

These solenoid valves have the same function and the same structure as the previously described three-way valves.

Even their structure is the same, but 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.

This is the reason why their use is especially recommended in all those cases requiring maximum connection security at the vacuum source, even in the absence of electrical and pneumatic power supply.

The standard electric coils are fully plastic-coated in synthetic resin, watertight, insulation class F (up to 155°C) as per standard VDE, with 6.3 mm three-terminal electrical connections for connectors in compliance with EN 175301-803 (ex DIN 43650). Protection degree IP 54; IP 65 with connector inserted.

Tolerance permitted on the nominal voltage value: ±10%.

Maximum absorption: 8 - 20 V.A. with AC and 6.5 - 18 W with DC.

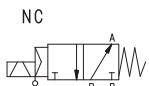
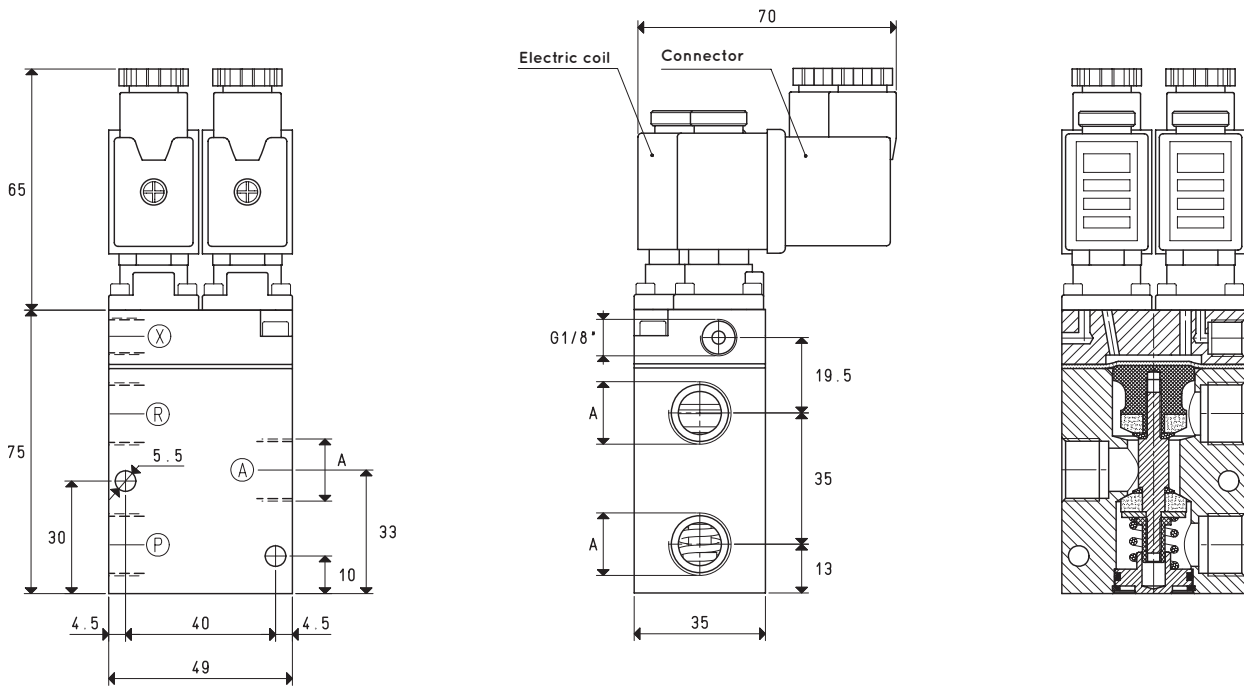
The electric coils can be rotated 180° on the coils and can be supplied, upon request, with LED lights, anti-interference circuit and/or with protection devices against overvoltage and polarity reversal.

Technical features

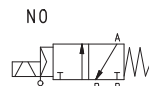
Operating pressure: from 0.5 to 3000 absolute mbar

Servo-control pressure: see table

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



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



NO
 X = Compressed air supply
 P = Discharge
 A = Use
 R = Pump

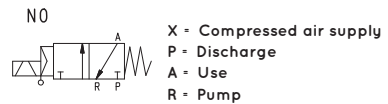
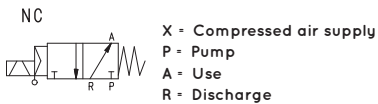
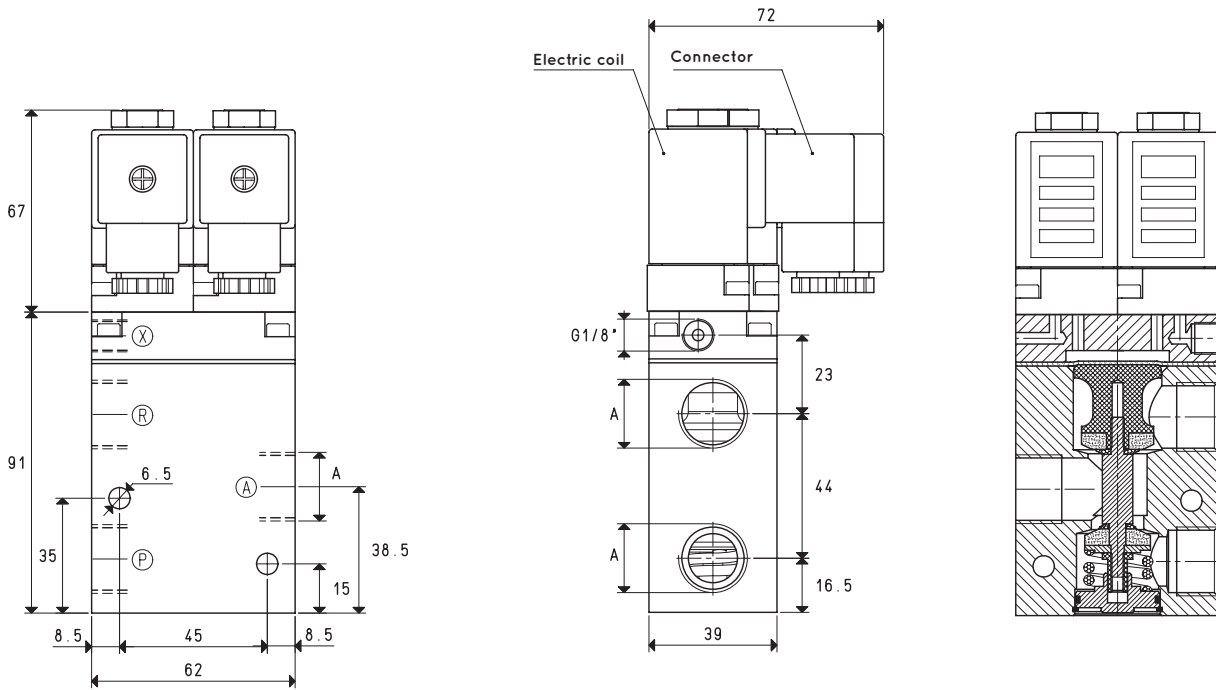
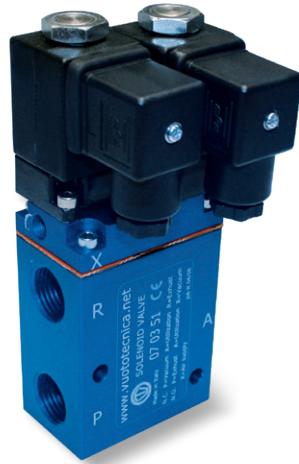
| Item | A Ø | Max flow rate m³/h | Level of vacuum abs. mbar | | Reaction time msec | | Mouth Ø | Cross-section of passage mm² | Pressure at servo-controlled bar | Weight Kg |
|-----------------|--------|-----------------------|------------------------------|-----|-----------------------|-----------|------------|------------------------------------|--|--------------|
| | | | min | max | energ. | de-energ. | | | | |
| 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: The coils and the connectors are 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.



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



| Item | A Ø | Max flow rate m³/h | Level of vacuum abs. mbar | | Reaction time msec | | Mouth Ø | Cross-section of passage mm² | Pressure at servo-controlled *bar | Weight Kg |
|-----------------|--------|-----------------------|------------------------------|-----|-----------------------|-----------|------------|------------------------------------|---|--------------|
| | | | min | max | energ. | de-energ. | | | | |
| 07 03 51 | G1/2" | 20 | 1000 | 0.5 | 16 | 40 | 15.0 | 176 | 6 ÷ 8 | 0.97 |

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

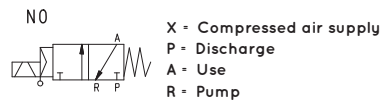
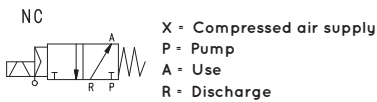
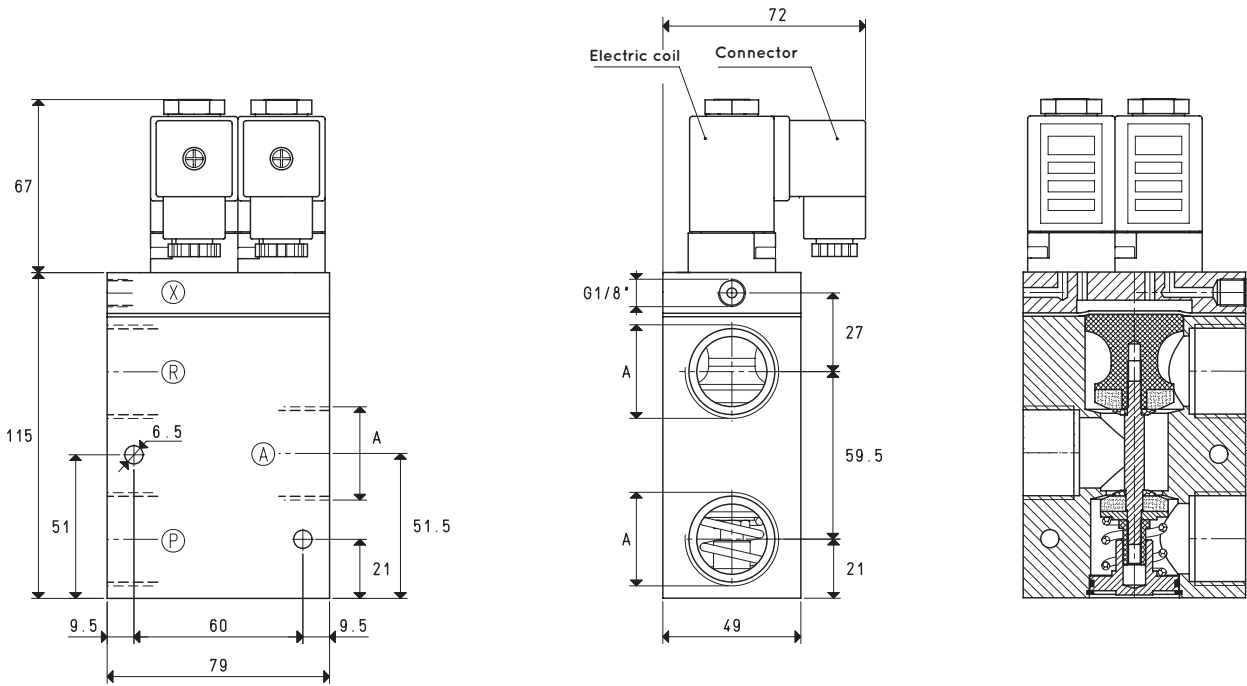
Note: The coils and the connectors are not integral parts of the solenoid valve and, therefore, must be ordered separately (See accessories for solenoid valves).

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

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| Item | A Ø | Max flow rate m³/h | Level of vacuum abs. mbar | | Reaction time msec | | Mouth Ø | Cross-section of passage mm² | Pressure at servo-controlled *bar | Weight Kg |
|-----------------|--------|-----------------------|------------------------------|-----|-----------------------|-----------|------------|------------------------------------|---|--------------|
| | | | min | max | energ. | de-energ. | | | | |
| 07 04 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 |

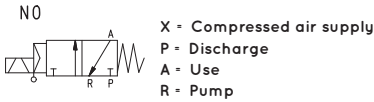
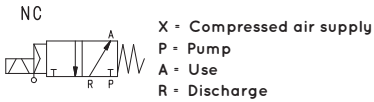
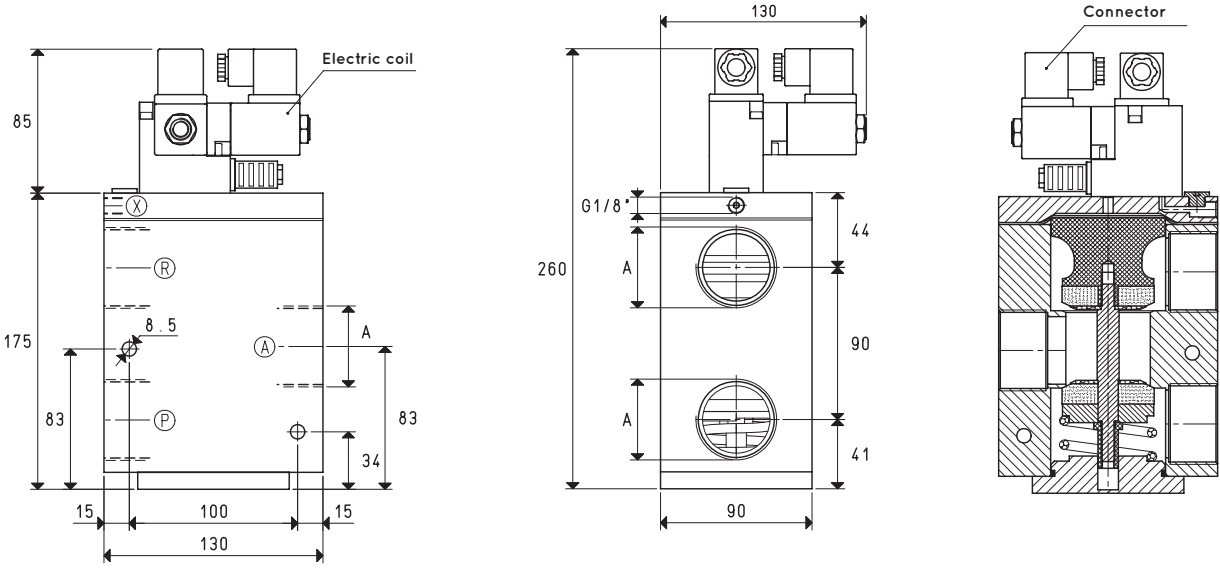
* Add the letters LP to the item for servo-controlled pressures 4 - 6 bar.

Note: The coils and the connectors are 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.



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



| Item | A Ø | Max flow rate m³/h | Level of vacuum abs. mbar | | Reaction time msec | | Mouth Ø | Cross-section of passage mm² | Pressure at servo-controlled *bar | Weight Kg |
|-----------------|---------|-----------------------|------------------------------|-----|-----------------------|-----------|------------|------------------------------------|---|--------------|
| | | | min | max | energ. | de-energ. | | | | |
| 07 06 51 | G1" 1/2 | 230 | 1000 | 0.5 | 60 | 38 | 40 | 1256 | 6 ÷ 8 | 5.24 |

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

Note: The coils and the connectors are 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)

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

Adapters for GAS - NPT threading available on page 1.130

The innovative construction technology of these solenoid valves and their conformation are the same as those previously described. What differentiates them are the two simple electrical impulse coils that exchange the shutter positions and keep them in position until the next impulse even in absence of compressed air at the servo control and of electric current. This is the reason why their use is especially recommended in all those cases requiring maximum connection security at the vacuum source, even in the absence of electrical and pneumatic power supply.

The standard electric coils of the actuator are fully plastic-coated in synthetic resin, watertight, insulation class F (up to 155°C) as per standard VDE, with 6.3 mm three-terminal electrical connections for connectors in compliance with EN 175301-803. Degree of protection IP 54;

IP 65 with connector inserted.

Tolerance permitted on the nominal voltage value: $\pm 10\%$.

Maximum absorption: 20 VA in AC and 18 W in DC.

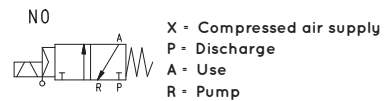
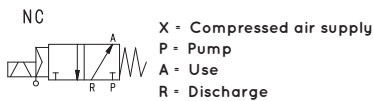
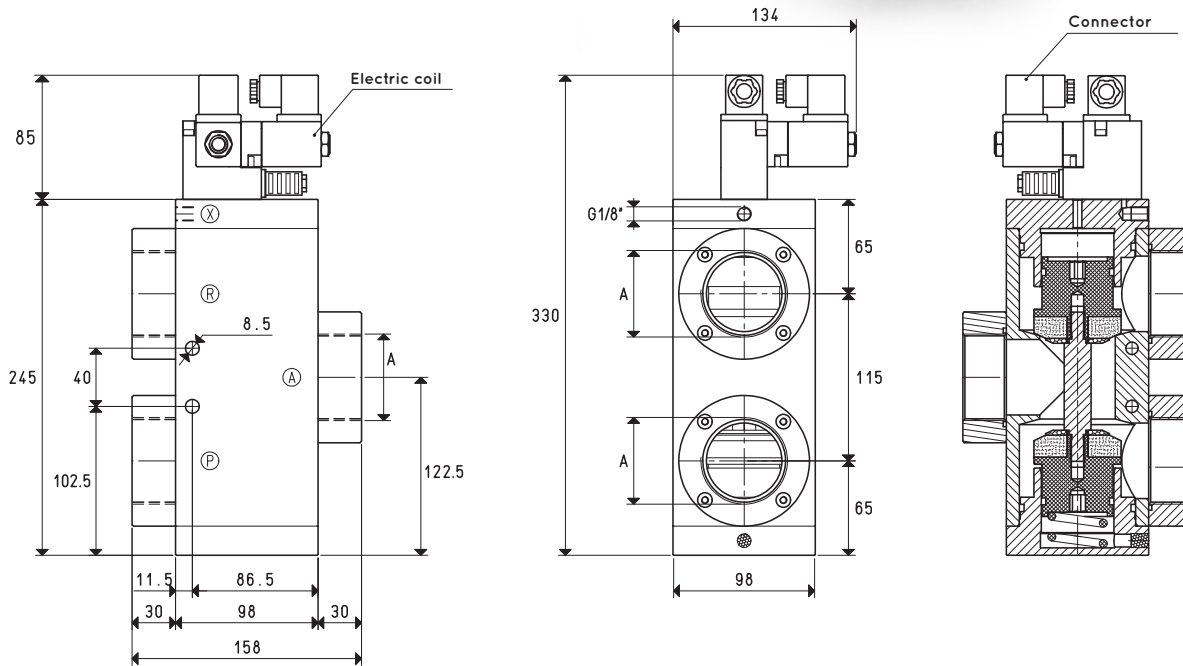
The electric coils can be rotated 180°, as well as the connectors, which can be supplied upon request with LED lights, with an anti-interference circuit and/or with protection devices against overvoltage and polarity reversal.

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



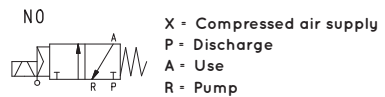
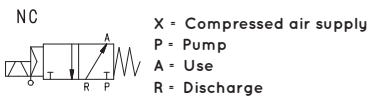
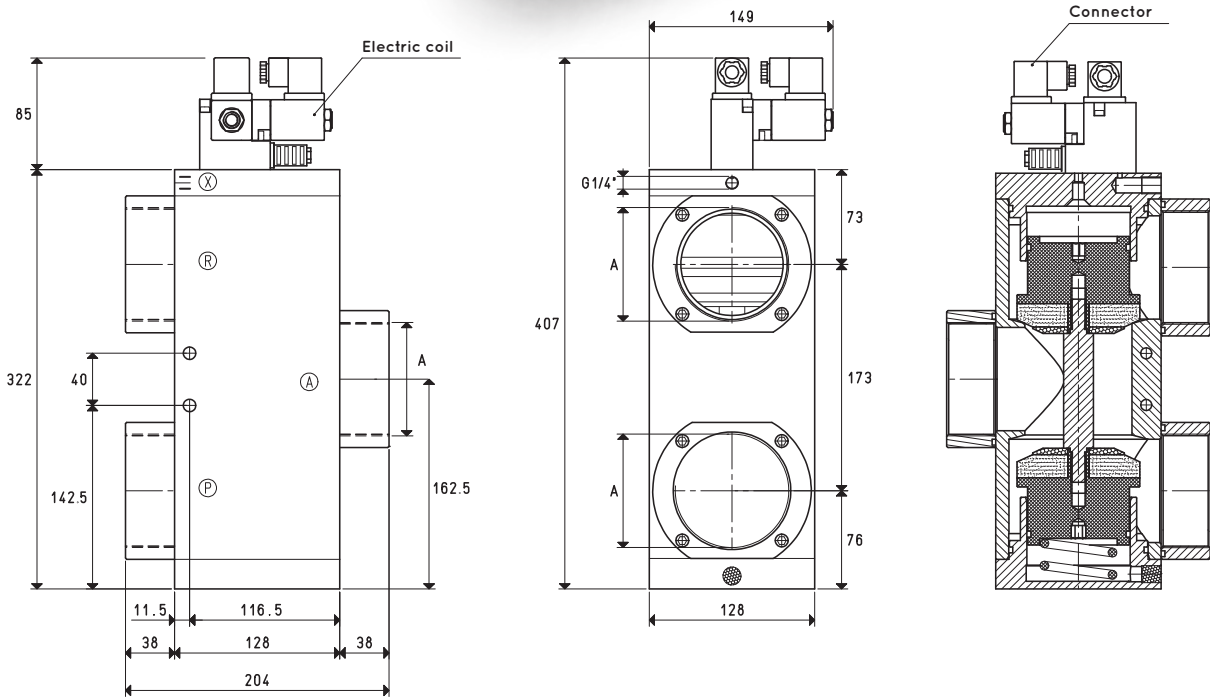
| Item | A | Max flow rate m ³ /h | Level of vacuum abs. mbar | | Reaction time msec | | Mouth Ø | Cross-section of passage mm ² | Pressure at servo-controlled bar | Weight Kg |
|-----------------|-----|------------------------------------|------------------------------|-----|-----------------------|-----------|------------|--|--|--------------|
| | | | min | max | energ. | de-energ. | | | | |
| 07 08 51 | G2" | 390 | 1000 | 0.5 | 78 | 50 | 52 | 2123 | 4 ÷ 8 | 6.0 |

Note: The coil and the connector are 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.



SERVO-CONTROLLED 3-WAY VACUUM SOLENOID VALVES WITH TWO ELECTRIC COILS, FOR LARGE CAPACITIES



| Item | A | Max flow rate m ³ /h | Level of vacuum abs. mbar | | Reaction time msec | | Mouth Ø | Cross-section of passage mm ² | Pressure at servo-controlled bar | Weight Kg |
|-----------------|-----|------------------------------------|------------------------------|-----|-----------------------|-----------|------------|--|--|--------------|
| | | | min | max | energ. | de-energ. | | | | |
| 07 09 51 | G3" | 750 | 1000 | 0.5 | 132 | 84 | 80 | 5024 | 4 ÷ 8 | 11.8 |

Note: The coil and the connector are 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)

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

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