

# Three-point gripper HGDD-63-A

Part number: 1163046

FESTO



 General operating condition

## Data sheet

| Feature                                                         | Value                                                                                      |
|-----------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| Size                                                            | 63                                                                                         |
| Stroke per gripper jaws                                         | 10 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                                    | ≤0.05 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)            | 1746 N                                                                                     |
| Total gripping force, closing, 0.6MPa (6bar, 87 psi)            | 1659 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)                    | 115 ms                                                                                     |
| Min. closing time at 0.6 MPa (6 bar, 87 psi)                    | 145 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-B2-L                                                                             |
| Degree of protection                                            | IP65                                                                                       |
| Ambient temperature                                             | 5 °C ... 60 °C                                                                             |
| Gripper force per gripper jaw, opening, 0.6 MPa (6 bar, 87 psi) | 582 N                                                                                      |
| Gripper force per gripper jaw, closing, 0.6 MPa (6 bar, 87 psi) | 553 N                                                                                      |
| Mass moment of inertia                                          | 29 kgcm <sup>2</sup>                                                                       |
| Max. force on gripper jaw Fz static                             | 2300 N                                                                                     |
| Max. torque at gripper Mx static                                | 70 Nm                                                                                      |
| Max. torque at gripper My static                                | 45 Nm                                                                                      |
| Max. torque at gripper Mz static                                | 50 Nm                                                                                      |

| Feature                                   | Value                                                                        |
|-------------------------------------------|------------------------------------------------------------------------------|
| Lubrication interval for guide components | 5 MioCyc                                                                     |
| Max. mass per external gripper finger     | 440 g                                                                        |
| Product weight                            | 2175 g                                                                       |
| Type of mounting                          | Either:<br>Via through-hole and dowel pin<br>Via female thread and dowel pin |
| Pneumatic connection, blocked air         | M5                                                                           |
| Pneumatic connection                      | G1/8                                                                         |
| Note on materials                         | RoHS-compliant                                                               |
| Material cover cap                        | High-alloy stainless steel                                                   |
| Material housing                          | Smooth-anodised wrought aluminium alloy                                      |
| Material gripper jaws                     | Hardened steel                                                               |