

## Check valve type RK, RB, RC, RE and ER

Check valves are a type of non-return valve. They block the oil flow in one direction and open in the opposite direction. In the closed state they have zero leakage. The check valve type RK, RB, RC and RE can be screwed-in, type ER can be plugged-in. The spring-loaded ball check valve type RK, RB and ER is very robust and insensitive to soiling. The spring-loaded plate valve type RC can be screwed-in in any direction and is particularly suitable for fast switching sequences. Type RE is a plate valve without a spring. Type ER can be integrated directly in valves for manifold mounting. As such an additional intermediate plate is not necessary for the check valve function. Type RE is suitable for isolating pressurising loads or as a foot valve for a pump suction line.

### Features and benefits:

- Operating pressures
- Easily machined mounting holes
- Sturdy
- Type RK, RB also available with different pre-load pressures

### Intended applications:

- General hydraulic systems
- Hydraulic pre-loading



<b>Nomenclature:</b>	Check valve
<b>Design:</b>	Insert valve Plug-in valve Combination with housing for pipe connection
<b>p<sub>max</sub>:</b>	700 bar
<b>Q<sub>max</sub>:</b>	620 lpm

### Design and order coding example

RC 2 - E

**Design with housing** For pipe connection (E, F, G), type RK, RB and RC

**Basic type, size** Plug-in check valve  
 Type RK, RB, size 0 ... 7  
 Type RC, size 1 ... 3  
 Type RE, size 0 ... 4  
 Type RE, ER (check valve insert), size 0 to 4

### Additional versions:

- Type RK with increased open-up pressure
- Type ER, stainless (size 01 ... 31)
- Type RK, RB, RC and RE with metric thread
- Type RK, RB with UNF thread

### Function

**RK**  
Ball seated valves



**RB**



**ER**



**RC**

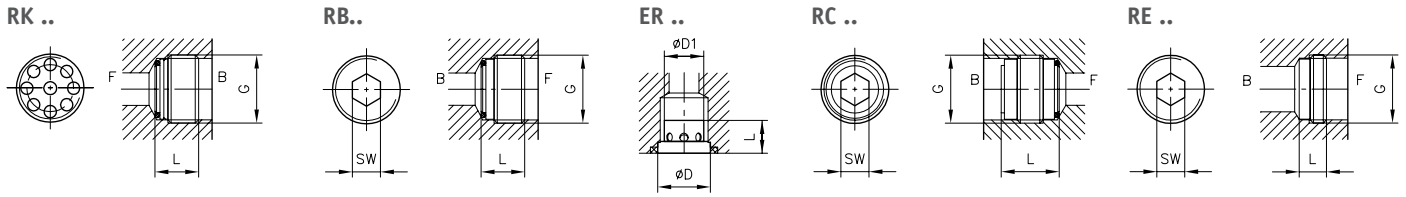
Shim type valves



**RE**



## General parameters and dimensions



	Q <sub>max</sub> [lpm]	p <sub>max</sub> [bar]	Ports	Dimensions [mm]		m [g]
				L	SW	
RK 0/RB 0	10	700	G 1/8 A, 7/16-20 UNF	7.2/7.9	SW 5	5
RK 1/RB 1	20	700	G 1/4 A, 9/16-18 UNF	9/10.3	SW 7	5
RK 2/RB 2	50	700	G 3/8 A, 9/16-18 UNF	11.2/11.7	SW 6	15
RK 3/RB 3	80	500	G 1/2 A, 9/16-18 UNF	13.5/13.2	SW 8	15/20
RK 4/RB 4	120	500	G 3/4 A, 9/16-18 UNF	17.5/17.5	SW 12	35/40
RK 5	240	500	G 1 A	22	-	85
RK 6	400	420	G 1 1/4 A	27.5	-	135
RK 7	620	420	G 1 1/2 A	35	-	280
RC 1	20	700	G 1/4 A	13	SW 4	6
RC 2	35	700	G 3/8 A	15	SW 5	13
RC 3	60	500	G 1/2 A	18	SW 8	24
RE 0	12	500	G 1/8 A	5	SW 4	2
RE 1	25	500	G 1/4 A	6	SW 5	4
RE 2	40	500	G 3/8 A	7	SW 8	6
RE 3	70	450	G 1/2 A	7.5	SW 10	10
RE 4	120	400	G 3/4 A	9	SW 12	18
				<b>L</b>	<b>D/D1</b>	<b>m[g]</b>
ER 0	6	500	G 1/8 A	5.6	6.1/4.6	0.5
ER 1	12	500	G 1/4 A	5.6	8.6/6.5	1
ER 2	30	500	G 3/8 A	8	14/10.5	5
ER 3	65	500	G 1/2 A	10	17/13	9
ER 4	120	400	G 3/4 A	17.5	28/21	40

### Associated technical data sheets:

- Check valve type ER and EK: [D 7325](#)
- Check valve type RE: [D 7555 R](#)
- Check valves, type RC: [D 6969 R](#)
- Check valve type RK and RB: [D 7445](#)

### Similar products:

- Check valve type CRK, CRB and CRH: [D 7712](#)
- Check valves, type B: [D 1191](#)

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