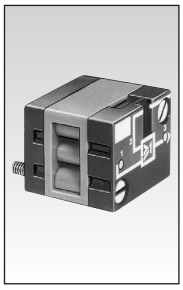
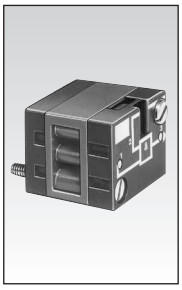
Logic elements



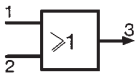


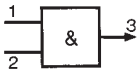
1

Part numbers

	OR	**81 521 501**	**81 540 001**	**81 540 004**	
Functions	AND	—	—	—	**81 522 501**
	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





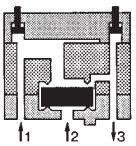
Characteristics

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)*
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	
Weight		grams		25		12		25		25	

Pilot/pressure curves

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

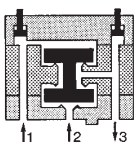
Principle of operation



OR element

The output signal “S” is present when a signal at “a” OR “b” is present

S = a OR b S = a + b



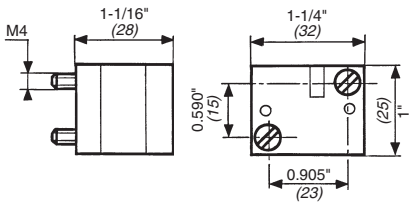
AND element

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

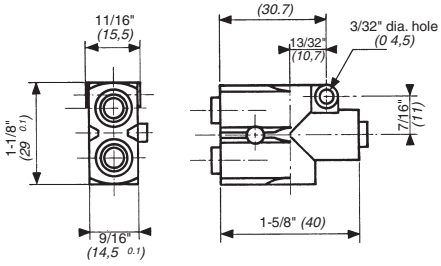
S = a AND b S = a . b

Dimensions

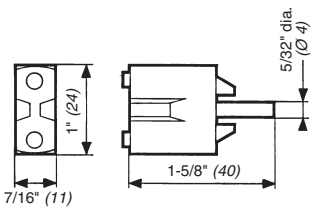
81 521 501 - 81 522 501



81 540 004 - 81 541 010



81 540 001 - 81 541 001



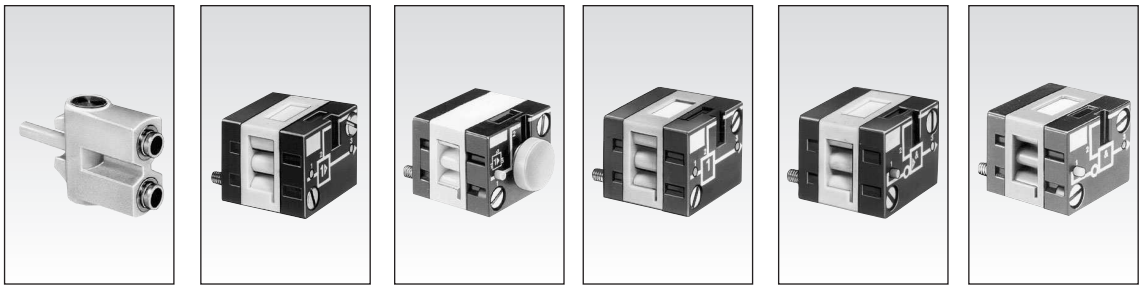
Use *(metric)* dimensions for critical data.

Other information

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

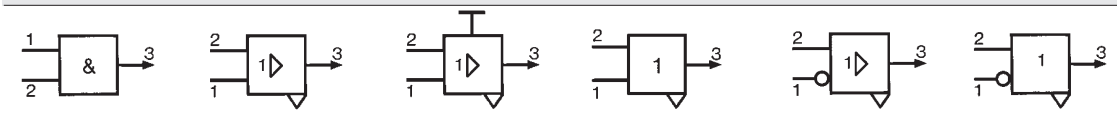
Products and specifications subject to change without notice.

Downloaded from Datasheet.su

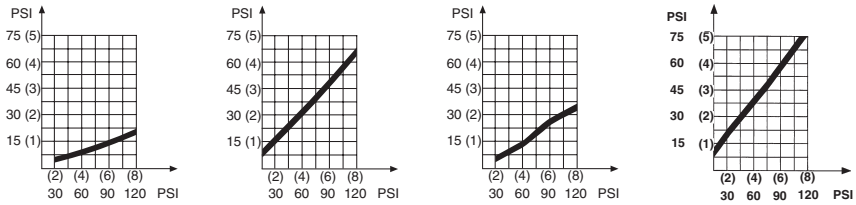


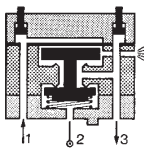
1

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
+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

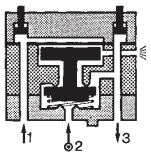




YES element

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

S = a YES b S = a



NOT element

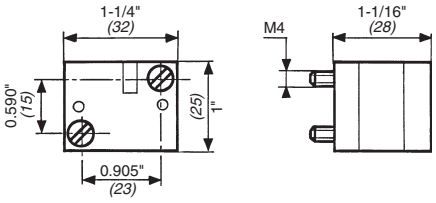
The output signal "s" is present only if the input signal "a" is NOT present. The output signal is therefore the inverse of the pilot signal.

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

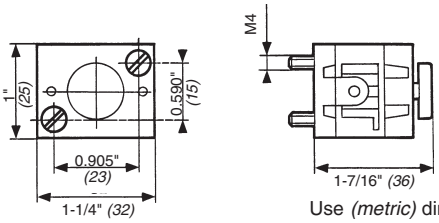
If the supply port is connected to a 2nd input "b", the function obtained is called Inhibition.

S = NOT a AND b S = $\overline{a}$. 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

5

Products and specifications subject to change without notice.

Downloaded from Datasheet.su