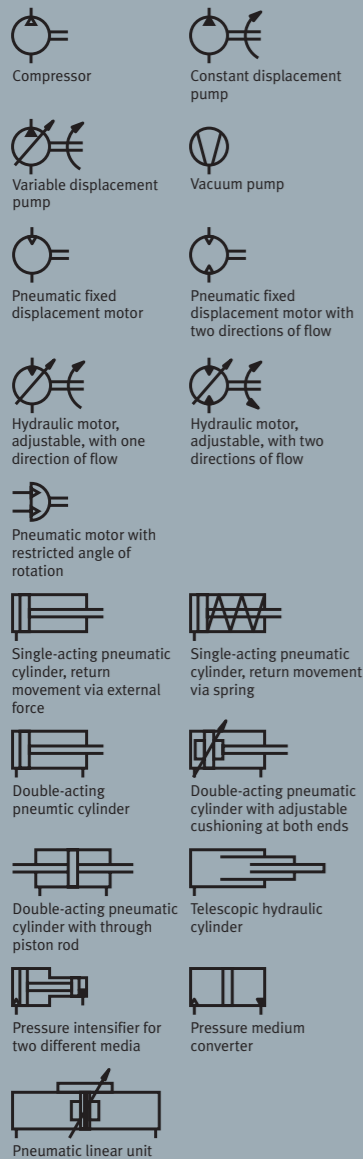


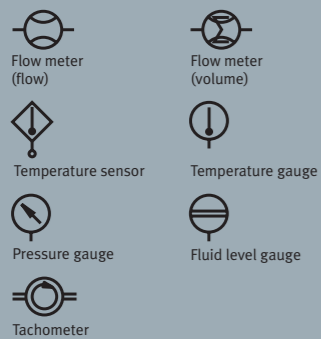
Electrical, pneumatic and logic symbols

Energy conversion

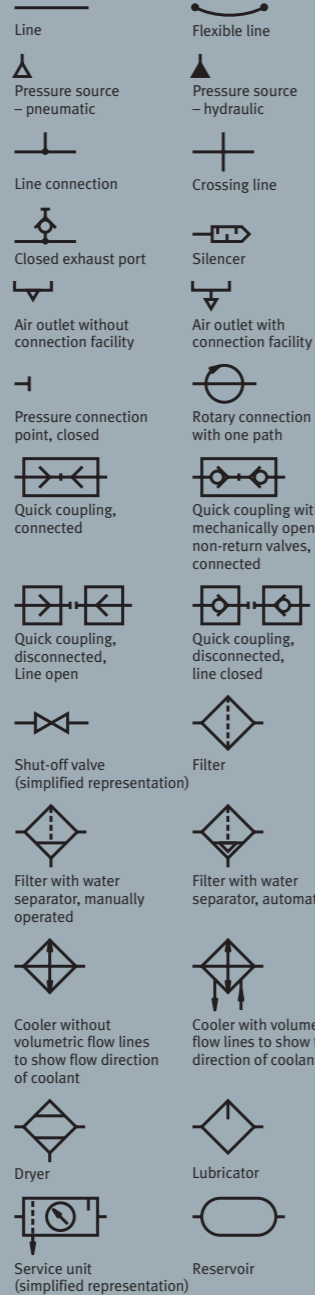


Other symbols

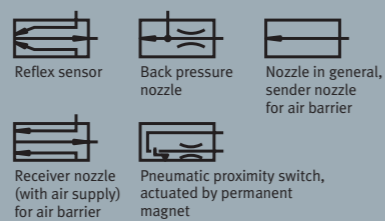
Other devices



Transfer of energy

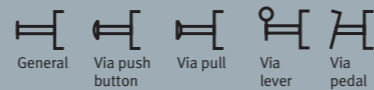


Special symbols

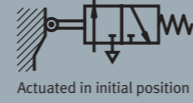
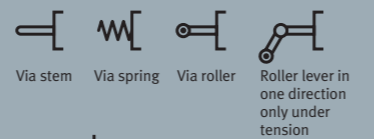


Actuation methods

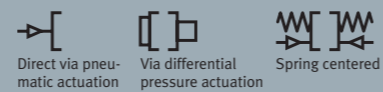
Manual operation



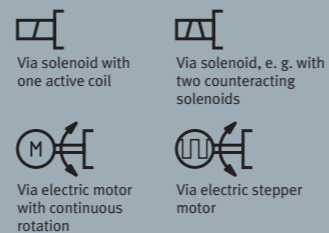
Mechanical actuation



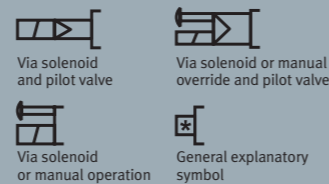
Pressure actuation



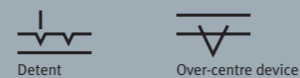
Electrical actuation



Combined actuation



Mechanical actuating components



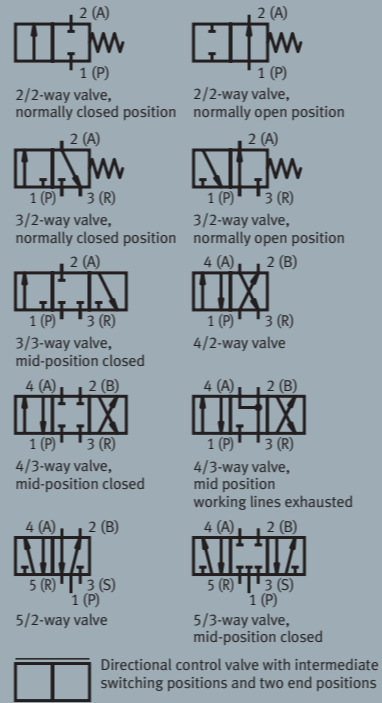
Connection designations

ISO/DIS 11727	for 2/2- and 3/2-way valves	for 4/2- and 4/3-way valves	for 5/2- and 5/3-way valves
1	P	P	P
2	A	B	B
3	R	R	S
4	-	A	A
5	-	-	R
10*	Z	-	-
12	Z	Y	Y
14	-	Z	Z

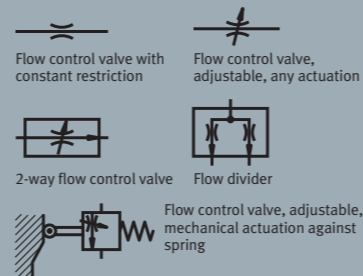
* Control port, on valves with normally open position (NOT function)

Valves

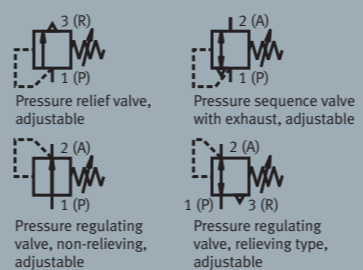
Directional control valves



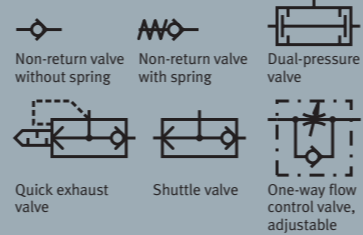
Flow control valve



Pressure valve



Non-return valve



Comparison of logic elements

Designation	Function table	Equation	Symbol to DIN 40900/12	Representation to ISO 1219/1 pneumatic	Representation to DIN EN 60617-7 electrical																				
Identity	<table border="1"><tr><td>E</td><td>A</td></tr><tr><td>0</td><td>0</td></tr><tr><td>1</td><td>1</td></tr></table>	E	A	0	0	1	1	$A=E$																	
E	A																								
0	0																								
1	1																								
Negation	<table border="1"><tr><td>E</td><td>A</td></tr><tr><td>0</td><td>1</td></tr><tr><td>1</td><td>0</td></tr></table>	E	A	0	1	1	0	$A=\bar{E}$																	
E	A																								
0	1																								
1	0																								
Or	<table border="1"><tr><td>E1</td><td>E2</td><td>A</td></tr><tr><td>0</td><td>0</td><td>0</td></tr><tr><td>0</td><td>1</td><td>1</td></tr><tr><td>1</td><td>0</td><td>1</td></tr><tr><td>1</td><td>1</td><td>1</td></tr></table>	E1	E2	A	0	0	0	0	1	1	1	0	1	1	1	1	$A=E1 \vee E2$								
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0	1	1																							
1	0	1																							
1	1	1																							
And	<table border="1"><tr><td>E1</td><td>E2</td><td>A</td></tr><tr><td>0</td><td>0</td><td>0</td></tr><tr><td>0</td><td>1</td><td>0</td></tr><tr><td>1</td><td>0</td><td>0</td></tr><tr><td>1</td><td>1</td><td>1</td></tr></table>	E1	E2	A	0	0	0	0	1	0	1	0	0	1	1	1	$A=E1 \wedge E2$								
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0	1	0																							
1	0	0																							
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Inhibition	<table border="1"><tr><td>E1</td><td>E2</td><td>A</td></tr><tr><td>0</td><td>0</td><td>0</td></tr><tr><td>0</td><td>1</td><td>0</td></tr><tr><td>1</td><td>0</td><td>1</td></tr><tr><td>1</td><td>1</td><td>0</td></tr></table>	E1	E2	A	0	0	0	0	1	0	1	0	1	1	1	0	$A=E1 \wedge \bar{E2}$								
E1	E2	A																							
0	0	0																							
0	1	0																							
1	0	1																							
1	1	0																							
Implication	<table border="1"><tr><td>E1</td><td>E2</td><td>A</td></tr><tr><td>0</td><td>0</td><td>1</td></tr><tr><td>0</td><td>1</td><td>0</td></tr><tr><td>1</td><td>0</td><td>1</td></tr><tr><td>1</td><td>1</td><td>1</td></tr></table>	E1	E2	A	0	0	1	0	1	0	1	0	1	1	1	1	$A=E1 \vee \bar{E2}$								
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Nor	<table border="1"><tr><td>E1</td><td>E2</td><td>A</td></tr><tr><td>0</td><td>0</td><td>1</td></tr><tr><td>0</td><td>1</td><td>0</td></tr><tr><td>1</td><td>0</td><td>0</td></tr><tr><td>1</td><td>1</td><td>0</td></tr></table>	E1	E2	A	0	0	1	0	1	0	1	0	0	1	1	0	$A=\bar{E1} \vee \bar{E2}$								
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Nand	<table border="1"><tr><td>E1</td><td>E2</td><td>A</td></tr><tr><td>0</td><td>0</td><td>1</td></tr><tr><td>0</td><td>1</td><td>1</td></tr><tr><td>1</td><td>0</td><td>1</td></tr><tr><td>1</td><td>1</td><td>0</td></tr></table>	E1	E2	A	0	0	1	0	1	1	1	0	1	1	1	0	$A=\bar{E1} \wedge \bar{E2}$								
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0	0	1																							
0	1	1																							
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1	1	0																							
Memory	<table border="1"><tr><td>S</td><td>R</td><td>A</td><td>B</td></tr><tr><td>1</td><td>0</td><td>1</td><td>0</td></tr><tr><td>0</td><td>0</td><td>1</td><td>0</td></tr><tr><td>0</td><td>1</td><td>0</td><td>1</td></tr><tr><td>0</td><td>0</td><td>0</td><td>1</td></tr></table>	S	R	A	B	1	0	1	0	0	0	1	0	0	1	0	1	0	0	0	1				
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0	0	0	1																						
Timer -adjustable -Switch-on delayed	<table border="1"><tr><td>E</td><td>t expired</td><td>A</td></tr><tr><td>0</td><td>0</td><td>0</td></tr><tr><td>1</td><td>0</td><td>0</td></tr><tr><td>1</td><td>1</td><td>1</td></tr></table>	E	t expired	A	0	0	0	1	0	0	1	1	1												
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