SERVO-CONTROLLED 3-WAY VACUUM SOLENOID VALVES WITH 2 ELECTRIC COILS

These solenoid valves have the same function and the same structure as the previous ones. Their distinctive features are the two coils that with a simple electric impulse, exchange the shutter positions and keep them in this position till the next impulse even in absence of compressed air at the servo control and of electric current.
For this feature, they are especially indicated in all those cases which require a safe connection to the vacuum source, even in absence of electric or pneumatic supply.
The standard electric coils are fully plasticised with synthetic resin, tight execution, insulation class F (up to 155 °C) compliant with VDE standards, with 6.3 mm 3-terminal electrical connections in compliance with EN 175301-803 (ex DIN 43650). Protection degree IP 54; IP 65 for inserted connector.
Allowed tolerance on the voltage nominal value: ±10%.
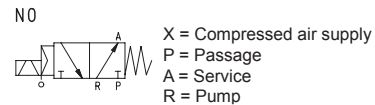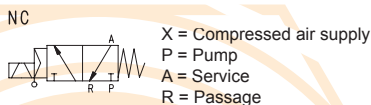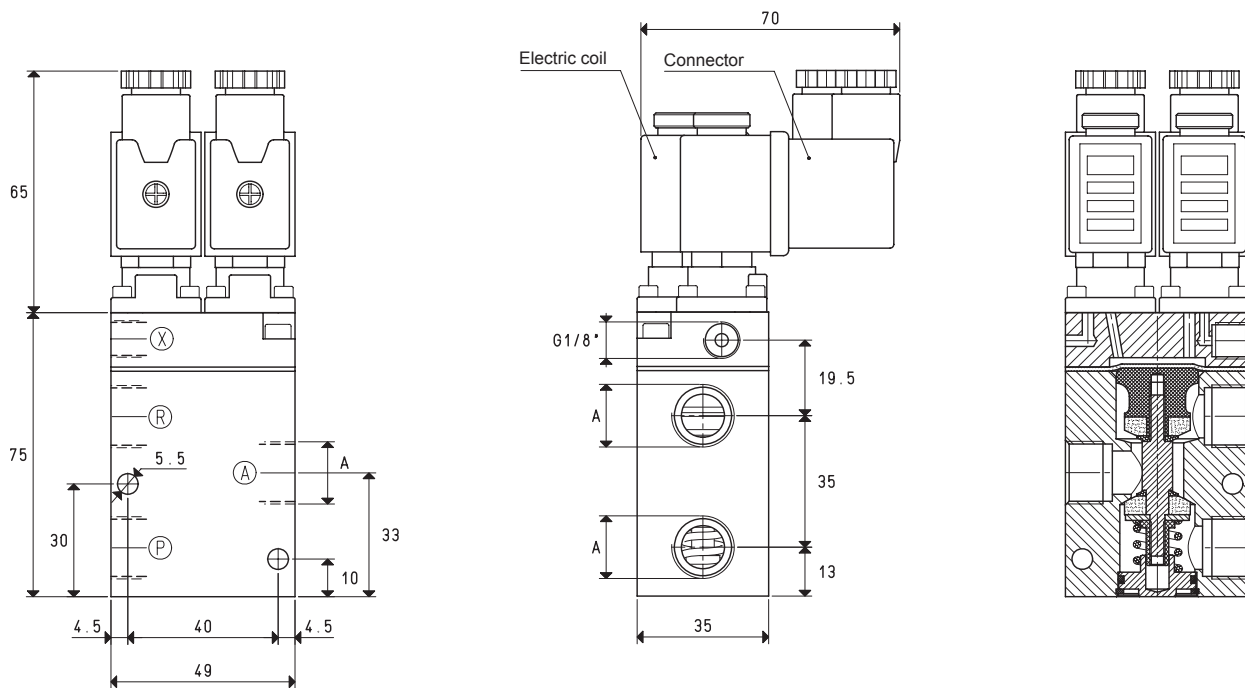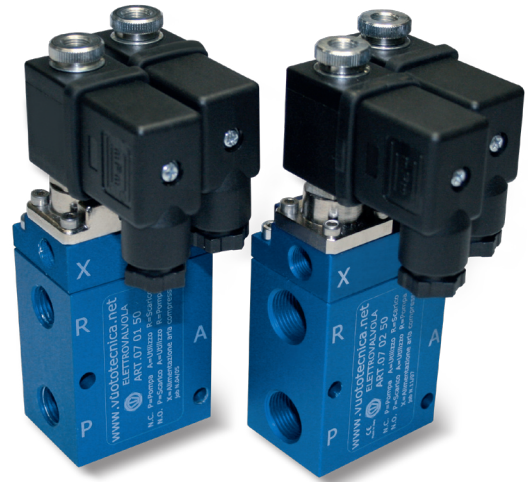*Max. absorption: 8 ÷ 16.5 V.A. with AC and 6.5 ÷ 16 W with DC.*
The electric coils can be rotated by 360°. The connector can be rotated by 180° on the coils and can be supplied, upon request, with Led lights, anti-interference circuit and/or with protection devices against overvoltage and polarity reversal.
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

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

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

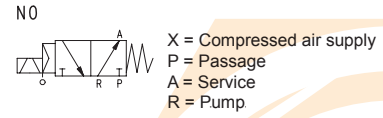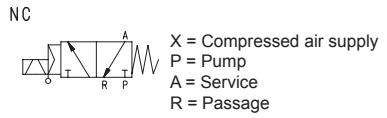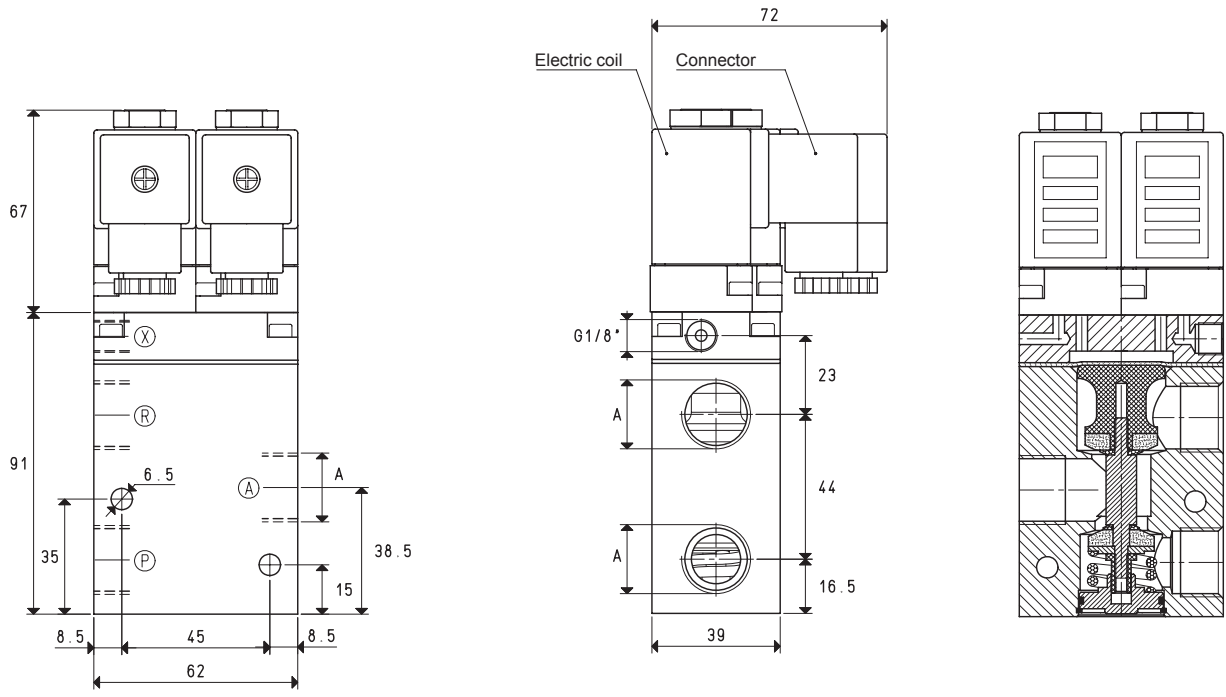| Art.	A	Max. capacity	Vacuum level		Reaction time		Ø	Passage section	Servo-control pressure	Weight
			mbar abs.		msec					
	Ø	cum/h	min	max	exc.	deexc.	orifice	mm²	bar (g)	Kg
07 01 51	G1/4"	6	1000	0.5	16	27	8.5	56.8	4 ÷ 7	0.59
07 02 51	G3/8"	10	1000	0.5	16	27	11.5	103.8	4 ÷ 7	0.58

Note: Coils and connectors are not integral part of the solenoid valves, therefore, they 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

4

Electric coil   Connector

72

G1/8*

23

44

16.5

39

67

91

35

6.5

A

38.5

15

8.5   45   8.5

62

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 51	G1/2"		20	1000	0.5	16	40	15.0	176	6 ÷ 8	0.97

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

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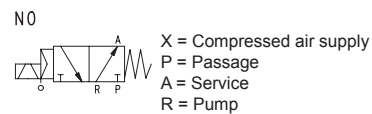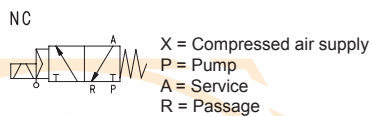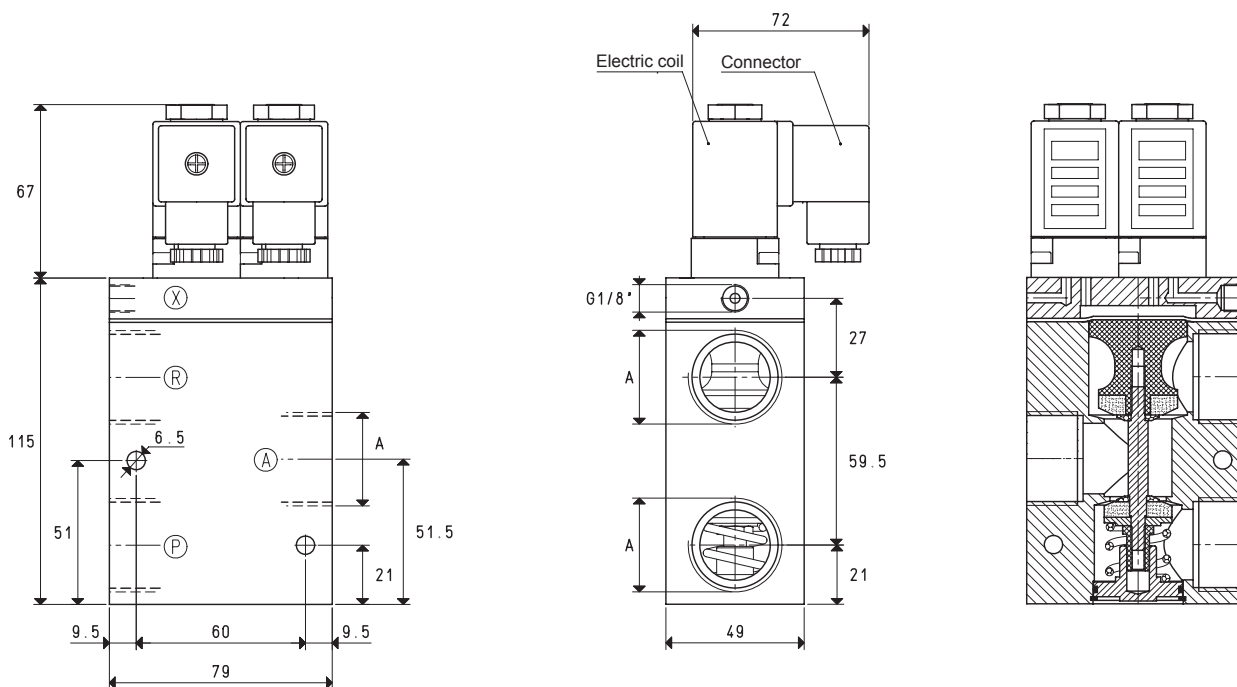
Conversion ratio: inch = $\frac{mm}{25.4}$; pounds = $\frac{g}{453.6}$ = $\frac{Kg}{0.4536}$ GAS-NPT thread adapters available at page 1.117

3D drawings available at www.vuototecnica.net

SERVO-CONTROLLED 3-WAY VACUUM SOLENOID VALVES WITH 2 ELECTRIC COILS

Electric coil   **Connector**

72

G1/8"

27

A

59.5

A

21

49

67

115

51

X

R

6.5

A

A

P

51.5

21

9.5   60   9.5

79

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 51	G3/4"		40	1000	0.5	16	40	20	314	6 ÷ 8	1.51
07 05 51	G1"		90	1000	0.5	18	42	25	490	6 ÷ 8	1.41

* Add the letters LP to the article for servo-control pressure 4 ÷ 6 bar (g).
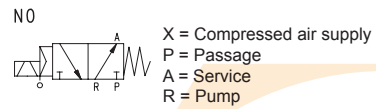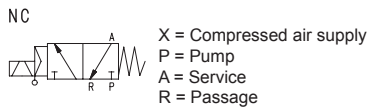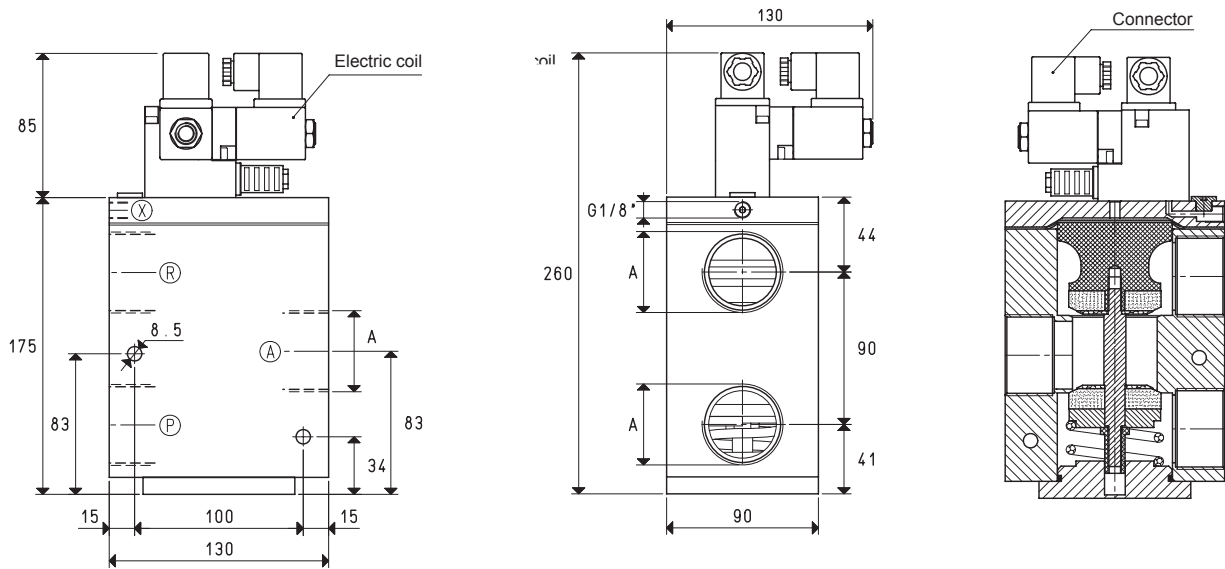
Note: Coils and connectors are not integral part of the solenoid valves, therefore, they must be ordered separately (See solenoid valve accessories).

4.26

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

4

Electric coil

85

Ⓧ

ⓇR

175

8.5

Ⓐ A

83

ⓅP

83

34

15   100   15

130

130

Connector

G1/8"

260

A

44

A

90

41

90

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 06 51	G1" 1/2		180	1000	0.5	60	38	40	1256	6 ÷ 8	5.24

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

Note: Coils and connectors are not integral part of the solenoid valves, therefore, they 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**