

vacuum pumps and pumpsets/vacuum generators and  
ejectors/octopus vacuum lifting systems/pneumatic suction  
and blowing pumps for graphic industry/special products

# VACUUM/09

# SOLUTION

vacuum pumps and pumpsets/vacuum generators and  
ejectors/octopus vacuum lifting systems/pneumatic suction  
and blowing pumps for graphic industry/special products

# 09

vacuum pumps and pumpsets/vacuum generator  
ejectors octopus vacuum lifting systems/pneumatic s  
and blowing pumps for graphic industry/special prod



# VACUUM

# VACUUM VALVES AND SOLENOID VALVES

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## SUCTION VALVES FOR VACUUM PRESS BAGS

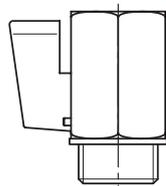


The suction valves described in this page have been designed for a quick vacuum connection on press bags for composite fibre products. These valves are composed of a steel distributor, to be inserted inside the bag, equipped with a cam housing suitable for the quick coupler for the vacuum connection. The latter is made with reeded and anodised aluminium and is easily coupled with the distributor by simply rotating it on its axis by 90°, once it's been inserted. A silicon seal to be placed between the two elements and the press bag, guarantees a perfect vacuum seal.

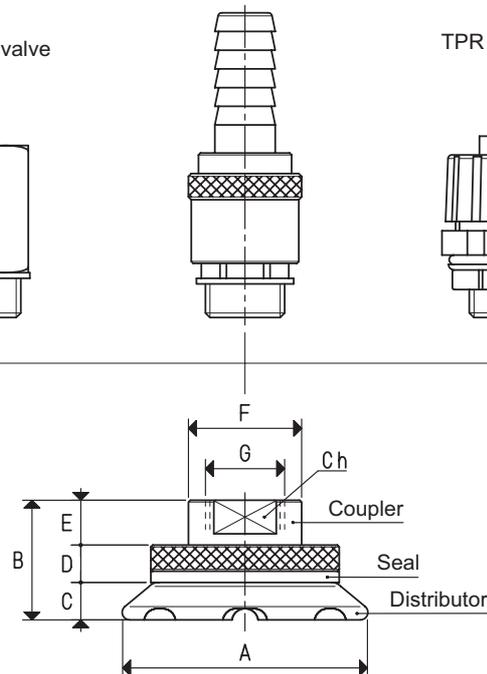
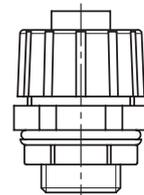
Manual 2-way valves, quick couplers or simply flexible pipe fittings can be assembled onto these valves. They are currently available in the two versions indicated in the table, but can be provided in different sizes and shapes upon request for a minimum amount.

### Quick coupling

2-way manual valve



TPR pipe fitting



Art.	Max. capacity recommended cum/h	Hole to be made on the sack $\emptyset$	Manual 2-way valve art.	Quick Coupler art.	TPR pipe fitting art.	Weight g	A $\emptyset$	B	C	D	E	F $\emptyset$	G $\emptyset$	Ch
VSS 3/8"	10	16	13 02 11	RR3/8"	RTPR3/8"	178	60	32	10	13	9	24	G3/8"	19
VSS 1/2"	20	19	13 03 11	RR1/2"	RTPR1/2"	218	65	35	10	13	12	30	G1/2"	25

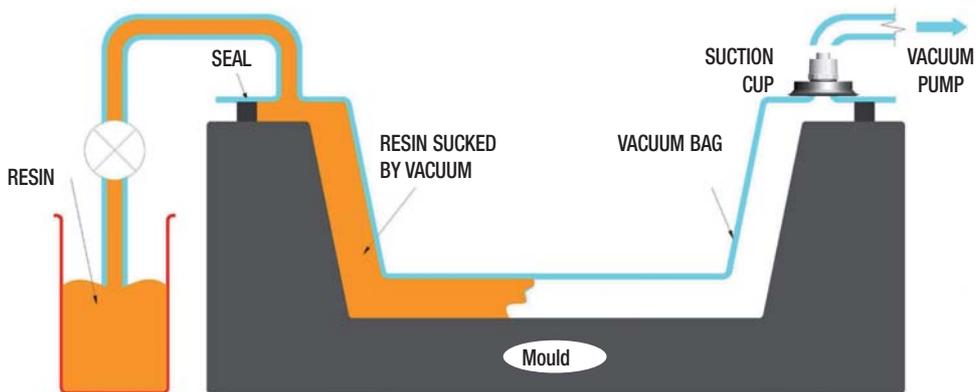
**Note:** 2-way valves are not integral part of the suction valve and therefore, must be ordered separately.

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

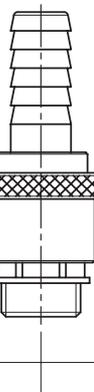
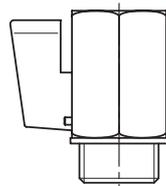
# SUCTION VALVES FOR RESIN INFUSION MOULD

These suction valves, once laid on the resin infusion mould connections, allow a quick vacuum connection and guarantee a perfect seal. They are made with silicon rubber, while their support is made with anodised aluminium. Manual 2-way valves, quick couplers or simply flexible pipe fittings can be assembled onto these valves. They are available in the two versions shown below, but can be supplied in different sizes and shapes upon request.

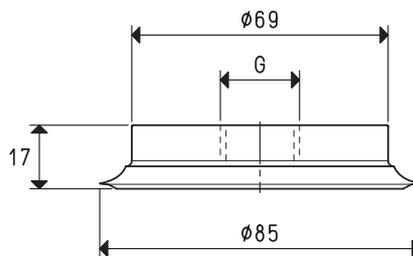
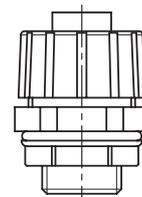


Quick coupling

2-way manual valve



TPR pipe fitting



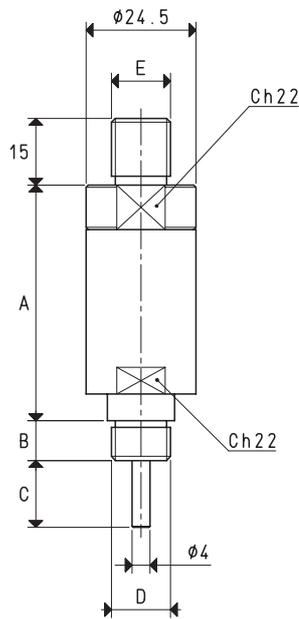
Art.	Max. capacity recommended cum/h	Manual 2-way valve art.	Quick coupler art.	TPR pipe fitting art.	Weight g	G
08 85 15 S 1/2"	20	13 03 11	RR1/2"	RTPR1/2"	108	G1/2"
08 85 15 S 3/4"	40	13 03 11	RR3/4"	RTPR3/4"	103	G3/4"

**Note:** 2-way valves and couplers are not integral part of the suction valve and therefore, must be ordered separately.

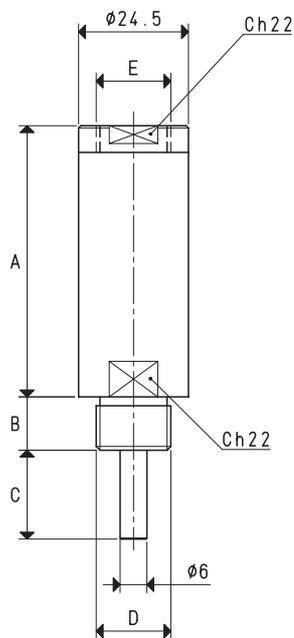
3D drawings available at [www.vuototecnica.net](http://www.vuototecnica.net)

## PLUNGER VALVES

Plunger valves are composed of a cylindrical brass body, a steel plunger with a conical valve and a thrust spring. Connected to vacuum, they are normally closed. They activate suction, thus creating vacuum, only when the plunger is in contact with the gripping surface. They are available in various versions, all suitable for our vacuum cups.



Art.	A	B	C	D Ø	E Ø	Weight g	Cup art.
19 01 10	53	9	15.0	G1/4"	G1/4"	160	08 150 16
19 01 11	53	9	15.0	M12	G1/4"	166	08 80 20
19 01 12	53	9	21.5	M12	G1/4"	152	08 127 15



Art.	A	B	C	D Ø	E Ø	Weight g	Cup art.
19 02 10	61	12	20	G3/8"	G3/8"	164	08 150 15 08 200 10 08 250 10
19 03 10	61	10	22	G1/2"	G3/8"	172	08 300 10 08 350 10
19 04 10	68	10	40	G1/2"	G3/8"	182	08 360 10

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

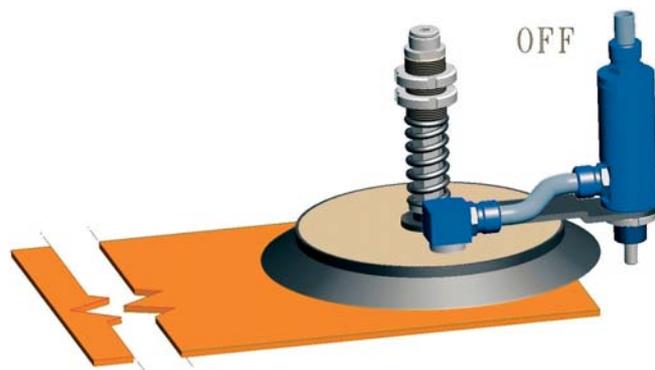
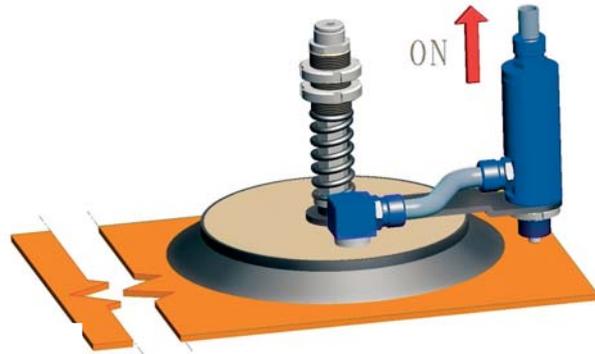
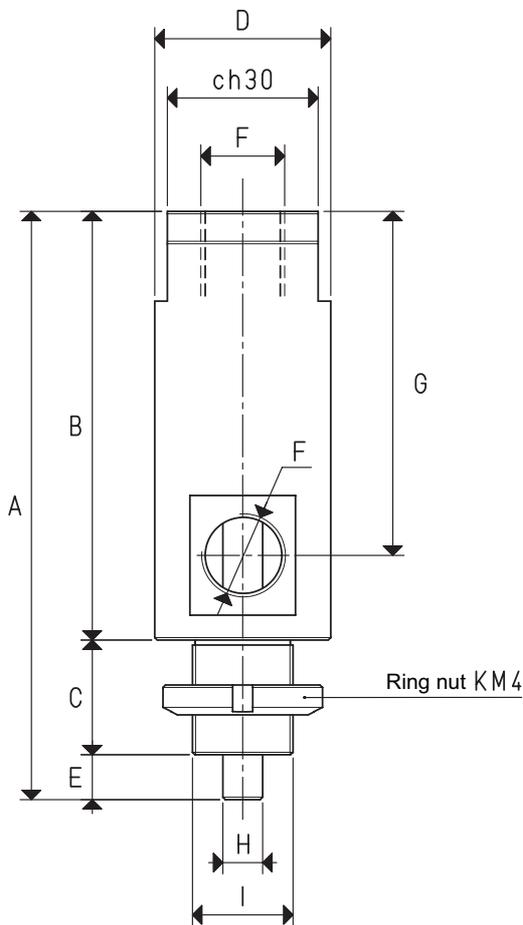
## MECHANICALLY OPERATED VALVES

These valves are composed of an anodised aluminium body, a steel pin solidly connected to a conical shutter and of a thrust spring.

Connected to vacuum, they are normally closed.

They activate suction, thus creating vacuum, only when the pin is activated by the cams or any other mechanical device.

They can be used as an alternative to plunger valves when these cannot be assembled onto the vacuum cups.



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

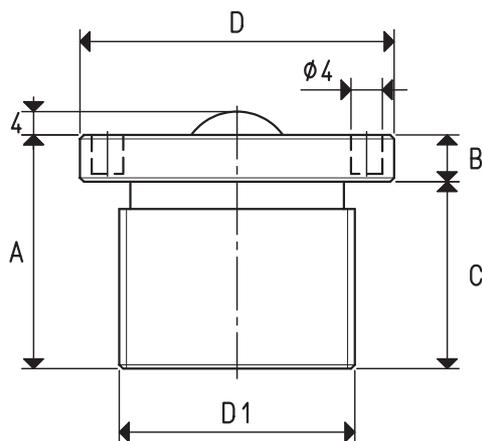
Art.	A	B	C	D	E	F	G	H	I	Weight g
19 02 30	112	80	23	35	9	G3/8"	63	8	M20 x 1	252

## VALVES WITH BALL SHUTTER

Valves with ball shutters activate suction, creating vacuum in the cups on which they are applied, only when the load to be held activates the sealing shutter.

They are made of an anodised aluminium body, a nylon ball shutter, a calibrated thrust spring and a threaded brass closing plug.

When properly calibrated, they guarantee a perfect vacuum seal. They are recommended for making vacuum operated clamping surfaces. They can be supplied in different sizes and shapes upon request and for a minimum quantity to be defined in the order.



Art.	A	B	C	D	D1	Weight
22 01 10	30	6	24	40	M30 x 1.5	70

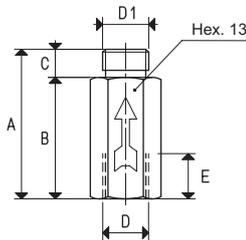
Conversion ratio: inch =  $\frac{\text{mm}}{25.4}$ ; pounds =  $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

## SHUT-OFF VALVES

They are special unidirectional valves that, when properly calibrated, allow a certain quantity of fluid to go through, afterwards, if the fluid continues to go through, they automatically close.

These shut-off valves have been specially designed to be applied on the cups and, in case of lack of objects to be gripped, of defective grips or leaks, they automatically deactivate suction, thus preventing any reduction of the vacuum level on the other gripping cups.

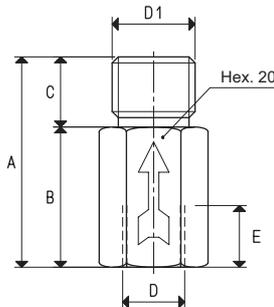
They are provided calibrated and commissioned, ready to be installed. They are made with anodised aluminium and can be supplied in different shapes and sizes upon request and for a minimum quantity to be defined in the order.



Art.	A	B	C	D	D1	E	Weight
14 01 05	32	26	6	G1/8"	G1/8"	8	8

Minimum ignition capacity = 1.5 cum/h

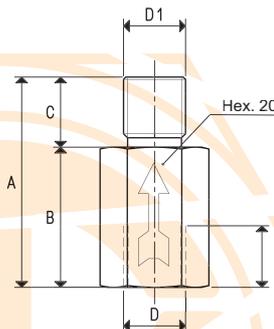
Minimum vacuum level = -250 mbar



Art.	A	B	C	D	D1	E	Weight
14 01 10	45	30	15	G1/4"	G3/8"	14	28

Minimum ignition capacity = 4 cum/h

Minimum vacuum level = -250 mbar



Art.	A	B	C	D	D1	E	Weight
14 01 15	45	30	15	G1/4"	G1/4"	14	29

Minimum ignition capacity = 4 cum/h

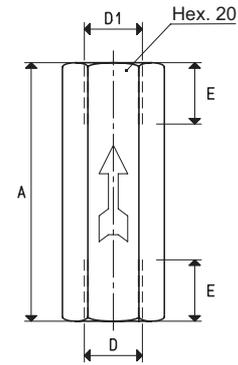
Minimum vacuum level = -250 mbar



Art.	A	D	D1	E	Weight
<b>14 02 10</b>	59	G1/4"	G1/4"	14	42

Minimum ignition capacity = 4 cum/h

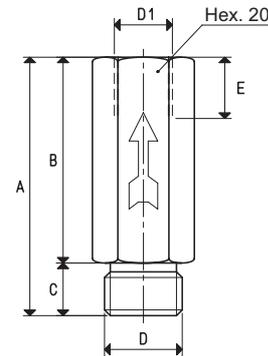
Minimum vacuum level = -250 mmba



Art.	A	B	C	D	D1	E	Weight
<b>14 03 10</b>	59	47	12	G3/8"	G1/4"	14	36

Minimum ignition capacity = 4 cum/h

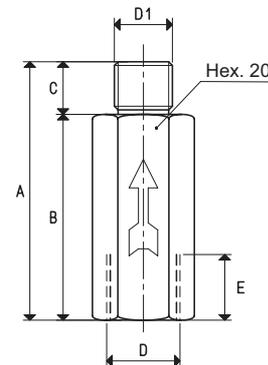
Minimum vacuum level = -250 mbar



Art.	A	B	C	D	D1	E	Weight
<b>14 05 10</b>	59	47	12	G3/8"	G1/4"	14	34

Minimum ignition capacity = 4 cum/h

Minimum vacuum level = -250 mbar



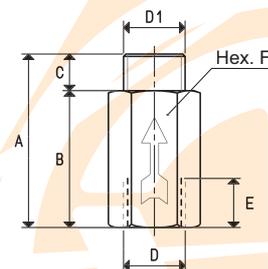
### SHUT-OFF VALVES WITH CONTROLLED LEAK

These shut-off valves are based on the same operating principle as the others, only their sealing shutter allows the vacuum source a minimum suction even when completely closed. This feature allows the cup that has not gripped the object to be handled, for example for the anticipated suction activation, to recreate vacuum inside and, therefore, to grip the object without having to repeat the work cycle. If, on the other hand, there is a lack of an object to be handled, the valve does not prevent the vacuum level reduction on the remaining gripping cups, but the slight leak is easy to control and, therefore, to restore. They are fully made with anodised aluminium.



Art.	Max. leak NI/min	Minimum ignition capacity cum/h	A	B	C	D	D1	E	F	Weight
<b>14 01 11</b>	7.5	1	36.0	29.5	6.5	G1/8"	G1/8"	10	13	8
<b>14 02 11</b>	7.5	1	37.5	29.5	8.0	G1/4"	G1/4"	15	17	16
<b>14 03 11</b>	24.0	3	42.0	32.5	9.5	G3/8"	G3/8"	17	22	28

Minimum vacuum level = -250 mbar

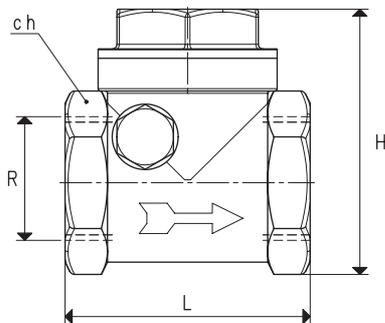


## CHECK VALVES

These unidirectional valves are made with bronze and brass with a seal in NBR nitrile rubber or, upon request, in Viton®.

To ensure a practical assembly they are available in two versions: horizontal and vertical.

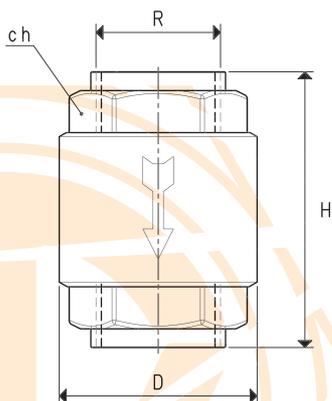
Fitted on the vacuum pump suction inlet, as soon as the latter stop, these valves prevent the air from returning in the plant (piping, tanks, autoclaves, vacuum gripping systems, vacuum cups, etc.), guaranteeing a perfect seal and preventing the oil from returning into the pump stator, which would cause considerable damages. Therefore, check valves are mandatory on all vacuum pumps with lubrication that do not have them built-in.



### HORIZONTAL

Art.	R Ø	Ch	H	L	Weight Kg
10 02 10	G3/8"	27	49	43	0.19
10 03 10	G1/2"	27	49	43	0.17
10 04 10	G3/4"	34	58	52	0.27
10 05 10	G1"	42	66	62	0.43
10 06 10	G1" 1/4	50	75	72	0.59
10 07 10	G1" 1/2	57	86	80	0.79
10 08 10	G2"	69	99	94	1.08

**Note:** To order the valve with Viton® seal, add the letter V to the article (E.g.: 10 02 10 V)



### VERTICAL

Art.	R Ø	Ch	D Ø	H	Weight Kg
10 01 11	G1/4"	21	28	47	0.10
10 02 11	G3/8"	25	35	59	0.17
10 03 11	G1/2"	26	35	48	0.12
10 04 11	G3/4"	33	42	65	0.28
10 05 11	G1"	40	48	74	0.42
10 06 11	G1" 1/4	50	61	82	0.64
10 07 11	G1" 1/2	55	71	92	0.87
10 08 11	G2"	70	87	100	2.70

**Note:** To order the valve with Viton® seal, add the letter V to the article (E.g.: 10 02 11 V)

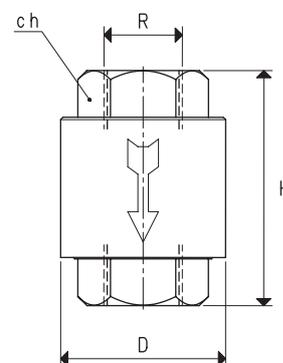
## MEMBRANE CHECK VALVES

These valves have the same features of the other check valves, but they are made with anodised aluminium, which makes them particularly light. The seal is guaranteed by a EPDM membrane instead of the metal shutter with NBR seal.

For these features and for their modern design, they are recommended for pneumatic vacuum generators and, of course, on vacuum pumps.



Art.	R Ø	Ch	D Ø	H	Weight g
10 01 15	G1/4"	20	30	42	46
10 02 15	G3/8"	24	35	50	74
10 03 15	G1/2"	24	37	55	86
10 04 15	G3/4"	33	42	64	110
10 05 15	G1"	40	49	74	162

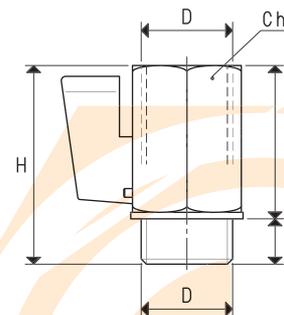


## MANUAL 2-WAY MINIATURE VACUUM VALVES

These small manual valves are suited for intercepting vacuum on vacuum cup holders and any small utility in which solenoid valves cannot be installed. They feature a hexagonal nickel-plated brass body, a chromed brass ball shutter and a seal in plastic material to guarantee a perfect seal. A lever on the ball shutter, rotated by 90°, allows opening or closing the valve with no effort.



Art.	D Ø	Ch	E	F	H	Weight g
13 01 11	G1/4"	21	7	32	39	80
13 02 11	G3/8"	21	10	30	40	74
13 03 11	G1/2"	25	12	33	45	110

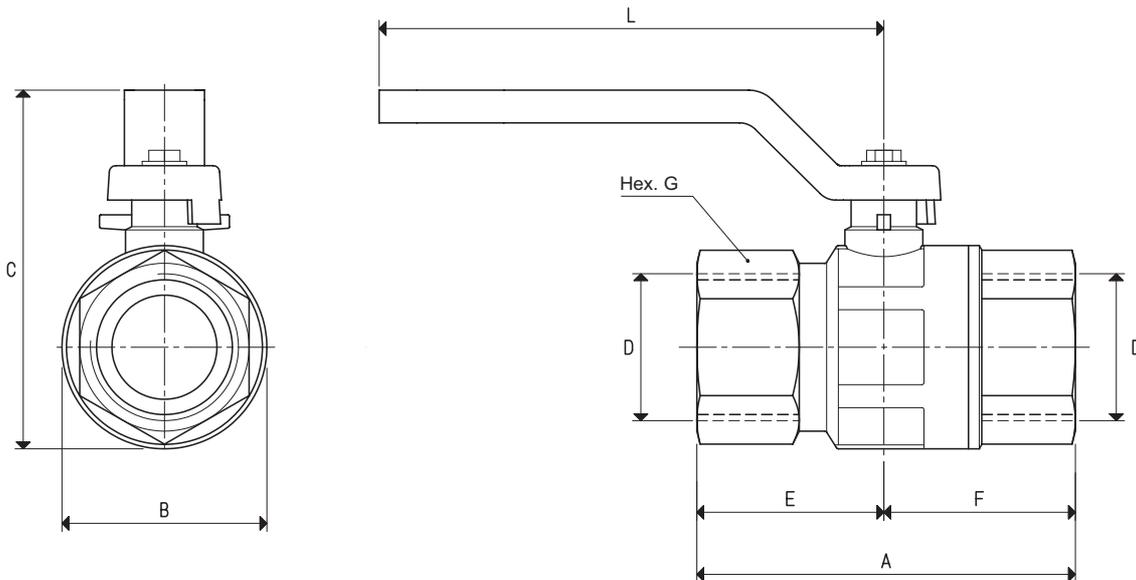


## MANUAL 2-WAY VACUUM VALVES

These manual valves are used for intercepting vacuum in all those plants where solenoid valves cannot be installed.

They feature a die-cast nickel-plated brass body, a chromed brass ball shutter and teflon seals to guarantee perfect seal even at high temperatures.

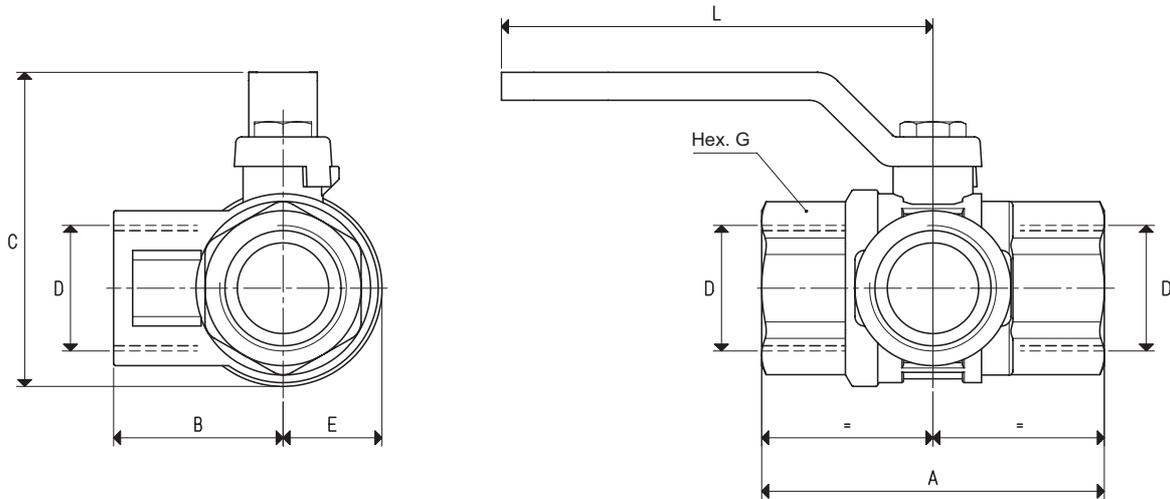
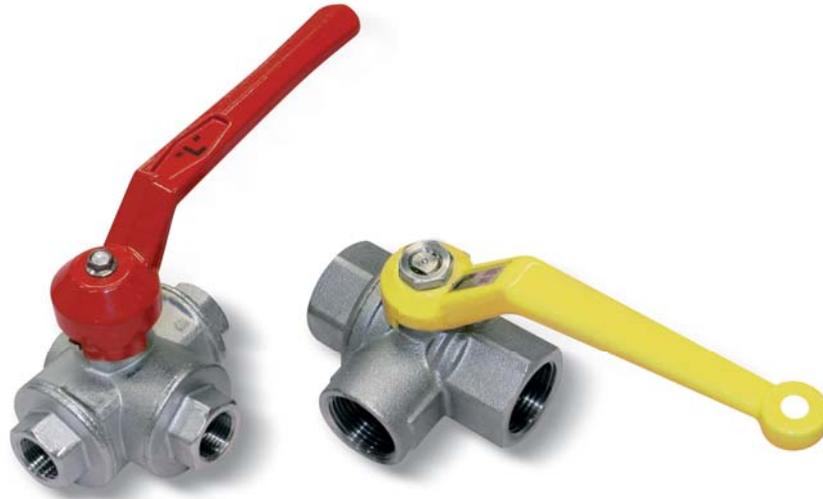
A lever on the ball shutter, rotated by 90°, allows opening or closing the valve with no effort.



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

### MANUAL 2-WAY VALVES

Art.	A	B	C	D Ø	E	F	G	L	Weight Kg
<b>13 01 10</b>	49	23	48	G1/4"	24	25	18	80	0.13
<b>13 02 10</b>	52	23	56	G3/8"	23	29	20	80	0.13
<b>13 03 10</b>	61	30	63	G1/2"	30	31	25	88	0.21
<b>13 04 10</b>	68	36	72	G3/4"	33	35	31	114	0.32
<b>13 05 10</b>	85	44	80	G1"	42	43	38	113	0.47
<b>13 06 10</b>	99	57	105	G1" 1/4	50	49	47	137	0.74
<b>13 07 10</b>	109	70	126	G1" 1/2	55	54	54	156	1.26
<b>13 08 10</b>	130	83	135	G2"	62	68	66	156	1.77
<b>13 09 10</b>	168	140	210	G3"	84	84	99	246	7.09



MANUAL 3-WAY VALVES

Art.	A	B	C	D	E	G	L	Weight Kg
<b>13 01 15</b>	46	23	58	G1/4"	11	19	109	0.16
<b>13 02 15</b>	52	26	59	G3/8"	12	22	109	0.19
<b>13 03 15</b>	67	33	66	G1/2"	17	27	109	0.30
<b>13 04 15</b>	76	39	79	G3/4"	17	32	130	0.49
<b>13 05 15</b>	90	45	88	G1"	22	41	130	0.85
<b>13 06 15</b>	118	65	134	G1" 1/4	27	50	170	1.76
<b>13 07 15</b>	114	62	138	G1" 1/2	43	55	150	2.45

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

# 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.

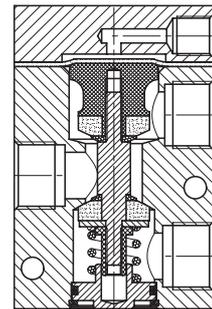
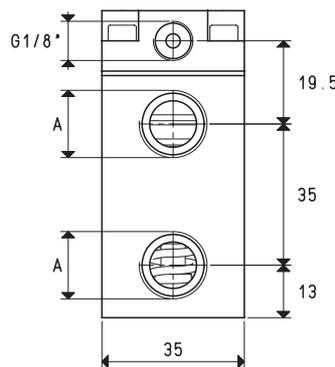
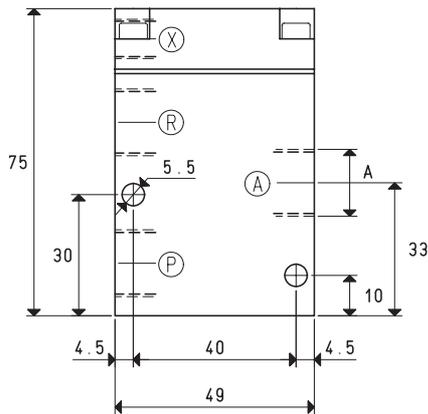
These valves allow reducing frictions and internal dynamic stresses to the minimum, the result being a high response speed and a guarantee of long lasting duration.

### 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

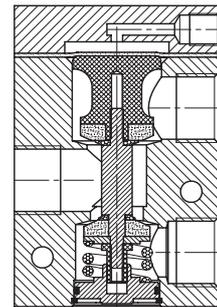
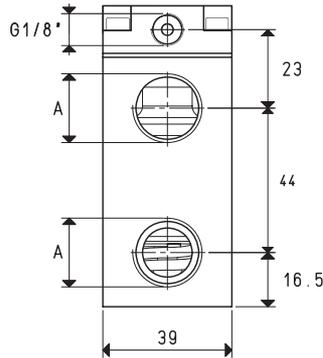
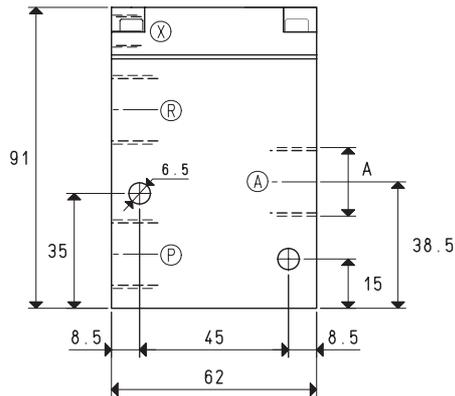
NO



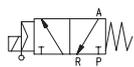
X = Compressed air supply  
P = Passage  
A = Service  
R = Pump<sub>1</sub>

Art.	A	Max. capacity cum/h	Vacuum level mbar abs.		Reaction time msec		Ø orifice	Passage section mm <sup>2</sup>	Servo-control pressure bar (g)	Weight 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

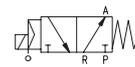


NC



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

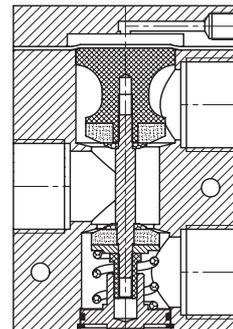
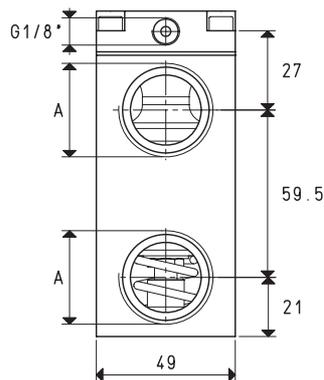
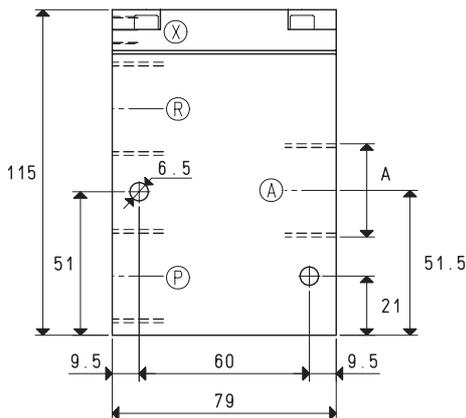
N0



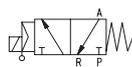
X = Compressed air supply  
P = Passage  
A = Service  
R = Pump

Art.	A Ø	Max. capacity cum/h	Vacuum level mbar abs.		Reaction time msec		Ø orifice	Passage section mm <sup>2</sup>	Servo-control pressure *bar (g)	Weight 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).

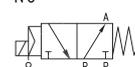


NC



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

N0



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

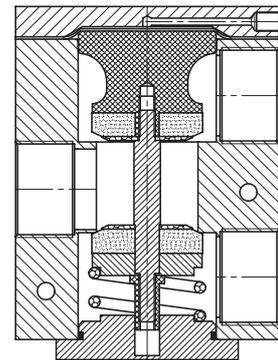
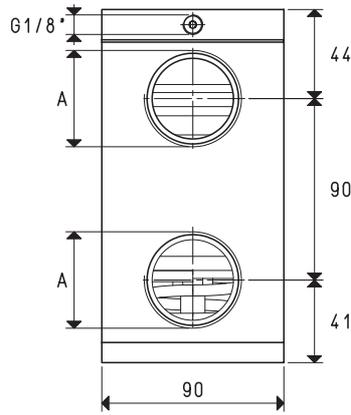
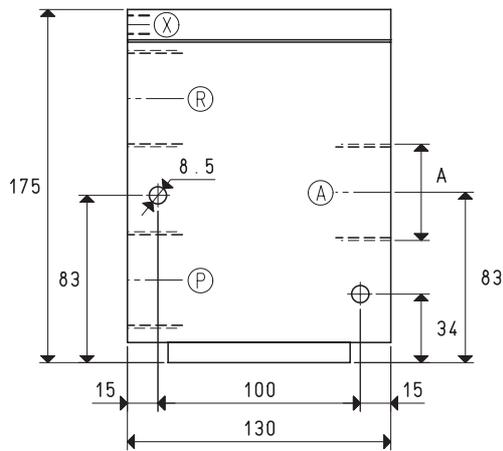
Art.	A Ø	Max. capacity cum/h	Vacuum level mbar abs.		Reaction time msec		Ø orifice	Passage section mm <sup>2</sup>	Servo-control pressure *bar (g)	Weight Kg
			min	max	exc.	deexc.				
07 04 31	G3/4"	40	1000	0.5	7	16	20	314	6 ÷ 8	1.060
07 05 31	G1"	90	1000	0.5	7	16	25	490	6 ÷ 8	0.964

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

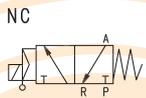
Conversion ratio: inch =  $\frac{\text{mm}}{25.4}$ ; pounds =  $\frac{\text{g}}{453.6}$  =  $\frac{\text{Kg}}{0.4536}$

GAS-NPT thread adapters available at page 1.117

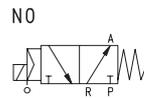
# 3-WAY VACUUM SOLENOID PILOT VALVES



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



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



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

Art.	A Ø	Max. capacity cum/h	Vacuum level mbar abs.		Reaction time msec		Ø orifice	Passage section mm <sup>2</sup>	Servo-control pressure *bar (g)	Weight Kg
			min	max	exc.	deexc.				
<b>07 06 31</b>	G1" 1/2	180	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).

## 2 AND 3-WAY VACUUM SOLENOID PILOT VALVES



These direct-drive valves have been specially designed for vacuum and are normally closed. They are composed of an anodised aluminium body, where the connections and the passage orifices are located, and of an actuator which is activated by an electric coil. The solenoid pilot valve shutter in NBR nitrile rubber or Vulkollan®, is an integral part of the actuator mobile core. Both the orifices of the 2-way solenoid pilot valves have the same size, while those of the 3-way ones have a 3mm outlet diameter, obtained through the tube. The very low reaction time allow carrying out a very high number of cycles per minute.

The standard electric coil is 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:  $\pm 10\%$ .

Max. absorption: 16.5 V.A. with AC and 16 W with DC.

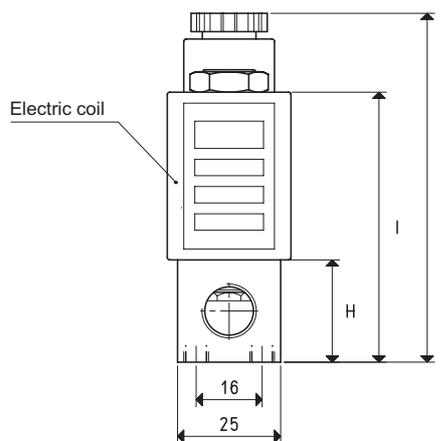
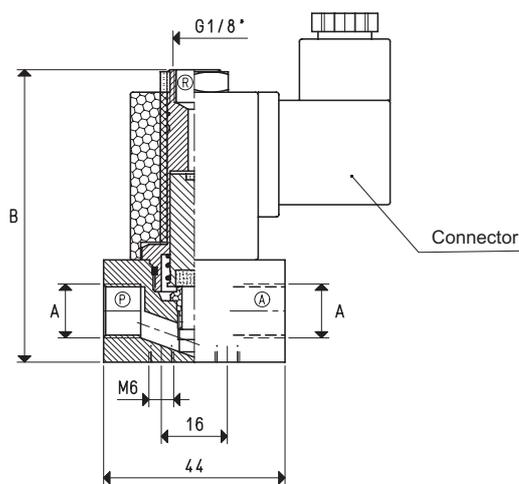
The electric coil can be rotated by 360°.

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.

**Technical features:**

Working pressure: from 1 to 1500 mbar abs.

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



3 / 2 NC



P = Pump  
A = Service  
R = Passage

### 3-WAY SOLENOID PILOT VALVE

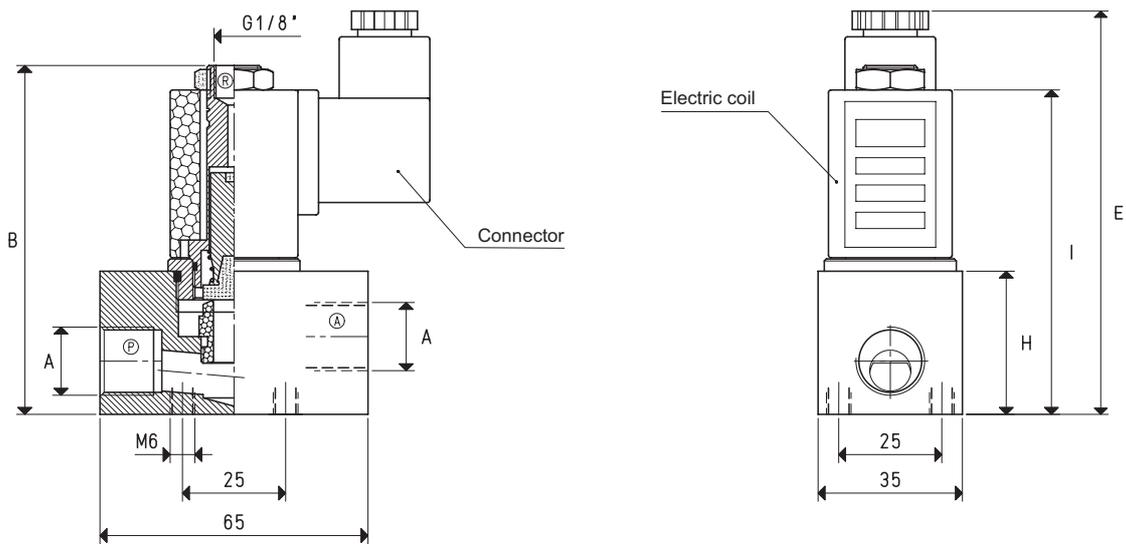
Art.	A	Max. capacity	Vacuum level		Reaction time		Ø	Passage section	B	E	H	I	Weight
			min	max	exc.	deexc.							
07 01 16	G1/4"	4 cum/h	1000	0.5	15	8	6 orifice	28.3	73	86	25	67	248

**Note:** The coil and the connectors are not integral part of the solenoid pilot valves, therefore, they must be ordered separately (See solenoid valve accessories).

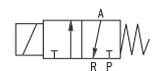
Conversion ratio: inch =  $\frac{\text{mm}}{25.4}$ ; pounds =  $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

GAS-NPT thread adapters available at page 1.117

# 3-WAY VACUUM SOLENOID PILOT VALVES



3 / 2 NC



P = Pump  
A = Service  
R = Passage

## 3-WAY SOLENOID PILOT VALVE

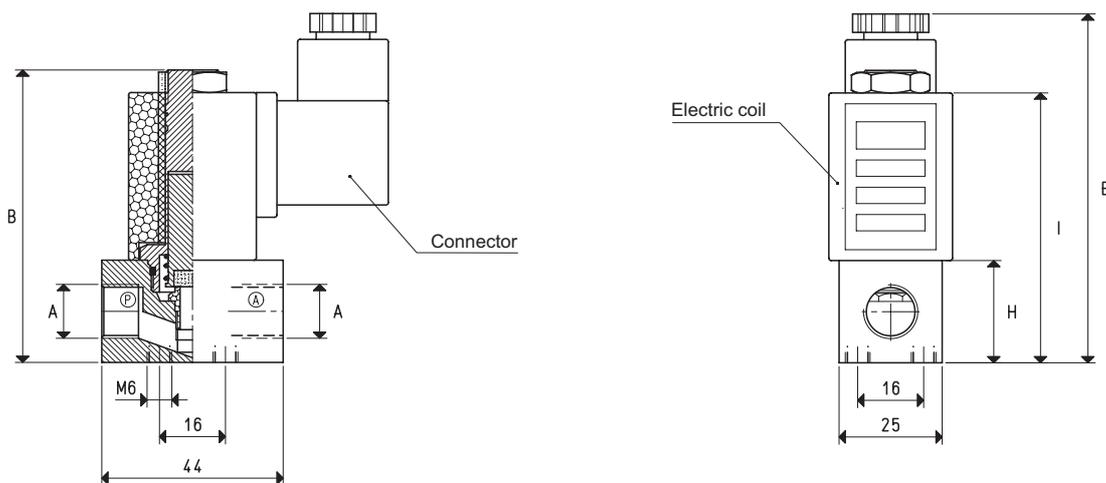
Art.	A Ø	Max. capacity cum/h	Vacuum level mbar abs.		Reaction time msec		Ø orifice	Passage section mm <sup>2</sup>	B	E	H	I	Weight g
			min	max	exc.	deexc.							
07 02 16	G3/8"	8	1000	0.5	22	10	10	78.5	85	98	35	79	392
07 03 16	G1/2"	10	1000	0.5	28	10	12	113.0	85	98	35	79	377

**Note:** The coil and the connectors are not integral part of the solenoid pilot valves, therefore, they must be ordered separately (See solenoid valve accessories).

## 2-WAY VACUUM SOLENOID PILOT VALVES



4



2 / 2 NC



P = Pump  
A = Service

### 2-WAY SOLENOID PILOT VALVE

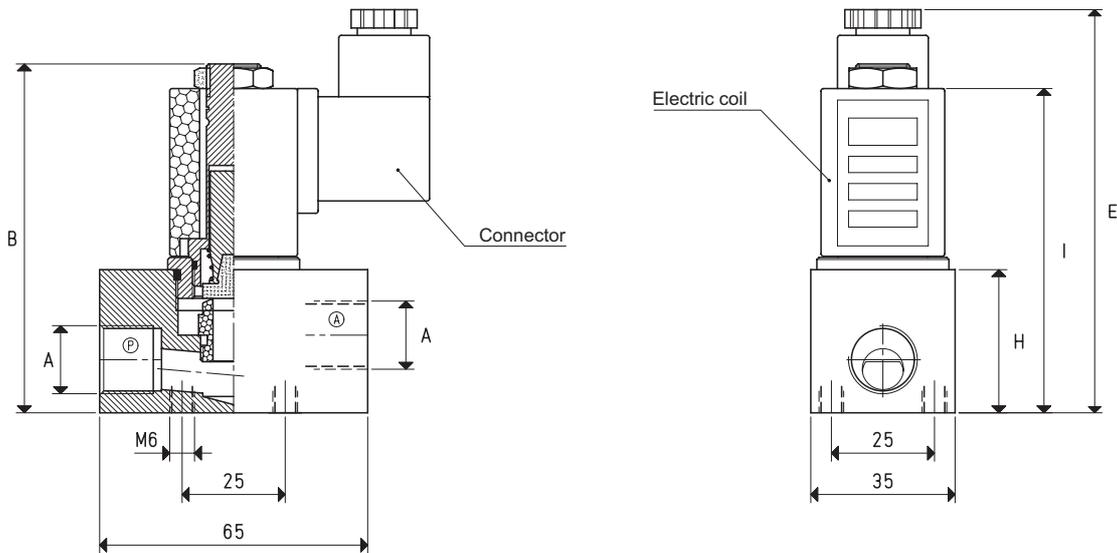
Art.	A	Max. capacity	Vacuum level		Reaction time		Ø	Passage section	B	E	H	I	Weight
			min	max	exc.	deexc.							
07 01 20	G1/4"	4 cum/h	1000	0.5	15	8	6 orifice	28.3 mm <sup>2</sup>	73	86	25	67	244

**Note:** The coil and the connectors are not integral part of the solenoid pilot valves, therefore, they must be ordered separately (See solenoid valve accessories).

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

## 2-WAY VACUUM SOLENOID PILOT VALVES



2 / 2 NC



### 2-WAY SOLENOID PILOT VALVE

Art.	A Ø	Max. capacity cum/h	Vacuum level mbar abs.		Reaction time msec		Ø orifice	Passage section mm <sup>2</sup>	B	E	H	I	Weight g
			min	max	exc.	deexc.							
07 02 20	G3/8"	8	1000	0.5	22	10	10	78.5	85	98	35	79	384
07 03 20	G1/2"	10	1000	0.5	28	10	12	113.0	85	98	35	79	372

**Note:** The coil and the connectors are not integral part of the solenoid pilot valves, therefore, they must be ordered separately (See solenoid valve accessories).

# DIRECT DRIVE 2-WAY VACUUM SOLENOID VALVES

These state of the art solenoid valves feature minimal overall dimensions and high volumetric efficiency and high response speed at any vacuum level. They are the result of an attentive choice of materials, state of the art constructive techniques and of the in-depth knowledge of our technicians.

This series of solenoid valves is patented.

The DDN solenoid valves are direct drive, 2-way, 2-position valves with direct drive, double shutter and they are normally closed. They are composed of hot pressed brass body where the connections are located, an internal mechanism with double shutter and of an actuator activated by an electric coil. The standard electric coil is 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 with inserted connector.

Allowed tolerance on the voltage nominal value:  $\pm 10\%$ .

Max. absorption: 16.5 V.A. with AC and 16 W with DC (except for DDN 25 which cannot be activated with DC).

The electric coil can be rotated by 360°. 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.

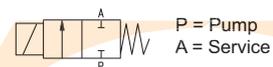
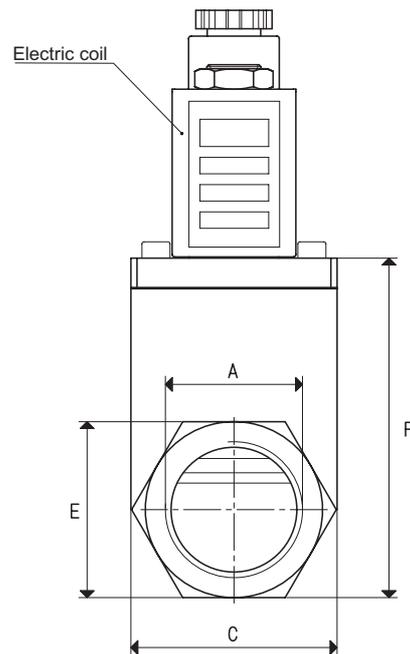
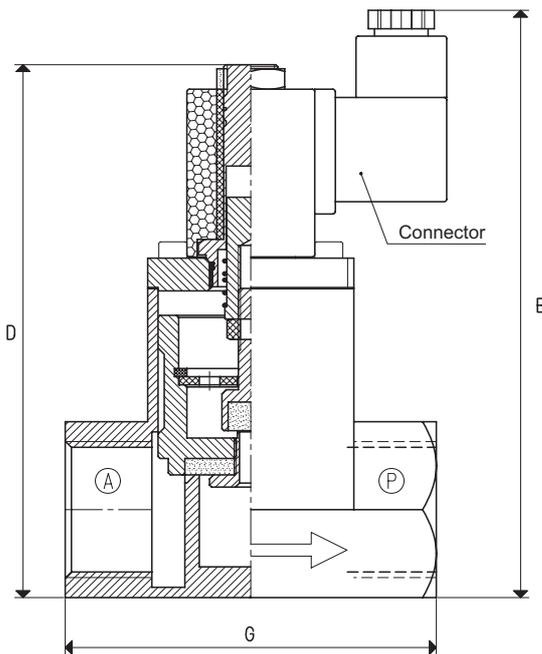
For a correct operation, we recommend installing the solenoid valve upside-down.

DDN solenoid valves are particularly indicated for degassers, autoclaves, vacuum thermo-welders and in all applications where suction has to be controlled separately from the air inlet into circuit.

### Technical features

Working pressure: from 0.5 to 1500 mbar abs.

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



Art.	A Ø	Max. capacity cum/h	Vacuum level mbar abs.		Reaction time msec		Ø orifice	Passage section mm <sup>2</sup>	B	C	D	E	F	G	Weight Kg
			min	max	exc.	deexc.									
<b>DDN 14</b>	G1/2"	20	1000	0.5	30	15	14	154	127	35	110	30	63	75	0.83
<b>DDN 25</b>	G1"	90	1000	0.5	55	33	25	490	142	50	128	43	82	90	1.56

**Note:** The coil and the connectors are not integral part of the solenoid valves, therefore, they must be ordered separately (See solenoid valve accessories).

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

# SERVO-CONTROLLED 3-WAY VACUUM SOLENOID VALVES

The 3-way vacuum solenoid valves in this series are 2-position valves with pneumatically servo-controlled conical shutters. They can normally be used either open or closed. 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; an actuator activated by an electric coil managed the compressed air supply. 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. The standard electric coil is 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: 16.5 V.A. in c.a. e 16 W in c.c.

The electric coil can be rotated by 360°. 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.

3-way vacuum solenoid valves are usually used for intercepting vacuum on feeders and cup stackers, robots, sheet feeders, sack openers and in all those cases where a quick response is needed between suction and the air inlet into the circuit, for a quick restoration of the atmospheric pressure.

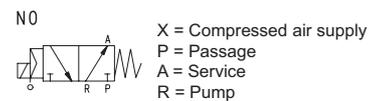
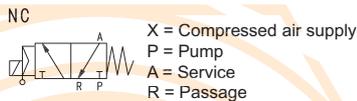
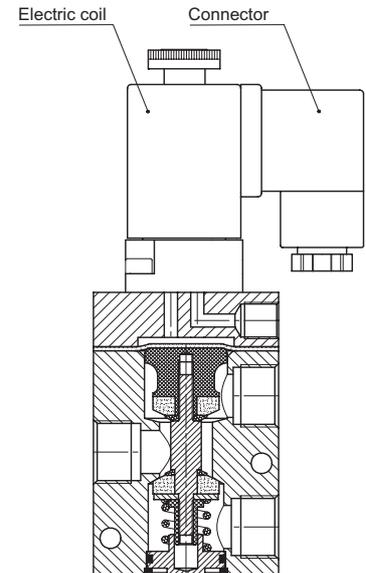
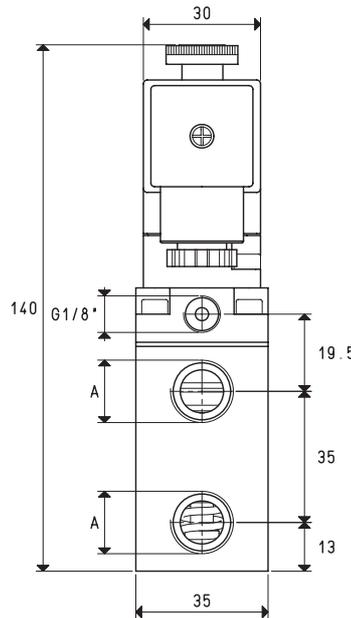
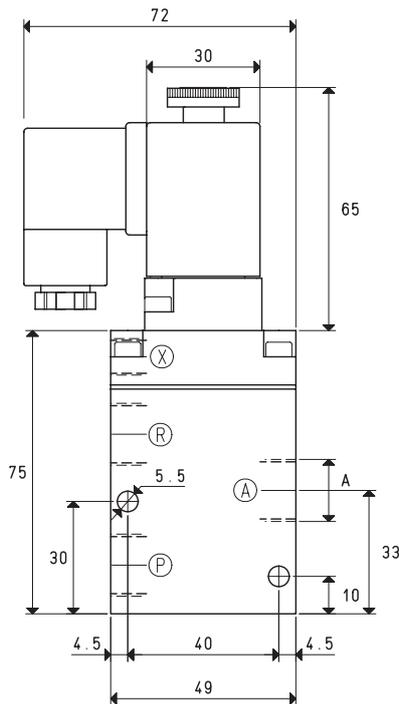
They can be supplied upon request with an SM device for manually opening and closing the solenoid valves already installed.

### 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



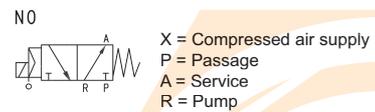
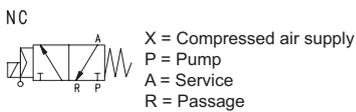
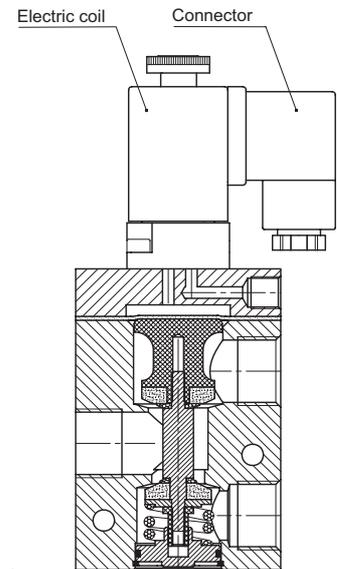
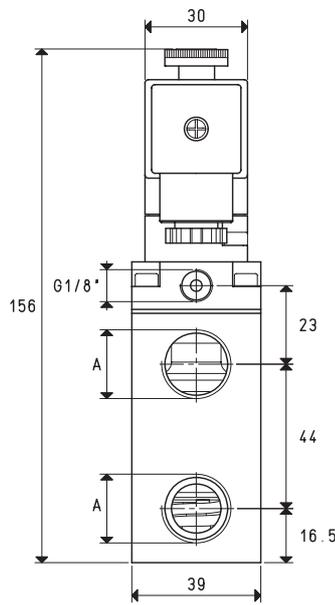
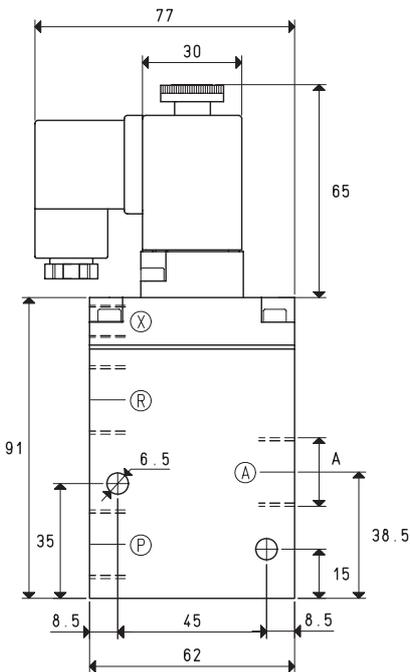
Art.	A Ø	Max. capacity cum/h	Vacuum level mbar abs.		Reaction time msec		Ø orifice	Passage section mm²	Servo-control pressure *bar (g)	Weight Kg
			min	max	exc.	deexc.				
07 01 11	G1/4"	6	1000	0.5	16	27	56.8	8.5	4 ÷ 7	0.56
07 02 11	G3/8"	10	1000	0.5	16	27	103.8	11.5	4 ÷ 7	0.54

**Note:** The coil and the connectors are not integral part of the solenoid valves, therefore, they must be ordered separately (See solenoid valve accessories).

# SERVO-CONTROLLED 3-WAY VACUUM SOLENOID VALVES



4



Art.	A	Max. capacity cum/h	Vacuum level mbar abs.		Reaction time msec		Ø orifice	Passage section mm <sup>2</sup>	Servo-control pressure *bar (g)	Weight Kg
			min	max	exc.	deexc.				
07 03 11	G1/2"	20	1000	0.5	16	40	15.0	176	6 ÷ 8	0.73

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

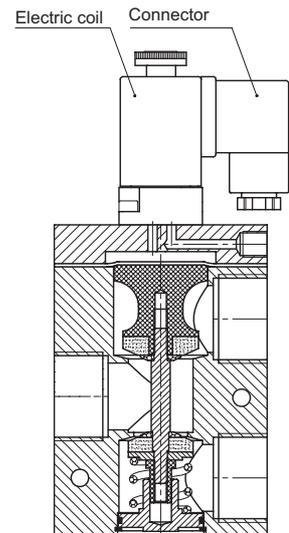
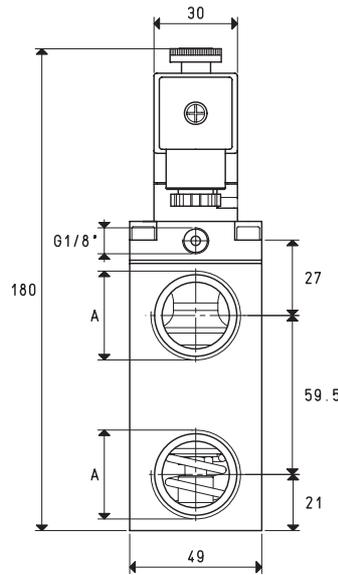
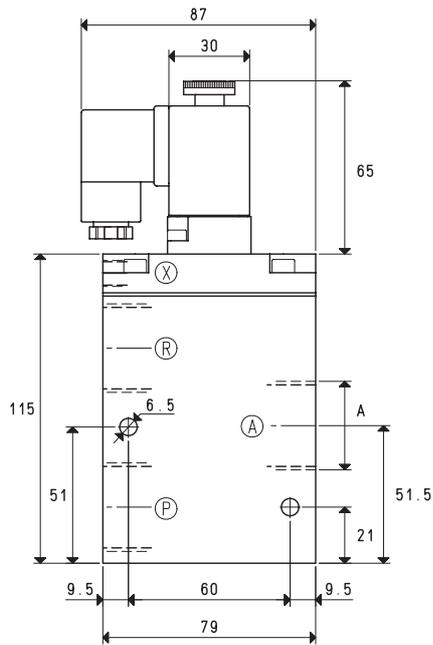
**Note:** The coil and the connectors are not integral part of the solenoid valves, therefore, they must be ordered separately (See solenoid valve accessories).

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

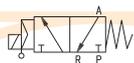
GAS-NPT thread adapters available at page 1.117

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

# SERVO-CONTROLLED 3-WAY VACUUM SOLENOID VALVES

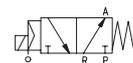


NC



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 cum/h	Vacuum level mbar abs.		Reaction time msec		Ø orifice	Passage section mm <sup>2</sup>	Servo-control pressure *bar (g)	Weight Kg
			min	max	exc.	deexc.				
07 04 11	G3/4"	40	1000	0.5	16	40	20	314	6 ÷ 8	1.25
07 05 11	G1"	90	1000	0.5	18	42	25	490	6 ÷ 8	1.16

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

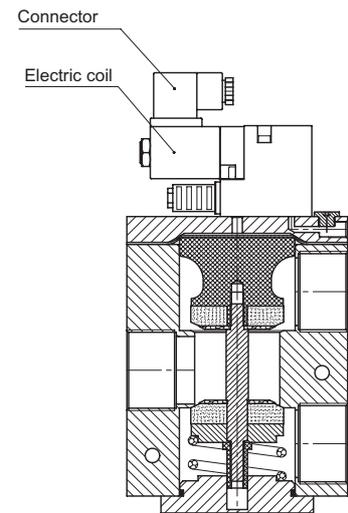
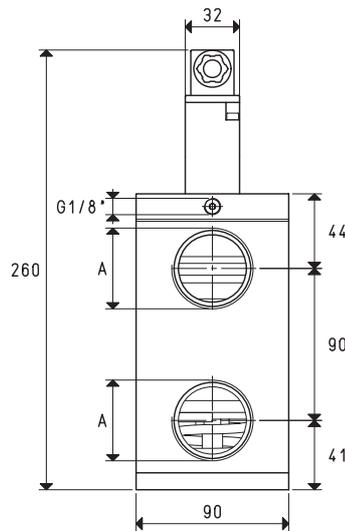
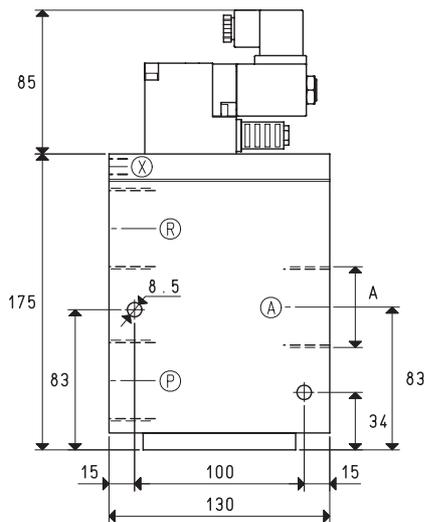
**Note:** The coil and the connectors are not integral part of the solenoid valves, therefore, they must be ordered separately (See solenoid valve accessories).

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

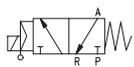
# SERVO-CONTROLLED 3-WAY VACUUM SOLENOID VALVES



4

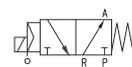


NC



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

NO



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

Art.	A Ø	Max. capacity cum/h	Vacuum level mbar abs.		Reaction time msec		Ø orifice	Passage section mm <sup>2</sup>	Servo-control pressure *bar (g)	Weight Kg
			min	max	exc.	deexc.				
07 06 11	G1" 1/2	180	1000	0.5	60	38	40	1256	6 ÷ 8	4.79

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

**Note:** The coil and the connectors are not integral part of the solenoid valves, therefore, they must be ordered separately (See solenoid valve accessories).

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

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

# 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:  $\pm 10\%$ .

Max. absorption:  $8 \div 16.5$  V.A. with AC and  $6.5 \div 16$  W with DC.

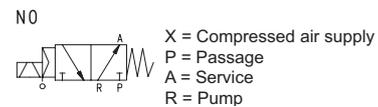
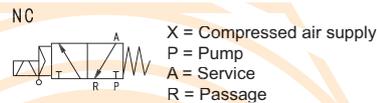
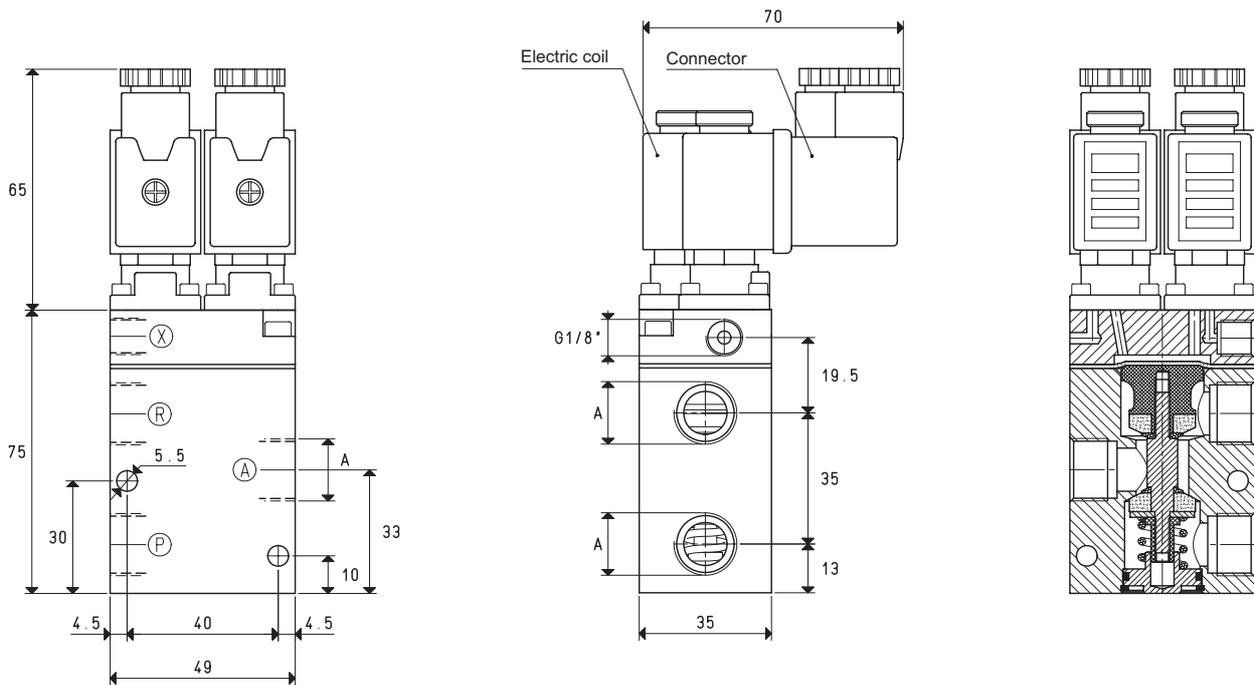
The electric coils can be rotated by 360°. The connector can be rotated by 180° on the coils and can be supplied, upon request, with Led lights, anti-interference circuit and/or with protection devices against overvoltage and polarity reversal.

### Technical features

Working pressure: from 0.5 to 3000 mbar abs.

Servo-control pressure: see table

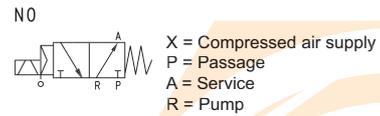
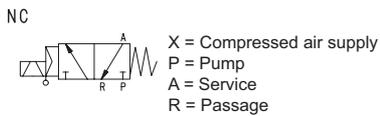
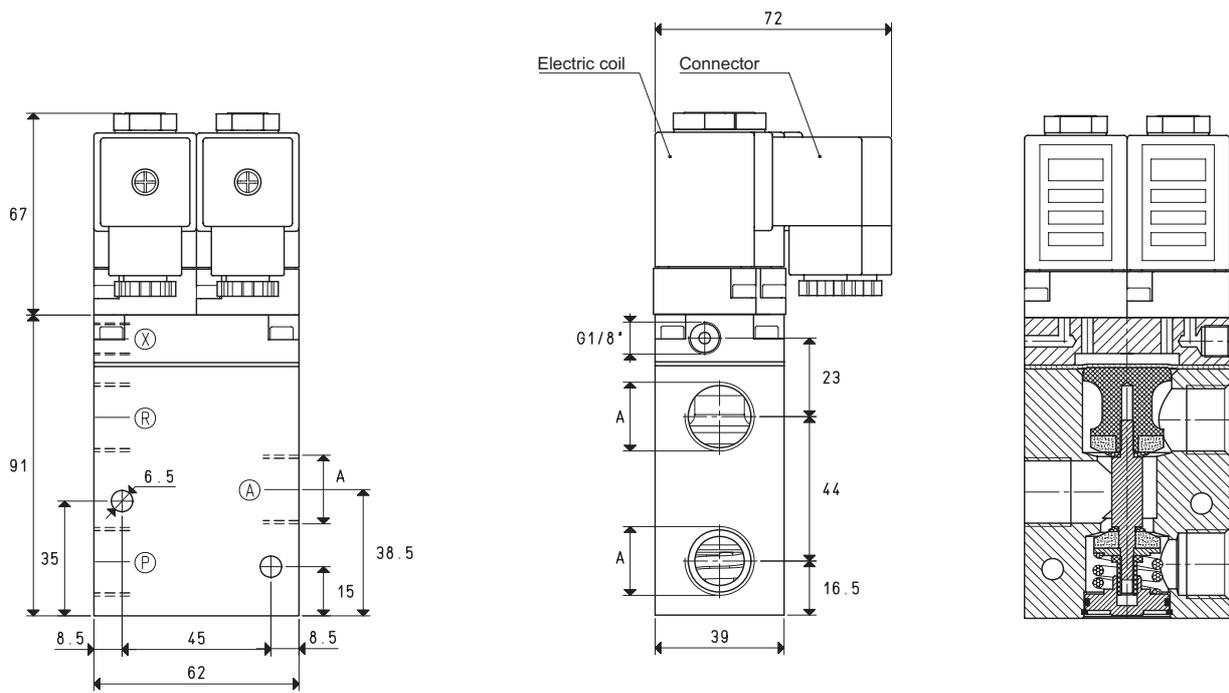
Temperature of the sucked fluid: from -5 to +60 °C



Art.	A Ø	Max. capacity cum/h	Vacuum level mbar abs.		Reaction time msec		Ø orifice	Passage section mm²	Servo-control pressure bar (g)	Weight Kg
			min	max	exc.	deexc.				
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).

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



Art.	A Ø	Max. capacity cum/h	Vacuum level mbar abs.		Reaction time msec		Ø orifice	Passage section mm <sup>2</sup>	Servo-control pressure *bar (g)	Weight Kg
			min	max	exc.	deexc.				
07 03 51	G1/2"	20	1000	0.5	16	40	15.0	176	6 ÷ 8	0.97

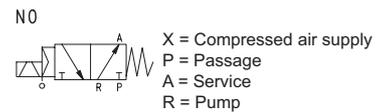
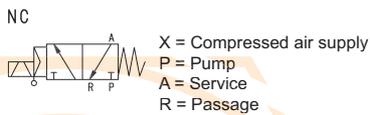
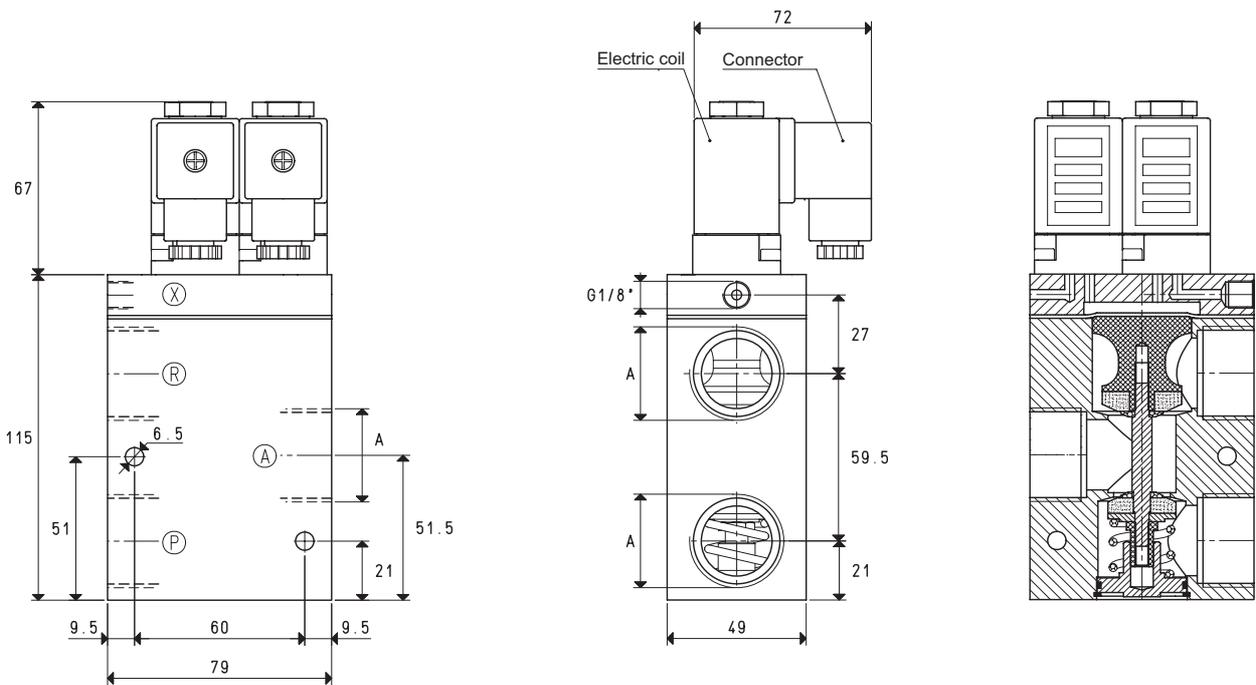
\* Add the letters LP to the article for servo-control pressure 4 ÷ 6 bar (g).

**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

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



Art.	A	Max. capacity cum/h	Vacuum level mbar abs.		Reaction time msec		Ø orifice	Passage section mm <sup>2</sup>	Servo-control pressure *bar (g)	Weight Kg
			min	max	exc.	deexc.				
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).

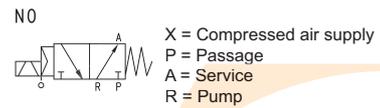
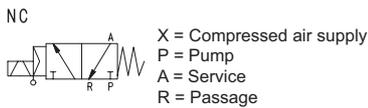
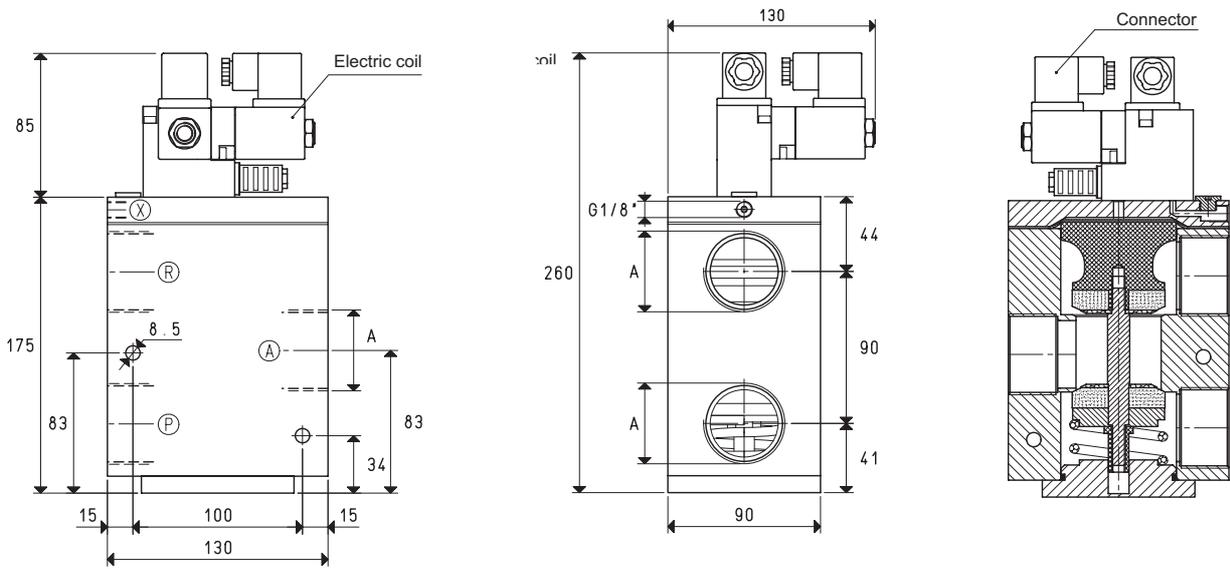
**Note:** Coils and connectors are not integral part of the solenoid valves, therefore, they must be ordered separately (See solenoid valve accessories).

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

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



4



Art.	A	Max. capacity cum/h	Vacuum level mbar abs.		Reaction time msec		Ø orifice	Passage section mm <sup>2</sup>	Servo-control pressure *bar (g)	Weight Kg
	Ø		min	max	exc.	deexc.				
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 =  $\frac{\text{mm}}{25.4}$ ; pounds =  $\frac{\text{g}}{453.6}$  =  $\frac{\text{Kg}}{0.4536}$

GAS-NPT thread adapters available at page 1.117

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

# DIRECT DRIVE 3-WAY VACUUM SOLENOID VALVES

These direct drive 3-way, 2-position vacuum solenoid valves feature conical shutters servo-controlled by the vacuum.

As a standard they are normally closed, but they can be supplied normally open upon request. They are composed of an anodised aluminium body where the connections are located, two silicon shutters assembled onto a stainless steel stem and a membrane in special reinforced compound. An actuator activated by an electric coil manages the vacuum at the servo-control. The operating principle of these solenoid valves is based on the pressure differential between the vacuum pump or generator and the pressure of the sucked air.

By addressing this "differential pressure" to the servo-control via the actuator, the shutters can be controlled without compressed air or springs.

Due to their operating principle, they are not recommended on plants with low vacuum levels (below 850 mbar abs., equal to 15 % of vacuum).

The lack of springs, frictions and internal dynamic stresses favours a high response speed and guarantees long lasting operation.

The standard electric coil is 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: 16.5 V.A. with AC and 16 W with DC.

The electric coil can be rotated by 360°. 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.

The solenoid valves in this series, along with the uses described for the 07 .. 11 series can be used on plants with no compressed air.

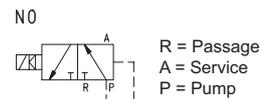
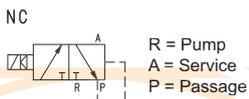
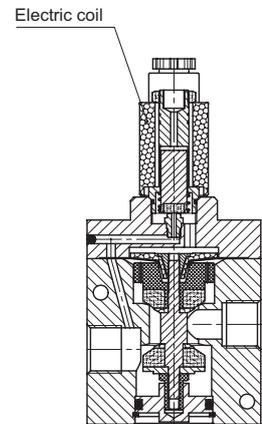
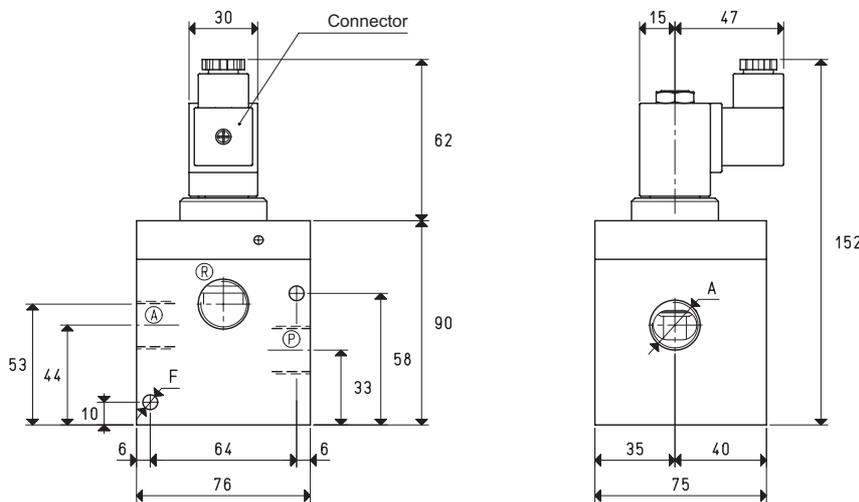
They can be provided, upon request, with SM device for manually opening or closing the solenoid valve already installed.

The solenoid valve must be always chosen according to the capacity and, therefore, to the vacuum pump or generator suction connection.

### Technical features

Working pressure: from 0.5 to 850 mbar abs.

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



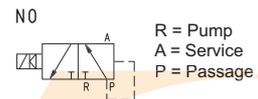
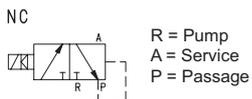
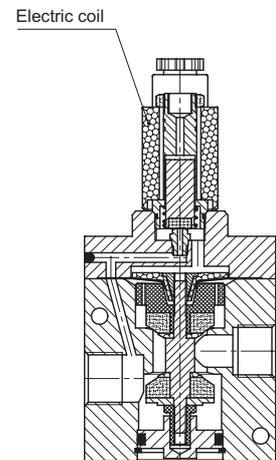
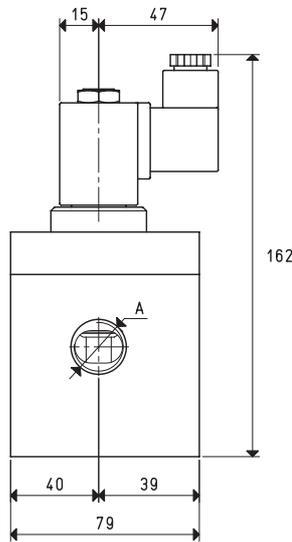
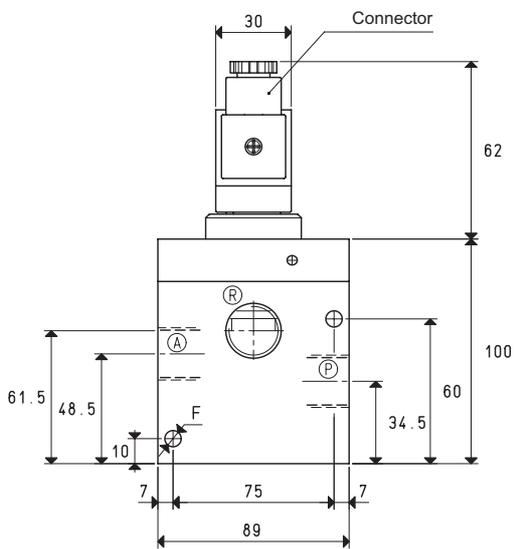
Art.	A	Max. capacity cum/h	Vacuum level mbar abs.		Reaction time msec		Ø orifice	Passage section mm <sup>2</sup>	F	Weight Kg
			min	max	exc.	deexc.				
07 03 40 NC	G1/2"	20	850	0.5	30	15	15	176	6.5	1.53
07 03 40 NO					20	18				
07 04 40 NC	G3/4"	40	850	0.5	30	15	20	314	6.5	1.50
07 04 40 NO					20	18				

**Note:** The coil and the connectors are not integral part of the solenoid valves, therefore, they must be ordered separately (See solenoid valve accessories).

# DIRECT DRIVE 3-WAY VACUUM SOLENOID VALVES



4



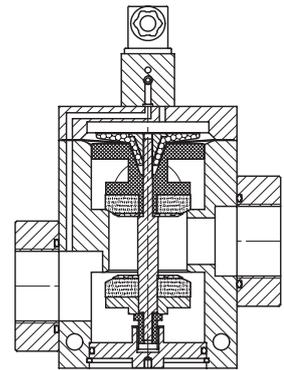
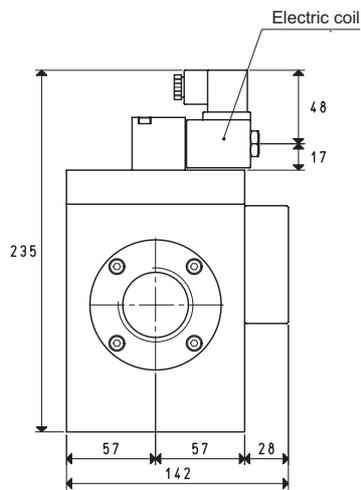
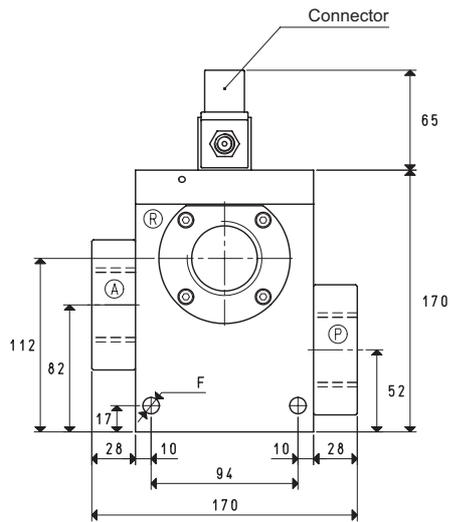
Art.	A	Max. capacity cum/h	Vacuum level mbar abs.		Reaction time msec		Ø orifice	Passage section mm <sup>2</sup>	F Ø	Weight Kg
			min	max	exc.	deexc.				
07 05 40 NC	G1"	90	850	0.5	38	18	25	490	6.5	1.91
07 05 40 NO					25	20				

**Note:** The coil and the connectors are not integral part of the solenoid valves, therefore, they must be ordered separately (See solenoid valve accessories).

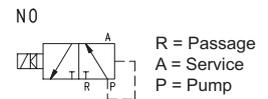
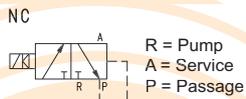
Conversion ratio: inch =  $\frac{\text{mm}}{25.4}$ ; pounds =  $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

GAS-NPT thread adapters available at page 1.117

# DIRECT DRIVE 3-WAY VACUUM SOLENOID VALVES



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



Art.	A	Max. capacity cum/h	Vacuum level mbar abs.		Reaction time msec		Passage section mm <sup>2</sup>	Ø orifice	F Ø	Weight Kg
			min	max	exc.	deexc.				
07 06 40 NC	G1" 1/2	180	850	0.5	75	50	1256	40	10.5	5.90
07 06 40 NO					70	60				

**Note:** The coil and the connectors are not integral part of the solenoid valves, therefore, they must be ordered separately (See solenoid valve accessories).

## Electric coils

Electric coils are windings of copper wire on nylon coils fully plasticised in synthetic resin which activate the electromagnetic actuators with which the solenoid valves are provided. Crossed by an electric current, these coils generate a magnetic field which activates the mobile core inside the actuators; the mobile core features a built-in or fixed shutter which cause the valve commutation by opening and closing their orifices.

The standard electric coil is 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 with inserted connector.

Allowed tolerance on the voltage nominal value:  $\pm 10\%$ .

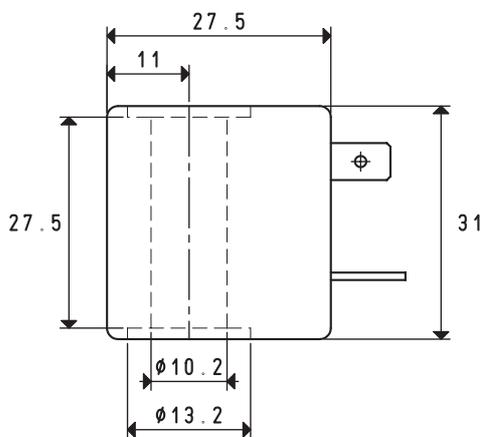
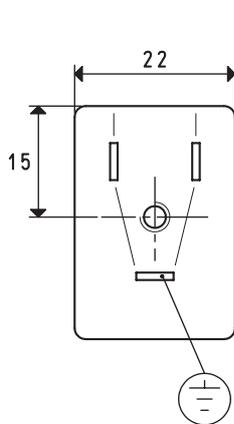
Allowed tolerance on the frequency value:  $\pm 5\%$

Room temperature: from -10 to +45 °C

Fluid temperature: from -10 to +95 °C

Electric absorption: 8 ÷ 16.5 V.A. with AC and 6.5 ÷ 16 W with DC.

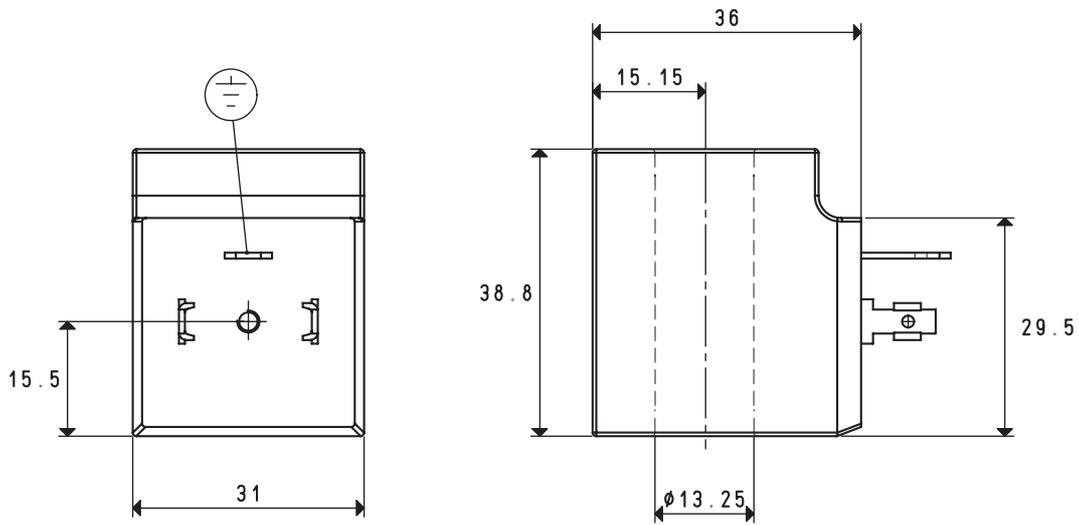
Electric coils can be rotated by 360°.



### AC AND DC COILS

Art.	Duty cycle	Absorption	Nominal voltage	Weight g	Solenoid valves art.
00 07 172	100%	6.5 W	V24 CC	54	07 01 51 - 07 02 51
00 07 173	100%	8 V.A.	V24 / 50 - 60Hz	54	07 01 51 - 07 02 51

# SOLENOID VALVE ACCESSORIES AND SPARE PARTS



## AC AND DC COILS

Art.	Duty cycle	Absorption	Nominal voltage	Weight g
<b>00 07 03 N</b>	100%	16 W	V12 CC	100
<b>00 07 04 N</b>	100%	16 W	V24 CC	100
<b>00 07 05 N</b>	100%	16 W	V48 CC	100
<b>00 07 06 N</b>	100%	16 W	V110 CC	100
<b>Solenoid valves art.</b>				
07 01 11 - 07 02 11 - 07 03 11 - 07 04 11 - 07 05 11 - 07 06 11				
07 01 16 - 07 02 16 - 07 03 16				
07 01 20 - 07 02 20 - 07 03 20				
07 03 40 - 07 04 40 - 07 05 40 - 07 06 40				
07 03 51 - 07 04 51 - 07 05 51 - 07 06 51				
DDN 14				
<b>00 07 256 N</b>	100%	16.5 V.A.	V24/50 - 60 Hz	100
<b>00 07 257 N</b>	100%	16.5 V.A.	V48/50 - 60 Hz	100
<b>00 07 258 N</b>	100%	16.5 V.A.	V110/50 - 60 Hz	100
<b>00 07 259 N</b>	100%	16.5 V.A.	V220/50 - 60 Hz	100
<b>Solenoid valves art.</b>				
07 01 11 - 07 02 11 - 07 03 11 - 07 04 11 - 07 05 11 - 07 06 11				
07 01 16 - 07 02 16 - 07 03 16				
07 01 20 - 07 02 20 - 07 03 20				
07 03 40 - 07 04 40 - 07 05 40 - 07 06 40				
07 03 51 - 07 04 51 - 07 05 51 - 07 06 51				
DDN 14 - DDN 25				

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

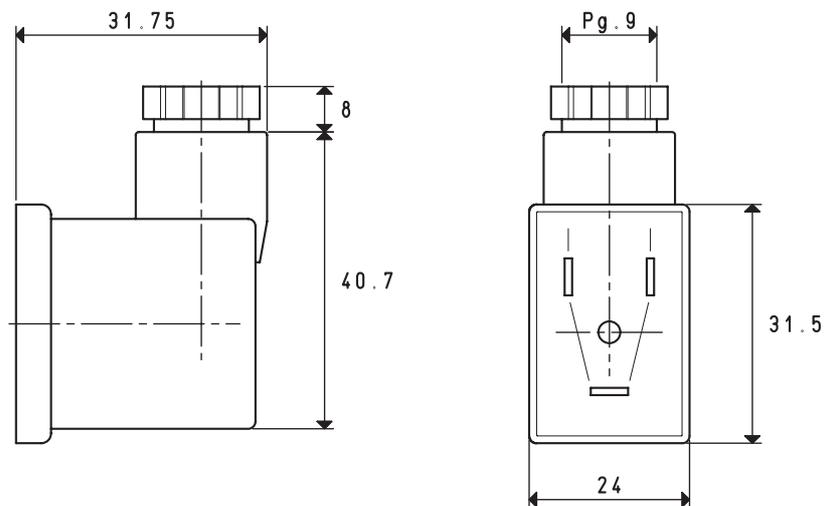
## SOLENOID VALVE ACCESSORIES AND SPARE PARTS



Connectors are fundamental for bringing electric current to the solenoid valve coils. They are available in the simple plug version installed as standard and, upon request, with LEDs to signal the presence of voltage, with anti-interference circuits, protection devices against overvoltage and polarity reversal. When correctly installed, all connectors provide full protection against water jets, according to EN 60529 standards (protection class IP 65). Moreover, they meet VDE 0110-1 /89 standards, working voltage up to 250 V, overvoltage category II, Degree of use 3, regarding insulation class.

In all contacts, a snap joint between contact holders and the external protection guarantees a safe locking and easy assembly. A safe locking is essential for guaranteeing the operator full protection when handling the connector.

The contact holder can be easily extracted from its casing simply using a screwdriver. This operation also allows orienting the earthing contact in the desired direction.

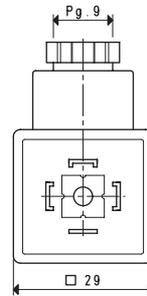
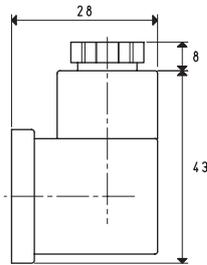


### COIL CONNECTORS

Art.	Contact nominal capacity		Conductor max. section mm <sup>2</sup>	Operating temperature °C	Ø cable mm	Weight g	Notes	Coil art.
	A							
<b>00 07 174</b>	10	max 16	1.5	-40 ÷ +90	6 ÷ 8	24	Standard	00 07 172
<b>00 07 260</b>	10	max 16	1.5	-40 ÷ +90	6 ÷ 8	24	with LED	00 07 173

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

## SOLENOID VALVE ACCESSORIES AND SPARE PARTS

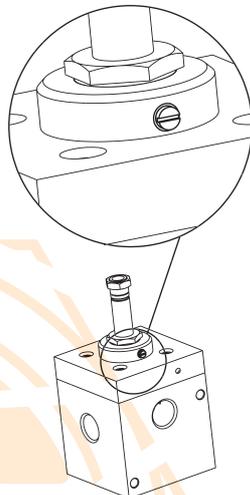


### COIL CONNECTORS

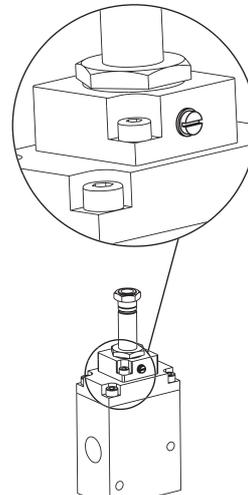
Art.	Contact nominal capacity		Conductor max. section	Operating temperature	Ø cable	Weight	Notes
	A		mm <sup>2</sup>	°C	mm	g	
<b>00 07 63</b>	10	max 16	1.5	-40 ÷ +90	6 ÷ 8	24	Standard
<b>00 07 101</b>	10	max 16	1.5	-40 ÷ +90	6 ÷ 8	24	with LED
<b>00 07 186</b>	10	max 16	1.5	-40 ÷ +90	6 ÷ 8	24	with LED and filtre
<b>Coil art.</b>							
00 07 03 - 00 07 04 - 00 07 05 - 00 07 06 - 00 07 215 - 00 07 216 - 00 07 217 - 00 07 218 - 00 07 219							
00 07 256 - 00 07 257 - 00 07 258 - 00 07 259							

## SM DEVICE FOR MANUALLY OPENING AND CLOSING THE SOLENOID VALVES

This small cam, which can be activated by a screwdriver, acts on the mobile core of the actuators causing their commutation. This device is installed, upon request, on compressed-air pilot-operated 3-way solenoid valves art. 07 .. 11 or vacuum solenoid valves art. 07 .. 40, to allow their opening and closing in absence of electricity. To order it, all you have to do is add the letters SM to the article of the solenoid valve.



SM device installation on solenoid valve art. 07 .. 40



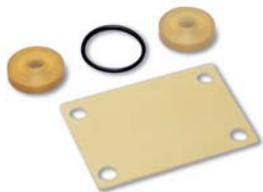
SM device installation on solenoid valve art. 07 .. 11

## VACUUM VALVE AND SOLENOID VALVE SEALING KIT

Sealing kits are composed of a membrane, shutters and standard O-rings installed on our compressed air and vacuum 3-way valves and solenoid valves.

In presence of very hot fluids (up to 250 °C) or corrosive fluids, we can supply sealing kits in special compounds. Please contact our technical department.

Complete kit for valves:



07 01 31 e 07 02 31	art. 00 07 267
07 03 31	art. 00 07 268
07 03 31 LP	art. 00 07 287
07 04 31 e 07 05 31	art. 00 07 269
07 04 31 LP e 07 05 31 LP	art. 00 07 288
07 06 31	art. 00 07 270
07 06 31 LP	art. 00 07 289

Complete kit for solenoid valves:



07 01 11 e 07 02 11	art. 00 07 271
07 03 11	art. 00 07 272
07 03 11 LP	art. 00 07 290
07 04 11 e 07 05 11	art. 00 07 273
07 04 11 LP e 07 05 11 LP	art. 00 07 291
07 06 11	art. 00 07 274
07 06 11 LP	art. 00 07 292

Complete kit for solenoid valves:



07 01 51 e 07 02 51	art. 00 07 275
07 03 51	art. 00 07 276
07 03 51 LP	art. 00 07 293
07 04 51 e 07 05 51	art. 00 07 277
07 04 51 LP e 07 05 51 LP	art. 00 07 294
07 06 51	art. 00 07 278
07 06 51 LP	art. 00 07 295

Complete kit for solenoid valves:



07 03 40 e 07 04 40	art. 00 07 279
07 05 40	art. 00 07 280
07 06 40	art. 00 07 281



## VACUUM VALVE AND SOLENOID VALVE PILOTING MEMBRANE

Art.	Valves art.	Connections	Material	Colour	Dimensions mm
<b>00 07 104</b>	07 03 40 - 07 04 40	G1/2" - G3/4"	reinforced NBR	Black	Ø 65
<b>00 07 105</b>	07 05 40	G1"	reinforced NBR	Black	Ø 76
<b>00 07 177</b>	07 06 40	G1" 1/2	reinforced NBR	Black	Ø 110
<b>00 07 229</b>	07 01 11 - 07 01 31 - 07 01 51 07 02 11 - 07 02 31 - 07 02 51	G1/4" - G3/8"	Vulkollan®	Beige	49 x 35
<b>00 07 230</b>	07 03 11 - 07 03 31 - 07 03 51	G1/2"	Urepan® 65	Grey - orange	62 x 39
<b>00 07 296</b>	07 03 11 LP - 07 03 31 LP - 07 03 51 LP	G1/2"	Vulkollan®	Beige	62 x 39
<b>00 07 231</b>	07 04 11 - 07 04 31 - 07 04 51 07 05 11 - 07 05 31 - 07 05 51	G3/4" - G1"	Urepan® 65	Grey - orange	79 x 49
<b>00 07 297</b>	07 04 11 LP - 07 04 31 LP - 07 04 51 LP 07 05 11 LP - 07 05 31 LP - 07 05 51 LP	G3/4" - G1"	Vulkollan®	Beige	79 x 49
<b>00 07 232</b>	07 06 11 - 07 06 31 - 07 06 51	G1" 1/2	Urepan® 65	Grey - orange	129 x 89
<b>00 07 298</b>	07 06 11 LP - 07 06 31 LP - 07 06 51 LP	G1" 1/2	Vulkollan®	Beige	129 x 89

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

# 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 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.

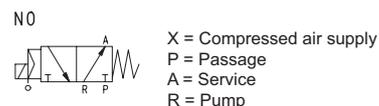
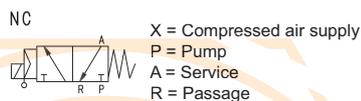
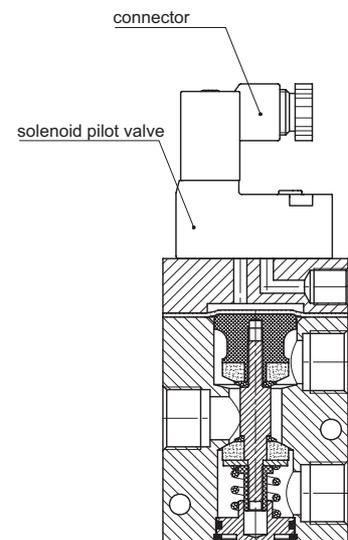
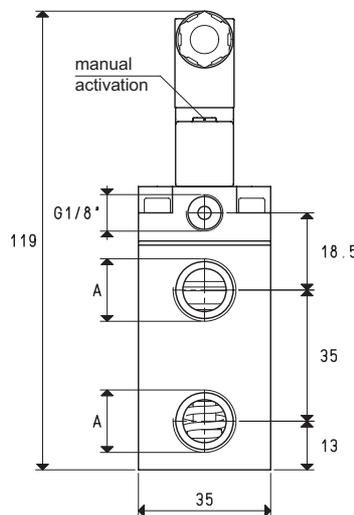
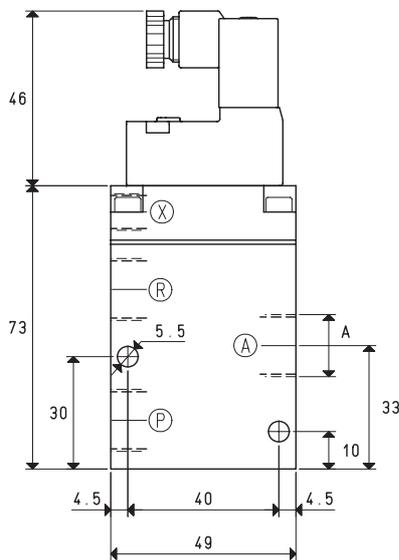
A push-button device, built-in the solenoid pilot valve, allows manually opening and closing the solenoid valve. 3-way vacuum solenoid valves are usually used for intercepting the vacuum in vacuum cup feeders and paletisers, robots, bag openers and in all those cases which require a quick exchange between 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



Art.	A	Max. capacity cum/h	Vacuum level mbar abs.		Reaction time msec		Ø orifice	Passage section mm <sup>2</sup>	Servo-control pressure bar (g)	Weight Kg
			min	max	exc.	deexc.				
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

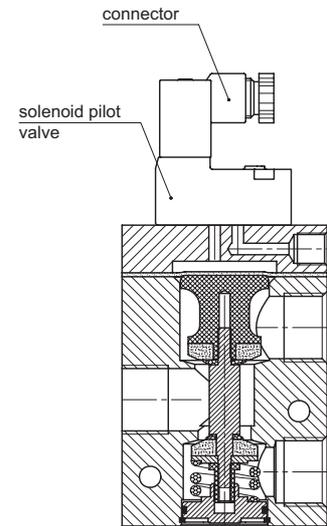
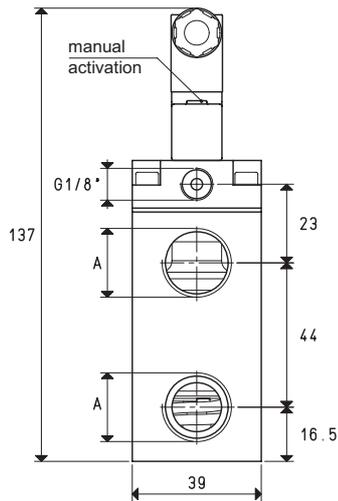
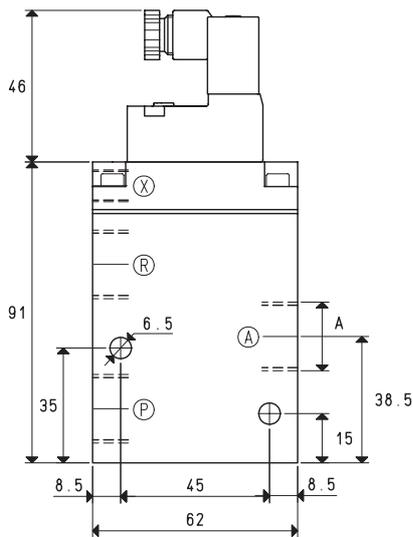
**Note:** Please specify the electric coil voltage in the order (E.g.: 07 01 13 V24-CC)

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

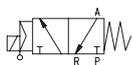
# SERVO-CONTROLLED 3-WAY VACUUM SOLENOID VALVES WITH LOW ABSORPTION ELECTRIC COIL



4

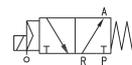


NC



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 cum/h	Vacuum level mbar abs.		Reaction time msec		Ø orifice	Passage section mm <sup>2</sup>	Servo-control pressure *bar (g)	Weight Kg
			min	max	exc.	deexc.				
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).

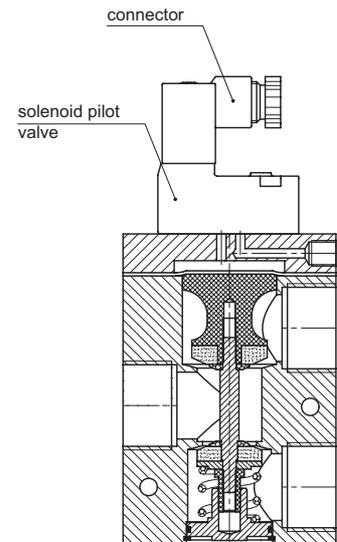
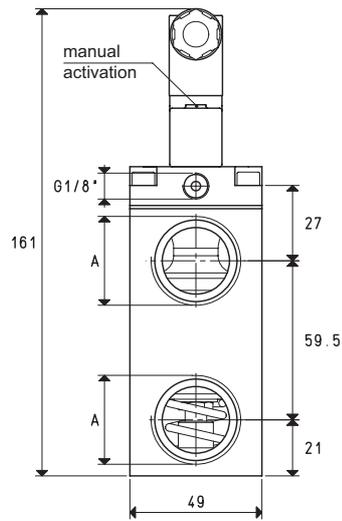
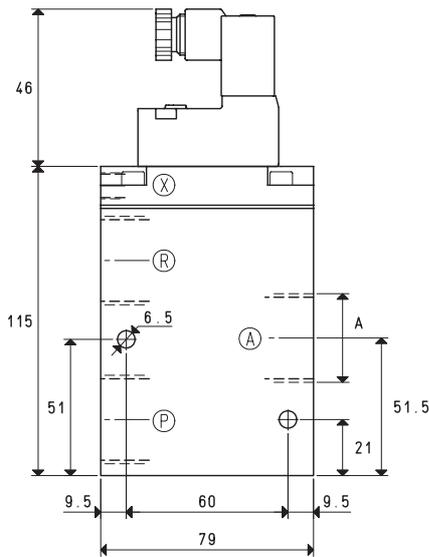
**Note:** Please specify the electric coil voltage in the order (E.g.: 07 03 13 V24-CC)

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

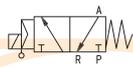
Conversion ratio: inch =  $\frac{\text{mm}}{25.4}$ ; pounds =  $\frac{\text{g}}{453.6}$  =  $\frac{\text{Kg}}{0.4536}$

GAS-NPT thread adapters available at page 1.117

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

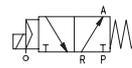


NC



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

NO



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

Art.	A Ø	Max. capacity cum/h	Vacuum level mbar abs.		Reaction time msec		Ø orifice	Passage section mm <sup>2</sup>	Servo-control pressure *bar (g)	Weight Kg
			min	max	exc.	deexc.				
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)

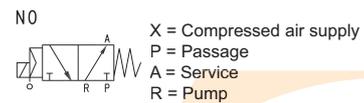
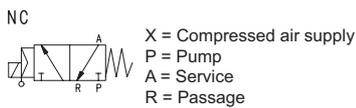
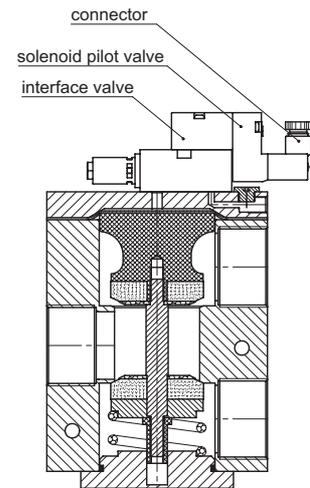
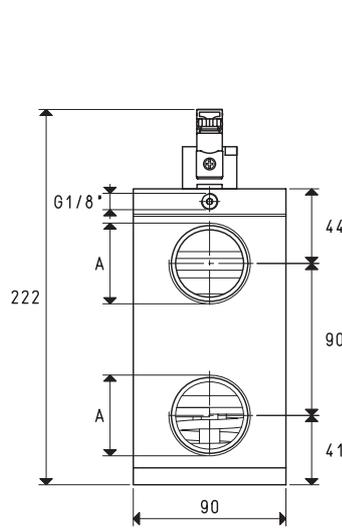
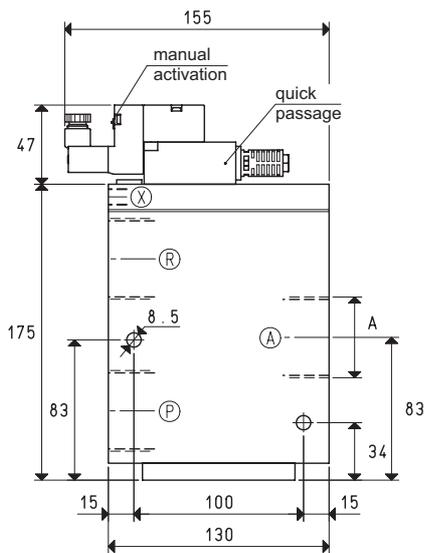
The connector is not integral part of the solenoid valve and, therefore, must be ordered separately (See solenoid valve accessories).

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

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



4



Art.	A	Max. capacity cum/h	Vacuum level mbar abs.		Reaction time msec		Ø orifice	Passage section mm <sup>2</sup>	Servo-control pressure *bar (g)	Weight Kg
			min	max	exc.	deexc.				
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 =  $\frac{\text{mm}}{25.4}$ ; pounds =  $\frac{\text{g}}{453.6}$  =  $\frac{\text{Kg}}{0.4536}$

GAS-NPT thread adapters available at page 1.117

# SERVO-CONTROLLED 3-WAY VACUUM SOLENOID VALVES WITH BISTABLE IMPULSE SOLENOID PILOT VALVE AND WITH LOW ABSORPTION ELECTRIC COIL

These solenoid valves have the same functions and structure as the previously described ones.

Their distinctive feature is a bistable impulse solenoid valve activated by a built-in low absorption electric coil which, at a simple electric impulse, exchanges the shutter position even in absence of electricity, until it receives a new impulse of opposite polarity. For this reason, they can only be supplied with DC electric coils.

They are particularly recommended in all those cases that require a safe connection to the vacuum source, even in absence of electricity.

The electric coil of the solenoid pilot valve is fully 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/CC.

Allowed tolerance on the voltage nominal value:  $\pm 10\%$ .

Maximum electric power: 1 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.

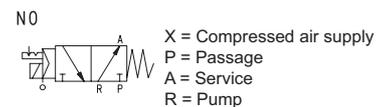
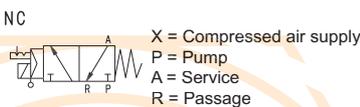
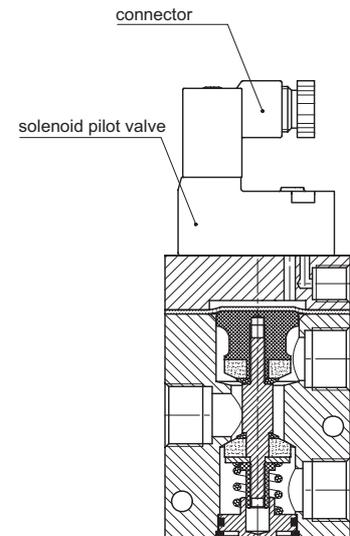
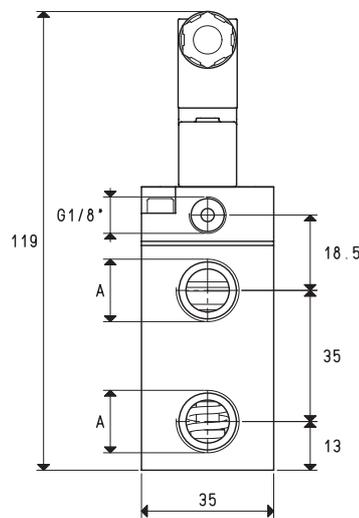
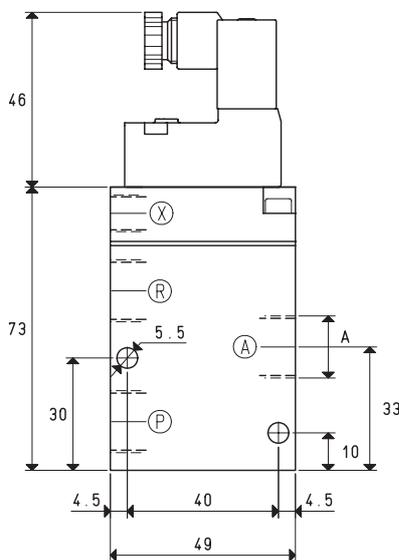
The push-button device for their manual activation cannot be installed on these solenoid valves.

### 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

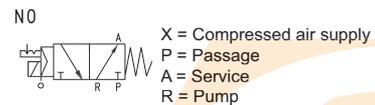
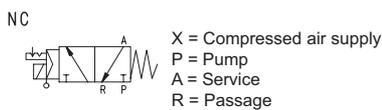
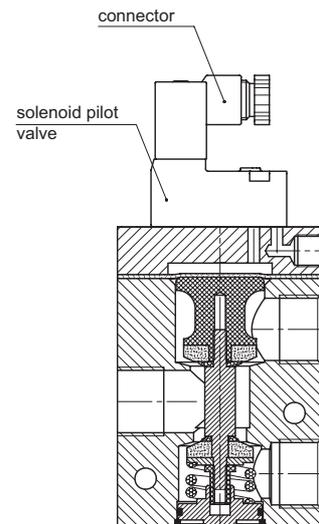
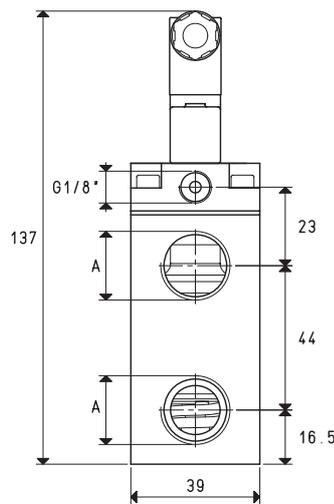
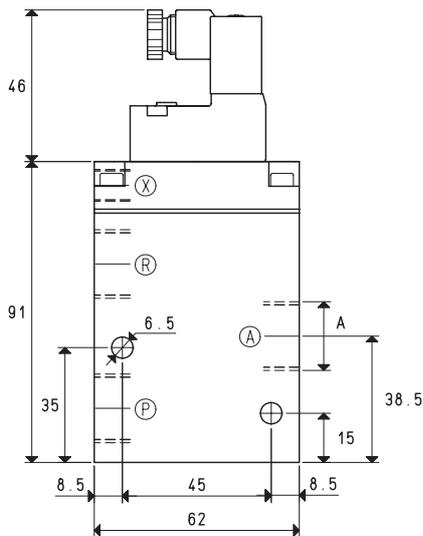


Art.	A	Max. capacity cum/h	Vacuum level mbar abs.		Reaction time msec		Ø orifice	Passage section mm <sup>2</sup>	Servo-control pressure bar (g)	Weight Kg
			min	max	exc.	deexc.				
07 01 53	G1/4"	6	1000	0.5	16	27	8.5	56.8	4 ÷ 7	0.44
07 02 53	G3/8"	10	1000	0.5	16	27	11.5	103.8	4 ÷ 7	0.43

**Note:** Please specify the electric coil voltage in the order (E.g.: 07 01 53 V24-CC)

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

# SERVO-CONTROLLED 3-WAY VACUUM SOLENOID VALVES WITH BISTABLE IMPULSE SOLENOID PILOT VALVE AND WITH LOW ABSORPTION ELECTRIC COIL



Art.	A	Max. capacity cum/h	Vacuum level mbar abs.		Reaction time msec		Ø orifice	Passage section mm <sup>2</sup>	Servo-control pressure *bar (g)	Weight Kg
			min	max	exc.	deexc.				
07 03 53	G1/2"	20	1000	0.5	16	40	15.0	176	6 ÷ 8	0.52

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

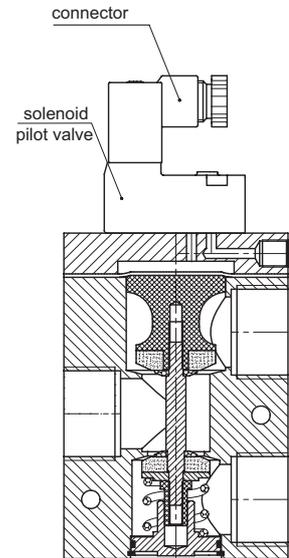
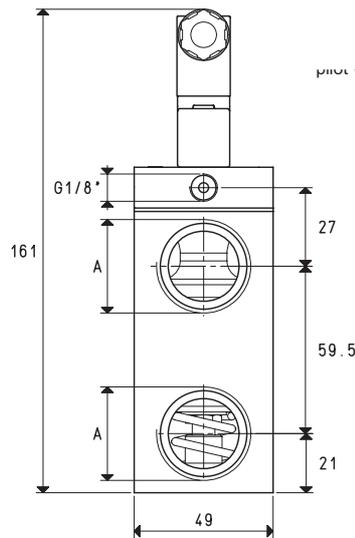
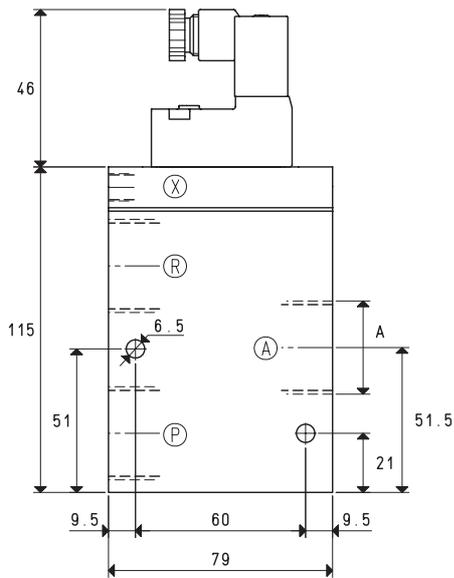
**Note:** Please specify the electric coil voltage in the order (E.g.: 07 03 53 V24-CC)

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

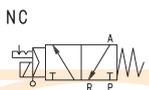
Conversion ratio: inch =  $\frac{\text{mm}}{25.4}$ ; pounds =  $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

GAS-NPT thread adapters available at page 1.117

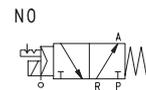
# SERVO-CONTROLLED 3-WAY VACUUM SOLENOID VALVES WITH BISTABLE IMPULSE SOLENOID PILOT VALVE AND WITH LOW ABSORPTION ELECTRIC COIL



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



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



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

Art.	A Ø	Max. capacity cum/h	Vacuum level mbar abs.		Reaction time msec		Ø orifice	Passage section mm <sup>2</sup>	Servo-control pressure *bar (g)	Weight Kg
			min	max	exc.	deexc.				
07 04 53	G3/4"	40	1000	0.5	16	40	20	314	6 ÷ 8	1.00
07 05 53	G1"	90	1000	0.5	18	42	25	490	6 ÷ 8	0.94

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

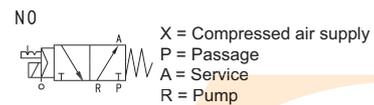
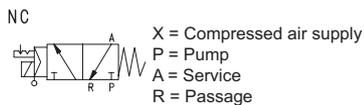
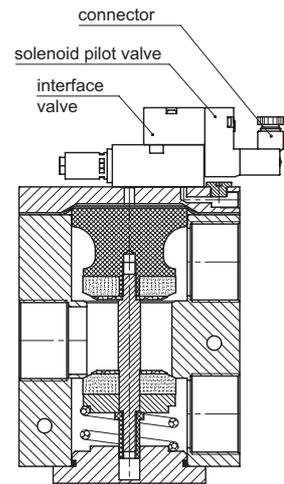
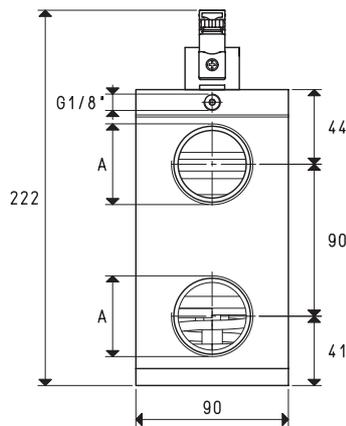
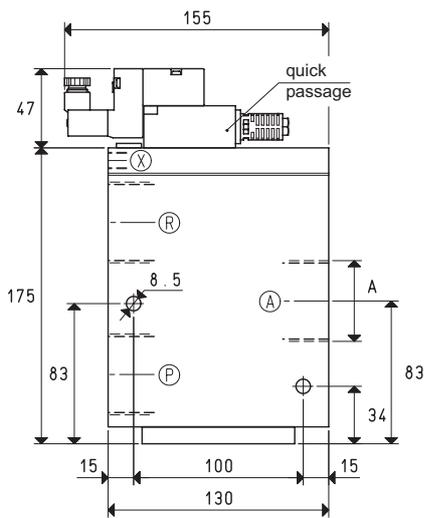
**Note:** Please specify the electric coil voltage in the order (E.g.: 07 04 53 V24-CC)

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

# SERVO-CONTROLLED 3-WAY VACUUM SOLENOID VALVES WITH BISTABLE IMPULSE SOLENOID PILOT VALVE AND WITH LOW ABSORPTION ELECTRIC COIL



4



Art.	A	Max. capacity cum/h	Vacuum level mbar abs.		Reaction time msec		Ø orifice	Passage section mm <sup>2</sup>	Servo-control pressure *bar (g)	Weight Kg
			min	max	exc.	deexc.				
07 06 53	G1*1/2	180	1000	0.5	60	38	40	1256	6 ÷ 8	4.5

\* 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 53 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 =  $\frac{\text{mm}}{25.4}$ ; pounds =  $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

GAS-NPT thread adapters available at page 1.117

# DIRECT DRIVE 3-WAY VACUUM SOLENOID VALVES WITH LOW ABSORPTION ELECTRIC COIL

The direct drive 3-way vacuum solenoid valves of this series feature two positions with conical shutters servo-controlled by the vacuum.

As a standard they are normally supplied closed, but upon request they can also be provided as normally open.

They are composed of an anodised aluminium body where the connections are located, two silicon shutters assembled onto a stainless steel stem and a membrane in special reinforced compound. A solenoid pilot valve activated by a built-in electric coil manages the servo-control vacuum. The operating principle of these solenoid valves is based upon the pressure differential between the vacuum pump or generator and the pressure of the sucked air. By directing this differential pressure to the servo-control via the solenoid pilot valve, it is possible to control the shutters with no need for compressed air or springs.

Due to their operating principle, these solenoid valves are not recommended for low vacuum level plants (below 850 mbar abs., equal to 15 % of vacuum).

The absence of springs, frictions and internal dynamic stresses favours a high response speed and guarantees a long lasting operation.

The electric coil of the solenoid pilot valve is fully 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

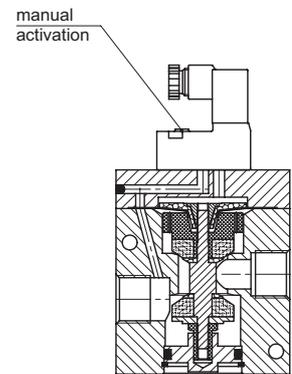
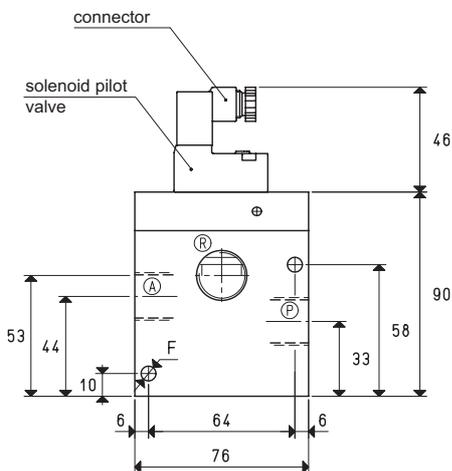
The connector can be rotated by 180° on the coil and can be supplied, upon request, with Led lights, anti-interference circuit and/or with protection devices against overvoltage and polarity reversal. A push-button device built-in the solenoid pilot valve allows the manual opening and closing of the solenoid valve.

The solenoid valves of this series can be used in almost all the cases described for the 07 .. 11 series, and also on plants with no compressed air.

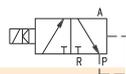
The solenoid valve must always be chosen according to the capacity and, therefore, to the vacuum pump or generator suction connection.

Working pressure: from 0.5 to 850 mbar abs.

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

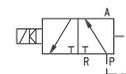


NC



R = Pump  
A = Service  
P = Passage

NO



R = Passage  
A = Service  
P = Pump

Art.	A	Max. capacity cum/h	Vacuum level mbar abs.		Reaction time msec		Ø orifice	passage section mm <sup>2</sup>	F Ø	Weight Kg
			min	max	exc.	deexc.				
07 03 43 NC	G1/2"	20	850	0.5	33	17	15	176	6.5	1.35
07 03 43 NO					22	20				
07 04 43 NC	G3/4"	40	850	0.5	33	17	20	314	6.5	1.30
07 04 43 NO					22	20				

**Note:** Please specify the electric coil voltage in the order (E.g.: 07 03 43 NC V24-CC)

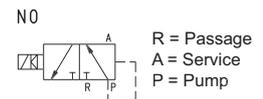
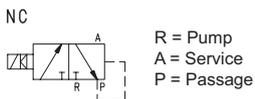
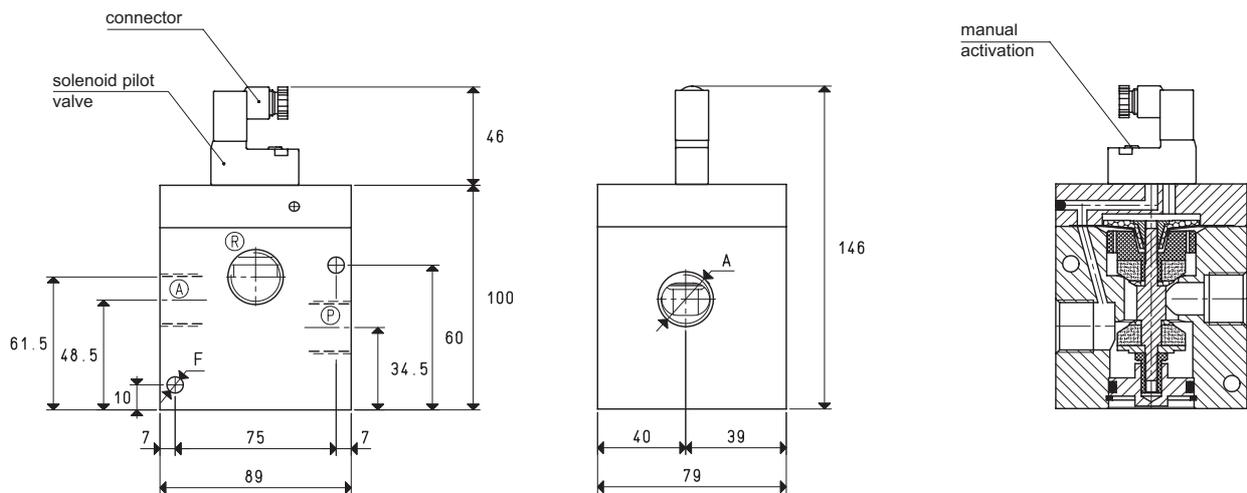
The connector is not integral part of the solenoid valve and, therefore, must be ordered separately (See solenoid valve accessories).

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

# DIRECT DRIVE 3-WAY VACUUM SOLENOID VALVES WITH LOW ABSORPTION ELECTRIC COIL



4



Art.	A	Max. capacity	Vacuum level		Reaction time		Ø	Passage section	F	Weight
			min	max	exc.	deexc.				
07 05 43 NC	Ø	cum/h	850	0.5	42	20	25	490	6.5	1.65
07 05 43 NO	G1"	90			28	22				

**Note:** Please specify the electric coil voltage in the order (E.g.: 07 05 43 NC 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 =  $\frac{\text{mm}}{25.4}$ ; pounds =  $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

GAS-NPT thread adapters available at page 1.117

## 3-WAY VACUUM SOLENOID VALVES WITH BISTABLE IMPULSE SOLENOID PILOT VALVE AND WITH LOW ABSORPTION ELECTRIC COIL

These solenoid valves have the same functions and structure as the previously described ones.

Their distinctive feature is a bistable impulse solenoid valve activated by a built-in low absorption electric coil which, at a simple electric impulse, exchanges the shutter position even in absence of electricity, until it receives a new impulse of opposite polarity. For this reason, they can only be supplied with DC electric coils.

They are particularly recommended in all those cases that require a safe connection to the vacuum source, even in absence of electricity.

The electric coil of the solenoid pilot valve is fully 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/CC.

Allowed tolerance on the voltage nominal value:  $\pm 10\%$ .

Maximum electric power: 1 W

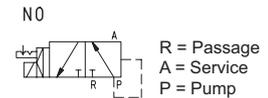
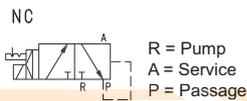
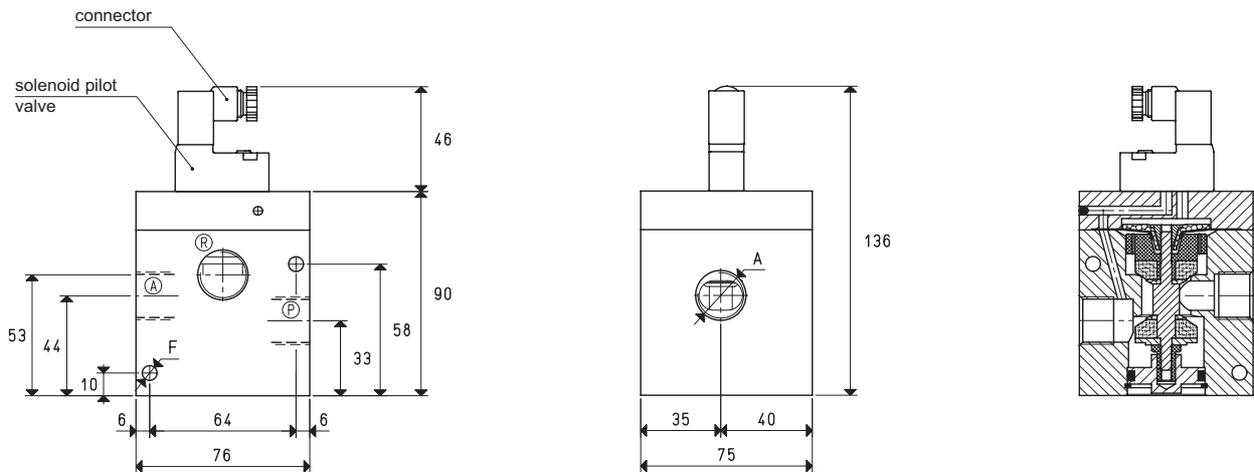
The connector can be rotated by 180° on the coil and can be supplied, upon request, with Led lights, anti-interference circuit and/or with protection devices against overvoltage and polarity reversal.

The push-button device for their manual activation cannot be installed on these solenoid valves.

### Technical features

Working pressure: from 0.5 to 850 mbar abs.

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

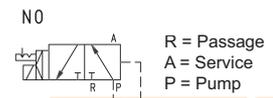
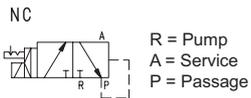
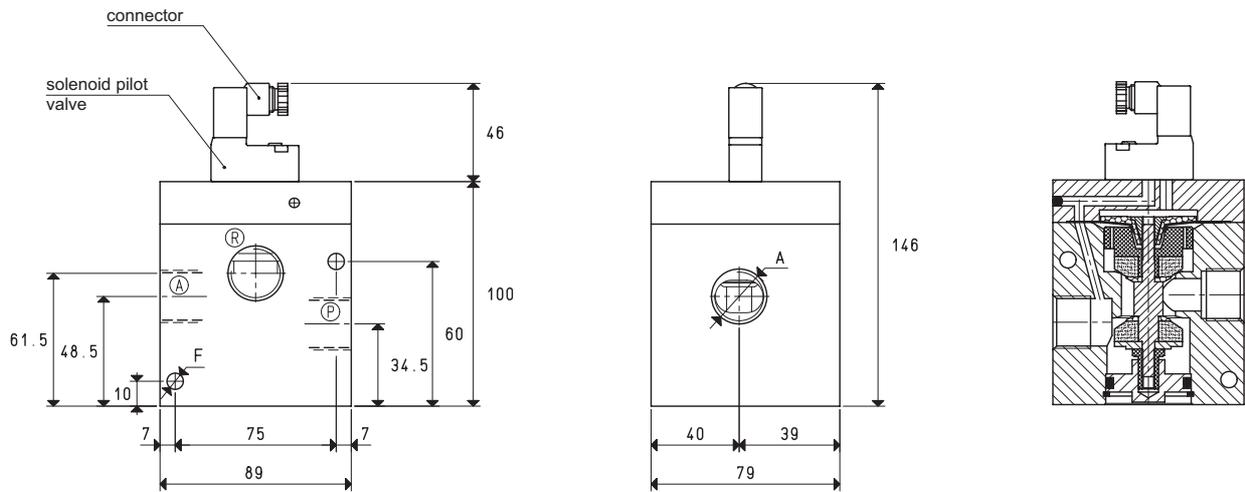


Art.	A	Max. capacity	Vacuum level		Reaction time		Ø	Passage section	F	Weight
			min	max	exc.	deexc.				
07 03 63 NC	G1/2"	20	850	0.5	33	17	15	176	6.5	1.35
07 03 63 NO					22	20				
07 04 63 NC	G3/4"	40	850	0.5	33	17	20	314	6.5	1.30
07 04 63 NO					22	20				

**Note:** Please specify the electric coil voltage in the order (E.g.: 07 03 63 NC V24-CC)

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

### 3-WAY VACUUM SOLENOID VALVES WITH BISTABLE IMPULSE SOLENOID PILOT VALVE AND WITH LOW ABSORPTION ELECTRIC COIL



Art.	A	Max. capacity	Vacuum level		Reaction time		Ø	Passage section	F	Weight
			min	max	exc.	deexc.				
07 05 63 NC	G1"	90	850	0.5	42	20	25	490	6.5	1.05
07 05 63 NO					28	22				

**Note:** Please specify the electric coil voltage in the order (E.g.: 07 05 63 NC V24-CC)

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

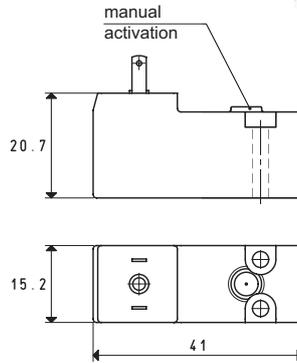
# ACCESSORIES AND SPARE PARTS FOR SOLENOID VALVES WITH LOW ABSORPTION COILS

## Solenoid pilot valves with built-in low absorption electric coil

Solenoid pilot valves are small 3-way valves activated by a built-in electric coil able to manage the compressed air or the vacuum for piloting the solenoid valves.

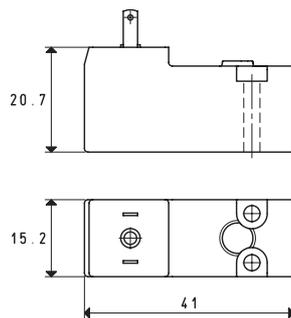
The electric coil of the solenoid pilot valve is fully plasticised with synthetic resin, tight execution, insulation class F (up to 155 °C) compliant with VDE standards, with 3 mm 2-terminal electrical connections in compliance with EN 175301-803 (ex DIN 43650)-C.

Protection degree IP 54; IP 65 for inserted connector.  
 Allowed tolerance on the voltage nominal value:  $\pm 10\%$   
 Allowed tolerance on the frequency value:  $\pm 5\%$   
 Room temperature: from -10 to +45 °C  
 Fluid temperature: from -10 to +95 °C  
 Electric power: from 1 to 2 W



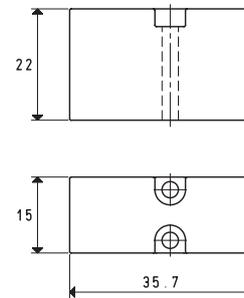
### SOLENOID PILOT VALVES WITH BUILT-IN LOW ABSORPTION ELECTRIC COIL

Art.	Duty cycle	Power W	Electric voltage Volt	Pressure bar (g)		Weight g
				min	max	
<b>00 07 301</b>	100%	1	12 / 50 - 60Hz	0	7	32
<b>00 07 302</b>	100%	1	24 / 50 - 60Hz	0	7	32
<b>00 07 303</b>	100%	2	12 / CC	0	7	32
<b>00 07 304</b>	100%	2	24 / CC	0	7	32
<b>Solenoid valves art.</b>						
07 01 13 - 07 02 13 - 07 03 13 - 07 04 13 - 07 05 13 - 07 06 13						
07 03 13 LP - 07 04 13 LP - 07 05 13 LP - 07 06 13 LP						
<b>00 07 305</b>	100%	1	12 / 50 - 60Hz	0	10	32
<b>00 07 306</b>	100%	1	24 / 50 - 60Hz	0	10	32
<b>00 07 307</b>	100%	2	12 / CC	0	10	32
<b>00 07 308</b>	100%	2	24 / CC	0	10	32
<b>Solenoid valves art.</b>						
07 03 43 - 07 04 43 - 07 05 43						



### BISTABLE IMPULSE SOLENOID PILOT VALVE WITH BUILT-IN ELECTRIC COIL

Art.	Duty cycle	Power W	Electric voltage Volt	Pressure bar (g)		Weight g
				min	max	
<b>00 07 309</b>	100%	1	12 / CC	0	8	30
<b>00 07 310</b>	100%	1	24 / CC	0	8	30
<b>Solenoid valves art.</b>						
07 01 53 - 07 02 53 - 07 03 53 - 07 04 53 - 07 05 53 - 07 06 53						
07 03 53 LP - 07 04 53 LP - 07 05 53 LP - 07 06 53 LP						
<b>00 07 311</b>	100%	1	12 / CC	0	5	30
<b>00 15 297</b>	100%	1	24 / CC	0	5	30
<b>Solenoid valves art.</b>						
07 03 63 - 07 04 63 - 07 05 63						



VALVE - INTERFACE				
Art.	Pressure (bar)		Weight g	Solenoid valves art.
	min	max		
00 15 154	0	7	20	07 06 13 - 07 06 13 LP 07 06 53 - 07 06 53 LP

### MICRO CONNECTORS EN 175301 - 803 (EX DIN 43650) - C, FOR SOLENOID PILOT VALVE COILS

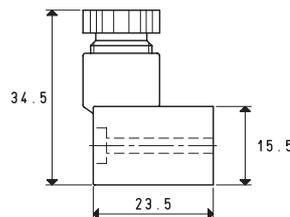
Connectors are essential elements for bringing electricity to solenoid pilot valves with built-in low absorption coil. They are available in the plug version, with a LED for signalling the presence of voltage and, upon request, with anti-interference circuits, with protection against overvoltage and polarity inversion. All connectors provide full protection against water jets, according to EN 60529 (protection class IP 65), when correctly installed.

They also meet VDE 0110-1 /89 standard, working voltage up to 250 V, overvoltage category II, degree of use 3 regarding insulation class.

In all contacts, a snap joint between contact holders and the external protection guarantees a safe locking and easy assembly.

A safe locking is essential for guaranteeing the operator full protection when handling the connector.

The contact holder can be easily extracted from its casing simply using a screwdriver. This operation also allows orienting the earthing contact in the desired direction.



Art.	Contact nominal capacity A	Conductor max section mm	Operating temperature °C	Ø cable mm	Weight g	Notes	Solenoid pilot valve art.
00 15 157	6 ÷ 10	0.75	-40 ÷ +90	4 ÷ 6	8	with LED	All

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

## SEALING KIT FOR SOLENOID VALVES WITH LOW ABSORPTION ELECTRIC COILS

Sealing kits are composed of a membrane, shutters and standard O-rings installed on our compressed air and vacuum 3-way valves and solenoid valves.

In presence of very hot fluids (up to 250 °C) or corrosive fluids, we can supply sealing kits in special compounds. Please contact our technical department.

Complete kit for solenoid valves:



07 01 13 and 07 02 13  
07 03 13  
07 03 13 LP  
07 04 13 and 07 05 13  
07 04 13 LP and 07 05 13 LP  
07 06 13  
07 06 13 LP

art. 00 07 271  
art. 00 07 272  
art. 00 07 290  
art. 00 07 273  
art. 00 07 291  
art. 00 07 274  
art. 00 07 292

Complete kit for solenoid valves:



07 01 53 and 07 02 53  
07 03 53  
07 03 53 LP  
07 04 53 and 07 05 53  
07 04 53 LP and 07 05 53 LP  
07 06 53  
07 06 53 LP

art. 00 07 275  
art. 00 07 276  
art. 00 07 293  
art. 00 07 277  
art. 00 07 294  
art. 00 07 278  
art. 00 07 295

Complete kit for solenoid valves:



07 03 43 and 07 04 43  
07 03 63 and 07 04 63  
07 05 43 and 07 05 63

art. 00 07 279  
art. 00 07 279  
art. 00 07 280

## PILOT MEMBRANE FOR SOLENOID VALVES WITH LOW ABSORPTION ELECTRIC COILS



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

Art.	Valves art.	Connections	Material	Colour	Dimensions mm
<b>00 07 104</b>	07 03 43 - 07 04 43 07 03 63 - 07 04 63	G1/2" - G3/4"	reinforced NBR	Black	Ø 65
<b>00 07 105</b>	07 05 43 - 07 05 63	G1"	reinforced NBR	Black	Ø 76
<b>00 07 229</b>	07 01 13 - 07 01 53 07 02 13 - 07 02 53	G1/4" - G3/8"	Vulkollan®	Beige	49 x 35
<b>00 07 230</b>	07 03 13 - 07 03 53	G1/2"	Urepan® 65	Grey - orange	62 x 39
<b>00 07 296</b>	07 03 13 LP - 07 03 53 LP	G1/2"	Vulkollan®	Beige	62 x 39
<b>00 07 231</b>	07 04 13 - 07 04 53 07 05 13 - 07 05 53	G3/4" - G1"	Urepan® 65	Grey - orange	79 x 49
<b>00 07 297</b>	07 04 13 LP - 07 04 53 LP 07 05 13 LP - 07 05 53 LP	G3/4" - G1	Vulkollan®	Beige	79 x 49
<b>00 07 232</b>	07 06 13 - 07 06 53	G1" 1/2	Urepan® 65	Grey - orange	129 x 89
<b>00 07 298</b>	07 06 13 LP - 07 06 53 LP	G1" 1/2	Vulkollan®	Beige	129 x 89