

## Orifices and restrictor check valves type EB, BE, and BC

The orifice inserts type EB are part of the flow valves, whereas the restrictor check valves type BE and BC are a combination of a flow and check valve.

These valves are preferentially used to limit flows when switching directional valves (e.g. flow limitation to  $Q_{max}$  and avoidance of excessively rapid accumulator draining). The restrictor check valves type BC and BE are designed as a hole or slot orifice and enable free flow in the direction  $F \rightarrow B$  and throttle function in the opposite direction.

Type BC is spring loaded and can be screwed into normal threaded holes (point angle  $118^\circ$ ).

Type EB orifice inserts can be used in the P gallery of manifold mounting valves, for example.

### Features and benefits:

- Max. 700 bar
- Simple design and installation

### Intended applications:

- General hydraulics
- Winch controls
- Hydraulic pilot systems



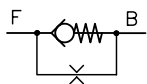
<b>Nomenclature:</b>	Orifice Restrictor check valve
<b>Design:</b>	Orifice insert Screw-in valve Version with housing for in-line installation
<b><math>p_{max}</math>:</b>	400 ... 700 bar
<b><math>Q_{max}</math>:</b>	0,5 ... 120 lpm

### Design and order coding example

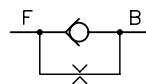
BC1	- 0,8	G
<b>Basic type, size</b>	<b>Orifice</b>	<b>Design with housing</b>
Type BC, size 1 to 3	Hole or slot type orifice, diameter in mm	For pipe connection, type BC, BE (E; F, G)
	<b>Additional versions</b>	
	■ With/without metric thread (type BC and BE)	

### Function

**BC**  
Screw-in valve

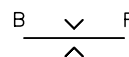


**BE**



**EB**

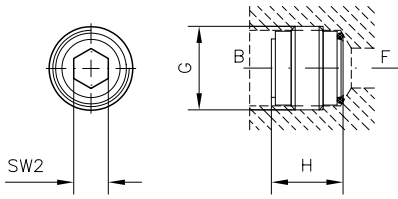
Orifice insert



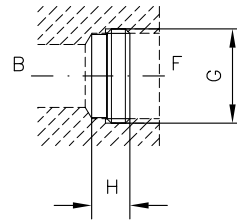
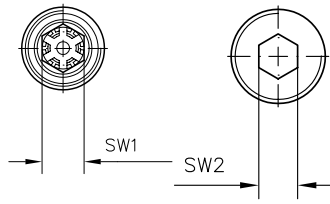
## General parameters and dimensions

### BC..

Screw-in valve

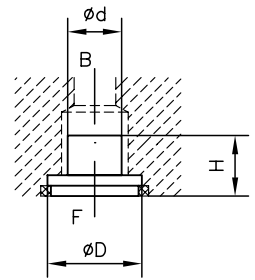


### BE ..



### EB..

Orifice insert



	$Q_{max}$ [l/min]	$p_{max}$ [bar]	Thread	Dimensions				m [g]
				H [mm]	G / D	SW = a/f 1/ød	SW = a/f 2	
BC 1	20	700	G 1/4 A	13	G 1/4 A	SW 8	SW 4	6
BC 2	35	700	G 3/8 A	15	G 3/8 A	SW 9	SW 5	10
BC 3	60	500	G 1/2 A	18	G 1/2 A	SW 12	SW 8	24
BE 0	12	500	G 1/8 A	5	G 1/8 A	SW 4	-	2
BE 1	25	500	G 1/4 A	6	G 1/4 A	SW 5	-	4
BE 2	40	500	G 3/8 A	7	G 3/8 A	SW 8	-	6
BE 3	70	450	G 1/2 A	7.5	G 1/2 A	SW 10	-	10
BE 4	120	400	G 3/4 A	9	G 3/4 A	SW 12	-	18
EB 0	6	500	-	1.8	9	5.6	-	2
EB 1	10	700	-	1.8	11	7.5	-	4
EB 2	40	700	-	9	18	12.8	-	6
EB 3	100	500	-	11.5	22	16	-	10
EB 4	120	500	-	10	28	25	-	18

#### Associated technical data sheets:

- Restrictor check valves type BC: [D 6969 B](#)
- Restrictor check valves type BE: [D 7555 B](#)
- Orifice inserts type EB: [D 6465](#)

#### Similar products:

- Insert check valves type RK, RB, RC, RE, ER: [D 7445](#), [D 6969 R](#), [D 7555 R](#), [D 7325](#)

- Screw-in flow valves type BSE, QSE, MSE: [D 7121](#)
- Restrictor check valves type RD, ED, RDF: [D 7540](#), [D 2570](#)