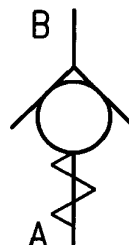


Check Valves, Size 04 ... 10
Plate-type, Screw-in Design
Series RVG ... 50 l/min, 250 bar



1 General

1.1 Product description

Series RVG-... units are screw-in check valves with mounting threads ranging from G 1/8" to G 3/4". For other thread forms, contact Bucher Hydraulics.

The valves prevent flow against the screw-in direction (A → B). In the opposite direction, the opening pressure is 0,2 ... 0,3 bar.

The units are spring-closed plate valves with hardened body, seat and valve plate. The sealing faces are diamond-lapped.

A metal cutting lip seals the leakage path between the valve and cavity wall.

The valves can be used for pressure relief in the opening direction, but only to a limited extent (consult Bucher Hydraulics for such applications).

1.2 Advantages

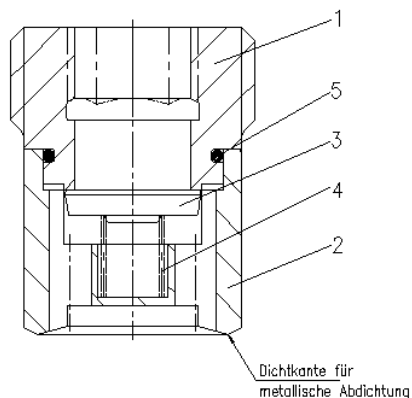
- Virtually leak-free
- High pressure rating
- Compact construction
- Particularly suitable for use as make-up check valves

2 Main characteristics

Designation	check valve / non-return valve
Design	geführte Plattenausführung
Mounting method	screw-in cartridge
Size	nominal 04 ... 10 mm. See table in section 5, Dimensions
Dimensions	see table in section 5, Dimensions
Mounting attitude	unrestricted
No-flow direction	A → B (see symbol)
Operating pressure range	... 250 bar
Opening pressure range	0,2 ... 0,3 bar
Flow rate, Q max.	... 50 l/min
Fluid	HL und HLP hydraulic oils to DIN 51524
Temperature range	-30°C ... + 80°C
Viscosity range	10 ... 500 cSt
Min. fluid cleanliness	18/14 to ISO 4406 / CETOP RP70H 8 ... 9 to NAS 1638

For applications outside these parameters, please contact Bucher Hydraulics.

3 Schematic section

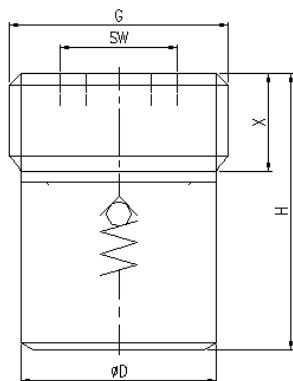


4 Components

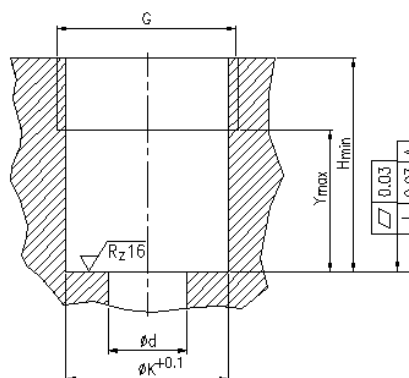
Item	Qty.	Description
1	1	Valve seat
2	1	Valve body
3	1	Valve plate
4	1	Spring
5	1	O-ring

5 Dimensions

5.1 Valve



5.2 Cavity type REG-03

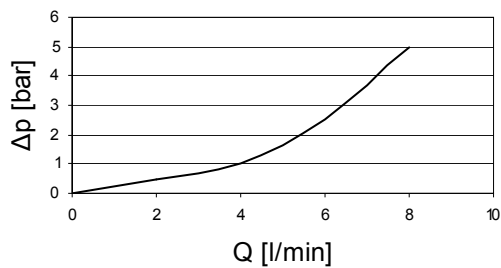


	Q Nom = Q _{max} (l/min)	G	ØD	H	X	SW	Tightening torque (Nm)	Ød	ØK	Y
RVG-04-ST	8	G1/8"	8,50	16,50	5,00	4	10	4,00	8,70	10,50
RVG-06-ST	15	G1/4"	11,50	20,00	7,00	6	20	6,00	11,75	12,00
RVG-08-ST	30	G3/8"	14,90	24,00	9,00	8	30	8,00	15,25	14,00
RVG-10-ST	50	G1/2"	18,70	26,50	10,00	10	60	11,00	19,00	15,50

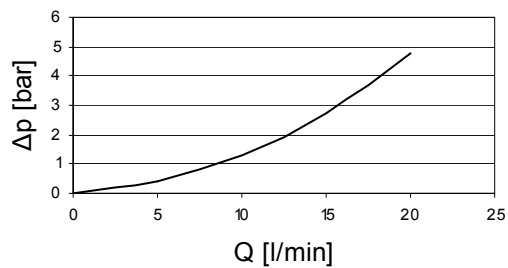
6 Performance graphs

measured with oil viscosity 33 cSt

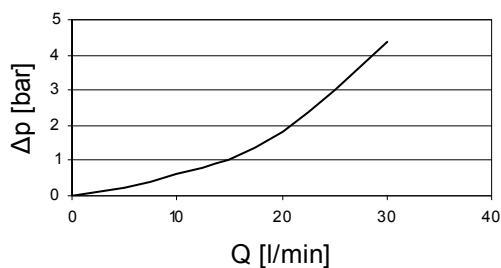
RVG-04
B → A



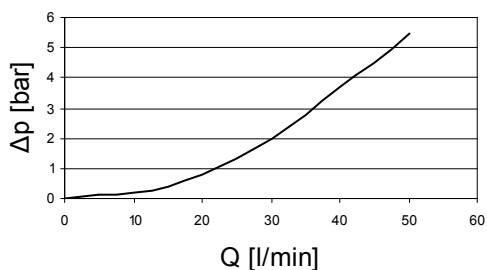
RVG-06
B → A



RVG-08
B → A

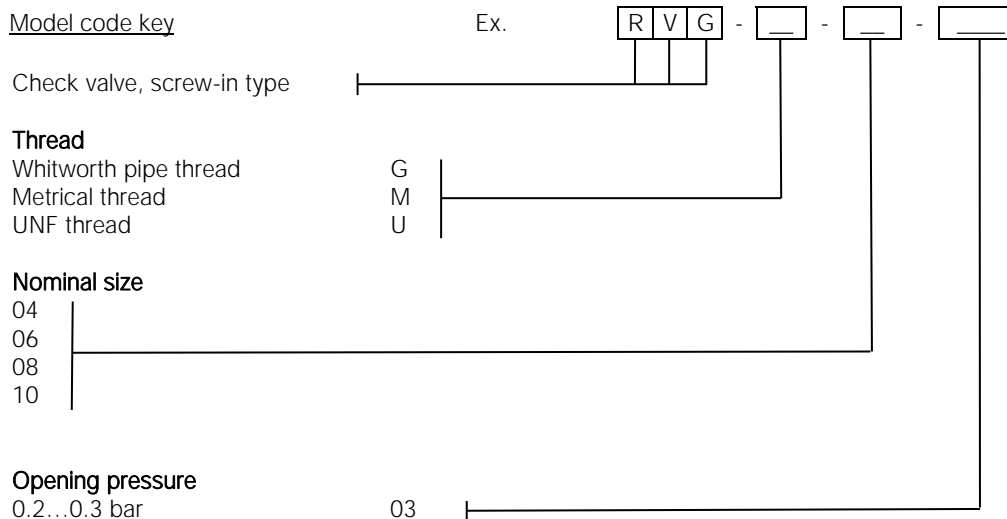


RVG-10
B → A



7 Ordering details

Model code key



Contact Bucher Hydraulics for further advice on:

- Other opening pressures
- Orifice diameters
- Special materials
- Customised designs

8 Design and installation notes

The installation dimensions and tolerances must be maintained.

Use the specified tightening torque when fitting the valve.

When fitting the valve, take particular care to ensure that:

Referring to the free-flow direction, nozzles and orifices must not be situated directly before the check valve. (see Data Sheet 170-P-059000-E)

We offer form tools for hire or sale.

- the valve cutting lip is firmly seated on the sealing surface
- valve components are not deformed by the use of excessive force

9 Application notes

The maximum operating pressure must not be exceeded and any pressure peaks must be taken into consideration.

In applications such as accumulator circuits, where sudden pressure can be applied to the valve in the free-flow direction, ensure that the specified flow ratings are not exceeded. In dynamic accumulator circuits, use the internally damped valves.

Buyers bear the sole responsibility for ensuring that the selected products are suitable for their applications. Buyers normally establish this by undertaking qualification programs on test stands, or by evaluating the performance of prototype machines or systems.

The specified nominal flow rate must not be exceeded.