

2-way flow control valves type SB, SQ, and SJ

These 2-way flow valves (drop rate braking valves), type SB or SQ, are used for flow control purposes with single acting cylinders. They maintain a constant drop rate irrespective of the size of the load. There is an integrated sliding metering orifice enabling free flow in the other direction. Type SB features load sensing to prevent oscillations (e.g. required with fork lift trucks) whereas type SQ has load independent characteristics.

Flow control valves type SJ (no sliding metering orifice) are used to limit control flows in consumer circuits. Version DSJ limits the flow both directions and is therefore intended for double acting consumers applications.



Nomenclature: 2-way flow control valve (drop rate braking valve)

Design: Screw-in type with housing for in-line installation

Adjustability: Fixed (pre-set)
Tool adjustable from outside

P_{max} : 315 bar

Q_{max} : 0.25 ... 400 lpm

Basic types and general parameters

Basic type and size	Coding for adjustment range of the set response flow from ... to ... lpm below						Tapped ports (standard) (BSPP)	Symbol	
	1	3	5	7	9	90		SB, SQ	SJ
SB 0	1...	1.6...	2.5...	4...	6.3...	10...	G 1/4 (A)		
SJ 0 ¹⁾	...1.6	...2.5	...4	...6.3	...10	...15			
SB 1	2.5...	4...	6.3...	10...	16...	25...	G 3/8 (A)		
SQ 1	...4	...6.3	...10	...16	...25	...35			
SB 2	16...	21...	28...	37...	50...		G 1/2 (A)		
SQ 2	...21	...28	...37	...50	...67 ²⁾				
SB 3	37...	50...	67...	90...	120...		G 3/4 (A)		
SQ 3	...50	...67	...90	...120	...150 ²⁾				
SB 4	80...	100...	125...	160...	200...		G 1 (A)		
	...100	...125	...160	...200	...250				
SB 5	170...	200...	236...	280...	335...		G 1 1/4 (A)		
	...200	...236	...280	...335	...400				

Additional versions

- Version with metric and UNF thread
- Version with thread reduction
- Version with housing for in-line installation
- Version with swivel housing or as banjo block
- Version with housing, externally adjustable and idle position can be locked
- Version type DSJ ($Q_{max} = 20$ lpm, $p_{max} = 300$ bar) flow control function for both flow directions suited for double acting consumers ³⁾

¹⁾ Type SJ 0 without coding: adjust. range 0.25 ... 1.2 lpm

²⁾ Not for type SQ..

³⁾ See also "Further information"

