

MABAC Threaded & Bayonet Series with PCB Contacts

Description

A compact solution

- The smallest connector available (shell size 3)
- Miniaturization of MIL-DTL-38999 Series I & Series III
- Stands off on sizes 5 & 7

A versatile solution

- 3 shells sizes: 3, 5, 7
- 2 coupling types: threaded (T Series) and bayonet (B Series)
- 3 platings
- Contacts #22D & #26
- 6 keyway orientations

Harsh environment-resistant solution

- Cavity to cavity sealed with interfacial seal and grommet
- Fluid resistant



Technical Features:

Materials

- **Shell:**
Aluminum alloy
- **Shell plating:**
Z: Zinc nickel (RoHS)
W: Nickel (RoHS)
F: Olive drab cadmium
- **Insulator:**
Thermoplastic
- **Contact body:**
Copper alloy
- **Contacts plating:**
Gold over nickel plated
- **Shell endurance:**
500 mating cycles

Electrical

- **Test voltage (at sea level):**
Size 22D: 1000 Vrms
Size 26: 400 Vrms
- **Contact resistance:**
Size 22D: <14.6 mΩ Size 26: <16 mΩ
- **Contact rating:**
Size 22D: 5A
Size 26: 3A
- **Shell to shell continuity (typical value)**

Series	Shell size	Aluminum	Stainless steel
T	N/A non ratcheted coupling		
	5, 7	10 mΩ	60 mΩ
B	3, 5, 7	250 mΩ	250 mΩ

- **EMI:**
Threaded (T) Series: -70 dB @ 1GHz
Bayonet (B) Series: -55 dB @ 1Ghz

Environmental

- **Temperature range:**
-55°C to +175°C
- **Water immersion:**
IP 67 on mated connector
1 meter for 30 min minimum
- **Hermeticity:**
10-4 atm.cm³/s
- **Salt spray:**
Zinc nickel: 500 hours
Nickel: 48 hours
Olive drab cadmium: 500 hours

Resistance to fluids

- **According to MIL-DTL-38999 standard**
Gasoline: JP5 (OTAN F44)
Mineral hydraulic fluid: MIL-H-5606 (OTAN H515)
Synthetic hydraulic fluid: Skydrol 500 B4
- **Compatible with de-icing fluids containing potassium acetate**

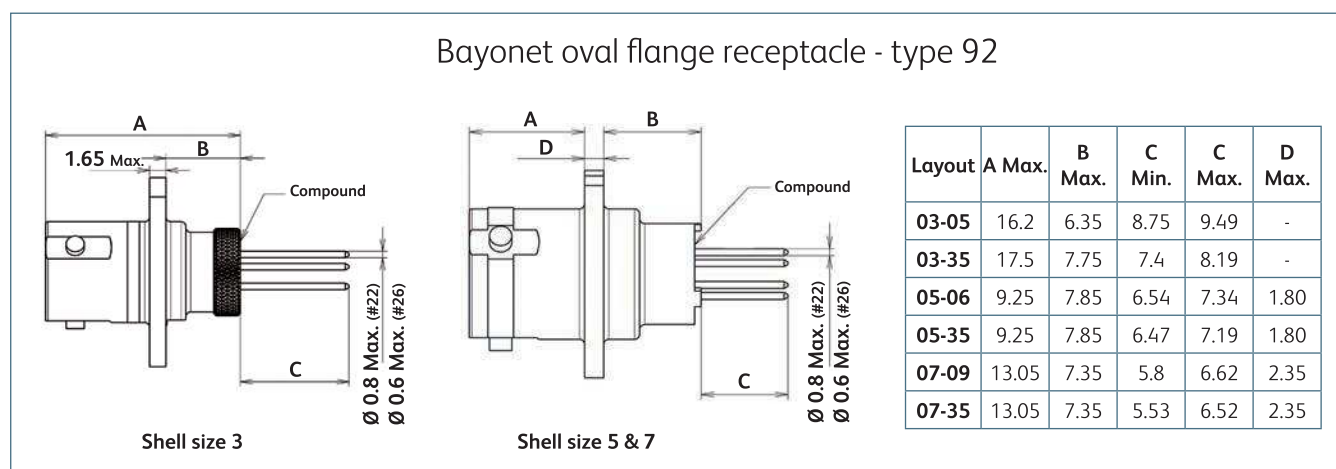
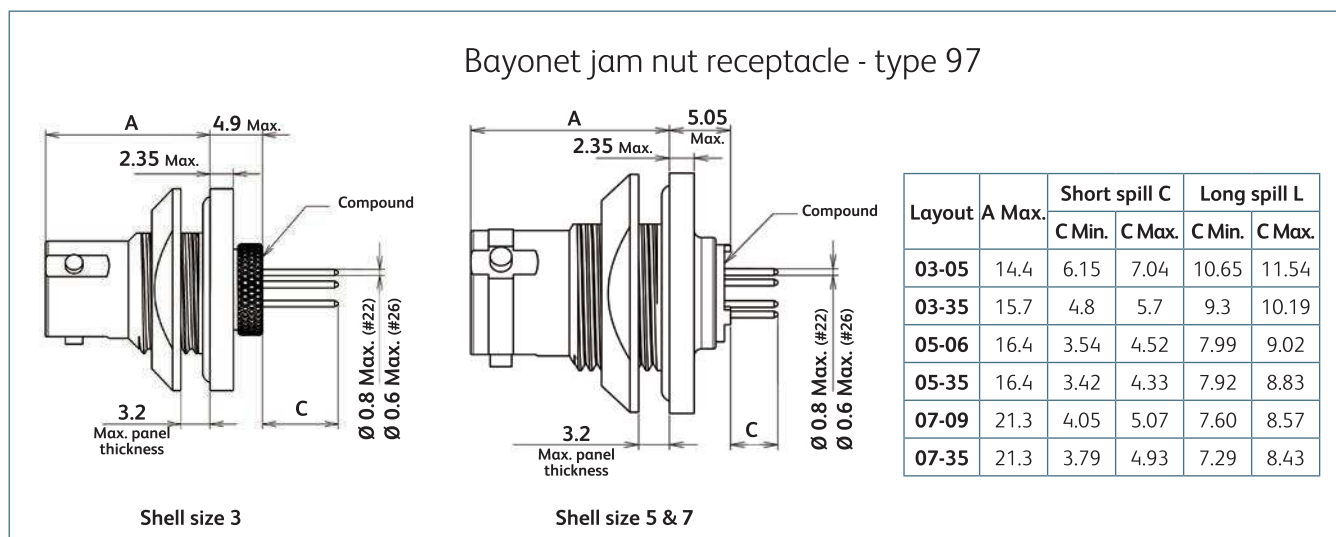
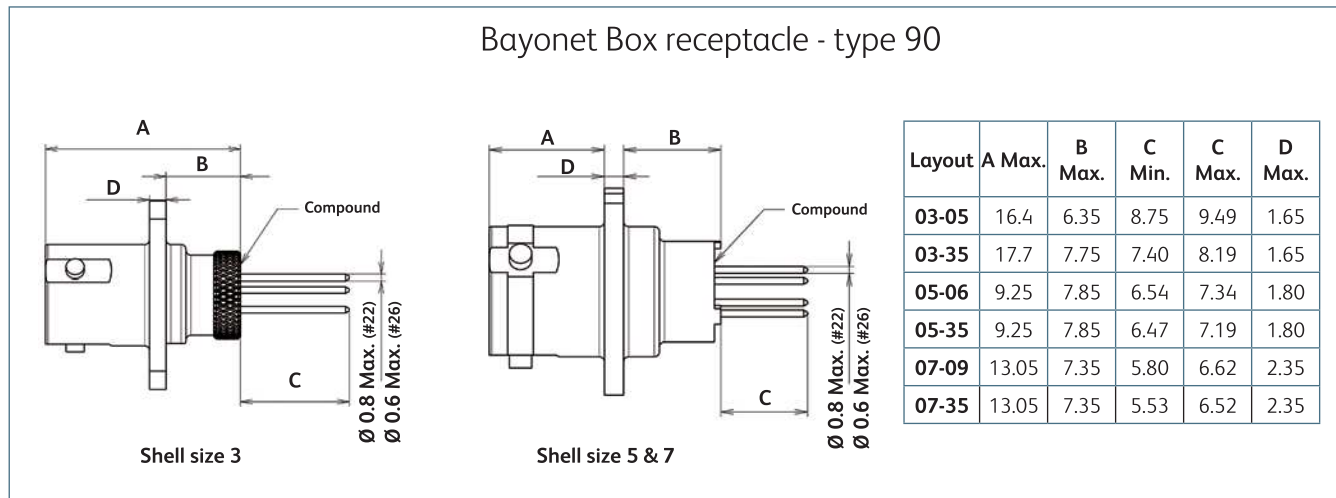
General Note

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All information is subject to TT Electronics' own data and is considered accurate at time of going to print.



MABAC Threaded & Bayonet Series with PCB Contacts

Bayonet B Series Dimensions



Note: All dimensions are in millimeters (mm). Shell design vary according to shell size. For L contact (long PC tail) please consult us.

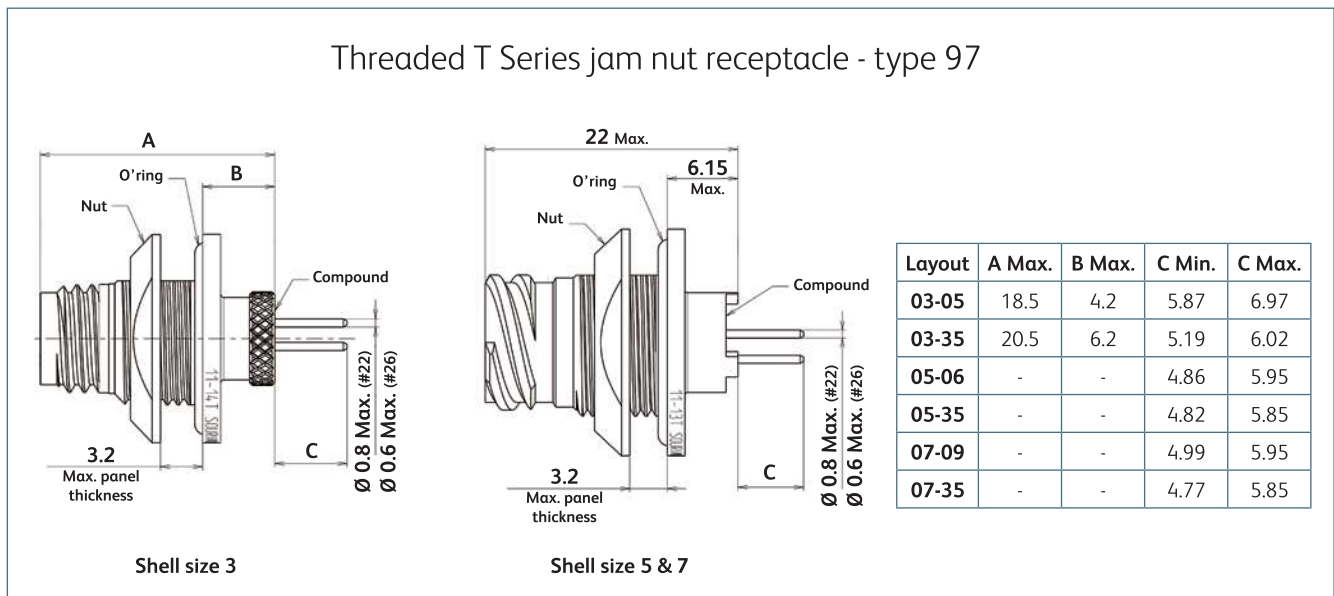
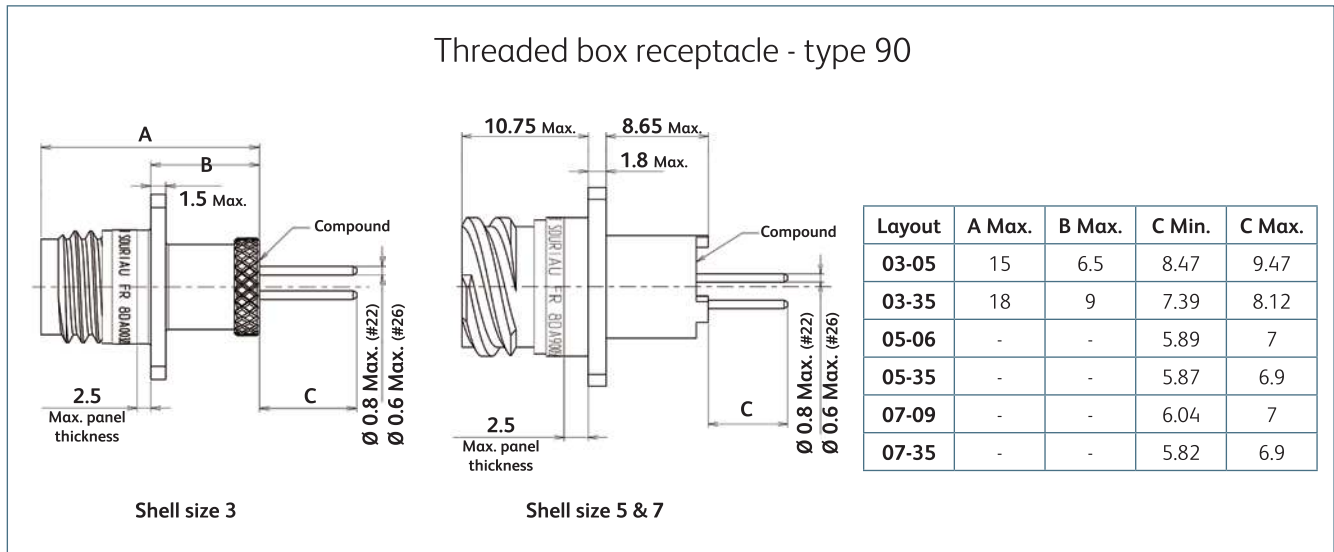
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Threaded T Series Dimensions



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Ordering information

PCB Contacts	MABAC	T	0	W	05	35	T	N	XXX
Mating mechanism:									
T = Threaded (3 start ACME)									
B = Bayonet									
Shell Style:									
90 = Square flange receptacle with PCB contacts									
92 = Oval flange receptacle with PCB contacts (Bayonet only)									
97 = Jam nut receptacle with PCB contacts									
Material and Finish:									
W = Cad									
F = Electroless Nickel									
Z = Zinc Nickel									
K = Stainless Steel									
Shell size: 03, 05, 07									
Insert Arrangement: See contact layouts									
Contact type:									
T1 = PCB Tail Short Pin									
T2 = PCB Tail Long Pin									
Orientation :									
N = Normal									
Alternative A,B,C,D,E									
Modification code									

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Contact layouts

Threaded (T Series) and Bayonet (B Series) PCB hole drilling and position information Note: For information only.

03 - 05			03 - 35		
Ctc	X	Y	Ctc	X	Y
1	0.00	1.45	A	0.00	1.30
2	-1.38	0.45	B	-1.13	-0.65
3	-0.85	-1.18	C	1.13	-0.65
4	0.85	-1.18			
5	1.38	0.45			
Rear view of plug for male & female insulator. Opposite marking between plug & receptacle.					

05 - 06			05 - 35		
Ctc	X	Y	Ctc	X	Y
1	0.00	1.70	A	-1.24	0.72
2	-1.47	0.85	B	0.00	-1.43
3	-1.47	-0.85	C	1.24	0.72
4	0.00	-1.70			
5	1.47	-0.85			
6	1.47	0.85			
Rear view of plug & receptacle for male insulator. Opposite marking between male & female insulator.					

07 - 09			07 - 35		
Ctc	X	Y	Ctc	X	Y
1	-0.85	2.05	A	-1.24	1.70
2	-2.05	0.85	B	-2.00	-0.66
3	-2.05	-0.85	C	0.00	-2.11
4	-0.85	-2.05	D	2.00	-0.66
5	0.85	-2.05	E	1.24	1.70
6	2.05	-0.85			
7	2.05	0.85			
8	0.85	2.05			
9	0.00	0.00			
Rear view of plug & receptacle for male insulator. Opposite marking between male & female insulator.					

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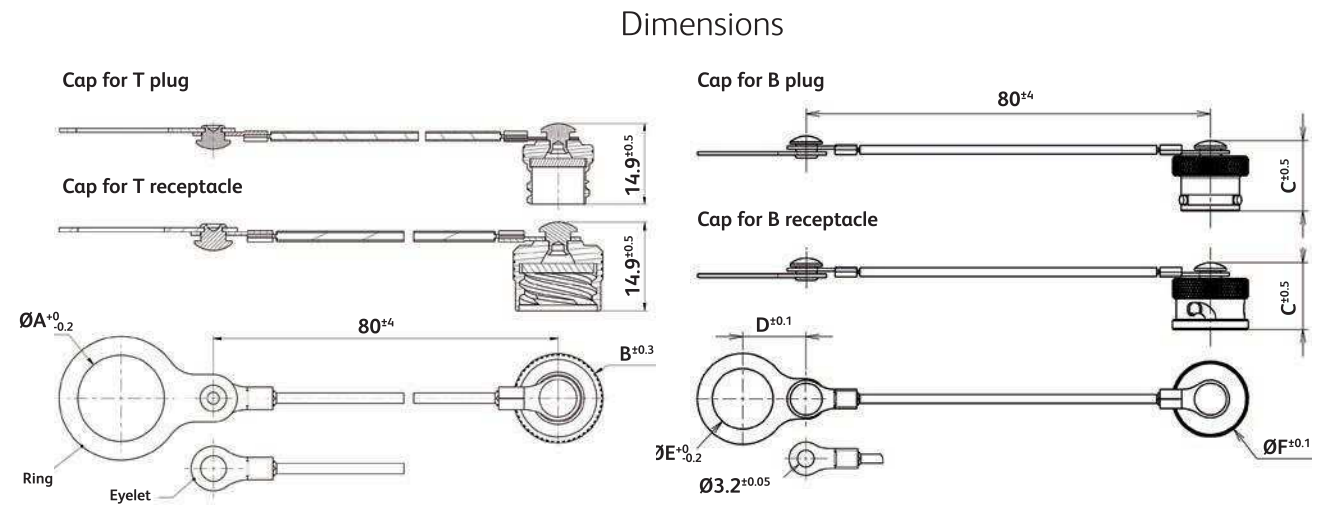


MABAC Threaded & Bayonet Series with PCB Contacts

Caps

Basic Series: MABAC T: Cap for Threaded Series MABAC B: Cap for Bayonet Series	MABAC T	32	Z	03	N
Cap type: 32: Cap for plug 33: Cap for receptacle					
Plating: Z: Black zinc nickel F: Nickel W: Olive drab cadmium					
Shell size: 03 - 05 - 07					
Style: N: Ring R: Eyelet					

Dimensions




Size	A	B		C		D	E	F
		Plug	Receptacle	Plug	Receptacle			
03	11.5	11	12.5	14.1	12.1	13.5	11.5	10.4
05	13.5	13	15	13.7	13.9	14.5	13	13.4
07	14.5	14	17	14	13.1	15.5	14.5	15.05

Note: for other lanyard length please consult us.

Gaskets

Shell size	Bayonet Box receptacle	Bayonet Box receptacle	Bayonet oval flange receptacle
3	TOG03	BOG03	B2G03
5	TOG05	BOG05	B2G05
7	TOG07	BOG07	B2G07



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