

# Dispense head

## VTOE-8-D8-T3-M22C-08-V-S-PC-M

FESTO

Part number: 8063635



### Data sheet

| Feature                                    | Value  |
|--|--|
| Valve function                             | 2/2, closed, monostable  |
| Operating pressure                         | 0 MPa ... 0.05 MPa   |
| Operating pressure                         | 0 bar ... 0.5 bar  |
| Operating pressure                         | 0 psi ... 7.25 psi   |
| Internal volume                            | 113 µl valve with fluid connections  |
| Nominal width                              | 0.8 mm   |
| Nominal width of dosing needle             | 0.6 mm   |
| Length of dosing needle                    | 30 mm  |
| Width dimension                            | 9 mm   |
| Type code                                  | VTOE   |
| Sealing principle                          | Soft   |
| Mounting position                          | Any  |
| Reset method                               | Mechanical spring  |
| Type of control                            | Direct   |
| Water flow rate at max. operating pressure | 1300 µl/s  |
| Min. dosing volume                         | 3 µl   |
| Note on dosing volume                      | Depending on the configuration, environment and application                          |
| Typical dosing precision                   | <1% CV for volumes >5 µl<br><2.5% CV for volumes between 1-5 µl                      |
| Note on dosing precision                   | Depending on the configuration, environment and application                          |
| Max. switching frequency                   | 4 Hz   |
| Note on switching frequency                | Dependent on the ambient temperature and installation state                          |
| On switching time                          | 7 ms   |
| Note on switching time on                  | Depending on the configuration, environment and application                          |
| Switching time off                         | 2 ms   |
| Note on switching time off                 | Depending on the configuration, environment and application                          |
| Duty cycle                                 | 50 % (max. switch-on time 1 s)   |
| Electrical power consumption               | 1.8 W  |
| Note on power consumption                  | Specification per pneumatic valve  |
| Nominal operating voltage DC               | 24 V   |
| Permissible voltage fluctuations           | +/- 10 %   |
| Medium                                     | Liquid media   |
| Information on medium                      | Observe resistance of materials that come into contact with media                    |
| Application note                           | See application note (available on the support portal at festo.com)                  |
| Vibration resistance                       | Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6 |

| Feature                                 | Value  |
|---|--|
| Shock resistance                        | Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27                      |
| Corrosion resistance class (CRC)        | 0 - No corrosion stress  |
| LABS conformity                         | VDMA24364-B2-L   |
| Storage temperature                     | -20 °C ... 70 °C   |
| Temperature of medium                   | 5 °C ... 50 °C   |
| Degree of protection                    | IP30   |
| Note on degree of protection            | In mounted state   |
| Ambient temperature                     | 5 °C ... 40 °C   |
| Product weight                          | 220 g  |
| Electrical connection                   | 9-pin<br>Plug<br>Sub-D   |
| Type of mounting                        | Optionally:<br>With through-hole for M3 screw<br>With internal thread and centering sleeve |
| Fluid connector                         | 8x UNF1/4-28   |
| Note on fluid connector                 | Fitting enclosed for pneumatic tubing with 3 mm outside diameter                           |
| Material of dosing needle               | High-alloy stainless steel   |
| Material number for dosing needle       | 1.4301   |
| Note on materials                       | RoHS-compliant   |
| Materials in contact with the media     | ETFE<br>FPM<br>PC<br>PEEK<br>PPS<br>High-alloy stainless steel                             |
| Actuation type                          | Electrical   |
| Nominal altitude of use above sea level | ≤ 2000 m NHN   |
| Relative air humidity                   | 0 - 95 %<br>Non-condensing   |
| Contamination level                     | 2  |