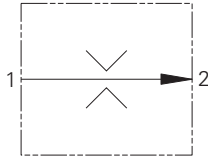


# FR1-20 - Flow Regulator

Fixed, pressure compensated

227 L/min (60 USgpm) • 210 bar (3000 psi)



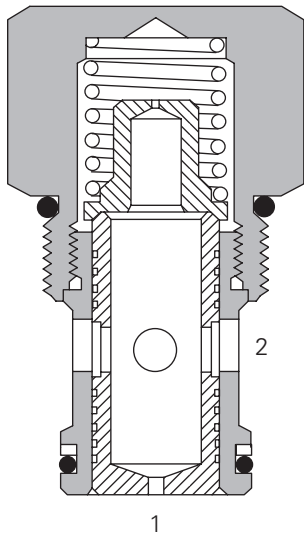
## Operation

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)	210 bar (3000 psi)	
Cartridge fatigue pressure (infinite life)	210 bar (3000 psi)	
Rated flow	227 L/min (60 USgpm)	
Temperature range	-40° to 120°C (-40° to 248°F)	
Flow regulation accuracy	3,8–18,5 L/min (1–4.9 USgpm)	±15%
	19–227 L/min (5–60 USgpm)	±10%
Factory set maximum flow rate accuracy under standard test conditions and within the above ranges		
Cavity	C-20-2	
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	
Weight cartridge only	0,82 kg (1.8 lbs)	
Seal kit	889615 (Buna-N), 889619 (Viton)	

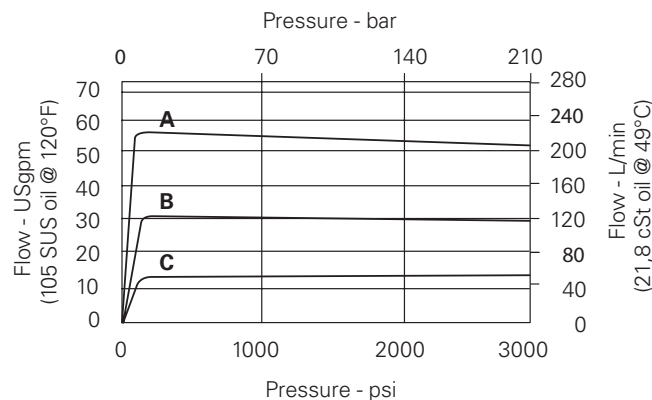
Viton is a registered trademark of E.I. DuPont

## Description

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

## Typical Flow Regulation

Cartridge only



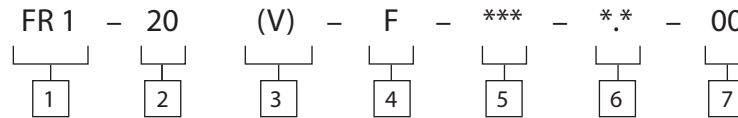
- A - 227 L/min (60.0 USgpm)
- B - 114 L/min (30.0 USgpm)
- C - 38 L/min (10.0 USgpm)

# FR1-20 - Flow Regulator

Fixed, pressure compensated

227 L/min (60 USgpm) • 210 bar (3000 psi)

## Model Code



**1** Function  
FR1 - Flow regulator

**2** Size  
20 - 20 Size

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

**4** Adjustment  
F - Fixed orifice

**5** Port Size

Code	Port Size	Housing Number	Aluminium Light duty	Aluminium Fatigue rated
0	Cartridge only			
6B	3/4" BSPP	02-175464	-	-
12T	SAE 12	566409	-	-
4G	1/2" BSPP	-	-	876732
6G	3/4" BSPP	-	-	876734
10H	SAE 10	-	-	876733
12H	SAE 12	-	-	876735

See section J for housing details.

**6** Factory Set Flow Rate, Nominal  
(Specify in USgpm)  
Range 3.8-277 L/min  
(1-60 USgpm)

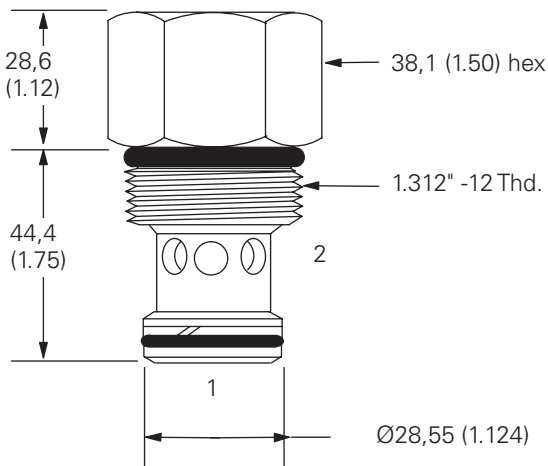
**7** Special Features  
00 - None  
(Only required if valve has special features, omitted if "00")

## Dimensions

mm (inch)

Torque cartridge in aluminum housing to 128-155 Nm (95-115 ft lbs)

Cartridge Basic Code  
FR1-20



## Installation Drawing

