



Industrie Service

Attestation of TA - Luft VDI 2440 and DIN EN ISO 15848-1

**Flowserve (Austria) GmbH
Control Valves- Villach Operation
Kasernengasse 6
9500 Villach
AUSTRIA**

Hereby, it is certified that the control valves FlowTop of the above mentioned company has been tested and accepted according to TA-Luft VDI 2440 and DIN EN ISO 15848-1. Details could be taken from the corresponding test report TR 08 004.

The product meets the following requirements:

German Clean Air Act [TA - Luft] in accordance with VDI 2440

- Operating conditions: Room temperature / 51,1bar, 400°C / 30 bar
- Number of cycles : 0, 5.000, 10.000, 15.000, 20.000
- Attainment of the required surface pressure in the sealing system through assembly according to the operating manual.
- Visual inspection of the required surface pressure according to the operating manual.
- Specific packing design
- Quality of the packing materials in accordance with purchase order specifications
- Surface roughness in accordance with drawings
- Dimensions, shape and position tolerances in accordance with drawings
- Spring characteristic of the preloaded springs acc. with purchase order specifications.

Examination according to DIN EN ISO 15848-1

- | | |
|----------------------|---------------------------|
| ▪ Leakage class: | B |
| ▪ Working condition: | RT/51,1bar, 400°C/ 30 bar |
| ▪ Numbers of cycles: | 20.000 (CC1) |

The basis of attestation are the testing principles according to the German Clean Air Act (TA-Luft) VDI 2440 and DIN EN ISO 15848-1 which contains the observance of the specific leakage rate according to the German Clean Air Act [$\lambda \leq 1 \times 10^{-2}$ mbar x l/(s x m)] and DIN EN ISO 15848-1 [$\lambda \leq 1 \times 10^{-2}$ mg/s x m] under the above-mentioned operating conditions.

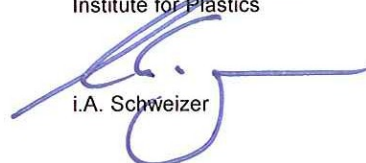
Product description:

- | | | |
|------------------------------------|----------|----------------|
| - FlowTop V740 / D740 | ½" - 16" | Class 150, 300 |
| - FlowTop V738 / D738 | ½" - 16" | Class 150/300 |
| - FlowTop V726 / D726 | DN15-400 | PN10,16,25,40 |
| - Packing design: LATTYGRAF 6940EF | | |

This certification is valid until November 2011

Munich, 27th November 2008

TÜV SÜD Industrie Service GmbH
Institute for Plastics


i.A. Schweizer

