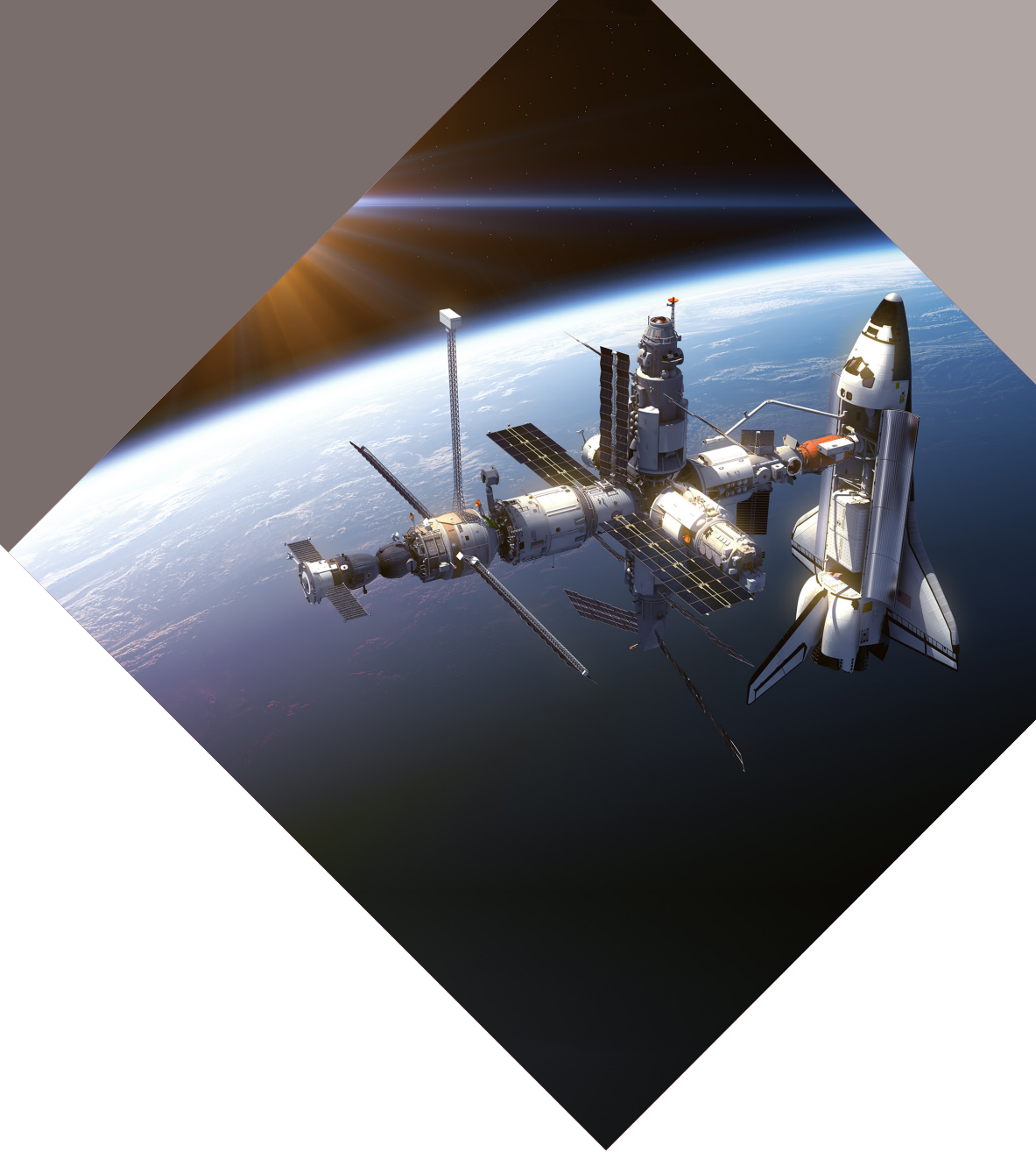
cannon

MKJ5 Series
Connectors Catalog



ITT

Our connector portfolio remains one of the most extensive in the industry, providing customers with a reliable and cost-effective range of interconnect solutions.

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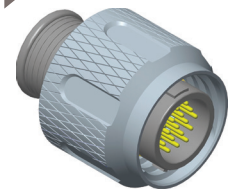
Table of Contents

MKJ5
Triple Start Coupling

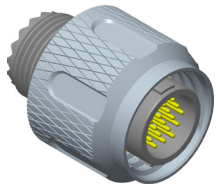
Features & Benefits

- Triple Start Threading provides single turn mating.
- Versatile configurations with 11 shell sizes and 39 contact arrangements.
- Multiple keying options to prevent miss-mating.
- Rear accessory thread or integral banding platform options.
- High reliability ratcheting mechanism.
- Secure solution for robust shock and vibration environments.

With all of the features of MIL-DTL-38999 connectors, ITT Cannon's innovative MKJ5 provides excellent performance in much smaller and lighter weight package. MKJ5's unique triple-start threaded coupling mechanism allows it to quickly connect and disconnect, up to 500 cycles, while maintaining performance under sustained shock and vibration conditions. The MKJ5 supports high-density configurations using size 12, 16, 20HD and 23 machined contacts for crimp and PCB, providing flexible options for data and power applications.

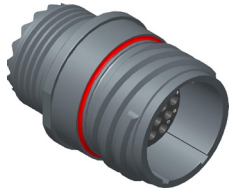


Straight Plug
Banded

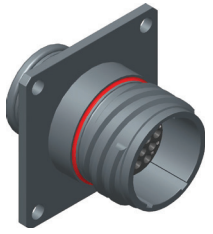


Straight Plug
Accessory Threaded

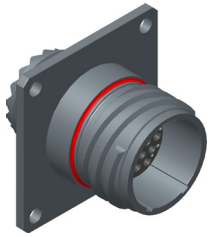
In-Line Receptacle
Banded



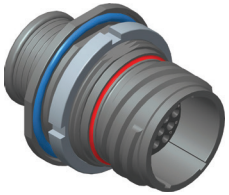
In-Line Receptacle
Accessory Threaded



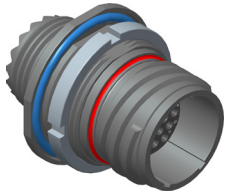
Box Mount Receptacle
Square Flange
Banded



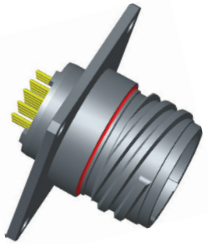
Box Mount Receptacle
Square Flange
Accessory Threaded



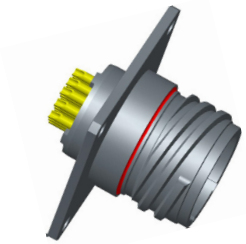
Jam Nut Receptacle
Rear Panel Mount
Banded



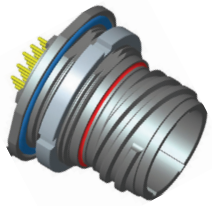
Jam Nut Receptacle
Rear Panel Mount
Accessory Threaded



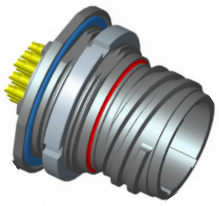
Box Mount Receptacle
Square Flange PCB
PC Tail



Box Mount Receptacle
Square Flange PCB
Solder Cup



Jam Nut Receptacle
Rear Panel Mount PCB
PC Tail



Jam Nut Receptacle
Rear Panel Mount PCB
Solder Cup

MKJ5 - Ordering Guide

Part Number Configurator

1- Series	2- Coupling	3- Class	4- Shell Style	5- Plating	6- Arrangement	7- Contact Style	8- Clocking	9- MOD Codes
MKJ	5	A	6	F	9-10	P	A	-F0

1- Product	
MKJ	MKJ Series
2- Coupling	
5	Threaded Coupling, Triple Start ACME Thread
3- Class	
A	Environmental with Banding/Overmolding Attachment
B	Environmental with Threaded Accessory Attachment
C	Back-Potted Plug/Receptacle-PC/Flex/Solder
4- Shell Style	
1	In-Line Receptacle
2	Box Mount Receptacle-Square Flange
6	Straight Plug
7	Jam Nut Receptacle-Rear Panel Mount
75	Jam Nut Receptacle-Square Flange PCB
5- Plating	
C	Aluminum / Anodized, Black
F	Aluminum/Electroless Nickel
K	Stainless Steel / Passivated
N	Stainless Steel/Electroless Nickel
T	Aluminum/Teflon Nickel
W	Aluminum/Olive Drab Cadmium over Electroless Nickel
Y	Stainless Steel / Electroless Nickel, Black
Z	Aluminum/Zinc Nickel, Black

6- Standard Arrangements (For Combo, please reference pages 12-13)			
8-4	4 Size 23 Contacts	8-1	1 Size 16 Contact
8-6	6 Size 23 Contacts	10-2	2 Size 16 Contacts
8-7	7 Size 23 Contacts	11-4	4 Size 16 Contacts
9-10	10 Size 23 Contacts	12-5	5 Size 16 Contacts
10-13	13 Size 23 Contacts	15-7	7 Size 16 Contacts
11-19	19 Size 23 Contacts	18-12	12 Size 16 Contacts
12-26	26 Size 23 Contacts	19-14	14 Size 16 Contacts
13-31	31 Size 23 Contacts	21-19	19 Size 16 Contacts
15-37	37 Size 23 Contacts	23-22	22 Size 16 Contacts
18-55	55 Size 23 Contacts	9-1	1 Size 12 Contact
19-85	85 Size 23 Contacts	12-2	2 Size 12 Contacts
21-100	100 Size 23 Contacts	15-2	2 Size 12 Contact
23-130	130 Size 23 Contacts	15-3	3 Size 12 Contact
8-23	3 Size 20HD Contacts	18-4	4 Size 12 Contact
9-25	5 Size 20HD Contacts	18-5	5 Size 12 Contact
10-28	8 Size 20HD Contacts	19-7	7 Size 12 Contact
11-210	10 Size 20HD Contacts	23-12	12 Size 12 Contact
15-220	20 Size 20HD Contacts		
18-235	35 Size 20HD Contacts		
19-241	41 Size 20HD Contacts		
21-255	55 Size 20HD Contacts		
23-269	69 Size 20HD Contacts		

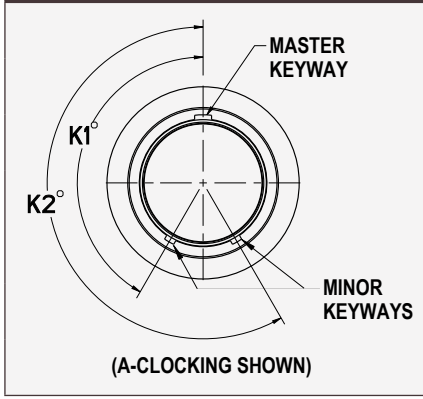
7- Contact Style	
P	Pin, Crimp, Removable (Class A & B)
S	Socket, Crimp, Removable (Class A & B)
A	Pin, PC-Tail, .062 Extension (Class C)
B	Pin, PC-Tail, .109 Extension (Class C)
G	Pin, PC-Tail, .125 Extension (Class C)
C	Socket, PC Tail, .062 Extension (Class C)
D	Socket, PC Tail, .109 Extension (Class C)
H	Socket, PC Tail, .125 Extension (Class C)
E	Pin, Solder Cup (Class A through C)
F	Socket, Solder Cup (Class A through C)

8- Clocking		
Position	K1°	K2°
A (Normal)	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°
E	75°	275°
F	95°	210°

9- Modification Codes	
-F0	Less Contacts ("F0" not stamped on connector, but must be included on the P.O.)
-518	Class "C" PC style black potted connectors w/water immersion testing

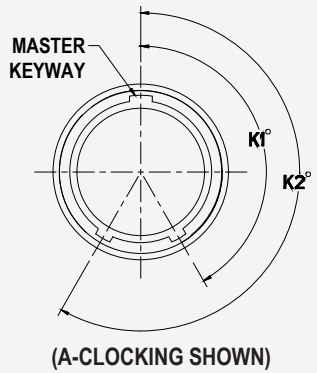
Clocking

Plug Shell Clocking Dimensions



Position	K1°	K2°
A (Normal)	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°
E	75°	275°
F	95°	210°

Receptacle Shell Clocking Dimensions



Position	K1°	K2°
A (Normal)	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°
E	75°	275°
F	95°	210°

For all shell sizes and clockings, the master keyway remains stationary at top center, with minor keys rotating to achieve alternate clocking positions.

Specifications

Enviromental Specifications

Humidity	Operational from 0-100% humidity
Salt Spray	Connector shall have no exposure of base metal when subjected to salt spray C - Aluminum/anodized, black >1000 hours F - Aluminum/electroless nickel 48 hours K - Stainless steel/passivated >1000 hours N - Stainless steel/electroless nickel 500 hours T - Aluminum/teflon nickel 500 hours W - Aluminum/olive drab cadmium 500 hours Y - Stainless steel/electroless nickel, black 500 hours Z - Aluminum/zinc nickel, black 500 hours ZN - Aluminum/zinc nickel, green (not RoHS) 500 hours MB - Marine Bronze >1000 hours

Salt Atmosphere	Connector shall operate in and when stored in a salt fog atmosphere without protective covers for 48 hrs
Rain & Water	The connectors shall remain functional during driving rain
Sand & Dust	The connector shall not suffer greater than cosmetic deterioration due to blowing sand and dust
Water Immersion, Mated Condition	1 meter for 1 hour
Fluid Immersion	Unmated connectors immersed in various fuels and oils shall have no damage detrimental to the operation of the connector components
Fungus	Fungus Inert

Specifications

Specifications		
Contact Type	Rear Crimp, Solder Cup, PCB Mount	
Contact Spacing	Size 12: 0.230" Spacing Size 16: 0.170" Spacing	Size 20HD: 0.106" Spacing Size 23: 0.076" Spacing
Wire Accommodation	Size 12: #12 - #14 AWG Size 16: #16 - #20 AWG	Size 20HD: #20 - #24 AWG Size 23: #22 - #28 AWG
Contact Rating	Size 12: 23 Amps Size 16: 13 Amps	Size 20HD: 7.5 Amps Size 23: 5 Amps
DWV Voltage (VAC) @ Sea Level	Size 12: 1800 VAC Size 16: 1800 VAC	Size 20HD: 1000 VAC Size 23: 5750 VAC
Insulation Resistance	>5000 Megohms @ 500 VDC	
Operating Temperature	-65°C to +175°C	
Contact Resistance	8 mΩ Maximum	
Shock/Vibration	37 g's Random Vibration; 300 g's Shock	
Altitude	Operational at sea level to 32,000 ft	
Receptacle Mounting	In-Line, flange, jam nut	
Durability	500 mating cycles	
Contact Retention (Minimum Force)	Size 12: 25 lbs / 111 N Size 16: 25 lbs / 111 N	Size 20HD: 15 lbs / 67 N Size 23: 6 lbs / 27 N

EMI Shielding Effectiveness, low frequency (100 MHz - 1000 MHz	Requirement		Procedure
	Frequency	Min. dB Attenuation	MIL-DTL-38999 paragraph 4.5.28.1 Electroless nickel plated connectors
	100 MHz	75	
	200 MHz	70	
	300 MHz	65	
	400 MHz	63	
	800 MHz	58	
	1000 MHz	55	

Max Voltage Drop	Less than 85 mV with contacts in the mated position and an applied load at 16VDC	
Shell-to-shell conductivity, after conditioning (48 hours salt spray)	<0.005 Ohms Note: measured on nickel plated connectors	
Coupling	Triple Start Threaded Coupling	

Recommended Torque Values	Shell Size	Coupling Torque In-lbs	
		Min.	Max.
	8	18	22
	9	20	24
	10	22	26
	11	24	28
	12 & 13	26	30
	15	32	36
	18	38	42
	19 & 21	40	44
	23	48	52

Materials	Shell, barrel, jam nut, coupling nut - Aluminum or stainless steel
	Insulators - Thermoplastic
	Grommet, peripheral seal, interfacial seal - Fluorosilicone
	Contacts - Copper Alloy with Gold over Nickel Plating

MKJ5 Contact Arrangements

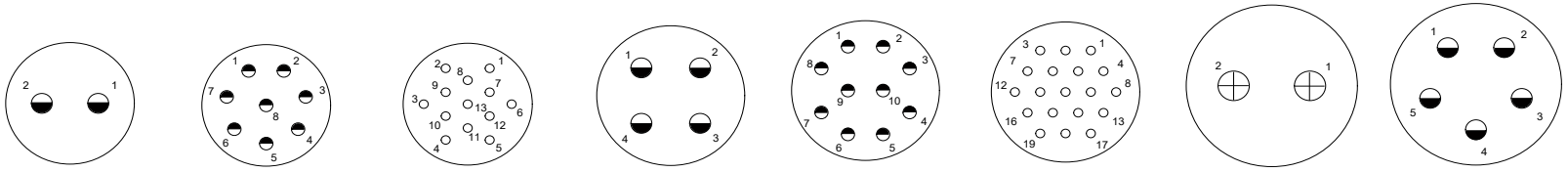
	Insert Arrange-ments	Contacts					
		#23	#20	#20HD	#16	#12	#8
Size #23 Contacts 5 Amp Max. Current #22-#28 AWG 750 VAC DWV	8-4	4					
	8-6	6					
	8-7	7					
	9-10	10					
	10-13	13					
	11-19	19					
	12-26	26					
	13-31	31					
	15-37	37					
	18-55	55					
	19-85	85					
	21-100	100					
	23-130	130					
Size #20HD Contacts 7.5 Amp Max. Current #20-#24 AWG 1000 VAC DWV	8-23			3			
	9-25			5			
	10-28			8			
	11-210			10			
	15-220			20			
	18-235			35			
	19-241			41			
	21-255			55			
	23-269			69			
Size #16 Contacts 13 Amp Max. Current #16-#20 AWG 1800 VAC DWV	8-1				1		
	10-2				2		
	11-4				4		
	12-5				5		
	15-7				7		
	18-12				12		
	19-14				14		
	21-19				19		
	23-22				22		

	Insert Arrange-ments	Contacts					
		#23	#20	#20HD	#16	#12	#8
Size #12 Contacts 23 Amp Max. Current #12- #14 AWG 1800 VAC DWV	9-1					1	
	12-2					2	
	15-2					2	
	15-3					3	
	18-4					4	
	18-5					5	
	19-7					7	
	23-12					12	
Combo* Arrangements Using Size #23 Contacts 5 Amp Max. Current #22 - #28 AWG 750 VAC DWV	12-200	12				1	
	12-201	4				2	
	15-200	6				2	
	15-201	10				2	
	11-200	4			2		
	12-202	8			2		
	10-200	4	2				
	11-201	8	2				
Combo* Arrangements Using Size #23 Contacts 5 Amp Max. Current #22 - #28 AWG 1300 VAC DWV	15-202	20			2		
	15-203	12			4		
	18-204	40			2		
	18-205	32			4		
	19-203	40			4		
	19-206	58			4		
	15-204	12				2	
	15-205	4				4	
	18-206	34				2	
	18-207	20				4	
	19-204	28				4	
	13-201	18					1
	18-208	32					1
	19-205	40					1
	21-201	44					2
	21-202	12					4
	23-200	28					4

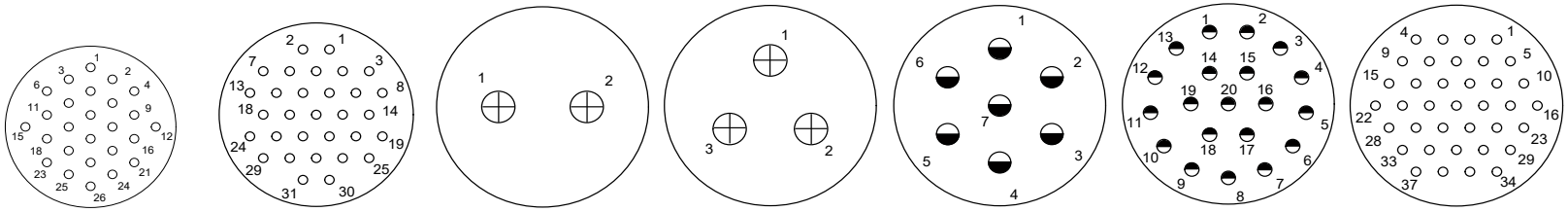
MKJ5 Standard Contact Arrangements

Contact Legend

MKJ5	8-1	8-23	8-4	8-6	8-7	9-1	9-25	9-10
Contact QTY	1	3	4	6	7	1	5	10
Contact Size	16	20HD	23	23	23	12	20HD	23
Voltage (VAC)	1800	1000	750	750	750	1800	1000	750
Current (Amps)	13	7.5	5	5	5	23	7.5	5



MKJ5	10-2	10-28	10-13	11-4	11-210	11-19	12-2	12-5
Contact QTY	2	8	13	4	10	19	2	5
Contact Size	16	20HD	23	16	20HD	23	12	16
Voltage (VAC)	1800	1000	750	1800	1000	750	1800	1800
Current (Amps)	13	7.5	5	13	7.5	5	23	13

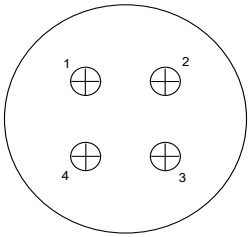


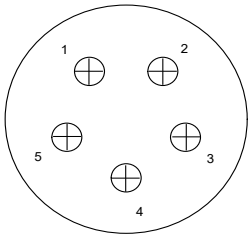
MKJ5	12-26	13-31	15-2	15-3	15-7	15-220	15-37
Contact QTY	26	31	2	3	7	20	37
Contact Size	23	23	12	12	16	20HD	23
Voltage (VAC)	750	750	1800	1800	1800	1000	750
Current (Amps)	5	5	23	23	13	7.5	5

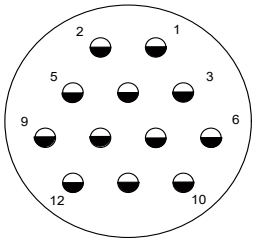
Dimensions shown in inches and (mm). Specifications and dimensions subject to change.

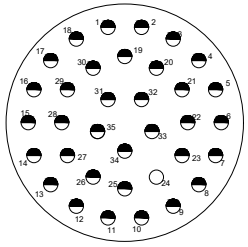
MKJ5 Standard Contact Arrangements

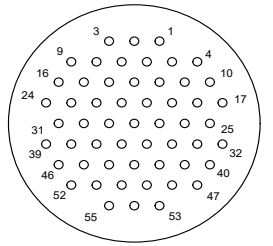
Contact Legend



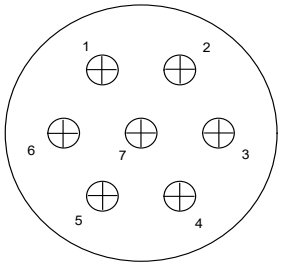


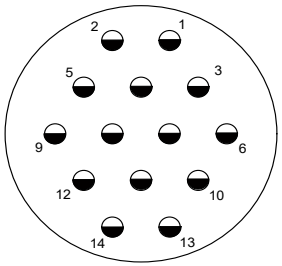


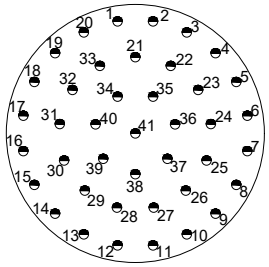


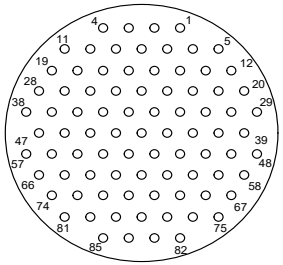


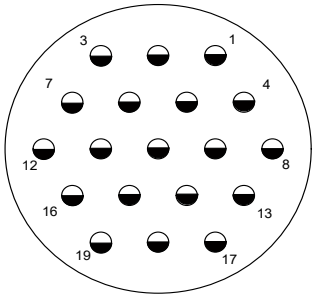
MKJ5	18-4	18-5	18-12	18-235	18-55
Contact QTY	4	5	12	35	55
Contact Size	12	12	16	20HD	23
Voltage (VAC)	1800	1800	1800	750	750
Current (Amps)	23	23	13	7.5	5







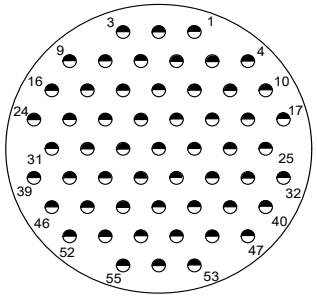


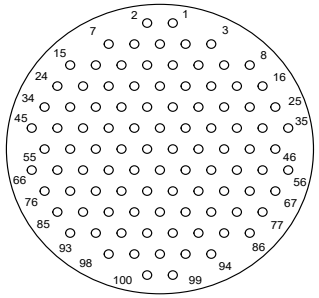


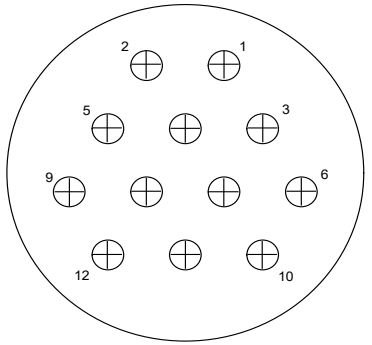
MKJ5	19-7	19-14	19-241	19-85	21-19
Contact QTY	7	14	41	85	19
Contact Size	12	16	20HD	23	16
Voltage (VAC)	1800	1800	1000	750	1800
Current (Amps)	23	13	7.5	5	13

MKJ5 Standard Contact Arrangements

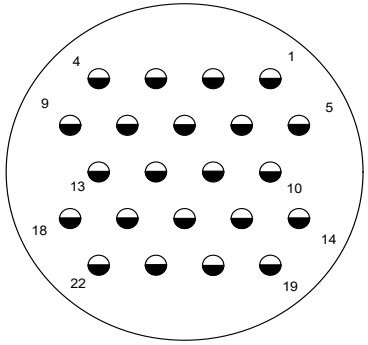
Contact Legend

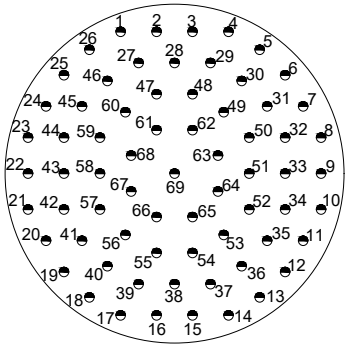


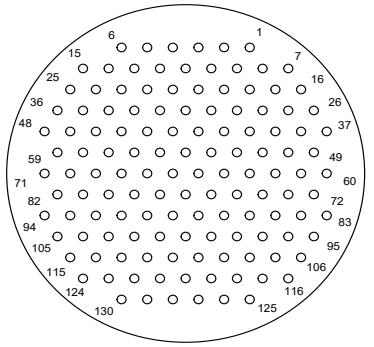




MKJ5	21-255	21-100	23-12
Contact QTY	55	100	12
Contact Size	20HD	23	12
Voltage (VAC)	1000	750	1800
Current (Amps)	7.5	5	23



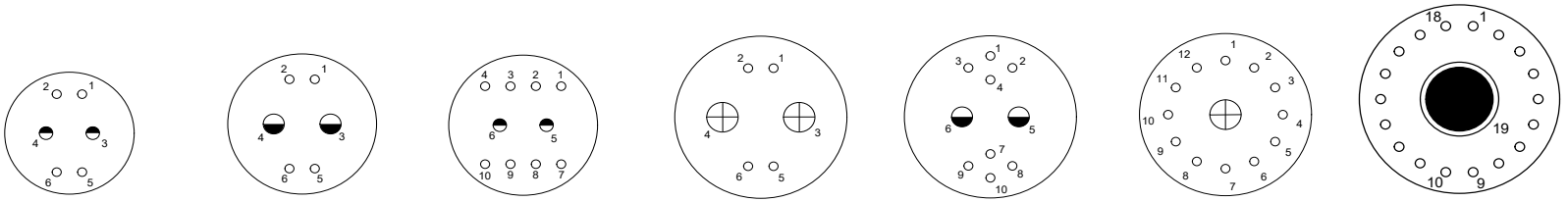




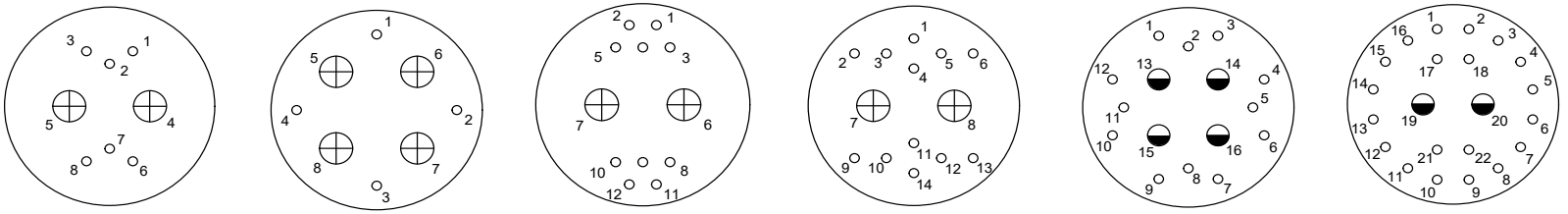
MKJ5	23-22	23-269	23-130
Contact QTY	22	69	130
Contact Size	16	20HD	23
Voltage (VAC)	1800	1000	750
Current (Amps)	13	5	7.5

MKJ5 Combo Contact Arrangements

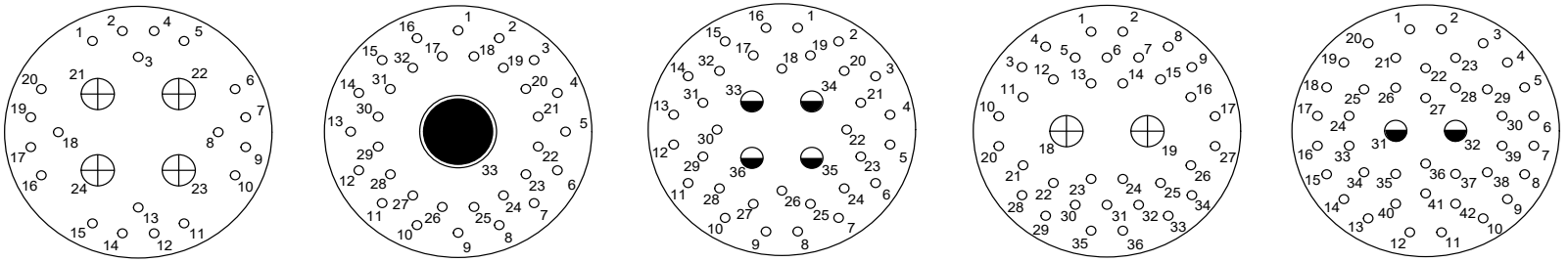
Contact Legend



MKJ5	10-200	11-200	11-201	12-201	12-202	12-200	13-201
Contact QTY	6	6	10	6	10	13	19
Contact Size	4 #23 / 2 #20HD	4 #23 / 2 #16	8 #23 / 2 #20HD	4 #23 / 2 #12	8 #23 / 2 #16	12 #23 / 1 #12	18 #23 / 1 #8
Voltage (VAC)	750 VAC DWV	750	750	750	750	750	1300
Current (Amps)	5	5	5	5	5	5	5



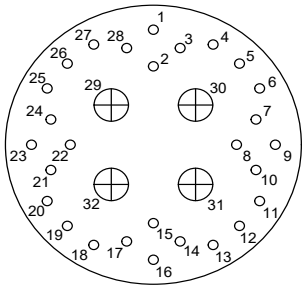
MKJ5	15-200	15-205	15-201	15-204	15-203	15-202
Contact QTY	8	8	12	14	16	22
Contact Size	6 #23 / 2 #12	4 #23 / 4 #12	10#23 / 2 #12	12#23 / 2 #12	12 #23 / 4 #16	20 #23 / 2 #16
Voltage (VAC)	750	1300	750	1300	1300	1300
Current (Amps)	5	5	5	5	5	5

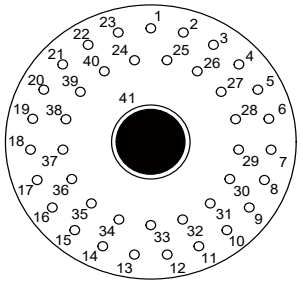


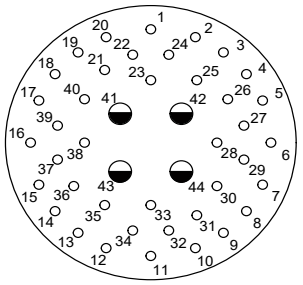
MKJ5	18-207	18-208	18-205	18-206	18-204
Contact QTY	24	33	36	36	42
Contact Size	20 #23 / 4 #12	32 #23 / 1 #8	32 #23 / 4 #16	34 #23 / 2 #12	40 #23 / 2 #16
Voltage (VAC)	1300	1300	1300	1300	1300
Current (Amps)	5	5	5	5	5

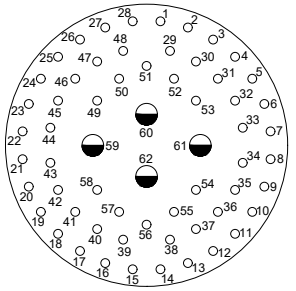
MKJ5 Combo Contact Arrangements

Contact Legend

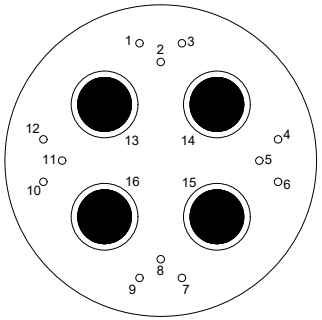


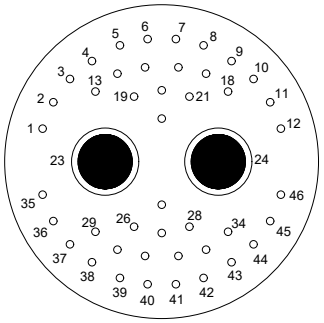


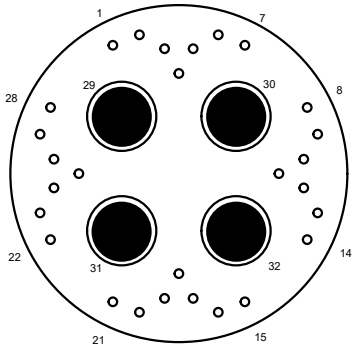




MKJ5	19-204	19-205	19-203	19-206
Contact QTY	32	41	44	62
Contact Size	28 #23 / 4 #12	40 #23 / 1 #8	40 #23 / 4 #16	58 #23 / 4 #16
Voltage (VAC)	1300	1300	1300	1300
Current (Amps)	5	5	5	5







MKJ5	21-202	21-201	23-200
Contact QTY	16	46	32
Contact Size	12 #23 / 4 #8	44 #23 / 2 #8	28 #23 / 4 #8
Voltage (VAC)	1300	1300	1300
Current (Amps)	5	5	5

For Combo PCB Hole Patterns, please consult the factory.

MKJ5 Straight Plug

Part Number Configurator

1- Series	2- Coupling	3- Class	4- Shell Style	5- Plating	6- Arrangement	7- Contact Style	8- Clocking	9- MOD Codes
MKJ	5	A	6	F	9-10	P	A	-F0

1- Product	
MKJ	MKJ Series
2- Coupling	
5	Threaded Coupling, Triple Start ACME Thread
3- Class	
A	Environmental with Banding/Overmolding Attachment
B	Environmental with Threaded Accessory Attachment
4- Shell Style	
6	Straight Plug
5- Plating	
C	Aluminum / Anodized, Black
F	Aluminum/Electroless Nickel
K	Stainless Steel / Passivated
N	Stainless Steel/Electroless Nickel
T	Aluminum/Teflon Nickel
W	Aluminum/Olive Drab Cadmium over Electroless Nickel
Y	Stainless Steel / Electroless Nickel, Black
Z	Aluminum/Zinc Nickel, Black

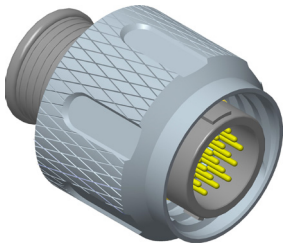
6- Standard Arrangements (For Combo, please reference pages 12-13)			
8-4	4 Size 23 Contacts	8-1	1 Size 16 Contact
8-6	6 Size 23 Contacts	10-2	2 Size 16 Contacts
8-7	7 Size 23 Contacts	11-4	4 Size 16 Contacts
9-10	10 Size 23 Contacts	12-5	5 Size 16 Contacts
10-13	13 Size 23 Contacts	15-7	7 Size 16 Contacts
11-19	19 Size 23 Contacts	18-12	12 Size 16 Contacts
12-26	26 Size 23 Contacts	19-14	14 Size 16 Contacts
13-31	31 Size 23 Contacts	21-19	19 Size 16 Contacts
15-37	37 Size 23 Contacts	23-22	22 Size 16 Contacts
18-55	55 Size 23 Contacts	9-1	1 Size 12 Contact
19-85	85 Size 23 Contacts	12-2	2 Size 12 Contacts
21-100	100 Size 23 Contacts	15-2	2 Size 12 Contact
23-130	130 Size 23 Contacts	15-3	3 Size 12 Contact
8-23	3 Size 20HD Contacts	18-4	4 Size 12 Contact
9-25	5 Size 20HD Contacts	18-5	5 Size 12 Contact
10-28	8 Size 20HD Contacts	19-7	7 Size 12 Contact
11-210	10 Size 20HD Contacts	23-12	12 Size 12 Contact
15-220	20 Size 20HD Contacts		
18-235	35 Size 20HD Contacts		
19-241	41 Size 20HD Contacts		
21-255	55 Size 20HD Contacts		
23-269	69 Size 20HD Contacts		

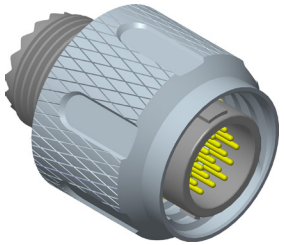
7- Contact Style	
P	Pin, Crimp, Removable
S	Socket, Crimp, Removable
E	Pin, Solder Cup
F	Socket, Solder Cup

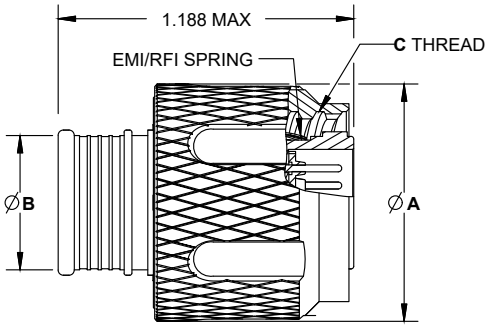
8- Clocking		
Position	K1°	K2°
A (Normal)	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°
E	75°	275°
F	95°	210°

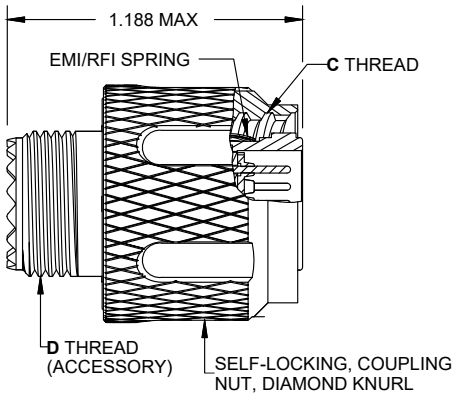
9- Modification Codes	
-F0	Less Contacts (“F0” not stamped on connector, but must be included on the P.O.)

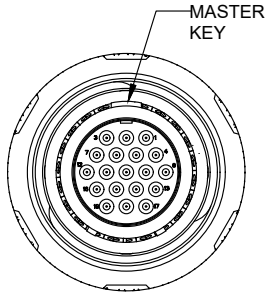
MKJ5 Straight Plug - Banded or Accessory Thread











MKJ5 Straight Plug - Banding/Overmolding Attachment

MKJ5 Straight Plug - Threaded Accessory Attachment

MKJ5 Straight Plug Dimensions				
SHELL SIZE	ØA	ØB	C THREAD	D THREAD ACCESSORY UNEF-2A
8	0.691	0.318	.5000-.1P-.3L-TS-2B	.3750-32
9	0.787	0.398	.5625-.1P-.3L-TS-2B	.4375-28
10	0.826	0.473	.6250-.1P-.3L-TS-2B	.5000-28
11	0.925	0.517	.6875-.1P-.3L-TS-2B	.5625-24
12	0.982	0.588	.7500-.1P-.3L-TS-2B	.6250-24
15	1.105	0.688	.9375-.1P-.3L-TS-2B	.7500-20
18	1.275	0.881	1.1250-.1P-.3L-TS-2B	.9375-20
19	1.310	0.881	1.1875-.1P-.3L-TS-2B	.9375-20
21	1.448	1.003	1.3125-.1P-.3L-TS-2B	1.0625-18
23	1.562	1.129	1.4375-.1P-.3L-TS-2B	1.1875-18

MKJ5 In-Line Receptacle

Part Number Configurator

1- Series	2- Coupling	3- Class	4- Shell Style	5- Plating	6- Arrangement	7- Contact Style	8- Clocking	9- MOD Codes
MKJ	5	A	1	F	9-10	P	A	-F0

1- Product	
MKJ	MKJ Series
2- Coupling	
5	Threaded Coupling, Triple Start ACME Thread
3- Class	
A	Environmental with Banding/Overmolding Attachment
B	Environmental with Threaded Accessory Attachment
4- Shell Style	
1	In-Line Receptacle
5- Plating	
C	Aluminum / Anodized, Black
F	Aluminum/Electroless Nickel
K	Stainless Steel / Passivated
N	Stainless Steel/Electroless Nickel
T	Aluminum/Teflon Nickel
W	Aluminum/Olive Drab Cadmium over Electroless Nickel
Y	Stainless Steel / Electroless Nickel, Black
Z	Aluminum/Zinc Nickel, Black

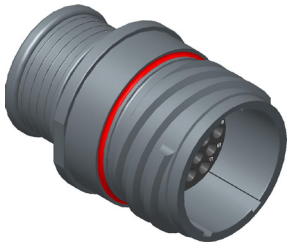
6- Standard Arrangements (For Combo, please reference pages 12-13)			
8-4	4 Size 23 Contacts	8-1	1 Size 16 Contact
8-6	6 Size 23 Contacts	10-2	2 Size 16 Contacts
8-7	7 Size 23 Contacts	11-4	4 Size 16 Contacts
9-10	10 Size 23 Contacts	12-5	5 Size 16 Contacts
10-13	13 Size 23 Contacts	15-7	7 Size 16 Contacts
11-19	19 Size 23 Contacts	18-12	12 Size 16 Contacts
12-26	26 Size 23 Contacts	19-14	14 Size 16 Contacts
13-31	31 Size 23 Contacts	21-19	19 Size 16 Contacts
15-37	37 Size 23 Contacts	23-22	22 Size 16 Contacts
18-55	55 Size 23 Contacts	9-1	1 Size 12 Contact
19-85	85 Size 23 Contacts	12-2	2 Size 12 Contacts
21-100	100 Size 23 Contacts	15-2	2 Size 12 Contact
23-130	130 Size 23 Contacts	15-3	3 Size 12 Contact
8-23	3 Size 20HD Contacts	18-4	4 Size 12 Contact
9-25	5 Size 20HD Contacts	18-5	5 Size 12 Contact
10-28	8 Size 20HD Contacts	19-7	7 Size 12 Contact
11-210	10 Size 20HD Contacts	23-12	12 Size 12 Contact
15-220	20 Size 20HD Contacts		
18-235	35 Size 20HD Contacts		
19-241	41 Size 20HD Contacts		
21-255	55 Size 20HD Contacts		
23-269	69 Size 20HD Contacts		

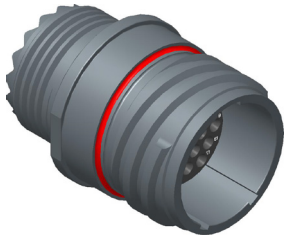
7- Contact Style	
P	Pin, Crimp, Removable
S	Socket, Crimp, Removable
E	Pin, Solder Cup
F	Socket, Solder Cup

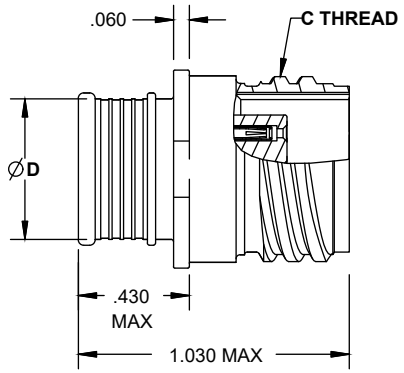
8- Clocking		
Position	K1°	K2°
A (Normal)	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°
E	75°	275°
F	95°	210°

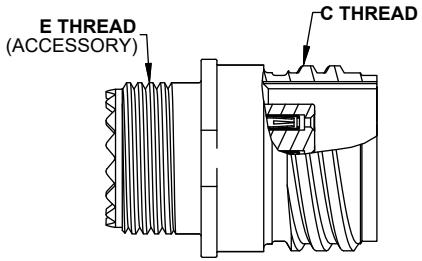
9- Modification Codes	
-F0	Less Contacts ("F0" not stamped on connector, but must be included on the P.O.)

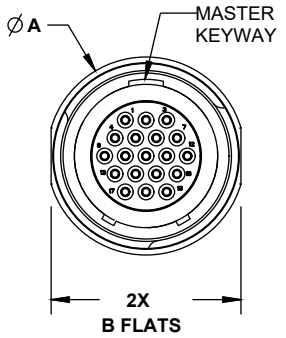
MKJ5 In-Line Receptacle - Banded and Accessory Thread











MKJ5 In-Line with Banding/Overmolding Attachment

MKJ5 In-Line with Threaded Accessory Attachment

MKJ5 In-Line Receptacle Dimensions					
SHELL SIZE	ØA	B FLAT	C THREAD	ØD	E THREAD ACCESSORY UNEF-2A
8	0.540	0.510	.5000-.1P-.3L-TS-2A	0.318	.3750-32
9	0.605	0.575	.5625-.1P-.3L-TS-2A	0.398	.4375-28
10	0.668	0.638	.6250-.1P-.3L-TS-2A	0.473	.5000-28
11	0.730	0.700	.6875-.1P-.3L-TS-2A	0.517	.5625-24
12	0.793	0.763	.7500-.1P-.3L-TS-2A	0.588	.6250-24
15	0.980	0.950	.9375-.1P-.3L-TS-2A	0.688	.7500-20
18	1.165	1.135	1.1250-.1P-.3L-TS-2A	0.881	.9375-20
19	1.235	1.205	1.1875-.1P-.3L-TS-2A	0.881	.9375-20
21	1.360	1.330	1.3125-.1P-.3L-TS-2A	1.003	1.0625-18
23	1.485	1.455	1.4375-.1P-.3L-TS-2A	1.129	1.1875-18

MKJ5 Box Mount Receptacle - Square Flange

Part Number Configurator

1- Series	2- Coupling	3- Class	4- Shell Style	5- Plating	6- Arrangement	7- Contact Style	8- Clocking	9- MOD Codes
MKJ	5	A	2	F	9-10	S	A	-F0

1- Product	
MKJ	MKJ Series
2- Coupling	
5	Threaded Coupling, Triple Start ACME Thread
3- Class	
A	Environmental with Banding/Overmolding Attachment
B	Environmental with Threaded Accessory Attachment
4- Shell Style	
2	Box Mount Receptacle-Square Flange
5- Plating	
C	Aluminum / Anodized, Black
F	Aluminum/Electroless Nickel
K	Stainless Steel / Passivated
N	Stainless Steel/Electroless Nickel
T	Aluminum/Teflon Nickel
W	Aluminum/Olive Drab Cadmium over Electroless Nickel
Y	Stainless Steel / Electroless Nickel, Black
Z	Aluminum/Zinc Nickel, Black

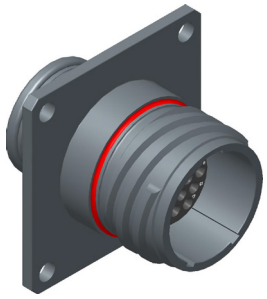
6- Standard Arrangements (For Combo, please reference pages 12-13)			
8-4	4 Size 23 Contacts	8-1	1 Size 16 Contact
8-6	6 Size 23 Contacts	10-2	2 Size 16 Contacts
8-7	7 Size 23 Contacts	11-4	4 Size 16 Contacts
9-10	10 Size 23 Contacts	12-5	5 Size 16 Contacts
10-13	13 Size 23 Contacts	15-7	7 Size 16 Contacts
11-19	19 Size 23 Contacts	18-12	12 Size 16 Contacts
12-26	26 Size 23 Contacts	19-14	14 Size 16 Contacts
13-31	31 Size 23 Contacts	21-19	19 Size 16 Contacts
15-37	37 Size 23 Contacts	23-22	22 Size 16 Contacts
18-55	55 Size 23 Contacts	9-1	1 Size 12 Contact
19-85	85 Size 23 Contacts	12-2	2 Size 12 Contacts
21-100	100 Size 23 Contacts	15-2	2 Size 12 Contact
23-130	130 Size 23 Contacts	15-3	3 Size 12 Contact
8-23	3 Size 20HD Contacts	18-4	4 Size 12 Contact
9-25	5 Size 20HD Contacts	18-5	5 Size 12 Contact
10-28	8 Size 20HD Contacts	19-7	7 Size 12 Contact
11-210	10 Size 20HD Contacts	23-12	12 Size 12 Contact
15-220	20 Size 20HD Contacts		
18-235	35 Size 20HD Contacts		
19-241	41 Size 20HD Contacts		
21-255	55 Size 20HD Contacts		
23-269	69 Size 20HD Contacts		

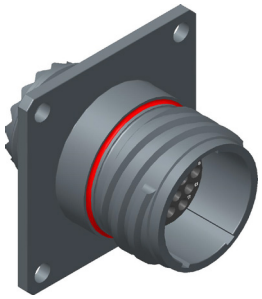
7- Contact Style	
P	Pin, Crimp, Removable
S	Socket, Crimp, Removable
E	Pin, Solder Cup
F	Socket, Solder Cup

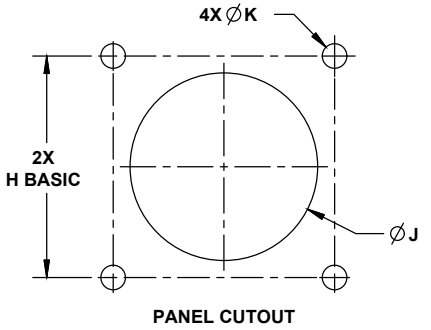
8- Clocking		
Position	K1°	K2°
A (Normal)	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°
E	75°	275°
F	95°	210°

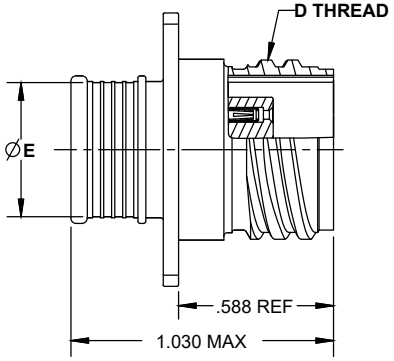
9- Modification Codes	
-F0	Less Contacts ("F0" not stamped on connector, but must be included on the P.O.)

MKJ5 Box Mount Receptacle - Square Flange

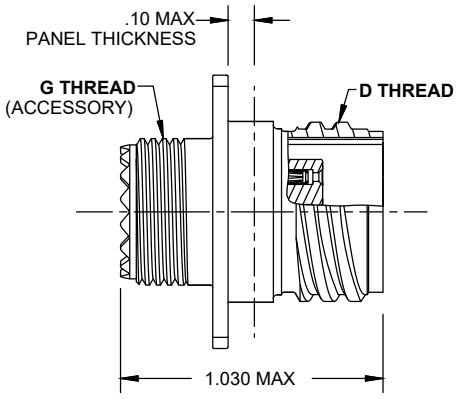




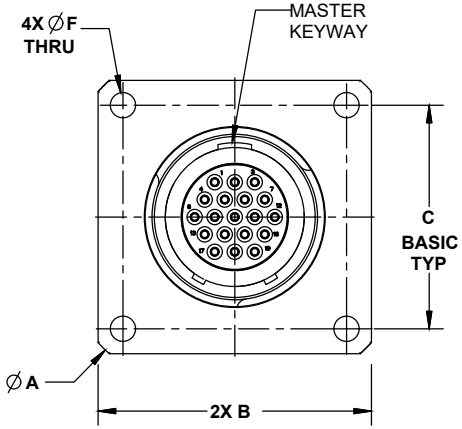




MKJ5 Box Mount Receptacle - Square Flange
with Banding/Overmolding Attachment



MKJ5 Box Mount Receptacle - Square Flange
with Threaded Accessory Attachment



MKJ5 Box Mount Receptacle - Square Flange Dimensions										
SHELL SIZE	ØA	B	C BASIC TYP	D THREAD	ØE	ØF ±.005	G THREAD, ACCESSORY (UNEF-2A)	H, BASIC	ØJ	ØK ±.003
8	1.150	0.850	0.660	.5000-.1P-.3L-TS-2A	0.318	0.094	.3750-32	0.660	0.520	0.094
9	1.230	0.913	0.723	.5625-.1P-.3L-TS-2A	0.398		.4375-28	0.723	0.584	
10	1.330	0.975	0.785	.6250-.1P-.3L-TS-2A	0.473		.5000-28	0.785	0.653	
11	1.410	1.039	0.848	.6875-.1P-.3L-TS-2A	0.517		.5625-24	0.848	0.718	
12	1.500	1.099	0.909	.7500-.1P-.3L-TS-2A	0.588		.6250-24	0.909	0.775	
15	1.750	1.288	1.058	.9375-.1P-.3L-TS-2A	0.688	0.128	.7500-20	1.058	0.961	0.128
18	2.000	1.475	1.255	1.1250-.1P-.3L-TS-2A	0.881		.9375-20	1.255	1.140	
19	2.094	1.537	1.327	1.1875-.1P-.3L-TS-2A	0.881		.9375-20	1.327	1.230	
21	2.270	1.663	1.452	1.3125-.1P-.3L-TS-2A	1.003		1.0625-18	1.452	1.328	
23	2.440	1.787	1.570	1.4375-.1P-.3L-TS-2A	1.129		1.1875-18	1.570	1.453	

MKJ5 Jam Nut Receptacle - Rear Panel Mount

Part Number Configurator

1- Series	2- Coupling	3- Class	4- Shell Style	5- Plating	6- Arrangement	7- Contact Style	8- Clocking	9- MOD Codes
MKJ	5	B	7	F	9-10	P	A	-F0

1- Product	
MKJ	MKJ Series
2- Coupling	
5	Threaded Coupling, Triple Start ACME Thread
3- Class	
A	Environmental with Banding/Overmolding Attachment
B	Environmental with Threaded Accessory Attachment
4- Shell Style	
7	Jam Nut Receptacle - Rear Panel Mount
5- Plating	
C	Aluminum / Anodized, Black
F	Aluminum/Electroless Nickel
K	Stainless Steel / Passivated
N	Stainless Steel/Electroless Nickel
T	Aluminum/Teflon Nickel
W	Aluminum/Olive Drab Cadmium over Electroless Nickel
Y	Stainless Steel / Electroless Nickel, Black
Z	Aluminum/Zinc Nickel, Black

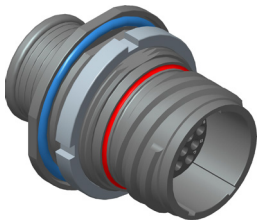
6- Standard Arrangements (For Combo, please reference pages 12-13)			
8-4	4 Size 23 Contacts	8-1	1 Size 16 Contact
8-6	6 Size 23 Contacts	10-2	2 Size 16 Contacts
8-7	7 Size 23 Contacts	11-4	4 Size 16 Contacts
9-10	10 Size 23 Contacts	12-5	5 Size 16 Contacts
10-13	13 Size 23 Contacts	15-7	7 Size 16 Contacts
11-19	19 Size 23 Contacts	18-12	12 Size 16 Contacts
12-26	26 Size 23 Contacts	19-14	14 Size 16 Contacts
13-31	31 Size 23 Contacts	21-19	19 Size 16 Contacts
15-37	37 Size 23 Contacts	23-22	22 Size 16 Contacts
18-55	55 Size 23 Contacts	9-1	1 Size 12 Contact
19-85	85 Size 23 Contacts	12-2	2 Size 12 Contacts
21-100	100 Size 23 Contacts	15-2	2 Size 12 Contact
23-130	130 Size 23 Contacts	15-3	3 Size 12 Contact
8-23	3 Size 20HD Contacts	18-4	4 Size 12 Contact
9-25	5 Size 20HD Contacts	18-5	5 Size 12 Contact
10-28	8 Size 20HD Contacts	19-7	7 Size 12 Contact
11-210	10 Size 20HD Contacts	23-12	12 Size 12 Contact
15-220	20 Size 20HD Contacts		
18-235	35 Size 20HD Contacts		
19-241	41 Size 20HD Contacts		
21-255	55 Size 20HD Contacts		
23-269	69 Size 20HD Contacts		

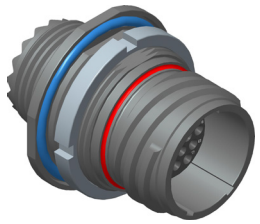
7- Contact Style	
P	Pin, Crimp, Removable
S	Socket, Crimp, Removable
E	Pin, Solder Cup
F	Socket, Solder Cup

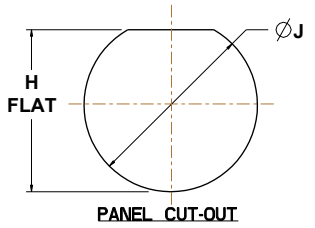
8- Clocking		
Position	K1°	K2°
A (Normal)	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°
E	75°	275°
F	95°	210°

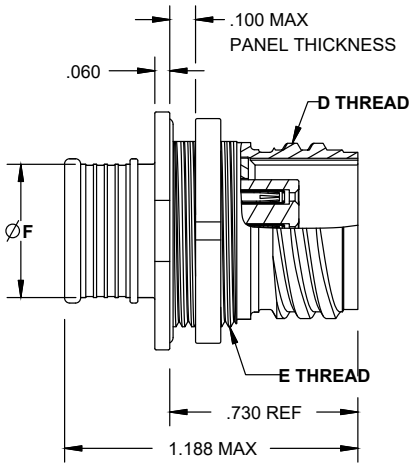
9- Modification Codes	
-F0	Less Contacts ("F0" not stamped on connector, but must be included on the P.O.)

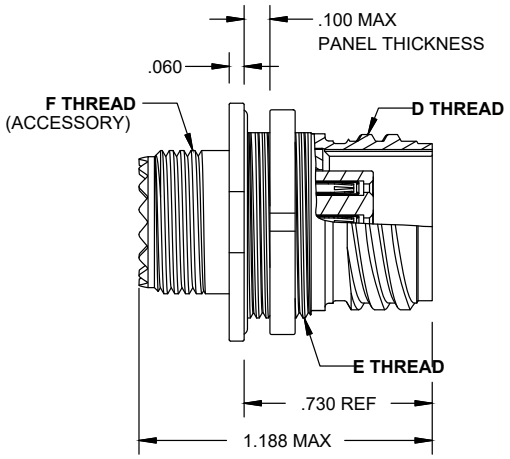
MKJ5 Jam Nut Receptacle - Rear Panel Mount

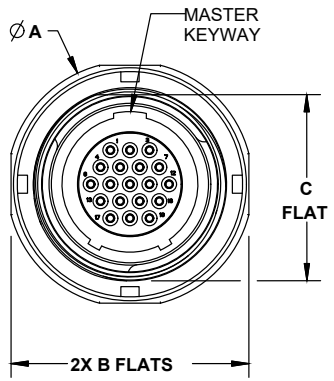












MKJ5 Jam Nut Receptacle - Rear Panel Mount with Banding/Overmolding Attachment

MKJ5 Jam Nut Receptacle - Rear Panel Mount with Threaded Accessory Attachment

MKJ5 Jam Nut Receptacle - Rear Panel Mount Dimensions									
SHELL SIZE	ØA	B FLATS	C FLAT	D THREAD	E THREAD (UN-2A)	ØF	F THREAD ACCESSORY (UNEF-2A)	H FLAT ± .002	ØJ ± .005
8	0.760	0.730	0.535	.5000-.1P-.3L-TS-2A	.5625-32	0.318	.3750-32	0.543	0.572
9	0.880	0.850	0.661	.5625-.1P-.3L-TS-2A	.6875-28	0.398	.4375-28	0.669	0.698
10	0.880	0.850	0.661	.6250-.1P-.3L-TS-2A	.6875-28	0.473	.5000-28	0.669	0.698
11	0.955	0.925	0.721	.6875-.1P-.3L-TS-2A	.7500-28	0.517	.5625-24	0.729	0.760
12	1.060	1.035	0.784	.7500-.1P-.3L-TS-2A	.8125-28	0.588	.6250-24	0.792	0.822
15	1.203	1.173	0.970	.9375-.1P-.3L-TS-2A	1.0000-28	0.688	.7500-20	0.978	1.010
18	1.389	1.359	1.147	1.1250-.1P-.3L-TS-2A	1.1875-28	0.881	.9375-20	1.155	1.198
19	1.450	1.420	1.221	1.1875-.1P-.3L-TS-2A	1.2500-28	0.881	.9375-20	1.231	1.260
21	1.590	1.560	1.350	1.3125-.1P-.3L-TS-2A	1.3750-28	1.003	1.0625-18	1.356	1.386
23	1.705	1.675	1.470	1.4375-.1P-.3L-TS-2A	1.5000-28	1.129	1.1875-18	1.480	1.510

MKJ5 Box Mount Receptacle - Square Flange PCB

Part Number Configurator

1- Series	2- Coupling	3- Class	4- Shell Style	5- Plating	6- Arrangement	7- Contact Style	8- Clocking	9- MOD Codes
MKJ	5	C	2	F	9-10	B	A	-518

1- Product	
MKJ	MKJ Series
2- Coupling	
5	Threaded Coupling, Triple Start ACME Thread
3- Class	
C	Back-Potted Receptacle-PC/Flex/Solder
4- Shell Style	
2	Box Mount Receptacle - Square Flange PCB
5- Plating	
C	Aluminum / Anodized, Black
F	Aluminum/Electroless Nickel
K	Stainless Steel / Passivated
N	Stainless Steel/Electroless Nickel
T	Aluminum/Teflon Nickel
W	Aluminum/Olive Drab Cadmium over Electroless Nickel
Y	Stainless Steel / Electroless Nickel, Black
Z	Aluminum/Zinc Nickel, Black

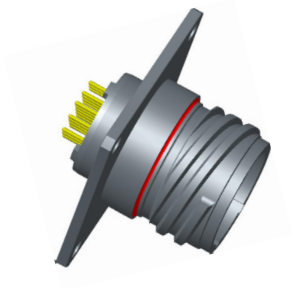
6- Standard Arrangements (For Combo, please reference pages 12-13)			
8-4	4 Size 23 Contacts	8-1	1 Size 16 Contact
8-6	6 Size 23 Contacts	10-2	2 Size 16 Contacts
8-7	7 Size 23 Contacts	11-4	4 Size 16 Contacts
9-10	10 Size 23 Contacts	12-5	5 Size 16 Contacts
10-13	13 Size 23 Contacts	15-7	7 Size 16 Contacts
11-19	19 Size 23 Contacts	18-12	12 Size 16 Contacts
12-26	26 Size 23 Contacts	19-14	14 Size 16 Contacts
13-31	31 Size 23 Contacts	21-19	19 Size 16 Contacts
15-37	37 Size 23 Contacts	23-22	22 Size 16 Contacts
18-55	55 Size 23 Contacts	9-1	1 Size 12 Contact
19-85	85 Size 23 Contacts	12-2	2 Size 12 Contacts
21-100	100 Size 23 Contacts	15-2	2 Size 12 Contact
23-130	130 Size 23 Contacts	15-3	3 Size 12 Contact
8-23	3 Size 20HD Contacts	18-4	4 Size 12 Contact
9-25	5 Size 20HD Contacts	18-5	5 Size 12 Contact
10-28	8 Size 20HD Contacts	19-7	7 Size 12 Contact
11-210	10 Size 20HD Contacts	23-12	12 Size 12 Contact
15-220	20 Size 20HD Contacts		
18-235	35 Size 20HD Contacts		
19-241	41 Size 20HD Contacts		
21-255	55 Size 20HD Contacts		
23-269	69 Size 20HD Contacts		

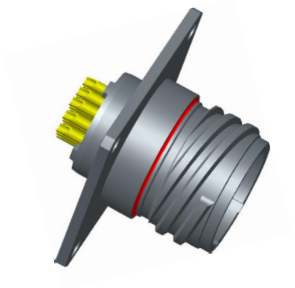
7-Contact Style	
A	Pin, PC-Tail, .062 Extension
B	Pin, PC-Tail, .109 Extension
G	Pin, PC-Tail, .125 Extension
C	Socket, PC Tail, .062 Extension
D	Socket, PC Tail, .109 Extension
H	Socket, PC Tail, .125 Extension
E	Pin, Solder Cup
F	Socket, Solder Cup

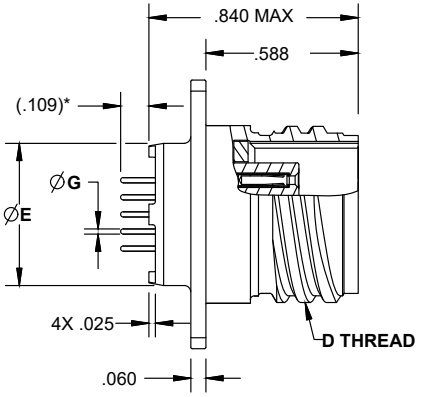
8- Clocking		
Position	K1°	K2°
A (Normal)	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°
E	75°	275°
F	95°	210°

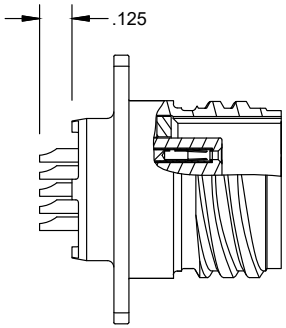
9- Modification Codes	
-F0	Less Contacts ("F0" not stamped on connector, but must be included on the P.O.)
-518	Class "C" PC style black potted connectors w/water immersion testing

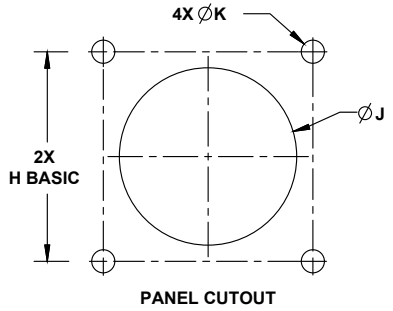
MKJ5 Box Mount Receptacle - Square Flange PCB

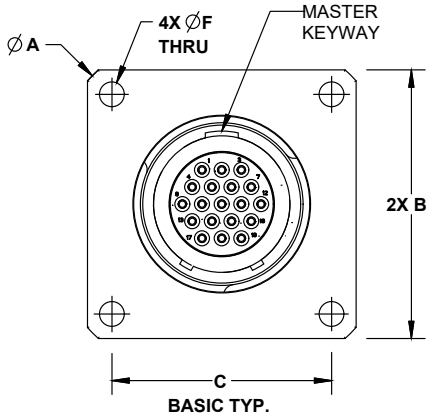












* Connector shown with contact style B

MKJ5 Box Mount Receptacle - Square Flange PCB with PC Tail

MKJ5 Box Mount Receptacle - Square Flange PCB with Solder Cup

MKJ5 Box Mount Receptacle - Square Flange PCB Dimensions										
SHELL SIZE	ØA	B	C, BASIC TYP	D THREAD	ØE	ØF ±.005	ØG	H, BASIC	ØJ	ØK ±.003
8	1.150	0.850	0.660	.5000-.1P-.3L-TS-2A	0.330	0.094	.SIZE 23 .018/.022 SIZE 20HD .024/.028	0.660	0.520	0.094
9	1.230	0.913	0.723	.5625-.1P-.3L-TS-2A	0.432			0.723	0.584	
10	1.330	0.975	0.785	.6250-.1P-.3L-TS-2A	0.493			0.785	0.653	
11	1.410	1.039	0.848	.6875-.1P-.3L-TS-2A	0.551			0.848	0.718	
12	1.500	1.099	0.909	.7500-.1P-.3L-TS-2A	0.620			0.909	0.775	
15	1.750	1.288	1.058	.9375-.1P-.3L-TS-2A	0.703	0.128	SIZE 16 .060/.064 SIZE 12 .092/.096	1.058	0.961	0.128
18	2.000	1.475	1.255	1.1250-.1P-.3L-TS-2A	0.863			1.255	1.140	
19	2.094	1.537	1.327	1.1875-.1P-.3L-TS-2A	0.912			1.327	1.230	
21	2.270	1.663	1.452	1.3125-.1P-.3L-TS-2A	1.017			1.452	1.328	
23	2.440	1.787	1.570	1.4375-.1P-.3L-TS-2A	1.162			1.570	1.453	

MKJ5 Jam Nut Receptacle- Rear Panel Mount PCB

Part Number Configurator

1- Series	2- Coupling	3- Class	4- Shell Style	5- Plating	6- Arrangement	7- Contact Style	8- Clocking	9- MOD Codes
MKJ	5	C	7	F	9-10	B	A	-518

1- Product	
MKJ	MKJ Series -
2- Coupling	
5	Threaded Coupling, Triple Start ACME Thread
3- Class	
C	Back-Potted Receptacle-PC/Flex/Solder
4- Shell Style	
7	Jam Nut Receptacle-Rear Panel Mount PCB
5- Plating	
C	Aluminum / Anodized, Black
F	Aluminum/Electroless Nickel
K	Stainless Steel / Passivated
N	Stainless Steel/Electroless Nickel
T	Aluminum/Teflon Nickel
W	Aluminum/Olive Drab Cadmium over Electroless Nickel
Y	Stainless Steel / Electroless Nickel, Black
Z	Aluminum/Zinc Nickel, Black

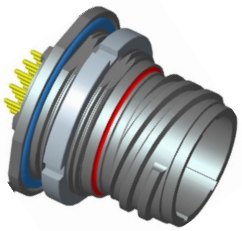
6- Standard Arrangements (For Combo, please reference pages 12-13)			
8-4	4 Size 23 Contacts	8-1	1 Size 16 Contact
8-6	6 Size 23 Contacts	10-2	2 Size 16 Contacts
8-7	7 Size 23 Contacts	11-4	4 Size 16 Contacts
9-10	10 Size 23 Contacts	12-5	5 Size 16 Contacts
10-13	13 Size 23 Contacts	15-7	7 Size 16 Contacts
11-19	19 Size 23 Contacts	18-12	12 Size 16 Contacts
12-26	26 Size 23 Contacts	19-14	14 Size 16 Contacts
13-31	31 Size 23 Contacts	21-19	19 Size 16 Contacts
15-37	37 Size 23 Contacts	23-22	22 Size 16 Contacts
18-55	55 Size 23 Contacts	9-1	1 Size 12 Contact
19-85	85 Size 23 Contacts	12-2	2 Size 12 Contacts
21-100	100 Size 23 Contacts	15-2	2 Size 12 Contact
23-130	130 Size 23 Contacts	15-3	3 Size 12 Contact
8-23	3 Size 20HD Contacts	18-4	4 Size 12 Contact
9-25	5 Size 20HD Contacts	18-5	5 Size 12 Contact
10-28	8 Size 20HD Contacts	19-7	7 Size 12 Contact
11-210	10 Size 20HD Contacts	23-12	12 Size 12 Contact
15-220	20 Size 20HD Contacts		
18-235	35 Size 20HD Contacts		
19-241	41 Size 20HD Contacts		
21-255	55 Size 20HD Contacts		
23-269	69 Size 20HD Contacts		

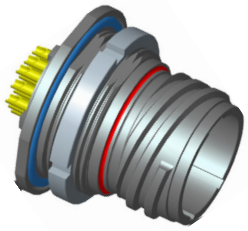
7- Contact Style	
A	Pin, PC-Tail, .062 Extension
B	Pin, PC-Tail, .109 Extension
G	Pin, PC-Tail, .125 Extension
C	Socket, PC Tail, .062 Extension
D	Socket, PC Tail, .109 Extension
H	Socket, PC Tail, .125 Extension
E	Pin, Solder Cup
F	Socket, Solder Cup

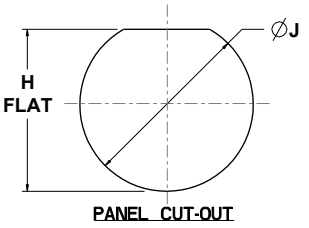
8- Clocking		
Position	K1°	K2°
A (Normal)	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°
E	75°	275°
F	95°	210°

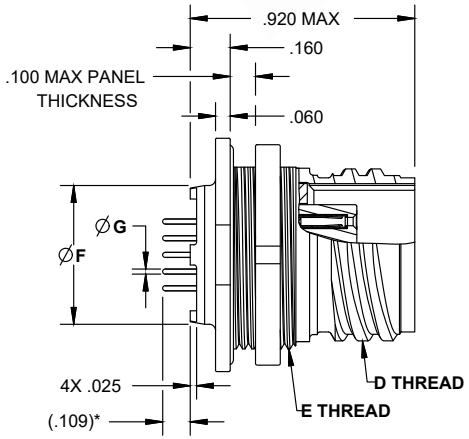
9- Modification Codes	
-F0	Less Contacts ("F0" not stamped on connector, but must be included on the P.O.)
-518	Class "C" PC style black potted connectors w/water immersion testing

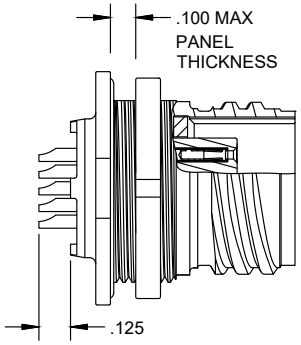
MKJ5 Jam Nut Receptacle - Rear Panel Mount PCB

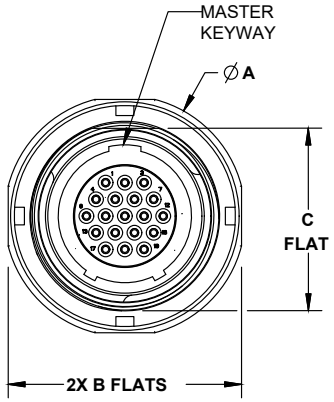












* Connector shown with contact style B

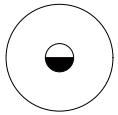
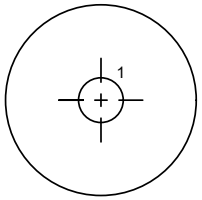
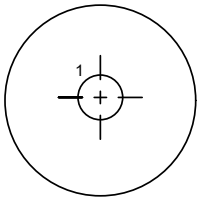
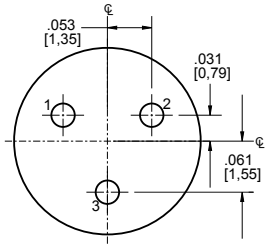
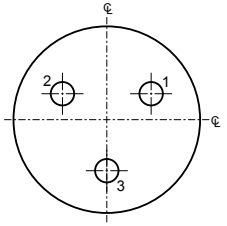
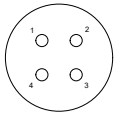
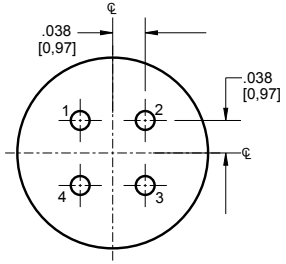
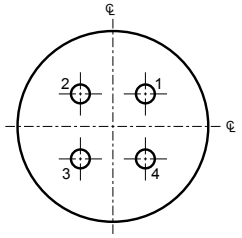
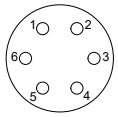
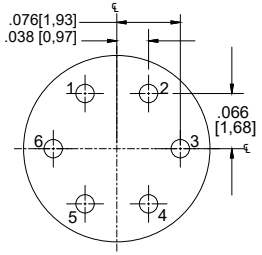
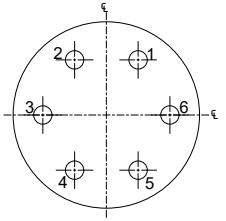
MKJ5 Jam Nut Receptacle - Rear Panel Mount PCB with PC Tail

MKJ5 Jam Nut Receptacle - Rear Panel Mount PCB with Solder Cup

MKJ5 Jam Nut Receptacle - Rear Panel Mount PCB Dimensions									
SHELL SIZE	ØA	B FLATS	C FLAT	D THREAD	E THREAD (UN-2A)	ØF	ØG	H FLAT ± .002	ØJ ± .005
8	0.760	0.730	0.535	.5000-.1P-.3L-TS-2A	.5625-32	0.330	.SIZE 23 .018/.022	0.543	0.572
9	0.880	0.850	0.661	.5625-.1P-.3L-TS-2A	.6875-28	0.432		0.669	0.698
10	0.880	0.850	0.661	.6250-.1P-.3L-TS-2A	.6875-28	0.493		0.669	0.698
11	0.955	0.925	0.721	.6875-.1P-.3L-TS-2A	.7500-28	0.551	SIZE 20HD .024/.028	0.729	0.760
12	1.060	1.035	0.784	.7500-.1P-.3L-TS-2A	.8125-28	0.620		0.792	0.822
15	1.203	1.173	0.970	.9375-.1P-.3L-TS-2A	1.0000-28	0.703	SIZE 16 .060/.064	0.978	1.010
18	1.389	1.359	1.147	1.1250-.1P-.3L-TS-2A	1.1875-28	0.863		1.155	1.198
19	1.450	1.420	1.221	1.1875-.1P-.3L-TS-2A	1.2500-28	0.912		1.231	1.260
21	1.580	1.550	1.348	1.3125-.1P-.3L-TS-2A	1.3750-28	1.017	SIZE 12 .092/.096	1.356	1.386
23	1.705	1.675	1.470	1.4375-.1P-.3L-TS-2A	1.5000-28	1.162		1.480	1.510

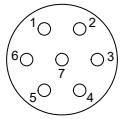
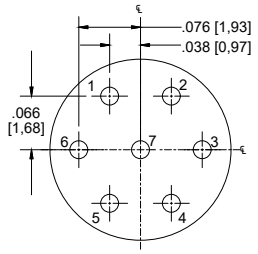
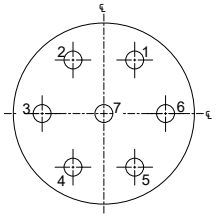
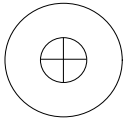
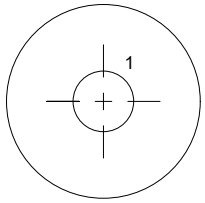
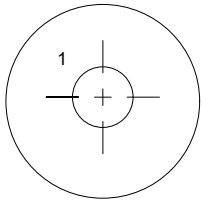
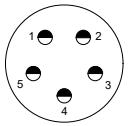
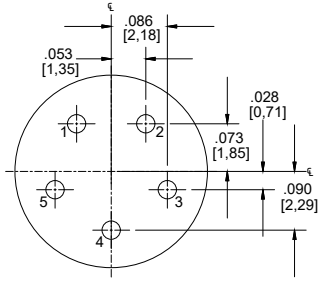
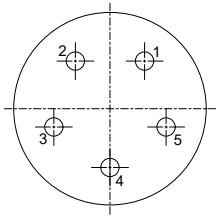
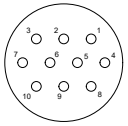
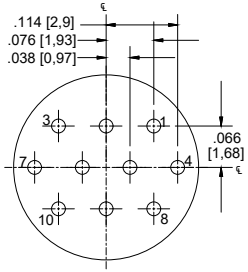
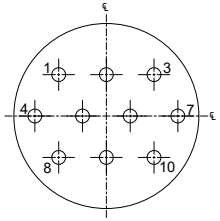
MKJ5 PCB Hole Patterns - Standard Arrangements

Face View of Pin Insulators (Socket layouts reversed)

Layout	Pin	Socket
		
Layout: 8-1 Contact QTY: 1 Contact Size: 16		
		
Layout: 8-23 Contact QTY: 3 Contact Size: 20HD		
		
Layout: 8-4 Contact QTY: 4 Contact Size: 23		
		
Layout: 8-6 Contact QTY: 6 Contact Size: 23		

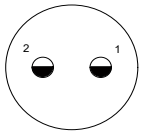
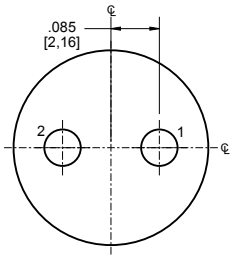
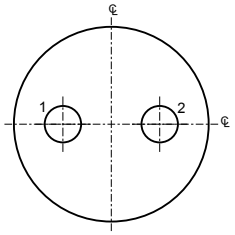
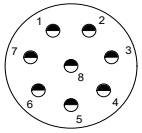
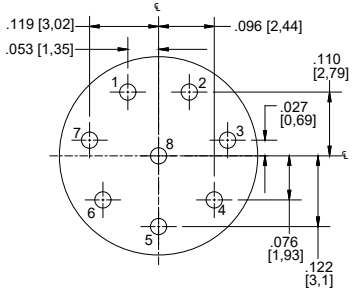
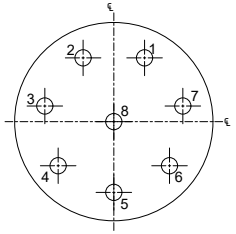
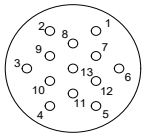
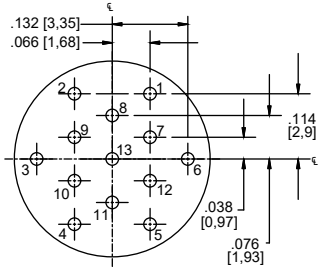
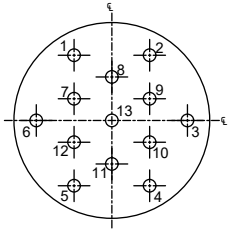
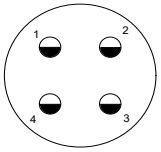
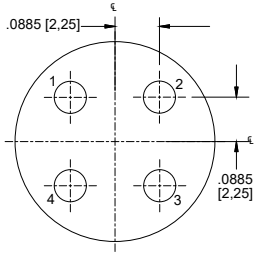
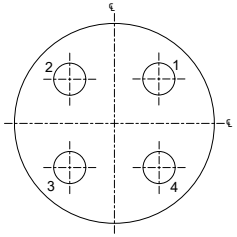
MKJ5 PCB Hole Patterns - Standard Arrangements

Face View of Pin Insulators (Socket layouts reversed)

Layout	Pin	Socket
 Layout: 8-7 Contact QTY: 7 Contact Size: 23		
 Layout: 9-1 Contact QTY: 1 Contact Size: 12		
 Layout: 9-25 Contact QTY: 5 Contact Size: 20HD		
 Layout: 9-10 Contact QTY: 10 Contact Size: 23		

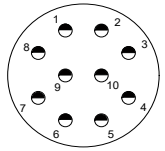
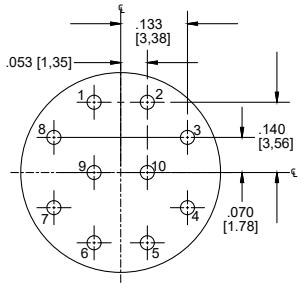
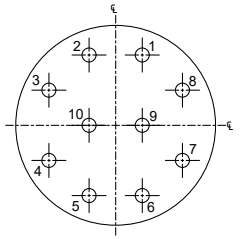
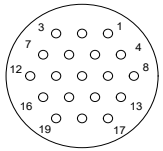
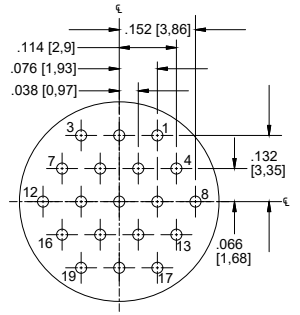
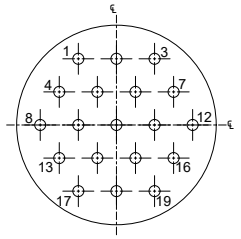
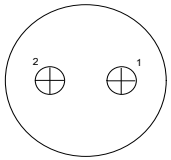
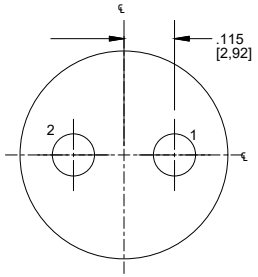
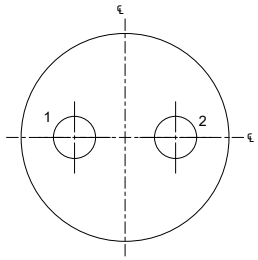
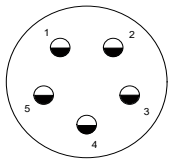
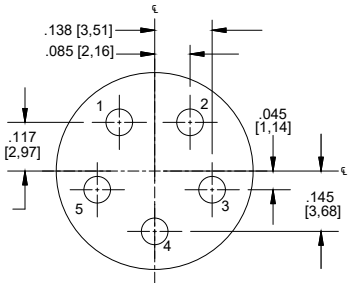
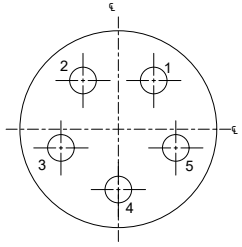
MKJ5 PCB Hole Patterns - Standard Arrangements

Face View of Pin Insulators (Socket layouts reversed)

Layout	Pin	Socket
		
Layout: 10-2 Contact QTY: 2 Contact Size: 16		
		
Layout: 10-28 Contact QTY: 8 Contact Size: 20HD		
		
Layout: 10-13 Contact QTY: 13 Contact Size: 23		
		
Layout: 11-4 Contact QTY: 4 Contact Size: 16		

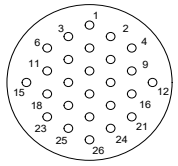
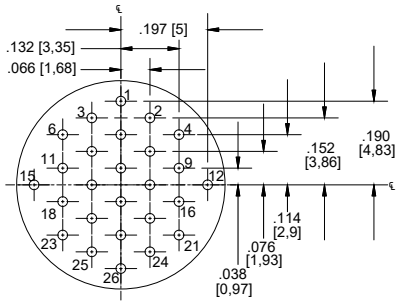
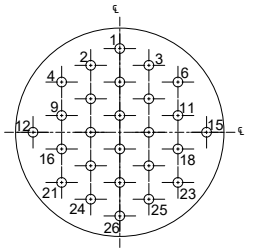
MKJ5 PCB Hole Patterns - Standard Arrangements

Face View of Pin Insulators (Socket layouts reversed)

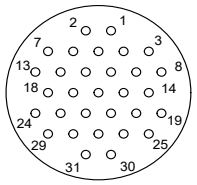
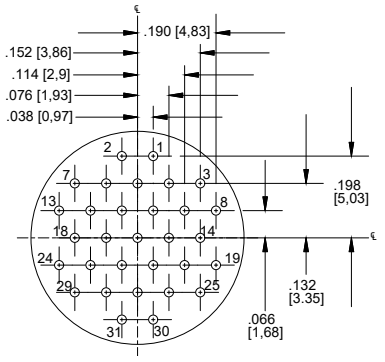
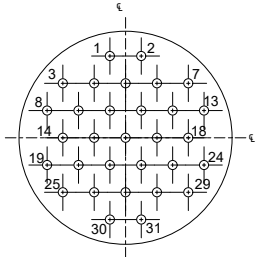
Layout	Pin	Socket
		
Layout: 11-210 Contact QTY: 10 Contact Size: 20HD		
		
Layout: 11-19 Contact QTY: 19 Contact Size: 23		
		
Layout: 12-2 Contact QTY: 2 Contact Size: 12		
		
Layout: 12-5 Contact QTY: 5 Contact Size: 16		

MKJ5 PCB Hole Patterns - Standard Arrangements

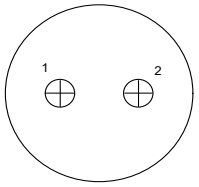
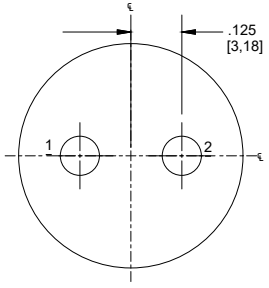
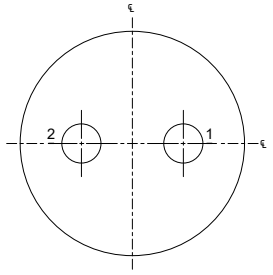
Face View of Pin Insulators (Socket layouts reversed)

Layout	Pin	Socket
		

Layout	12-26
Contact QTY	26
Contact Size	23

Layout	Pin	Socket
		

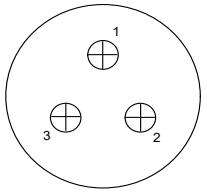
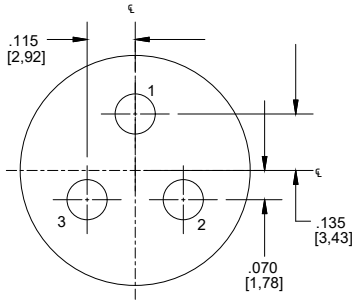
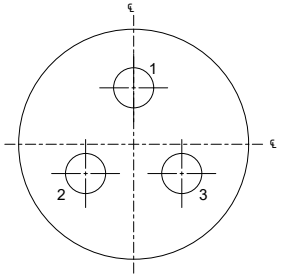
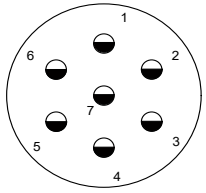
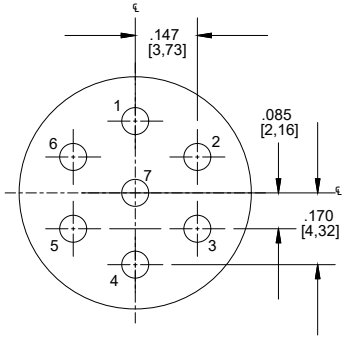
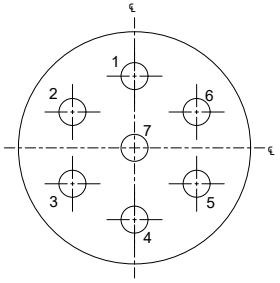
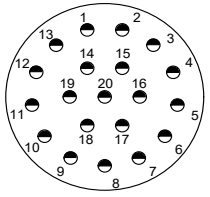
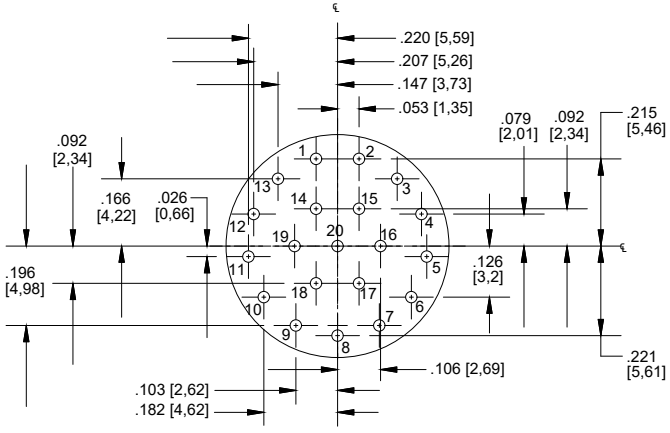
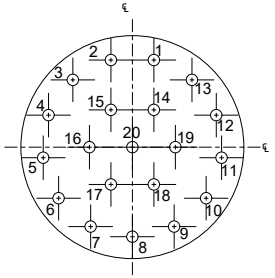
Layout	13-31
Contact QTY	31
Contact Size	23

Layout	Pin	Socket
		

Layout	15-2
Contact QTY	2
Contact Size	12

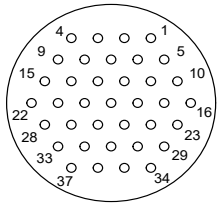
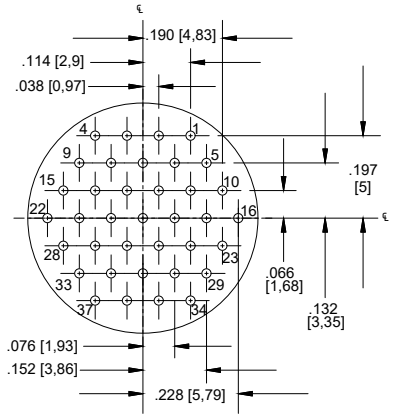
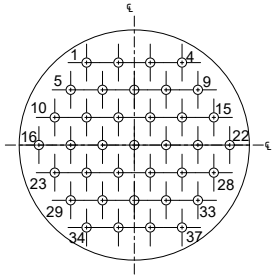
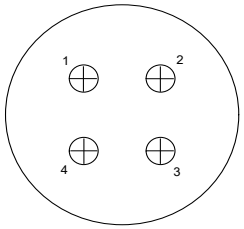
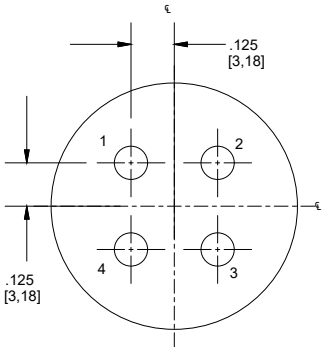
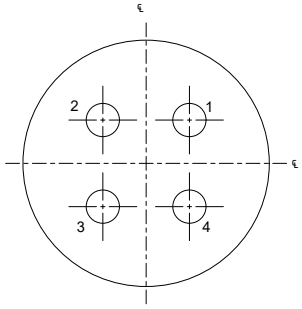
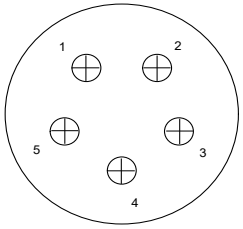
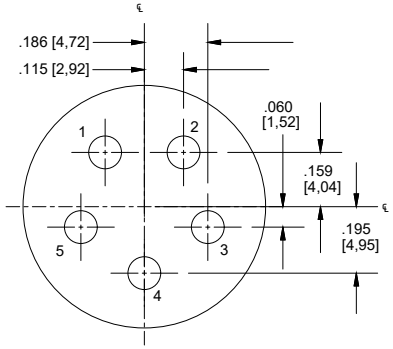
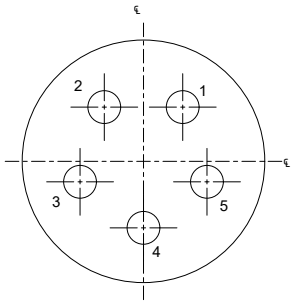
MKJ5 PCB Hole Patterns - Standard Arrangements

Face View of Pin Insulators (Socket layouts reversed)

Layout	Pin	Socket
		
Layout: 15-3 Contact QTY: 3 Contact Size: 12		
		
Layout: 15-7 Contact QTY: 7 Contact Size: 16		
		
Layout: 15-220 Contact QTY: 20 Contact Size: 20HD		

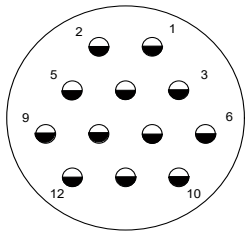
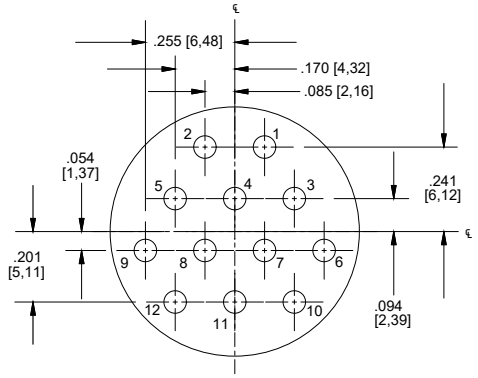
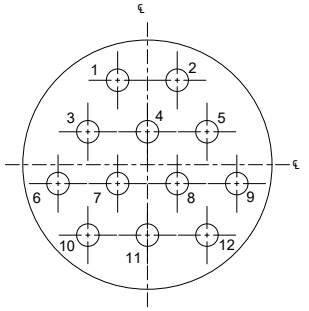
MKJ5 PCB Hole Patterns - Standard Arrangements

Face View of Pin Insulators (Socket layouts reversed)

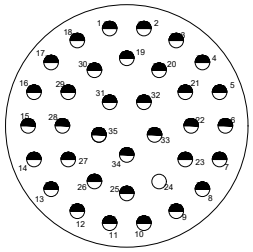
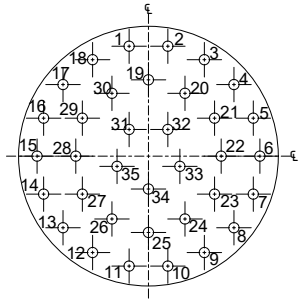
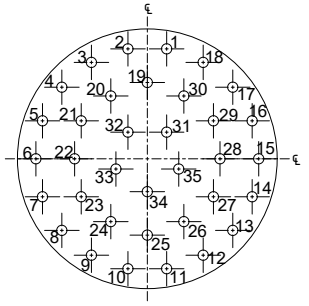
Layout	Pin	Socket
		
Layout: 15-37 Contact QTY: 37 Contact Size: 23		
		
Layout: 18-4 Contact QTY: 4 Contact Size: 12		
		
Layout: 18-5 Contact QTY: 5 Contact Size: 12		

MKJ5 PCB Hole Patterns - Standard Arrangements

Face View of Pin Insulators (Socket layouts reversed)

Layout	Pin	Socket
		

Layout	18-12
Contact QTY	12
Contact Size	16

Layout	Pin	Socket
		

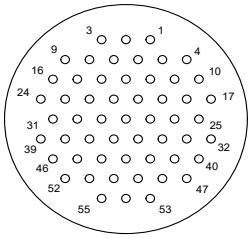
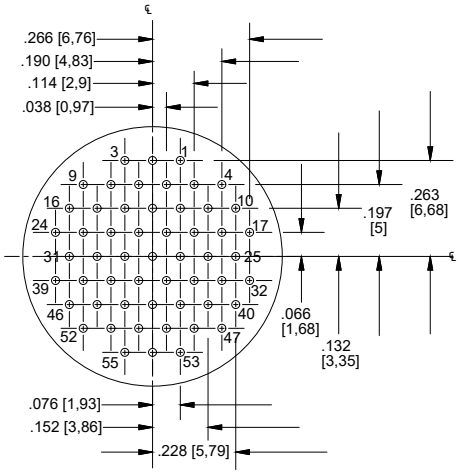
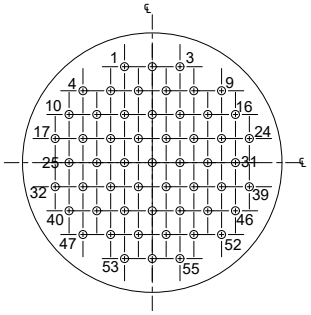
Layout	18-235
Contact QTY	35
Contact Size	20HD

18-235

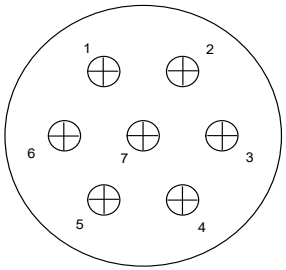
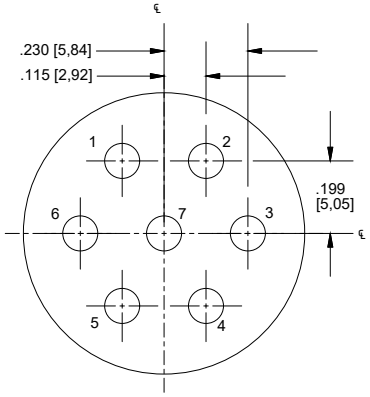
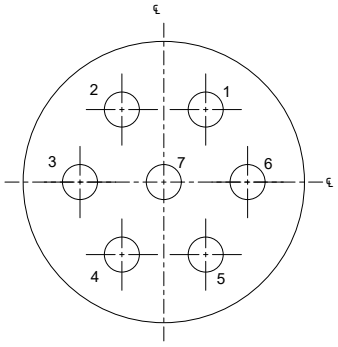
Pin. No.	X		Y		Pin. No.	X		Y		Pin. No.	X		Y	
	in.	mm.	in.	mm.		in.	mm.	in.	mm.		in.	mm.	in.	mm.
1	-.053	-1.35	.301	7.65	**13**	-.234	-5.94	-.196	-4.98	**25**	.000	.00	-.209	-5.31
2	.053	1.35	.301	7.65	**14**	-.287	-7.29	-.104	-2.64	**26**	-.100	-2.54	-.172	-4.37
3	.153	3.89	.264	6.71	**15**	-.305	-7.75	.000	.00	**27**	-.181	-4.60	-.104	-2.64
4	.234	5.94	.196	4.98	**16**	-.287	-7.29	.104	2.64	**28**	-.199	-5.05	.000	0.00
5	.287	7.29	.104	2.64	**17**	-.234	-5.94	.196	4.98	**29**	-.181	-4.60	.104	2.64
6	.305	7.75	.000	.00	**18**	-.153	-3.89	.264	6.71	**30**	-.100	-2.54	.172	4.37
7	.287	7.29	-.104	-2.64	**19**	.000	.00	.209	5.31	**31**	-.053	-1.35	.073	1.85
8	.234	5.94	-.196	-4.98	**20**	.100	2.54	.172	4.37	**32**	.053	1.35	.073	1.85
9	.153	3.89	-.264	-6.71	**21**	.181	4.60	.104	2.64	**33**	.086	2.18	-.028	-0.71
10	.053	1.35	-.301	-7.65	**22**	.199	5.05	.000	.00	**34**	.000	.00	-.090	-2.29
11	-.053	-1.35	-.301	-7.65	**23**	.181	4.60	-.104	-2.64	**35**	-.086	-2.18	-.028	-0.71
12	-.153	-3.89	-.264	-6.71	**24**	.100	2.54	-.172	-4.37					

MKJ5 PCB Hole Patterns - Standard Arrangements

Face View of Pin Insulators (Socket layouts reversed)

Layout	Pin	Socket
		

Layout	18-55
Contact QTY	55
Contact Size	23

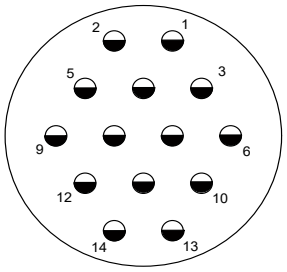
Layout	Pin	Socket
		

Layout	19-7
Contact QTY	7
Contact Size	12

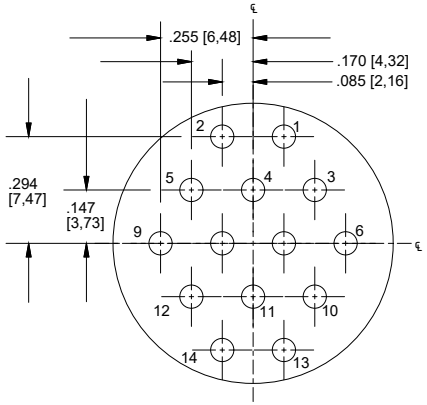
MKJ5 PCB Hole Patterns - Standard Arrangements

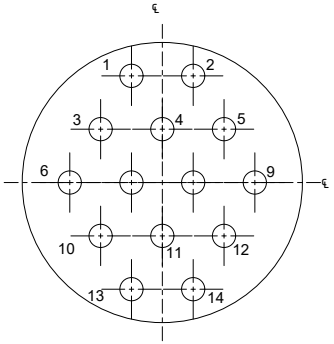
Face View of Pin Insulators (Socket layouts reversed)

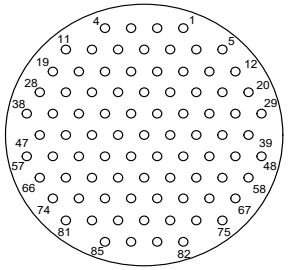
Layout	Pin	Socket



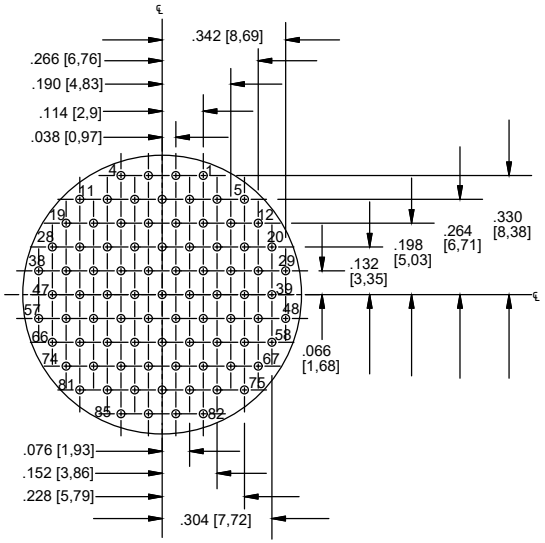
Layout	19-14
Contact QTY	14
Contact Size	16

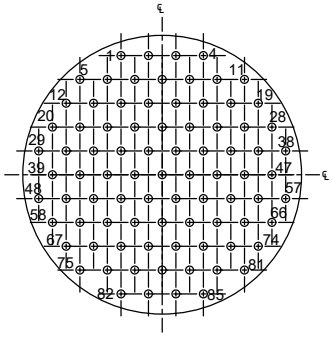






Layout	19-85
Contact QTY	85
Contact Size	23

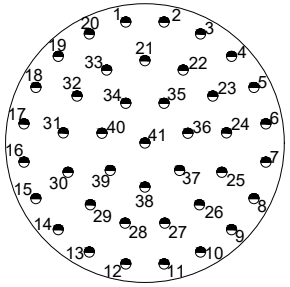


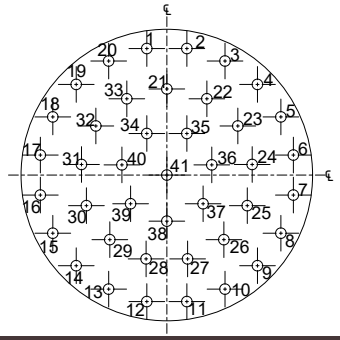


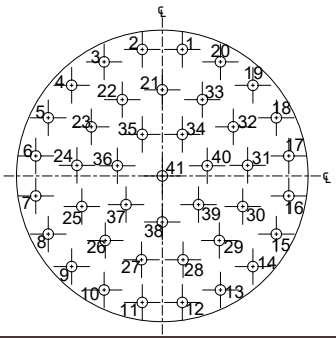
MKJ5 PCB Hole Patterns - Standard Arrangements

Face View of Pin Insulators (Socket layouts reversed)

Layout	Pin	Socket



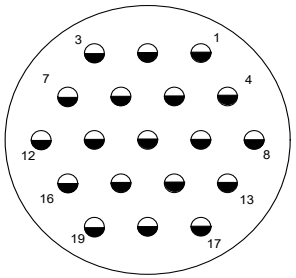




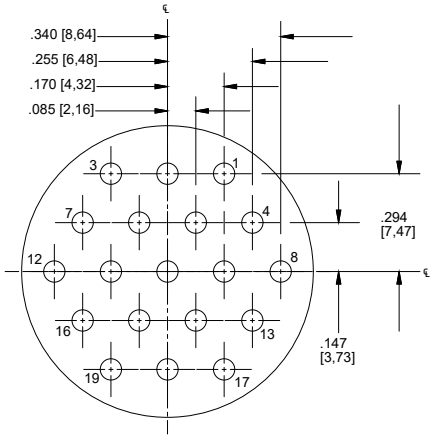
Layout	19-241
Contact QTY	41
Contact Size	20HD

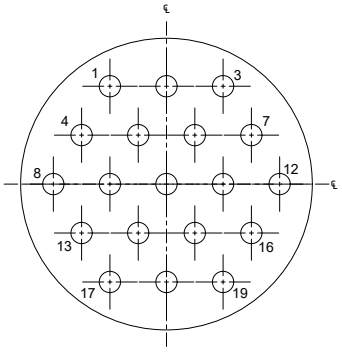
19-241

Pin. No.	X		Y		Pin. No.	X		Y		Pin. No.	X		Y	
	in.	mm.	in.	mm.		in.	mm.	in.	mm.		in.	mm.	in.	mm.
1	-.053	-1.35	.335	8.51	**15**	-.302	-7.67	-.154	-3.91	**29**	-.151	-3.84	-.171	-4.34
2	.053	1.35	.335	8.51	**16**	-.335	-8.51	-.053	-1.35	**30**	-.213	-5.41	-.081	-2.06
3	.154	3.91	.302	7.67	**17**	-.335	-8.51	.053	1.35	**31**	-.226	-5.74	.028	0.71
4	.240	6.10	.240	6.10	**18**	-.302	-7.67	.154	3.91	**32**	-.188	-4.78	.130	3.30
5	.302	7.67	.154	3.91	**19**	-.240	-6.10	.240	6.10	**33**	-.106	-2.69	.202	5.13
6	.335	8.51	.053	1.35	**20**	-.154	-3.91	.302	7.67	**34**	-.053	-1.35	.110	2.79
7	.335	8.51	-.053	-1.35	**21**	.000	0.00	.228	5.79	**35**	.053	1.35	.110	2.79
8	.302	7.67	-.154	-3.91	**22**	.106	2.69	.202	5.13	**36**	.119	3.02	.027	0.69
9	.240	6.10	-.240	-6.10	**23**	.188	4.78	.130	3.30	**37**	.096	2.44	-.076	-1.93
10	.154	3.91	-.302	-7.67	**24**	.226	5.74	.028	0.71	**38**	.000	0.00	-.122	-3.10
11	.053	1.35	-.335	-8.51	**25**	.213	5.41	-.081	-2.06	**39**	-.096	-2.44	-.076	-1.93
12	-.053	-1.35	-.335	-6.51	**26**	.151	3.84	-.171	-4.34	**40**	-.119	-3.02	.027	0.69
13	-.154	-3.91	-.302	-7.67	**27**	.055	1.40	-.222	-5.64	**41**	.000	0.00	.000	0.00
14	-.240	-6.10	-.240	-6.10	**28**	-.055	-1.40	-.222	-5.64					



Layout	21-19
Contact QTY	19
Contact Size	16

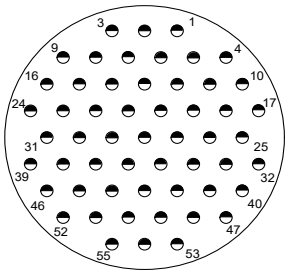




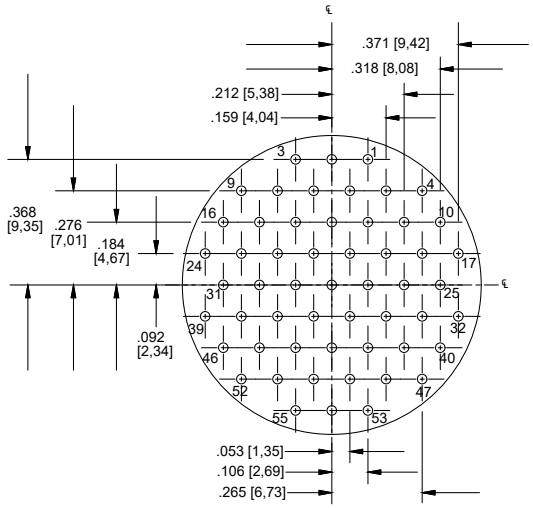
MKJ5 PCB Hole Patterns - Standard Arrangements

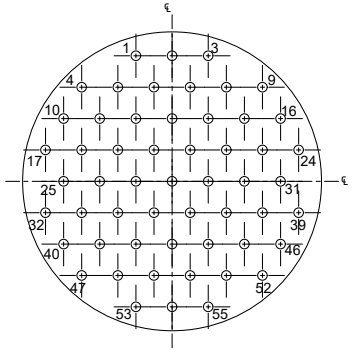
Face View of Pin Insulators (Socket layouts reversed)

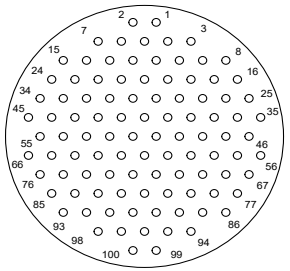
Layout	Pin	Socket



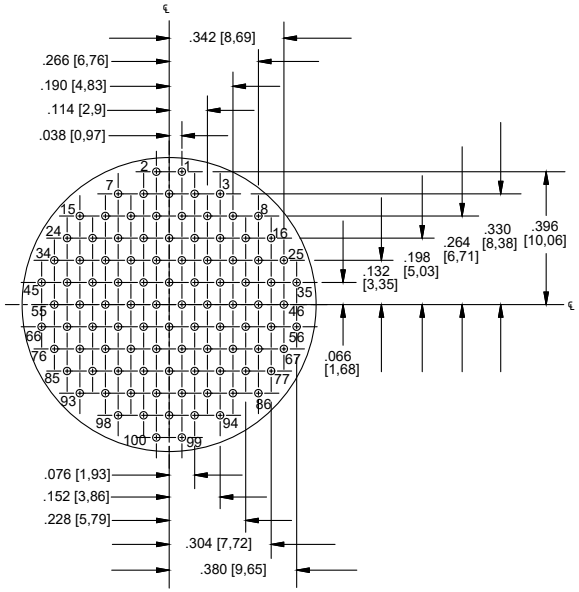
Layout	21-255
Contact QTY	55
Contact Size	20HD

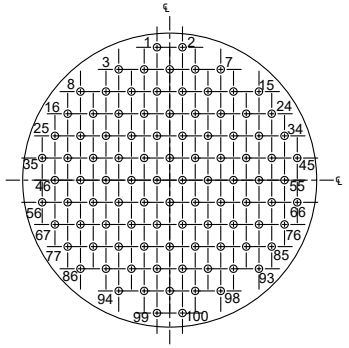






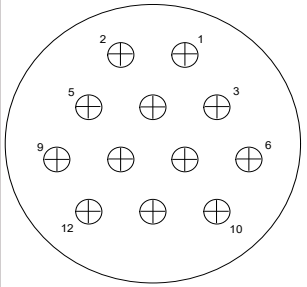
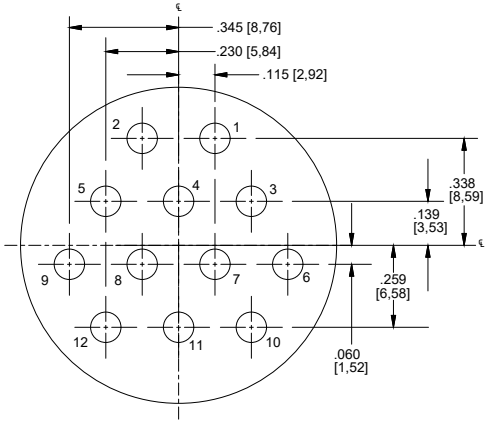
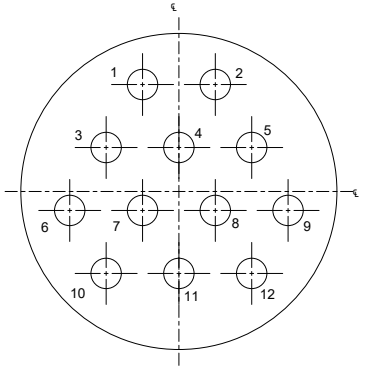
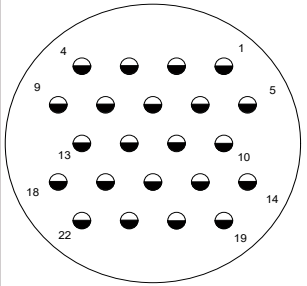
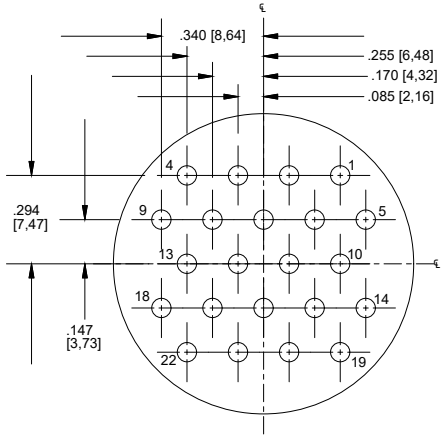
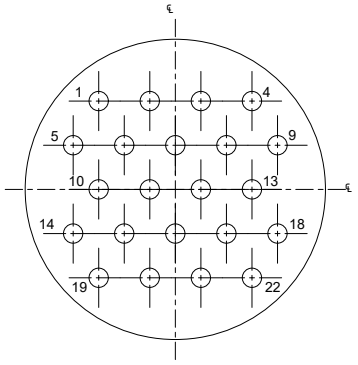
Layout	21-100
Contact QTY	100
Contact Size	23





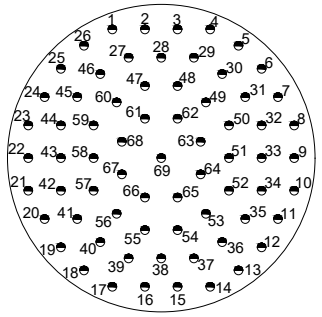
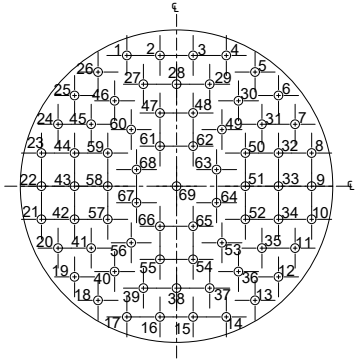
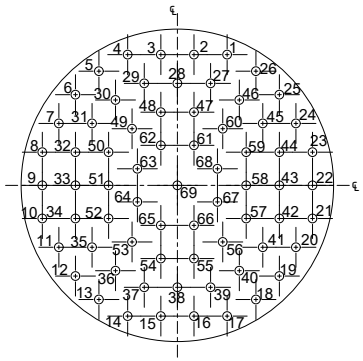
MKJ5 PCB Hole Patterns - Standard Arrangements

Face View of Pin Insulators (Socket layouts reversed)

Layout	Pin	Socket
		
Layout: 23-12 Contact QTY: 12 Contact Size: 12		
		
Layout: 23-22 Contact QTY: 22 Contact Size: 16		

MKJ5 PCB Hole Patterns - Standard Arrangements

Face View of Pin Insulators (Socket layouts reversed)

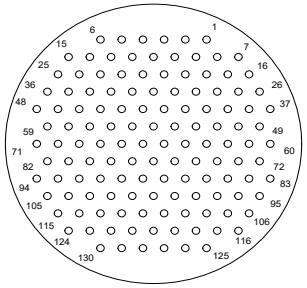
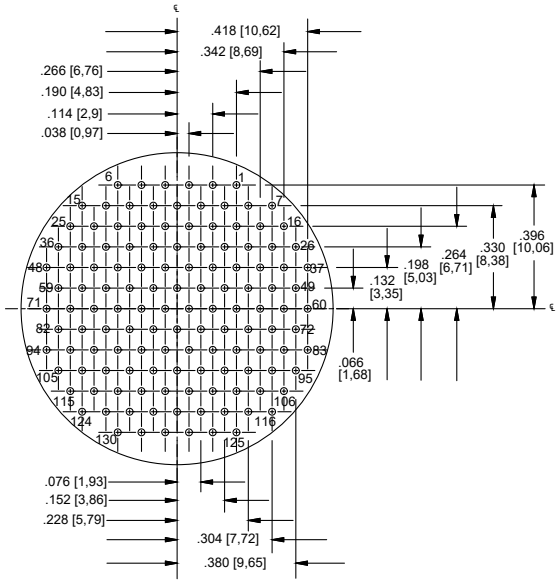
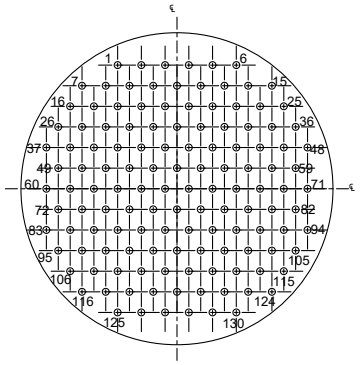
Layout	Pin	Socket
		

Layout	23-269
Contact QTY	69
Contact Size	20HD

23-269														
Pin. No.	X		Y		Pin. No.	X		Y		Pin. No.	X		Y	
	in.	mm.	in.	mm.		in.	mm.	in.	mm.		in.	mm.	in.	mm.
1	-.159	-4.04	.418	10.62	**24**	-.379	-9.63	.198	5.03	**47**	-.053	-1.35	.234	5.94
2	-.053	-1.35	.418	10.62	**25**	-.326	-8.28	.290	7.37	**48**	.053	1.35	.234	5.94
3	.053	1.35	.418	10.62	**26**	-.251	-6.38	.365	9.27	**49**	.145	3.68	.181	4.60
4	.159	4.04	.418	10.62	**27**	-.106	-2.69	.326	8.28	**50**	.220	5.59	.106	2.69
5	.251	6.38	.365	9.27	**28**	.000	0.00	.326	8.28	**51**	.220	5.59	.000	0.00
6	.326	8.28	.290	7.37	**29**	.106	2.69	.326	8.28	**52**	.220	5.59	-.106	-2.69
7	.379	9.63	.198	5.03	**30**	.198	5.03	.273	6.93	**53**	.145	3.68	-.181	-4.60
8	.432	10.97	.106	2.69	**31**	.273	6.93	.198	5.03	**54**	.053	1.35	-.234	-5.94
9	.432	10.97	.000	0.00	**32**	.326	8.28	.106	2.69	**55**	-.053	-1.35	-.234	-5.94
10	.432	10.97	-.106	-2.69	**33**	.326	8.28	.000	0.00	**56**	-.145	-3.68	-.181	-4.60
11	.379	9.63	-.198	-5.03	**34**	.326	8.28	-.106	-2.69	**57**	-.220	-5.59	-.106	-2.69
12	.326	8.28	-.290	-7.37	**35**	.273	6.93	-.198	-5.03	**58**	-.220	-5.59	.000	0.00
13	.251	6.38	-.365	-9.27	**36**	.198	5.03	-.273	-6.93	**59**	-.220	-5.59	.106	2.69
14	.159	4.04	-.418	-10.62	**37**	.106	2.69	-.326	-8.28	**60**	-.145	-3.68	.181	4.60
15	.053	1.35	-.418	-10.62	**38**	.000	0.00	-.326	-8.28	**61**	-.053	-1.35	.128	3.25
16	-.053	-1.35	-.418	-10.62	**39**	-.106	-2.69	-.326	-8.28	**62**	.053	1.35	.128	3.25
17	-.159	-4.04	-.418	-10.62	**40**	-.198	-5.03	-.273	-6.93	**63**	.128	3.25	.053	1.35
18	-.251	-6.38	-.365	-9.27	**41**	-.273	-6.93	-.198	-5.03	**64**	.128	3.25	-.053	-1.35
19	-.326	-8.28	-.290	-7.37	**42**	-.326	-8.28	-.106	-2.69	**65**	.053	1.35	-.128	-3.25
20	-.379	-9.63	-.198	-5.03	**43**	-.326	-8.28	.000	0.00	**66**	-.053	-1.35	-.128	-3.25
21	-.432	-10.97	-.106	-2.69	**44**	-.326	-8.28	.106	2.69	**67**	-.128	-3.25	-.053	-1.35
22	-.432	-10.97	.000	0.00	**45**	-.273	-6.93	.198	5.03	**68**	-.128	-3.25	.053	1.35
23	-.432	-10.97	.106	2.69	**46**	-.198	-5.03	.273	6.93	**69**	.000	0.00	.000	0.00

MKJ5 PCB Hole Patterns - Standard Arrangements

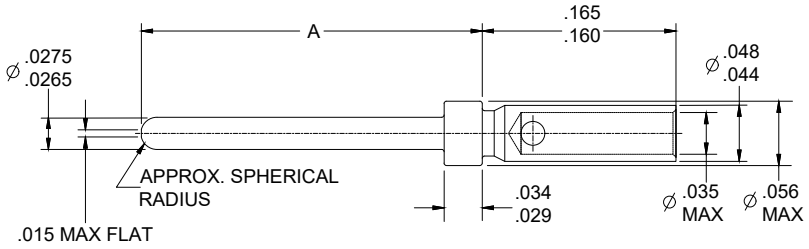
Face View of Pin Insulators (Socket layouts reversed)

Layout	Pin	Socket
		

Layout	23-130
Contact QTY	130
Contact Size	23

MKJ Crimp Contact Drawings

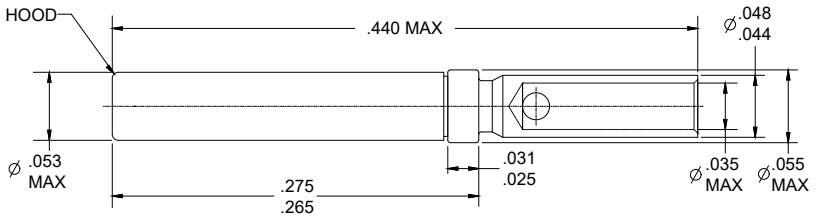
Size #23 Contacts - 5 Amp Max. / Current 750 VAC / #22-#28 AWG



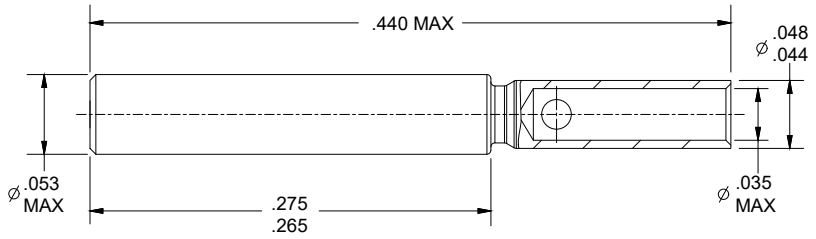
Part Number	A (Dim)	Contact Area Plating	Wire Size
030-9649-000	.283 - .289	50 Micro Inches Gold over Nickel	#22-28 AWG Wire
030-9649-011*	.323 - .327	50 Micro Inches Gold over Nickel	#22-28 AWG Wire
030-9649-100	.283 - .289	50 Micro Inches Gold over Nickel	#26-30 AWG Wire

*First-Mate-Last-Break crimp contact.

Pin - 030-9649-000/-011/-100

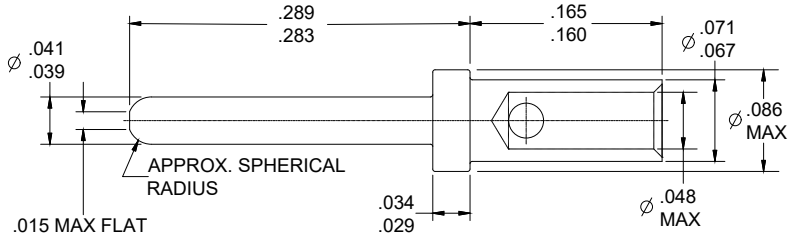


Socket - 031-9750-040 WITH STAINLESS STEEL HOOD

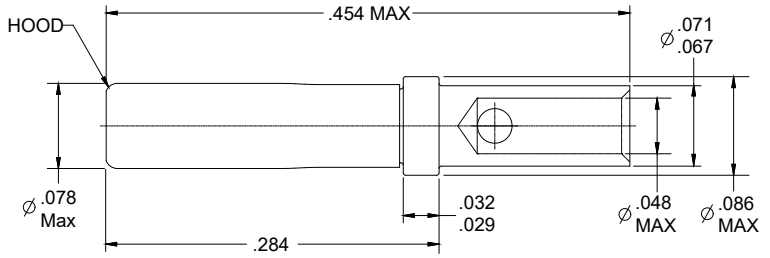


Socket - 031-9750-000 CONTACT Assembly, CRIMP, SIZE 23

Size #20HD Contacts- 7.5 Amp Max. / Current 1000 VAC / #20-#24 AWG



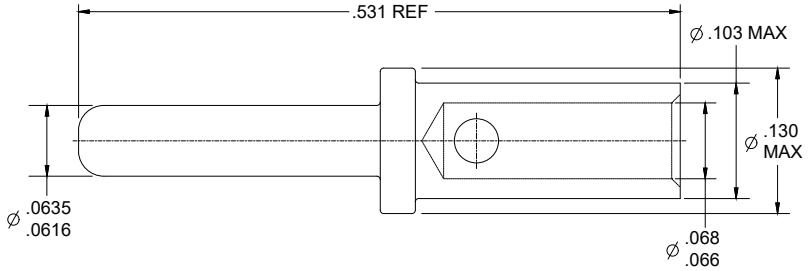
Pin - 030-9661-000



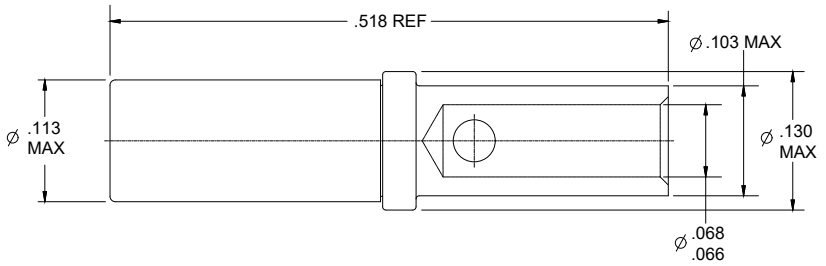
Socket - 031-9766-000

MKJ Crimp Contact Drawings

Size #16 Contacts - 13 Amp Max. / Current 1800 VAC / #16-#20 AWG

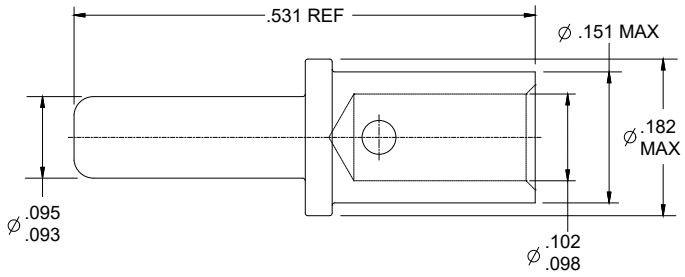


Pin- 980-0008-880

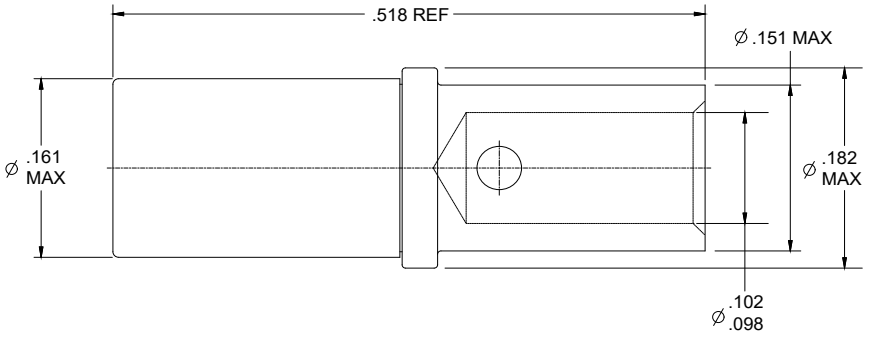


Socket - 980-0008-876

Size #12 Contacts- 23 Amp Max. / Current 1800 VAC / #12-14 AWG



Pin - 980-0008-881



Socket - 980-0008-877

Notes:

Non-removable solder cup and PC tail contacts are supplied with the connectors.
Crimp contacts are supplied with the connector, but not installed. Bulk crimp contacts can be ordered separately.

MKJ5 Series - Accessories

Crimp Tooling

Locator Standard - 995-0002-297

Contact Size	Crimp Tools		Locators	
	ITT Part Number	Military Part number	ITT Part Number	Military Part number
23	995-0002-293	-	995-0002-297	-
20HD	995-0002-293	-	995-0002-303	-
16	995-0001-585	M22520/1-01	-	M22520/1-04
12	995-0001-585	M22520/1-01	-	M22520/1-04

Additional Tooling

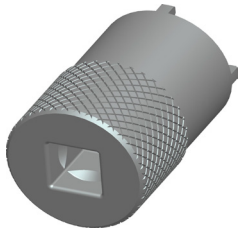
1/8" Bands - 995-0002-299

Tooling	
Tooling Type	Part Number
Insertion Tool	995-0002-295
Extraction Tool	995-0002-294
Hand Banding Tool	995-0002-298
Hand Banding Tool	995-0002-306
1/8" Bands (100 pk)	995-0002-299

Spanner Nut Tool	
Shell Size	Part Number
8	317-2187-001
9, 10	317-2187-012
11	317-2187-013
12	317-2187-014
15	317-2187-015
18	317-2187-018
19	317-2187-038
21	317-2187-036
23	317-2187-037

Hand Banding Tool - 995-0002-298

Hand Banding Tool - 995-0002-306

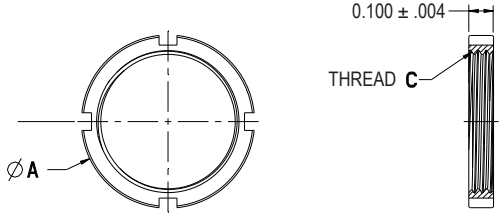


MKJ5 Series - Accessories

Disposable Dust Caps

Disposable Dust Caps			
Shell Size	Part Number	Shell Size	Part Number
8	980-9500-321	15	980-9500-412
9	980-9500-360	18	980-2003-014
10	980-9500-322	19	980-2003-015
11	980-9500-312	21	980-9500-414
12	980-2003-011	23	980-9500-415
13	980-9500-411		

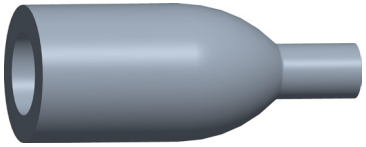
Jam Nut

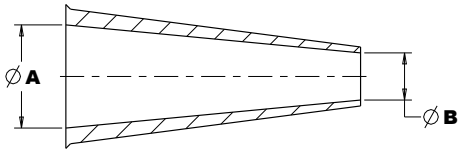


Jam Nut							
SIZE	Material and Finish					ØA ±.005	Thread C
	Aluminum/ Electroless Nickel	Aluminum/ O.D CAD over Nickel	Aluminum/ Teflon Nickel	Aluminum/ Black Zinc Nickel	Stainless Steel/ Electroless Nickel		
8	217-9653-000	217-9653-001	217-9653-002	217-9653-003	217-9653-020	.688	.5625-32 UN-2B
9, 10	217-9658-000	217-9658-001	217-9658-002	217-9658-003	217-9658-020	.814	.6875-28 UN-2B
11	217-9657-000	217-9657-001	217-9657-002	217-9657-003	217-9657-020	.877	.7500-28 UN-2B
12	217-9659-000	217-9659-001	217-9659-002	217-9659-003	217-9659-020	.939	.8125-28 UN-2B
15	217-9665-000	217-9665-001	217-9665-002	217-9665-003	217-9665-020	1.123	1.000-28 UN-2B
18	217-9666-000	217-9666-001	217-9666-002	217-9666-003	217-9666-020	1.313	1.1875-28 UN-2B
19	217-9703-000	217-9703-001	217-9703-002	217-9703-003	217-9703-020	1.370	1.250-28 UN-2B
21	217-9704-000	217-9704-001	217-9704-002	217-9704-003	217-9704-020	1.500	1.375-28 UN-2B
23	217-9705-000	217-9705-001	217-9705-002	217-9705-003	217-9705-020	1.625	1.500-28 UN-2B

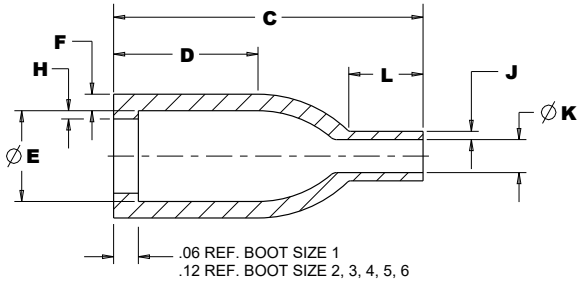
MKJ5 Accessories

Heat Shrink Boot - Straight Angle





STRAIGHT BOOT
(AS PURCHASED, EXPANDED)



STRAIGHT BOOT (AS RECOVERED)

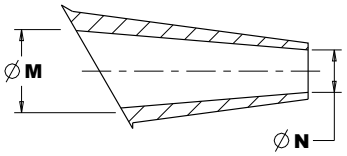
Heat Shrink Boot - Straight Angle Dimensions														
ITT BOOT SIZE	MIL SPEC	FITS SIZE MKJ5	MATERIAL	ITT PART NUMBER	Ø A MIN	Ø B MIN	C ±10%	D ±10%	Ø E MAX	F ±10%	H ±10%	J ±10%	Ø K MAX	L ±10%
2	-	8, 9	High performance, High-Temp epoxy	078-2000-001	0.65	0.65	1.00	.56	.31	.05	.04	.05	.15	.27
			Non-Halogen, Hot melt adhesive	078-2000-007	0.65	0.65	1.00	.56	.31	.05	.04	.05	.15	.27
			High performance, Hot melt adhesive	078-2000-013	0.65	0.65	1.00	.56	.31	.05	.04	.05	.15	.27
3	MS3109-11	10, 11	High performance, High-Temp epoxy	078-2000-002	0.92	0.92	1.50	.90	.41	.06	.04	.06	.22	.40
			Non-Halogen, Hot melt adhesive	078-2000-008	0.92	0.92	1.50	.90	.41	.06	.04	.06	.22	.40
			High performance, Hot melt adhesive	078-2000-014	0.92	0.92	1.50	.90	.41	.06	.04	.06	.22	.40
4	MS3109-12	12, 15	High performance, High-Temp epoxy	078-2000-003	1.22	1.22	2.17	.90	.56	.06	.04	.06	.26	.40
			Non-Halogen, Hot melt adhesive	078-2000-009	1.22	1.22	2.17	.90	.56	.06	.04	.06	.26	.40
			High performance, Hot melt adhesive	078-2000-015	1.22	1.22	2.17	.90	.56	.06	.04	.06	.26	.40
5	MS3109-13	18, 19	High performance, High-Temp epoxy	078-2000-004	1.22	1.22	2.60	1.50	.70	.08	.04	.08	.28	.70
			Non-Halogen, Hot melt adhesive	078-2000-010	1.22	1.22	2.60	1.50	.70	.08	.04	.08	.28	.70
			High performance, Hot melt adhesive	078-2000-016	1.22	1.22	2.60	1.50	.70	.08	.04	.08	.28	.70
6	MS3109-15	23	High performance, High-Temp epoxy	078-2000-005	1.68	1.68	3.90	2.50	1.11	.08	.07	.08	.39	.86
			Non-Halogen, Hot melt adhesive	078-2000-011	1.68	1.68	3.90	2.50	1.11	.08	.07	.08	.39	.86
			High performance, Hot melt adhesive	078-2000-017	1.68	1.68	3.90	2.50	1.11	.08	.07	.08	.39	.86

Notes:

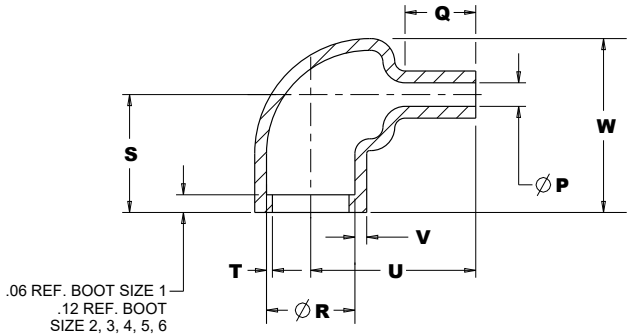
- Material: High performance: Fluid resistance flame retarded elastomer, color black. Temperature range: -75°C to 150°C.
  Non-Halogen: Flexible zero-halogen limited fire hazard, color black. Temperature range: -55°C to 105°C.
- Minimum dimensions are as purchased , unrecovered. • Maximum dimensions shown represent the dimension at the boots maximum shrink.
- Boot size applicable only to standard ITT MKJ banded connectors. Consult factory for other size applications.
- Boot has a pre-applied polyamide hot melt adhesive or 1 part epoxy. A. Hot melt adhesive is halogen free. Operating range is -55°C to 120°C.
  B. High-Temp epoxy has an operating temperature of -75°C to 200°C.

MKJ5 Series - Accessories

Heat Shrink Boot - Right Angle



RIGHT ANGLE BOOT
(AS PURCHASED, EXPANDED)



RIGHT ANGLE BOOT (AS RECOVERED)

Heat Shrink Boot - Right Angle Dimensions														
ITT BOOT SIZE	MIL SPEC	FITS SIZE MKJ5	MATERIAL	ITT PART NUMBER	Ø M MIN	Ø N MIN	Ø P MAX	Q ±10%	Ø R MAX	S ±10%	T ±20%	U ±10%	V ±20%	W ±10%
2	-	8, 9	High performance, High-Temp epoxy	078-2100-001	0.65	0.65	.15	.16	.31	.60	.04	.68	.04	.79
			Non-Halogen, Hot melt adhesive	078-2100-007	0.65	0.65	.15	.16	.31	.60	.04	.68	.04	.79
			High performance, Hot melt adhesive	078-2100-013	0.65	0.65	.15	.16	.31	.60	.04	.68	.04	.79
3	MS3117-11	10, 11	High performance, High-Temp epoxy	078-2100-002	0.92	0.92	.22	.23	.41	.60	.04	.80	.05	.90
			Non-Halogen, Hot melt adhesive	078-2100-008	0.92	0.92	.22	.23	.41	.60	.04	.80	.05	.90
			High performance, Hot melt adhesive	078-2100-014	0.92	0.92	.22	.23	.41	.60	.04	.80	.05	.90
4	MS3117-12	12, 15	High performance, High-Temp epoxy	078-2100-003	1.12	1.12	.25	.28	.56	.84	.04	1.17	.06	1.12
			Non-Halogen, Hot melt adhesive	078-2100-009	1.12	1.12	.25	.28	.56	.84	.04	1.17	.06	1.12
			High performance, Hot melt adhesive	078-2100-015	1.12	1.12	.25	.28	.56	.84	.04	1.17	.06	1.12
5	MS3117-13	18, 19	High performance, High-Temp epoxy	078-2100-004	1.22	1.22	.28	.34	.70	.81	.04	1.40	.07	1.20
			Non-Halogen, Hot melt adhesive	078-2100-010	1.22	1.22	.28	.34	.70	.81	.04	1.40	.07	1.20
			High performance, Hot melt adhesive	078-2100-016	1.22	1.22	.28	.34	.70	.81	.04	1.40	.07	1.20
6	MS3117-15	23	High performance, High-Temp epoxy	078-2100-005	1.68	1.68	.38	.62	1.10	1.10	.07	2.10	.08	1.70
			Non-Halogen, Hot melt adhesive	078-2100-011	1.68	1.68	.38	.62	1.10	1.10	.07	2.10	.08	1.70
			High performance, Hot melt adhesive	078-2100-017	1.68	1.68	.38	.62	1.10	1.10	.07	2.10	.08	1.70

Notes:

- Material: High performance: Fluid resistance flame retarded elastomer, color black. Temperature range: -75°C to 150°C.
  Non-Halogen: Flexible zero-halogen limited fire hazard, color black. Temperature range: -55°C to 105°C.
- Minimum dimensions are as purchased , unrecovered. • Maximum dimensions shown represent the dimension at the boots maximum shrink.
- Boot size applicable only to standard ITT MKJ banded connectors. Consult factory for other size applications.
- Boot has a pre-applied polyamide hot melt adhesive or 1 part epoxy. A. Hot melt adhesive is halogen free. Operating range is -55°C to 120°C.
  B. High-Temp epoxy has an operating temperature of -75°C to 200°C.

MKJ Series Overview

Up to 71% weight and 52% size reduction in an industry-leading quick disconnect*

ITT Cannon continues its tradition of innovation with the MKJ line of miniature circular connectors. Bringing together a unique combination of design, functionality and flexibility, Cannon's MKJ Series offers proven, reliable and cost-effective interconnect solutions that enable critical communication, navigation and high speed data transmission–at half the size and weight of traditional D38999. Choose from UNC thread, double-start, triple-start, bayonet, breakaway and clip-lock latching coupling methods in a cost-efficient, lightweight and highly engineered design.

MKJ0 UNC Thread

MKJ3 Bayonet

MKJ5 Triple Start

MKJ1 Double Start

MKJ4 Breakaway

MKJ Clip Lock

MKJ Warrior

Key Features

- Versatile and proven for use in military, industrial and medical applications where safety and reliability are critical
- A number of connectors in the MKJ Series offer up to 2,000 mating cycles, making them the perfect solution for ruggedized computers and hand-held communications equipment
- Multiple coupling mechanisms enable connectivity for navigation and telemetry applications
- Plugs and receptacles are environmentally sealed for use in the harshest environments
- Teflon nickel, black zinc nickel and olive drab cadmium plating maintain robust reliability for 500 hours of salt spray
- RoHS Compliant plating and part numbers available
- Qualified to GOSSRA and design per Nett Warrior

Cables to Outfit Your MKJ Connector

Value-Added Cabling Solutions from ITT Cannon

Let ITT Cannon complete your solution with our custom cable products. A complement to the reduction in size of the connectors is the reduction in weight and thickness in cabling. Choose from several available options to help customize your application. Improving on our high reliability connectors, we offer over molds that are suitable for military requirements in harsh environments.

Note: Polyurethane jacketed round cables and silicon jacket high-flex flat cables with overmolds.

Braiding

- EMI shielded metal to light weight, textile braiding for abrasion protection

Overmolding

- Injection molding with polyureaurethane, Santoprene, and polyimide
- Transfer molding with Cannon's Super Jacketing System (SJS Series), Viton, Neoprene, EPDM, and alternative molding compounds
- Low pressure and prototype molding including M24041, poly ureaurethane, Polyimide, and custom compounds

Shrink Boots

- Customized solution for all connector-to-cable transition type including straight, 90 and 45 degree.

Backshells

- Integration of commercial and MIL-Spec backshell and molding adapters

Cable Jacket

- Blown-on jacketing for multi leg cables using SJS jacket, Viton Neoprene, EPDM, and various other tubing jackets
- RONDENT proof extruded jackets using SJS jacket, poly ureaurethane, Santoprene and Neoprene.
- Textile braids and heat shrink jackets

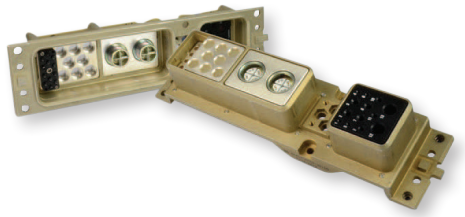
Integrated Assembly

- Integrated connector and cabling into box system
- Ribbon cable assembly
- Cable/Wire harnesses in boxes or as an LRU
- Machined & integrated high volume Die Cast housing

Amazing things happen

when great things connect

ITT Cannon is a leading global manufacturer of connector products serving international customers in the aerospace and defense, medical, energy, transportation and industrial end markets. Whether delivering critical specs to aircraft pilots, streaming data through communications satellites or enabling ultrasound technology that gives an expectant mother the first glimpse of her unborn child, Cannon connects the world's most important information with the people who need it.



With over 100 years of interconnect excellence and seven decades of global presence from the Defense and Medical Industry, we are a committed partner among today's critical equipment manufacturers.

A Century of Connections

In 2015, Cannon marked its 100th Anniversary of Innovation. Cannon products were used in the first "talking" movies and helped transmit the first messages back to earth when we landed on the moon. Today we proudly continue our legacy of innovating to connect the world and inspire the successes of the next century – because amazing things happen when great things connect.

Visit ittcannon.com to learn more.

About ITT

ITT is a diversified leading manufacturer of highly engineered critical components and customized technology solutions for the transportation, industrial, and oil and gas markets. Building on its heritage of innovation, ITT partners with its customers to deliver enduring solutions to the key industries that underpin our modern way of life.

Dimensions shown in inches and (mm). Specifications and dimensions subject to change.

ITT Cannon Defense Solutions

Meet Some of Our Most Innovative Connectors

Cu Light Series

Size #8 TOSA-ROSA for 10 Gbps Copper-to-Fiber conversion in military circular connectors

C5 Warrior Series

Ultra-High-Density, 10 Gbps Solution, 4 times smaller than D38999 connectors for USB-C, DisplayPort, HDMI & Gb Ethernet protocols

MKJ Display Port Series

Vibration resistant Display Port with 5.4 Gbps data lanes, optimized impedance-controlled contact system, and low-smoke zero-halogen cabling

KJ Series (38999-style)

- High contact density pin count
- Moisture resistant
- Quick connect & disconnect
- Fiber Optic, Hermetic, Filter

CA Bayonet Series

- 1 to 140 contact arrangements
- Shell size #10SL to #36
- Reverse bayonet up to IP69K
- CAB/VG95234 & CGE/VG96929

Nemesis Series

- 20+ meter sealing
- Dual coupling or Breakaway
- Power, signal & data
- Blind mating design

KP Series

- 10 shell size, with up to 40 layouts from 2 to 61 contacts
- Sealing up to IP67
- VG95238 & MIL-DTL-26482

CA Threaded / 5015 Series

- 5 polarizations
- Individual wire sealing grommet
- RoHS compliant options
- MIL-DTL-5015 (SAE-AS50151)

Fiber Optic Series

- Termini, savers and cable assemblies integrations in M29504, D38999, M28876, Jewel, NGCON, DSUB, Micro, PHD and ARINC

D-Sub Series

- Mixed Signal / Power, M24308, Crimp, Solder, PC Tail, Double Density, Filter/ Hermetic
- Up to 104 contact

HDx Series

- High-Density, Small Form Factor
- High speed data - USB® 3.1 Gen1 up to 5Gbit/s, Ethernet up to 10Gbit/s, HDMI® up to 8.16 Gbit/s

Micro Series

- High Temperature (+230˚C)
- Low profile configuration
- Mixed power, coax and signal layouts & M83513

MKJ Series

- High-density, miniature footprint
- UNC thread, double start, triple start, bayonet, breakaway and clip lock latching

Product Safety Information

This note must be read in conjunction with the Product Data Sheet / Catalog. Failure to observe the advice in this information sheet and the operating conditions specified in the Product Data Sheet / Catalog could result in hazardous situations.

1. MATERIAL CONTENT & PHYSICAL FORM

Electrical connectors do not usually contain hazardous materials. They contain conducting and non-conducting materials and can be divided into two groups:

a) Printed circuit types and low cost audio types which employ all plastic insulators and casings.

b) Rugged, Fire Barrier and High Reliability types with metal casings and either natural rubber, synthetic rubber, plastic or glass insulating materials. Contact materials vary with type of connector and also application and are usually manufactured from either: Copper, copper alloys, nickel, alumel, chromel or steel. In special applications, other alloys may be specified.

2. FIRE CHARACTERISTICS AND ELECTRIC SHOCK HAZARD

There is no fire hazard when the connector is correctly wired and used within the specified parameters.

Incorrect wiring or assembly of the connector or careless use of metal tools or conductive fluids, or transit damage to any of the component parts may cause electric shock or burns. Live circuits must not be broken by separating mated connectors as this may cause arcing, ionization and burning. Heat dissipation is greater at maximum resistance in a circuit. Hot spots may occur when resistance is raised locally by damage, e.g. cracked or deformed contacts, broken strands of wire. Local over- heating may also result from the use of the incorrect application tools or from poor quality soldering or slack screw terminals. Overheating may occur if the ratings in the product Data Sheet/Catalog are exceeded and can cause breakdown of insulation and hence electric shock. If heating is allowed to continue it intensifies by further increasing the local resistance through loss of temper of spring contacts, formation of oxide film on contacts and wires and leakage currents through carbonization of insulation and tracking paths. Fire can then result in the presence of combustible materials and this may release noxious fumes. Overheating may not be visually apparent. Burns may result from touching overheated components.

3. HANDLING

Care must be taken to avoid damage to any component parts of electrical connectors during installation and use. Although there are normally no sharp edges, care must be taken when handling certain components to avoid injury to fingers. Electrical connectors may be damaged in transit to the customers, and damage may result in creation of hazards. Products should therefore be examined prior to installation/use and rejected if found to be damaged.

4. DISPOSAL

Incineration of certain materials may release noxious or even toxic fumes.

5. APPLICATION

Connectors with exposed contacts should not be selected for use on the current supply side of an electrical circuit, because an electric shock could result from touching exposed contacts on an unmated connector. Voltages in excess of 30 V ac or 42.5 V dc are potentially hazardous and care should be taken to ensure that such voltages cannot be transmitted in any way to exposed metal parts of the connector body. The connector and wiring should be checked, before making live, to have no damage to metal parts or insulators, no solder blobs, loose strands, conducting lubricants, swarf, or any other undesired conducting particles. Circuit resistance and continuity check should be made to make certain that there are no high resistance joints or spurious conducting paths. Always use the correct application tools as specified in the Data Sheet/Catalog. Do not permit untrained personnel to wire, assemble or tamper with connectors. For operation voltage please see appropriate national regulations.

6. IMPORTANT GENERAL INFORMATION

6.1 Air and creepage paths/operating voltage. The admissible operating voltages depend on the individual applications and the valid national and other applicable safe- ty regulations. For this reason the air and creepage path data are only reference values. Observe reduction of air and creepage paths due to PC board and/or harnessing.

6.2 Temperature. All information given are temperature limits. The operation tempera- ture depends on the individual application.

6.3 Other important information. Cannon continuously endeavors to improve their products. Therefore, Cannon products may deviate from the description, technical data and shape as shown in this catalog and data sheets.

7. MISCELLANEOUS

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NORTH AMERICA

USA - Irvine, CA
+1.800.854.3028

MEXICO - Nogales
+52.631.3110050

EUROPE

GERMANY - Weinstadt
+49.7151.699.0

UK - Basingstoke
+44.1256.347400

ITALY - Lainate
+39.02938721

FRANCE
+33.1.60.04.93.93

ASIA PACIFIC

SINGAPORE
+65 66974205

JAPAN - Kanagawa
+81.462.57.2010

KOREA
+82.2.702.7111

CHINA - Shenzhen City
+86.755.2726.7888

HONG KONG
+852.2732.2720

ITT Cannon MKJ5 Catalog 03/2025