

# Parallel gripper DHPC-L-10-A-S-1

Part number: 8116772

FESTO



[PDF](#) General operating condition

## Data sheet

| Feature                                            | Value                                                                                                                                                                                                                          |
|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Size                                               | 10                                                                                                                                                                                                                             |
| Stroke per gripper jaw                             | 4 mm                                                                                                                                                                                                                           |
| Max. interchangeability                            | 0.2 mm                                                                                                                                                                                                                         |
| Max. gripper jaw angular play ax, ay               | 0 deg                                                                                                                                                                                                                          |
| Max. gripper jaw backlash Sz                       | 0 mm                                                                                                                                                                                                                           |
| Rotational symmetry                                | ≤0.2 mm                                                                                                                                                                                                                        |
| Pneumatic gripper repetition accuracy              | ≤0.02 mm                                                                                                                                                                                                                       |
| Number of gripper jaws                             | 2                                                                                                                                                                                                                              |
| Actuator system                                    | Pneumatic                                                                                                                                                                                                                      |
| Mounting position                                  | Any                                                                                                                                                                                                                            |
| Mode of operation                                  | Double-acting                                                                                                                                                                                                                  |
| Gripper function                                   | Parallel                                                                                                                                                                                                                       |
| Gripping force backup                              | Without                                                                                                                                                                                                                        |
| Structural design                                  | Connection direction at side<br>Lever<br>Side mounting type for gripper fingers<br>Positively driven motion sequence                                                                                                           |
| Guide                                              | Ball guide                                                                                                                                                                                                                     |
| Position sensing                                   | For proximity sensor                                                                                                                                                                                                           |
| Symbol                                             | 00991894                                                                                                                                                                                                                       |
| Variants                                           | Metals with copper, zinc or nickel by mass as main constituent are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils. |
| Operating pressure                                 | 0.2 MPa ... 0.8 MPa                                                                                                                                                                                                            |
| Operating pressure                                 | 2 bar ... 8 bar                                                                                                                                                                                                                |
| Operating pressure                                 | 29 psi ... 116 psi                                                                                                                                                                                                             |
| Max. operating frequency of pneumatic gripper      | 3 Hz                                                                                                                                                                                                                           |
| Min. opening time at 6 bar                         | 15 ms                                                                                                                                                                                                                          |
| Min. closing time at 6 bar                         | 15 ms                                                                                                                                                                                                                          |
| Max. mass per external gripper finger              | 25 g                                                                                                                                                                                                                           |
| Operating medium                                   | Compressed air as per ISO 8573-1:2010 [7:4:4]                                                                                                                                                                                  |
| Information on operating and pilot media           | Operation with oil lubrication possible (required for further use)                                                                                                                                                             |
| 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                                                                                                                                                                                                               |

| Feature                                          | Value                                                                                                                                                   |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gripping force per gripper jaw at 6 bar, opening | 51.2 N                                                                                                                                                  |
| Gripping force per gripper jaw at 6 bar, closing | 43 N                                                                                                                                                    |
| Gripping force per gripper jaw at 6 bar, opening | 25.6 N                                                                                                                                                  |
| Gripping force per gripper jaw at 6 bar, closing | 21.5 N                                                                                                                                                  |
| Mass moment of inertia                           | 0.057 kgcm <sup>2</sup>                                                                                                                                 |
| Maximum force on gripper jaw Fz, static          | 33 N                                                                                                                                                    |
| Maximum torque on gripper jaw, Mx static         | 0.18 Nm                                                                                                                                                 |
| Maximum torque on gripper jaw, My static         | 0.28 Nm                                                                                                                                                 |
| Maximum torque on gripper jaw, Mz static         | 0.28 Nm                                                                                                                                                 |
| Product weight                                   | 59 g                                                                                                                                                    |
| Type of mounting                                 | Optionally:<br>Direct mounting via through-hole<br>Direct fastening via thread<br>With through-hole and dowel pin<br>With internal thread and dowel pin |
| Pneumatic connection                             | M3                                                                                                                                                      |
| Note on materials                                | RoHS-compliant                                                                                                                                          |
| Housing material                                 | Aluminum, anodized                                                                                                                                      |
| Gripper jaw material                             | High-alloy stainless steel                                                                                                                              |