### **Characteristics**

- · Nominal pressure PN 16
- Regulating capability  $\frac{k_{VS}}{k_{Vr}} > 25$
- · Double seated
- · Linear characteristic

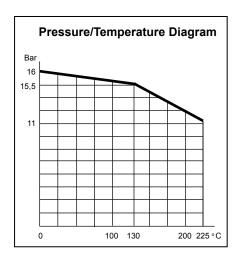
# **Applications**

Control valves type L2S are designed for regulation of hot water and lubricating oils.

The valves are installed combined with one of our self-acting thermostats, pressure differential regulators or electric valve actuators for regulation in central heating plants, industrial plants, industrial processes or marine installations.

# **Dimensioning**

For sizing of control valves and selection of actuators please see "Quick Choice" leaflet no. 9.0.00.



#### Design

The valve body, seats and cone are made of gun metal RG 5. The stem is made of brass.

The thread for the actuator connection is G1B ISO 228.

The valves are double seated and designed for tight closure. The leakage rate is less than 0.5% of the full flow (according to VDI/VDE 2174).

# **Quality assurance**

All valves are manufactured under an ISO 9001 certification, and are pressure and leakage tested before shipment.

#### **Function**

Without the actuator being connected, the valve is held in open position by means of a spring. With pressure on the spindle the valve will close.

In connection with our thermostats or electric actuators, the valves will close at rising temperatures. For cooling circuits a reverse acting valve can be used.

The linear characteristic will not cease, until the flow has dropped below 4% of the full flow.



## **Technical Data**

Materials:

- valve body Gur - components Gur - stem Bra:

Nominal pressure Seating

Valve characteristic Leakage Temperature range

Mounting
Internal connection
threads

Gun metal RG 5 Gun metal RG 5

Brass PN 16 Double seated

Linear  $\leq 0.5\%$  of  $k_{vs}$  See pressure/tem-

perature diagram See page 2

ISO 7/1

| Specifications |                    |                 |               |                                |                      |                     |
|----------------|--------------------|-----------------|---------------|--------------------------------|----------------------|---------------------|
| Туре           | Connection threads | <b>DN</b><br>mm | Opening<br>mm | k <sub>vs</sub> -value<br>m³/h | Lifting height<br>mm | <b>Weight</b><br>kg |
| 40 L2S         | Rp 1½              | 40              | 40            | 20                             | 8                    | 2.9                 |
| 50 L2S         | Rp 2               | 50              | 50            | 30                             | 9                    | 3.8                 |

Subject to change without notice.



### Definition of k<sub>vs</sub>-value

The  $k_{vs}$ -value is identical to the IEC flow coefficient  $k_v$  and defined as the water flow rate in m³/h through the fully open valve by a constant differential pressure,  $\Delta p_v$ , of 1 bar.

### Mounting

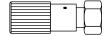
The valves can be installed with vertical as well as horizontal spindles. For valve temperatures of max. 170°C, the thermostat/actuator can be fitted below or above the valve. For valve temperatures above 170°C, a cooling unit of type KS 4 has to be applied with connection downwards.

#### Strainer

It is recommended to use a strainer in front of the control valve if the liquid contains suspended particles.

#### **Accessories**

**Manual Adjusting Device** 

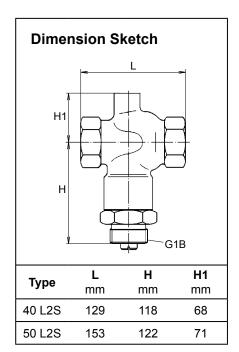


The device has a built-in stuffing box. For sealing and manual operation of valves when an actuator has not been fitted, e.g. during periods of construction (max. 170°C).

### **Cooling Unit KS-4**



Cooling unit protecting the stuffing box of the electric actuator/thermostat. To be applied at valve temperatures between 170°C and 250°C.



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E-mail: mail@cloriuscontrols.com Web: www.cloriuscontrols.com