

FlowCon K 15-40mm

Automatic Balance Valve - Accessible Pre-Set Cartridge

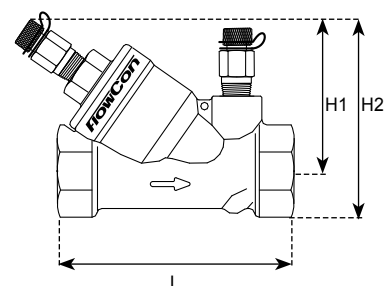


SPECIFICATIONS

Pressure rating:	2500 kPa / 360 psi
Temperature rating, media:	-30°C to +120°C / -22°F to +248°F
Material:	
- Cartridge:	AISI Type 304 stainless steel
	AISI Type 17-7 PH stainless steel spring
- Body:	Forged brass ASTM CuZn40Pb2 or
	DZR brass CW602N CuZn36Pb2AS ("Enkotal®")
- O-rings:	EPDM
End connections:	Fixed female ISO or NPT
Body tappings:	1/4" ISO
Flow rate range:	0.021 l/sec - 2.774 l/sec
Accessory options:	
Strainer:	20 mesh stainless steel

DIMENSIONS AND WEIGHTS (NOMINAL) (measured in mm unless noted)

Model no.	Valve size	Cartridge size	L	H1	H2	Weight (kgs.)	Kv (m³/hr)
F380.x.E.x.x	15	20	89.0	61.0	74.0	0.5	5
F380.x.F.x.x	20		96.5	63.5	76.2	0.5	7
F380.x.H.x.x	25		105.0	66.0	86.4	0.5	10
F381.x.H.x.x	25	40	150.0	86.4	94.0	1.5	20
F381.x.J.x.x	32		155.0	89.0	107.0	1.5	30
F381.x.K.x.x	40		155.0	89.0	107.0	1.5	30



MODEL NUMBER SELECTION¹

Insert body size:
380=15/20/25mm for 20mm cartridge
381=25/32/40mm for 40mm cartridge

Insert kPaD control range:
0=none 1=10-95 kPaD 2=22-210 kPaD 4=40-390 kPaD 8=90-880 kPaD

Insert type of end connection:
E=15mm F=20mm H=25mm J=32mm K=40mm

Insert p/t plugs requirements:
B=pressure/temperature plugs P=taps plugged O=taps open

Insert type of thread:
Leave it blank if end connection type is NPT
I=ISO

Insert valve body material:
Leave it blank for standard body material
D=DZR brass

Insert valve cartridge as per selection chart:
Leave it blank if no cartridge required

Example: F381.4.K.B.I.F361444=FlowCon K 40mm ISO female threaded body, standard brass, with p/t plugs and a F361444 cartridge (1.85 l/sec, 40-390 kPaD).

Note 1: Part number and flow rate of cartridge are indicated on label affixed to body.

Accuracy: $\pm 5\%$ of controlled flow rate.

FLOW RATE TABLES - STAINLESS STEEL CARTRIDGE - FOR VALVES DN15-DN25 SMALL

20mm · 3/4" · stainless steel cartridge											
Nominal flow rate	Pressure range, ΔP:			10-95 kPaD 1-14 psid		22-210 kPaD 2-32 psid		40-390 kPaD 4-57 psid		90-880 kPaD 8-128 psid	
	l/sec	l/hr	GPM	Type 1		Type 2		Type 4		Type 8	
				Marking	FlowCon	Marking	FlowCon	Marking	FlowCon	Marking	FlowCon
	0.0210	75.7	0.333	11-1	F360111						
	0.0315	114	0.500	01-1	F360101						
	0.0347	125	0.550			11-2	F360211				
	0.0421	151	0.667	02-1	F360102						
	0.0473	170	0.750			01-2	F360201	11-4	F360411		
	0.0631	227	1.00	03-1	F360103	02-2	F360202	01-4	F360401		
	0.0694	250	1.10							11-8	F360811
	0.0841	303	1.33	04-1	F360104			02-4	F360402		
	0.0946	341	1.50			03-2	F360203			01-8	F360801
	0.105	379	1.67	05-1	F360105						
	0.126	454	2.00	06-1	F360106	04-2	F360204	03-4	F360403	02-8	F360802
	0.147	530	2.33	07-1	F360107						
	0.158	568	2.50			05-2	F360205				
	0.168	606	2.67	08-1	F360108			04-4	F360404		
	0.189	681	3.00			06-2	F360206			03-8	F360803
	0.210	757	3.33	10-1	F360110			05-4	F360405		
	0.221	795	3.50			07-2	F360207				
	0.252	908	4.00	12-1	F360112	08-2	F360208	06-4	F360406	04-8	F360804
	0.294	1060	4.67	14-1	F360114			07-4	F360407		
	0.315	1140	5.00	16-1	F360116	10-2	F360210			05-8	F360805
	0.336	1210	5.33					08-4	F360408		
	0.379	1360	6.00			12-2	F360212			06-8	F360806
	0.421	1511	6.67					10-4	F360410		
	0.442	1590	7.00			14-2	F360214			07-8	F360807
	0.505	1820	8.00			16-2	F360216	12-4	F360412	08-8	F360808
	0.589	2120	9.33					14-4	F360414		
	0.631	2270	10.0					16-4	F360416	10-8	F360810
	0.757	2730	12.0							12-8	F360812
	0.883	3180	14.0							14-8	F360814
	1.01	3630	16.0							16-8	F360816

Accuracy: ±5% of controlled flow rate.

FLOW RATE TABLES - STAINLESS STEEL CARTRIDGE - FOR VALVES DN25 LARGE-DN40

40mm · 1 1/2" · stainless steel cartridge											
Nominal flow rate	Pressure range, ΔP:			10-95 kPaD 1-14 psid		22-210 kPaD 2-32 psid		40-390 kPaD 4-57 psid		90-880 kPaD 8-128 psid	
	l/sec	l/hr	GPM	Type 1		Type 2		Type 4		Type 8	
				Marking	FlowCon	Marking	FlowCon	Marking	FlowCon	Marking	FlowCon
	0.189	681	3.00	09-1	F361109						
	0.210	757	3.33	10-1	F361110						
	0.252	908	4.00	12-1	F361112						
	0.284	1020	4.50			09-2	F361209				
	0.294	1060	4.67	14-1	F361114						
	0.315	1140	5.00			10-2	F361210				
	0.336	1210	5.33	16-1	F361116						
	0.379	1360	6.00	18-1	F361118	12-2	F361212	09-4	F361409		
	0.421	1510	6.67	20-1	F361120			10-4	F361410		
	0.442	1590	7.00			14-2	F361214				
	0.463	1670	7.33	22-1	F361122						
	0.505	1820	8.00	24-1	F361124	16-2	F361216	12-4	F361412		
	0.547	1970	8.67	26-1	F361126						
	0.568	2040	9.00			18-2	F361218			09-8	F361809
	0.589	2120	9.33	28-1	F361128			14-4	F361414		
	0.631	2270	10.00	30-1	F361130	20-2	F361220			10-8	F361810
	0.673	2420	10.7	32-1	F361132			16-4	F361416		
	0.694	2500	11.0			22-2	F361222				
	0.715	2570	11.3	34-1	F361134						
	0.757	2730	12.0	36-1	F361136	24-2	F361224	18-4	F361418	12-8	F361812
	0.799	2880	12.7	38-1	F361138						
	0.820	2950	13.0			26-2	F361226				
	0.841	3030	13.3	40-1	F361140			20-4	F361420		
	0.883	3180	14.0	42-1	F361142	28-2	F361228			14-8	F361814
	0.925	3330	14.7	44-1	F361144			22-4	F361422		
	0.946	3410	15.0			30-2	F361230				
	1.01	3630	16.0			32-2	F361232	24-4	F361424	16-8	F361816
	1.07	3860	17.0			34-2	F361234				
	1.09	3940	17.3					26-4	F361426		
	1.14	4090	18.0			36-2	F361236			18-8	F361818
	1.18	4240	18.7					28-4	F361428		
	1.20	4320	19.0			38-2	F361238				
	1.26	4540	20.0			40-2	F361240	30-4	F361430	20-8	F361820
	1.32	4770	21.0			42-2	F361242				
	1.35	4850	21.3					32-4	F361432		
	1.39	5000	22.0			44-2	F361244			22-8	F361822
	1.43	5150	22.7					34-4	F361434		
	1.51	5450	24.0					36-4	F361436	24-8	F361824
	1.60	5750	25.3					38-4	F361438		
	1.64	5910	26.0							26-8	F361826
	1.68	6060	26.7					40-4	F361440		
	1.77	6360	28.0					42-4	F361442	28-8	F361828
	1.85	6660	29.3					44-4	F361444		
	1.89	6810	30.0							30-8	F361830
	2.02	7270	32.0							32-8	F361832
	2.15	7720	34.0							34-8	F361834
	2.27	8180	36.0							36-8	F361836
	2.40	8630	38.0							38-8	F361838
	2.52	9080	40.0							40-8	F361840
	2.65	9540	42.0							42-8	F361842
	2.78	9990	44.0							44-8	F361844

Accuracy: ±5% of controlled flow rate.

ACCESSORIES

- P/t plugs: 2 x ACC00101
- 20 mesh strainer (ACC609000 / ACC609001)

GENERAL SPECIFICATIONS

1. AUTOMATIC BALANCING VALVES - FLOWCON K

- 1.1. Contractor shall install automatic balancing valves where indicated in drawings.
- 1.2. Valve shall consist of a dynamic and accessible flow limiting device.

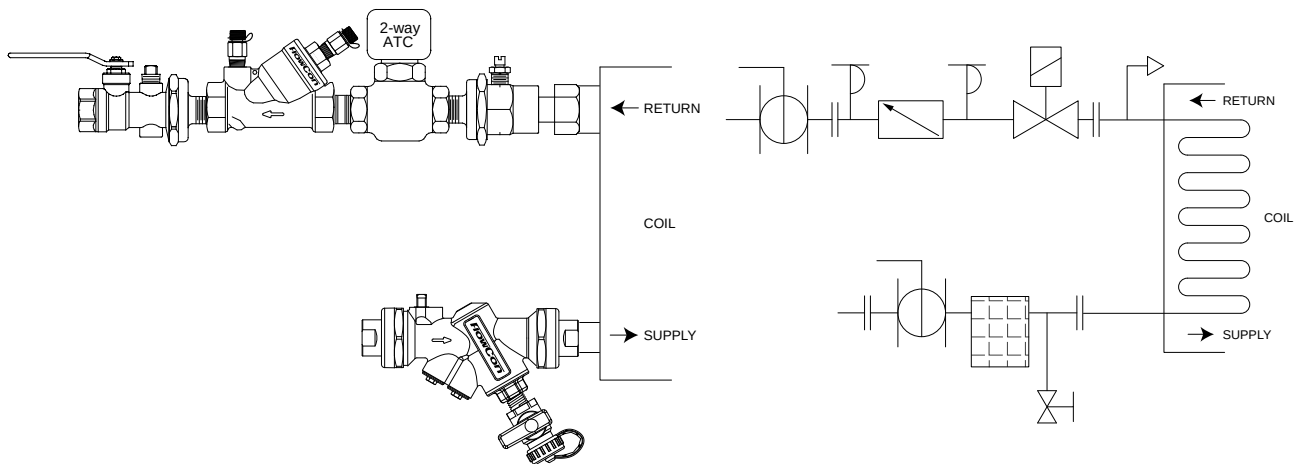
2. VALVE HOUSING

- 2.1. Valve housing shall consist of forged brass ASTM CuZn40Pb2 or DZR brass CW602N CuZn36Pb2AS (Enkotal®), rated at no less than 2500 kPa static pressure and +120°C.
- 2.2. Valve housing shall be permanently marked to show direction of flow.
- 2.3. Valve housing shall be ISO female threaded for the appropriate pipe size and shall be configured for flow regulation unit accessibility.
- 2.4. Optional dual pressure/temperature test plugs for verifying accuracy of flow performance shall be available for all valve sizes.

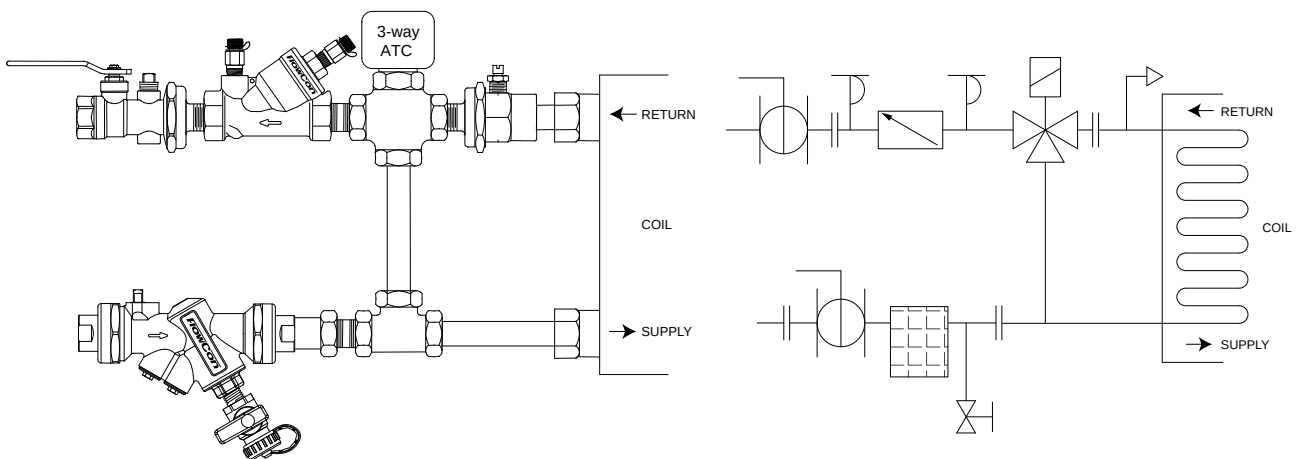
3. FLOW REGULATOR / AUTOMATIC BALANCING UNIT

- 3.1. Flow regulation unit assembly shall be manufactured of AISI type 304 stainless steel and stainless steel 17-7 spring.
- 3.2. Flow regulation unit shall be readily accessible for change-out or maintenance.
- 3.3. Flow regulation unit shall be available in 4 different kPaD operational ranges, minimum range shall be capable of being activated by minimum 10 kPaD. Further, the flow regulation unit shall be capable of controlling flow within $\pm 5\%$ of rated flow.
- 3.4. Identification tags shall be available for all valves; tags shall be indelibly marked with part number and flow rate.

2-WAY APPLICATION AND SCHEMATIC EXAMPLE



3-WAY APPLICATION AND SCHEMATIC EXAMPLE



UPDATES

For latest updates please see www.flowcon.com

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