Gas-leak-tight Connection
Model GLTC10 - 3-way combination valve

Applications
- 3-way self-sealing valve allowing for isolation of gas density monitor

Special features
- Optional customer adaptions
- Designed for repeated opening and closing
- Helium leak tested to a level of $1 \cdot 10^{-8}$ mbar l/sec to ensure a leak-tight system

Description

Keeping SF$_6$ gas inside circuit-breaker tanks during the filling process is nearly impossible without using a self-sealing coupling. This special 3-way valve features a DN 20 tank fillport and a special regulation valve to allow leak-free checking of the gas density monitor, and a self-sealing valve for the gas density monitor.

The valve is normally in the “open” position so that SF$_6$ gas flows to the gas density monitor. However, it can be moved to the “close” position using a special key to turn the valve. The exact position of the valve can easily be seen because the red arrow of the screw points toward the visual band where “open” or “close” is indicated. Once the screw reaches the first part of the “close” band, it is 100 % closed. However, further tightening deeper into the “close” band is also possible.

The DN 20 valve and gas density monitor connection threads are greased with graphite in order to make it easier to attach or remove the GLTC20 protective cap.

Tank thread size
DN 20 (nominal size 20 mm)

Permissible temperature
Ambient: -40 °C ... +60 °C

Permissible pressure
Max. 10 bar
Close-up of the operation of the isolation valve

After closing with the key (hand-screwed) the triangle should be pointed to this area, valve = close

If the red triangle points to this area: valve = open

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Combination valve with protective cap