MEDENUS Gas Pressure Regulation

MEDENUS

Gas pressure regulator RSP 254 / RSP 255

Regulator R 70-10 / R 70-20 / R 70-100

Actuator AS 254 / AS 255

Product information





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List of abbreviations and formula symbols

AC	Accuracy class	P_{d20}	Outlet pressure R70-20	W _{dsu}	Lower adjustment range (SSV)
AG	Upper response pressure	P _{d20/2}	Outlet pressure R70-10 with	Δp_{wo}	Min. re-engagement difference
	group		1:2 pressure converter for		between upper
AG	Lower response pressure		follow-up setpoint adjustment		response pressure and
ŭ	group	P _{d20/1}	Outlet pressure R70-10 with		normal operating pressure
BV	Breather valve	020/1	1:1 follow-up setpoint adjustment	Δp_{wu}	Min. re-engagement difference
HDS	High-pressure screw spindle	$P_{_{d10}}$	Outlet pressure R70-10	• ₩0	between lower
K	value	Q	Standard volumetric flow rate		response pressure and
p_d	Outlet pressure	RSD	Throttle valve		normal operating pressure
p_{ds}	Setpoint of the	RSS	Switching valve	MOP	Maximum operating pressure in a
· us	outlet pressure	SSV	Safety shut-off valve		system
p_{dso}	Upper SSV response pressure	SD	Setting device	MOP	Maximum operating pressure
p_{dsu}	Lower SSV response pressure	SG	Closing pressure group	ŭ	upstream of the system
PS	Maximum allowable pressure	At	Actuator		
<i>p</i> ,,	Inlet pressure	t _{ugas}	Gas inlet temperature		
ρ	Standard gas density	VŠ	Valve seat		
P_{dF}	Pneumatic follow-up setpoint from	W _u	Inlet gas velocity		
đF	I/P converter	W	Outlet gas velocity		
л	• • • • •	$W_{dso}^{'}$	Upper adjustment range (SSV)		
P_{d100}	Outlet pressure R70-100	aso			

in a

Application, Characteristics, Technical Data

Application

Gas pressure regulator (GDR), indirect-acting (operating with auxiliary power), for systems acc. to DVGW - work sheet G 491 (A) and G 600 (A) (TRGI)

Can be used as an equipment component on gas consumption facilities as defined in EC Directive EU/2016/426 (GAR) Can be used for the gases defined in DVGW - work sheet G 260 / G 262 and neutral non-aggressive gases. (other gases on request)

Characteristics

- Regulator with double-diaphragm system
- Model according to DIN EN 334 / 14382
- Integral pressure-tight model (IS)
- Gas pressure regulator with or without integrated SSV
- Compact and maintenance-friendly modular design
- SSV functional class, optionally A or B to DIN EN 14382
- Open-air model

Type of model (option)

- Optionally with micro filter upstream of the regulator
- Optionally with pneumatic follow-up setpoint from I/P converter
- With built-in noise reduction
- With SSV manual release
- With SSV electromagnetic remote release when power is applied or in case of power failure
- With electric position indicator SSV 'Closed' via inductive proximity initiator or via Reed contact
- With BV breather valve or RSS switching valve (for SSV release in case of diaphragm breakage)
- Coating with epoxy resin in RAL colours
- Optionally steel model for marine applications 0 °C to 60 °C
- Special model such as Wobbe correction $Ws = \frac{Hs}{\sqrt{d}}$

$$Ws - \sqrt{P} = \frac{Hs}{\sqrt{d}} - \sqrt{P} = constant$$
 $P = burner pressure$

Technical Data

Gas pressure regulator	RSP 254 / RSP 255 (with integrated SSV) RP 254 / RP 255 (without integrated SSV)
Actuator model	AS 254 / AS 255 (with integrated SSV) A 254 / A 255 (without integrated SSV)
Safety shut-off valve (SSV)	with MD control device (W _{dsu} 8 mbar - 50 mbar ; W _{dso} 50 mbar - 400 mbar) With MD-R control device (W _{dsu} 30 mbar - 200 mbar ; W _{dso} 300 mbar - 4,000 mbar) With K 70-10 control device indirect-acting (W _{dso} 2,000 mbar - 12,500mbar)
Regulator models	R 70-10, R 70-20, R 70-20 (1:2), R 70-100
Model	Integral pressure-tight (IS)
Max. allowable pressure PS	16 bar
Max. inlet pressure p _{u,max}	16 bar
Nominal widths	RSP 254: DN 25, DN 50, DN 80, DN 100, DN 150, DN 200 RSP 255: DN 50, DN 80, DN 100
Actuator flange connection	DIN EN 1092 - flanges PN 16 ASME - B16.5 - flanges Class 150 RF
Pipe connection type	G 1/4″ or G 3/8″ for threaded pipe connections to DIN EN ISO 8434-1 (DIN 2353)
Actuator material	Al cast alloy or steel* (delivery time on request)
Regulator material	Al wrought alloy or steel
Temperature range (Operating/ambient temperature)	-20 °C to +60 °C to DIN EN 334/ 14382 0 °C to 60 °C for marine applications (steel model)
Function, Strength and Tightness	DIN EN 334 / 14382
Ex protection	The mechanical components of the device do not have any ignition sources of their own and are thus not covered by the scope of ATEX (2014/34/EU). Electrical components used at the device fulfil the ATEX requirements.

*) Corrosivity category to DIN EN ISO 12944-2. Categories C1 to C5-I are guaranteed without additional coatings. For category C5-M, an epoxy resin coating is recommended.

Application, Characteristics, Technical Data

Design and function of the gas pressure regulator (GPR)

The gas pressure regulators RSP 254/255 have the function of keeping the outlet pressure of a gas train downstream of a gas pressure regulator largely constant within specified limits, independently of changes in the gas tap or inlet pressure. The required auxiliary energy is obtained from the pressure gradient between the inlet pressure and outlet pressure of the gas pressure regulator. No external energy is required, and no gas whatsoever will flow out of the system into the surrounding atmosphere in standard operation. The regulator consists of the regulating unit, optionally connected upstream to a micro filter and bypass valve.

The control variable - the outlet pressure - is detected by a sensitive diaphragm in the regulating unit, which is part of a doublediaphragm system. The pneumatic amplifier working by the nozzle/baffle plate principle is actuated by the comparator formed by a double-diaphragm system. The bypass valve and possible changes in the setpoint spring can be used to affect the static amplification of the regulator and adjust it to the respective condition of a gas train.

The outlet pressure is applied to the top side of the double-diaphragm system in the regulating unit via a measurement line, converted into a pressure force and compared with the set setpoint spring force as command variable. Any deviation from the control value is followed by a suitable proportional change in the spacing between nozzle and baffle plate, corresponding to a proportional change in the setting pressure. The valve opening required in each case for adjusting the outlet pressure actual value to the setpoint is effected by the setting pressure generated by the actuating drive of the actuator.

In the operating state, the inlet pressure taken at the inlet flows as auxiliary energy through the nozzle/baffle plate system and the bypass valve into the outlet pressure chamber, generating, depending on the position of the nozzle/baffle plate system, the setting pressure for the valve opening position required in each case against the bypass valve. The auxiliary energy gas then flows back to the outlet pressure network via the bypass valve.

In case of zero tap of the gas train, the amplifier valve in the double-diaphragm system of the regulating unit will close tight, causing the closing pressure to be established.

Models with pneumatic follow-up setpoint inputs with 1:1 and 1:2 pressure conversions are available. Using, for example, IP converters allows you to continuously set directly the required outlet pressure setpoint via, for example, 4 to 20 mA signals. Moreover, by means of a setting spring, variable zero points can be suppressed.

Design and function of the safety shut-off valve (SSV) direct-acting

In case of inadmissible overpressure or lack of gas in the gas train, 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 on to the SSV control device via a separate measurement line. As a function of the change in pressure, the SSV diaphragm in the control device is raised or lowered. When the outlet pressure in the gas train 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 screw spindle, and the closing spring will press the SSV valve plate 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 (Δp). The SSV can, except where otherwise stipulated in national legislation, be used either in function class A (with diaphragm rupture protection) or B (without diaphragm rupture protection).

There is also the option of using a remote display for the SSV position 'CLOSED' and a manual and remote release when power is applied or in case of power failure.

Design and function of the safety shut-off valve (SSV) indirect-acting

At a safeguarding pressure of the gas train of greater than 4 bar, the SSV must be combined with a control device K70-10. In this case, the SSV switching device is designed as function class B and set to a switching pressure of approx. 500 mbar. The control device K70-10 connected upstream of the switching device is set to the upper safeguarding pressure. As soon as the pressure of the gas train reaches the upper safeguarding pressure, the control device will open and allow the gas pressure to flow to the measurement connection of the SSV switching device. Here a pressure of more than 500 mbar will build up, causing the switching device to release as described above. The excess pressure in the measurement line will be let down by flowing into the breather line via the bypass throttle and safely released into the atmosphere.

Sectional view Actuator AS 255



Sectional view Regulators R 70-10, R 70-20, R 70-100 and SSV control device K 70-10



R 70-20

K 70-10 SSV control device

with pneumatic 1:2 pressure converter for follow-up setpoint adjustment, for example, via I/P converter



Application, Characteristics, Technical Data

K_g* value

		Setting device							
			AS	254			AS 255		
Nominal width	DN	DN	DN	DN	DN	DN	DN	DN	DN
	25	50	80	100	150	200	50	80	100
Setting device									
Ø	320	320	390	390	385	385	390	385	385
Valve seat	020	020		0.0					
Ø									
17.5 mm	200	220							
27.5 mm	420	500	550	600			550		
32.5 mm		750	850	900			750		
42.5 mm			1,450	1,500	1,600		1,250	1,500	1,500
52.5 mm				1,800	2,000		1,700	1,800	1,850
65.0 mm					3,500			2,600	3,200
85.0 mm					4,600			3,500	4,300
95.0 mm					5,800	6,100			4,800
115.0 mm						8,950			

Setting device is approved for a max. pressure differential of 0.5 bar

Accuracy class AC / Closing pressure group SG (preliminary)

	ØS			
Outlet pressure range p_d	320	385	390	
10 mbar to 20 mbar	10 / 50	10 / 50	10 / 50	-
20 mbar to 50 mbar	5/20	5 / 20	5 / 20	-
50 mbar to 500 mbar	5/10	5/10	5/10	-
0.5 bar to 2.5 bar	2.5 / 10	2.5 / 10	2.5 / 10	
2.5 bar to 5 bar	1/10	1/10	1/10	[An 12ha
> 5 bar	1/5	1/5	1/5	- (∆p _{u,max} ±2ba

Response pressure group AG (SSV direct-acting)

Response pressure group AG (SSV indirect-acting) control device K 70-10

Upper response pressure group AG	
800 mbar to 4,000 mbar	AG 2.5
> 4,000 mbar	AG 2,5

Upper response pressure group AG		
30 mbar to 100 mbar	AG	10
100 mbar to 500 mbar	AG	5
> 500mbar	AG	2.5
Lower response pressure AG		
5 mbar to 30 mbar	AG	20
30 mbar to 50 mbar	AG	10
> 50mbar	AG	5

*) KG value for natural gas: d = 0.64 (ρ_n = 0.83 kg/m³), t_{ugas} = 15 °C

	Upper response pressure		Lower response	e pressure	Sprin	Spring data		
Туре	<i>w_{dso}</i> [mbar]	$\Delta p_{_{wo}}$ [mbar]	w _{dsu} [mbar]	Δρ _{wu} [mbar]	Spring no.	Colour [RAL]		
			2 - 8	15	FE 900	1028		
			8 - 18	15	FE 901	2002		
			18 - 30	20	FE 902	6010		
			22 - 35	30	FE 903	5015		
MD			31 - 45	30	FE 904	9005		
small			45 - 60	40	FE 905	9010		
ball lock			60 - 85	50	FE 906	4002		
	40 - 80	20			FD 911	2002		
AS 254: DN 25 - 100	65 - 120	30			FD 912	6010		
DN 25-100	100 - 170	30			FD 913	5015		
AS 255:	140 - 240	40			FD 914	9005		
DN 50-80	200 - 370	60			FD 915	9010		
	360 - 510	80			FD 916	3020		
	490 - 710	80			FD 917	5010		
	630 - 1080	100			FD 918	9006		
	980 - 1500	200			FD 919	4002		
			35 - 52	30	FE 900	1028		
			50 - 80	40	FE 901	2002		
			75 - 110	50	FE 902	6010		
			90 - 130	80	FE 903	5015		
MD-R			115 - 160	80	FE 904	9005		
small			160 - 210	100	FE 905	9010		
ball lock			220 - 290	100	FE 906	4002		
	100 - 135	30			FD 910	1028		
AS 254:	130 - 265	40			FD 911	2002		
AS 254: DN 25 - 100	210 - 380	60			FD 912	6010		
DIN 20-100	320 - 530	80			FD 913	5015		
AS 255:	440 - 730	80			FD 914	9005		
DN 50-80	600 - 1130	100			FD 915	9010		
	1050 - 1500	200			FD 916	3020		
	1450 - 2100	200			FD 917	5010		
	1850 - 3500	200			FD 918	9006		
	2800 - 4000	200			FD 919	4002		

SSV setpoint spring table - Control device direct-acting

	Upper response pressure		Lower response	pressure	Spring data		
Туре	<i>w_{dso}</i> [mbar]	$\Delta p_{_{wo}}$ [mbar]	w _{dsu} [mbar]	$\Delta p_{_{wu}}$ [mbar]	Spring no.	Colour [RAL]	
MD			10 - 40	15	FM 400	1028	
large			35 - 115	30	FM 402	6010	
ball lock			60 - 245	60	FM 404	9005	
AS 254: DN 150 - 200	40 - 180	20			FL 412	6010	
RSP 255:	70 - 340	50			FL 413	5015	
DN 100	330 - 1100	80			FL 415	9010	
MD-R			10 - 180	50	FM 400	1028	
large			155 - 380	100	FM 402	6010	
ball lock AS 254:			200 - 950	150	FM 404	9005	
AS 254: DN 150 - 200	145 - 670	100			FL 412	6010	
RSP 255:	270 - 1230	200			FL 413	5015	
DN 100	1200 - 4500	200			FL 415	9010	

SSV setpoint spring table - Control device direct-acting

Determining the upper response pressure

Output pressure P_d	Upper response pressure $W_{_{dso}}$ *
≤200 mbar	P_{d} +100 mbar
>200 mbar to ≤800 mbar	P _d x 1.5
>800 mbar to ≤1600 mbar	P _d x 1.3
> 1600mbar	P _d +500 mbar

Regulator setpoint spring table

R70-100	R70-20		R70-10		Spring data	
P _{d100} [mbar]	P _{d20} [mbar]	P _{d20s} [mbar] (1:2)	P _{d10} [mbar]	P _{d10s} [mbar] (1:1)	Spring no.	Colour [RAL]
0-37	0-180		0-370		FD 911	2002
30-85	150-400	P _{d20s} =P _{d10} +Ph*2	300-850		FD 912	6010
55-160	250-750		550-1600		FD 913	5015
100-260	550-1250		1000-2600	$P_{d10s} = P_{d10} + P_{h}$	FD 914	9005
200-460	1000-2250		2000-4600		FD 915	9010
400-620	2000-3000		4000-6200		FD 917	5010
600-1300	3000-6500		6000-13000		FD 918	9006

 P_{h} Pneumatic follow-up setpoint from I/P converter (0-6 bar)

 P_{d100} P_{d20} P_{d20s} P_{d10} Outlet pressure R70-100

Outlet pressure R70-20

Outlet pressure R70-20 with follow-up setpoint 1:2

Outlet pressure R70-10

- $\mathsf{P}_{d^{10s}}$ Outlet pressure R70-20 with follow-up setpoint
- *) The upper response pressure is rounded up to full tens, for example 251 mbar-> 260 mbar

Dimensions, Connection and Weight

Nominal width	Setting device	SSV control devi	ce direct-acting		
	Setting pressure line / Return line	SSV measurement line	Breather line		
DN 025					
DN 050		Connection	* for: tube		
DN 080	Connection* for: Tube 12 x 1.5	12 x 1.5 (thread G 1/4)			
DN 100	(thread G 3/8)				
DN 150		Connection	* for: tube		
DN 200		12 x 1.5 (thread G 3/8)			

AS 255: Connection of the functional line and breather lines

Nominal width	Setting device	SSV control devi	ce direct-acting		
	Setting pressure line / Return line	SSV measurement line	Breather line		
DN 050	Connection* for:	Connection* for: tube			
DN 080	Tube 12 x 1.5	12 x 1.5 (thread G 1/4)			
DN 100	(thread G 3/8)	Connection* for: tube 12 x 1.5 (thread G 3/8)			

R 70: Connection of the functional line and breather lines

	Function / Breather line
R 70-10	Connection* for:
R 70-20 (1:2)	Tube 12 x 1.5
R 70-100	(thread G 1/4)

K 70: Connection of the functional line and breather lines

	Function / Breather line
	Connection* for:
K 70-10	Tube 12 x 1.5
	(thread G 1/4)

Note: Observe the following publications in relation to installation, start-up and maintenance: DVGW - work sheets G 491 and G 600

Operating and Maintenance Instructions RSP 254 / 255

The gas pressure regulators RSP 254 / 255 shall be installed in the pipeline preferably in horizontal position. For all nominal widths, the direction of flow is indicated by an arrow on the housing.

*) Threaded pipe connections to DIN EN ISO 8434-1 (DIN 2353)

Design

Calculation of the required ${\rm K}_{\rm g}$ value

 $\begin{array}{c} p_d \, / \, p_u > 0.5 & p_d \, / \, p_u \leq 0.5 \\ K_G \text{ value at} & K_G \text{ value at} \\ a \text{ sub-critical pressure ratio} \\ K_G = Q_n \, / \, \sqrt{p_d} \cdot (p_u - p_d) & K_G = 2 \cdot Q_n \, / \, p_u \end{array}$

Note: all calculated pressures are absolute pressures.

Device selection

The device is selected on the basis of its $\rm K_{\rm g}$ value from the table of flow rate coefficients (page 10)

Note: For the device design, a capacity reserve of 10% is recommended.

Example:

1.5 bar / 6 bar = 0.25 < 0.5 → Supercritical pressure ratio K_g = 2•1500 / 6 = 500 ((m³/h)/bar)

AS 254 DN 50 VS 32.5 K_gvalue: 750 (m³/h)/bar

Note: To obtain a more accurate design configuration of our gas pressure regulators, you can use our configurator, on our homepage medenus.de, under Service. (medenus.de/de/service/konfigurator.html)

Dimensions, Connection and Weight

Dimensional drawing of gas pressure regulator

SE Gas pressure regulator (ii) ie. RSP 255 consisting of: 00 OD Ā 2000 erin Actuator AS 255 DOD DON 1-9 Regulator R 70-10 12 - Baston ∢ Ð Control device K 70-10 T ш L2 L L1 SE Gas pressure regulator 븠 RSP 255 consisting of: E ON Ole 间 Actuator AS 255 Ā Regulator R 70-20/2 with I/P E03 OTESAS NOW 1-3 8-1 2007 converter 1 2 ∢ Control device K 70-10 13 മ 1

Gas pressure regulator RSP 255 consisting of:

Actuator AS 255 Regulator R 70-100 Control device MD or MD-R



L2



L

L1

Dimensional drawing of regulator

Pressure range: 0.5 bar - 12 bar





Dimensional drawing of control device

С Ţ \odot 0 ۲







Dimensions and weight

Gas pressu	re regulator			RSP 255							
Nominal width Dimensions		DN 25	DN 50	DN 80	DN 100	DN 150	DN 200	DN 50	DN 80	DN 100	
A [mm]	RE 320	214	232	-	-	-	-	-	-	-	
A [[1111]]	RE 385/390	-	-	293	308	370	510	292	370	441	
	R 70-10										
A1* [mm]	R 70-20	345	365	423	438	500	640	422	500	571	
	R 70-100										
B [mm]		270	282	305	315	386	400	305	311	386	
L [mm]		230	230	310	350	480	600	310	410	480	
L1* [mm]		500	500	585	616	598	800	586	660	710	
	R 70-10	480									
L2* [mm]	R 70-20		480	502	514	462	570	501	520	542	
	R 70-100										
Y [mm]	100		100	100	100	150	150	100	150	150	
Weight [kg]	RE 320	13.5	15	-	-	-	-	22	-	-	
	RE 385/390	-	-	28	29	58	88	-	42	58	
Actuator connection	DIN EN 1092 - PN16										
				ASME	B 16.5 -	Class 150)				
Regulator	R 70-1	R 70-10 R 70-20 R 70-100									
C [mm]	94		9	4	Ø1	61					
D [mm]	124		1:	24	1:	24					
E [mm]	227.5	5	2	59	28	3.5					
Weight [kg]	3.7		4	.2	5	.3					
									(

G 1/4

Regulator connection

Control device	K 70-10
C [mm]	70
D [mm]	124
E [mm]	250
Weight [kg]	3.7
Control device connection	G 1/4

Reactivation of SSV



*) The dimensions given are "max." and depending on the control device and piping

Installation situations





RSP 255 shown with actuator AS 255 incl. switching device MD or MD-R, Regulator R 70-10 and control device K 70-10





Connection example



Gas pressure regulator RSP 254 with integrated SSV indirect-acting



Gas pressure regulator RSP 254 with integrated SSV direct-acting

Breather line



Order data

Order selectionDesiTypeRSP 254RSP 257RSP 255with integrated SSVRSP 257RP 254without integrated SSVRP 257RP 255without integrated SSVRP 257DN - Nominal widthTableFlange modelPN 16PN 16-Class 150CSSVwith control device MDwith control device MD-RMD-Fwith control device K 70-10 indirect-actingK 70-FSSV functional classA incl. diaphragm rupture protection-BBDirection of flowB	255 254 255 le p. 22	RSP 254 RSP 254 	050	-	MD-R	-	left	SR	BV	N 	H	R 70-10	W 	WAZ	So
TypeRSPRSP 254with integrated SSVRSP 2RP 255without integrated SSVRP 25DN - Nominal widthTableFlange modelPN 16PN 16-Class 150CSSVwith control device MDMDwith control device K 70-10 indirect-actingK 70-SSV functional classA incl. diaphragm rupture protectionBBBB	254 255 254 255 le p. 22	RSP 254													
RSP 254with integrated SSVRSP 2RSP 255with integrated SSVRP 25RP 255without integrated SSVRP 25DN - Nominal widthTableFlange model-PN 16-Class 150CSSVwith control device MDMDwith control device K 70-10 indirect-actingK 70-SSV functional classA incl. diaphragm rupture protection-BBBDirection of flowF	255 254 255 le p. 22	RSP 254	050 050												
RSP 255with integrated SSVRSP 25RP 255without integrated SSVRP 25DN - Nominal widthTableFlange model-PN 16-Class 150CSSVwith control device MDMDwith control device MD-RMD-Fwith control device K 70-10 indirect-actingK 70-SSV functional classAA incl. diaphragm rupture protection-BBDirection of flow-	255 254 255 le p. 22	RSP 254	050												
RP 253RP 253RP 254without integrated SSVRP 25RP 255without integrated SSVRP 25DN - Nominal widthTableFlange model-PN 16-Class 150CSSVwith control device MDMDwith control device MD-RMD-Fwith control device K 70-10 indirect-actingK 70-SSV functional classA incl. diaphragm rupture protection-BBBDirection of flow-	254 255 le p. 22		050												
RP 255 without integrated SSV RP 25 DN - Nominal width Table Flange model - PN 16 - Class 150 C SSV with control device MD with control device MD-R MD-F with control device K 70-10 indirect-acting K 70- SSV functional class - A incl. diaphragm rupture protection - B B Direction of flow -	255 le p. 22		050	-											
NP 200 NP 200 DN - Nominal width Table Flange model - PN 16 - Class 150 C SSV with control device MD with control device MD-R MD-F with control device K 70-10 indirect-acting K 70- SSV functional class A incl. diaphragm rupture protection B B Direction of flow -	le p. 22		050	-											
Flange model - PN 16 - Class 150 C SSV - with control device MD MD with control device MD-R MD-F with control device K 70-10 indirect-acting K 70- SSV functional class - A incl. diaphragm rupture protection - B B Direction of flow -	-R		050	-											
PN 16 - Class 150 C SSV with control device MD with control device MD-R MD-F with control device K 70-10 indirect-acting K 70- SSV functional class A A incl. diaphragm rupture protection - B B Direction of flow B				-											
Class 150CSSVwith control device MDwith control device MD-RMD-Fwith control device K 70-10 indirect-actingK 70-SSV functional classAA incl. diaphragm rupture protection-BBDirection of flow-				-											
SSV MD with control device MD MD with control device MD-R MD-F with control device K 70-10 indirect-acting K 70- SSV functional class A A incl. diaphragm rupture protection - B B Direction of flow B															
with control device MD MD with control device MD-R MD-F with control device K 70-10 indirect-acting K 70- SSV functional class A A incl. diaphragm rupture protection - B B Direction of flow B															
with control device MD-R MD-F with control device K 70-10 indirect-acting K 70- SSV functional class A incl. diaphragm rupture protection B B Direction of flow B															
with control device K 70-10 indirect-acting K 70- SSV functional class A incl. diaphragm rupture protection B B Direction of flow B															
SSV functional class - A incl. diaphragm rupture protection - B B Direction of flow -)-10				MD-R										
A incl. diaphragm rupture protection - B B Direction of flow															
B B Direction of flow															
B B Direction of flow						-									
Disht (farme left to sight)															
Right (from left to right) _															
Left (from right to left)							left								
Noise reduction							tort								
without noise reduction															
with noise reduction SR								SR							
SSV valve accessories								511							
without SSV valve accessories -															
Switching valve RSS															
Breather valve BV	,								BV						
Electrical position indicator, SSV 'Closed'									01						
without electrical position indicator -															
with , via proximity switch N										N					
with , via Reed contact R										IN					
SSV release															
without release															
with manual release H											Н				
with electromagnetic											п				
remote release, when power is supplied SG															
with electromagnetic															
remote release, in case of power failure															
Regulator															
R 70-10 (0,5 bar bis 12bar) R 70-	D-10											R 70-10			
)-20/2														
	D-100														
I/P converter (follow-up setpoint adjustment)															
with I/P converter W													W		
without I/P converter -															
without acceptance test certificate -															
with acceptance test certificate WAZ	Z														
Special model So*														WAZ	

DN - Nor	ninal wid	th				
Regulator type	025	050	080	100	150	200
RSP 254	Х	Х	Х	Х	Х	Х
RSP 255		Х	Х	Х		

In each selection group, only one option can be selected in each case.

*) for example coating with epoxy resin in RAL colours

Contact

If you want to know more about solutions from MEDENUS for the gas industry, please contact your local contact person or go to our internet site at www.medenus.de

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How to get there



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Notes

Notes

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