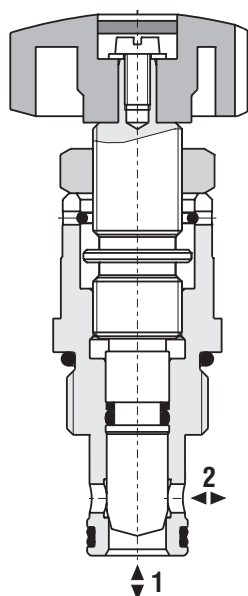


Needle - Restrictor Valve

ST21A-B2

7/8-14 UNF • Q_{max} 140 l/min (37 GPM) • p_{max} 350 bar (5100 PSI)



Technical Features

- › Hardened precision parts
- › Fine low-torque adjustment
- › Linear adjustment and positive seat overlap
- › Optionally adjustable by 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. The valve restricts flow in both directions, making it ideal for fine control of an uncompensated system or for use as a shut-off valve.

Model Code	ST21A-B2
Symbol	

Technical Data

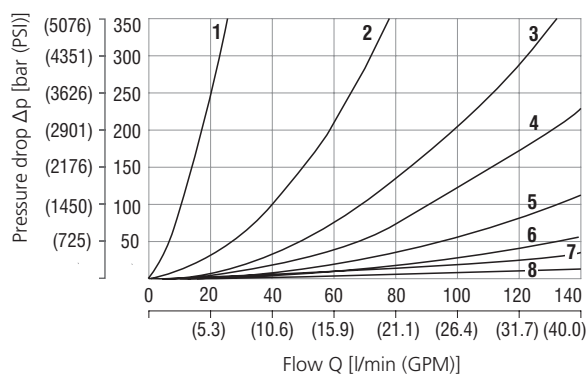
Valve size / Cartridge cavity		7/8-14 UNF / B2
Max. flow	l/min (GPM)	140 (37)
Max. operating pressure	bar (PSI)	350 (5076)
Fluid temperature range (NBR)	°C (°F)	-30 ... +100 (-22 ... +212)
Weight	kg (lbs)	0.3 (0.66)

	Datasheet	Type
General information	GI_0060	Products and operating conditions
Valve bodies	In-line mounted	SB_0018
	Sandwich mounted	SB-04(06)_0028
Cavity details / Form tools	SMT_0019	SMT-B2*
Spare parts	SP_8010	

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

Pressure drop related to flow rate

Flow direction 1 - 2

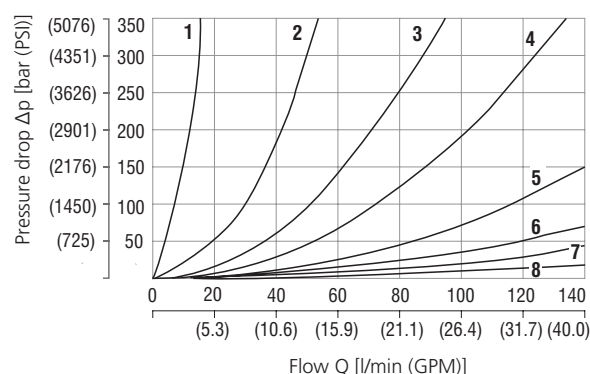


Number of half turns (180°) of the adjust. screw

1	2	3	4	5	6	7	8
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Pressure drop related to flow rate

Flow direction 2 - 1

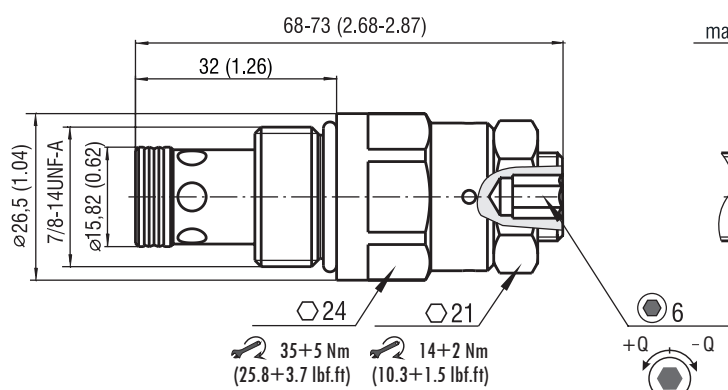


Number of half turns (180°) of the adjust. screw

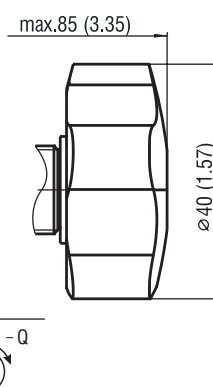
1	2	3	4	5	6	7	8
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Dimensions in millimeters (inches)

Model S



Model RP



Ordering Code

ST21A-B2 / -

Needle - restrictor valves 7/8-14 UNF

Version
High performance

Flow rate
140 l/min (37 GPM)

H

140

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
allen key (hex. 6), without protective cap
hand screw, plastic

S
RP