U, RG179A/U, RG187/U, RG188/U, RG161/U, as well as shielded wire.

Can also accommodate Cable MIL-C-27500-22 KING (Extruded) or 22 AWG per MIL-C-7078 type II.

*** Accommodates Cable MIL-C-27500 KING; 20 KING; 18 KING (Extruded) or 22, 20, 18 AWG, per MIL-C-7078 type II.

**** For use with RG195/U and RG180/U, RG180A/U, and RG1808/U.

***** Accommodates Cables RG178/U, RG178A/U, RG1788/U, and RG196/U.

Grommet Sealing Plugs

Color Code	Size	Cinch Part No.	MS Part No.
Yellow	12 & #1 Shielded	C48-2221-12	MS27488-12
Blue	16	C48-2221-16	MS27488-16
Red	20	C48-2221-20	MS27488-20
White	#2 Shielded	C48-1458-01	--

Tools

Contact Size	Crimp Tool	Insertion Tool		Removal Tool	
		Superseded No.	Current No.	Superseded No.	Current No.
No. 20	M22520/1-01	MS24256A20	M81969/17-03	MS24256R20	M81969/19-06
No. 16	M22520/1-01	MS24256A16	M81969/17-04	MS24256R16	M81969/19-01
No. 12	M22520/1-01	MS24256A12	M81969/17-05	MS24256R12	M81969/19-02
Adjustable Turret					
No. 20	M22520/1-02				
No. 16	M22520/1-02				
No. 12	M22520/1-02				
No. 1 (Shielded)		MS24256A12	M81969/17-05	MS24256R12	M81969/19-09
No. 2 (Shielded)		--	294-128	--	294-127

- Cinch has qualified a series of connectors to Boeing Specifications in bayonet and threaded styles that meet high-performance requirements for:

+ Vibration

+ Shielding Effectiveness

+ Fluid Resistance

BACC63 Series

	<u>BN</u>	<u>BP</u>	<u>BV</u>	<u>CB</u>	<u>CC</u>
■ Vibration-resistant Bayonet Plug	●			●	
■ Vibration-resistant Self-Locking threaded Plug		●			
■ Optional Ground Spring on Plug		●		●	
■ Shielded Connectors		●	●	●	●
■ Advanced fluid-resistant elastometers		●	●	●	●
■ Non-rotating accessory teeth conforming to MS3155		●	●	●	●
■ Optional Stainless Steel Shells		●	●		

BOEING TO Cinch CROSS-REFERENCE DATA

Cinch Part Numbers and Order Codes
For Applicable Purchase Order Exceptions, see Note 6.

Boeing Part Numbers	No Exceptions	Less Contacts	Less Contacts & Cable Support	Less Cable Support
BACC45FM**-**P	C48-00R**Y**P-402	-406	-406	-402
See Note 2 A P6	See Note 3 P6-410	-415	-416	-412
B P7	P7-420	-425	-426	-422
See Note 5 C P8	P8-430	-435	-436	-432
D P9	P9-440	-445	-446	-442
E P10	P10-450	-455	-456	-452
BACC45FN**-**P6	C48-10R**Y**P6-402	-406	-406	-402
BACC45FS**-**P6	C48-06R**Y**P6-402	-406	-406	-402
BACC45FT**-**P6	C48-16R**Y**P6-402	-406	-402	-406
(BACC63 Types)				
BACC63BN*-**P6	C0909A**-**P6Y402	Y406	Y406	Y402
See Note 5 B	See Note 3 Y420	Y425	Y426	Y422
C	Y430	Y435	Y436	Y432
BACC63BP**A**P6	CN0966A**A**P6Y140	Y040	N/A	N/A
B	A**S**P6Y140	Y040	N/A	N/A
See Note 7 C	B**G**P6Y140	Y040	N/A	N/A
D	B**S**P6Y140	Y040	N/A	N/A
BACC63BV**A**P6	CN0967C**A**P6Y140	Y040	N/A	N/A
B	S**P6Y140	Y040	N/A	N/A
F	G**P6Y140	Y040	N/A	N/A
BACC63CB**-**P6	CN1020A**G**P6Y140	Y040	N/A	N/A
BACC63CC**-**P6	CN1021A**G**P6Y140	Y040	N/A	N/A

See Note 4

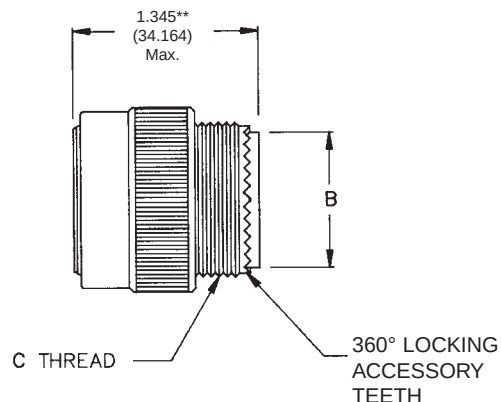
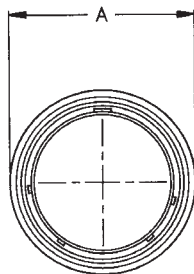
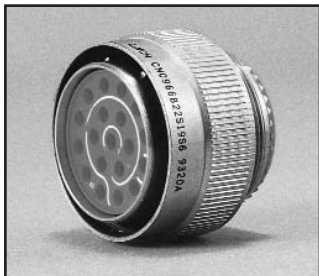
NOTES:

- All parts are marked with Boeing part number.
 - Part number system also applies to BACC45FN, BACC45FS, and BACC45FT.
 - May be "Y" or "-" (dash) designator
 "Y" = Insert arrangements with size 20 contacts (see page 3-4) use small wire grommet seals, Boeing insert discs, and hard socket inserts.
 "-" = Insert arrangements that contain no size 20 contact locations. Use standard "MS" grommets, discs, and inserts.
 - "P6" represents contact style and shell polarities defined in individual part numbering systems.
 - Specifies optional cable support:
 "-" = No cable support
 "A" = BACC10GH Straight Single-Leg Clamp
 "B" = MS27559 Right-Angle Saddle Clamp
 "C" = MS27291 Straight Saddle Clamp
 "D" = BACC10JC Right-Angle Single Leg Clamp
 "E" = BACC10JS Straight Single-Leg Composite Clamp
 - The Boeing specifications permit omission of contacts and/or cable support through purchase order exceptions.
 - Specifies material and shell designs. See Boeing specification.
- ** These part number fields represent shell size and insert arrangement as defined in individual part number systems.

CN0966 Series (C48 Family) Self-Locking Plug Connectors



Threaded Coupling CN0966XXXXXXX BACC63BP¹



Dimensions

Shell Size	A ± .005 (.127)		B Max. Dia.		C Thread UNEF-2A
	in	mm	in	mm	
8	.835	21.209	.306	7.773	.500-20
10	.972	23.698	.371	9.423	.625-24
12	1.165	27.254	.547	13.894	.750-20
14	1.230	30.124	.613	15.570	.875-20
16	1.355	33.198	.758	19.253	1.000-20
18	1.470	34.798	.865	21.971	1.0625-18
20	1.607	38.100	.986	25.044	1.1875-18
22	1.735	41.148	1.106	28.092	1.3125-18
24	1.858	44.069	1.235	31.369	1.4375-18
28	2.113	52.070	1.485	37.719	1.750-18*

Ordering Information²

CN0966 B 10 S 05 P N - 000

Series Designation

CN0966

Series Modification

A - Ungrounded

B - Grounded (Conductive)

Shell Size

8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28

Class

A - Anodized Aluminum

G - Cadmium/Nickel-Plated Aluminum

K - Stainless Steel Flame Resistant

N - Electroless Nickel-Plated Aluminum

S - Stainless Steel

Order Code (Deviations)¹

000 - Less Contacts

100 - * See below

200 - With Gold-Plated Contacts

Alternate Shell Positions

N, 6, 7, 8, 9, 10

Per table on page 3-4

Contact Style

P - Pin Insert

S - Socket Insert

Insert Arrangements

(See page 3-4)

Notes:

¹ For Boeing Specification, see page 3-14.

² For modifications, classes, etc. not listed, consult factory.

* Th'd: UNS-2A

** Size 28 = 1.395 (35.434)

* Former order code - 100 designated rhodium plated contacts

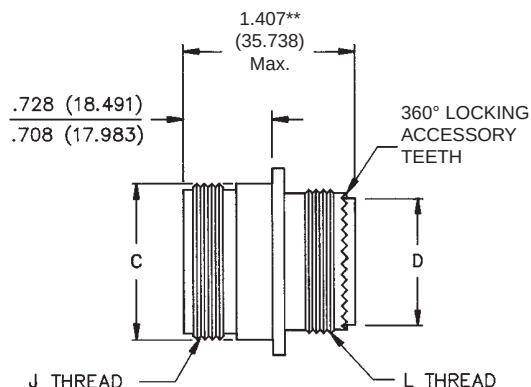
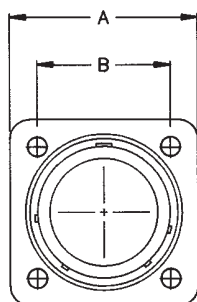
CN0967 (C48 Series) Vibration-Resistant Receptacle



Threaded Coupling

CN0967XXXXXXXXX

BACC63BV¹



Dimensions

Shell Size	A		B		C		D		J	L
	+.0045 (.114)		+.005 (.127)		Max.		Max. Dia.		Thread	Thread
	in	mm	in	mm	in	mm	in	mm	UNE-F-2A	UNE-F-2A
8	.812	20.625	.594	15.088	.561	14.250	.328	8.331	.5265-24	.5000-20
10	.937	23.800	.719	18.263	.696	14.250	.371	9.423	.6875-24	.6250-24
12	1.031	26.187	.812	20.625	.875	17.679	.547	13.894	.8750-20	.7500-20
14	1.125	28.575	.906	23.012	.935	22.225	.609	15.469	.9375-20	.8750-20
16	1.250	31.750	.969	24.613	1.062	23.749	.758	19.253	1.0625-18	1.0000-20
18	1.343	34.112	1.062	26.975	1.187	30.150	.865	21.971	1.1875-18	1.0625-18
20	1.437	36.500	1.156	29.362	1.312	33.325	.986	25.044	1.3125-18	1.1875-18
22	1.562	39.675	1.250	31.750	1.437	36.500	1.106	28.092	1.4375-18	1.3125-18
24	1.703	43.256	1.375	34.925	1.562	39.675	1.235	31.369	1.5625-18	1.4375-18
28	2.000	50.800	1.562	39.675	1.810	45.976	1.485	37.719	1.8125-16	1.750-18*

Ordering Information²

CN0967 C 10 S 05 P N - 000									
Series Designation			Order Code (Deviations)						
CN0967			000 - Less Contacts						
Series Modification			100 - * See below						
C - Square-Flange Mount			200 - With Gold-Plated Contacts						
G - Square-Flange with Clinch Nuts			Alternate Shell Position						
Shell Size			N, 6, 7, 8, 9, 10						
8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28			Per table on page 3-4.						
Environmental Class			Contact Style						
A - Anodized Aluminum			P - Pin						
G - Cadmium/Nickel-Plated Aluminum			S - Socket						
K - Stainless Steel, Flame Resistant			Insert Arrangements						
N - Electroless Nickel-Plated Aluminum			(See page 3-4)						
S - Stainless Steel									

NOTES:

¹ For Boeing Specification, see page 3-14.

² For modifications, classes, etc., not listed, consult factory.

• For mounting hole dimensions, see page 3-20.

* Th'd: UNS-2A

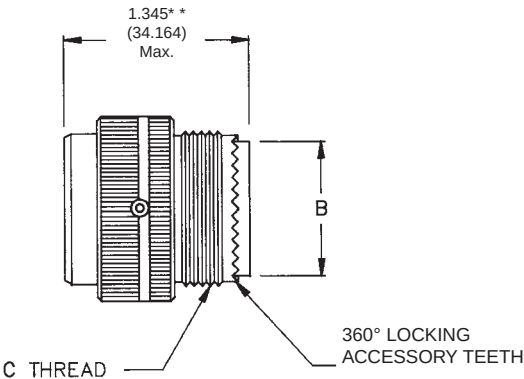
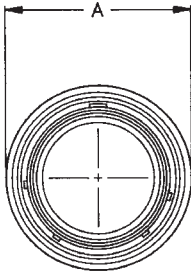
**Size 28 = 1.457 (37.008)

* Former order code - 100 designated rhodium plated contacts

CN1020 Series (C48 Family)
Vibration-Proof Plug Connector



Bayonet Coupling
CN1020-XXXXXXXX
BACC63CB¹



Dimensions

Shell Size	A + .005 (.127)		B Max. Dia.		C Thread
	in	mm	in	mm	UNEF-2A
8	.765	19.447	.306	7.773	.500-20
10	.967	24.561	.371	9.423	.625-24
12	1.078	27.381	.547	13.894	.750-20
14	1.187	30.149	.613	15.570	.875-20
16	1.309	33.248	.758	19.253	1.000-20
18	1.375	34.925	.865	21.971	1.0625-18
20	1.505	38.227	.986	25.044	1.1875-18
22	1.625	41.275	1.106	28.092	1.3125-18
24	1.755	44.577	1.235	31.369	1.4375-18
28	2.161	54.889	1.485	37.719	1.750-18*

Ordering Information²

CN1020 A 10 G 05 P N - 000

Series Designation
CN1020

Series Modification
A - Standard Plug

Shell Size
8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28

Environmental Class
A - Anodized Aluminum
G - Cadmium/Nickel-Plated Aluminum

Order Code (Deviations)¹
000 - Less Contacts
100 - * See below
200 - With Gold-Plated Contacts

Alternate Shell Positions
N, 6, 7, 8, 9, 10
Per table on page 3-4.

Contact Style
P - Pin
S - Socket

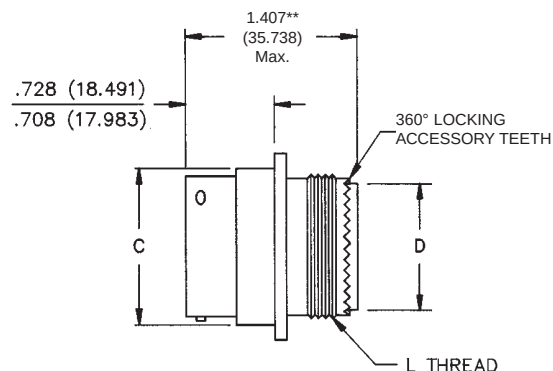
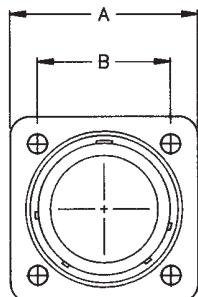
Insert Arrangements
(See page 3-4)

Notes:
¹ For Boeing Specification, see page 3-14.
² For modification, classes, etc., not listed, consult factory.
* Th'd: UNS-2A
** Size 28 = 1.395 (35.434)
* Former order code - 100 designated rhodium plated contacts

CN1021 Series (C48 Family) Vibration-Resistant Receptacle



Bayonet Coupling CN1021XXXXXXXXX BACC63CC¹



Dimensions

Shell Size	A +.0045 (.114)		B +.005 (.127)		C Max.		D Max. Dia.		L Thread UNEF-2A
	in	mm	in	mm	in	mm	in	mm	
8	.812	20.625	.594	15.088	.561	14.250	.328	8.331	.500-20
10	.937	23.800	.719	18.263	.696	14.250	.371	9.423	.625-24
12	1.031	26.187	.812	20.625	.875	17.679	.547	13.894	.750-20
14	1.125	28.575	.906	23.012	.935	22.225	.609	15.469	.875-20
16	1.250	31.750	.969	24.613	1.062	23.749	.758	19.253	1.000-20
18	1.343	34.112	1.062	26.975	1.187	30.150	.865	21.971	1.0625-18
20	1.437	36.500	1.156	29.362	1.312	33.325	.986	25.044	1.1875-18
22	1.562	39.675	1.250	31.750	1.437	36.500	1.106	28.092	1.3125-18
24	1.703	43.256	1.375	34.925	1.562	39.675	1.235	31.369	1.4375-18
28	2.000	50.800	1.562	39.675	1.810	45.976	1.485	37.719	1.750-18*

Ordering Information²

CN1021 A 10 G 05 P N - 000									
Series Designation CN1021				Series Modification A - Square-Flange Mount C - Square-Flange with Clinch Nuts		Shell Size 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28		Environmental Class A - Anodized Aluminum G - Cadmium/Nickel-Plated Aluminum	
								Order Code (Deviations) 000 - Less Contacts 100 - * See below 200 - With Gold-Plated Contacts	
								Alternate Shell Position N, 6, 7, 8, 9, 10 Per table on page 3-4.	
								Contact Style P - Pin S - Socket	
								Insert Arrangements (See page 3-4)	

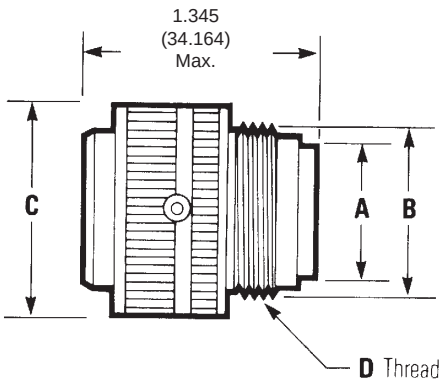
Notes:

- ¹ For Boeing Specification, see page 3-14.
- ² For modifications, classes, etc. not listed, consult factory.
- For mounting hole dimensions, see page 3-20.
- * Th'd: UNS-2A
- ** Size 28 = 1.457 (37.008)
- * Former order code - 100 designated rhodium plated contacts

C0909A MMB Series (C48 Family)
Vibration-Proof Plug Connector



Bayonet Coupling
C0909AXXXXXXX
BACC63BN¹



3 Dimensions

Shell Size	A Dia.		B Dia.		C Max.		D Thread UNEF-2A
	in	mm	in	mm	in	mm	
8	.328	8.331	.437	11.100	.766	19.456	.437-28
10	.420	10.668	.562	14.275	.906	23.012	.562-24
12	.580	14.732	.750	19.050	1.078	27.381	.750-20
14	.664	16.866	.812	20.625	1.141	28.981	.812-20
16	.769	19.533	.938	23.825	1.266	32.156	.937-20
18	.902	22.911	1.062	26.975	1.375	34.925	1.062-18
20	1.033	26.238	1.182	30.023	1.510	38.354	1.187-18
22	1.152	29.261	1.312	33.325	1.625	41.275	1.312-18
24	1.282	32.253	1.432	36.373	1.760	44.704	1.437-18

Ordering Information²

C0909A 10 - 05 P 8 - XXX

Series Designation
C0909A

Shell Size
8, 10, 12, 14, 16, 18, 20, 22, 24

Class
(Dash) - Anodized Aluminum
E - Cadmium/Nickel-Plated Aluminum
N - Nickel-Plated Aluminum

Order Code (Deviations)
202 - With Gold-Plated Contacts*
106 - Less Contacts

Alternate Shell Positions
N, 6, 7, 8, 9, 10
Per table on page 3-4.

Contact Style
P - Pin Insert
S - Socket Insert

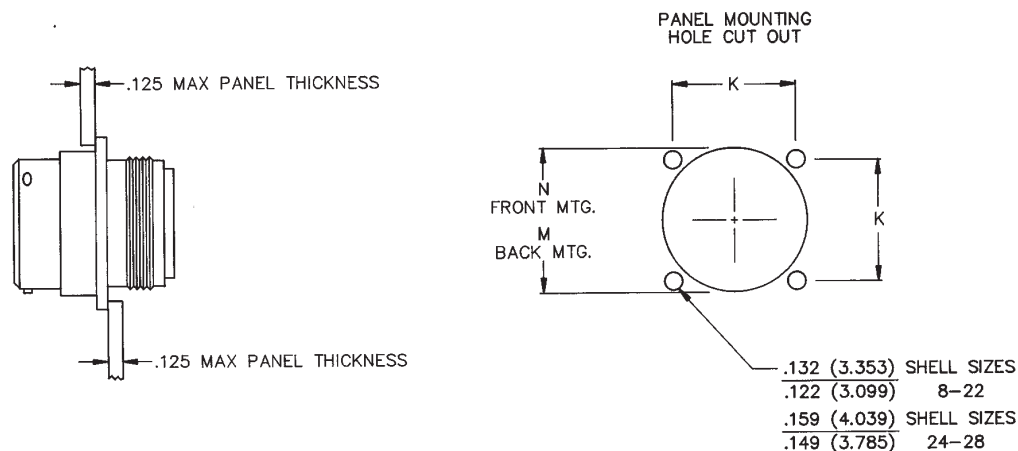
Insert Arrangements
(See page 3-4)

Notes:
¹ For Boeing Specification, see page 3-14.
² For deviations, classes, etc. not listed, consult factory.
* Former order code - 102 designated rhodium plated contacts

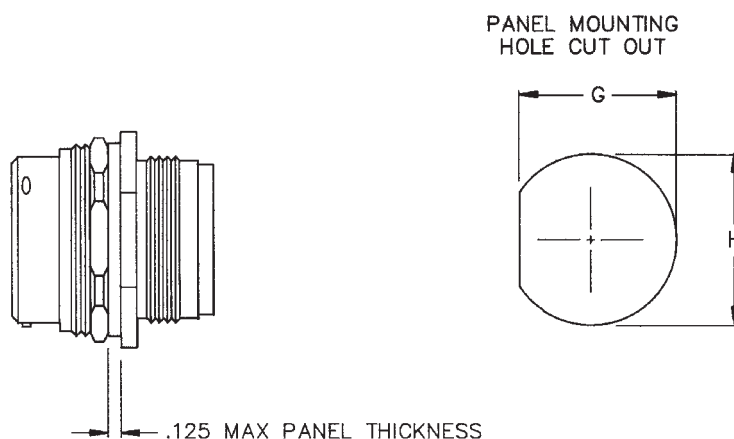
C48 Series & C48 Family Mounting Panel Data



Square-Flange Mount



Single-Hole Mount (Jam-Nut Mount)



Dimensions

Shell Size	M Min.		N Min.		G ±.005 (.127)		H ±.005 (.127)		K ±.005 (.127)	
	in	mm	in	mm	in	mm	in	mm	in	mm
8	.620	15.748	.447	11.354	.605	15.638	.635	16.129	.594	15.088
10	.748	18.999	.572	14.529	.730	18.542	.760	19.304	.719	18.263
12	.913	23.190	.760	19.304	.917	23.292	.947	24.054	.812	20.625
14	.980	24.892	.822	20.879	.980	24.892	1.010	25.654	.906	23.013
16	1.107	28.119	.948	24.079	1.105	28.067	1.135	28.829	.969	24.613
18	1.209	30.709	1.072	27.229	1.225	31.115	1.260	32.004	1.062	26.975
20	1.337	33.906	1.192	30.277	1.350	34.290	1.385	35.179	1.156	29.363
22	1.452	36.881	1.322	33.579	1.475	37.465	1.510	38.354	1.250	31.750
24	1.577	40.056	1.442	36.627	1.600	40.640	1.635	41.529	1.375	34.925
28	1.827	46.406	1.760	44.704	1.856	47.143	1.885	47.879	1.562	39.675

Recommended Minimum Torque for Jam Nut

Shell Size	8	10	12	14	16	18	20	22	24
Torque (Inch/lb.)	28	36	56	64.5	69	81	102	122.5	144