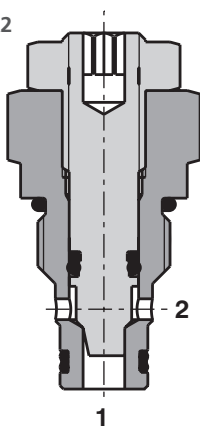


## Needle - Restrictor Valve with Reverse Flow Check, Fine Adjustable

### ST2C1A-A2

3/4-16 UNF •  $Q_{max}$  20 l/min (5 GPM) •  $p_{max}$  320 bar (4600 PSI)

ST21A-A2



#### Technical Features

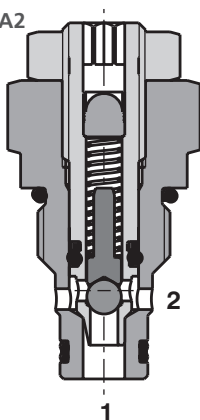
- › Reverse flow check option
- › Hardened precision parts
- › Fine low-torque adjustment
- › Linear adjustment and positive seat overlap
- › Optionally adjustable by allen key or hand screw
- › Desired settings may be locked down
- › In the standard version, the valve is zinc-coated for 240 h protection acc. to ISO 9227

#### Functional Description

A hydraulic flow restrictor valve in the form of a screw-in cartridge with an optional by-pass check valve. After loosening the lock nut the valve may be unscrewed up to the red marked safety notch. Beyond the marking, the valve may get completely unscrewed, leading to leakage.

Model Code	ST21A-A2	ST2C1A-A2
Symbol		

ST2C1A-A2



#### Technical Data

Valve size / Cartridge cavity		3/4-16 UNF-2A / A2 (C-8-2)
Max. flow	l/min (GPM)	20 (5.3)
Max. operating pressure	bar (PSI)	320 (4600)
Fluid temperature range (NBR)	°C (°F)	-30 ...+100 (-22 ...+212)
Mass	kg (lbs)	0.2 (0.44)

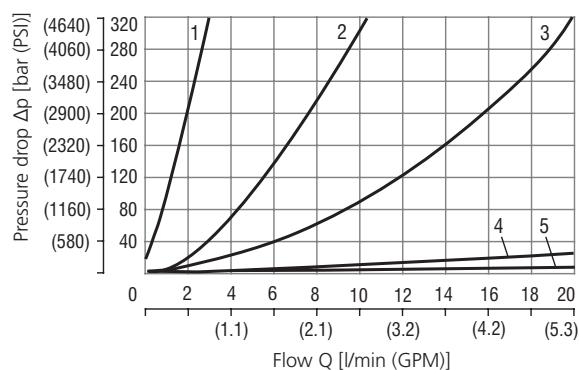
		Datasheet	Type
General information		GI_0060	Products and operating conditions
Valve bodies	In-line mounted	SB_0018	SB-A2*
	Sandwich mounted	SB-04(06)_0028	SB-*A2*
Cavity details / Form tools		SMT_0019	SMT-A2*
Spare parts		SP_8010	

### Characteristics measured at $v = 32 \text{ mm}^2/\text{s}$ (156 SUS)

#### Pressure drop related to flow rate

Flow direction 2→1

ST21A-A2/L20\*, ST2C1A-A2/L20\*

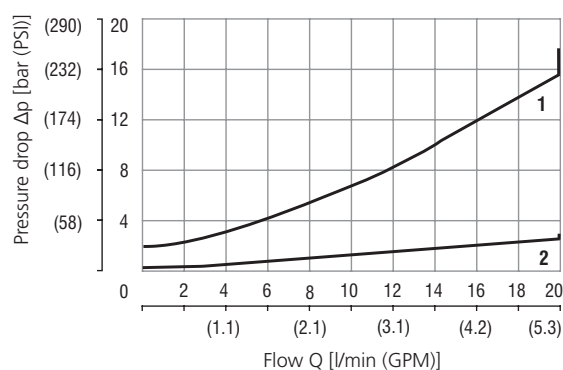


Number of turns of the adjustment screw				
1	2	3	4	5

#### Check valve pressure drop related to flow rate

Flow direction 1→2

ST2C1A-A2/L20\*

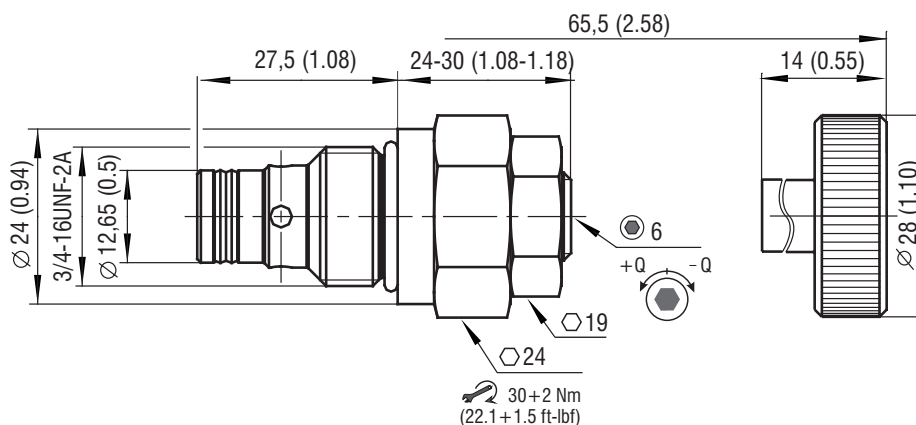


Trottle valve closed	Trottle valve opened
1	2

**Dimensions** in millimeters (inches)

Model S

Model RS



**Ordering Code**

ST2C1A - A2 / L 20

Needle - restrictor valve, fine adjustable

ST21A

Needle - restrictor valve with reverse flow check, fine adjustable

ST2C1A

Valve cavity

3/4-16 UNF-2A (C-8-2)

Version

Lightline

Flow rate

20 lpm (5 GPM)

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

**No designation**  
**V**

**Seals**  
**NBR**  
**FPM (Viton)**

**Adjustment option**  
**S** allen key (hex. 6), without protective cap  
**RS** hand screw, metal