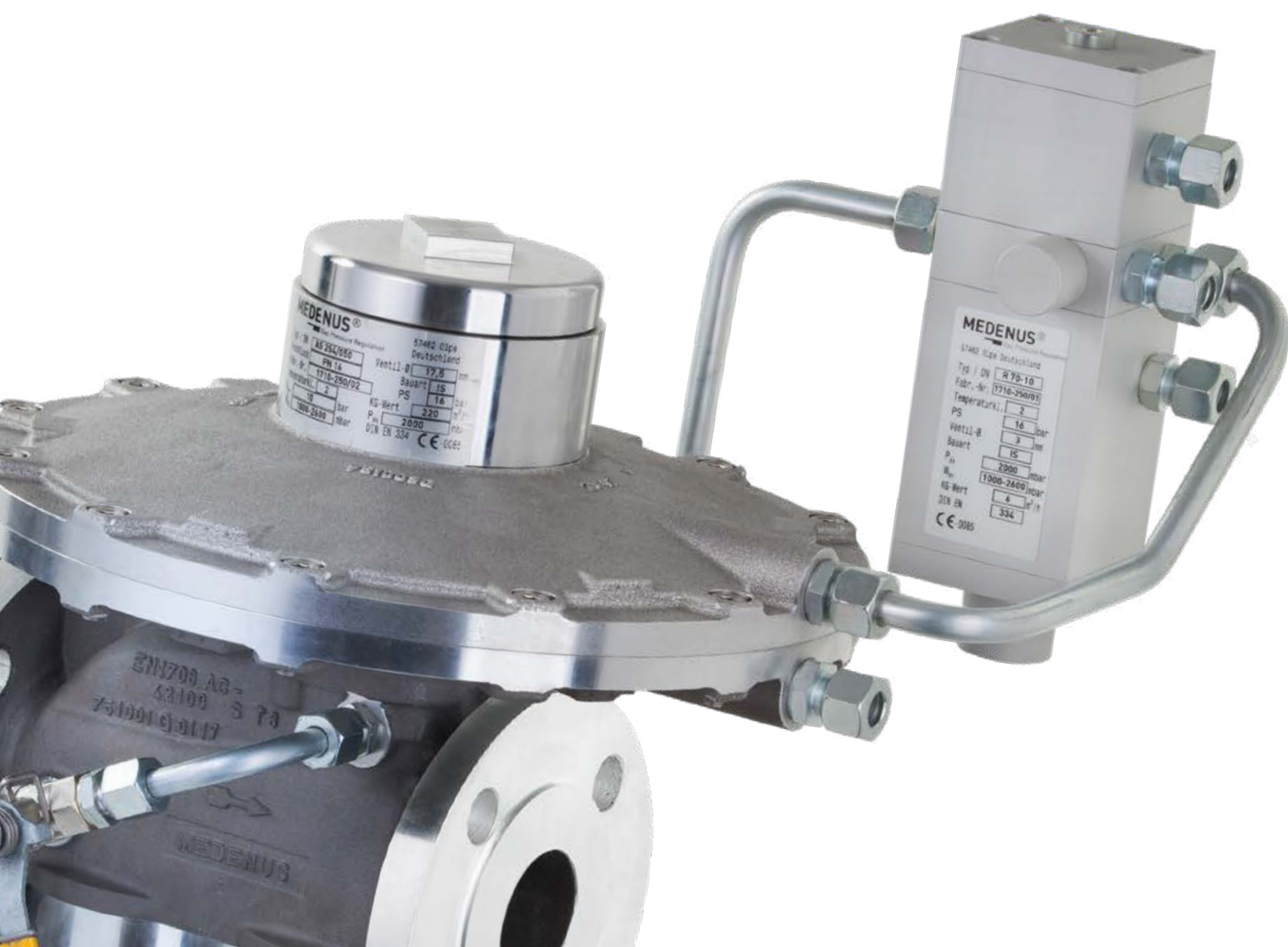


# MEDENUS

Gas Pressure Regulation



General Catalogue MEDENUS 2019/2020

EN

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## List of abbreviations and formula symbols

ATC	acceptance test certificate	$P_{d20/2}$	outlet pressure R70-20 with IP converter 1:2 for follow setpoint adjustment
BV	Vent valve		
DN	nominal size	$P_{d10}$	outlet pressure R70-10
DVGW	Deutsche Vereinigung des Gas- und Wasserfaches e.V.	$Q_n$	standard volumetric flow rate
f	conversion factor gases	$Q_{min}$	minimum volumetric flow rate
FPR	fluoro polymer rubber	$Q_{max}$	maximum volumetric flow rate
HD	high-pressure	RE	control unit
HDS	high-pressure screw spindle	RSD	throttle valve
$H_{s,n}$	calorific value	SSV	safety shut-off valve
$K_G$	KG-value	SRV	safety relief valve
$p_d$	outlet pressure	$t_{Gas}$	gas temperature
$p_{ds\ o,u}$	setpoint of the response pressure	VA	stainless steel
PS	maximum allowable pressure	$w_d$	outlet gas velocity
$p_u$	inlet pressure	$w_u$	inlet gas velocity
$P_{dF}$	pneumatic following target value of I/P converter	$\rho_n$	gas density
$P_{d100}$	outlet pressure R70-100	$\Delta p$	differential pressure
$P_{d20}$	outlet pressure R70-20		

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# INFORMATION REGARDING THE CATALOGUE

Please observe the following information when using this catalogue.

## **Selecting the devices:**

For all devices, information is available on the correct selection of the products in question. If you require assistance in selecting a suitable product please get in-touch using the inquiry form at the back of this price list.

## **Special versions:**

If you cannot find a suitable product in our catalogue, please feel free to contact us. We manufacture a large number of customized products and may be able to help you find a solution for your problem.

## **Training courses:**

We offer both standard seminars in small groups of no more than 8 participants and customer-specific training courses.





## EXPRESS

You're in a hurry? We will be glad to help you!

If you require your valve even quicker than our standard delivery times then please get in-touch. Once reviewed by our production team, we will advise what options are available. We will advise which possibilities we have.

# TECHNICAL THEORY

## Calculation of the required $K_G$ -value

The standard flow rate value for a completely open actuator ( $p_u = 2$  bar;  $p_d = 1$  bar) corresponds to the  $K_G$ -value.

The  $K_G$ -value refers to natural gas of density  $0.83 \text{ kg/m}^3$  at  $15^\circ \text{C}$ . For other gases, a flow rate equivalent to that of natural gas is to be expected.

$$Q_{n \text{ natural gas}} = Q_{n \text{ Gas}} / f$$

$$p_d / p_u > 0,5$$

$K_G$  value at a subcritical pressure ratio

$$K_G = Q_n / \sqrt{p_d \cdot (p_u - p_d)}$$

$$p_d / p_u \leq 0,5$$

$K_G$ -value at a supercritical pressure ratio

$$K_G = 2 \cdot Q_n / p_u$$

Note: all calculated pressures are absolute pressures.

## Device selection

The device is selected on the basis of its  $K_G$ -value from the table of flow rate coefficients.

Note: For spring-loaded devices, a capacity reserve of 10-20 % is recommended in order to comply with the accuracies given.

For the  $Q_{\min}$  small load, at an SZ of 2.5

$$Q_{\min} = 0,025 \cdot K_G \cdot p_{u \text{ max}}$$

Note:  $Q_{\min}$  small load - When starting the burner or at  $Q_{\min}$ , the value should be at least 1 % of the  $K_G$ -value.

## Checking the gas velocities

$$w = 380 \cdot Q_n / (DN^2 \cdot p_{\text{abs}})$$

Note: The factor 380 refers to an operating gas temperature from approx.  $15^\circ \text{C}$  to  $20^\circ \text{C}$ . For other temperatures, the velocity must be corrected as follows:

$$w_{\text{corr}} = w \cdot (t_{\text{gas}} + 273.15) / 290$$

Recommended max. gas velocity at the inlet flange: 50 - 70 m/s lower value for deflections upstream of the regulating valve, 20 m/s for filters connected upstream.

Recommended max. gas velocity at the outlet flange: 100 - 200 m/s lower value for reducing noise emission.

Recommended max. gas velocity at the impulse tap: 25 m/s Lower value for outlet pressures below 100 mbar.

## EXAMPLE

$$p_{u \text{ min}} 5,0 \text{ bar} / p_{u \text{ max}} 8,0 \text{ bar}$$

$$p_{d \text{ min}} 0,2 \text{ bar} / p_{d \text{ max}} 0,5 \text{ bar}$$

$$Q_{n \text{ min}} 800 \text{ m}^3/\text{h} / Q_{n \text{ max}} 1.500 \text{ m}^3/\text{h}$$

Values as absolute pressures

$$1,5 \text{ bar} / 6 \text{ bar} = 0,25 < 0,5$$

→ supercritical pressure ratio

$$K_G = 2 \cdot 1500 / 6 = 500 \text{ (m}^3/\text{h)/bar}$$

RS 250 DN 50 VS 32,5

$K_G$ -Value: 750 (m<sup>3</sup>/h)/bar (regarding page 23)

$$Q_{\min} = 0,025 \cdot 750 \cdot 9 = 169 \text{ m}^3/\text{h}$$

Inlet and outlet nominal size of the pipeline

according to the selected device: 50 mm

Selected widening of the outlet pipeline: 150 mm

$$w_u = 380 \cdot 1500 / (50^2 \cdot 6) = 38 \text{ m/s}$$

$$w_d = 380 \cdot 1500 / (50^2 \cdot 1,5) = 152 \text{ m/s}$$

$$w_{\text{impuls}} = 380 \cdot 1500 / (150^2 \cdot 1,5) = 17 \text{ m/s}$$

The device selected in the example of nominal size DN 50 can be operated under these conditions.

## Characteristics of gases

Gas	f	H <sub>s,n</sub> [kWh/m³]	Gas	f	H <sub>s,n</sub> [kWh/m³]
Acetylene	0,84	16,25	Helium	2,15	-
Ammonia	1,04	4,83	Sewage gas	0,84	-
Butane	0,55	37,23	Carbon monoxide	0,81	3,51
Chlorine	0,51	-	Carbon dioxide	0,65	-
Landfill gas	ca. 0,80	-	Air	0,80	-
Natural gas L	1,00	9,77	Methane	1,08	11,06
Natural gas H	1,03	11,45	Propane	0,64	28,03
Ethane	0,78	19,55	Oxygen	0,76	-
Ethylene	0,97	16,516	Sulphur dioxide	0,53	-
Mine gas (30% CH <sub>4</sub> )	0,86	-	Nitrogen	0,81	-
			Hydrogen	3,04	13,43

## Pressure conversion factors

Unit	bar	mbar	Pa N/m²	at kp/cm²	atm	Torr mmHg mmQS	psi lbf/in2
1 bar	1	10 <sup>3</sup>	10 <sup>5</sup>	1,02	0,987	750	14,5
1 mbar	10 <sup>-3</sup>	1	100	1,02 10 <sup>-3</sup>	0,987 10 <sup>-3</sup>	0,750	0,0145
1 Pa 1 N/m²	10 <sup>-5</sup>	0,01	1	1,02 10 <sup>-5</sup>	0,987 10 <sup>-5</sup>	0,0075	1,45 10 <sup>-4</sup>
1 at 1 kp/cm²	0,981	981	0,981 10 <sup>5</sup>	1	0,968	736	14,22
1 atm	1,013	1013	1,013 10 <sup>5</sup>	1,033	1	760	14,696
1 Torr 1 mm Hg 1 mm QS	1,333 10 <sup>-3</sup>	1,333	133,322	1,36 10 <sup>-3</sup>	1,316 10 <sup>-3</sup>	1	1,934 10 <sup>-2</sup>
1 psi 1 lbf/in²	6,895 10 <sup>-2</sup>	68,95	6895	7,031 10 <sup>-2</sup>	0,06805	51,7	1

## Units conversion factors

	kWh	J = Ws = Nm
1 kWh	1	3,6 · 10 <sup>6</sup>
1 J = 1 Ws = 1 Nm	277,8 · 10 <sup>-9</sup>	1
1 PSh	0,7355	2,6476 · 10 <sup>6</sup>
1 kpm	2,724 · 10 <sup>-6</sup>	9,81
1 kcal	1,163 · 10 <sup>-3</sup>	4186,8
1 ft lbf	376,6 · 10 <sup>-9</sup>	1,3558
1 in ozf	1,96 · 10 <sup>-9</sup>	0,00706
1 ft pdl	1,17 · 10 <sup>-8</sup>	0,04214
1 SKE	8,141	31,83 · 10 <sup>6</sup>

## Notes

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# GAS PRESSURE REGULATOR | R 50

for simple applications with stable input pressure ( $\pm 5\%$ )



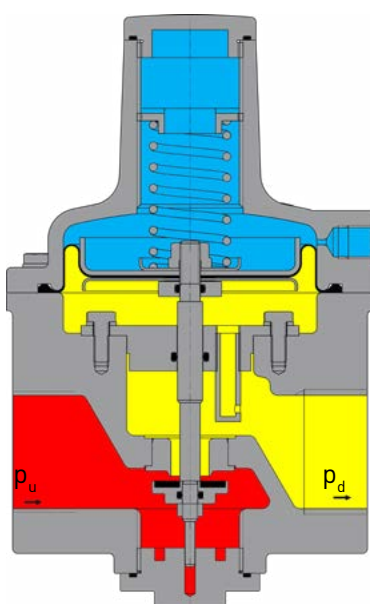
## Design und function

The spring-loaded gas pressure regulator R 50 has the function of keeping the outlet pressure of a gaseous medium constant within allowable limits. The gas pressure regulator is composed of the actuator housing and the „diaphragm assembly plus actuator“ functional unit. The gas flows through the actuator housing in the direction of the arrow. The internal measurement line port is used for passing the outlet pressure to be regulated to the bottom of the diaphragm comparator of the diaphragm assembly. It compares the actual value with the command variable preset by the force of the setpoint spring. The setpoint required in each case is set via the setting screw. Any deviation from the setpoint is transmitted by the valve stem to the actuator, which is adjusted such that the actual value is adjusted to the setpoint.

In case of zero flow, the actuator will close tight, causing the closing pressure to be established.

Got questions about the R 50?

[info@medenus.de](mailto:info@medenus.de) or in the product information [products.medenus.de/R50](https://products.medenus.de/R50)



## Characteristics

Inlet pressure $p_u$	max. 3 bar
Outlet pressure $p_d$	0,2 - 1,2 bar
Rp1": $Q_{max}$	100 Nm <sup>3</sup> /h
Rp1 1/2"; Rp2": $Q_{max}$	300 Nm <sup>3</sup> /h
PS	5 bar
Ambient temperature	-20 °C to +60 °C
Housing material	aluminium
Approval	according PED Gas families 2, 3 (DVGW - G 260) and non-aggressive gases. Other gases on request.
Gas specification	



## Versions

Nominal Size	Description	Outlet pressure ranges [mbar]
DN 25 Rp 1"	Standard	200 - 400
	High-pressure version	401 - 1.000
	High-pressure version with high-pressure screw spindle	1.001 - 1.200
DN 40 Rp 1½"	Standard	200 - 400
	High-pressure version	401 - 1.000
	High-pressure version with high-pressure screw spindle	1.001 - 1.200
DN 50 Rp 2"	Standard	200 - 400
	High-pressure version	401 - 1000
	High-pressure version with high-pressure screw spindle	1.001 - 1.200

## Options

- Suitable for oxygen
- Coating with epoxy resin in RAL colours
- Acceptance test certificate (ATC) to EN 10204/3.1

## Valve diameter

Nominal size	Valve diameter [mm]
DN 25 Rp 1"	11,0
	15,0
	20,0
DN 40 Rp 1½"	15,0
	25,0
DN 50 Rp 2"	15,0
	25,0

# THIS IS HOW YOU SELECT YOUR GAS PRESSURE REGULATOR R 50

- Determine the required flow rate
- Select a size that can handle the required flowrate
- Select the version of the valve that can do the required outlet pressure
- Select any options you require
- When ordering please advise the direction of the gas flow (from right to left or left to right)

# GAS PRESSURE REGULATOR | R 51



## Design and function

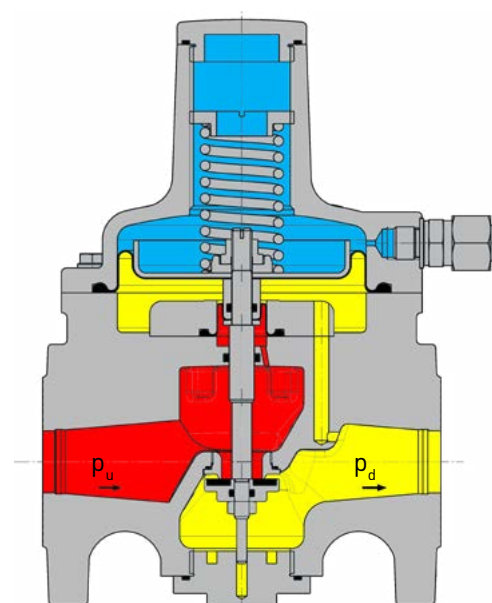
The spring-loaded gas pressure regulator R 51 has the function of keeping the outlet pressure of a gaseous medium constant within permissible limits, independently of the effect of interferences, such as changes in the inlet pressure and/or in the gas flow, in the connected regulating line on the outlet side. The regulator is composed of the actuator housing and "diaphragm assembly plus actuator" functional unit.

The valve seat model is pre-pressure-compensated. The gas flows through the actuator housing in the direction of the arrow. The internal or external measurement line port is used for passing the outlet pressure to be regulated to the bottom of the diaphragm comparator of the diaphragm assembly. It compares the actual value with the command variable preset by the force of the setpoint spring. The setpoint required in each case is set via the setting screw. Any deviation from the setpoint is transmitted by the valve rod to the actuator, which is adjusted such that the actual value is adjusted to the setpoint.

In case of zero flow, the actuator will close tight, causing the closing pressure to be established.

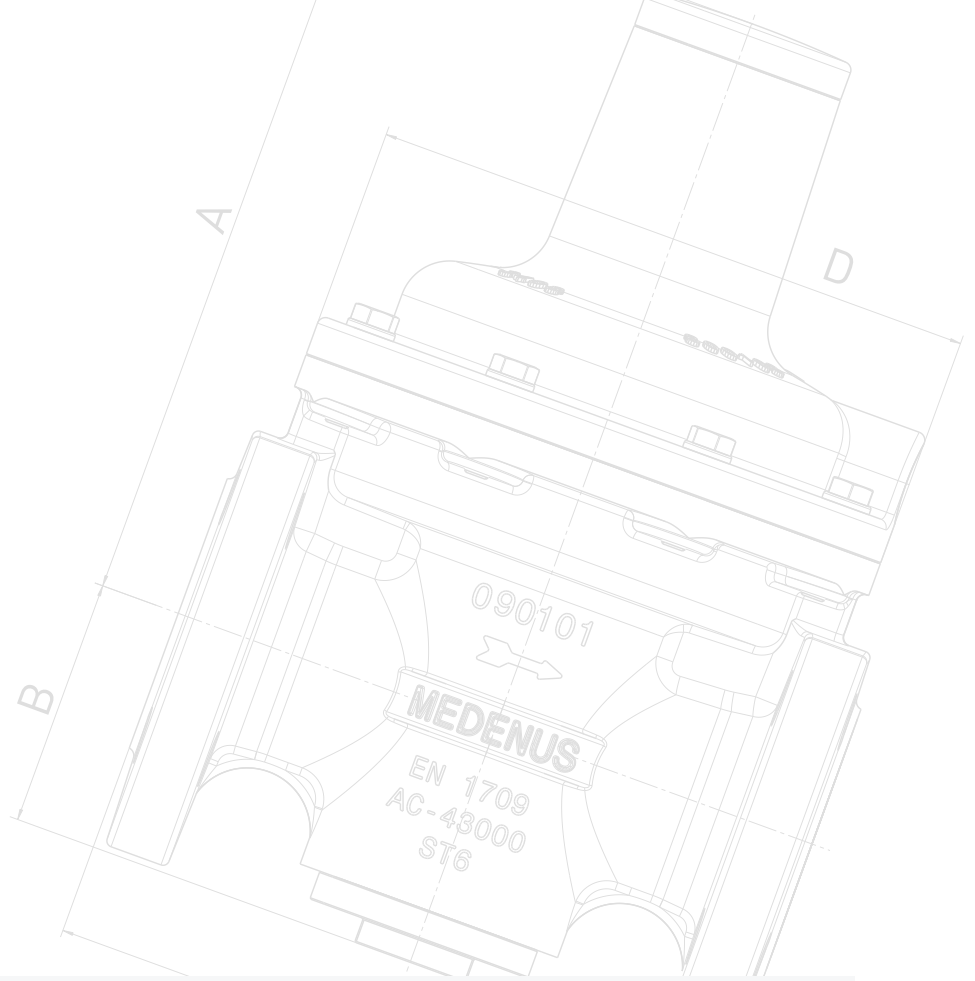
Got questions about the R 51?

[info@medenus.de](mailto:info@medenus.de) or in the product information [products.medenus.de/R51](https://products.medenus.de/R51)



## Characteristics

Inlet pressure $P_u$	16 bar
Outlet pressure $P_d$	0,02 - 3 bar
$K_G$ -value **	175 (m³/h)/bar
Ambient temperature	-20 °C to +60 °C
PS	16 bar
Housing Material	aluminium
Approval	according to PED
Gas specification	Gas families 2, 3 (DVGW - G 260) and non-aggressive gases. Other gases on request.
flange standard	DIN 1092 - PN 16



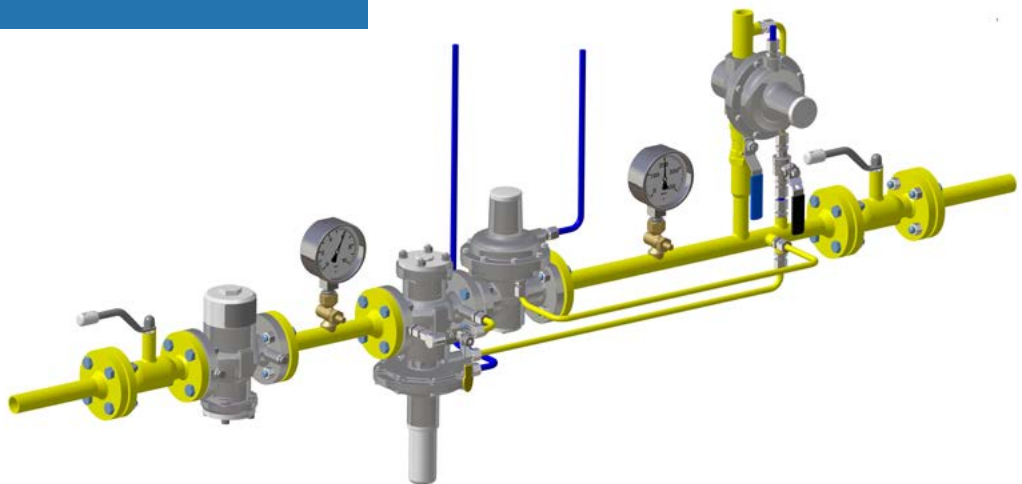
## Versions

Nominal size	Description	Outlet pressure ranges [mbar]
DN 25	Standard	20 - 575
	High-pressure version	420 - 1.000
	High pressure version with high-pressure screw spindle	1.001 - 3.000

## Options

- External measuring connection\*\*
- Vent valve **(BV)** for breather connection
- Suitable for oxygen
- Coating with epoxy resin in RAL colours
- Acceptance test certificate **(ATC)** to EN 10204/3.1

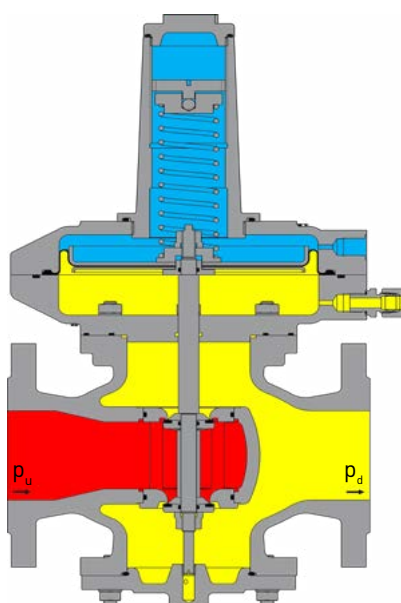
\*\* ) With an internal impulse line, the maximum accuracy class [AC] can only be reached at  $Q_n < 100 \text{ nm}^3/\text{h}$ .



# GAS PRESSURE REGULATOR | R 100



Got questions about the R 100?  
[info@medenus.de](mailto:info@medenus.de) or in the product information  
[products.medenus.de/R100](http://products.medenus.de/R100)



## Design and function

The spring-loaded gas pressure regulator R 100 has the function of keeping the outlet pressure of a gaseous medium constant within allowable limits, independently of the effect of interferences, such as changes in the inlet pressure and/or in the gas flow, in the connected regulating line on the outlet side. The gas pressure regulator is composed of the actuator housing and the "diaphragm assembly plus actuator" functional unit. The double valve seat model is pre-pressure-compensated. The gas flows through the actuator housing in the direction of the arrow. The external measurement line port is used for passing the outlet pressure to be regulated to the bottom of the diaphragm comparator of the diaphragm assembly. It compares the actual value with the command variable preset by the force of the setpoint spring. The setpoint required in each case is set via the setting screw. Any deviation from the setpoint is transmitted by the valve stem to the actuator, which is adjusted such that the actual value is adjusted to the setpoint. In case of zero flow, the actuator will close tight, causing the closing pressure to be established.

## $K_g$ - Value

Nominal size	Valve diameter [mm]	$K_g$ -value [m <sup>3</sup> /(h*bar)]
DN 50	27,5 - 27,5	800
DN 80	32,5 - 32,5	1.500
	45,0 - 50,0	2.500
DN 100	42,5 - 42,5	2.400
	60,0 - 65,0	4.700
DN 150	65,0 - 65,0	5.200
	95,0 - 100,0	12.000
DN 200	90,0 - 90,0	10.000
	125,0 - 130,0	20.200

## Characteristics

Inlet pressure $p_u$	max. 8 bar
Outlet pressure $p_d$	8 - 1.200 mbar
PS	8 bar
Ambient temperature	-20 °C to +60 °C
Housing Material	aluminium
Approval	according to PED Gas families 2, 3 (DVGW - G 260) and non-aggressive gases. Other gases on request.
Gas specification	
flange standard	DIN 1092 - PN 16 or ASME B 16.5-Class 150

## Versions

Nominal size	Description	Outlet pressure range [mbar]	High-pressure screw spindle in the pressure range [mbar]
DN 50	with RE 390	8 - 130	130 - 450
	with RE 275	130 - 450	450 - 1.100
	with RE 160	450 - 1.200	-
DN 80	with RE 390	8 - 130	130 - 450
	with RE 275	130 - 450	450 - 1.100
	with RE 160	450 - 1.200	-
DN 100	with RE 390	8 - 130	130 - 450
	with RE 275	130 - 450	450 - 1.100
	with RE 160	450 - 1.200	-
DN 150	with RE 385	8 - 350	350 - 850
	with RE 275	350 - 850	850 - 1.200
DN 200*	with RE 385	8 - 350	350 - 850
	with RE 275	350 - 850	850 - 1.200

\* Please note that we changed the DIN flange standard for DN200 from PN10 to PN16 with September 2018.

### Options

- High-pressure screw spindle (**HDS**) for convenient and accurate setting of the regulator despite high spring forces
- Safety diaphragm (**SM**) for the control device
- Breathing valve (**BV**) for the breathing connection (for non-dynamic rule tasks)
- Valve disc and valve pad made of stainless steel and FPR
- Throttle valve (**RSD**) for impulse line
- Suitable for oxygen
- Coating with epoxy resin in RAL colours
- Acceptance test certificate (**ATC**) to EN 102045/3.1

### Nominal size

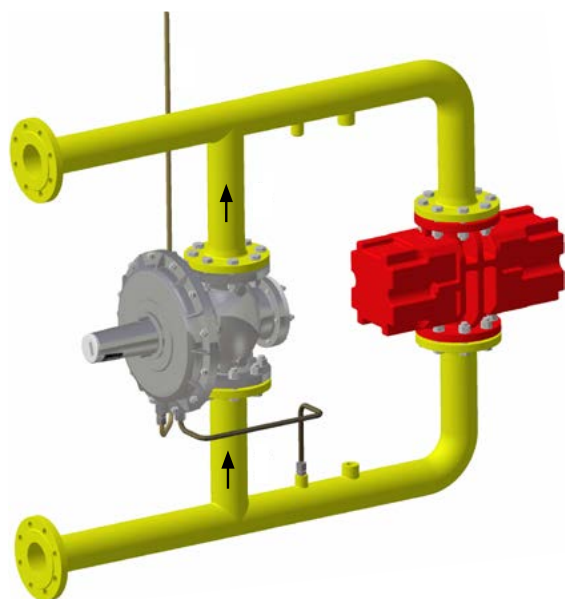
DN 50 - DN 100  
 DN 150 - DN 200  
 RE 275  
 RE 385  
 (BV-1/4") or  
 (BV-3/8")  
 DN 50 / DN 80  
 DN 100 / DN 150  
 DN 200  
  
 DN 50 - DN 100  
 DN 150 - DN 200

## THIS IS HOW YOU SELECT YOUR GAS PRESSURE REGULATOR R 100

- Determine the required KG value (see page 6)
- Using the KG value you have just calculated, select a suitably sized valve from the "K<sub>G</sub>-value" table below. Allow at least an additional 10% spare capacity in the valve you select
- Select the diaphragm assembly that has the relevant outlet pressure from the "Version" table below
- Select any options you require
- In addition, check the flow rates (see page 6)
- When ordering please advise the direction of the gas flow (from right to left or left to right). For safety reasons, please also provide us with your process details (P<sub>u</sub>, P<sub>d</sub>, Q<sub>n</sub> and the type of gas) so we can check your selection

# ROTARY REGULATOR | R 100 U

CE EAC



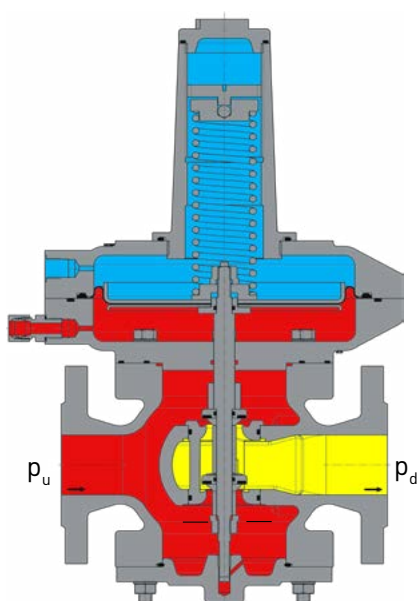
## Design and function

Circulation regulator for limiting the pressure in gas-pressure-increasing systems. Upon exceeding the opening pressure, the gas flows back to the suction side of the compressor.

Got questions about the R 100 U?  
[info@medenus.de](mailto:info@medenus.de) or in the product information  
[products.medenus.de/R100U](https://products.medenus.de/R100U)

## K<sub>G</sub> - Value

Nominal size	Valve diameter [mm]	K <sub>G</sub> -value [m <sup>3</sup> /(h*bar)]
DN 50	27,5 - 27,5	800
DN 80	32,5 - 32,5 45,0 - 50,0	1.500 2.500
DN 100	42,5 - 42,5 60,0 - 65,0	2.400 4.700
DN 150	65,0 - 65,0 95,0 - 100,0	5.200 12.000
DN 200	90,0 - 90,0 125,0 - 130,0	10.000 20.200



## Characteristics

Opening pressure $p_u$	8 - 1.200 mbar
Back pressure $p_d$	< $p_u$
PS	8 bar
Ambient temperature	-20 °C to +60 °C
Housing Material	aluminium
Approval	according to PED Gas families 2, 3 (DVGW - G 260) and non-aggressive gases. Other gases on request.
Gas specification	
flange standard	DIN 1092 - PN 16 or ASME B 16.5-Class 150

## Versions

Nominal size	Description	Outlet pressure range [mbar]	High-pressure screw spindle in the pressure range [mbar]
DN 50	with RE 390	8 - 130	130 - 450
	with RE 275	130 - 450	450 - 1.100
	with RE 160	450 - 1.200	-
DN 80	with RE 390	8 - 130	130 - 450
	with RE 275	130 - 450	450 - 1.100
	with RE 160	450 - 1.200	-
DN 100	with RE 390	8 - 130	130 - 450
	with RE 375	130 - 450	450 - 1.100
	with RE 160	450 - 1.200	-
DN 150	with RE 385	8 - 350	350 - 850
	with RE 275	350 - 850	850 - 1.200
DN 200*	with RE 385	8 - 350	350 - 850
	with RE 275	350 - 850	850 - 1.200

\* Please note that we changed the DIN flange standard for DN200 from PN10 to PN16 with September 2018.

### Options

- High-pressure screw spindle (**HDS**) for convenient and accurate setting of the regulator\*
- Safety diaphragm for the control device
- Breathing valve (**BV**) for the breathing connection (for non-dynamic rule tasks)
- Valve disc and valve pad made of stainless steel
- Coating with epoxy resin in RAL colours
- Acceptance test certificate (**ATC**) to EN 102045/3.1

### Nominal size

DN 50 - DN 100  
 DN 150 - DN 200  
 RE 275  
 RE 385  
 (BV-1/4") or  
 (BV-3/8")  
 DN 50 / DN 80  
 DN 100 / DN 150  
 DN 200  
 DN 50 - DN 100  
 DN 150 - DN 200

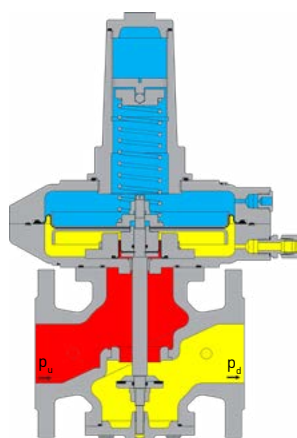
## THIS IS HOW YOU SELECT YOUR GAS PRESSURE REGULATOR R 100 U

- Determine the required KG value (see page 6).
- Using the KG value you have just calculated, select a suitably sized valve from the "KG - Value" table below. Allow at least an additional 10 % spare capacity in the valve you select.
- Select the diaphragm assembly that has the relevant outlet pressure from the "Version" table below.
- Select any options you require
- In addition, check the flow rates (see page 6)
- When ordering please advise the direction of the gas flow (from right to left or left to right). For safety reasons, please also provide us with your process details ( $P_u$ ,  $p_d$ ,  $Q_n$  and the type of gas) so we can check your selection.



# GAS PRESSURE REGULATOR | R 101

CE EAC



## Design and function

The spring-loaded gas pressure regulator R 101 has the function of keeping the outlet pressure of a gaseous medium constant within allowable limits, independently of the effect of interferences, such as changes in the inlet pressure and/or in the gas flow, in the connected regulating line on the outlet side. The gas pressure regulator is composed of the actuator housing and the "diaphragm assembly plus actuator" functional unit. The diaphragm assembly is pre-pressure-compensated. The gas flows through the actuator housing in the direction of the arrow. The external measurement line port is used to pass the outlet pressure to be regulated to the bottom of the diaphragm comparator of the diaphragm assembly. It compares the actual value with the command variable preset by the force of the setpoint spring. The setpoint required in each case is set via the setting screw. Any deviation from the setpoint is transmitted by the valve stem to the actuator, which is adjusted such that the actual value is adjusted to the setpoint. In case of zero flow, the actuator will close tight, causing the closing pressure to be established.

Got questions about the R 101?

[info@medenus.de](mailto:info@medenus.de) or in the production  
[products.medenus.de/R101](https://products.medenus.de/R101)

## K<sub>G</sub> - Value

### Characteristics

Inlet pressure $p_u$	max. 8 bar
Outlet pressure $p_d$	8 - 1.200 mbar
PS	8 bar
Ambient temperature	-20 °C to +60 °C
Mounting position	any
Housing Material	aluminium
Approval	according to PED Gas families 2, 3 (DVGW - G 260) and non-aggressive gases. Other gases on request.
Gas specification	
flange standard	DIN 1092 - PN 16 or ASME B 16.5-Class 150

Nominal size	Valve diameter [mm]	K <sub>G</sub> -Value [m <sup>3</sup> /(h*bar)]
DN 25	17,5	200
	27,5	460
DN 40	17,5	220
	27,5	600
	32,5	750
DN 50	32,5	1.000
	42,5	1.500
	52,5	1.800
DN 65	32,5	1.000
	42,5	1.500
	52,5	1.800
DN 100	65,0	3.500
	95,0	5.800

## Versions

Nominal size	Description	Recommended use of the high-pressure screw spindle in the pressure range [mbar]	Outlet pressure ranges [mbar]
DN 25	with RE 320	22 - 200	200 - 800
	with RE 205	200 - 750	750 - 1.200
	with RE 160	750 - 1200	-
DN 40	with RE 320	22 - 200	200 - 800
	with RE 205	200 - 750	750 - 1.200
	with RE 160	750 - 1200	-
DN 50	with RE 385	22 - 130	130 - 450
	with RE 275	130 - 400	400 - 1.100
	with RE 205	400 - 750	750 - 1.200
DN 65	with RE 385	22 - 130	130 - 450
	with RE 275	130 - 400	400 - 1.100
	with RE 205	400 - 750	750 - 1.200
DN 100	with RE 485	22 - 150	150 - 450
	with RE 385	150 - 350	350 - 850
	with RE 275	350 - 850	850 - 1.200

### Options

- High-pressure screw spindle **(HDS)** for convenient and accurate setting of the regulator despite high spring force
- Safety diaphragm for the control device
- Breathing valve **(BV)** for the breathing connection (for non-dynamic rule tasks)
- Throttle valve **(RSD)** for impulse line
- Suitable for oxygen
- Coating with epoxy resin in RAL colours
- Acceptance test certificate **(APZ)** to EN 102045/3.1

### Nominal size

DN 25 - DN 65  
 DN 100  
 RE 205 / RE 275  
 RE 320 / RE 385  
 RE 485  
 (BV-1/4") or  
 (BV-3/8")

DN 25 - DN 100

## THIS IS HOW YOU SELECT YOUR GAS PRESSURE REGULATOR R 101

- Calculate the required KG value (see page 6)
- Using the KG value you have just calculated, select a suitably sized valve from the "K<sub>G</sub>-value" table below. Allow at least an additional 10% spare capacity in the valve you select
- Select the diaphragm assembly that has the relevant outlet pressure from the "Version" table below
- Select any options you require
- In addition, check the flow rates (see page 6)
- When ordering please advise the direction of the gas flow (from right to left or left to right). For safety reasons, please also provide us with your process details (P<sub>u</sub>, P<sub>d</sub>, Q<sub>n</sub> and the type of gas) so we can check your selection

# OVERFLOW VALVE | R 101 U



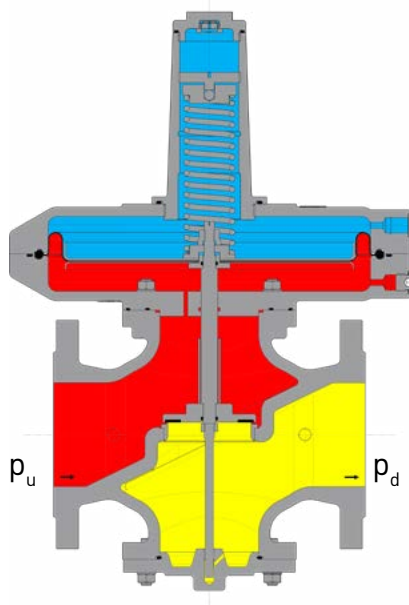
## Design and function

The R 101 U is a gas overpressure valve that opens from a set pressure. The diaphragm is charged from below through the impulse line (Ø8mm). When the pressure under the diaphragm becomes higher than the spring pressure, the valve will open, allowing the medium to escape. Since there is only spring load, the valve can be installed in any position.

Got questions about the R 101 U?  
[info@medenus.de](mailto:info@medenus.de) or in the product information  
[products.medenus.de/R101U](https://products.medenus.de/R101U)

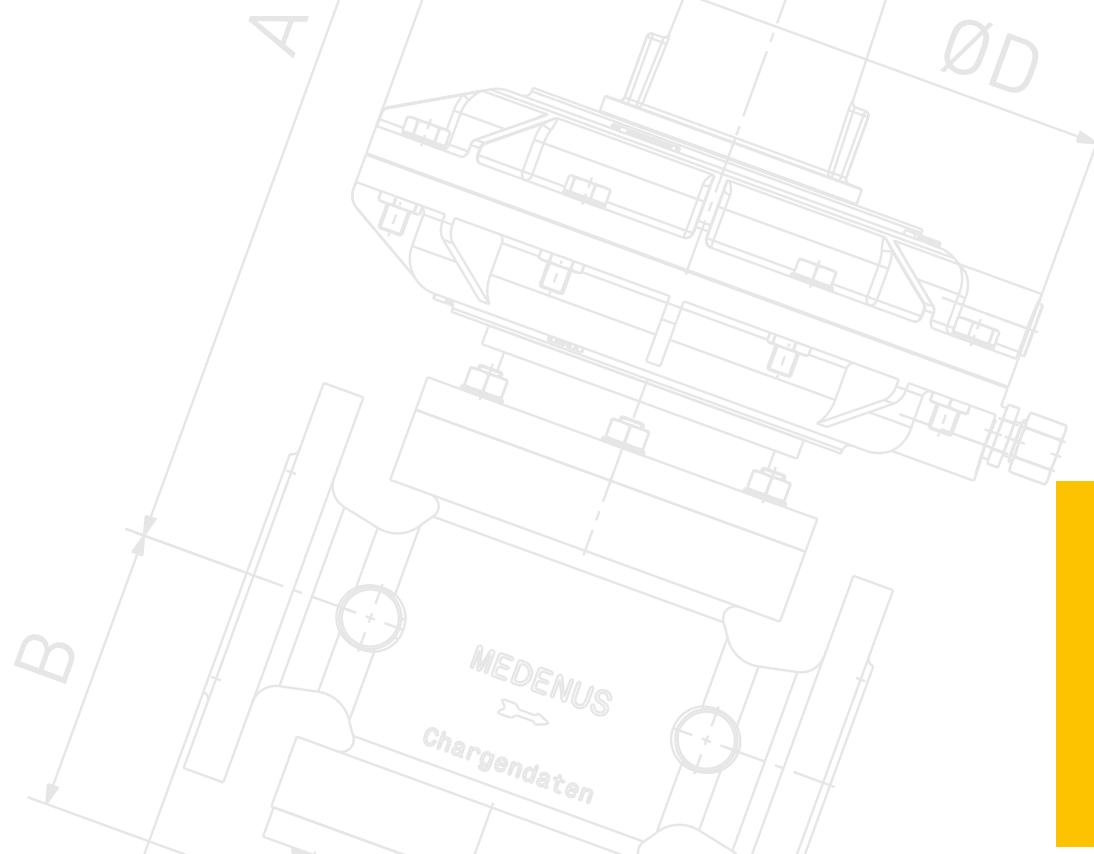
## K<sub>G</sub> - Value

Nominal size	Valve diameter [mm]	K <sub>G</sub> -Value [m³/(h*bar)]
DN 50	52,5	1.350
DN 65	52,5	1.650
DN 80	80,0	3.300
DN 100	80,0	3.900
DN 125	80,0	4.500
DN 150	125,0	8.000
DN 200	160,0	14.000



## Characteristics

Inlet pressure P <sub>u</sub>	50 mbar
PS	8 bar
Ambient temperature	-20 °C to +60 °C
Mounting position	any
Housing material	aluminium
Gas specification	Gas families 2, 3 (DVGW - G 260) and non-aggressive gases. Other gases on request.
flange standard	DIN 1092 - PN 16 or ASME B 16.5-Class 150



## Versions

Nominal size	Description	Outlet pressure ranges [mbar]
DN 50	with RE 390	5 - 50
DN 65	with RE 390	5 - 50
DN 80	with RE 390	5 - 50
DN 100	with RE 390	5 - 50
DN 125	with RE 390	5 - 50
DN 150	with RE 385	5 - 50
DN 200*	with RE 385	5 - 50

\* Please note that we changed the DIN flange standard for DN200 from PN10 to PN16 with September 2018.

## Options

- Coating with epoxy resin RAL colors
- Acceptance test certificate **(ATC)** to EN 10204/3.1

## Nominal size

DN 50 - DN 100  
DN 125 - DN 200

# NOTE ON DEVICE SELECTION GAS PRESSURE REGULATOR R 101 U

Due to a very wide variation in applications and specific requirements of the gas pressure regulators, we would ask you to contact us for the detailed design of the devices.

# REGULATOR FOR GAS TORCHES | R 101 US



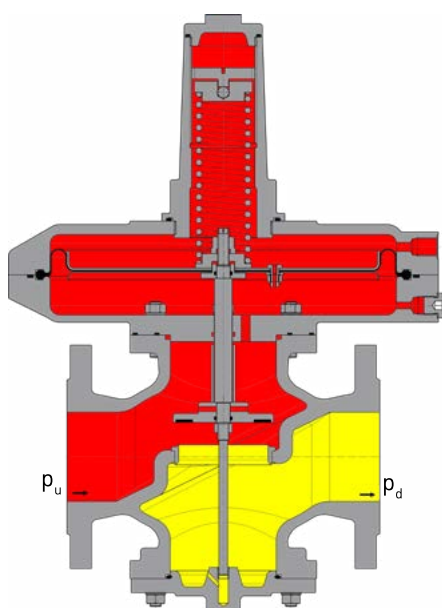
## Design and function

The R 101 US is a gas pressure control valve controlled via a solenoid valve.

When the solenoid valve is closed, the open bore in the diaphragm ensures that the pressure on both sides of the diaphragm in the diaphragm gas will flow through the bore in the diaphragm as in the closed solenoid valve. However, the gas can escape more quickly through the now open solenoid valve through a larger bore than the gas that enters through the bore in the membrane. As a result, higher pressure builds up under the diaphragm, resulting in the valve being opened.

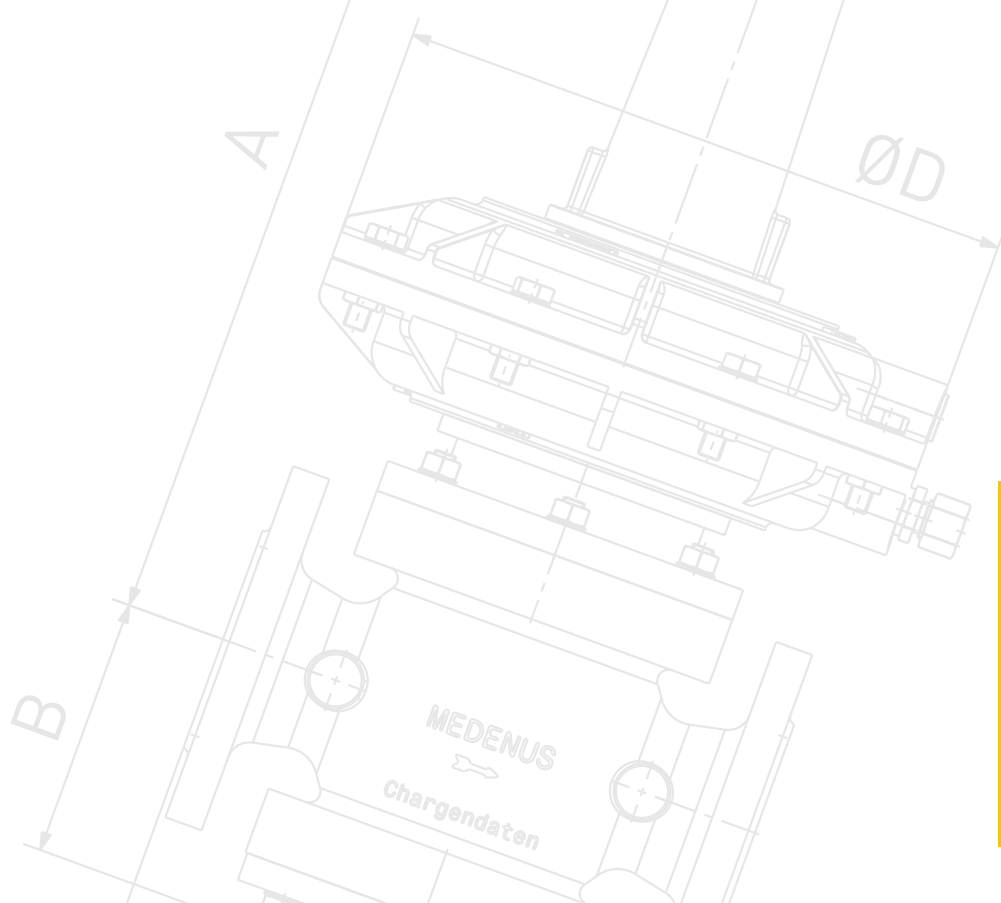
Got questions about the R 101 US?

[info@medenus.de](mailto:info@medenus.de) or in the product information [products.medenus.de/R101US](https://products.medenus.de/R101US)



## Characteristics

Inlet pressure $p_u$	max. 5 - 50 mbar
Outlet pressure $p_d$	$< p_u$
PS	8 bar
Ambient temperature	-20 °C to +60 °C
Mounting position	any
Housing material	aluminium Gas families 2, 3 (DVGW - G 260) and non- aggressive gases. Other gases on request.
Gas specification	
flange standard	DIN 1092 - PN 16 or ASME B 16.5-Class 150



## Versions

Nominal size	Description	Outlet pressure ranges [mbar]
DN 50	with RE 390	5 - 50
DN 65	with RE 390	5 - 50
DN 80	with RE 390	5 - 50
DN 100	with RE 390	5 - 50
DN 125	with RE 390	5 - 50
DN 150	with RE 385	5 - 50
DN 200*	with RE 385	5 - 50

\* Please note that we changed the DIN flange standard for DN200 from PN10 to PN16 with September 2018.

## K<sub>G</sub> - Value

Nominal size	Valve diameter [mm]	K <sub>G</sub> -Value [m <sup>3</sup> /(h*bar)]
DN 50	52,5	1.350
DN 65	52,5	1.650
DN 80	80,0	3.300
DN 100	80,0	3.900
DN 125	80,0	4.500
DN 150	125,0	8.000
DN 200	160,0	14.000

## Options

- Coating with epoxy resing in RAL colours
- Acceptance test certificate (ATC) to EN10204/3.1

## Nominal size

DN 50 - DN 100  
DN 125 - DN 200

# NOTE ON DEVICE SELECTION GAS PRESSURE REGULATOR R 101 US

Due to a very wide variation in applications and specific requirements of the gas pressure regulators, we would ask you to contact us for the detailed design of the devices.

# GAS PRESSURE REGULATOR | RS 250 / RS 251 CE EAC

with integrated safety shut-off valve with a maximum inlet pressure of 8 bar



## Design and function

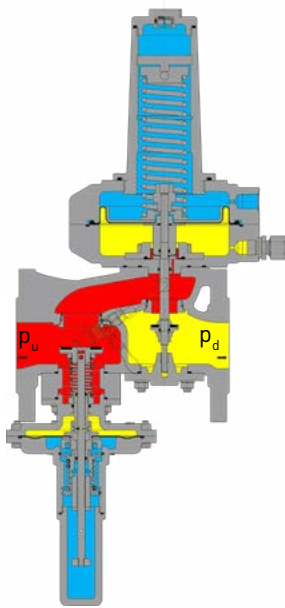
The spring-loaded gas pressure regulators RS 250 / RS 251 have the function of keeping the outlet pressure of a gaseous medium constant within allowable limit values, independently of the effect of interferences, such as changes in the inlet pressure and/or in the gas flow, in the connected regulating line on the outlet side. The gas pressure regulator is composed of the actuator housing and the "diaphragm assembly plus actuator" and "SRV controller/switching device plus actuator" functional units.

For each nominal size, the actuator of the diaphragm assembly can be designed in different valve seat diameters. The diaphragm assembly is pre-pressure-compensated and can be equipped with noise reduction on request.

The gas flows through the actuator housing in the direction of the arrow. The measurement line port is used to pass the outlet pressure to be regulated to the bottom of the diaphragm comparator of the diaphragm assembly. It compares the actual value with the command variable preset by the force of the setpoint spring. The setpoint required in each case is set via the setting screw. Any deviation from the setpoint is transmitted by the valve stem to the actuator, which is adjusted such that the actual value is adjusted to the setpoint. In case of zero flow, the actuator will close tight, causing the closing pressure to be established. In case of inadmissible overpressure or lack of gas in the regulating section, the actuator of the safety shut-off valve arranged in the same housing on the inlet side will shut off the gas flow. To this end, the outlet pressure to be monitored is passed to the SSV control device via a separate measurement line. As a function of the change in pressure, the diaphragm comparator in the controller is raised or lowered. When the outlet pressure in the regulating section exceeds or falls below a certain response pressure, the switch socket connected to the SSV diaphragm will move to the corresponding disengaging position, the balls of the engaging mechanism will release the SSV valve stem, and the closing spring will press the SSV valve disc against the valve seat. The SSV actuator shuts off the gas flow gas-tight. The SSV can only be opened by hand and engaged in the open position. To do so, the outlet pressure at the measuring point must be lowered below the upper response pressure or raised above the lower response pressure by at least the re-engaging differential amount ( $\Delta p$ ).

Got questions about the RS 250 or RS 251?  
[info@medenus.de](mailto:info@medenus.de) or in the product information  
[products.medenus.de/RS250](https://products.medenus.de/RS250)  
[products.medenus.de/RS251](https://products.medenus.de/RS251)





### Characteristics

Inlet pressure $p_u$	max. 8 bar
Outlet pressure $p_d$	18 - 3.000 mbar
Ambient temperature	-20 °C to +60 °C
Mounting position	any
SAV $p_{ds\ o}$	50 - 4.000 mbar
SAV $p_{ds\ u}$	5 - 300 mbar
Housing Material	aluminium
Approval	according to PED
Gas specification	Gas families 2, 3 (DVGW - G 260) and nonaggressive gases. Other gases on request.
flange standard	DIN 1092 - PN 16 or ASME B 16.5-Class 150

### K<sub>G</sub>-Value [m³/(h\*bar)]

	RS 250						RS 251		
	DN 25	DN 50	DN 80	DN 100	DN 150	DN 200	DN 50	DN 80	DN 100
17,5	200	220							
27,5	420	500	550	600			550		
32,5		750	850	900			750		
42,5			1.450	1.500	1.600		1.250	1.500	1.500
52,5				1.800	2.000		1.700	1.800	1.850
65,0					3.500			2.600	3.200
85,0					4.600			3.500	4.300
95,0					5.800	6.100			4.800
115,0						8.950			

## Versions RS 250

Nominal size	Description	Outlet pressure range [mbar]	With high-pressure screw spindle (HDS option) [mbar]
DN 25	with RE 320	18 - 200	200 - 800
	with RE 205	200 - 750	750 - 3.000
DN 50	with RE 320	18 - 200	200 - 800
	with RE 205	200 - 750	750 - 3.000
DN 80	with RE 390	18 - 130	130 - 450
	with RE 275	130 - 400	400 - 1.100
	with RE 205	400 - 750	750 - 3.000
DN 100	with RE 390	18 - 130	130 - 450
	with RE 275	130 - 400	400 - 1.100
	with RE 205	400 - 750	750 - 3.000
DN 150	with RE 485	18 - 150	150 - 450
	with RE 385	150 - 350	350 - 850
	with RE 275	350 - 850	850 - 3.000
DN 200	with RE 485	18 - 150	150 - 450
	with RE 385	150 - 350	350 - 850
	with RE 275-2	350 - 850	850 - 3.000

## Versions RS 251

Nominal size	Description	Outlet pressure range [mbar]	With high-pressure screw spindle (HDS option) [mbar]
DN 50	with RE 390	18 - 130	130 - 450
	with RE 275	130 - 400	400 - 1.100
	with RE 205	400 - 750	750 - 3.000
DN 80	with RE 385	18 - 350	350 - 850
	with RE 275-2	350 - 850	850 - 3.000
DN 100	with RE 485	18 - 150	150 - 450
	with RE 385-2	150 - 350	350 - 850
	with RE 275-2	350 - 850	850 - 3.000

## Options

- High-pressure screw spindle (**HDS**) for convenient and accurate setting of the regulator despite high spring forces
- noise reduction equipment
- Safety diaphragm for the diaphragm assembly
- Integrated Safety relief valve (**SRV**) for the diaphragm assembly
- Vent valve (**BV**) for breather connection  
(For non-dynamic control tasks or the SSV)
- Throttle valve (**RSD**) for impulse line
- SSV position indicator
  - Inductive
  - Reed contact
- SSV release
  - Manual release
  - Remote release (upon current supply or in case of power failure)
  - Manual and remote release (upon current supply or in case of power failure)
- Suitable for oxygen
- Coating with epoxy resin in RAL colours
- Acceptance test certificate (**ATC**) to EN 10204/3.1

## Nominal size

RS 250: DN 25 - DN 100  
 DN 150 - DN 200  
 RS 251: DN 50  
 DN 80 - DN 100  
 RS 250: DN 25 / DN 50  
 DN 80 / DN 100  
 DN 150 / DN 200  
 RS 251: DN 50 / DN 80  
 DN 100  
 RE 205 / RE 275  
 RE 320 / RE 385  
 RE 485

(BV-1/4") oder (BV-3/8")

RS 250: DN 25 - DN 100  
 DN 150 - DN 200  
 RS 251: DN 50  
 DN 80 - DN 100

# SELECT IS HOW YOU SELECT YOUR GAS PRESSURE REGULATOR RS 250 / RS 251

- Calculate the required KG value (see page 6)
- Using the  $K_G$ -value you have just calculated, select a suitably sized valve from the " $K_G$ -value" table below. Allow at least an additional 10% spare capacity in the valve you select
- Select the diaphragm assembly that has the relevant outlet pressure from the "Version" table below.
- For the selection of the relevant safety shut-off valve, please refer to our Product information leaflet RS 250 / RS 251, which can be found on our website in the Service / Downloads area
- Select any options you require
- In addition, check the flow rates (see page 6)
- When ordering please advise the direction of the gas flow (from right to left or left to right). For safety reasons, please also provide us with your process details ( $P_u$ ,  $P_d$ ,  $Q_n$  and the type of gas) so we can check your selection

# GAS PRESSURE REGULATOR | RS 254 / RS 255



with integrated safety shut-off valve with a maximum inlet pressure up to 16 bar



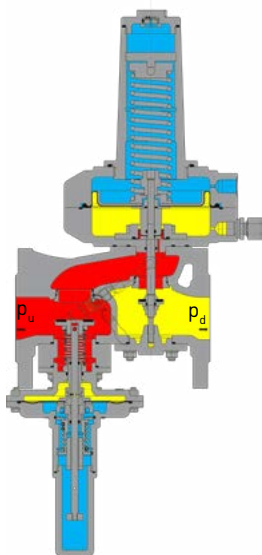
## Design and function

The spring-loaded gas pressure regulators RS 254 / RS 255 have the function of keeping the outlet pressure of a gaseous medium constant within allowable limit values, independently of the effect of interferences, such as changes in the inlet pressure and/or in the gas flow, in the connected regulating line on the outlet side. The gas pressure regulator is composed of the actuator housing and the "diaphragm assembly plus actuator" and "SRV controller/switching device plus actuator" functional units.

For each nominal size, the actuator of the diaphragm assembly can be designed in different valve seat diameters. The diaphragm assembly is pre-pressure-compensated and can be equipped with noise reduction on request.

The gas flows through the actuator housing in the direction of the arrow. The measurement line port is used to pass the outlet pressure to be regulated to the bottom of the diaphragm comparator of the diaphragm assembly. It compares the actual value with the command variable preset by the force of the setpoint spring. The setpoint required in each case is set via the setting screw. Any deviation from the setpoint is transmitted by the valve stem to the actuator, which is adjusted such that the actual value is adjusted to the setpoint. In case of zero flow, the actuator will close tight, causing the closing pressure to be established. In case of inadmissible overpressure or lack of gas in the regulating section, the actuator of the safety shut-off valve arranged in the same housing on the inlet side will shut off the gas flow. To this end, the outlet pressure to be monitored is passed to the SSV control device via a separate measurement line. As a function of the change in pressure, the diaphragm comparator in the controller is raised or lowered. When the outlet pressure in the regulating section exceeds or falls below a certain response pressure, the switch socket connected to the SSV diaphragm will move to the corresponding disengaging position, the balls of the engaging mechanism will release the SSV valve stem, and the closing spring will press the SSV valve disc against the valve seat. The SSV actuator shuts off the gas flow gas-tight. The SSV can only be opened by hand and engaged in the open position. To do so, the outlet pressure at the measuring point must be lowered below the upper response pressure or raised above the lower response pressure by at least the re-engaging differential amount ( $\Delta p$ ).

Got question about the RS 254 or RS 255?  
[info@medenus.de](mailto:info@medenus.de) or in the product information  
[products.medenus.de/RS254](https://products.medenus.de/RS254)  
[products.medenus.de/RS255](https://products.medenus.de/RS255)



### Characteristics

Inlet pressure $P_u$	max. 16 bar
Outlet pressure $P_d$	18 - 3.000 mbar
Ambient temperature	-20 °C to +60 °C
Mounting position	any
SAV $p_{ds\ o}$	50 - 4.000 mbar
SAV $p_{ds\ u}$	5 - 300 mbar
Housing Material	aluminium
Approval	according to PED
Gas specification	Gas families 2, 3 (DVGW - G 260) and non-aggressive gases. Other gases on request.
flange standard	DIN 1092 - PN 16 or ASME B 16.5-Class 150

### K<sub>G</sub>-Value [m³/(h\*bar)]

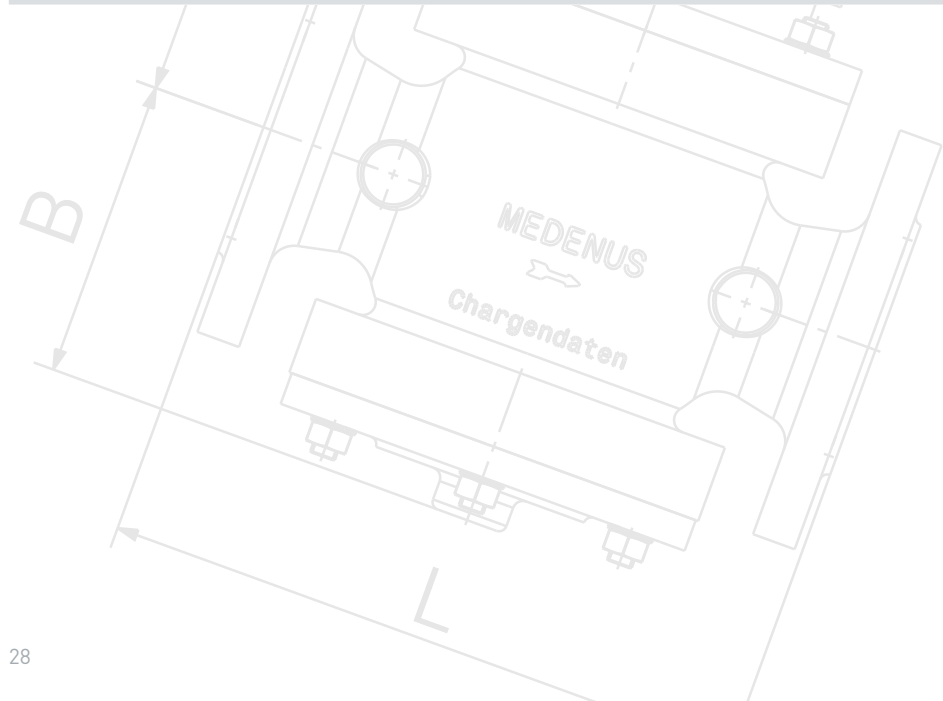
	RS 254						RS 255		
	DN 25	DN 50	DN 80	DN 100	DN 150	DN 200	DN 50	DN 80	DN 100
17,5	200	220							
27,5	420	500	550	600			550		
32,5		750	850	900			750		
42,5			1.450	1.500	1.600		1.250	1.500	1.500
52,5				1.800	2.000		1.700	1.800	1.850
65,0					3.500			2.600	3.200
85,0					4.600			3.500	4.300
95,0					5.800	6.100			4.800
115,0						8.950			

## Versions RS 254

Nominal size	Description	Outlet pressure range [mbar]	With high-pressure screw spindle (HDS option) [mbar]
DN 25	with RE 320	18 - 200	200 - 800
	with RE 205	200 - 750	750 - 3.000
DN 50	with RE 320	18 - 200	200 - 800
	with RE 205	200 - 750	750 - 3.000
DN 80	with RE 390	18 - 130	130 - 450
	with RE 275	130 - 400	400 - 1.100
	with RE 205	400 - 750	750 - 3.000
DN 100	with RE 390	18 - 130	130 - 450
	with RE 275	130 - 400	400 - 1.100
	with RE 205	400 - 750	750 - 3.000
DN 150	with RE 485	18 - 150	150 - 450
	with RE 385	150 - 350	350 - 850
	with RE 275	350 - 850	850 - 3.000
DN 200	with RE 485	18 - 150	150 - 450
	with RE 385	150 - 350	350 - 850
	with RE 275	350 - 850	850 - 3.000

## Versions RS 255

Nominal size	Description	Outlet pressure range [mbar]	With high-pressure screw spindle (HDS option) [mbar]
DN 50	with RE 390	18 - 130	130 - 450
	with RE 275	130 - 400	400 - 1.100
	with RE 205	400 - 750	750 - 3.000
DN 80	with RE 385	18 - 350	350 - 850
	with RE 275-2	350 - 850	850 - 3.000
DN 100	with RE 485	18 - 150	150 - 450
	with RE 385	150 - 350	350 - 850
	with RE 275-2	350 - 850	850 - 3.000



### Options

- High-pressure screw spindle **(HDS)** for convenient and accurate setting of the regulator despite high spring forces
- Noise reduction equipment
- Safety diaphragm **(SM)** for the control device
- Integrated Safety relief valve **(SRV)** for the diaphragm assembly
- Vent valve **(BV)** for breather connection (For non-dynamic control tasks or the SSV)
- Throttle valve **(RSD)** for the breathing port on SAV
- SSV position indicator
  - Inductive
  - Reed contact
- SSV release
  - Manual release
  - Remote release (upon current supply or in case of power failure)
  - Manual and remote release (upon current supply or in case of power failure)
- Suitable for oxygen
- Coating with epoxy resin in RAL colours
- Acceptance test certificate **(ATC)** to EN 10204/3.1

### Nominal size

RS 254: DN 25 - DN 100  
 DN 150 - DN 200  
 RS 255: DN 50  
 DN 80 - DN 100  
 RS 254: DN 25 / DN 50  
 DN 80 / DN 100  
 DN 150 / DN 200  
 RS 255: DN 50 / DN 80  
 DN 100  
 RE 205 / RE 275  
 RE 320 / RE 385  
 RE 485

(BV-1/4") oder (BV-3/8")

RS 254: DN 25 - DN 100  
 DN 150 - DN 200  
 RS 255: DN 50  
 DN 80 - DN 100

## THIS IS HOW YOU SELECT YOUR GAS PRESSURE REGULATOR RS 254 / RS 255 AUS

- Calculate the required  $K_G$ -value (see MEDENUS Price List page 6)
- Using the  $K_G$ -value you have just calculated, select a suitably sized valve from the " $K_G$ -value" table below. Allow at least an additional 10% spare capacity in the valve you select
- Select the diaphragm assembly that has the relevant outlet pressure from the "Version" table below
- For the selection of the relevant safety shut-off valve, please refer to our product information leaflet RS 254 / RS 255, which can be found on our website in the Service / Downloads area
- Select any options you require
- In addition, check the flow rates (see page 6)
- When ordering please advise the direction of the gas flow (from right to left or left to right). For safety reasons, please also provide us with your process details ( $P_u$ ,  $P_d$ ,  $Q_n$  and the type of gas) so we can check your selection



# PILOT CONTROLLED GAS PRESSURE REGULATOR RSP 254 / RSP 255



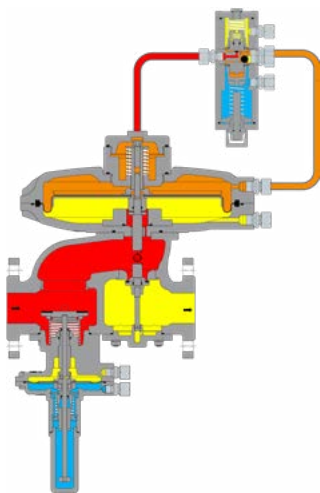
Pilot controlled gas pressure regulator (RSP) with integrated safety shut-off valve and Pilot controlled gas pressure regulator (RP) without integrated safety shut-off valve with maximum inlet pressure of 16 bar



## Design and function

The gas pressure regulator RSP 254/255 has the task of keeping the outlet pressure of a gas regulating circuit according to a gas pressure regulating device constant, independent of changes in the gas absorption and changes in the inlet pressure. The required auxiliary energy is taken from the pressure gradient between the inlet pressure and the outlet pressure of the gas pressure regulator. The regulator consists of the control stage, optionally with a fine filter and a downstream valve. The control variable is measured via a diaphragm in the control stage, which is part of a double diaphragm system. The pneumatic amplifier operating according to the nozzle baffle plate principle is actuated by this comparator. The static gain of the controller can be influenced via the discharge valve and possibly setpoint spring changes and adapted to the respective conditions of a control section. The output pressure is conducted via the measuring line to the upper side of the double diaphragm system in the regulating stage, thereby resulting in a compressive force and compared with the adjusted setpoint value of the force as a predetermined guide variable for the output pressure to be regulated. If the control loop is taken off at zero, the amplifier valve closes in the double diaphragm system of the control stage, the closing pressure is established. Versions with pneumatic following setpoint inputs with pressure ratios 1: 1 and 1: 2 are available. For example: With an I/P converter and a 4-20 mA signal you can adjust the outlet pressure remotely.

Got questions about the RSP 254 / RSP 255?  
[info@medenus.de](mailto:info@medenus.de) or in the product information  
[products.medenus.de/RSP254](https://products.medenus.de/RSP254)  
[products.medenus.de/RSP255](https://products.medenus.de/RSP255)



### Characteristics

Inlet pressure $P_u$	max. 16 bar
Outlet pressure $P_d$	10 - 12.000 mbar
Ambient temperature	-20 °C to +60 °C
Mounting position	according to manual
SAV $p_{ds\ o}$	50 - 4.000 mbar (4.000 - 12.500 mbar*)
SAV $p_{ds\ u}$	5 - 300 mbar
Housing Material	aluminium
Approval	according to PED
Gas specification	Gas families 2, 3 (DVGW - G 260) and non-aggressive gases. Other gases on request.
flange standard	DIN 1092 - PN 16 or ASME B 16.5-Class 150

### $K_G$ -Value [ $m^3/(h \cdot bar)$ ]

	RSP 254						RSP 255		
	DN 25	DN 50	DN 80	DN 100	DN 150	DN 200	DN 50	DN 80	DN 100
17,5	200	220							
27,5	420	500	550	600			550		
32,5		750	850	900			750		
42,5			1.450	1.500	1.600		1.250	1.500	1.500
52,5				1.800	2.000		1.700	1.800	1.850
65,0					3.500			2.600	3.200
85,0					4.600			3.500	4.300
95,0					5.800	6.100			4.800
115,0						8.950			

\*) additional control device K70 needed

### Versions Actuator A(S) 254/255

Nominal size	Description
DN 25	with RE 320
DN 50	with RE 320
DN 80	with RE 390
DN 100	with RE 390
DN 150	with RE 385
DN 200	with RE 385

Nominal size	Description
DN 50	with RE 390
DN 80	with RE 385
DN 100	with RE 385

\*) with SAV until  $w_{dso} \leq 4$  bar  
(from  $w_{dso} \geq 4$  bar a control device K70-10 is additionally required).

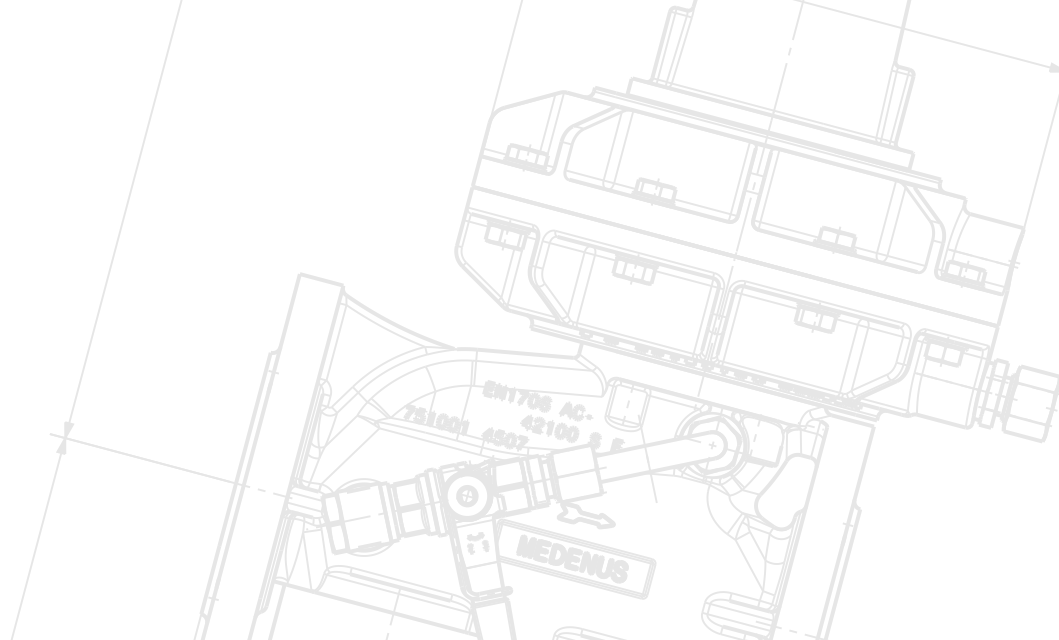
### Versions R70

Description	Measuring ranges
R 70-10	500 - 12.000
R 70-20 (1:1) with integrated amplifier	100 - 6.000
R 70-100	10 - 500

### Outlet pressure range RSP 254/255

Actuator A(S) 254		Outlet pressure range [mbar]		
Nominal size	Description	R70-10	R70-20 (1:2)	R70-100
DN 25	with RE 320	500 - 12.000	200 - 12.000	10 - 500
DN 50	with RE 320	500 - 12.000	200 - 12.000	10 - 500
DN 80	with RE 390	500 - 12.000	200 - 12.000	10 - 500
DN 100	with RE 390	500 - 12.000	200 - 12.000	10 - 500
DN 150	with RE 385	500 - 12.000	200 - 12.000	10 - 500
DN 200	with RE 385	500 - 12.000	200 - 12.000	10 - 500

Actuator A(S) 255		Outlet pressure range [mbar]		
Nominal size	Description	R70-10	R70-20 (1:2)	R70-100
DN 50	with RE 390	500 - 12.000	200 - 12.000	10 - 500
DN 80	with RE 385	500 - 12.000	200 - 12.000	10 - 500
DN 100	with RE 385	500 - 12.000	200 - 12.000	10 - 500



## Options

- Controll unit K 70-10 (indirect acting)
- Fine filter (**FF**) in front of the pilot regulator
- Pneumatic I / P converter
- Noise reduction equipment

- Breathing valve (**BV**) for breathing connection
- Vent valve (**BV**) for breather connection
- SSV position indicator "close"
  - Inductive
  - Reed Kontakt
- SSV release
  - Manual release
  - Remote release (upon current supply or in case of power failure)
  - Manual and remote release (upon current supply or in case of power failure)
- Suitable for oxygen
- Coating with epoxy resin in RAL colours

- Acceptance test certificate (**ATC**) to EN 10204/3.1

## Nominal size

AS 254: DN 25 / DN 50  
 DN 80 / DN 100  
 DN 150 / DN 200  
 AS 255: DN 50 / DN 80  
 DN 100  
 (BV-1/4") or (BV-3/8")

RSP 254: DN 25 - DN 100  
 DN 150 - DN 200  
 RSP 255: DN 50  
 DN 80 - DN 100

## THIS IS HOW YOU SELECT YOUR GAS PRESSURE REGULATOR RSP 254 / RSP 255

- Calculate the required  $K_G$ -value (see MEDENUS Price List page 6)
- Using the  $K_G$ -value you have just calculated, select a suitably sized valve from the " $K_G$ -value" table below. Allow at least an additional 10% spare capacity in the valve you select
- Select the diaphragm assembly that has the relevant outlet pressure from the "Version" table below
- For the selection of the relevant safety shut-off valve, please refer to our product information leaflet RSP 254 / RSP 255, which can be found on our website in the Service / Downloads area
- Select any options you require
- In addition, check the flow rates (see page 6)
- When ordering please advise the direction of the gas flow (from right to left or left to right). For safety reasons, please also provide us with your process details ( $P_u$ ,  $P_d$ ,  $Q_n$  and the type of gas) so we can check your selection

# SAFETY SHUT-OFF VALVE | S 50

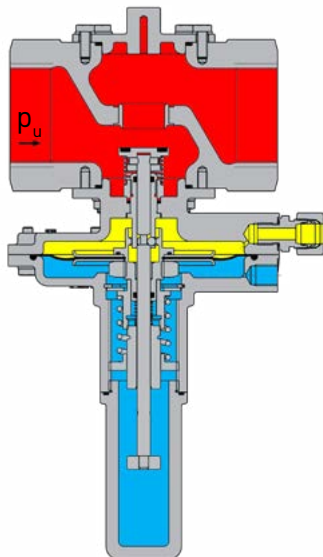


## Design and function

The safety shut-off valve S 50 shuts off the gas flow when the outlet pressure in the regulating sections exceeds or falls below a certain response pressure. To this end, the outlet pressure to be monitored is passed to the SSV controller via a separate measurement line. As a function of the change in pressure, the diaphragm comparator in the controller is raised or lowered. When the outlet pressure in the regulating section falls below the lower switch-off point or exceeds the upper switch-off point, the switch socket connected to the SSV diaphragm will move to the corresponding disengaging position, the balls of the engaging mechanism will release the SSV valve stem, and the closing spring will press the SSV valve disc against the valve seat. The SSV actuator shuts off the gas flow gas-tight. The SSV can only be opened by hand and engaged in the open position. To do so, outlet pressure at the measuring point must be lowered below the upper response pressure or raised above the lower response pressure by at least the re-engaging differential amount ( $\Delta p$ ).

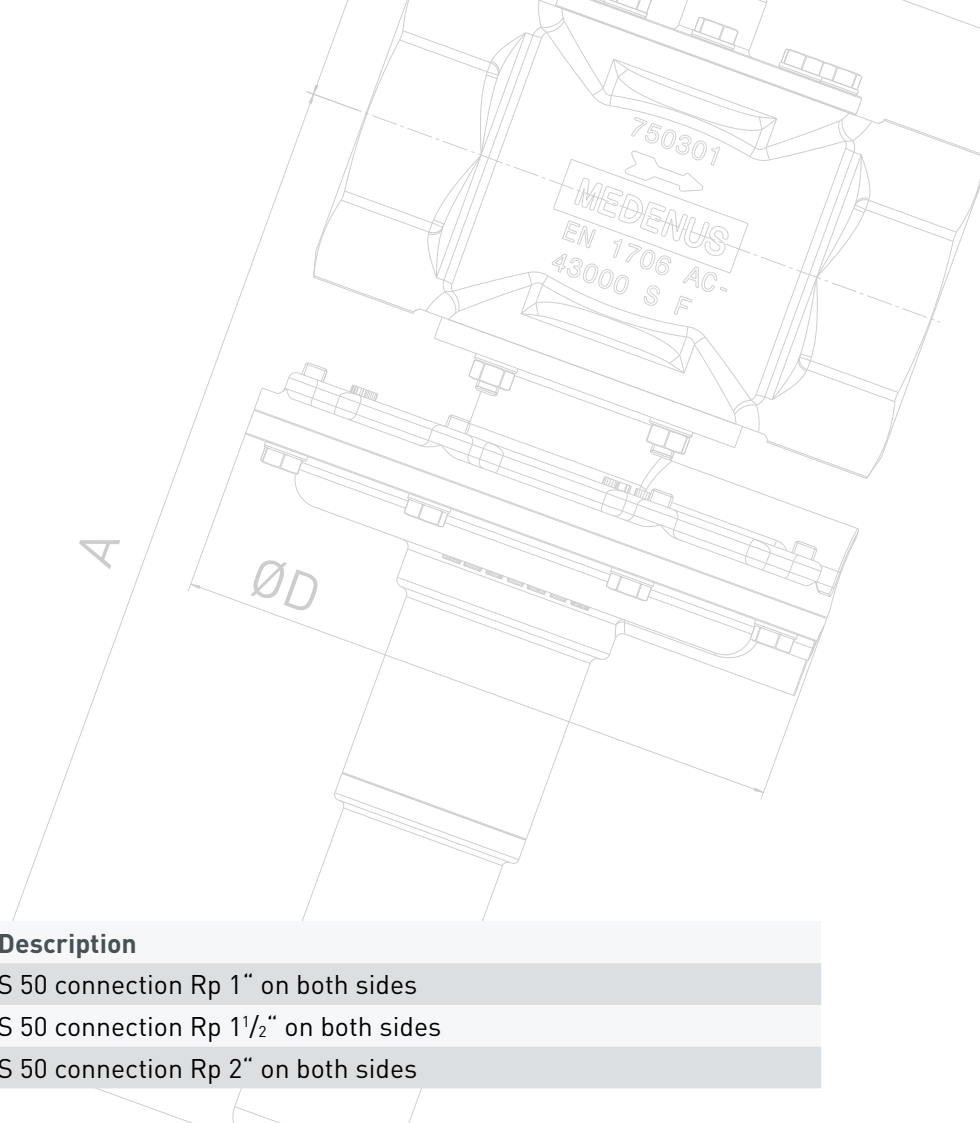
Got questions about the S 50?

[info@medenus.de](mailto:info@medenus.de) or in the product information [products.medenus.de/S50](https://products.medenus.de/S50)



## Characteristics

Inlet pressure $p_u$	max. 3 bar
$p_{ds\ o}$	50 - 1.500 mbar
$p_{ds\ u}$	10 - 300 mbar
Ambient temperature	-20 °C to +60 °C
Rp1": $Q_{max}$	100 Nm <sup>3</sup> /h
Rp1 1/2"; Rp2": $Q_{max}$	300 Nm <sup>3</sup> /h
Mountin position	any
Housing Material	aluminium
Approval	according to PED
Gas specification	Gas families 2, 3 (DVGW - G 260) and non-aggressive gases. Other gases on request.



## Versions

Nominal size	Description
DN 25	S 50 connection Rp 1" on both sides
DN 40	S 50 connection Rp 1 1/2" on both sides
DN 50	S 50 connection Rp 2" on both sides

## Options

- Vent valve **(BV)** for breather connection
- SSV position indicator
  - Inductive
  - Reed Contact
- SSV release
  - Manual release
  - Remote release (upon current supply or in case of power failure)
  - Manual an remote release (upon current supply or in case of power failure)
- Suitable oxygen
- Coating with epoxy resin in RAL colours
- Acceptance test certificate **(ATC)** to EN 10204/3.1

## THIS IS HOW YOU SELECT YOUR SAFETY SHUT-OFF VALVE S 50

- Determine the required flow rate
- Select a size that can handle the required flowrate
- Select the version of the valve that can do the required outlet pressure
- Select any options you require
- In addition, check the flow rates (see page 6)
- When ordering please advise the direction of the gas flow (from right to left or left to right)

# SAFETY SHUT-OFF VALVE | S 100

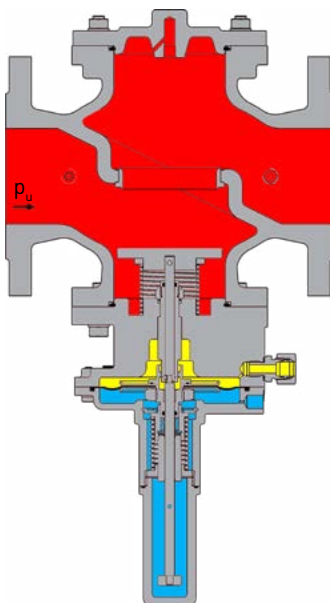


## Design and function

The safety shut-off valve S 100 shuts off the gas flow when the outlet pressure in the regulating sections exceeds or falls below a certain response pressure. To this end, the outlet pressure to be monitored is passed on to the SSV controller via a separate measurement line. As a function of the change in pressure, the diaphragm comparator in the controller is raised or lowered. When the outlet pressure in the regulating section falls below the lower switch-off point or exceeds the upper switch-off point, the switch socket connected to the SSV diaphragm will move to the corresponding disengaging position, the balls of the engaging mechanism will release the SSV valve stem, and the closing spring will press the SSV valve disc against the valve seat. The SSV actuator shuts off the gas flow gas-tight. The SSV can only be opened by hand and engaged in the open position. To do so, the outlet pressure at the measuring point must be lowered below the upper response pressure or raised above the lower response pressure by at least the re-engaging differential amount ( $\Delta p$ ).

Got questions about the S 100?

[info@medenus.de](mailto:info@medenus.de) or in the product information [products.medenus.de/S100](https://products.medenus.de/S100)



## Characteristics

Inlet pressure $p_u$	max. 8 bar
$P_{ds\ o}$	50 - 1.500 mbar
$P_{ds\ u}$	10 - 300 mbar
Ambient temperature	-20 °C to +60 °C
Mounting position	any
Housing material	aluminium
Approval	according to PED
Gas specification	Gas families 2, 3 (DVGW - G 260) and non-aggressive gases. Other gases on request.
flange standard	DIN 1092 - PN 16 or ASME B 16.5-Class 150



## Versions

Nominal size	Description
DN 25	Safety shut-off valve S 100
DN 40	Safety shut-off valve S 100
DN 50	Safety shut-off valve S 100
DN 65	Safety shut-off valve S 100
DN 80	Safety shut-off valve S 100
DN 100	Safety shut-off valve S 100
DN 125	Safety shut-off valve S 100
DN 150	Safety shut-off valve S 100
DN 200*	Safety shut-off valve S 100

\* Please note that we changed the DIN flange standard for DN200 from PN10 to PN16 with September 2018.

Options	Nominal size
<ul style="list-style-type: none"> <li>Vent valve <b>(BV)</b> for breather connection</li> <li>SSV position indicator               <ul style="list-style-type: none"> <li>Inductive</li> <li>Reed contact</li> </ul> </li> <li>SSV release               <ul style="list-style-type: none"> <li>Manual release</li> <li>Remote release (upon current supply or in case of power failure)</li> </ul> </li> <li>Manual and Remote release (upon current supply or in case of power failure)</li> <li>Suitable for oxygen</li> <li>Coating with epoxy resin in RAL colours</li> <li>Acceptance test certificate <b>(ATC)</b> to EN 10204/3.1</li> </ul>	DN 25 - DN 100 DN 125 - DN 200

## K<sub>G</sub> - Value

Nominal size	Valve diameter [mm]	K <sub>G</sub> -Value [m³/(h*bar)]
DN 25	32,5	450
DN 40	32,5	550
DN 50	52,5	1.350
DN 65	52,5	1.650
DN 80	80,0	3.300
DN 100	80,0	3.900
DN 125	80,0	4.500
DN 150	125,0	8.000
DN 200	160,0	14.000

## THIS IS HOW YOU SELECT YOUR SAFETY SHUT-OFF VALVE S 100

- Calculate the required K<sub>G</sub>-value at the supercritical pressure ratio (see page 6)
- This is followed by selecting the suitable nominal size for the required K<sub>G</sub>-value from the table listed below
- Select any options you require
- In addition, check the flow rates (see page 6)
- When ordering please advise the direction of the gas flow (from right to left or left to right)

# SAFETY RELIEF VALVE | SL 10



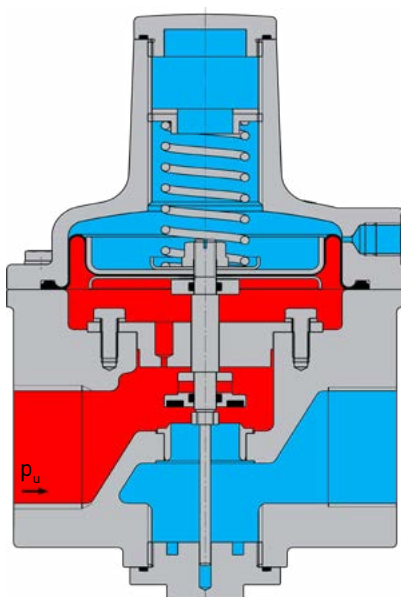
## Design and function

The spring-loaded safety relief valve SL 10 is used for reducing short-term pressure surges upstream of gas consumption systems or preventing an inadmissibly high pressure increase due to escaping gas. The safety relief valve is composed of the actuator housing and the "control device" functional unit.

In the open position, the gas flows through the actuator housing in the direction of the arrow. The internal measurement line port is used to pass the outlet pressure to be regulated to the bottom of the diaphragm comparator of the safety relief valve. It compares the actual value with the command variable preset by the force of the setpoint spring. The setpoint required in each case is set via the setting screw. When the setpoint is exceeded, the measuring movement will lift the actuator, allowing the gas to escape via the blow-off line.

Got the questions about the SL 10?

[info@medenus.de](mailto:info@medenus.de) or in the product information [products.medenus.de/SL10](https://products.medenus.de/SL10)



## Characteristics

$P_{uo}$	0,025 - 3,5 bar
PS	8 bar
$Rp1''$ : $Q_{max}$	100 Nm <sup>3</sup> /h
$Rp1\ 1/2''$ ; $Rp2''$ : $Q_{max}$	300 Nm <sup>3</sup> /h
Ambient temperature	-20 °C to +60 °C
Mounting position	any
Housing material	aluminium
Approval	according to PED
Gas Specification	Gas families 2, 3 (DVGW - G 260) and non-aggressive gases. Other gases on request.



## Versions

Nominal size	Description	Outlet pressure range [mbar]
DN 25 Rp 1"	Standard	25 - 400
	High-pressure version	401 - 1.000
	High-pressure version with HDS	1.001 - 3.500
DN 40 Rp 1½"	Standard	25 - 400
	High-pressure version	401 - 1.000
	High-pressure version with HDS	1.001 - 3.500
DN 50 Rp 2"	Standard	25 - 400
	High-pressure version	401 - 1.000
	High-pressure version with HDS	1.001 - 3.500

## Options

- Suitable for oxygen
- Coating with epoxy resin in RAL colours
- Acceptance test certificate **(ATC)** to EN 10204/3.1
- Vent valve **(BV)** for breather connection for (BV-1/4") or (BV-3/8")
- Leakage gas indicator
  - Typ LI-1 (corner version)
    - with reed contact
    - without reed contact
  - Typ LI-2 (straight execution)
    - with reed contact
    - without reed contact

## THIS IS HOW YOU SELECT YOUR SAFETY RELIEF VALVE SL 10

- Determine the required blow-off quantity
- Select a size that can handle the required flowrate
- Then you select the desired blow-off pressure
- Select any options you require

# CELLULAR GAS FILTER | DF 100



## Design and function

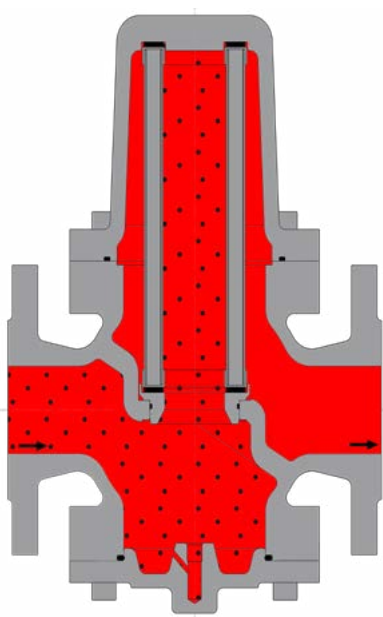
The gas flows through the inlet flange into the filter housing. The more than 100-fold increased filter area compared with the cross-section of the inlet flange reduces the flow rate accordingly. The dust particles entrained in the gas are retained by the filter element. The cleaned gas flows off through the outlet flange.

The filters mainly consist of the housing, the cover and the filter cartridge. Taking off the cover for maintenance and replacement of the filter cartridge guarantees easy access. The filter cartridge consists of the filter basket and the filter element. Depending on the application and the particle size to be separated, the filter cartridge to be used must have a suitable pore size.

The lid at the bottom of the filter allows convenient removal of any residues formed.

Got questions about the DF 100?

[info@medenus.de](mailto:info@medenus.de) or in the product information [products.medenus.de/DF100](https://products.medenus.de/DF100)



## Characteristics

Inlet pressure $P_u$	max. 16 bar
PS	16 bar
Ambient temperature	-20 °C to +60 °C optional -40 °C to +70 °C
Housing material	aluminium
Approval	according to PED
Gas specification	Gas families 2, 3 (DVGW - G 260) and non-aggressive gases. Other gases on request.
flange standard	DIN 1092 - PN 16 or ASME B 16.5-Class 150

## Versions

Nominal size	Description
DN 25	Cellular gas filter DF 100
DN 50	Cellular gas filter DF 100
DN 80	Cellular gas filter DF 100
DN 100	Cellular gas filter DF 100
DN 150	Cellular gas filter DF 100
DN 200	Cellular gas filter DF 100

Please find the related pressure loss of the devices in the product information leaflet on our webpage.

### Options

- Differential pressure gauge equipped with 2 shut-off ball (fully assembled)
- Differential pressure gauge equipped with reed contact and 2 shut-off ball valves (fully assembled)
- Temperature range -40°C to +70°C
- Suitable for oxygen
- Coating with epoxy resin in RAL colours
- Acceptance test certificate **(ATC)** to EN 10204/3.1

### Nominal size

DN25-DN100  
DN150-DN200

## THIS IS HOW YOU SELECT YOUR CELLULAR GAS FILTER DF 100

- Determine the required flow rate
- Select a size that can handle the required flowrate from the table listed above
- Select any options you require
- When ordering please advise the direction of the gas flow (from right to left or left to right)

# ACCESSOIRES

## Description

- Drilling winch set (including drill winch, nut, connecting square and extension) for easy adjustment of the setpoint value



- Suction nut for mounting ball cage

- Breathing valve (BV) for the breathing connection, the safety shut - off valve or the Safety relief



- Throttle valve (RSD) for the measuring line on the control unit. The throttle valve can be used to optimize the control behavior of the controller in case of need



- Inductive sensor for safety shut-off valve with cap



- Reed contact for safety shut-off valve with cap

- Helium leak test (eg for hydrogen applications)
  - R 50 / S 50 / SL 10
  - DN 25 - DN 100
  - DN 125 - DN 200

- Additional or subsequent type plate

- Inspection test certificate 3.2 / Individual inspection

- Inspection test certificate 3.1 with material verification list

- Leakage gas indicator
  - Type LI-1 (corner version)
    - with reed contact
    - without reed contact
  - Type LI-2 (Straight execution)
    - with reed contact
    - without reed contact



- Fine filter (FF) for pilot controller



- Other accessories such as flange gaskets, spare parts\*

\*) For product-specific spare parts kits please use our spare parts catalog (on request) and / or our factory number search on our website [products.medenus.de/fabricationno](https://products.medenus.de/fabricationno)





## THE MEDENUS ADD ONS

### 10 reasons in favour of good business relationships

1. High levels of expertise and high quality standards developed over decade
2. Wide range of reliable, well proven regulators
3. Customised designs as well as special constructions can be supplied if you cannot find what you need from our standard range
4. Modern, fast and efficient production systems
5. Guaranteed delivery dates
6. Quick response times
7. We hold a large quantity of valve parts meaning new valves and spares can be supplied quickly
8. Theoretical and practical training sessions can be provided to suit your needs
9. Optimised spare parts inventories due to the modular design of our whole product range
10. 100% Made in Germany

# TRADE GOODS

To offer even better service and to save you time and money in your ordering processes, we also offer some other products German manufacturers as trading products.

## FLANGED BALL VALVES



### Design and function

Our flanged ball valves consist of a two-piece spheroidal graphite cast iron housing and are fire-safe designed.

The sliding ball on the inside, sealed on three sides, is adjusted via the handle. Optionally, the handle can be replaced with an electric or pneumatic rotary drive.

### Versions

DN	DN	DN	DN	DN	DN	DN	DN	DN	DN
25	32	40	50	65	80	100	125	150	200

### Options

- Special paint finishes
- Inspection certificate 3.1
- Oxygen versions
- Locking device

### Characteristics

PS	16 bar
Ambient temperature	-20 bis +60 °C
Housing material	spheroidal graphite iron
Corrosion protection	primer
Gas specification	Gas families 1, 2, 3 (DVGW - G 260) and non-aggressive gases. Other gases on request.
flange standard	DIN 1092 - PN 16



# MECHANICAL QUANTOMETER



## Characteristics

PS	16 bar
Ambient temperature	-20 to +55 °C
Housing material	aluminium
PED-Approval	Hpi / 222-103-Q-01
Reproduceibility	< 0,2 %
Pressure change rate	< 0,35 bar/s
Gas spezification	Gas families 1, 2, 3 (DVGW - G 260) and non-aggressive gases. Other gases on request.

## Design and function

The turbine meter / quantometer is a flow meter. The flow of the gas to be measured rotates the impeller wheel. The gas flow is concentrated to an annular cross-section and directed onto the smooth-running aluminium impeller wheel. The number of turbine wheel revolutions is proportional to the flow volume, while the frequency of rotation is proportional to the flow rate. The rotation of the impeller wheel is reduced by means of a reduction gear and transmitted from the gas-filled room to the adjustable roller counter in the ambient atmosphere by means of a magnetic coupling. The quantometers are delivered without flanges als intermediate flange version together with the relevant thread bolts, nuts and flat seals.

## Options

- aluminium counter head
- NF reed contact for aluminium counter head
- 1 x MF for aluminium counter head
- 1 x HF sensor / 2 x HF sensor
- Oil pump
- 1 x thermowell / 2 x thermowell
- Additionally copy of the manual
- Test certificate 3.1 with / without detailed material list

## Following characteristics are included as standard:

- 1 x NF reed contact
- 1 x anti-manipulation contact
- Intermediate flange design with mounting aid
- Counter head mafe of plastic
- 1 x standard documentation
- Test certificate 2.2

## Versions

Nominal size	G-Size	Q <sub>min</sub> [m³/h]	Q <sub>max</sub> [m³/h]
25/1"	G 10	1,6	16
25/1"	G 16	2,5	25
25/1"	G 25	2,0	40
50/2"	G 40	3,3	65
50/2"	G 65	5,0	100
80/3"	G 100	8,0	160
80/3"	G 160	12,5	250
80/3"	G 250	20,0	400
100/4"	G 160	12,5	250
100/4"	G 250	20,0	400
100/4"	G 400	32,5	650
150/6"	G 400	32,5	650
150/6"	G 650	50,0	1000
150/6"	G1000	80,0	1600

# ELECTRONICAL QUANTOMETER



## Design and function

The MQMe Quantometer is a turbine gas meter that registers the operating volume using a nine-digit electronic index.

The flow of the gas to be measured causes the turbine rotor to rotate. The gas flow is narrowed on an annular cross section, is accelerated and directed onto the smooth-running Aluminum rotor. The number of rotations is proportional to the measured gas volume; the frequency of rotations is proportional to the actual gas flow.

The rotation of the rotor is transmitted via a magnetoresistance sensor from the gas pressurized area to the electronic index which is in the atmospheric environment. The CPU is receiving the high frequency signal for the magnetoresistance sensor to calculate the gas flow and gas volume under operating conditions. If the optional electronic volume corrector function is installed the gas flow and gas volume under standard conditions will be calculated according AGA NX-19. The calculation can be based on fixed factors for temperature and pressure or on optionally installed temperature and pressure sensors. The MQMe is designed to have one external temperature and one external pressure transmitter installed directly in the meter.



## Characteristics

PS	16 bar
Ambient temperature	-25 to +55 °C
Housing material	aluminium
PED-Approval	Hpi / 222-103-Q-01
Reproducibility	< 0,2 %
Pressure change rate	< 0,35 bar/s
Gas specification	Gas families 1, 2, 3 (DVGW - G 260) and non-aggressive gases. Other gases on request.

## Versions

Nominal size	G-Size	Q <sub>min</sub> [m³/h]	Q <sub>max</sub> [m³/h]
25/1"	G 10	1,6	16
25/1"	G 16	2,5	25
25/1"	G 25	2,0	40
50/2"	G 40	3,3	65
50/2"	G 65	5,0	100
80/3"	G 100	8,0	160
80/3"	G 160	12,5	250
80/3"	G 250	20,0	400
100/4"	G 160	12,5	250
100/4"	G 250	20,0	400
100/4"	G 400	32,5	650
150/6"	G 400	32,5	650
150/6"	G 650	50,0	1000
150/6"	G1000	80,0	1600

\*) Factory calibration range 1:20 available from nominal width DN50 upwards

### Options

- integrated volume corrector (incl. pressure & temperature sensors)
- analog output (4-20 mA) only with ext. care
- RS485 (then no M-bus possible)
- M-Bus (then no RS485 possible)
- 1x HF sensor acceptance on the Alurad (only with external supply)
- Oil pump
- 1 x thermowell
- Test certificate 3.1 without detailed material list

### Following characteristics are included as standard:

- Permanently sprinkled warehouse
- NF or HF Signal
- Aluminium turbine
- Intermediate flange design with mounting aid
- Configuration software
- 1 x standard documentation
- Test certificate 2.2
- Pressure connection

- several options to transmit the measured and calculated data to a digital control system (**DCS**) or **SCADA**
- equipped with alternatively RS 485 or M-Bus interface and one high frequency (**HF**) as well as one low frequency (**LF**) pulser
- if an external power supply is connected to the MQME one 4 to 20 mA configurable signal is available
- the rotation of the rotor can be scanned additionally with one external high frequency (**HF**) sensor
- the HF-sensor signal allows the determination of the actual gas flow in high-resolution and can be transmit to any digital control system (**DCS**) or **SCADA** for flow control purposes
- integrated electronic volume corrector

# ENQUIRY FORM

To be able to answer your enquiry as quickly as possible, please complete as much as possible.

Title \_\_\_\_\_ First name \_\_\_\_\_ Last name \_\_\_\_\_

Company \_\_\_\_\_

Street and number \_\_\_\_\_

PP box \_\_\_\_\_ Post code \_\_\_\_\_ Place \_\_\_\_\_

E-Mail \_\_\_\_\_ Country \_\_\_\_\_ Tel. \_\_\_\_\_

Fax \_\_\_\_\_ Mobile \_\_\_\_\_

Please tick the device type in question.

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Gas pressure regulator                                       | <input type="checkbox"/> Rotary regulator          | <input type="checkbox"/> Vacuum regulator |
| <input type="checkbox"/> Overflow valve   | <input type="checkbox"/> Regulator for gas torches |   |
| <input type="checkbox"/> Gas pressure regulator with integrated safety shut-off valve | <input type="checkbox"/> Safety shut-off valve     |   |
| <input type="checkbox"/> Safety relief valve  |  |   |

Should you require a replacement device or spare parts, please tell us the fabrication number of your device.

Please tick the desired nominal size.

- |                                 |                                 |                                 |
|---------------------------------|---------------------------------|---------------------------------|
| <input type="checkbox"/> DN 25  | <input type="checkbox"/> DN 40  | <input type="checkbox"/> DN 50  |
| <input type="checkbox"/> DN 65  | <input type="checkbox"/> DN 80  | <input type="checkbox"/> DN 100 |
| <input type="checkbox"/> DN 125 | <input type="checkbox"/> DN 150 | <input type="checkbox"/> DN 200 |

Please enter the relevant flow rate and pressures.

Inlet pressure  $P_u$  \_\_\_\_\_ Outlet pressure  $p_d$  \_\_\_\_\_

Flow rate \_\_\_\_\_ Pressure level \_\_\_\_\_

Please enter the relevant type of gas and the temperature range.

Type of gas \_\_\_\_\_ Temperature range \_\_\_\_\_

Notes / additional equipment (e.g.: Breathing valve):

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# SERVICE AND TRAINING

## On-site service

Service Engineer hourly rate	€ 84,-
Surcharge from first additional working hour up to 10 working hours maximum daily and no later than 8:00 p.m.	+25%
additional charge for more than 10 hours daily and/or after 8:00 p.m.	+50%
Surcharge for public holidays, Sundays and on December 24th and December 31st	+125%

As a working hour is also the travel time for arrival and departure to the customer to the construction site, the documentation and any resulting additional times required or caused by the customer.  
(e.g. waiting time for requested operators, set-up times, etc.)

## Daily expenses:

Each day of attendance is calculated from a travel time of 4 hours  
a rate of € 40,- per day.

## Accommodation costs:

Any accommodation costs incurred shall be payable by the customer as follows:

- Per night (or after receipt) € 60,-

## Travel expenses/ mileage allowance:

Service vehicle € 0,75 / km

To determine the kilometres to be charged, the place of departure of the Service Engineer shall be used. Round trip will be charged. The upper calculation limit for the number of km shall be 1000 km maximum.

## Fixed prices:

For clearly defined scopes of services, we can offer you fixed prices.  
Please contact our sales department.

## Repair

We will be glad to assess returned devices as to whether repair is still worthwhile.

This will incur the following fees:

- Cost estimate for repair: € 79,-

(This fee does not apply if repair or a new device is ordered)

- Scrapping fee per device:
  - for small devices (threaded versions) € 50,-
  - for flanged versions € 75,-

Any returns will incur the relevant freight and packing costs.

## Training courses

We offer both standard seminars in small groups of no more than 6 participants as well as customer-specific training on site.



# Precision and experience

Your success is our motivation, daily

After the founding of the company by Mr. Dieter Medenus in 1972, our Gas pressure regulators, safety shut-off valves and safety relief valves have been produced in Rösraath near Cologne for more than 30 years.

Mr. Medenus decided in 2004 to transfer the company into younger hands for reasons of age. The production site was relocated to the current location of the company in Olpe. From here we deliver our complete product range with the proven Medenus plus points, quality with short delivery time and absolute on-time delivery.

In the meantime, we have expanded our product range to include filtration and the pilot-operated gas pressure regulators in order to provide our customers with the entire gas pressure control technology from a single source.





# CONTACT

If you want to know more about our products and services, please contact your local representative or visit our website at [www.medenus.de/en](http://www.medenus.de/en).



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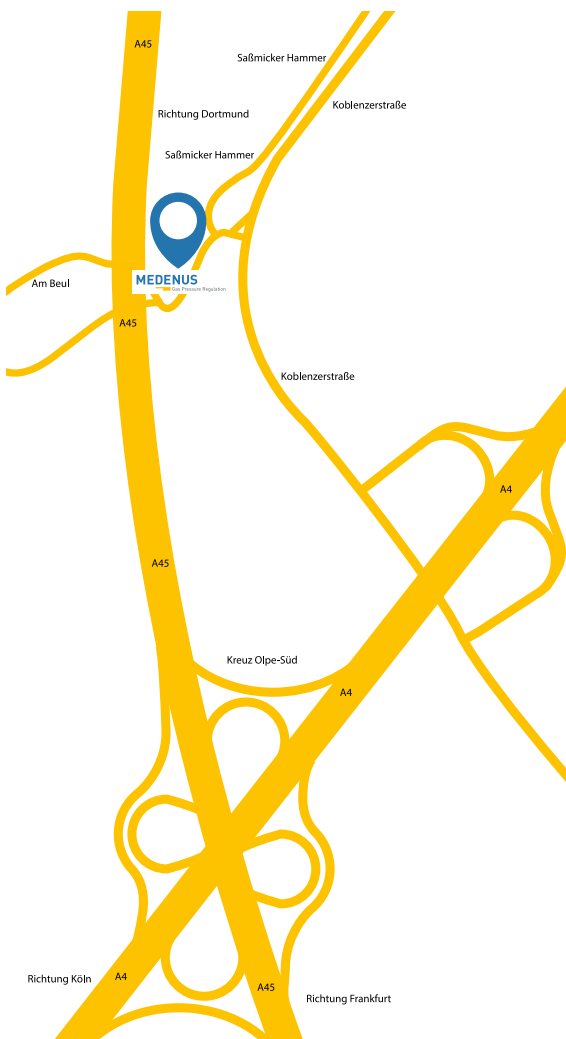
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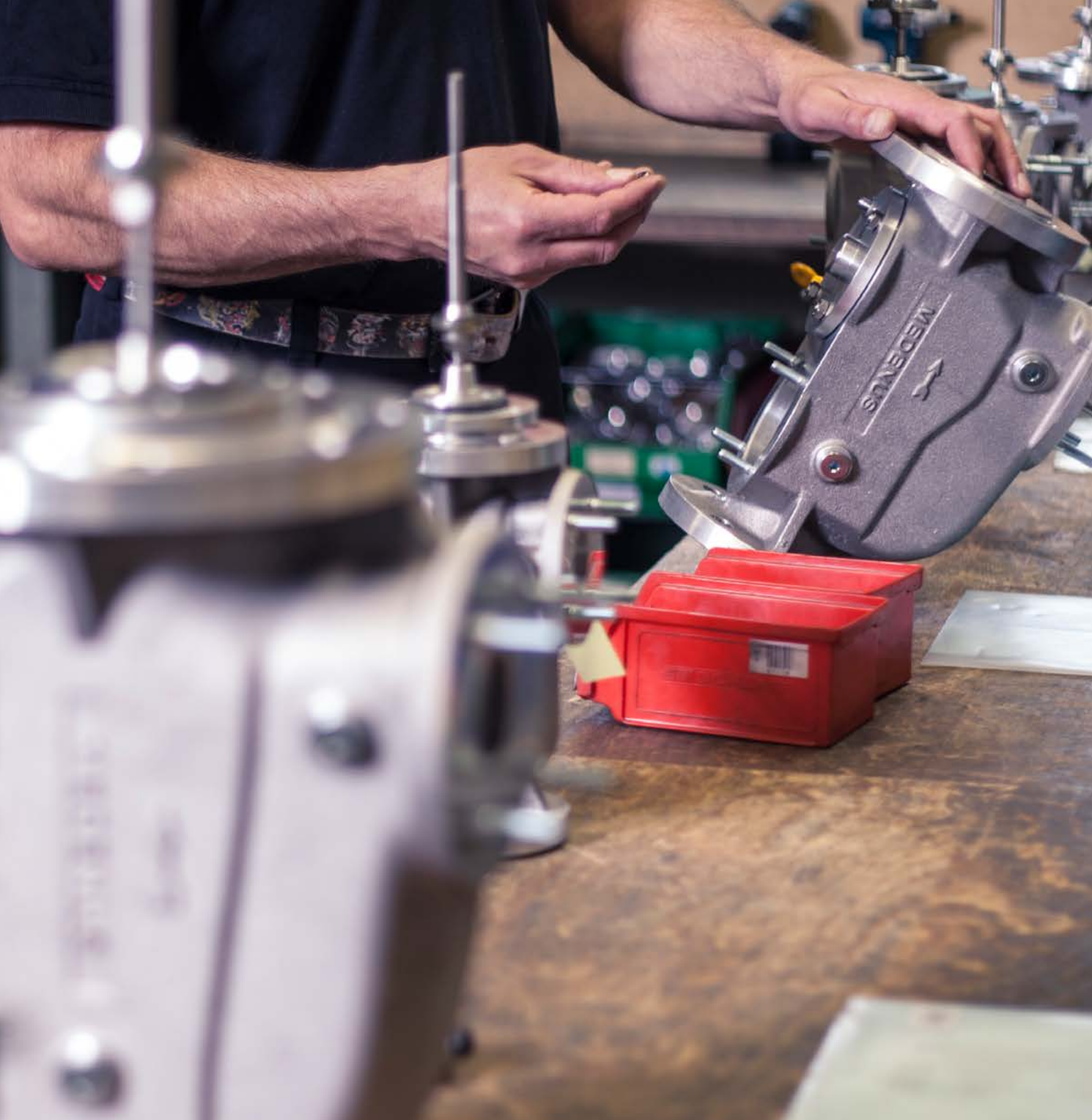
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