FC1 Flow Control Valve

Date of last Review : 25/05/2016

Installation, Operation & Maintenance Instructions

OPB0020 Rev 1

Fig.1

The Flow Control Valve shall only be used in accordance with the requirements of this document. Please read all details carefully prior to installation.

Models Covered by this instruction:

The models covered in this instruction are:

S06–FC1	B06-FC1	S06-FC1-FM	
SE06-FC1			(1/4" valves)
S09-FC1	B09-FC1	S09-FC1-FM	(3/8" valves)
S12-FC1	B12-FC1	S12-FC1-FM	(1/2" valves)
S19-FC1	B19-FC1	S19-FC1-FM	(3/4" valves)

" B" denotes Brass

"S" Denotes 316L Stainless Steel

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1.0 General

The Bifold Flow Control Valve range is available in 1/4",3/8" & 1/2". Seal Repair Kits (SRK) and spare components are available to order from Bifold. Prefix the valve model number with the letters **"SRK". E.g. SRKS06-FC1**
Where possible please advise the serial number of the valve requiring Seal Repair Kits to ensure the correct components are supplied.

2.0 Installation

Selection, installation, operation, and maintenance must only be carried out by qualified, trained, authorised, and competent personnel in accordance with the relevant codes, rules, and regulations. Good engineering practice must be carried out during installation, operation, and maintenance.

Since most Flow Control Valves are bidirectional, consider the flow direction when mounting the valve. Check that the connecting tube fittings or valve have a compatible thread form. Standard valves have an NPT thread form; this taper thread requires the use of a thread sealant. NB It is not a dry-seal thread form.
Bifold Fluidpower strongly recommend that tube fittings are sealed into the fluid ports using thread sealant, Loctite 577 or equivalent, and that PTFE tape is not used.

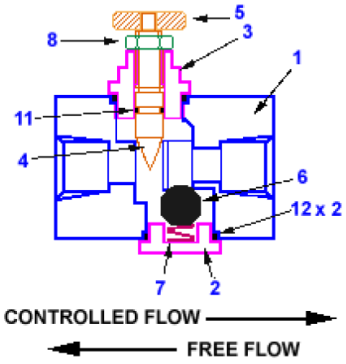

Fig. 2

2.1Schematic Layout

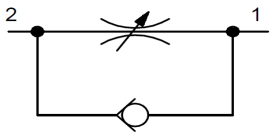

Fig. 3

2.2 Operating and Environmental Limitations

The standard operating pressure for this range is **0 to 12 Bar g.**

3.0 Maintenance

The operating media must be de-pressurised and secured against re-activation before carrying out any maintenance.

Bifold recommends "Magnalube G" grease as the correct lubricant for standard products. For Oxygen use or for very low temperature applications consult Bifold prior to commencing work.

With reference to Fig 2:

-Unscrew the open End Cap (item 3)
Note on S06-FC1-N models, the end caps are retained by screws (two per cap).
-Release the lock nut (Item 8) and screw down clockwise to expose the o ring seal (Item 11).
-Replace O rings (Items 11 & 12).
-Refit the assembly back into the main body.
-Remove the Closed End Cap (Item 2) and the Ball and Spring (Items 6 & 7).
-Replace the o ring seal (Item 12).
-Fit a new Ball and Spring (Items 6 & 7) and refit the assembly back into the valve body.
-Adjust the adjusting knob (Item 5) to give the correct flow and lock using the Lock Nut (Item 8).

4.0 Testing

Always test with low pressure to ensure correct operation before adjusting to the correct system pressure. Refer to the valve label for the correct operating parameters.