## 3/2-way Solenoid Valve for compressed air and vacuum applications

- 3-way solenoid salve with manual override
- Smoothly operating servo-piston
- For technical vacuum
- For neutral gases with low pressures
- NC or NO circuit function

Type 0344 can be combined with...


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Type 2508
Cable plug

Type 1078
Timer unit


Type 2511
ASI cable plug

The pilot-controlled 3/2-way valve Type 0344 with a smoothly operating servo-piston requires a differential pressure of 0.25 bar for complete opening and closing. In the circuit functions NC und NO, it is particularly suited for use with neutral gases with low pressures and for technical vacuum, even with dry running.

## Circuit function C



Circuit function D

vacuum pump connected at port R

| Technical data |  |
| :--- | :--- |
| Orifice | DN $8.0-40 \mathrm{~mm}$ |
| Body material | Brass |
| Coil material | Epoxy |
| Coil insulation class | H |
| Seal material | NBR |
| Media | Neutral gases, compressed air, vacuum |
| Media temperature | 0 to $+90^{\circ} \mathrm{C}$ |
| Ambient temperature | Max. $+55^{\circ} \mathrm{C}$ |
| Voltage tolerance | $\pm 10 \%$ |
| Duty cycle | $100 \%$ continuous operation |
| Electrical connection | Cable plug for $\varnothing 7$ mm cable, acc. to DIN EN 175301- |
| Protection class | 803 Form A (supplied as standard) |
| Installation | IP 65 with cable plug |


| Flow rate <br> QNn value air $[1 / \mathrm{min}]$ | measured at $+20^{\circ} \mathrm{C}, 1$ bar pressure at valve inlet and <br> free outlet |
| :---: | :--- |
| Pressure values [bar] | gauge pressures with respect to the prevailing atmos- <br> pheric pressure |
| Response times $[\mathrm{ms}]$ <br> Opening <br> Closing | measured with water at valve outlet at 6 bar and $+20^{\circ} \mathrm{C}$ <br> pressure build-up 0 to $90 \%$ <br> pressure decay 100 to10 $\%$ |

## Technical data

| Orifice [mm] | QNn value <br> air $P \rightarrow A$ <br> [I/min] | Port connection $A / B$ und $P$ | Pressure range [bar] | Power consumption |  |  |  | Response times |  | Weight [kg] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Inrush AC <br> [VA] | Hold AC (hot coil) [ VA] | [W] | Hot/cold coil DC <br> [W] | Opening [ms] | Closing [ms] |  |
| 8 | 1030 | G 1/4 | Vacuum | 30 | 15 | 8 | 8/11 | 25 | 25 | 1.0 |
| 12 | 2800 | G 1/2 | up to | 30 | 15 | 8 | 8/11 | 30 | 30 | 1.2 |
| 20 | 7200 | G 3/4 | 3 bar | 30 | 15 | 8 | 8/11 | 40 | 40 | 2.2 |
| 25 | 11000 | G 1 |  | 30 | 15 | 8 | 8/11 | 70 | 70 | 2.7 |
| 40 | 26000 | G $11 / 2$ |  | 30 | 15 | 8 | 8/11 | 120 | 120 | 6.8 |

## Materials



Ordering chart for valves (other versions on request)
All valves with manual override, brass body, NBR seal and cable plug

|  |  | $\begin{aligned} & \text { E } \\ & \underline{E} \\ & \text { U } \\ & \text { UL } \\ & 0 \end{aligned}$ |  |  | Item no. per voltage/frequency [V/Hz] |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | $\begin{aligned} & \text { U } \\ & \text { N} \\ & \text { Nio } \end{aligned}$ | $\begin{aligned} & \text { io } \\ & \text { N్ㅇㅇ } \end{aligned}$ | $\begin{aligned} & \text { io } \\ & \text { O} \\ & \text { No } \end{aligned}$ |
| C 3/2-way valve NC | G 1/4 | 8.0 | 1030 | Vacuum up to 3 | 047383 | 047787 | 045134 |
|  | G 1/2 | 12 | 2800 | Vacuum up to 3 | 046580 | 047897 | 046180 |
|  | G 3/4 | 20 | 7200 | Vacuum up to 3 | 046833 | 053492 | 046461 |
|  | G 1 | 25 | 11000 | Vacuum up to 3 | 043691 | 050367 | 055445 |
|  | G $11 / 2$ | 40 | 26000 | Vacuum up to 3 | 057829 | - | 047853 |
| D 3/2-way valve NO | G 1/4 | 8.0 | 1030 | Vacuum up to 3 | 046986 | 049336 | 046408 |
|  | G 1/2 | 12 | 2800 | Vacuum up to 3 | 046246 | 051354 | 046373 |
|  | G 3/4 | 20 | 7200 | Vacuum up to 3 | 046087 | 057636 | 047616 |
|  | G 1 | 25 | 11000 | Vacuum up to 3 | 047873 | 043479 | 041681 |

Further versions on request
4
Voltage
Non-standard voltages

## Dimensions [mm]



| DN | A | B | D | H | L | R |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | 46 | 33 | G $1 / 4$ | 154.5 | 65 | G $3 / 8$ |
| 12 | 46 | 33 | G 3/8 | 179.5 | 76 | G 3/4 |
| 12 | 46 | 33 | G $1 / 2$ | 179.5 | 76 | G 3/4 |
| 20 | 62 | 52 | G 3/4 | 215.5 | 90 | G 1 |
| 25 | 82 | 60 | G 1 | 237.5 | 110 | G 1 1/4 |
| 40 | 117 | 88 | G 1 1/2 | 274.0 | 153 | G 2 |

This dimensional drawing shows a valve in circuit function C with the port specifications $P, R$ and $A / B$ (manual override via port $P$ ).
In circuit function $D$ the manual override is located above the port A/B (pilot rotated $180^{\circ}$ compared to circuit function C).
(Vacuum pump connected at port R, atmospheric pressure connected at port P.)

In case of special application conditions, please consult for advice.

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