

# Parallel gripper DHPC-25-A-NC-S-1

Part number: 8116862

FESTO



 [General operating condition](#)

## Data sheet

| Feature                                                         | Value                                                                                                                         |
|-----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Size                                                            | 25                                                                                                                            |
| Stroke per gripper jaws                                         | 7 mm                                                                                                                          |
| Max. replacement accuracy                                       | 0.2 mm                                                                                                                        |
| Max. angular gripper jaw backlash ax, ay                        | 0 deg                                                                                                                         |
| Max. gripper jaw backlash Sz                                    | 0 mm                                                                                                                          |
| Rotationally symmetrical                                        | ≤0.2 mm                                                                                                                       |
| Repetition accuracy, gripper                                    | ≤0.02 mm                                                                                                                      |
| Number of gripper jaws                                          | 2                                                                                                                             |
| Drive system                                                    | Pneumatic                                                                                                                     |
| Mounting position                                               | Any                                                                                                                           |
| Mode of operation                                               | Single-acting<br>Closed                                                                                                       |
| Gripper function                                                | Parallel                                                                                                                      |
| Gripper force back-up                                           | During closing                                                                                                                |
| Design                                                          | Connection direction on the side<br>Lever<br>Side mounting method for gripper fingers<br>Force pilot operated motion sequence |
| Guide                                                           | Ball guide                                                                                                                    |
| Position detection                                              | Via proximity switch                                                                                                          |
| Symbol                                                          | 00997348                                                                                                                      |
| Operating pressure                                              | 0.25 MPa ... 0.8 MPa                                                                                                          |
| Operating pressure                                              | 2.5 bar ... 8 bar                                                                                                             |
| Operating pressure                                              | 36.25 psi ... 116 psi                                                                                                         |
| Max. operating frequency of gripper                             | 3 Hz                                                                                                                          |
| Min. opening time at 0.6 MPa (6 bar, 87 psi)                    | 114 ms                                                                                                                        |
| Min. closing time at 0.6 MPa (6 bar, 87 psi)                    | 49 ms                                                                                                                         |
| Max. mass per external gripper finger                           | 160 g                                                                                                                         |
| 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                                  | 0 - No corrosion stress                                                                                                       |
| LABS (PWIS) conformity                                          | VDMA24364-B2-L                                                                                                                |
| Suitability for the production of Li-ion batteries              | Suitable for battery production with reduced Cu/Zn/Ni values (F1a)                                                            |
| Ambient temperature                                             | -10 °C ... 60 °C                                                                                                              |
| Total gripping force, opening, 0.6MPa (6bar, 87 psi)            | 291.4 N                                                                                                                       |
| Gripper force per gripper jaw, opening, 0.6 MPa (6 bar, 87 psi) | 145.7 N                                                                                                                       |

| Feature                             | Value                                                                                                                                                               |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mass moment of inertia              | 1.6 kgcm <sup>2</sup>                                                                                                                                               |
| Max. force on gripper jaw Fz static | 155.9 N                                                                                                                                                             |
| Max. torque at gripper Mx static    | 4.83 Nm                                                                                                                                                             |
| Max. torque at gripper My static    | 2.52 Nm                                                                                                                                                             |
| Max. torque at gripper Mz static    | 2.52 Nm                                                                                                                                                             |
| Product weight                      | 441 g                                                                                                                                                               |
| Type of mounting                    | Either:<br>Direct mounting via through-hole<br>Direct mounting via thread<br>On mounting frame<br>Via through-hole and dowel pin<br>Via female thread and dowel pin |
| Pneumatic connection                | M5                                                                                                                                                                  |
| Note on materials                   | RoHS compliant                                                                                                                                                      |
| Material housing                    | Anodised aluminium                                                                                                                                                  |
| Material gripper jaws               | High-alloy stainless steel                                                                                                                                          |