SERVO-CONTROLLED 3-WAY VACUUM SOLENOID VALVES WITH LOW ABSORPTION ELECTRIC COIL

The 3-way vacuum solenoid valves in this series feature two positions with pneumatically pilot-operated conical shutters.
They can normally be used either open or closed.
They are composed of an anodised aluminium body where the connections are located, two shutters in vulkollan® assembled onto a stainless steel stem, a special compound membrane for the servo-control and a spring for the shutter return. A solenoid pilot valve activated by a built-in electric coil, manages the compressed air supply.
The particular execution of these valves allows reducing frictions and internal dynamic stresses to the minimum, which results in a high response speed and a guarantee of long lasting operation.
The electric coil of the solenoid pilot valve is fully plasticised plasticised with synthetic resin, tight execution, insulation class F (up to 155 °C) compliant with VDE standards, with 3 mm 2-terminal electrical connections in compliance with EN 175301-803 (ex DIN 43650)-C. Protection degree IP 54; IP 65 for inserted connector.
Available for voltages of 12-24V/50-60Hz and 12-24V/CC.
Allowed tolerance on the voltage nominal value: ±10%.
Maximum electric power: 2 W
The connector can be rotated by 180° on the coil and can be supplied, upon request, with Led lights, anti-interference circuit and/or with protection devices against overvoltage and polarity reversal.
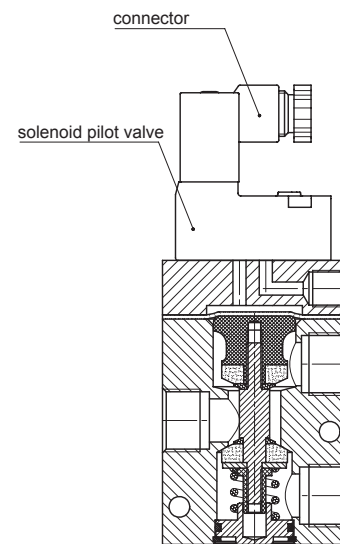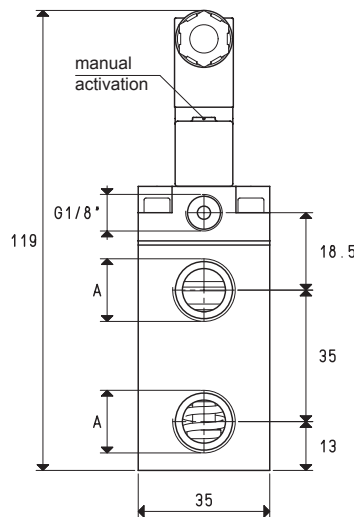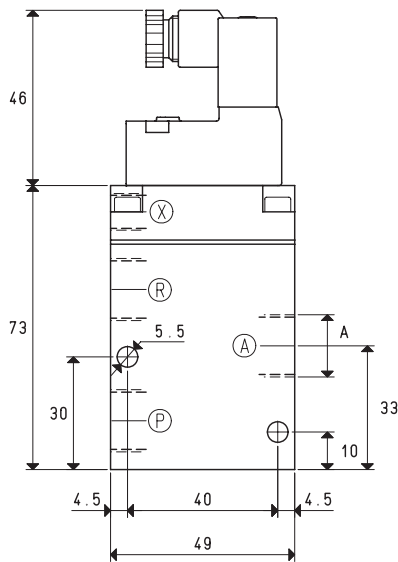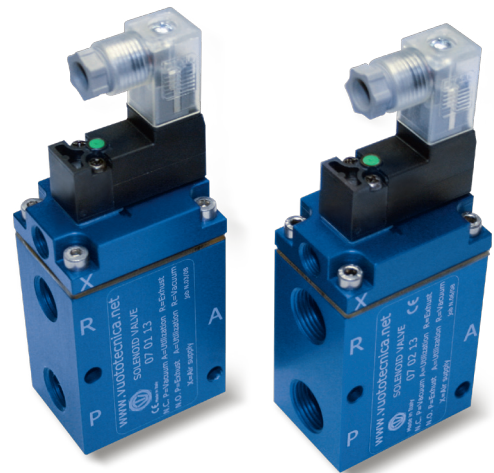*A push-button device, built-in the solenoid pilot valve, allows manually opening and closing the solenoid valve. 3-way vacuum solenoid valves are usually used for intercepting the vacuum in vacuum cup feeders and paletisers, robots, bag openers and in all those cases which require a quick exchange between the vacuum pump suction and the air inlet in the circuit, for a quick restoration of the atmospheric pressure.*
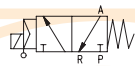*Technical features*
Working pressure: from 0.5 to 3000 mbar abs.
Servo-control pressure: see table
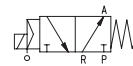*Temperature of the sucked fluid: from -5 to +60 °C*

connector

solenoid pilot valve

manual activation

NC

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

NO

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

Art.	A		Max. capacity	Vacuum level		Reaction time		Ø	Passage section	Servo-control pressure	Weight
				mbar abs.		msec					
	Ø		cum/h	min	max	exc.	deexc.	orifice	mm²	bar (g)	Kg
07 01 13	G1/4"		6	1000	0.5	16	27	8.5	56.8	4 ÷ 7	0.44
07 02 13	G3/8"		10	1000	0.5	16	27	11.5	103.8	4 ÷ 7	0.43

Note: Please specify the electric coil voltage in the order (E.g.: 07 01 13 V24-CC)

The connector is not integral part of the solenoid valve and, therefore, must be ordered separately (See solenoid valve accessories).
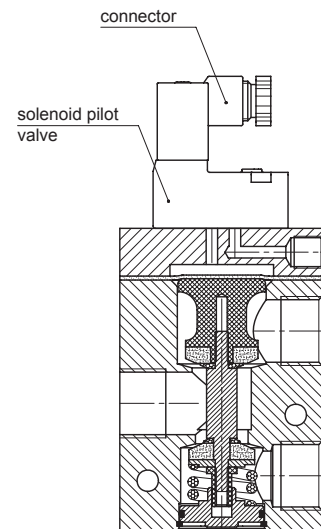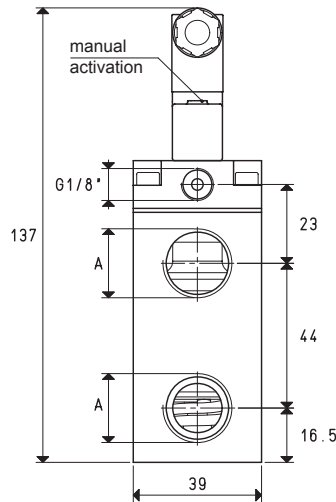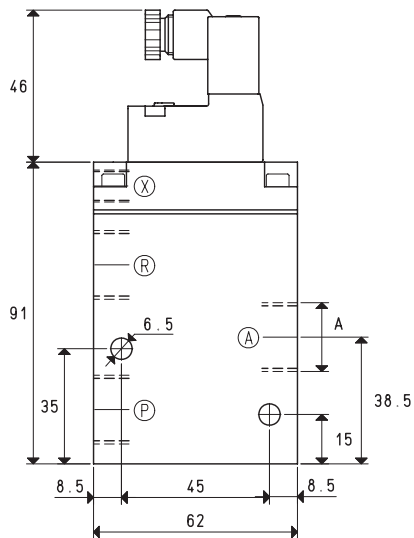
Conversion ratio: inch = $\frac{mm}{25.4}$; pounds = $\frac{g}{453.6} = \frac{Kg}{0.4536}$

GAS-NPT thread adapters available at page 1.117

SERVO-CONTROLLED 3-WAY VACUUM SOLENOID VALVES WITH LOW ABSORPTION ELECTRIC COIL

4

connector

solenoid pilot valve

manual activation

G1/8"

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

NO
X = Compressed air supply
P = Passage
A = Service
R = Pump

Art.	A		Max. capacity	Vacuum level		Reaction time		Ø	Passage section	Servo-control pressure	Weight
				mbar abs.		msec					
	Ø		cum/h	min	max	exc.	deexc.	orifice	mm²	*bar (g)	Kg
07 03 13	G1/2"		20	1000	0.5	16	40	15.0	176	6 ÷ 7	0.52

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

Note: Please specify the electric coil voltage in the order (E.g.: 07 03 13 V24-CC).

The connector is not integral part of the solenoid valve and, therefore, must be ordered separately (See solenoid valve accessories).

Conversion ratio: inch = $\frac{mm}{25.4}$; pounds = $\frac{g}{453.6} = \frac{Kg}{0.4536}$ GAS-NPT thread adapters available at page 1.117

3D drawings available at www.vuototecnica.net

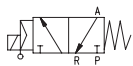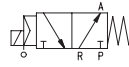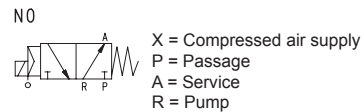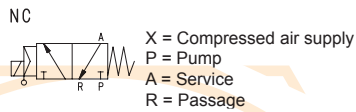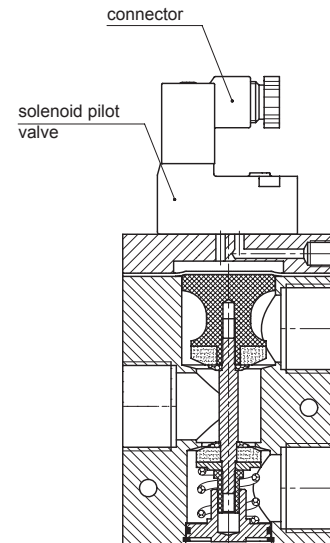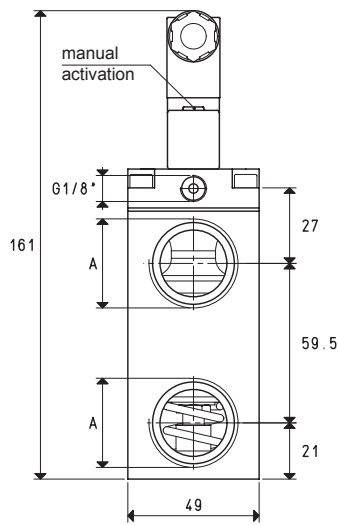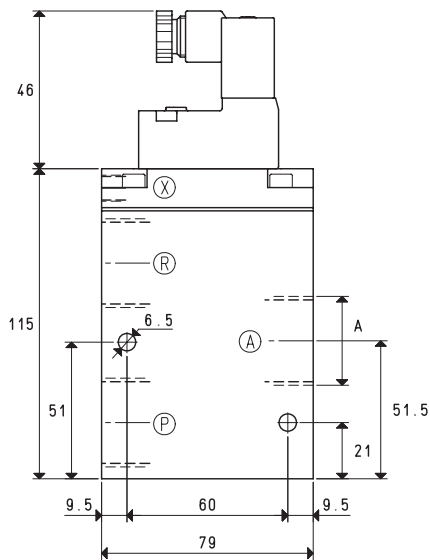**4.37**

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SERVO-CONTROLLED 3-WAY VACUUM SOLENOID VALVES WITH LOW ABSORPTION ELECTRIC COIL

NC

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

NO

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

Art.	A	Max. capacity	Vacuum level		Reaction time		Ø	Passage section	Servo-control pressure	Weight
			mbar abs.		msec					
	Ø	cum/h	min	max	exc.	deexc.	orifice	mm²	*bar (g)	Kg
07 04 13	G3/4"	40	1000	0.5	16	40	20	314	6 ÷ 7	1.00
07 05 13	G1"	90	1000	0.5	18	42	25	490	6 ÷ 7	0.94

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

Note: Please specify the electric coil voltage in the order (E.g.: 07 04 13 V24-CC).

The connector is not integral part of the solenoid valve and, therefore, must be ordered separately (See solenoid valve accessories).
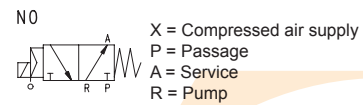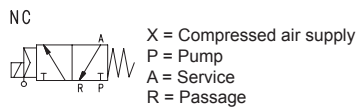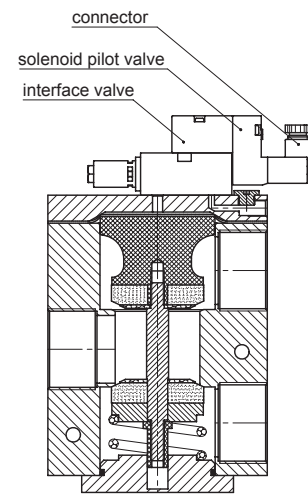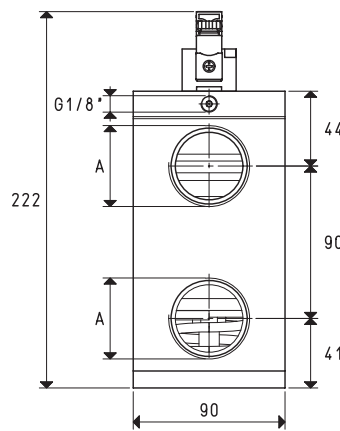
Conversion ratio: inch = $\frac{mm}{25.4}$; pounds = $\frac{g}{453.6} = \frac{Kg}{0.4536}$ GAS-NPT thread adapters available at page 1.117

SERVO-CONTROLLED 3-WAY VACUUM SOLENOID VALVES WITH LOW ABSORPTION ELECTRIC COIL

NC

X = Compressed air supply
P = Pump
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NO

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

Art.	A	Max. capacity	Vacuum level		Reaction time		Ø	Passage section	Servo-control pressure	Weight
			mbar abs.		msec					
	Ø	cum/h	min	max	exc.	deexc.	orifice	mm²	*bar (g)	Kg
07 06 13	G1"1/2	180	1000	0.5	60	38	40	1256	6 ÷ 7	4.50

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

Note: Please specify the electric coil voltage in the order (E.g.: 07 06 13 V24-CC).

The connector is not integral part of the solenoid valve and, therefore, must be ordered separately (See solenoid valve accessories).

Conversion ratio: inch = $\frac{mm}{25.4}$; pounds = $\frac{g}{453.6} = \frac{Kg}{0.4536}$ GAS-NPT thread adapters available at page 1.117

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