

Compact, sturdy design
Minimum space required,
high stability, fit and forget

1

Favourable fluid dynamics
Higher K_{vs} values

2

Balanced cone
Outlet pressure control
independently from the
inlet pressure

8

Mankenberg clamp system and
plug-in pack
Easy maintenance

3

Spring cap and medium-wetted
internal parts of CrNiMo steel
Corrosion-resistant

4

Closed spring cap
Complete protection against
contact

5

Leakage line connection and
adjusting screw seal
Suitable for inflammable and
dangerous media In accordance
with accident prevention
regulations

6

EASY-CHECK –
Non-rising adjusting screw
Function externally visible, easy
and accurate to adjust the set
pressure, non-varying
installation height

7

Matched control surfaces, springs
and control lines
Very high control accuracy

9

Exchangeable drives
Easy change between
pressure ranges

10

Option

Body made of stainless steel

Elastomers made of FKM, NBR,
PTFE or other materials

Inlet Pressure

Outlet Pressure

Control Pressure

Control line connection and
bleeding are offset by an angle of
90° in the drawing!

Standard Cast Valve

MDM 618

Mankenberg Pressure Reducing Valve in Action

MANKENBERG

We reserve the right to make technical changes. Images are non-binding 11/2016



Standard Cast Valve

DM 618

Single seat straight-way valve for high flow rates with balanced cone | suitable for liquids and gases up to 130° C | body made of GS-C25 optionally CrNiMo steel | medium-wetted internal parts made of CrNiMo steel | very precise control | spring cap with leakage line connection and adjusting screw seal

DN	15 - 100	PN	16 - 40
		T	bis 130 °C
P ₂	0.8 - 10 bar	K _{VS}	4.5 - 110 m ³ /h

New!

Pressure Control for a Water Brake in an Engine Test Bench

A high level of operational safety and reliability is required for engine-driven plants or systems. The most important technical parameters of the engines can already be determined, analysed, and evaluated on a test bench at the factory through detailed tests. On performance test benches the units under test are examined as to whether they correspond to key parameters of the specification, such as torque or performance. The determined values are used for optimising the engine so that it will operate effectively during its later application.

A German manufacturer offers measuring instruments and devices for various testing systems, including engine testing systems. The performance test benches perform trial and acceptance tests for hot, i.e. running engines while real operating conditions are simulated. The hydraulic test benches are designed for 400 through to 6,500 kW. They are operated with water from the municipal utilities network at the usual network pressure of 2 - 4 bar.

The water powered performance brakes simulate the engine load. They are designed for 1.5 bar at max. 65 m³/h and are very sensitive to overpressure. The Mankenberg pressure reducing valve DM 618 controls the water pressure of the water brake and reliably reduces the fed mains pressure down to the required value of 1.5 bar.

The self-acting DM 618 controls the pressure downstream of the valve without pneumatical or electrical control components. The diaphragm-operated and spring-loaded proportional valve is designed for high flow rates and provides reliable and precise control. The sturdy valve body is made of cast steel. The internal parts are of CrNiMo steel because they are subjected to mechanical stress from the water brake and corrosion.