

# Parallel gripper DHPC-10-A-B-1

Part number: 8116757

**FESTO**



## Data sheet

| Feature                                       | Value                                                                                                                                                                                                                          |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Size                                          | 10                                                                                                                                                                                                                             |
| Stroke per gripper jaw                        | 2 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                         | None                                                                                                                                                                                                                           |
| Structural design                             | Connection direction underneath<br>Lever<br>Side mounting type for gripper fingers<br>Positively driven motion sequence                                                                                                        |
| Guide                                         | Ball guide                                                                                                                                                                                                                     |
| Position sensing                              | Via proximity switch                                                                                                                                                                                                           |
| 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<br>2 bar...8 bar<br>29 psi...116 psi                                                                                                                                                                         |
| Max. operating frequency of pneumatic gripper | 3 Hz                                                                                                                                                                                                                           |
| Min. opening time at 6 bar                    | 12 ms                                                                                                                                                                                                                          |
| Min. closing time at 6 bar                    | 14 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                                                                                                                                                                                                                 |

| Feature                                            | Value                                                                                                                                                      |
|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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                                                                                                                                             |
| Gripping force per gripper jaw at 6 bar, opening   | 51.2 N<br>25.6 N                                                                                                                                           |
| Gripping force per gripper jaw at 6 bar, closing   | 43 N<br>21.5 N                                                                                                                                             |
| Mass moment of inertia                             | 0.04 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                                     | 49 g                                                                                                                                                       |
| Type of mounting                                   | Alternatively:<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                                   | Anodized aluminum                                                                                                                                          |
| Gripper jaw material                               | high-alloy stainless steel                                                                                                                                 |