

Axial Flow Valve – made in Germany

About 2 years ago we began setting up production of the Axial Flow Valve at the Elster GmbH site in Mainz-Kastel, Germany. Today, we are able to offer the entire device range of PED-compliant quality – from DN 50 to DN 300.

The most up-to-date production methods allow efficient production with the shortest throughput times. It has thus also been possible to enhance product quality.

The Axial Flow Valve's well-known and still up-to-date design principle is used in more than 50 countries worldwide.

The main reasons for this are as we see it:

The unique regulator operates at inlet pressures of up to 100 bar, providing flows of up to 1,000,000 sm³/h and outlet pressures between 20 mbar (2 kPa) and 50 bar (5 MPa). It comprises only 4 main components (Fig. 1), with one design covering all pressure ranges, and:

- is very compact
- has a greater capacity compared 'size for size' with similar regulators
- is very easy to build and operate



Fig. 2: Axial Flow Valve



Fig. 1: AFV main components

- is reliable and easy to maintain
- has a proven, low risk design which has been on the market for over 30 years
- has a wide range of applications using one common design.

It can be used for:

- Pressure regulation
- Overpressure relief
- Flow control
- On/Off control

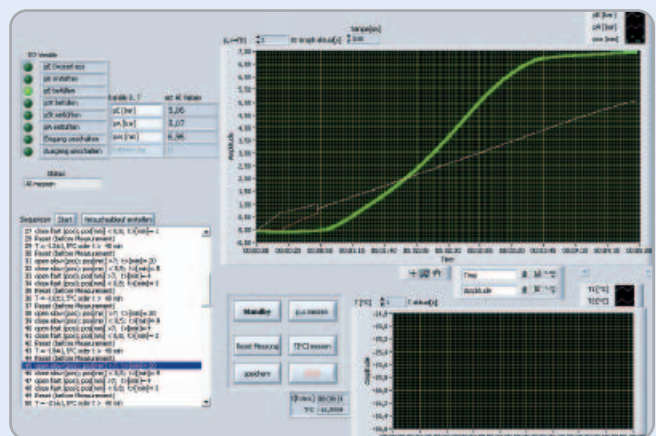


Fig. 3: Open and close characteristics (speed and pressure) as a function of temperature

Production is not the only thing being set up in Mainz-Kastel, however. At the same time, product and application know-how is being centralised on this site so that we

can offer our customers competent technical support. State-of-the-art, computer-assisted test rigs make it possible to carry out multifaceted tests, beginning with life cycle tests and culminating in investigating application-specific pilot configurations (Fig. 3).

The "Quiet Axial Flow Valve" series will also be continued in sizes DN 50 and DN 80. This enhances the range of axial flow valve regulators by incorporating an integral silencer. The metal foam insert significantly reduces noise and can eliminate the need for expensive traditional noise reduction measures such as cladding or acoustic enclosures.

In addition to valves, the range of stabilizers and pilots, as well as the inspirator and restrictor manifold blocks will also be produced. Depending on the configuration required, the devices will be supplied with a ready assembled and tested pilot loop. Accessories such as springs for the pilots and bolts for the flange couplings, as well as spare parts and sleeves, are, of course, also included in our product range.

AFV ANSI 150/300

- Line sizes: DN 50, 80, 100, 150, 200, 300
- Maximum operating pressure
 - Using 5 or 7 sleeves = 51 bar (5.1 MPa)
 - Using 5L sleeves = 4.1 bar (0.41 MPa)

AFV ANSI 600

- Line sizes: DN 50, 100, 150, 200
- Maximum operating pressure
 - 102 bar (10.2 MPa)

Pilots

- Z
- Z 138
- ZSC 100
- ZSC 150
- ZSC 320-100
- ZSC 320-150

Manifolds

- Inspirator block
- Restrictor block

Spares/Springs/Sleeves/Bolts for:

- AFV
- Z series
- Manifold blocks

The success story of the time-tested axial flow valve in use throughout the world continues, thanks to the most up-to-date production and engineering methods.