



## SERVO-CONTROLLED 3-WAY VACUUM VALVES

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 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.

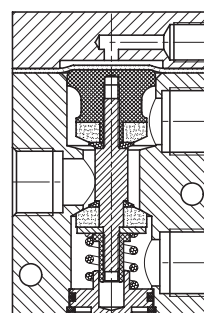
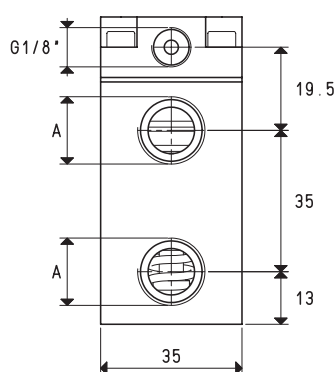
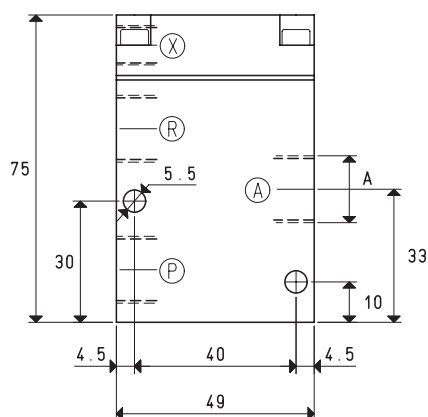
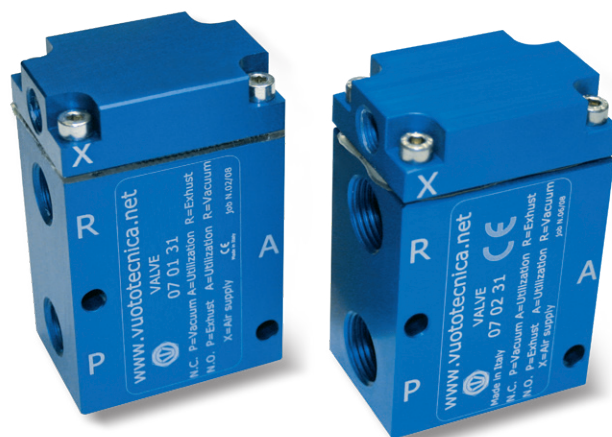
These valves allow reducing frictions and internal dynamic stresses to the minimum. The result being a high response speed and a guarantee of long lasting duration.

### Technical features

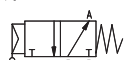
Operating pressure: from 0.5 to 3000 absolute mbar

Servo-control pressure: see table

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

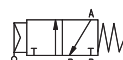


NC



X = Compressed air supply  
P = Pump  
A = Use  
R = Discharge

NO



X = Compressed air supply  
P = Discharge  
A = Use  
R = Pump

Item	A Ø	Max flow rate m³/h	Level of vacuum abs. mbar min max		Reaction time msec energ. de-energ.		Mouth Ø	Cross-section of passage mm²	Pressure at servo-controlled bar	Weight Kg
07 01 31	G1/4"	6	1000	0.5	5	10	8.5	56.8	4 ÷ 7	0,32
07 02 31	G3/8"	10	1000	0.5	5	10	11.5	103.8	4 ÷ 7	0,31

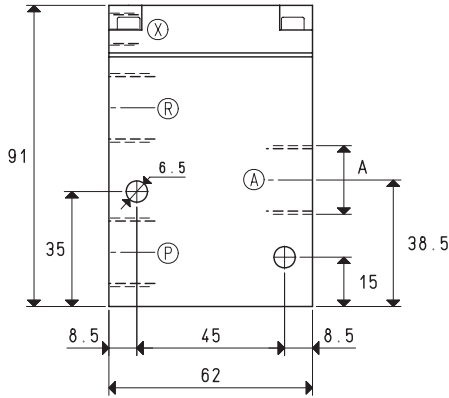
Note: Valve servo-controlled power must be supplied with non-lubricated compressed air, 5 micron filtration, according to standard ISO 8573-1 class 4.

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

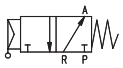
inch =  $\frac{\text{mm}}{25.4}$ ; pounds =  $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

Adapters for GAS - NPT threading available on page 1.130

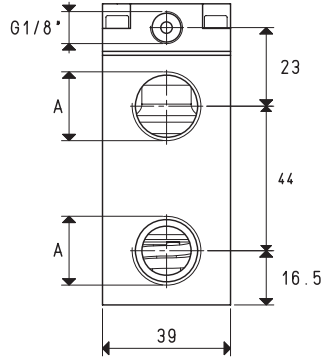
# SERVO-CONTROLLED 3-WAY VACUUM VALVES



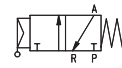
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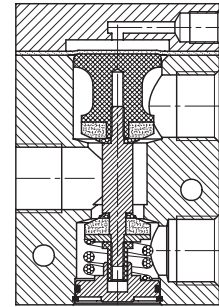
X - Compressed air supply  
P - Pump  
A - Use  
R - Discharge



NO



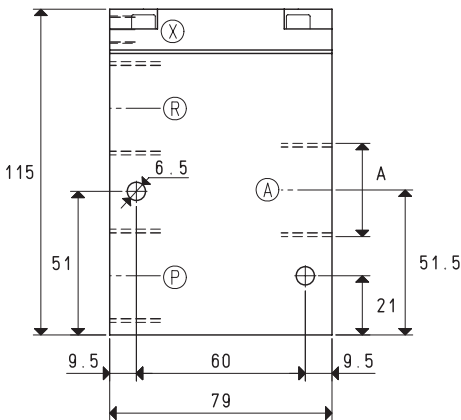
X - Compressed air supply  
P - Discharge  
A - Use  
R = Pump



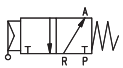
Item	A Ø	Max flow rate m³/h	Level of vacuum abs. mbar		Reaction time msec		Mouth Ø	Cross-section of passage mm²	Pressure at servo-controlled *bar	Weight Kg
			min	max	energ.	de-energ.				
07 03 31	G1/2"	20	1000	0.5	6	15	15.0	176	6 ÷ 8	0.490

\* Add the letters LP to the item for servo-controlled pressures 4 - 6 bar.

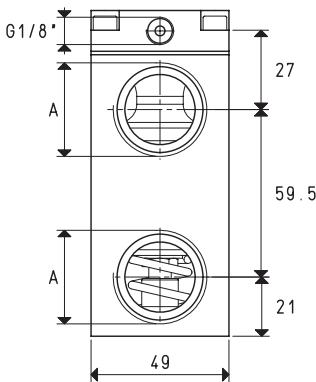
Note: Valve servo-controlled power must be supplied with non-lubricated compressed air, 5 micron filtration, according to standard ISO 8573-1 class 4.



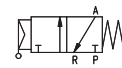
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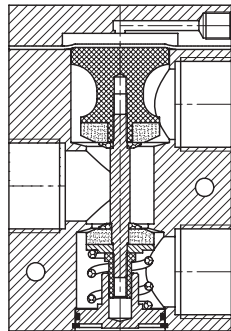
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NO



X - Compressed air supply  
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A - Use  
R = 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 servo-controlled *bar	Weight Kg
			min	max	energ.	de-energ.				
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 item for servo-controlled pressures 4 - 6 bar.

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

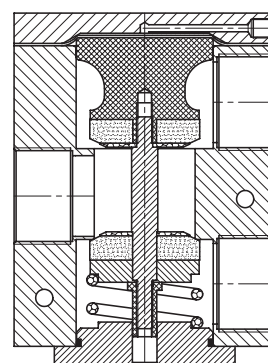
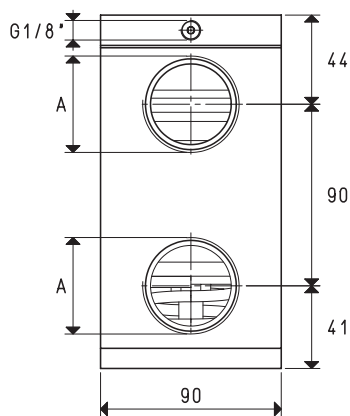
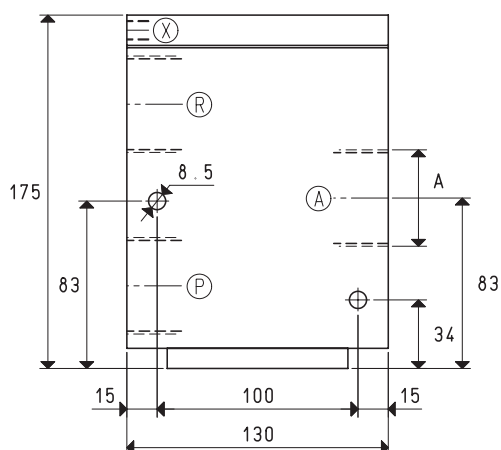
Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)

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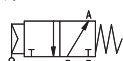
Adapters for GAS - NPT threading available on page 1.130



# SERVO-CONTROLLED 3-WAY VACUUM VALVES

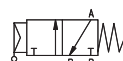


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NO



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Item	A Ø	Max flow rate m³/h	Level of vacuum abs. mbar min max	Reaction time msec energ. de-energ.	Mouth Ø	Cross-section of passage mm²	Pressure at servo-controlled *bar	Weight Kg
07 06 31	G1" 1/2	230	1000 0.5	65 30	40	1256	6 ÷ 8	4.456

\* Add the letters LP to the item for servo-controlled pressures 4 - 6 bar.

Note: Valve servo-controlled 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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# 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 Vulkollan® 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.

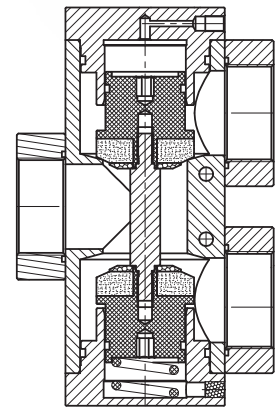
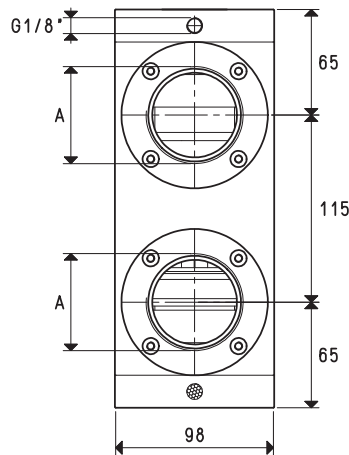
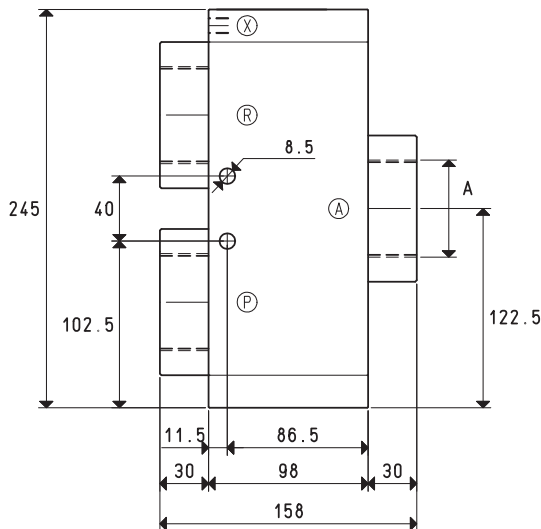
The three-way valves are used for vacuum interception on power supply units and suction palletisers, vacuum thermoformers, vacuum packaging units, robots, feeders, bag opening units and in all those cases where rapid exchange between pump suction for vacuums and air supply into the circuit is necessary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

## Technical features

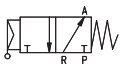
Operating pressure: from 0.5 to 1000 absolute mbar

Servo-control pressure: from 4 to 8 bar

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

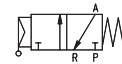


NC



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A = Use  
R = Discharge

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A = Use  
R = Pump

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

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

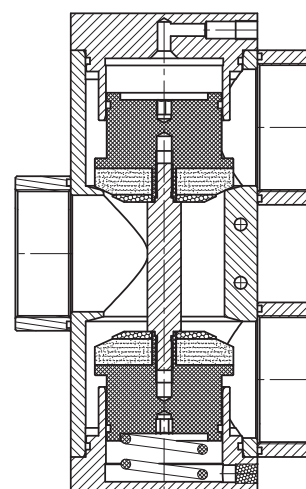
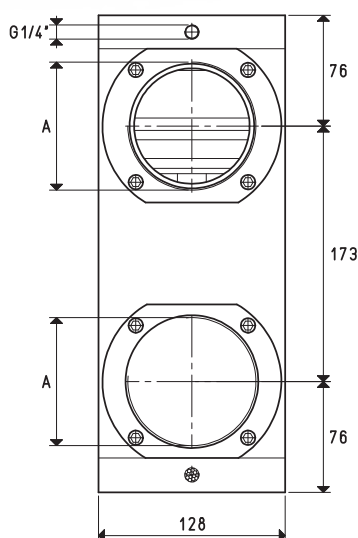
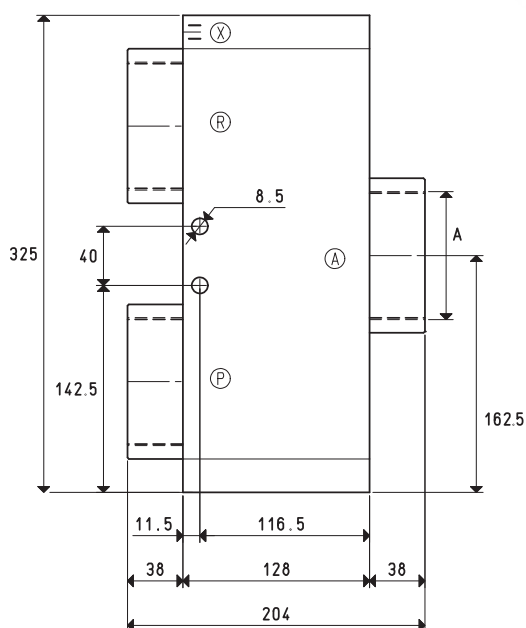


# SERVO-CONTROLLED 3-WAY VACUUM SOLENOID VALVES, FOR LARGE FLOW RATES

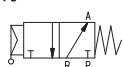
3D drawings are available on [vuototecnica.net](http://vuototecnica.net)



4

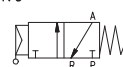


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X - Compressed air supply  
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R - Pump

Item	A	Max flow rate	Level of vacuum		Reaction time		Mouth	Cross-section of passage	Pressure at servo-controlled	Weight
	Ø	m³/h	abs. min	mbar max	msec energ.	msec de-energ.	Ø	mm²	bar	Kg
<b>07 09 31</b>	G3"	750	1000	0.5	132	84	80	5024	4 ÷ 8	11.4

Note: Valve servo-controlled 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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