

HOKE Dielectric Tube Fittings



The HOKE Gyrolok Dielectric Tube Fittings are for use in applications where electrical current flowing through a pipe or tube line must be interrupted to protect vital instrumentation and metering equipment.

Features

- Thermoplastic Insulators with:
- Resistance in excess of 10^8 ohms at 70°F (21°C) and 50% relative humidity.
 - Resistance in excess of 10^6 ohms at 100°F (38°C) and 90% relative humidity.

Metal components made of 316 Stainless Steel:

Appropriate orifice for fitting size (e.g. .422" orifice in 1/2" fitting):

HOKE Gyrolok tube fitting ends:

Benefits

- Maximum safety and protection to critical monitoring station instrumentation.
- Long component life in rugged environment.
- Maximum flow capability provided by all sizes of HOKE Gyrolok Dielectric tube fittings.
- The unique value and performance offered by HOKE Gyrolok.

Technical Data

- Body Construction Materials: • 316 Stainless Steel
- Insulator: • Molded Thermoplastic
- O-ring Material: • 90 Durometer Viton
- Back-up Washer: • Virgin TFE

- Electrical Resistance of Insulators: • $7.0 \times 10^8 \Omega$ @ 10 Volts DC @ 70°F and 50% relative humidity
 • $1.0 \times 10^6 \Omega$ @ 10 Volts DC @ 100°F and 90% relative humidity
- Pressure Rating: • 4000 PSIG @ 70°F (27,580kPa @ 21°C)
- Temperature Rating: • -40°F to $+200^\circ\text{F}$ (-40°C to $+93^\circ\text{C}$)

Design

The Dielectric Tube Fitting must perform three primary functions:

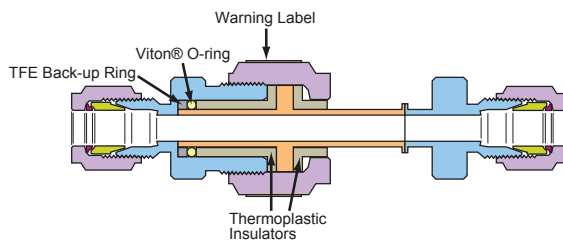
- Electrical insulation
- Reliable fluid containment
- Appropriate flow for line size

In the HOKE design, the insulation function is performed by thermoplastic insulators which provide performance unequaled by any similar product.

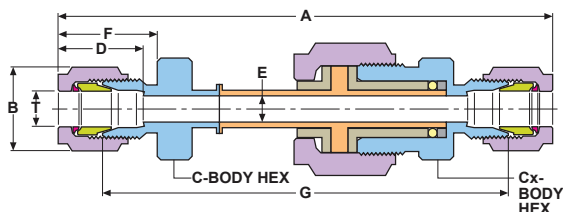
A Viton o-ring and TFE back up ring provide the containment function within the fitting. Gyrolok's 2-ferrule system provides sealing with the impulse line tubing.

Appropriate flow for line size is achieved by providing the appropriate inside diameter for tubing size. See "E" dimensions in Dimensional Table.

WARNING: A "NO WRENCHING" label is placed on the hex of the nut in the insulation sections. Do not disconnect at this point. Instructions are provided with every HOKE Dielectric fitting.

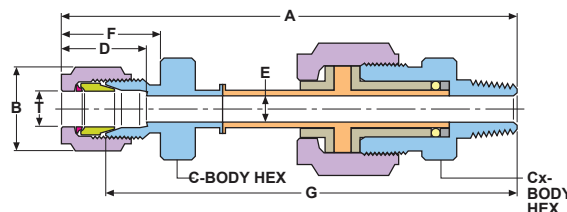


Dielectric Unions: DU

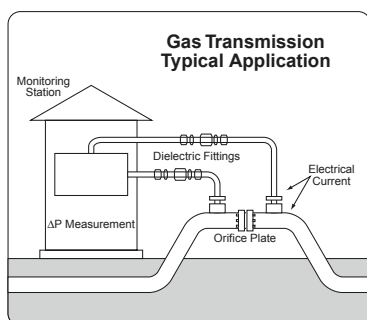


Part No.	Dimensions — inches								
	T Tube O.D.	A	B	C Hex Flat	Cx Hex Flat	D	E min	F	G
4DU-316	1/4	3.78	9/16	1/2	11/16	.64	.19	.77	3.12
6DU-316	3/8	3.92	11/16	5/8	13/16	.72	.28	.83	3.23
8DU-316	1/2	4.15	7/8	13/16	15/16	.97	.42	.92	3.21

Dielectric Male Connectors: DCM



Part No.	Dimensions — inches								
	T Tube O.D.	A	B	C Hex Flat	Cx Hex Flat	D	E min	F	G
6DCM4-316	3/8	3.66	11/16	5/8	13/16	.72	.28	.83	3.32



Application

Commonly used in the Natural Gas Transmission industry, the Dielectric Fitting will prevent current flow resulting from Impressed Current Cathodic Protection Systems, static electricity or even lightning strikes, from reaching sensitive monitoring station equipment.

Impressed Current Cathodic Protection Systems involve the application of a low voltage, low amperage direct current to a pipeline and eventual transfer of corrosive effects to a typically underground anode bed.

If the current flow is not interrupted before reaching the monitoring station critical equipment could be damaged or rendered inaccurate.

By installing HOKE's Gyrolok Dielectric Tube Fitting on impulse lines between the pipeline and the monitoring station, current flow is interrupted while full fluid flow is permitted.