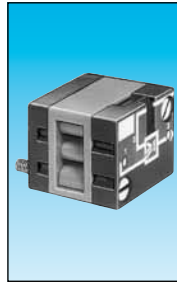


Logic elements

- Performs "combined" Pneumatic
- Easy to use



Also available in **ATEX** version for use in potentially explosive atmospheres in accordance with 94/9/EC Directive



81 521 501



81 540 001



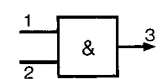
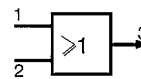
81 540 005



81 522 501

Functions	OR	—	—	—	—
	AND	—	—	—	—
	YES	—	—	—	—
	NO	—	—	—	—
Version		On Sub-base page 4/14-4/15	Plug-in Ø 4	Plug-in Ø 6	On Sub-base page 4/14-4/15

Symbol



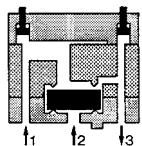
Characteristics

Push-in connection for semi-rigid tubing (NFE 49100)	Male/Female/Female	—	—	—	—
	Female/Female/Female	—	—	—	—
Colour		Blue	Blue	Blue	Green
Operating pressure	bar	2 → 8	2 → 8	2 → 8	2 → 8
Orifice diameter	mm	2.7	2.7	4	2.7
Flow at 6 bars	NI/min	170	170	200	170
Pressure indicator		●	—	—	●
Switching time	ms	—	—	—	—
Operating temperature	°C	-5 → +50	-5 → +50	-5 → +50	-5 → +50
Mechanical life	operations	>10 ⁷	>10 ⁷	>10 ⁷	>10 ⁷
Weight	g	25	12	25	25

Pilot/pressure curves

P_p : Pilot pressure
P_a : Supply pressure

Principle of operation

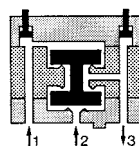


Cellule OR

The output signal "S" is present when a signal at "a" OR "b" is present:

$$S = a \text{ OR } b$$

$$S = a + b$$



Cellule AND

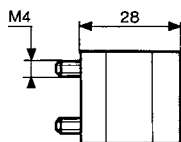
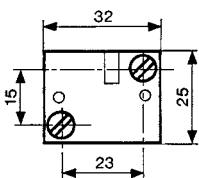
The output signal "S" is present only when signals "a" AND "b" are present simultaneously:

$$S = a \text{ AND } b$$

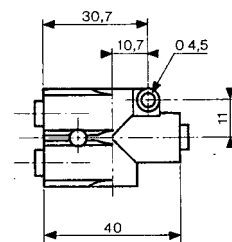
$$S = a \cdot b$$

Dimensions

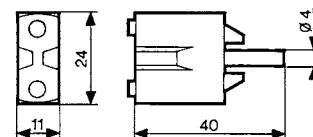
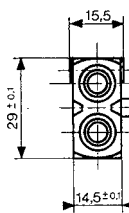
81 521 501 - 81 522 501



81 540 005 - 81 541 005

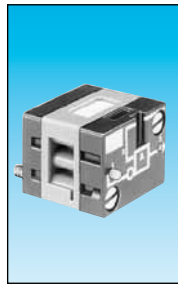


81 540 001 - 81 541 001



Other information

See pages 54/55 for mounting plan for logic elements.



81 541 001

81 541 005

81 501 025

81 503 025

81 504 025

81 506 025

Plug-in
Ø 4

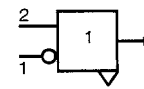
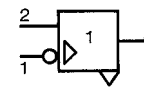
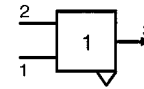
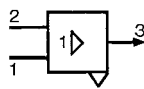
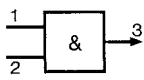
Plug-in
Ø 6

On sub-base
page 36-37

Threshold
On sub-base page
4/14-4/15

Threshold
On sub-base page
4/14-4/15

Threshold
On sub-base page
4/14-4/15



Ø 4 mm

Ø 6 mm

Green
2 → 8
2.7
150

Green
2 → 8
4
200

Yellow
2 → 8
2.7
170

Orange
2 → 8
2.7
170

Light grey
2 → 8
2.7
170

Dark grey
2 → 8
2.7
170

-5 → +50

-5 → +50

-5 → +50

-5 → +50

-5 → +50

-5 → +50

>10⁷

>10⁷

>10⁷

>10⁷

>10⁷

>10⁷

13

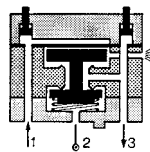
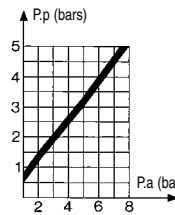
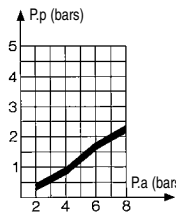
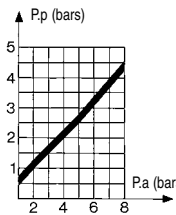
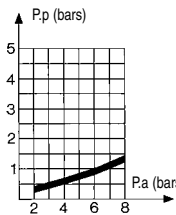
25

30

30

30

30

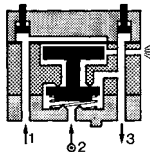


YES element

The output signal "S" is only present when the pilot is present "a" is present:

$S = a \text{ YES } b$

$S = a$



NOT element

The output signal "s" is present only if the input signal "a" is NOT present. The output signal is therefore the inverse of the pilot signal:

$S = \text{NOT } a$

$S = \bar{a}$

If the supply port is connected to a 2nd input "b", the function obtained is called inhibition:

$S = \text{NOT } a \text{ AND } b$

$S = \bar{a} \cdot b$

81 501 025 - 81 503 025

81 504 025 - 81 506 025

