

FlowCon K 40-80mm

Automatic Balance Valve - Accessible Pre-Set Insert



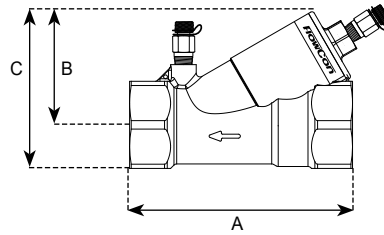
SPECIFICATIONS

Pressure rating:	1600 kPa / 230 psi
Temperature rating, media:	-30°C to +120°C / -22°F to +248°F
Material:	
- Insert:	AISI Type 304 stainless steel
	AISI Type 17-7 PH stainless steel spring
- Body:	Forged brass ASTM CuZn40Pb2 or DZR brass CW602N CuZn36Pb2AS ("Enkotal [®] ") (DN40-DN50 small) or cast brass (DN50 large-DN80)
- O-rings:	EPDM
End connections:	F382-models: Fixed female ISO F383-models: Fixed female ISO or NPT
Body tappings:	1/4" ISO (DN40-DN50 small) 1/4" NPT (DN50 large-DN80)
Flow rate range:	0.757-10.09 l/sec

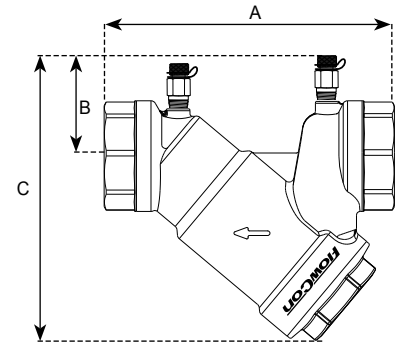
DIMENSIONS AND WEIGHTS (NOMINAL) (measured in mm unless noted)

Model no.	Valve size	Insert size	A	B	C	Weight (kgs.)	Kv (m ³ /hr)
F382.x.K.x.x ¹	40	50	166	85	114	1.8	35
F382.x.L.x.x ¹	50		174	88	123	2.1	52
F383.x.L.x.x	50	80	226	69	216	4.3	65
F383.x.M.x.x	65		249				
F383.x.N.x.x	80		259				

Note 1: only ISO available



FlowCon K Model F382



FlowCon K Model F383

MODEL NUMBER SELECTION²

Insert body size:
382=40/50mm for 50mm insert (only ISO) | _____
383=50/65/80mm for 80mm insert | _____

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:
K=40mm **L**=50mm **M**=65mm **N**=80mm | _____

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

Insert type of thread:
N=NPT (not available for F382-models) | _____
I=ISO | _____

Insert valve body material:
 Leave it **blank** for standard body material | _____
D=DZR brass (DN40-DN50mm small) | _____

Insert valve insert as per selection chart:
 Leave it **blank** if no insert required | _____

F

Example: F382.2.K.B.I.F3C2248=FlowCon K 40mm ISO female threaded body, standard brass with p/t plugs and a F3C2248 cartridge (1.51 l/sec, 22-210 kPaD).

Note 2: Part number and flow rate of insert are indicated on label affixed to body.

FLOW RATE TABLES - STAINLESS STEEL INSERT - FOR VALVES DN40 AND DN50 SMALL

50mm · 2" · stainless steel insert											
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
0.757	2730	12.0	36-1	F3C2136							
0.883	3180	14.0	42-1	F3C2142							
1.01	3630	16.0	48-1	F3C2148							
1.14	4090	18.0	54-1	F3C2154	36-2	F3C2236					
1.26	4540	20.0	60-1	F3C2160							
1.32	4770	21.0			42-2	F3C2242					
1.39	5000	22.0	66-1	F3C2166							
1.51	5450	24.0	72-1	F3C2172	48-2	F3C2248	36-4	F3C2436			
1.64	5910	26.0	78-1	F3C2178							
1.70	6130	27.0			54-2	F3C2254					
1.77	6360	28.0	84-1	F3C2184			42-4	F3C2442			
1.89	6810	30.0	90-1	F3C2190	60-2	F3C2260					
2.02	7270	32.0	96-1	F3C2196			48-4	F3C2448			
2.08	7490	33.0			66-2	F3C2266					
2.15	7720	34.0	102-1	F3C21102							
2.27	8180	36.0	108-1	F3C21108	72-2	F3C2272	54-4	F3C2454	36-8	F3C2836	
2.40	8630	38.0	114-1	F3C21114							
2.46	8860	39.0			78-2	F3C2278					
2.52	9080	40.0					60-4	F3C2460			
2.65	9540	42.0			84-2	F3C2284			42-8	F3C2842	
2.78	9990	44.0					66-4	F3C2466			
2.84	10200	45.0			90-2	F3C2290					
3.03	10900	48.0			96-2	F3C2296	72-4	F3C2472	48-8	F3C2848	
3.22	11600	51.0			102-2	F3C22102					
3.28	11800	52.0					78-4	F3C2478			
3.41	12300	54.0			108-2	F3C22108			54-8	F3C2854	
3.53	12700	56.0					84-4	F3C2484			
3.60	12900	57.0			114-2	F3C22114					
3.79	13600	60.0					90-4	F3C2490	60-8	F3C2860	
4.04	14500	64.0					96-4	F3C2496			
4.16	15000	66.0							66-8	F3C2866	
4.29	15400	68.0					102-4	F3C24102			
4.54	16400	72.0					108-4	F3C24108	72-8	F3C2872	
4.79	17300	76.0					114-4	F3C24114			
4.92	17700	78.0							78-8	F3C2878	
5.30	19100	84.0							84-8	F3C2884	
5.68	20400	90.0							90-8	F3C2890	
6.06	21800	96.0							96-8	F3C2896	
6.44	23200	102							102-8	F3C28102	
6.81	24500	108							108-8	F3C28108	
7.19	25900	114							114-8	F3C28114	

Accuracy: ±5% of controlled flow rate.

FLOW RATE TABLES - STAINLESS STEEL INSERT - FOR VALVES DN50 LARGE-DN80

80mm · 3" · stainless steel insert											
Pressure range, ΔP:			10-135 kPaD 1-20 psid		22-210 kPaD 2-32 psid		40-390 kPaD 4-57 psid		90-880 kPaD 8-128 psid		
Nominal flow rate			Type 1		Type 2		Type 4		Type 8		
	l/sec	l/hr	GPM	Marking	FlowCon	Marking	FlowCon	Marking	FlowCon	Marking	FlowCon
0.883	3180	14.0	35-1	F324135							
1.01	3630	16.0	40-1	F324140							
1.10	3970	17.5			35-2	F324235					
1.14	4090	18.0	45-1	F324145							
1.26	4540	20.0	50-1	F324150	40-2	F324240					
1.39	5000	22.0	55-1	F324155							
1.42	5110	22.5			45-2	F324245					
1.47	5300	23.3					35-4	F324435			
1.51	5450	24.0	60-1	F324160							
1.58	5680	25.0			50-2	F324250					
1.64	5910	26.0	65-1	F324165							
1.68	6060	26.7					40-4	F324440			
1.73	6250	27.5			55-2	F324255					
1.77	6360	28.0	70-1	F324170							
1.89	6810	30.0	75-1	F324175	60-2	F324260	45-4	F324445			
2.02	7270	32.0	80-1	F324180							
2.05	7380	32.5			65-2	F324265					
2.10	7570	33.3					50-4	F324450			
2.15	7720	34.0	85-1	F324185							
2.21	7950	35.0			70-2	F324270			35-8	F324835	
2.27	8180	36.0	90-1	F324190							
2.31	8330	36.7					55-4	F324455			
2.37	8520	37.5			75-2	F324275					
2.40	8630	38.0	95-1	F324195							
2.52	9080	40.0	100-1	F3241100	80-2	F324280	60-4	F324460	40-8	F324840	
2.65	9540	42.0	105-1	F3241105							
2.68	9650	42.5			85-2	F324285					
2.73	9840	43.3					65-4	F324465			
2.78	9990	44.0	110-1	F3241110							
2.84	10200	45.0			90-2	F324290			45-8	F324845	
2.90	10400	46.0	115-1	F3241115							
2.94	10600	46.7					70-4	F324470			
3.00	10800	47.5			95-2	F324295					
3.03	10900	48.0	120-1	F3241120							
3.15	11400	50.0	125-1	F3241125	100-2	F3242100	75-4	F324475	50-8	F324850	
3.28	11800	52.0	130-1	F3241130							
3.31	11900	52.5			105-2	F3242105					
3.36	12100	53.3					80-4	F324480			
3.41	12300	54.0	135-1	F3241135							
3.47	12500	55.0			110-2	F3242110			55-8	F324855	
3.53	12700	56.0	140-1	F3241140							
3.58	12900	56.7					85-4	F324485			
3.63	13100	57.5			115-2	F3242115					
3.66	13200	58.0	145-1	F3241145							
3.79	13600	60.0	150-1	F3241150	120-2	F3242120	90-4	F324490	60-8	F324860	
3.94	14200	62.5			125-2	F3242125					
4.00	14400	63.3					95-4	F324495			
4.10	14800	65.0			130-2	F3242130			65-8	F324865	
4.21	15100	66.7					100-4	F3244100			
4.26	15300	67.5			135-2	F3242135					
4.42	15900	70.0			140-2	F3242140	105-4	F3244105	70-8	F324870	
4.57	16500	72.5			145-2	F3242145					
4.63	16700	73.3					110-4	F3244110			
4.73	17000	75.0			150-2	F3242150			75-8	F324875	
4.84	17400	76.7					115-4	F3244115			
5.05	18200	80.0					120-4	F3244120	80-8	F324880	
5.26	18900	83.3					125-4	F3244125			
5.36	19300	85.0							85-8	F324885	
5.47	19700	86.7					130-4	F3244130			
5.68	20400	90.0	220-1	F3241220*			135-4	F3244135	90-8	F324890	
5.89	21200	93.3					140-4	F3244140			
5.99	21600	95.0							95-8	F324895	
6.10	22000	96.7					145-4	F3244145			
6.31	22700	100					150-4	F3244150	100-8	F3248100	
6.62	23800	105							105-8	F3248105	
6.94	25000	110	270-1	F3241270*	220-2	F3242220**			110-8	F3248110	
7.26	26100	115							115-8	F3248115	
7.57	27300	120							120-8	F3248120	
7.89	28400	125							125-8	F3248125	
8.20	29500	130	320-1	F3241320*					130-8	F3248130	
8.52	30711	135			270-2	F3242270**			135-8	F3248135	
8.83	31800	140							140-8	F3248140	
9.15	32900	145							145-8	F3248145	
9.46	34100	150							150-8	F3248150	
10.10	36300	160			320-2	F3242320**					

Accuracy: ±5% of controlled flow rate.

* Standard flow, high capacity: the pressure range for these flow rates is 28-135 kPaD
 ** Standard flow, high capacity: the pressure range for these flow rates is 55-210 kPaD.

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.

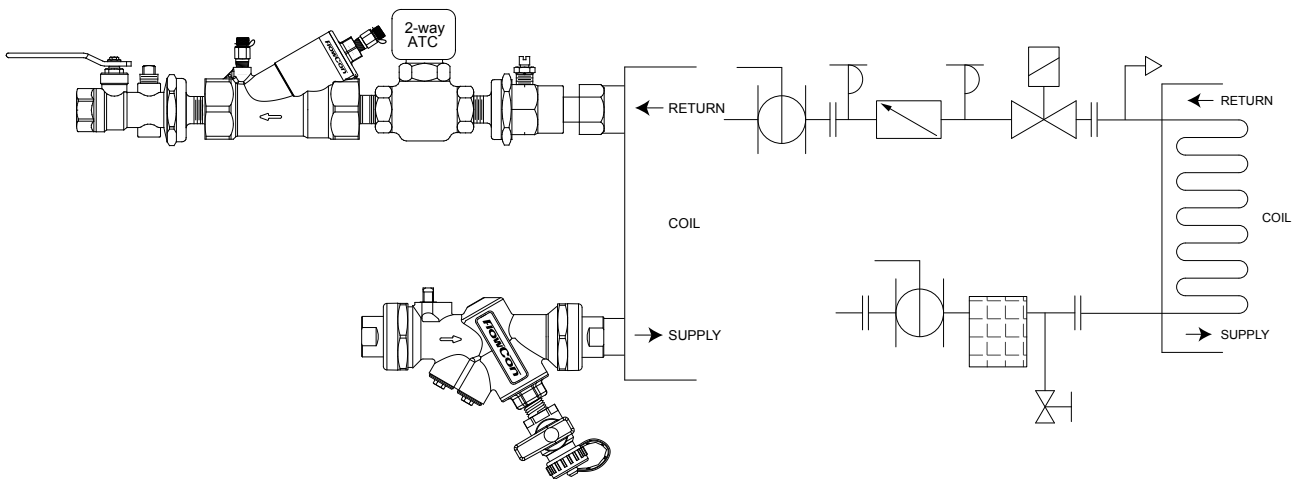
2. VALVE HOUSING

- 2.1. Valve housing shall consist of forged brass ASTM (CuZn40Pb2) or DZR brass CW602N CuZn6Pb2AS ("Enkotal[®]") (FlowCon K DN40-DN50 small) or cast brass (FlowCon K DN50 large-DN80) and be rated at no less than 1600 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 accessibility.
- 2.4. Optional dual pressure/temperature test plugs for verifying accuracy of flow performance shall be available for all valve sizes.
- 2.5. Housing shall be configured for flow regulation unit accessibility.

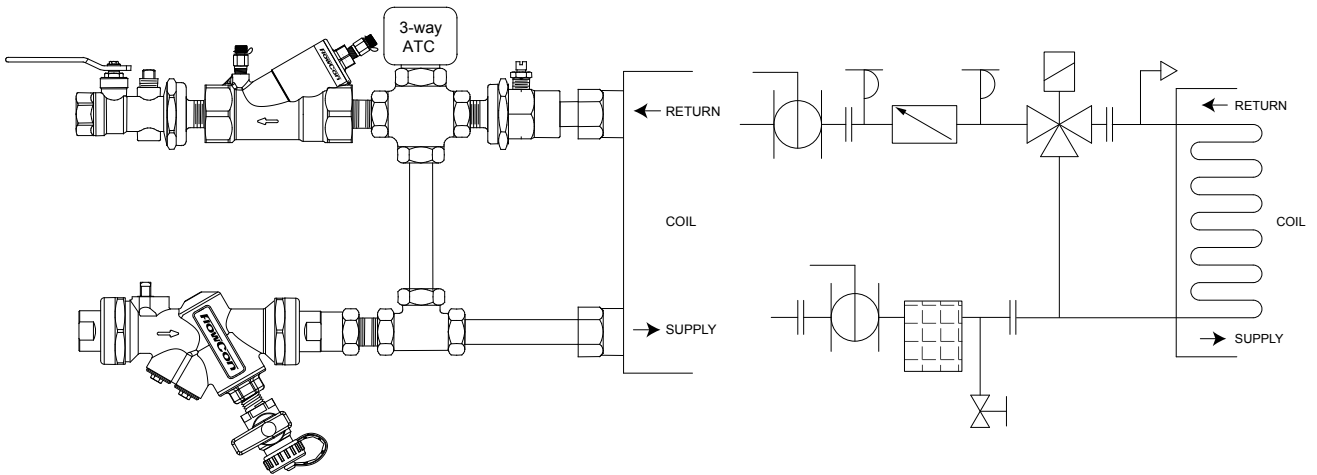
3. FLOW REGULATOR / AUTOMATIC BALANCING UNIT

- 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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