

## SCHUCK TYPE SHD INSULATING JOINT

For electrical separation of pipelines

The Schuck Type SHD Insulating Joints are used to interrupt the electric conductivity of pipelines or rather a system of cathodic corrosion protection. An integrated lightning protection conducts high voltage through the patented spark gap. This means that the insulating joint cannot be destroyed by electricity and is fully functional after the occurrence of a surge.

The lightning protection is achieved thanks to the spark gaps invented and patented by the Schuck Group. The construction assures that the electric field is concentrated at this defined point and the spark does not spread along the surface of the insulating material and jump over. If the spark were to jump on the insulating material and burn this area, the insulating joint would be electrically conductive because of the carbon filament, and therefore defect. The spark gap is revolving to avoid burnout. Consequently the spark basically runs itself down.

The Schuck Type SHD Insulating Joint comes in various versions, pressure levels and connection types for several media like gas, water, district heating etc. It is used in all sorts of different pipelines like in the conventional construction of pipelines, plant construction and compressor and regulator stations.

### ADDITIONAL PRODUCTS OF THE SCHUCK GROUP

- » Compensator Type SDS, 2" – 56"
- » Pig Launcher Type SMO, 3" – 60"
- » Collector, 3" – 60"
- » T-Fitting, 3" – 60"
- » Insulating Flange Type SIF, 1" – 40"
- » Insulating Flange Type SIF Conversion Kit, 1" – 48"



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## SCHUCK TYPE SHD INSULATING JOINT

Insulating joint with spark gap used to interrupt the metallic conductivity of pipelines.



We manufacture and distribute components for connecting pipeline systems in more than 50 countries, with 5 international offices and over 40 years of experience.

Do you want to find out more about a specific product?  
Give us a call or visit to our website at [www.schuck-group.com](http://www.schuck-group.com).

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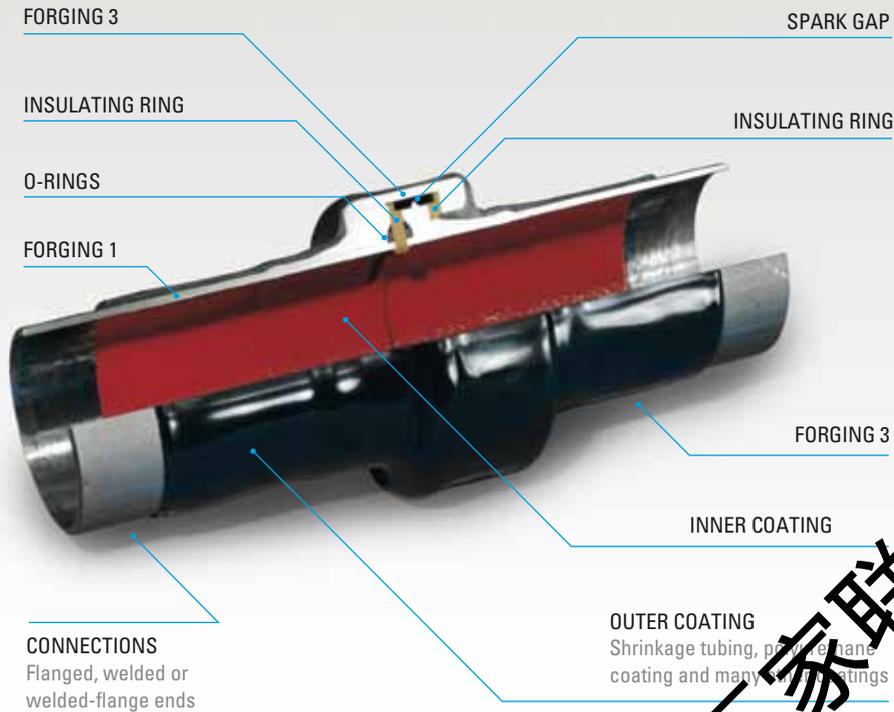
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DESIGN  
ENGINEERING  
MANUFACTURING  
MADE IN GERMANY

## SCHUCK TYPE SHD INSULATING JOINT

Insulating joint with spark gap used to interrupt the metallic conductivity of pipelines.



### PRODUCT FEATURES

- » Integrated and patented spark gap
- » cathodic corrosion protection possible
- » Ready to install, fiction-locked and fully welded design
- » No loss of preload force
- » Homogenous seamless external insulation
- » Resistant to deflection
- » Symmetric or asymmetric design
- » Optional brackets for external spark gap
- » ATEX design available
- » Firesafe design available
- » Different external and internal coatings possible (Standard is without internal coating)
- » Designed according to AD instructions or ASME
- » Different o-ring and insulating materials available depending on application.

### APPLICATIONS

Insulating joint for gas, oil, flammable liquids, water, acids, bases and district heating for above- and below-ground use.

Min. temp. range -60°C to +50°C

Standard temp. range -10°C to +50°C

Max. temp. range -10°C to +150°C

### DESIGN

With flanged, welded or welded-flange ends

Outer diameter, connection and wall thickness as per customer's specification

Symmetric/asymmetric

Available from 1" to 60"

Design pressure up to PN420

### MANUFACTURING

DIN 2470 part 1

DVGW work sheet G 463

PED 97/23 EG

Guide line 94/4/EG (ATEX)

DIN 30690-1

TRFL (Technical rules for pipelines)

ÖVGW G 24 Edition 06.2004

EN 1594 edition 06.2009

### MATERIALS

Materials according to AD2000-instructions or ASME

Steel- and insulating-materials suitable for temperature-/media

Outer corrosion protection either shrinkage tubing (DIN 30672), polyurethane coating or many other coatings

Figure at left:

The Schuck Type SHD Insulating Joint in details

Figure at right:

The Schuck Type SHD Insulating Joint in side face