

INSTALLATION AND OPERATION INSTRUCTION

FlowCon A
15-25mm, 1/2"-1"

FlowCon AB
15-50mm, 1/2"-2"

FlowCon ABV
15-40mm, 1/2"-1 1/2"

Install the **FlowCon A / AB / ABV** as called for in the design drawings. Although the performance of the valve is not affected either way, industry standards call for balancing devices to be installed on the downstream side of the terminal unit. Especially for the ABV with its isolation ball valve, it is recommended to ensure the isolation valve is downstream of the balancing device. **INSTALL THE VALVE HOUSING WITH THE FLOW DIRECTIONAL ARROW POINTING IN THE CORRECT DIRECTION.**

The **FlowCon A** valve (Model Nos. A15.X, A20.X and A25.I.K) is available with fixed female-by-female threaded connections, i.e. figure 1.

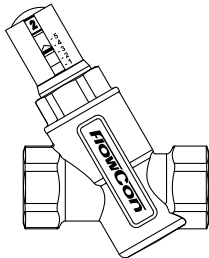


Figure 1

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 pls. 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 **FlowCon AB** valve (Model Nos. AB15.X, AB20.X, AB25.I.K, AB25.X, AB32.X, AB40.I and AB50.I) is similarly available with fixed female-by-female threaded connections, i.e. figure 2.

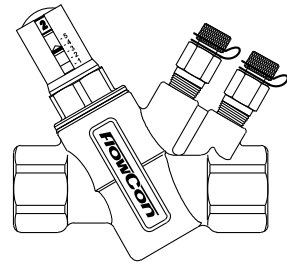


Figure 2

The thread standard for the AB model is equal to what is available for the A model (except for DN25 small, DN40 and DN50 which currently are only ISO).

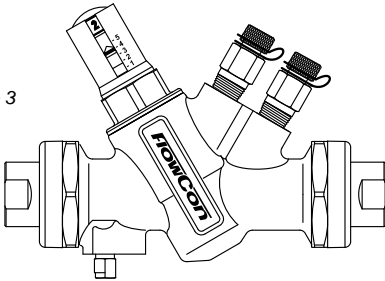
For all threaded connections pls. clear threads on both valve and piping of debris. Sealant such as pipe dope or teflon tape is recommended. **WHEN USING HEMP AS PIPE SEALANT, ENSURE NO STRANDS ARE LEFT IN THE VALVE OR PIPING.**

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, pls. 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 Nos. ABV1 and ABV2) 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 these 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 pls. 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-RINGS 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, pls. seal the threads of the p/t plugs (DO NOT OVER TIGHTEN).

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

Choice of cartridge:

Valve bodies in this series, i.e. A, AB or ABV can be installed with either a standard composite cartridge, internally adjustable to one of eight flow rates or the FlowCon E-JUST cartridge, externally adjustable to one of 41 different flow rates in the same cartridge. Alternatively, a factory-set stainless steel cartridge can be installed with an adaptor.

It is recommended that the o-rings located around the cartridge and adaptor are lubricated with silicone grease, before the cartridge/-adaptor is installed into the valve body. **IMPORTANT:** Never use mineral oil or petrol based grease or oil on the o-rings.

If applying the stainless steel cartridge, please make sure that the cartridge o-ring is placed on the inside groove at the top of the adaptor **BEFORE** inserting the cartridge! Hereafter the cartridge is easily inserted with a hard push. Once you hear a click sound, it is properly placed and the cartridge is correctly fitted. Screw on the lock ring and insert the adaptor into the valve body.

The cartridge can be removed by unscrewing the lock ring and pulling out the cartridge. The cartridge o-ring will also come out. Insert the new o-ring and afterwards insert the new cartridge as described above.

Warranty obligation.

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

General.

It is recommended flushing the system before installing the cartridge in the valve body. Suitable flushing caps are available. Water must always be suitable treated, clean and free of debris. It is recommended that a strainer be installed prior to the valve body to prevent damage or blockage due to debris. Further, it is recommended not to exceed maximum differential pressure control range of the cartridge, particularly for the diaphragm type.

**Assembly drawing
FlowCon A:**

- A: Valve housing
- B1: E-JUST cartridge
- B2: Standard composite cartridge
- B3: Stainless steel cartridge w. adaptor
- C: Adjustment key.

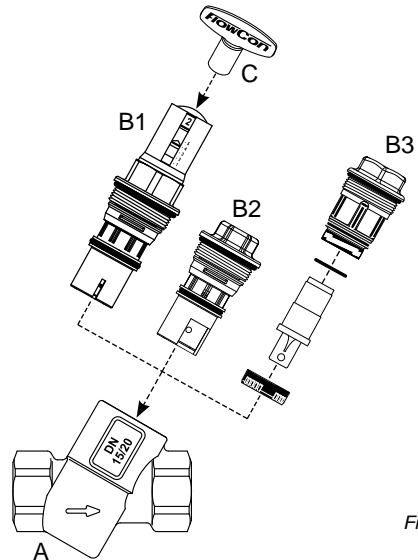


Figure 4

**Assembly drawing
FlowCon AB:**

- A: Valve housing
- B1: E-JUST cartridge
- B2: Standard composite cartridge
- B3: Stainless steel cartridge w. adaptor
(not available for DN40/50)
- C: Adjustment key
- D1: P/t plug (2 pcs.)
- D2: Plug and gasket (2 of each).

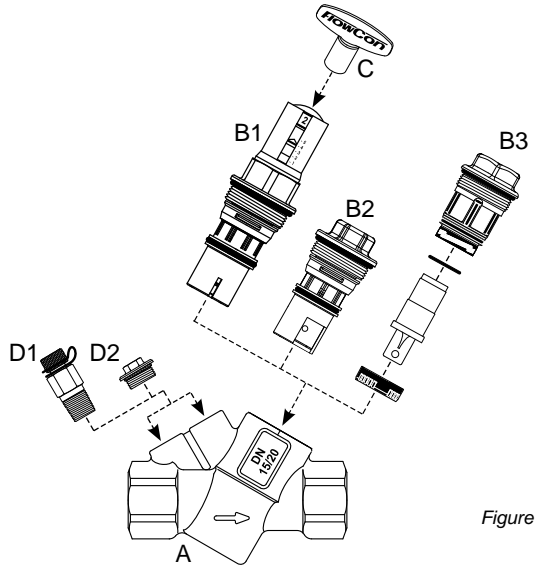


Figure 5

**Assembly drawing
FlowCon ABV:**

- A: Valve housing
- B1: E-JUST cartridge
- B2: Standard composite cartridge
- B3: Stainless steel cartridge w. adaptor
- C: Adjustment keys
- D1: P/t plug (2 pcs.)
- D2: Plug and gasket (2 of each)
- E: Union end connections.

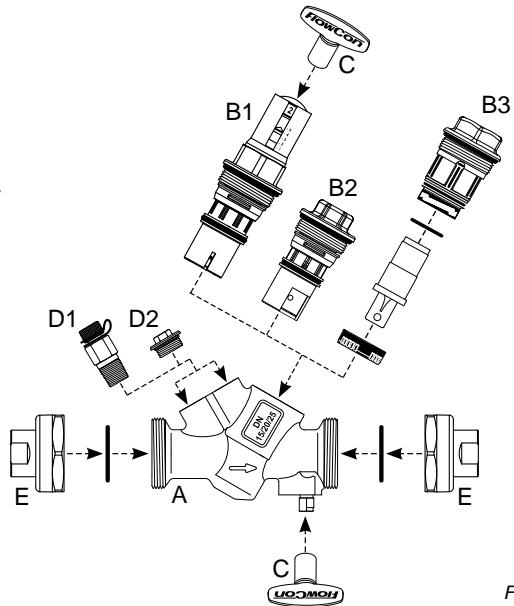


Figure 6