figure	224
type ends	flanged Y-type

ZETKAMA

DIFFERENTIAL PRESSURE REGULATING VALVE

zCON

body material	nominal pressure	nominal diameter	max. temperature
A grey cast iron	C 16 bar	DN 65-150	120°C

according to the pressure equipment directive 2014/68/UE
CE marking for DN≥065

FEATURES

- compact construction
- environment - friendly
- balancing disc
- adjustable differential pressure
- measurement differential pressure
- movement of the locking function
- ranges of settings 20-70 kPa, 40-160 kPa
- face to face dimension according to EN558 series 1
- tests according EN-12266-1

APPLICATION

- heating
- refigeration and airconditioning
- industrial water
- compressed air
- neutral fluids

Data given can be changed without notice.

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figure	224
type ends	flanged Y-type

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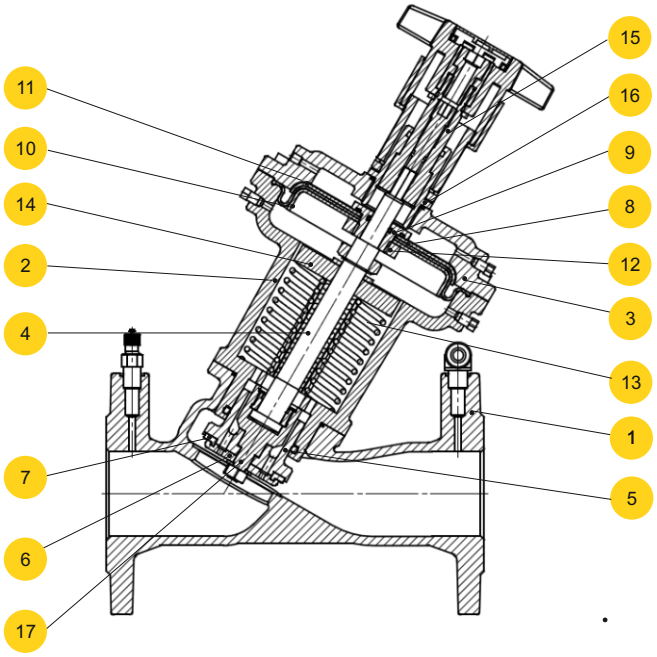
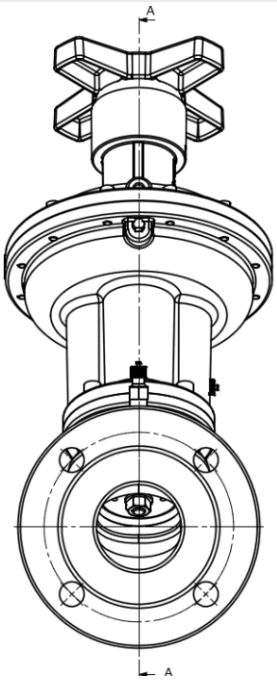
MATERIALS





	body material	A
	type	56,66
1	body	EN-GJL-250 (JL1040)
2	top cover	EN-GJL-250 (JL1040)
3	bottom cover	EN-GJL-250 (JL1040)
4	stem	CuZn36Pb2As
5	disc	PPS
6	retaining ring	X5CrNi18-10
7	seal of the disc	EPDM
8	diaphragm	EPDM
9	sleeve diaphragm	X5CrNi18-10
10	bottom bracket of diaphragm	X5CrNi18-10
11	top bracket of diaphragm	X5CrNi18-10
12	nut	X5CrNi18-10
13	spring	X17CrNi16-2
14	nut of spring	X5CrNi18-10
15	top stem	CuZn36Pb2As
16	bush	CuZn36Pb2As
17	jointing sleeve	CuZn36Pb2As

continued on page 3

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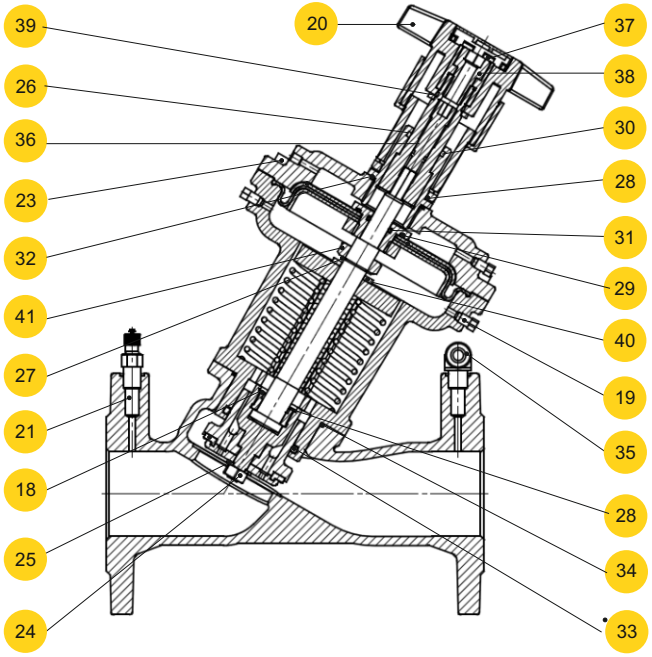

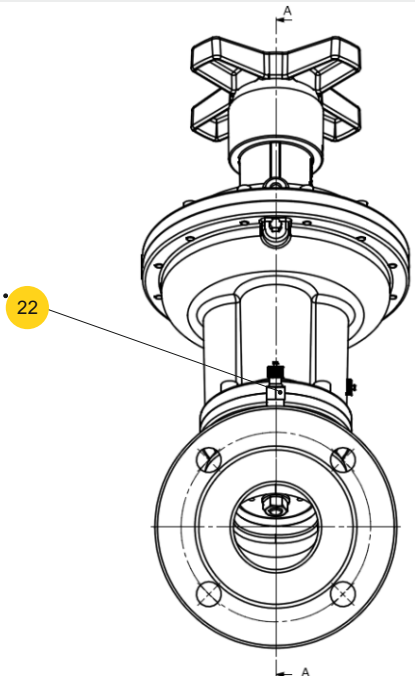

	body material	A
	type	56,66
18	screw	CuZn36Pb2As
19	plug G1/16”	CuSn5Zn5Pb5
20	hand wheel	POLIAMID PA6.6
21	measuring nipples	CuZn36Pb2As
22-23	screw	8.8 A2A
24	washer	A2
25	nut	A2
26	o-ring	EPDM
27-28	expanding ring	A2
29-34	o-ring	EPDM
35	screwed elbow	CuZn36Pb2As
36	screw	A2
37	screw of hand wheel	A2
38	bush	CuZn39Pb2
39	washer	CuZn40Pb2
40	washer	CuZn36Pb2As
41	nut of stem	CuZn40Pb2
max.temperature		120°C

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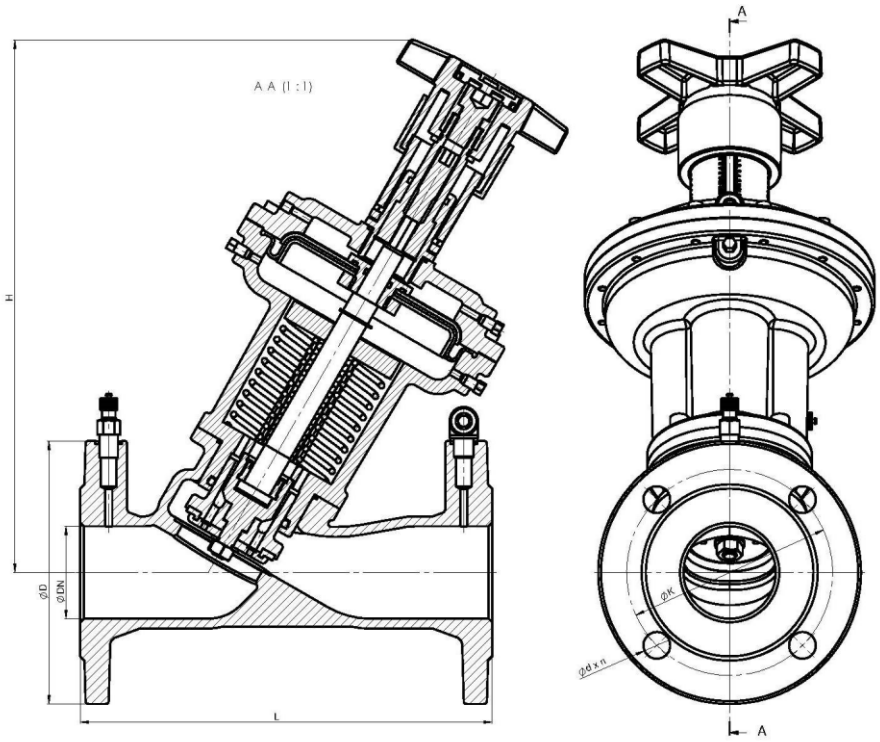
DIMENSION



DN	L	D	K	d x n	H	
mm						kg
65	290	185	145	19 x 4	385	24,5
80	310	200	160	19 x 8	390	28,5
100	350	220	180	19 x 8	405	35,0
125	400	250	210	19 x 8	425	45,5
150	480	285	240	23 x 8	440	58,5

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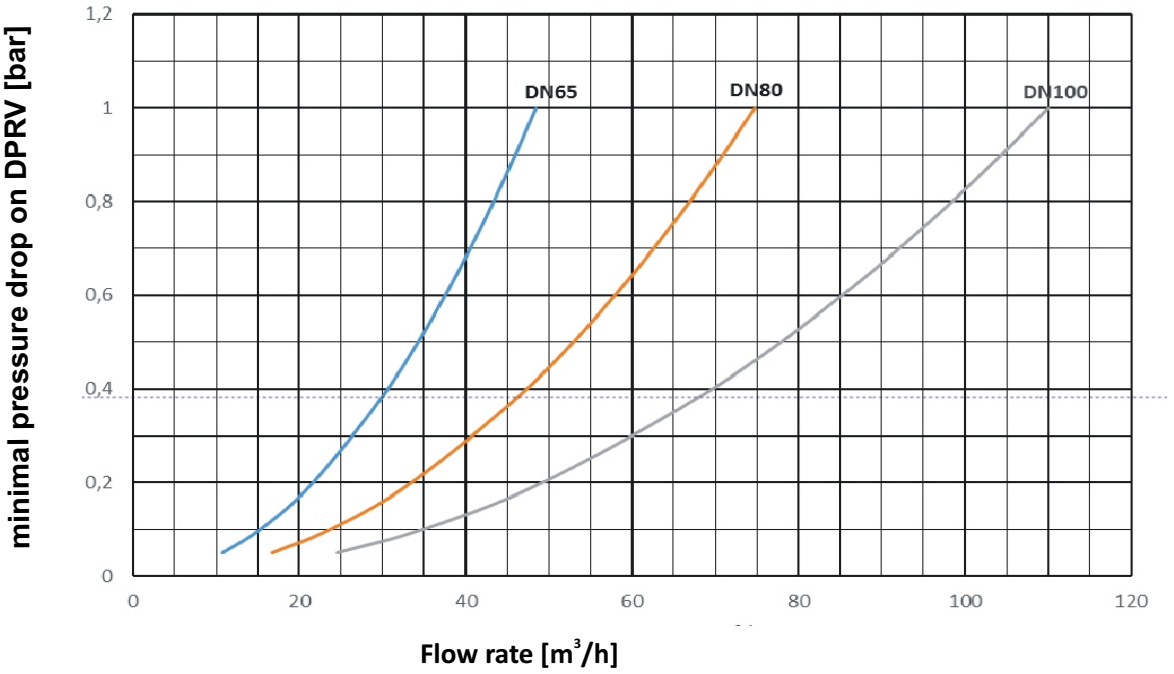
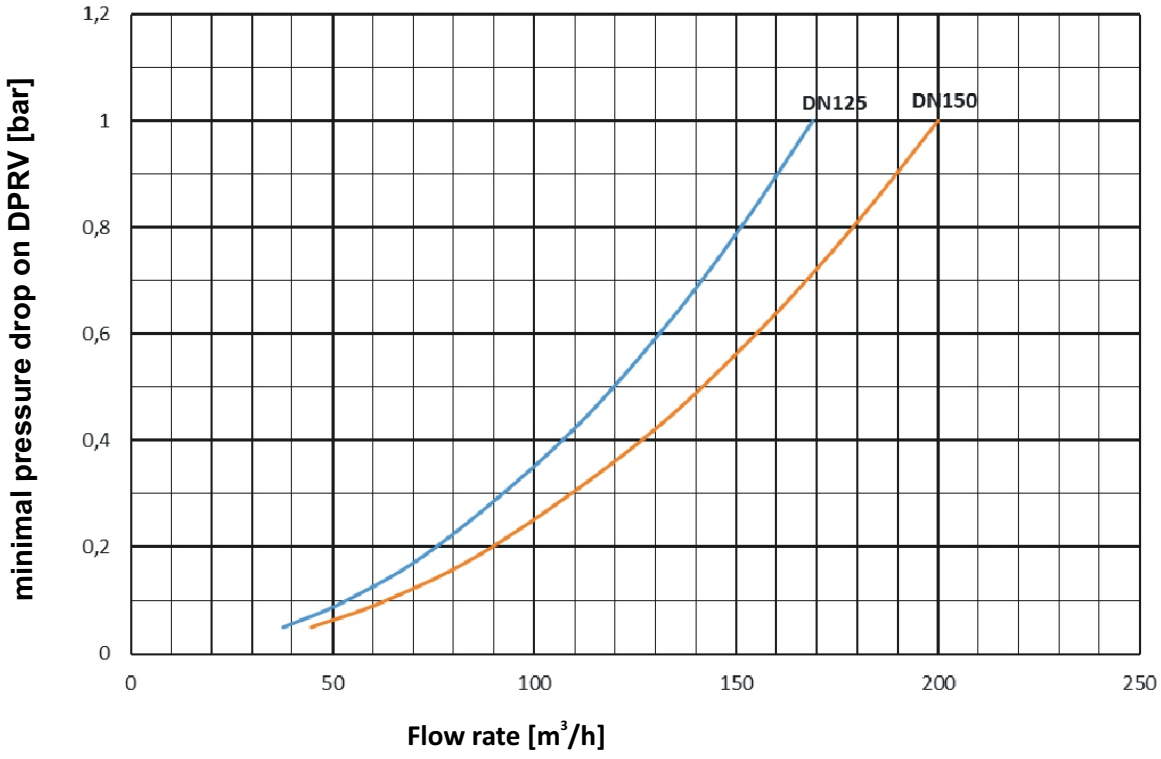
SELECTION AND RANGE OF DPRV

The lowest pressure drop required for proper work of DPRV



The lowest pressure drop required for proper work of DPRV



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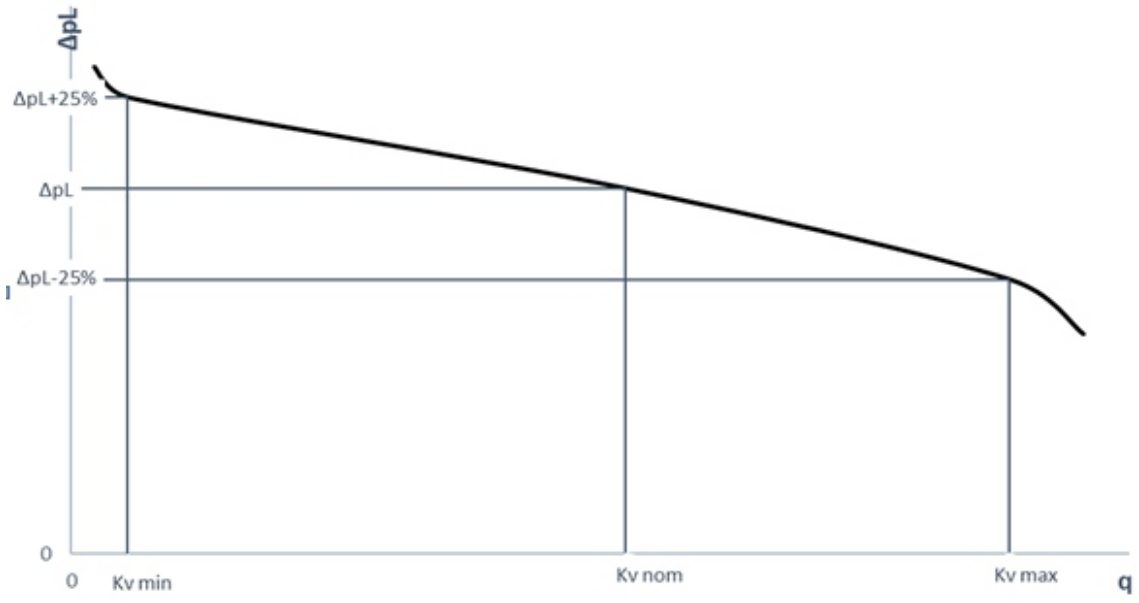
SELECTION AND RANGE OF DPRV

For calculation of DPRV the graphs listed above should be used, based on flow rate and pressure difference. For calculation make sure that at any point of the installation maximum flow in the circuit does not exceed the recommended value. The scale on the hand-wheel indicates the pressure drop ΔPLnom.

DN	Kv_{min}	Kv_{nom}	Kv_{max}
65	1,3	20,5	48,4
80	2,1	29,0	74,7
100	4,5	60,0	110,0
125	5,7	101,6	169,0
150	6,3	112,0	200,0



To guarantee sufficient authority of DPRV, available pressure ΔP_{dyspoz} should be at least 1.5 times greater than the pressure drop in circulation ΔP_{instal}

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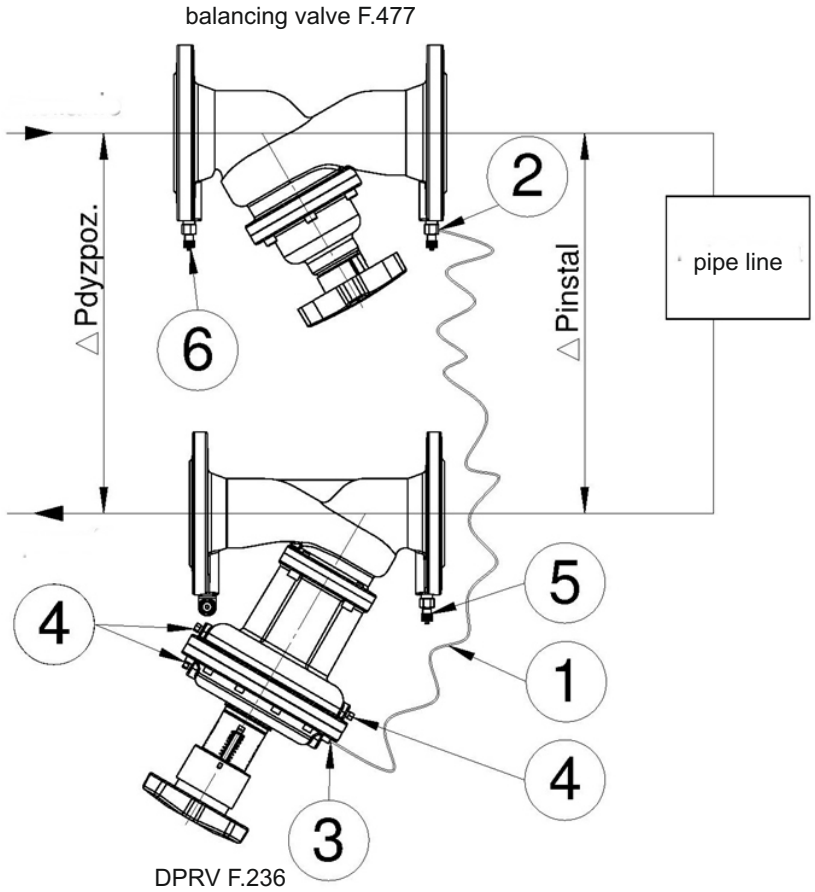
INSTALLATION AND REGULATION

DPRV is mounted on the return pipe, according to the flow direction arrow

1. Before starting the installation of the pipeline the DPRV must be flush.
2. Connect impulse pipe (pos. 1) between a balancing valve mounted on the supply (item 2) and DPRV (item 3) mounted on the return.
3. Vent the upper and lower part and impulse pipe by loosening the appropriate vent plugs (item 4) until water flows.
4. Check the DPRV using cold water.



Setting the DPRV with the presetting valves :

1. Fully open all balancing valves
2. Set all valves at the end receivers on the design flow.
3. Set the differential pressure using of hand-wheel - number of rotations is given in Table 2.
4. Measure the pressure difference Δp_{instal} - using the Balancing Measuring Device T550, connecting it to the measuring nipples in Fig.447, item. 2, and the measuring nipples item. 5 of DPRV.
5. If the flow rate on a balancing valve Fig.447 is different from the design value, reset ΔP_{instal} to get on the valve in Fig.447 design value of flow rate.
   Because the installation has of the inertia, wait a few minutes to read the measured values.

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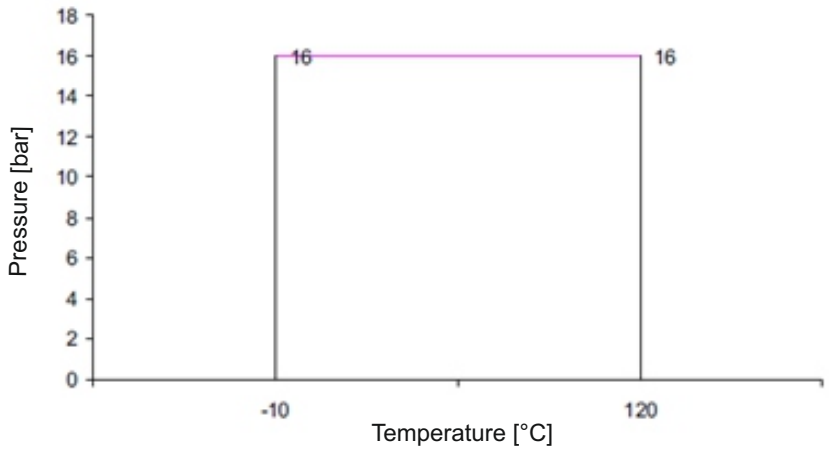
INSTALLATION AND REGULATION

TABLE 2

P_{instal} [kPa]	Turn	
	20-70kPa	40-160kPa
20	0	
25	1,5	
30	3,0	
35	4,5	
40	6,0	0,5
45	7,5	1,1
50	9,0	1,7
55	10,5	2,3
60	12,0	2,9
65	13,5	3,5
70	15,0	4,1
75		4,7
80		5,3
85		5,9
90		6,5
95		7,1
100		7,7
105		8,3
110		8,9
115		9,5
120		10,1
125		10,7
130		11,3
135		11,9
140		12,5
145		13,1
150		13,7
155		14,3
160		14,9

PRESSURE - TEMPERATURE RATINGS



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type ends	flanged Y-type

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TYPES

figure	body material	nominal diameter DN	nominal pressure PN	type
224	A grey cast iron EN-GJL-250	65-150 mm	C 16 bar	56 Tmax 120 °C • differential pressure 0,4 - 1,6 bar, disc with EPDM rings
		65-150 mm	C 16 bar	66 Tmax 120 °C • differential pressure 0,2 - 0,7 bar, disc with EPDM rings

ORDERING

To place an odrer please use our product number (Index)

figure	body material	nominal diameter DN	nominal pressure PN	type
224	A	065	C	56

ORDER EXAMPLE 224 A 065 C 56

differential pressure regullating valve,Y-type,flanged	224
grey cast iron GJL-250	A
nominal diameter DN65	065
nominal pressure PN16	C
differential pressure 0,4 - 1,6 bar, disc with EPDM rings	56

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