

Low and high pressure applications.

Use of the valve in the cryogenic medium.

Maintenance free.

Extremely fast shutter speed.

Unrestricted installation position.

# STÖHR AXIS

Please read and follow these safety instructions:

The STÖHR product catalogue, checklists, our sales personnel and our sales representatives will assist you in identifying and selecting your valve. The decision regarding a special valve type to choose as well as the proper installation, commissioning, operation and maintenance is, however, the responsibility of the system designer and user. The valve function, the type of sealing, material compatibility, operating pressure, operating temperature and the system environment must be taken into account.

# AxiuS

Pneumatic Cryogenic Globe Valve . . . . . 56

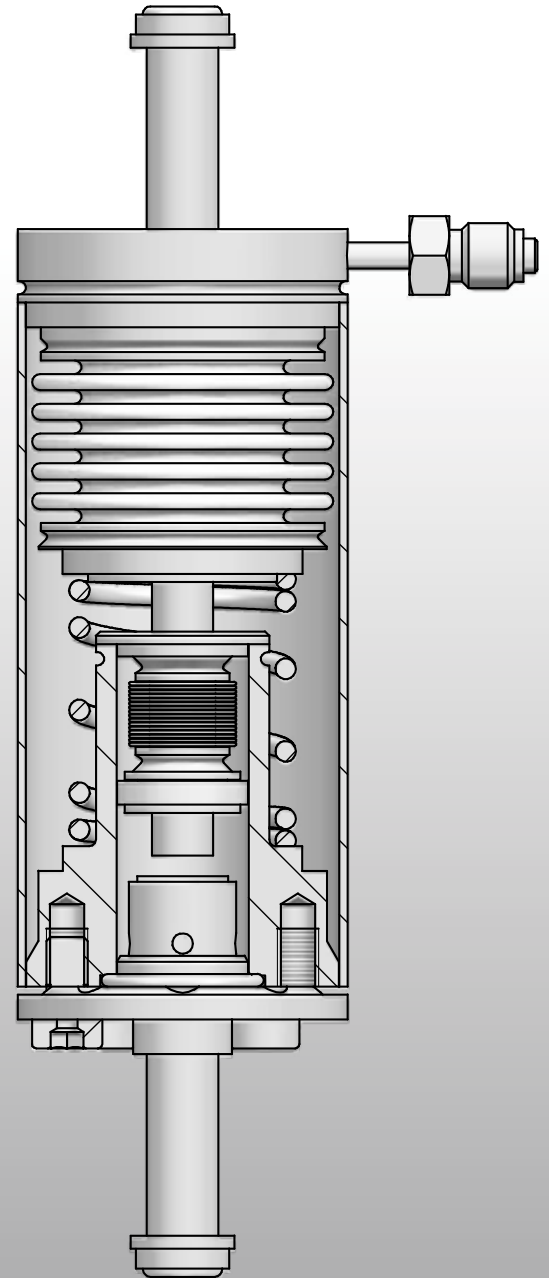


# Axiuš

## 1400

### Pneumatic Cryogenic Globe Valve

Straight valve designed for high pressure. Compact and space-saving with integrated axial bellow actuator with stainless steel body for gaseous and liquid media for cryogenic service. Low heat inlet. Quick closing and opening valve for any installation position. Hermetical tight internal tube with stainless steel bellows on both sides for long life and leak-tightness. End connections in butt-welded execution or according to customer specification. Further PN values on request.



| Technical data                 |   |
|--------------------------------|---|
| Service fluids                 | N <sub>2</sub> , O <sub>2</sub> , Ar, H <sub>2</sub> , He, NG*  |
| Operating temp. fluid          | -196°C(-269° C) to + 50°C   |
| Operating temp. environment    | -30°C to + 50°C   |
| Actuator                       | bellow actuated, pneumatic single-acting  |
| Body shape                     | straight  |
| Seat sealing                   | metal/PCTFE seat leakage rate 1 x 10 <sup>-6</sup> mbar l/s<br>metal/copper seat leakage rate im Sitz 1 x 10 <sup>-3</sup> mbar l/s |
| Body sealing                   | hermetically tight<br>He leakage rate to atmosphere 1 x 10 <sup>-8</sup> mbar l/s   |
| Stem sealing                   | stainless steel bellow physically tight   |
| Safety position                | normally closed (NC) or normally open (NO)  |
| Actuating pressure             | 6 + 0,5/-0,0 bar, dry compressed air or nitrogen  |
| End connect. for actuating air | female thread G 1/8"  |
| Surface treatment              | machined, ground, electro-polished or passivated**  |
| Installation position          | any position  |
| Body material                  | stainless steel   |
| Material certificates          | DIN EN 10204/3.1 AD2000-A4  |

\* All dangerous, toxic, acid fluids with material selection.

\*\* Execution of the surface treatment to customer specifications.



# Certificates

## Key aspects of the Quality Programme

### Rules and standards:

STÖHR ARMATUREN standard is the Pressure Vessel Code (DruckGRL).

Optional are rules like ASME, KTA etc.

### Existing testing facilities:

- hydraulic pressure test up to 1600 bar
- helium leak test by He leak detector  
to  $\leq 1,0 \times 10^{-10}$  mbar l/sec. at room temp. and  $-196^{\circ}\text{C}$
- oxygen-compatible surface cleaning possible
- surface improvement by grinding and electro-polishing to  $Ra \leq 0,25\mu\text{m}$  possible
- clean room assembly to class 100 possible.
- welding with valid WPQ (Welding Procedure Qualifications) and welder's performance qualification
- 100% test record of the welding seams (acc. to DIN EN 473) by:
  - visual test
  - surface crack test
  - ultrasonic test
  - X-ray examination.

### Existing certifications:

- AD2000-HPO
- DIN 2303 - Q2 BK2
- DIN EN ISO 9001:2008
- Pressure Vessel Code - module H
- KTA 1401
- Qualification for transfer of identification acc. to AD2000-HPO

