



The Wild Children of D38999

A complete range of space saving miniature connectors with all of the features and capabilities of D38999 for harsh applications.

A compact and complete solution



Diameter up to 45% smaller than size 9 (D38999).
Up to 50% shorter.
Threaded, break away and bayonet coupling.

A high density solution



With #26 contacts (in accordance with 39029).
5 layouts (size 3, 5 and 7 with #22 & #26).

Excellent features



Designed to meet D38999 requirements.
IP67 sealing when mated.
Scoop proof.

RoHS and Cadmium free



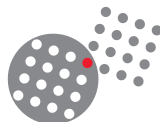
Available in zinc nickel (RoHS) plating, as well as
nickel and olive drab cadmium.

Integrated backshell



Cost and space saving.

Not QPL registered.



SOURIAU



micro38999: smaller & more compact than D38999

Previously the smallest size available
D38999 Series III (8D) Size 9

Now even SMALLER !

Compact Shell

Contact Size

Contact Pitch

#22D
Ø 0.76mm

#26
Ø 0.5mm

2.28 mm

1.7 mm

50% shorter length
33% smaller diameter
3 times lighter
Scoop proof
-55°C to +175°C

micro38999

A wide miniature 38999 product ranges

► **8DA**
Threaded coupling



8DA5/8DA6
Plug



8DA1 In line receptacle **8DA7** Jam nut receptacle



8DA0
Square flange receptacle

► **8BA**
Break away



8BA6
Plug



8BA1 In line receptacle **8BA7** Jam nut receptacle

► **8LTA**
Bayonet coupling



8LTA6
Plug



8LTA1 In line receptacle **8LTA7** Jam nut receptacle



8LTA0
Square flange receptacle



8LTA2
Oval flange receptacle



Description

- **A compact solution**
 - The smallest connector available on the market (shell size 3)
 - Miniaturization of MIL-DTL-38999 Series III
 - 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
 - 3 materials, 3 platings
 - Crimp & PC tails (on request)
 - Removable contacts #22D & #26
 - 6 keyings
- **Harsh environment-resistant solution**
 - Scoop Proof
 - 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)
 - Composite (8LTA size 7 only)
- **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:**
 - 8DA: 44 grms, 2 axes during 8 hours
 - 8BA & 8LTA: 30 grms, 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)**

Series	Shell size	Aluminum	Stainless steel
8DA & 8BA	3	NA	NA
	5, 7	10 mΩ	60 mΩ
8LTA	3, 5, 7	250 mΩ	250 mΩ
- **EMI:**
 - 8DA & 8BA:
 - . Aluminum: -70 dB @ 1GHz
 - . Stainless steel: -55 dB @ 1Ghz
 - 8LTA: -55 dB @ 1Ghz

Environmental

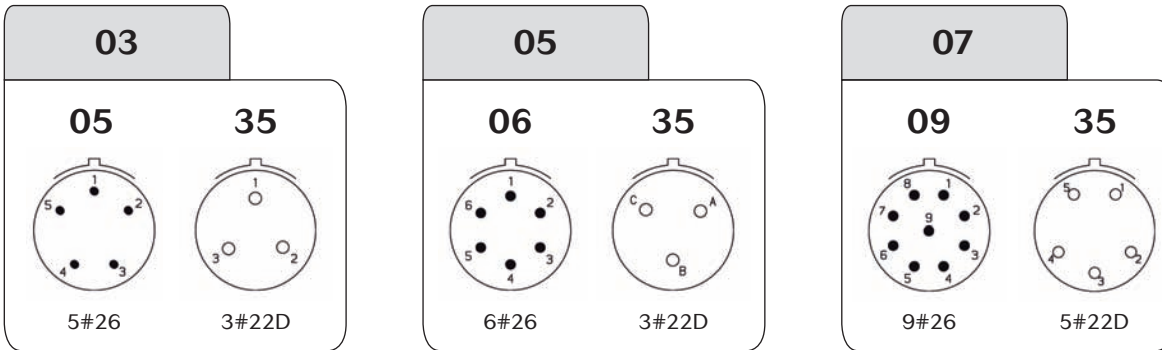
- **Temperature range:**
 - 55°C to +175°C
- **Water immersion:**
 - IP 67 on mated connector
 - 1 meter for 30 min minimum
 - > IP68 with appropriate cable termination
- **Salt spray:**
 - Zinc nickel: 500 hours
 - Nickel: 48 hours
 - Olive drab cadmium: 500 hours
 - Passivated stainless steel: 500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



Contact layouts



Ordering information

Basic Series: 8DA: Threaded coupling 8BA: Break away 8LTA: Bayonet coupling	8DA	0	03	W	05	P	N
Shell type: 0: Square flange receptacle (8DA & 8LTA only) 1: In line receptacle 2: Oval flange receptacle (8LTA only) 5: Plug with EMI ring (8DA only - size 5 & size 7) 6: Plug 7: Jam nut receptacle							
Shell size: 03 - 05 - 07							
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 (8DA shell size 3 scoop proof only when pin contacts mounted in Type 6) S: Socket (8DA shell size 3 scoop proof only when socket contacts mounted in Type 1 & Type 7. 8BA scoop proof only when socket contacts mounted in Type 1 & Type 7)							
Orientation: N, A, B, C, D, E							

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