

# Three-point gripper HGDT-63-A-F-G2

Part number: 560191

FESTO



## Data sheet

| Feature                                       | Value                                                              |
|-----------------------------------------------|--------------------------------------------------------------------|
| Size                                          | 63                                                                 |
| Stroke per gripper jaw                        | 5 mm                                                               |
| Max. interchangeability                       | ≤0.2 mm                                                            |
| Max. gripper jaw angular play ax, ay          | ≤0.1 deg                                                           |
| Max. gripper jaw backlash Sz                  | ≤0.05 mm                                                           |
| Rotational symmetry                           | ≤0.2 mm                                                            |
| Pneumatic gripper repetition accuracy         | ≤0.03 mm                                                           |
| Type code                                     | HGDT                                                               |
| Number of gripper jaws                        | 3                                                                  |
| Mounting position                             | Any                                                                |
| Mode of operation                             | Double-acting                                                      |
| Gripper function                              | 3-point                                                            |
| Gripping force backup                         | During closing                                                     |
| Design                                        | Inclined plane<br>Positively driven motion sequence                |
| Position sensing                              | For proximity sensor                                               |
| Symbol                                        | 00991895                                                           |
| Operating pressure                            | 4 bar ... 8 bar                                                    |
| Operating pressure for sealing air            | 0 bar ... 0.5 bar                                                  |
| Max. operating frequency of pneumatic gripper | ≤4 Hz                                                              |
| Min. opening time at 6 bar                    | 169 ms                                                             |
| Min. closing time at 6 bar                    | 128 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)              | 2 - Moderate corrosion stress                                      |
| Ambient temperature                           | 5 °C ... 60 °C                                                     |
| Mass moment of inertia                        | 39.5 kgcm <sup>2</sup>                                             |
| Maximum force on gripper jaw Fz, static       | 2500 N                                                             |
| Maximum torque on gripper jaw, Mx static      | 80 Nm                                                              |
| Maximum torque on gripper jaw, My static      | 50 Nm                                                              |
| Maximum torque on gripper jaw, Mz static      | 60 Nm                                                              |
| Relubrication interval for guidance elements  | 5 MioCyc                                                           |
| Max. mass per external gripper finger         | 250 g                                                              |
| Product weight                                | 2543 g                                                             |

| Feature                          | Value                                                                                |
|----------------------------------|--------------------------------------------------------------------------------------|
| Type of mounting                 | Optionally:<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                | Free of copper and PTFE<br>RoHS-compliant                                            |
| Cover cap material               | High-alloy stainless steel                                                           |
| Housing material                 | Wrought aluminum alloy<br>COMPCOTE-coated                                            |
| Gripper jaw material             | Steel<br>Hardened                                                                    |