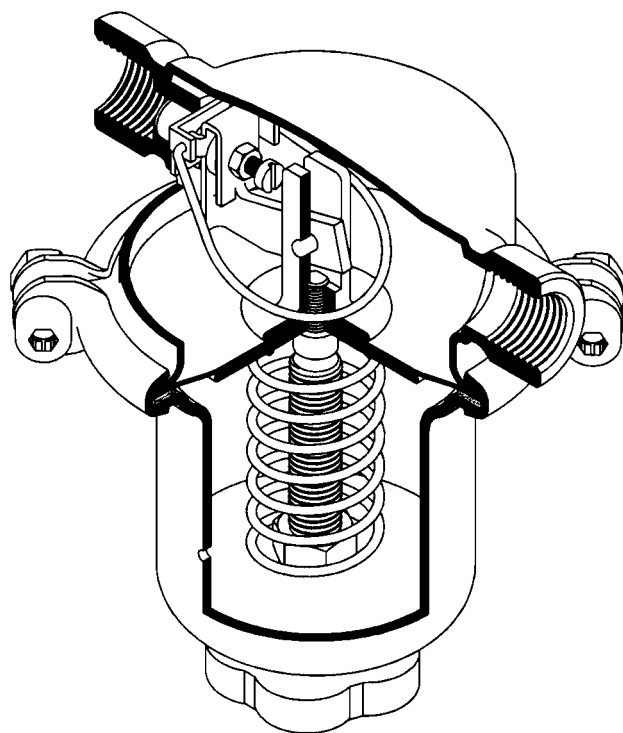


# PRESSURE REDUCING VALVES

**MANKENBERG**  
INDUSTRIEARMATUREN

for liquids and gases  
up to 80 / 130 °C

**Type 765**



## TECHNICAL DATA

MEDIUM	liquids, gases
NOMINAL PRESSURE	PN 16 / 1, 16 / 2,5
CONNECTION	G 1/2
INLET PRESSURE	up to 8 bar
OUTLET PRESSURE	0,03 - 0,8 bar in 3 ranges
TEMPERATURE	up to 80 / 130 °C
KVS-VALUE	0,2 m <sup>3</sup> /h

## DESCRIPTION

Pressure reducing valves control the pressure at the outlet side.

The type 752 pressure reducer is a diaphragm-controlled spring-loaded proportional control valve. All components are made of stainless steel (CrNiMo) and have smooth surfaces. The valve cone has a soft seal. The sealing is equal to or better than VDI/VDE rule 2174.

With depressurized pipeline the spring keeps the valve cone in open position. Under pressure the medium flows from the inlet side through the valve seat into the body and acts on the diaphragm /spring system from the outlet side (outlet pressure).

A pressure difference ( $p_1 - p_2$ ) of at least 1 bar is required to cause a good regulation.

The outlet pressure balances the force of the valve spring across the diaphragm (set value). As the outlet pressure rises above the pressure set using the setting screw, the valve cone moves toward the seat causing the flow to be restricted. As the outlet pressure drops the restricting orifice becomes larger. The valve is fully open if the pipeline is depressurized. Rotating the setting screw clockwise increases the outlet pressure.

The maximum permitted outlet pressure is 1,5 times the set pressure, unless otherwise specified.

If toxic or hazardous media are used the valve must feature a sealed spring cover (including setting spindle seal) fitted with a leakage line connection. When the overflow valve is installed on site a leakage line must be fitted capable of safely draining the escaping medium in case the control valve should become defective.

Type 765 is also available in an oil and grease-free version for oxygen, in a clean gas version with special connection.

If you require a larger nominal size of valve you should select type 762 (Kvs values up to 3,6 m<sup>3</sup>/h).

If you require a valve that is free from gaps or pockets you should select types 152 or 462.

Mankenberg reserves the right, to alter or improve the designs or specifications of the products described herein without notice.

Special designs on request.

### SETTING RANGES [bar], KVS-VALUES [m<sup>3</sup>/h]

setting ranges [bar]	0,03 - 0,12	0,08 - 0,32	0,2 - 0,8
nominal pressure [PN]	16 / 1	16 / 2,5	
Ø diaphragm [mm]	105		
KVS-value [m <sup>3</sup> /h]	0,2		

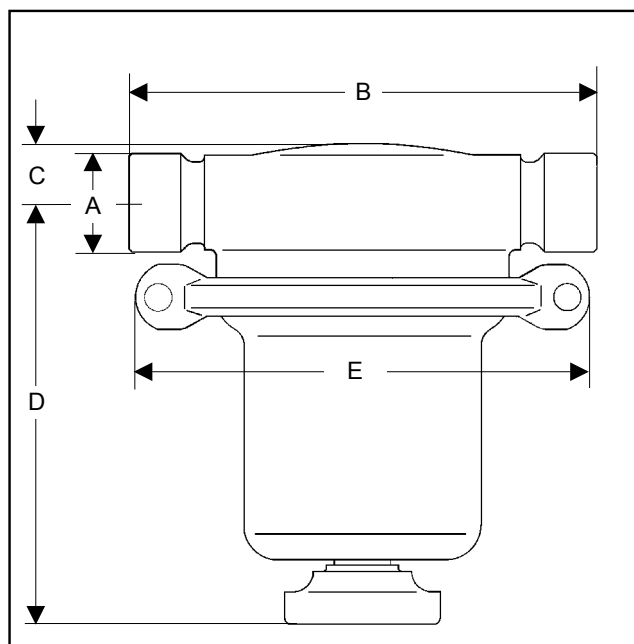
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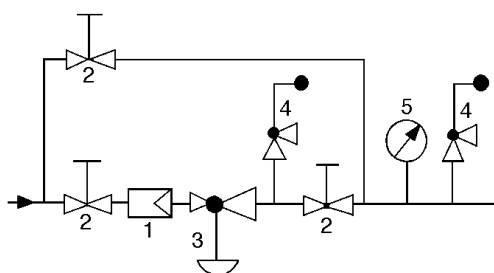
**Type 765**

MATERIALS		
TEMPERATURE	80°C	130°C
BODY	CrNiMo-steel	
SPRING CAP		
INNER PARTS		
SCREWS		
SET SCREW	CrNiMo-steel with handwheel made of Duroplast	
VALVE SEAL	FPM	
SPRING	CrNi-steel	
DIAPHRAGM	NBR	EPDM FPM



DIMENSIONS [mm] + WEIGHTS [kg]	
size	Nominal diameter (size A) G 1/2
B	140
C	~ 20
D	~ 130
E	ø 138 / 110
weight	1,5

## RECOMMENDED INSTALLATION



- 1 strainer \*
- 2 shutoff valves
- 3 **pressure reducer\***
- 4 safety valve \*
- 5 pressure gauge \*
- \* use  
MANKENBERG-products

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