

# Flat cylinder DZF-12-50-A-P-A

Part number: 161227

FESTO



 General operating condition

## Data sheet

| Feature                                                      | Value                                                                                      |
|--------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| Stroke                                                       | 50 mm                                                                                      |
| Piston diameter                                              | 12 mm<br>Equivalent diameter                                                               |
| Piston rod thread                                            | M6                                                                                         |
| Torsional backlash at piston rod +/-                         | 2.5 deg                                                                                    |
| Cushioning                                                   | Elastic cushioning rings/plates at both ends                                               |
| Mounting position                                            | optional                                                                                   |
| Mode of operation                                            | Double-acting                                                                              |
| Design                                                       | Piston<br>Piston rod                                                                       |
| Position detection                                           | Via proximity switch                                                                       |
| Symbol                                                       | 00991217                                                                                   |
| Variants                                                     | Piston rod at one end                                                                      |
| Protection against torque/guide                              | Oval piston                                                                                |
| Operating pressure                                           | 0.16 MPa ... 1 MPa                                                                         |
| Operating pressure                                           | 1.6 bar ... 10 bar                                                                         |
| 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-B1/B2-L                                                                          |
| Ambient temperature                                          | -20 °C ... 80 °C                                                                           |
| Impact energy in end positions                               | 0.09 J                                                                                     |
| Max. torque for protection against torsion                   | 0.1 Nm                                                                                     |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke  | 51 N                                                                                       |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke | 68 N                                                                                       |
| Moving mass for 0 mm stroke                                  | 12 g                                                                                       |
| Additional moving mass per 10 mm stroke                      | 2 g                                                                                        |
| Additional weight per 10 mm stroke                           | 9 g                                                                                        |
| Basic weight for 0 mm stroke                                 | 96 g                                                                                       |
| Type of mounting                                             | Either:<br>Via female thread<br>With accessories                                           |
| Pneumatic connection                                         | M5                                                                                         |
| Material cover                                               | Wrought aluminium alloy                                                                    |
| Material seals                                               | NBR<br>TPE-U(PU)                                                                           |

| Feature              | Value                            |
|----------------------|----------------------------------|
| Material housing     | Anodised wrought aluminium alloy |
| Material piston seal | NBR                              |
| Material piston rod  | High-alloy stainless steel       |