



## **RMC** Connector Series

Multi-Pin  
High Voltage  
Connector Kits

**5 to 45 KVDC**  
Threaded Coupling

Altitude to 15,000 feet

**Operating Temperature:**  
-40°C to +85°C

## **RMC** Connector Series\*



### **MULTI-CONTACT HIGH VOLTAGE CONNECTOR KITS and CABLE ASSEMBLIES**

#### **FEATURES:**

- -40°C to +85°C operating temperature
- Can be assembled in the field
- Materials conform to Mil-Specs
- Highly reliable
- Sea level to 15,000 ft operation
- Environmentally sealed interface

\*Reynolds Industries, Inc. acquired the RMC connector series product line from Rowe Industries, Inc. in 1997.



# RMC Connector Series

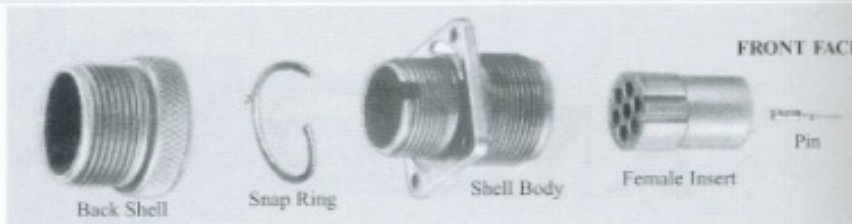
Multi-Pin  
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# RMC Connector Series



**APPLICATIONS:** Designed for use wherever high reliability, low cost and multi-contact connectors are required:

- Power Supplies • Lasers • Radar • X-Ray • Displays

**OPERATION:** The RMC Series uses tapered silicone rubber mating interfaces which provides corona resistant, weathertight operation over a temperature range of -40°C to + 85°C.

**SPECIFICATIONS:** Shell body and related hardware are aluminum per Federal Specification QQ-A-591. Inserts are silicone rubber per ZZ-F-765 in all styles except where noted. Socket contacts are used in the male insert and pin contacts in the female insert. (See photo above). Pin contacts are brass half hard and sockets are beryllium copper.

**NOTE:** All connectors supplied *unassembled* as a kit. Assembly instructions can be found on pages 18 thru 20

## HOW TO ORDER:

RMC Connector Series are normally supplied unassembled with simple instructions which cover soldering or crimping contacts, assembly, potting, etc. If required, Reynolds will supply connectors terminated and tested to your specifications. Please specify cable type and length, connector type and testing parameters.

## CATALOG PART NUMBER EXPLANATION:

3 RMC 2406P 1/10/-/-

### SHELL STYLE

(See page 12 for shell styles)

- 1= Plug
- 2= Panel mounted receptacle
- 3= Receptacle
- 4= Panel mounted receptacle with potting shell

### INSERT STYLE

(See page 11 for insert styles.) Insert Style determines shell size, number of contacts, contact type (pin or socket) and gage pin.

### OPTIONS (Omit for Standard)

**SHELL PLATING:** Cadmium per QQ-P-416, Type II, is standard

1= Olive drab chromate per QQ-P-416, Type II, Class C

2= Black cadmium plate per QQ-P-416, Type II, Class C

4= Electroless nickel per MIL-C-26074, Grade A, Class 4

**CONTACT PLATING:** Gold plated per MIL-G-45204, Class 1 is standard

### STRAIN RELIEF:

20= Cable Clamp

20A= Cable Clamp w/rubber bushing

### SPECIAL:

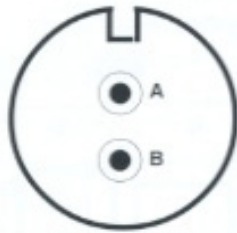
CS= See customer drawing for specifications for special termination, etc.

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### Single Contact

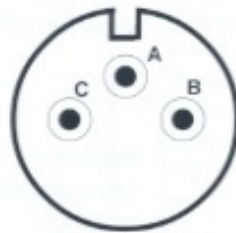
Insert Style	KVDC	Pin	Shell Size
1001P	16	#20 P	#10 MOD
1001S	16	#20 S	#10 MOD
1802P	30	#20 P	#18
1802S	30	#20 S	#18
1803P	30	#16 P	#18
1803S	30	#16 S	#18
2204P	45	#16 P	#22
2204S	45	#16 S	#22
2405P	30	#12 P	#24
2405S	30	#12 S	#24



### Two Contact

Insert Style	KVDC	Pin	Shell Size
2406P	25	#12 P	#24
2406S	25	#12 S	#24

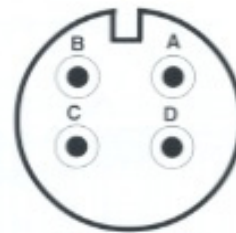
Note: Voltage ratings are pin to pin and pin to shell and socket to socket and socket to shell.



### Three Contact

Insert Style	KVDC	Pin	Shell Size
1607P	16	#20 P	#16 MOD
1607S	16	#20 S	#16 MOD
2408P	25	#12 P	#24
2408S	25	#12 S	#24

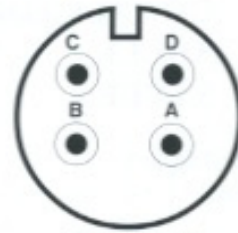
Note: Voltage ratings are pin to pin and pin to shell and socket to socket and socket to shell.



### Four Contact

Insert Style	KVDC	Pin	Shell Size
1809P	15	#16 P	#18 MOD
1809S	15	#16 S	#18 MOD

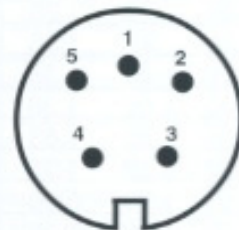
Note: Voltage ratings are pin to pin and pin to shell and socket to socket and socket to shell.



### Four Contact

Insert Style	KVDC	Pin	Shell Size
2810P	20*	#8 P (C&D) #28 #16 P (A&B)	#28
2810S	20*	#8 S (C&D) #28 #16 S (A&B)	#28

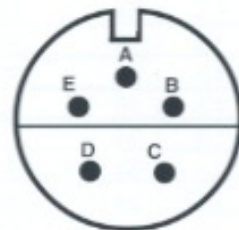
\*Note: Voltage rating by contact:  
Pin C&D to pin A & B and shell is 20 KVDC  
Pin C to pin D is 500 VDC  
Pin A to pin B is 500 VDC  
Pin A&B to shell is 500 VDC



### Five Contact

Insert Style	KVDC	Pin	Shell Size
1211P	10	#20 P	#12 MOD
1211S	10	#20 S	#12 MOD

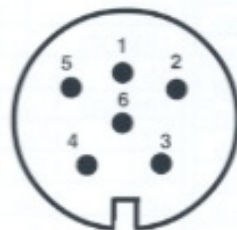
Note: Voltage ratings are pin to pin and pin to shell and socket to socket and socket to shell.



### Five Contact

Insert Style	KVDC	Pin	Shell Size
2812P	25*	#12 P	#28
2812S	25*	#12 S	#28

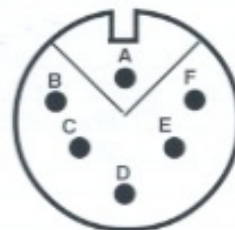
\*Note: Voltage rating by contact:  
pin C, D; pin C,D to A,B,E and to shell is 25 KVDC  
Pin A,B,E to pin A,B,E and to shell is 5 KVDC. Ratings apply to both insert styles



### Six Contact

Insert Style	KVDC	Pin	Shell Size
1221P	10	#20 P	#12
1221S	10	#20 S	#12

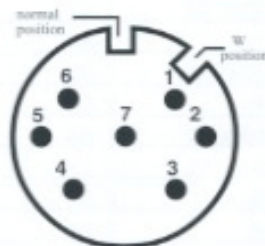
Note: Voltage ratings are pin to pin and pin to shell and socket to socket and socket to shell.



### Six Contact

Insert Style	KVDC	Pin	Shell Size
2814P	25*	#12 P	#28
2814S	25*	#12 S	#28

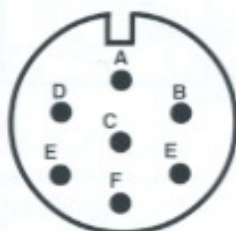
\*Note: 25 KVDC rating is for pin A to other pins and shell.  
Pins B,C,E, F to other pins and shell are 5 KVDC rated. Pin D to shell is 115 VDC rated.  
Ratings apply to both insert styles



### Seven Contact

Insert Style	KVDC	Pin	Shell Size
1615P	15	#20 P	#16
1615S	15	#20 S	#16

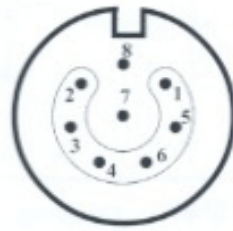
Note: Voltage ratings are pin to pin and pin to shell and socket to socket and socket to shell.  
Ordering Note: When ordering this insert, specify normal position as 1615P or W position 1615PW.



### Seven Contact

Insert Style	KVDC	Pin	Shell Size
4016P	15*	#6 P (A-D) #12P (E-G)	#40
4016S	15*	#6 S (A-D) #12S (E-G)	#40

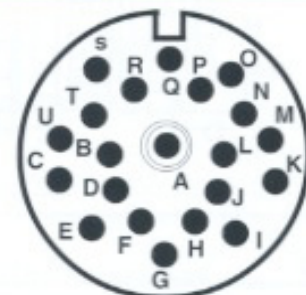
\*Note: Voltage rating by contact:  
pin A,B,C,D, to pin E,F,G and to shell is 15 KVDC  
Pin E,F,G to pin E,F,G and to shell is 600 VDC. Ratings apply to both insert styles



### Eight Contact

Insert Style	KVDC	Pin	Shell Size
3218P	30*	#16 P	#32
3218S	30*	#16 S	#32

\*Note: Voltage rating by contact:  
pin 7& 8, to other pins and to shell is 30 KVDC  
Pin 1-6 to pin 1-6 and to shell is 10 KVDC. Ratings apply to both insert styles



### Twenty-One Contact

Insert Style	KVDC	Pin	Shell Size
4020P	25*	#12 P (A) #16 P (B-U)	#40
4020S	25*	#12 S (A) #16P (B-U)	#40

\*Note: Voltage rating by Contact:  
Pin A to other pins and to shell is 25 KVDC  
All other pins to pins is 10 KVDC  
All other pins to shell is 5 KVDC  
Ratings apply to both insert styles



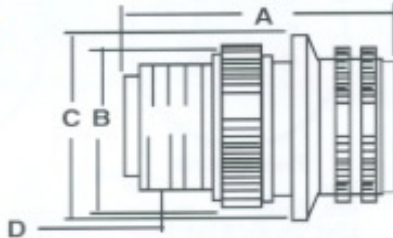
## CONNECTOR SHELL STYLES

RMC Connector Series hardware such as mechanical strain relief, split shell bodies and right angle adapters are compatible with shell bodies shown on this page.

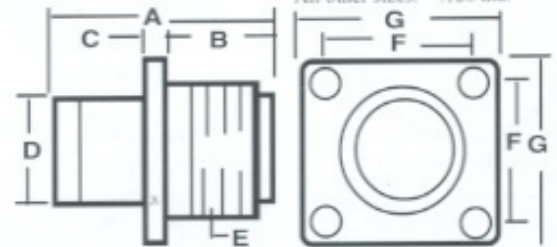
**Mounting Hole Diameter (shell styles 2&4)**

Sizes 32, 36, 40: .173 dia.  
 Sizes 24 and 28: .147 dia.  
 All other sizes: .120 dia.

Shell Style 1 Plug



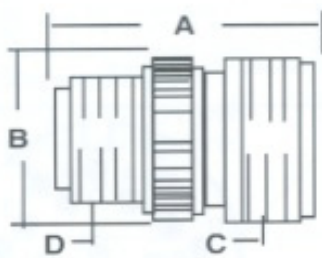
Shell Style 2 Panel mounted receptacle



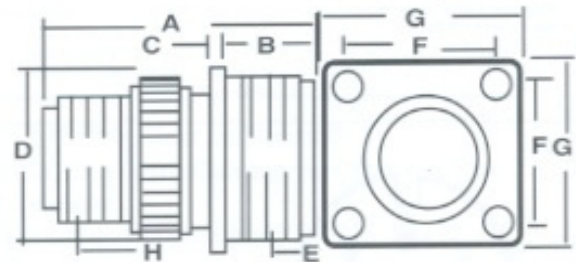
Shell Size	A	B	C	D
10MOD	1.31	.63	.88	1/2 -28
12	1.88	.78	1.00	5/8 -24
12MOD	1.41	.78	.88	5/8 -24
16	1.89	1.00	1.25	7/8 -20
16MOD	1.69	1.00	1.13	7/8 -20
18	2.00	1.13	1.34	1 -20
18MOD	1.84	1.13	1.34	1 -20
22	2.13	1.38	1.59	1 3/16 -18
24	2.25	1.50	1.72	1 7/16 -18
28	2.25	1.75	1.97	1 7/16 -18
32	2.38	2.03	2.22	1 3/4 -18
40	2.38	2.50	2.72	2 1/4 -16

Shell Size	E	C	A	B	D	F	G
10MOD	5/8 -24	.13	.94	.53	.50	.72	1.00
12	3/4 -20	.08	1.31	.75	.69	.81	1.09
12MOD	3/4 -20	.08	.88	.44	.69	.81	1.09
16	1 -20	.13	1.34	.75	.88	.97	1.28
16MOD	1 -20	.13	1.16	.55	.88	.97	1.56
18	1 1/8 -18	.13	1.34	.75	1.00	1.06	1.38
18MOD	1 1/8 -18	.13	1.16	.56	1.00	1.06	1.38
22	1 3/8 -18	.13	1.34	.75	1.25	1.25	1.63
24	1 1/2 -18	.13	1.34	.81	1.38	1.38	1.75
28	1 3/4 -18	.13	1.34	.81	1.63	1.56	2.00
32	2 -18	.13	1.44	.88	1.91	1.75	2.25
40	2 1/2 -16	.13	1.44	.88	2.19	2.81	2.75

Shell Style 3 Receptacle



Shell Style 4 Panel mounting receptacle with potting shell



Shell Size	C	A	B	D
10MOD	5/8 -24	1.28	.62	1/2 -28
12	3/4 -20	1.84	.78	5/8 -24
12MOD	3/4 -20	1.38	.78	5/8 -24
16	1 -20	1.89	1.00	7/8 -20
16MOD	1 -20	1.72	1.00	7/8 -20
18	1 1/8 -18	2.00	1.13	1 -20
18MOD	1 1/8 -20	1.83	1.13	1 -20
22	1 3/8 -18	2.13	1.38	1 3/16 -18
24	1 1/2 -18	2.25	1.50	1 7/16 -18
28	1 3/4 -18	2.25	1.75	1 7/16 -18
32	2 -18	2.38	2.03	1 3/4 -18
40	2 1/2 -16	2.38	2.50	2 1/4 -16

Shell Size	Coupling Threads	C	A	B	D	F	G	H
10MOD	5/8 -24	.13	1.28	.53	.63	.72	1.00	1/2 -28
12	3/4 -20	.08	1.84	.75	.78	.81	1.09	5/8 -24
12MOD	3/4 -20	.08	1.38	.44	.78	.81	1.09	5/8 -24
16	1 -20	.13	1.89	.75	1.00	.97	1.28	7/8 -20
16MOD	1 -20	.13	1.72	.55	1.00	.97	1.28	7/8 -20
18	1 1/8 -18	.13	2.00	.75	1.13	1.06	1.38	1 -20
18MOD	1 1/8 -18	.13	1.84	.56	1.00	1.06	1.38	1 -20
22	1 3/8 -18	.13	2.13	.75	1.38	1.25	1.63	1 3/16 -18
24	1 1/2 -18	.13	2.25	.81	1.50	1.38	1.75	1 7/16 -18
28	1 3/4 -18	.13	2.25	.81	1.75	1.56	2.00	1 7/16 -18
32	2 -18	.13	2.38	.88	2.03	1.75	2.25	1 3/4 -18