

# Installation and Operation Instruction

The **FlowCon PIM™-DP** are available in three different models covering six different sizes:

- FlowCon PIM™-DP DN65-80 (2 1/2"-3")
- FlowCon PIM™-DP DN100 (4")
- FlowCon PIM™-DP DN125-150 (5"-6")

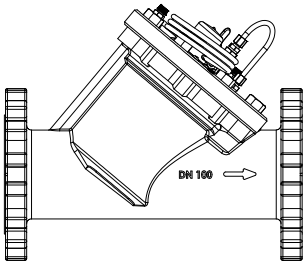


Figure 1

## Installation

Prior to installation the FlowCon PIM™-DP (supplied from factory in half open position), the system should be properly flushed. If it is not possible to flush the system before PIM™-DP installation, please make sure valve is fully open (clockwise turning until fully open) and then flush.

## Capillary tube

Do not damage the capillary tube by compressing or bending the tube with a bending radius below 20 mm (3/4"). Capillary tube is to be finger mounted and tightened with 1-3Nm - **DO NOT OVER TIGHTEN.**

## Air venting

It is important to release all air inside the valve. Upon doing so open and close the partner valve fully. It will make the diaphragm to fully extend and contract and thereby remove all trapped air inside. PUMP MUST BE OPERATIONAL FOR THIS PROCEDURE TO BE EFFECTIVE AND IT MUST BE CARRIED OUT AFTER THE SYSTEM HAS BEEN VENTED.

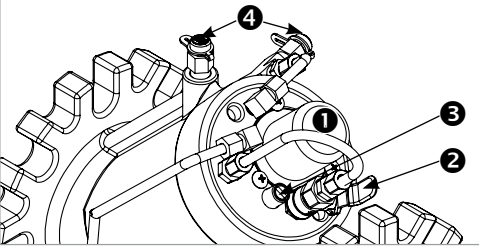
## Setting

After installation and air venting, the desired  $\Delta p_{Circuit}$  is set by adjusting the setting ❶ (figure 2) under the cap on top of the valve. Use a 13 mm (1/2") Allen key and NOTE: ADJUSTMENT SHOULD BE DONE SLOWLY, APPROXIMATELY ONE TURN EVERY 10 SEC. Increasing the  $\Delta p_{Circuit}$  by turning clockwise and decreasing by turning counter-clockwise.  $\Delta p_{Circuit}$  setting ranges from 25-170 kPaD and for the below settings, the approximate  $\Delta p_{Circuit}$  will be:

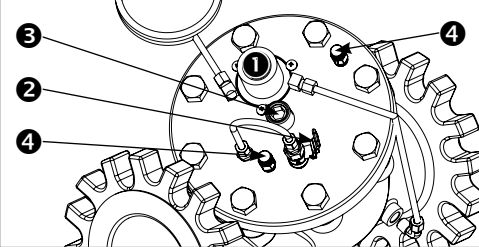
Approximate setting	$\Delta p_{Circuit}$ (kPaD)
0.0 (pilot valve closed)	170
5.0	165
8.5	160
10.0	130
11.0	105
12.5	70
13.0	60
13.5	50
14.0	35
14.5	30
15.0	25

To increase to maximum  $\Delta p_{Circuit}$  (170 kPaD / 25 psid) turn the setting approximately 15 full turns.

**FlowCon PIM™-DP DN65-80 (2 1/2"-3")**



**FlowCon PIM™-DP DN100 (4")**



**FlowCon PIM™-DP DN125-150 (5"-6")**

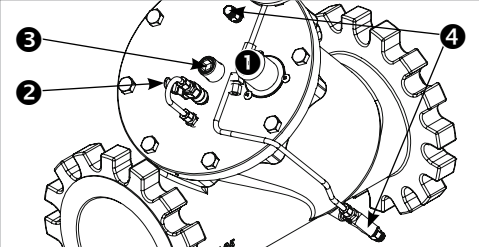


Figure 2

**Close off procedure**

1. Turn the adjustment bolt under the cap ① (figure 2) clockwise to fully open the valve (max. 12.5 Nm).
2. Turn off the ball valve ② (figure 2) by positioning the handle across the pipe and wait for at least 1 minute.
3. Close the on/off bolt ③ (figure 2) all the way by turning clockwise with a flat screwdriver on DN65/80 (2 1/2") or a 13 mm (1/2") Allen key on DN80/100 (3/4") and DN125/150 (5/6").

To open the valve, please follow steps 1 through 3 in reverse order.

**Filter cleaning**

1. Isolate the filter by turning the valve off (follow the close off procedure).
2. Then remove the copper tubing by loosening the connection nuts ⑤. Experiencing some water leaking is possible due to downstream pressure.
3. Remove the filter housing ⑥ and thereafter remove the filter ⑦ with a sharp pick. BE CAREFUL NOT TO DAMAGE ENLARGEN THE FILTER.
4. Clean the filter and put it back in. It is recommended also to inspect the flow restrictor for blockage ⑧.

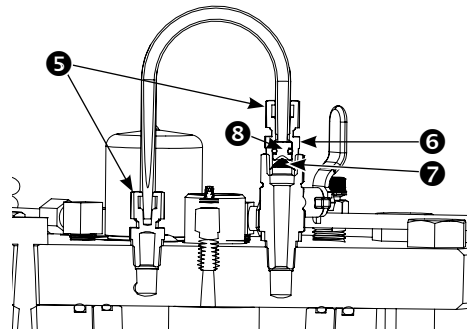


Figure 3

**Measurement**

Measure the  $\Delta p_{\text{circuit}}$  on the p/t plugs ④ (figure 2) while turning the adjustment ①. WAIT UNTIL THE VALVE STABILIZES ITSELF.

Flange match

Model no.	Flange size (inch)	ASME B16.5 weld neck flanges		Flange size (mm)	EN1092-1 weld neck flanges			
		Class 150	Class 300		PN10	PN16	PN25	PN40
PIMDP.0.J	2 1/2		(✓)	65	(✓)	(✓)	(✓)	(✓)
	3	✓	✓	80	✓	✓	✓	✓
PIMDP.0.K	4	✓	✓	100	✓	✓	✓	✓
PIMDP.0.L	5		✓	125				✓
	6	✓		150	✓	✓	✓	✓

