



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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cannon

MKJ4 Series Connectors
Miniature Circular Catalog



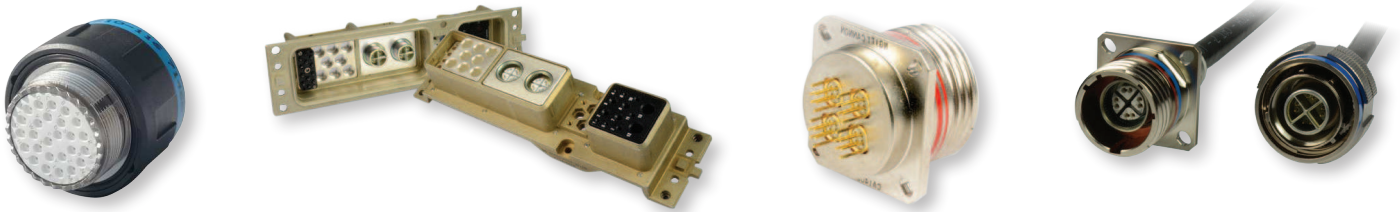
ITT

ENGINEERED FOR LIFE

Amazing things happen when great things connect

ITT's Interconnect Solutions' Cannon brand 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.

No one is more qualified to help you equip military personnel than ITT Cannon. With 100 years of interconnect excellence and seven decades of global presence in the Defense Industry, we are a committed partner among today's military equipment manufacturers. We continue to lead the market and meet the military's needs for adaptability, mobility and survivability. And we do so with one goal in mind: to get our soldiers back home safely.



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 energy, transportation and industrial 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. This work is made possible by the talent and innovation of committed ITT employees in more than 35 countries who create trusted products and brands such as Goulds Pumps, KONI shock absorbers, Cannon connectors and Enidine energy absorption devices. Founded in 1920, ITT is headquartered in White Plains, N.Y. and generated 2015 revenues of \$2.5 billion. For more information, visit itt.com

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

Visit ittcannon.com to learn more.



Medical Equipment



Marine Vessels



Rail



Soldier-Worn Systems



Unmanned Systems



Heavy Equipment



Commercial Aircraft



Oil & Gas

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

Table of Contents

MKJ Miniature Circular Connectors 5

We Connect Soldiers with Smaller, Lighter Wearable Technology 6

Markets & Applications 7

Coupling Styles 8

Overview MKJ4 Breakaway 9

MKJ4 Contact Arrangements & Layouts 10-11

MKJ4 Plug (Banded & Accessory Thread) 12-14

MKJ4 Plug Flange Mount Rear Panel, Jam Nut Rear Mount, Jam Nut Front Mount 15-16

MKJ4 Plug Flange Mount Rear Panel (Potted, PCB & Solder Cup) 17

MKJ4 Plug Jam Nut Rear Mount (Potted, PCB & Solder Cup) 18

MKJ Plug Jam Nut Front Mount (Potted, PCB & Solder Cup) 19

MKJ4 Receptacle In-Line Receptacle, Jam Nut Rear Mount, Jam Nut Front Mount 20-21

MKJ4 Receptacle In-Line (Banded & Accessory Thread) 22

MKJ4 Receptacle Jam Nut Rear Mount (Banded & Accessory Thread) 23

MKJ4 Receptacle Jam Nut Front Mount (Banded & Accessory Thread) 24

MKJ4 Receptacle Jam Nut Rear Mount, Jam Nut Front Mount (PCB & Solder Cup) 25-26

MKJ4 Receptacle Jam Nut Rear Panel Mount (Potted, PCB & Solder Cup) 27

MKJ4 Receptacle Jam Nut Front Panel Mount (Potted, PCB & Solder Cup) 28

MKJ4 Weight Charts 29

Cables to Outfit MKJ Connectors 30

About ITT Cannon 31

Product Safety Information 32

Meet Some of our Most Innovative Connectors 33

MKJ Series Connectors

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 ones. Choose from UNC thread, double start, triple start, bayonet and breakaway coupling methods in a cost-efficient, lightweight and highly engineered design.



MKJ0
UNC Thread



MKJ1
Double Start



MKJ3
Bayonet



MKJ4
Breakaway



MKJ5
Triple Start



Key Features

- 71% weight and 52% size reduction without the loss of reliability*
- Available in rear-release crimp, PC tail or solder cup contacts
- Shells and jam nuts available in aluminum alloy or corrosion resistant stainless steel
- Up to 2,000 mating cycles
- Environmentally sealed using fluorosilicone material for the front interfacial seal and rear wire sealing grommet
- RoHS Compliant

*When compared to the 38999 layouts with size 22 contacts

We Connect Modern Soldiers with Smaller, Lighter Wearable Technology

From extended foot patrols to combat assignments and missions, today's soldiers and military personnel must be equipped with the most advanced, lightweight and cost-efficient equipment available. Made to the smallest form factor possible for required signals and performance, and available in a variety of coupling styles, Cannon's MKJ Miniature Circular Connectors are ready to take on your toughest challenges, even in the harshest environments.

Today's Soldiers Carry an Average Load of 87-127 lbs. (39 - 57 kg)

On average, a modern soldier carries anywhere from 87 to 127 lbs. of equipment. This includes clothing, helmets, canteens, weapons, communications, computers, ammunition and body armor. At half the size and weight of D38999 connectors, Cannon's MKJ Miniature Circular Connectors can help lighten the load without sacrificing reliability or performance. That's because Cannon's MKJ Connectors provide similar electrical and mechanical characteristics as larger and heavier Military Standard Environmental interconnects, but in a significantly smaller design.*



Markets & Applications

Cannon MKJ Miniature Circular Connectors are designed for soldier-worn systems, military equipment, industrial and medical applications...and so much more.



Key Applications

- Sensors
- Satellites
- Instrumentation
- Missile systems
- Avionic systems
- Soldier technology
- UAVs / unmanned systems
- Navigation & telemetry equipment
- Medical test & diagnostic equipment
- Ruggedized computers
- Hand-held communication equipment
- Commercial & military aircraft electronics
- Industrial equipment

Highlights

- Versatile and proven for use in **military, industrial and medical applications** where safety and reliability are critical
- A number connectors in the MKJ Series offer a **2,000 mating cycle**, 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

A Wide Range of Coupling Styles

The wide range of coupling options available for the MKJ Series allows compatible connectors to meet your demands even in the harshest environments.



Coupling	MKJ0 UNC Thread	MKJ1 Double Start	MKJ3 Bayonet	MKJ4 Breakaway	MKJ5 Triple Start
Markets & Segments	Defense, Aerospace, Medical, Industrial, Commercial				
Hardware	Aluminum/ Stainless Steel	Aluminum/ Stainless Steel	Aluminum/ Stainless Steel	Aluminum/ Stainless Steel	Aluminum/ Stainless Steel
EMI Shielding Effectiveness	40dB Attenuation, 100MHz to 1000MHz				
Mating Cycles	2000	2000	250 Aluminum 2000 Stainless Steel	2000	500
RoHS Compliant	Available				
Materials	Shells - Aluminum Alloy or Stainless Steel Insulators - Thermoplastic Seals - Fluorosilicone Contacts - Copper Alloy with gold over nickel plating				

Product Performance

MKJ Series Performance				
Contact Size	#23	#20HD	#16	#12
Spacing	.076"	.106"	.170"	.230"
Contact Type	Rear Crimp, Solder Cup, PCB Mount			
Current Rating	5 Amps	7.5 Amps	13 Amps	23 Amps
Wire Accommodation	#22 - #28 AWG	#20 - #24 AWG	#16 - #20 AWG	#12 - #14 AWG
DWV Voltage (VAC)	750 VAC	1000 VAC	1800 VAC	1800 VAC
Insulation Resistance	5000 Megaohms RMS Sea			
Operating Temperature	-65°C to +175°C			
Contact Resistance	8 Millihoms Maximum			
Shock/Vibration	300g / 37g			
Clocking Position	Master Key and 2 Secondary Keys. 6 Clocking Positions			
Housing Materials	Aluminum and Stainless Steel			
Receptacle Mounting	Jam Nut, Square Flange, In-Line			

Overview

MKJ4 Breakaway

ITT Cannon's MKJ4 features a canted retention spring disconnect coupling mechanism. This durable coupling mechanism allows quick and easy mating and de-mating of the connector. Ideal for battlefield and medical device equipment.





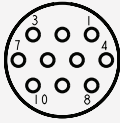
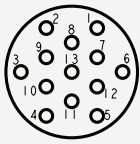
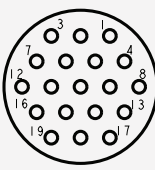
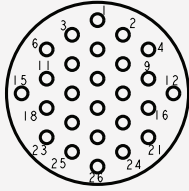
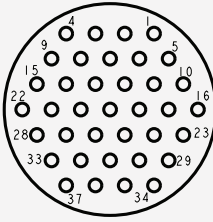
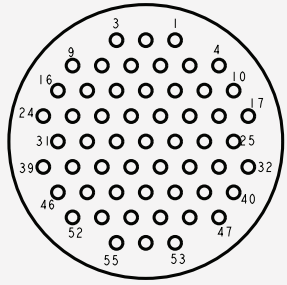



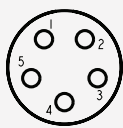
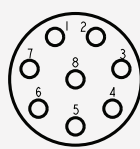
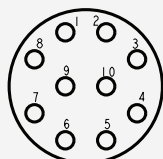
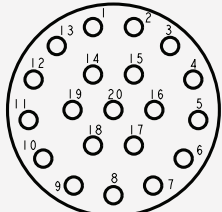
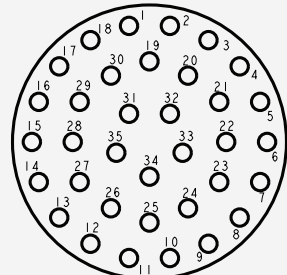
MKJ4's versatility, performance and reliability enable unparalleled functionality to support critical communication, navigation and high speed data transmission needs, at half the size and weight of traditional connectors.*

Specifications			
Contact Type	Rear Crimp, Solder Cup, PCB Mount	Insulation Resistance	5,000 Megaohms RMS Sea
Contact Spacing	Size 23 (0.076" spacing), Size 20HD (0.106" spacing), Size 16 (0.170" spacing), Size 12 (0.230" spacing)	Operating Temperature	-65°C to +175°C
		Contact Resistance	8 Milliohms Maximum
		Shock/Vibration	300g / 37g
Wire Accommodation	Size 23 #22 - #28 AWG, Size 20HD #20 - #24 AWG, Size 16 #16 - #20 AWG, Size 12 #12 - #14 AWG	EMI Shielding Effectiveness	40dB Attenuation, 100MHz to 1000MHz
		Coupling	Quick Disconnect (Canted Spring)
Contact Rating	Size 23 5 Amps, Size 20HD 7.5 Amps, Size 16 13 Amps, Size 12 23 Amps	Receptacle Mounting	Jam Nut, Flange, In-Line
		Durability	2,000 Mating Cycles
DWV Voltage (VAC)	Size 23 750 VAC, Size 20HD 1000 VAC, Size 16 1800 VAC, Size 12 1800 VAC	Layouts	See Available Layout on Pages 10-11
		Materials	Shells - Aluminum Alloy or Stainless Steel
			Insulators - Thermoplastic
			Seals - Fluorosilicone
		Contacts - Copper alloy with gold over nickel plating	
		Canted Spring - Stainless Steel	

*When compared to the 38999 layouts with size 22 contacts

MKJ4 Contact Arrangements & Layouts





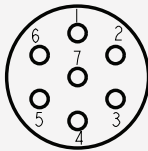
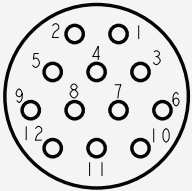
Contact Arrangements							
Layout	Contacts						
	Size 23						
5-3	3						
		5-3 Layout	6-4 Layout	6-6 Layout	6-7 Layout	7-10 Layout	8-13 Layout
6-4	4						
6-6	6						
6-7	7						
7-10	10						
8-13	13						
9-19	19						
		9-19 Layout	10-26 Layout	12-37 Layout	14-55 Layout		
10-26	26						
12-37	37						
14-55	55						

Contact Arrangements				
Layout	Contacts			
	Size 20HD			
6-23	3			
		6-23 Layout	7-25 Layout	8-28 Layout
7-25	5			
8-28	8			
9-210	10			
		9-210 Layout	12-220 Layout	14-235 Layout
12-220	20			
14-235	35			



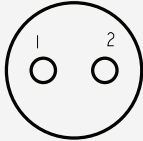
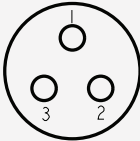
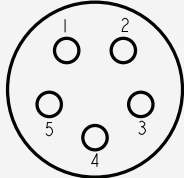
Note: Pin insert front side shown for reference only. Socket insert is a mirror image.

MKJ4 Contact Arrangements & Layouts

Contact Arrangements							
Layout	Contacts						
	Size 16						
6-1	1						
8-2	2						
9-4	4						
10-5	5						
12-7	7						
14-12	12						

					
6-1 Layout	8-2 Layout	9-4 Layout	10-5 Layout	12-7 Layout	14-12 Layout

Contact Arrangements						
Layout	Contacts					
	Size 12					
7-1	1					
10-2	2					
12-2	2					
12-3	3					
14-5	5					

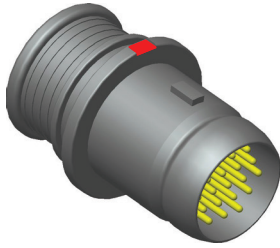
				
7-1 Layout	10-2 Layout	12-2 Layout	12-3 Layout	14-5 Layout

Note: Pin insert front side shown for reference only. Socket insert is a mirror image.

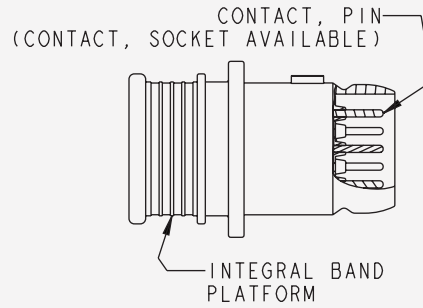
MKJ4 Plug

Banded & Accessory Thread

MKJ4 Plug (Shown with Banding/Overmolding Attachment)



MKJ4 Plug with Pin Insert (Banding Version)

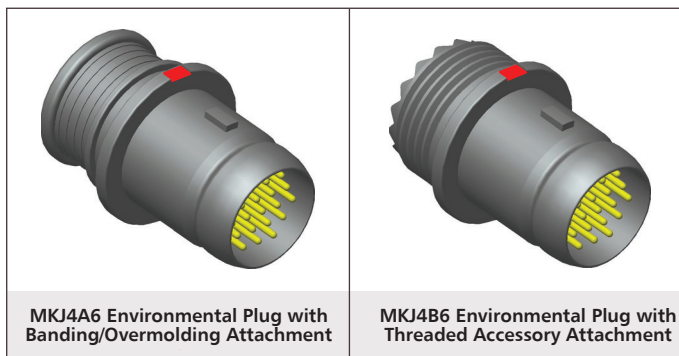


How to Order – MKJ4 Plug

Banded & Accessory Thread

Product	MKJ4 (Breakaway/Quick Disconnect)		MKJ4	A	6	F	9-19	P	A	**	
Class:	A -	Environmental Plug with Banding/Overmolding Attachment									
	B -	Environmental Plug with Threaded Accessory Attachment									
Shell Style:	6 -	Straight Plug									
Material/Plating:	C -	Aluminum/Anodize, Black									
	F -	Aluminum/Electroless Nickel									
	K -	Stainless Steel/Passivated									
	T -	Aluminum/Teflon Nickel									
	W -	Aluminum/Olive Drab Cadmium									
	Y -	Stainless Steel/Electroless Nickel, Black									
	Z -	Aluminum/Zinc Nickel, Black									
	N -	Stainless Steel/Electroless Nickel									
Shell Size/Contact Arrangement:		See Available Layouts on Pages 10–11									
Contact Style:	P -	Pin, Crimp, Removable									
	S -	Socket, Crimp, Removable									
	E -	Pin, Solder Cup, Potted, Non-removable									
	F -	Socket, Solder Cup, Potted, Non-removable									
Shell Clocking:	Omit	Single Keyway									
	A -	Normal									
	B, C, D, E, F	Alternatives									
Modification Codes:	- F0	Less Contacts ("F0" not stamped on the connector, but must be included on the P.O.)									
	- F256	Stainless Steel Hood (Socket contact only)									
	- 518	Potted connectors with water immersion testing (10 ⁻⁴ Helium leak tested)									

Consult factory for other modification codes



MKJ4 Plug

Banded & Accessory Thread

Cable Plug Dimensions				
Shell Size	ØA	ØB	ØC	D Thread UNEF-2A
5	0.422	0.248	0.246	0.2500-32
6	0.485	0.311	0.290	0.3125-32
7	0.565	0.381	0.390	0.4375-28
8	0.607	0.426	0.447	0.5000-28
9	0.660	0.481	0.500	0.5625-24
10	0.736	0.561	0.561	0.6250-24
12	0.851	0.676	0.650	0.6875-24
14	0.977	0.796	0.806	0.9375-20

MASTER KEY

ØA

FRONT VIEW

D THREAD

ØB

.060

.561

.950 MAX.

ACCESSORY THREAD VERSION

ØC

ØB

.060

.561

1.005 MAX.

BANDED VERSION

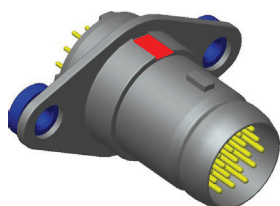
For all Shell Sizes and Clockings, the Master Keyway remains stationary at top dead center, with minor keys rotating to achieve alternate clocking positions.

Cable Plug Shell Clocking Dimensions			
MKJ4 PLUG SHELL CLOCKING	Position	K1°	K2°
	<p>SHELL CLOCKING (A-CLOCKING SHOWN)</p>	A (Normal)	150°
B		75°	210°
C		95°	230°
D		140°	275°
E		75°	275°
F		95°	210°
Leave Blank	Master Key Only No Minor Keys		

MKJ4 Plug

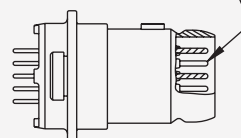
Flange Mount Rear Panel, Jam Nut Rear Mount, Jam Nut Front Mount

MKJ4 Plug (Flange Mount Rear Panel)

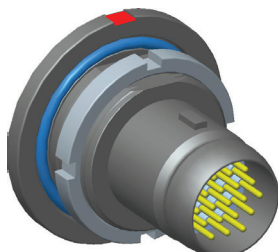


MKJ4 Plug Flange Mount Rear Panel with Pin Insert

CONTACT, PIN
(CONTACT, SOCKET AVAILABLE)

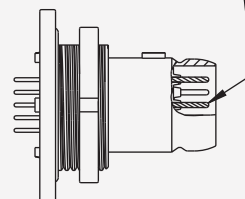


MKJ4 Plug Jam Nut Rear Mount

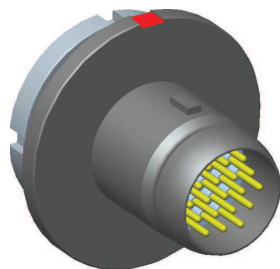


MKJ4 Plug Jam Nut Rear Mount with Pin Insert

CONTACT, PIN
(CONTACT, SOCKET AVAILABLE)

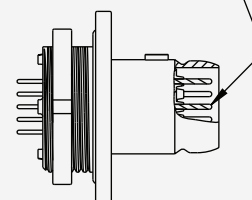


MKJ4 Plug Jam Nut Front Mount



MKJ4 Plug Jam Nut Front Mount with Pin Insert

CONTACT, PIN
(CONTACT, SOCKET AVAILABLE)

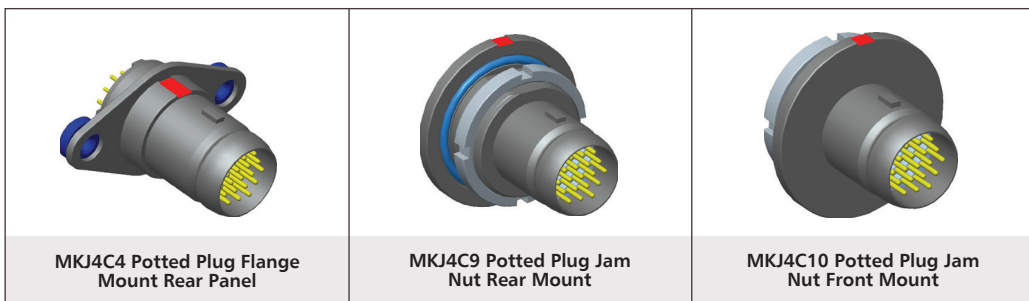


How to Order – MKJ4 Plug

Flange Mount Rear Panel, Jam Nut Rear Mount, Jam Nut Front Mount

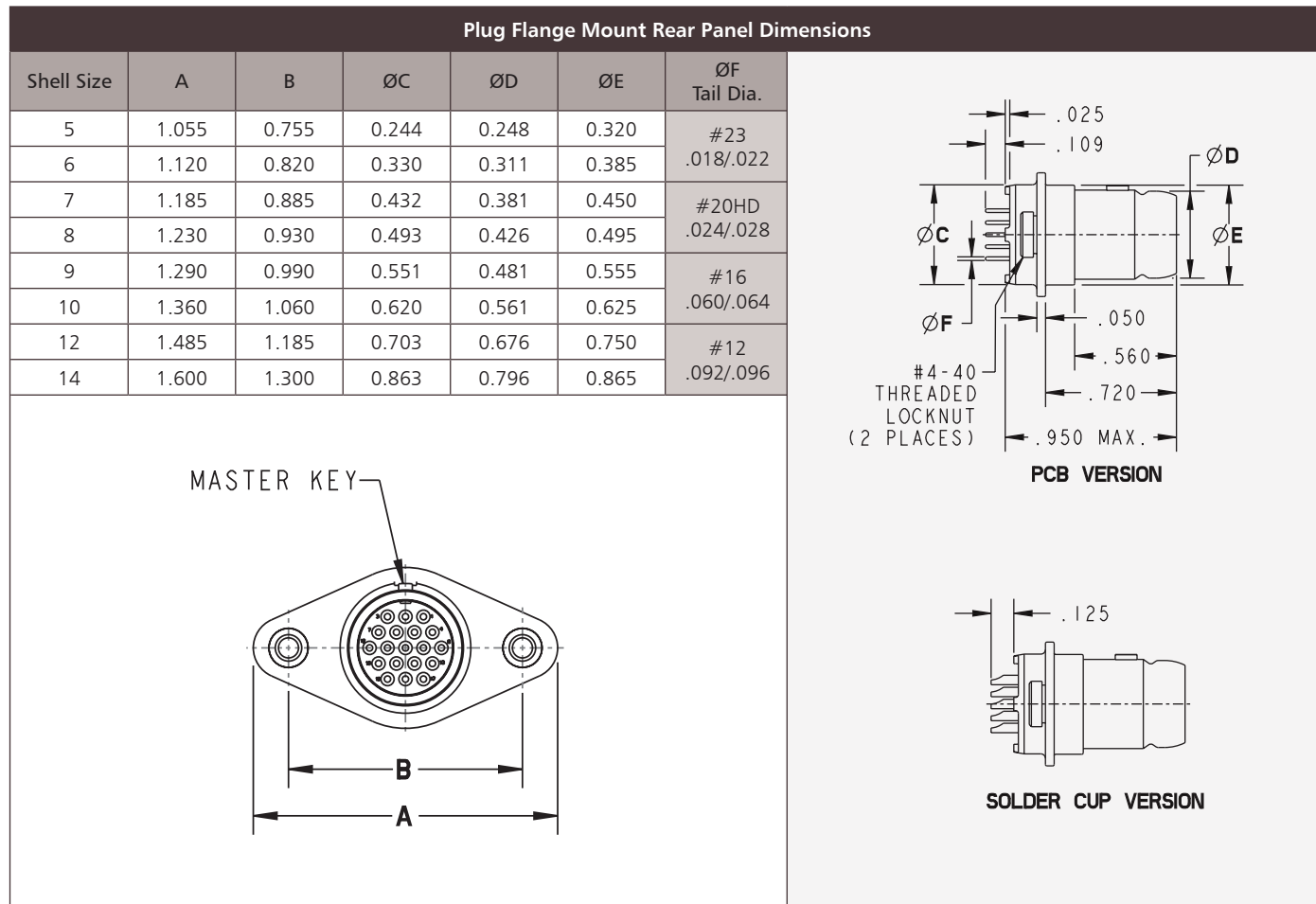
Product	MKJ4 (Breakaway/Quick Disconnect)								
	MKJ4	C	9	F	9-19	B	A	**	
Class:	C -	Potted Plug - PC/Flex/Solder							
Shell Style:	4 -	Flange Mount Rear Panel (Box Mount Plug)							
	9 -	Jam Nut Plug-Rear Panel Mount							
	10 -	Jam Nut Plug-Front Panel Mount							
Material/Plating:	C -	Aluminum/Anodize, Black							
	F -	Aluminum/Electroless Nickel							
	K -	Stainless Steel/Passivated							
	T -	Aluminum/Teflon Nickel							
	W -	Aluminum/Olive Drab Cadmium							
	Y -	Stainless Steel/Electroless Nickel, Black							
	Z -	Aluminum/Zinc Nickel, Black							
	N -	Stainless Steel/Electroless Nickel							
Shell Size/Contact Arrangement	See Available Layouts on Pages 10–11								
Contact Style:	B -	Pin, PC Tail, .109 Extension, Potted, Non-removable							
	D -	Socket, PC Tail, .109 Extension, Potted, Non-removable							
	E -	Pin, Solder Cup, Potted, Non-removable							
	F -	Socket, Solder Cup, Potted, Non-removable							
Shell Clocking:	Omit	Single Keyway							
	A -	Normal							
	B, C, D, E, F	Alternatives							
Modification Codes:	- F256	Stainless Steel Hood (Socket contact only)							
	- 518	Potted connectors with water immersion testing (10 ⁻⁴ Helium leak tested)							

Consult factory for other modification codes

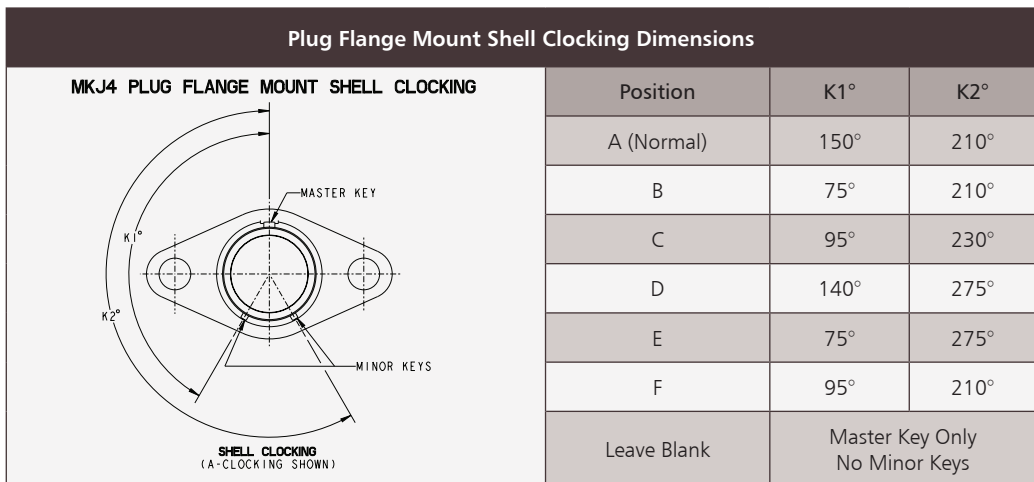


MKJ4 Plug

Flange Mount Rear Panel
Potted, PCB & Solder Cup



For all Shell Sizes and Clockings, the Master Keyway remains stationary at top dead center, with minor keys rotating to achieve alternate clocking positions.



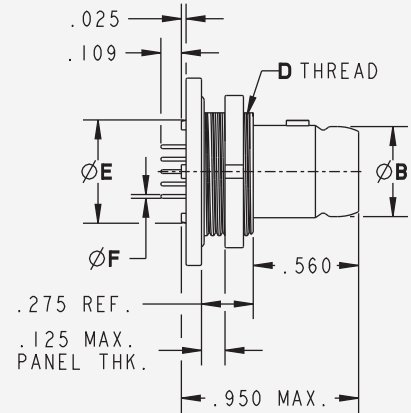
Dimensions shown in inches (mm)
Specifications and dimensions subject to change

MKJ4 Plug

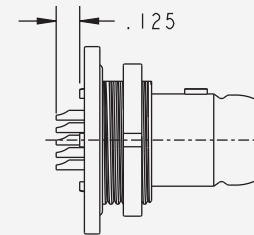
Jam Nut Rear Mount
Potted, PCB & Solder Cup

Plug Jam Nut Rear Mount Dimensions

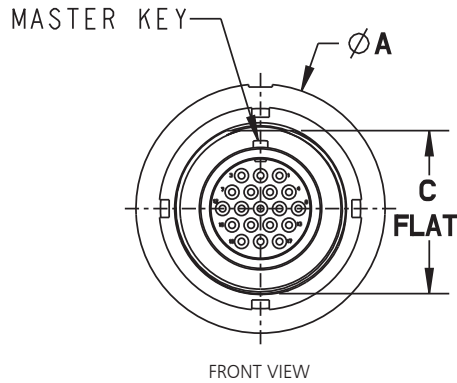
Shell Size	ØA	ØB	C Flat	D Thread UN-2A	ØE	ØF Tail Dia.	G (Flat) + .002	ØH + .005
5	0.790	0.248	0.415	0.4375-28 UNEF	0.244	#23 .018/.022	0.423	0.448
6	0.830	0.311	0.467	0.5000-32	0.330		0.475	0.505
7	0.910	0.381	0.594	0.6250-28	0.432	#20HD .024/.028	0.602	0.635
8	0.955	0.426	0.594	0.6250-28	0.493		0.602	0.635
9	1.000	0.481	0.655	0.6875-28	0.551	#16 .060/.064	0.663	0.698
10	1.085	0.561	0.721	0.7500-28	0.620		0.726	0.76
12	1.180	0.676	0.843	0.8750-28	0.703	#12 .092/.096	0.851	0.885
14	1.325	0.796	0.968	1.0000-28	0.863		0.976	1.01



PCB VERSION



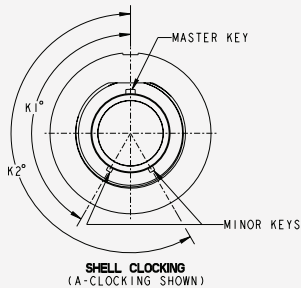
SOLDER CUP VERSION



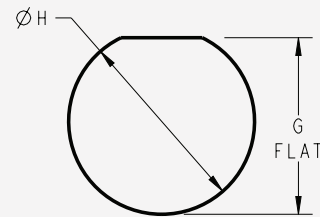
For all Shell Sizes and Clockings, the Master Keyway remains stationary at top dead center, with minor keys rotating to achieve alternate clocking positions.

Plug Jam Nut Rear Mount Shell Clocking Dimensions

MKJ4 PLUG JAM NUT REAR MOUNT SHELL CLOCKING	Position	K1°	K2°
	A (Normal)	150°	210°
B	75°	210°	
C	95°	230°	
D	140°	275°	
E	75°	275°	
F	95°	210°	
Leave Blank		Master Key Only No Minor Keys	



Panel Cutout Dimensions



MKJ4 Plug

Jam Nut Front Mount
Potted, PCB & Solder Cup

Plug Jam Nut Front Mount Dimensions								
Shell Size	ØA	ØB	C Flat	D Thread UN-2A	ØE	ØF Tail Dia.	G (Flat) + .002	ØH + .005
5	0.790	0.248	0.415	0.4375-28 UNEF	0.244	#23 .018/.022	0.423	0.448
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12	1.180	0.676	0.843	0.8750-28	0.703	#12 .092/.096	0.851	0.885
14	1.325	0.796	0.968	1.0000-28	0.863		0.976	1.01

FRONT VIEW

PCB VERSION

SOLDER CUP VERSION

For all Shell Sizes and Clockings, the Master Keyway remains stationary at top dead center, with minor keys rotating to achieve alternate clocking positions.

Plug Jam Nut Front Mount Shell Clocking Dimensions			
MKJ4 PLUG JAM NUT FRONT MOUNT SHELL CLOCKING	Position	K1°	K2°
	A (Normal)	150°	210°
	B	75°	210°
	C	95°	230°
	D	140°	275°
	E	75°	275°
	F	95°	210°
	Leave Blank	Master Key Only No Minor Keys	

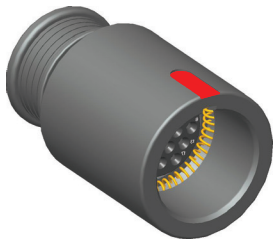
Panel Cutout Dimensions

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

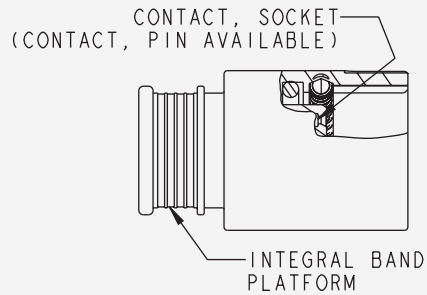
MKJ4 Receptacle

In-Line Receptacle, Jam Nut Rear Mount, Jam Nut Front Mount
Banded & Accessory Thread

MKJ4 In-Line Receptacle (Shown with Banding/Overmolding Attachment)



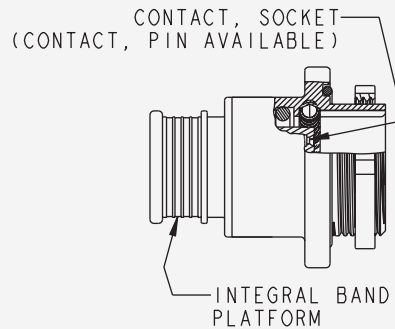
MKJ4 Receptacle with Socket Insert
(Banding Version)



MKJ4 Receptacle Jam Nut Rear Mount (Shown with Banding/Overmolding Attachment)



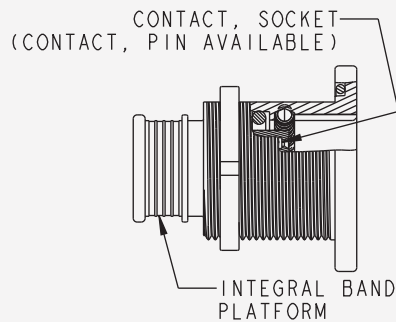
MKJ4 Receptacle Jam Nut Rear Mount
with Socket Insert (Banding Version)



MKJ4 Receptacle Jam Nut Front Mount (Shown with Banding/Overmolding Attachment)



MKJ4 Receptacle Jam Nut Front Mount with
Socket Insert (Banding Version)



How to Order – MKJ4 Receptacle

In-Line Receptacle, Jam Nut Rear Mount, Jam Nut Front Mount Banded & Accessory Thread

Product	MKJ4 (Breakaway/Quick Disconnect)	MKJ4	A	1	F	9-19	P	A	**																
Class:	<table border="1"> <tr> <td>A -</td> <td>Environmental Receptacle with Banding/Overmolding Attachment</td> </tr> <tr> <td>B -</td> <td>Environmental Receptacle with Threaded Accessory Attachment</td> </tr> </table>	A -	Environmental Receptacle with Banding/Overmolding Attachment	B -	Environmental Receptacle with Threaded Accessory Attachment																				
A -	Environmental Receptacle with Banding/Overmolding Attachment																								
B -	Environmental Receptacle with Threaded Accessory Attachment																								
Shell Style:	<table border="1"> <tr> <td>1 -</td> <td>In-Line Receptacle</td> </tr> <tr> <td>7 -</td> <td>Jam Nut Receptacle-Rear Panel Mount</td> </tr> <tr> <td>8 -</td> <td>Jam Nut Receptacle-Front Panel Mount</td> </tr> </table>	1 -	In-Line Receptacle	7 -	Jam Nut Receptacle-Rear Panel Mount	8 -	Jam Nut Receptacle-Front Panel Mount																		
1 -	In-Line Receptacle																								
7 -	Jam Nut Receptacle-Rear Panel Mount																								
8 -	Jam Nut Receptacle-Front Panel Mount																								
Material/Plating:	<table border="1"> <tr> <td>C -</td> <td>Aluminum/Anodize, Black</td> </tr> <tr> <td>F -</td> <td>Aluminum/Electroless Nickel</td> </tr> <tr> <td>K -</td> <td>Stainless Steel/Passivated</td> </tr> <tr> <td>T -</td> <td>Aluminum/Teflon Nickel</td> </tr> <tr> <td>W -</td> <td>Aluminum/Olive Drab Cadmium</td> </tr> <tr> <td>Y -</td> <td>Stainless Steel/Electroless Nickel, Black</td> </tr> <tr> <td>Z -</td> <td>Aluminum/Zinc Nickel, Black</td> </tr> <tr> <td>N -</td> <td>Stainless Steel/Electroless Nickel</td> </tr> </table>	C -	Aluminum/Anodize, Black	F -	Aluminum/Electroless Nickel	K -	Stainless Steel/Passivated	T -	Aluminum/Teflon Nickel	W -	Aluminum/Olive Drab Cadmium	Y -	Stainless Steel/Electroless Nickel, Black	Z -	Aluminum/Zinc Nickel, Black	N -	Stainless Steel/Electroless Nickel								
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N -	Stainless Steel/Electroless Nickel																								
Shell Size/Contact Arrangement:	See Available Layouts on Pages 10–11																								
Contact Style:	<table border="1"> <tr> <td>P -</td> <td>Pin, Crimp, Removable</td> </tr> <tr> <td>S -</td> <td>Socket, Crimp, Removable</td> </tr> <tr> <td>E -</td> <td>Pin, Solder Cup, Potted, Non-removable</td> </tr> <tr> <td>F -</td> <td>Socket, Solder Cup, Potted, Non-removable</td> </tr> </table>	P -	Pin, Crimp, Removable	S -	Socket, Crimp, Removable	E -	Pin, Solder Cup, Potted, Non-removable	F -	Socket, Solder Cup, Potted, Non-removable																
P -	Pin, Crimp, Removable																								
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F -	Socket, Solder Cup, Potted, Non-removable																								
Shell Clocking:	<table border="1"> <tr> <td>Omit</td> <td>Single Keyway</td> </tr> <tr> <td>A -</td> <td>Normal</td> </tr> <tr> <td>B, C, D, E, F</td> <td>Alternatives</td> </tr> </table>	Omit	Single Keyway	A -	Normal	B, C, D, E, F	Alternatives																		
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B, C, D, E, F	Alternatives																								
Modification Codes:	<table border="1"> <tr> <td>- F0</td> <td>Less Contacts ("F0" not stamped on the connector, but must be included on the P.O.)</td> </tr> <tr> <td>- F256</td> <td>Stainless Steel Hood (Socket contact only)</td> </tr> <tr> <td>- 518</td> <td>Potted connectors with water immersion testing (10⁻⁴ Helium leak tested)</td> </tr> </table>	- F0	Less Contacts ("F0" not stamped on the connector, but must be included on the P.O.)	- F256	Stainless Steel Hood (Socket contact only)	- 518	Potted connectors with water immersion testing (10 ⁻⁴ Helium leak tested)																		
- F0	Less Contacts ("F0" not stamped on the connector, but must be included on the P.O.)																								
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Consult factory for other modification codes

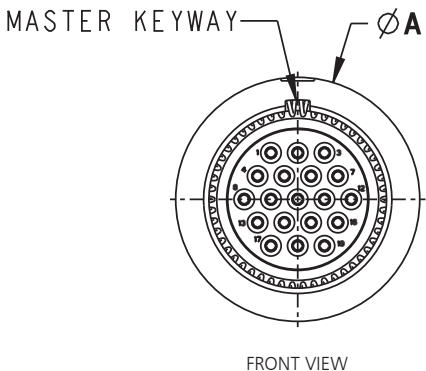


MKJ4 Receptacle

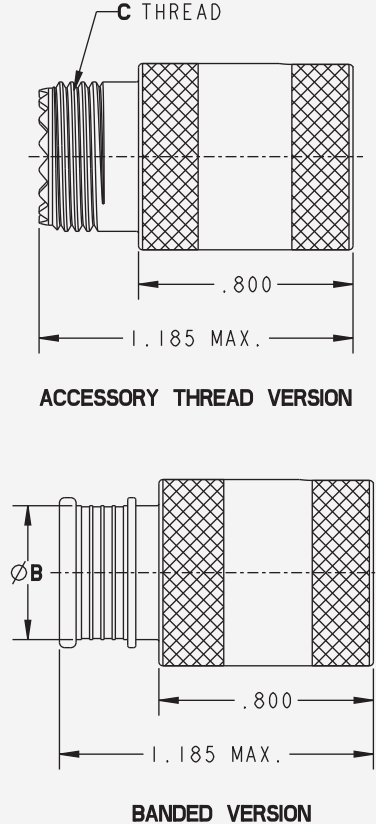
In-Line

Banded & Accessory Thread

Cable Receptacle Dimensions			
Shell Size	ØA	ØB	C Thread UNEF-2A
5	0.450	0.246	0.2500-32
6	0.480	0.290	0.3125-32
7	0.580	0.390	0.4375-28
8	0.610	0.442	0.5000-28
9	0.695	0.500	0.5625-24
10	0.735	0.564	0.6250-24
12	0.880	0.650	0.6875-24
14	1.010	0.805	0.9375-20



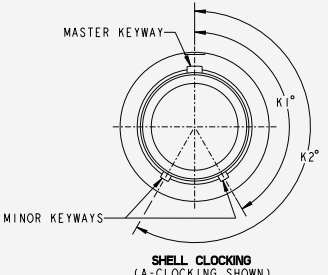
FRONT VIEW



ACCESSORY THREAD VERSION

BANDED VERSION

For all Shell Sizes and Clockings, the Master Keyway remains stationary at top dead center, with minor keys rotating to achieve alternate clocking positions.

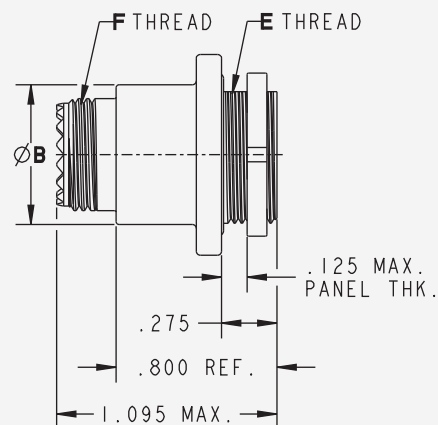
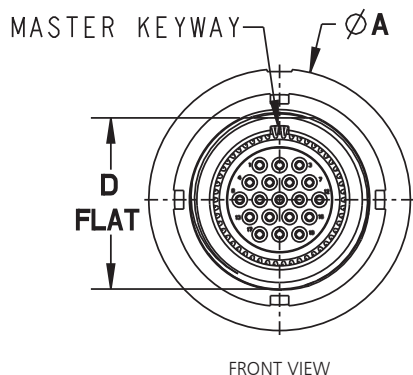
Cable Receptacle Shell Clocking Dimensions			
MKJ4 RECEPTACLE SHELL CLOCKING	Position	K1°	K2°
 <p>SHELL CLOCKING (A-CLOCKING SHOWN)</p>	A (Normal)	150°	210°
	B	75°	210°
	C	95°	230°
	D	140°	275°
	E	75°	275°
	F	95°	210°
	Leave Blank	Master Key Only No Minor Keys	

MKJ4 Receptacle

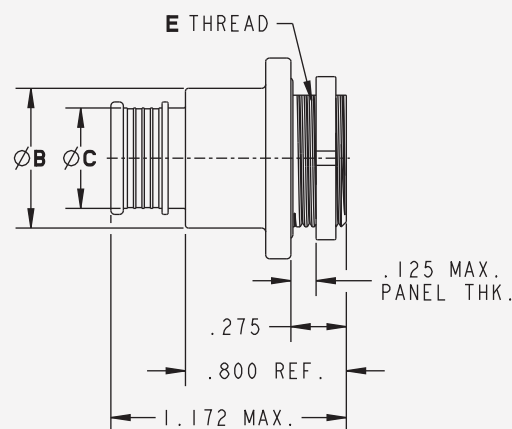
Jam Nut Rear Mount

Banded & Accessory Thread

Cable Receptacle Jam Nut Rear Mount Dimensions								
Shell Size	ØA	ØB	ØC	D Flat	E Thread UN-2A	F Thread UNEF-2A	G (Flat) + .002	ØH + .005
5	0.790	0.450	0.246	0.415	0.4375-28 UNEF	0.2500-32	0.423	0.448
6	0.830	0.520	0.286	0.467	0.5000-32	0.3125-32	0.475	0.505
7	0.910	0.580	0.390	0.594	0.6250-28	0.4375-28	0.602	0.635
8	0.955	0.603	0.442	0.594	0.6250-28	0.5000-28	0.602	0.635
9	1.000	0.695	0.500	0.655	0.6875-28	0.5625-24	0.663	0.698
10	1.085	0.735	0.564	0.721	0.7500-28	0.6250-24	0.726	0.76
12	1.180	0.880	0.650	0.843	0.8750-28	0.6875-24	0.851	0.885
14	1.325	1.010	0.805	0.968	1.0000-28	0.9375-20	0.976	1.01



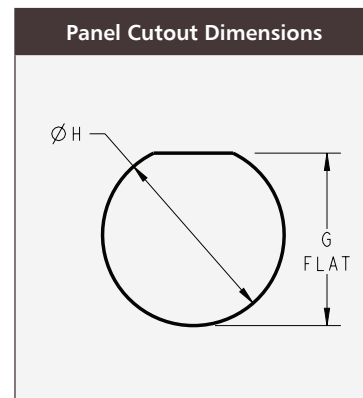
ACCESSORY THREAD VERSION



BANDED VERSION

For all Shell Sizes and Clockings, the Master Keyway remains stationary at top dead center, with minor keys rotating to achieve alternate clocking positions.

Cable Receptacle Jam Nut Front Mount Shell Clocking Dimensions			
Position	K1°	K2°	Diagram
B	75°	210°	
C	95°	230°	
D	140°	275°	
E	75°	275°	
F	95°	210°	
Leave Blank	Master Key Only No Minor Keys		



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

MKJ4 Receptacle

Jam Nut Front Mount

Banded & Accessory Thread

Cable Receptacle Jam Nut Front Mount Dimensions							
Shell Size	ØA	ØB	C Thread UNEF-2A	D Thread UN-2A	E FLAT	G (Flat) + .002	ØH + .005
5	0.830	0.246	0.2500-32	0.5000-32	0.470	0.475	0.505
6	0.885	0.286	0.3125-32	0.5625-32	0.530	0.536	0.572
7	0.995	0.390	0.4375-28	0.6875-28	0.663	0.663	0.698
8	0.995	0.442	0.5000-28	0.6875-28	0.663	0.663	0.698
9	1.075	0.500	0.5625-24	0.7500-28	0.720	0.726	0.76
10	1.140	0.564	0.6250-24	0.8125-28	0.788	0.794	0.822
12	1.340	0.650	0.6875-24	1.0000-28	0.970	0.976	1.01
14	1.390	0.805	0.9375-20	1.0625-20	1.020	1.026	1.072

MASTER KEYWAY

ØA

FRONT VIEW

C THREAD

D THREAD

E FLAT

.500 MAX.

.800 REF.

1.150 MAX.

ACCESSORY THREAD VERSION

D THREAD

E FLAT

ØB

.500 MAX.

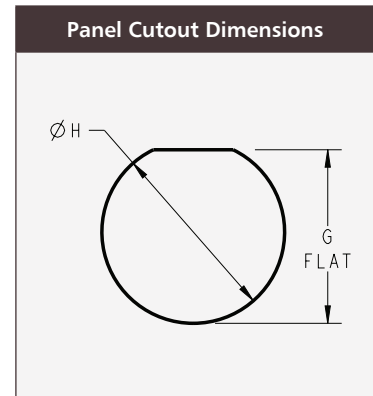
.800 REF.

1.170 MAX.

BANDED VERSION

For all Shell Sizes and Clockings, the Master Keyway remains stationary at top dead center, with minor keys rotating to achieve alternate clocking positions.

Cable Receptacle Jam Nut Front Mount Shell Clocking Dimensions			
MKJ4 RECEPTACLE JAM NUT FRONT MOUNT SHELL CLOCKING	Position	K1°	K2°
	<p>MASTER KEYWAY</p> <p>MINOR KEYWAYS</p> <p>K1°</p> <p>K2°</p> <p>SHELL CLOCKING (A-CLOCKING SHOWN)</p>	A (Normal)	150°
B		75°	210°
C		95°	230°
D		140°	275°
E		75°	275°
F		95°	210°
Leave Blank	Master Key Only		No Minor Keys



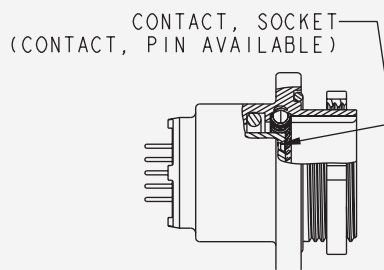
MKJ4 Receptacle

Jam Nut Rear Mount, Jam Nut Front Mount
PCB & Solder Cup

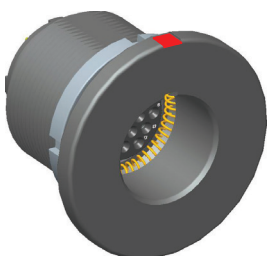
MKJ4 Receptacle Jam Nut Rear Panel Mount



MKJ4 Receptacle Jam Nut Rear Panel Mount
with Socket Insert



MKJ4 Receptacle Jam Nut Front Panel Mount



MKJ4 Receptacle Jam Nut Front Panel Mount
with Socket Insert

