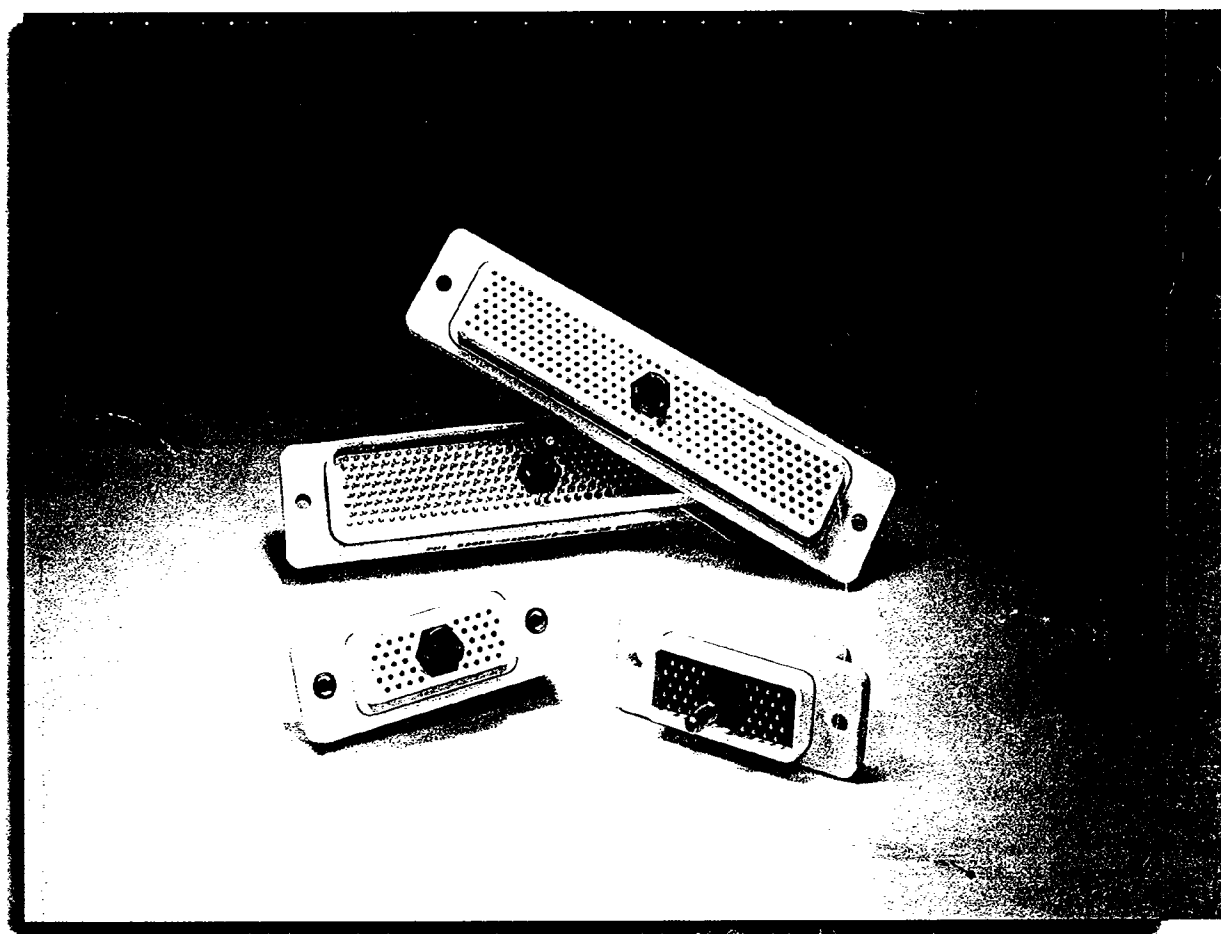


PACKARD-HUGHES INTERCONNECT ELECTRICAL CONNECTORS



SUBMINIATURE RECTANGULAR CONNECTORS

MIL-C-28804

HAC-PAK™ SUBMINIATURE RECTANGULAR CONNECTORS

MIL-C-28804

HAC-PAK Connectors provide a packaging concept that offers the ultimate in interconnection versatility. Termination of a variety of cable types is easily accomplished.

- Flat printed wiring cable to fixed solder-tail contacts.
- Flat printed wiring cable to fixed filter contacts with solder-tails.
- Standard round wire to crimp/removable rear-release contacts.

With HAC-PAK Connectors, it's easier than ever to connect round cable to flat cable, flat cable to flat cable, or round cable to round cable.

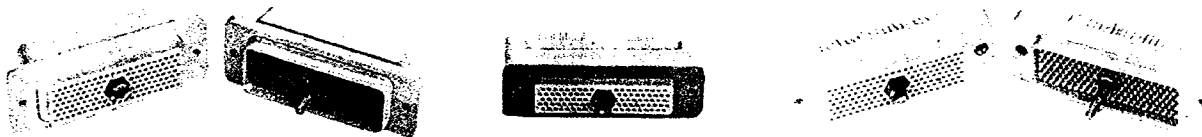
Three types of contacts are available:

- Crimp/removable, rear-release contacts: non-environmental, environmental or potted
- Fixed solder-tail contacts
- RFI/EMI fixed filtered contacts

Rear surfaces of fixed filter and fixed solder-tail contact connectors are flat, to facilitate termination. Hold-down inserts are provided for strain relief.

Connectors are intermateable and intermountable with one another and with Packard-Hughes front-release subminiature rectangular connectors. (W Series and WSS Series.)

They are engineered for use in missiles, aircraft, ground support systems, cable to chassis/cable to cable connections, computers and other automated electronic equipment.



CRIMP/REMOVABLE REAR-RELEASE

- Increased contact stability
- Closed entry socket
- Insert arrangements of 38, 88, 108, 132, 244
- Easy termination with standard military crimp tool M22520/2-01

RFI/EMI FILTER

- Positive protection against radio frequency and electromagnetic interference
- Each connector contains a passive filter network
- Fixed contact dependability
- Insert arrangements of 38, 88, 132
- Available in receptacle only

FIXED SOLDER-TAIL

- Pre-assembled contacts
- Fixed contact dependability
- Solder tails pre-tinned
- Easy termination of flat printed wiring cable
- Insert arrangements of 38, 88, 108, 132, 244

2

EXCLUSIVE FEATURES:

POLARHEX™ center jackscrew coupling assures alignment, provides positive polarization with a choice of polarizing positions. Prevents mismatching. The compactness of the POLARHEX center jackscrew coupling allows the maximum number of contacts in the

smallest space, resulting in the highest contact density of number 22 contacts in the industry.

Packard-Hughes HAC-PAK packaging concept provides maximum versatility in termination techniques never before offered.

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Connector types, uses, features, benefits	2
MIL-C-28804	
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MILITARY ORDERING NOMENCLATURE

MIL-C-28804

TO ORDER CONTACTS:

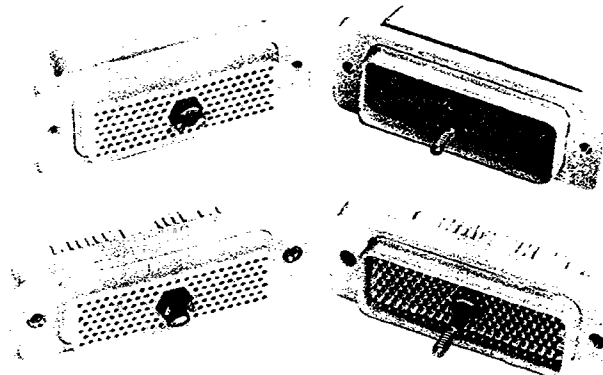
Crimp removable contacts supplied with connector but not installed.

To order connector without contacts, consult factory.

To order contacts separately, use the following nomenclature:

M28804/9-1 = Pin contacts for plug.

M28804/10-1 = Socket contacts for receptacle.



M28804 /

1

—2

N

**BASIC
SPEC.
NUMBER**

CLASS

- 1 = G (Receptacle, nonenvironmental, crimp removable contacts)
- 2 = G (Plug, non-environmental, crimp removable contacts)
- 3 = E (Receptacle, environmental, crimp removable contacts)
- 4 = E (Plug, environmental, crimp removable contacts)
- 5 = P (Receptacle, potted, crimp removable contacts)
- 6 = P (Plug, potted, crimp removable contacts)
- 7 = S (Receptacle, fixed solder tail contacts)
- 8 = S (Plug fixed solder tail contacts)
- 11 = SE (Plug interfacial seal, fixed solder tail contacts)

INSERT ARRANGEMENT AND COUPLING HARDWARE Standard Coupling Hardware Actuating Jackscrew (Plug only) Fixed Jacksocket (Recp. only)

SHELL SIZE	NO. OF CONTACTS
—2 = 10	38
—3 = 12	88
—4 = 14	108
—5 = 16	132
—6 = 18	244

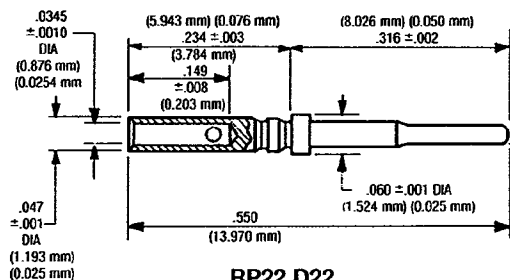
Optional Coupling Hardware Fixed Jackscrew (Plug only) Actuating Jacksocket (Recp. only)

— 8 = 10	38
— 9 = 12	88
—10 = 14	108
—11 = 16	132
—12 = 18	244

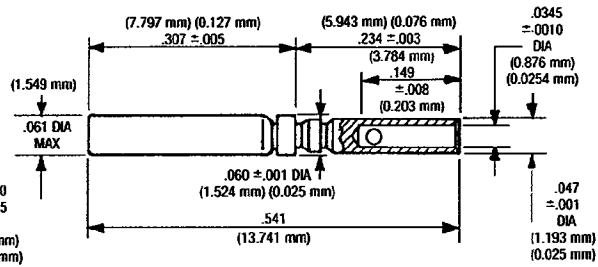
POLARIZATION
90° Boss
N
V
W

85° Boss
X
Y
Z

CONTACTS, SIZE 22



RP22 D22



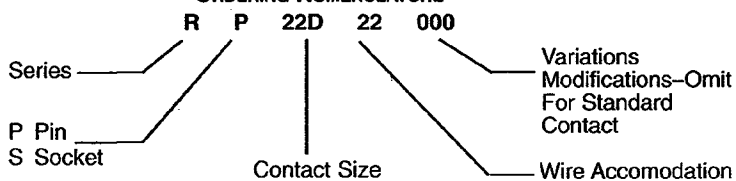
RS22 D22

CRIMP/REMOVABLE: Snap-in contacts featuring greater stability for pins and closed entry socket. Contacts are gold-plated in accordance with MIL-G-45204. Socket is split line type with stainless steel hood for greater reliability. Pin and sockets accommodate 22-26 gage wire.

FIXED CONTACT (Not Shown): Contacts are goldplated in accordance with MIL-G-45204. Solder terminations meet solderability tests of MIL-STD-202, Method 208. These contacts are widely used for inter-connection to flex printed wiring circuits.

DESCRIPTION	MATERIAL	FINISH
CONTACT, PIN	BRASS ROD PER QQ-B-626 COMP. II	GOLD PLATE PER MIL-G-45204
CONTACT, SOCKET	BERYLLIUM COPPER PER QQ-C-530	GOLD PLATE PER MIL-G-45204
HOOD	STAINLESS STEEL, TYPE 305 PER QQ-S-766	PASSIVATE PER MIL-F-14072, FINISH E300

ORDERING NOMENCLATURE



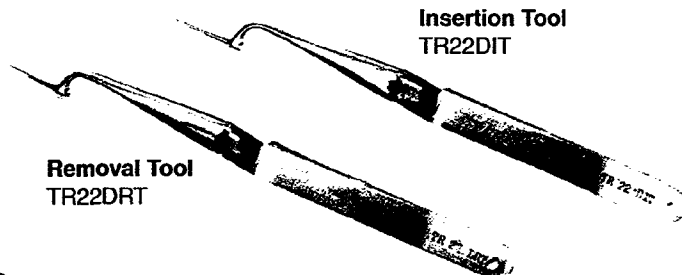
22-26 Gage

TOOLS

CRIMPING TOOL
Tool: M22520/2-01
Locator Stop
TLR22D



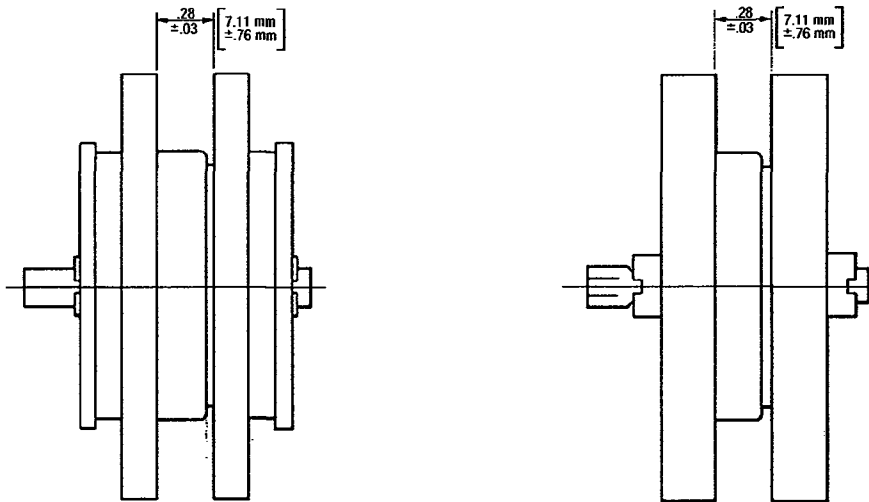
Removal Tool
TR22DRT



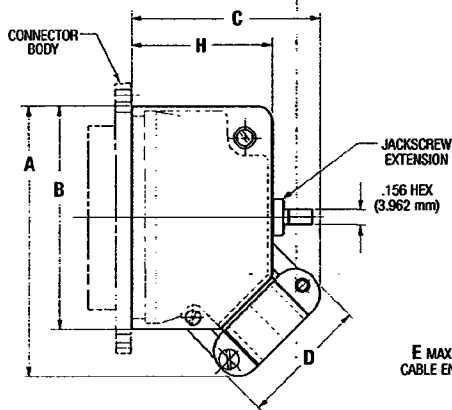
Insertion Tool
TR22DIT

MATED PAIR

MATED DIMENSIONS

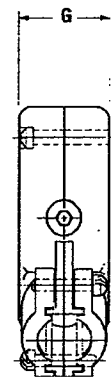
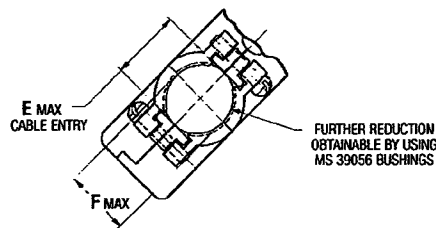


BACKSHELL/STRAIN RELIEF — 45° OPENING — CRIMP REMOVABLE — REAR RELEASE CONNECTORS ONLY



Material:
Backshell and Clamp:
Aluminum Alloy A380
Per QQ-A-591
Screws & Extension: CRES

Finish:
Backshell and Clamp:
Anodize per MIL-A-8625,
Type II, Class 2
Dyed Black
Screws & Extension: Passivated



Ordering Nomenclature with extension	Ordering Nomenclature without extension	SHELL SIZE	NO. OF CONTACTS	A		B		C		D		E MAX		F MAX		G		H	
				IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
RAC0038H00*	RAC0038H000	10	38	1.96	49.784	1.41	38.814	1.85	46.990	1.01	25.654	.43	10.922	.43	10.922	.73	18.542	1.460	37.084
RAC0088H00*	RAC0088H000	12	88	2.70	68.580	2.25	57.150	1.91	48.514	1.18	29.972	.60	15.240	.60	15.240	.73	18.542	1.460	37.084
RAC0108H00*	RAC0108H000	14	108	2.30	58.420	1.64	41.658	2.19	55.626	1.28	32.562	.70	17.780	.70	17.780	1.08	27.432	1.675	50.165
RAC0132H00*	RAC0132H000	16	132	2.78	70.612	2.26	57.404	1.97	50.038	1.34	34.036	.76	19.304	.76	19.304	.91	23.114	1.460	37.084
RAC0244H00*	RAC0244H000	18	244	4.02	102.108	3.60	91.440	2.20	55.880	1.67	42.418	1.10	27.940	.76	19.304	.91	23.114	1.715	43.561

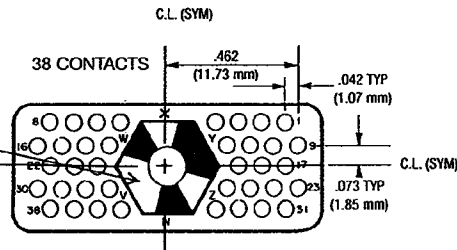
*Insert 5 for Environmental and Potting
Insert 6 for Non-Environmental

INSERT ARRANGEMENTS AND POLARIZATIONS

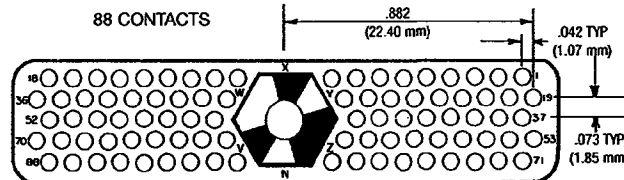
SOCKET BODY—FACE VIEW

TO POLARIZE CONNECTOR,
BOSS IS MOUNTED IN THE
INSERT WITH LARGEST
OPENING ADJACENT TO
DESIRED POSITION

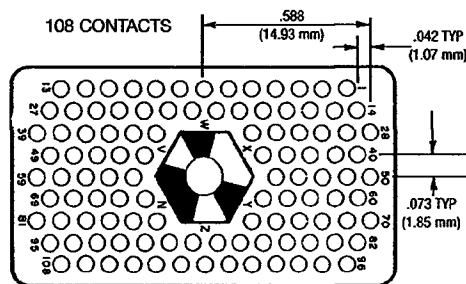
POLARIZING
BOSS SHOWN
IN V POSITION



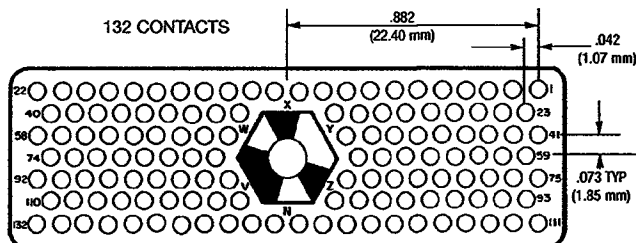
POLARIZING
BOSS SHOWN
IN W POSITION



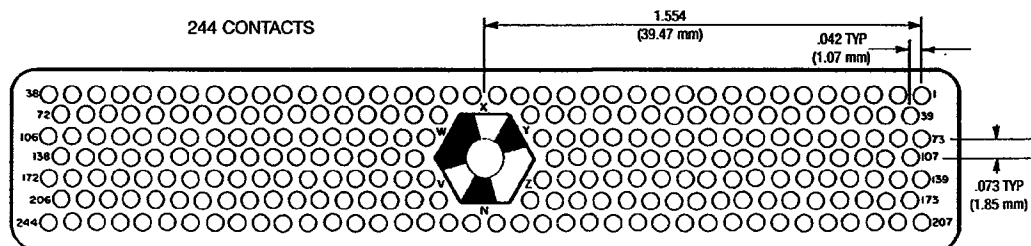
POLARIZING
BOSS SHOWN
IN X POSITION



POLARIZING
BOSS SHOWN
IN Y POSITION



POLARIZING
BOSS SHOWN
IN Z POSITION



CRIMP REMOVABLE — REAR RELEASE

GENERAL INFORMATION

CONTACT PERFORMANCE DATA

Size	22 gage
Separation Forces	0.7 oz. minimum
Engagement Forces	12 oz. maximum
Current Rating	22 Awg. Ga. 5 amps 26 Awg. Ga. 2 amps
Resistance	60 mv. maximum
Crimp Tensile Strength	
Wire Size 22	12 lbs. minimum
26	5 lbs. minimum

CONTACT/CONNECTOR PERFORMANCE DATA

Mating & Unmating Forces	7 inch lbs., maximum torque
Contact Retention	10 lbs. minimum

CONNECTOR PERFORMANCE DATA

Durability	500 cycles
Dielectric Strength	
Sea Level	1200 VAC RMS
70,000 ft. altitude	375 VAC RMS
Thermal Shock (Operating Temperature)	-54°C to +125°C (-65°F to +257°F)
Insulation Resistance at 500 V DC	5000 megohms minimum

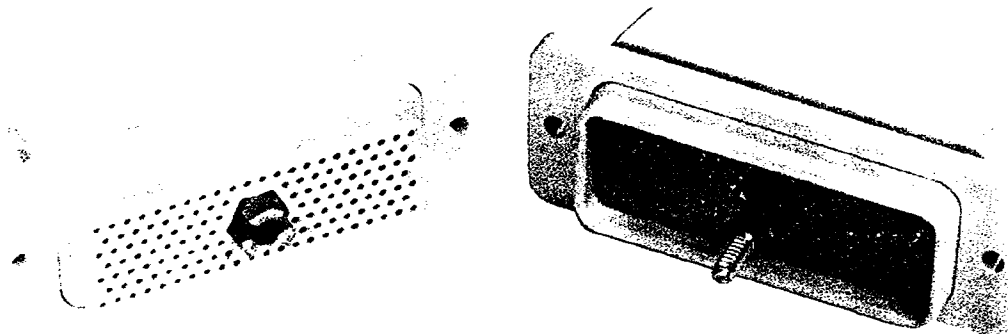
MATERIALS

Connector Body	Thermoplastic polyester, flame retardant, 30% glass filled per ASTM D-4507
Jackscrew	Stainless Steel, Type 303 per ASTM A 581 or A 582
Polarizing Boss	Aluminum Alloy 7075-T6 Per QQ-A-225/9
Retaining Clip	Beryllium Copper Per QQ-C-533
Interfacial Seal and Backseal	Fluorosilicone Rubber

FINISH

Jackscrew	Electrolytic Polish per MIL-S-5002
Polarizing Boss	Anodize per MIL-A-8625, Type II, gray

CRIMP REMOVABLE — REAR RELEASE ORDERING NOMENCLATURE



RA 9 A 16 C 132 P N 000

CONNECTOR & COUPLING TYPE

RA for Boss
with Standard Jackscrew
RB for Boss only
RJ for Boss
with Fixed Jackscrew
RK for Actuating Boss

SHELL STYLE

2 for Receptacle Shell
with Mounting Flange,
Socket Contacts
9 for Plug Shell
with Mounting Flange,
Pin Contacts

CLASS

A for Non-Environmental
E for Environmental
P for Potting

SHELL SIZE

10 for 38 Contacts
12 for 88 Contacts
14 for 108 Contacts
16 for 132 Contacts
18 for 244 Contacts
(Page 7)

CONTACTS

C for Connector with Contacts
—for Connector less Contacts

VARIATIONS, MODIFICATIONS

Contact factory for available
variations and modifications.

BOSS POLARIZING POSITION

(Page 7)

90° Boss	85° Boss
N	X
V	Y
W	Z

CONTACT STYLE (Page 5)

P for Pin (Plug shell only)
S for Socket (Receptacle shell only)

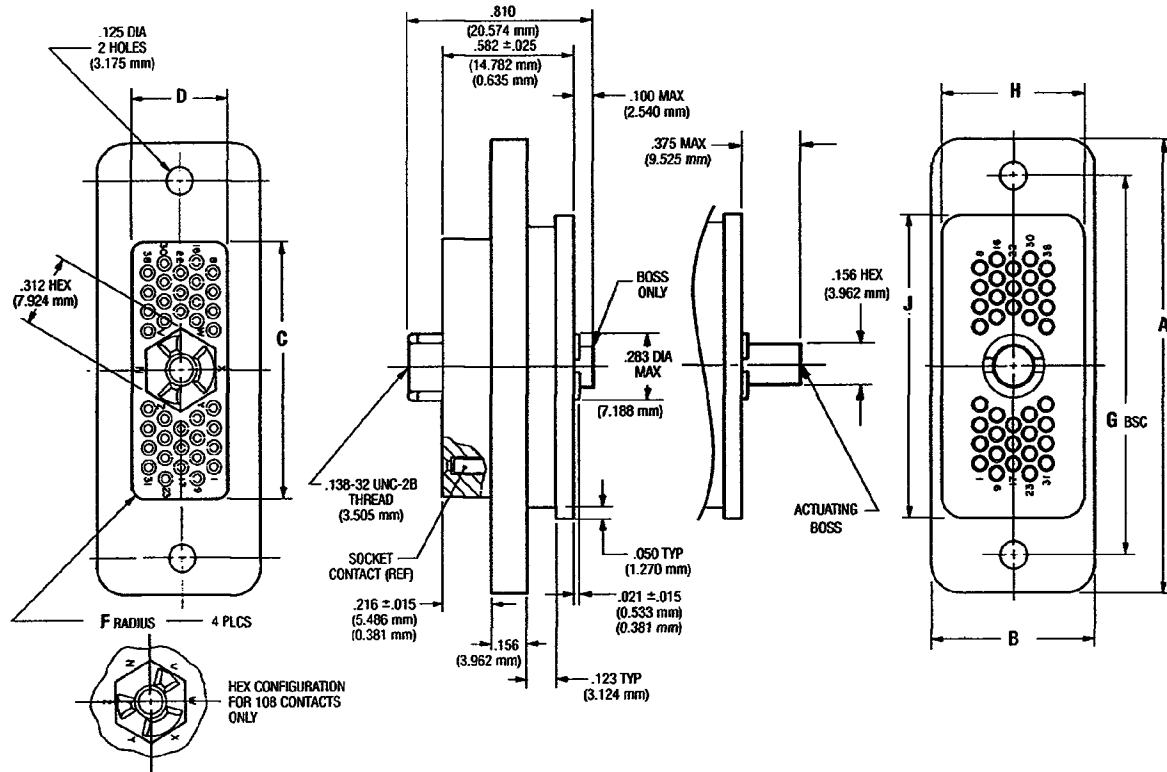
INSERT ARRANGEMENT

(Page 7)

038
088
108
132
244

CRIMP REMOVABLE – REAR RELEASE – RECEPTACLE NON-ENVIRONMENTAL

SIZE 38 SHOWN



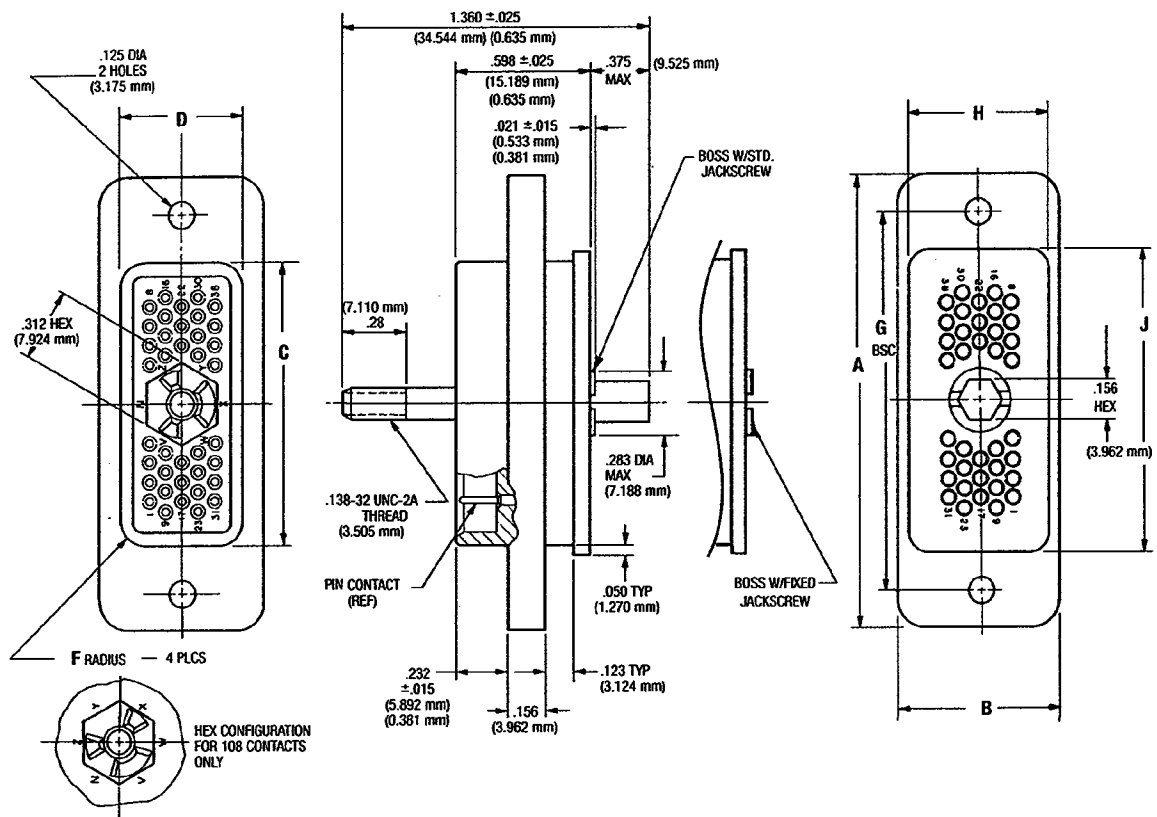
TYPE RB2A
MATES WITH PLUG
TYPE RA OR WNA

TYPE RK2A
MATES WITH PLUG
TYPE RJ OR WNJ

SHELL SIZE	NO. OF CONTACTS	A		B		C MAX		D MAX		F MAX		G BSC		H MAX		J MAX	
		IN. ±.015	MM ±0.381	IN. ±.015	MM ±0.381	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.
10	38	1.945	49.403	.725	18.415	1.108	28.143	.432	10.972	.065	1.651	1.625	41.275	.635	16.129	1.318	33.477
12	88	2.780	70.612	.725	18.415	1.948	49.479	.432	10.972	.065	1.651	2.460	62.484	.635	16.129	2.158	54.813
14	108	1.990	50.546	1.077	27.355	1.332	33.832	.781	19.837	.073	1.854	1.718	43.637	.987	25.069	1.542	39.166
16	132	2.790	70.866	.902	22.910	1.956	49.682	.616	15.646	.115	2.921	2.470	62.738	.812	20.624	2.166	55.016
18	244	4.128	104.851	.902	22.910	3.302	83.870	.624	15.849	.119	3.022	3.808	96.723	.812	20.624	3.504	89.001

CRIMP REMOVABLE – REAR RELEASE – PLUG
NON-ENVIRONMENTAL

SIZE 38 SHOWN



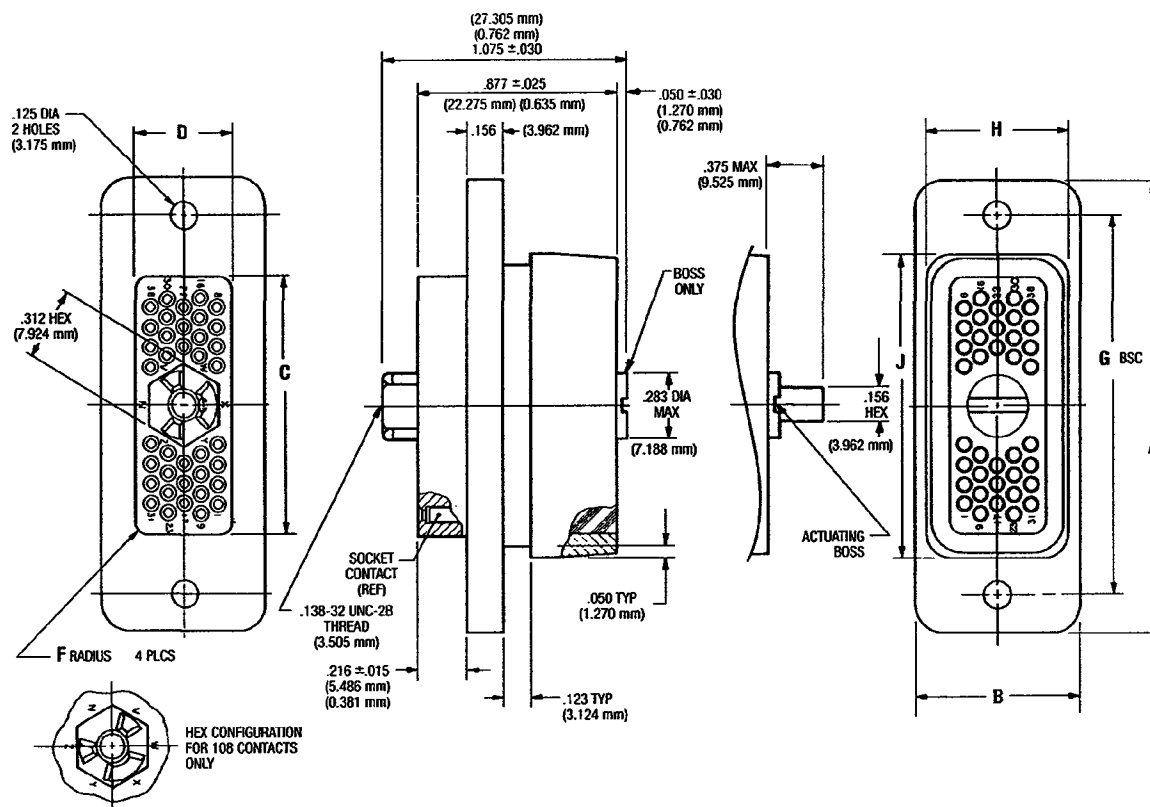
**TYPE RA9A
MATES WITH RECEPTACLE
TYPE RB OR WNB**

TYPE RJ9A
MATES WITH RECEPTACLE
TYPE RK OR WNK

SHELL SIZE	NO. OF CONTACTS	A		B		C MAX		D MAX		F MAX		G BSC		H MAX		J MAX	
		IN. ±.015	MM ±0.381	IN. ±.015	MM ±0.381	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.
10	38	1.945	49.403	.725	18.415	1.229	31.216	.557	14.147	.115	2.921	1.625	41.275	.635	16.129	1.318	33.477
12	88	2.780	70.612	.725	18.415	2.069	52.552	.557	14.147	.115	2.921	2.460	62.484	.635	16.129	2.158	54.813
14	108	1.990	50.546	1.077	27.355	1.453	36.906	.906	23.012	.123	3.124	1.718	43.637	.987	25.069	1.542	39.166
16	132	2.790	70.866	.902	22.910	2.077	52.755	.741	18.821	.165	4.191	2.470	62.738	.812	20.624	2.166	55.016
18	244	4.128	104.851	.902	22.910	3.415	86.741	.741	18.821	.165	4.191	3.808	96.723	.812	20.624	3.504	89.001

CRIMP REMOVABLE – REAR RELEASE – RECEPTACLE
ENVIRONMENTAL

SIZE 38 SHOWN



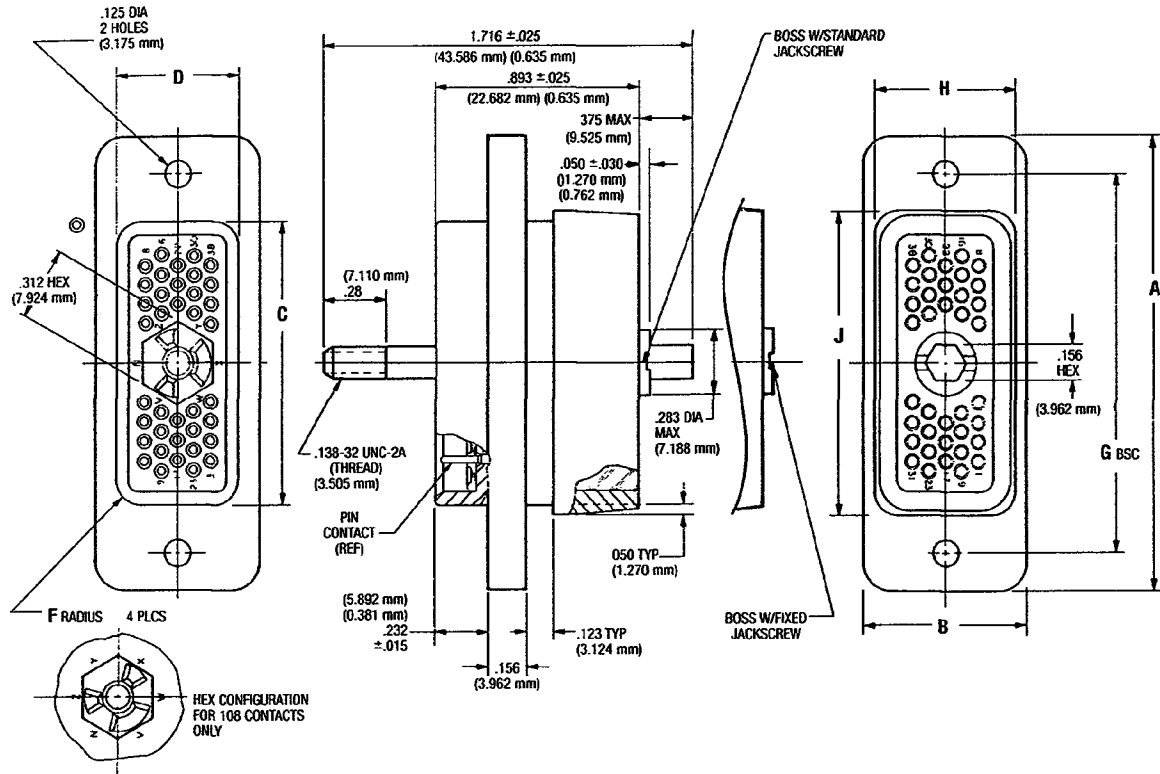
TYPE RB2E
MATES WITH PLUG
TYPE RA OR WNA

TYPE RK2E
MATES WITH PLUG
TYPE RJ OR WNJ

SHELL SIZE	NO. OF CONTACTS	A		B		C MAX		D MAX		F MAX		G BSC		H MAX		J MAX	
		IN. ±.015	MM ±0.381	IN. ±.015	MM ±0.381	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.
10	38	1.945	49.403	.725	18.415	1.108	28.143	.432	10.972	.065	1.651	1.625	41.275	.635	16.129	1.318	33.477
12	88	2.780	70.612	.725	18.415	1.948	49.479	.432	10.972	.065	1.651	2.460	62.484	.635	16.129	2.158	54.813
14	108	1.990	50.546	1.077	27.355	1.332	33.832	.781	19.837	.073	1.854	1.718	43.637	.987	25.069	1.542	39.166
16	132	2.790	70.866	.902	22.910	1.956	49.682	.616	15.646	.115	2.921	2.470	62.738	.812	20.624	2.166	55.016
18	244	4.128	104.851	.902	22.910	3.302	83.870	.624	15.849	.119	3.022	3.808	96.723	.812	20.624	3.504	89.001

CRIMP REMOVABLE – REAR RELEASE – PLUG ENVIRONMENTAL

SIZE 38 SHOWN



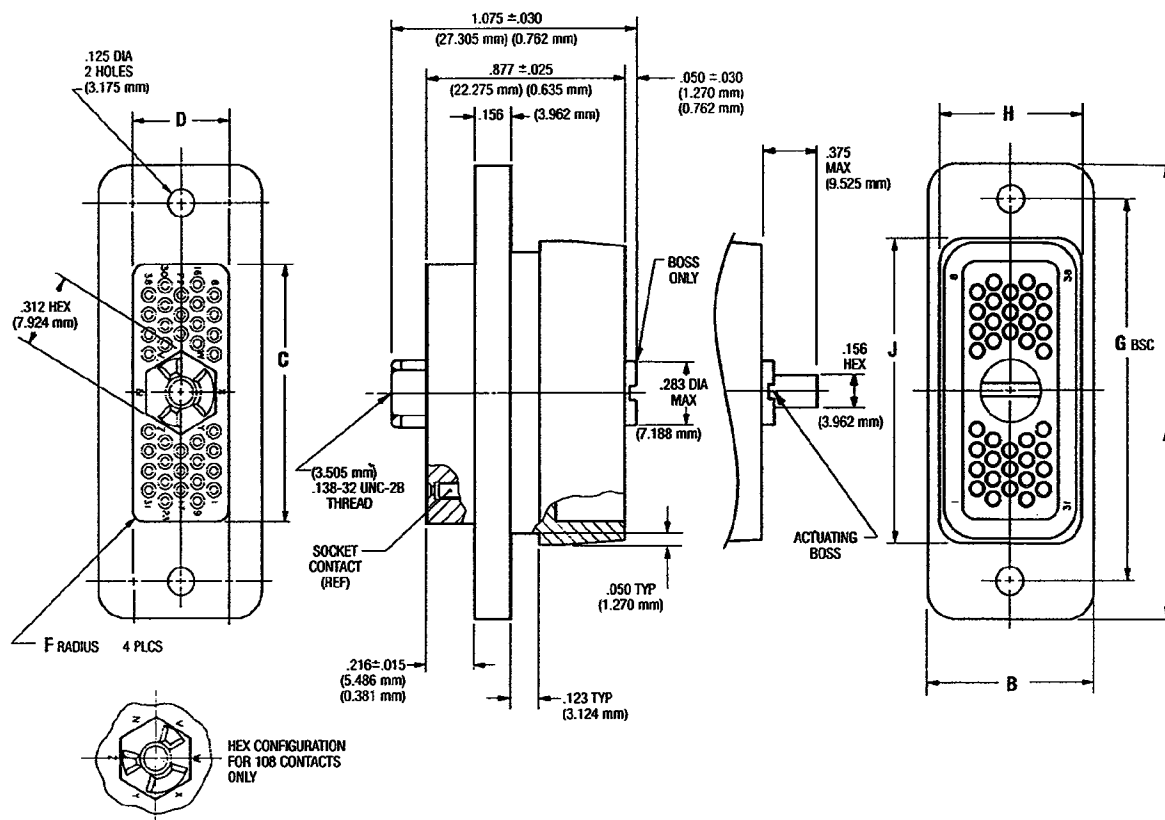
TYPE RA9E
MATES WITH RECEPTACLE
TYPE RB OR WNB

TYPE RJ9E
MATES WITH RECEPTACLE
TYPE RK OR WNK

SHELL SIZE	NO. OF CONTACTS	A		B		C MAX		D MAX		F MAX		G BSC		H MAX		J MAX	
		IN. ±.015	MM ±0.381	IN. ±.015	MM ±0.381	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.
10	38	1.945	49.403	.725	18.415	1.229	31.216	.557	14.147	.115	2.921	1.625	41.275	.635	16.129	1.318	33.477
12	88	2.780	70.612	.725	18.415	2.069	52.552	.557	14.147	.115	2.921	2.460	62.484	.635	16.129	2.158	54.813
14	108	1.990	50.546	1.077	27.355	1.453	39.906	.906	23.012	.123	3.124	1.718	43.637	.987	25.069	1.542	39.166
16	132	2.790	70.866	.902	22.910	2.077	52.755	.741	18.821	.165	4.191	2.470	62.738	.812	20.624	2.166	55.016
18	244	4.128	104.851	.902	22.910	3.415	86.741	.741	18.821	.165	4.191	3.808	96.723	.812	20.624	3.504	89.001

CRIMP REMOVABLE – REAR RELEASE – RECEPTACLE POTTING

SIZE 38 SHOWN



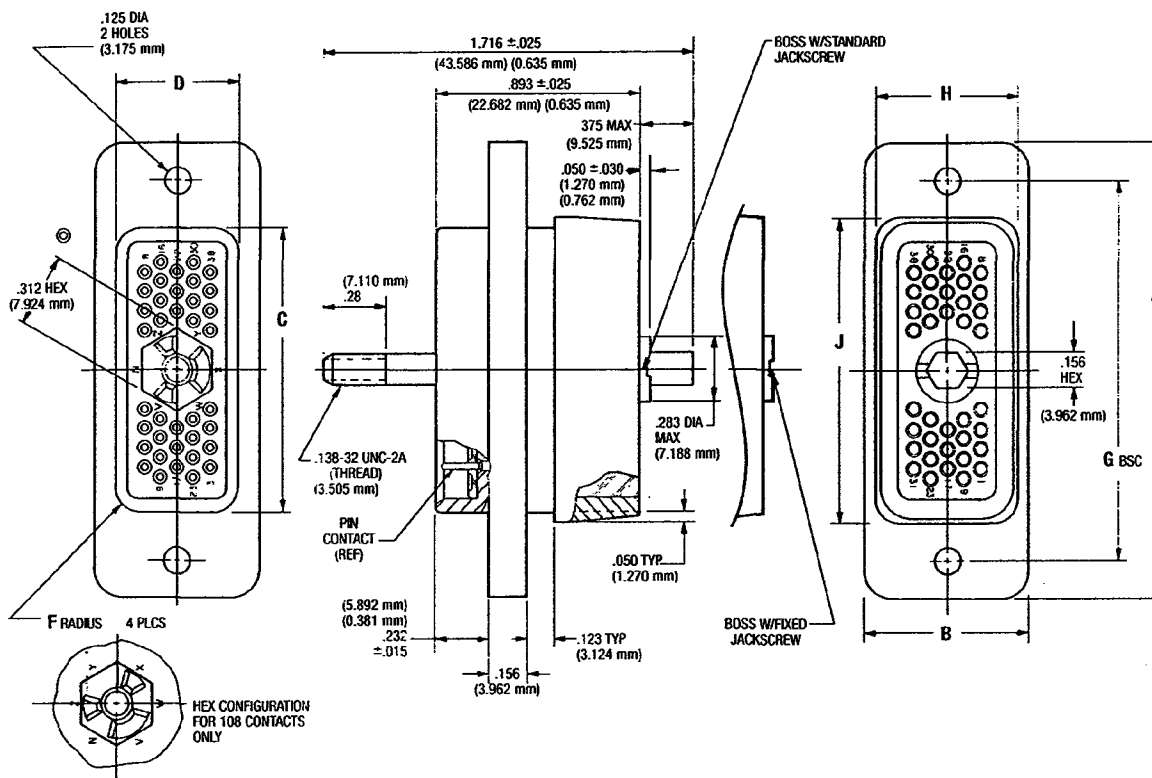
TYPE RB2P
MATES WITH PLUG
TYPE RA OR WNA

TYPE RK2P
MATES WITH PLUG
TYPE RJ OR WNJ

SHELL SIZE	NO. OF CONTACTS	A		B		C MAX		D MAX		F MAX		G BSC		H MAX		J MAX	
		IN. ±.015	MM ±0.381	IN. ±.015	MM ±0.381	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.
10	38	1.945	49.403	.725	18.415	1.108	28.143	.432	10.972	.065	1.651	1.625	41.275	.635	16.129	1.318	33.477
12	88	2.780	70.612	.725	18.415	1.948	49.479	.432	10.972	.065	1.651	2.460	62.484	.635	16.129	2.158	54.813
14	108	1.990	50.546	1.077	27.355	1.332	33.832	.781	19.837	.073	1.854	1.718	43.637	.987	25.069	1.542	39.166
16	132	2.790	70.866	.902	22.910	1.956	49.682	.616	15.646	.115	2.921	2.470	62.738	.812	20.624	2.166	55.016
18	244	4.128	104.851	.902	22.910	3.302	83.870	.624	15.849	.119	3.022	3.808	96.723	.812	20.624	3.504	89.001

CRIMP REMOVABLE – REAR RELEASE – PLUG POTTING

SIZE 38 SHOWN



TYPE RA9P
MATES WITH RECEPTACLE
TYPE RB OR WNB

TYPE RJ9P
MATES WITH RECEPTACLE
TYPE RK OR WNK

SHELL SIZE	NO. OF CONTACTS	A		B		C MAX		D MAX		F MAX		G BSC		H MAX		J MAX	
		IN. ±.015	MM ±0.381	IN. ±.015	MM ±0.381	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.
10	38	1.945	49.403	.725	18.415	1.229	31.216	.557	14.147	.115	2.921	1.625	41.275	.635	16.129	1.318	33.477
12	88	2.780	70.612	.725	18.415	2.069	52.552	.557	14.147	.115	2.921	2.460	62.484	.635	16.129	2.158	54.813
14	108	1.990	50.546	1.077	27.355	1.453	39.906	.906	23.012	.123	3.124	1.718	43.637	.987	25.069	1.542	39.166
16	132	2.790	70.866	.902	22.910	2.077	52.755	.741	18.821	.165	4.191	2.470	62.738	.812	20.624	2.166	55.016
18	244	4.128	104.851	.902	22.910	3.415	86.741	.741	18.821	.165	4.191	3.808	96.723	.812	20.624	3.504	89.001

RFI/EMI FIXED SOLDER FILTER – WF SERIES

GENERAL INFORMATION

CONTACT PERFORMANCE DATA

Size	22 gage
Separation Forces	0.7 oz. minimum
Engagement Forces	12 oz. maximum
Voltage Rating	200 VDC
Feed Thru Current Rating	3 amps
R F Current Maximum	0.25 amps
Resistance	57 mv. maximum
Insertion Loss (Attenuation) Minimum	
100 mhz	35 db minimum
200 mhz	50 db minimum
1000 mhz	50 db minimum
10 ghz.	50 db minimum
Capacitance	1000 pf to 3000 pf

CONTACT/CONNECTOR PERFORMANCE DATA

Mating & Unmating Forces	5 inch lbs. maximum torque
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CONNECTOR PERFORMANCE DATA

Durability	500 cycles
Dielectric Strength	
Sea Level	500 V DC
70,000 ft. altitude	125 VDC
Thermal Shock (Operating Temperature)	-54°C to +125°C (-65°F to +257°F)
Insulation Resistance at 200 V DC.	10,000 megohms minimum

MATERIALS

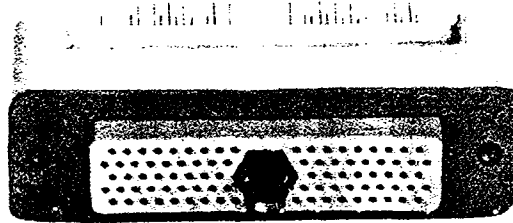
Connector Body	Thermoplastic polyester, flame retardant, 30% glass filled per ASTM D-4507
Polarizing Boss	Aluminum Alloy 7075-T6 per QQ-A-225/9
Securing Cap	Corrosion Resistant Steel, Type 303 per ASTM A 581 or A 582
Insert	Brass
Grounding Gaskets	Conductive Rubber
Filter Assembly	Ceramic Capacitor & Ferrite Core
Ground Plane	Corrosion Resistant Steel, QQ-S-766

FINISH

Polarizing Boss	Electroless Nickel
Securing Cap and Ground Plane	Passivate per MIL-S-5002

RFI/EMI FIXED SOLDER FILTER – WF SERIES

ORDERING INFORMATION



W F B 038 O S BN 000

SERIES

FIXED FILTER

COUPLING TYPE

A—Boss w/Jackscrew
B—Boss

INSERT ARRANGEMENT

038
088
132
(Page 7)

CONTACT LOCATION

O – Full complement of
Filter contacts
For variations in number and
location of Filter and Dummy
contacts, consult factory.

MODIFICATIONS & VARIATIONS

Omit for Standard –
Consult factory
for available variations
and modifications

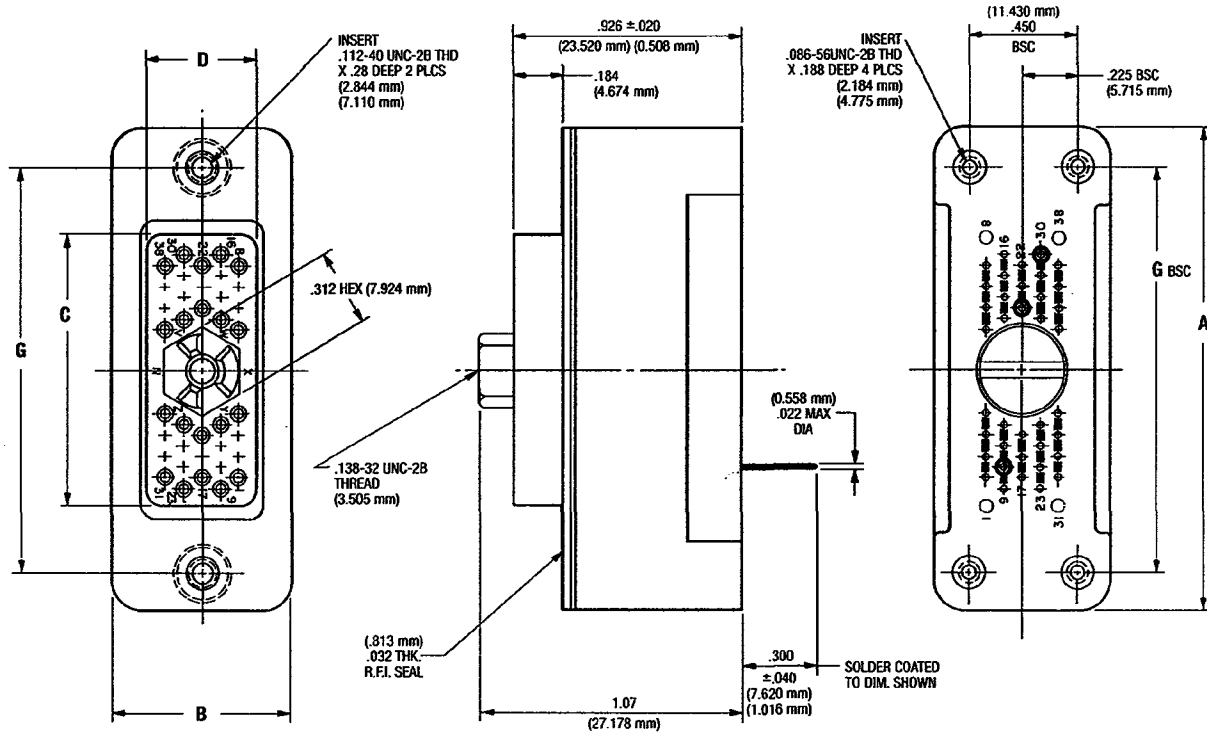
POLARIZING POSITION

90° BOSS	85° BOSS
BN	CX
BV	CY
BW	CZ

CONTACTS
S—SOCKET

RFI/EMI FIXED SOLDER FILTER — WF SERIES

SIZE 38 SHOWN



RFI FIXED FILTER RECEPTACLE
MATES WITH PLUG TYPE RA OR WNA

NO. OF CONTACTS	A		B		C MAX		D MAX		G BSC	
	IN. ±.015	MM ±0.381	IN. ±.015	MM ±0.381	IN.	MM	IN.	MM	IN.	MM
38	1.945	49.403	.725	18.415	1.108	28.143	.432	10.972	1.625	41.275
88	2.780	70.612	.725	18.415	1.948	49.479	.432	10.972	2.460	62.484
132	2.790	70.866	.902	22.910	1.956	49.682	.616	15.646	2.470	62.738

FIXED SOLDER TAIL CONTACT — WN SERIES

GENERAL INFORMATION

CONTACT PERFORMANCE DATA

Size	22 gage
Separation Forces	0.7 oz. minimum
Engagement Forces	12 oz. maximum
Current Rating	3 amps
Resistance	25 mv. maximum

CONTACT/CONNECTOR PERFORMANCE DATA

Mating & Unmating Forces	7 inch lbs maximum torque
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CONNECTOR PERFORMANCE DATA

Durability	500 cycles
Dielectric Strength	
Sea Level	1200 VAC RMS
70,000 ft altitude	375 VAC RMS
Thermal Shock (Operating Temperature)	-54°C to +125°C (-65°F to +257°F)
Insulation Resistance at 500 V DC	5000 megohms minimum

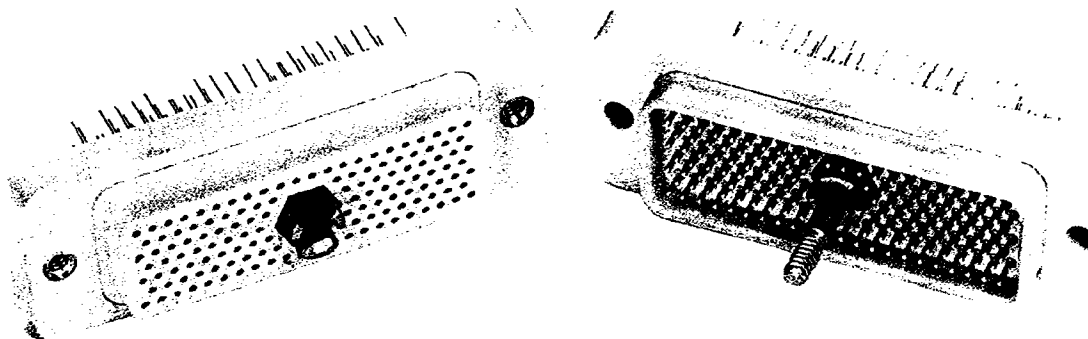
MATERIALS

Connector Body	Thermoplastic polyester, flame retardant, 30% glass filler per ASTM-D4507
Jackscrew	Stainless Steel, Type 303 per ASTM A 581 or A 582
Interfacial Seal	Fluorosilicone Rubber
Polarizing Boss	Aluminum Alloy 7075-T6 per QQ-A-225/9
Securing Cap	Aluminum Alloy 7075-T6 per QQ-A-225/9
Insert	Brass

FINISH

Jackscrew	Electrolytic Polish per MIL-S-5002
Contacts (pin & socket)	Gold plate per MIL-G-45204, Type II, Class I over nickel plate per QQ-N-290, Class 2 Solder terminations meet solderability tests of MIL-STD-202, Method 208
Polarizing Boss	Anodize, MIL-A-8625, Type II, Gray
Securing Cap	Anodize, MIL-A-8625, Type II, Gray

FIXED SOLDER TAIL CONTACT — WN SERIES **ORDERING NOMENCLATURE**



W N B 038 S BN 000

SERIES

**NON-REMOVABLE
CONTACTS**

COUPLING TYPE

A — BOSS W/JACKSCREW
 B — BOSS
 J — BOSS WITH FIXED JACKSCREW
 K — ACTUATING BOSS

INSERT ARRANGEMENT

038 FOR 38 CONTACTS
 088 FOR 88 CONTACTS
 108 FOR 108 CONTACTS
 132 FOR 132 CONTACTS
 244 FOR 244 CONTACTS
 (Page 7)

MODIFICATIONS & VARIATIONS EXAMPLE

Omit for
 Standard Receptacle Connector

000 Plug Connector
 with Interfacial Seal

001 Plug Connector
 less Interfacial Seal

*Consult factory for other
 variations and modifications.*

POLARIZING POSITION

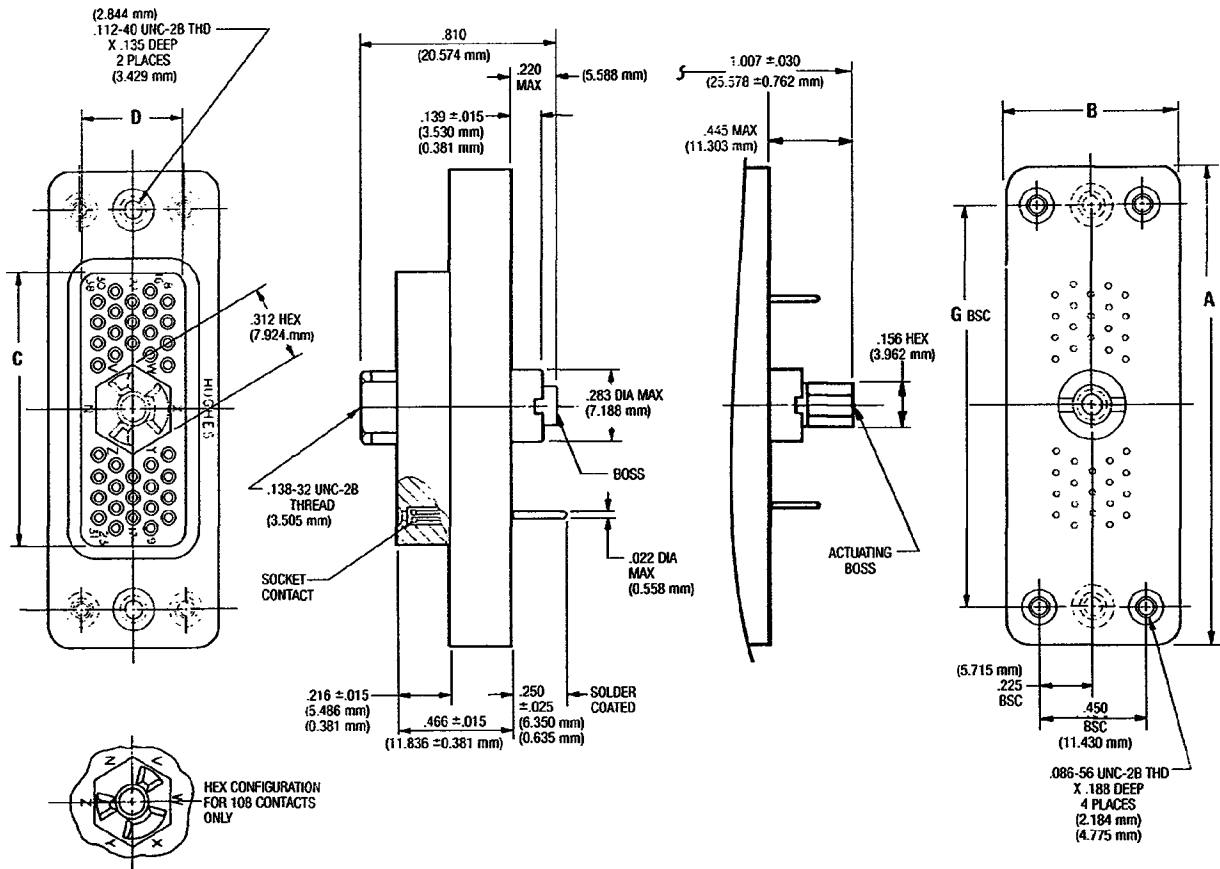
90° BOSS	85° BOSS
BN	CX
BV	CY
BW	CZ

CONTACTS

P for Pin (Plug shell only)
 S for Socket (Receptacle shell only)

FIXED SOLDER TAIL CONTACT — WN SERIES — RECEPTACLE

SIZE 38 SHOWN



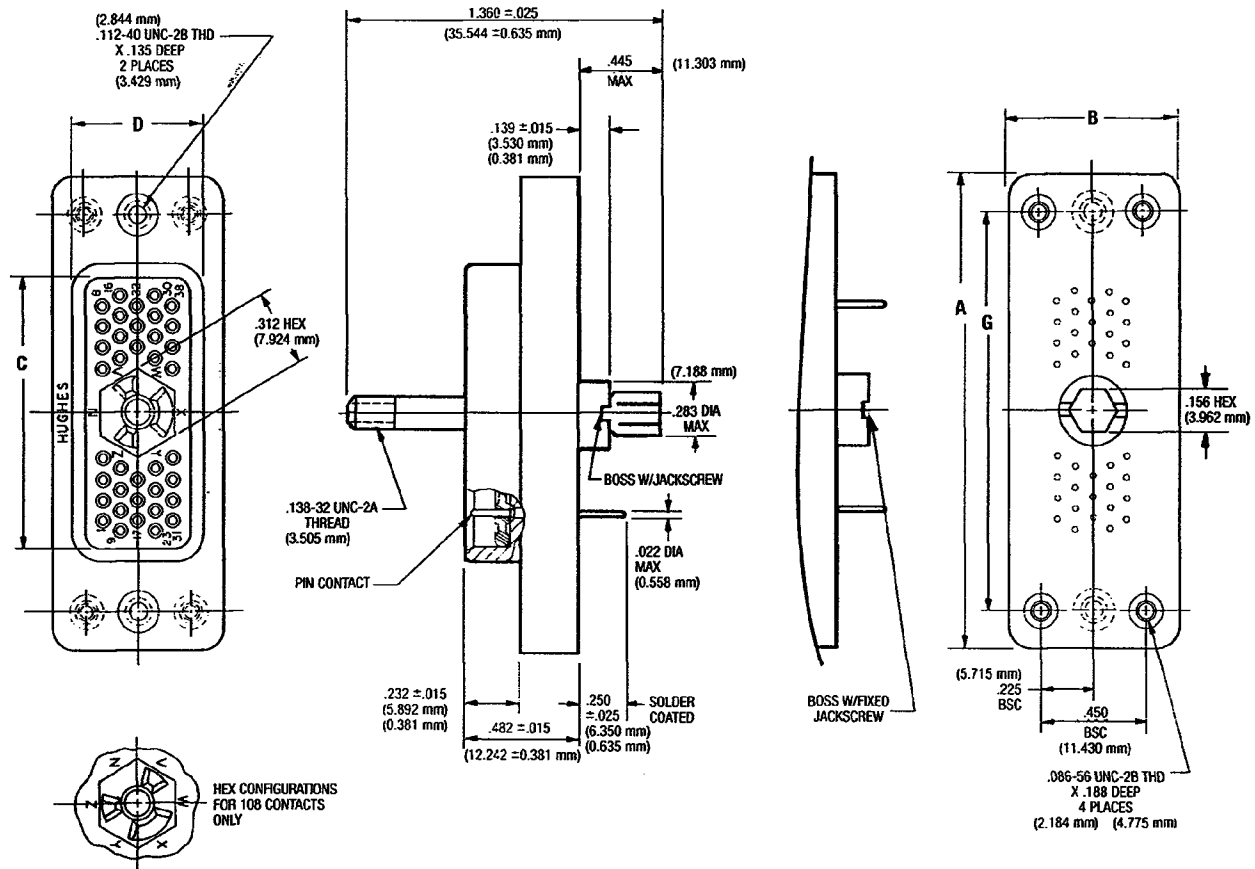
TYPE WNB
MATES WITH PLUG
TYPE WNA OR RA

TYPE WNK
MATES WITH PLUG
TYPE WNJ OR RJ

SHELL SIZE	NO. OF CONTACTS	A		B		C MAX		D MAX		G BSC	
		IN. ±.015	MM ±0.381	IN. ±.015	MM ±0.381	IN.	MM.	IN.	MM.	IN.	MM.
10	38	1.945	49.403	.725	18.415	1.108	28.143	.432	10.972	1.625	41.275
12	88	2.780	70.612	.725	18.415	1.948	49.479	.432	10.972	2.460	62.484
14	108	1.990	50.546	1.077	27.355	1.332	33.832	.781	19.837	1.718	43.637
16	132	2.790	70.866	.902	22.910	1.956	49.682	.616	15.646	2.470	62.738
18	244	4.128	104.851	.902	22.910	3.302	83.870	.624	15.849	3.808	96.723

FIXED SOLDER TAIL CONTACT — WN SERIES — PLUG

SIZE 38 SHOWN



TYPE WNA
MATES WITH RECEPTACLE
TYPE WNB OR RB

TYPE WNJ
MATES WITH RECEPTACLE
TYPE WNK OR RK

SHELL SIZE	NO. OF CONTACTS	A		B		C MAX		D MAX		G BSC	
		IN. ±.015	MM ±0.381	IN. ±.015	MM ±0.381	IN.	MM.	IN.	MM.	IN.	MM.
10	38	1.945	49.403	.725	18.415	1.129	31.216	.557	14.147	1.625	41.275
12	88	2.780	70.612	.725	18.415	2.069	52.552	.557	14.147	2.460	62.484
14	108	1.990	50.546	1.077	27.355	1.453	36.906	.906	23.012	1.718	43.637
16	132	2.790	70.866	.902	22.910	2.077	52.755	.741	18.821	2.470	62.738
18	244	4.128	104.851	.902	22.910	3.415	86.741	.741	18.821	3.808	96.723