

FlowCon QuickDisc[®]

Manual Flow Control 15-20 mm / 1/2"-3/4"



SPECIFICATIONS

Static pressure: Media temperature: Material:	2700 kPa / 400 psi -20°C to +120°C / -4°F to +250°F
- Venturi:	Brass ASTM CuZn38Pb2
- Disc:	Ceramic
- O-rings:	EPDM
- Housing:	Forged brass ASTM CuZn38Pb2
Adjustment:	Pin with graduated marking on housings and memory stop
Maximum close off pressure:	2700 kPa / 400 psi
Maximum operational ΔP :	2700 kPaD / 400 psid
Shut-off leakage:	Bubble tight, EN12266-2:2003 - Class A
Flow rate range:	66.6-5260 l/hr / 0.29-23.2 GPM
End connections:	Fixed female DN15/20 ISO or fixed female 1/2"-3/4" NPT ¹
Body taps:	1/4" ISO

Note1: NPT only available ex. US-factory.

DIMENSIONS AND WEIGHT (NOMINAL)

Model no.	Valve size	L	H1	H2	D (depth)	Weight ²	Kv/Cv ³
	mm (in)	mm (in)	mm (in)	mm (in)	mm (in)	kg (lb)	m ³ /hr (GPM)
FQ.E.I.B.X	15 (1/2)	69 (2.72)	58 (2.28)	43 (1.69)	51 (2.01)	0.44 (0.97)	5.6 (6.5)
FQ.F.I.B.X	20 (3/4)					0.40 (0.88)	

Note 2: Weight s including p/t plugs (2 pcs) for measuring ports and without plug for connection port. Note 3: Kv is used to calculate the permanent pressure drop. Δp=(Q/Kv)² * 100. Use the p/t plugs for flow verification according to flow curves later in this tech note.



MODEL NUMBER SELECTION

	FQ	· ·
Insert size of valve: E =15mm (1/2") F =20mm (3/4")		
Connections standard: I=ISO (standard) N=NPT		
Standard plugs for measuring ports: B=pressure/temperature plug (2 pcs)		
Insert plug requirement for connection port: 0 =none (standard) C =Capillary tube (Ø6 x M8 thread connections)		

Example: FQ.E.I.B.0=15 mm (1/2") female-female ISO threaded FlowCon QuickDisc®, with 2 p/t plugs and open connection port.

DESCRIPTION

FlowCon QuickDisc[®] is a flow limiting valve intended to be used as partner valve for the FlowCon DPCV range. Installation of a FlowCon QuickDisc[®] valve will allow manual flow adjustment, flow verification through the buildin venturi as well as isolation. The valve does not react to chemical treatment in water and is built with a ceramic disc, providing equal percentage flow openings ensuring smooth flow setting. In general, the valve is more compact compared with globe type Double Regulating Valves (DRVs). Furthermore, it operates with significantly reduced differential pressure loss making it a very energy efficent alternative to traditional DRVs.

Model Valve no. (mi	Valvo sizo	Valvo sizo	Pressure range		
	(mm)	(")	1-80 kPaD (I/hr)	0.15-11.6 psid (GPM)	
FQ.E.I.B.X	15	1/2	66.6-5260	0.29-23.16	
FQ.F.I.B.X	20	3/4	75.7-5170	0.33-22.76	

FLOW RATES VS MEASURED DIFFERENTIAL PRESSURE



Flow rates - FlowCon QuickDisc[®] DN15-20 Δp: 20-80 kPaD



APPLICATION EXAMPLES



FlowCon SDP mounted with FlowCon QuickDisc[®] on the branch in a 2-pipe heating system.

FlowCon SDP mounted with FlowCon QuickDisc[®] on the riser in a 2-pipe heating system.

FlowCon SDP mounted with FlowCon QuickDisc[®] on a manifold for an underfloor heating system.

GENERAL SPECIFICATIONS

1. STATIC BALANCING VALVE – FLOWCON QUICKDISC®

- 1.1. Contractor shall install the static balancing valves where indicated in drawings.
- 1.2. Valve shall be a complete unit, mechanically operated, static balancing device, which shall accurately control flow.
- 1.3. Contractor shall provide an energy efficient solution with low radiant energy loss due to no insulation breaking handle.
- 1.4. Contractor shall provide a low torqued solution due to the ceramic disc construction.

2. VALVE HOUSING

- 2.1. Housing shall consist of forged brass ASTM CuZn38Pb2, rated at no less then 2500 kPa (360 psi) static pressure at +120°C (+248°F).
- 2.2. Housing shall be permanently marked to show direction of flow.
- 2.3. Housing shall be for threaded installation without any pipe length restrictions before and after the valve.
- 2.4. Pressure/temperature test plugs for verifying accuracy of flow performance shall be standard for all valve sizes.

3. FLOW REGULATION UNIT

- 3.1. Flow regulation unit shall be a venturi for fast and accurate commissioning.
- 3.2. Flow regulation unit shall include a ceramic disc which allows close off function providing bubble tight leakage rate.
- 3.3. Flow regulation unit shall include equal percentage flow opening providing smooth flow control.

UPDATES

For latest updates please see www.flowcon.com

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