

R 100

Construction and function of the R 100

The R 100 is a gas pressure regulator, which ensures the constant outlet pressure given a varying inlet pressure or flow capacity.

The gas flows through the regulator housing in arrow direction. The main diaphragm is actuated via an impulse line from the outlet side by pressure. The required outlet pressure is adjusted at the spring. The valve remains open as long as the outlet pressure is below the seat value. When reaching the set point the regulator valve closes.

The measure work is directly mounted and operates independent from the inlet pressure.

R 100 with double seat regulating valve
Nominal diameters: DN 50, 80, 100, 150, 200



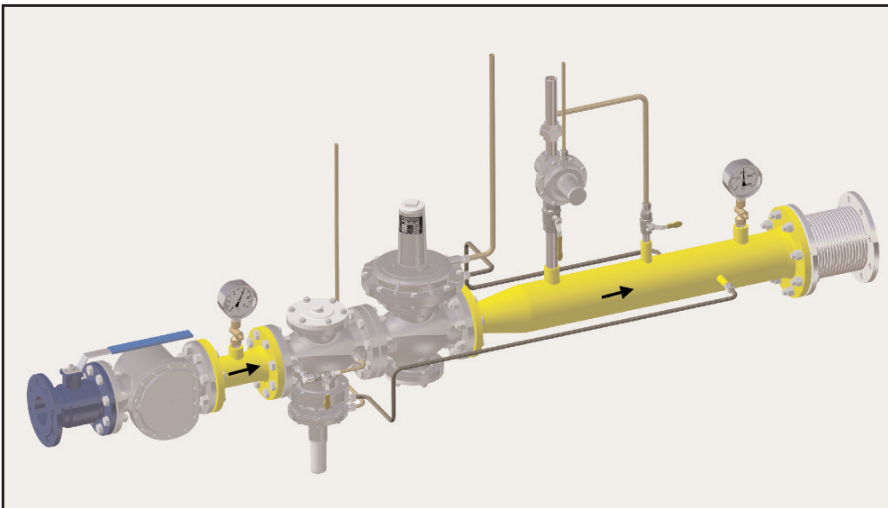
Wheel in use materials

Housing:	Silumin casting	DN 50 - 150
Diaphragm cap:	Silumin casting	DN 200
Internal parts:	stainless	
Diaphragms:	50 NBR	
valve discs:	50 NBR, vulcanized	

Connections

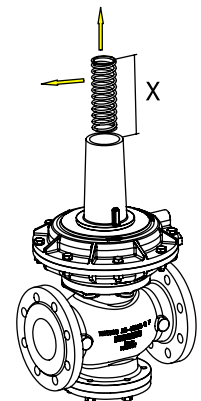
Flange PN 16 DIN 2533
Flange PN 10 DIN 2532
8-bore

R 100 in a gas train

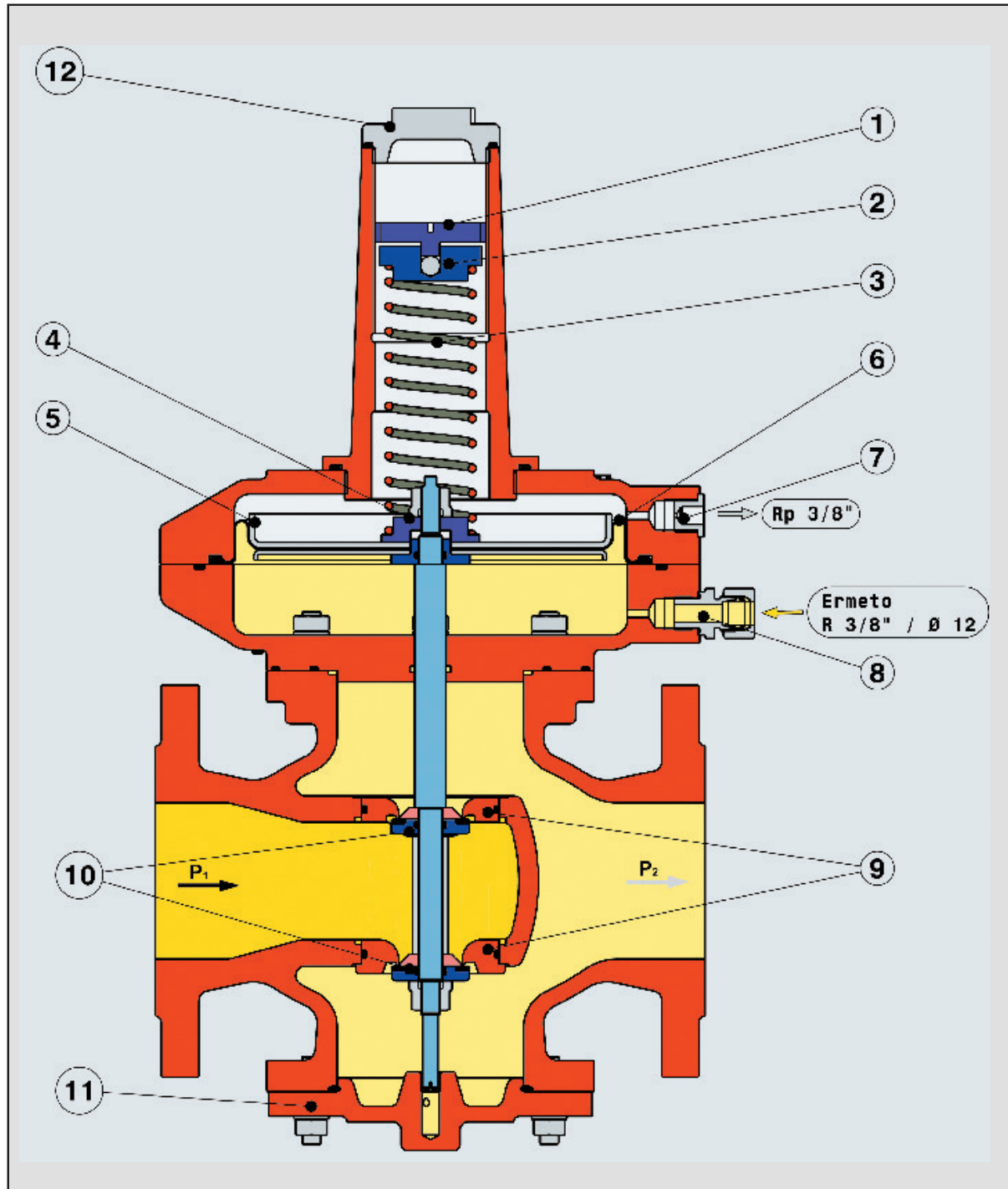


Install space -spring - X

R 100 DN 50-100	210mm
R 100 DN 150/200	410mm

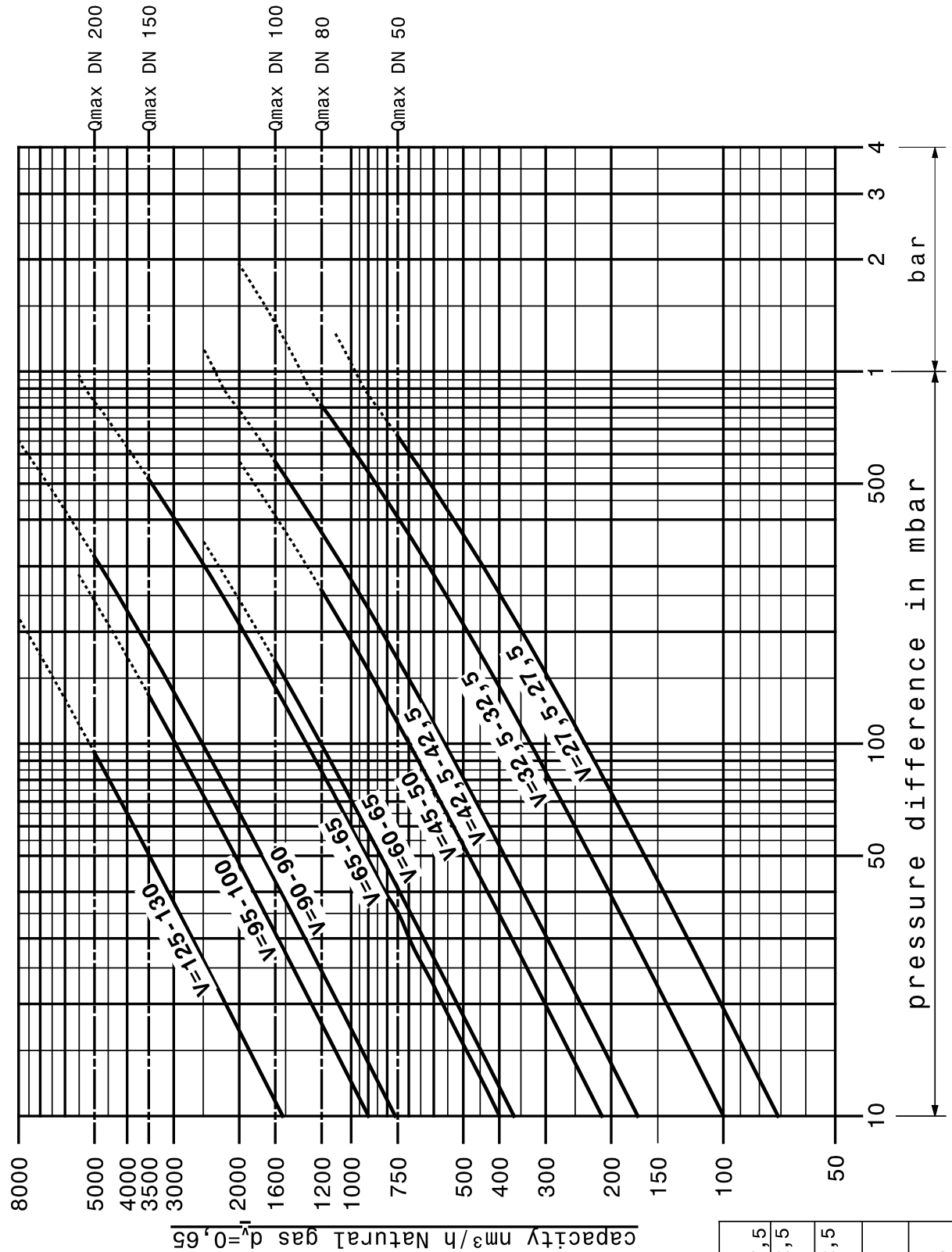


R 100



- | | | | |
|---|--------------------------|----|----------------------|
| 1 | Pressure setting screw | 7 | Breathing connection |
| 2 | Spring disc | 8 | Impulse connection |
| 3 | Setting spring | 9 | Regulator valve seat |
| 4 | Feet disc | 10 | Valve disc |
| 5 | Diaphragm disc | 11 | Cover plate |
| 6 | Regulator main diaphragm | 12 | Cap |

R 100



R 100	
DN 050	- 27,5/27,5
DN 080	- 32,5/32,5
DN 100	- 42,5/42,5
DN 150	- 65/65
DN 200	- 90/90
	125/130

R 100 DN 50

$P_e = P_u$ max. 4 bar
 $P_a = P_d$ 8-1.200mbar
 Q max. 750 Nm³/h
 (1.100) Nm³/h

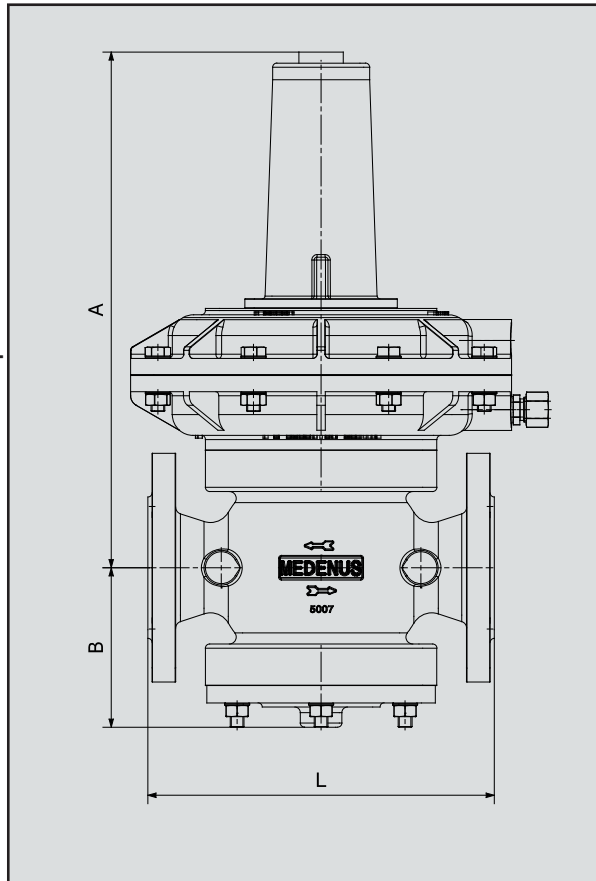
KG-Werte
V 27,5-27,5 924 Nm³/h

Gas characteristics:
 suitable for gas of the gas families 1, 2, 3 and other neutral gaseous media.

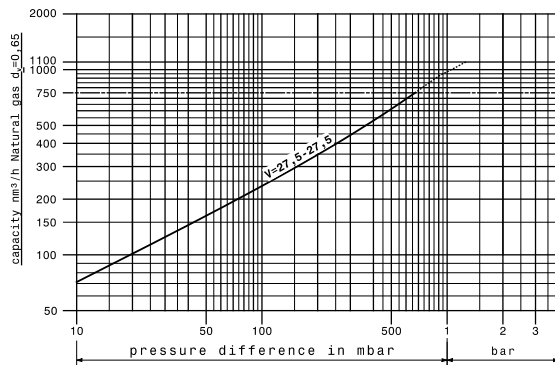
Ambient-temperature -20...+60°C

Fitting position any

Flow speed 30m/s
 (limit 60m/s)



Special design:
 high pressure shaft
 bigger valve seats
 internal parts stainless steel-viton



$P_d < 130$ mbar* 19kg PN16 A=372mm B=115mm L=250mm $\Phi 385$	$P_d < 750$ mbar* 17kg PN16 A=372mm B=115mm L=250mm $\Phi 275$	$P_d < 1.200$ mbar* 14kg PN16 A=398mm B=115mm L=250mm $\Phi 160$

*for higher pressure high pressure shaft

R 100 DN 80

$P_e = P_u$ max. 4 bar
 $P_a = P_d$ 8-1.200mbar
 Q max. 1.200 Nm³/h
 (2.000) Nm³/h

KG-Values

V 32,5-32,5 1.285 Nm³/h
V 45-50 2.727 Nm³/h

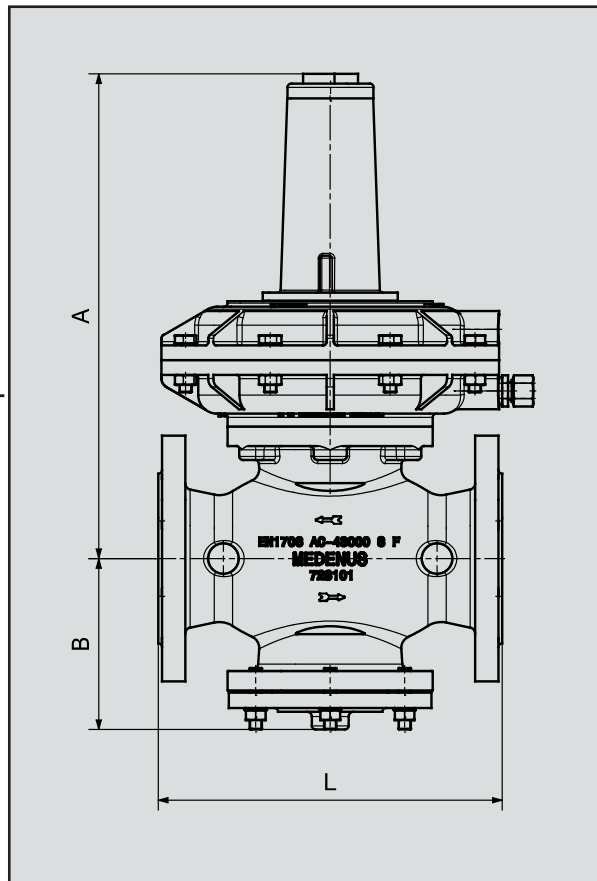
Gas characteristics:

suitable for gas of the gas families 1, 2, 3 and other neutral gaseous media.

Ambient-temperature -20...+60°C

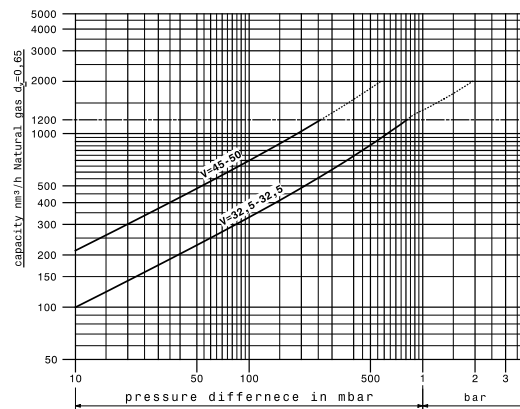
Fitting position any

Flow speed 30m/s
 (limit 60m/s)



Special design:

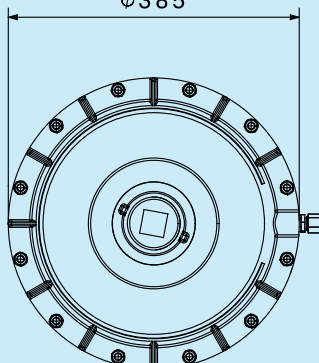
high pressure shaft
 bigger valve seats
 internal parts
 stainless steel-viton



$P_d < 130$ mbar*

22kg
PN16

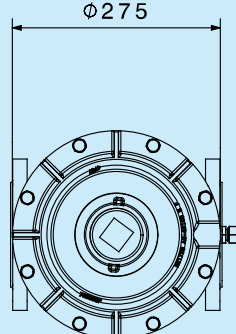
A=394mm
B=138mm
L=280mm
 $\phi 385$



$P_d < 750$ mbar*

19kg
PN16

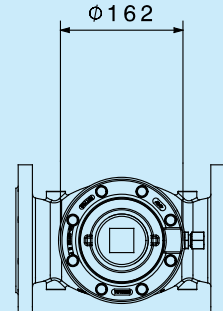
A=395mm
B=138mm
L=280mm
 $\phi 275$



$P_d < 1.200$ mbar*

16kg
PN16

A=421mm
B=138mm
L=280mm
 $\phi 162$



*for higher pressure high pressure shaft

R 100 DN 100

$P_e = P_u$ max. 4 bar
 $P_a = P_d$ 8-1.200mbar
 Q max. 1.600 Nm³/h
 (2.500) Nm³/h

KG-Werte

V 42,5-42,5 2.374 Nm³/h
V 60-65 4.704 Nm³/h

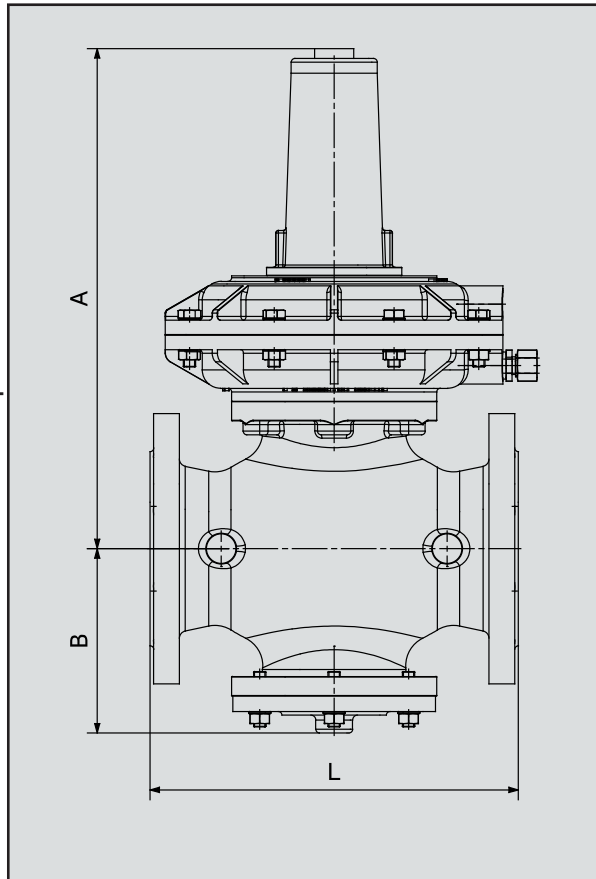
Gas characteristics:

suitable for gas of the gas families 1, 2, 3 and other neutral gaseous media.

Ambient-temperature -20...+60°C

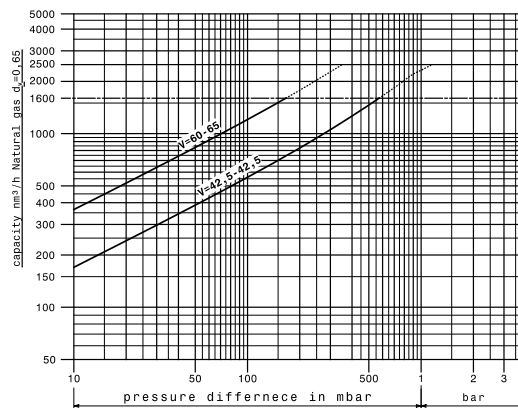
Fitting position any

Flow speed 30m/s
(limit 60m/s)



Special design:

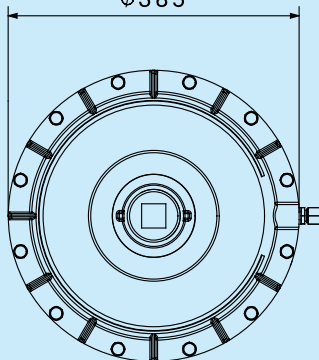
high pressure shaft
 bigger valve seats
 internal parts
 stainless steel-viton



P_d < 130 mbar*

25kg
PN16

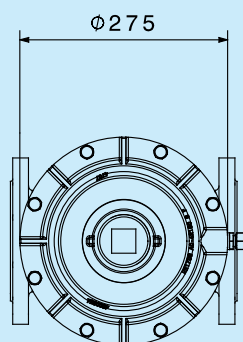
A=407mm
B=150mm
L=300mm
Ø385



P_d < 750 mbar*

22kg
PN16

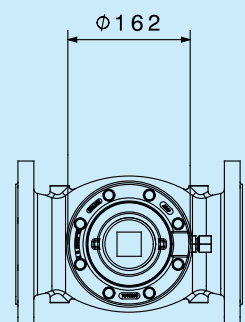
A=407mm
B=150mm
L=300mm



P_d < 1.200 mbar*

19kg
PN16

A=433mm
B=150mm
L=300mm



*for higher pressure high pressure shaft

R 100 DN 150

$P_e = P_u$ max. 4 bar
 $P_a = P_d$ 8-1.200mbar
 Q max. 3.500 Nm³/h
 (5.500) Nm³/h

KG-Values

V 65-65 5.141 Nm³/h
V 95-100 11.568 Nm³/h

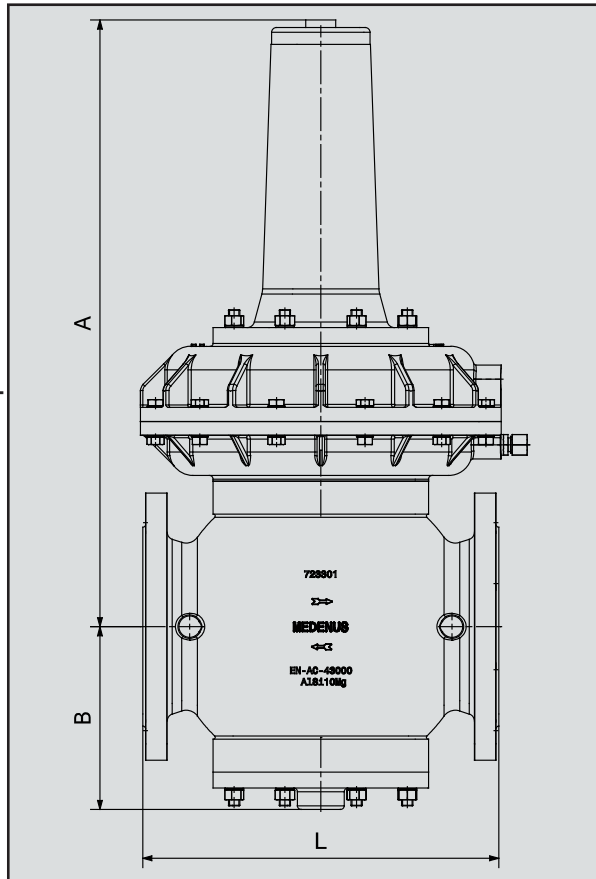
Gas characteristics:

suitable for gas of the gas families 1, 2, 3 and other neutral gaseous media.

Ambient-temperature -20...+60°C

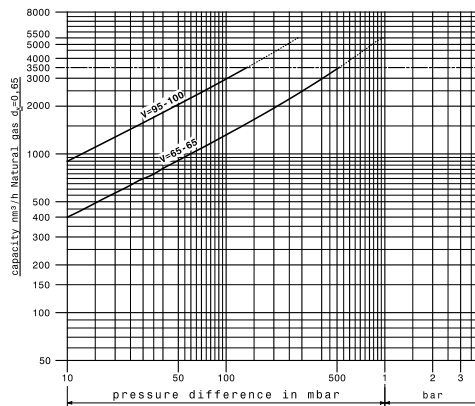
Fitting position any

Flow speed 30m/s
 (limit 60m/s)



Special design:

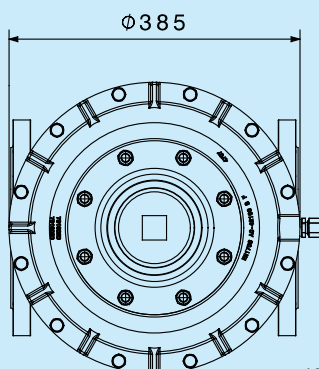
high pressure shaft
 bigger valve seats
 internal parts
 stainless steel-viton



$P_d < 250$ mbar*

65kg
PN16

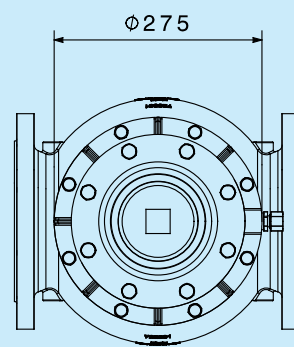
A=647mm
B=195mm
L=380mm



$P_d < 1.200$ mbar*

62kg
PN16

A=694mm
B=195mm
L=380mm



*for higher pressure high pressure shaft

R 100 DN 200

Pe = Pu max. 1 bar

(90/396/EEC)

Pe = Pu max. 4 bar

(97/23/EC)

Pa = Pd 8-1.200mbar

Q max. 5.000 Nm³/h
(8.000) Nm³/h

KG-Values

V 90-90 9.797 Nm³/h

V 125-130 19.681 Nm³/h

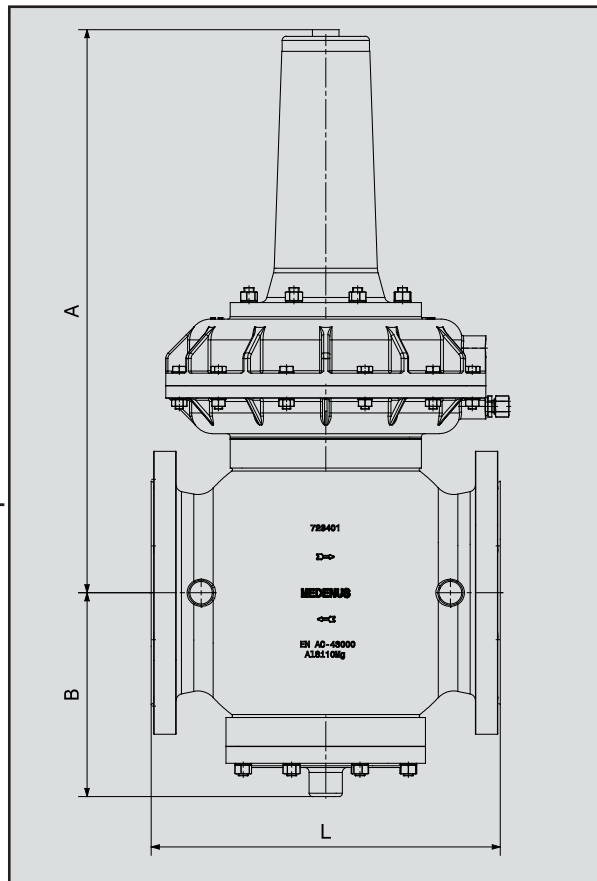
Gas characteristics:

suitable for gas of the gas families 1, 2, 3 and other neutral gaseous media.

Ambient-temperature -20...+60°C

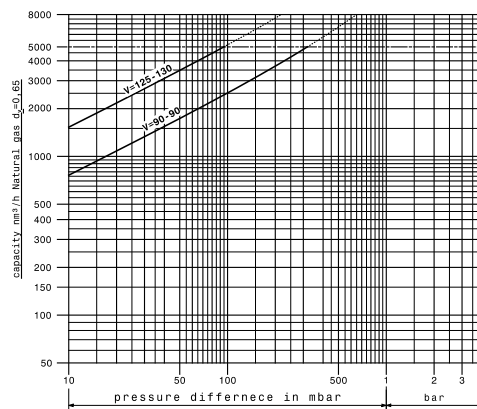
Fitting position any

Flow speed 30m/s
(limit 60m/s)



Special design:

high pressure shaft
bigger valve seats
internal parts
stainless steel-viton



Pd < 250 mbar*

64kg

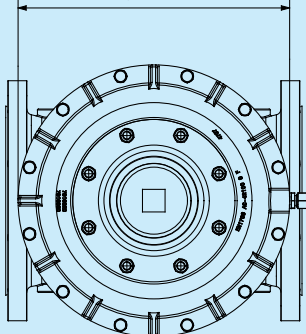
PN10

A=677mm

B=245mm

L=420mm

Ø385



Pd < 1.200 mbar*

60kg

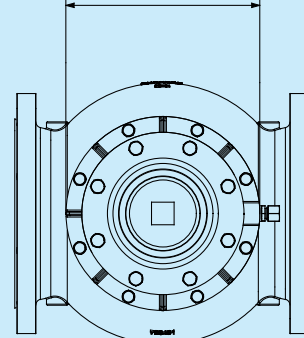
PN10

A=724mm

B=245mm

L=420mm

Ø275



*for higher pressure high pressure shaft