# 2-way Control Valve type L1S

Gun Metal, PN 16, DN 15/6 – 20 mm. Single Seated

0-2.2.02-L Page 1 of 2



## **TECHNICAL DATA**

#### **Materials:**

- Valve body
- Components

- Gasket Nominal pressure Seating

Flow characteristic

Leakage rate
Regulating capability
Internal connection threads
Single seated and tight closing

Gun metal RG 5
Stainless steel
Reinz AFM34
PN 16
Single seated
Quadratic
≤ 0.05% of Kvs
Kv5/Kvr > 25
ISO 7/1

## **APPLICATIONS**

Control valves type L1S are designed for regulating low, medium and high pressure hot water, steam and lubricating oils with thermostats, pneumatic or electric actuators. The valves are installed combined with temperature or pressure differential regulators in control systems for heating of domestic premises, district heating, industrial processes or marine installations. They can also be used in cooling applications when used with an electric actuator.

## **DESIGN**

The valve components - spindle, seat and cone - are made of stainless steel. The valve body is made of gun metal RG 5. The thread for the actuator connection is G1B ISO 228. The valve is single seated. The leakage rate is less than 0.05% of the full flow (according to VDI/VDE 2174).

## **FUNCTION**

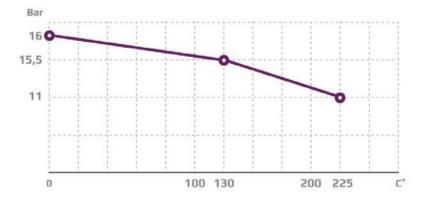
Without the actuator being connected, the valve is held in open position by means of a spring. With pressure on the spindle the valve will close. In connection with thermostats, pneumatic or electric actuators, the valve will close at rising temperatures. For cooling circuits the valve can be used in conjunction with a reverse acting electric actuator. Alternatively a reverse acting valve can be used with our self-acting thermostats. The quadratic characteristic will not cease, until the flow has dropped below 4% of the full flow.

## **FEATURES**

- Simple design secures reliable controls and reduces costly downtime.
- Location of the pack box in the actuator makes the valve service friendly.
- Reliable and secure due to internal parts of stainless steel.
- · Low leakage rate reduces the risk of overheating

#### PRESSURE/TEMPERATURE DIAGRAM

According to DIN 2401



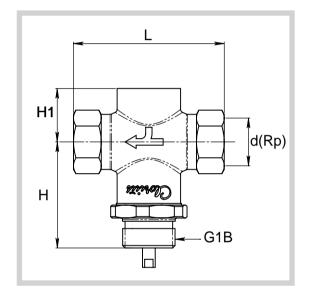
Subject to change without notice.



# MOUNTING

The valve 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 mounted with thermostats in media temperatures above 170 °C, a cooling unit has to be applied with connection downwards (please refer to data sheet for thermostat accessories). For electric actuators a high temperature adaptor must be used (please refer to datasheets for the electric actuators).

# **DIMENSION SKETCH**



Туре	<b>L</b> (mm)	<b>H</b> (mm)	<b>H1</b> (mm)	d
15/6 L1S	85	65	20	Rp ½
15/9 L1S	85	65	20	Rp 1⁄2
15/12 L15	85	65	20	Rp ⅓
15 L15	85	65	26	Rp ⅓
20 L15	95	67	32	Rp ³⁄₄

## **SPECIFICATIONS**

Туре	Connection threads	<b>DN</b> (mm)	<b>Opening</b> (mm)	<b>k<sub>vs</sub>-value</b> m³/h	Lifting height (mm)	<b>Weight</b> (kg)
15/6 L1S	Rp ½	15	6	0.45	6	0.7
15/9 L15	Rp ½	15	9	0.95	6	0.7
15/12 L15	Rp ½	15	12	1.7	6	0.7
15 L1S	Rp ½	15	15	2.75	6	0.7
20 L15	Rp ³⁄₄	20	20	5.00	7	0.8