

FlowCon K 40-80mm

Automatic Balance Valve - Accessible Pre-Set Cartridge



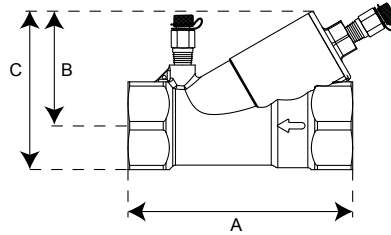
SPECIFICATIONS

Pressure rating:	1600 kPa, 232 psi
Temperature rating:	-30°C to +120°C, -22°F to +248°F
Material:	
- Body:	Forged brass ASTM CuZn39Pb2 or DZR brass "Enkotal®" (40-50small mm) Cast brass (50large-80mm)
- Cartridge:	AISI Type 304 stainless steel AISI Type 17-7 PH stainless steel spring
- O-rings:	EPDM
End Connections:	Female ISO/BSP (Optional NPT for F383-models)
Body Tappings:	1/4" ISO/BSP (40-50small mm) 1/4" NPT (50large-80mm)
Flow Rate Range:	0.757 l/sec – 10.09 l/sec

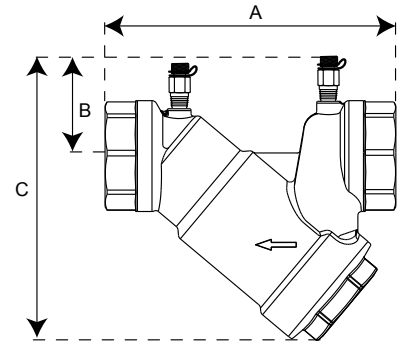
DIMENSIONS AND WEIGHTS (NOMINAL) (measured in mm unless noted)

Model no.	Size	A	B	C	Weight (kgs.)	Kv (m ³ /hr)
F382xKxx ¹	40	166	85	114	1.8	35
F382xLxx (2" cartridge) ¹	50	174	88	123	2.1	52
F383xLxx (3" cartridge)	50	226	69	216	4.3	65
F383xMxx	65	249				
F383xNxx	80	259				

Note 1: only ISO/BSP available



FlowCon K Model F382



FlowCon K Model F383

MODEL NUMBER SELECTION¹

Insert body size:

382=40/50mm (1 1/2"-2") for 2" cartridge (only ISO/BSP)

383=50/65/80mm (2", 2 1/2", 3") for 3" 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:

K=40mm (1 1/2") **L**=50mm (2") **M**=65mm (2 1/2") **N**=80mm (3")

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

J=JIS

Insert valve body material:

Leave it **blank** for standard body material

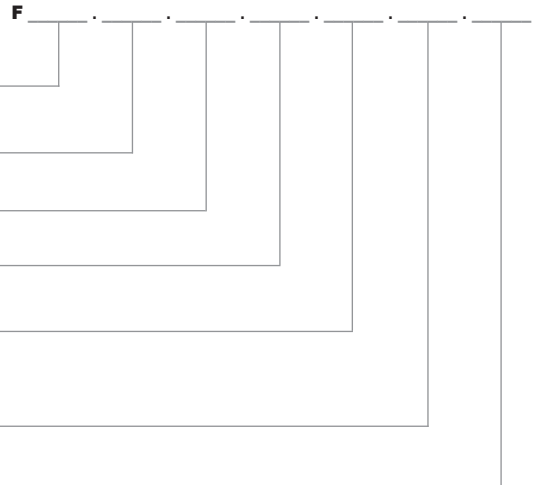
D=DZR (40-50mm small)

Insert valve cartridge as per selection chart:

Leave it **blank** if no cartridge required

Example: F382.2.K.B.I.F3C2248=a FlowCon K, standard body material with p/t plugs and ISO 40mm female connections with a F3C2248 cartridge (1.5414 l/sec, 22-210 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 DN40 AND DN50

50mm · 2" · stainless steel cartridge											
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
	0.757	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 CARTRIDGE - FOR VALVES DN50-DN80

80mm · 3" · stainless steel cartridge											
Pressure range, ΔP:			10-135 kPa 1-20 psid		22-210 kPa 2-32 psid		40-390 kPa 4-57 psid		90-880 kPa 8-128 psid		
Controlled 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.

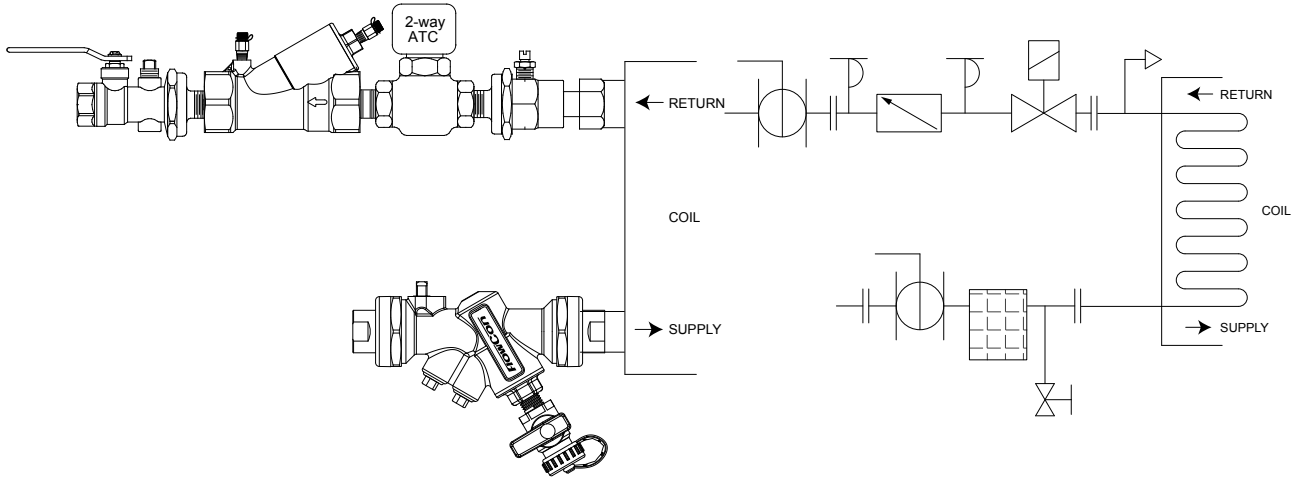
2. VALVE HOUSING

- 2.1. Housing shall for be constructed of forged brass ASTM (CuZn39Pb2) or DZR brass (Enkotal®) (FlowCon K 40-50mm) or of cast brass (FlowCon K 50-80mm) and be rated at no less than 1600 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. Optimal dual pressure/temperature test plugs for verifying accuracy of flow performance shall be provided 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.

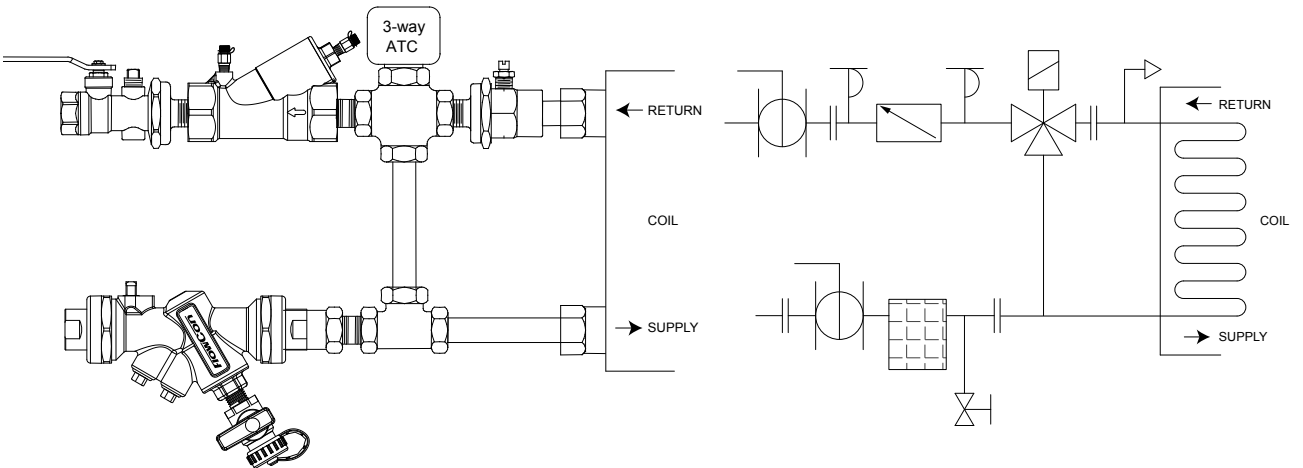
3. FLOW REGULATOR / AUTOMATIC BALANCING UNIT

- 3.1. Flow regulation cartridge assembly shall be precision ground, all 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

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