

1

Part numbers

Functions	OR	81 521 501	81 540 001	81 540 004	81 522 501
	AND	—	—	—	—
	YES	—	—	—	—
	NOT	—	—	—	—
Version		On sub-base page 5/44 - 5/45	Plug-in Ø 5/32" (4mm)	Plug-in Ø 5/32" (4mm)	On sub-base page 5/44 - 5/45

Symbol



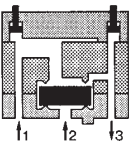
Characteristics

Push-in connection for semi-rigid tubing (NFE 49100) O.D.	Male/Female/Female	—	Ø 5/32" (4 mm)	—	—
	Female/Female/Female	—	—	Ø 1/4" (6.35 mm)	—
Color		Blue	Blue	Blue	Green
Operating pressure	psi (bar)	30 > 120 (2 > 8)	30 > 120 (2 > 8)	30 > 120 (2 > 8)	30 > 120 (2 > 8)
Orifice diameter	inches (mm)	0.106" (2.7)	0.106" (2.7)	0.157" (4)	0.106" (2.7)
Flow at 90 PSI (6 bars)	cfm (Nl/min)	6 (170)	6 (170)	7 (200)	6 (170)
Pressure indicator		●	—	—	●
Switching time	ms	—	—	—	—
Operating temperature	°F (°C)	+20 > +120 (-5 > +50)	+20 > +120 (-5 > +50)	+20 > +120 (-5 > +50)	+20 > +120 (-5 > +50)
Mechanical life	cycles	10 million	10 million	10 million	10 million
Weight	grams	25	12	25	25

Pilot/pressure curves

P.p : Pilot pressure
P.a : Supply pressure

Principle of operation

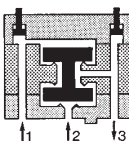


OR element

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

S = a OR b

S = a + b



AND element

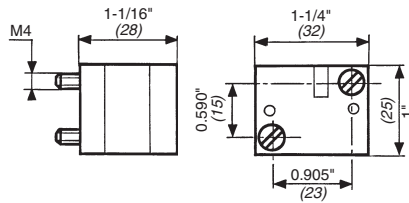
The output signal "S" is present only when signals "a" AND "b" are present simultaneously.

S = a AND b

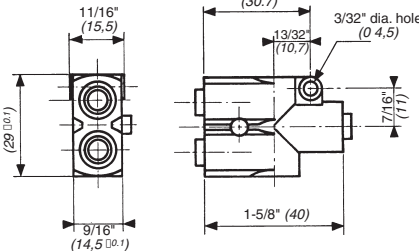
S = a . b

Dimensions

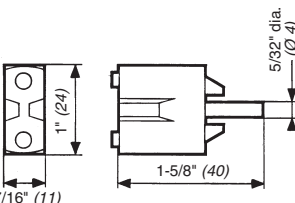
81 521 501 - 81 522 501



81 540 004 - 81 541 010



81 540 001 - 81 541 001



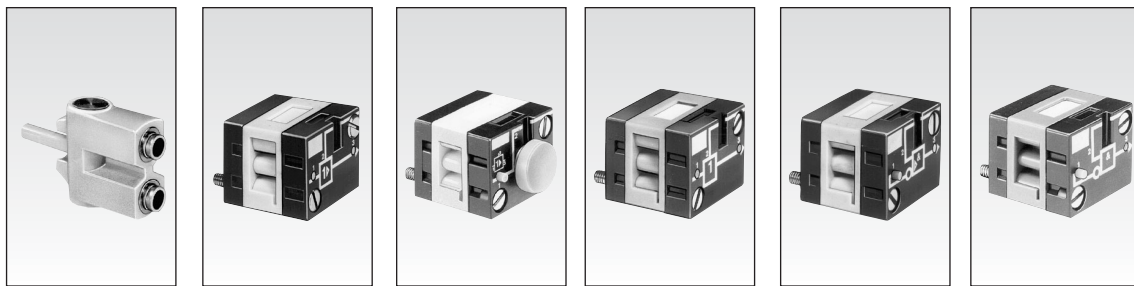
Use (metric) dimensions for critical data.

Other information

See page 4/8 for mounting plan for logic elements.

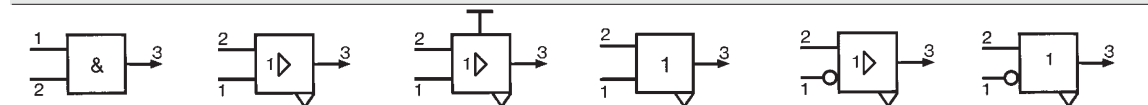
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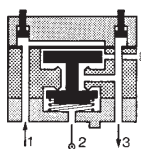
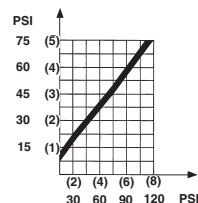
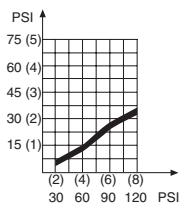
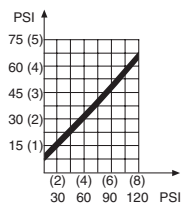
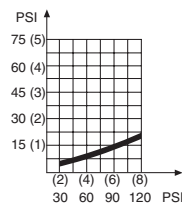


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81 541 001	81 501 025	81 501 065	81 503 025	81 504 025	81 506 025
Plug-in Ø 5/32" (4)	Standard On sub-base page 5/44 - 5/45	Manual override On sub-base page 5/44 - 5/45	Low-ratio On sub-base page 5/44 - 5/45	Standard and inhibition On sub-base page 5/44 - 5/45	Low-ratio On sub-base page 5/44 - 5/45



Ø 5/32" (4 mm)					
Green	Yellow	Yellow	Orange	Light grey	Dark grey
30 > 120 (2 > 8)	30 to 120 (2 to 8)	30 to 120 (2 to 8)	30 to 120 (2 to 8)	30 to 120 (2 to 8)	30 to 120 (2 to 8)
0.106" (2.7)	0.106" (2.7)	0.106" (2.7)	0.106" (2.7)	0.106" (2.7)	0.106" (2.7)
5-1/4 (150)	6 (170)	6 (170)	6 (170)	6 (170)	6 (170)
<4	<4	<4	<4	<4	<4
+20 > +120 (-5 > +50)	+20 > +120 (-5 > +50)	+20 > +120 (-5 > +50)	+20 > +120 (-5 > +50)	+20 > +120 (-5 > +50)	+20 > +120 (-5 > +50)
10 million	10 million	10 million	10 million	10 million	10 million
13	30	35	30	30	30

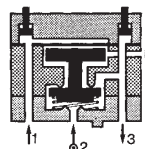


YES element

The output signal "S" is only present when the pilot 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.

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

$$S = \bar{a}$$

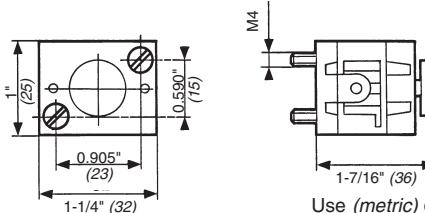
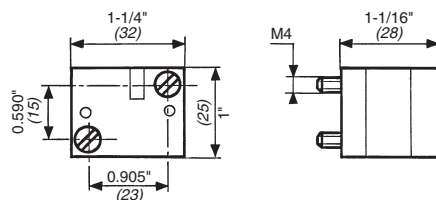
If the supply port is connected to a 2nd input "b", the function obtained is called Inhibition.

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

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

81 501 025 - 81 503 025
81 504 025 - 81 506 025

81 501 065



Use (metric) dimensions for critical data.

To order, specify :

Standard products	1 Part number
Standard products, non stocked	Example : Logic elements 81 521 501

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