# **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 withoutplastic internals
- materials brass or stainless steel
- Pmax: 10 bar, Tmax: 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.



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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 130 l/min:					
bis 2 l/min:	$\pm$ 15 % of flow value				
ab 3 l/min:	$\pm$ 10 % of flow value				
Accuracy for 40 l/min:	± 15 % of flow value				

## **Order Code:**

des nale nale " NPT male	9		
01			
			_
	des nale nale " NPT male	des nale "NPT male	des nale nale " NPT male

0 = without1 = please specify in plain text

## **Dimensions:**

#### Female threads on both sides:



#### Input female thread, output male thread:



Туре	GI	GA	L1	L2	GT	GL	SW
SB02.1	G ½ female	-	-	43	14	-	24
SB02.2	G ¾ female	-	-	45	15	-	30
SB02.3	G ½ female	G ½ male	16	43	14	14	24
SB02.4	G ¾ female	G ¾ male	18	45	15,5	15	30

## **Materials:**

Brass version:	device body: regulating star: cone: rivet: retaining ring:	brass 1.4310 1.4301 1.4301 1.4122
Stainless steel version:	device body: regulating star: cone: rivet: retaining ring:	1.4305 1.4310 1.4301 1.4301 1.4122



PKP Prozessmesstechnik GmbH Borsigstr. 24 • D-65205 Wiesbaden info@pkp.de ●
www.pkp.de

**PKP Process Instruments Inc.** 10 Brent Drive • Hudson, MA 01749 Sector State S