

# Parallel gripper DHPC-40-A-S-1

Part number: 8116895

FESTO



## Data sheet

| Feature                                            | Value                                                                                                                |
|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Size                                               | 40                                                                                                                   |
| Stroke per gripper jaw                             | 15 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                              | On opening                                                                                                           |
| Structural design                                  | Lateral connection direction<br>Lever<br>Side mounting type for gripper fingers<br>Positively driven motion sequence |
| Guide                                              | Ball guide                                                                                                           |
| Position sensing                                   | Via proximity switch                                                                                                 |
| Operating pressure                                 | 0.1 MPa...0.8 MPa<br>1 bar...8 bar<br>14.5 psi...116 psi                                                             |
| Max. operating frequency of pneumatic gripper      | 1 Hz                                                                                                                 |
| Min. opening time at 6 bar                         | 158 ms                                                                                                               |
| Min. closing time at 6 bar                         | 153 ms                                                                                                               |
| Max. mass per external gripper finger              | 400 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                                                                                                       |
| Gripping force per gripper jaw at 6 bar, opening   | 777.2 N                                                                                                              |

| Feature                                          | Value                                                                                                                                                                           |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                  | 388.6 N                                                                                                                                                                         |
| Gripping force per gripper jaw at 6 bar, closing | 717.2 N<br>358.6 N                                                                                                                                                              |
| Mass moment of inertia                           | 14.87 kgcm <sup>2</sup>                                                                                                                                                         |
| Maximum force on gripper jaw Fz, static          | 351.5 N                                                                                                                                                                         |
| Maximum torque on gripper jaw, Mx static         | 16.15 Nm                                                                                                                                                                        |
| Maximum torque on gripper jaw, My static         | 9.55 Nm                                                                                                                                                                         |
| Maximum torque on gripper jaw, Mz static         | 9.55 Nm                                                                                                                                                                         |
| Product weight                                   | 1369 g                                                                                                                                                                          |
| Type of mounting                                 | Alternatively:<br>Direct mounting via through-hole<br>Direct fastening via thread<br>On mounting frame<br>With through-hole and dowel pin<br>With internal thread and dowel pin |
| Pneumatic connection                             | M5                                                                                                                                                                              |
| Note on materials                                | RoHS compliant                                                                                                                                                                  |
| Housing material                                 | Anodized aluminum                                                                                                                                                               |
| Gripper jaw material                             | high-alloy stainless steel                                                                                                                                                      |