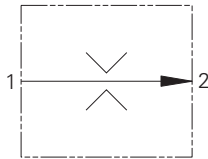


# FR5-8 - Flow Regulator

Fixed pressure compensated

10 L/min (2.5 USgpm) • 280 bar (4000 psi)



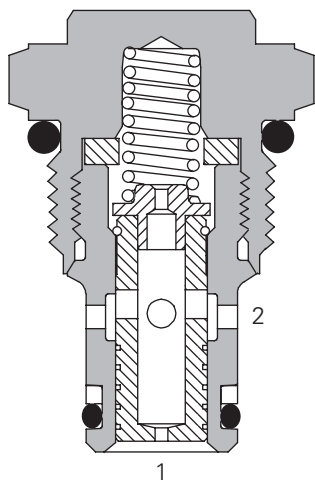
## Operation

This valve maintains a constant flow from port 1 to port 2 based on 5.5 bar (80 psid) regardless of pressure changes downstream on port 2. Reverse flow from port 2 to port 1 is at the value of the fixed orifice and is non-pressure compensated.

## Features

Hardened and ground and honed working components.  
Cartridge construction for maximum mounting flexibility.

## Sectional View



## Performance Data

### Ratings and Specifications

Performance data is typical with fluid at 21,8 cSt (105 SUS) and 49°C (120°F)

Typical application pressure (all ports)	350 bar (5000 psi) steel housing 210 bar (3000 psi) aluminum housing	
Cartridge fatigue pressure (infinite life)	280 bar (4000 psi)	
Rated flow	10 L/min (2.5 USgpm)	
Temperature range	-40° to 120°C (-40° to 248°F)	
Flow regulation accuracy	0,4–1,9 L/min (0.1–0.49 USgpm)	20% @ 210 bar (3000 psi)
	0,4–1,9 L/min (0.1–0.49 USgpm)	40% @ 350 bar (5000 psi)
	1,9 – 5,7 L/min (0.5–1.49 USgpm)	15%
	5,7–10 L/min (1.5–2.5 USgpm)	10%
Factory set maximum flow rate accuracy under standard test conditions and within the above ranges		
Cavity	C-8-2	
Fluids	All general purpose hydraulic fluids such as MIL-H-5606, SAE 10, SAE 20 etc.	
Filtration	Cleanliness code 18/16/13	
Standard housing material	Aluminum or steel	
Weight cartridge only	0,05 kg (0.12 lbs)	
Seal kit	02–165875 (Buna-N) 02–165877 (Viton)	

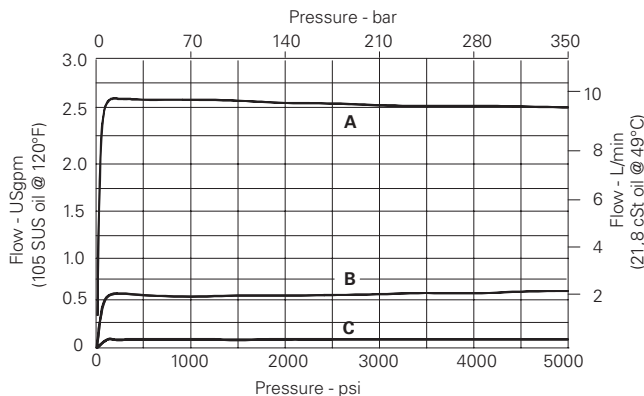
Viton is a registered trademark of E.I. DuPont

## Description

This is a fixed orifice, pressure compensated, restrictive flow regulator screw-in cartridge valve.

## Typical Flow Regulation

### Cartridge only



A - 9,5 L/min (2.5 USgpm)

B - 1,9 L/min (0.5 USgpm)

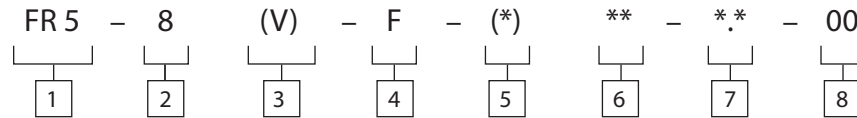
C - 0,38 L/min (0.1 USgpm)

# FR5-8 - Flow Regulator

Fixed pressure compensated

10 L/min (2.5 USgpm) • 280 bar (4000 psi)

## Model Code



**1** Function  
FR5 - Flow regulator

**2** Size  
8 - 8 Size

**3** Seal Material  
Blank - Buna-N  
V - Viton®

**4** Adjustment  
F - Fixed orifice

**5** Valve Housing Material  
Omit for cartridge only  
A - Aluminum  
S - Steel

**6** Port Size

Code	Port Size	Housing Number	
		Aluminium Fatigue rated	Steel Fatigue rated
0	Cartridge only		
4T	SAE 4	02-160730	02-160736
6T	SAE 6	02-160731	02-160737
8T	SAE 8	02-160732	02-160738
2G	1/4" BSPP	02-160727	02-160733
3G	3/8" BSPP	02-160728	02-160734

See section J for housing details.

**7** Factory Set Flow Rate, Nominal  
(Specify in USgpm) Range  
0,4-9,5 L/min (0.1-2.5 USgpm)

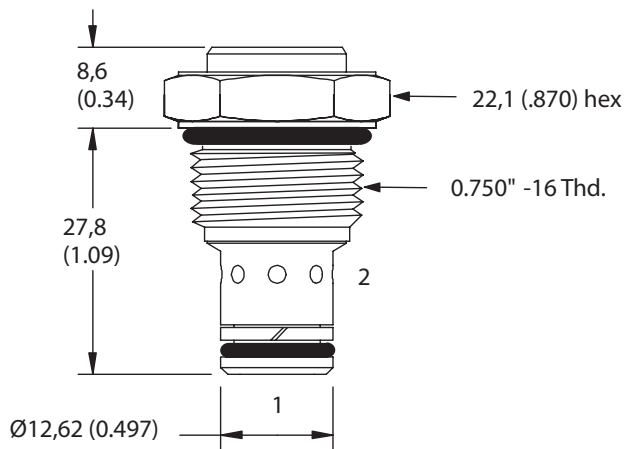
**8** Special features  
00 - None  
(Only required if valve has special features, omitted if "00")  
SS - 316 Stainless Steel external components

## Dimensions

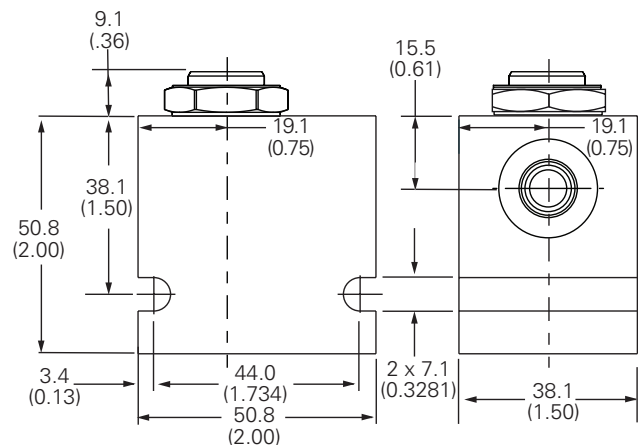
mm (inch)

Torque cartridge in steel  
or aluminum housing 34-41 Nm  
(25-30 ft lbs).

Cartridge  
Basic Code  
FR5-8



## Installation Drawing (Steel)



## WARNING

Aluminum housings can be used for pressures up to 210 bar (3000 psi). Steel housings must be used for operating pressures above 210 bar (3000 psi).