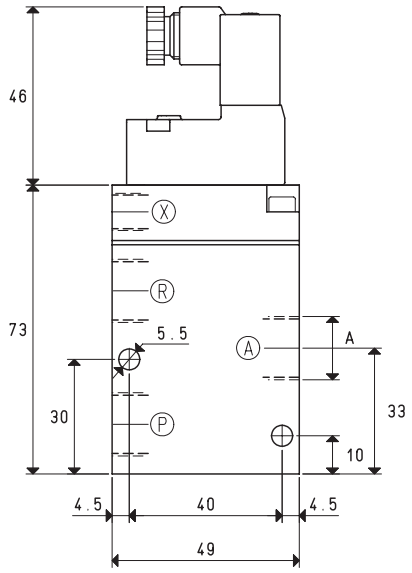
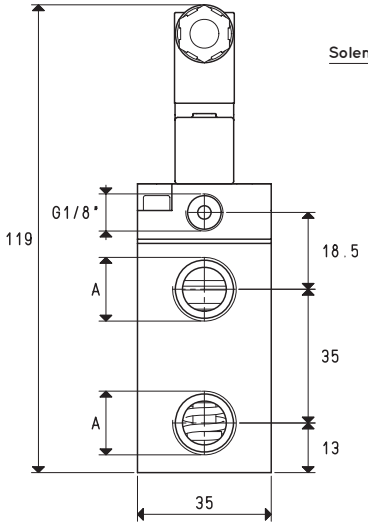
SERVO-CONTROLLED 3-WAY VACUUM SOLENOID VALVES WITH BISTABLE IMPULSE SOLENOID PILOT VALVE AND WITH LOW ABSORPTION ELECTRIC COIL

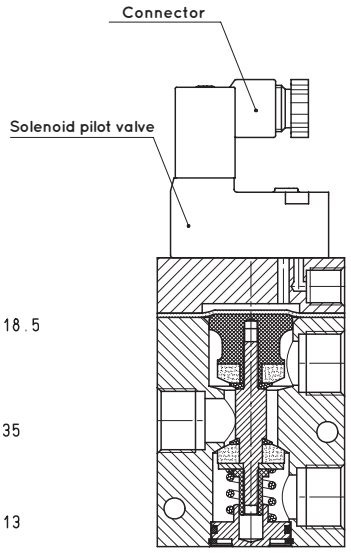
These solenoid valves have the same function and the same structure as the previously described three-way valves.
Even their structure is the same; what differentiates them are the bistable impulse solenoid pilot valve powered by a low absorption fitted electrical coil which, with a simple electrical impulse, exchanges the shutter positions and keeps them there even in absence of electricity, until it receives a new impulse of opposite polarity. For this reason, they can only be supplied with direct current electric coils.
Their use is especially recommended in all those cases requiring maximum connection security at the vacuum source, even in the absence of electrical power supply.
The electric coils of the solenoid pilot valve are fully plastic-coated in synthetic resin, watertight, insulation class F (up to 155°C) as per standard VDE, with 3 mm two-terminal electrical connections for connectors in compliance with EN 175301-803
(ex DIN 43650) - C. Protection degree IP 54; IP 65 with connector inserted.
Available for voltages 12-24VDC.
Tolerance permitted on the nominal voltage value: ±10%.
Maximum electric power: 1 W
The connector can be rotated 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

Operating pressure: from 0.5 to 3000 absolute mbar
Servo-control pressure: see table
Temperature of suctioned fluid: from -5 to +60°C







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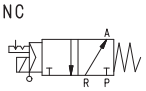
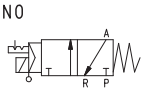


X = Compressed air supply
P = Pump
A = Use
R = Discharge

NO



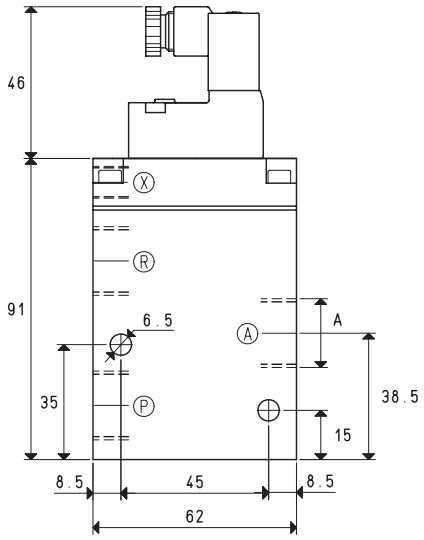
X = Compressed air supply
P = Discharge
A = Use
R = Pump

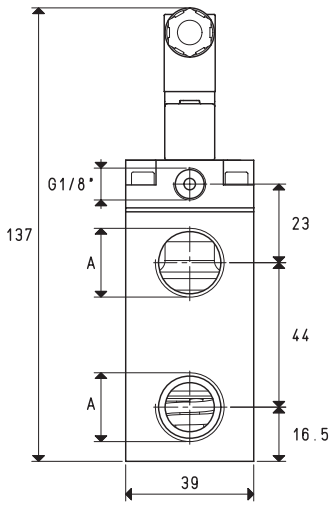
Item	A	Max flow rate	Level of vacuum abs. mbar		Reaction time msec		Mouth	Cross-section of passage	Pressure at servo-controlled	Weight
	Ø	m³/h	min	max	energ.	de-energ.	Ø	mm²	bar	Kg
07 01 53	G1/4"	6	1000	0.5	16	27	8.5	56.8	4 ÷ 7	0.44
07 02 53	G3/8"	10	1000	0.5	16	27	11.5	103.8	4 ÷ 7	0.43

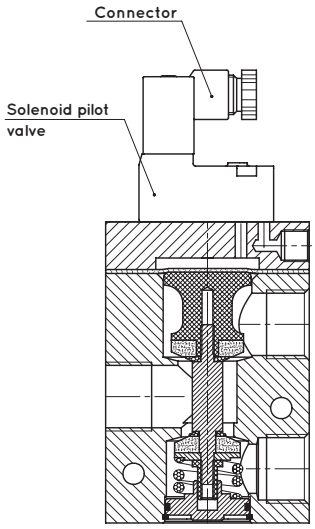
Note: Specify the voltage of the electric coil when ordering. (Example: 07 01 53 V24-CC)
The connector is not integral parts of the solenoid valve and, therefore, must be ordered separately (See accessories for solenoid valves).
Solenoid valve servo-controlled power must be supplied with non-lubricated compressed air, 5 micron filtration, according to standard **ISO 8573-1 class 4**.

Transformation ratio: N (newton) = Kg x 9.81 (force of gravity) inch = $\frac{mm}{25.4}$; pounds = $\frac{g}{453.6} = \frac{Kg}{0.4536}$

Adapters for GAS - NPT threading available on page 1.130







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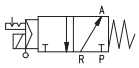
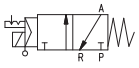


X = Compressed air supply
P = Pump
A = Use
R = Discharge

NO



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

Item	A	Max flow rate	Level of vacuum abs. mbar		Reaction time msec		Mouth	Cross-section of passage	Pressure at servo-controlled	Weight
	Ø	m³/h	min	max	energ.	de-energ.	Ø	mm²	*bar	Kg
07 03 53	G1/2"	20	1000	0.5	16	40	15.0	176	6 ÷ 7	0.52

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

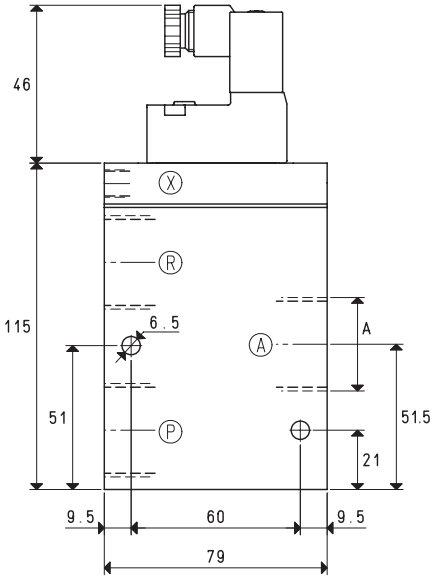
Note: Specify the voltage of the electric coil when ordering. (Example: 07 03 53 V24-CC)

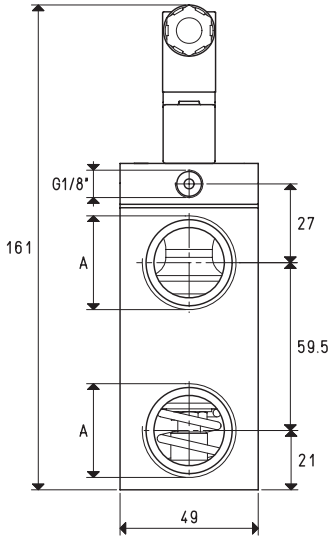
The connector is not integral parts of the solenoid valve and, therefore, must be ordered separately (See accessories for solenoid valves).

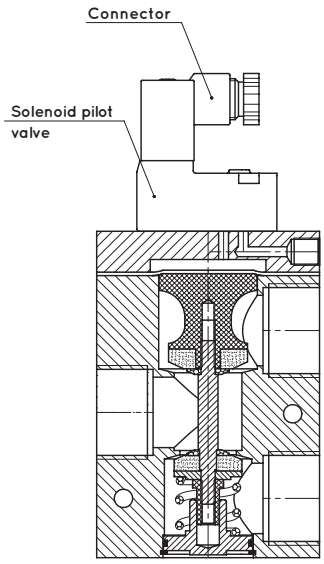
Transformation ratio: N (newton) = Kg x 9.81 (force of gravity) inch = $\frac{mm}{25.4}$; pounds = $\frac{g}{453.6} = \frac{Kg}{0.4536}$

Adapters for GAS - NPT threading available on page 1.130

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







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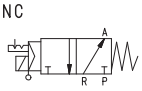
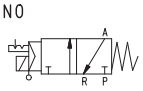


X = Compressed air supply
P = Pump
A = Use
R = Discharge

NO



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

Item	A	Max flow rate	Level of vacuum abs. mbar		Reaction time msec		Mouth	Cross-section of passage	Pressure at servo-controlled	Weight
	Ø	m³/h	min	max	energ.	de-energ.	Ø	mm²	*bar	Kg
07 04 53	G3/4"	40	1000	0.5	16	40	20	314	6 ÷ 7	1.00
07 05 53	G1"	90	1000	0.5	18	42	25	490	6 ÷ 7	0.94

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

Note: Specify the voltage of the electric coil when ordering. (Example: 07 04 53 V24-CC)

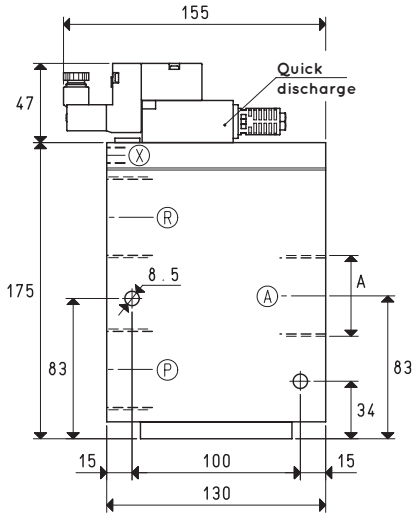
The connector is not integral parts of the solenoid valve and, therefore, must be ordered separately (See accessories for solenoid valves).

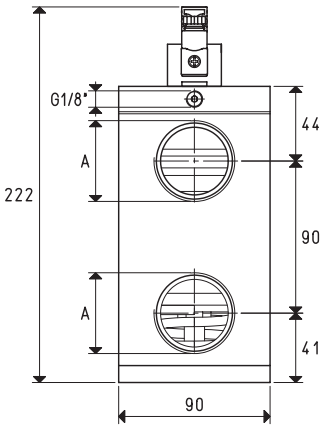
Solenoid valve servo-controlled power must be supplied with non-lubricated compressed air, 5 micron filtration, according to standard **ISO 8573-1 class 4**.

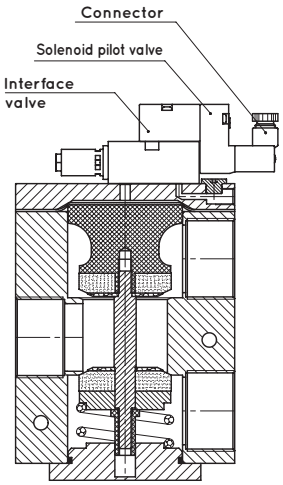
Transformation ratio: N (newton) = Kg x 9.81 (force of gravity) inch = $\frac{mm}{25.4}$; pounds = $\frac{g}{453.6}$ = $\frac{Kg}{0.4536}$

Adapters for GAS - NPT threading available on page 1.130

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







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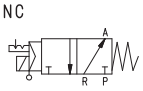
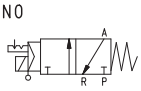


X = Compressed air supply
P = Pump
A = Use
R = Discharge

NO



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

Item	A	Max flow rate	Level of vacuum abs. mbar		Reaction time msec		Mouth	Cross-section of passage	Pressure at servo-controlled	Weight
	Ø	m³/h	min	max	energ.	de-energ.	Ø	mm²	*bar	Kg
07 06 53	G1"1/2	230	1000	0.5	60	38	40	1256	6 ÷ 8	4.50

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

Note: Specify the voltage of the electric coil when ordering. (Example: 07 06 53 V24-CC)

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

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

Transformation ratio: N (newton) = Kg x 9.81 (force of gravity) inch = $\frac{mm}{25.4}$; pounds = $\frac{g}{453.6} = \frac{Kg}{0.4536}$

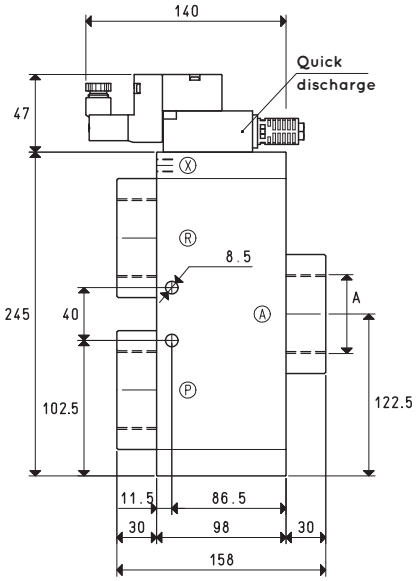
Adapters for GAS - NPT threading available on page 1.130

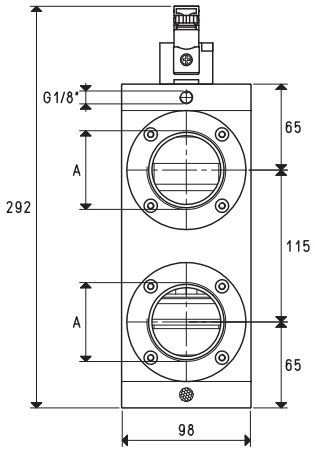
SERVO-CONTROLLED 3-WAY VACUUM SOLENOID VALVES WITH BISTABLE IMPULSE SOLENOID PILOT VALVE AND WITH LOW ABSORPTION ELECTRIC COIL FOR LARGE CAPACITIES

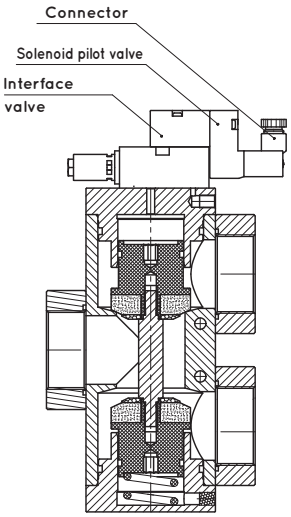
The innovative construction technology of these solenoid valves and their conformation are the same as those previously described. What differentiates them are the bistable impulse pilot valve powered by a low absorption fitted electrical coil which, with a simple electrical impulse, exchanges the shutter positions and keeps them there even in absence of electricity, until it receives a new impulse of opposite polarity. For this reason, they can only be supplied with direct current electric coils. This is the reason why their use is recommended in all those cases requiring maximum connection security at the vacuum source, even in the absence of an electrical power supply.
The electric coil of the pilot valve is fully plastic-coated in synthetic resin, watertight, insulation class F (up to 155°C) as per standard VDE, with 3 mm two-terminal electrical connections for micro connectors in compliance with EN 175301-803 (ex DIN 43650) – C. Degree of protection IP 54; IP 65 with connector inserted. Available for voltages 12 – 24VDC.
Tolerance permitted on the nominal voltage value: ± 10%.
Maximum electric power: 1W
The connector can be rotated 180° on the coil and can be supplied upon request with LED lights, with anti-interference circuit and/or with protection devices against overvoltage. The push-button device for their manual activation cannot be installed on these solenoid valves.

Technical features

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







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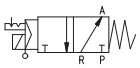
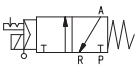


X = Compressed air supply
P = Pump
A = Use
R = Discharge

NO



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

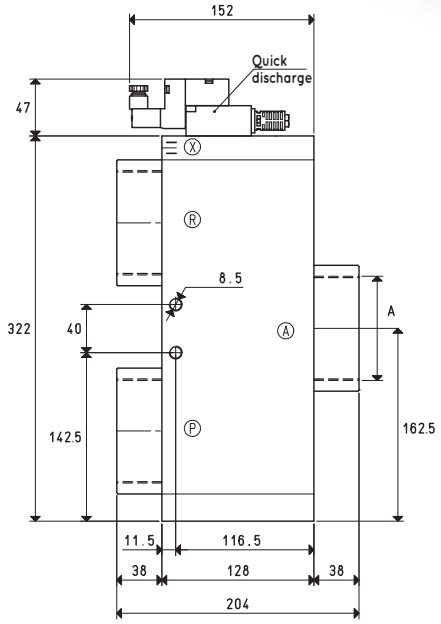
Item	A	Max flow rate	Level of vacuum abs. mbar		Reaction time msec		Mouth	Cross-section of passage	Pressure at servo-controlled	Weight
	Ø	m³/h	min	max	energ.	de-energ.	Ø	mm²	bar	Kg
07 08 53	G2"	390	1000	0.5	78	50	52	2123	4 ÷ 8	5.87

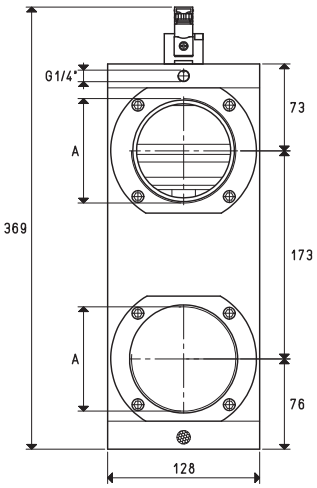
Note: Specify the voltage of the electric coil when ordering. (Example: 07 08 53 V24-CC)
The connector is not integral parts of the solenoid valve and, therefore, must be ordered separately (See accessories for solenoid valves).
Solenoid valve servo-controlled power must be supplied with non-lubricated compressed air, 5 micron filtration, according to standard **ISO 8573-1 class 4**.

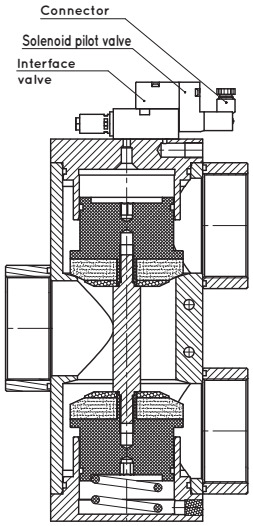
Transformation ratio: N (newton) = Kg x 9.81 (force of gravity) inch = $\frac{mm}{25.4}$; pounds = $\frac{g}{453.6} = \frac{Kg}{0.4536}$

Adapters for GAS - NPT threading available on page 1.130

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







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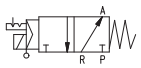
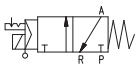


X = Compressed air supply
P = Pump
A = Use
R = Discharge

NO



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

Item	A	Max flow rate	Level of vacuum abs. mbar		Reaction time msec		Mouth	Cross-section of passage	Pressure at servo-controlled	Weight
	Ø	m^3/h	min	max	energ.	de-energ.	Ø	mm^2	bar	Kg
07 09 53	G3"	750	1000	0.5	132	84	80	5024	4 ÷ 8	11.80

Note: Specify the voltage of the electric coil when ordering. (Example: 07 09 53 V24-CC)
The connector is not integral parts of the solenoid valve and, therefore, must be ordered separately (See accessories for solenoid valves).
Solenoid valve servo-controlled power must be supplied with non-lubricated compressed air, 5 micron filtration, according to standard **ISO 8573-1 class 4**.

Transformation ratio: N (newton) = Kg x 9.81 (force of gravity) inch = $\frac{mm}{25.4}$; pounds = $\frac{g}{453.6} = \frac{Kg}{0.4536}$

Adapters for GAS - NPT threading available on page 1.130