

# FlowCon K 15-40mm

*Automatic Balance Valve - Accessible Pre-Set Cartridge*

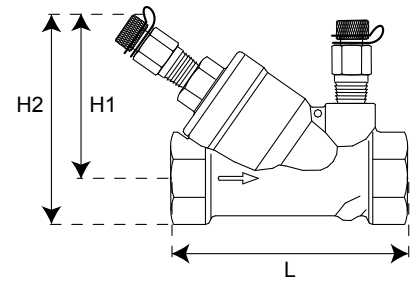


## SPECIFICATIONS

Pressure rating:	2500 kPa, 363 psi
Temperature rating:	-30°C to +120°C, +22°F to +248°F
Material:	
- Body:	Forged brass ASTM CuZn39Pb2 or DZR Brass "Enkotal®"
- Cartridge:	AISI Type 304 stainless steel AISI Type 17-7 PH stainless steel spring
- O-rings:	EPDM
End connections:	Female ISO/BSP (Optional NPT)
Body tappings:	1/4" ISO/BSP
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.	Size	L	H1	H2	Weight (kgs.)	Kv (m <sup>3</sup> /hr)
F380.x.E.x.x	15	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 (3/4" cartridge)	25	105.0	66.0	86.4	0.5	10
F381.x.H.x.x (1 1/2" cartridge)	25	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 SELECTION<sup>1</sup>

Insert body size:  
**380**=15/20/25mm (1/2", 3/4", 1") for 3/4" cartridge  
**381**=25/32/40mm (1", 1 1/4", 1 1/2") for 1 1/2" 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  
**J**=JIS

Insert valve body material:  
 Leave it **blank** if body material is B584 brass  
**D**=DZR

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

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

Note 1: Flow rate, color and dial setting of cartridge are indicated on label affixed to body.

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

<b>20mm · 3/4" · stainless steel cartridge</b>											
Controlled flow rate	Pressure range, ΔP:			10-95 kPa 1-14 psid		22-210 kPa 2-32 psid		40-390 kPa 4-57 psid		90-880 kPa 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-DN40

<b>40mm · 1 1/2" · stainless steel cartridge</b>											
Controlled flow rate	Pressure range, ΔP:			10-95 kPa 1-14 psid		22-210 kPa 2-32 psid		40-390 kPa 4-57 psid		90-880 kPa 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.

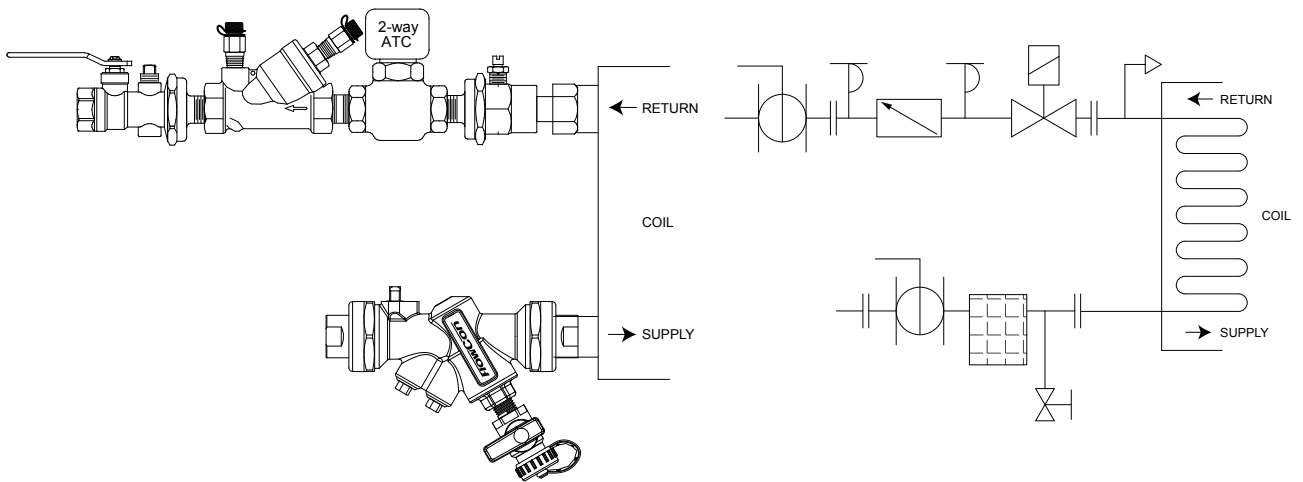
### 2. VALVE HOUSING

- 2.1. Housing shall be constructed of forged brass ASTM CuZn39Pb2 or DZR brass (Enkota<sup>®</sup>) rated at no less than 2500 kPa static pressure and +120°C.
- 2.2. Valve housing shall be ISO/BSP female threaded for the appropriate pipe size and shall be configured for accessibility.
- 2.3. Optional dual pressure/temperature test plugs for verifying accuracy of flow performance shall be available for all valve sizes.
- 2.4. Identification tags shall be available for all valves; tags shall be indelibly marked with part number and flow rate.

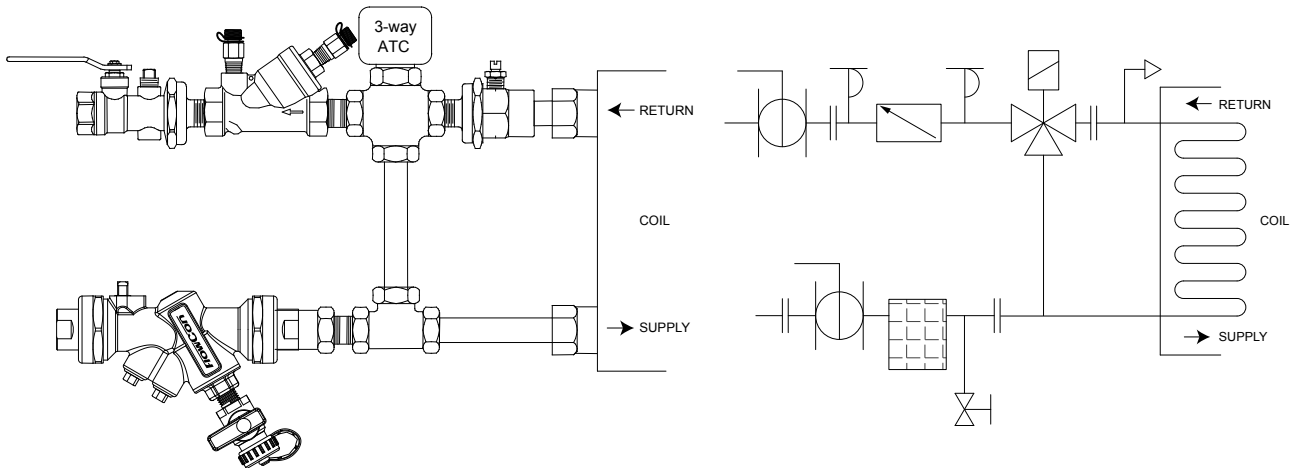
### 3. FLOW REGULATOR / AUTOMATIC BALANCING UNIT

- 3.1. Flow regulation cartridge assembly shall be precision ground, an AISI type 304 stainless steel; shall be available in four kPaD control ranges; minimum range shall be capable of being activated by minimum 10 kPa; and shall be capable of controlling flow within  $\pm 5\%$  of rated flow.
- 3.2. Flow regulation unit shall be readily accessible for change-out or maintenance.

## 2-WAY APPLICATION AND SCHEMATIC EXAMPLE



## 3-WAY APPLICATION AND SCHEMATIC EXAMPLE



## UPDATES

For latest updates please see [www.flowcon.com](http://www.flowcon.com)

FlowCon International A/S can accept no responsibility for possible errors in any printed material.  
All rights reserved.