

Check valves with release type RH and DRH

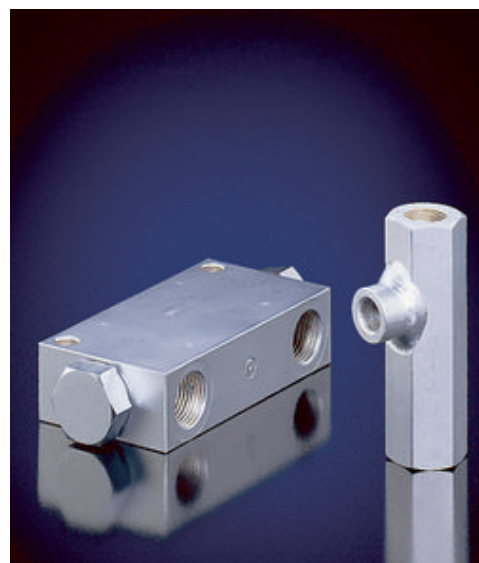
Check valves with hydraulic release are used to block one or both hydraulic consumer pipes or as a hydraulically actuated drain or circulation valve. The valves type RH and DRH are also available with pre-release for one or both sides of the connection to suppress decompression surges for circuits with high pressures and high consumer flows.

Features and benefits:

- Pressures up to 700 bar
- With pre-release for smooth switching

Intended applications:

- Blocking of leak-free hydraulic cylinders in connection with a directional spool valve control suffering from leaking oil
- Return flow relief if return oil flows that are greater than the permissible flow for the directional valve are experienced due to the surface ratio, when introducing a double-acting hydraulic cylinder
- Hydraulically actuated drain or circulation valve



Check valve with hydraulic release or releasable double check valve	Check valve with hydraulic release or twin check valve
Design:	Individual valve for <ul style="list-style-type: none"> ■ Pipe connection ■ Manifold mounting
Hydraulic	Hydraulic
400...700 bar	400...700 bar
15...160 lpm	15...160 lpm

Design and order coding example

RH 3	V
Function	Without pre-release (-) With pre-release (V)
Basic type, size	Releasable check valve RH, size 1 to 5

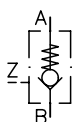
DRH 3 LSS	- 30	/100
Pre-charge pressure [bar]		
Pressure setting [bar]		
Basic type, size, function	Releasable double check valve DRH, size 1 to 5	

Additional versions:

- With pre-release (one or both sides)
- With shock valves (for hydraulic motors)
- With safety valve preventing slow pressure rises
- With leakage port preventing unintended open-up when pressure migrated from the control side
- Manifold mounting version (type DRH3P)

Function

RH

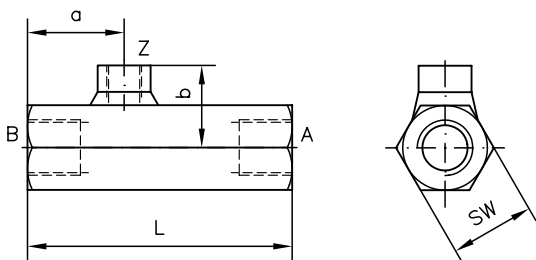


DRH

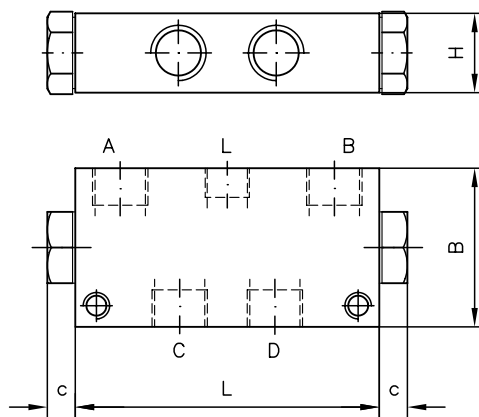


General parameters and dimensions

RH..



DRH..



	Q_{\max} [lpm]	p_{\max} [bar]	Release ratio $p_{A(B)}/p_Z$	Tapped ports (BSPP)		Dimensions [mm]				m [kg]
				A, B, C, D	Z	L	a	b	SW = a/f	
RH 1	15	700	2.7	G 1/4	G 1/4	84	31.5	27	SW 24	0.4
RH 2	35	700	3	G 3/8		90	32	28.5	SW 27	0.4
RH 3	55	500	2.4	G 1/2		100	36.5	31	SW 32	0.6
RH 4	100	500	2.4	G 3/4		126	45	35.5	SW 41	1.3
RH 5	160	500	3	G 1		143	52	38	SW 46	1.8
						L	B	H	c	
DRH 1	16	500	2.5	G 1/4	-	70	45	20	8	0.5
DRH 2	30	500		G 3/8		89	60	30	10	1.2
DRH 3	60	500		G 1/2		115	60	30	13	1.6
DRH 4	90	400		G 3/4		150	70	40	15.5	2.9
DRH 5	140	400		G 1		195	80	50	17	5.5

Associated technical data sheets:

- Releasable check valves type RH: [D 6105](#)
- Releasable twin check valves type DRH: [D 6110](#)

Similar products:

- Type RHV: [D 3056](#)
- Type CRH and RHC: [D 7712](#), [D 7165](#)
- Type HRP: [D 5116](#)