

# Parallel gripper DHPC-20-A-S

Part number: 8116817

FESTO



## Data sheet

| Feature                                      | Value  |
|--|--|
| Size   | 20   |
| Stroke per gripper jaws                      | 5 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                            | optional   |
| Mode of operation                            | Double-acting  |
| Gripper function                             | Parallel   |
| Gripper force back-up                        | None   |
| Design                                       | Connection direction at side<br>Lever<br>Standard mounting method for gripper fingers<br>Force pilot operated motion sequence  |
| Guide  | Ball guide   |
| Position detection                           | 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                           | 0.1 MPa...0.8 MPa<br>1 bar...8 bar<br>14.5 psi...116 psi   |
| Max. operating frequency of gripper          | 3 Hz   |
| Min. opening time at 0.6 MPa (6 bar, 87 psi) | 62 ms  |
| Min. closing time at 0.6 MPa (6 bar, 87 psi) | 40 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               | 0 - No corrosion stress  |
| LABS (PWIS) conformity                       | VDMA24364-B2-L   |

| Feature   | Value  |
|---|--|
| Suitability for the production of Li-ion batteries              | Product corresponds to the internal product definition from Festo for use in battery production:Metals with more than 1% by mass of copper, zinc or nickel are excluded from use.The exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils |
| Ambient temperature   | -10 °C...60 °C   |
| Total gripping force, opening, 0.6MPa (6bar, 87 psi)            | 192.6 N  |
| Total gripping force, closing, 0.6MPa (6bar, 87 psi)            | 159.5 N  |
| Gripper force per gripper jaw, opening, 0.6 MPa (6 bar, 87 psi) | 96.3 N   |
| Gripper force per gripper jaw, closing, 0.6 MPa (6 bar, 87 psi) | 79.8 N   |
| Mass moment of inertia  | 0.515 kgcm <sup>2</sup>  |
| Max. force on gripper jaw Fz static                             | 101.3 N  |
| Max. torque at gripper Mx static                                | 1.43 Nm  |
| Max. torque at gripper My static                                | 1.3 Nm   |
| Max. torque at gripper Mz static                                | 1.3 Nm   |
| Product weight  | 224 g  |
| Type of mounting  | 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<br>Either:  |
| Pneumatic connection  | M5   |
| Note on materials   | RoHS-compliant   |
| Material housing  | Anodised aluminium   |
| Material gripper jaws   | High-alloy stainless steel   |