

# Basic logic valves Series 2L

Cartridge Ø 4 mm.  
or - and - yes - not - memory



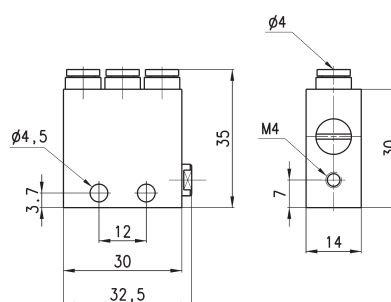
Basic logic functions Series 2L are available in 5 different models and can be mounted separately by means of 2 passing holes in the body. Bracket Mod. 2LQ-8A allows to have the inlets and outlets on the front side, facilitating the mounting of the connection tubes.

All models are constructed with the pressure window incorporated, which allows an easy detection of any problems. Moreover the fittings are incorporated into the valve body and are super-rapid Ø4. The "NOT" element has an actuating pressure of 0,3 bar.

## GENERAL DATA

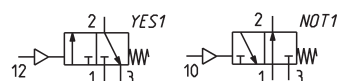
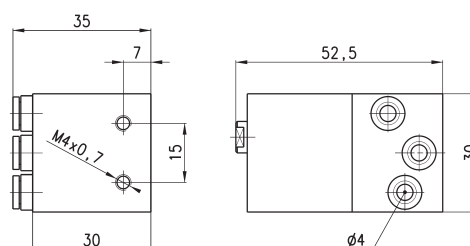
Construction	poppet (spool memory)
Materials	aluminium body; NBR seals; OT58 brass
Valve group	automatic valves (logic units)
Ports	cartridge Ø 4
Operating temperature	0°C ÷ 80°C (-20°C with dry air)
Operating pressure	2 ÷ 8 bar
Nominal flowrate	70 NI/min. (6 bar ΔP = 1)
Fluid	filtered air, without lubricant. If lubricated air is used, it is recommended to use oil ISO VG32. Once applied the lubrication should never be interrupted.

## Basic logics



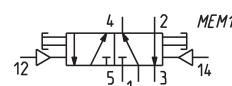
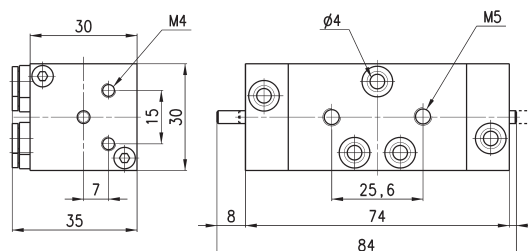
Mod.	Function	Symbol
<b>2LD-SB4-B</b>	AND	AND1
<b>2LR-SB4-B</b>	OR	OR01

## Basic logics



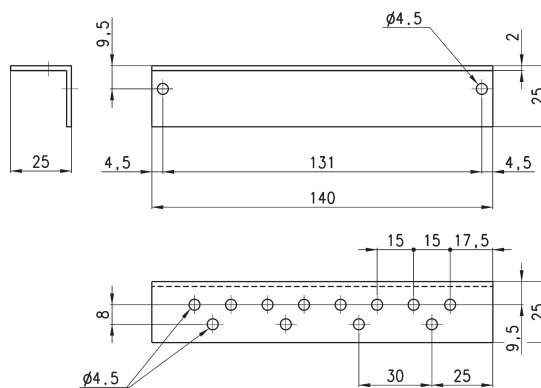
Mod.	Function	Symbol
<b>2LS-SB4-B</b>	YES	YES1
<b>2LT-SB4-B</b>	NOT	NOT1

## Memory



Mod.	Function
<b>2LM-SB4-B</b>	Memory

## Right-angled bracket



Mod.  
**2LQ-8A**

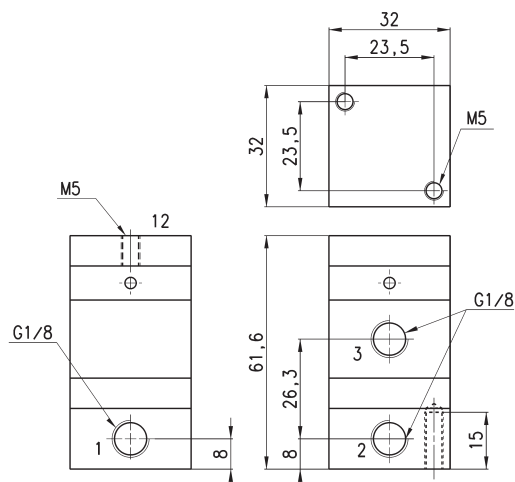
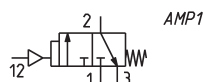
## Pneumatically operated 3/2 NC amplifier valve - G1/8 ports



The amplifier valve Mod. 2LA-AM is able to change low pressure signals into signals with pressure from 2 to 8 bar. The poppet type construction shows a minimum permanent air consumption at rest.

Mounting: with M5 screws  
Installation: in any position  
Fluid: filtered air, without lubricant

Materials:  
- AL body  
- NBR seals



Mod.	Working pressure	Min/max operating pressure	Permanent air consumption at rest	Nominal flow ( $\Delta P$ 1)
<b>2LA-AM</b>	2 bar ÷ 8 bar	0.03 bar / 0.6 bar	3.3 NI/min	120 NI/min

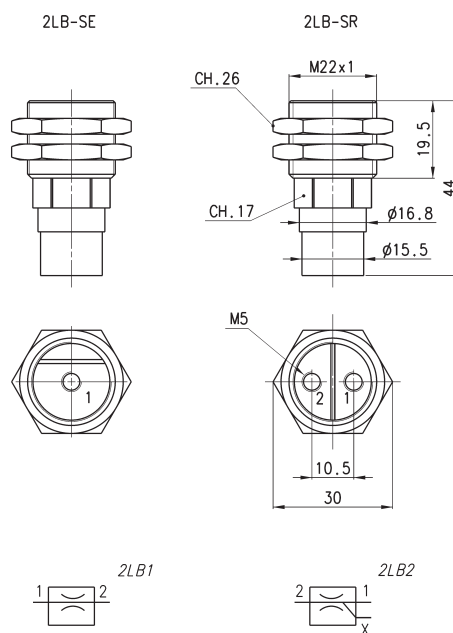
## Sender and receiver sensor Series 2L - M5 ports



Materials: aluminium - brass  
 Construction: nozzle without moving parts  
 Threading mounting: M22 x 1  
 Mounting diameter: 22.5 mm  
 Mounting bracket: B20-25, E20-25  
 Max air consumption: P 2 bar  $\approx$  45 NI/min  
 Fluid: filtered air, without lubricant

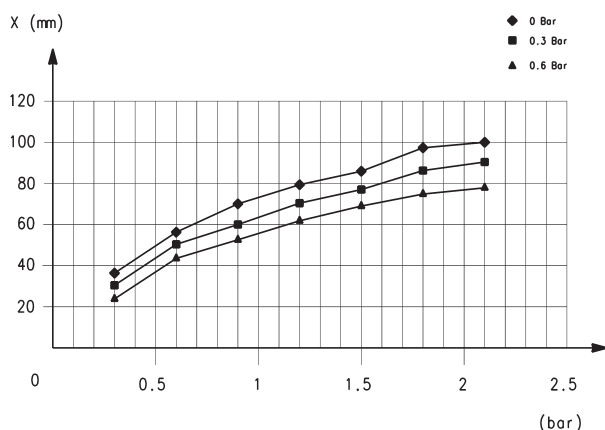
Conditions of functioning: the receiver pressure (2LB-SR) has to be lower or equal compared with the sender pressure (2LB-SE)

The receiver nozzle (2LB-SR) is supplied to ensure the self-cleaning. The air jet of the sender (2LB-SE) avoids the free outflow of the air jet from the receiver. A back pressure is thus produced that generates at outlet A a pilot pressure which is sent to the amplifier drive. When an object interrupts the air jet between the two sensors, this signal becomes zero.

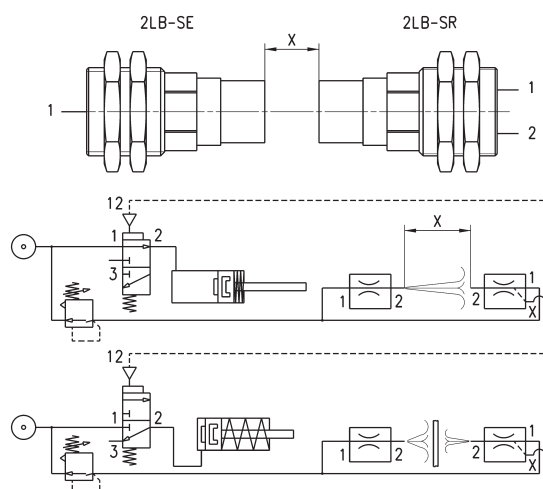


Mod.	Type	Min. pressure	Max pressure	Temperature	Symbol
<b>2LB-SE</b>	Sender	0.3 bar	2 bar	-20°C + +60°C	2LB1
<b>2LB-SR</b>	Receiver	0.3 bar	0.6 bar	-20°C + +60°C	2LB2

### SENDER AND RECEIVER SENSORS SERIES 2L



DISTANCE DIAGRAM between  
 SENDER (2LB-SE) and RECEIVER (2LB-SR)  
 according to the supply pressures



X = distance between nozzles (30 mm ÷ 80 mm)