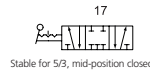


## »4H« Series

514.1000–514.2003

Symbol



### Product features

Traditional and robust valve series. Suitable for all applications where pneumatic actuators have to be operated. These valves are designed for in-line installation. Mounting in any position.

The following types are available:

- Three port sizes (1/8", 1/4" and 3/8")
- 5/2 and 5/3-way versions

### Valve's specification

Art. No.	Size 200				Size 300			
	514.1000	514.2000	514.1001	514.2001	514.1002	514.2002	514.1003	514.2003
Fluid	Air (to be filtered by $\leq 40 \mu\text{m}$ filter element)							
Operating	Manual control direct acting type							
Port size	In = Out		In = Out = 1/4"		In = Out		In = Out = 3/8"	
	= Exhaust = 1/8"		Exhaust = 1/8"		Exhaust = 1/4"		Exhaust = 1/4"	
Valid area of section	14.0 mm <sup>2</sup>	12.0 mm <sup>2</sup>	16.0 mm <sup>2</sup>	12.0 mm <sup>2</sup>	25.0 mm <sup>2</sup>	18.0 mm <sup>2</sup>	30.0 mm <sup>2</sup>	18.0 mm <sup>2</sup>
Valve type	5/2-way	5/3-way	5/2-way	5/3-way	5/2-way	5/3-way	5/2-way	5/3-way
Lubrication	Not required							
Pressure range	0 to 10 bar (0 to 1 MPa; 0 to 145 psi)							
Proof pressure	15 bar (1.5 MPa; 215 psi)							
Temperature	-20 to 70 °C							
Material of body	Aluminium alloy							
Flow rate measurement at $P_1 = 8 \text{ bar}$ , $P_2 = 6 \text{ bar}$ and pressure drop $\Delta p = 1 \text{ bar}$	750 L/min	750 L/min	850 L/min	850 L/min	1300 L/min	1300 L/min	1500 L/min	1500 L/min

### Port identification pneumatic valves

	Designation at the valve	Corresponds to ISO 1219-1
Input port	P	1
Output port	A	2
Output port	B	4
Exhaust port	R	3
Exhaust port	S	5
Control port	Y	12
Control port	Z	14

### Ordering information

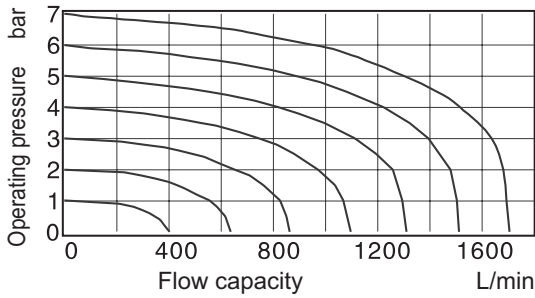
Art. No.	Type
514.1000, 514.1003	5/2-way valve, operated by hand lever, latching
514.2000, 514.2003	5/3-way valve, operated by hand lever, MID-position closed, latching

»4H« Series

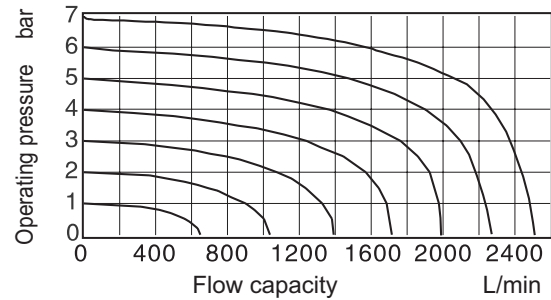
514.1000–514.2003

Flow chart

514.1001 (G 1/8")

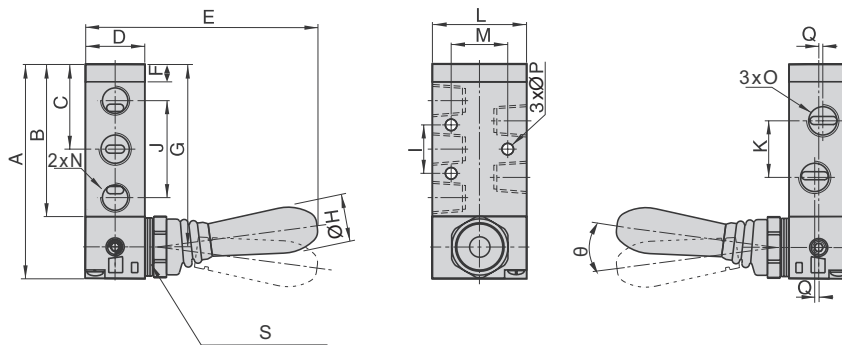


514.1003 (G 1/4")



Dimensions

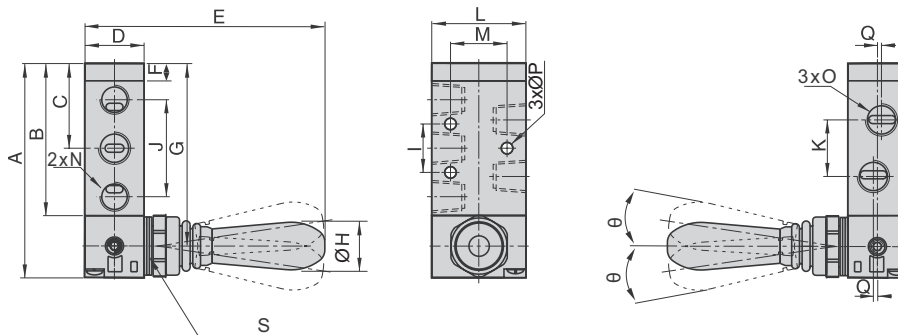
514.1000–514.1003 (5/2-way)



Art. No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	θ	S
514.1000	81.5	57.5	32.5	22	90	7.5	69.5	18	20	36	18	35	23.5	1/8"	1/8"	4.3	-	15	M16x1.5
514.1001	81.5	57.5	32.5	22	90	7.5	69.5	18	20	36	21	35	23.5	1/8"	1/4"	4.3	1.5	15	M16x1.5
514.1002	101	73	40.5	27	93.5	8	87	18	24	45	22	40	27.5	1/4"	1/4"	4.3	-	18	M20x1.5
514.1003	101	73	40.5	27	93.5	8	87	18	24	45	24	40	27.5	1/4"	3/8"	4.3	2	18	M20x1.5

(Values in mm, exception N, O = inch)

514.2000–514.2003 (5/3-way)



Art. No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	θ	S
514.2000	81.5	57.5	32.5	22	90.5	7.5	69.5	18	20	36	18	35	23.5	1/8"	1/8"	4.3	-	8.5	M16x1.5
514.2001	81.5	57.5	32.5	22	90.5	7.5	69.5	18	20	36	21	35	23.5	1/8"	1/4"	4.3	1.5	8.5	M16x1.5
514.2002	101	73	40.5	27	94	8	87	18	24	45	22	40	27.5	1/4"	1/4"	4.3	-	10	M20x1.5
514.2003	101	73	40.5	27	94	8	87	18	24	45	24	40	27.5	1/4"	3/8"	4.3	2	10	M20x1.5

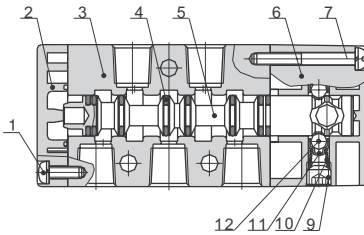
(Values in mm, exception N, O = inch)

## »4H« Series

514.1000–514.2003

### Components and materials

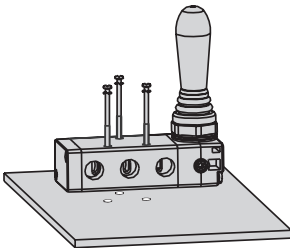
5/2-way and 5/3-way



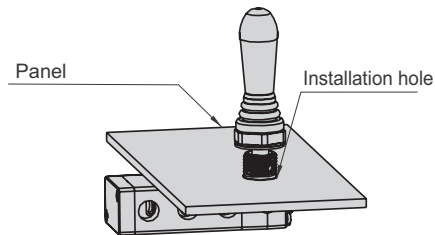
No.	Item	Material
1	Screw	Steel
2	Cover	Aluminium alloy
3	Body	Aluminium alloy
4	O-ring	HNBR
5	Spool	Aluminium alloy
6	Cover	Aluminium alloy
7	Screw	Steel
8	Axle	Steel
9	Screw	Steel
10	Spring	Stainless steel
11	Steel ball jacket	POM
12	Steel ball	Steel

### Mounting

Body mounting



Panel mounting



Art. No.	514.1000, 514.1001 514.2000, 514.2001	514.1002, 514.1003 514.2002, 514.2003
Panel thickness	≤5 mm	≤6 mm
Diameter of installation hole	Ø 16.5	Ø 20.5

**Ordering information**

<b>Art. No.</b>	<b>Ident No.</b>
514.1000	115964
514.1001	115965
514.1002	115966
514.1003	115967
514.2000	115968
514.2001	115969
514.2002	115970
514.2003	115971