

## 1 General

Pilot operated spring-loaded conical seat valve in cartridge form.

Hardened components (Seat and cone) guarantees no oil leakage in neutral position and longer life-spans. The valve offers security against unintended lowering of load if a feed-line breaks.

### 1.1 Applications

For sensitive support cylinder movements and similar applications up to 500 bar.

### 1.2 Mounting location (Recommendation)

The pilot-operated check valve cartridge is built directly into the cylinder or used in a valve block.

## 2 Function

The valve is designed for leakagefree locking of outrigger cylinders. Without inlet pressure A1 and B1 are locked leakagefree.

The inlet to the cylinder is provided by a check valve.

The locked outlet side of the valve is opened each with the inlet pressure of the opposite side. The valve is designed as double stage valve with pilot and main stage. The valve is opened if the inlet pressure exceeds 11% of the pressure of the locked cylinder side (9:1).

For valve version 421.082.429.9 the main stage opens with the pilot stage, other versions are available.

The free cross section of the main stage corresponds with a 5,4 mm orifice.

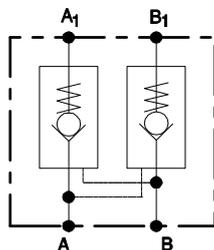


A possible pressure increase on the rod side of the cylinder has to be checked. Cylinder ratio and flows have to be considered.

## 3 Characteristics

- Leakage-free support cylinder protection
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## 4 Hydraulic Diagram



### Connections:

A, B Inlet port  
A<sub>1</sub>, B<sub>1</sub> Cylinderport

## 5 Technical Data

### 5.1 General

Installation position:	Any
Weight:	0.42 kg
Maximum input pressure:	500 bar
Connections:	Step drill
Opening ratio:	9 : 1 pilot and main stage
RV function:	A to A <sub>1</sub> ; B to B <sub>1</sub>
Leakage rate:	Q <sub>max</sub> = 1 cm <sup>3</sup> /h (= 16 drops/h)

### 5.2 Hydraulics

Inlet flow:	70 l/min
Hydraulic fluid:	Mineral oil (HL, HLP) conforming with DIN 51524, other fluids upon request
Hydraulic fluid temperature range:	-20 – +80 °C
Environmental temperature:	< +50 °C
Viscosity range:	2.8 – 500 mm <sup>2</sup> /s
Contamination grade:	Filtering conforming with NAS 1638, class 9, with minimum retention rate β <sub>10</sub> ≥ 75

### 5.3 Standards

The following standards are to be observed because of the surface temperatures on the check valve:

- EN 563  
Temperatures on surfaces that can be touched.
- EN 982  
Safety-technical requirements for fluid-technical systems and their components.

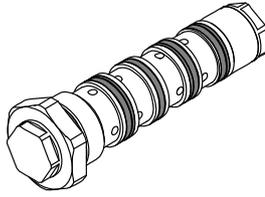
## 6 Installation

### General Information

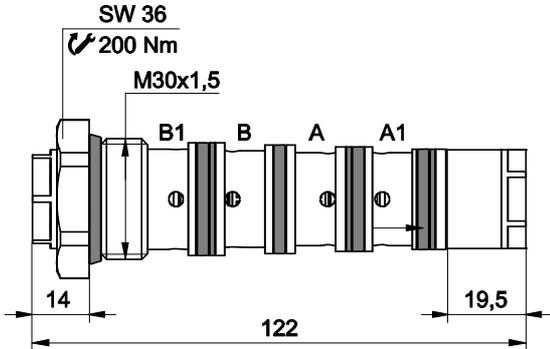
- Observe all installation and safety information of the construction machine manufacturer.
- Only technically permitted changes are to be made on the construction machine.
- The user is to ensure that the device is suitable for the respective application.
- Application exclusively for the range of application specified by the manufacturer.
- Before installation or deinstallation, the hydraulic system is to be depressurized.
- Settings are to be made by qualified personnel only.
- Opening is only to be performed with the approval of the manufacturer, otherwise the warranty is invalidated.
- No responsibility is taken for the correctness of these connection recommendations, the functionality and the technical details of the construction machine must be checked.

# Check valve cartridge double, unlockable

421.082.429.9



## 6.1 Installation



## 6.2 Connection Dimensions

The locations of the holes A, A1, B and B1 are optional on the edges.

