Three-point gripper
HGDD-50-A


## Data sheet

| Feature | Value |
| :---: | :---: |
| Size | 50 |
| Stroke per gripper jaw | 8 mm |
| Max. replacement accuracy | $<=0.2 \mathrm{~mm}$ |
| Max. angular gripper jaw backlash ax, ay | < $=0.1 \mathrm{deg}$ |
| Max. gripper jaw backlash Sz | $<=0.05 \mathrm{~mm}$ |
| Rotationally symmetrical | $<=0.2 \mathrm{~mm}$ |
| Repetition accuracy, gripper | < $=0.03 \mathrm{~mm}$ |
| 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 ( $6 \mathrm{bar}, 87 \mathrm{psi}$ ), opening | 1,113 N |
| Total gripping force at 0.6 MPa (6 bar, 87 psi ), closing | 1,044 N |
| Working pressure | $3 \ldots 8 \mathrm{bar}$ |
| Working pressure, sealing air | $0 . .0 .5$ bar |
| Max. operating frequency of gripper | $<=4 \mathrm{~Hz}$ |
| Min. opening time at 0.6 MPa (6 bar, 87 psi ) | 93 ms |
| Min. closing time at 0.6 MPa (6 bar, 87 psi ) | 128 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-B2-L |
| Protection class | IP65 |
| Ambient temperature | $5 \ldots 60^{\circ} \mathrm{C}$ |
| Gripping force per gripper jaw at 0.6 MPa (6 bar, 87 psi ) opening | 371 N |
| Gripping force per gripper jaw at 0.6 MPa (6 bar, 87 psi ) closing | 348 N |
| Mass moment of inertia | 9.65 kgcm2 |
| Max. force on gripper jaw Fz static | 1,300 N |
| Max. torque at gripper Mx static | 45 Nm |
| Max. torque at gripper My static | 30 Nm |
| Max. torque at gripper Mz static | 30 Nm |
| Lubrication interval for guide components | 5 Mio SP |
| Max. mass per external gripper finger | 276 g |
| Product weight | 1,117 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 | Smooth-anodised wrought aluminium alloy |
| Material gripper jaws | Steel, hardened |

