

# Three-point gripper DHDS-16-A-NC

Part number: 1259492

FESTO



 General operating condition

## Data sheet

| Feature                                            | Value                                                                                                                                                 |
|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Size                                               | 16                                                                                                                                                    |
| Stroke per gripper jaws                            | 2.5 mm                                                                                                                                                |
| Max. replacement accuracy                          | ≤0.2 mm                                                                                                                                               |
| Max. angular gripper jaw backlash ax, ay           | ≤0.5 deg                                                                                                                                              |
| Max. gripper jaw backlash Sz                       | ≤0.02 mm                                                                                                                                              |
| Rotationally symmetrical                           | ≤0.2 mm                                                                                                                                               |
| Repetition accuracy, gripper                       | ≤0.04 mm                                                                                                                                              |
| Number of gripper jaws                             | 3                                                                                                                                                     |
| Mounting position                                  | optional                                                                                                                                              |
| Mode of operation                                  | Double-acting                                                                                                                                         |
| Gripper function                                   | 3-point                                                                                                                                               |
| Gripper force back-up                              | During closing                                                                                                                                        |
| Design                                             | Force pilot operated motion sequence                                                                                                                  |
| Position detection                                 | Via Hall sensor                                                                                                                                       |
| Symbol                                             | 00995947                                                                                                                                              |
| Operating pressure                                 | 4 bar ... 8 bar                                                                                                                                       |
| Max. operating frequency of gripper                | ≤4 Hz                                                                                                                                                 |
| Min. opening time at 0.6 MPa (6 bar, 87 psi)       | 31 ms                                                                                                                                                 |
| Min. closing time at 0.6 MPa (6 bar, 87 psi)       | 34 ms                                                                                                                                                 |
| Operating medium                                   | Compressed air to ISO 8573-1:2010 [7:4:4]                                                                                                             |
| Note on operating and pilot medium                 | Lubricated operation possible (in which case lubricated operation will always be required)                                                            |
| Corrosion resistance class CRC                     | 1 - Low corrosion stress                                                                                                                              |
| LABS (PWIS) conformity                             | VDMA24364-B2-L                                                                                                                                        |
| Suitability for the production of Li-ion batteries | Metals with more than 5% by mass of copper are excluded from use. Exceptions are printed circuit boards, cables, electrical plug connectors and coils |
| Ambient temperature                                | 5 °C ... 60 °C                                                                                                                                        |
| Mass moment of inertia                             | 0.139 kgcm <sup>2</sup>                                                                                                                               |
| Max. force on gripper jaw Fz static                | 50 N                                                                                                                                                  |
| Max. torque at gripper Mx static                   | 2 Nm                                                                                                                                                  |
| Max. torque at gripper My static                   | 2 Nm                                                                                                                                                  |
| Max. torque at gripper Mz static                   | 2 Nm                                                                                                                                                  |
| Lubrication interval for guide components          | 10 MioCyc                                                                                                                                             |
| Max. mass per external gripper finger              | 50 g                                                                                                                                                  |
| Product weight                                     | 99 g                                                                                                                                                  |

| Feature               | Value                                 |
|-----------------------|---------------------------------------|
| Type of mounting      | Via female thread and dowel pin       |
| Pneumatic connection  | M3                                    |
| Note on materials     | RoHS-compliant                        |
| Material cover cap    | PA                                    |
| Material housing      | Hard anodised wrought aluminium alloy |
| Material gripper jaws | High-alloy stainless steel            |