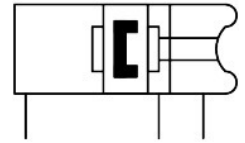


# Adaptive shape gripper DHEF-20-A

Part number: 8092533

FESTO



## Data sheet

[PDF](#) General operating condition

| Feature                                                      | Value                                                 |
|--------------------------------------------------------------|-------------------------------------------------------|
| Size                                                         | 20                                                    |
| Inverting cap version                                        | Standard                                              |
| Stroke                                                       | 66 mm                                                 |
| Min. ø to be gripped                                         | 12 mm                                                 |
| Max. ø to be gripped                                         | 38 mm                                                 |
| Drive system                                                 | Pneumatic                                             |
| Mounting position                                            | optional                                              |
| Mode of operation                                            | Double-acting                                         |
| Gripper function                                             | Adaptive                                              |
| Design                                                       | Inverting cap<br>Force pilot operated motion sequence |
| Guide                                                        | Basic guide                                           |
| Position detection                                           | Via proximity switch                                  |
| Symbol                                                       | 00997278                                              |
| Pick-up tolerance                                            | ±4 mm                                                 |
| Placement tolerance                                          | ±2 mm                                                 |
| Operating pressure of ball valve drive unit                  | 1 bar ... 8 bar                                       |
| Operating pressure of cap                                    | 0.07 bar ... 0.1 bar                                  |
| Burst pressure of cap                                        | 0.3 bar                                               |
| Recommended flow rate for pressure regulator                 | 10 l/min                                              |
| Max. operating frequency of gripper                          | 1 Hz                                                  |
| Return-stroke time                                           | 290 ms                                                |
| Advance time                                                 | 270 ms                                                |
| Max. speed without gripped object                            | 290 mm/s                                              |
| Max. speed during gripping                                   | 120 mm/s                                              |
| Operating medium                                             | Compressed air to ISO 8573-1:2010 [7:4:4]             |
| Note on operating and pilot medium                           | Lubricated operation not possible                     |
| Corrosion resistance class CRC                               | 2 - Moderate corrosion stress                         |
| LABS (PWIS) conformity                                       | VDMA24364 zone III                                    |
| Suitable for use with food                                   | See supplementary material information                |
| Ambient temperature                                          | 0 °C ... 60 °C                                        |
| Mass moment of inertia                                       | 1.29 kgcm <sup>2</sup>                                |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke | 158 N                                                 |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke  | 189 N                                                 |
| Dynamic lateral force with max. projection                   | 2.3 N                                                 |

| Feature                                                | Value                 |
|--------------------------------------------------------|-----------------------|
| Contact force on the gripping object                   | 20 N                  |
| Static holding force parallel to the gripper axis      | 26 N                  |
| Static holding force perpendicular to the gripper axis | 45 N                  |
| Impact energy in end positions                         | 0.1 J                 |
| Guide value for effective load                         | 1 kg                  |
| Product weight                                         | 475 g                 |
| Moving mass                                            | 60 g                  |
| Note on the moving mass                                | Without inverting cap |
| Type of mounting                                       | To ISO 9409           |
| Pneumatic connection                                   | M5                    |
| Note on materials                                      | RoHS-compliant        |
| Material cap                                           | VMQ (silicone)        |
| Material housing                                       | Anodised aluminium    |
| Locking cover material                                 | PA                    |