INSTALLATION AND OPERATION INSTRUCTION

FlowCon DPCV 15-50mm

Install the **FlowCon DPCV** in the return pipework of the riser with connection to the supply pipework of the riser through the capillary tube as called for in the design drawings. It is recommended that a strainer be installed prior to the inlet of the capillary tube to prevent damage or blockage due to debris. INSTALL THE VALVE HOUSING WITH THE FLOW DIRECTIONAL TRIANGLE POINTING IN THE CORRECT DIRECTION.

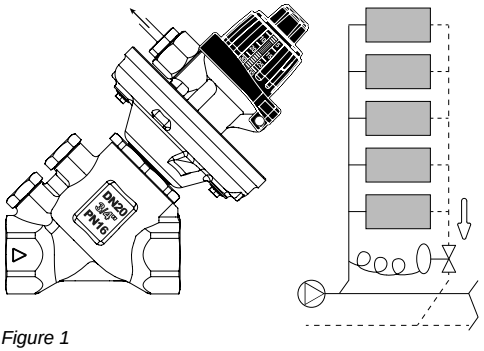


Figure 1

The valve body is available with female threaded end connections. The thread standard is EN 10226-1, which is a straight metric thread. Please clear threads on both valve and piping of debris. Sealant such as pipe dope or Teflon tape is recommended. WHEN USING HEMP AS PIPE SEALANT, ENSURE NO STRANDS ARE LEFT IN THE VALVE OR PIPING.

The capillary tube is available with ¼" straight male end connections with gaskets for sealing. One end is mounted on the upper part of the DPCV instead of the black plastic plug. The other end is mounted at the inlet of the riser fx. in a FlowCon ABS.

For each end of the capillary tube start by mounting the big nut with the gasket (❶) in the valve and proceed as shown in figure 2. Pull the small nut (❷) onto the copper tube (❸) with the thread toward the end of the tube, and then push the cutting ring (❹) onto the tube as far as possible. Push the copper tube into the hole of the big nut and screw the small nut into the big nut with a wrench using 12-15Nm.

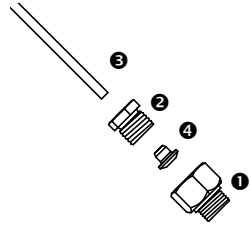
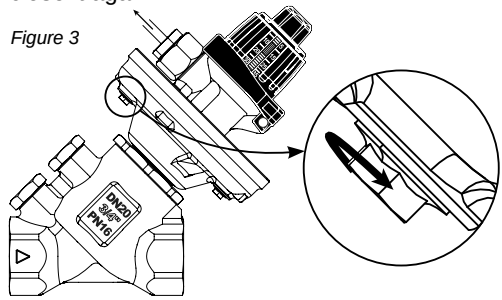


Figure 2

When the DPCV is installed with the capillary tube in place and the system is operational, please vent the capillary tube as shown in figure 3. Open the highest elevated screw by turning it counter-clockwise max. 2 rotations until water runs constantly from it, and then close it again.

Figure 3



As standard, the valve body is supplied with plugs in the body tappings. Each plug is sealed with a gasket. Alternative to plugs, pressure/-temperature fittings (p/t plugs) are available

upon request for the DPCV valve. Before finger mounting the p/t plugs in the tappings please seal the threads of the p/t plugs (DO NOT OVER TIGHTEN).

Pump pressure.

Please do not use the FlowCon DPCV in systems with pump pressures higher than 210kPaD.

Setting the DPCV.

To change the setting, please remove the black lock ring (❶) and turn the black top part by hand (❷) as shown in figure 4 (do not use more than 1 Nm force). Turn the black top part clockwise to increase and counter-clockwise to decrease the setting. The setting can be seen directly on the valve because the scale is printed on the top part (which is turned) and the setting is defined by the groove in the brass part inside the top part ❸.

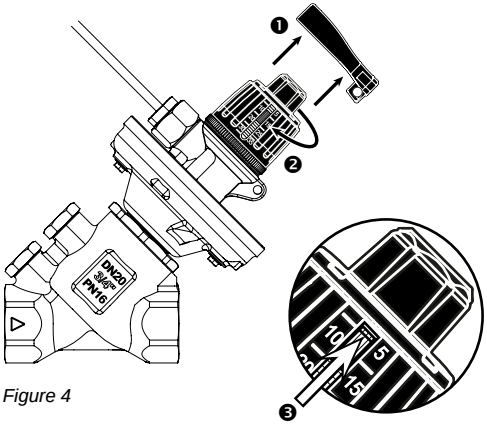


Figure 4

To make the setting tamper-proof, please return the lock ring so that the small holes in the lock ring will align with the small hole in the housing in order to fasten the lock ring with a cable binder as shown in figure 5.

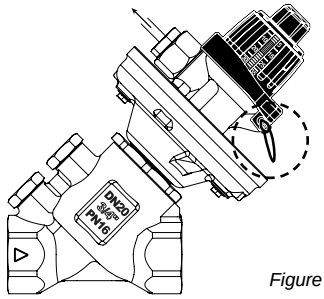


Figure 5

To reach settings in between the settings in table 1, please measure the differential pressure as shown in figure 6 (P2÷P1) while turning the black top until the measurement shows the desired setting. The same procedure can be used to get a more precise setting if required.

FlowCon DPCV		
General Settings		
Setting	kPaD	psid
5	5	0.7
10	10	1.5
15	15	2.2
20	20	2.9
25	25	3.6
30	30	4.4
35	35	5.1

Tabel 1

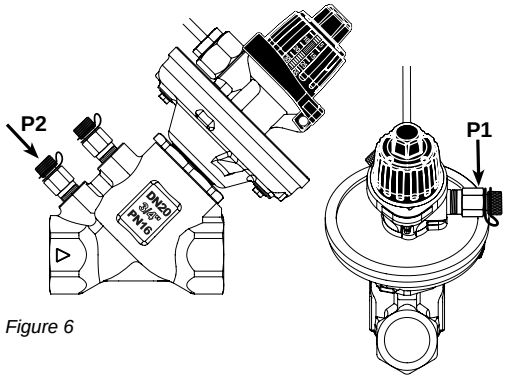


Figure 6

Using the DPCV as a shut-off valve.

To use the FlowCon DPCV as a shut-off valve please use a 4mm hex key on the top as shown in figure 7. Turn the hex key clockwise (several rotations) until end point to close the valve, and counter-clockwise until end point to open the valve and in order for it to function as a differential pressure control valve again (the setting is kept). Be sure not to use more than 1Nm torque.

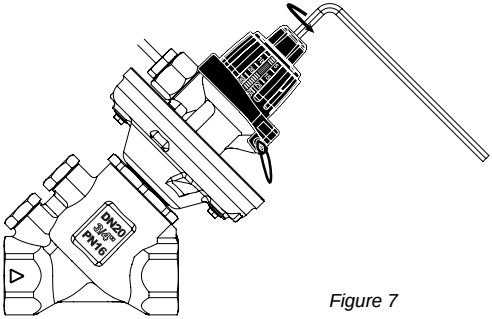


Figure 7

General.

Water must always be suitably treated, clean and free from debris. It is recommended that a strainer be installed prior to the inlet of the capillary tube to prevent damage or blockage due to debris. Further, it is recommended not to exceed the maximum operational differential pressure.

Warranty obligation.

Failure to abide by all recommendations as per this installation and operation instruction will void warranty.

When manually operating the valve do not use more than 1 Nm torque. Using more than 1 Nm torque will void warranty.