

# 2 Way Flow Control Valves with Free Flow Check Valves

SF2C2A-K2/I

HA 5236 7/2008

Replaces HA 5236 9/2006

M27 x 2 • p<sub>max</sub> 350 bar • Q 60 L/min



### **Functional Description**

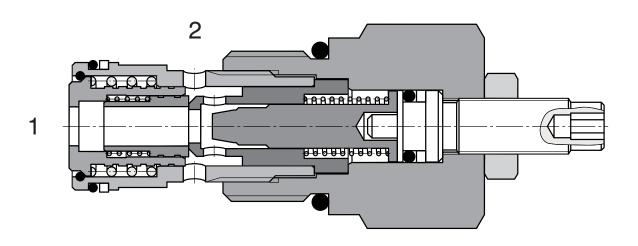
The valve consists of an adjustable measuring orifice plate after which it is installed a stabilizer of pressure drop and of an by-pass unidirectional valve formed by a bushing of the stabilizer gate valve fitted with a seat on the front surface.

During the flow from (1) to (2) the liquid flows through the centre of the stabilizer gate valve and applies pressure at the same time to the gate valve of the unidirectional valve to press it in the seat and then continues to flow through the throttling cross section to the side channel (2). The stabilizer has been designed to serve for maintaining a pressure difference arisen in front of the measuring orifice plate and after the measuring orifice plate at a constant level of approximately of 1.2 MPa given by the spring force so as to ensure a constant

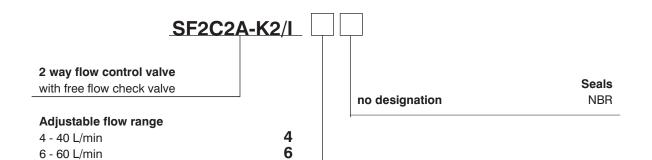
rate of flow through the channel (2). The pressure in front of the throttling orifice plate acts to the side part of the stabilizer gate valve and the pressure in the channel (2) acts to back side of the stabilizer gate valve. Due to permanent equalizing the forces the position of the stabilizer gate valve changes with each change of pressure before and after the measuring orifice plate and in this way it results in appropriate decreasing or eventually appropriate increasing the flow cross section in the channel (2).

In the direction from (2) to (1) the liquid flows through the unidirectional valve with a small pressure drop.

As for appropriate basic surface finish the external parts are zinc coated.



## **Ordering Code**

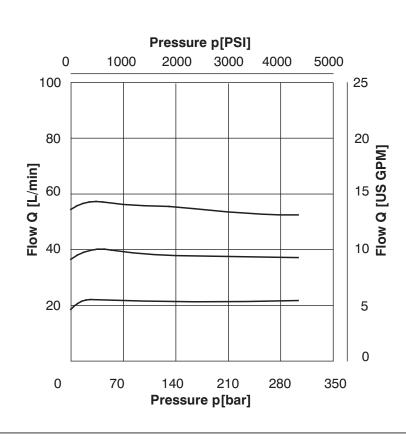


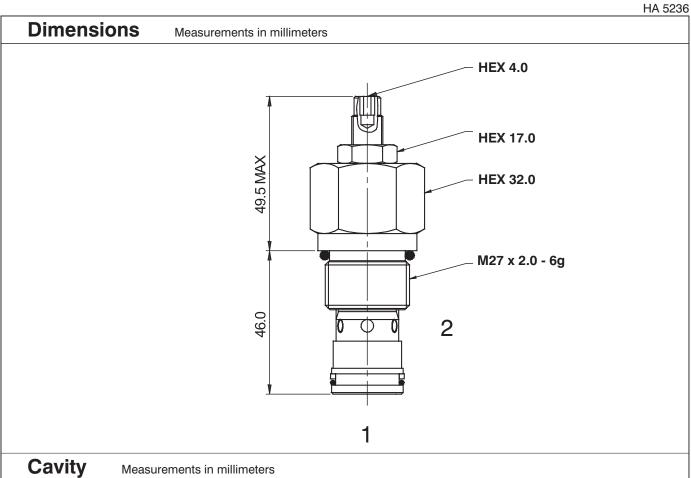
## **Technical Data**

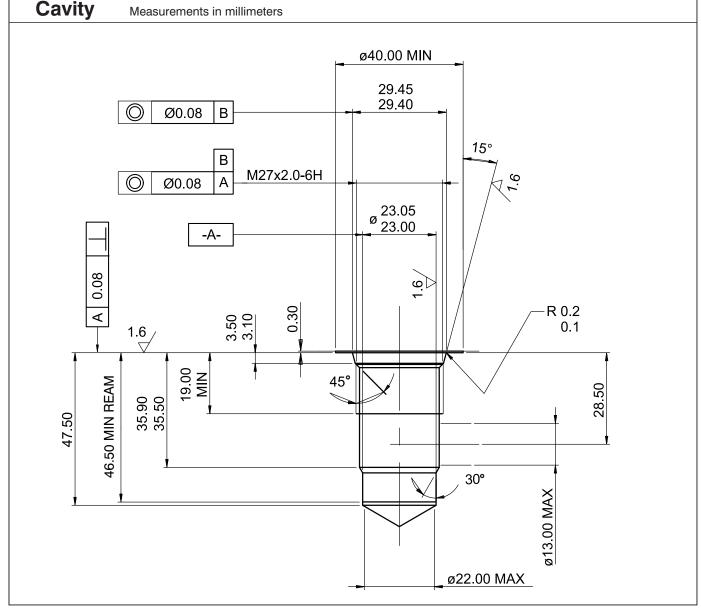
Cavity		M27 x 2		
Adjustment range	L/min	4 - 60		
Max. pressure	bar	350		
Hydraulic fluid		Hydraulic oil (HM, HV) according to DIN 51524		
Fluid temperature range	°C	-20 +90		
Viscosity	mm <sup>2</sup> /s	20400		
Maximum degree of fluid contamination		According to ISO 4406, Class 21/18/15		
Weight	kg	0.29		
Maximum valve tightening torque in valve body or in control block	Nm	75 <sup>+2</sup>		
Mounting position		Unrestricted		

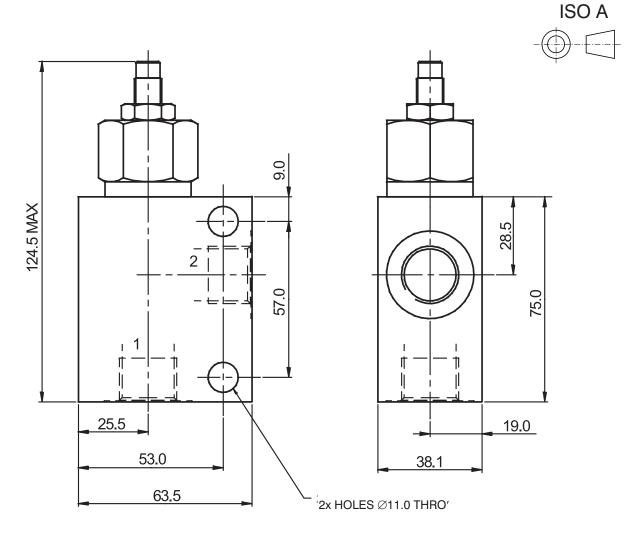
## p-Q Characteristics

Measured at  $v = 40 \text{ mm}^2/\text{s}$ 









Body without valve				
Material	Ports	Port size	Type code	
Aluminium	1, 2	G1/2	SB-K2-0105AL	
	1, 2	SAE 10, 7/8-14	SB-K2-0106AL	
Steel	1, 2	G1/2	SB-K2-0105ST	
	1, 2	SAE 10, 7/8-14	SB-K2-0106ST	

The use of aluminium bodies is limited to a maximum operating pressure of 210 bar.

### **Spare Parts**

Seal kits on request.

#### Caution!

- The packing foil is recyclable.
- The technical information regarding the product presented in this catalogue is for descriptive purposes only. It should not be construed in any case as a guaranteed representation of the product properties in the sense of the law.

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