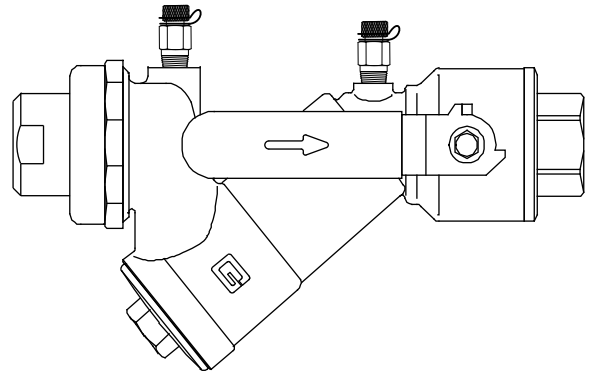


Isolator™ “R” 40-50mm

Automatic Flow Control - Accessible Pre-Set Cartridge



SPECIFICATIONS

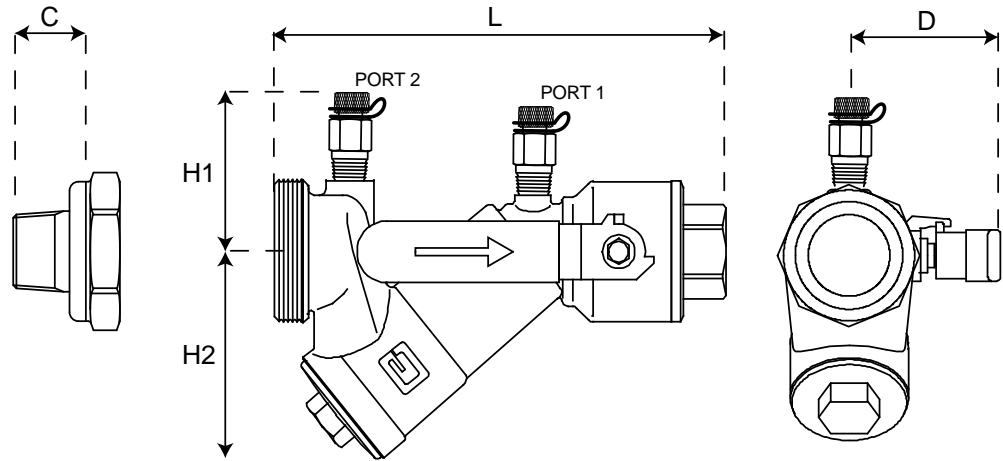
Pressure rating:	1800 kPa / 260 psi
Temperature rating:	+120°C / +248°F
Material:	
- Cartridge:	AISI type 304 stainless steel AISI type 17-7 PH stainless steel spring
- Body:	Cast brass
- Ball valve:	Nickel plated brass ball. Optional: stainless steel ball
- Ball valve seals:	Teflon
- Union end connection (in-let):	Brass alloy NPT or sweat
- O-rings:	EPDM
- Field repairable stem:	Dual teflon seals and EPDM o-ring
Body tappings ¹ :	Port 1 and 2: two combination p/t plug and manual air vent (CPTA)
Assembly:	Valve comes fully assembled

Note 1: Body tappings for accessories are a leak proof metal to metal seal and do not require pipe dope or tape. Tape or dope should not be used.

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

Model no.	Valve size	Cartridge size	L		H1	H2	D	C ²				Weight (kgs.)	Kv ³ (m ³ /hr)
			Fixed end connection					End connections					
			NPT female	Sweat				Size	NPT female	NPT male	Sweat		
FIR3xx	40	50	238.8	243.9	66.1	94.0	94.0	32	40.7	45.8	40.7	4.0	34.4
	50		236.3	249.0				40	40.7	40.7	43.2		
								50	N/A ⁴	40.7	40.7		

Note 2: For overall length, add union end connection length to body length.
 Note 3: Kv-values are based on housing without cartridge.
 Note 4: Tailpiece is not available for this size. Male tailpiece used with coupling.



MODEL NUMBER SELECTION⁵

FIR3

Insert kPaD control range:
 1=10-95 kPaD 2=22-210 kPaD 4=40-390 kPaD 8=90-880 kPaD _____

Select ball and stem package:
 P=plated ball S=SS ball and stem _____

Insulation option⁶:
 N=no (standard) _____

Valve	Fixed end or union end ⁷		Union end only ⁷
	Female threaded	Sweat	Male treaded
FIR3	P ⁸ =32mm=1 1/4" Q=40mm=1 1/2" R ⁸ =50mm=2"	K ⁸ =32mm=1 1/4" W=40mm=1 1/2" Y=50mm=2"	S=32mm=1 1/4" T=40mm=1 1/2" U=50mm=2"

T=Optional aluminum identification tag: _____

Please specify flow requirement as per selection chart when ordering.

Note 5: Model no. and flow rate are indicated on label affixed to body.
 Note 6: Insulation option includes handle cover and accessory extensions.
 Note 7: Select the fixed end first and the union end second.
 Note 8: Fixed end not available for this size. Union tailpiece only.
 Note 9: Tailpiece is not available for this size. Male tailpiece used with coupling.

FLOW RATE TABLE - FOR VALVES DN40 AND DN50

50mm · 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	Model no.	Marking	Model no.	Marking	Model no.	Marking	Model no.
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.

GENERAL SPECIFICATIONS

1. AUTOMATIC BALANCING VALVES - ISOLATOR™ “R”

- 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 and isolation handle ball valve.

2. VALVE HOUSING

- 2.1. Valve housing shall consist of cast brass rated at no less than 1800 kPa static pressure and +120°C.
- 2.2. Valve shall be permanently marked to show direction of flow.
- 2.3. Valve shall be constructed in a one piece housing to include an isolation ball. Ball shall be chemically nickel plated brass, alternatively stainless steel.
- 2.4. Combination pressure/temperature plugs and manual air vent for verifying accuracy of flow performance and venting air shall be provided 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.

UPDATES

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