

### Attestation of Leakage Rate Nr. IS-AN5-MUC-2411-10188980-001

## GEMÜ

# 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

 $\leq 1 \times 10^{-4} \text{ mbar} \times \text{I} \times \text{s}^{-1} \text{ m}^{-1} \text{ and } \leq 0,01 \text{ mg} \times \text{s}^{-1} \text{ m}^{-1}$ 

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  $\leq 10^{-4}$  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

2500 mechanical cycles (full stroke) C03:

Number of readjustments: 0 SSA0:

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

According to product brochure pressure / temperature Nominal pressure:

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 November 2027.

Munich, 21 November 2024

TÜV SÜD Industrie Service GmbH Institute for Plastics

i. A. Schweizer

TÜV®