



ITT

Interconnect Solutions  
Cannon, VEAM, BIW

Enabling innovative **"Chip on Flex"**

filter technology providing over

**1000 cycles**

of extreme thermal shock

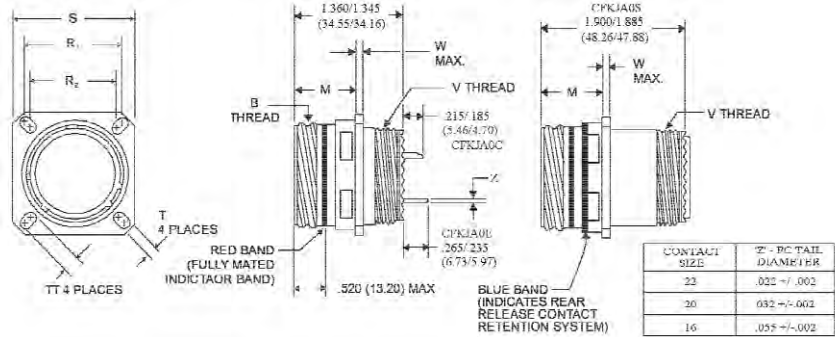


*Engineered for life*

# MIL-DTL-38999 Series I, II, III, IV Filter Connectors Chip-on-Flex

## Wall Mount Receptacle: MIL-DTL-38999 Series III

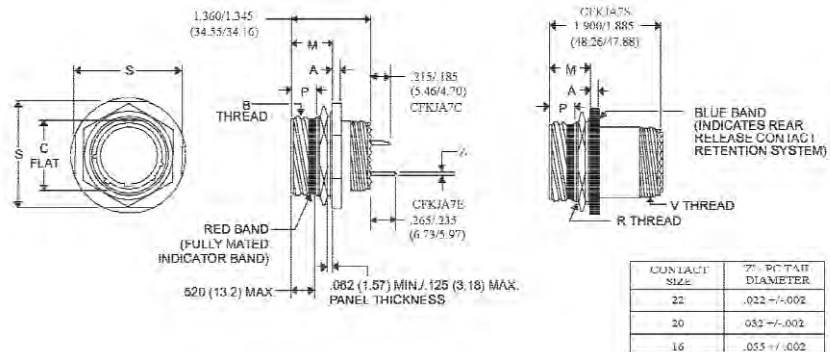
CFKJA0



Shell Size	MS Shell size Code	B Thread Class 2A (Plated)	M +.000 (.000) - .005 (.130)	R 1	R 2	S +.012 (.300)	T +.004 (.100) - .002 (.050)	TT +.004 (.100) - .002 (.050)	Metric V Thread (Plated)	W Max.	Z +.005 (.130) - .010 (.250)
9	A	.6250-0.1P-0.3L-TS	.820 (20.83)	.719 (18.26)	.594 (15.09)	.938 (23.83)	.128 (3.25)	.216 (5.49)	M12X1-6g0.100R	.098 (2.50)	1.235 (31.36)
11	B	.7500-0.1P-0.3L-TS	.820 (20.83)	.812 (20.62)	.719 (18.26)	1.031 (26.19)	.128 (3.25)	.194 (4.93)	M15X1-6g0.100R	.098 (2.50)	1.235 (31.36)
13	C	.8750-0.1P-0.3L-TS	.820 (20.83)	.906 (23.01)	.812 (20.62)	1.125 (28.58)	.128 (3.25)	.194 (4.93)	M18X1-6g0.100R	.098 (2.50)	1.235 (31.36)
15	D	1.0000-0.1P-0.3L-TS	.820 (20.83)	.969 (24.61)	.906 (23.01)	1.219 (30.96)	.128 (3.25)	.173 (4.39)	M22X1-6g0.100R	.098 (2.50)	1.235 (31.36)
17	E	1.1875-0.1P-0.3L-TS	.820 (20.83)	1.062 (26.97)	.969 (24.61)	1.312 (33.32)	.128 (3.25)	.194 (4.93)	M25X1-6g0.100R	.098 (2.50)	1.235 (31.36)
19	F	1.2500-0.1P-0.3L-TS	.820 (20.83)	1.156 (29.36)	1.062 (26.97)	1.438 (36.53)	.128 (3.25)	.194 (4.93)	M28X1-6g0.100R	.098 (2.50)	1.235 (31.36)
21	G	1.3750-0.1P-0.3L-TS	.790 (20.07)	1.250 (31.75)	1.156 (29.36)	1.562 (39.67)	.128 (3.25)	.194 (4.93)	M31X1-6g0.100R	.126 (3.20)	1.235 (31.36)
23	H	1.5000-0.1P-0.3L-TS	.790 (20.07)	1.375 (34.92)	1.250 (31.75)	1.688 (42.88)	.154 (3.91)	.242 (6.15)	M34X1-6g0.100R	.126 (3.20)	1.235 (31.36)
25	J	1.6250-0.1P-0.3L-TS	.790 (20.07)	1.500 (38.10)	1.375 (34.92)	1.812 (46.02)	.154 (3.91)	.242 (6.15)	M37X1-6g0.100R	.126 (3.20)	1.235 (31.36)

## Jam Nut Receptacle: MIL-DTL-38999 Series III

CFKJA7



Shell Size	MS Shell size Code	A +.010 (.250) - .005 (.130)	B Thread Class 2A (Plated)	C +.004 (.100) - .010 (.250)	Z +.005 (.130) - .040 (.100)	M +.005 (.130) - .004 (.100)	P +.016 (.410) - .004 (.100)	S	Metric R Thread (Plated)	Metric V Thread (Plated)
9	A	.104 (2.64)	.6250-0.1P-0.3L-TS	.651 (16.53)	1.243 (31.57)	.871 (22.12)	.555 (14.10)	1.062 (26.97)	M17X1-6g0.100R	M12X1-6g0.100R
11	B	.104 (2.64)	.7500-0.1P-0.3L-TS	.751 (19.07)	1.243 (31.57)	.871 (22.12)	.555 (14.10)	1.250 (31.75)	M20X1-6g0.100R	M15X1-6g0.100R
13	C	.104 (2.64)	.8750-0.1P-0.3L-TS	.938 (23.82)	1.243 (31.57)	.878 (22.30)	.563 (14.30)	1.375 (34.92)	M25X1-6g0.100R	M18X1-6g0.100R
15	D	.104 (2.64)	1.0000-0.1P-0.3L-TS	1.062 (26.97)	1.243 (31.57)	.878 (22.30)	.563 (14.30)	1.500 (38.10)	M28X1-6g0.100R	M22X1-6g0.100R
17	E	.104 (2.64)	1.1875-0.1P-0.3L-TS	1.187 (30.15)	1.243 (31.57)	.878 (22.30)	.563 (14.30)	1.625 (41.28)	M32X1-6g0.100R	M25X1-6g0.100R
19	F	.135 (3.43)	1.2500-0.1P-0.3L-TS	1.312 (33.32)	1.243 (31.57)	.878 (22.30)	.563 (14.30)	1.812 (46.02)	M35X1-6g0.100R	M28X1-6g0.100R
21	G	.135 (3.43)	1.3750-0.1P-0.3L-TS	1.437 (36.50)	1.243 (31.57)	.878 (22.30)	.563 (14.30)	1.938 (49.23)	M38X1-6g0.100R	M31X1-6g0.100R
23	H	.135 (3.43)	1.5000-0.1P-0.3L-TS	1.562 (39.67)	1.243 (31.57)	.878 (22.30)	.563 (14.30)	2.062 (52.37)	M41X1-6g0.100R	M34X1-6g0.100R
25	J	.135 (3.43)	1.6250-0.1P-0.3L-TS	1.687 (42.85)	1.243 (31.57)	.878 (22.30)	.563 (14.30)	2.188 (55.38)	M44X1-6g0.100R	M37X1-6g0.100R

Note: Currently designed for MIL-DTL-38999 Series III. This can be provided for MIL-C-38999 I, II, and III. Please contact Customer Service.

Filter

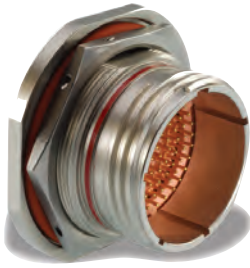


F



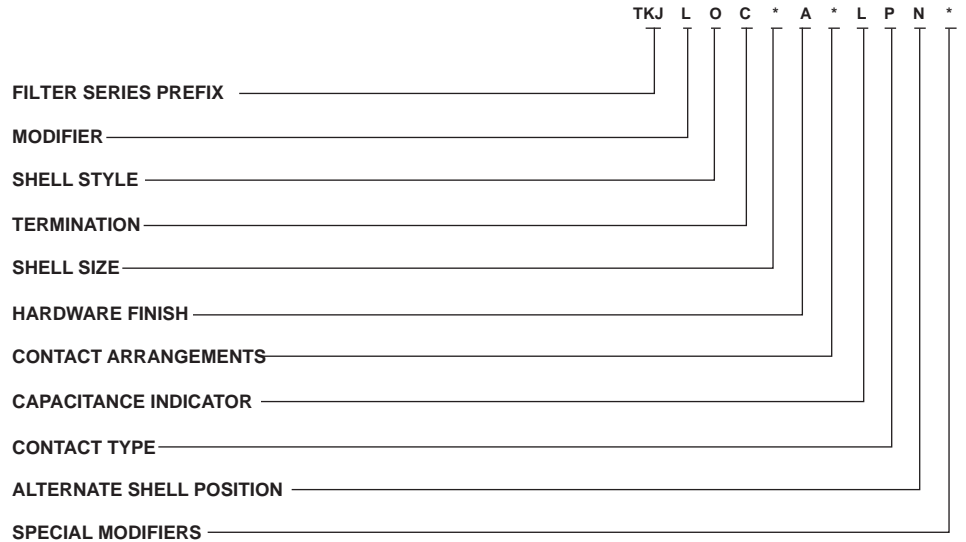
Dimensions shown in inches (mm)  
Specifications and dimensions subject to change

# MIL-DTL-38999 Series I, II, III, IV Filter Connectors



These miniature circular filter connectors are designed to combine the functions of a standard electrical connector and a feed-thru filter into one compact package. They are designed and can be provided with planar array capacitor or Chip-on-flex technology to meet the applicable portions of military specification MIL-DTL-38999 series I, II, III and IV. These connectors feature arrangements that will accommodate up to 12B contacts.

## How to Order - TKJL/TKJ/TKJA/TKJB



**FILTER SERIES PREFIX**  
TKJ - ITT Cannon prefix

**MODIFIER**  
L - Series I scoop-proof shell  
(omit if Series II desired)  
A - Series III Triple Start Thread  
(omit if Series II desired)  
B - Series IV - Available in receptacle only  
(omit if Series II desired)

**SHELL STYLE**  
0 - Wall mounting receptacle (front panel mounting)  
2 - Box mounting (front panel mounting)  
3 - Wall mounting (black panel mounting)  
5 - Box mounting receptacle (back panel mounting)  
7 - Jam nut receptacle

**NOTES:**  
1) Backshell thread and teeth.  
Series I and II - Provided only on shell types indicated on dimension sheets.  
Series III - No threads or teeth provided.  
Series IV - Provided with threads and teeth.  
2) Hermetic versions of the filter connectors can be provided. Contact Customer Service for availability.  
3) Series III and IV can only be shell style 0 or 7.

**TERMINATION**  
C - Solder pot termination  
E - P.C. tails  
S - Crimp Piggyback  
W - Wire wraps

**SHELL SIZE**  
Series I, III and IV:  
11, 13, 15, 17, 19, 21, 23, and 25  
Series II:  
10, 12, 14, 16, 18, 20, 22, and 24

**HARDWARE FINISH**  
A - Bright cadmium over nickel plate  
B - Olive drab cadmium over nickel plate  
N - Electroless nickel plate (preferred)

**CONTACT ARRANGEMENTS**  
See page 22.

**CAPACITANCE INDICATOR\***  
L - 32,000-45,000 PF  
M - 8,000-12,000 PF  
T - 3,300-5,000 PF  
H - 850- 1,300 PF

**CONTACT TYPE**  
P-pin;  
S-socket

**ALTERNATE SHELL POSITION**  
N (normal), A, B, C, D

**SPECIAL MODIFIERS**  
Consult Customer Service for definition and availability

# MIL-DTL-38999 Series I, II, III, IV Filter Connectors

## Performance and Material Specifications

### MATERIALS AND FINISHES

Shell	Aluminum alloy*
Insulator	High grade plastic/epoxy
Contacts	Copper alloy, gold plate
Grommet and Seal	Silicone base elastomer
Jam Nut	Aluminum alloy*
Grounding Spring	Beryllium copper, gold plate

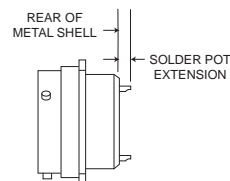
\*Finish as noted in How to Order section.

### ELECTRICAL (Size #16, #20 and #22)

Filter Description	Low Freq.	Mid Freq.	Std. Freq.	High Freq.
Catalog Indicator	L	M	T	H
Voltage Rating	200 VDC - 120 VAC rms 400 Hz			
Current Rating (amp DC)	15 amp - size 16/7.5 amp - size 20/5.0 amp, size 22			
Insulation Resistance, 2 min. electrification time max. at 25°C	5,000 megohms min. @ 100 VDC			
DWV, sea level, with 500 microamps max. charge/discharge	300 VDC size 22 500 VDC size 16 & 20		500 VDC	
Capacitance at 1 KHz, 0.1 V rms Picofarads	32,000	8,000	3300	850
	45,000	12,000	5000	1,300
Attenuation per MIL-STD-220 at 25°C with no applied voltage or current.	Freq. MHz			
	0.1	2 min.	-	-
	1	10 min.	2 min.	-
	2	16 min.	7 min.	2 min.
	10	40 min.	18 min.	8 min.
	100	60 min.	55 min.	45 min.
	500 to 1000	60 min.	60 min.	55 min.
		50 min.	50 min.	
Filter Type/Construction	Pi	Pi	Pi	Pi

Consult factory for higher or mixed attenuation values and higher voltage ratings.

## Contact Extension - All Connectors

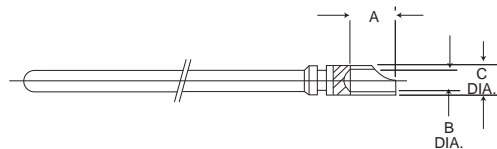


Note: Solder pot extension typically will be .200 (5.08) max. beyond shell rear.

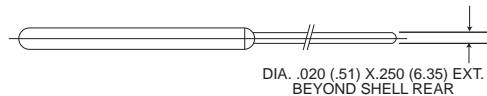
## Contact - Pin and Sockets

### Standard Contact Terminations

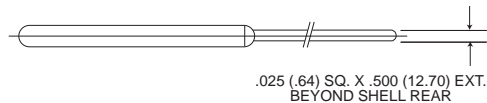
Finish: Gold plate per MIL-G-45204, Type 1,  
Class 1, over nickel plate per QQ-N-290.



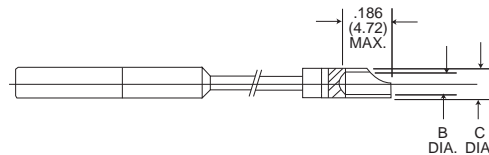
Pin/Solder Pot



Pin/Printed Circuit



Pin/Square Post



Socket/Solder Pot

Contact Size	A	B Dia.	C Dia.
#22	.115 (2.92)	.039 (0.97)	.056 (1.42)
	.095 (2.41)	.035 (0.89)	.051 (1.30)
#20	.125 (3.18)	.047 (1.19)	.066 (1.68)
	.110 (2.79)	.042 (1.07)	.061 (1.55)
#16	.170 (4.32)	.077 (1.96)	.104 (2.64)
	.150 (3.81)	.068 (1.73)	.097 (2.46)

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



# MIL-DTL-38999 Series I, II, III, IV Filter Connectors

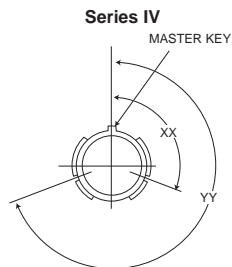
## Contact Arrangements

Engaging view, pin insert

Series I, III & IV Series II No. of Contacts Service Ratings	 9-35 8-35 6 #22D M	 11-5 10-5 5 #20 I	 11-98 10-98 6 #20 I	 11-35 10-35 13 #22D M	 13-8 12-8 8 #20 I	 13-98 12-98 10 #20 I	 13-35 12-35 22 #22D M	
Series I, III & IV Series II No. of Contacts Service Ratings	 15-5 14-5 5 #16 II	 15-18 14-18 18 #20 I	 15-19 14-19 19 #20 I	 15-35 14-35 37 #22D M	 - 16-99 21 #20, 2 #16 I	 17-8 16-8 8 #16 II	 17-26 16-26 26 #20 I	 17-35 16-35 55 #22D M
Series I, III & IV Series II No. of Contacts Service Ratings	 19-32 18-32 32 #20 I	 19-35 18-35 66 #22D M	 21-16 20-16 16 #16 II	 21-35 20-35 79 #22D M	 21-41 20-41 41- #20 I			
Series I, III & IV Series II No. of Contacts Service Ratings	 23-21 22-21 21 #16 II	 23-35 22-35 100 #22D M	 23-53 22-53 53 #20 I	 23-55 22-55 55 #20 I				
Series I, III & IV Series II No. of Contacts Service Ratings	 25-29 24-29 29 #16 I	 25-35 24-35 128 #22D M	 25-61 24-61 61 #20 I					

Please consult factory for availability of layouts not shown.

## Polarizing Positions



Front face of receptacle shown. Polarizing keys are external.

Key Arrangements	XX	YY
N	110°	250°
A	100°	260°
B	90°	270°
C	80°	280°
D	70°	290°

See page 24 for Series I, II and III polarization.

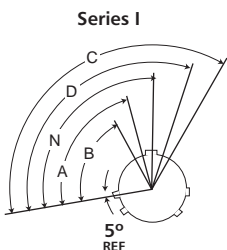
Dimensions shown in inches (mm)  
Specifications and dimensions subject to change

www.itccannon.com

# MIL-DTL-38999 Series I Filter Connectors

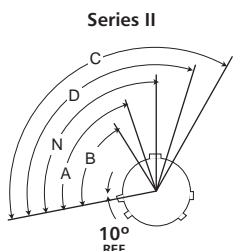
## Filter Connectors

### Polarizing Positions



Front face of receptacle (plug opposite). Insert arrangement does not rotate with main key-keyway. The master key is rotated to provide shell polarization; the minor keys remain fixed.

Shell Size	Angle of Rotation (Degrees)				
	Normal	A	B	C	D
9	95°	77°			113°
11	95°	81°	67°	123°	109°
13	95°	75°	63°	127°	115°
15	95°	74°	61°	129°	116°
17	95°	77°	65°	125°	113°
19	95°	77°	65°	125°	113°
21	95°	77°	65°	125°	113°
23	95°	80°	69°	121°	110°
25	95°	80°	69°	121°	110°

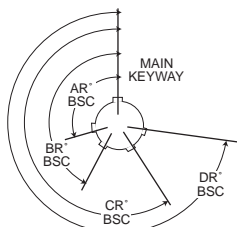


Front face of receptacle (plug opposite). Insert arrangement does not rotate with main key-keyway. The master key is rotated to provide shell polarization; the minor keys remain fixed.

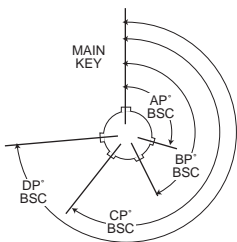
Shell Size	Angle of Rotation (Degrees)				
	Normal	A	B	C	D
8	100°	82°			118°
10	100°	86°	72°	128°	114°
12	100°	80°	68°	132°	120°
14	100°	79°	66°	134°	121°
16	100°	82°	70°	130°	118°
18	100°	82°	70°	130°	118°
20	100°	82°	70°	130°	118°
22	100°	85°	74°	126°	115°
24	100°	85°	74°	126°	115°

### Series III

RECEPTACLE  
(Front face shown)



PLUG  
(Front face shown)



#### NOTES

- All Angles are BSC
- The insert arrangement does not rotate with main key/keyway
- All minor keys are rotated to provide shell polarization, the master key remains fixed at twelve o'clock position.
- Polarization is different from Series I and II.

Shell Size	Key & Keyway Arrangement identification Letter	Key Locations				
		AR° or AP° BSC	BR° or BP° BSC	CR° or CP° BSC	DR° or DP° BSC	
9	N	105	140	215	265	
	A	102	132	248	320	
	B	80	118	230	312	
	C	35	140	205	275	
	D	64	155	234	304	
11	N	95	141	208	236	
	A	113	156	182	292	
	13 and 15	B	90	145	195	252
		C	53	156	220	255
	17 and 19	D	119	146	176	298
E		51	141	184	242	
N		80	142	196	293	
A		135	170	200	310	
B		49	169	200	244	
21 and 23	C	66	140	200	257	
	D	62	145	180	280	
	E	79	153	197	272	
	N	80	142	196	293	
	A	135	170	200	310	
25	B	49	169	200	244	
	C	66	140	200	257	
	D	62	145	180	280	
	E	79	153	197	272	



Special In-line Cable Filter Adapters



Filter adapters are designed to be engaged between connectors in an existing circuit to provide instant filtering without having to rewire. They are environmentally sealed and have pin contacts in the plug end and socket contacts in the end that mates with the receptacle. The filter is concentric around the central pin-socket contact. Electrical and operating characteristics are the same as in the standard TKJ file connectors.

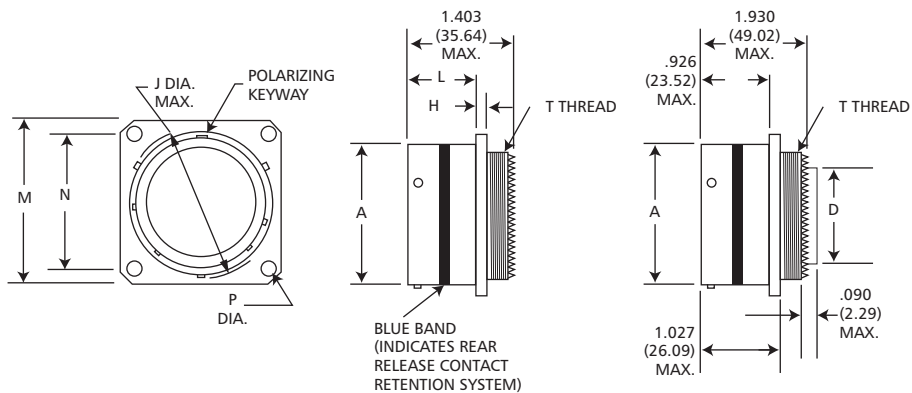
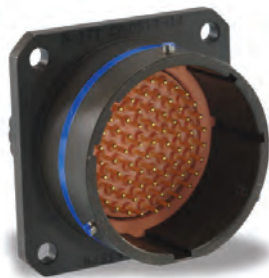
These adapters will mate with all MIL-DTL-38999 connectors having like contact arrangements. For proper performance both the mating receptacle and panel must have a conductive finish. Please contact Customer Service for dimensions.

Flange mounted in-line connectors, similar to MS27662, are also available. They are environmentally sealed and use the same filters as in regular TKJ receptacles. Design permits engaging cable plugs to both ends.

Contact Customer Service for proper nomenclature and availability of the in-line cable adapters and in-line flange mounted TKJ connectors.

Wall Mounting Receptacle

TKJLO

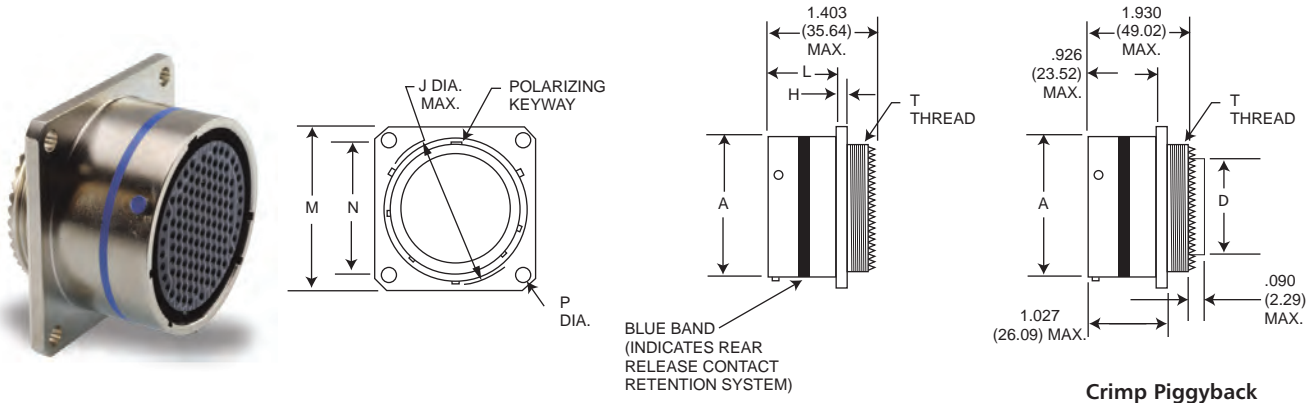


Crimp Piggyback

Shell Size	A Dia. Max.	D Dia. Max.	G Dia. Max.	H Max.	J Dia. Max.	L Max.	M Max.	N T.P.	P Dia. Max.	T Thread
9	.573 (14.55)	.299 (7.59)	.562 (14.27)	.100 (2.54)	.662 (16.81)	.632 (16.05)	.958 (24.33)	.719 (18.26)	.138 (3.51)	.5625-24UNEF-2A
11	.701 (17.81)	.427 (10.85)	.626 (15.90)	.100 (2.54)	.810 (20.57)	.632 (16.05)	1.051 (26.70)	.812 (20.62)	.138 (3.51)	11/16-24UNEF-2A
13	.851 (21.62)	.541 (13.74)	.751 (19.07)	.100 (2.54)	.960 (24.38)	.632 (16.05)	1.145 (29.08)	.906 (23.01)	.138 (3.51)	13/16-20UNEF-2A
15	.976 (24.79)	.666 (16.92)	.876 (22.25)	.100 (2.54)	1.085 (27.56)	.632 (16.05)	1.239 (31.47)	.969 (24.61)	.138 (3.51)	15/16-20UNEF-2A
17	1.101 (27.97)	.791 (20.09)	1.001 (25.42)	.100 (2.54)	1.210 (30.73)	.632 (16.05)	1.332 (33.83)	1.062 (26.97)	.138 (3.51)	1-1/16-18UNEF-2A
19	1.208 (30.68)	.888 (22.35)	1.063 (27.00)	.100 (2.54)	1.317 (33.45)	.632 (16.05)	1.458 (37.03)	1.156 (29.36)	.138 (3.51)	1-1/16-18UNEF-2A
21	1.333 (33.86)	1.005 (25.52)	1.188 (30.17)	.130 (3.30)	1.442 (36.63)	.602 (15.29)	1.582 (40.18)	1.250 (31.75)	.138 (3.51)	1-3/16-18UNEF-2A
23	1.458 (37.03)	1.130 (28.70)	1.313 (33.35)	.130 (3.30)	1.567 (39.80)	.602 (15.29)	1.708 (43.38)	1.375 (34.93)	.157 (3.99)	1-5/16-18UNEF-2A
25	1.583 (40.21)	1.255 (31.88)	1.438 (36.52)	.130 (3.30)	1.692 (42.98)	.602 (15.29)	1.832 (46.53)	1.500 (38.10)	.157 (3.99)	1-7/16-18UNEF-2A

Wall Mounting Receptacle (Back Panel)

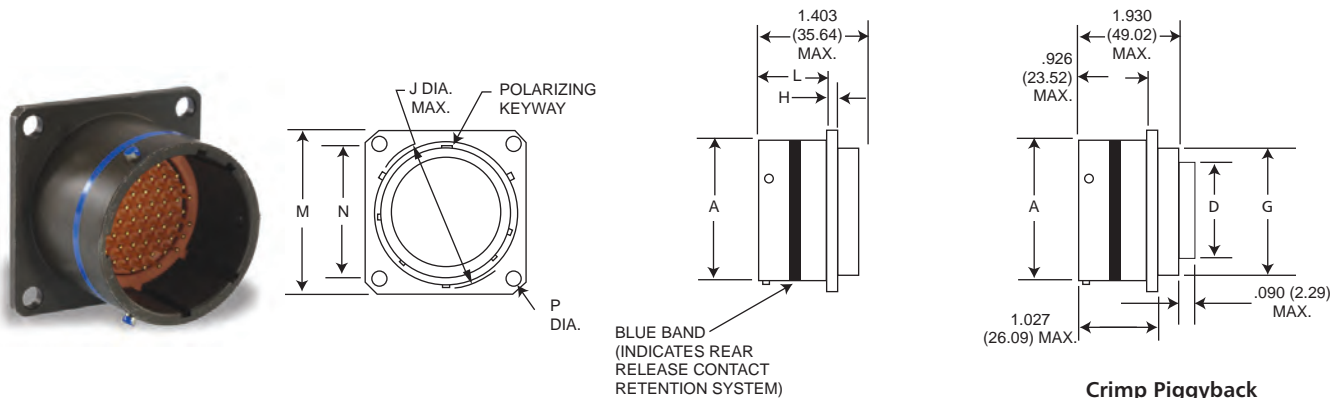
TKJL3



Crimp Piggyback

Box Mounting Receptacle (No Rear Threads)

TKJL5



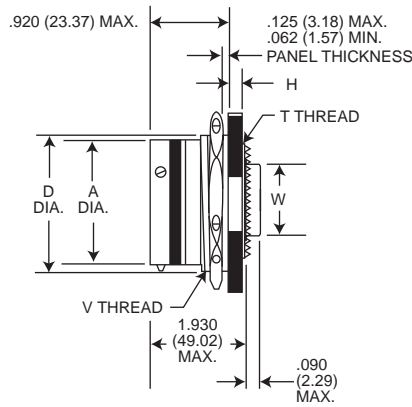
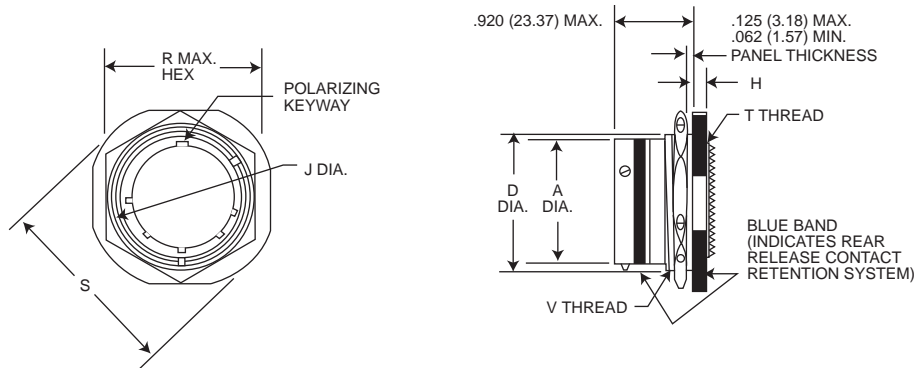
Crimp Piggyback

Shell Size	A Dia. Max.	D Dia. Max.	G Dia. Max.	H Max.	J Dia. Max.	L Max.	M Max.	N T.P.	P Dia. Max.	T Thread
9	.573 (14.55)	.299 (7.59)	.562 (14.27)	.100 (2.54)	.662 (16.81)	.820 (20.83)	.958 (24.33)	.719 (18.26)	.138 (3.51)	.5625-24UNEF-2A
11	.701 (17.81)	.427 (10.85)	.594 (15.08)	.100 (2.54)	.810 (20.57)	.820 (20.83)	1.051 (26.70)	.812 (20.62)	.138 (3.51)	11/16-24UNEF-2A
13	.851 (21.62)	.541 (13.74)	.720 (18.28)	.100 (2.54)	.960 (24.38)	.820 (20.83)	1.145 (29.08)	.906 (23.01)	.138 (3.51)	13/16-20UNEF-2A
15	.976 (24.79)	.666 (16.92)	.844 (21.43)	.100 (2.54)	1.085 (27.56)	.820 (20.83)	1.239 (31.47)	.969 (24.61)	.138 (3.51)	15/16-20UNEF-2A
17	1.101 (27.97)	.791 (20.09)	.969 (24.61)	.100 (2.54)	1.210 (30.73)	.820 (20.83)	1.332 (33.83)	1.062 (26.97)	.138 (3.51)	1-1/16-18UNEF-2A
19	1.208 (30.68)	.880 (22.35)	1.063 (27.00)	.100 (2.54)	1.317 (33.45)	.820 (20.83)	1.458 (37.03)	1.156 (29.36)	.138 (3.51)	1-1/16-18UNEF-2A
21	1.333 (33.86)	1.005 (25.52)	1.188 (30.17)	.130 (3.30)	1.442 (36.63)	.790 (20.07)	1.582 (40.18)	1.250 (31.75)	.138 (3.51)	1-3/16-18UNEF-2A
23	1.458 (37.03)	1.130 (28.70)	1.313 (33.35)	.130 (3.30)	1.567 (39.80)	.790 (20.07)	1.708 (43.38)	1.375 (34.93)	.157 (3.99)	1-5/16-18UNEF-2A
25	1.583 (40.21)	1.255 (31.88)	1.438 (36.52)	.130 (3.30)	1.692 (42.98)	.790 (20.07)	1.832 (46.53)	1.500 (38.10)	.157 (3.99)	1-7/16-18UNEF-2A



Jam Nut Receptacle

TKJL7

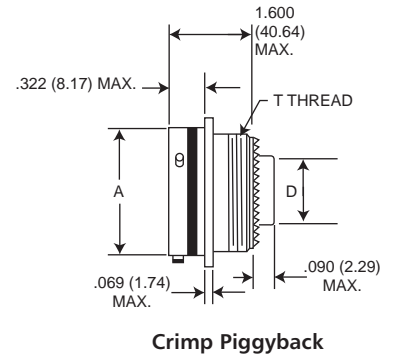
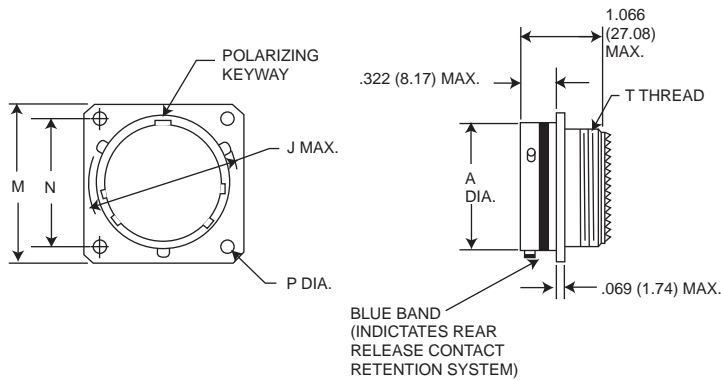


Crimp Piggyback

Shell Size	A Dia. Max.	D Max.	H Max.	J Dia. Max.	R Max. Hex.	S Dia. Max.	T Thread	V Thread Class 2A	W Dia. Max.
9	.573 (14.55)	.655 (16.64)	.120 (3.05)	.662 (16.81)	.892 (22.66)	1.204 (30.58)	.5625-24UNEF-2A	11/16-24UNEF	.299 (7.59)
11	.701 (17.81)	.755 (19.18)	.120 (3.05)	.810 (20.57)	1.017 (25.83)	1.391 (35.33)	11/16-24UNEF-2A	13/16-24UNEF	.427 (10.85)
13	.851 (21.62)	.942 (23.93)	.120 (3.05)	.960 (24.38)	1.205 (30.61)	1.516 (35.51)	13/16-20UNEF-2A	1-20UNEF	.541 (13.74)
15	.976 (24.79)	1.066 (27.08)	.120 (3.05)	1.085 (27.56)	1.329 (33.76)	1.641 (41.68)	15/16-20UNEF-2A	1-1/8-18UNEF	.666 (16.92)
17	1.101 (27.97)	1.191 (30.25)	.120 (3.05)	1.210 (30.73)	1.455 (36.96)	1.766 (44.86)	1-1/16-18UNEF-2A	1-1/4-18UNEF	.791 (20.09)
19	1.208 (30.68)	1.316 (33.43)	.151 (3.84)	1.317 (33.45)	1.579 (40.11)	1.954 (49.63)	1-1/16-18UNEF-2A	1-3/8-18UNEF	.880 (22.35)
21	1.333 (33.86)	1.441 (36.60)	.151 (3.84)	1.442 (36.63)	1.705 (43.31)	2.078 (52.78)	1-3/16-18UNEF-2A	1-1/2-18UNEF	1.005 (25.52)
23	1.458 (37.03)	1.566 (39.78)	.151 (3.84)	1.567 (39.80)	1.829 (46.46)	2.204 (55.98)	1-5/16-18UNEF-2A	1-5/8-18UNEF	1.130 (28.70)
25	1.583 (40.21)	1.691 (42.95)	.151 (3.84)	1.692 (42.98)	2.017 (51.23)	2.328 (59.13)	1-7/16-18UNEF-2A	1-3/4-18UNS	1.255 (31.88)

Wall Mounting Receptacle

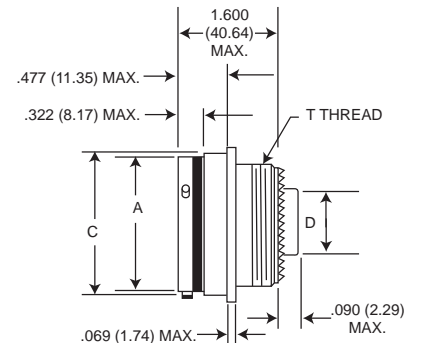
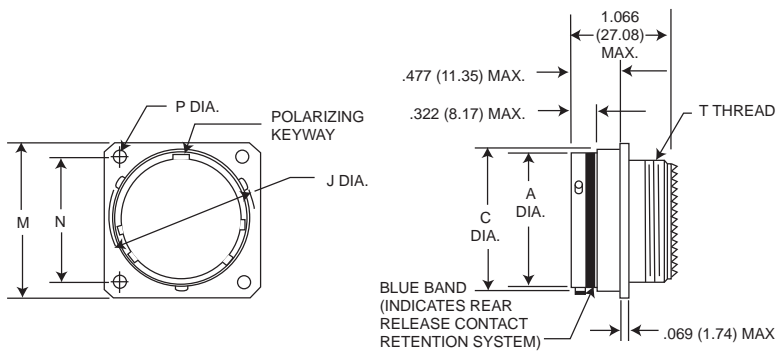
TKJ0



Crimp Piggyback

Wall Mounting Receptacle (Back Panel)

TKJ3



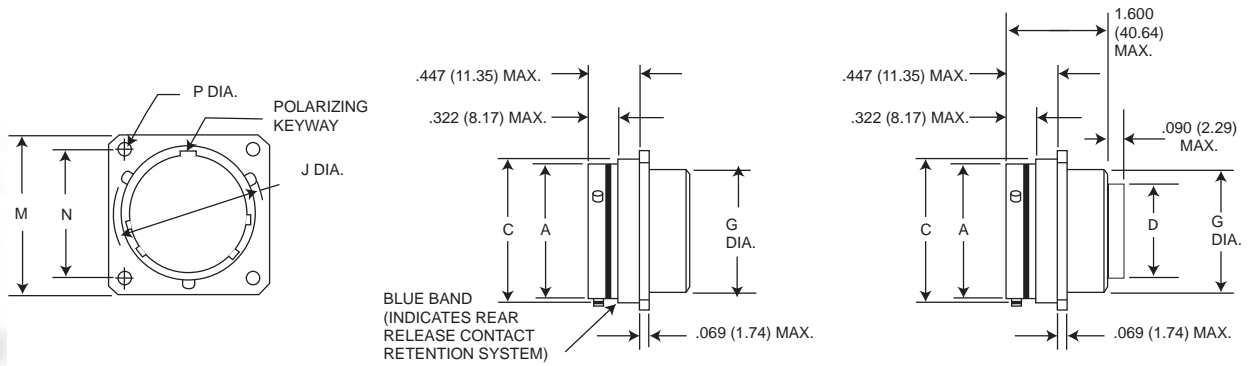
Crimp Piggyback

Shell Size	A Dia. Max.	C Dia. Max.	D Dia. Max.	G Dia. Max.	J Dia. Max.	M Max.	N T.P	P +.005 (0.13) -.010 (0.25)	T Thread
8	.474 (12.04)	.547 (13.89)	.299 (7.59)	.562 (14.27)	.563 (14.30)	.828 (21.03)	.594 (15.09)	.125 (3.18)	.5625-24UNEF-2A
10	.591 (15.01)	.672 (17.06)	.427 (10.85)	.594 (15.08)	.680 (17.27)	.954 (24.23)	.719 (18.26)	.125 (3.18)	11/16-24UNEF-2A
12	.751 (19.08)	.844 (21.43)	.541 (13.74)	.720 (13.28)	.859 (21.82)	1.047 (26.59)	.812 (20.62)	.125 (3.18)	13/16-20UNEF-2A
14	.876 (22.25)	.969 (24.61)	.666 (16.92)	.844 (21.43)	.984 (24.99)	1.141 (28.98)	.906 (23.01)	.125 (3.18)	15/16-20UNEF-2A
16	1.001 (25.43)	1.094 (27.78)	.791 (20.09)	.969 (24.61)	1.108 (28.14)	1.234 (31.34)	.969 (24.61)	.125 (3.18)	1-1/16-18UNEF-2A
18	1.126 (28.60)	1.219 (30.96)	.880 (22.35)	1.063 (27.00)	1.233 (31.32)	1.328 (33.73)	1.062 (26.97)	.125 (3.18)	1-1/16-18UNEF-2A
20	1.251 (31.78)	1.344 (34.13)	1.005 (25.52)	1.188 (30.17)	1.358 (34.49)	1.453 (36.91)	1.156 (27.36)	.125 (3.18)	1-3/16-18UNEF-2A
22	1.376 (34.95)	1.469 (37.31)	1.130 (28.70)	1.313 (33.35)	1.483 (37.67)	1.578 (39.08)	1.250 (31.76)	.125 (3.18)	1-5/16-18UNEF-2A
24	1.501 (38.13)	1.594 (40.48)	1.255 (31.88)	1.438 (36.52)	1.610 (40.89)	1.703 (43.26)	1.375 (34.92)	.152 (3.86)	1-7/16-18UNEF-2A

# MIL-DTL-38999 Series II Filter Connectors TKJ

## Box Mounting Receptacle (Back Panel, No Rear Threads)

TKJ5

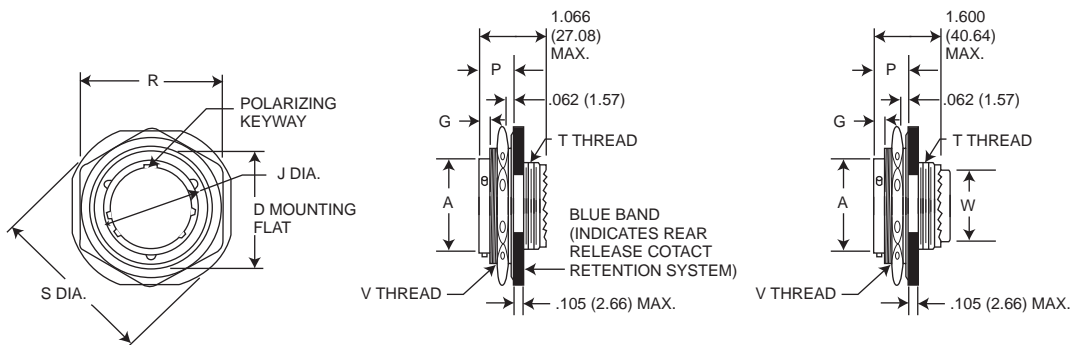


Crimp Piggyback

Shell Size	A Dia. Max.	C Dia. Max.	D Dia. Max.	G Dia. Max.	J Dia. Max.	M Max.	N T.P.	P +.005 (0.13) -.010 (0.25)
8	.474 (12.04)	.547 (13.89)	.299 (7.59)	.562 (14.27)	.563 (14.30)	.828 (21.03)	.594 (15.09)	.125 (3.18)
10	.591 (15.01)	.672 (17.06)	.427 (10.85)	.594 (15.08)	.680 (17.27)	.954 (24.23)	.719 (18.26)	.125 (3.18)
12	.751 (19.08)	.844 (21.43)	.541 (13.74)	.720 (18.28)	.859 (21.82)	1.047 (26.59)	.812 (20.62)	.125 (3.18)
14	.876 (22.25)	.969 (24.61)	.666 (16.92)	.844 (21.43)	.984 (24.99)	1.141 (28.98)	.906 (23.01)	.125 (3.18)
16	1.001 (25.42)	1.094 (27.78)	.791 (20.09)	.969 (24.61)	1.108 (28.14)	1.234 (31.24)	.969 (24.61)	.125 (3.18)
18	1.126 (28.60)	1.219 (30.96)	.880 (22.35)	1.063 (27.00)	1.233 (31.32)	1.328 (33.73)	1.062 (26.97)	.125 (3.18)
20	1.251 (31.77)	1.344 (34.13)	1.005 (25.52)	1.188 (30.17)	1.358 (34.49)	1.453 (36.91)	1.156 (29.36)	.125 (3.18)
22	1.376 (34.95)	1.469 (37.31)	1.130 (28.70)	1.313 (33.35)	1.483 (37.67)	1.578 (40.08)	1.250 (31.75)	.125 (3.18)
24	1.501 (38.13)	1.594 (40.48)	1.255 (31.88)	1.438 (36.52)	1.610 (40.89)	1.703 (43.66)	1.375 (34.92)	.152 (3.86)

## Jam Nut Receptacle

TKJ7



Crimp Piggyback

Shell Size	C Dia. Max.	D Max.	G Max.	J Max.	P Max.	R Max. Hex.	S Dia. Max.	T Thread	V Thread	W Dia. Max.
8	.474 (12.04)	.818 (20.78)	.145 (3.68)	.563 (14.30)	.443 (11.25)	1.079 (27.41)	1.381 (35.08)	.5625-24UNEF-2A	7/8-20UNEF-2A	.299 (7.59)
10	.591 (15.01)	.942 (23.93)	.145 (3.68)	.680 (17.27)	.443 (11.25)	1.205 (30.61)	1.506 (38.25)	11/16-24UNEF-2A	1-20UNEF-2A	.427 (10.85)
12	.751 (19.08)	1.066 (27.08)	.145 (3.68)	.859 (21.82)	.443 (11.25)	1.329 (33.76)	1.631 (41.43)	13/16-20UNEF-2A	1-1/8-18UNEF-2A	.541 (13.74)
14	.876 (22.25)	1.191 (30.25)	.145 (3.68)	.984 (24.99)	.443 (11.25)	1.455 (36.96)	1.756 (44.60)	15/16-20UNEF-2A	1-1/4-18UNEF-2A	.666 (16.92)
16	1.001 (25.43)	1.321 (33.55)	.145 (3.68)	1.108 (28.14)	.443 (11.25)	1.579 (40.11)	1.944 (49.38)	1-1/16-18UNEF-2A	1-3/8-18UNEF-2A	.791 (20.09)
18	1.126 (28.60)	1.441 (36.60)	.145 (3.68)	1.233 (31.32)	.443 (11.25)	1.705 (43.31)	2.022 (51.36)	1-1/16-18UNEF-2A	1-1/2-18UNEF-2A	.880 (22.35)
20	1.251 (31.78)	1.566 (39.78)	.171 (4.34)	1.358 (34.49)	.469 (11.91)	1.829 (46.46)	2.147 (54.53)	1-3/16-18UNEF-2A	1-5/8-18UNEF-2A	1.005 (25.52)
22	1.376 (33.95)	1.691 (42.95)	.171 (4.34)	1.483 (37.67)	.469 (11.91)	2.017 (51.23)	2.271 (57.68)	1-5/16-18UNEF-2A	1-3/4-18UNEF-2A	1.130 (28.70)
24	1.501 (38.13)	1.816 (46.13)	.171 (4.34)	1.610 (40.89)	.469 (11.91)	2.142 (54.41)	2.396 (60.86)	1-7/16-18UNEF-2A	1-7/8-18UNEF-2A	1.255 (31.88)

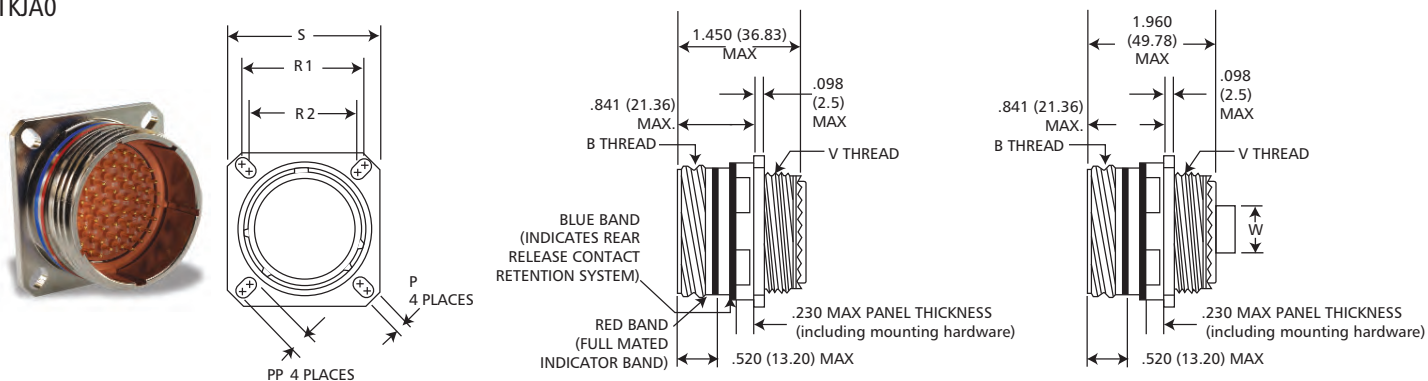
Dimensions shown in inches (mm)  
Specifications and dimensions subject to change

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Wall Mounting Receptacle (No Rear Threads)

TKJA0

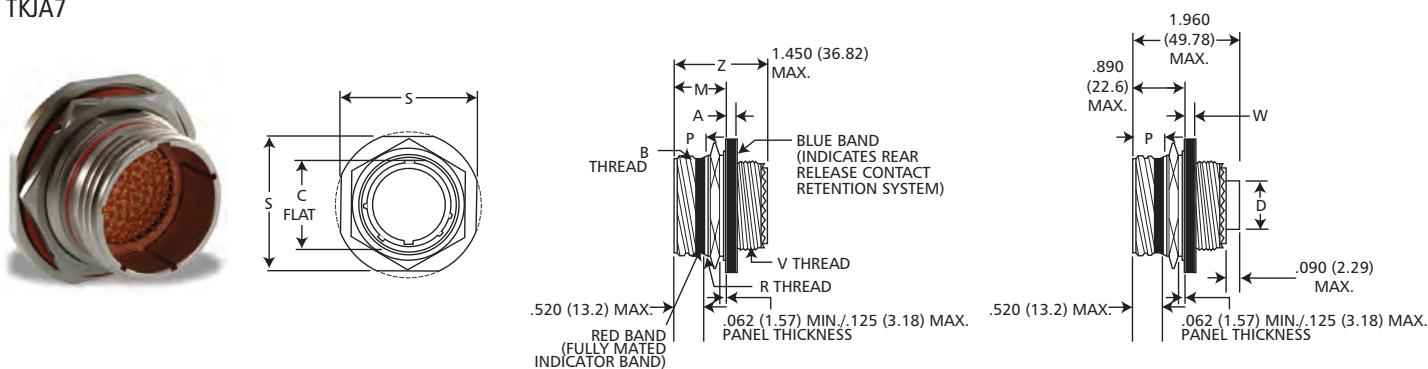


Crimp Piggyback

Shell Size	Shell size Code	P Dia. Max.	PP Max.	R <sub>1</sub>	R <sub>2</sub>	S Max.	W Max.	BB Thread .01P-.03L-TS-2A
9	A	.132 (3.25)	.220 (5.59)	.719 (18.26)	.594 (15.09)	.949 (24.1)	.098 (2.50)	.6250 (15.88)
11	B	.132 (3.25)	.198 (5.03)	.812 (20.62)	.719 (18.26)	1.043 (26.5)	.098 (2.50)	.7500 (19.05)
13	C	.132 (3.25)	.198 (5.03)	.906 (23.01)	.812 (20.62)	1.138 (28.9)	.098 (2.50)	.8750 (22.23)
15	D	.132 (3.25)	.198 (5.03)	.969 (24.61)	.906 (23.01)	1.232 (31.3)	.098 (2.50)	1.000 (25.46)
17	E	.132 (3.25)	.198 (5.03)	1.062 (26.97)	.969 (24.61)	1.323 (33.6)	.098 (2.50)	1.1875 (30.16)
19	F	.132 (3.25)	.198 (5.03)	1.156 (29.36)	1.062 (26.97)	1.449 (36.8)	.098 (2.50)	1.2500 (31.75)
21	G	.132 (3.25)	.198 (5.03)	1.250 (31.75)	1.156 (29.36)	1.575 (40.0)	.126 (3.20)	1.375 (34.93)
23	H	.158 (4.01)	.246 (6.25)	1.375 (34.92)	1.250 (31.75)	1.701 (43.2)	.126 (3.20)	1.5000 (38.10)
25	J	.158 (4.01)	.246 (6.25)	1.500 (38.10)	1.375 (34.92)	1.823 (46.3)	.126 (3.20)	1.6250 (41.28)

Jam Nut Receptacle (No Rear Threads)

TKJA7



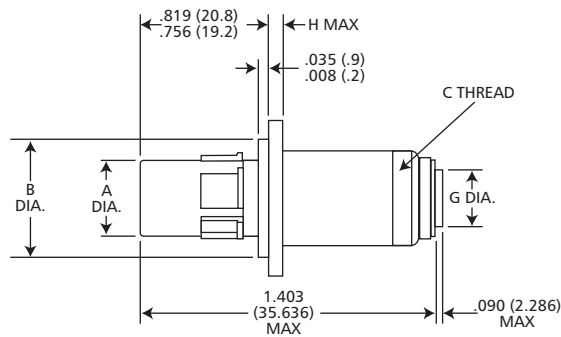
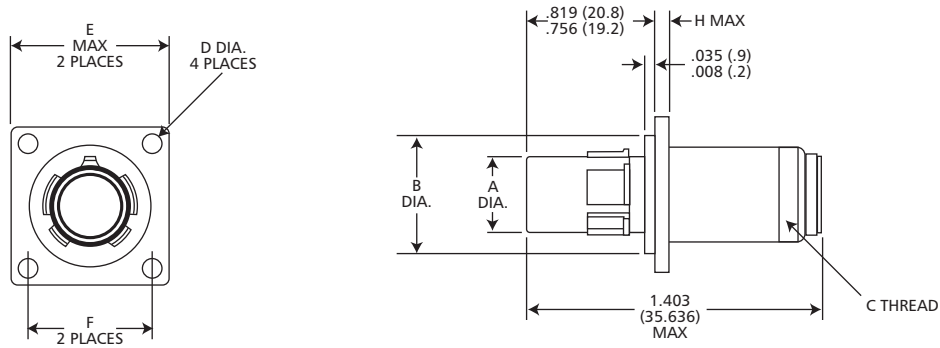
Crimp Piggyback

Shell Size	Shell size Code	A Dia. Max.	B Flat Max.	C Max.	D Dia. Max.	G Thread 1.0-6g 0.100 R	P Max.	S Max.	W Max.	BB Thread .01P-.03L-TS-2A
9	A	1.201 (30.5)	.655 (16.63)	.880 (22.31)	.299 (7.59)	M17	.571 (14.5)	1.079 (27.4)	.114 (2.9)	.6250 (15.88)
11	B	1.386 (35.2)	.755 (19.17)	.880 (22.31)	.427 (10.85)	M20	.571 (14.5)	1.268 (32.2)	.114 (2.9)	.7500 (19.05)
13	C	1.512 (38.4)	.942 (23.92)	.890 (22.6)	.541 (13.74)	M25	.579 (14.7)	1.390 (35.3)	.114 (2.9)	.8750 (22.23)
15	D	1.638 (41.6)	1.066 (27.07)	.890 (22.6)	.666 (16.92)	M28	.579 (14.7)	1.516 (38.5)	.114 (2.9)	1.000 (25.46)
17	E	1.764 (44.8)	1.191 (30.25)	.890 (22.6)	.791 (20.09)	M32	.579 (14.7)	1.642 (41.7)	.114 (2.9)	1.1875 (30.16)
19	F	1.949 (49.5)	1.316 (33.42)	.890 (22.6)	.880 (22.35)	M35	.579 (14.7)	1.827 (46.4)	.146 (3.7)	1.2500 (31.75)
21	G	2.075 (52.7)	1.441 (36.60)	.890 (22.6)	1.005 (25.52)	M38	.579 (14.7)	1.953 (49.6)	.146 (3.7)	1.375 (34.93)
23	H	2.201 (55.9)	1.566 (39.77)	.890 (22.6)	1.130 (28.70)	M41	.579 (14.7)	2.079 (52.8)	.146 (3.7)	1.5000 (38.10)
25	J	2.323 (59.0)	1.691 (42.95)	.890 (22.6)	1.255 (31.88)	M44	.579 (14.7)	2.205 (56.0)	.146 (3.7)	1.6250 (41.28)



Wall Mounting Receptacle

TKJB0



Crimp Piggyback

Shell Size	Shell size Code	A Dia. Max.	B Dia. Max.	C* Thread 1.0-6g 0.100 R	D ± .008 (.20) Dia.	E Dia. Max.	F Basic	G Dia. Max.	H Max
11	B	.509 (12.93)	.793 (20.15)	M15	.130 (3.3)	1.051 (26.7)	.812 (20.62)	.427 (10.85)	.102 (2.590)
13	C	.634 (16.10)	.919 (23.35)	M18	.130 (3.3)	1.146 (29.1)	.906 (23.02)	.541 (13.74)	.102 (2.590)
15	D	.759 (19.28)	1.044 (26.52)	M22	.130 (3.3)	1.240 (31.5)	.969 (24.62)	.666 (16.92)	.102 (2.590)
17	E	.885 (22.48)	1.170 (29.72)	M25	.130 (3.3)	1.335 (33.9)	1.062 (26.98)	.791 (20.09)	.102 (2.590)
19	F	1.009 (25.63)	1.294 (32.87)	M28	.130 (3.3)	1.461 (37.1)	1.156 (29.36)	.880 (22.35)	.102 (2.590)
21	G	1.134 (28.80)	1.419 (36.05)	M31	.130 (3.3)	1.583 (40.2)	1.250 (31.76)	1.005 (25.52)	.134 (3.403)
23	H	1.259 (31.98)	1.544 (39.22)	M34	.150 (3.8)	1.709 (43.4)	1.375 (34.92)	1.130 (28.70)	.134 (3.403)
25	J	1.384 (25.15)	1.669 (42.40)	M37	.150 (3.8)	1.835 (46.6)	1.500 (38.10)	1.255 (31.880)	.134 (3.403)

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

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