

# PILOT-OPERATED 3-WAY VACUUM VALVES

These 2-position, 3-way valves feature pneumatically activated conical shutters.

They can be normally used either open or closed.

They are recommended in all the cases that require a quick exchange between the vacuum pump suction and the air inlet into the circuit for a quick restoration of the atmospheric pressure.

They are composed of an anodised aluminium body, two vulkollan® shutters assembled onto a stainless steel stem, a membrane for servo-control made with special compounds and a thrust spring for the shutter return.

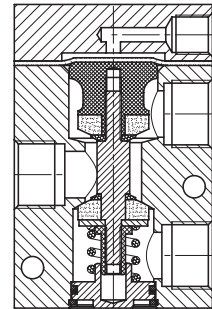
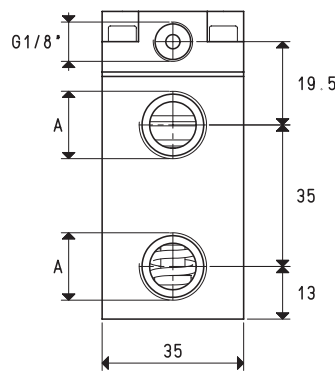
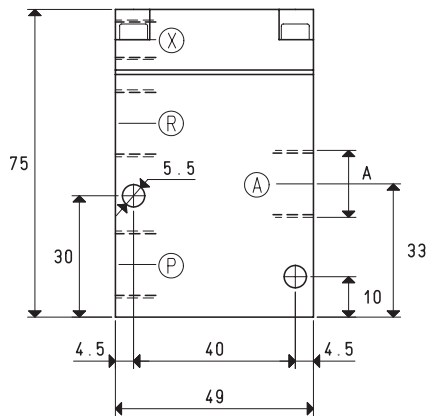
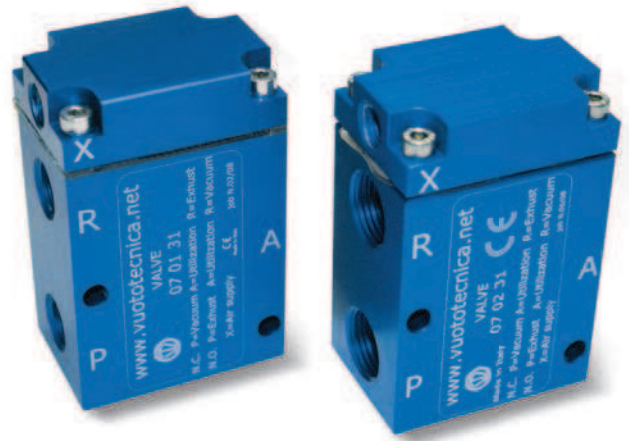
These valves allow reducing frictions and internal dynamic stresses to the minimum, the result being a high response speed and a guarantee of long lasting duration.

### Technical features

Working pressure: from 0.5 to 3000 mbar abs.

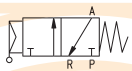
Servo-control pressure: see table

Temperature of the sucked fluid: from -5 to +60 °C



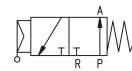
3D drawings available at [www.vuototecnica.net](http://www.vuototecnica.net)

NC



X = Compressed air supply  
P = Pump  
A = Service  
R = Passage

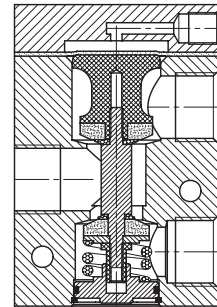
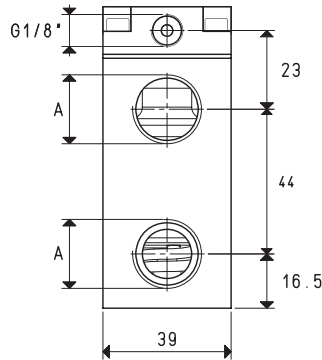
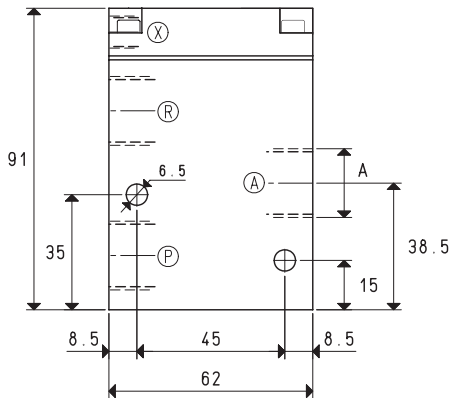
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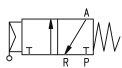
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| Art.     | A<br>Ø | Max. capacity<br>cum/h | Vacuum level<br>mbar abs. |     | Reaction time<br>msec |        | Ø<br>orifice | Passage<br>section<br>mm² | Servo-control<br>pressure<br>bar (g) | Weight<br>g |
|----------|--------|------------------------|---------------------------|-----|-----------------------|--------|--------------|---------------------------|--------------------------------------|-------------|
|          |        |                        | min                       | max | exc.                  | deexc. |              |                           |                                      |             |
| 07 01 31 | G1/4"  | 6                      | 1000                      | 0.5 | 5                     | 10     | 8.5          | 56.8                      | 4 ÷ 7                                | 318         |
| 07 02 31 | G3/8"  | 10                     | 1000                      | 0.5 | 5                     | 10     | 11.5         | 103.8                     | 4 ÷ 7                                | 308         |

### 3-WAY VACUUM SOLENOID PILOT VALVES

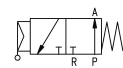


NC



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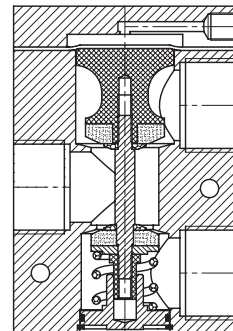
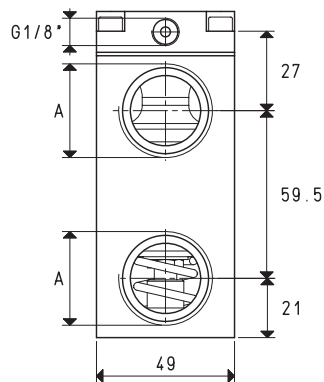
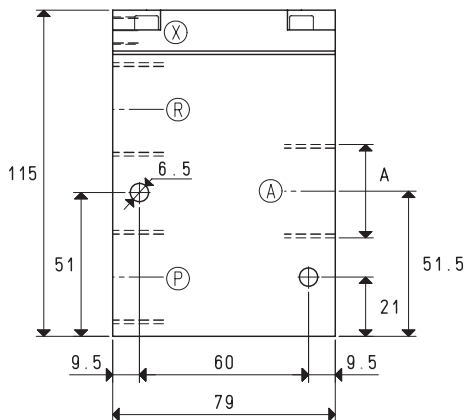
N0



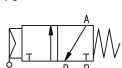
X = Compressed air supply  
P = Passage  
A = Service  
R = Pump

| Art.     | A<br>Ø | Max. capacity<br>cum/h | Vacuum level<br>mbar abs. |     | Reaction time<br>msec |        | Ø<br>orifice | Passage<br>section<br>mm <sup>2</sup> | Servo-control<br>pressure<br>*bar (g) | Weight<br>Kg |
|----------|--------|------------------------|---------------------------|-----|-----------------------|--------|--------------|---------------------------------------|---------------------------------------|--------------|
|          |        |                        | min                       | max | exc.                  | deexc. |              |                                       |                                       |              |
| 07 03 31 | G1/2"  | 20                     | 1000                      | 0.5 | 6                     | 15     | 15.0         | 176                                   | 6 ÷ 8                                 | 0.490        |

\* Add the letters LP to the article for servo-control pressure 4 ÷ 6 bar (g).

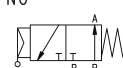


NC



X = Compressed air supply  
P = Pump  
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N0



X = Compressed air supply  
P = Passage  
A = Service  
R = Pump

| Art.     | A<br>Ø | Max. capacity<br>cum/h | Vacuum level<br>mbar abs. |     | Reaction time<br>msec |        | Ø<br>orifice | Passage<br>section<br>mm <sup>2</sup> | Servo-control<br>pressure<br>*bar (g) | Weight<br>Kg |
|----------|--------|------------------------|---------------------------|-----|-----------------------|--------|--------------|---------------------------------------|---------------------------------------|--------------|
|          |        |                        | min                       | max | exc.                  | deexc. |              |                                       |                                       |              |
| 07 04 31 | G3/4"  | 40                     | 1000                      | 0.5 | 7                     | 16     | 20           | 314                                   | 6 ÷ 8                                 | 1.060        |
| 07 05 31 | G1"    | 90                     | 1000                      | 0.5 | 7                     | 16     | 25           | 490                                   | 6 ÷ 8                                 | 0.964        |

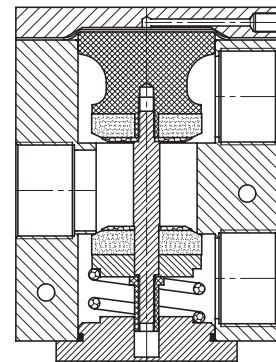
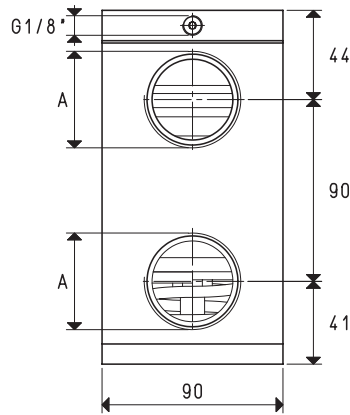
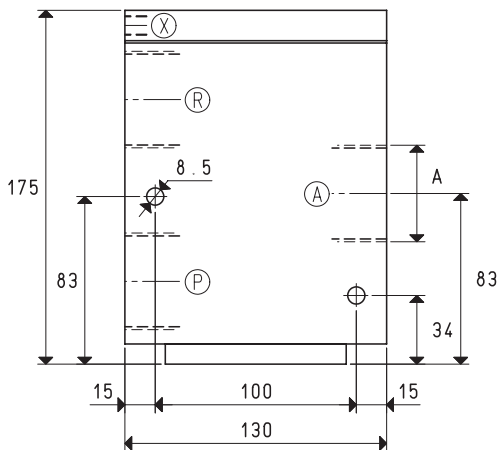
\* Add the letters LP to the article for servo-control pressure 4 ÷ 6 bar (g).

Conversion ratio: inch =  $\frac{\text{mm}}{25.4}$ ; pounds =  $\frac{\text{g}}{453.6}$  =  $\frac{\text{Kg}}{0.4536}$

GAS-NPT thread adapters available at page 1.117

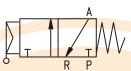
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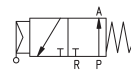
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NC



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NO



X = Compressed air supply  
P = Pump  
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R = Passage

| Art.     | A       | Max. capacity<br>cum/h | Vacuum level<br>mbar abs. |     | Reaction time<br>msec |        | Ø<br>orifice | Passage<br>section<br>mm <sup>2</sup> | Servo-control<br>pressure<br>*bar (g) | Weight<br>Kg |
|----------|---------|------------------------|---------------------------|-----|-----------------------|--------|--------------|---------------------------------------|---------------------------------------|--------------|
|          |         |                        | min                       | max | exc.                  | deexc. |              |                                       |                                       |              |
| 07 06 31 | G1" 1/2 | 320                    | 1000                      | 0.5 | 65                    | 30     | 40           | 1256                                  | 6 ÷ 8                                 | 4.456        |

\* Add the letters LP to the article for servo-control pressure 4 ÷ 6 bar (g).

4.14

$$\text{Conversion ratio: inch} = \frac{\text{mm}}{25.4}, \text{ pounds} = \frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$$

GAS-NPT thread adapters available at page 1.117