

- Check valve size 04 ... size 16
- Spherical poppet-type, Screw-in design
- up to 80 l/min; 350 bar (500 bar on request)



Description

Series RKVG units are screw-in check valves with mounting threads from G 1/8" to G 3/4". Other thread forms are available on request.

Identical cavities allow the replacement with valves of the series RKVE and RVE.

The valves prevent flow against the screw-in direction A→B (see symbol). In the opposite direction, there is a range of opening pressures from 0,2 to 1 bar.

The units are spring-closed spherical poppet valves with hardened poppet and seat. The poppet is fully guided.

A metallic sealing edge seals the leakage path between the valve and cavity wall, or an o-ring (only size 06 ... 16)

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

Advantages:

- virtually leak-free
- high pressure rating
- compact construction
- spring enclosed

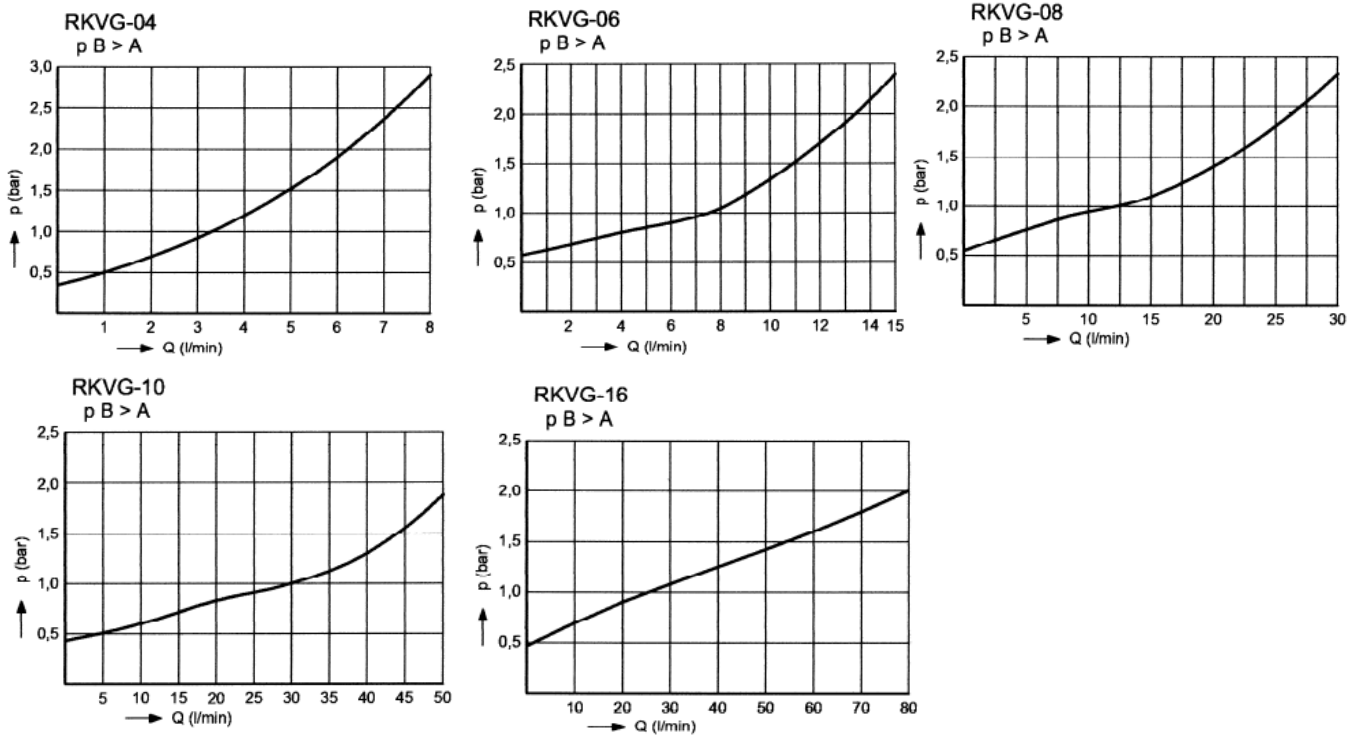
Technical Data

General Specifications	RKVG
Design:	spherical poppet design
Mounting method:	screw-in cartridge
Size:	nominal 04 ... 16 (see table Dimensions)
Mounting position:	unrestricted

Hydraulic Specifications	
No-flow direction:	A → B (see symbol)
Max. pressure:	350 bar (500 bar on request)
Opening pressure range:	0,2 ... 1 bar
Max. flow:	80 l/min
Fluid:	hydraulic oils HL and HLP according DIN 51524
Temperature range:	-30°C ... + 80°C
Viscosity range:	10 ... 500 mm ² /s (cSt)
Min. fluid cleanliness	18/14 to ISO 4406 / CETOP RP70H 8 ... 9 to NAS 1638

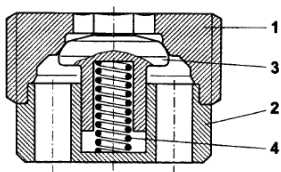
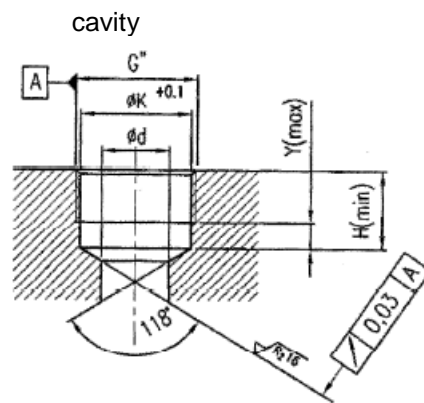
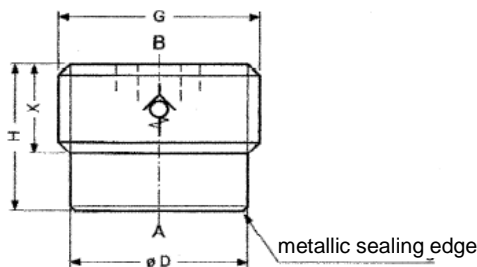
Characteristics

oil viscosity 33 mm²/s (cSt)



Dimensions

valve with metallic sealing edge



Item	Qty.	Description
1	1	Valve seat
2	1	Valve body
3	1	Valve poppet
4	1	Spring

	Q _{Nom.} = Q _{max.} (l/min)	G	øD	H	X	width across flats SW	øK	ød _{max}	Y _{max}	H _{min}	Tightening torque (Nm)
RKVG-04-...	8	G1/8"	8,5	9,0	5,5	3,5	8,70	6,0	2,5	10,0	8
RKVG-06-...	15	G1/4"	11,6	11,3	6,3	5,0	11,75	8,0	4,0	11,5	20
RKVG-08-...	30	G3/8"	14,9	13,0	7,8	6,0	15,25	11,5	4,0	13,5	25
RKVG-10-...	50	G1/2"	18,8	15,0	9,6	8,0	19,00	15,5	4,5	16,0	40
RKVG-16-...	80	G3/4"	24,2	18,5	11,5	10,0	24,50	20,0	6,0	19,0	60

Type code

RKVG	-...	-...	
			<p>Opening pressure omit = standard 0,5 bar 0,1 = 0,1 bar 0,2 = 0,2 bar 1 = 1 bar</p> <hr/> <p>Nominal size 04 06 08 10 16</p> <hr/> <p>Check valve, spherical poppet type, screw-in design, no-flow direction in opposite to screw-in direction</p>

Options on request:

- with metric or UNF thread
- other opening pressures
- special materials
- customised design

Ordering example

- Check valve, spherical poppet type, screw-in design, no-flow direction in opposite to screw-in direction
- Nominal size 06, G 1/4"
- Opening pressure 1 bar

Type code

RKVG-06-1

Design and installation notes

The installation dimensions and tolerances must be maintained.

Use the specified tightening torque when fitting the valve.

Referring to the free-flow direction, nozzles and orifices must not be situated directly before the check valve.

Application notes

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

The specified nominal flow rate must not be exceeded. 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.

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

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

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 evaluating the performance of prototype machines or systems.