

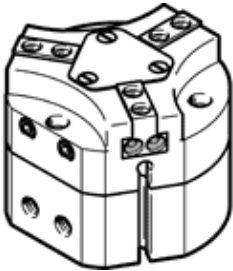
three-point gripper

HGDT-50-A-F

Part number: 560186

FESTO

Sturdy, can be used as internal and external gripper, for position sensing.



Data sheet

| Feature | Value |
|---|---|
| Size | 50 |
| Stroke per gripper jaw | 4 mm |
| Max. replacement accuracy | ≤ 0.2 mm |
| Max. angular gripper jaw backlash ax,ay | ≤ 0.1 deg |
| Max. gripper jaw backlash Sz | ≤ 0.05 mm |
| Rotationally symmetrical | ≤ 0.2 mm |
| Repetition accuracy, gripper | ≤ 0.03 mm |
| Number of gripper fingers | 3 |
| Assembly position | Any |
| Mode of operation | double-acting |
| Gripper function | 3-point |
| Design structure | Inclined plane guided motion sequence |
| Position detection | For proximity sensor |
| Total gripping force at 0.6 MPa (6 bar, 87 psi), opening | 2,220 N |
| Total gripping force at 0.6 MPa (6 bar, 87 psi), closing | 1,875 N |
| Operating pressure | 3 ... 8 bar |
| Operating pressure, sealing air | 0 ... 0.5 bar |
| Max. operating frequency of gripper | ≤ 4 Hz |
| Min. opening time at 0.6 MPa (6 bar, 87 psi) | 96 ms |
| Min. closing time at 0.6 MPa (6 bar, 87 psi) | 83 ms |
| Operating medium | Compressed air in accordance with ISO8573-1:2010 [7:4:4] |
| Note on operating and pilot medium | Lubricated operation possible (subsequently required for further operation) |
| Corrosion resistance classification CRC | 2 - Moderate corrosion stress |
| PWIS conformity | VDMA24364-B1/B2-L |
| Ambient temperature | 5 ... 60 °C |
| Gripping force per gripper jaw at 0.6 MPa (6 bar, 87 psi) opening | 740 N |
| Gripping force per gripper jaw at 0.6 MPa (6 bar, 87 psi) closing | 625 N |
| Mass moment of inertia | 11.05 kgcm ² |
| Max. force on gripper jaw Fz static | 1,500 N |
| Max. torque at gripper Mx static | 50 Nm |
| Max. torque at gripper My static | 30 Nm |
| Max. torque at gripper Mz static | 40 Nm |
| Lubrication interval for guide components | 5 Mio SP |
| Max. mass per external gripper finger | 160 g |
| Product weight | 1,104 g |
| Mounting type | With through-hole and dowel pin With internal thread and dowel pin Optional |
| Pneumatic connection, sealing air | M5 |
| Pneumatic connection | G1/8 |
| Materials note | Conforms to RoHS |
| Material cover cap | High alloy steel, non-corrosive |
| Material housing | Wrought Aluminium alloy COMPCOTE coated |
| Material gripper jaws | Steel, hardened |