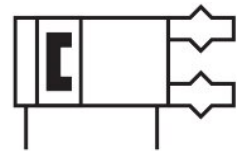


# Parallel gripper HPPF-16-64-A-S

Part number: 8143714

FESTO



## Data sheet

| Feature                                            | Value                                                                                                                                                                                                                          |
|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Size                                               | 16                                                                                                                                                                                                                             |
| Complete stroke                                    | 64 mm                                                                                                                                                                                                                          |
| Stroke per gripper jaw                             | 32 mm                                                                                                                                                                                                                          |
| Max. gripper jaw angular play ax, ay               | 0 deg                                                                                                                                                                                                                          |
| Max. gripper jaw backlash Sz                       | 0 mm                                                                                                                                                                                                                           |
| Pneumatic gripper repetition accuracy              | 0.06 mm                                                                                                                                                                                                                        |
| Number of gripper jaws                             | 2                                                                                                                                                                                                                              |
| Actuator system                                    | Pneumatic                                                                                                                                                                                                                      |
| Mounting position                                  | Any                                                                                                                                                                                                                            |
| Mode of operation                                  | Double-acting                                                                                                                                                                                                                  |
| Cushioning                                         | Elastic cushioning rings/pads at both ends                                                                                                                                                                                     |
| Gripper function                                   | Parallel                                                                                                                                                                                                                       |
| Gripping force backup                              | None                                                                                                                                                                                                                           |
| Structural design                                  | Flat mounting type for gripper fingers<br>Gear rack/pinion<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                                 | 0.1 MPa...0.7 MPa<br>1 bar...7 bar<br>14.5 psi...101.5 psi                                                                                                                                                                     |
| Max. operating frequency of pneumatic gripper      | 1 Hz                                                                                                                                                                                                                           |
| Min. opening time at 6 bar                         | 189 ms                                                                                                                                                                                                                         |
| Min. closing time at 6 bar                         | 181 ms                                                                                                                                                                                                                         |
| Max. mass per external gripper finger              | 335 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                                                                                                                                                                                                        |
| Suitability for the production of Li-ion batteries | Suitable for battery production with reduced Cu/Zn/Ni values (F1a)                                                                                                                                                             |

| Feature                                          | Value                                                           |
|--------------------------------------------------|-----------------------------------------------------------------|
| Ambient temperature                              | -10 °C...60 °C                                                  |
| Gripping force per gripper jaw at 6 bar, opening | 218.2 N<br>109.1 N                                              |
| Gripping force per gripper jaw at 6 bar, closing | 218.2 N<br>109.1 N                                              |
| Maximum force on gripper jaw Fz, static          | 180 N                                                           |
| Max. torque Mx                                   | 4.4 Nm                                                          |
| Max. torque My                                   | 2.2 Nm                                                          |
| Max. torque Mz                                   | 2.2 Nm                                                          |
| Product weight                                   | 755 g                                                           |
| Type of mounting                                 | Direct mounting via through-hole<br>Direct fastening via thread |
| Pneumatic connection                             | M5                                                              |
| Note on materials                                | RoHS compliant                                                  |
| Cover cap material                               | Wrought aluminum alloy, anodized                                |
| Cover material                                   | Wrought aluminum alloy, anodized                                |
| End plate material                               | high-alloy stainless steel                                      |
| Housing material                                 | Wrought aluminum alloy, anodized                                |
| Gripper jaw material                             | High-alloy steel                                                |
| Piston seal material                             | TPE-U(PU)                                                       |
| O-ring material                                  | NBR                                                             |
| Material of screws                               | Coated steel                                                    |
| Gear rack material                               | high-alloy stainless steel                                      |