

7/8" EIA Connector for 7/8" Air Cable, Gas Stop/Pass, Compound Sealing

These high performance coaxial cable connectors are designed specifically to provide the highest quality connector-cable interface while simplifying and speeding up the attachment of connectors to air dielectric coaxial cables. The connectors are fully tested for mechanical and electrical compliance specifications. They are available in all popular cable sizes in a variety of mating interfaces. EIA connectors provide optimal power handling for the complete transmission line system.

Connectors are available in sizes matching the nominal cable size. To join two EIA connectors, a coupling element is used to make the connection of the center conductor. The coupling element has to be ordered separately.

FEATURES / BENEFITS

- Excellent gas tightness
- Robust Mechanical Design, Superior and consistent performance guarantees outstanding system characteristics.
- Extremely low reflection factor, Outstanding low reflection factor improves overall system performance and margin, and reduces mismatch losses
- Waterproof rates at IP68, ensuring safe, long term operation in the harshest of environments.



Connector EIA 7/8"

Technical features

GENERAL SPECIFICATIONS

| Transmission Line Type | Coaxial Cable | |
|------------------------|---|---------|
| Cable Size | 7/8 | |
| Cable Type | Air Dielectric | |
| Model Series | HCA78-50 Series | |
| Connector Interface | 7/8" EIA | |
| Connector Type | Gas Stop. Can be converted to gas pass type by drilling through the insulation. One-piece | design. |
| Sealing Method | Sealing Compound ¹) | |
| Gender | Female | |

ELECTRICAL SPECIFICATIONS

| Nominal Impedance, ohms | Ohm | 50 |
|---------------------------|-----------|--|
| Connector Frequency Range | GHz | DC to 3 GHz |
| VSWR, Return Loss | VSWR (dB) | DC to 1.0GHz: 1.02 (40) 1.0GHz to 2.0GHz: 1.03 (36.6) |
| | | 2.0GHz to 3.0GHz: 1.06 (30.7) |

MECHANICAL SPECIFICATIONS

| Plating Outer/Inner | | Silver/Silver |
|--------------------------|---------|------------------|
| Length | mm (in) | 91 (3.58) |
| Outer Diameter | mm (in) | 57.2 (2.25) |
| Weight | kg (lb) | 0.6 (1.3) |
| Body Material | | Copper Alloy |
| Inner Contact Material | | Copper Alloy |
| Inner Contact Attachment | | Spring Finger |
| Outer Contact Attachment | | Threaded |
| Gas Inlet | | Female, M10x0.75 |

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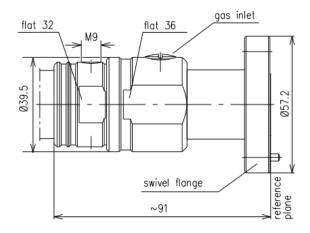


Sealing Volume, cm3 (ounces)

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cm³ (ounces)

ACCESSORIES Wrench size front mm (in) 36 (1-7/16) Wrench size rear mm (in) 32 (1-1/4) TESTING AND ENVIRONMENTAL



Connector Outline Drawing, dimensions in mm

External Document Links Installation Instruction

Notes

 $^{\rm 1})$ The sealing compound must be ordered separately, model name is P2000-001

5 (0.17)

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