



figure

223

type  
endsthreaded  
Y-type

## DIFFERENTIAL PRESSURE REGULATING VALVE

**zCON**

body material	nominal pressure	nominal diameter	max. temperature
H brass	C 16 bar	DN 15-50	120°C

according to the pressure equipment directive 2014/68/UE  
does not require CE marking

### FEATURES

- compact construction
- environment - friendly
- balancing disc
- adjustable differential pressure
- measurement differential pressure
- movement of the locking function
- ranges of settings: 10-30 kPa, 25-70 kPa for DN15-25  
20-60 kPa, 40-90 kPa for DN32-50
- face to face dimension according to DIN3202 M4

### APPLICATION

- heating
- refrigeration and air conditioning
- industrial water
- neutral fluids

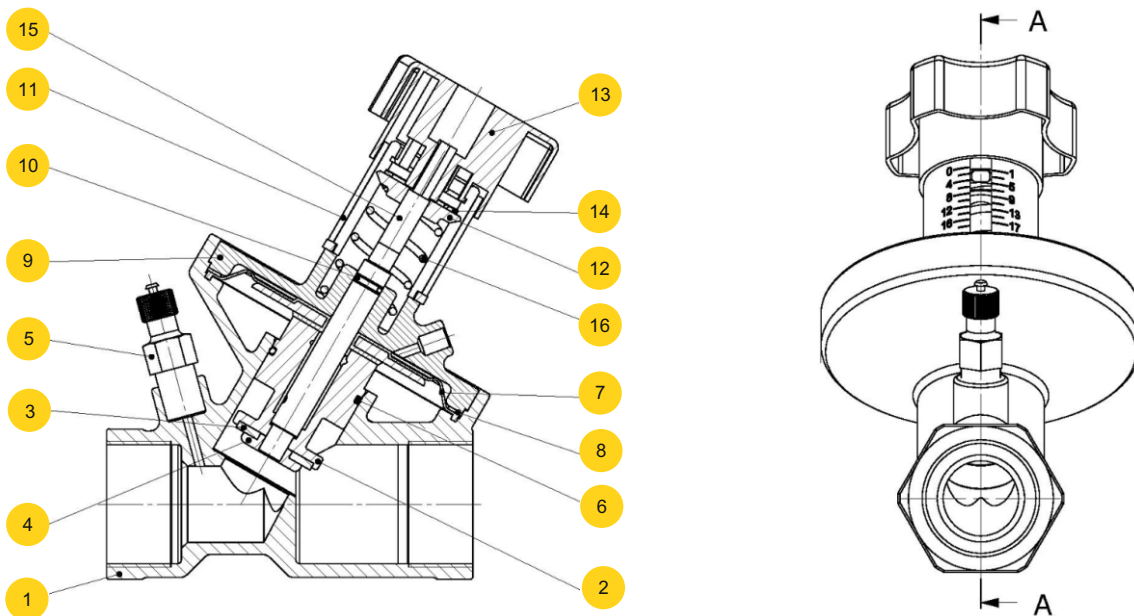
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figure **223**  
type ends threaded Y-type

**MATERIALS**



	body material	H
	type	55,56,65,66
1	body	CuZn36Pb2As
2	disc	CuZn36Pb2As
3	seal of the disc	EPDM
4	retaining ring	CuZn36Pb2As
5	measuring nipples	CuZn36Pb2As
6	o-ring	EPDM
7	diaphragm	EPDM + X5CrNi18-10
8	support	SPETOBAR BAS 340
9	bonnet	CuZn36Pb2As
10	o-ring	EPDM
11	hand-wheel - scale	polyamide
12	nut spring	CuZn36Pb2As
13	hand-wheel	polyamide
14	retaining ring	A2
15	stem	CuZn36Pb2As
16	spring	X17CrNi16-2
max. temperature		120°

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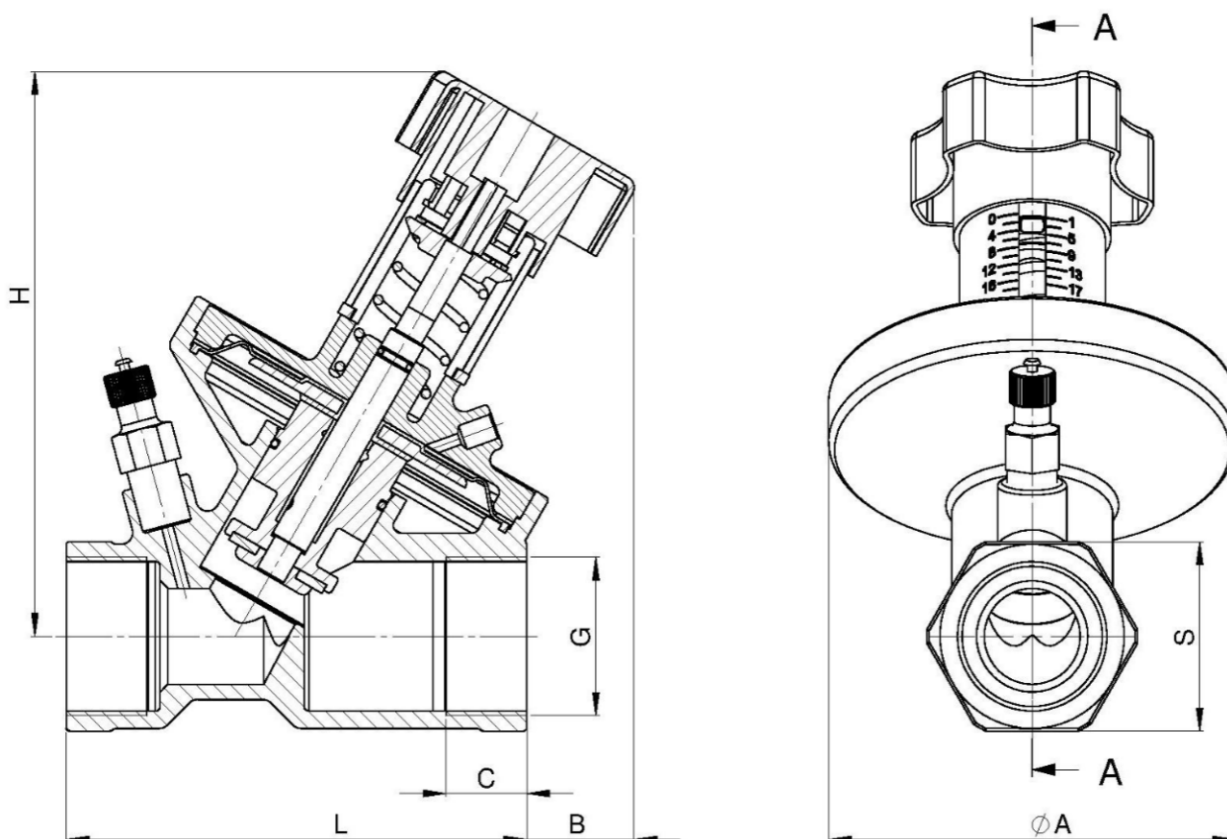
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## DIMENSIONS



DN	G	A	B	C	L	S	H	Dk	
	mm								kg
15	G1/2"	71	35	15,0	85	27	126	72	1,05
20	G3/4"	71	35	16,5	95	33	131	72	1,20
25	G1'	71	30	19,5	105	41	136	72	1,40
32	G1 1/4"	106	30	21,4	120	49	152	72	2,25
40	G1 1/2"	106	30	21,4	130	56	152	72	2,60
50	G2"	106	30	25,7	150	68	158	72	3,25

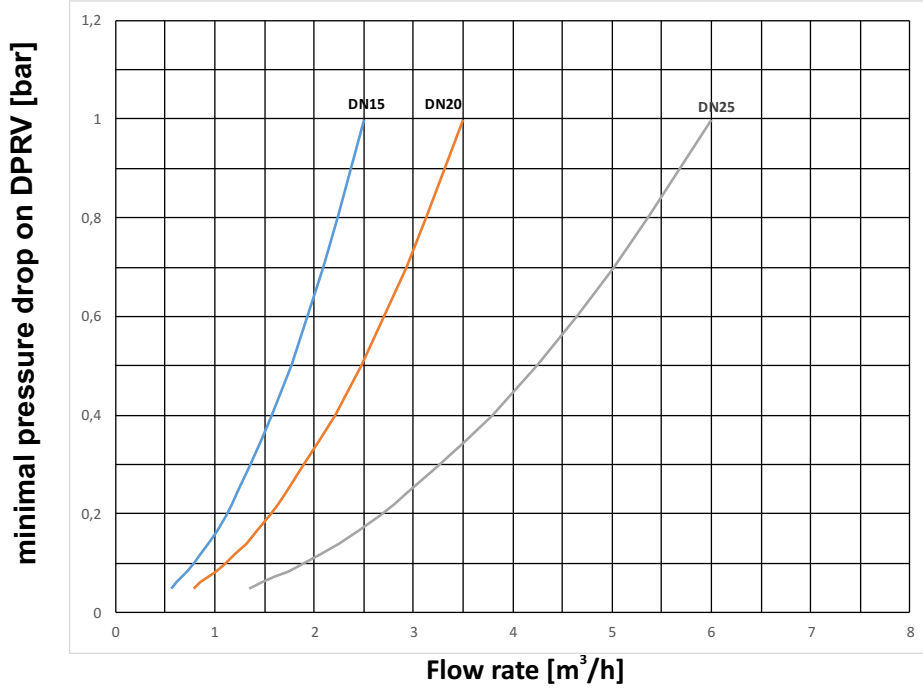
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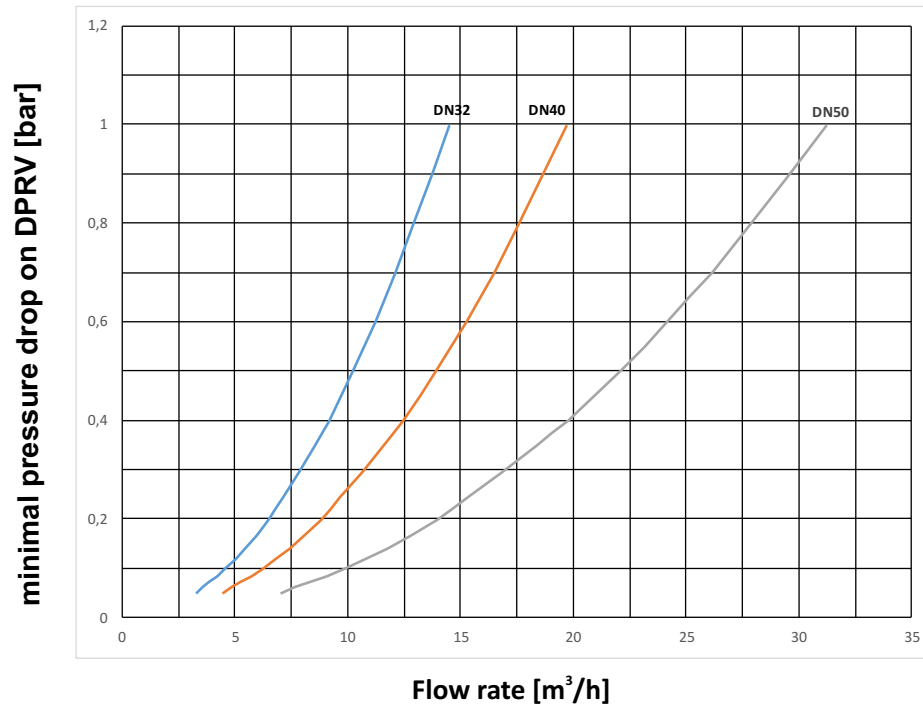


## SELECTION AND RANGE OF DPRV

The lowest pressure drop required for proper work of DPRV



The lowest pressure drop required for proper work of DPRV





figure

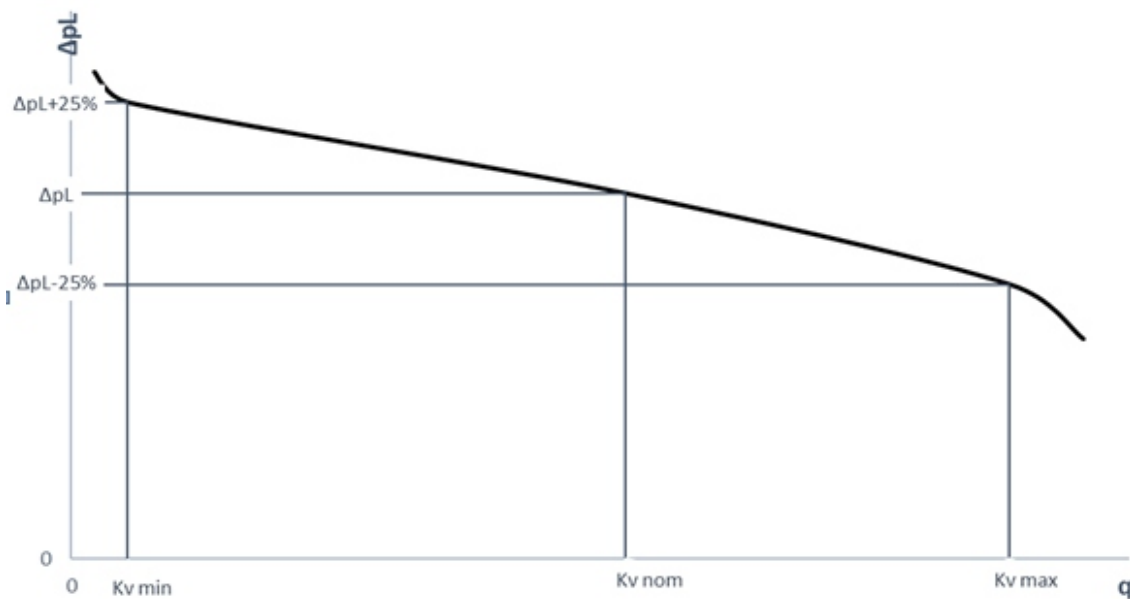
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## SELECTION AND RANGE OF DPRV

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  $\Delta P_{Lnom}$ .

DN	Kv <sub>min</sub>	Kv <sub>nom</sub>	Kv <sub>max</sub>
15	0,1	1,4	2,5
20	0,2	2,0	3,5
25	0,4	3,0	6,0
32	0,5	7,5	14,5
40	0,65	9,5	19,7
50	1,0	15,0	31,2



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



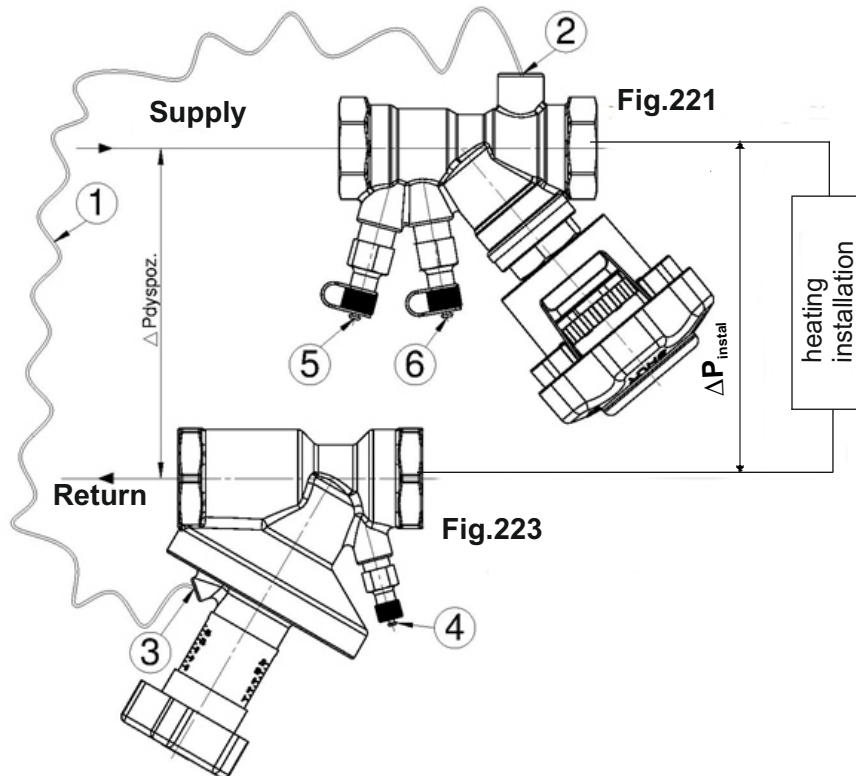
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## INSTALLATION AND REGULATION

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



### 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  $\Delta P_{instal}$  - using the Balancing Measuring Device T550, connecting it to the measuring nipples in Fig.221, item. 2, and the measuring nipples item. 4 of DPRV.
5. If the flow rate on a balancing valve Fig.221 is different from the design value, reset  $\Delta P_{instal}$  to get on the valve in Fig.221 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

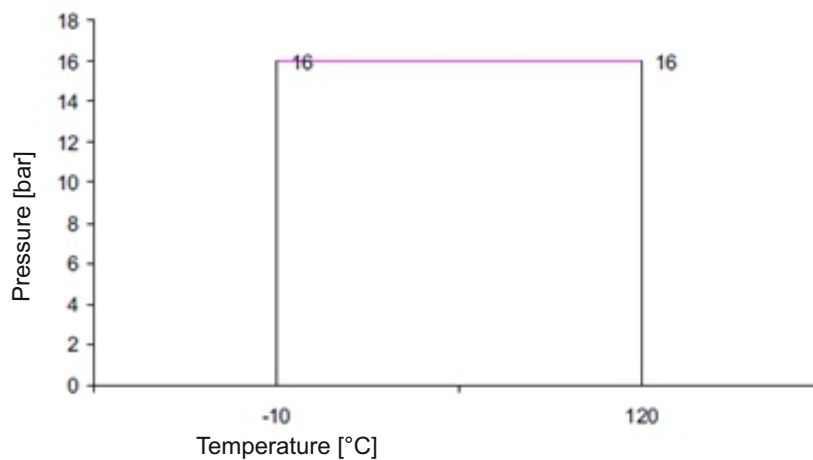
For DN15-25

P <sub>instal</sub> {kPa}	Turn	
	10-30kPa	25-70kPa
10	0,0	
15	3,0	
20	6,0	
25	9,0	0,0
30	12,0	1,3
35		2,7
40		4,0
45		5,3
50		6,7
55		8,0
60		9,3
65		10,7
70		12,0

For DN32-50

P <sub>instal</sub> {kPa}	Turn	
	20-60kPa	40-90kPa
20	0,0	
25	1,3	
30	2,5	
35	3,8	
40	5,0	0,0
45	6,3	1,0
50	7,5	2,0
55	8,8	3,0
60	10,0	4,0
65		5,0
70		6,0
75		7,0
80		8,0
85		9,0
90		10,0

## PRESSURE - TEMPERATURE RATINGS



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type ends	threaded Y-type

## TYPES

figure	body material	nominal diameter DN	nominal pressure PN	type
<b>223</b>	<b>H</b> brass CuZn36Pb2As	15-25 mm	<b>C</b> 16 bar	<b>56</b> Tmax 90 °C • differential pressure 0,25 - 0,7 bar, disc with EPDM rings
		15-25 mm	<b>C</b> 16 bar	<b>66</b> Tmax 90 °C • differential pressure 0,1 - 0,3 bar, disc with EPDM rings
		32-50 mm	<b>C</b> 16 bar	<b>55</b> Tmax 90 °C • differential pressure 0,4 - 0,9 bar, disc with EPDM rings
		32-50 mm	<b>C</b> 16 bar	<b>65</b> Tmax 90 °C • differential pressure 0,2 - 0,6 bar, disc with EPDM rings

## ORDERING

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

figure	Body material	nominal diameter DN	nominal pressure PN	type
<b>223</b>	<b>H</b>	<b>025</b>	<b>C</b>	<b>56</b>

### ORDER EXAMPLE

	<b>223</b>	<b>H</b>	<b>025</b>	<b>C</b>	<b>56</b>
differential pressure regulating valve, Y-type, threaded	<b>223</b>				
brass CuZn36Pb2As		<b>H</b>			
nominal diameter DN25			<b>025</b>		
nominal pressure PN16				<b>C</b>	
differential pressure 0,25 - 0,7 bar, disc with EPDM rings					<b>56</b>