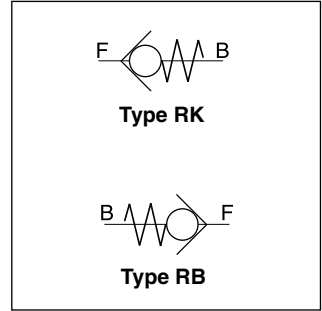


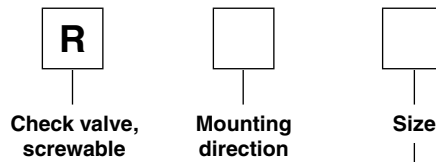
Characteristics / Ordering Code

The check valves series RK and RB are designed to go into simple, threaded cavities. The connection is O-ring sealed on the 118° shoulder in the mounting cavity.

The valve body is supplied as a unit, with a spring loaded, hardened and polished semisphere of stainless bearing steel inside. The seat is also hardened and ground.



Ordering code



Code	Mounting direction
K	in the blocked direction
B	in open flow direction

Code	Flow [l/min]	Thread	Seal
0 ¹⁾	10	G1/8A	NBR
1	20	G1/4A	NBR
2	50	G3/8A	NBR
3	80	G1/2A	NBR

Bold letters =
Short-term availability

¹⁾ Only series RK available.

Technical data

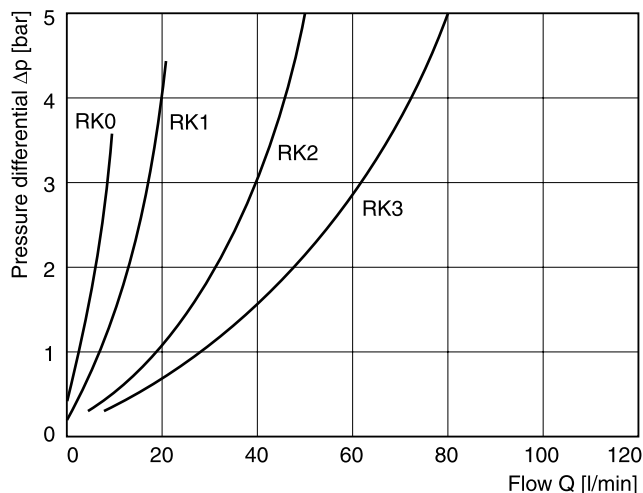
Series design with pipe thread

General								
Code		RK0	RK1	RK2	RK3	RB1	RB2	RB3
Flow	[l/min]	10	20	50	80	20	50	80
Operating pressure	[bar]	700	700	700	500	700	700	500
Opening pressure	[bar]	0.15	0.18	0.2	0.25	0.15	0.07	0.17
Thread (DIN ISO 228/1)		G1/8A	G1/4A	G3/8A	G1/2A	G1/4A	G3/8A	G1/2A
Tightening torque* ±20 %	[Nm]	10	15	20	40	15	20	40
Weight	[g]	5	5	15	15	5	15	20
Mounting position		unrestricted						
Ambient temperature	[°C]	-20 ... +60						
Hydraulic								
Fluid		Hydraulic oil according to DIN 51524						
Fluid temperature	[°C]	-25...+70						
Viscosity,	permitted	[cSt] / [mm²/s]	20 ... 400					
	recommended	[cSt] / [mm²/s]	30 ... 80					
Filtration		ISO 4406 (1999); 18/16/13						

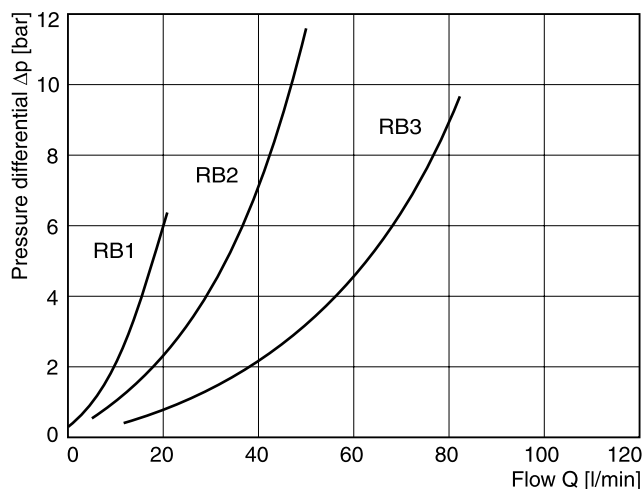
* In case of strong vibration, it is recommended to secure the mounting threads.

Δp/Q performance curves

Type RK



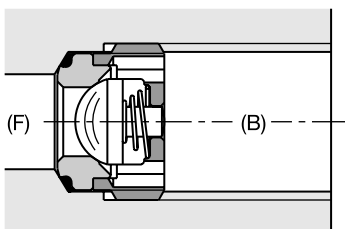
Type RB



All characteristic curves measured with HLP46 at 50 °C.

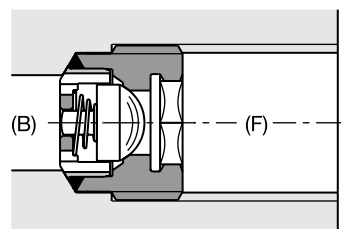
Mounting direction

Type RK



Screwed in, in the blocked direction

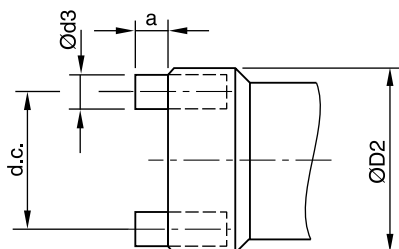
Type RB



Screwed in, in the open flow direction

Mounting tool

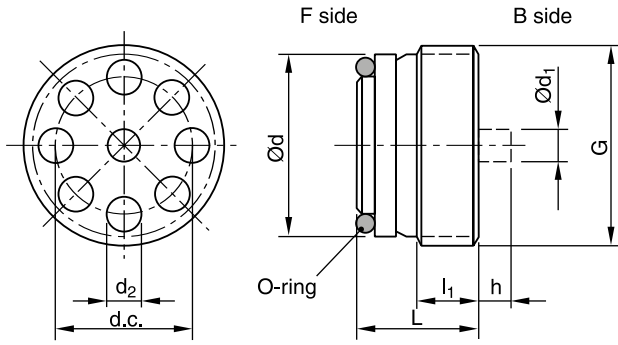
Type RK



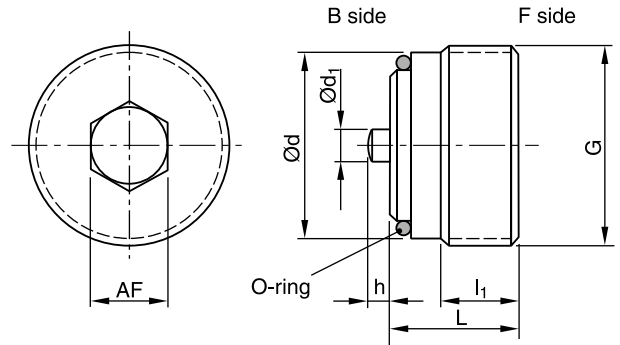
Type	Ordering number	D ₂	a	d ₃
RK0	5005216	8.6	2	1.5
RK1	5005217	11.5	2.5	2
RK2	5005218	15	2	2.5
RK3	5005219	18.8	4	3.5

Dimensions

Type RK



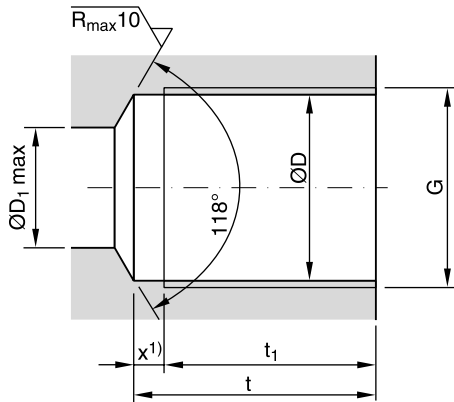
Type RB



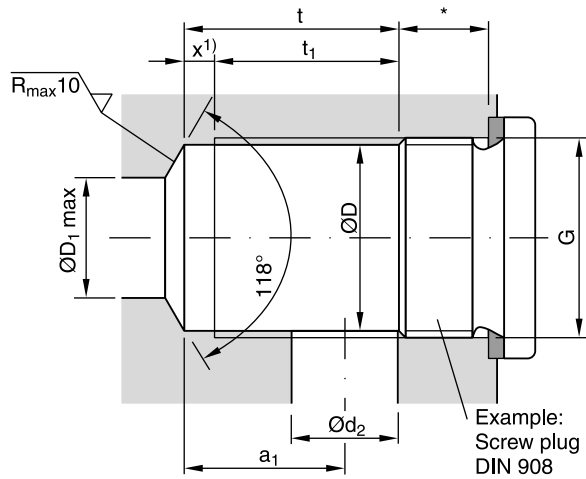
Type	Thread	L	l ₁	d	d ₁	d ₂	h	d.c.	O-ring	Nm
RK0	G1/8A	7.2	3.8	8.6	2	1.5	1.3	6.8	6x1	8
RK1	G1/4A	9	4.5	11.5	2.6	2.2	1.5	8.8 _{-0.1}	9x1	15
RK2	G3/8A	11.5	6.5	15	3.4	3	2.5	11	11x1.5	20
RK3	G1/2A	13.5	8	18.5	4.3	3.8	3	14.2 _{-0.1}	14x1.5	40

Type	Thread	L	l ₁	d	d ₁	h	AF	O-ring	Nm
RB1	G1/4A	10.3	5.5	11.6	2.2	1.3	5	9x1	15
RB2	G3/8A	11.5	7.0	15	3	2	6	11x1.5	20
RB3	G1/2A	13.15	8	18.5	3.4	2.5	8	14x1.5	40

Type RK



Type RB



Type	Thread	D	D ₁	t	t ₁ ²⁾	x ¹⁾
RK0	G1/8	8.7	5	16	13.7	2.3
RK1 and RB1	G1/4	11.8	8	22	19	3
RK2 and RB2	G3/8	15.25	9	24.5	21.5	3
RK3 and RB3	G1/2	19	12	29	25.5	3.5

Type	Thread	D	D ₁	t	t ₁ ²⁾	x ¹⁾	a ₁	d ₂
RK0	G1/8	8.7	5	12.3	10	2.3	9.5	5
RK1 and RB1	G1/4	11.8	8	14	11	3	11	6
RK2 and RB2	G3/8	15.25	9	17	14	3	13	8
RK3 and RB3	G1/2	19	12	22	18.5	3.5	16	12

Mounting cavity

- for connecting in combination with tube fitting
- for internal line channels

* Required depth depending on type of screw plug, connecting plate etc. used.

1) Thread runout x must be maintained. It may be smaller, but not larger (requirement for a perfect seal using the O-ring).

2) Fully cut-out thread