CERTIFIED
ISO 9001 · ISO 14001
ISO 45001

LDM®

01 - 01.2
12.21.GB

SELF-ACTING REGULATORS OF DIFFERENTIAL PRESSURE

RD122 BEE line



POWER THROUGH IDEAS
www.ldmvalves.com

BEE line



Application

These valves are designed for applications in common warm-water and hot-water heating circuits, refrigerating and air-conditioning with max. differential pressure of 1,6 MPa.

Process media

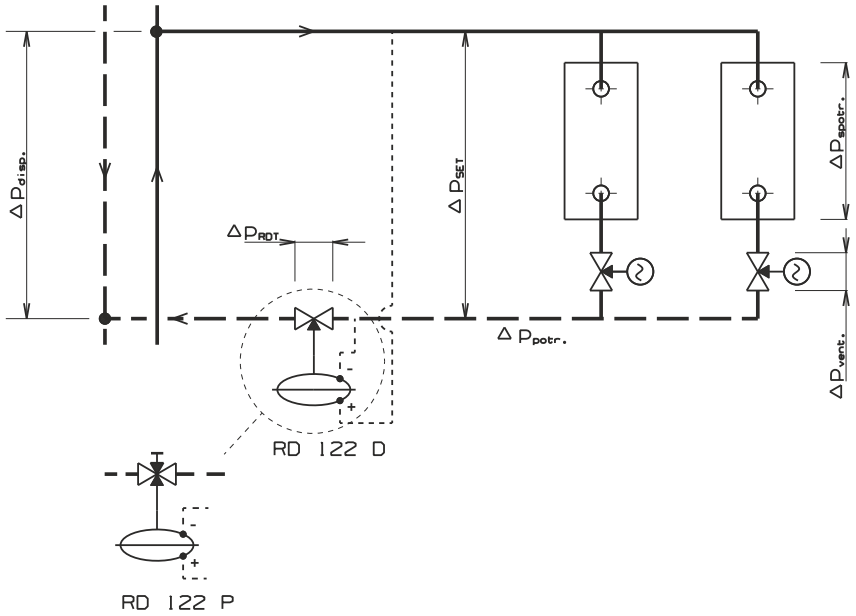
Valves series RD 122 are suitable for process media such as water, air or low-pressure steam to 0,4 MPa. In addition, they are suitable for cooling mixtures and other non-aggressive media and gases with temperature range +2 °C to +150 °C, possibly with condensation wells up to 180°C. Sealing surfaces of the trim are resistant to common sludge or water impurities. Yet it is recommended to pipe a strainer in front of the valve to ensure a reliable function and tightness in case there are abrasive particles present in the process medium.

Installation

Basic operating position of regulator is when the body is above its controlling head that points downwards. The position must be kept especially when reducing steam pressure or when temperature exceeds 90 °C. For gases that have lower temperatures, the valve can be installed in any position.

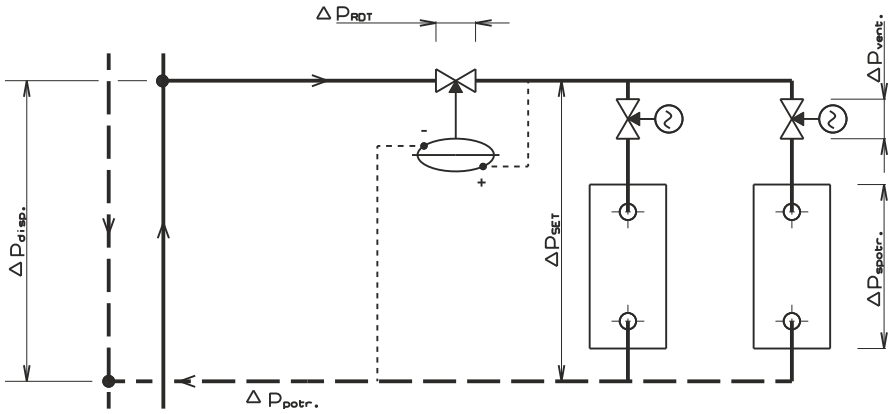
Typical scheme of wiring the regulators

Scheme of typical regulation loop with differential pressure regulator at secondary side

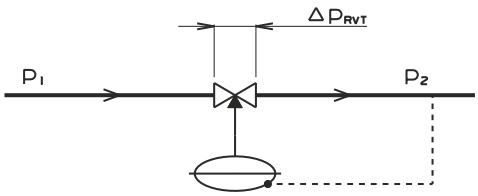


In cases that the differential pressure regulator is forced to work with high differential pressure (Δp_{RDT} > 250 kPa), the producer recommends to install both differential pressure regulator and control valves at primary line of the control loop. Such an installation ensures better working conditions for the regulator and better function of the whole system.

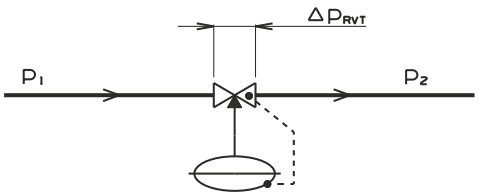
Scheme of regulation loop with differential pressure regulator at primary side



Basic scheme of piping outlet pressure regulator



RD 122 V2
RD 122 V3



RD 122 V4



RD 122 D

Self-acting regulator of differential pressure **BEE line**

DN 15 - 50
PN 25

Self-acting regulator of differential pressure series RD 122 D is designed to keep a constant differential pressure value of given appliance. Such a function is ensured by a diaphragm exposed to effects of inlet and outlet pressure of the appliance. Deflections of the diaphragm transfer to the valve plug and it closes the valve upon increase of differential pressure value. Owing to a pressure-balanced plug, value of differential pressure is not affected by pressure ratios within the valve. In case when required value of differential pressure is within range of two spring ranges, it is more suitable to choose the range with lower values to ensure sensitivity of the regulator.

Connecting impulse pipes for extraction of pressure from the pipeline are within the scope of supply as standard.

Technical data

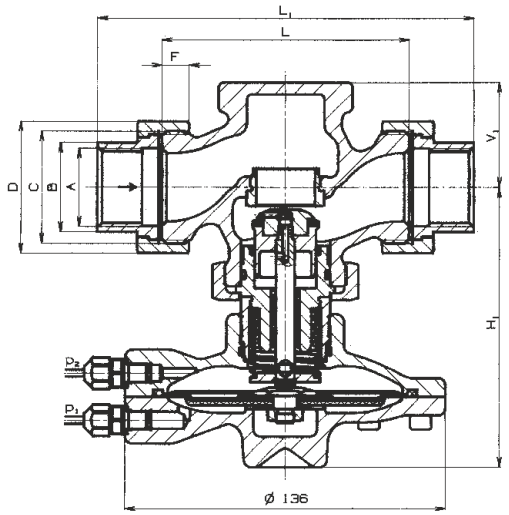
Series	**RD 122 D**
Execution	**Self-acting regulator of differential pressure**
Nominal diameter range	DN 15 to 50
Nominal pressure	PN 25
Body material	Spheroidal cast iron EN-JS1030
Plug material	Stainless steel 1.4006 / 17 027.6
Seat material	Stainless steel 1.4021 / 17 027.6
Stem material	Stainless steel 1.4305
Material of diaphragm and sealing	EPDM
Material of diaphragm chamber bonnets	Spheroidal cast iron / Carbon steel
Operating temperature range	+2 to +150 °C, version with condensing well up to +180°C
Connection	Externally threaded coupling + screw joints Flanges with raised faces Externally threaded coupling + weld unions
Material of weld unions	DN 15 to 32 ... 1.0036 / 11 373.0 DN 40 and 50 ... 1.0308 / 11 353.0
Plug type	Contoured, pressure-balanced, with soft seat sealing
Kvs values	0,63 to 32 m^3 /h
Leakage rate	Class IV. - S1 acc. to ČSN-EN 1349 (5/2001) (< 0.0005 % Kvs)
Range of adjustable diff. press. values Δp_{set} The tolerance of setting of the end values of the range is 10% from the corresponding value of the range.	DN 15 to 25: 10; 15 to 60; 30 to 210; 60 to 400; 150 to 550; 220 to 1000 kPa DN 32 to 50: 10; 20; 25 to 70; 40 to 220; 70 to 410; 150 to 550; 220 to 1000 kPa

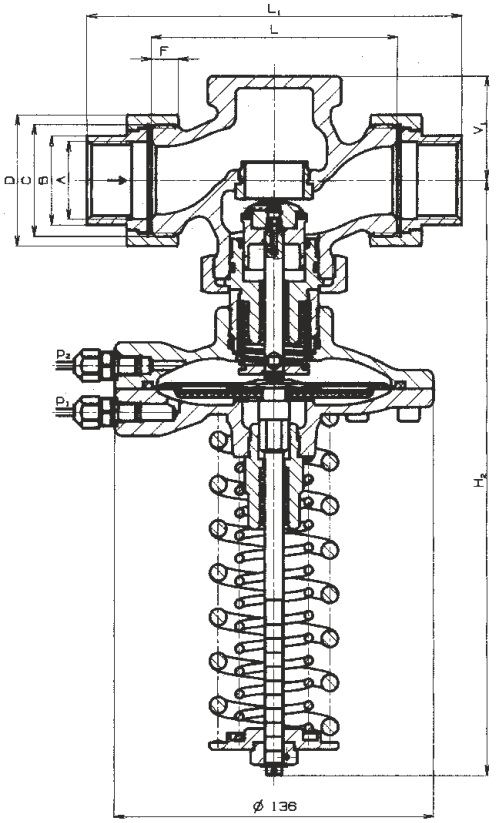
Dimensions and weights for RD 122 D../T with thread couplings and RD 122 D../W with weld unions

DN	L	L_1	V_1	H_1 *)	H_2 *)	A	B	C	D	ØM	ØN	ØF	m_1 *)	m_2 *)
	[mm]	[mm]	[mm]	[mm]	[mm]		[mm]		[mm]	[mm]	[mm]	[mm]	[kg]	[kg]
15	100	146	44.5	119	254	Rp 1/2	25	G 1	41	16.1	21.3	9	3.6	4.1
20	100	149	44.5	119	254	Rp 3/4	32	G 1 1/4	51	21.7	26.9	10	3.9	4.4
25	105	160	44.5	119	254	Rp 1	38	G 1 1/2	56	29.5	33.7	11	4.2	4.7
32	130	193	63	139	274	Rp 1 1/4	47	G 2	71	37.2	42.4	12	5.6	6.1
40	140	207	63	139	274	Rp 1 1/2	53	G 2 1/4	76	43.1	48.3	14	6.5	7.0
50	160	233	63	139	274	Rp 2	66	G 2 3/4	91	54.5	60.3	16	8.6	9.1

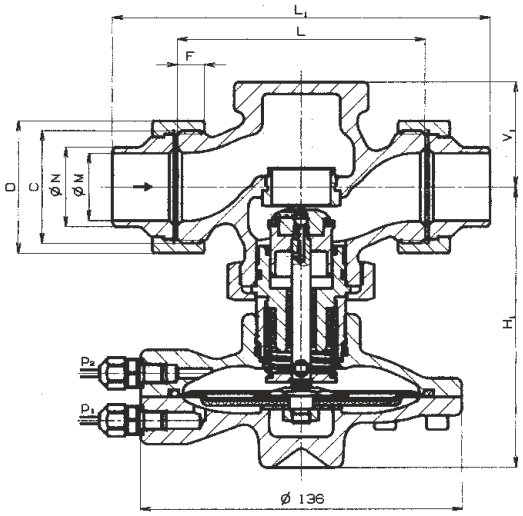
*) H_1 , m_1 ... dimensions and weights for the valves with constant differential pressure value RD 122 D1
H_2 , m_2 ... dimensions and weights for the valves with adjustable differential pressure value RD 122 D2

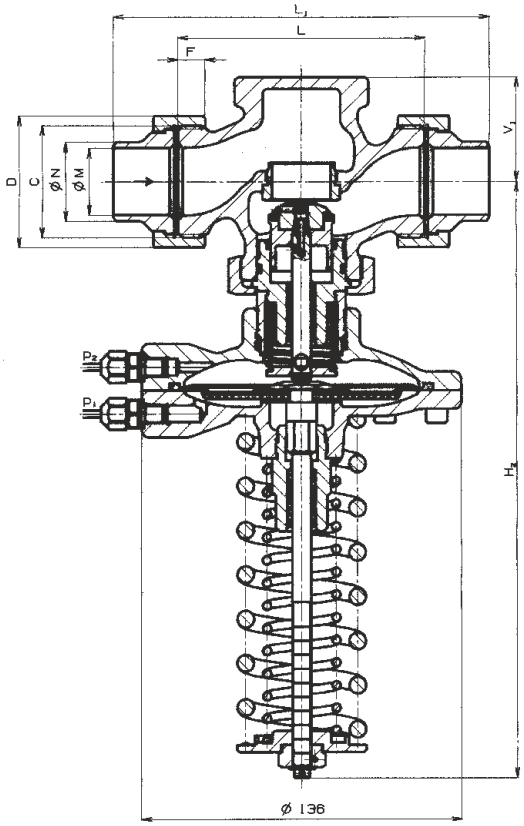
Ventily RD 122 D../T with thread couplings





Ventily RD 122 D../W with weld unions



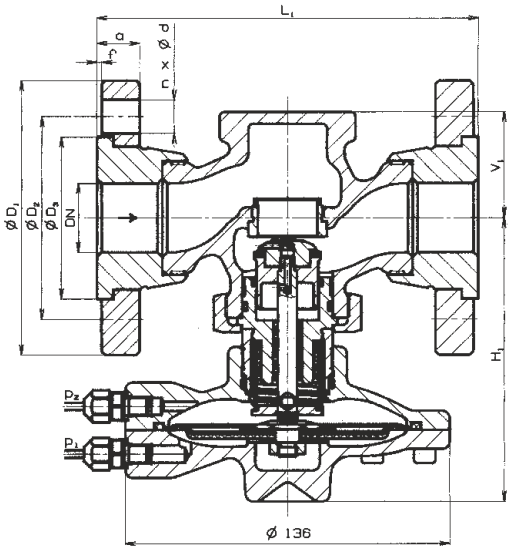


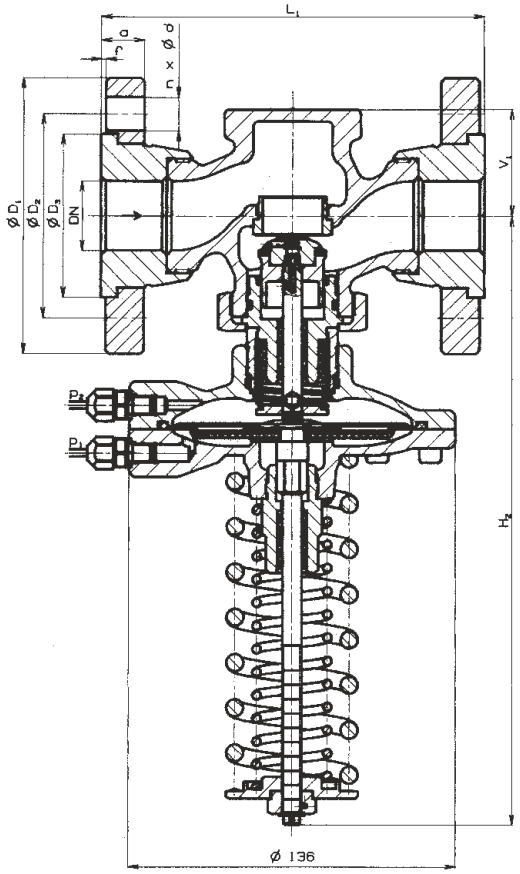
Dimensions and weights for RD 122 D../F with flange connection

DN	L_1	V_1	H_1 *)	H_2 *)	$ØD_1$	$ØD_2$	$ØD_3$	a	f	n	Ød	m_1 *)	m_2 *)
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[mm]	[kg]	[kg]
15	130	44.5	119	254	95	65	45	16	2	4	14	4.7	5.2
20	150	44.5	119	254	105	75	58	16	2	4	14	5.4	5.9
25	160	44.5	119	254	115	85	68	18	2	4	14	6.3	6.8
32	180	63	139	274	140	100	78	18	2	4	18	8.4	8.9
40	200	63	139	274	150	110	88	19	3	4	18	9.9	10.4
50	230	63	139	274	165	125	102	19	3	4	18	12.8	13.3

*) H_1 , m_1 ... dimensions and weights for the valves with constant differential pressure value RD 122 D1
H_2 , m_2 ... dimensions and weights for the valves with adjustable differential pressure value RD 122 D2

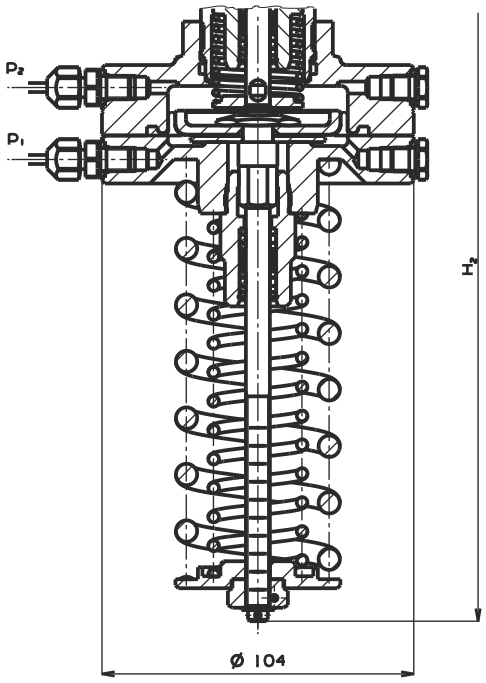
Ventily RD 122 D../F v přírubovém provedení s hrubou těsnicí lištou



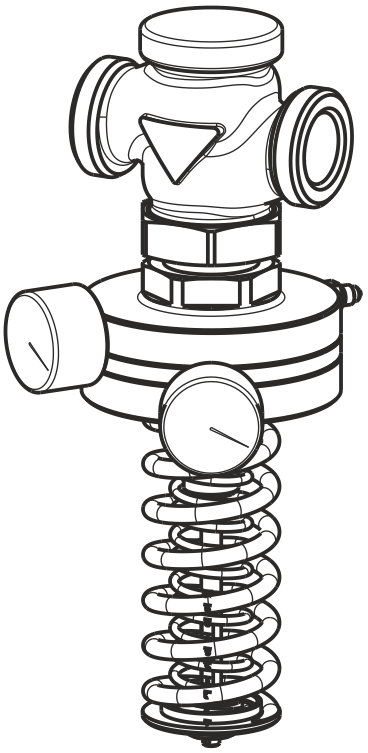


Dimensions and execution of head D3 or D4 with diaphragm 26 cm²

Dimensions of head RD 122 D3



Execution D4, with manometer



Specification code for ordering of valves RD 122 D

			XX	XXX	X	XXXX	XX	/	XXX	-	XX	/	X
1. Valve	Self-acting pressure regulator		**RD**										
2. Series	Pressure-balanced			**122**									
3. Function	Differential pressure regulator				**D**								
4. Execution	With constant differential pressure value					**1**							
	With adjustable differential pressure value, diaphragm 63 cm²					**2**							
	With adjustable differential pressure value, diaphragm 26 cm²					**3**							
	With adjustable differential pressure value, diaphragm 26 cm², with manometers					**4**							
5. Range of pressure setting / spring colour *Max.differential pressure may not exceed 0,2 MPa for this setting range*	DN 15 to 25	10 kPa				**11**							
		15 to 60 kPa / red				**22**							
		30 to 210 kPa / red + yellow				**23**							
		60 to 400 kPa / red + black				**24**							
	DN 32 to 50	10 kPa[1)]				**10**							
		20 kPa				**11**							
		15 to 60 kPa[1)] / red				**20**							
		25 to 70 kPa / red				**22**							
		40 to 220 kPa / red + yellow				**23**							
		70 to 410 kPa / red + black				**24**							
	DN 15 to 50	150 to 550 kPa / red + yellow				**33**							
		220 to 1000 kPa / red + black				**34**							
	DN 15 to 50	150 to 550 kPa / red + yellow				**43**							
		220 to 1000 kPa / red + black				**44**							
6. Impulse pipeline	Standard 1,6 m					**1**							
	Extended 2,5 m					**2**							
	Width 1,6 m, with cock R 1/4					**3**							
	Extended 2,5 m, with cock R 1/4					**4**							
	Other execution after agreement					**9**							
7. Kvs	No. of the column of the Kvs values					**X**							
8. Pressure nominal	PN 25						**25**						
9. Max. operating temp. °C	150°C								**150**				
	With condensing well up to 180°C								**180**				
10. Nominal size	DN 15 to 50										**XX**		
11. Connection	Threaded couplings												**T**
	Flange PN 25 with raised-faced flanges												**F**
	Weld unions												**W**

Note: flange dimensions for PN 25, PN 16 and PN 10 in range of DN 15 - 50 remain the same
Ordering example: **RD122 D 2411 25/150-25/W**

Kvs value table

	Kvs [m³/h]				
DN	**1**	**2**	**3**	**4**	**5**
15	5	2.5	1.6	1.0	0.63
20	8	---	---	---	---
25	10	---	---	---	---
32	15	---	---	---	---
40	21	---	---	---	---
50	32	---	---	---	---



RD 122 P

Self-acting regulator of differential pressure with flow limitation **BEE line**

DN 15 - 50
PN 25

Self-acting regulator of differential pressure with flow limitation RD 122 P is designed especially to ensure maximum flow rate required in an appliance.

Such a function is ensured by two plugs one of which is adjustable to the value required by the user, and the other is controlled by differential pressure with the aid of diaphragm head. Deflection of the diaphragm transfer to plug and it closes the valve upon the increase of differential pressure value. Pressure-balanced plugs ensure a reliable function and stability of set value within the whole of both available and differential pressure ranges. Connecting impulse pipes for extraction of pressure from the pipeline are within the scope of supply as standard.

Technical data

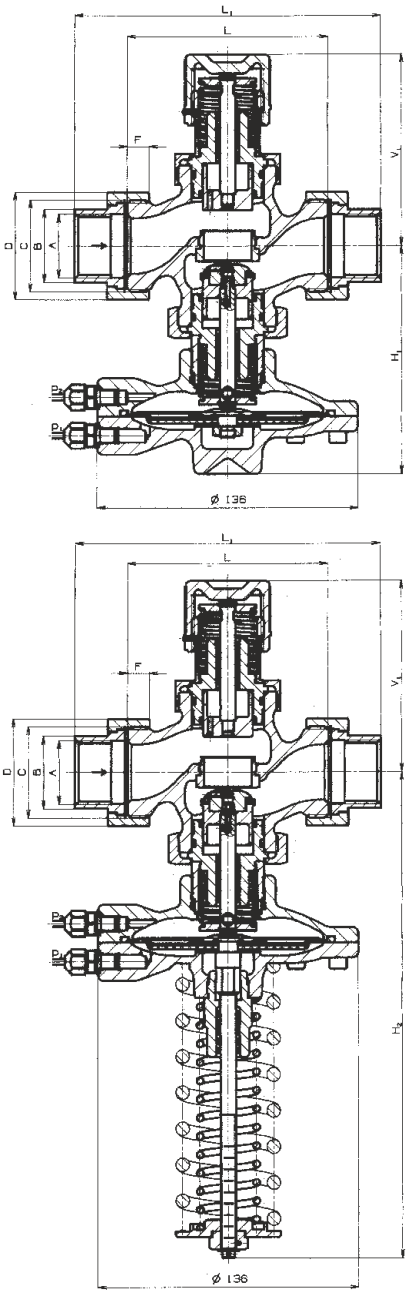
Series	**RD 122 P**
Execution	**Self-acting regulator of differential pressure with flow limitation**
Nominal diameter range	DN 15 to 50
Nominal pressure	PN 25
Body material	Spheroidal cast iron EN-JS1030
Plug material	Stainless steel 1.4006 / 17 027.6
Seat material	Stainless steel 1.4021 / 17 022.6
Stem material	Stainless steel 1.4305
Material of diaphragm and sealing	EPDM
Material of diaphragm chamber bonnets	Spheroidal cast iron / Carbon steel
Operating temperature range	+2 to +150 °C, version with condensing well up to +180°C
Connection	Externally threaded coupling + screw joints Flanges with raised faces Externally threaded coupling + weld unions
Material of weld unions	DN 15 to 32 ... 1.0036 / 11 373.0 DN 40 and 50 ... 1.0308 / 11 353.0
Plug type	Contoured, pressure-balanced, with soft seat sealing
Kvs values	0,63 acc. to 28,5 m^3/h
Leakage rate	Třída IV. - S1 acc. to ČSN-EN 1349 (5/2001) (< 0.0005 % Kvs)
Range of adjustable diff. press. values Δp_{set} The tolerance of setting of the end values of the range is 10% from the corresponding value of the range.	DN 15 to 25: 10; 15 to 60; 30 to 210; 60 to 400; 150 to 550; 220 to 1000 kPa DN 32 to 50: 10; 20; 25 to 70; 40 až 220; 70 to 410; 150 to 550; 220 to 1000 kPa

Dimensions and weights for RD 122 P../T with thread couplings and RD 122 P../W with weld unions

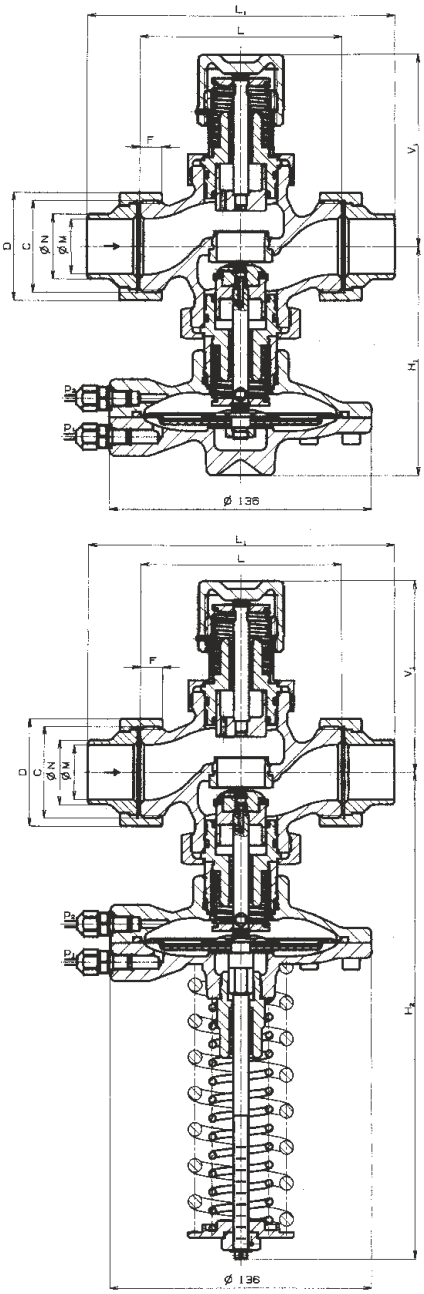
DN	L	L_1	V_2	H *)	H_2 *)	A	B	C	D	ØM	ØN	F	m_1 *)	m_2 *)
	[mm]	[mm]	[mm]	[mm]	[mm]		[mm]		[mm]	[mm]	[mm]	[mm]	[kg]	[kg]
15	100	146	100	119	254	Rp 1/2	25	G 1	41	16.1	21.3	9	4.0	4.5
20	100	149	100	119	254	Rp 3/4	32	G 1 1/4	51	21.7	26.9	10	4.3	4.8
25	105	160	100	119	254	Rp 1	38	G 1 1/2	56	29.5	33.7	11	4.6	5.1
32	130	193	119	139	274	Rp 1 1/4	47	G 2	71	37.2	42.4	12	6.4	6.9
40	140	207	119	139	274	Rp 1 1/2	53	G 2 1/4	76	43.1	48.3	14	7.4	7.9
50	160	233	119	139	274	Rp 2	66	G 2 3/4	91	54.5	60.3	16	9.9	10.4

***)** H_1 , m_1 ... dimensions and weights for the valves with constant differential pressure value RD 122 P1
H_2 , m_2 ... dimensions and weights for the valves with adjustable differential pressure value RD 122 P2

Valves RD 122 P../T with thread couplings



Valves RD 122 P../W with weld unions

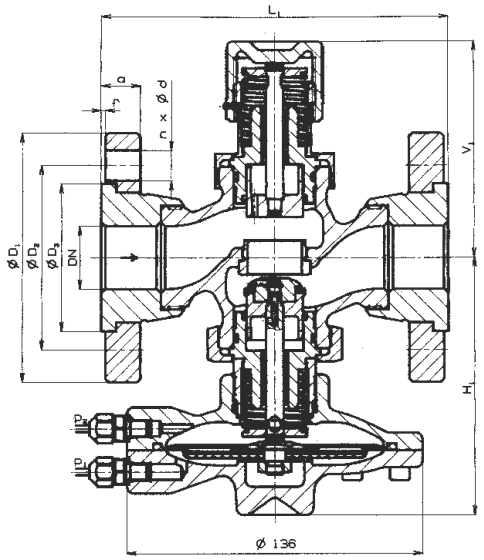


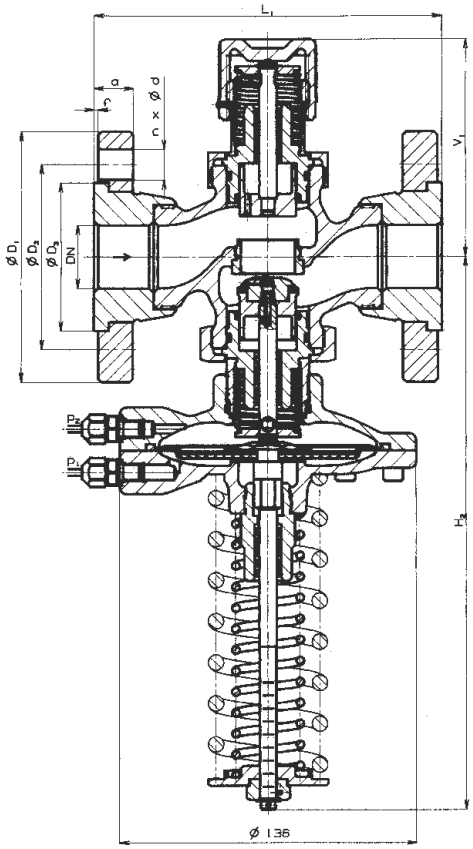
Dimensions and weights for RD 122 P../F with flange connection

DN	L_1	V_2	H_1 *)	H_2 *)	$ØD_1$	$ØD_2$	$ØD_3$	a	f	n	Ød	m_1 *)	m_2 *)
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[mm]	[kg]	[kg]
15	130	100	119	254	95	65	45	16	2	4	14	5.1	5.6
20	150	100	119	254	105	75	58	16	2	4	14	5.8	6.3
25	160	100	119	254	115	85	68	18	2	4	14	6.7	7.2
32	180	119	139	274	140	100	78	18	2	4	18	9.2	9.7
40	200	119	139	274	150	110	88	19	3	4	18	10.8	11.3
50	230	119	139	274	165	125	102	19	3	4	18	14.1	14.6

***)** H_1 , m_1 ... dimensions and weights of the valves with constant differential pressure value RD 122 P1
H_2 , m_2 ... dimensions and weights of the valves with adjustable differential pressure values RD 122 P2

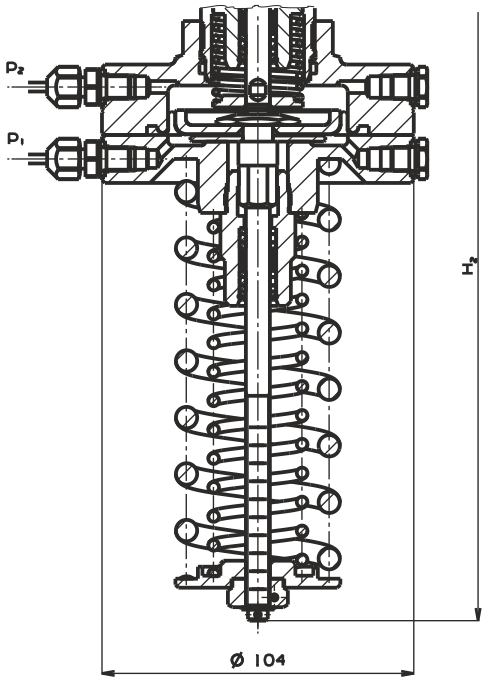
Valves RD 122 P../F with raised-faced flanges



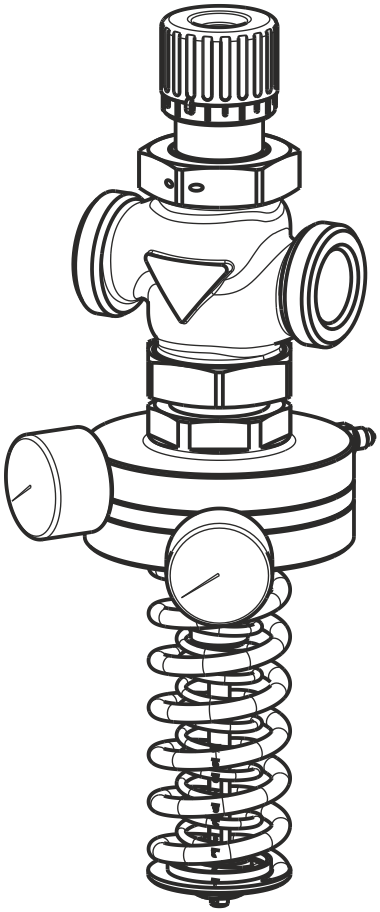


Dimensions and execution of head P3 or P4 with diaphragm 26 cm²

Dimensions of head RD 122 P3



Execution P4, with manometer



Specification code for ordering of valves RD 122 P

			XX	XXX	X	XXXX	XX	/	XXX	-	XX	/	X
1. Valve	Self-acting pressure regulator		**RD**										
2. Series	Pressure-balanced			**122**									
3. Function	Differential pressure regulator with flow limitation				**P**								
4. Execution	With constant differential pressure value					**1**							
	With adjustable differential pressure value , diaphragm 63 cm²					**2**							
	With adjustable differential pressure value , diaphragm 26 cm²					**3**							
	With adjustable differential pressure value , diaphragm 26 cm², with manometers					**4**							
5. Range of pressure setting / spring colour *Max.differential pressure may not exceed 0,2 MPa for this setting range*	DN 15 to 25	10 kPa				**11**							
		15 to 60 kPa / red				**22**							
		30 to 210 kPa / red + yellow				**23**							
		60 to 400 kPa / red + black				**24**							
	DN 32 to 50	10 kPa[1]				**10**							
		20 kPa				**11**							
		15 to 60 kPa[1] / red				**20**							
		25 to 70 kPa / red				**22**							
		40 to 220 kPa / red + yellow				**23**							
		70 to 410 kPa /red + black				**24**							
	DN 15 to 50	150 to 550 kPa / red + yellow				**33**							
		220 to 1000 kPa / red + black				**34**							
	DN 15 to 50	150 to 550 kPa / red + yellow				**43**							
		220 to 1000 kPa / red + black				**44**							
6. Impulse pipeline	Standard 1,6 m					**1**							
	Extended 2,5 m					**2**							
	Width 1,6 m, with cock R 1/4					**3**							
	Extended 2,5 m, with cock R 1/4					**4**							
	Other execution after agreement					**9**							
7. Kvs	Číslo sloupce dle tabulky Kvs					**X**							
8. Pressure nominal	PN 25						**25**						
9. Max. operating temp. °C	150°C								**150**				
	With condensing well up to 180°C[1]								**180**				
10. Nominal size	DN 15 to 50										**XX**		
11. Connection	Threaded couplings												**T**
	Flange PN 25 with raised-faced flanges												**F**
	Weld unions												**W**

[1] *Not applicable for V4*

Note: flange dimensions for PN 25, PN 16 and PN 10 in range of DN 15 - 50 remain the same
Ordering example: **RD122 P 2411 25/150-25/W**

Kvs values table

	Kvs [m³/h]				
DN	**1**	**2**	**3**	**4**	**5**
15	5	2.5	1.6	1.0	0.63
20	8	---	---	---	---
25	10	---	---	---	---
32	15	---	---	---	---
40	21	---	---	---	---
50	28.5	---	---	---	---



RD 122 V

Self-acting regulators of outlet pressure **BEE line**

DN 15 - 50
PN 25

Self-action regulators of outlet pressure type RD 122 V are valves designed for a medium pressure reducing and keeping it at required value. Such function is ensured by diaphragm exposed to influence of observed outlet pressure from one side adn controlled by spring from the second side. Diaphragm´s deflection transfers to valve plug and when pressure drops in relation to increase of medium bleeding, then closing of valve is induced. Owing to pressure-balanced plug, a value of outlet pressure is not influenced by changes of pressure ratios within the valve. In case when required value of differential pressure is within range of two spring ranges, it is more suitable to choose the range with lower values to ensure sensitivity of the regulator.

Technical data

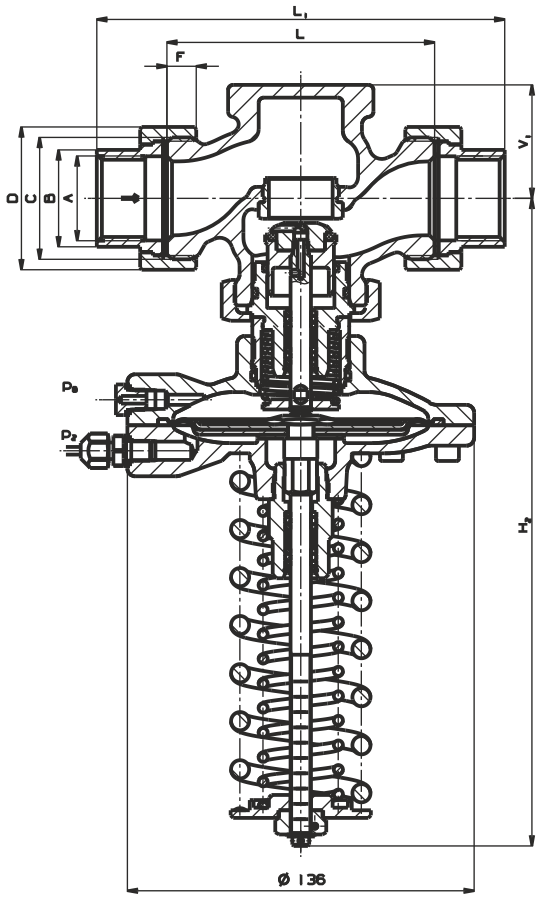
Series	**RD 122 V**
Execution	**Self-acting regulator of outlet pressure**
Nominal diameter range	DN 15 to 50
Nominal pressure	PN 25
Body material	Spheroidal cast iron EN-JS1030
Plug material	Stainless steel 1.4006 / 17 027.6
Seat material	Stainless steel 1.4021 / 17 022.6
Stem material	Stainless steel 1.4305
Material of diaphragm and sealing	EPDM
Material of diaphragm chamber bonnets	Spheroidal cast iron / Carbon steel
Operating temperature range	+2 to +150°C, version with condensing well up to +180°C
Connection	Externally threaded coupling + screw joints Flanges with raised faces Externally threaded coupling + weld unions
Material of weld unions	DN 15 to 32 ... 1.0036 / 11 373.0 DN 40 and 50 ... 1.0308 / 11 353.0
Plug type	Contoured, pressure-balanced, with soft seat sealing
Kvs values	0,63 to 32 m^3/hod
Leakage rate	Class IV. - S1 according to ČSN-EN 1349 (5/2001) (< 0.0005 % Kvs)
Range of adjustable diff. press. values Δp_{set} The tolerance of setting of the end values of the range is 10% from the corresponding value of the range.	DN 15 to 50: 25 to 70; 40 to 220; 70 to 410; 150 to 550; 220 to 1000 kPa

Dimensions and weights for RD 122 V../T with thread couplings and RD 122 V../W with weld unions

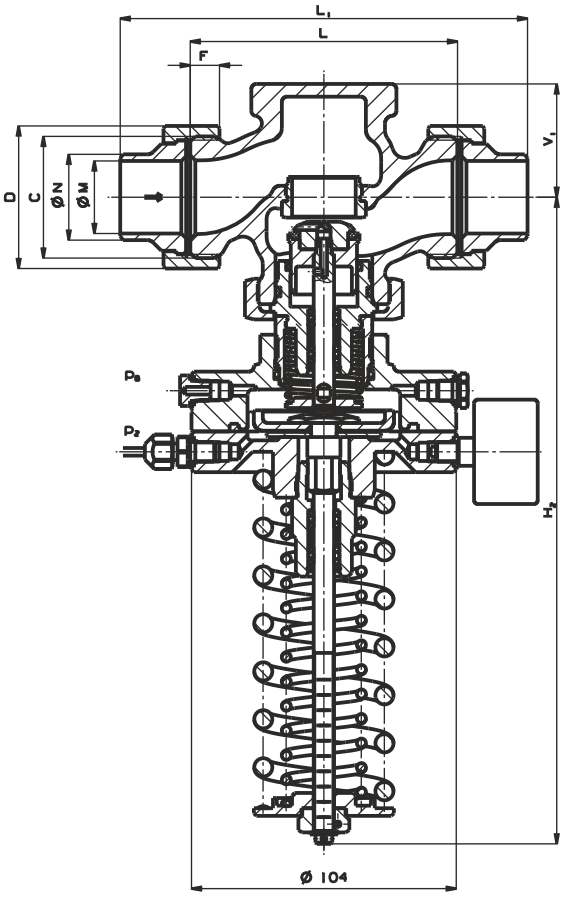
DN	L	L_1	V_1	H_2	H_2*)	A	B	C	D	ØM	ØN	F	m
	[mm]	[mm]	[mm]	[mm]	[mm]		[mm]		[mm]	[mm]	[mm]	[mm]	[kg]
15	100	146	44.5	254	287	Rp 1/2	25	G 1	41	16.1	21.3	9	3.9
20	100	149	44.5	254	287	Rp 3/4	32	G 1 1/4	51	21.7	26.9	10	4.2
25	105	160	44.5	254	287	Rp 1	38	G 1 1/2	56	29.5	33.7	11	4.5
32	130	193	63	274	307	Rp 1 1/4	47	G 2	71	37.2	42.4	12	5.9
40	140	207	63	274	307	Rp 1 1/2	53	G 2 1/4	76	43.1	48.3	14	6.8
50	160	233	63	274	307	Rp 2	66	G 2 3/4	91	54.5	60.3	16	8.9

*) execution with condensing well up to180°C

Valves RD 122 V2../T with thread couplings



Valves RD 122 V3../W with weld unions

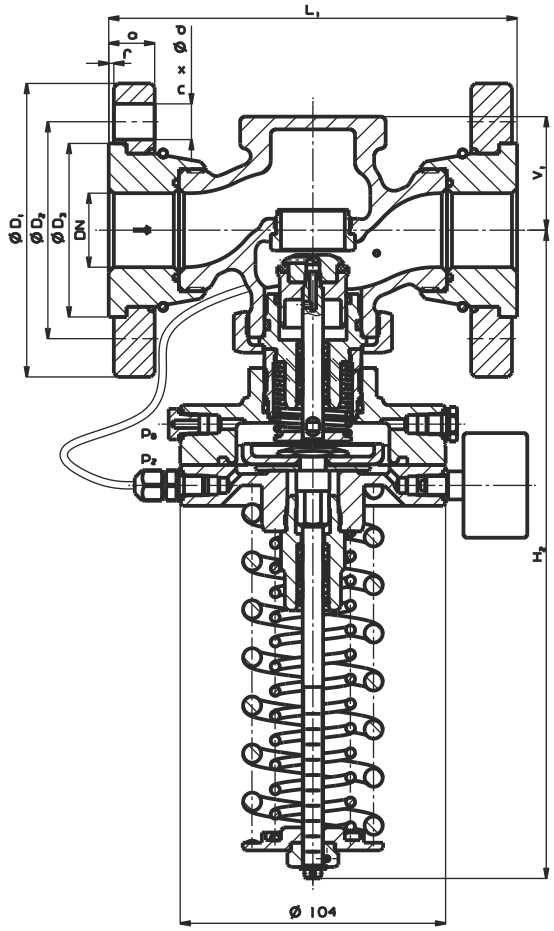


Dimensions and weights for RD 122 V../F with flange connection

DN	L_1	V_1	H_2	H_2*)	$ØD_1$	$ØD_2$	$ØD_3$	a	f	n	Ød	m
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[mm]	[kg]
15	130	44.5	254	287	95	65	45	16	2	4	14	5.0
20	150	44.5	254	287	105	75	58	16	2	4	14	5.7
25	160	44.5	254	287	115	85	68	18	2	4	14	6.6
32	180	63	274	307	140	100	78	18	2	4	18	8.7
40	200	63	274	307	150	110	88	19	3	4	18	10.2
50	230	63	274	307	165	125	102	19	3	4	18	13.1

*) execution with condensing well up to180°C

Valves RD 122 V4../F with raised-faced flanges



Specification code for ordering of valves RD 122 V

			XX	XXX	X	XXXX	XX	/	XXX	-	XX	/	X
1. Valve	Self-acting pressure regulator		**RD**										
2. Series	Pressure-balanced			**122**									
3. Function	Regulator of outlet pressure				**V**								
4. Execution	Diaphragm 63 cm², without manometer, direct inlet of reducing press. from extraction from pipeline					**2**							
	Diaphragm 26 cm², with manometer, direct inlet of reducing press. from extraction from pipeline					**3**							
	Diaphragm 26 cm², with manometer, integral inlet of reducing pressure					**4**							
5. Range of pressure setting / spring colour	DN 15 to 50	25 to 70 kPa / red				**22**							
		40 to 220 kPa / red + yellow				**23**							
		70 to 410 kPa / red + black				**24**							
		150 to 550 kPa / red + yellow				**33**							
		220 to 1000 kPa / red + black				**34**							
		150 to 550 kPa / red + yellow				**43**							
		220 to 1000 kPa / red + black				**44**							
6. Impulse pipeline	Without impulse pipeline (only for V4)					**0**							
	Standard 1,6 m					**1**							
	Extended 2,5 m					**2**							
	Width 1,6 m, with cock R 1/4					**3**							
	Extended 2,5 m, with cock R 1/4					**4**							
	Other execution after agreement					**9**							
7. Kvs	No. of the column of the Kvs values					**X**							
8. Pressure nominal	PN 25						**25**						
9. Max. operating temp. °C	150°C								**150**				
	With condensing well up to 180°C								**180**				
10. Nominal size	DN 15 to 50										**XX**		
11. Connection	Threaded couplings												**T**
	Flange PN 25 with raised-faced flanges												**F**
	Weld unions												**W**

Note: flange dimensions for PN 25, PN 16 and PN 10 in range of DN 15 - 50 remain the same
Ordering example: **RD122 V 3311 25/150-25/W**

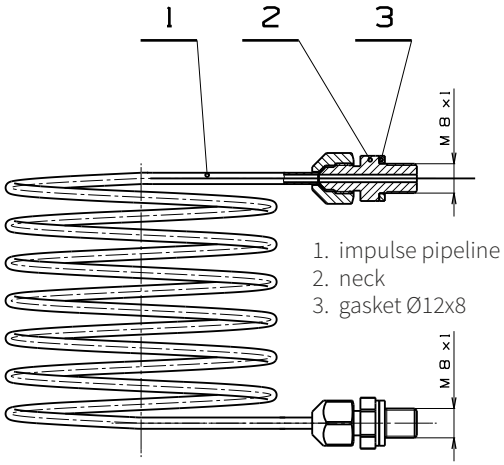
Kvs values table

	Kvs [m³/h]				
DN	**1**	**2**	**3**	**4**	**5**
15	5	2.5	1.6	1.0	0.63
20	8	---	---	---	---
25	10	---	---	---	---
32	15	---	---	---	---
40	21	---	---	---	---
50	32	---	---	---	---

Accessories

Impulse pipeline for supply of pressure impulse into regulator

It is in the scope of supply as standard.

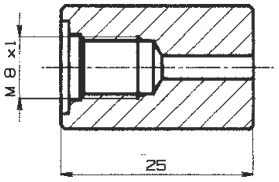


1. impulse pipeline
2. neck
3. gasket Ø12x8

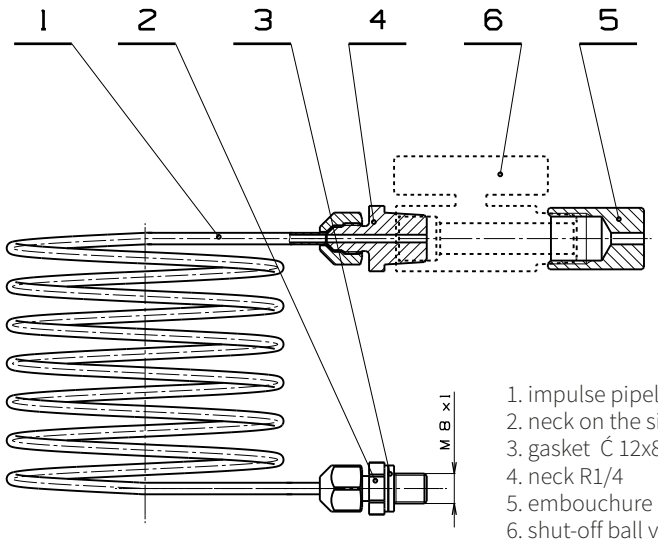
Welding coupling for connecting of impulse pipe

It is in the scope of supply as standard.

Material: **1.0036 / 11 373.0**
Ordering code: **VM 43 0046**



Impulse pipe for supplying a pressure impulse with shut-off ball valve and connecting thread 1/4''



1. impulse pipeline
2. neck on the side of regulator
3. gasket Ć 12x8
4. neck R1/4
5. embouchure G1/4
6. shut-off ball valve

Cooling condensing well

It is in the scope of supply as standard for valves with execution to 180°C.

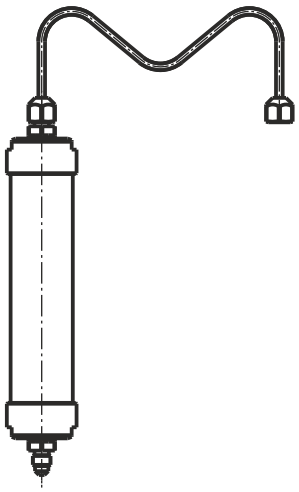
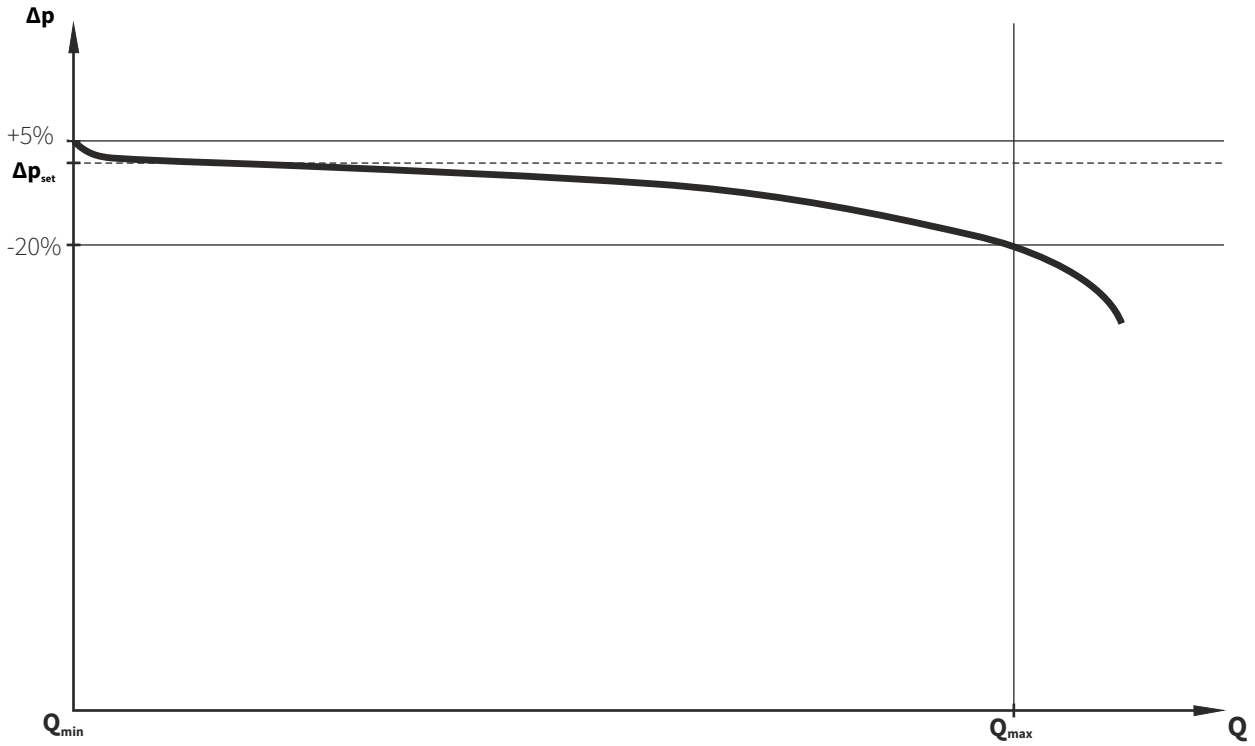


Diagram of behaviour of Δp of the protected line with flow rate Q in the circuit



The table specifying flow rate values Q_{max} [m^3 /h] for different Δp_{set} values

The values have been measured at total pressure drop $\Delta p_{avail} = 2 \times \Delta p_{set}$

DN	Kvs	Δp_{set} [kPa]								Součinitel k
		10	25	40	60	80	100	180	400	
15	2.5	0.85	1.60	2.05	2.25	2.40	2.70	3.80	4.70	1
15	5	1.35	2.20	3.00	3.80	4.00	4.70	6.50	7.60	1.12
20	8	1.85	3.25	4.45	5.50	6.20	7.00	9.50	12.00	1.15
25	10	2.65	4.60	6.40	7.80	8.80	9.80	13.00	16.00	1.1

The values have been measured at total pressure drop $\Delta p_{disp} = 2 \times \Delta p_{set}$

DN	Kvs	Δp_{set} [kPa]								Součinitel k
		10	20	30	45	65	100	180	400	
32	15	5.50	6.70	8.70	10.50	12.70	14.90	20.50	25.00	1
40	21	6.30	10.80	11.90	13.30	16.00	20.00	26.40	33.00	1.05
50	32	7.00	12.10	14.40	17.50	21.00	26.50	34.00	42.00	1.25

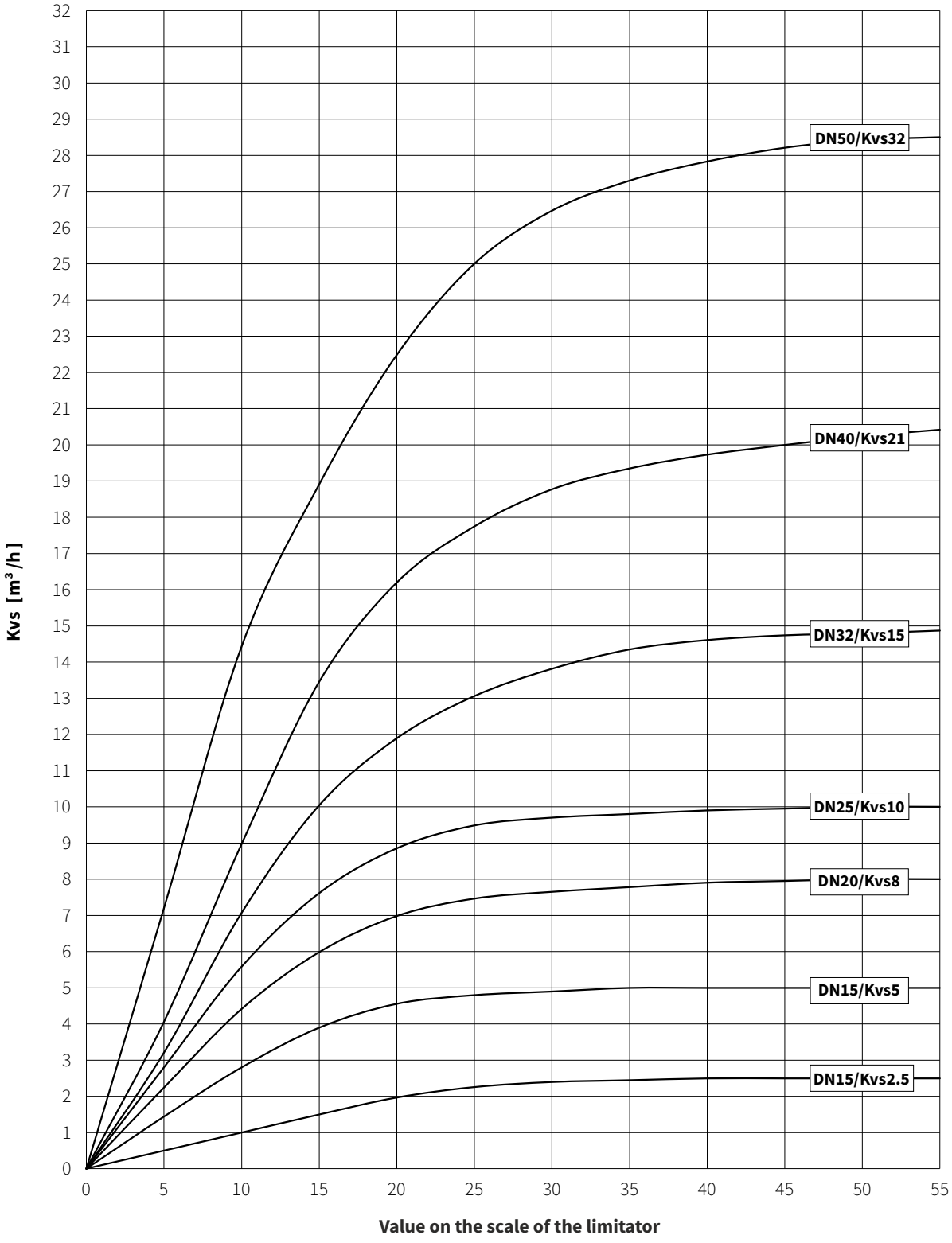
For in-between values of Δp_{SET}, it is possible to calculate an approximate value of Q_{MAX} according to the following formula:

$$Q_{max} = \frac{Kvs}{k} \cdot \sqrt{\frac{Dp_{set}}{100}},$$

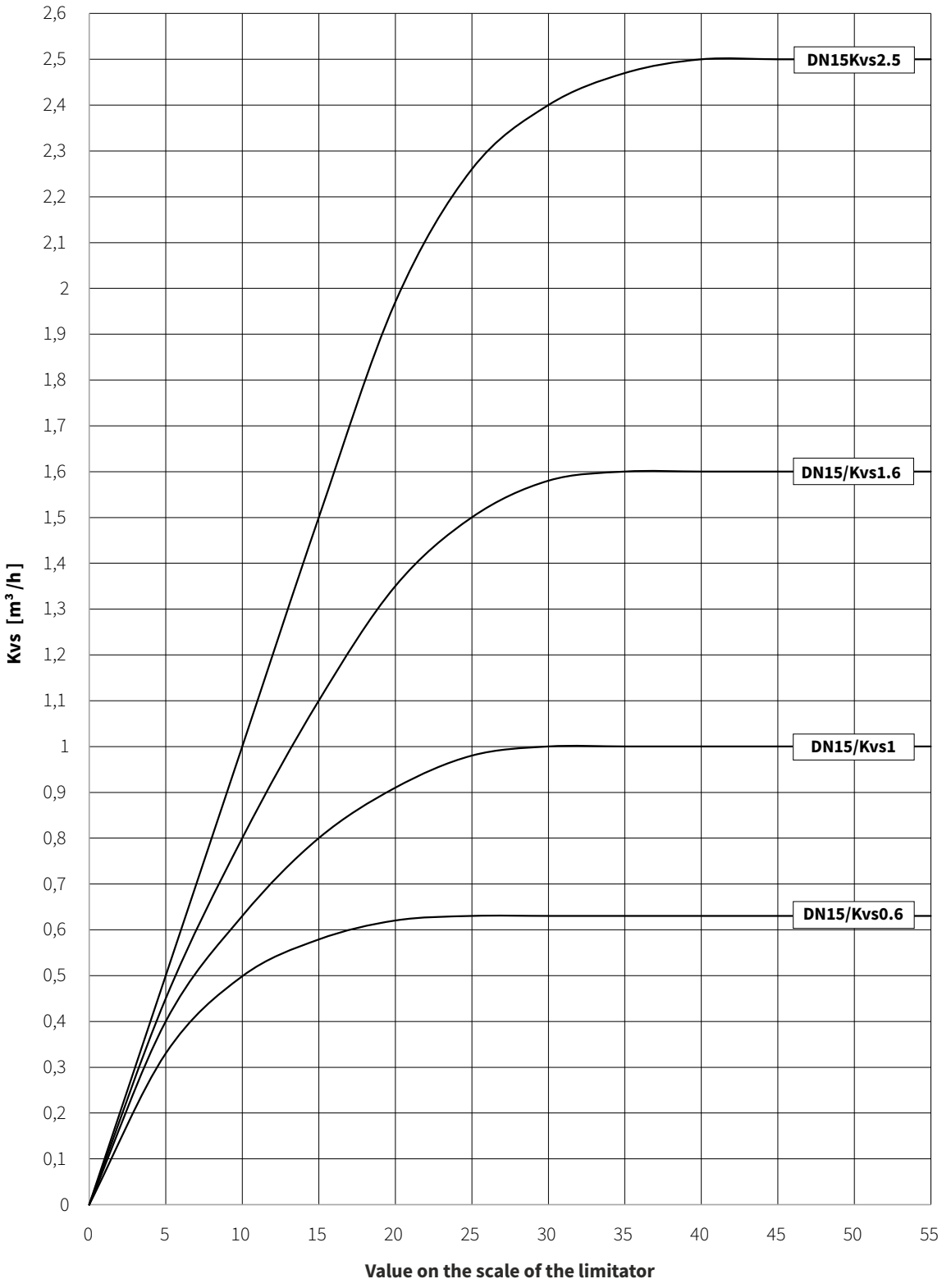
where: Δp_{set} stands for set differential pressure value [kPa]
k is correction coefficient [-]

For minimum flow rate Q_{min} the following applies $Q_{min} = 0$.

RD 122 P - behaviour of Kvs value with flow limitator setting



RD 122 P - behaviour of Kvs value with flow limitator setting



Maximal permissible pressure values [MPa]

Material	PN	Temperature [°C]				
		RT[1)]	100	120	150	180
Spheroidal cast iron EN-JS1030	**25**	2,50	2,50	2,50	2,43	2,38

[1)] -10°C to 50°C

LDM, spol. s r.o.
Litomyšlská 1378
560 02 Česká Třebová
Czech Republic

tel.: +420 465 502 511
fax: +420 465 533 101
e-mail: sale@ldm.cz

LDM, spol. s r.o.
Office Prague
Podolská 50
147 01 Praha 4
Czech Republic

tel.: +420 241 087 360
fax: +420 241 087 192
e-mail: sale@ldm.cz

LDM, spol. s r.o.
Office Ústí nad Labem
Ladova 2548/38
400 11 Ústí nad Labem
- Severní Terasa
Czech Republic

tel.: +420 602 708 257
e-mail: sale@ldm.cz

LDM servis, spol. s r.o.
Litomyšlská 1378
560 02 Česká Třebová
Czech Republic

tel.: +420 465 502 411-3
fax: +420 465 531 010
e-mail: servis@ldm.cz

LDM Bratislava s.r.o.
Mierová 151
821 05 Bratislava
Slovakia

tel.: +421 2 43415027-8
fax: +421 2 43415029
e-mail: ldm@ldm.sk

LDM, Polska Sp. z o.o.
ul. Bednorza 1
40 384 Katowice
Poland

tel.: +48 32 730 56 33
fax: +48 32 730 52 33
mobile: +48 601 354 999
e-mail: ldmpolska@ldm.cz

LDM Armaturen GmbH
Wupperweg 21
D-51789 Lindlar
Germany

tel.: +49 2266 440333
fax: +49 2266 440372
mobile: +49 177 2960469
e-mail: ldmarmaturen@ldmvalves.com

OOO "LDM Promarmatura"
Jubilejniy prospekt,
dom.6a, of. 601
141400 Khimki Moscow Region
Russia

tel.: +7 4957772238
fax: +7 4956662212
mobile: +7 9032254333
e-mail: inforus@ldmvalves.com

TOO “LDM”
Shakirova 33/1
kab. 103
100012 Karaganda
Kazakhstan

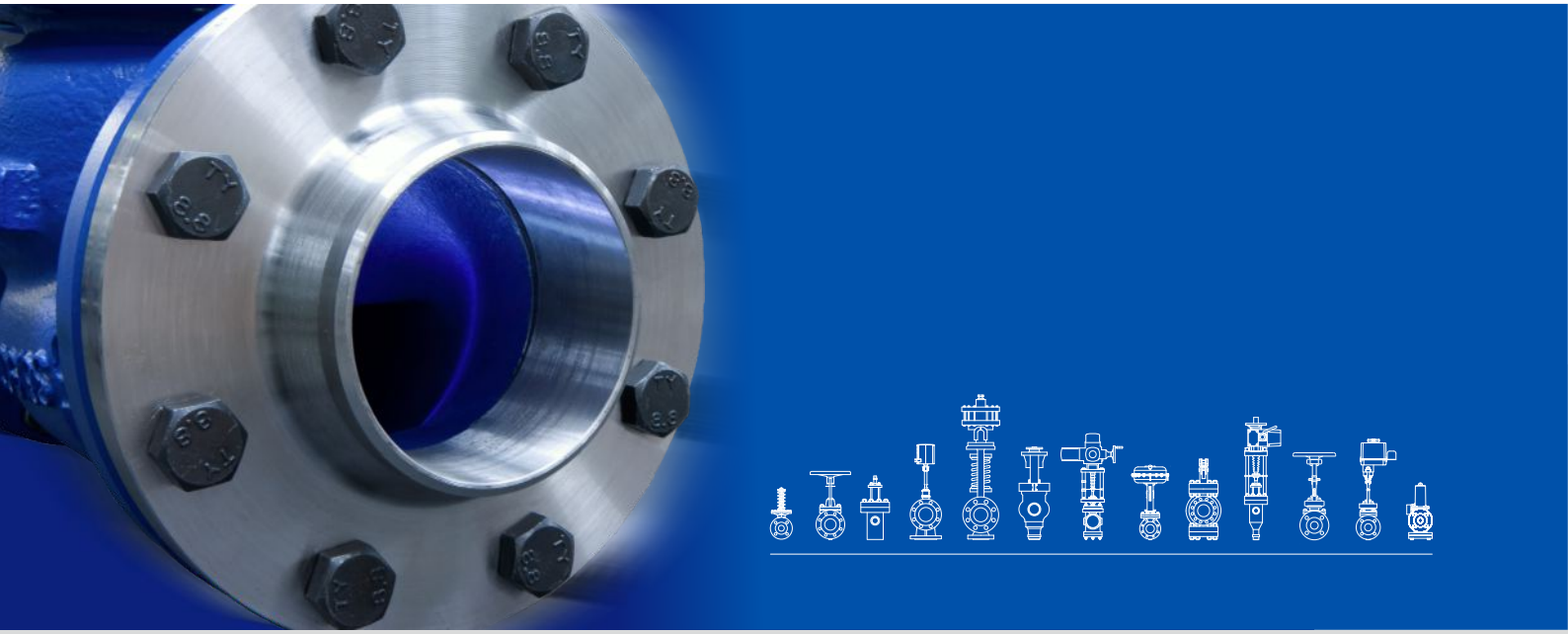
tel.: +7 7212 566 936
fax: +7 7212 566 936
mobile: +7 701 738 36 79
e-mail: sale@ldm.kz

LDM - Bulgaria - OOD
z. k. Mladost 1
bl. 42, floor 12, app. 57
1784 Sofia
Bulgaria

tel.: +359 2 9746311
fax: +359 2 9746311
mobile: +359 888 925 766
e-mail: ldm.bg@ldmvalves.com

www.ldmvalves.com

LDM reserves the right to modify or improve the designs or specifications of such products at any time without notice.



POWER THROUGH IDEAS