

## Selection advice

If the valve is to be screwed directly into a hydraulic cylinder, please order model VSM-11.

If the valve is to be combined with the directional valve of a power pack, please order model VSM-21. (see picture on page 410).

# VSM Safety-check valves

## 700 bar

These safety-check valves are used for those applications where pressure drops must be avoided (e.g. holding of a lifted load). Depending on the location in a hydraulic circuit, these valves can have different functions. The model VSM-11 can be directly screwed into the oil port of a hydraulic cylinder and works at this location as a "hose break fuse". The design of the VSM-21 is suitable for a combination with VHP directional valves.

At this location the VSM-21 ensures that the pressure is held precisely and that pressure drops caused by operating the directional valve are avoided.

## Operation

After closing the relief valve (hand wheel) the cylinder can be advanced via the by-pass. In direction to the cylinder the valves always have free flow. The built-in check valve ensures that a pressurized cylinder (e.g. a lifted load) is held precisely in stop position.

A smooth lowering speed can be adjusted by opening the throttle valve (hand wheel) in order to relieve the pressure. A safety pressure valve protects the cylinder from being overloaded by external loading.

## Technical data VSM

Model	ArtNo.	Operating pressure max. bar	Control	Oil-port cylinder side A	Oil-port pump side B	Width mm	Weight kg
VSM-11	N14100921	700	Check valve	3/8-18 NPT outer	3/8-18 NPT inner	6	0.9
VSM-21	N14100972	700	Check valve	3/8-18 NPT inner	3/8-18 NPT outer	6	1.0

## Dimensions VSM (housing incl. hand wheel)

Model	VSM-11	VSM-21
Length, mm	65	65
Width, mm	60	60
Height, mm	110	110

