



Competence and solutions for
self-acting control valves

PRESSURE CONTROL | LEVEL CONTROL | SERVICE

Mankenberg control valves – Optimum customer-specific solutions

As a leading manufacturer of self-acting control valves, Mankenberg combines the tradition of an owner-managed industrial company with innovative spirit and entrepreneurial vision and decidedly boosts its own agile digital transformation. Mankenberg is a specialist for stainless steel and special materials in deep-drawing processes. The portfolio offers flexible standard valves and project-related special valves, from large series to small quantities and individual production, and is being further developed. In Luebeck, we set the course for the future.



Quality –
Made in Germany



Foundation
1885

Independent /
owner-managed



> 5.000
active customers



Customer-oriented
and based on partnership



Head office in
Luebeck
(Germany)



Excellent expertise
from practitioners to
practitioners



Also in
special material



CFD simulations
and 3D geometries



Represented in
49 countries



Short delivery times /
high on-time delivery



> 95 %
vertical range of manufacture



Technical acceptances
individual as per our
customers' requirements

**Development, production and
sale of industrial valves**

From standard to innovative
tailor-made special valves

Know-how in all industries and applications –

From the oil production platform to the pharmaceutical industry

Chemical industry



Conventional power generation



Electrolyzers



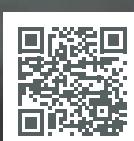
Food and beverage



Mining



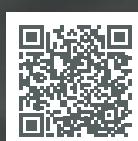
Offshore



Oil and gas



Pharmaceutical industry



Pulp and paper



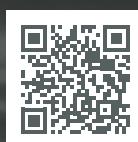
Renewable energies



Shipbuilding



Water supply



ATEX



Corrosion



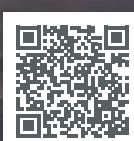
High pressure



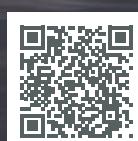
Industrial water

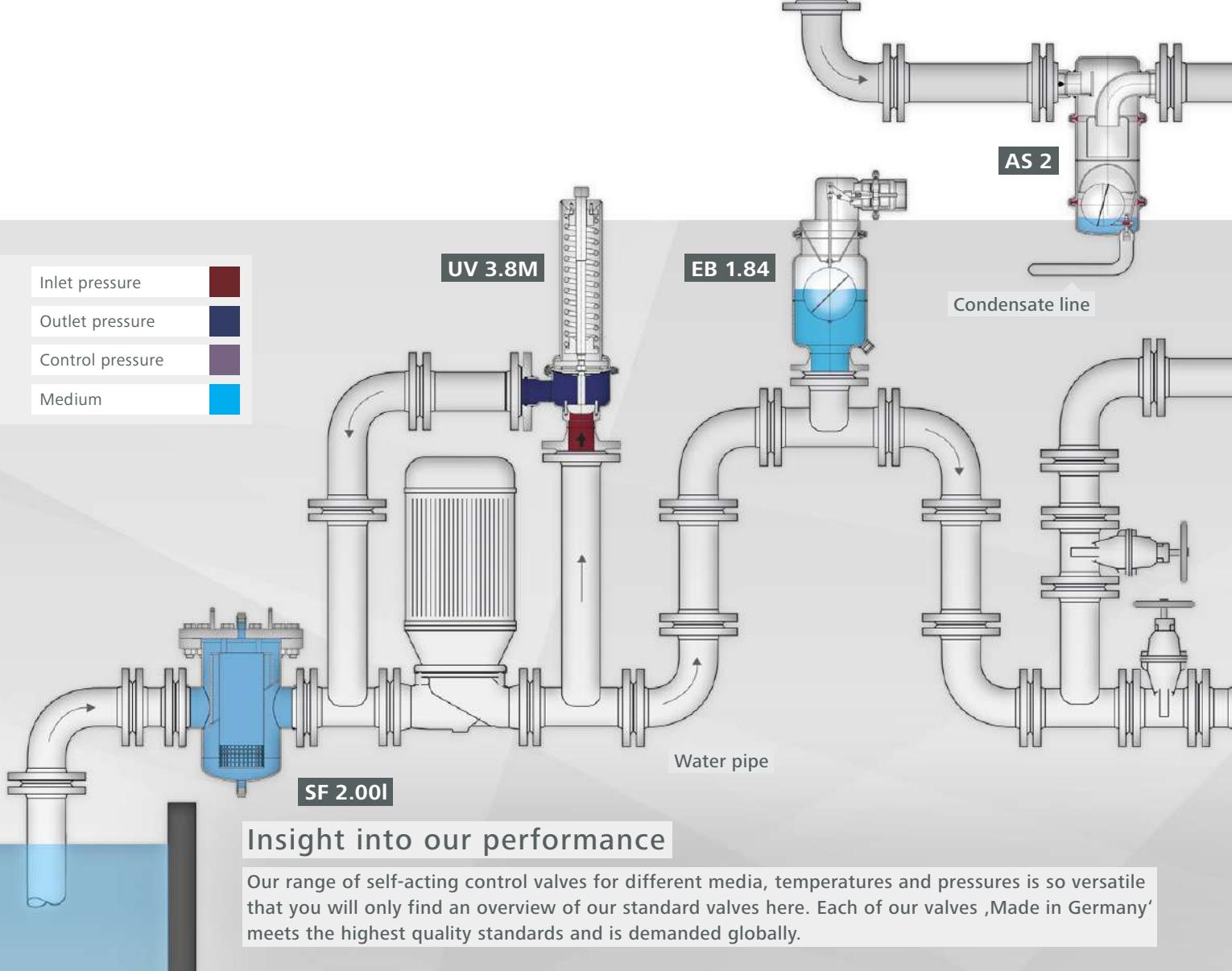


Tank blanketing



Ultra-pure water





Insight into our performance

Our range of self-acting control valves for different media, temperatures and pressures is so versatile that you will only find an overview of our standard valves here. Each of our valves 'Made in Germany' meets the highest quality standards and is demanded globally.

Spring-operated pressure control valves

Tasks / service areas

Pressure reducing valves

DM

Pressure reducing valves reduce a high and frequently fluctuating pressure to an adjustable constant pressure downstream of the valve. A spring keeps the valve open and this closes as the outlet pressure rises.

DN	15 - 800	PN	1 - 400
G	1/2 - 2	T	-60 - 400 °C
p_2	0.002 - 160 bar	K_{vs}	0.05 - 2,100 m³/h

Vacuum breakers

VV

Vacuum breakers protect vessels and pipelines against vacuum. A vacuum can build up when a system is being drained, when it cools down or when a pump fails. Vacuum control valves are pressure reducing valves or back pressure regulators which control pressures below 1 bara.

DN	15 - 250	PN	16 - 40
G	1/2 - 2 1/2	T	-60 - 250 °C
p_2	0.05 - 0.95 bar (abs.)	K_{vs}	0.2 - 388 m³/h

Back pressure regulators

UV

Back pressure regulators control an adjustable constant pressure upstream of the valve. A spring keeps the valve closed. As the inlet pressure rises, the valve opens.

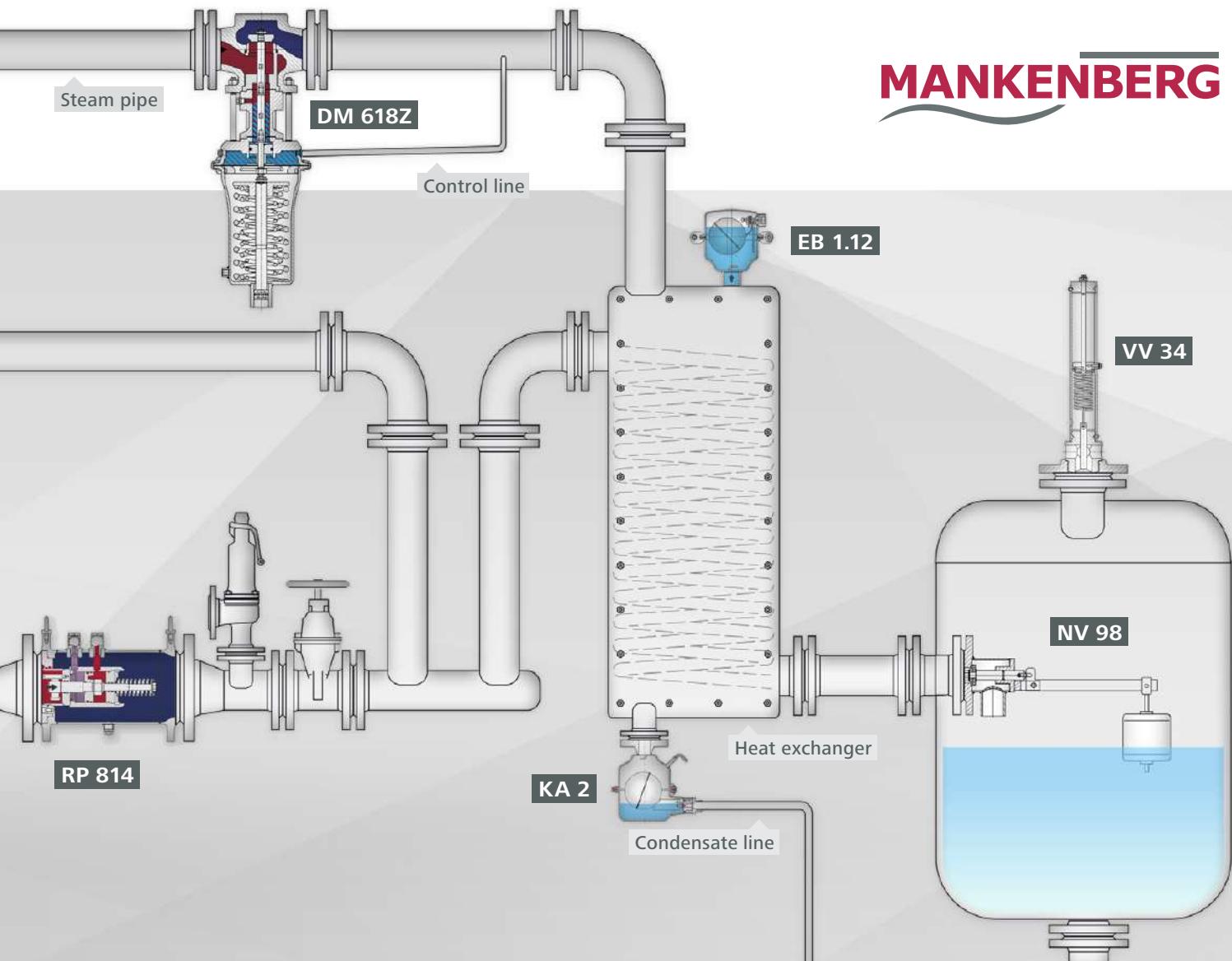
DN	15 - 800	PN	1 - 250
G	1/2 - 2	T	-60 - 400 °C
p_2	0.002 - 220 bar	K_{vs}	0.05 - 2,100 m³/h

Differential pressure control valves

DV

Differential pressure control valves control a pressure depending on a second varying pressure without external measurement sensors.

DN	15 - 150	PN	1 - 400
G	1/2 - 2	T	-45 - 200 °C
Δp	0.002 - 25 bar	K_{vs}	0.05 - 160 m³/h



Float-operated level control valves

Tasks / service areas

Bleeding and venting valves

EB

Bleeding and venting valves remove or admit air or gases automatically from/to tanks, vessels or pipelines. They are float-controlled valves which close as the liquid level rises and open as the level falls.

DN 15 - 200	PN 16 - 63
G 1/2 - 2	T -60 - 400 °C
p ₁ 0 - 63 bar	Q up to 9,670 m ³ /h

Steam traps

KA

Steam traps automatically drain condensate without loss of steam or gas. They operate instantaneously and are not affected by back pressure or pressure fluctuations. They do not require an external energy input.

DN 15 - 50	PN 16 - 63
G 1/2 - 1	T 300 °C
p 0 - 60 bar	Q 3,700 m ³ /h

Float valves

NV

Float valves automatically control liquid levels in sealed or open (non-pressurised) tanks and vessels without requiring external energy. The float registers the liquid level and directly controls the valve via a lever. A change in the liquid level immediately results in a changed flow volume.

DN 15 - 150	PN 16 - 40
G 3/8 - 2	T -60 - 300 °C
p 0 - 16 bar	K _{vs} 0.2 - 160 m ³ /h

Separators

AS

Separators separate media of different states of aggregation.

DN 15 - 50	PN 16
G 1/2	T 200 °C
p 0 - 16 bar	Q up to 73 m ³ /h

Mankenberg top sellers

We consistently develop further our range of products. But our customers also remain loyal to our proven valves. These top sellers have been leading the list of the best selling valves for years.

Valve for small to medium flow rates DM 555

DN	15 - 50	PN	40
G	1/2 - 2	T	-40 - 200 °C
p ₁	up to 40 bar	K _{vs}	1.3 - 7.5 m ³ /h
p ₂	0.5 - 20 bar		

Liquids, gases up to 130 °C | single-seated, balanced | soft or metallic cone | piston-controlled | completely made of stainless steel | ATEX version optional



M DM 555

High pressure valve for small to medium flow rates DM 510

DN	15 - 50	PN	16 - 320
G	3/8 - 2	T	400 °C
p ₁	up to 320 bar	K _{vs}	0.2 - 5.5 m ³ /h
p ₂	2 - 160 bar		

Liquids, gases up to 130 °C, steam up to 400 °C | single-seated, non-balanced | soft or metallic seal | diaphragm, piston or bellows-controlled | body made of C-steel, stainless steel, Duplex, Super Duplex or Hastelloy® | NACE-compatible | ATEX version optional



M DM 510


M DM 652
**Valve for medium to high flow rates
DM 652**

DN	15 - 50	PN	16 - 40
G	1/2 - 2	T	190 °C
p ₁	40 bar	K _{vs}	5 - 22 m ³ /h
p ₂	0.02 - 12 bar		

Liquids, gases up to 130 °C, steam up to 190 °C | single-seated, balanced | soft seal | diaphragm-controlled | completely made of stainless steel | ATEX version optional


M DM 755
**Millibar control valve for small to medium flow rates
DM 755**

DN	15 - 50	PN	16
G	1/2 - 2	T	130 °C
p ₂	0.002 - 0.52 bar	K _{vs}	0.2 - 4.5 m ³ /h

Liquids, gases up to 130 °C | single-seated, non-balanced | soft seal | diaphragm-controlled | completely made of stainless steel | ATEX version optional


M EB 1.12
**Continuous bleeding valve with DVGW approval for
small to high flow rates EB 1.12**

DN	25 - 100	PN	16
G	1/2 - 2	T	130 °C
p	0 - 16 bar	Q	248 m ³ /h

Liquids up to 130 °C | soft or metallic seal | completely made of stainless steel | standard design with a BSP male connection G 3/4" on the outlet | DVGW certificate | ATEX version optional



Our speciality – Custom-made valves

Custom-made special solutions are developed individually for the respective customer system. For each enquiry Mankenberg checks the requirements of the plant and then recommends the appropriate technical solution. Even for requirements such as **vacuum, volume or differential pressure control** our engineers will develop a tailor-made special solution. This can range from a slightly modified valve series to a complete system.

Custom-made special
solutions



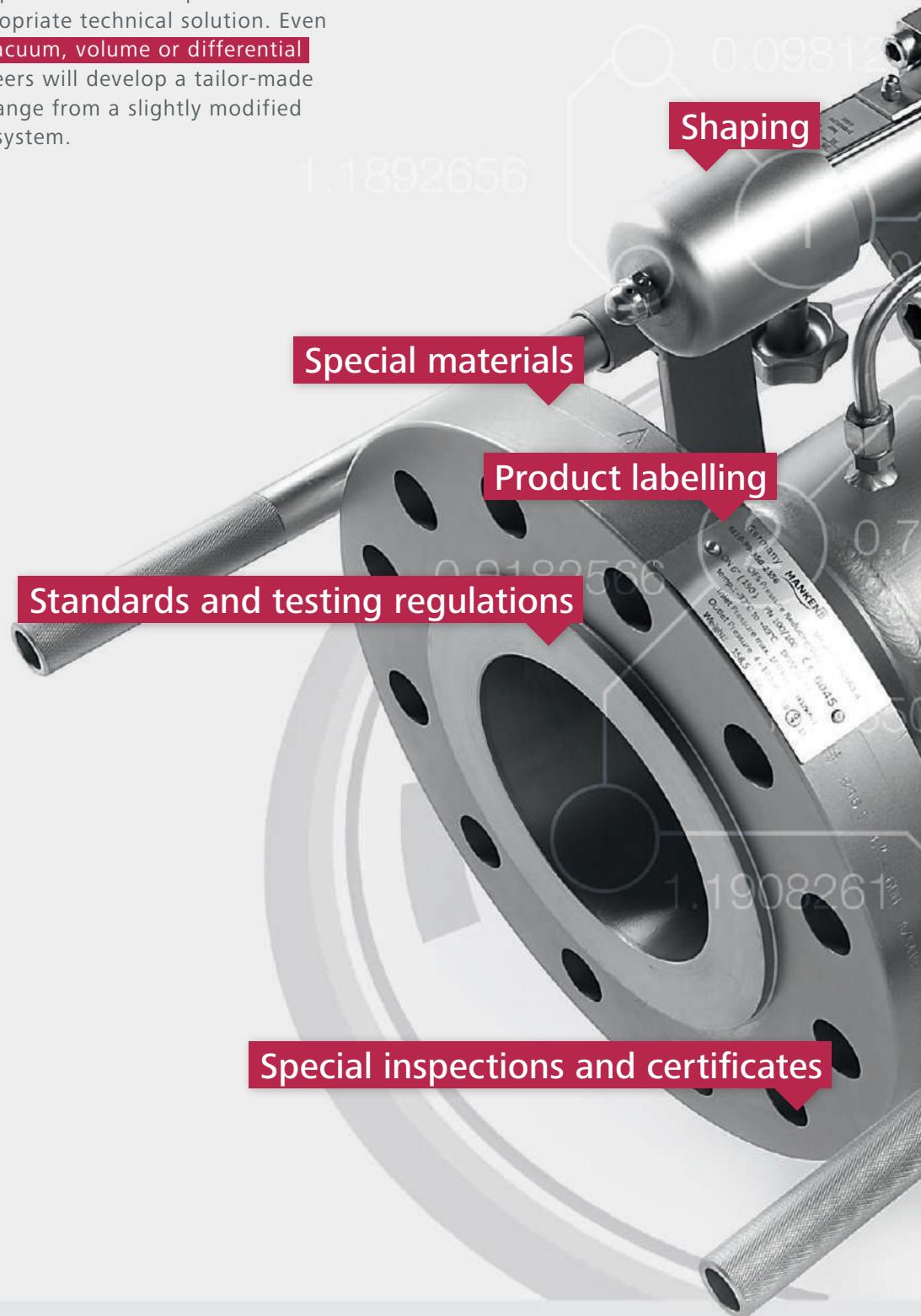
Standards and testing regulations

Special materials

Product labelling

Special inspections and certificates

Shaping



Quantities: 1 or more

Prototype production

Connections

Particular function

Additional documentation



industrial-valve-solutions.com

Contact us,
we will advise you.

myvalve@mankenberg.com

Mankenberg product advantages

Our valves are true all-rounders. For our customers, however, it is the essence of all properties that counts so that they can choose the right valve for their application. Therefore, Mankenberg offers overviews with the product advantages of the most popular valves.

Example DM 555

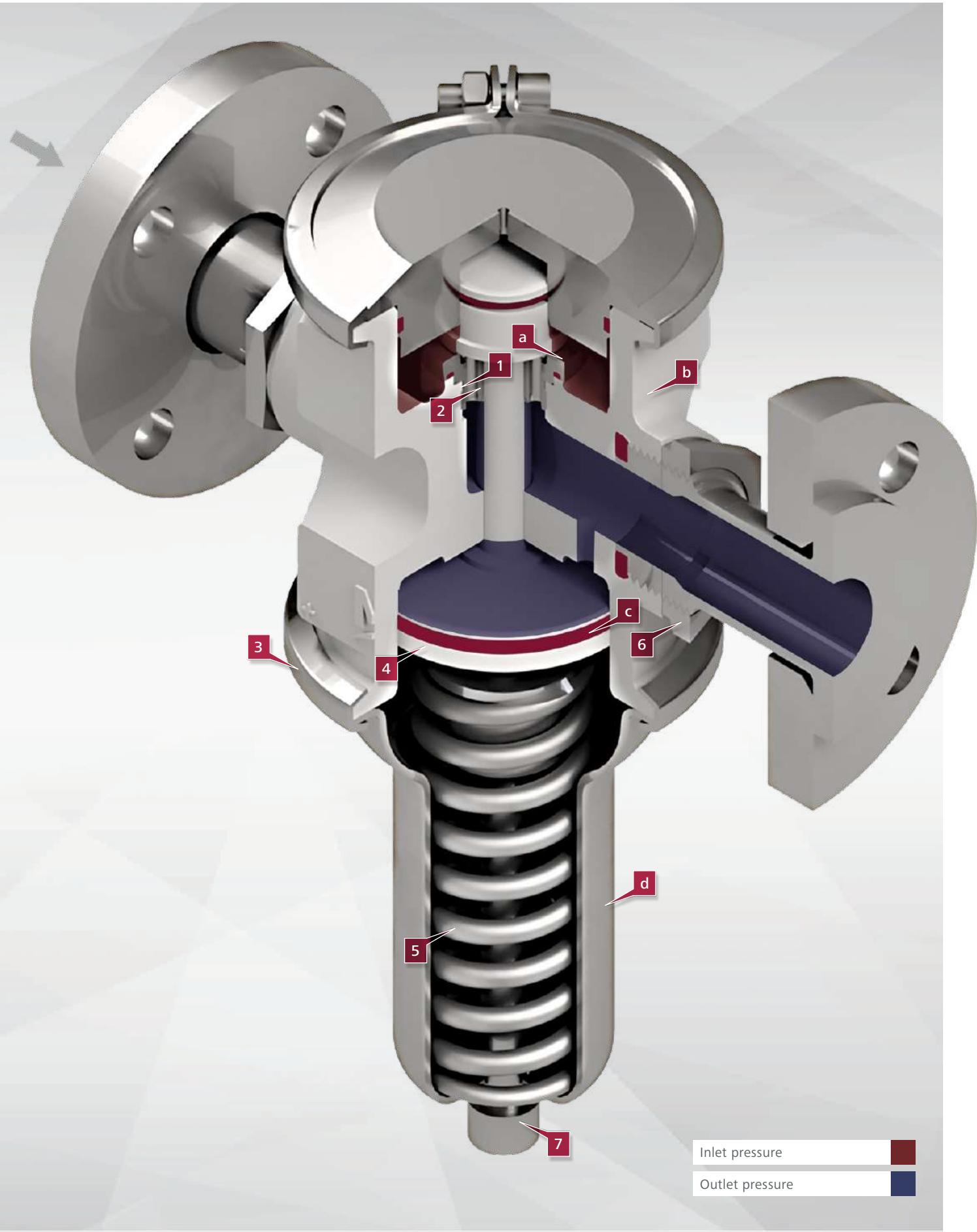
Mankenberg advantages at a glance

SPECIAL FEATURES	OPTIONS
Modular construction acc. to EN or ASME, excellent control characteristics, high reduction ratio	Hard-faced valve cone and seat Suitable for high pressure drops a
With soft or metallic seal Can also be used for abrasive media	Special material possible: Duplex, Super Duplex, Hastelloy® and titanium available b
Exchangeable seat Easy adjustment to changed flow rates	Elastomers made of FKM, NBR, PTFE or others, also FDA compliant c
Mankenberg clamp system Easy maintenance	Delivery in accordance with NACE d
Balanced cone Downstream pressure control independent from the upstream pressure	
Exchangeable control parts Easy change of pressure ranges	
EASY-ADAPT – Connection adapter	
EASY-CHECK – Non-rising adjusting screw Function externally visible, easy and exact setpoint adjustment, unchanged construction height	

140
since 1885 – nearly
Years

Experience and know-how

Guaranteed reliability
and ability to deliver.





MANKENBERG ORDER SERVICE

FAST, RELIABLE, DELIVERABLE

Our answer to these increasingly important requirements is **M TIME**, the continuously optimised Mankenberg storage and logistics system.

See for yourself.



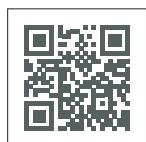
CALCULATION AND DESIGN SOFTWARE – VALVEPILOT EASY VALVE SELECTION

COMFORTABLE TO CALCULATE THE K_v AND K_{vs} VALUE

ValvePilot also provides warnings about potential hazards such as cavitation, flashing or excessive noise pressure levels. You will also receive an alert if a pipe expansion is required owing to your operational data. This calculation tool works entirely online.

These values are essential for the optimal selection of valves. In addition, the programme determines the following values / parameters:

- » Noise pressure level
- » Nominal diameter
- » Reduction ratio
- » Inflow and outflow velocity
- » Phase changeover



valvepilot.com



Visit our LinkedIn channel and stay up to date. It's worth it.

linkedin.com

Please send us your enquiry and allow us to advise you.



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Made in Germany – since 1885