

Parallel gripper HPPF-12-48-A-S

Part number: 8141589

FESTO



 [General operating condition](#)

Data sheet

| Feature | Value |
|--|---|
| Size | 12 |
| Complete stroke | 48 mm |
| Stroke per gripper jaw | 24 mm |
| Max. gripper jaw angular play ax, ay | 0 deg |
| Max. gripper jaw backlash Sz | 0 mm |
| Pneumatic gripper repetition accuracy | ≤0.02 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 | Without |
| Structural design | Flat mounting type for gripper fingers Gear rack/pinion Positively driven motion sequence |
| Guide | Ball guide |
| Position sensing | For proximity sensor |
| Symbol | 00991894 |
| 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 |
| Operating pressure | 1 bar ... 7 bar |
| Operating pressure | 14.5 psi ... 101.5 psi |
| Max. operating frequency of pneumatic gripper | 2 Hz |
| Min. opening time at 6 bar | 121 ms |
| Min. closing time at 6 bar | 105 ms |
| 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 zone III |
| Suitability for the production of Li-ion batteries | Metals with more than 1% by mass of copper, zinc or nickel by mass are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils |

| Feature | Value |
|--|---|
| Cleanroom class | Class 7 according to ISO 14644-1 |
| Ambient temperature | -10 °C ... 60 °C |
| Gripping force per gripper jaw at 6 bar, opening | 135.72 N |
| Gripping force per gripper jaw at 6 bar, closing | 135.72 N |
| Gripping force per gripper jaw at 6 bar, opening | 67.86 N |
| Gripping force per gripper jaw at 6 bar, closing | 67.86 N |
| Maximum force on gripper jaw Fz, static | 98 N |
| Max. torque Mx | 1.4 Nm |
| Max. torque My | 0.7 Nm |
| Max. torque Mz | 0.7 Nm |
| Product weight | 339 g |
| Type of mounting | Direct mounting via through-hole 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 | Steel, coated |
| Gear rack material | High-alloy stainless steel |