## VF1-16 - Velocity Fuse

114 L/min (30 USgpm) • 210 bar (3000 psi)



#### **Sectional View**



## Н

#### Description

This is a screw in cartridge velocity fuse used to lock a cylinder or motor in place in the case of a complete hose failure.

Note: The valve is not intended for use in pump unloading applications.

## Operation

Performance Data Ratings and Specifications

This valve is normally open from port 1 to port 2. When flow exceeds the setting of the valve, it closes. The valve returns to the open condition when the pressure at port 1 is reduced to less than 80 psi.

#### Features

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

Performance data is typical with fluid at 21,8 cST (105 SUS) a	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	114 L/min (30 USgpm)
Flow regulation accuracy Factory set maximum flow rate accuracy under standard test conditions and within the above ranges	9,5–114 L/min (2.5–30.0 USgpm) ±20%
Internal leakage	Port 1 to 2 closed; <5 drops/min maximum @ 210 bar (3000 psi)
Temperature range	-40° to 120°C (-40° to 248°F)
Cavity	C-16-2
Fluids	All general purpose hydraulic fluids such as MIL-H–5606, SAE 10, SAE 20, etc.
Filtration	Cleanliness code 18/16/13
Standard housing materials	Aluminum
Weight cartridge only	0,33 kg (0.72 lbs)
Seal kit	565810 (Buna-N) 889609 (Viton <sup>°</sup> )

Viton is a registered trademark of E.I. DuPont

## Pressure Drop

Cartridge only



- A 114 L/min (30 USgpm) maximum flow setting
- Port 1 to 2, fusing direction
- --- Port 2 to 1, reverse flow down to 0
- B 60 L/min (15 USgpm) maximum flow setting
- Port 1 to 2, fusing direction
- --- Port 2 to 1, reverse flow down to 0
- C 19 L/min (5 USgpm) maximum flow setting
- Port 1 to 2, fusing direction
- --- Port 2 to 1, reverse flow down to 0





# VF1-16 - Velocity Fuse

114 L/min (30 USgpm) • 210 bar (3000 psi)

Model Code	VF1	- 16 (V) -	F - *** - 4 5	** - 00 	
1 Function VF1 - Velocity fuse	5 Po	ort Size Port Size	Housing Number		6 Factory Set Flow Rate (Specify in USgpm) Range
2 Size	_		Aluminium Light Duty	Aluminium Fatigue Rated	9,5-114 L/min ((2.5-30 USgpm)
 16 - 16 size	0	Cartridge only			7 Special Features
	6B	3/4" BSPP	02-175463	-	<ul> <li>00 - None</li> <li>(Only required if valve has special features, omitted if "00".)</li> </ul>
3 Seals	12T	SAE 12	566149	-	
Blank - Buna-N	4G	1/2" BSPP	_	876716	
V - Viton <sup>®</sup>	6G	3/4" BSPP	-	876718	
	- 10H	SAE 10	-	876717	—
4 Style	12H	SAE 12	-	566113	
F - Factory set	See section J for housing details.			_	

## Dimensions

mm (inch)

Torque cartridge in aluminum housing to 108–122 Nm (80–90 ft lbs) Vickers spreadsheet has VF1-16ph1.eps = A-2673-003 cartridge and A-3476-XXX housing. PDF says cartridge scale is off but I checked measurements on this cartridge and it's height of 41.3 is proportionate.

Installation Drawing





28.4 (1.12) = = 63.5 (2.50) 2 = = 88.9 2X 8.74 (3.50) ŧ (.344) 1 10.3 31.8 68.28 (2.688) (1.25) (0.41) 88.9 (3.50)



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).





Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

Η