

# DEUTSCH WILDCAT MICRO CONNECTORS

Extreme temperature, vibration, fluid,  
and corrosion resistance in a  
high-density, lightweight connector

*iS* Rayfast

# DEUTSCH WILDCAT MICRO CONNECTORS

Compact, Reliable Interconnections for Demanding Applications



Offering a high-reliability interconnection for demanding applications including military and aerospace, Wildcat Micro connectors are extremely compact and available in two housing sizes with four contact layouts with 3, 5, or 9 contacts.

Coupling choices include a robust bayonet mechanism for quick and positive coupling or an anti-vibration triple-start threaded option.

Various mounting options are available, and the rear accessory feature provides for cable braid and boot termination.

A variety of material and plating options means versatile choices to match the demands of your application.

## SPACE AND WEIGHT SAVINGS

- High-density contact spacing and lightweight materials

## RUGGED RELIABILITY

- Robust bayonet coupling mechanism
- Extreme temperature, vibration and corrosion resistance
- Aggressive fluid resistance and dust ingress prevention
- Fully sealed cable and mating interface with IP67 rating

## DURABLE

- Over 500 mating cycles

## EASY TO USE

- Scalloped/knurled coupling ring for easy gripping
- Scoop-proof interface
- Rear removable crimp and PCB contacts
- Cable braid and boot rear feature for fast, effective shield termination and no need for separate backshell

## VERSATILE

- Multiple keying options
- Suitable for both signal and low power applications
- MIL-STD-1553 protocol compatible (3-way connectors)

## Performance Characteristics

### ELECTRICAL

- **Dielectric Withstand Voltage:** 1000 VAC
- **Current Rating:** 3 to 5 amps/contact, depending on layout

### ENVIRONMENTAL

- **Temperature:** -55°C to +175°C
- **Durability:** 500 mating cycles
- **Vibration:**
  - Sinusoidal: 10 to 2000 Hz, 30 g max.
  - Random: 50 to 2000 Hz, 1 g<sup>2</sup>/Hz
- **Fluid Resistance:** Withstands a wide range of military and aerospace fluids
- **Salt Spray Resistance:** 500 hours (cadmium finish)
- **Environmental Sealing:** IP67

### MATERIALS

- **Shell and Coupling Ring:** Aerospace-grade aluminum alloy as standard
- **Plating:** Olive drab cadmium, RoHS electroless nickel, black zinc nickel (other finishes available on request)
- **Insulators:** High-performance thermoplastic
- **Seals:** Fluorinated silicone
- **Contacts:** Gold-plated machined copper alloy
- **Wire Size:** 28 to 22 AWG, depending on layout

## TE Components . . . TE Technology . . . TE Know-how . . .

AMP | Agastat | CII | Hartman | Kilovac | Microdot | Nanonics | Polamco | Raychem | Rochester | DEUTSCH SEACON Phoenix | L.L. Rowe | Phoenix Optix | AFP | SEACON

Get your product to market faster with a smarter, better solution.

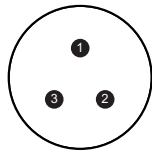


## Wildcat Micro Connectors

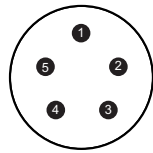
### Contact Arrangements

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

#### Shell Size 03

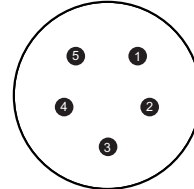


03-03

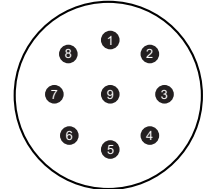


03-05

#### Shell Size 06

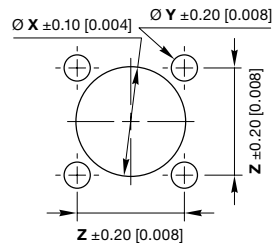


06-05

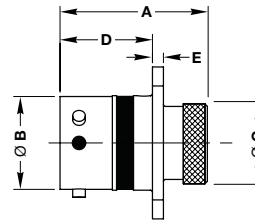
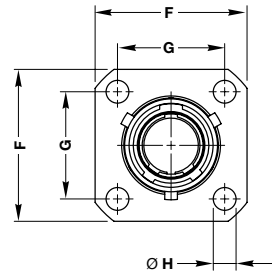


06-09

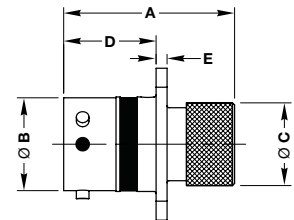
### Square Flange Receptacle: Shell Type 0



Shell Type 0 Panel Detail  
Panel Thickness = 2.25 Max. (0.089)



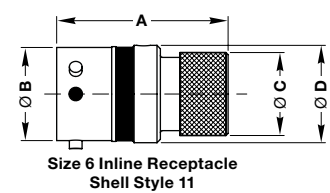
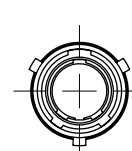
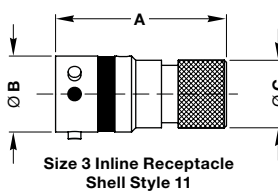
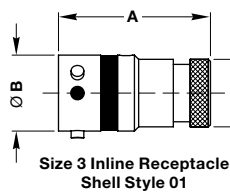
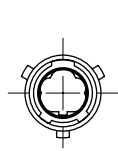
Square Flange Receptacle  
Shell Style 00



Square Flange Receptacle  
Shell Style 10

Shell Size	Shell Style	Knurl	A Max	ØB Max	ØC Max	D Max	E Max	F Max	G	ØH Min	ØX	ØY	Z
03	00	Short	18.20 (.717)	9.15 (.360)	8.20 (.323)	9.10 (.358)	1.50 (.059)	16.40 (.646)	11.46 (.451)	2.50 (.098)	11.00 (.433)	3.10 (.122)	11.46 (.451)
	10	Long	21.50 (.846)										
06	10	Long	20.45 (.805)	11.15 (.439)	10.05 (.396)	11.10 (.437)		18.20 (.717)	12.70 (.500)	2.50 (.098)	13.00 (.512)	3.10 (.122)	12.70 (.500)

### In-Line Receptacle: Shell Style 1

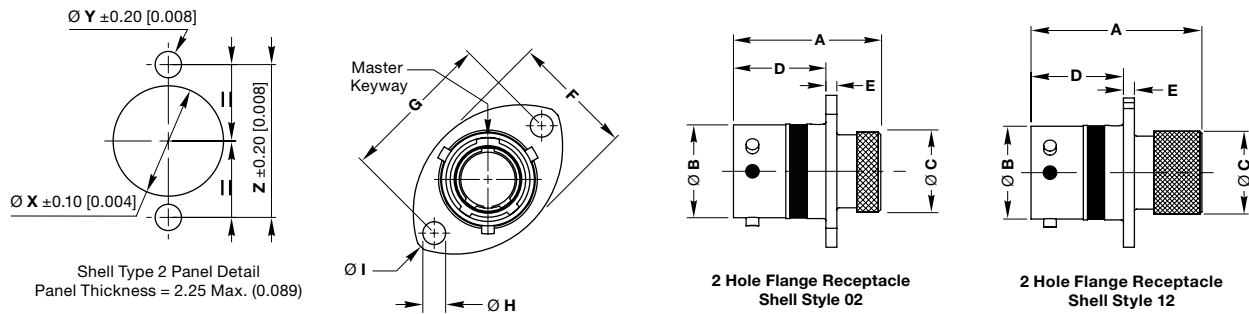


Shell Size	Shell Style	Knurl	A Max.	ØB Max.	ØC Max.	D Max.
03	01	Short	18.20 (.716)	9.15 (.360)	8.20 (.323)	N/A
	11	Long	20.45 (.805)			
06	11	Long	20.45 (.805)	11.15 (.439)	10.05 (.396)	11.75 (.462)



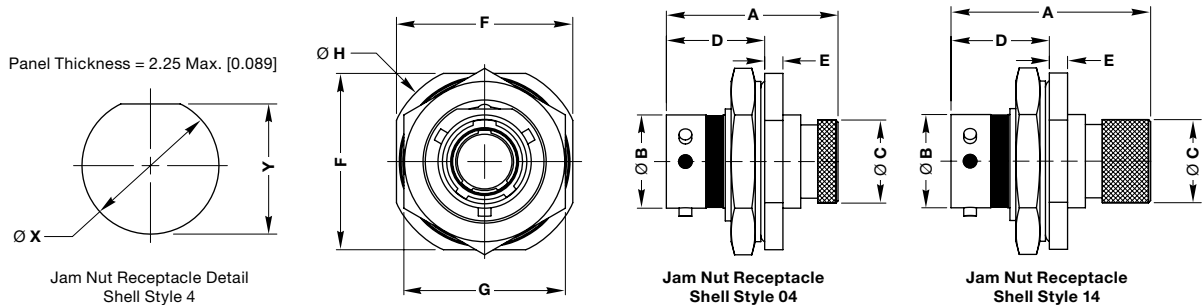
## Wildcat Micro Connectors

### 2-Hole Flanged Receptacle: Shell Type 2



Shell Size	Shell Style	Knurl	A Max.	ØB Max.	ØC Max.	D Max.	E Max.	F Max.	G	ØH Min.	ØI Max.	ØX	ØY	Z
03	02	Short	18.20 (.717)	9.15 (.360)	8.20 (.323)	9.10 (.358)	1.50 (.059)	13.40 (.528)	16.20 (.638)	2.50 (.098)	20.75 (.817)	11.00 (.433)	3.10 (.122)	16.20 (.638)
	12	Long	21.50 (.805)											
06	12	Long	20.45 (.805)	11.15 (.439)	10.05 (.396)	11.10 (.437)	1.50 (.059)	14.85 (.585)	18.00 (.709)	2.50 (.098)	22.70 (.894)	13.00 (.512)	3.10 (.122)	18.00 (.709)

### Jam Nut Receptacle: Shell Type 4

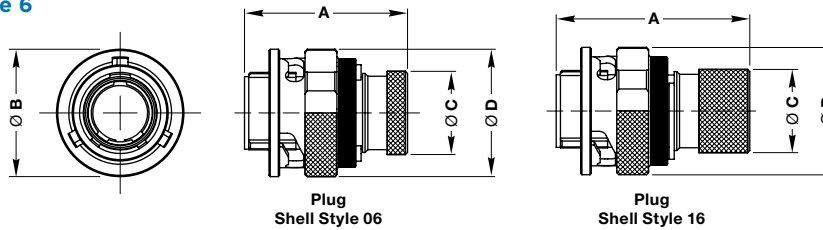


Shell Size	Shell Style	Knurl	A Max.	ØB Max.	ØC Max.	D Max.	E Max.	F Max.	G Max.	ØH Max.	ØX	Y
03	04	Short	18.20 (.717)	9.15 (.360)	8.20 (.323)	11.60 (.457)	2.35 (.093)	19.00 (.748)	17.10 (.673)	21.15 (.833)	12.20 (.480)	11.82 (.465)
	14	Long	21.50 (.846)									
06	04	Short	20.45 (.805)	11.15 (.439)	10.05 (.396)	11.70 (.461)	2.35 (.093)	21.00 (.827)	19.25 (.758)	23.15 (.911)	13.97 (0.55)	13.25 (0.52)
	14	Long	23.75 (.935)									



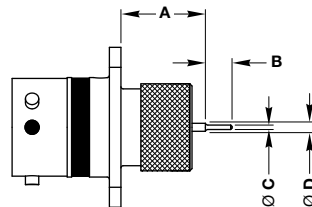
## Wildcat Micro Connectors

### Free Plug: Shell Type 6



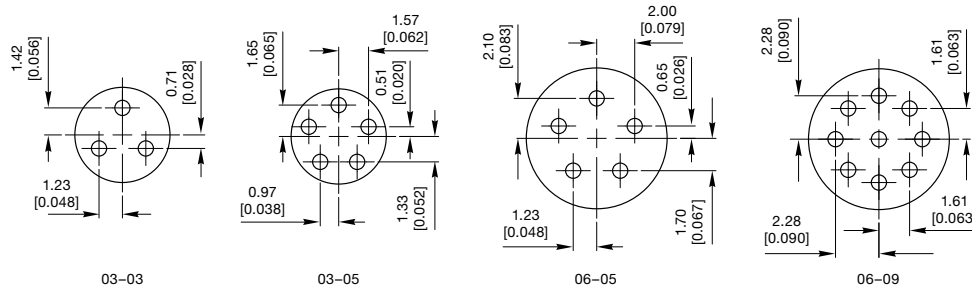
Shell Size	Shell Style	Knurl	A Max.	ØB Max.	ØC Max.	ØD Max.	
						Scalloped (Standard)	Knurled (Option Code 'KCR')
03	06	Short	18.50 (.728)	12.50 (0.492)	7.75 (0.305)	12.45 (0.490)	11.40 (0.449)
	16	Long	22.45 (.884)				
06	06	Short	19.40 (.764)	15.15 (0.596)	10.00 (0.394)	15.10 (0.594)	13.55 (0.533)
	16	Long	23.00 (.906)				

### PCB Tail Dimensions Square Flange Receptacle



Layout	Part No. Option Code	Contact Tail	Part No.		A		B Max.	ØC Max.	ØD Max.
			Pin	Socket	Max.	Min.			
03-03	-110	Long	605679-31	605681	15.03 (.592)	13.92 (.548)	3.05 (.120)	.70 (.028)	1.23 (.048)
	-111	Short	610292-31	610944	9.83 (.387)	8.72 (.343)	3.05 (.120)	.70 (.028)	1.23 (.048)
03-05	-120	Long	610006-31	610008	15.71 (.619)	14.58 (.574)	3.05 (.120)	.57 (.022)	.94 (.037)
	-121	Short	610294-31	610945	10.71 (.422)	9.58 (.377)	3.05 (.120)	.57 (.022)	.94 (.037)
06-05	-130	Long	604990-31	604992	14.91 (.587)	14.12 (.556)	3.05 (.120)	.57 (.022)	1.26 (.050)
	-131	Short	610293-31	610916	9.91 (.390)	8.12 (.320)	3.05 (.120)	.57 (.022)	1.26 (.050)
06-09	-140	Long	610006-31	610008	14.92 (.587)	14.14 (.557)	3.05 (.120)	.57 (.022)	.94 (.037)
	-141	Short	610294-31	610945	9.92 (.391)	9.14 (.360)	3.05 (.120)	.57 (.022)	.94 (.037)

### PCB Layout





## Wildcat Micro Connectors

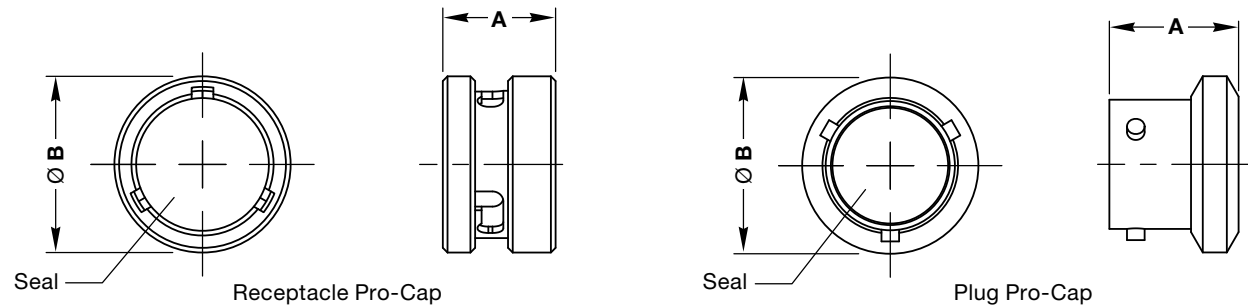
### CONTACTS AND TOOLING

Layout	Contact Part No.		Current Rating	Wire Size (AWG)	Conductor		Wire Sealing Range		Filler Plug	Ins/Ext Tool	Crimp Tool	Positioner	
	Pin	Socket			Ø Min.	Ø Max.	Ø Min.	Ø Max.				Pin	Socket
03-03	604946-31	604984	5 A	22-26	.32 (.013)	.79 (.031)	.60 (.030)	1.37 (.054)	600300-22	M81969/14-01		605463	605464
03-05	605705-31	605704	3 A	24-28	.25 (.010)	.51 (.020)	.60 (.024)	.96 (.038)	600300-24	605837		605839	605840
06-05	604927-31	604935	3 A	22-26	.32 (.013)	.79 (.031)	.60 (.024)	1.37 (.054)	600300-22	M81969/14-01	M22520/2-01	604972	604973
06-09	605705-31	605704	3 A	24-28	.25 (.010)	.51 (.020)	.60 (.024)	.96 (.038)	600300-24	605837		605839	605840
06-09*	610760-31	610539	3 A	22-26	.25 (.010)	.51 (.020)	.60 (.024)	.96 (.038)	600300-24	Non-Removable		610948	610947

\*Specifically for the '-220' option code: -220 option code should be used to order with these contacts for 22 AWG wire (see ordering information).

### ACCESSORIES

#### Protective Caps



Type	Shell Size	A Max.	ØB Max.	Part No.
Receptacle	03	8.80 (.346)	12.55 (.494)	605684-12
	06	9.80 (.386)	15.20 (.598)	604029-12
Plug	03	11.20 (.441)	12.55 (.494)	605687-12
	06	11.20 (.441)	15.20 (.598)	604027-12

-12 = Cadmium olive drab, -58 = Nickel

#### Raychem Heat-Shrink Boots

Shell Size	Straight Boot	90° Boot
03	204W221-25-G03	224W221-25-G03
06	204W221	224W221

#### CRES-Lock Bandstraps



##### Easy to Use

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

##### High Performance

- Low profile, one-piece design helps eliminate EMI leakage paths

##### Rugged

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



## Wildcat Micro Connectors

### ORDERING INFORMATION

#### Part Number Example:

WM 0 6 B W 06-05 S N - \*\*\*\*

**Series:** \_\_\_\_\_  
Wildcat Micro

**Shell Rear Accessory:** \_\_\_\_\_  
**0** = Short Knurl—Boot Mounting  
 (Short Knurl not applicable for Shell Size 6, Types 0, 1, or 2)  
**1** = Long Knurl—Cable Screen Braid and Boot Mounting  
**3** = No Accessory (No Knurl)

**Shell Type:** \_\_\_\_\_  
**0** = Square Flange Receptacle  
**1** = In-line Receptacle  
**2** = 2 Hole Flange Receptacle  
**4** = Jam Nut Receptacle  
**6** = Free Plug

**Coupling Type:** \_\_\_\_\_  
**B** = Bayonet  
**T** = Triple-start ACME Thread (Shell Size 06 only)

**Class Code:** \_\_\_\_\_  
**W** = Aluminum with Olive Drab Cadmium  
**F** = Aluminum with Electroless Nickel (RoHS Compliant)  
**Z** = Aluminum with Black Zinc Nickel (RoHS Compliant)

**Shell Size—Insert Arrangement:** \_\_\_\_\_  
**03-03** = Shell Size 3, 3 Positions  
**03-05** = Shell Size 3, 5 Positions  
**06-05** = Shell Size 6, 5 Positions  
**06-09** = Shell Size 6, 9 Positions

**Contact Type:** \_\_\_\_\_  
**P** = Pin  
**S** = Socket

**Keying:** \_\_\_\_\_  
**N** = Normal  
**A, B, C, D, E**

**Option Code (3 digits) or Modification Code:** \_\_\_\_\_  
**090** = Supplied without Contacts  
**1xx** = PCB Contact (see PCB option table for code)  
**220** = Enlarged Crimp Barrel Contacts for 22AWG Wire  
 (non-removable, suitable for 03-05 and 06-09 layout only)

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