micro38999 Series High Vibration Miniature Connectors





The Wild Children of D38999

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

A compact and complete solution ■ Diameter up to 45% smaller than D38999 size 9. Integrated backshell: up to 50% shorter. Threaded, break away and bayonet coupling.

A high density solution With #26 contacts (according 39029). 6 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.

Not QPL listed.



A wide product range of compact 38999







8DA Series













A wide product range of compact 38999

materials, 4 platings

Aluminum

- · Black Zinc Nickel RoHS
- · Nickel RoHS
- · Cadmium

Stainless Steel

· Passivated RoHS

removable contacts

AWG 26 #26 Ø 1.29 mm

AWG 22 #22D Ø 1.5 mm miniature shell sizes

Shell size 3

Layouts 3-05; 3-35

Shell size 5

Layouts 5-06; 5-35

Shell size 7

Layouts 7-09; 7-35

Smaller and more compact than D38999

More Compact Shell

8DA Series, size 5 with Integrated Backshells

micro38999

D38999 Series III





Smaller Contact Size

#26 Ø 0.5 mm



#22D Ø 0.76 mm









micro38999

D38999 Series III

Same number of contacts in a smaller connector!

50% SHORTER LENGTH | 33% SMALLER DIAMETER | 3 TIMES LIGHTER

Although smaller, all the features and excellence of D38999



High grade thermoplastic insert

Silicone elastomer grommet and sealing -55° to +175°C as in D38999



Ratcheting system Vibration: 44grms @125°C

EMI shielding As in D38999



Scoop proof Contacts protected like D38999



Triple-start thread

Contact design according to M39029

EMI grounding Connection as in D38999



6 keyings Same as D38999

Not QPL listed.

Always a solution to meet your application needs



Tactical radio/ **Network** systems Switch, docking station, power supply, ...



Infantry/ **Display** Battery charger, helmet, radio, ...



Autonomous robot/Solar Control unit, transmission, ...



UAV/On board equipment Missile, civil & military aircraft, control unit, actuator, ...



Cockpit/ Aircraft cabin Lighting, interconnect, ...



Industrial equipment Instrumentation, small equipment for industry, ...



Threaded 8DA Series













Break away 8BA Series





Bayonet 8LTA Series

















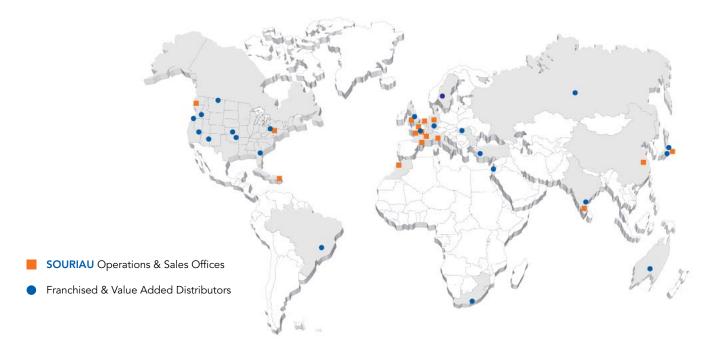
Worldwide Sales Network

SOURIAU is recognized as one of the top international manufacturers of connectors for harsh environment and is continuously strengthening its leading position through its solid structure as an international group. Today the SOURIAU group has a strong global presence and operates 24 facilities (10 production sites and 14 offices) on 4 continents:

- 15 in Europe,
- 4 in Americas,
- 4 in Asia
- 1 in Africa.

Our international presence is reinforced by 26 franchised and value added distributors in 14 countries.

We also rely upon an extensive network of distributors and resellers worldwide. This coverage, together with a strong commitment towards service, ensures rapid responses to the specific needs of our customers.



Multisourcing

SOURIAU have reached a partnership agreement in the manufacturing, qualification, and marketing of micro38999 connectors

This partnership will provide customers with two independent sources of manufacture, guaranteed interchangeability and intermateability, with all critical features including interfacial and mounting dimensions, based on common controlled shared drawings.

Please contact us for more information.



Miniature sizes

• A compact solution

- The smallest connector available on the market (shell size 3)
- Miniaturization of MIL-DTL-38999
- Threaded, break away or bayonet coupling
- Integrated backshell:
 - . Easy to wire and handle
 - Compatible with heat shrink boot and braid retention band
 - . Compliant with overmolding

• A versatile solution

- 3 shell sizes (3, 5, 7)
- 2 materials, 4 platings
- Crimp & PC tails contacts
- 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 allov Passivated stainless steel (consult us)

• 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: Up to 1000 mating/unmating cycles

• Vibration (2 axes during 8 hours): 8DA: 44 grms @125°C 8BA & 8LTA: 30 grms ambiant

Electrical

• Wire size

Layouts	Wire (AWG)	
03-05; 05-06; 07-09	24-30	
03-35; 05-35; 07-35	22-28	

• Test voltage (at sea level):

Size 22D: 1000 Vrms Size 26: 400 Vrms

• Contact resistance:

Size 22D: <14.6 m Ω 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	8DA & 8BA		8LTA
size	Aluminum	Stainless steel	All versions
3		NA	
5	10 mO	60 mO	$250~\text{m}\Omega$
7	10 mt2	60 mt2	

• EMI:

8DA & 8BA (aluminum): -70dB @ 1GHz 8DA & 8BA (stainless steel): -55 dB @ 1Ghz 8LTA (all versions): -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: 250 hours

Resistance to fluids

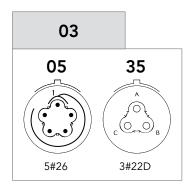
• According to MIL-DTL-38999 standard

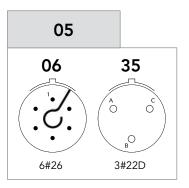
Gasoline: JP5 (OTAN F44) Mineral hydraulic fluid: MIL-H-5606 (OTAN H515)

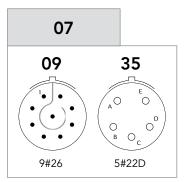
Synthetic hydraulic fluid: Skydrol 500 B4

· Compatible with de-icing fluids containing potassium acetate

Contact layouts





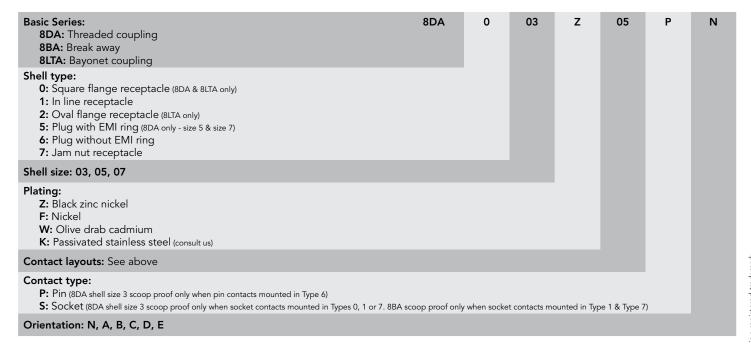


Size 3: Marking on shell. Rear view of receptacle for male and female insulator. Opposite marking between plug and receptacle.

Sizes 5 and 7: Marking on insulator. Rear view of male insulator for plug and receptacle.

Opposite marking between male and female insulator.

Ordering information



More information

Dimensions, weights, orientations, large sizes, PC tail version, coordiantes, accessories, tooling, ... Please consult SOURIAU «8DA, 8BA & 8LTA Series» catalog.

> For further information contact us at contactmilaero@souriau.com or visit our web site www.souriau.com

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

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