

INSTALLATION AND OPERATION INSTRUCTION

FlowCon EDP.1 - 15-25mm

The **FlowCon EDP.1** insert is available with three different FlowCon valve housings, either:

- FlowCon A (DN15/20/25)
- FlowCon AB (DN15/20/25)
- FlowCon ABV (DN15/20/25)

Install the selected valve housing as called for in the design drawings.

INSTALL THE VALVE WITH THE FLOW DIRECTIONAL ARROW POINTING IN THE CORRECT DIRECTION.

The **FlowCon A** valve (Model no. A15.X, A20.X and A25.I.K) is available with fixed female-by-female connections, i.e. figure 1.

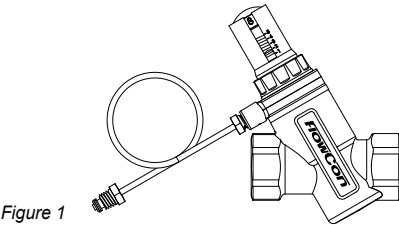


Figure 1

The thread standard for the A model is either ISO 228, which is a straight metric thread (compatible with BS-2779) or NPT threading standard, depending on the product number ordered (except for DN25 which currently is only ISO).

For all threaded connections please clear threads on both valve and piping of debris. Sealant such as pipe dope or teflon is recommended. WHEN USING HEMP AS PIPE SEALANT, ENSURE NO STRANDS ARE LEFT IN THE VALVE OR PIPING.

The **FlowCon AB** valve (Model no. AB15.X, AB20.X, and AB25.X) is similarly available with female-by-female threaded connections, i.e. figure 2.

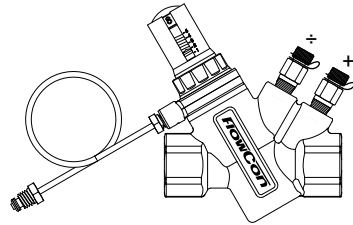


Figure 2

The thread standard for the AB model is equal to the standard available for the A model.

For all threaded connections please clear threads on both valve and piping of debris. Sealant such as pipe dope or teflon is recommended.

WHEN USING HEMP AS PIPE SEALANT, ENSURE NO STRANDS ARE LEFT IN THE VALVE OR PIPING.

Pressure/temperature fittings (p/t plugs) are available upon request for the AB valve. Before finger mounting the p/t plugs in the body tappings, please seal the threads of the p/t plugs (DO NOT OVER TIGHTEN).

Alternatively to p/t plugs, the valve body can be ordered with plugs for the body tappings. Each plug is sealed by a gasket.

The **FlowCon ABV** valve (Model no. ABV1) is available with double union end connections, i.e. figure 3.

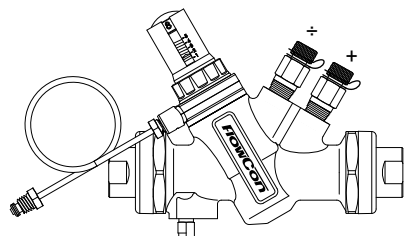


Figure 3

Two types of end connections are available for use with the union nut:

Threaded (male or female):

The thread standard is ISO 228 which is a straight metric thread (compatible with BS-2779) or NPT threading standard, depending on the end connections ordered. The threads on both the connection and piping should be cleaned carefully. As these models are union end connected, the union nuts and the end connections should be removed for installation.

O-rings are supplied with the valve body and used to seal the connections. It is recommended to grease the O-rings with silicone grease before installation.

IMPORTANT: Never use mineral oil or petrol based grease or oil on the o-rings. Please make sure the o-rings are in place in the o-ring grooves in the inlet and outlet of the valve body when installing the housing and REMEMBER TO TIGHTEN THE UNION NUTS TO ENSURE SEALING.

For all threaded connections 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.

Soldered end (sweat):

REMOVE THE END CONNECTIONS FROM THE HOUSING BEFORE SOLDERING. THIS ENSURES THAT THE O-RING AND INTERNAL PARTS ARE NOT DAMAGED BY HEAT.

Pressure/temperature fittings (p/t plugs) are available upon request for the ABV valve. Before finger mounting the p/t plugs in the body tappings, please seal the threads of the p/t plugs (DO NOT OVER TIGHTEN)

Alternatively to p/t plugs, the valve body can be ordered with plugs for the body tappings. Each plug is sealed by a gasket.

Inserting the insert

Prior to installing the FlowCon EDP.1 insert (supplied from factory in setting 1.0 due to calibration), the system should be properly flushed. A blank valve cover is available to be installed during flushing.

It is recommended that the o-rings located around the EDP.1 insert and at the headnut is lubricated with silicone grease, before the insert is installed into the valve body.

If it is not possible to rotate the EDP.1 insert because of the connection to the capillary tube, it is possible to turn the "connection-ring" independently of the insert.

IMPORTANT: never use mineral oil or petrol based grease or oil in the system.

Setting the valve

The selected DP is adjusted on the valve (turned from 1.0 and up). To adjust the setting of the valve a specially designed key is used (ACC0001) (figure 4).

The key is used to adjust the scale on the top of the insert; the large white numbers are numbered 1.0-5.0 and the red are numbered 1 through 9.

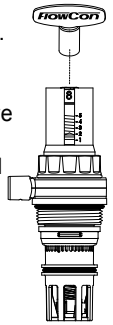


Figure 4

Measurement

Please measure the differential pressure as shown in figure 5 while turning the adjustments on top of the valve (figure 4). **Wait until the valve stabilize itself.**

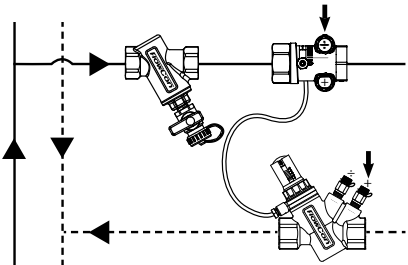


Figure 5

Capillary tube

Please do not damage the capillary tube by forcing the tube to compress or 90° bends with small radius.

		Flow (l/hr)														
		FlowCon EDP.1 setting														
Dpc [kPa]	1	1,2	1,4	1,6	1,8	2	2,2	2,4	2,6	2,8	3	3,5	4	4,5	5	
3	330	430	520	620	710	810	920	1030	1150	1270	1390					
4	260	370	470	560	660	760	870	980	1100	1220	1340					
5	190	310	410	510	610	710	820	930	1050	1170	1290					
6	120	240	350	460	560	660	770	880	1000	1120	1240	1540				
7	50	180	300	400	510	610	720	830	950	1070	1190	1490				
8	15	120	240	350	460	560	670	780	900	1020	1140	1440				
9		60	190	300	410	510	620	740	850	970	1090	1390				
10		15	130	240	350	460	570	690	800	920	1040	1340				
11			70	190	300	410	520	640	750	870	990	1290				
12			15	140	250	360	470	590	700	820	940	1240	1520			
13				90	200	310	420	540	650	770	890	1190	1470			
14				30	150	260	370	490	600	720	840	1140	1420			
15				15	100	210	320	440	550	670	790	1090	1370			
16					50	160	280	390	500	620	740	1040	1320			
17					15	110	230	340	450	570	690	990	1270	1540		
18						60	180	290	410	520	640	940	1220	1490		
19						15	130	240	360	470	590	890	1170	1440		
20							80	190	310	420	540	840	1120	1390		
21							30	140	260	370	490	780	1070	1340		
22							15	90	210	320	440	730	1020	1290		
23								40	160	270	390	680	970	1240	1550	
24								15	110	220	340	630	920	1190	1500	
25									60	170	290	580	870	1140	1450	
26									15	120	240	530	820	1100	1400	
27										70	190	480	770	1050	1350	
28										20	140	430	720	1000	1300	
29										15	90	380	670	950	1250	
30											40	330	620	900	1200	
31											15	280	570	850	1150	
32												230	520	800	1100	
33												180	470	750	1050	
34												130	420	700	1000	
35												80	370	650	950	
36												30	320	600	900	
37												15	270	550	850	
38													220	500	800	
39													170	450	750	
40													120	400	700	
41													70	350	650	
42													15	300	600	
43														250	550	
44														200	500	
45														150	450	
46														110	400	
47														60	350	
48														15	300	
49															250	
50															200	
51															150	
52															100	
53															50	
54															15	

Assembly drawing FlowCon EDP.1

- A: Valve housing
(here FlowCon ABV1, incl. o-rings for end connections)
- B: FlowCon EDP.1 insert
- C: Capillary tube for QuickDisc partner valve
- D: Union M8 to 1/4" adaptor (ISO 7/1)
- E: Union end connections
- F1: P/t plug (2 pcs.)
- F2: Plug and gasket (2 of each)
- G: Adjustment keys.

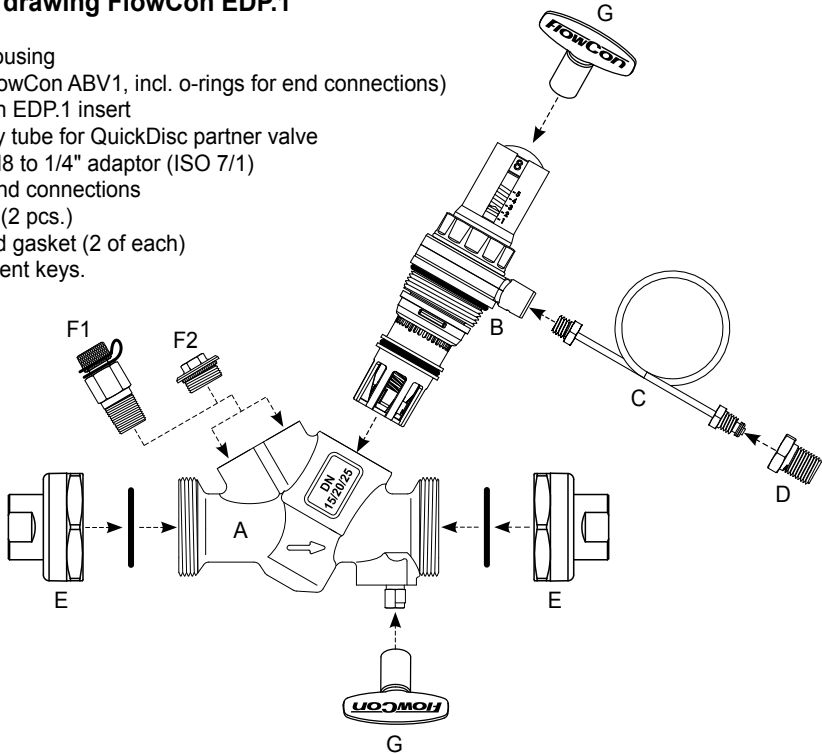


Figure 6

General

It is highly recommended to flush the entire pipe-line. Following this recommendation before installing the insert, would give the valves longer life time and better flow regulation due to the clean water quality. Suitable flushing caps are available.

If it is not possible to flush the system unless the FlowCon EDP.1 is installed, please make sure to adjust the setting to 5.0. Water must always be suitable treated, clean and free of debris and oil. It is recommended that a strainer be installed prior to the valve body to prevent damage or blockage due to debris. Ensure that the valve is not in the fully closed position when filling the system with water

Warranty obligation

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

For latest updates please see www.flowcon.com