

SB03

Flow Limiter for Large Flow Rates

- without additional power requirements
- saves energy by limiting the flow rate to the actually needed flow
- for pipe diameters DN 20...DN 80
- with male thread for mounting into existing pipes or complete with flow housing
- all metal version without plastic
- materials: brass or stainless steel
- P_{\max} : 10 bar, T_{\max} : 200 °C



Description:

The model SB03 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 SB03 limiter do not utilize a plastic membrane as limiting device. Instead the SB03 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 carwash installations, for sanitary applications and in water treatment systems.

Principle or operation:

See data sheet SB02

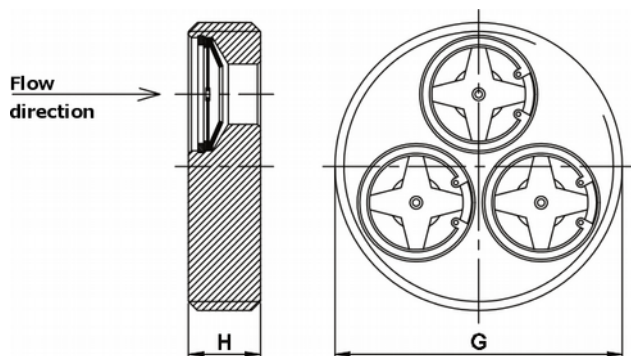
Flow rates:

Single limiting elements may be supplied for the following flow rates: 1...30 l/min water in steps of 1 l/min and for 40 l/min (only for G 3/4").

By adding several flow elements onto a common disc nearly all flow rates may be realized.

Versions and Dimensions:

The SB03 flow limiters are available as a disc with male thread.



G Disc size (male thread G)	Max. No. of limiting elements	Flow rate [l/min]	H [mm]
3/4"	1	1-40	12
1 1/2"	3	3-90	12
2"	5	5-150	15
2 1/2"	9	9-210	15
3"	13	13-270	15

Technical Data:

Min. regulating pressure: 2 bar
(3 bar for limiter to 40 l/min)

Max. process pressure: 10 bar

Max. medium temperature: 100 °C

Accuracy for 1...30 l/min:

up to 2 l/min: ± 15 % of average flow value

up to 3 l/min: ± 10 % of average flow value

Accuracy for 40 l/min: ± 15 % of average flow value

Order Code:

Order number SB03. 1. 50. 100

Flow Limiter for
large flow rates

Disc material:

1 = Disc of brass, inserts of st. steel
2 = Disc of st. steel, inserts of st. steel

Disc outer diameter:

20 = G 3/4
40 = G 1 1/2
50 = G 2
65 = G 2 1/2
80 = G 3

Flow rate:

xxx = in l/min. water

Materials:

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

St. st. version: housing: 1.4571
regulating star: 1.4310
cone: 1.4301
rivet: 1.4301
retaining ring: 1.4122