PRODUCT DATASHEET

318EIA-HCA300-C03KT

3-1/8" EIA Connector Kit for 3" Coaxial Air Dielectric Cable, O-Ring Sealing

RFS Technologies' high-performance air dielectric coaxial cable connectors are designed to ensure a top-quality connector-cable interface, while simplifying and accelerating installation. These connectors, rigorously tested for mechanical and electrical compliance, can be installed quickly and securely with basic hand tools.

The outer contact features a tab flare and integrated O-ring sealing, enhancing both ease of use and durability. Designed for flexibility, the connectors are configured as gas-stop types but can be converted to gas-pass simply by drilling through the insulation.

With a flange interface that meets international EIA and IEC standards, these connectors are built for seamless compatibility. Each C03 series connector is packaged with a flange gasket, coupling element, and necessary hardware—everything required for a reliable and efficient connection.

Connector 3-1/8" EIA

FEATURES / BENEFITS

- **High power rating for enhanced performance**: Built to handle high power levels, these connectors ensure reliable performance and efficient signal transmission, even under demanding conditions.
- **Quick, labor-saving installation**: Installers can attach these connectors easily with basic hand tools, reducing time and effort on site.
- **Adaptable to a variety of applications**: Designed as a gas-stop type, each connector can also be converted to gas-pass by drilling, offering flexibility to match specific needs.
- **Broad compatibility across systems**: The flange interface complies with EIA and IEC standards, allowing for seamless integration into different setups.
- **Connector kit convenience**: Each C03 series air cable connector comes with a flange gasket, coupling element, and complete hardware kit for mating with another flange, eliminating the need for additional parts and simplifying ordering and stocking.

Technical features

GENERAL SPECIFICATIONS

Transmission Line Type		Coax Cable
Cable Size		3-1/8
Cable Type		Air Dielectric
Model Series		HCA300-50 Series
Connector Interface		3-1/8" EIA, Swivel Flange
Connector Type		Gas Stop, can be converted to Gas Pass type by drilling through the insulation
Sealing Method		O-Ring
Gender		Female, with coupling element provided

ELECTRICAL SPECIFICATIONS

Nominal Impedance, ohms	Ohm	50
Insertion loss	dB	≤ 0.05dB
Connector Frequency Range	GHz	DC to 1.64GHz
VSWR, Return Loss	VSWR (dB)	DC to 1.0GHz: 1.03 (36.6) 1.0GHz to 1.6GHz: 1.05 (32.3)
Peak Power Rating	KW	640
Average Power Rating	KW	11.6 @ DC to 960MHz

All values nominal unless tolerances provided; information contained in the present datasheet is subject to confirmation at time of ordering

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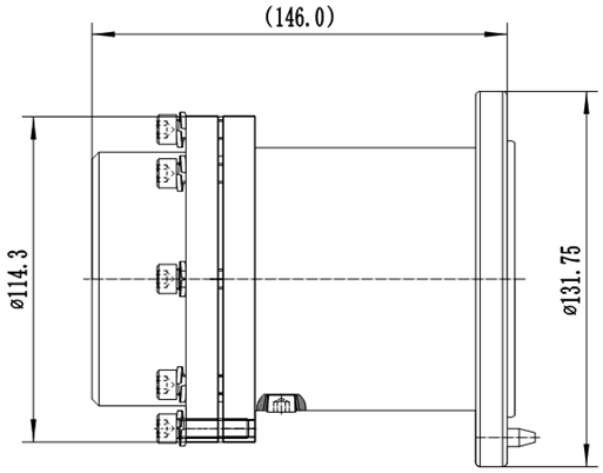
MECHANICAL SPECIFICATIONS

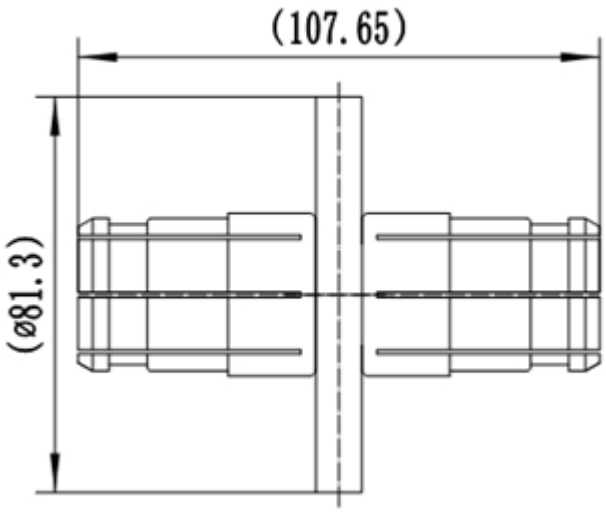
Plating Outer/Inner		Tri-metal / Silver
Length	mm (in)	146 (5.75)
Outer Diameter	mm (in)	114.3 (4.5)
Weight	kg (lb)	4.3 (9.5)
Body Material		Brass
Inner Contact Material		Brass/Phosphor Bronze
Inner Contact Attachment		Tab Flare
Outer Contact Attachment		Tab Flare
Gas Inlet		1/8 NPT Female

TESTING AND ENVIRONMENTAL

Waterproof Level		IP68
Operation Temperature	°C(°F)	-55 to 85 (-67 to 185)



Connector Outline Drawing, dimensions in mm



Coupling Element Outline Drawing, dimensions in mm

External Document Links

Installation Instruction

Notes

These accessories are provided with the connector.

Protection Cap
Coupling Element
Flange O Ring
Flange Screw Kit

Order 318EIA-HCA300-C03RK for the connector reattachment kit.

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