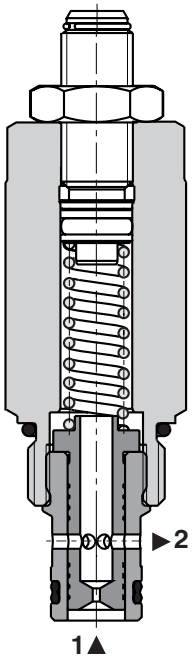
ARGO HYTOS

2-Way Flow Regulator, Pressure Compensated

SF22A-A2/H

3/4-16 UNF • Q_{max} 21 l/min (6 GPM) • p_{max} 350 bar (5100 PSI)

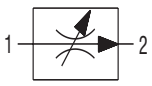


Technical Features

- Set flow rate independent of load pressure and temperature changes
- Adjusted flow rate depends on the orifice area and adjusted differential pressure
- Hardened precision parts
- High flow capacity
- Quiet and modulated response to load changes
- Used in meter-in, meter-out, or bleed-off applications
- Wide range of flow rate options
- Adjustable by allen key or hand screw, optionally sealable (lockwire holes)
- In the standard version, the valve is zinc-coated for 240 h protection acc. to ISO 9227

Functional Description

This pressure compensated, hydraulic flow regulator in the form of a screw-in cartridge with fixed orifice and variable spring setting is designed to control flow rates independently of pressure and temperature, especially in systems where only small movements due to load changes are required. The flow rate stabilization is provided by a pressure compensator in the direction from 1 to 2. The valve will maintain the set flow regardless of pressure variations on the regulated or inlet port.
In flow direction 2 - 1, the valve works as an ordinary throttle valve without pressure compensation. The regulated flow increases with clockwise rotation of the adjustment screw and descreases with counter-clockwise rotation. The desired settings can be locked down.

Symbol	

Technical Data

Valve size / Cartridge cavity		3/4-16 UNF-2A / A2		
Nominal flow rates		2	6	12
Adjustment range	l/min (GPM)	0.5-3.2 (0.1-0.8)	3-8.5 (0.8-2.3)	8-21 (2.1-5.6)
Max. operating pressure	bar (PSI)	350 (5080)		
Fluid temperature range (NBR)	°C (°F)	-30 ... +100 (-22 ... +212)		
Fluid temperature range (FPM)	°C (°F)	-20 ... +120 (-4 ... +248)		
Mass	kg (lbs)	0.19 (0.42)		

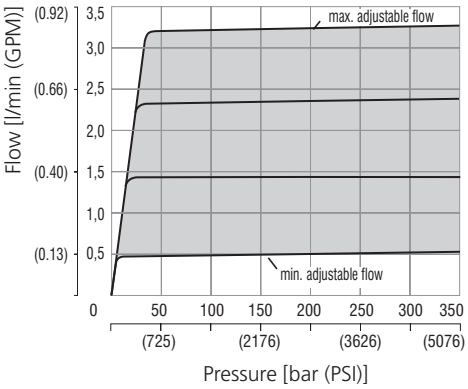
		Datasheet	Type
General information		GI_0060	Products and operating conditions
Valve bodies	In-line mounted	SB_0018	SB-A2-*
	Sandwich mounted	SB-04(06)_0028	SB-*A2*
Cavity details / Form tools		SMT_0019	SMT-A2*
Spare parts		SP_8010	

Characteristics measured at ν = 32 mm²/s (156 SUS)

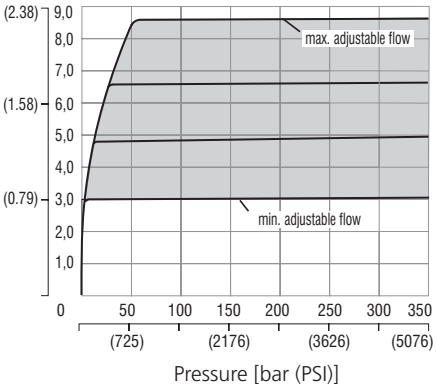
Regulated flow related to input pressure

Flow direction 1 - 2 (regulated flow)

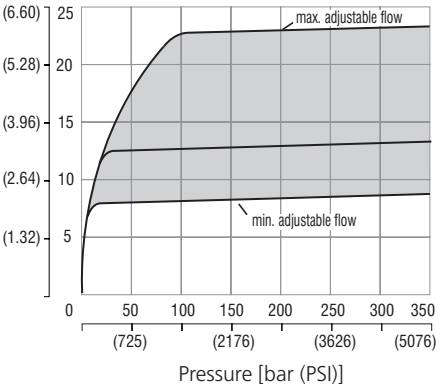
Flow rate 2



Flow rate 6



Flow rate 12

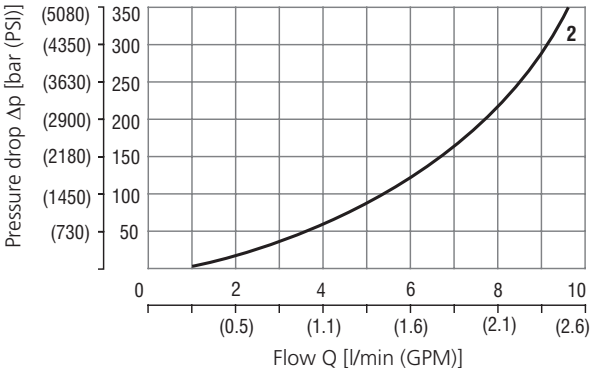


Characteristics measured at ν = 32 mm²/s (156 SUS)

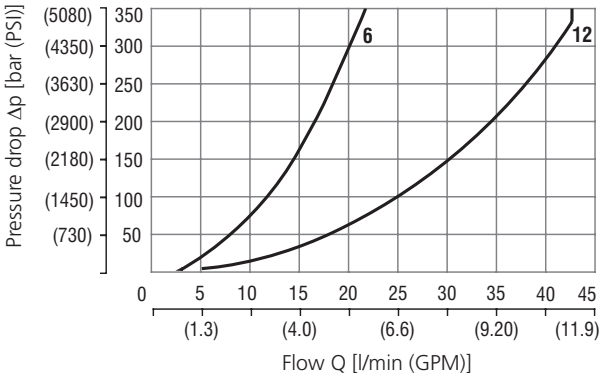
Pressure drop related to flow rate

Flow direction 2 - 1 (throttling without compensation)

Flow rate 2

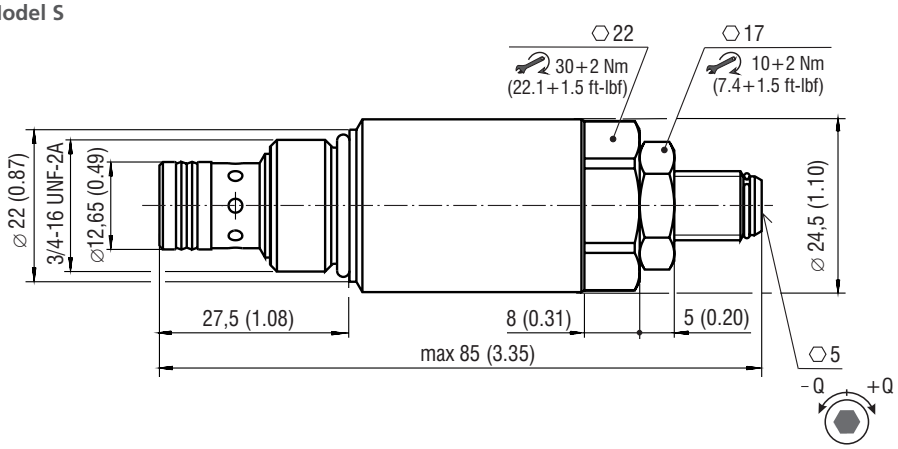


Flow rates 6, 12

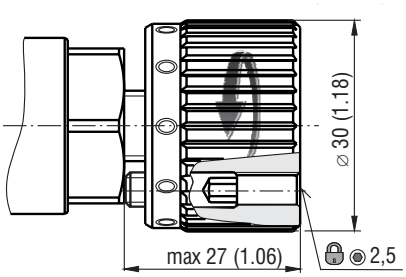


Dimensions in millimeters (inches)

Model S



Model RS



Ordering Code

SF22A-A2/H ☐ ☐ ☐ - ☐

2-Way flow regulator, pressure compensated
3/4-16 UNF

Model
High performance **H**

Flow rate

0.5 - 3.2 l/min	(0.1 - 0.8 GPM)	**2**
3 - 8.5 l/min	(0.8 - 2.3 GPM)	**6**
8 - 21 l/min	(2.1 - 5.6 GPM)	**12**

Adjustment option

S	allen key (hex. 5), without protective cap
RS	hand screw, metal

Seals

No designation	NBR
V	FPM (Viton)

Surface treatment

A	zinc-coated (ZnCr-3), ISO 9227 (240 h)
B	zinc-coated (ZnNi), ISO 9227 (520 h)