

# WILDCAT 38999 CONNECTORS

High Reliability and High Contact Density



Combine high reliability and high contact density in a familiar MIL-DTL-38999 format with Wildcat 38999 connectors. With nearly double the number of contact in the same shell size, Wildcat 38999 connectors offer extreme temperature, vibration, and corrosion resistance, and 500+-mating-cycle durability in a space-saving design.

The easy-grip coupling ring and rapid, positive coupling make mating and unmating fast and simple.

A variety of material and plating options include aluminum, stainless steel, or aluminum bronze housings with cadmium, nickel, zinc cobalt, or zinc nickel plating.

## SPACE AND WEIGHT SAVINGS

- Almost double the contact density of MIL-DTL-38999 connectors
- Lightweight materials

## RUGGED

- Threaded anti-vibration coupling
- Scoop-proof interface
- Aggressive fluid resistance and dust ingress prevention

## RELIABLE

- Fully sealed cable and mating interface
- EMI screening as per MIL-DTL-38999 Series III
- RFI mating interface band

## VERSATILE

- 7 keying options including "Universal"
- Various plating and material options
- Backshell or cable braid/boot rear feature that eliminates need for backshell
- Rear-removable crimp and PCB contacts (consult TE for PCB details)

## Performance Characteristics

### ELECTRICAL

- **Dielectric Withstand Voltage:** 1000 VAC
- **Current Rating:** 3 amps/contact

### ENVIRONMENTAL

- **Temperature:**
  - 65°C to +175°C (cadmium)
  - 65°C to +200°C (nickel)
- **Durability:** 500 mating cycles min.
- **Vibration:** MIL-DTL-38999 Series III
- **Thermal Shock:** MIL-DTL-38999 Series III
- **Shock:** 300 g, 3 ms in 3 axes
- **Fluid resistance:** Withstands a wide range of military and aerospace fluids
- **Salt spray resistance:**
  - 500 hours (cadmium finish) per MIL-STD-1344 Method 100 B and NFC93422.
  - 48 hours (nickel finish)
- **Sealing:** Up to 30,000 m/100,000 ft. altitude

### MATERIALS

- **Shell and Coupling Ring:** Aerospace grade aluminum alloy as standard
- **Plating:** Cadmium olive drab as standard  
For other material and plating options see Wildcat 38999 ordering information
- **Seals:** Fluorinated silicone
- **Insulators:** High-performance thermoplastic
- **Contacts:** Gold-plated machined copper alloy
- **Wire Size:** 28 to 24 AWG

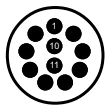


## Wildcat 38999 Connectors

### Contact Arrangement

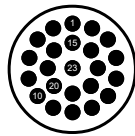
(Viewed from the mating face of a connector with pin contacts)

Shell Size 09



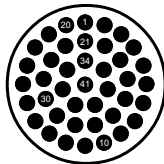
09-11

Shell Size 11



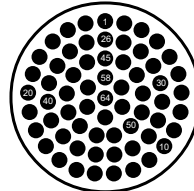
11-23

Shell Size 13



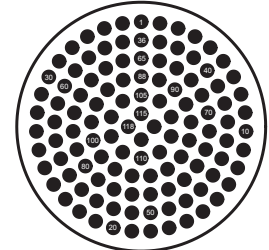
13-41

Shell Size 15



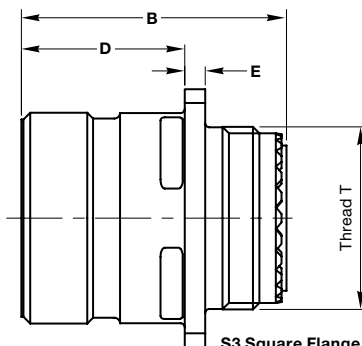
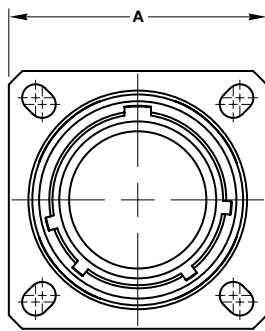
15-64

Shell Size 19

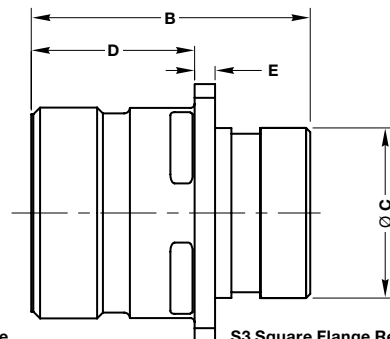


19-118

### Square Flange Receptacle: Shell Type 0



S3 Square Flange Receptacle  
Shell Type 20



S3 Square Flange Receptacle  
Shell Type 10

### Square Flange Receptacle with Accessory Thread

Shell Size	A Max.	B Max.	D Max.	E Max.	Thread 'T'
09	24.00 (.945)				M12 x 1.0-6g
11	26.40 (1.039)	31.55 (1.242)	19.90 (.783)	2.50 (.098)	M15 x 1.0-6g
13	28.90 (1.138)				M18 x 1.0-6g
15	31.30 (1.232)				M22 x 1.0-6g

Consult TE for further information on 19-118 connectors

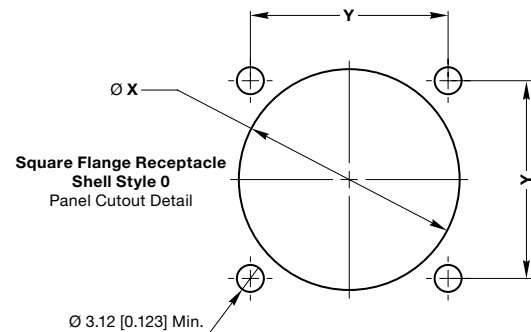
### Square Flange Receptacle with Knurled Rear

Shell Size	A Max.	B Max.	C Max.	D Max.	E Max.
09	24.00 (.945)		11.30 (.445)		
11	26.40 (1.039)	33.80 (1.331)	14.35 (.565)	19.90 (.783)	2.50 (.098)
13	28.90 (1.138)		17.50 (.689)		
15	31.30 (1.232)		20.65 (.813)		

Consult TE for further information on 19-118 connectors

### Square Flange Receptacle Panel Cutouts

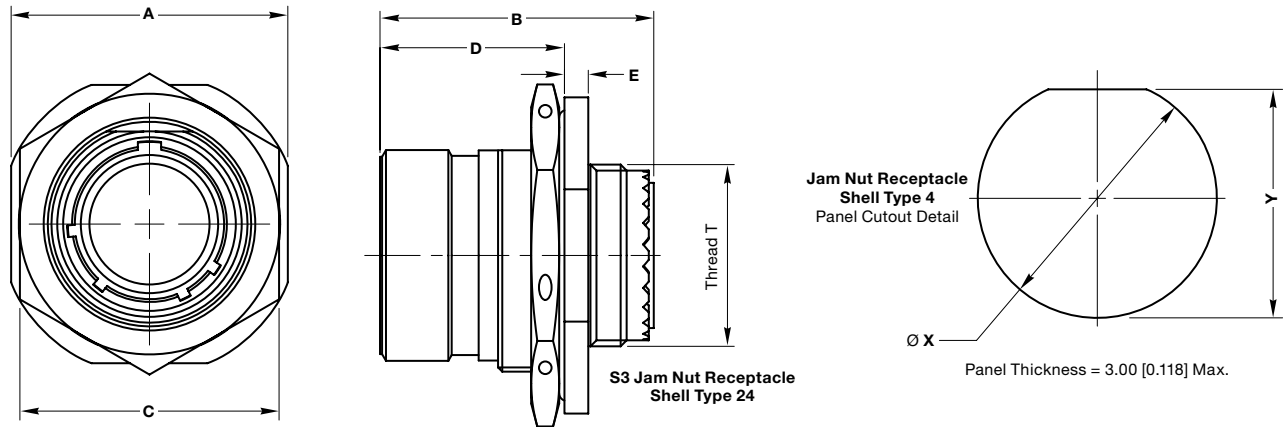
Shell Size	ØX		Y	
	Front Mount	Rear Mount	Max.	Min.
09	13.11 (.516)	16.66 (.656)	18.26 (.719)	15.09 (.594)
11	15.08 (.594)	22.22 (.875)	20.26 (.798)	18.26 (.719)
13	19.05 (.750)	23.42 (.922)	23.01 (.906)	20.62 (.812)
15	23.01 (.906)	26.59 (1.047)	24.61 (.969)	23.01 (.906)





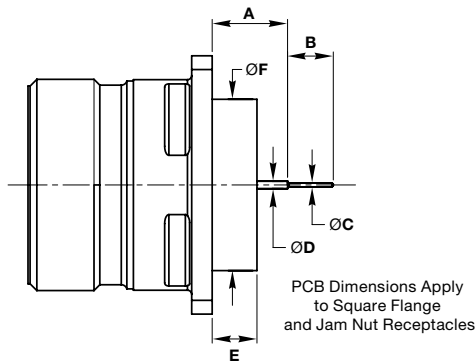
## Wildcat 38999 Connectors

### Jam Nut Receptacle: Shell Type 4



Shell Size	A Max.	B Max.	C Max.	D Max.	E Max.	Thread 'T'
09	27.20 (1.071)		23.25 (.915)			M12x1.0-6g
11	32.00 (1.260)	32.55 (1.281)	26.30 (1.035)	22.40 (.882)	2.95 (.116)	M15x1.0-6g
13	35.10 (1.382)		32.00 (1.260)			M18x1.0-6g
15	38.30 (1.508)		36.00 (1.417)			M22x1.0-6g

Consult TE for further information on 19-118 connectors



### Jam Nut Receptacle Panel Cutouts

Shell Size	ØX (±.01)	Y (±.01)
09	17.80 (.700)	16.89 (0.665)
11	20.98 (.826)	19.43 (.765)
13	25.68 (1.011)	24.16 (.951)
15	28.90 (1.138)	27.43 (1.080)

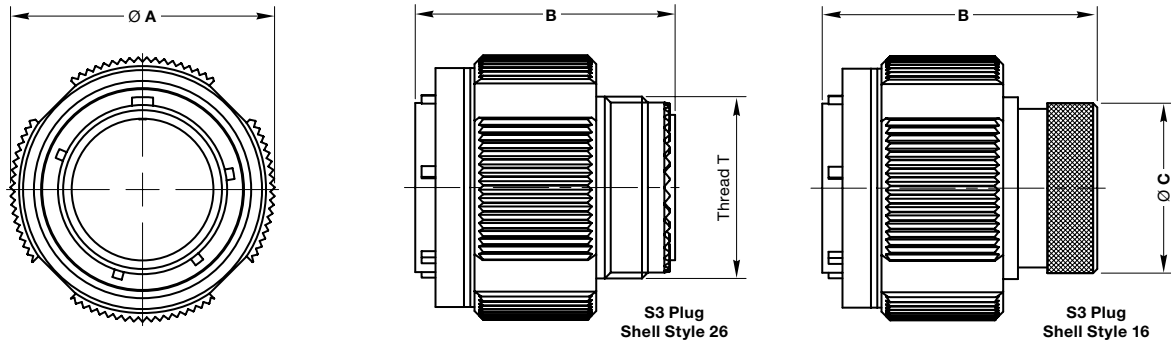
### PCB Tail Dimensions: Square Flange Receptacle

Layout	Part No. Option Code	Shell Accessory	Part No.		A		B Max.	ØC Max.	ØD Max.	E Max.	ØF Max.	
			Pins	Sockets	Max.	Min.					Shell Size	SØ Max.
09-11 11-23 13-41 15-64 19-118	-151	W320	611624-31	611625	11.73 (.462)	10.73 (.422)	5.55 (.219)	.60 (.024)	1.00 (.039)	5.74 (.226)	09	11.07 (.436)
	-151	W324	611556-31	611627	9.73 (.383)	8.73 (.344)	5.55 (.219)	.60 (.024)	1.00 (.039)	5.74 (.226)	11	14.33 (.564)
	-151	W330	Potted	Potted	9.73 (.383)	8.73 (.344)	5.55 (.219)	.60 (.024)	1.00 (.039)	5.74 (.226)	13	17.42 (.686)
	-151	W334	Potted	Potted	6.73 (.265)	5.73 (.226)	5.55 (.219)	.60 (.024)	1.00 (.039)	5.74 (.226)	15	20.57 (.810)



## Wildcat 38999 Connectors

### Free Plug: Shell Type 6



### Plug with Accessory Thread

Shell Size	ØA Max.	B Max.	Thread 'T'
09	21.30 (.839)	31.10 (1.224)	M12x1.0-6g
11	23.75 (.935)		M15x1.0-6g
13	29.10 (1.146)		M18x1.0-6g
15	32.30 (1.272)		M22x1.0-6g

Consult TE for further information on 19-118 connectors

### Plug with Knurled Rear

Shell Size	ØA Max.	B Max.	ØC Max.
09	21.30 (.839)	33.30 (1.311)	11.30 (.445)
11	23.75 (.935)		14.35 (.565)
13	29.10 (1.146)		17.50 (.689)
15	32.30 (1.272)		27.00 (1.063)

Consult TE for further information on 19-118 connectors

## CONTACTS AND TOOLING

Layout	Contact		Current Rating	Wire Size (AWG)	Conductor		Wire Sealing Range		Filler Plug	Ins/Ext Tool	Crimp Tool	Positioner	
	Pin	Socket			Min. Ø	Max. Ø	Min. Ø	Max. Ø				Pin	Socket
09-11 11-23 13-41 15-64 19-118	605719-31	605721	3 A	24-28	.254 (.010)	.511 (.020)	.600 (.024)	.96 (.038)	600300-24	605837	M22520/2-01	610286	610287



## Wildcat 38999 Connectors

### ACCESSORIES

#### Protective Caps and Backshells

Wildcat 38999 connectors are compatible with MIL-DTL-38999 Series III type backshells and procaps or equivalent.

#### Raychem Heat-Shrink Boots

Shell Size	Straight Boot	90° Boot
09	202K121	222K121
11	202K132	222K121
13	202K142	222K132
15	202K142	222K142
19	202K153	222K153

#### CRES-Lock Bandstraps



##### Easy to Use

- Quick, easy, cost-effective and reliable termination of braided shielding

##### High Performance

- Low profile, one-piece design eliminates EMI leakage paths

##### Rugged

- Shock, vibration and environmental tested to meet aerospace and defense requirements



## Wildcat 38999 Connectors

### ORDERING INFORMATION

**Part Number Example:**

W3    1    6    T    W    09-11    S    N -    \*\*\*\*

**Series:**

Wildcat 38999

**Shell Rear Accessory:**

- 1 = Braid and Boot Mounting Feature
- 2 = Rear Accessory Thread, Anti-rotation Teeth
- 3 = No Accessory, Boxmount, Panel Rear

**Shell Type:**

- 0 = Square Flange Receptacle
- 4 = Jam Nut Receptacle
- 6 = Free Plug
- 7 = Reduced Jam Nut Flange Receptacle

**Coupling Type:**

- T = Triple-start ACME Thread
- B = Bayonet (Consult TE on Availability)

**Class Code:**

- W = Aluminum with Olive Drab Cadmium
- F = Aluminum with Electroless Nickel
- Z = Aluminum with Zinc Nickel
- U = Aluminum with Zinc Cobalt
- K = Stainless Steel
- B = Bronze

**Shell Size—Insert Arrangement:**

- 09-11 = Shell Size 9, 11 Way
- 11-23 = Shell Size 11, 23 Way
- 13-41 = Shell Size 13, 41 Way
- 15-64 = Shell Size 15, 64 Way
- 19-118 = Shell Size 19, 118 Way (Consult TE on Availability)

**Contact Type:**

- P = Pin
- S = Socket

**Keying:**

- N = Normal
- U = Universal
- A, B, C, D, E

**Option Code (3 digits) or Modification Code:**

- 090 = Supplied without Contacts
- 151 = PCB Contacts