

KLINGER Fluid Control

Reference Case

KLINGER Ballostar KHI Permacor - "LowEx" Heating (Cooling)

Operator: Audi AG (Strabag AG)
Location: Ingolstadt / Germany
Industry: District Heating

Operating Conditions

Operating Temperature: 5°C-30°C
Operating Pressure: 16 bar (3-4 bar)
Media: Water

KLINGER Product: Ballostar KHI VII-AF-KFC VVS2
Size: DN250-DN600
Material: Carbon Steel "Permacor"
Sealing: KFC25



Description

An essential element of the innovative energy concept is the so-called LowEx network - this water-based pipeline network serves all buildings on the IN-Campus as a source of heat or for a reduction in water temperature. For this purpose, plastic pipes up to DN600 are installed in the earth of construction phase 1.

Buildings with a high cooling load put "waste heat" (such as data center) into the grid, and buildings with a high heat load extract the necessary energy from the LowEx grid. This is how consumers become producers. The system takes advantage of the seasonal temperature fluctuation between 5 ° C and 30 ° C. This is ideal for ambient heat or waste heat to feed into the network. With the help of reversible heat pumps in the respective buildings, the necessary system temperatures are ensured.

The special feature of the ball valves is that they are coated with epoxy resin (Permacor). In the "normal case" a KMR system is required for buried valves in district heating. However, as this is a low-temperature network with PE piping, this unique variant has been selected for economic reasons. Another special feature of this project is the flange connections of carbon steel (KHI) on PE pipe.

Contact person for further information

Name: Mr. Jörg-Gregor Marquardt
Company: Klinger Fluid Control GmbH
Mail: joerg-gregor.marquardt@klinger-kfc.de
Phone: +49 162/2622519