

3-way Control Valve type L3S

Gun metal, PN 10, DN 15 – 50 mm

0-2.2.07-K

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TECHNICAL DATA

Materials:

- Valve body, seats and cone	Gun metal RG 5
- O-ring	90 NBR
- Gasket	Reinz-AFM34
Nominal pressure	PN 10
	(max. 120°C option 200°C)

Seating	Two single seats
	15-20 mm unbalanced
	25-50 mm balanced

Flow characteristic	Almost linear
Leakage rate	≤ 0.5% of Kvs
Regulating capability	Kvs/Kvr > 25

Way of operation	When spindle is actuated:
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Gate 1-2 closes
Gate 1-3 opens
ISO 7/1

Internal connection threads	ISO 7/1
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APPLICATIONS

Control valves type L3S are designed for regulating fresh water, cold and hot sea-water and lubricating liquids. The valves are used in conjunction with temperature regulators in control systems for cooling and heating of domestic premises, district heating, industrial processes or marine installations.

DESIGN

The valve components - valve body, seats and cone - are made of sea-water resistant gun metal RG 5. The valves are single seated. The leakage rate is less than 0.5% of the full flow (according to VDI/VDE 2174). Note: The design of the sizes DN 15 (½") and DN 20 (¾") is different from the bigger ones.

FUNCTION

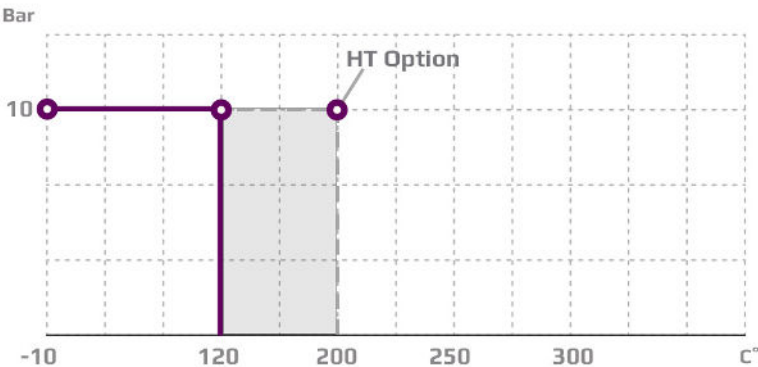
Without an actuator being connected, connection 2-1 is fully open and connection 3-1 completely closed by means of a spring. On increasing pressure on the spindle, the opening of the ports changes proportionally to the travel of the spindle, and when the spindle is pressed to the bottom, connection 3-1 is fully open and connection 2-1 completely closed.

FEATURES

- Sea water resistant
- Simple design secures reliable controls and reduces costly downtime.
- Can be used for both mixing and diverting

PRESSURE/TEMPERATURE DIAGRAM

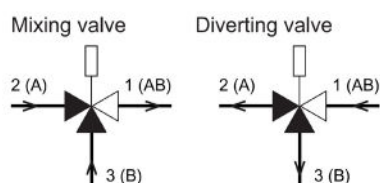
According to DIN 2401



Subject to change without notice.

PORT NUMBERING

The ports of valves type L35 are marked with the figures 1, 2 and 3. The letters in parentheses refer to the corresponding internationally adapted designations.



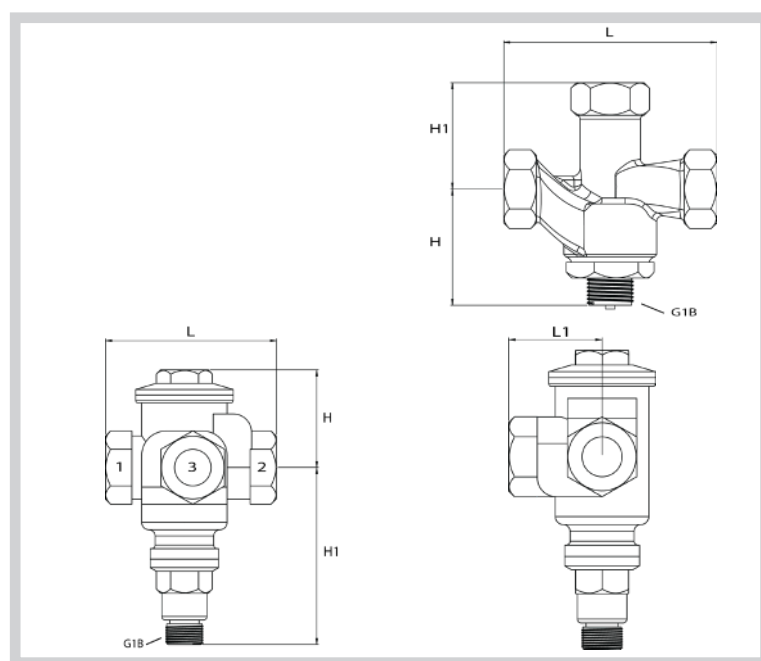
Port 1(AB) common port always open
Port 2(A) closes at load on spindle
Port 3(B) opens at load on spindle

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MOUNTING

The valves can be installed with vertical as well as horizontal spindles. The thermostat/actuator can be fitted below or above the valve.

DIMENSION SKETCH



Type	L (mm)	L1 (mm)	H (mm)	H1 (mm)
15 L35	110	-	60	55
20 L35	110	-	60	55
25 L35	140	70	145	80
32 L35	140	70	145	80
40 L35	185	95	150	105
50 L35	185	95	150	105

SPECIFICATIONS

Type	Connection threads	DN mm	Opening mm	k_{vs} -value mixing valve m^3/h	k_{vs} -value diverting valve m^3/h	Lifting height mm	Weight kg
15 L35	Rp 1/2	15	15	2.75	2.4	3	1
20 L35	Rp 3/4	20	20	5	4.3	4	1
25 L35	Rp 1	25	25	7.5	6.4	4	4.4
32 L35	Rp 1 1/4	32	32	12.5	10.7	6	4.5
40 L35	Rp 1 1/2	40	40	20	17.2	6	7,7
50 L35	Rp 2	50	50	30	25.8	8	8,3