

IsoGewBolzen200

Insulating Threaded Bolt for Insulated Flange Connections up to 200 °C Operating Temperature

Function The insulating threaded bolts correspond to standard threaded bolts for flange connections and are coated with a hardened glass fiber-resin composite material between hex two nuts. This ensures galvanic separation of the components in combination with insulating washers. This solution is significantly more robust than the previously common variant with Mylar insulating sleeves and is much easier to install.

Scope of Delivery Included accessories: 2 steel washers, 2 insulating washers, and 2 nuts

Variants

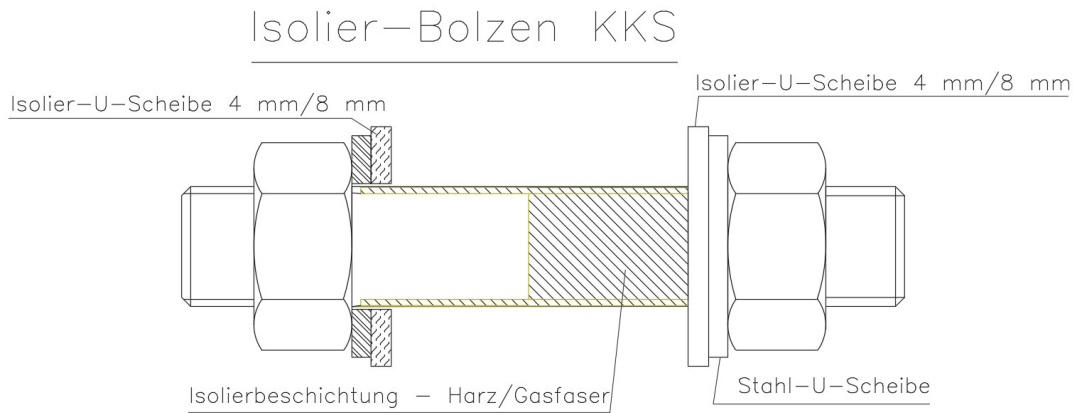
- Suitable for flange bolts M10-M52 according to ISO4017/ISO4014/DIN933
- Other bolt dimensions on request (e.g., ANSI)
- Customer-provided bolts possible

Materials 42CrMo4 (APZ3.1), 25CrMo4 galvanized (APZ3.1), 8.8 galvanized, stainless steel A2-70, other materials on request

Insulation Hardened glass fiber-resin composite material, firmly applied to the bolt for maximum load capacity.

Technical Data

	Unit	Value	Test Method
Operating Temperature	C	200	IEC 60216
Glass Fibers	pcs/cm	30	
Tensile Strength	N/cm	> 2,500	
Elastic Modulus	MPa	approx. 50,000	
Thickness	mm	4.0 (standard) to 20	
Specific Volume Resistivity	Ωcm	10^{14}	IEC 168
Insulation Resistance	Ω	15	IEC 168
Water Absorption (10mm)	mg	20	ISO 62/1

Datasheet IsoGewBolzen200 (Page 2)**Sketch****Dimensions**

The dimensions correspond to threaded bolts according to common standards (DIN 976 / DIN975 / ...). The length of the insulated section (so-called insulation length) is designed depending on the clamping length and the height of the washers. The outer diameter of the hardened insulation matches exactly the thread diameter of the threaded bolt. This is a significant advantage compared to solutions with insulating sleeves, which increase the outer diameter of the component.