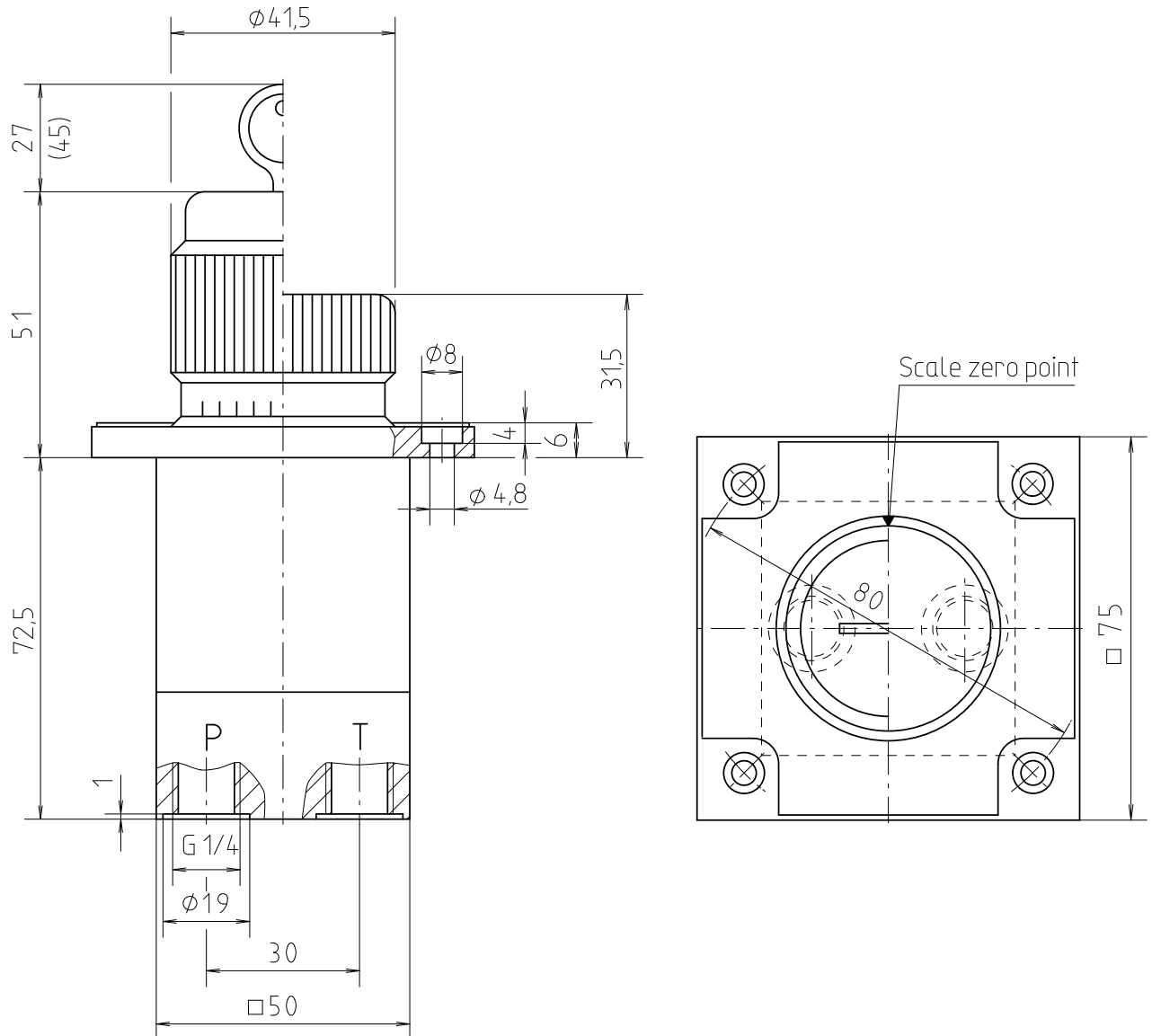


A valve which limits maximum pressure by exhausting fluid when the required pressure is reached.

#### FEATURES

- Scaled control knob, setting angle 325°
- Control knob can be locked optionally - VW locking E 10
- 4 setting volume flow ranges
- Pipe conduit connection: Screw holes - to DIN 3852 T.2
- Standard sealing material Buna N (NBR)



#### ORDER DATA

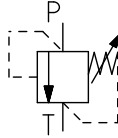
The delivery scope includes for the, "S" model one safety key.

|                                       |  |     |   |  |  |
|---------------------------------------|--|-----|---|--|--|
| Name                                  | Pressure Relief Valve                    | 614 | A |  |  |
| Type series                           |  |     |   |  |  |
| Series code letter                    |  |     |   |  |  |
| Actuation:                            | Control knob without lock = without Code |     |   |  |  |
|                                       | Control knob with lock = S               |     |   |  |  |
| Rated set pressure in bar:            | 70; 140; 210; 315                        |     |   |  |  |
| Supplementary data for special models | e.g. special Viton sealings (FKM) = M15  |     |   |  |  |

# CHARACTERISTICS

## 1. General

Symbol



Design one stages; seat valve, hydrodynamics damped  
Weight 1,5 kg  
Mounting position any  
Direction of volume flow P to T  
Ambient temperature -25°C to +80°C

## 2. Hydraulic characteristics

Nominal pressure  $\cong$  Max. pressure connection P = 315 bar  
connection T = 70 bar  
Adjustment volume flow 5 - 70 bar; 5 - 140 bar; 5 - 210 bar; 5 - 315 bar  
Volume flow check valve 5 L/min  
Volume flow signal function see Fig. 1  
Hydraulic fluid Hydraulic oil according to DIN 51 524 (1.2)  
Hydraulic fluid temperature range -20°C to +70°C  
Viscosity range 5 - 350 mm<sup>2</sup>/s  
Contamination level/filtering General permissible class 19/16 according to ISO 4406 or 10 according NAS 1638 (recommended filter: min. retaining rate  $\beta_{20} \geq 75$ )

## 3. Type of actuation

Manual via control knob

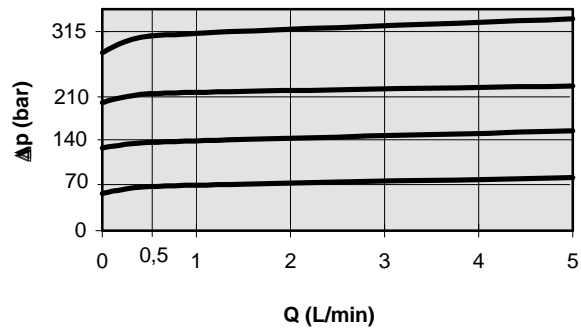
Controlling torque  
Setting angle

325°

### Volume flow signal function $\Delta p$ -Q-characteristic

Fig. 1 shows the volume flow dependency by the different adjustment pressure controlling.

Fig. 1



## DESCRIPTION OF THE VALVE

### 1. Valve

The valve consists of one stag (directly operated); seat valve perpetration. The valve cone is in the lock movement hydrodynamics damped, the opening movement is non damped. The volume flow can be controlled by means of the scaled control knob.

The valve has two connections, **P** and **T** for inlet and outlet.

### 2. Material

The valve parts are made from engineering steel. The valve housing is galvanized, all wear parts are hardened. The connecting flange with pipe conduit connection is burnished. The front plate with flange is burnished and the orifice is from aluminium. The unlockable control knob is made from aluminium with core plastic. The lockable control knob is made from aluminium, the inlet parts are steel made from (burnished) and the lock cylinder is made from brass.

For applications in excess of the given specifications, please contact Schiedrum.

All specified parameters are partially based on long user's experience and partly on measurements made in laboratories. The data are typical of the valve and can deviate in series. All measurements were carried out on a test stand with an oil viscosity of 36 mm<sup>2</sup>/sec and a filter mesh of < 25 μm. All data given here should be used as description for the product only and they are not to understand as warranty (*zugesicherte Eigenschaft*) in the sense of law.