Series 2L
basic logic valves

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

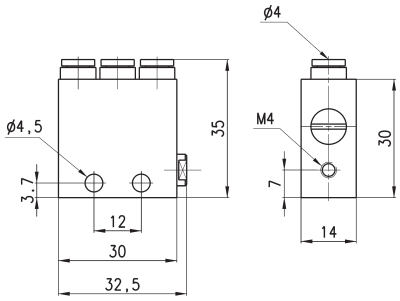
Series 2L basic logic functions are available in 5 different models and can be mounted separately by means of 2 passing holes in the body.
Bracket Mod. 2LQ-8A allows to have the inlets and outlets on the front side, facilitating the mounting of the connection tubes.

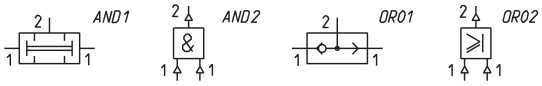
All models are constructed with the pressure window incorporated, which allows an easy detection of any problems. Moreover the fittings are incorporated into the valve body and are super-rapid ø4.
The “NOT” element has an actuating pressure of 0,3 bar.

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 ÷ 60°C (-20°C with dry air)
Operating pressure	2 bar ÷ 10 bar
Nominal flowrate	100 Nl/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.

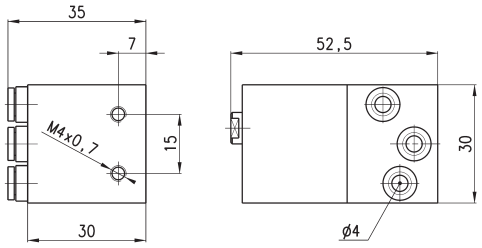
Basic logic valves AND / OR

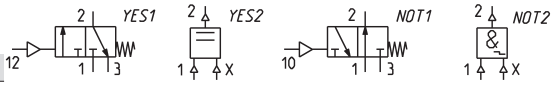




Mod.	Function	Pneumatic symbol	Logic symbol
2LD-SB4-B	AND	AND1	AND2
2LR-SB4-B	OR	OR01	OR02

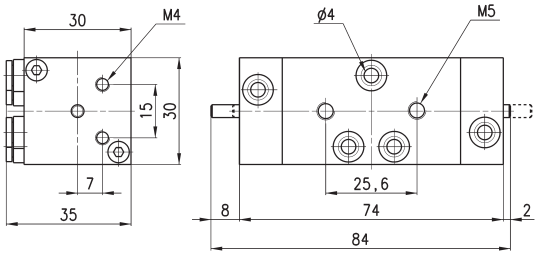
Basic logic valves YES / NOT

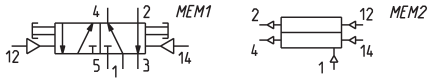




Mod.	Function	Pneumatic symbol	Logic symbol
2LS-SB4-B	YES	YES1	YES2
2LT-SB4-B	NOT	NOT1	NOT2

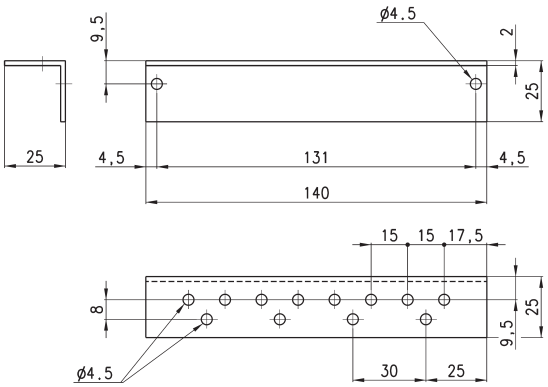
Basic logic valves “Memory”





Mod.	Function	Pneumatic symbol	Logic symbol
2LM-SB4-B	Memory	MEM1	MEM2

Right-angled bracket



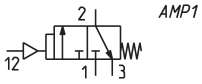
Mod.
2LQ-8A

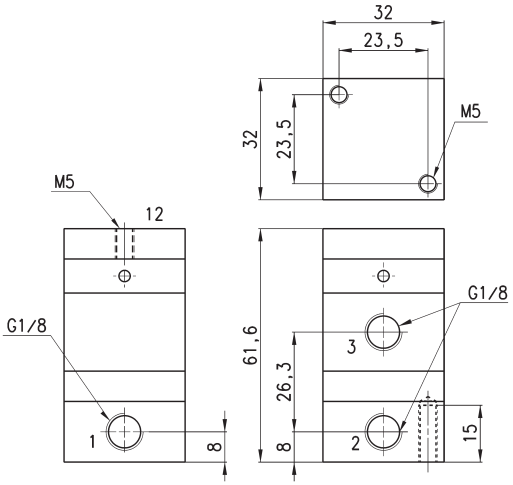
Pneumatically operated 3/2 NC amplifier valve - G1/8 ports

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





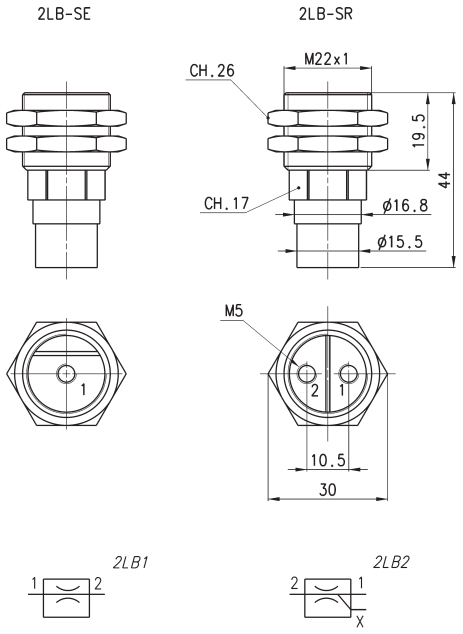
Mod.	Working pressure (bar)	Min/max operating pressure (bar)	Permanent air consumption at rest (Nl/min)	Nominal flow (Nl/min ΔP 1)
2LA-AM	2 ÷ 8	0.03 / 0.6	3.3	120

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 ≅ 45 Nl/min
Fluid: filtered air, without lubricant

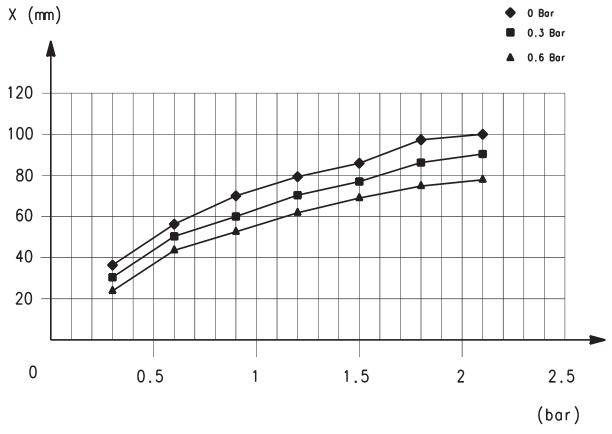
Conditions of functioning: the receiver pressure (2LB-SR) has to be lower or equal compared with the sender pressure (2LB-SE)

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.

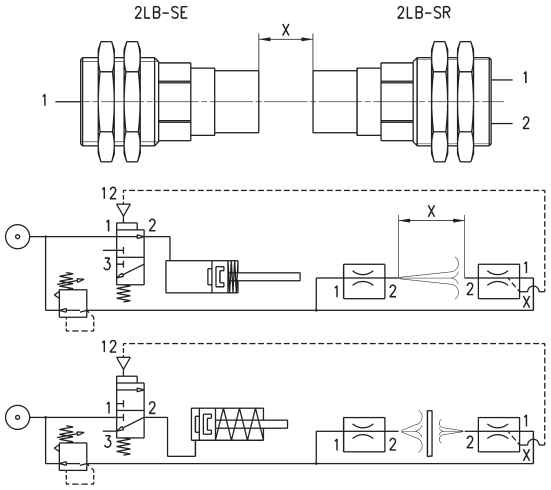


Mod.	Type	Min. pressure	Max pressure	Temperature	Symbol
2LB-SE	Sender	0.3 bar	2 bar	-20°C ÷ +60°C	2LB1
2LB-SR	Receiver	0.3 bar	0.6 bar	-20°C ÷ +60°C	2LB2

SENDER AND RECEIVER SENSORS SERIES 2L



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



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