

# Attestation of Leakage Rate Nr. IS-AN5-MUC-2512-10188980-001

## GEMU

## Gebr. Müller Apparatebau GmbH & Co. KG Fritz-Müller-Straße 6 - 8 74653 Ingelfingen

we hereby confirm that the ball valve series BB02, B22, B42 and B52 with actuator of the above-mentioned company with regard to the properties according

- TA-Luft (8/2021), § 5.2.6.4
- DIN EN ISO 15848-1 (2015/2017)
- VDI 2440 (11/2000) § 3.3.1.3 / § 4.3.1.4
- VDI 2440 (06/2021) § 6.3.1.3

has been verified and approved in accordance with TA-Luft. Details can be found in the corresponding test report with the A-No. 3311102 Ball valve series BB02, B22, B42 and B52.

The product fulfills the following requirements under the max. allowable operating conditions for the test medium helium defined by the manufacturer:

Tightness or compliance with the specific leakage rate as defined in TA-Luft (07-2002), § 5.2.6.4 and new version of TA-Luft (12-2020), § 5.2.6.3. and VDI 2240

 $\leq 1 \times 10^{-4} \text{ mbar} \times 1 \times \text{s}^{-1} \text{ m}^{-1} \text{ and } \leq 0.01 \text{ mg} \times \text{s}^{-1} \text{ m}^{-1}$ 

Compliance and assessment based on the requirements of the TA-Luft and DIN EN ISO 15848-1

Housing seal: ≤ 50 ppmv
Classification in the tightness class: BH ≤ 10<sup>-4</sup> mg×s<sup>-1</sup> m<sup>-1</sup>

#### **Product description:**

- Ball valve series BB02, B22, B42 and B52
- · Electric / pneumatic actuator
- Seal design PTFE

### The product receives the marking:

ISO FE - BH - C03 - SSA0 - t (-20 °C/+180 °C) - PN63 - ISO 15848-1

C03: 2500 mechanical cycles (full stroke)

SSA0: Number of readjustments: 0

Temperature classes: -20 °C to +180 °C

Nominal pressure: According to product brochure pressure / temperature

Management instructions for installation, testing and maintenance of the sealing systems

Type testing according to guideline VDI 2440 and DIN EN ISO 15848-1

The attestation is based on the test programme of TA-Luft and DIN EN ISO 15848-1. This attestation includes the verification of flange gaskets and fittings with regard to tightness / leakage rate. This was proven by initial testing.

This confirmation is valid from December 2028.

Munich, 2 December 2025

TÜV SÜD Industrie Service GmbH Institute for Plastics

i. A. Schweizer

