

## PNEUMATIC VALVES

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**Application**

Pneumatic valves are air operated and designed for shut-off and diversion functions. The wide choice of body combinations allows them to be used as a shut-off valve with two or three ports, or as a diverting valve with three to five ports.

**Features**

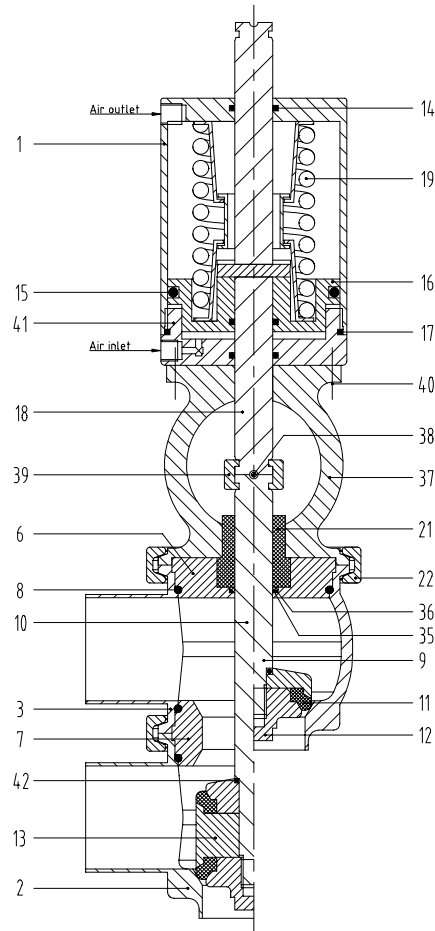
Valves series 900 are made in conformity with the 3-A standards criteria, are fully self-draining, easy to sterilize and internal components are easily accessible during CIP process. Valves can become either normally open or normally closed by simply turning the cylinder upside down.

Valves series 800 offer a wide choice of shutters and gaskets designed for specific system requirements.

Valves are available with single and double-acting actuators, control units and a full range of electrical components.

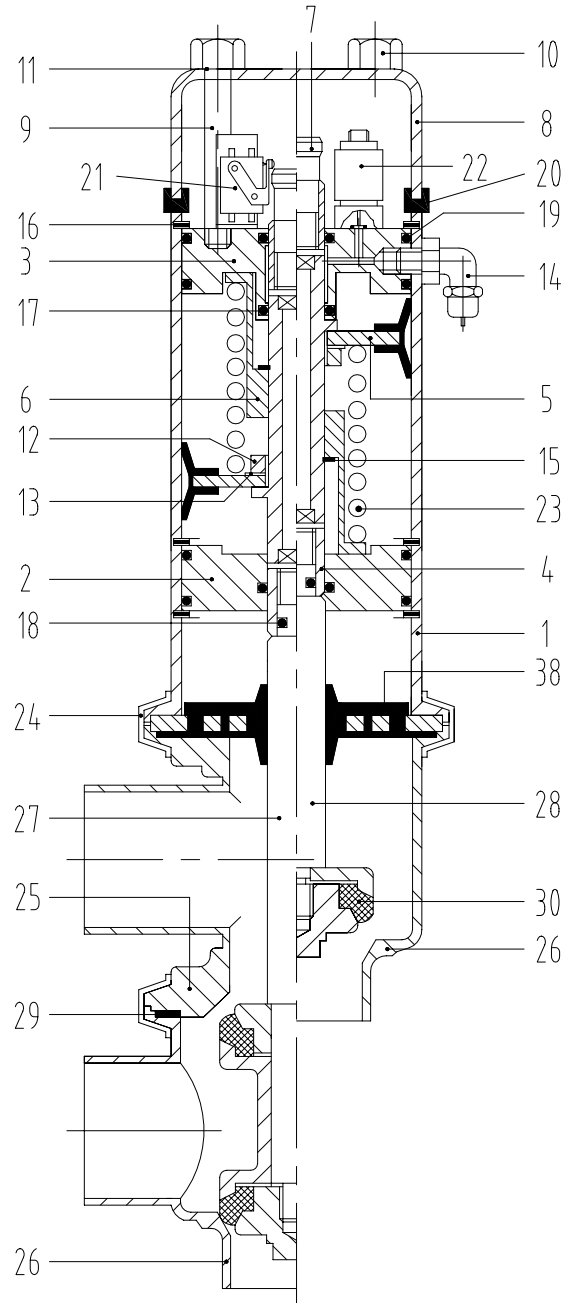
**Components**

Pneumatic valves series 900:



PARTS LIST		
1	Cylinder	Aisi 304L
2	Valve body	Aisi 316L
3	Middle body	Aisi 316L
6	Top head	Aisi 316L
7	Bottom head	Aisi 316L
8	OR seal ring	NBR
9	Shutter 2-way pneumatic valve	Aisi 316L
10	Shutter 3-way pneumatic valve	Aisi 316L
11	Lip gasket	PTFE
12	Locking collar	Aisi 316L
13	Spacer	Aisi 316L
14	OR seal ring	NBR
15	OR seal ring	NBR
16	Piston	Aluminium
17	OR seal ring	NBR
18	Shaft	Chromium steel
19	Spring	Steel
21	Bush	PTFE
22	Clamp	Aisi 304L
35	Washer	PTFE
36	OR seal ring	NBR
37	Lantern	Aisi 304L
38	Screw	Aisi 304L
39	Joining ring	Aisi 304L
40	Screw	Aisi 304L
41	Blank	Aisi 304L
42	OR seal ring	NBR

Pneumatic valves series 800:



PARTS LIST		
1	Cylinder	Aisi 304L
2	Bottom head	Aisi 304L
3	Top head	Aisi 304L
4	Piston	Aisi 304L
5	Lip Gasket	NBR
6	Distance piece	Aisi 304L
7	Microswitch rod	Aisi 304L
8	Cap	Aisi 304L
9	Tie rod	Aisi 304L
10	Nut	Aisi 304L
11	OR seal ring	NBR
12	Locking collar	Aisi 304L
13	Washer	Aisi 304L
14	Air connection	Brass
15	Snap ring	Steel
16	Snap ring	Steel
17	OR seal ring	NBR
18	OR seal ring	NBR
19	OR seal ring	NBR
20	Cap seal	NBR
21	Microswitch	
22	Solenoid valve	
23	Spring	Steel
24	Collar	Aisi 304L
25	Middle body	Aisi 304L
26	Lower body	Aisi 304L
27	Piston 3-way pneumatic valve	Aisi 304L
28	Piston 2-way pneumatic valve	Aisi 304L
29	Seal	NBR
30	Lip gasket	EPDM/Silicone/PFE/FTM
38	Two-lip gasket	EPDM/Silicone

## Technical Data

Max. product pressure:

- 4 bar valves with simple effect actuator;
- 10 bar valves with double effect actuator.

Actuator air pressure: 5/7 bar.

General temperature range: -10°C +95°C (+15°F +205°F).

Seals temperature range:

- PTFE: -10°C +150°C (+15°F +300°F);
- silicone: -50°C +200°C (-60°F +390°F);
- EPDM: -30°C +140°C (-20°F +280°F);
- FTM: -15°C +220°C (+5°F +430°F);

Finish:

- 150 grit (max  $R_a$  0.76-0.89  $\mu\text{m}$ , 30-35  $\mu\text{m}$ ) pneumatic valves series 900;
- 120 grit (max  $R_a$  1.01-1.14  $\mu\text{m}$ , 40-45  $\mu\text{m}$ ) pneumatic valves series 800.

Optional electrical components:

- proximity contact;
- microswitch;
- solenoid valve;
- connector.

Product range: DN 28 to DN 100, 1" to 4".

## Materials

Product wetted steel parts:

- AISI 316L pneumatic valves series 900;
- AISI 304L or AISI 316L pneumatic valves series 800.

Other steel parts: AISI 304L.

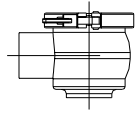
Shutter stem: AISI 316L.

Shutter seal: PTFE.

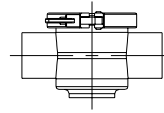
Product wetted seals:

- PTFE pneumatic valves series 900;
- silicone pneumatic valves series 800; on request: EPDM, PTFE, FTM.

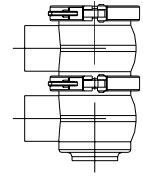
### Body Combinations



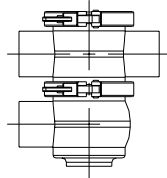
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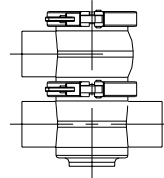
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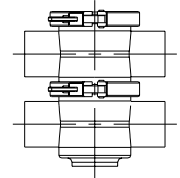
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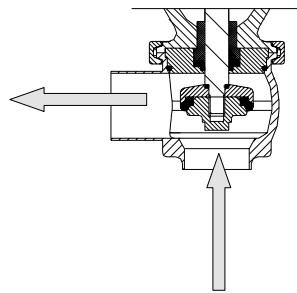


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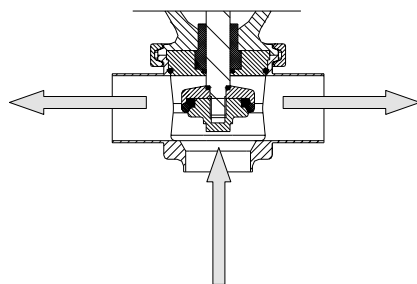
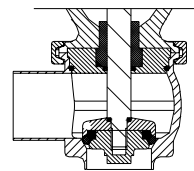


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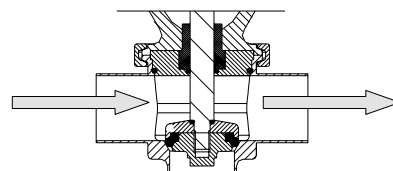
### Flowcharts

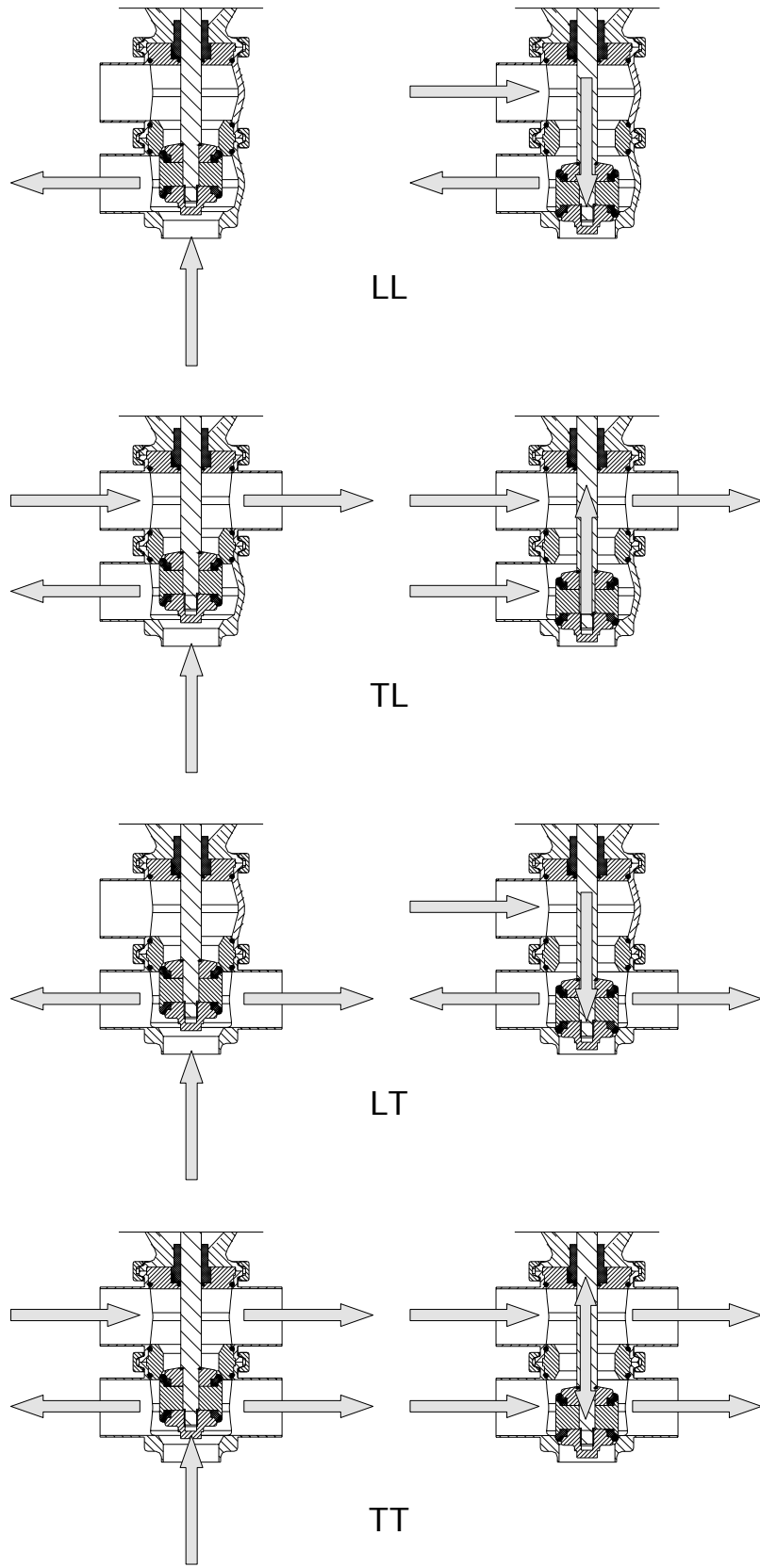


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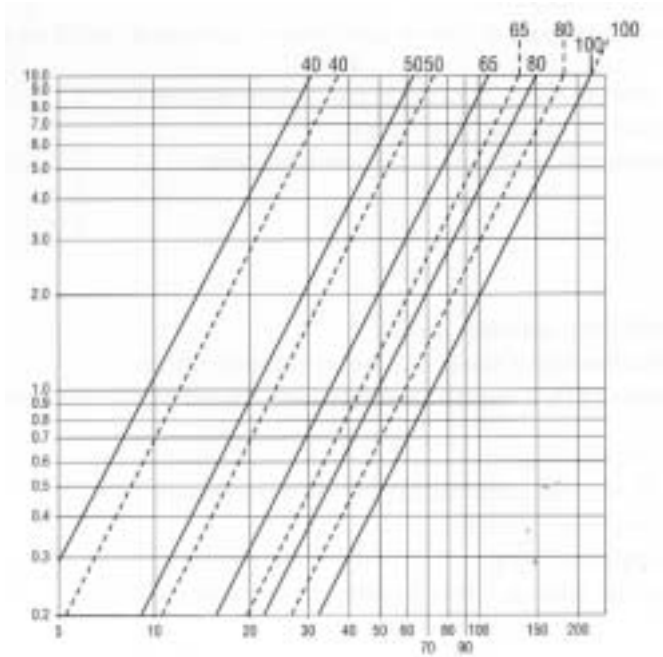




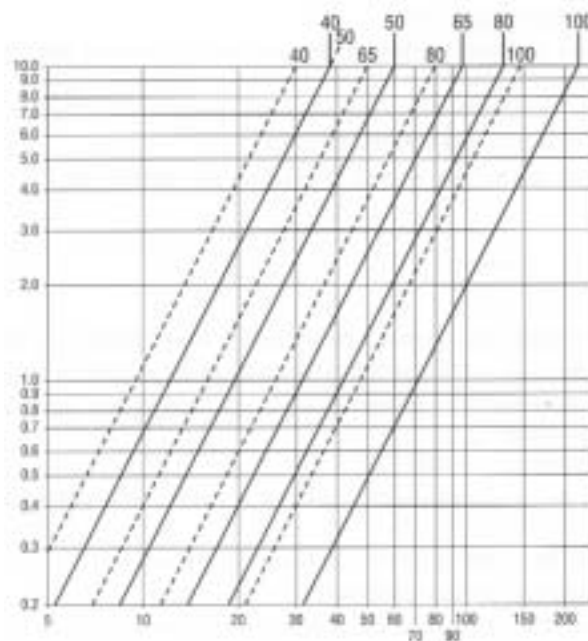


**Pressure Drop**

Pressure drop 2-way pneumatic valves L:



Pressure drop 3-way pneumatic valves LL:



*For further technical information, section and dimensional drawings and range of models available please refer to our series of product brochures, technical catalogues and valve manuals.*