



»3L« Series

514.3001–514.4005

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")
- Type of operation: manual (bistable)
- 3/2 and 5/2-way versions

Valve's specification

Art. No.	Size 100	Size 200		Size 300	
	514.3001 514.4001	514.3002 514.4002	514.3003 514.4003	514.3004 514.4004	514.3005 514.4005
Fluid	Air (to be filtered by $\leq 40 \mu\text{m}$ filter element)				
Operating	Manual control direct acting type				
Port size	1/8"		1/4"		3/8"
Valid area of section	12.0 mm ² (Cv = 0.67)	14.0 mm ² (Cv = 0.78)	16.0 mm ² (Cv = 0.89)	25.0 mm ² (Cv = 1.39)	30.0 mm ² (Cv = 1.67)
Valve type	3 port/5 port 2 position				
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 bar, P ₂ = 6 bar and pressure drop $\Delta p = 1$ bar	500 L/min	750 L/min	850 L/min	1300 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

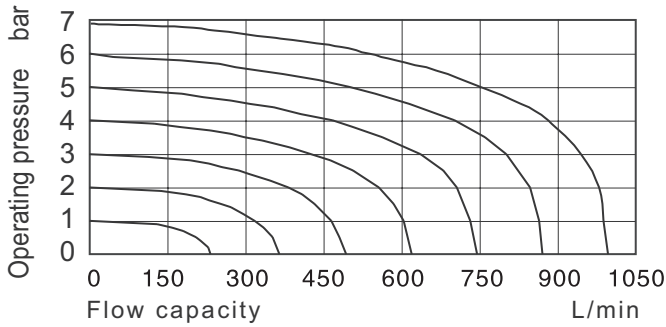
Art. No.	Type
514.3001–514.3005	3/2-way valve, operated by pushbutton, for panel mounting
514.4001–514.4005	5/2-way valve, operated by pushbutton, for panel mounting

»3L« Series

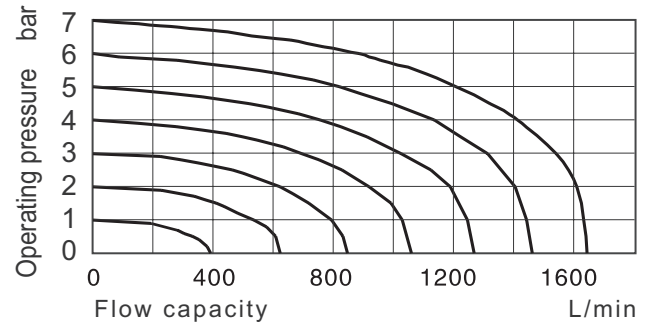
514.3001–514.4005

Flow chart

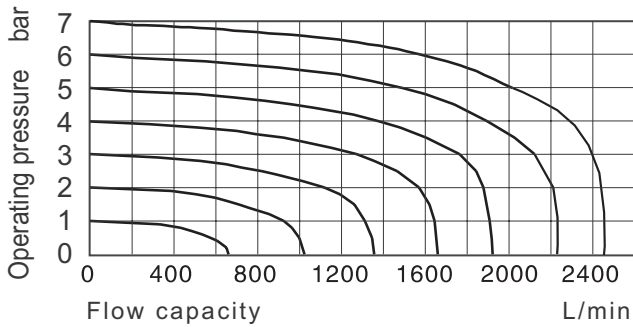
514.3001, 514.4001



514.3003, 514.4003

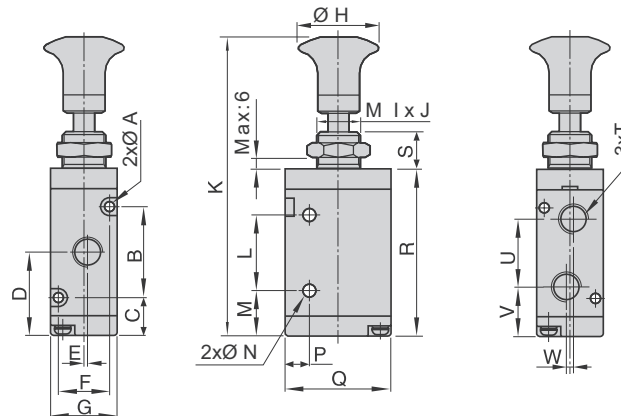


514.3005, 514.4005



Dimensions

514.3001–514.3005



Art. No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	R	S	T	U	V	W
514.3001	3.3	19	13.2	23.7	1	13	18	22	12	1.0	79	21	12.2	3.3	7.5	27	47	10	1/8"	16	14.7	2
514.3002	3.3	30	12.7	27.7	0	17	22	22	14	0.75	90	25	15.2	4.3	8	35	57	10	1/8"	22.5	16.5	0
514.3003	3.3	30	12.7	27.7	1.5	17	22	22	14	1.0	90	25	15.2	4.3	8	35	57	10	1/4"	22.5	16.5	0
514.3004	4.3	35	15	32.5	0	20	27	25	16	1.0	100	30	17.5	4.3	10	40	65.8	10	1/4"	24	20.5	0
514.3005	4.3	35	15	32.5	2	20	27	25	16	1.0	100	30	17.5	4.3	10	40	65.8	10	3/8"	24	20.5	0

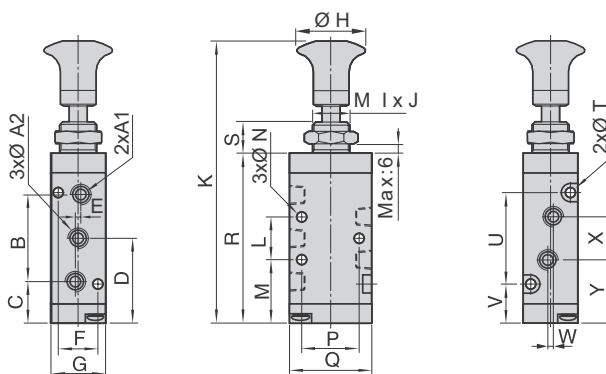
(Values in mm, exception T = inch)

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514.3001–514.4005

Dimensions

514.4001–514.4005



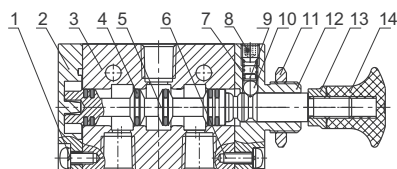
Art. No.	A1	A2	B	C	D	E	F	G	H	I	J	K	L
514.4001	1/8"	1/8"	28	14.2	28.2	2	13	18	22	12	0.75	90	14
514.4002	1/8"	1/8"	36	13.7	31.7	0	17	22	22	14	1.0	98	20
514.4003	1/8"	1/4"	36	13.7	31.7	0	17	22	22	14	1.0	98	20
514.4004	1/4"	1/4"	45	17.5	40	0	20	27	25	16	1.0	115	24
514.4005	1/4"	3/8"	45	17.5	40	0	20	27	25	16	1.0	115	24

Art. No.	M	N	P	Q	R	S	T	U	V	W	X	Y
514.4001	21.2	3.3	19	27	58	10	3.3	30	13.2	3	16	20.2
514.4002	21.7	4.3	23.5	35	65	10	3.3	38	12.7	0	18	22.7
514.4003	21.7	4.3	23.5	35	65	10	3.3	38	12.7	3	21	21.2
514.4004	28	4.3	27.5	40	80.8	10	4.3	50	15	0	22	29
514.4005	28	4.3	27.5	40	80.8	10	4.3	50	15	4	24	28

(Values in mm, exception A1/A2 = inch)

Components and materials, 3/2-way

514.3001–514.3005



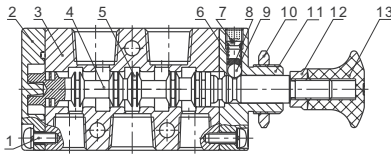
No.	Item	Material
1	Screw	Steel
2	Cover	Aluminium alloy
3	Body	Aluminium alloy
4	O-ring	HNBR
5	Spool	Aluminium alloy
6	Screw	Steel
7	Spring	Stainless steel
8	Screw	Steel
9	Spring holder	POM
10	Steel ball	Steel
11	Hexagon nut	Steel
12	Cover	Aluminium alloy
13	Safety nut	Steel
14	Hand grip	Art. No. 514.3001–514.3003 PA66 Art. No. 514.3004–514.3005 Aluminium alloy

»3L« Series

514.3001–514.4005

Components and materials, 5/2-way

514.4001–514.4005



No.	Item	Material
1	Screw	Steel
2	Cover	Aluminium alloy
3	Body	Aluminium alloy
4	Spool	Aluminium alloy
5	O-ring	HNBR
6	Spring	Stainless steel
7	Screw	Steel
8	Spring holder	POM
9	Steel ball	Steel
10	Hexagon nut	Steel
11	Cover	Aluminium alloy
12	Safety nut	Steel
13	Hand grip	Art. No. 514.4001–514.4003: PA66 Art. No. 514.4004–514.4005: Aluminium alloy

Ordering information

Art. No.	Ident No.
514.3001	115971
514.3002	115973
514.3003	115974
514.3004	115975
514.3005	115976
514.4001	115977
514.4002	115978
514.4003	115979
514.4004	115980
514.4005	115981