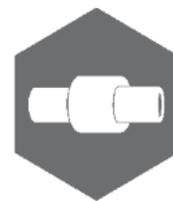


INSULATING JOINTS

DATASHEET

2.2

ISOLATION JOINTS



The insulating monoblock is a metal-insulating, non-dismountable prefabricated structure with or without a spark gap, ensuring the electrical continuity of the pipeline in which it is installed is interrupted.

Application

On underground and above-ground transmission and distribution pipelines, on existing facilities as well as during construction, before and after gas reduction stations, in above-ground installations and underground storage of gas and crude oil mines, on tanks and installations of liquid and gaseous fuels.

Mechanical properties

Monoblock bodies are made as welded structures of thick sheets (carbon or low-alloy structural steel), the results of the measurements and tests carried out are included in the documentation attached to our products.

Electrical properties

The guarantee of quality is the use of high-class insulating materials, use of replaceable spark gaps, no sparking and no breakdown during the electrical test with alternating voltage of 5 kV (50 Hz) for 1 min. (test performed before and after the hydrostatic test), monoblock resistance above 1GΩ at a voltage of 1kV in a dry state, no breakdown at a voltage of 15 ÷ 25 kV (depending on requirements) when checking the tightness of the outer insulation coating.

Calculations

Standard according to WUDT-UC-WO-0, PN-EN 13480-3 and ASME VIII Div. 1 additional values such as bending moment and bursting forces can be imposed by the customer, the necessary parameter to perform the calculations is the specification of the working pressure

Materials

Used pipes for welding acc. To PN-EN ISO 3183, PN-EN 10028, DIN 1626, API Spec 5L, ASTM A53 and others, steel elements (rings) are made of sheets, metallurgical rings and forgings according to PN-EN 10028, The insulating material is laminated epoxy boards according to PN-EN 60893 and DIN 7735.



BAC[®]

CORROSION CONTROL

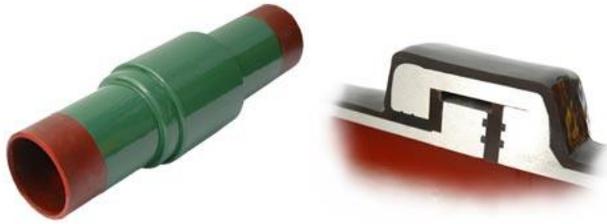
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INSULATING JOINTS

DATASHEET

2.3 ISOLATION JOINTS



Welding and non-destructive testing

Steel elements of the monoblock are joined together by MAG welding in accordance with approved procedures by an independent certification body, the welds made are tested using non-destructive methods: VT (visual testing), PT (penetration testing) and UT (ultrasonic testing) by 2nd degree specialists with competence certificates issued by the Welding Institute.

Applied external coatings

Polyurethane coatings according to PN-EN 10290,
Heat-shrinkable coatings according to PN-EN 12068, "CANUSA", "REIHEM"
Paint coatings (epoxy) according to PN-EN 12944

Applied internal coatings

paint coatings (epoxy) according to PN-EN 12944, PN-EN 10301

Tests

Construction, dimensions, materials,
hydrostatic strength test by pressure 1.5xMOP (maximum working pressure),
pneumatic tightness test at a pressure of 6 bar,
electric test with alternating voltage 5kV / 50 Hz for 1 minute (no sparking),
resistance above 1GΩ at 1 kV DC voltage

The scope of execution

It is possible to supply monoblocks with increased operating parameters, i.e. working pressure up to 420 bar (ANSI 2500), working temperature -50 ° C ÷ 180 ° C, additionally, version with an internal or external spark gap or adaptation for an external spark gap