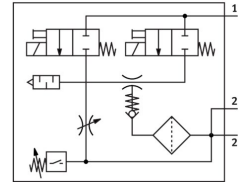


# Vacuum generator VADMI-45-LS-N

Part number: 171054

**FESTO**



General operating condition

## Data sheet

| Feature                       | Value                                                                                                                                                     |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Nominal width of Laval nozzle | 0.45 mm                                                                                                                                                   |
| Width dimension               | 10 mm                                                                                                                                                     |
| Muffler construction type     | Closed                                                                                                                                                    |
| Mounting position             | Any                                                                                                                                                       |
| Ejector characteristics       | High vacuum                                                                                                                                               |
| Grade of filtration           | ≤40 µm                                                                                                                                                    |
| Manual override               | Non-detenting                                                                                                                                             |
| Integrated function           | Ejector pulse valve, electric<br>Flow control<br>On/off valve, electric<br>Filter<br>Air saving function, electrical<br>Non-return valve<br>Vacuum switch |
| Measured variable             | Relative pressure                                                                                                                                         |
| Measuring principle           | Piezoresistive                                                                                                                                            |
| Switching element function    | N/O contact                                                                                                                                               |
| Switching function            | Threshold value comparator                                                                                                                                |
| Symbol                        | 00991306                                                                                                                                                  |
| Valve function                | Closed                                                                                                                                                    |
| Reverse polarity protection   | for all electrical connections                                                                                                                            |
| Display type                  | LED                                                                                                                                                       |
| Setting range hysteresis      | -0.06 MPa ... -0.01 MPa                                                                                                                                   |
| Setting range hysteresis      | -0.6 bar ... -0.1 bar                                                                                                                                     |
| Hysteresis setting range      | -8.7 psi ... -1.45 psi                                                                                                                                    |
| Setting options               | Potentiometer                                                                                                                                             |
| Switching status indication   | Optical                                                                                                                                                   |
| Setting range threshold value | -0.09 MPa ... -0.02 MPa                                                                                                                                   |
| Setting range threshold value | -0.9 bar ... -0.2 bar                                                                                                                                     |
| Threshold value setting range | -13.05 psi ... -2.9 psi                                                                                                                                   |
| Operating pressure            | 0.15 MPa ... 0.8 MPa                                                                                                                                      |
| Operating pressure            | 1.5 bar ... 8 bar                                                                                                                                         |
| Operating pressure            | 21.75 psi ... 116 psi                                                                                                                                     |
| Max. vacuum                   | 85 %                                                                                                                                                      |
| Nominal operating pressure    | 0.6 MPa                                                                                                                                                   |
| Nominal operating pressure    | 6 bar                                                                                                                                                     |

| Feature                                                          | Value                                            |
|------------------------------------------------------------------|--------------------------------------------------|
| Nominal operating pressure                                       | 87 psi                                           |
| Max. overload pressure                                           | 5 bar                                            |
| Air supply time at nominal operating pressure with ejector pulse | 1.9 s                                            |
| DC operating voltage range                                       | 21.6 V ... 26.4 V                                |
| Duty cycle                                                       | 100%                                             |
| Switching output                                                 | NPN                                              |
| Certification                                                    | RCM compliance mark<br>c UL us - Recognized (OL) |
| CE marking (see declaration of conformity)                       | As per EU EMC directive                          |
| UKCA marking (see declaration of conformity)                     | To UK instructions for EMC                       |
| Operating medium                                                 | Compressed air as per ISO 8573-1:2010 [7:4:4]    |
| Information on operating and pilot media                         | Operation with oil lubrication not possible      |
| Corrosion resistance class (CRC)                                 | 2 - Moderate corrosion stress                    |
| LABS (PWIS) conformity                                           | VDMA24364-B1/B2-L                                |
| Temperature of medium                                            | 0 °C ... 60 °C                                   |
| Degree of protection                                             | IP65                                             |
| Ambient temperature                                              | 0 °C ... 50 °C                                   |
| Product weight                                                   | 90 g                                             |
| Pressure measuring range                                         | 0 MPa ... 0.1 MPa                                |
| Pressure measuring range                                         | 0 bar ... 1 bar                                  |
| Pressure measuring range                                         | 0 psi ... 14.5 psi                               |
| Electrical connection                                            | 4-pin<br>M8x1<br>Plug                            |
| Type of mounting                                                 | With through-hole<br>With internal thread        |
| Pneumatic connection 1                                           | M5                                               |
| Pneumatic connection 3                                           | Pneumatic muffler integrated                     |
| Vacuum connection                                                | M5                                               |
| Note on materials                                                | RoHS-compliant                                   |
| Seals material                                                   | NBR                                              |
| Female nozzle material                                           | Brass, nickel-plated                             |
| Compressed air filter material                                   | PA                                               |
| Material of filter housing                                       | PC                                               |
| Housing material                                                 | Wrought aluminum alloy                           |
| Muffler material                                                 | PE<br>POM                                        |
| Material of piston                                               | POM                                              |
| Material of jet nozzle                                           | Brass, nickel-plated                             |