## Parallel gripper HPPF-20-20-A-S Part number: 8143425



## **Data sheet**

| Feature                                      | Value  |
|--|--|
| Size   | 20   |
| Total stroke                                 | 20 mm  |
| Stroke per gripper jaws                      | 10 mm  |
| Max. angular gripper jaw backlash ax, ay     | 0 deg  |
| Max. gripper jaw backlash Sz                 | 0 mm   |
| Repetition accuracy, gripper                 | 0.06 mm  |
| Number of gripper jaws                       | 2  |
| Drive system                                 | Pneumatic  |
| Mounting position                            | optional   |
| Mode of operation                            | Double-acting  |
| Cushioning                                   | Elastic cushioning rings/plates at both ends   |
| Gripper function                             | Parallel   |
| Gripper force back-up                        | None   |
| Design                                       | Flat mounting method for gripper fingers<br>Rack and pinion<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<br>excluded from use. Exceptions are nickel in steel, chemically nickel-<br>plated surfaces, printed circuit boards, cables, electrical plug connectors<br>and coils. |
| Operating pressure                           | 0.1 MPa0.7 MPa<br>1 bar7 bar<br>14.5 psi101.5 psi  |
| Max. operating frequency of gripper          | 1 Hz   |
| Min. opening time at 0.6 MPa (6 bar, 87 psi) | 90 ms  |
| Min. closing time at 0.6 MPa (6 bar, 87 psi) | 70 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 zone III   |

## **FESTO**

| Feature   | Value  |
|---|--|
| Suitability for the production of Li-ion batteries              | Suitable for battery production according to the Festo internal definition of the degree of severity F1A with restrictions regarding the use of Cu/Zn/Ni |
| Cleanroom class   | Class 7 according to ISO 14644-1   |
| Ambient temperature   | -10 °C60 °C  |
| Total gripping force, opening, 0.6MPa (6bar, 87 psi)            | 346.6 N  |
| Total gripping force, closing, 0.6MPa (6bar, 87 psi)            | 346.6 N  |
| Gripper force per gripper jaw, opening, 0.6 MPa (6 bar, 87 psi) | 173.3 N  |
| Gripper force per gripper jaw, closing, 0.6 MPa (6 bar, 87 psi) | 173.3 N  |
| Max. force on gripper jaw Fz static                             | 320 N  |
| Max. moment Mx  | 6 Nm   |
| Max. moment My  | 3 Nm   |
| Max. moment Mz  | 3 Nm   |
| Product weight  | 783 g  |
| Type of mounting  | Direct mounting via through-hole<br>Direct mounting via thread   |
| Pneumatic connection  | M5   |
| Note on materials   | RoHS-compliant   |
| Material cover cap  | Wrought aluminium alloy, anodised  |
| Material cover  | Anodised wrought aluminium alloy   |
| Material end plate  | High-alloy stainless steel   |
| Material housing  | Anodised wrought aluminium alloy   |
| Material gripper jaws   | High-alloy steel   |
| Material piston seal  | TPE-U(PU)  |
| Material o-ring   | NBR  |
| Material screws   | Coated steel   |
| Gear rack material  | High-alloy stainless steel   |