

BENCOR (Pty) Ltd.

Check valves



Check valves and pre-fill valves type F

The check and pre-fill valves, type F, utilize a spring pre-loaded valve head.

The check valves, type F, enable free flow in one direction and block the flow in the opposite direction.

This valve is used as a high flow valve (check valve with hydraulic release) in top ram presses for quickly draining and replenishing press cylinders during opening and closing in rapid traverse mode.

The smaller sizes may be equipped with a pre-release device as an option to prevent pressure surges during decompression (high volume and high pressure surge).

Nomenclature: Check valve
Check valve with hydraulic release (pre-fill valve)

Design: Intermediate section between pipe flanges

Actuation: Hydraulic

P_{max}: 400 bar

Q_{max}: 100...4000 l/min



Basic types and general parameters

Basic type and size	Pre-fill valve	Flow Q _{max} (l/min)	Oper. pressure P _{max} (bar)	Release ratio P _A / P _Z	Symbol
F 25	F 25-12	100	400	4,3	pre-fill valve
F 32	F 32-16	160	400	3,6	
F 40	F 40-20	250	400	3,9	check valve
F 50	F 50-25	400	400	4,2	
F 63	F 63-30	630	400	4,2	check valve
F 80	F 80-36	1000	400	4,5	
F 100	F 100-45	1600	400	4,3	check valve
F 125	F 125-60	2500	400	4,3	
F 160	F 160-76	4000	400	4,3	check valve

Additional versions

- Pre-fill valves with pre-release (size 25 bis 80)

- Servo-suction and return control valves type N used as simple check valves or as check valves with hydraulic release (response pressure may be lower or higher than in the main duct) for bottom ram presses

Order examples

F 100 - 45
Pre-fill valve size 100

F 100
Check valve size 100