

Technical Features

- › Excellent stability throughout flow range with rapid response to dynamic pressure changes
- › Low hysteresis, accurate pressure control and low pressure drop
- › Pressure range up to 350 bar
- › Hardened precision parts
- › Adjustable by allen key
- › In the standard version, the valve is zinc-coated for 240 h protection acc. to ISO 9227. Enhanced surface protection for mobile sector available for the steel parts (ISO 9227, 520 h salt spray)

Functional Description

A direct acting, spool type hydraulic sequence valve in the form of a screw-in cartridge with internal pilot and spring chamber drain. The valve directs the fluid to the secondary circuit when the input pressure exceeds the pre-set pressure. In the neutral position, the valve blocks flow at port 1 (inlet), while allowing flow to pass from port 2 to 3 (tank). When the pressure on port 1 reaches the pre-set pressure, the cartridge opens the connection between port 1 to 2. Back pressure on port 3 adds to the pressure pre-set by the spring.



Technical Data

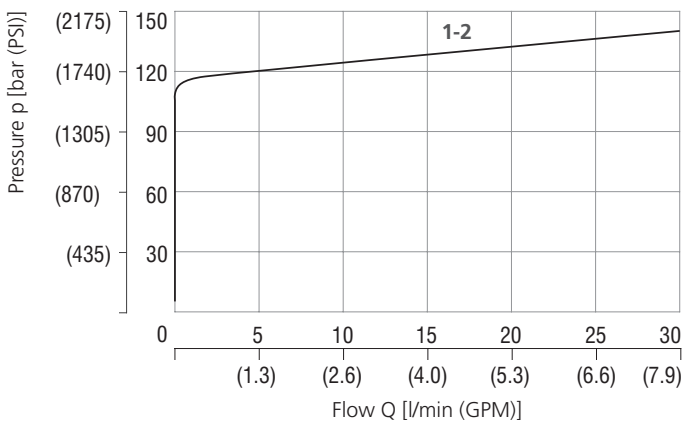
Valve size / Cartridge cavity		3/4-16 UNF-2A / A3
Max. flow	l/min (GPM)	30 (7.9)
Max. operating pressure	bar (PSI)	350 (5100)
Max. preset pressure	bar (PSI)	240 (3480)
Fluid temperature range (NBR)	°C (°F)	-30 ... +100 (-22 ... 212)
Fluid temperature range (FPM)	°C (°F)	-20 ... +120 (-4 ... 248)
Weight	kg (lbs)	0.23 (0.51)

		Datasheet	Type
General information		HA 0060	Products and operating conditions
Valve bodies	In-line mounted	HA 0018	SB-A3*
	Sandwich mounted	HA 0028	SB-*A3*
Cavity details / Form tools		HA 0019	SMT-A3*
Spare parts		HA 8010	

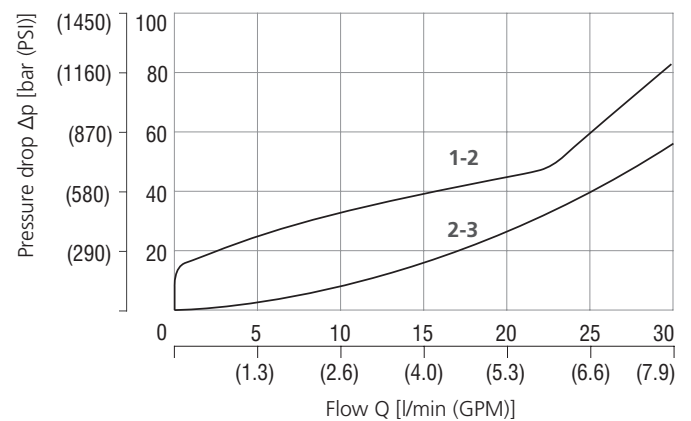
Characteristics measured at $v = 32 \text{ mm}^2/\text{s}$ (156 SUS)

Relief pressure related to flow rate

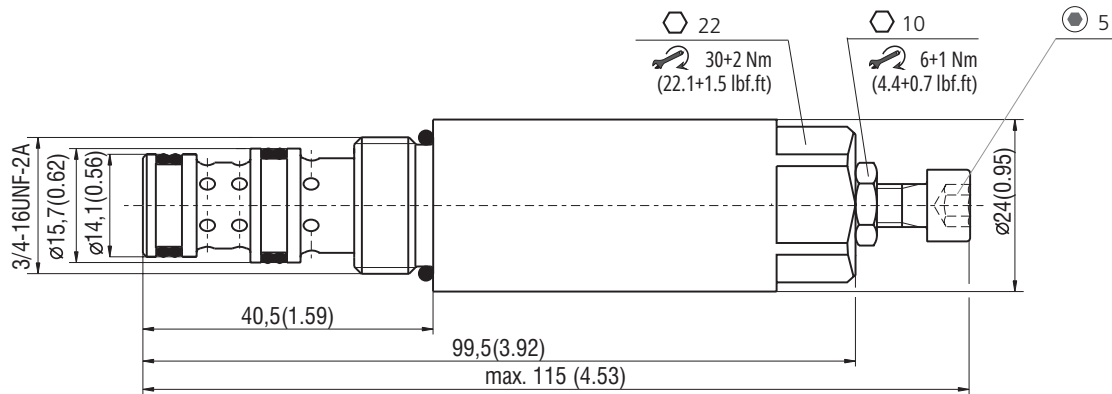
Example of factory preset valve, at 120 bar (1740 PSI), 5 l/min (1.3 GPM)



Pressure drop related to flow rate



Dimensions in millimeters (inches)



Ordering Code

SS4A - A3 / H S -

Sequence valve, internal pilot and drain,
spool type, direct acting

Valve cavity
3/4-16 UNF (C-8-3)

Model
High performance

Pressure range
10 - 50 bar (150 - 730 PSI)
50 - 240 bar (730 - 3480 PSI)

5
24

Surface treatment

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

Seals

- No designation
- V
- NBR
- FPM (Viton)

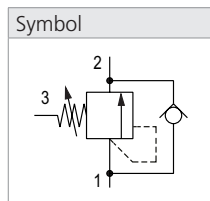
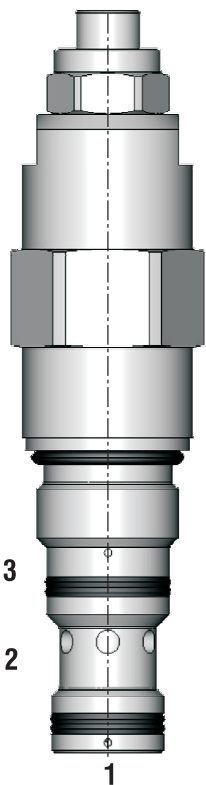
Adjustment option

allen key (hex. 5), without protective cap

Pressure Sequence Valve, Poppet Type, Direct Acting, External Drain

SS3A-BP3

7/8-14 UNF • Q_{max} 40 l/min (11 GPM) • p_{max} 420 bar (6100 PSI)



Technical Features

- › Valve enables motion sequence of hydraulic actuators
- › Pressure relief function protecting the actuator against overloading and pressure peaks
- › Integrated check valve acting as an anti-cavitation valve and by-pass valve
- › Spring chamber is connected to external drainage (port 3)
- › No influence of back pressure in port 2 on cracking pressure
- › Setting can be performed during machine operation = leak free closing of adjustable element
- › Wide range of relief pressure setting up to 420 bar (6100 PSI)
- › In the standard version, the valve is zinc-coated for 520 h protection acc. to ISO 9227

Functional Description

A poppet type, direct acting, pressure sequence valve providing ordered sequencing of hydraulic actuators and pressure limiting function. The spring acts on the poppet and presses it into the valve seat. If the hydraulic pressure is below the pre-set value, the valve is closed. If the hydraulic force exceeds the pre-set value, the valve opens and flow passes from port 1 to port 2 until the system pressure falls below the spring pre-set value and the valve closes again. Back pressure at port 2 has no influence on cracking pressure. The built-in check valve allows flow from port 2 to port 1.

Note:

For proper function, port 3 must be without a pressure.
Pressure in port 3 automatically increases the set cracking pressure of the valve in a ratio of 1:1.

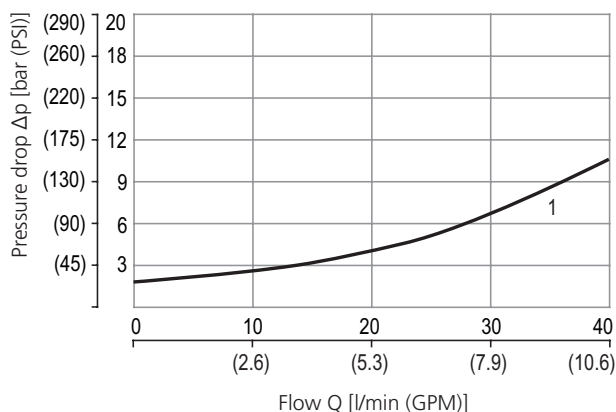
Technical Data

Valve size / Cartridge cavity		7/8-14 UNF-2A / BP3 (C-10-3S)		
Max. flow	l/min (GPM)	40 (10.6)		
Relief pressure range		21	32	42
Max. relief pressure	bar (PSI)	210 (3050)	320 (4640)	420 (6100)
Fluid temperature range (NBR)	°C (°F)	-30... +100 (-22... +212)		
Fluid temperature range (FPM)	°C (°F)	-20... +120 (-4... +248)		
Leakage	ml/min	0,3 (5 drops per min)		
Weight	kg (lbs)	0,29 (0.64)		

		Datasheet	Type
General information		HA 0060	Products and operating conditions
Valve bodies	In-line mounted	HA 0018	SB-BP3*
	Sandwich mounted	HA 0028	SB-BP3*
Cavity details		HA 0019	SMT-BP3*
Spare parts		HA 8010	

Characteristics measured at $v = 40 \text{ mm}^2/\text{s}$ (195 SUS)

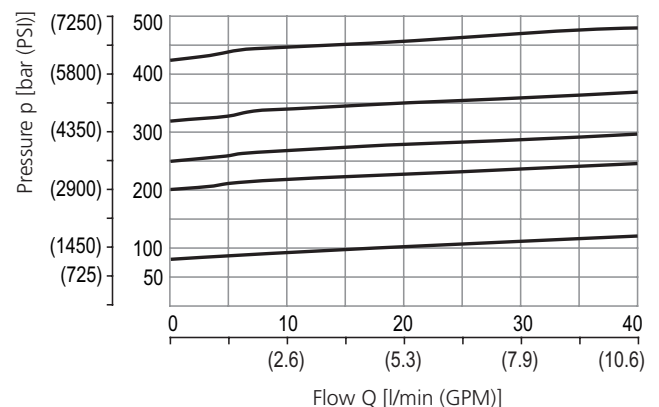
Pressure drop related to flow rate



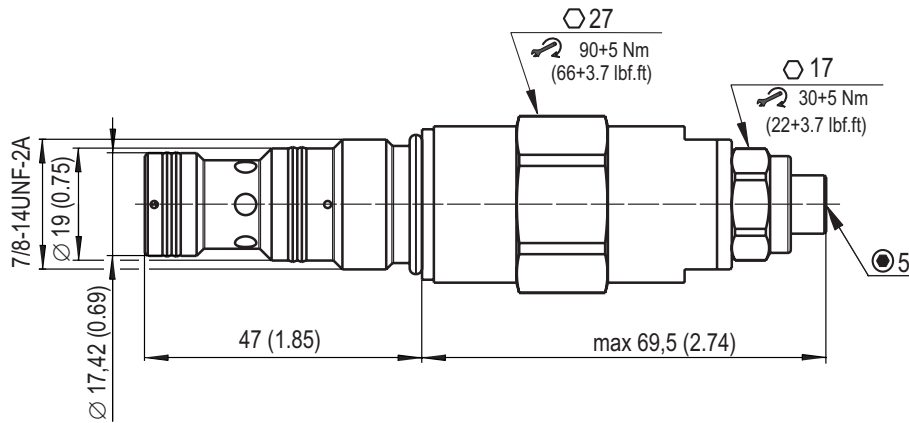
Flow	
1	free flow (2→1)

Cracking pressure related to flow rate

Pressure range 32



Dimensions in millimeters (inches)



Ordering Code

SS3A - BP3 / H S - B

Pressure sequence valve, poppet type, direct acting, external drain

Valve cavity
7/8-14 UNF (C-10-3S)

Model
High performance

Relief pressure range

70 - 210 bar (1020 - 3050 PSI)	21
106 - 320 bar (1540 - 4640 PSI)	32
140 - 420 bar (2030 - 6090 PSI)	42

Surface treatment
zinc-coated (ZnNi), ISO 9227 (520 h)

No designation
V

Seals
NBR
FPM (Viton)

Adjustment option
allen head (Hex. 5) without protective cap