Flow valves





Restrictors and restrictor check valve type EB, BE, BC

Restrictors are a type of flow valve. They are used as a local flow resistance that suddenly reduces the line cross-section. The reduction in the cross-section is very short. As a result the volumetric flow is only dependent on the pressure difference and not on the viscosity. The restrictor check valve type BE and BC combines the function of a metering valve with a check valve. The valve is available as a perforated restrictor or as a slotted restrictor. It limits the volumetric flow during the switching of directional valves. E.g. it limits the flow or prevents excessively quick accumulator emptying.

The orifice insert type EB is primarily used in valves for manifold mounting. As such an additional intermediate plate is not necessary.

Features and benefits:

- Max. 700 bar
- Simple design and installation

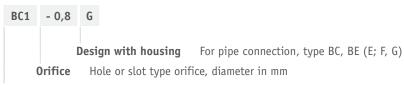
Intended applications:

- General hydraulics
- Winch controls
- Hydraulic pilot systems



| Nomen- clature: | Orifice Restrictor check valve |
|--------------------|--|
| Design: | Orifice insert Screw-in valve Version with housing for in-line installation |
| p _{max} : | 700 bar |
| Q _{max} : | 120 l/min |

Design and order coding example



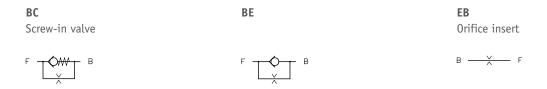
Basic type, size

Type BC, size 1 to 3

Additional versions

Type BC and BE with metric thread

Function

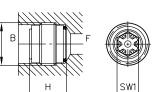


General parameters and dimensions

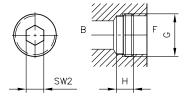
BC..

Screw-in valve

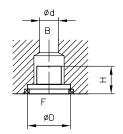
SW2



BE ..



EB.. Orifice insert



| | Q _{max} [l/min] | p _{max} [bar] | Thread | Dimensions | | | | m [g] |
|------|-----------------------------|---------------------------|---------|------------|---------|------------------|------------|----------|
| | | | | H [mm] | G / D | SW = a/f 1/Æd | 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 O | 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 valve type BC: D 6969 B
- Restrictor check valve type BE: D 7555 B
- Orifice type EB: D 6465

Similar products:

- Insert check valves type RK, RB, RC, RE, ER: <u>D 7445</u>, <u>D 6969 R</u>, <u>D 7555 R</u>, <u>D 7325</u>
- Restrictor check valves type RD, ED, RDF: <u>D 7540</u>, <u>D 2570</u>