

SB02

Flow Limiter

- **without additional power requirements**
- **saves energy by limiting the flow rate to the actually needed flow**
- **compact design**
- **easy to install**
- **all metal version without-plastic internals**
- **materials brass or stainless steel**
- **P_{max} : 10 bar, T_{max} : 200 °C**



Description:

The model SB02 flow limiters are used to limit the flow of water or waterlike media to a fixed value. They make sure that this fixed flow rate stays constant despite varying upstream or downstream pressures.

Contrary to the commonly used products of this kind the SB02 limiter do not utilize a plastic membrane as limiting device.

Instead the SB02 work with a spring loaded stainless steel variable orifice. Due to the differential pressure across the limiter this variable orifice changes its aperture continuously. Through increasing the orifice size with falling pressure or decreasing it with rising pressure the flow rate will always remain constant.

Typical applications:

For water and waterlike media. Usable in water distribution systems in the industry, in car wash installations, for sanitary applications and in water treatment systems.

Models:

Process connection:

- G 1/2 female thread on both sides
- G 3/4 female thread on both sides
- 3/4" NPT female thread on both sides
- input G 1/2 female thread, output G 1/2 male thread
- input G 3/4 female thread, output G 3/4 male thread
- input 3/4" NPT female thread, output 3/4" NPT male thread

Flow Rates:

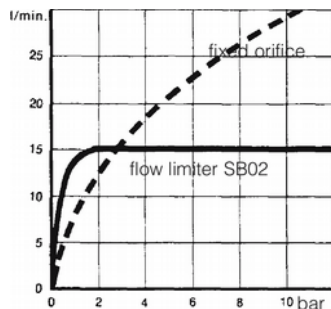
1...30 l/min in steps of 1 l/min and 40 l/min water

The flow rates are defined by the design of the units and cannot be changed by the user.

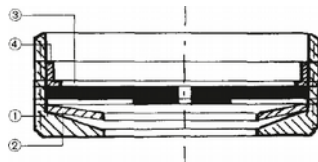
By adding several individual elements, almost any flow rate values can be achieved (see data sheet SB03)

Principle of Operation:

The orifice size decreases proportional to the upstream pressure, therefore the flow rate remains constant.



- 1) housing
- 2) ring
- 3) variable orifice
- 4) fixing ring



Technical Data:

Min. control pressure:	2 bar (3 bar with limiter at 40 l/min)
Max. operating pressure:	10 bar
Max. media-temperature:	200 °C
Accuracy for 1...30 l/min:	
bis 2 l/min:	± 15 % of flow value
ab 3 l/min:	± 10 % of flow value
Accuracy for 40 l/min:	± 15 % of flow value

Order Code:

Order number **SB02. 1. 1. 10. 0**

Flow limiter

Process connection:

- 1 = G 1/2 female thread on both sides
- 2 = G 3/4 female thread on both sides
- 2N = 3/4" NPT female thread on both sides
- 3 = input G 1/2 female, output G 1/2 male
- 4 = input G 3/4 female, output G 3/4 male
- 4N = input 3/4" NPT female, output 3/4" NPT male

Materials:

- 1 = brass
- 2 = stainless steel 1.4305, 1.4310, 1.4301

Flow rates:

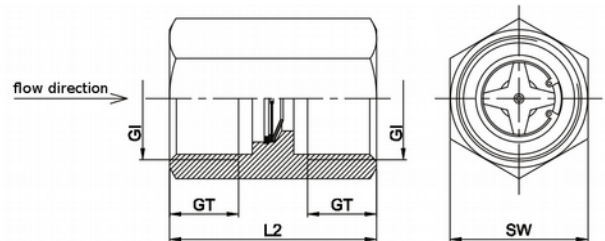
- 01...30 = flow rate in l/min
- 40 = 40 l/min

Options:

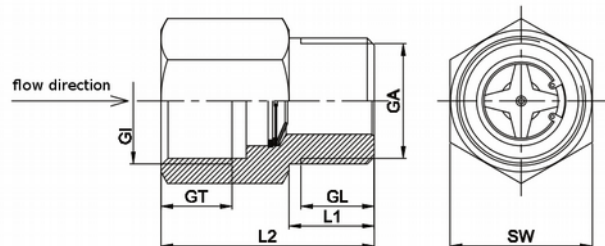
- 0 = without
- 1 = please specify in plain text

Dimensions:

Female threads on both sides:



Input female thread, output male thread:



Type	GI	GA	L1	L2	GT	GL	SW
SB02.1	G 1/2 female	-	-	43	14	-	24
SB02.2	G 3/4 female	-	-	45	15	-	30
SB02.3	G 1/2 female	G 1/2 male	16	43	14	14	24
SB02.4	G 3/4 female	G 3/4 male	18	45	15,5	15	30

Materials:

Brass version:

device body:	brass
regulating star:	1.4310
cone:	1.4301
rivet:	1.4301
retaining ring:	1.4122

Stainless steel version:

device body:	1.4305
regulating star:	1.4310
cone:	1.4301
rivet:	1.4301
retaining ring:	1.4122