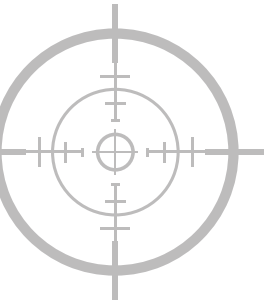
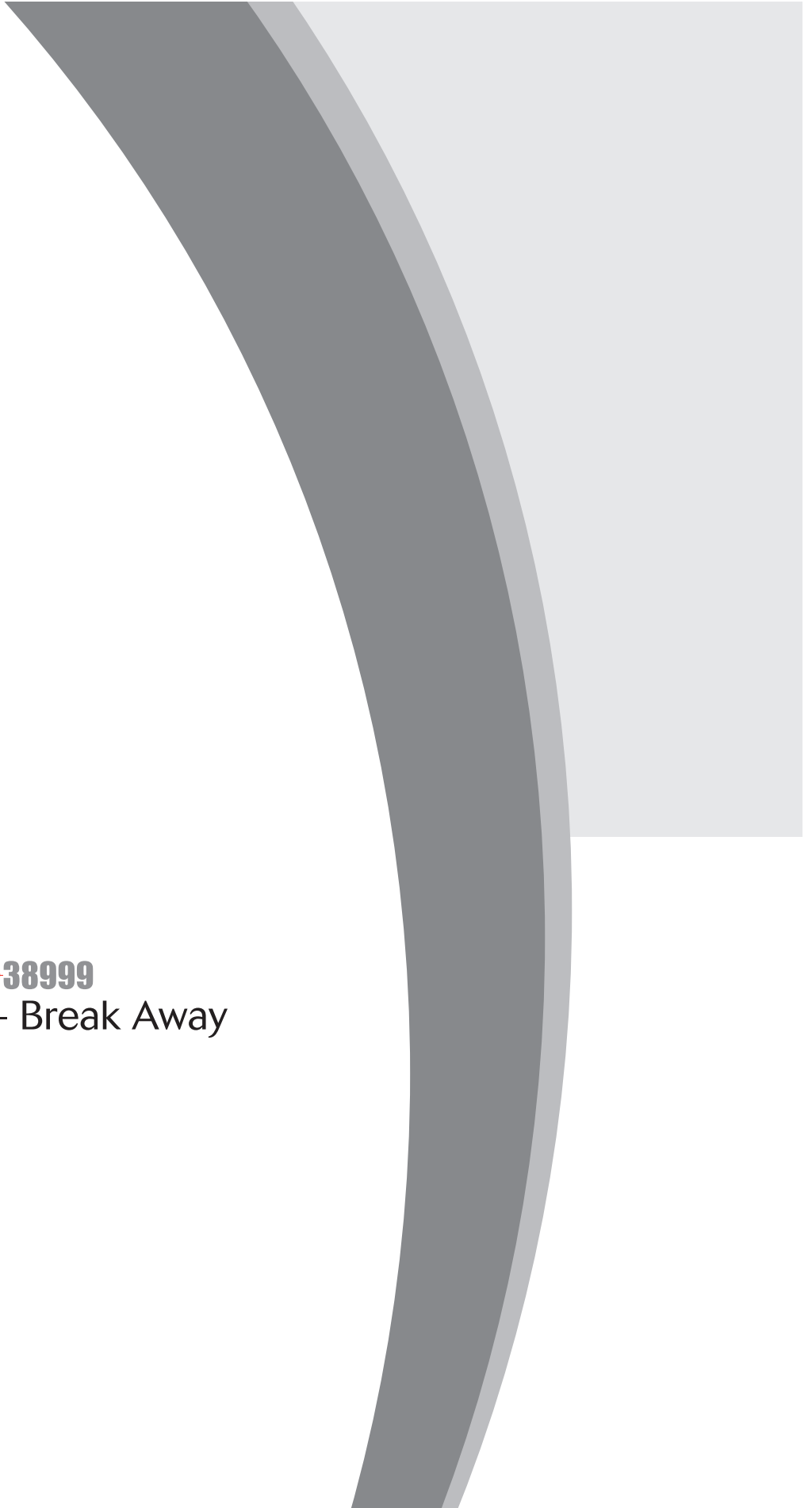


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8BA - Break Away





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Description

- **A compact solution**
 - The smallest connector available on the market (shell size 3)
 - Break away: 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 keyings
- **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

Mechanical

- **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**

Shell size	Aluminum version	Stainless steel version
03	< 10 mΩ	< 60 mΩ
05		
07		
- **EMI:**
 - Aluminum: -70dB @ 1GHz
 - Passivated stainless steel: -55 dB @ 1Ghz

Environmental

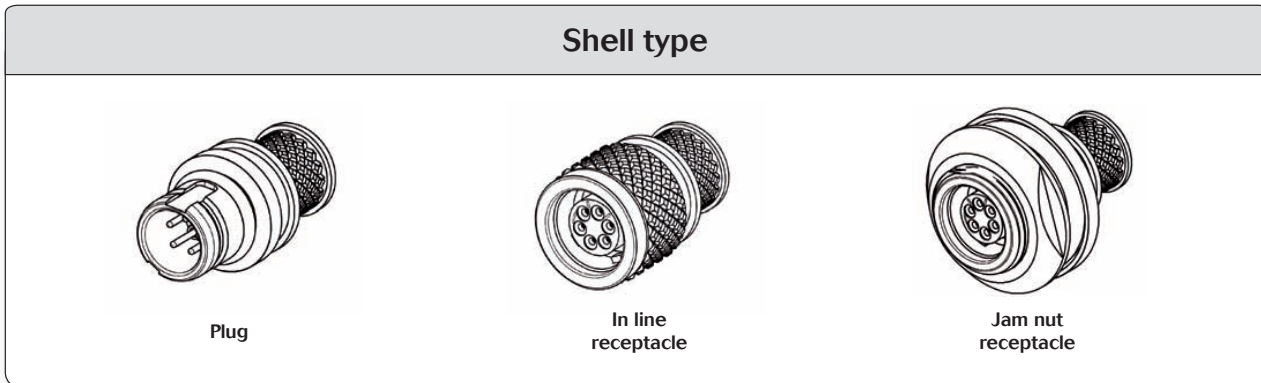
- **Temperature range:**
 - 55°C to +175°C
- **Water immersion:**
 - IP 67 on mated connector
 - 1 meter for 30 min minimum
 - > IP68 with appropriate cable termination
- **Salt spray:**
 - Zinc nickel: 500 hours
 - Nickel: 48 hours
 - Olive drab cadmium: 500 hours
 - Passivated stainless steel: 500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

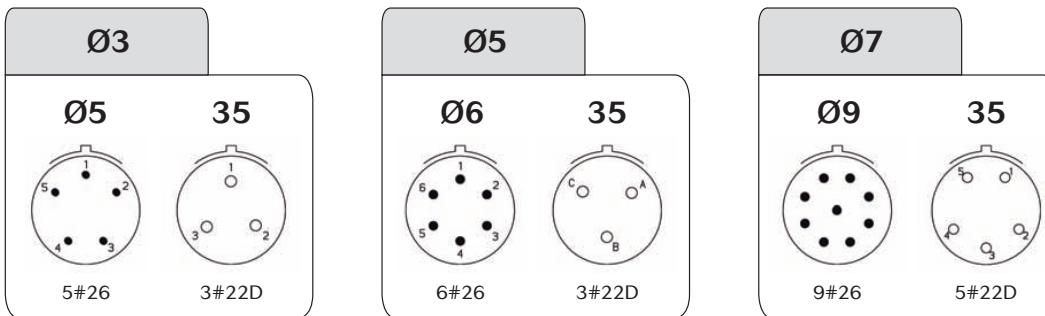


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For other configuration (PC tail, specific jam nut, ...) please consult us.

Contact layouts



Ordering information

Basic Series	8BA	1	Ø3	W	Ø5	P	N
Shell type:							
1: In line receptacle							
6: Plug							
7: Jam nut receptacle							
Shell size: Ø3 - Ø5 - Ø7							
Plating :							
Z: Black zinc nickel							
F: Nickel							
W: Olive drab cadmium							
K: Passivated stainless steel (except for size 3)							
Contact layouts: See above							
Contact type:							
P: Pin							
S: Socket (Scoop proof only when socket contacts mounted in Type 1 & Type 7)							
Orientation:							
N, A, B, C, D, E							

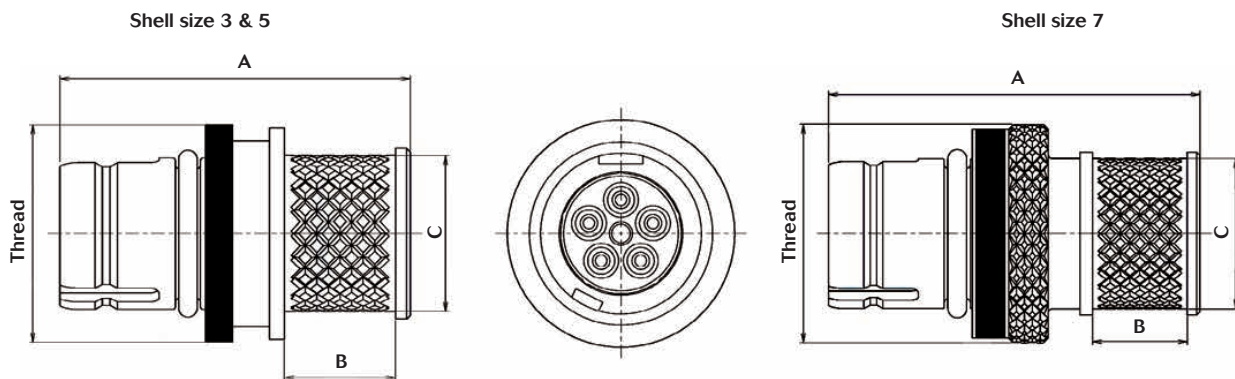
Note: Ø = Zero



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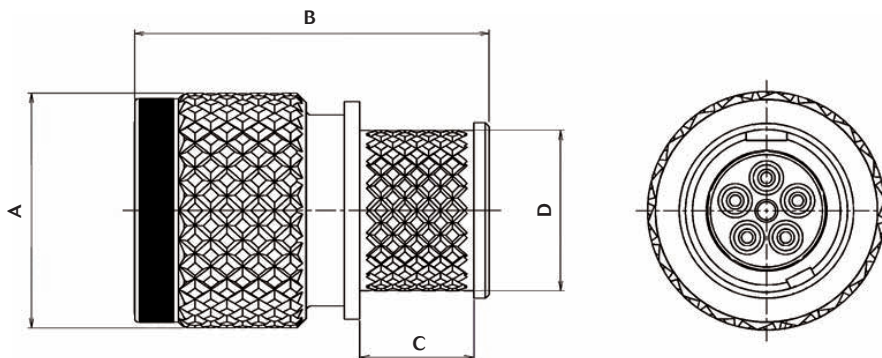
Dimensions

Plug - Shell type 6



Shell size	Thread	A Max	B Max	Ø C Max
3	10.3	18.4	6.1	7.3
5	12.2	19.4	6.1	8.9
7	14.3	24	6.1	10

In line receptacle - Shell type 1



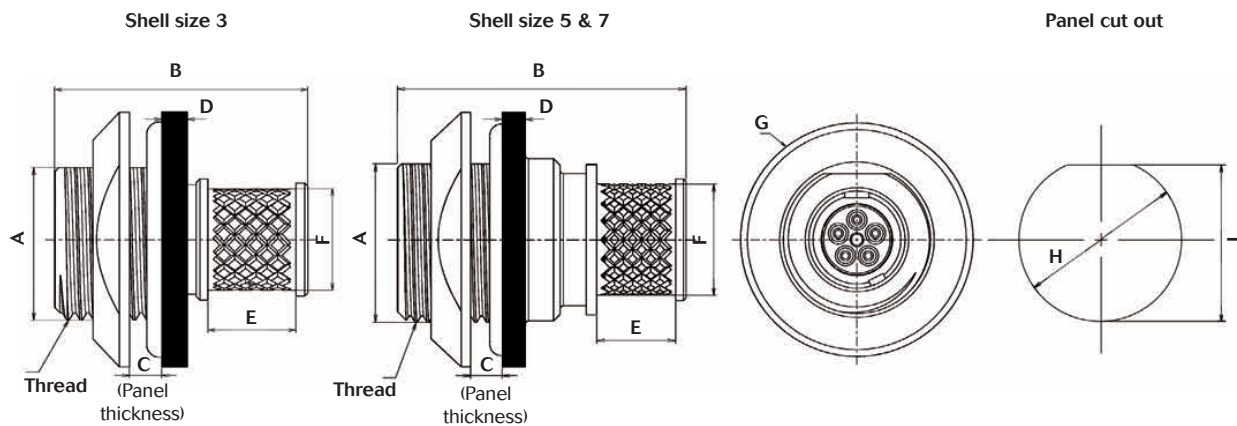
Shell size	A	B Max	C Max	Ø D Max
3	11	17.7	6.1	7.3
5	12.8	19.1	6.1	9
7	14.3	24	6.1	10

Note: All dimensions are in mm.



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Jam nut receptacle - Shell type 7



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 \pm 0.3	6.1	7.3	17.5	11.3 \pm 0.1	10.6 \pm 0.05
5	1/2"28 UNEF 2A	12.2	22.5	3.2	1.75 \pm 0.3	6.1	8.9	19.5	12.8 \pm 0.1	12.3 \pm 0.05
7	9/16"24 UNEF 2A	13.6	24	3.2	1.75 \pm 0.3	6.1	10	21	14.5 \pm 0.1	13.8 \pm 0.05

Note: All dimensions are in mm.



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Connector weights

Weight				
Aluminum version (in gram ±10 %)				
Shell size & layout	Plug		In line receptacle	
	Without contacts	With contacts	Without contacts	With contacts
3-05	1.7	1.8	1.3	1.4
5-06	2.6	2.8	2.9	3.1
7-09	4.3	4.7	4.7	5.1

Orientations

Orientation - All shell types							
<p>Shell size 3</p>				<p>Shell size 5 & 7</p>			
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