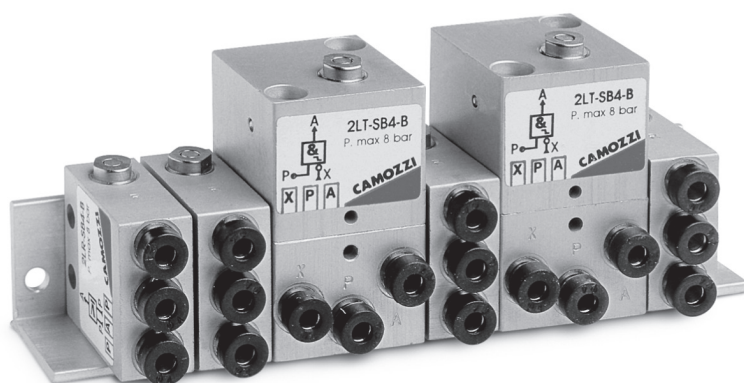


# Basic logic valves Series 2L

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



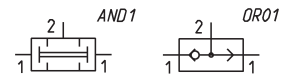
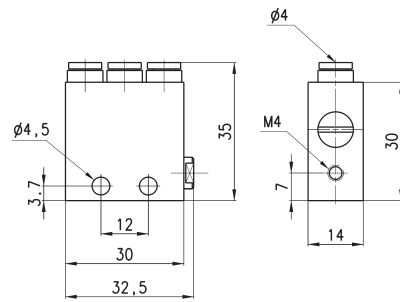
Basic logic functions Series 2L are available in 5 different models and can be mounted separately by means of 2 passing holes in the body. Bracket Mod. 2LQ-8A allows to have the inlets and outlets on the front side, facilitating the mounting of the connection tubes.

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

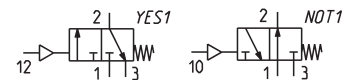
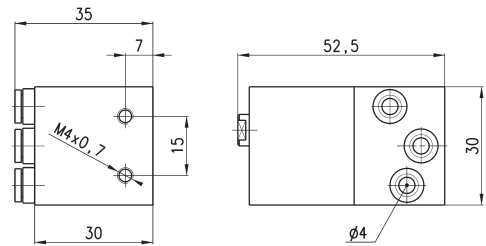
<b>Construction</b>	poppet (spool memory)
<b>Materials</b>	aluminium body; NBR seals; OT58 brass
<b>Valve group</b>	automatic valves (logic units)
<b>Ports</b>	cartridge Ø 4
<b>Operating temperature</b>	0°C + 80°C (-20°C with dry air)
<b>Operating pressure</b>	2 ÷ 8 bar
<b>Nominal flowrate</b>	70 NI/min. (6 bar ΔP = 1)
<b>Fluid</b>	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



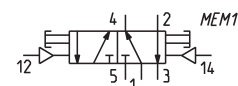
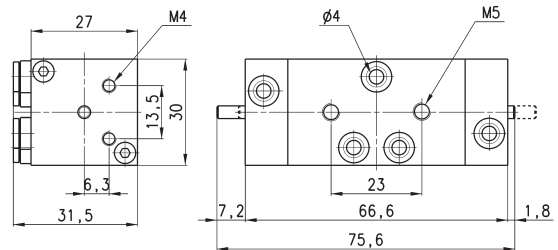
Mod.	Function	Symbol
<b>2LD-SB4-B</b>	AND	AND1
<b>2LR-SB4-B</b>	OR	OR01

Basic logics

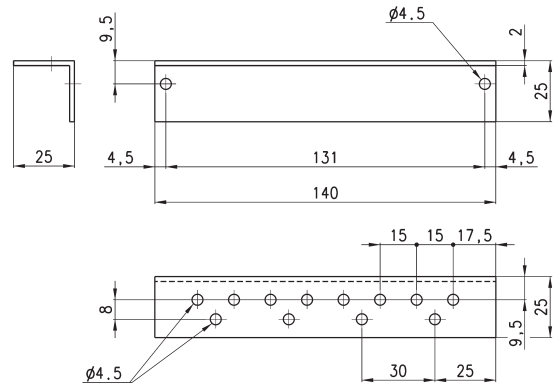


Mod.	Function	Symbol
<b>2LS-SB4-B</b>	YES	YES1
<b>2LT-SB4-B</b>	NOT	NOT1

Memory



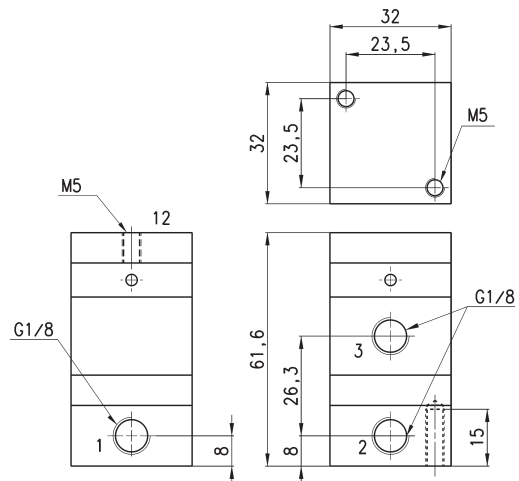
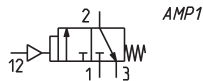
Mod.	Function
<b>2LM-SB4-B</b>	Memory

**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



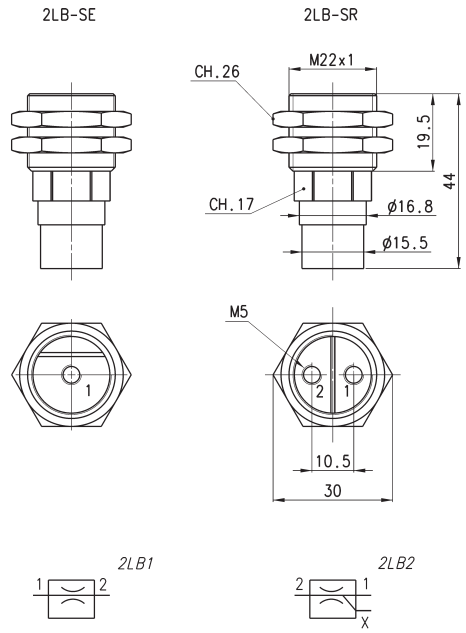
Mod.	Working pressure	Min/max operating pressure	Permanent air consumption at rest	Nominal flow ( $\Delta P$ 1)
<b>2LA-AM</b>	2 bar ÷ 8 bar	0.03 bar / 0.6 bar	3.3 NI/min	120 NI/min

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

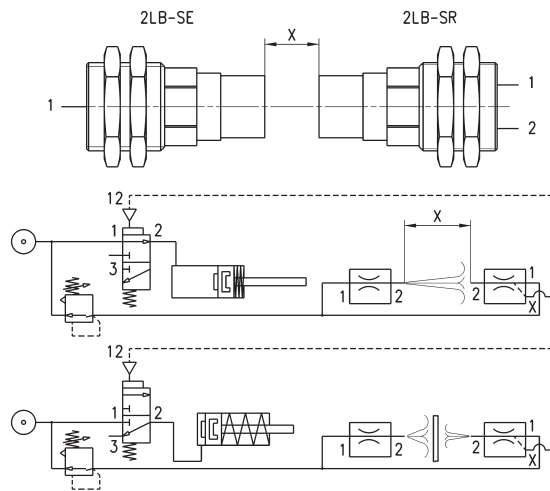
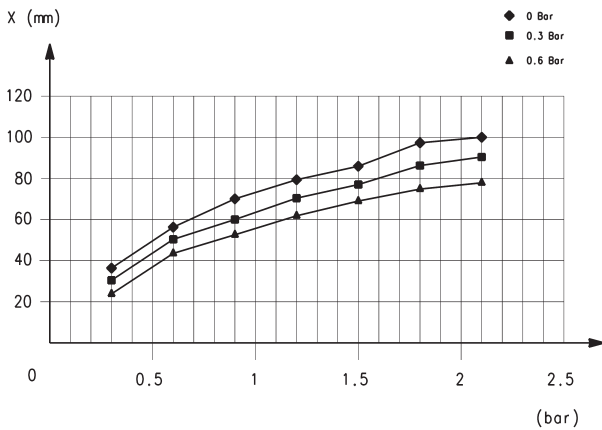
Conditions of functioning: the receiver pressure (2LB-SR) has to be lower or equal compared with the sender pressure (2LB-SE)

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
2LB-SE	Sender	0.3 bar	2 bar	-20°C + +60°C	2LB1
2LB-SR	Receiver	0.3 bar	0.6 bar	-20°C + +60°C	2LB2

SENDER AND RECEIVER SENSORS SERIES 2L



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

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