

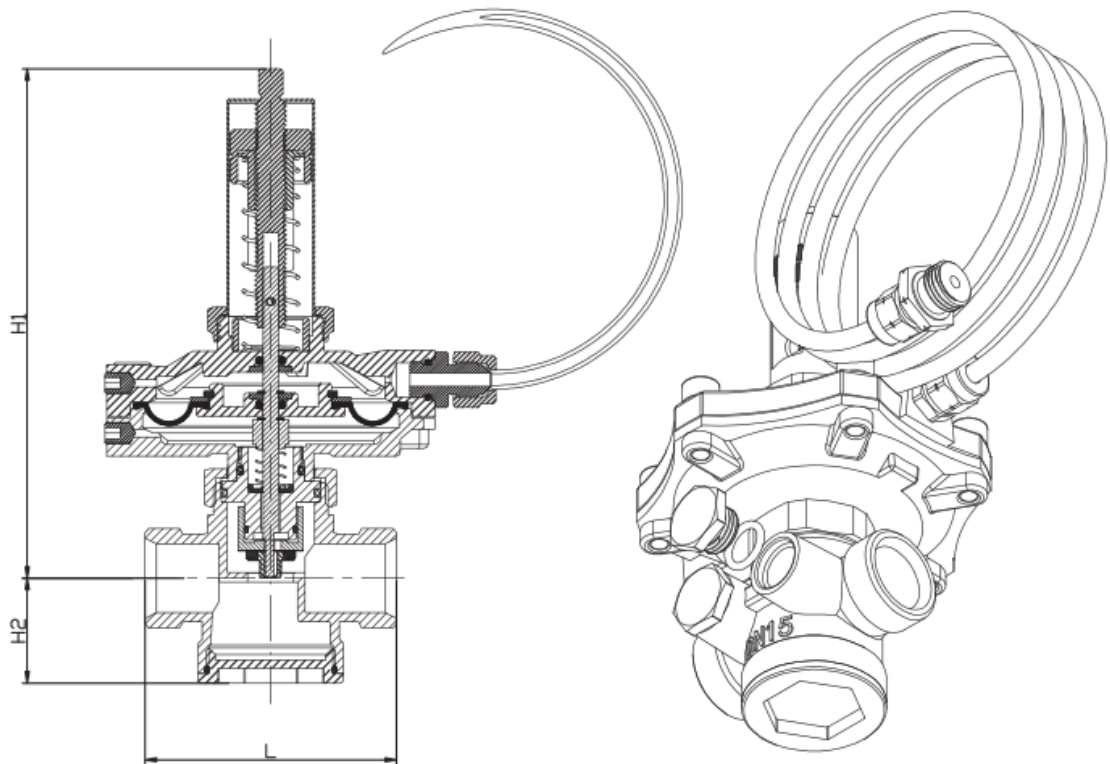
VBG53.2XXX



Differential Pressure Control Valve

DN 15-50, PN 20

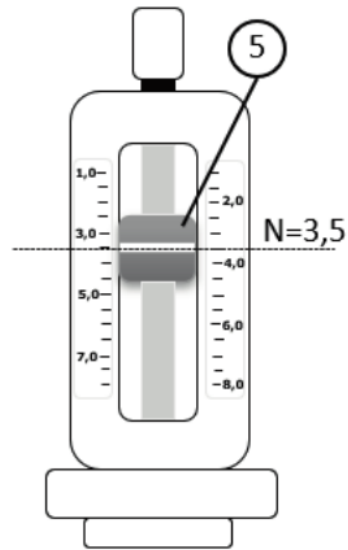
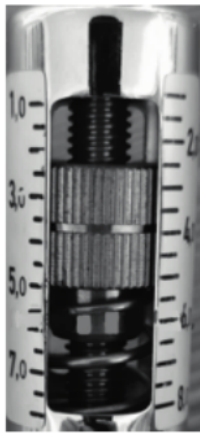
Adjustable set point 5-30kPa



Technical Data & Dimensions

DN, mm	KVS	Rp ISO7-1	L,mm	H1,mm	H2,mm
15	1.9	Rp 3/4	66	133.5	27.5
20	2.9	Rp 1	76	133.5	27.5
25	5.3	Rp 1 1/4	76	133.5	27.5
32	9.3	Rp 1 1/2	114	151	37
40	15	Rp 2	132	161	43.7
50	15	Rp 2 1/2	140	161	43.7

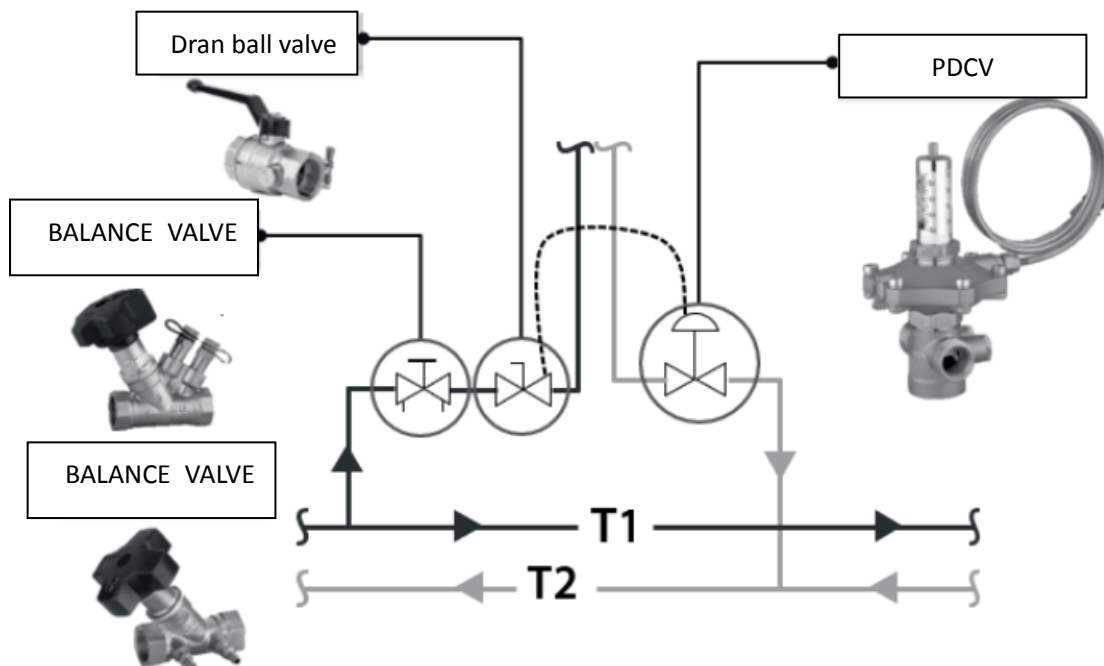
Operating pressure	DN15-- PN16, DN20-50—PN20
Working temperature	0 °C to 120 °C
Transport and storage temperatures	-40 °C to 70 °C
BODY	BRASS
Membrane	EPDM
Pulse tube	Copper 1m

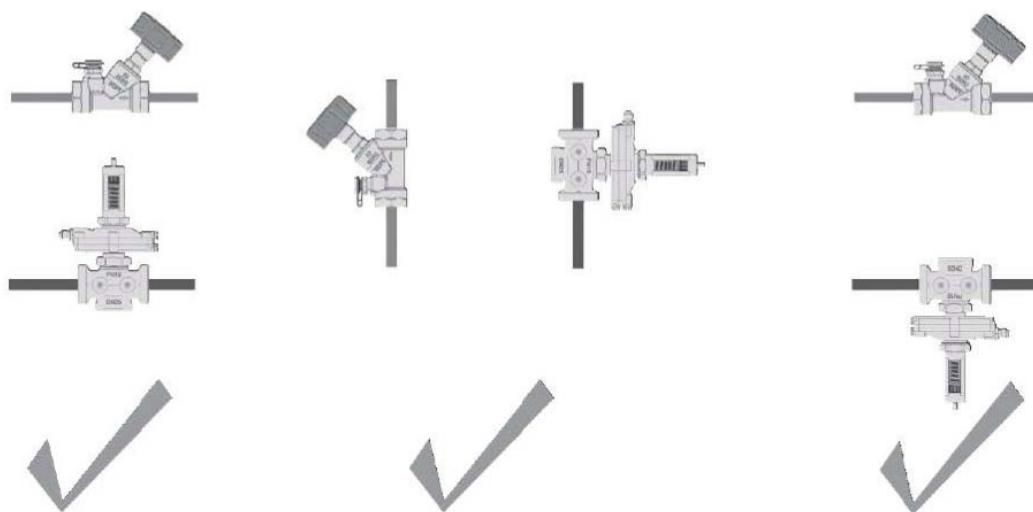
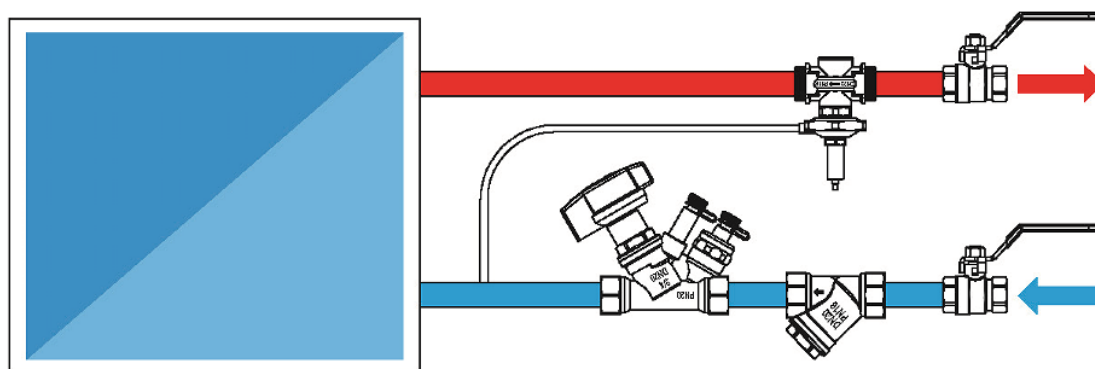
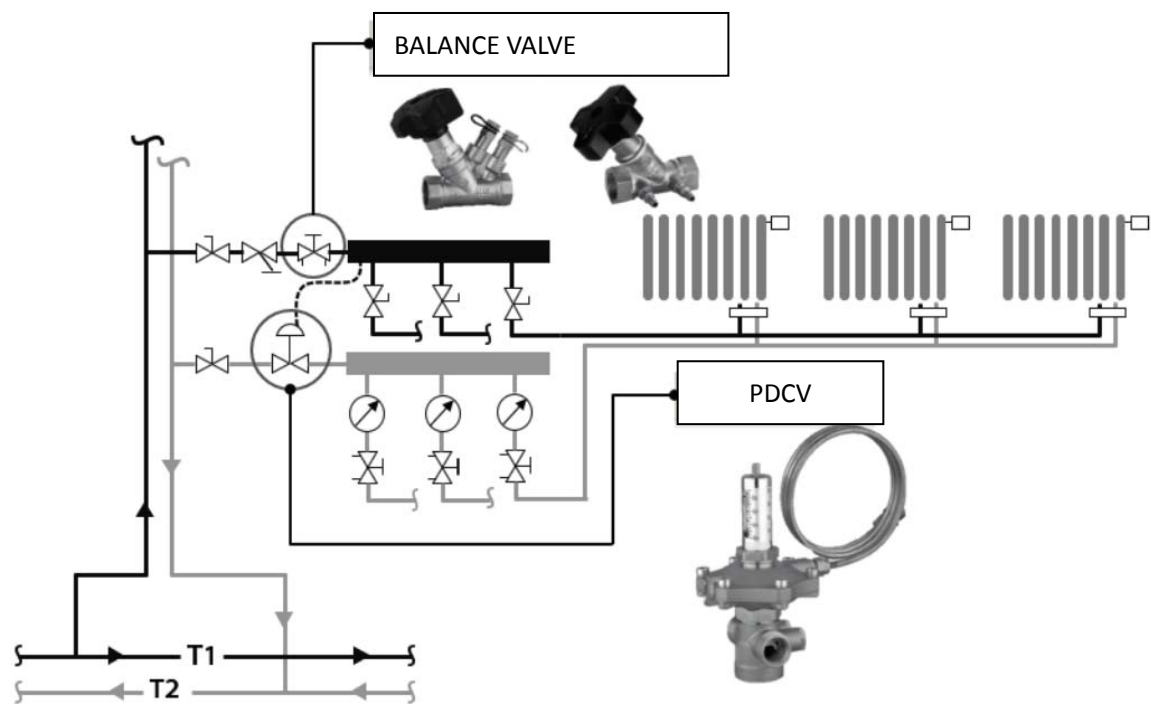


Setting	Pressure Change
1	5
1.5	7.15
2	9.3
2.5	11.45
3	13.6
2.5	15.75
4	17.9
4.5	20.05
5	22.2
5.5	24.35
6	26.5
6.5	28.7
7	30.8
7.5	33
8	35

Installation

The valve is fitted in the return in any position. The arrow on the valve body should align with the direction of flow. It is recommended that an isolation valve is fitted both upstream and downstream of the differential pressure controller





Function description

The differential pressure controllers are used to stabilize the differential pressure in heating and cooling circuits, which ensures that the heating consumer is independent of dynamic fluctuations in the riser.

For the presetting of the differential pressure controller,

the pressure loss ΔP of the riser (of the branch, of the system) is used.

The total pressure loss of the riser $\Sigma\Delta P_{\text{riser}}$ [kPa] is calculated using the following formula:

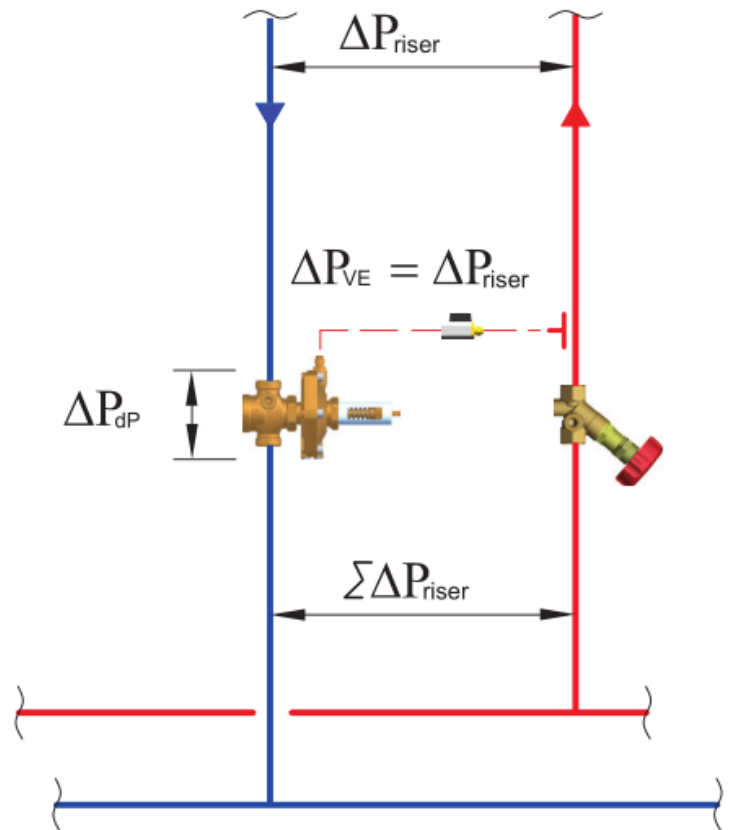
$$\Sigma\Delta P_{\text{riser}} = \Delta P_{\text{riser}} + \Delta P_{\text{dP}}$$

in which:

ΔP_{dP} - pressure loss of the DP controller.

A minimum ΔP_{dP} of

10 kPa is recommended for optimal function



Warning notices

The valves must be installed for the correct application using clean fittings. strainer should be fitted to prevent impurities.

Test points

Two test points are fitted next to each other. This arrangement ensures the best accessibility and optimal connection of measuring devices in all installation positions