

Three-point gripper HGDT-50-A

Part number: 540868

FESTO



[PDF](#) General operating condition

Data sheet

| Feature | Value |
|---|--|
| Size | 50 |
| Stroke per gripper jaws | 8 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 jaws | 3 |
| Mounting position | optional |
| Mode of operation | Double-acting |
| Gripper function | 3-point |
| Design | Force pilot operated motion sequence |
| Position detection | Via proximity switch |
| Symbol | 00991894 |
| Total gripping force, opening, 0.6MPa (6bar, 87 psi) | 1041 N |
| Total gripping force, closing, 0.6MPa (6bar, 87 psi) | 921 N |
| Operating pressure | 3 bar ... 8 bar |
| Operating pressure of blocked air | 0 bar ... 0.5 bar |
| Max. operating frequency of gripper | ≤4 Hz |
| Min. opening time at 0.6 MPa (6 bar, 87 psi) | 85 ms |
| Min. closing time at 0.6 MPa (6 bar, 87 psi) | 75 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 | 2 - Moderate corrosion stress |
| LABS (PWIS) conformity | VDMA24364-B1/B2-L |
| Ambient temperature | 5 °C ... 60 °C |
| Gripper force per gripper jaw, opening, 0.6 MPa (6 bar, 87 psi) | 347 N |
| Gripper force per gripper jaw, closing, 0.6 MPa (6 bar, 87 psi) | 307 N |
| Mass moment of inertia | 11.05 kgcm ² |
| Max. force on gripper jaw Fz static | 1500 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 MioCyc |

| Feature | Value |
|---------------------------------------|--|
| Max. mass per external gripper finger | 160 g |
| Product weight | 1104 g |
| Type of mounting | Either: Via through-hole and dowel pin Via female thread and dowel pin |
| Pneumatic connection, blocked air | M5 |
| Pneumatic connection | G1/8 |
| Material cover cap | High-alloy stainless steel |
| Material housing | Wrought aluminium alloy Coated with COMPCOTE |
| Material gripper jaws | Hardened steel |