

# AJ Aquacon

## specifications, alternate positions

**AJ Contact Ratings**

Contact Size	Test Current		Maximum Millivolt Drop			Crimp Well Data		Solder Well Data	
	Standard	Hermetic	Crimp	Solder	Solder Hermetic	Diameter	Depth	Diameter	Depth
22M	3	2	30	20	60	.029 ±.001	.141	.029 <sup>+0.004</sup> <sub>-.000</sub>	.094
22D	5	–	40	–	–	.0345 ±.001	.141	–	–
22	5	3	40	20	85	.0365 ±.001	.141	.036 <sup>+0.004</sup> <sub>-.000</sub>	.094
20	7.5	5	35	20	60	.047 ±.001	.209	.044 <sup>+0.004</sup> <sub>-.000</sub>	.125
16	13	10	25	20	85	.067 ±.001	.209	.078 <sup>+0.004</sup> <sub>-.002</sub>	.141
12	23	17	25	20	85	.100 ±.002	.209	.116 ±.004	.151

**Service Rating**

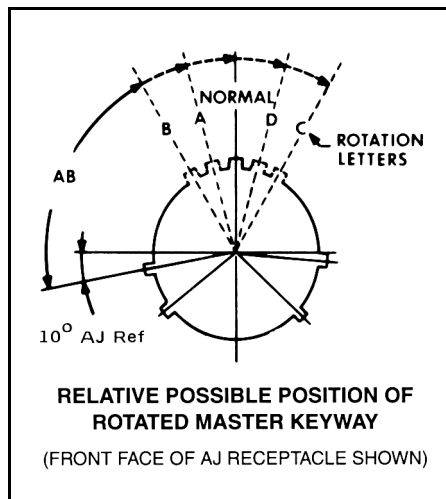
Service Rating	Suggested Operating Voltage (Sea Level)	
	AC (RMS)	DC
M	400	550
I	600	850
II	900	1250

The establishment of electrical safety factors is left entirely in the designer's hands, as he can best determine what peak voltage, switching surges, transients, etc. can be expected in a particular circuit.

Alternate positioning of connectors allows connectors with identical insert arrangements to be mounted side by side by providing a positive means of eliminating inadvertent cross-mating or cross-plugging.

Alternate positioning of Aquacon AJ Series is achieved by a rotation of the master key/keyway, relative to the insert, as part of the shell manufacturing operation.

Recommended practice is to use alternate position inserts only when necessary.



**AJ Master Key/Keyway Rotation**

Shell Size	AB Angle of Rotation (Degrees)				
	Normal	A	B	C	D
8	100	82			118
10	100	86	72	128	114
12	100	80	68	132	120
14	100	79	66	134	121
16	100	82	70	130	118
18	100	82	70	130	118
20	100	82	70	130	118
22	100	85	74	126	115
24	100	85	74	126	115

# AJ Aquacon

## insert availability

AJ	Solder	Crimp	Hermetic*	Service Rating**	Total Contacts	Contact Size					
						22D	22M	22	20	16	12
8-3	X		X	M	3				3		
8-6	X	X	X	M	6		6				
8-35		X	X	M	6	6					
8-44		X	X	M	4			4			
8-98		X	X	I	3				3		
10-5	X	X	X	I	5				5		
10-13	X	X	X	M	13		13				
10-35		X	X	M	13	13					
10-98	X	X	X	I	6				6		
12-3	X	X	X	II	3					3	
12-8	X	X	X	I	8				8		
12-35		X	X	M	22	22					
12-98	X	X	X	I	10				10		
14-5	X	X		II	5					5	
14-15	X	X	X	I	15				14	1	
14-18	X	X	X	I	18				18		
14-35		X	X	M	37	37					
14-37	X	X	X	M	37		37				
16-6†		X	X	I	6						6
16-8	X	X	X	II	8					8	
16-26	X	X	X	I	26				26		
16-35		X	X	M	55	55					
16-55	X	X	X	M	55		55				
18-11	X	X	X	II	11					11	
18-32	X	X	X	I	32				32		
18-35		X	X	M	66	66					
18-66	X	X	X	M	66		66				
20-1		X		M	79		79				
20-2		X		M	65			65			
20-16	X	X	X	II	16					16	
20-35		X		M	79	79					
20-39	X	X	X	I	39				37	2	
20-41	X	X	X	I	41				41		
22-2	X	X	X	M	85			85			
22-21	X	X	X	II	21					21	
22-32	X		X	I	32				32		
22-35		X		M	100	100					
22-55	X	X	X	I	55				55		
24-19†		X		I	19						19
24-24†		X	X	I	24					12	12
24-35		X		M	128	128					
24-61	X	X	X	I	61				61		

\* Pin insert only (Consult Amphenol, Sidney, NY for socket availability)

\*\* See specifications

† Available in AS version. Consult Amphenol, Sidney, NY for information.  
Additional insert arrangements may be made available upon request.

# AJ Aquacon

## insert arrangements

<b>Insert Arrangement</b>	8-3	8-6	8-35	8-44	8-98	10-5	10-13
<b>Service Rating</b>	M	M	M	M	I	I	M
<b>Number of Contacts</b>	3	6	6	4	3	5	13
<b>Contact Size</b>	20	22M	22D	22	20	20	22M

<b>Insert Arrangement</b>	10-35	10-98	12-3	12-8	12-35	12-98
<b>Service Rating</b>	M	I	II	I	M	I
<b>Number of Contacts</b>	13	6	3	8	22	10
<b>Contact Size</b>	22D	20	16	20	22D	20

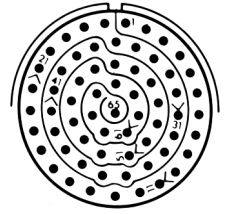
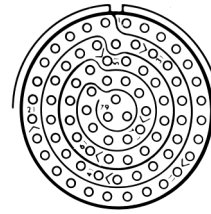
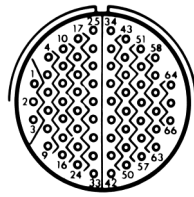
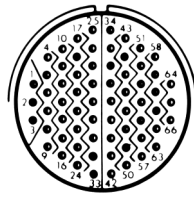
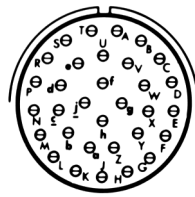
<b>Insert Arrangement</b>	14-5	14-15	14-18	14-35	14-37	16-6
<b>Service Rating</b>	II	I	I	M	M	I
<b>Number of Contacts</b>	5	14 1	18	37	37	6
<b>Contact Size</b>	16	20 16	20	22D	22M	12

<b>Insert Arrangement</b>	16-8	16-26	16-35	16-55	18-11
<b>Service Rating</b>	II	I	M	M	II
<b>Number of Contacts</b>	8	26	55	55	11
<b>Contact Size</b>	16	20	22D	22M	16

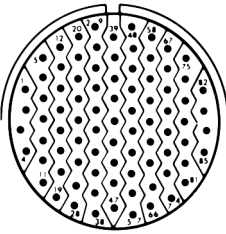
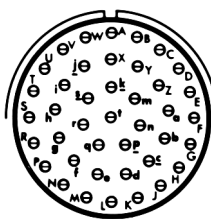
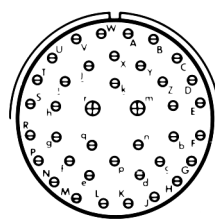
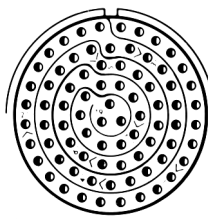
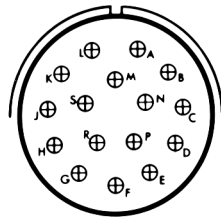
Front face of pin inserts illustrated  
See page 3 for service ratings and contact sizes



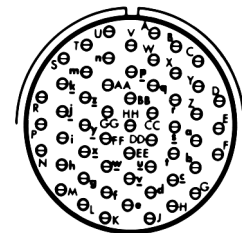
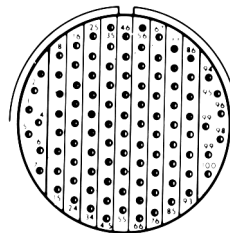
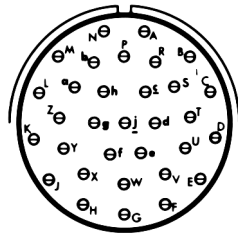
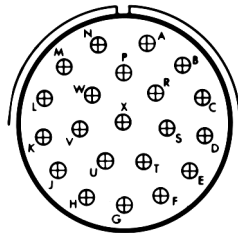
# AJ Aquacon insert arrangements



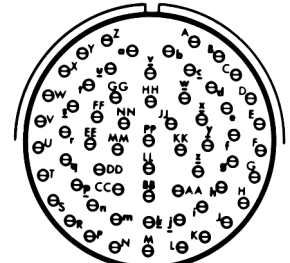
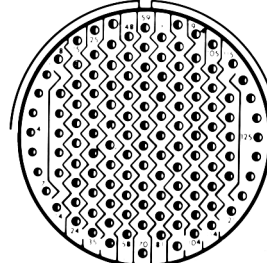
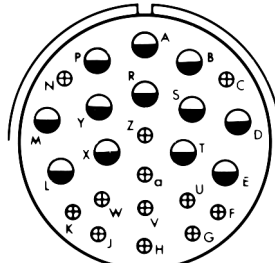
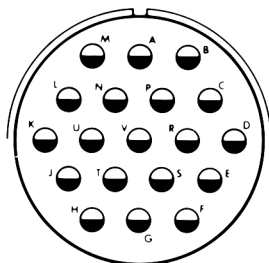
Insert Arrangement	18-32	18-35	18-66	20-1	20-2
Service Rating	I	M	M	M	M
Number of Contacts	32	66	66	79	65
Contact Size	20	22D	22M	22M	22



Insert Arrangement	20-16	20-35	20-39	20-41	22-2
Service Rating	II	M	I	I	M
Number of Contacts	16	79	37 2	41	85
Contact Size	16	22D	20 16	20	22



Insert Arrangement	22-21	22-32	22-35	22-55
Service Rating	II	I	M	I
Number of Contacts	21	32	100	55
Contact Size	16	20	22D	20



Insert Arrangement	24-19	24-24	24-35	24-61
Service Rating	I	I	M	I
Number of Contacts	19	12 12	128	61
Contact Size	12	16 12	22D	20

Front face of pin inserts illustrated  
See page 3 for service ratings and contact sizes

