



---

## **Spark gaps in ex areas – easy installation and testing thanks to coaxial connection technology.**

**The EXFS Coaxial Connection Box by DEHN is the ideal solution for integrating electrically conductive parts in ex areas like, for instance, the insulating joints of pipelines, in the lightning equipotential bonding.**

**This effectively protects those electrically conductive parts in ex areas which cannot be directly interconnected against lightning induced surges.**

**The benefits for the user, above all, during installation, maintenance and testing are significant. The Coaxial Connection Box is installed above the ground so that the regular inspection of the integrated EXFS 100 can be conducted outside the ex area. There is also no need to disconnect cables or remove insulation when testing. What is more, mounting is simple because DEHN includes all fixtures and assembly accessories in the scope of delivery.**

The Coaxial Connection Box serves to protect insulating joints mounted underground or to bridge them in cathodically protected pipe sections. The connection between the insulating joint and the connection box forms a coaxial connection cable. The protective effect is up to three times higher than with a conventional connection of comparable length. The Coaxial Connection Box, therefore, has the advantage that the insulation strength of the insulating joint is not exceeded, even with longer connection cables. The EXFS 100 used here is approved according to the ATEX guideline 2014/34/EU, IECEx, UL and Inmetro. The low sparkover voltage of this spark gap has proven its worth, especially with functionally isolated parts of an installation which only have a low insulation strength with each other. With a maximum lightning impulse current of 100 kA (10/350), the EXFS 100 also fulfils the criteria of class H, the highest lightning current carrying capability according to DIN EN 62561-3 "Lightning Protection System Components (LPSC). Requirements for isolating spark gaps".

The functionality of such protective systems is checked at the inspection intervals laid down for the system, for example, every 2 years in compliance with DIN EN 62305-3 or every 3 years in accordance with DIN EN 60079-17 (VDE 0165 part 10-1). The DEHN Coaxial Connection Box makes it easy to inspect and exchange the ex spark gap EXFS 100 outside the hazardous area without the need for any excavation work.

---

**DEHN + SÖHNE GmbH + Co.KG.**

**Corporate Communication**

Postfach 1640  
D-92306 Neumarkt  
Tel. + 49 9181 906-0  
Fax + 49 9181 906-1100  
eMail: [info@dehn.de](mailto:info@dehn.de)  
**[www.dehn.de](http://www.dehn.de)**

Petra Raab  
Tel. + 49 9181 906-1426  
Fax + 49 9181 906-551426  
eMail: [petra.raab@dehn.de](mailto:petra.raab@dehn.de)



**Advantages in a nutshell**

- ✓ Simple inspection and replacement of the spark gap outside the ex area
- ✓ Protective solution tested by the manufacturer – suitable for all classes of LPS
- ✓ No disconnection of cables and removal of insulation for inspection purposes
- ✓ Up to three times lower voltage drop on the connection cable than with a conventional connection cable
- ✓ Version for lightning equipotential bonding in hazardous areas according to IEC 62305
- ✓ Simple to mount – All fixtures and assembly accessories are included in the scope of delivery



Figure: DEHN Coaxial Connection Box

**DEHN is a leading, globally-active, family-owned company for electrical engineering** with almost 1,800 employees worldwide offering innovative products and solutions as well as comprehensive services in the field of **surge protection, lightning protection and safety equipment**.

DEHN focusses on protecting plant and building technology, transport, telecommunications and process industry systems, photovoltaic systems and wind turbines alongside many other applications. The company's continuous growth is based on more than 100 years of tradition and experience as well as the highest quality standards and consistent customer and market orientation.

**DEHN + SÖHNE GmbH + Co.KG.**

Postfach 1640  
D-92306 Neumarkt  
Tel. + 49 9181 906-0  
Fax + 49 9181 906-1100  
eMail: [info@dehn.de](mailto:info@dehn.de)  
**[www.dehn.de](http://www.dehn.de)**

**Corporate Communication**

Petra Raab  
Tel. + 49 9181 906-1426  
Fax + 49 9181 906-551426  
eMail: [petra.raab@dehn.de](mailto:petra.raab@dehn.de)