

# Radial gripper HGRT-20-A

Part number: 563906

FESTO



 General operating condition

## Data sheet

| Feature                                                   | Value                                                                                      |
|-----------------------------------------------------------|--------------------------------------------------------------------------------------------|
| Size                                                      | 20                                                                                         |
| Max. replacement accuracy                                 | ≤0.2 mm                                                                                    |
| Max. angular gripper jaw backlash ax, ay                  | ≤0.1 deg                                                                                   |
| Max. opening angle                                        | 180 deg                                                                                    |
| Rotationally symmetrical                                  | ≤0.2 mm                                                                                    |
| Repetition accuracy, gripper                              | ≤0.02 mm                                                                                   |
| Number of gripper jaws                                    | 2                                                                                          |
| Mounting position                                         | optional                                                                                   |
| Mode of operation                                         | Double-acting                                                                              |
| Gripper function                                          | Radial                                                                                     |
| Design                                                    | Force pilot operated motion sequence                                                       |
| Position detection                                        | Via proximity switch<br>Via inductive sensors                                              |
| Symbol                                                    | 00991894                                                                                   |
| Operating pressure                                        | 3 bar ... 8 bar                                                                            |
| Max. operating frequency of gripper                       | ≤3 Hz                                                                                      |
| Min. opening time at 0.6 MPa (6 bar, 87 psi)              | 280 ms                                                                                     |
| Min. closing time at 0.6 MPa (6 bar, 87 psi)              | 308 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                            | 1 - Low corrosion stress                                                                   |
| LABS (PWIS) conformity                                    | VDMA24364-B1/B2-L                                                                          |
| Ambient temperature                                       | 5 °C ... 60 °C                                                                             |
| Total gripping torque at 0.6 MPa (6 bar, 87 psi), opening | 588 Ncm                                                                                    |
| Total gripper torque, closing, 0.6 MPa (6 bar, 87 psi)    | 516 Ncm                                                                                    |
| Mass moment of inertia                                    | 0.74 kgcm <sup>2</sup>                                                                     |
| Max. force on gripper jaw Fz static                       | 100 N                                                                                      |
| Max. torque at gripper My static                          | 6.2 Nm                                                                                     |
| Max. torque at gripper Mz static                          | 0.5 Nm                                                                                     |
| Lubrication interval for guide components                 | 10 MioCyc                                                                                  |
| Product weight                                            | 290 g                                                                                      |
| Type of mounting                                          | Via female thread and centring sleeve                                                      |
| Pneumatic connection                                      | M5                                                                                         |
| Note on materials                                         | RoHS-compliant                                                                             |

| Feature               | Value                                   |
|-----------------------|-----------------------------------------|
| Material housing      | Smooth-anodised wrought aluminium alloy |
| Material gripper jaws | Hardened steel                          |