









# **Extract from the Variety of our Valves for High Pressure Applications**

#### **Pressure Reducing Valve for High Flow Rates**

#### **DM 2125K**

single seat, balanced universal straightway valve | piston-controlled | body of GS-C25, C steel, CrNiMo steel, also available of special materials such as Duplex, Superduplex, Hastelloy® or titanium

DN	32 - 150	PN	16 - 160
		Т	130 °C
p <sub>2</sub>	4 - 35 bar	K <sub>vs</sub>	8 - 160 m³/h



#### Pressure Reducing Valve for High Flow Rates (at high Temperatures) DM 401

double-seat straight-way valve for high pressure and high temperature, high flow rates | usable for steam | body made of cast steel, high-temperature steel, forged steel | usable as soot blower with damping | especially sturdy, offers long maintenance intervals, a long operational lifespan

DN	25 - 250	PN	16 - 100
		Т	500 °C
p <sub>2</sub>	1.5 - 32 bar	K <sub>vs</sub>	6 - 360 m³/h



#### **Pressure Reducing Valve for Small Flow Rates**

DM 505

single-seat straight-way valve, inlet pressure up to 250 bar, also controls millibar ranges | usable for liquids and gases | completely made of deep-drawn CrNiMo-steel (316L) – surface finish of the body Ra  $\leq 1.6~\mu m$  | adjusting screw as a function of display, easy-to-maintain owing to the clamp system | corrosion-resistant, very lightweight and compact | long operational lifespan, manageable installation, various designs and connection types | can be actuated pneumatically, spring cap available with leakage line connection and adjusting screw seal

DN	15 - 25	PN	250
G	1/2	Т	130 °C
p <sub>3</sub>	0.005 - 20 bar	K <sub>ve</sub>	0.2 - 1.4 m <sup>3</sup> /h



#### Pressure Reducing Valve for Small and Medium Flow Rates DM 510 - 518

single-seat straight-way valve for small to medium flow rates | highest pressures, up to 315 bar inlet pressure, high temperatures, also controls millibar ranges | usable for liquids, gases and steam | body made of C-steel, CrNiMo-steel, special materials such as Duplex, Superduplex, Hastelloy® or titanium available | NACE-compatible | spring cap available with leakage line connection and adjusting screw seal | hard-faced valve cone and seat available for high pressure drops

DN	15 - 50	PN	16 - 315
G	<sup>3</sup> / <sub>8</sub> - 2	Т	130 °C / 180 °C / 400 °C
p <sub>2</sub>	0.005 - 160 bar	K <sub>vs</sub>	0.2 - 5.5 m <sup>3</sup> /h



#### **Universal Pressure Reducing Valve**

DM 662

single-seat straight-way valve with balanced cone  $\mid$  usable for liquids and gases  $\mid$  completely made of deep-drawn CrNiMo-steel (316L) – surface finish of the body Ra  $\leq$  1.6  $\mu$ m  $\mid$  adjusting screw as a function of display, easy-to-maintain owing to the clamp system  $\mid$  corrosion-resistant, very lightweight and compact  $\mid$  highest regulating accuracy thanks to a multitude of control ranges  $\mid$  can be actuated pneumatically, spring cap available with leakage line connection and adjusting screw seal

DN	15 - 25	PN	100
G	1/2 - 1	Т	130 °C
p <sub>2</sub>	0.02 - 12 bar	K <sub>vs</sub>	3.2 - 3.6 m <sup>3</sup> /h



#### Valve for Small Flow Rates at High Temperatures

DM 701

double-seat straight-way valve for high pressures and temperatures, small flow rates | usable for steam | body made of cast steel, high-temperature steel, forged steel | especially sturdy with long service intervals, long operational lifespan | optionally: integrated extension on the outlet side

DN	15 - 50	PN	315
		Т	500 °C
p <sub>2</sub>	0.5 - 40 bar	K <sub>vs</sub>	0.2 - 5.5 m <sup>3</sup> /h



#### **Backpressure Regulator for High Flow Rates**

**UV 1.2KSO** 

seat-controlled regulating valve in the straightway or angle version | suitable for liquids or gases | body of the angle version made of C-steel, CrNiMo steel, also available in special materials such as Duplex, Superduplex, Hastelloy® or titanium

DN	65 - 150	PN	16 - 160
		Т	130 °C
p,	2 - 70 bar	K <sub>vc</sub>	12 - 125 m³/h



#### Backpressure Regulator for Small and Medium Flow Rates UV 8.2

single-seat straight-way or angle valve for small and medium flow rates | highest pressures, high temperatures | usable for liquids, gases and steam | body made of C-steel, CrNiMo-steel, special material such as Duplex, Superduplex, Hastelloy® or titanium | NACE-compatible | spring cap available with leakage line connection and adjusting screw seal | hard-faced valve cone and seat available for high pressure drops

DN	15 - 50	PN	100
G	<sup>3</sup> / <sub>8</sub> - 2	Т	400 °C
p <sub>1</sub>	2 - 100 bar	K <sub>vs</sub>	0.2 - 5.5 m <sup>3</sup> /h



#### **Differential Pressure Regulator**

DV 510 - 518

single seat straight-way valve for small and medium flow rates | useable for liquids, gases and steam | body made of C-steel, CrNiMo steel, also available in special materials such as Duplex, Superduplex, Hastelloy® or titanium | NACE-compatible, highest pressures and temperatures, up to 315 bar inlet pressure | hard-faced valve cone and seat available for high pressure drops

DN	15 - 50	PN	16 - 315
G	<sup>3</sup> / <sub>8</sub> - 2	Т	130 °C/180 °C/400 °C
Δр	0.05 - 160 bar	K <sub>vs</sub>	0.2 - 5.5 m <sup>3</sup> /h



#### **Pilot-operated Control Valve**

RP 810, 820

cast steel pilot-operated pressure reducing valve or backpressure regulator for large flow rates | suitable for liquids and gases | body made of spheroidal cast iron, cast steel, CrNiMo steel (316L) | maintenance work can be done from above at the installed valve, special versions available

DN	40 - 400	PN	160
p <sub>1</sub>	2 - 40 bar	Т	130 °C
p <sub>2</sub>	1 - 40 bar	K <sub>vs</sub>	20 - 900 m³/h





#### **Pilot-operated Control Valve**

RP 814, 815, 824, 825

pilot-operated pressure reducing valve or backpressure regulator for large flow rates  $\mid$  inline design, welded construction  $\mid$  RP 815, RP 825 with extended casing for maximum K<sub>vs</sub>-values, high pressure at large flow rates  $\mid$  body made of steel, CrNiMo steel  $\mid$  special versions available

DN	100 - 800	PN	100
p <sub>1</sub>	2 - 20 bar	Т	130 °C
p <sub>2</sub>	1 - 40 bar	K <sub>vs</sub>	60 - 2,100 m³/h



#### **Continuous Bleeding and Venting Valve**

EB 1.3250

float-controlled operational bleeding valve, float and lever made of stainless steel, flanged body halves, also available as pure bleeding valve  $\,|\,$  usable for nearly all liquids  $\,|\,$  completely made of deep-drawn CrNiMo-steel (316L) – surface finish of the body Ra  $< 1.6~\mu m$   $\,|\,$  corrosion-resistant, very lightweight and compact  $\,|\,$  long operational lifespan, manageable installation, easy-to-maintain – highest effectiveness with compact design

DN	15 - 50	PN	63
G	1/2 - 2	Т	200 °C
р	0 - 63 bar	Q	30 Nm³/h



#### Sight Glass

DA 4.00SO

without inner parts, with two metal-fused sight glass plates | suitable for liquids, gases, steam | body of C steel, CrNiMo steel, also available in special materials such as Duplex, Superduplex, Hastelloy® or titanium

DN	15 - 50	PN	63 - 160
G	1/2 - 2	Т	300 °C



#### Strainer

SF 2.00, 3.00

strainer made of forged steel in block design, low pressure drop, different sieve finenesses, clear mesh width 0.25–2.5 mm | usable for liquids, gases and steam | body made of C-steel, CrNiMo-steel, special material such as Duplex, Superduplex, Hastelloy® or titanium available | optionally with manometer connection

DN	15 - 600	PN	500
		Т	550 °C



#### Customised Solutions Your operating data determine the solution.

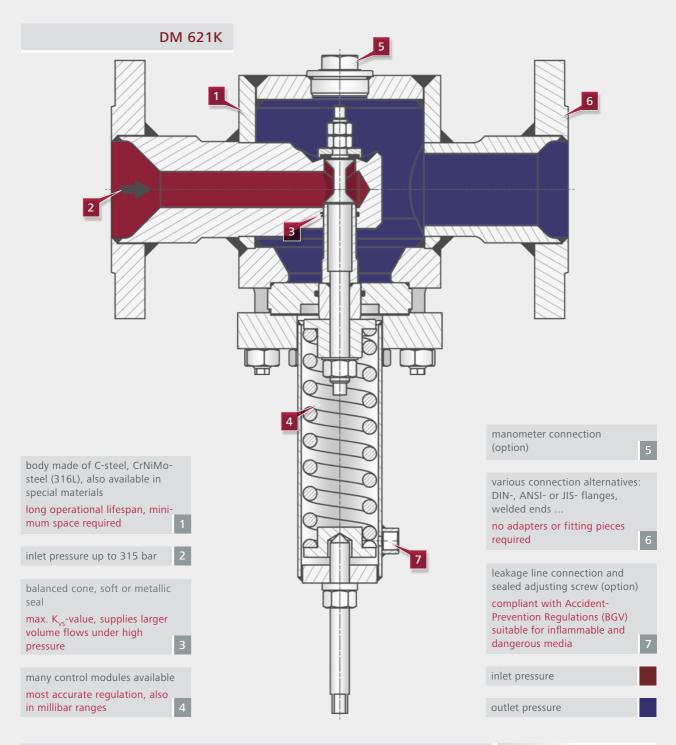
Customer-specific solutions are individually designed valves for our customers' special requirements. Mankenberg checks with every enquiry the customer-specific technical operating data and subsequently quotes the technical solution. If the operating data require solutions which cannot be realised with Mankenberg standard valves, our engineers will be happy to develop special solutions in accordance with our customer's enquiry. This may lead to either slightly modified valve type series or to a complex system.

Discover our strength also in this case and send us your enquiry.



## **Pressure Reducing Valve for Medium** and **High Flow Rates**





#### Pressure Reducing Valve for Medium and High Flow Rates DM 620 - 628

single-seat straight-way valve for medium and high flow rates with balanced cone | highest pressures, up to 315 bar inlet pressure | usable for liquids and gases | body made of C-steel, CrNiMo-steel, special materials such as Duplex, Superduplex, Hastelloy® or titanium are available | NACE-compatible | spring cap available with leakage line connection and adjusting screw seal | hard-faced valve cone and seat available for high pressure drops | allows for the solution of most difficult procedural requirements with only one device

DN	15 - 50	PN	16 - 315
G / NPT	1/2 - 2	Т	200 °C
p <sub>2</sub>	2 - 160 bar	K <sub>vs</sub>	0.4 - 10 m³/h



### **Mankenberg High Pressure Valves in Action**

### **Cleaning under high Pressure**

To clean the inner walls of carbon-fired boilers so-called soot blowers are used. Sootblowing can be done by means of high pressure steam, with the plants being exposed to high temperatures, as well as by means of water. Both procedures serve the purpose of maintaining the optimal effectiveness for the heat transfer from the boiler to the boiler feed water.

In the water blow systems water with an inlet pressure of 35 to 45 bar is fed to the lances that are arranged around the boiler at various heights. However, lances work at a very restricted pressure range of 18.6 bar. The pilot-operated Mankenberg pressure reducing valve of the RP 810 type with a nominal width of DN 100 reduces the inlet pressure correspondingly so that the inner boiler wall is continuously cleaned and a malfunction of the entire plant is avoided. Steam soot blowing can be regulated using pressure reducing valves of the DM 401 / DM 701 type.



## Reducing Pressure when Need be

The pumped storage station built as an underground station near a reservoir uses the height difference of about 360 m between the upper and the lower basin to generate energy and/or to compensate peak system loads. In case of failure of the electrical systems, emergency cooling water for the turbines and extinguishing water in case of a fire can still be provided.

The inlet pressure always amounts to abt. 36 bar owing to the height difference between the upper basin and the engine room. To protect the pipelines and plant components that are designed for a pressure rating of PN 16, a self-actuated pressure reducing valve of the RP 814 type is used. It features utmost regulating accuracy with highest flow rates. The RP 814 valve reduces the water pressure from 36 to 8 bar also in this case in an extremely reliable way.



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

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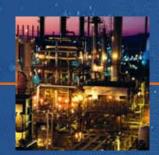
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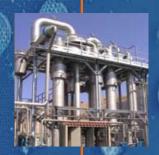






Potravinářský průmysl
Farmaceutický průmysl
Biotechnologie
Petrochemie
Chemický průmysl
Energetika
Úprava vody
Papírenství a zpracování celulózy
Plynárenský průmysl
Keramický průmysl
Zpracovatelský průmysl













Firma s tradicí od r. 1990 se při svém vzniku zaměřila na dodávky základních komponent, přístrojové a měřící techniky a dodávky technologií pro farmaceutický a potravinářský průmysl. Cílem bylo zajistit kompletní dodavatelsko - inženýrské služby, včetně servisu. V roce 1998, který byl pro firmu velmi významným mezníkem, proběhla transformace společnosti do nynější formy. V dalších letech činnosti společnosti dochází k rozšíření portfolia a je navazována spolupráce s partnery v oblasti armatur, komponent, ventilů, procesní měřící techniky a čerpadel.

Oblastí působnosti je potravinářský, farmaceutický průmysl, biotechnologie, chemický průmysl, petrochemie, úprava vody, papírenství a celulóza, energetika, keramický průmysl a zpracovatelský průmysl.

Firma REGOM INSTRUMENTS je díky širokému dodavatelskému portfoliu a bohatým zkušenostem schopna zajistit dodávky armatur, komponent, čerpadel, přístrojů a zařízení.

Cílem společnosti REGOM INSTRUMENTS je poskytování kvalitních služeb a spolehlivých dodávek pro co nejširší okruh zákazníků.

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