

# Parallel gripper HGPT-50-A-B-F-G1

Part number: 560226

**FESTO**



## Data sheet

| Feature                                       | Value                                                              |
|-----------------------------------------------|--------------------------------------------------------------------|
| Size                                          | 50                                                                 |
| Stroke per gripper jaw                        | 6 mm                                                               |
| Max. interchangeability                       | 0.2 mm                                                             |
| Max. gripper jaw angular play ax, ay          | 0.1 deg                                                            |
| Max. gripper jaw backlash Sz                  | 0.02 mm                                                            |
| Rotational symmetry                           | 0.2 mm                                                             |
| Pneumatic gripper repetition accuracy         | 0.05 mm                                                            |
| Number of gripper jaws                        | 2                                                                  |
| Actuator system                               | Pneumatic                                                          |
| Mounting position                             | Any                                                                |
| Mode of operation                             | Double-acting                                                      |
| Gripper function                              | Parallel                                                           |
| Gripping force backup                         | On opening                                                         |
| Structural design                             | Inclined plane<br>Positively driven motion sequence                |
| Position sensing                              | Via proximity switch                                               |
| Operating pressure                            | 4 bar...8 bar                                                      |
| Operating pressure for sealing air            | 0 bar...0.5 bar                                                    |
| Max. operating frequency of pneumatic gripper | 2 Hz                                                               |
| Min. opening time at 6 bar                    | 70 ms                                                              |
| Min. closing time at 6 bar                    | 143 ms                                                             |
| Max. mass per external gripper finger         | 640 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)              | 2 - Moderate corrosion stress                                      |
| LABS (PWIS) conformity                        | VDMA24364-B1/B2-L                                                  |
| Degree of protection                          | IP40                                                               |
| Ambient temperature                           | 5 °C...60 °C                                                       |
| Mass moment of inertia                        | 29.423 kgcm <sup>2</sup>                                           |
| Maximum force on gripper jaw Fz, static       | 3200 N                                                             |
| Maximum torque on gripper jaw, Mx static      | 120 Nm                                                             |
| Maximum torque on gripper jaw, My static      | 120 Nm                                                             |

| Feature                                      | Value                                                                                                                                                                         |
|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Maximum torque on gripper jaw, Mz static     | 100 Nm                                                                                                                                                                        |
| Relubrication interval for guidance elements | 5 MioCyc                                                                                                                                                                      |
| Product weight                               | 1832 g                                                                                                                                                                        |
| Type of mounting                             | Alternatively:<br>With internal thread and centering sleeve<br>Via through-hole and centering sleeve<br>With through-hole and dowel pin<br>With internal thread and dowel pin |
| Sealing air pneumatic connection             | M5                                                                                                                                                                            |
| Pneumatic connection                         | G1/8                                                                                                                                                                          |
| Note on materials                            | RoHS compliant                                                                                                                                                                |
| Cover cap material                           | high-alloy stainless steel                                                                                                                                                    |
| Housing material                             | Anodized aluminum                                                                                                                                                             |
| Gripper jaw material                         | Hardened steel                                                                                                                                                                |