

# Radial gripper DHRC-20-A

Part number: 8128697

FESTO



 General operating condition

## Data sheet

| Feature                                                   | Value                                                                                      |
|-----------------------------------------------------------|--------------------------------------------------------------------------------------------|
| Size                                                      | 20                                                                                         |
| Max. replacement accuracy                                 | ≤0.2 mm                                                                                    |
| Max. opening angle                                        | 180 deg                                                                                    |
| Rotationally symmetrical                                  | ≤0.2 mm                                                                                    |
| Repetition accuracy, gripper                              | ≤0.1 mm                                                                                    |
| Number of gripper jaws                                    | 2                                                                                          |
| Drive system                                              | Pneumatic                                                                                  |
| Mounting position                                         | optional                                                                                   |
| Mode of operation                                         | Double-acting                                                                              |
| Gripper function                                          | Radial                                                                                     |
| Gripper force back-up                                     | None                                                                                       |
| Design                                                    | Connection direction at side<br>Force pilot operated motion sequence                       |
| Position detection                                        | Via proximity switch                                                                       |
| Symbol                                                    | 00991894                                                                                   |
| Operating pressure                                        | 0.1 MPa ... 0.8 MPa                                                                        |
| Operating pressure                                        | 1 bar ... 8 bar                                                                            |
| Operating pressure                                        | 14.5 psi ... 116 psi                                                                       |
| Max. operating frequency of gripper                       | ≤2 Hz                                                                                      |
| Min. opening time at 0.6 MPa (6 bar, 87 psi)              | 44 ms                                                                                      |
| Min. closing time at 0.6 MPa (6 bar, 87 psi)              | 57 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                            | 0 - No corrosion stress                                                                    |
| LABS (PWIS) conformity                                    | VDMA24364-B2-L                                                                             |
| Ambient temperature                                       | -10 °C ... 60 °C                                                                           |
| Total gripping torque at 0.6 MPa (6 bar, 87 psi), opening | 166.2 Ncm                                                                                  |
| Total gripper torque, closing, 0.6 MPa (6 bar, 87 psi)    | 134.3 Ncm                                                                                  |
| Mass moment of inertia                                    | 0.292 kgcm <sup>2</sup>                                                                    |
| Max. force on gripper jaw Fz static                       | 100 N                                                                                      |
| Max. torque at gripper Mx static                          | 4 Nm                                                                                       |
| Max. torque at gripper My static                          | 2 Nm                                                                                       |
| Max. torque at gripper Mz static                          | 4 Nm                                                                                       |
| Product weight                                            | 218.4 g                                                                                    |

| Feature               | Value                                                                                                                                          |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Type of mounting      | Direct mounting via through-hole<br>Direct mounting via thread<br>Via through-hole and dowel pin<br>Via female thread and dowel pin<br>Either: |
| Pneumatic connection  | M5                                                                                                                                             |
| Note on materials     | RoHS-compliant                                                                                                                                 |
| Material cover cap    | Wrought aluminium alloy, anodised                                                                                                              |
| Material housing      | Anodised wrought aluminium alloy                                                                                                               |
| Material gripper jaws | High-alloy steel                                                                                                                               |