

Installation and Operation Instruction

Install the **FlowCon K** as called for in the design drawings. INSTALL THE VALVE HOUSING WITH THE FLOW DIRECTIONAL ARROW POINTING IN THE CORRECT DIRECTION.

The **FlowCon K** valve (Model Nos. F38X.0.X.X) is available with fixed female-by-female threaded connections for all model sizes.

The thread standard for the K model is either ISO 228, which is a straight metric thread (compatible with BS-2779) or NPT threading standard, depending on the product number ordered.

For all pipe threads or P/T threads FlowCon recommends thread sealant (PermaBond A1044 or equivalent). If sealant such as pipe dope is used, please ensure no strands are left in the valve or piping. When using Teflon tape, FlowCon recommends 3-5 rounds of Teflon are used. The Teflon tape has to be applied tightly in clockwise rotation.

Pressure/temperature fittings (p/t plugs) are available upon request for the K valve. Before finger mounting the p/t plugs in the body tapings, please seal the threads of the p/t plugs (DO NOT OVER TIGHTEN).

Alternatively to p/t plugs, the valve body can be ordered with **plugs** for the body tapings. Each plug is sealed by a gasket.

Inserting the insert:

For FlowCon K valve bodies size DN15-DN40 (Figure 1) a 3/4", respectively a 1 1/2" stainless steel insert is inserted. It is recommended that the o-rings located around the insert and cap are lubricated with silicone grease, before the insert is installed into the valve body.

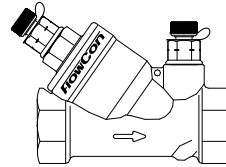


Figure 1

IMPORTANT: Never use mineral oil or petrol based grease or oil on the o-rings. When inserting the insert, be assured to check the placement of the o-ring. There is no need to use tools - the insert can be inserted/removed by the fingers. Also the 3" insert is mounted with an o-ring (DN50/65/80 valve bodies as in Figure 3).

NOTE: 2" inserts used in valve bodies size DN40 and DN50 (Figure 2) are mounted without o-ring.

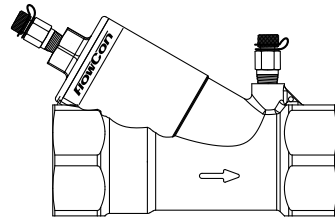


Figure 2

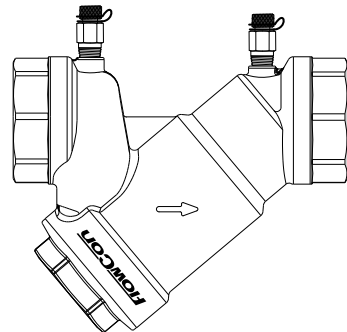
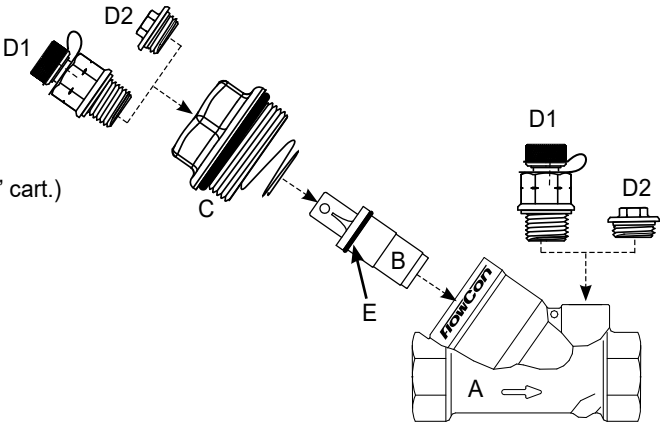


Figure 3

Assembly drawing
FlowCon K:

- A: Valve housing
- B: Stainless steel insert
- C: Cap incl. o-ring
- D1: P/t plug (2 pcs.)
- D2: Plug and gasket (2 of each)
- E: O-ring (only 3/4", 1½" and 3" cart.)



General

It is recommended flushing the system before installing the insert in the valve body. Suitable flushing caps are available. Water must always be suitable treated, clean and free of debris. It is recommended that a strainer be installed prior to the valve body to prevent damage or blockage due to debris.

Warranty obligation

Failure to abide by all recommendations as per this installation and operation instruction will void warranty.

For latest updates pls. see www.flowcon.com

**Stainless Steel Insert for
DN15/20/25, 1/2"-1" (3/4" insert)**

I/sec	I/hr	GPM	Type 1 10-95 kPaD	Type 2 22-210 kPaD	Type 4 40-390 kPaD	Type 8 90-880 kPaD
0.0210	75.7	0.333	F360111			
0.0315	114	0.500	F360101			
0.0347	125	0.550		F360211		
0.0421	151	0.667	F360102			
0.0473	170	0.750		F360201	F360411	
0.0631	227	1.00	F360103	F360202	F360401	
0.0694	250	1.10				F360811
0.0841	303	1.33	F360104		F360402	
0.0946	341	1.50		F360203		F360801
0.105	379	1.67	F360105			
0.126	454	2.00	F360106	F360204	F360403	F360802
0.147	530	2.33	F360107			
0.158	568	2.50		F360205		
0.168	606	2.67	F360108		F360404	
0.189	681	3.00		F360206		F360803
0.210	757	3.33	F360110		F360405	
0.221	795	3.50		F360207		
0.252	908	4.00	F360112	F360208	F360406	F360804
0.294	1060	4.67	F360114		F360407	
0.315	1140	5.00	F360116	F360210		F360805
0.336	1210	5.33			F360408	
0.379	1360	6.00		F360212		F360806
0.421	1510	6.67			F360410	
0.442	1590	7.00		F360214		F360807
0.505	1820	8.00		F360216	F360412	F360808
0.589	2120	9.33			F360414	
0.631	2270	10.0			F360416	F360810
0.694	2500	11.0			F360417	
0.757	2730	12.0				F360812
0.883	3180	14.0				F360814
1.01	3630	16.0				F360816

Accuracy ±5%

FlowCon K DN15-80 (1/2"-3")

1K95000 - 06/2023



A Griswold Controls LLC/FlowCon International Company

Stainless Steel Insert for DN25/32/40, 1"-1 1/2" (1 1/2" insert)

l/sec	l/hr	GPM	Type 1	Type 2	Type 4	Type 8
			10-95 kPaD	22-210 kPaD	40-390 kPaD	90-880 kPaD
0.189	681	3.00	F3611109			
0.210	757	3.33	F3611110			
0.252	908	4.00	F3611112			
0.284	1020	4.50		F361209		
0.294	1060	4.67	F3611114			
0.315	1140	5.00		F361210		
0.336	1210	5.33	F3611116			
0.379	1360	6.00	F3611118	F361212	F361409	
0.421	1510	6.67	F3611120		F361410	
0.442	1590	7.00		F361214		
0.463	1670	7.33	F3611122			
0.505	1820	8.00	F3611124	F361216	F361412	
0.547	1970	8.67	F3611126			
0.568	2040	9.00		F361218		F361809
0.589	2120	9.33	F3611128		F361414	
0.631	2270	10.0	F3611130	F361220		F361810
0.673	2420	10.7	F3611132		F361416	
0.694	2500	11.0		F361222		
0.715	2570	11.3	F3611134			
0.757	2730	12.0	F3611136	F361224	F361418	F361812
0.799	2880	12.7	F3611138			
0.820	2950	13.0		F361226		
0.841	3030	13.3	F3611140		F361420	
0.883	3180	14.0	F3611142	F361228		F361814
0.925	3330	14.7	F3611144		F361422	
0.946	3410	15.0		F361230		
1.01	3630	16.0		F361232	F361424	F361816
1.07	3860	17.0		F361234		
1.09	3940	17.3			F361426	
1.14	4090	18.0		F361236		F361818
1.18	4240	18.7			F361428	
1.20	4320	19.0		F361238		
1.26	4540	20.0		F361240	F361430	F361820
1.32	4770	21.0		F361242		
1.35	4850	21.3			F361432	
1.39	5000	22.0		F361244		F361822
1.43	5150	22.7			F361434	
1.51	5450	24.0			F361436	F361824
1.60	5750	25.3			F361438	
1.64	5910	26.0				F361826
1.68	6060	26.7			F361440	
1.77	6360	28.0			F361442	F361828
1.85	6660	29.3			F361444	
1.89	6810	30.0				F361830
2.02	7270	32.0				F361832
2.15	7720	34.0				F361834
2.27	8180	36.0				F361836
2.40	8630	38.0				F361838
2.52	9080	40.0				F361840
2.65	9540	42.0				F361842
2.78	9990	44.0				F361844

Accuracy ±5%

Stainless Steel Insert for DN40/50, 1 1/2"-2" (2" insert)

l/sec	l/hr	GPM	Type 1	Type 2	Type 4	Type 8
			10-95 kPaD	22-210 kPaD	40-390 kPaD	90-880 kPaD
0.757	2730	12.0	F3C2136			
0.883	3180	14.0	F3C2142			
1.01	3630	16.0	F3C2148			
1.14	4090	18.0	F3C2154	F3C2236		
1.26	4540	20.0	F3C2160			
1.32	4770	21.0		F3C2242		
1.39	5000	22.0	F3C2166			
1.51	5450	24.0	F3C2172	F3C2248	F3C2436	
1.64	5910	26.0	F3C2178			
1.70	6130	27.0		F3C2254		
1.77	6360	28.0	F3C2184		F3C2442	
1.89	6810	30.0	F3C2190	F3C2260		
2.02	7270	32.0	F3C2196		F3C2448	
2.08	7490	33.0		F3C2266		
2.15	7720	34.0	F3C21102			
2.27	8180	36.0	F3C21108	F3C2272	F3C2454	F3C2836
2.40	8630	38.0	F3C21114			
2.46	8860	39.0		F3C2278		
2.52	9080	40.0			F3C2460	
2.65	9540	42.0		F3C2284		F3C2842
2.78	9990	44.0			F3C2466	
2.84	10200	45.0		F3C2290		
3.03	10900	48.0		F3C2296	F3C2472	F3C2848
3.22	11600	51.0		F3C22102		
3.28	11800	52.0			F3C2478	
3.41	12300	54.0		F3C22108		F3C2854
3.53	12700	56.0			F3C2484	
3.60	12900	57.0		F3C22114		
3.79	13600	60.0			F3C2490	F3C2860
4.04	14500	64.0			F3C2496	
4.16	15000	66.0				F3C2866
4.29	15400	68.0			F3C24102	
4.54	16400	72.0			F3C24108	F3C2872
4.79	17300	76.0			F3C24114	
4.92	17700	78.0				F3C2878
5.30	19100	84.0				F3C2884
5.68	20400	90.0				F3C2890
6.06	21800	96.0				F3C2896
6.44	23200	102				F3C28102
6.81	24500	108				F3C28108
7.19	25900	114				F3C28114

Accuracy ±5%

FlowCon K DN15-80 (1/2"-3")

1K95000 - 06/2023

Stainless Steel Insert for DN50/65/80, 2"-3" (3" insert, standard flow)

l/sec	l/hr	GPM	Type 1 10-135 kPaD	Type 2 22-210 kPaD	Type 4 40-390 kPaD	Type 8 90-880 kPaD
0.883	3180	14.0	F324135			
1.01	3630	16.0	F324140			
1.10	3970	17.5		F324235		
1.14	4090	18.0	F324145			
1.26	4540	20.0	F324150	F324240		
1.39	5000	22.0	F324155			
1.42	5110	22.5		F324245		
1.47	5300	23.3			F324435	
1.51	5450	24.0	F324160			
1.58	5680	25.0		F324250		
1.64	5910	26.0	F324165			
1.68	6060	26.7			F324440	
1.73	6250	27.5		F324255		
1.77	6360	28.0	F324170			
1.89	6810	30.0	F324175	F324260	F324445	
2.02	7270	32.0	F324180			
2.05	7380	32.5		F324265		
2.10	7570	33.3			F324450	
2.15	7720	34.0	F324185			
2.21	7950	35.0		F324270		F324835
2.27	8180	36.0	F324190			
2.31	8330	36.7			F324455	
2.37	8520	37.5		F324275		
2.40	8630	38.0	F324195			
2.52	9080	40.0	F3241100	F324280	F324460	F324840
2.65	9540	42.0	F3241105			
2.68	9650	42.5		F324285		
2.73	9840	43.3			F324465	
2.78	9990	44.0	F3241110			
2.84	10200	45.0		F324290		F324845
2.90	10400	46.0	F3241115			
2.94	10600	46.7			F324470	
3.00	10800	47.5		F324295		
3.03	10900	48.0	F3241120			
3.15	11400	50.0	F3241125	F3242100	F324475	F324850
3.28	11800	52.0	F3241130			
3.31	11900	52.5		F3242105		
3.36	12100	53.3			F324480	
3.41	12300	54.0	F3241135			
3.47	12500	55.0		F3242110		F324855
3.53	12700	56.0	F3241140			
3.58	12900	56.7			F324485	
3.63	13100	57.5		F3242115		
3.66	13200	58.0	F3241145			
3.79	13600	60.0	F3241150	F3242120	F324490	F324860
3.94	14200	62.5		F3242125		
4.00	14400	63.3			F324495	
4.10	14800	65.0		F3242130		F324865
4.21	15100	66.7			F3244100	
4.26	15300	67.5		F3242135		
4.42	15900	70.0		F3242140	F3244105	F324870

Accuracy ±5%

Stainless Steel Insert for DN50/65/80, 2"-3" (3" insert, standard flow)

l/sec	l/hr	GPM	Type 1 10-135 kPaD	Type 2 22-210 kPaD	Type 4 40-390 kPaD	Type 8 90-880 kPaD
4.57	16500	72.5		F3242145		
4.63	16700	73.3			F3244110	
4.73	17000	75.0		F3242150		F324875
4.84	17400	76.7			F3244115	
5.05	18200	80.0			F3244120	F324880
5.26	18900	83.3			F3244125	
5.36	19300	85.0				F324885
5.47	19700	86.7			F3244130	
5.68	20400	90.0			F3244135	F324890
5.89	21200	93.3			F3244140	
5.99	21600	95.0				F324895
6.10	22000	96.7			F3244145	
6.31	22700	100			F3244150	F3248100
6.62	23800	105				F3248105
6.94	25000	110				F3248110
7.26	26100	115				F3248115
7.57	27300	120				F3248120
7.89	28400	125				F3248125
8.20	29500	130				F3248130
8.52	30700	135				F3248135
8.83	31800	140				F3248140
9.15	32900	145				F3248145
9.46	34100	150				F3248150

Accuracy ±5%

Stainless Steel Insert for DN50/65/80, 2"-3" (3" insert, st. flow, hi. capacity)

l/sec	l/hr	GPM	Type 1 28-135 kPaD	Type 2 55-210 kPaD
5.68	20400	90.0	F3241220	
6.94	25000	110	F3241270	F3242220
8.20	29500	130	F3241320	
8.52	30700	135		F3242270
10.1	36300	160		F3242320

Accuracy ±5%