Type AV

Particularly robust high-pressure control valve for water applications in single- or multi-stage design as perforated bushing

> Type AV, front view

> Type AV, sectional view

Product features

- Single-stage and multi-stage cavitation-free, low-noise throttle body design (perforated bushing)
- Robust valve reduction unit with single- or multi-stage perforated bushing system
- Unloaded and loaded throttle bodies
- Screwed-on housing cover
- Linearly modified characteristic curve

Applications

- High-quality high-pressure control valve for the power plant and process industry.
  Suitable for feed water control (100 %)

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Technical data

Nominal diameter	DN 50–600 / NPS 2–24
Pressure class	PN 16–640/Class 150 –4500
Temperature (max.)	280 °C / 536 °F
Housing material	1.0460 / A105 1.5415 1.7335 / A182F12Cl.2 1.7383 / A182F22Cl.3 1.4903 / A182F91 1.6368 1.4404 / A182F316L
Housing type	Forged
Media	Water, vapour, condensate
Flanges	EN 1092-1, ASME B16.5, ISO 7005, JIS, JPI, welding ends on request
Designs	Angle type, globe type
Actuators	Electric, pneumatic or hydraulic
Number of stages (max.)	7
Number of controlled stages (max.)	4
Operating range (max.)	1:50

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Function

The pressure reducing control valves of the AV series enable reliable control even under difficult operating conditions.

The series is characterized by the use of perforated throttle bodies as control units. Individual characteristic curves can be achieved by adapting the hole patterns to the particular requirements.

The optional pressure-balanced design also enables actuating forces to be reduced, which permits the use of smaller and more cost-effective actuators even at high pressures.

The parts of the throttle body are perfectly matched to each other so that best sealing properties are guaranteed even without the use of additional elastomers.

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Sectional drawing (angle type)
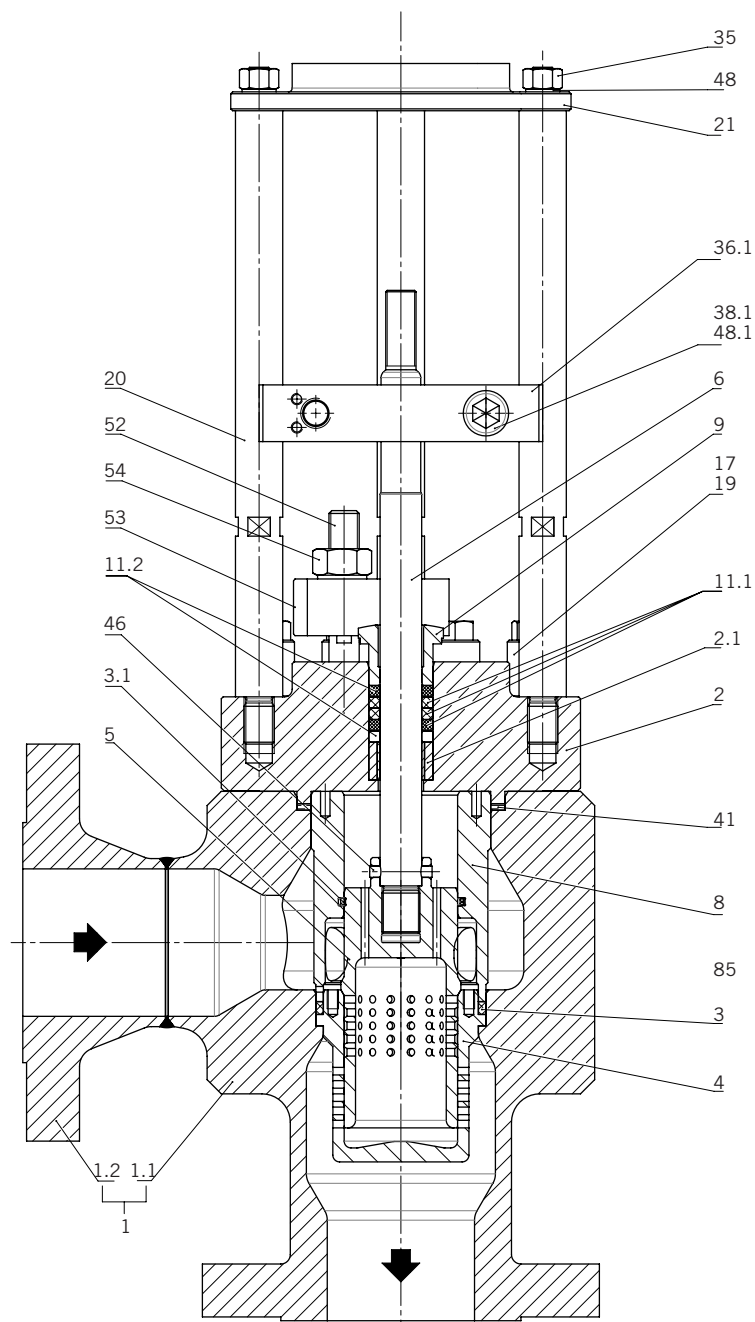
Dimensions: on request

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Parts list (angle type)

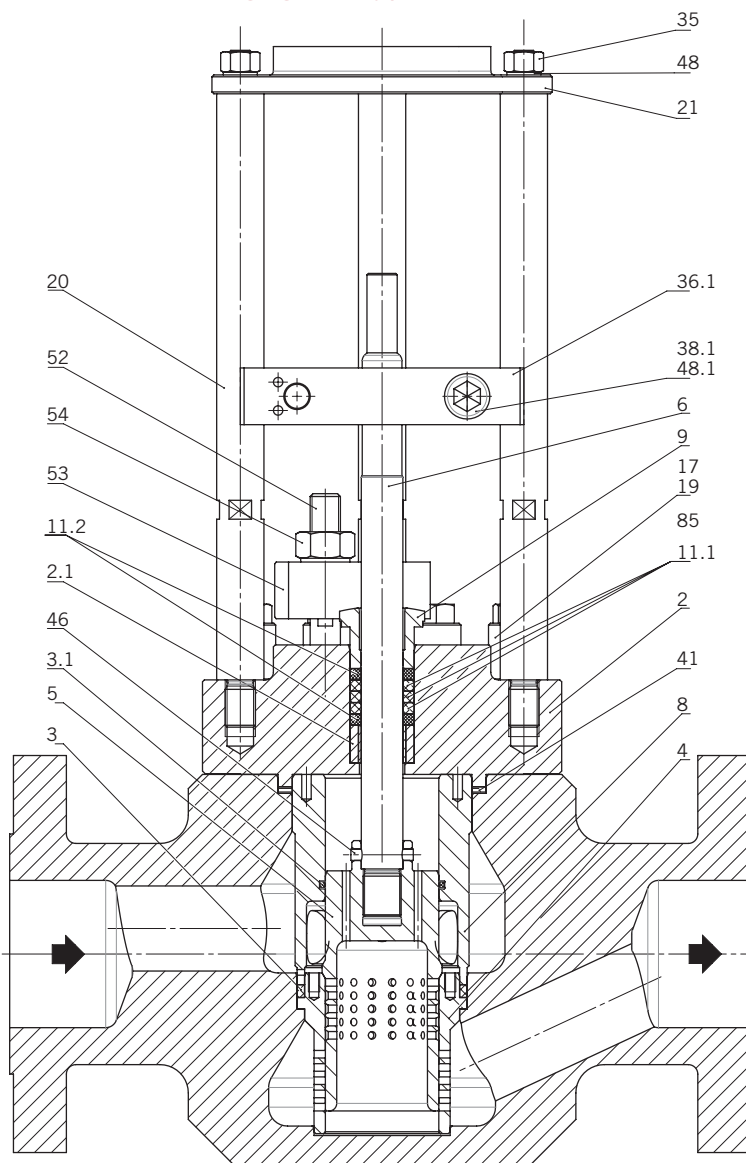| Pos.	Item	Material
1	Housing cpl.	*
1.1	Housing	*
1.2	Flange	*
2	Cap	*
2.1	Bushing	1.4404
3	Profile ring	Grafit
4	Cascade bushing	1.4122
4.1	Shuck	1.4122
5	Calve Plug	1.4122
6	Valve spindle	1.4057
8	Bushing	1.4122
9	Packing follower	1.4122
11.1	Packing	PTFE
11.2	Packing	PTFE/Grafit
17	Hexagon nut	**
19	Stud bolt	**
20	Spacer bolt	1.1181
21	Flange	1.0460/A105
35	Hexagon nut	8
36.1	Bridge	1.4571
38.1	Socket head screw	8.8
41	Spiral gasket	1.4541/Grafit
48	Lock washer	1.1211
48.1	Lock washer	1.1211
52	Stud bolt	**
53	Gland plate	*
54	Hexagon nut	**

*   See table "Technical data"

**   Depending on customer requirements

Parts list as an example of the standard configuation

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Sectional drawing (globe type)

Dimensions: on request

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Parts list (globe type)

Pos.	Item	Material
1	Housing cpl.	*
2	Cap	*
2.1	Bushing	1.4404
3	Profile ring	Grafit
4	Cascade bushing	1.4122
4.1	Shuck	1.4122
5	Valve plug	1.4122
6	Valve spindle	1.4057
8	Bushing	1.4122
9	Packing follower	1.4122
11.1	Packing	PTFE
11.2	Packing	PTFE/Grafit
17	Hexagon nut	**
19	Stud bolt	**
20	Distance Bolt	1.1181
21	Flange	1.0460/A105
35	Hexagon nut	8
36.1	Bridge	1.4571
38.1	Socket head screw	8.8
41	Spiral gasket	1.4541/Grafit
48	Lock washer	1.1211
48.1	Lock washer	1.1211
52	Stud bolt	**
53	Gland plate	*
54	Hexagon nut	**

*   See table "Technical data"

**   Depending on customer requirements

Parts list as an example of the standard configuation