

MABAC Push Pull Series

Description

- **A compact solution**
 - The smallest connector (shell size 3)
 - Push Pull: quick disconnect
 - Integrated backshell:
 - Easy to wire and handle
 - Compatible with heat shrink boot and braid retention band
 - Compliant with overmolding
- **A versatile solution**
 - 3 shells sizes: 3, 5, 7
 - Plug; In line and jam nut receptacle
 - 2 materials, 3 platings
 - Crimp & PC tails (on request)
 - Removable contacts #22D & #26
 - 6 keyway orientations
- **Harsh environment-resistant solution**
 - Scoop proof (when sockets mounted into receptacle only)
 - Cavity to cavity sealed with interfacial seal and grommet
 - Fluid resistant



Technical Features:

Materials

- **Shell:**
Aluminum alloy
Passivated stainless steel (for size 5 & 7)
- **Shell plating:**
Aluminum:
. Zinc nickel (RoHS)
. Nickel (RoHS)
. Olive drab cadmium
Passivated stainless steel (RoHS)
- **Insulator:** Thermoplastic
- **Contact body:** Copper alloy
- **Contacts plating:** Gold over nickel plated
- **Shell endurance:**
Aluminum:
500 mating/unmating cycles
Passivated stainless steel:
1000 mating/unmating cycles
- **Vibration:**
30 grms ambient, 2 axes during 8 hours
- **Shock:**
300g, 3 ms

Electrical

- **Wire size**

Layout	Wire (AWG)
03-05	24-30
03-35	22-28
05-06	24-30
05-35	22-28
07-09	24-30
07-35	22-28
- **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
- **Contact retention:**
Size 22D: 45N Size 26: 30N
- **Shell to shell continuity (typical value)**

Shell size	Aluminum version	Stainless steel version
3		NA
5	10 mΩ	60 mΩ
7		
- **EMI:**
Aluminum: -70dB @ 1GHz
Passivated stainless steel: -55 dB @ 1Ghz

Environmental

- **Temperature range:**
-55°C to +175°C
- **Water immersion:**
IP 67 on mated connector
1 meter for 30 min minimum
> IP68 with appropriate cable termination
- **Salt spray:**
Zinc nickel: 500 hours
Nickel: 48 hours
Olive drab cadmium: 500 hours
Passivated stainless steel: 500 hours

Resistance to fluids

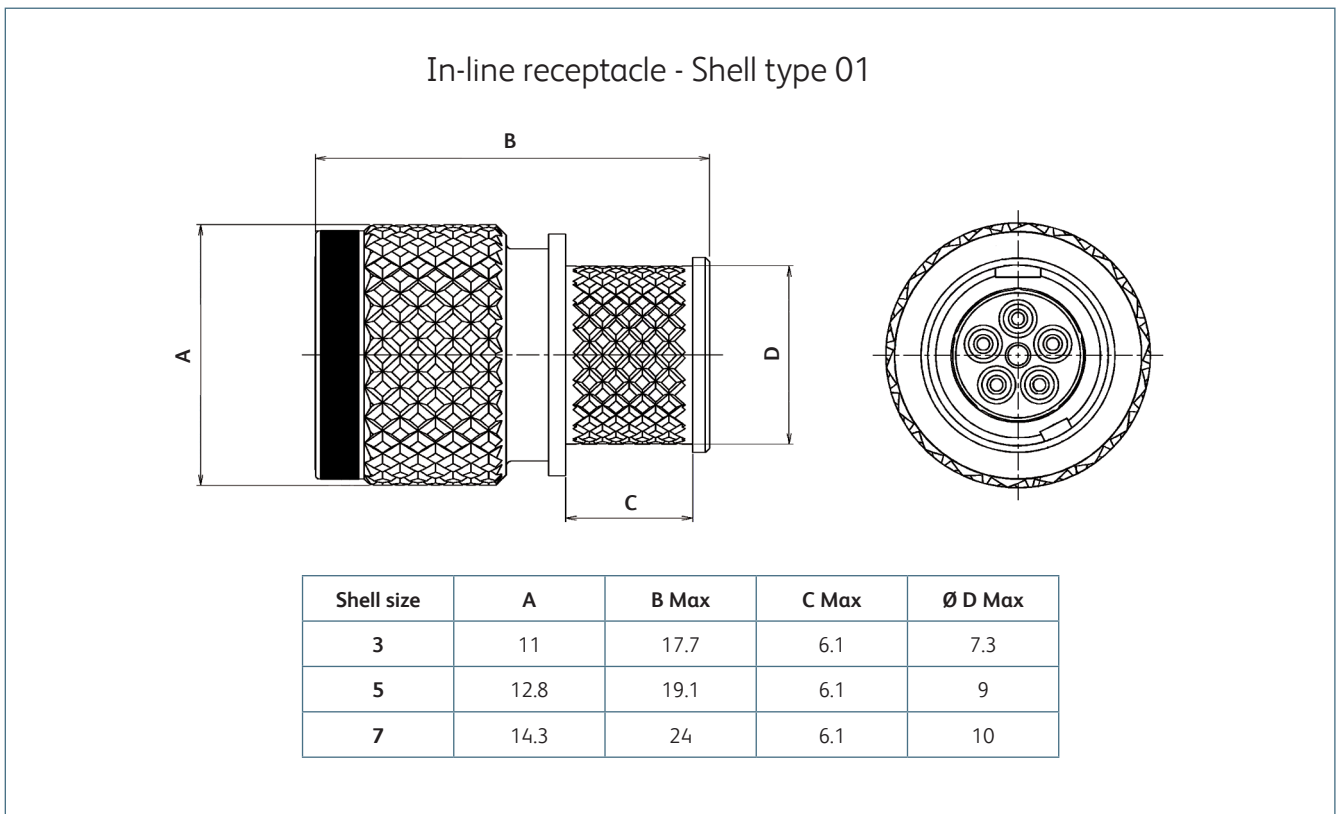
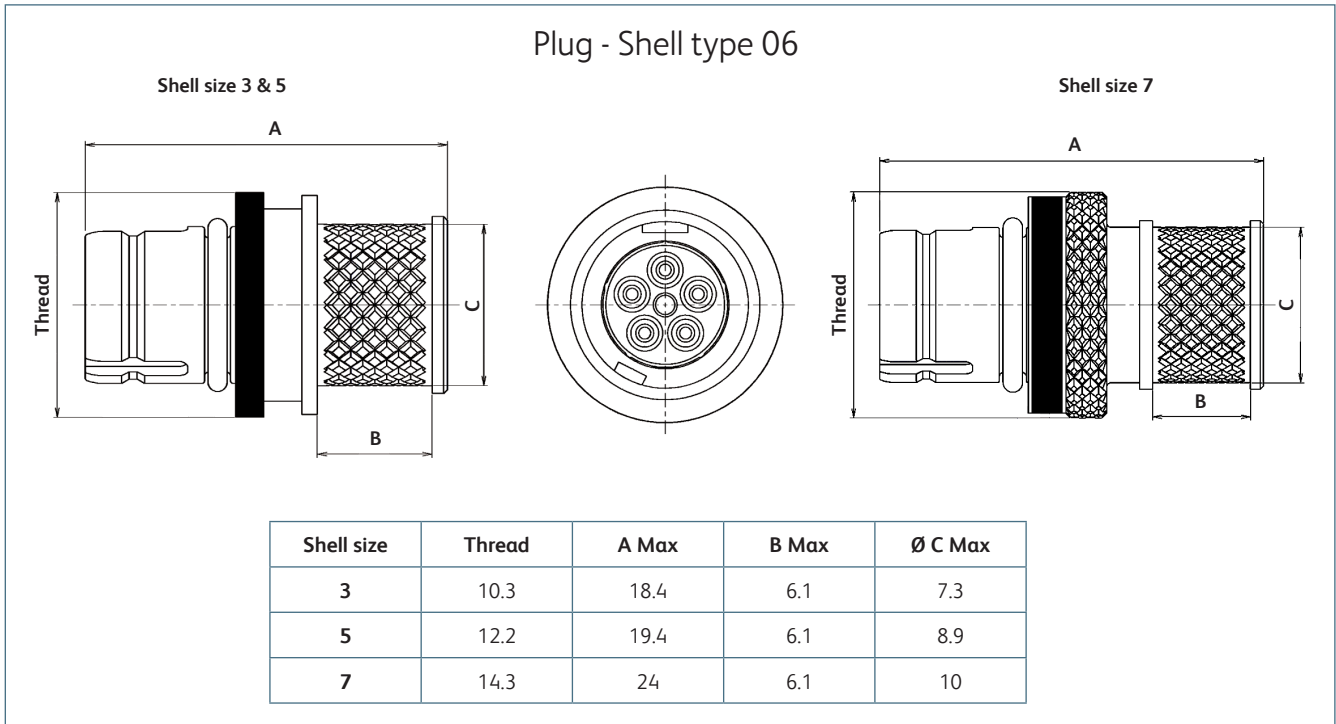
- **According to MIL-DTL-38999 standard**
Gasoline: JP5 (OTAN F44)
Mineral hydraulic fluid: MIL-H-5606 (OTAN H515)
Synthetic hydraulic fluid: Skydrol 500 B4
- **Compatible with de-icing fluids containing potassium acetate**

General Note

TT Electronics reserves the right to make changes in product specification without notice or liability.
All information is subject to TT Electronics' own data and is considered accurate at time of going to print.



Dimensions



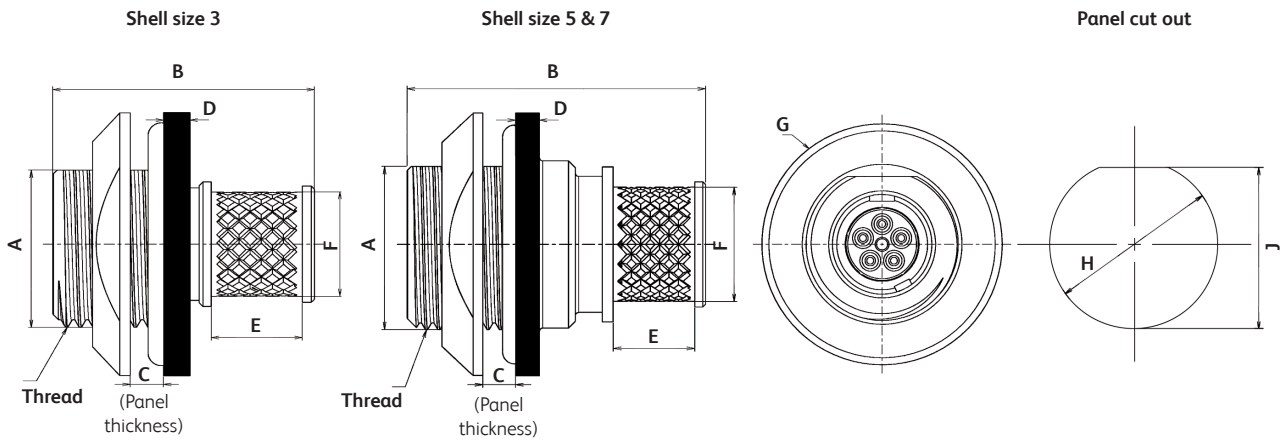
Note: All dimensions are in mm.

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Jam nut receptacle - Shell type 07



Shell size	Thread	A Max	B Max	C Max	D	E Max	Ø F Max	Ø G Max	Ø H	J
3	7/16''28 UNEF 2A	10.55	17.7	3.2	1.75 ^{±0.3}	6.1	7.3	17.5	11.3 ^{±0.1}	10.6 ^{±0.05}
5	1/2''28 UNEF 2A	12.2	22.5	3.2	1.75 ^{±0.3}	6.1	8.9	19.5	12.8 ^{±0.1}	12.3 ^{±0.05}
7	9/16''24 UNEF 2A	13.6	24	3.2	1.75 ^{±0.3}	6.1	10	21	14.5 ^{±0.1}	13.8 ^{±0.05}

Note: All dimensions are in mm.

Connector weights

Weight

Aluminum version (in gram ±10 %)

Shell size & layout	Plug		In line receptacle	
	Without contacts	With crimp contacts	Without contacts	With crimp contacts
03-05	1.7	1.8	1.3	1.4
05-06	2.6	2.8	2.9	3.1
07-09	4.3	4.7	4.7	5.1

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

General Note

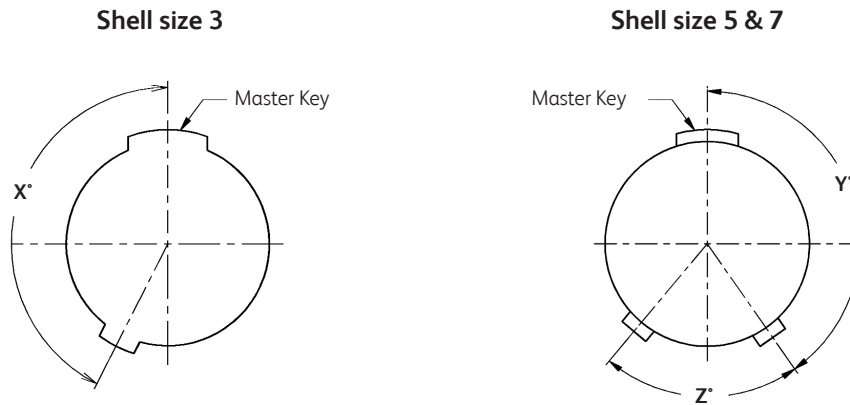
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Orientations

Orientation - All shell types

Plug front face view



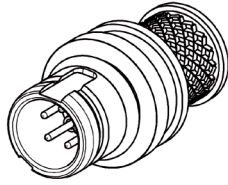
Shell size	Angles	N	A	B	C	D	E
3	X °	153	51	102	204	255	306
5 & 7	Y °	145	130	110	155	90	90
	Z °	75	120	120	115	115	180

General Note

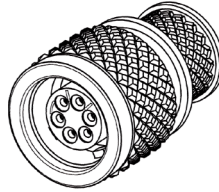
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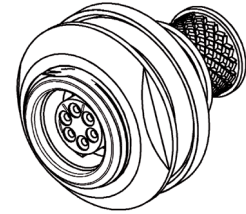
Shell type



Plug



In line
receptacle



Jam nut
receptacle

For other configuration (PC tail, specific jam nut, ...) please consult us.

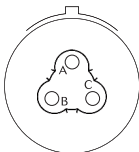
Contact layouts

03 - 05



5#26

03 - 35



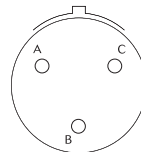
3#22D

05 - 06



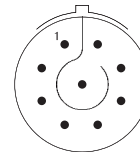
6#26

05 - 35



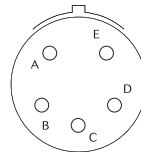
3#22D

07 - 09



9#26

07 - 35



5#22D

Note: For information only.

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Ordering information

Push Pull Series	MABAC P	6	W	05	35	P	N	XXX
Shell Style:								
06 = Cable Plug								
01 = In-line Receptacle								
00 = Box Receptacle 4 hole								
07 = Jam Nut Receptacle								
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:								
P = Pin								
S = Socket								
Orientation :								
N = Normal								
Alternative A,B,C,D,E								
Modification code								

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