

Flow control valve (lowering brake valve) type SB, SQ, SJ and DSJ

Flow control valves are a type of flow valve. They generate a set constant flow rate, largely independently of the load.

The flow control valve type SB and SQ is available as a screw-in cartridge, a housing version with pipe connection or as a banjo screw version. Type SB has a slightly inclined characteristic curve for oscillation damping. Type SQ is largely independent of the load.

The freely movable sliding metering orifice enables greater flow in the opposite flow direction. No bypass check valve is therefore required. The flow control valve type SB and SQ is used to control the lowering speed of single-acting consumers.

Features and benefits:

- Oscillation damping and load-independent
- Compact screw-in valve

Intended applications:

- General hydraulic systems
- Industrial trucks
- Lifting equipment



Nomenclature:	2-way flow control valve (drop rate braking valve)
Design:	Screw-in type with housing for in-line installation
Adjustment:	Fixed (pre-set) Tool adjustable from outside
p_{max}:	315 bar
Q_{max}:	400 lpm

Design and order coding example

SB 2 1 C - 30

Response flow [l/min] Desired factory set response flow within the respective range

- Design** Adjustable or non adjustable version
- Screw-in version (C)
 - Version with housing for pipe mounting (E, F, G)
- Additional versions**
- With metric or UNF-thread
 - With thread adaptor
 - As banjo bolt and/or with swiveling screw fitting

Adjustment range Adjustable response flow

Basic type, size Type SB, SQ and SJ, size
Type DSJ, flow control function in both directions for double-acting consumers

Function

SB, SQ



SJ



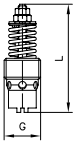
DSJ



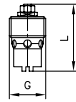
General parameters and dimensions

Screw-in valve ...C

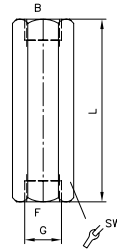
SB, SQ



SJ



With housing...G



	Coding for adjustment range of the set response flow from ... to ... [lpm] below						Ports	Dimensions [mm]			m [g]
	1	3	5	7	9	90		G (Series)	L	L1 _{max}	
SB 0	1...1.6	1.6...2.5	2.5...4	4...6.3	6.3...10	10...15	G 1/4 (A)	39	78	19	13
SJ 0 ¹⁾								24	-	-	35
SB 1	2.5...4	4...6.3	6.3...10	10...16	16...25	25...35	G 3/8 (A)	43	82	22	23
SQ 1											
SB 2	16...21	21...28	28...37	37...50	50...67 ²⁾	-	G 1/2 (A)	49	96	27	40
SQ 2											
SB 3	37...50	50...67	67...90	90...120	120...150 ²⁾	-	G 3/4 (A)	61	106	32	80
SQ 3											
SB 4	80...100	100...125	125...160	160...200	200...250	-	G 1 (A)	78	145	41	150
SB 5	170...200	200...236	236...280	280...335	335...400	-		G 1 1/4 (A)	94	160	50
DSJ 1	1.0...21.0						G 3/8 (A)	39	78	19	30

1) Type SJ 0 without coding: adjust. range 0.25 ... 1.2 l/min

2) Not for type SQ..

Associated technical data sheets:

- [Flow control valve \(lowering brake valve\) type SB and SQ: D 6920](#)
- [Flow control valve type SJ: D 7395](#)
- [Flow control valve type CSJ: D 7736](#)
- [Flow control valve type DSJ: D 7825](#)