Dielectric Fittings

Dielectric fittings isolate monitoring instruments from the effects of electrical current. Installed on impulse lines ahead of monitoring stations in natural gas pipelines, the fittings interrupt cathodic current flow while permitting full fluid flow. The fitting design is unique in that it separates the two primary functions of electrical insulation and fluid containment. Thermoplastic insulators provide high dielectric strength over a wide range of operating and climatic conditions. A fluorocarbon FKM quad seal contained in the fitting provides the primary fluid seal.

Features

- Metal components are machined from 316 stainless steel for use in rugged environments.
- Molded thermoplastic insulation with excellent electrical, chemical, and ultraviolet resistance and low water absorption maintains dielectric strength and integrity over a wide range of operating and climatic conditions.
- Gaugeable Swagelok® tube fitting or tapered pipe thread end connections (NPT/BSP) provide direct connection to tubing or piping system.

Ordering Information and Dimensions

<table>
<thead>
<tr>
<th>End Connections</th>
<th>Ordering Number</th>
<th>Dimensions, in. (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tube Size</td>
<td>Pipe Size</td>
<td>A</td>
</tr>
<tr>
<td>1/4 in.</td>
<td>—</td>
<td>3.77 (95.8)</td>
</tr>
<tr>
<td>3/8 in.</td>
<td>—</td>
<td>3.92 (99.6)</td>
</tr>
<tr>
<td>1/2 in.</td>
<td>—</td>
<td>4.17 (106)</td>
</tr>
<tr>
<td>12 mm</td>
<td>—</td>
<td>4.23 (107)</td>
</tr>
<tr>
<td>Swagelok male NPT</td>
<td>SS-6-DE-1-4</td>
<td>3.73 (94.7)</td>
</tr>
</tbody>
</table>

Caution: Do not disassemble the insulating connection. It must not be broken or used as a disconnection point.

Materials

Body: 316 stainless steel  
Insulators: Polyamide-imide  
Quad Seal: 70 durometer fluorocarbon FKM  
Backup Ring: Virgin PTFE

Technical Data

Electrical Resistance of Insulators at 70°F (20°C):  
10 × 10⁶ Ω at 10 V (dc)
Pressure Rating: 5000 psig (344 bar)  
Temperature Rating: −40 to 200°F (−40 to 93°C)

Swagelok tube fittings

Dimensions shown with Swagelok nuts finger-tight. Dimensions are for reference only and are subject to change.
Introduction
Since 1947, Swagelok has designed, developed, and manufactured high-quality, general-purpose and specialty fluid system products to meet the evolving needs of global industries. Our focus is on understanding our customers’ needs, finding timely solutions, and adding value with our products and services.

We are pleased to provide this global edition of the book-bound Swagelok Product Catalog, which compiles more than 100 separate product catalogs, technical bulletins, and reference documents into one convenient, easy-to-use volume. Each product catalog is up to date at the time of printing, with its revision number shown on the last page of the individual catalog. Subsequent revisions will supersede the printed version and will be posted on the Swagelok website and in the Swagelok electronic Desktop Technical Reference (eDTR) tool.

For more information, visit your Swagelok website or contact your authorized Swagelok sales and service representative.

Warranty Information
Swagelok products are backed by The Swagelok Limited Lifetime Warranty. For a copy, visit swagelok.com or contact your authorized Swagelok representative.

Safe Product Selection
When selecting a product, the total system design must be considered to ensure safe, trouble-free performance. Function, material compatibility, adequate ratings, proper installation, operation, and maintenance are the responsibilities of the system designer and user.

⚠️ WARNING
Do not mix/interchange Swagelok products or components not governed by industrial design standards, including Swagelok tube fitting end connections, with those of other manufacturers.