



# SERVO-CONTROLLED 3-WAY VACUUM VALVES

3D drawings are available on [vuototecnica.net](http://vuototecnica.net)

These two-position, three-way valves feature pneumatically activated conical shutters. They can be used normally either closed or open. 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 HNBR shutters assembled onto a stainless steel stem, a membrane for servo-control made with special compounds and a thrust spring for the shutter return.

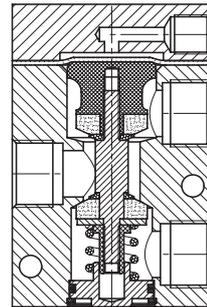
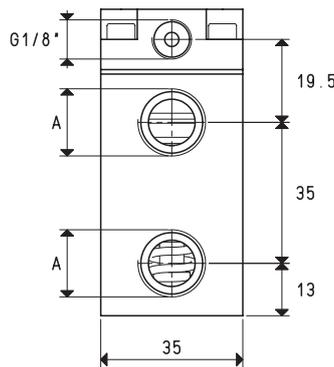
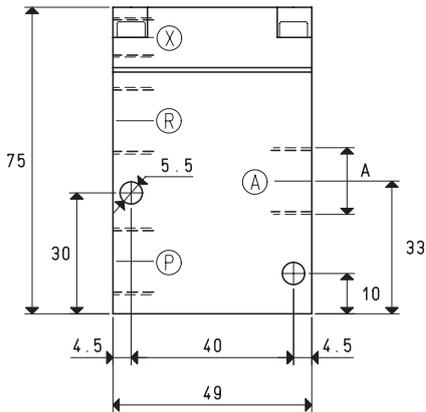
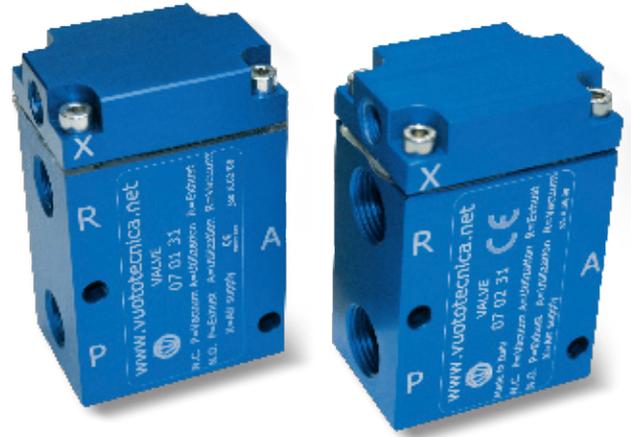
These valves allow reducing frictions and internal dynamic stresses to the minimum. The result being a high response speed and a guarantee of long lasting duration.

### Technical features

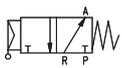
Operating pressure: from 0.5 to 3000 absolute mbar

Servo-control pressure (X): see table

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

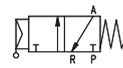


NC



- ⊗ Pneumatic control
- Ⓟ Pump
- Ⓐ Use
- Ⓡ Discharge

NO



- ⊗ Pneumatic control
- Ⓟ Discharge
- Ⓐ Use
- Ⓡ Pump

Item	A ∅	Max flow rate m <sup>3</sup> /h	Level of vacuum abs. mbar		Reaction time msec		Mouth ∅	Cross-section of passage mm <sup>2</sup>	Pressure at control (X) bar	Weight Kg
			min	max	energ.	de-energ.				
<b>07 01 31</b>	G1/4"	6	1000	0.5	5	10	8.5	56.8	4 ÷ 7	0.32
<b>07 02 31</b>	G3/8"	10	1000	0.5	5	10	11.5	103.8	4 ÷ 7	0.31
<b>Spare parts</b>			<b>07 01 31</b>				<b>07 02 31</b>			
<b>Solenoid valve sealing kit</b>			item 00 07 267				item 00 07 267			
<b>Pilot membranes for solenoid valves</b>			item 00 07 229				item 00 07 229			

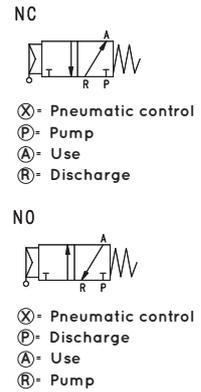
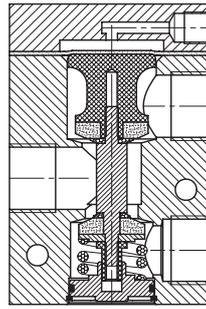
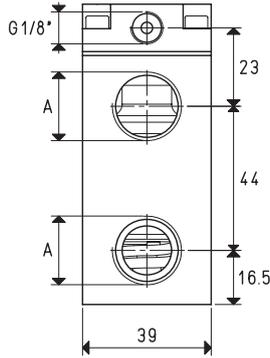
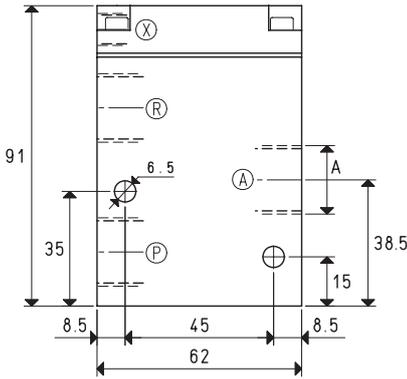
Note: Valve pneumatic control power must be supplied with non-lubricated compressed air, 5 micron filtration, according to standard ISO 8573-1 class 4.

Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)

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

Adapters for GAS - NPT threading available on page 1.134

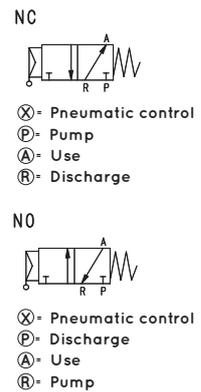
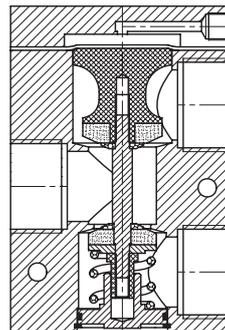
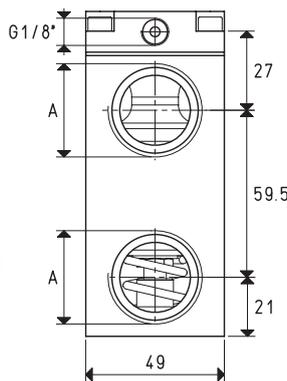
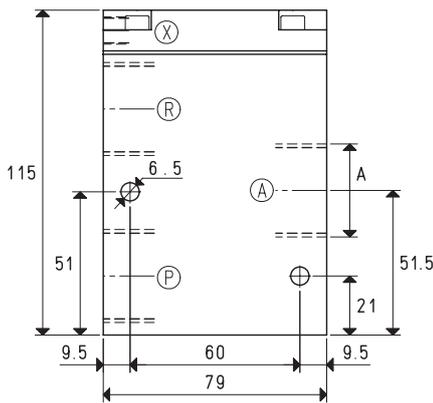
# SERVO-CONTROLLED 3-WAY VACUUM VALVES



Item	A ∅	Max flow rate m <sup>3</sup> /h	Level of vacuum abs. mbar		Reaction time msec		Mouth ∅	Cross-section of passage mm <sup>2</sup>	Pressure at control (X) *bar	Weight Kg
			min	max	energ.	de-energ.				
<b>07 03 31</b>	G1/2"	20	1000	0.5	6	15	15.0	176	6 ÷ 8	0.490
<b>Spare parts</b>			<b>07 03 31</b>							
<b>Solenoid valve sealing kit</b>			item						00 07 268	
<b>Pilot membranes for solenoid valves</b>			item						00 07 230	

\* Add the letters LP to the item for pneumatic control pressures 4 - 6 bar.

Note: Valve pneumatic control power must be supplied with non-lubricated compressed air, 5 micron filtration, according to standard ISO 8573-1 class 4.



Item	A ∅	Max flow rate m <sup>3</sup> /h	Level of vacuum abs. mbar		Reaction time msec		Mouth ∅	Cross-section of passage mm <sup>2</sup>	Pressure at control (X) *bar	Weight Kg
			min	max	energ.	de-energ.				
<b>07 04 31</b>	G3/4"	40	1000	0.5	7	16	20	314	6 ÷ 8	1.060
<b>07 05 31</b>	G1"	90	1000	0.5	7	16	25	490	6 ÷ 8	0.964
<b>Spare parts</b>			<b>07 04 31</b>				<b>07 05 31</b>			
<b>Solenoid valve sealing kit</b>			item						00 07 269	
<b>Pilot membranes for solenoid valves</b>			item						00 07 231	

\* Add the letters LP to the item for pneumatic control pressures 4 - 6 bar.

Note: Valve pneumatic control power must be supplied with non-lubricated compressed air, 5 micron filtration, according to standard ISO 8573-1 class 4.

Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)

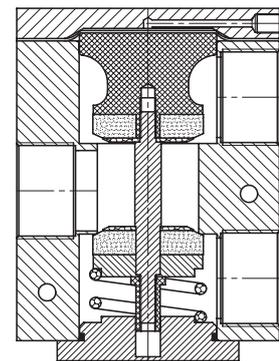
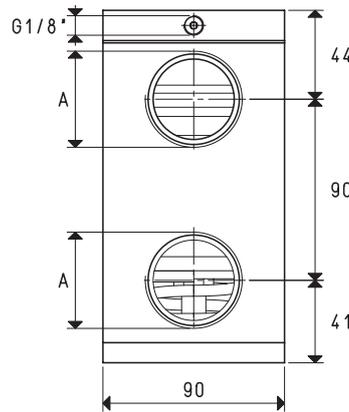
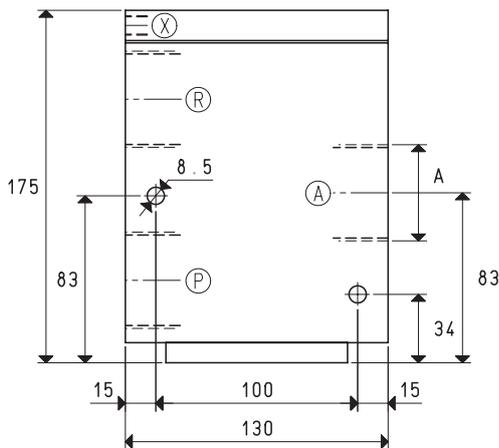
inch =  $\frac{\text{mm}}{25.4}$ ; pounds =  $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

Adapters for GAS - NPT threading available on page 1.134



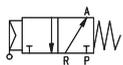
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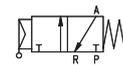
4

NC



- ⊗ - Pneumatic control
- Ⓟ - Pump
- Ⓐ - Use
- Ⓡ - Discharge

NO



- ⊗ - Pneumatic control
- Ⓟ - Discharge
- Ⓐ - Use
- Ⓡ - Pump

Item	A Ø	Max flow rate m³/h	Level of vacuum abs. mbar		Reaction time msec		Mouth Ø	Cross-section of passage mm²	Pressure at control (X) *bar	Weight Kg
			min	max	energ.	de-energ.				
<b>07 06 31</b>	G1" 1/2	230	1000	0.5	65	30	40	1256	6 ÷ 8	4.456
<b>Spare parts</b>			<b>07 06 31</b>							
<b>Solenoid valve sealing kit</b>			item							00 07 270
<b>Pilot membranes for solenoid valves</b>			item							00 07 232

\* Add the letters LP to the item for pneumatic control pressures 4 - 6 bar.

Note: Valve pneumatic control power must be supplied with non-lubricated compressed air, 5 micron filtration, according to standard ISO 8573-1 class 4.

Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)

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

Adapters for GAS - NPT threading available on page 1.134



# SERVO-CONTROLLED 3-WAY VACUUM SOLENOID VALVES, FOR LARGE FLOW RATES

Strengthened by our constant desire for research and innovation and our experience, acquired over more than forty years of operations in the vacuum sector, we have made these new valves using absolutely innovative technologies, to guarantee exceptionally low intervention times, almost negligible pressure drops, and minimal dimensions compared to the large connections with which they are equipped. Furthermore, we have obtained them from aluminium block to eliminate even the slightest chance of loss due to transpiration, as perhaps could occur with a fusion.

This new series of solenoid valves for vacuums are three-way, two-position and are composed of:

- An anodised aluminium body set with attachment connections;
- Two conical HNBR shutters fitted on the aluminium pistons, pneumatically powered with spring return.

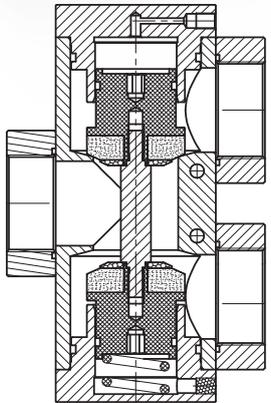
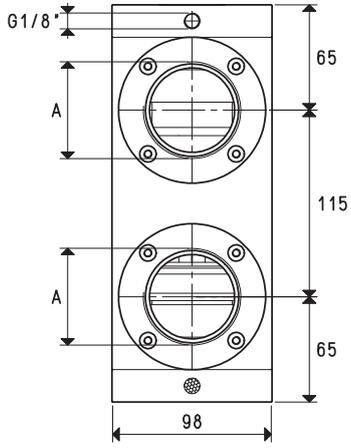
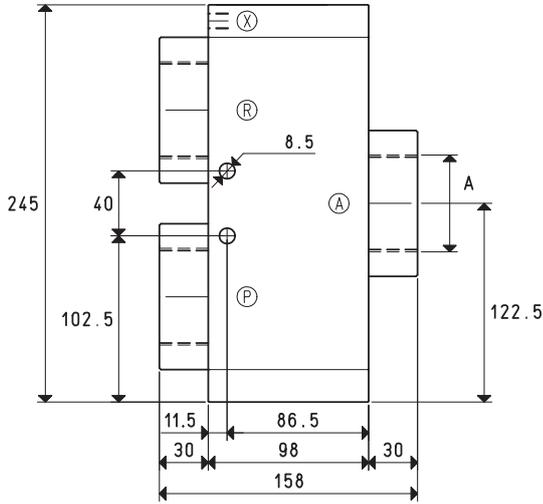
The composition of these valves, especially the original Teflon® slide system that the pistons have been equipped with, help minimise friction and internal dynamic stress, deriving high response speed and ensuring enduring operation.

They can be used normally either closed or open.

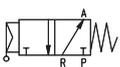
The three-way valves are used for vacuum interception on power supply units and suction palletisers, vacuum thermoformers, vacuum packaging units, robots, feeders, bag opening units and in all those cases where rapid exchange between pump suction for vacuums and air supply into the circuit is necessary for quick restoration of atmospheric pressure.

### Technical features

- Operating pressure: from 0.5 to 1000 absolute mbar
- Servo-control pressure (X): from 4 to 8 bar
- Temperature of suctioned fluid: from - 5 to + 60°C

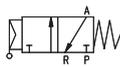


NC



- ⊗ Pneumatic control
- Ⓟ Pump
- Ⓐ Use
- Ⓡ Discharge

NO



- ⊗ Pneumatic control
- Ⓟ Discharge
- Ⓐ Use
- Ⓡ Pump

Item	A Ø	Max flow rate m³/h	Level of vacuum abs. mbar		Reaction time msec		Mouth Ø	Cross-section of passage mm²	Pressure at control (X) bar	Weight Kg
			min	max	energ.	de-energ.				
<b>07 08 31</b>	G2"	390	1000	0.5	110	70	52	2123	4 ÷ 8	5.5

Spare parts			07 08 31		
Solenoid valve sealing kit	item		00 07 380		

Note: Valve pneumatic control power must be supplied with non-lubricated compressed air, 5 micron filtration, according to standard ISO 8573-1 class 4.

Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)

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

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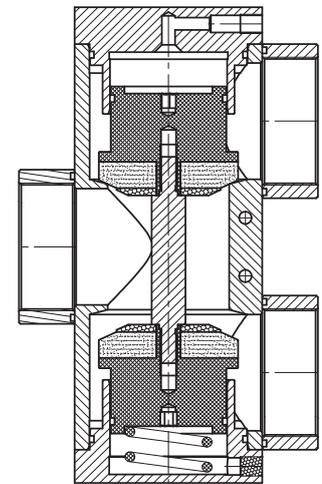
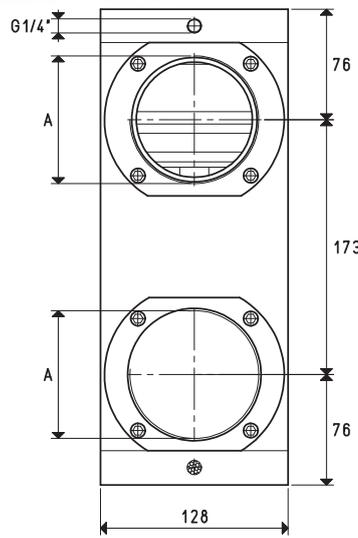
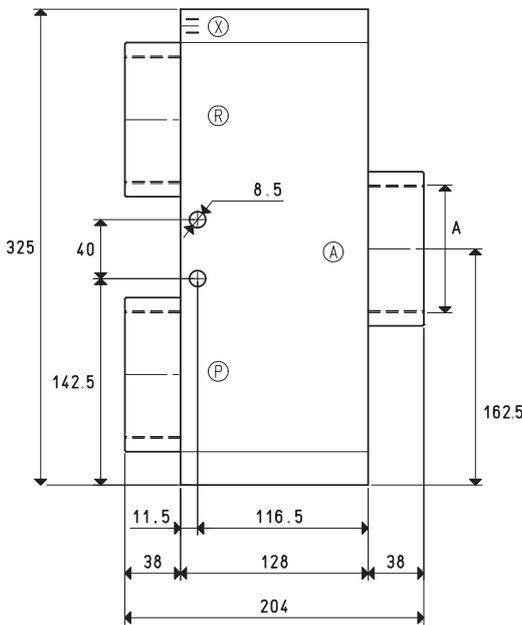


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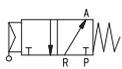
3D drawings are available on vuototecnica.net



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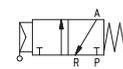


NC



- ⊗ - Pneumatic control
- Ⓟ - Pump
- Ⓜ - Use
- Ⓡ - Discharge

NO



- ⊗ - Pneumatic control
- Ⓟ - Discharge
- Ⓜ - Use
- Ⓡ - Pump

Item	A Ø	Max flow rate m³/h	Level of vacuum abs. mbar		Reaction time msec		Mouth Ø	Cross-section of passage mm²	Pressure at control (X) bar	Weight Kg	
			min	max	energ.	de-energ.					
<b>07 09 31</b>	G3"	750	1000	0.5	132	84	80	5024	4 ÷ 8	11.4	
<b>Spare parts</b>					<b>07 09 31</b>						
<b>Solenoid valve sealing kit</b>					item		00 07 384				

Note: Valve pneumatic control power must be supplied with non-lubricated compressed air, 5 micron filtration, according to standard ISO 8573-1 class 4.

Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)

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

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