

R 50

Construction and function of the R 50

The gas pressure regulator type R 50 serves to ensure constant outlet pressure at varying flow capacity.

The single seat valve depends on the inlet pressure. Therefore it is necessary to take corrections at the setting spring in case of larger variations of the inlet pressure.

Because the diaphragm is only loaded by the spring power a quick regulation of the pressure is ensured.

The gas flows through the regulator housing in arrow direction. the main diaphragm is actuates via an impulse bore from the outlet side by pressure. The required outlet pressure is adjusted at the setting spring.

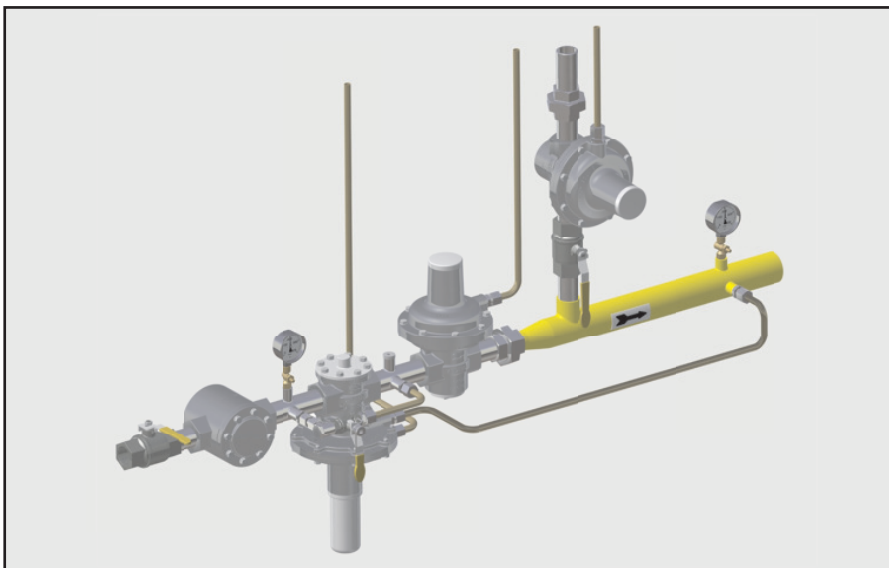
The valve seat remains open as long as the outlet pressure is below the seat value. When reaching the set point the regulator valve closes.



Wheel in use materials

Housing:	Silumin casting
Diaphragm cap:	Silumin casting
Internal parts:	stainless
Diaphragms:	50 NBR
Valve discs:	50 NBR, vulcanized

R 50 in a gas train

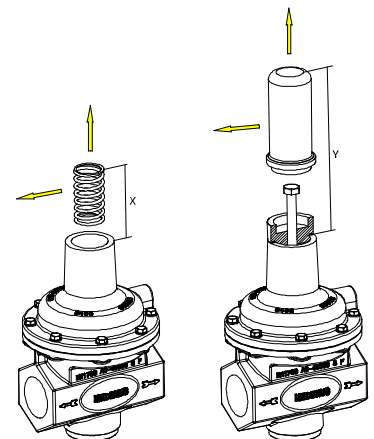


installation space - spring - X

R 50 1" / 1,5" / 2" 100mm

installation space - cap by high pressure screw spindle - Y

R 50 1" / 1,5" / 2" 177mm



R 50

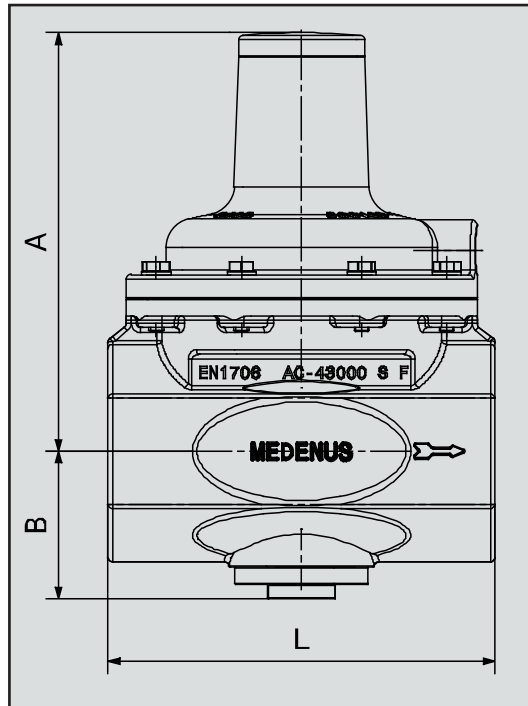
Pe max. 3 bar
Q max. 100 Nm³/h - R1"
 300 Nm³/h - R1½", R2"

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

**Ambient-
 temperature** -20...+60°C

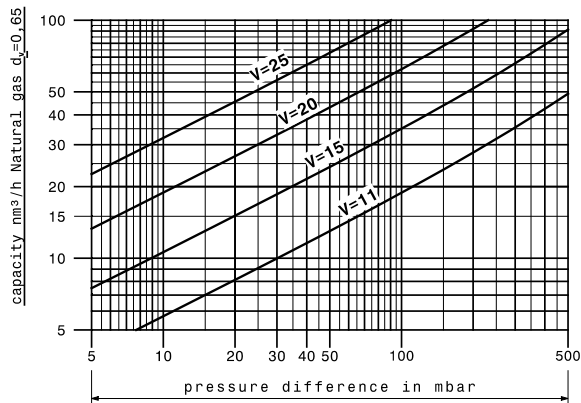
Fitting position any

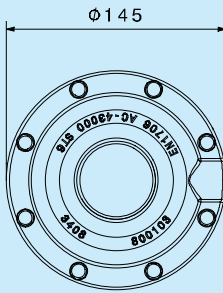
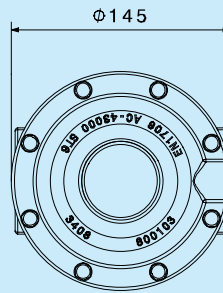
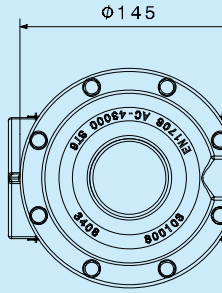
Flow speed 30m/s
 (limit 60m/s)



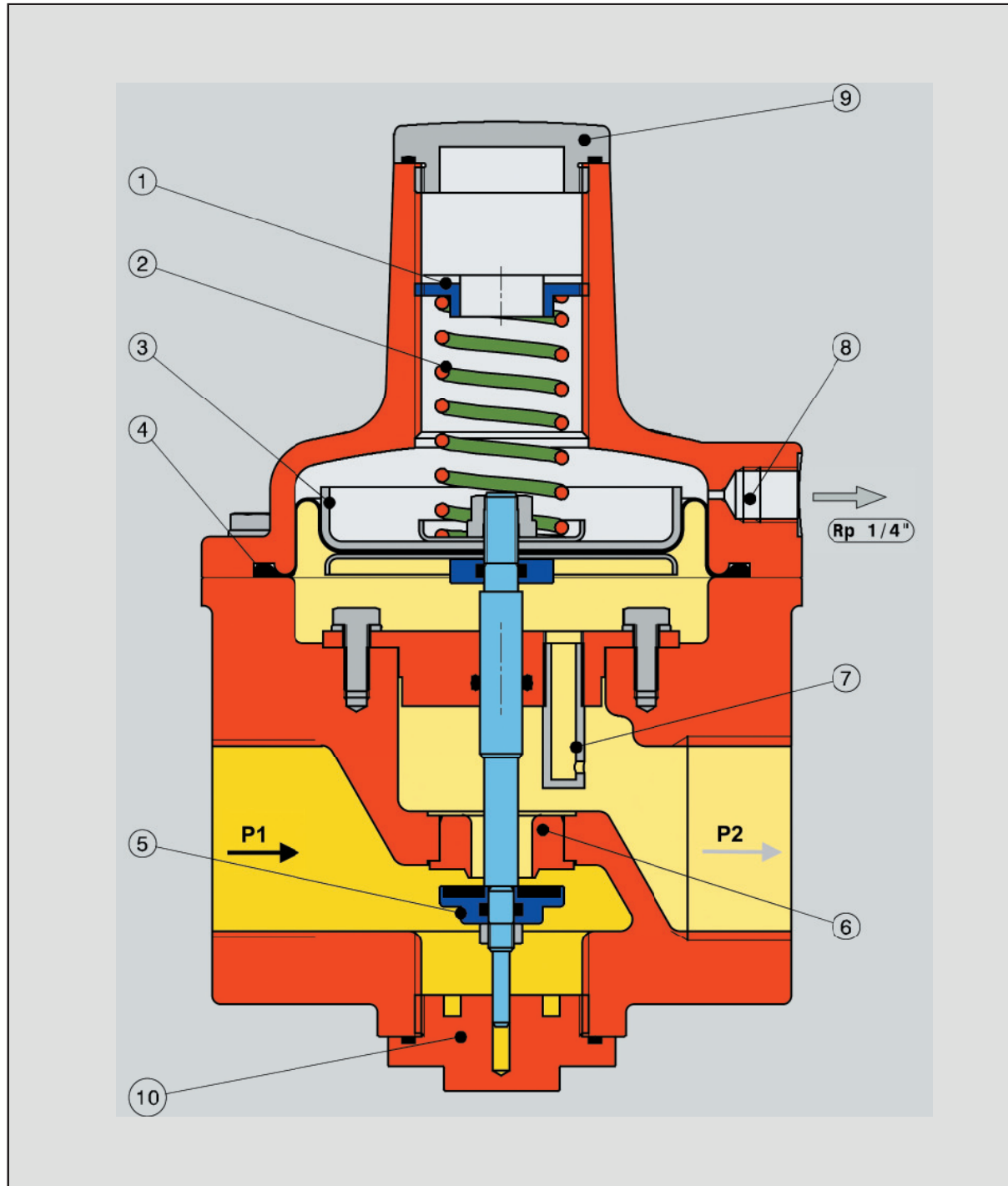
Special design:

- HD-design (Pö>400mbar)
- HD-Spindle (Pö>900mbar)
- Valve seat stainless
- Valve disc stainless+Viton
- Diaphragm Viton



R 1"	R 1½"	R 2"
2,5kg	3,5kg	3,5kg
Q max. 100 Nm ³ /h	Q max. 300 Nm ³ /h	Q max. 300 Nm ³ /h
A=173mm	A=173mm	A=173mm
B= 53mm	B= 61mm	B= 61mm
L=100mm	L=140mm	L=160mm
		

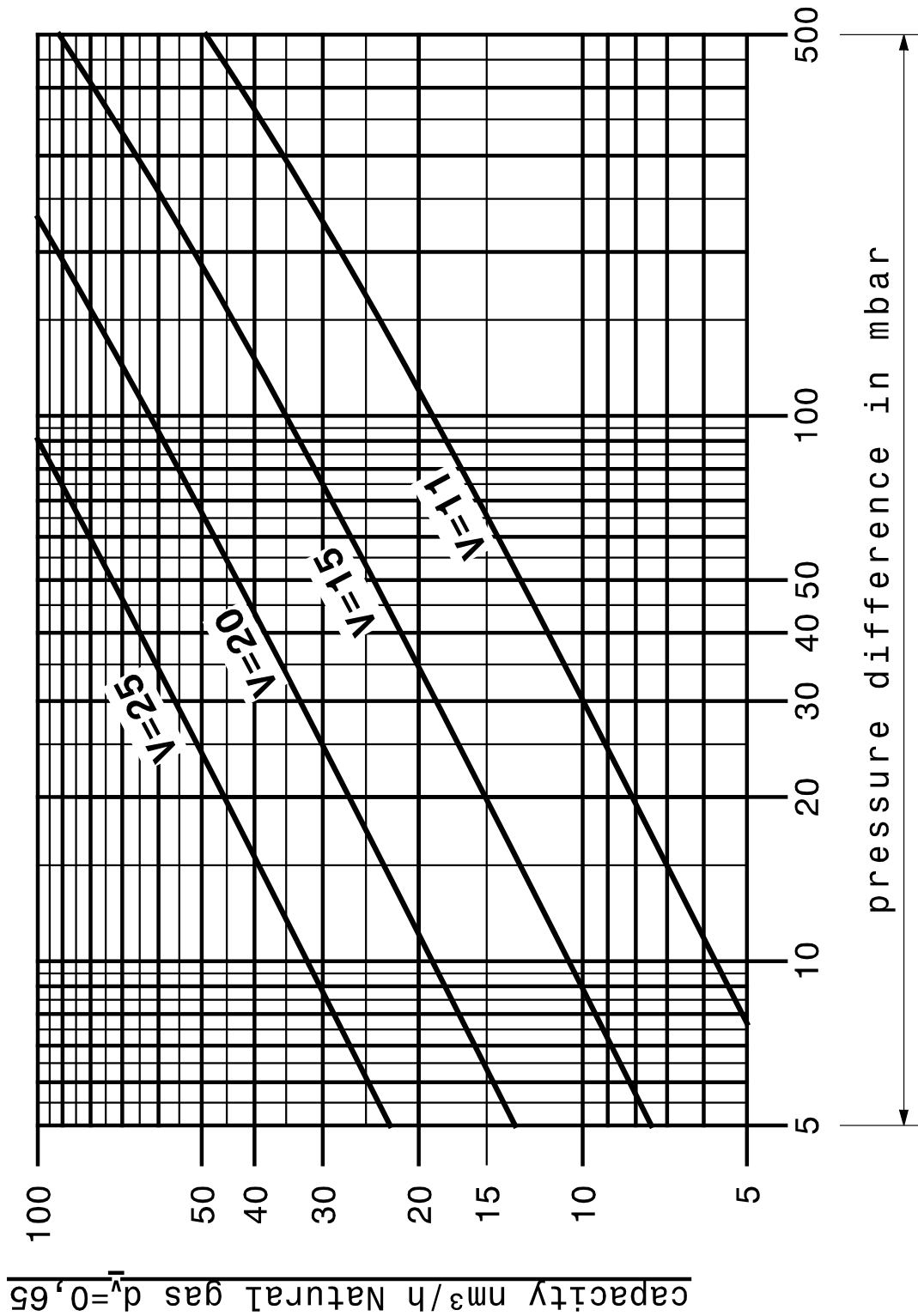
R 50



- 1 Pressure setting screw
- 2 Setting spring
- 3 Diaphragm disc
- 4 Regulator main diaphragm
- 5 Valve disc

- 6 Regulator valve seat
- 7 internal impulse
- 8 Breathing connection
- 9 Cap
- 10 Cover plate

R 50



<u>R 50</u>	
R 1" -	V=11
	V=15
	V=20
R 1 1/2" -	V=11
	V=15
	V=20
	V=25
R 2" -	V=11
	V=15
	V=20
	V=25