

# Hinge cylinder DWB-50-100-Y

Part number: 549555

FESTO



 General operating condition

## Data sheet

| Feature                                                      | Value                                                                                      |
|--------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| Stroke                                                       | 100 mm                                                                                     |
| Piston diameter                                              | 50 mm                                                                                      |
| Piston rod thread                                            | M16x1.5                                                                                    |
| Broad rod clevis/swivel mounting                             | 19.5 mm                                                                                    |
| Cushioning                                                   | Pneumatic cushioning, adjustable at both ends                                              |
| Mounting position                                            | optional                                                                                   |
| Design                                                       | Piston<br>Piston rod with rod clevis<br>Swivel mounting on bearing cap<br>Cylinder barrel  |
| Speed regulation                                             | Integrated flow control at both ends                                                       |
| Position detection                                           | Without                                                                                    |
| Piston-rod end                                               | Male thread with rod clevis                                                                |
| Operating pressure                                           | 1 bar ... 10 bar                                                                           |
| Mode of operation                                            | Double-acting                                                                              |
| 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                                                                           |
| Impact energy in end positions                               | 0.7 J                                                                                      |
| Cushioning length                                            | 20 mm                                                                                      |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke  | 990 N                                                                                      |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke | 1178 N                                                                                     |
| Moving mass for 0 mm stroke                                  | 664 g                                                                                      |
| Additional moving mass per 10 mm stroke                      | 25 g                                                                                       |
| Basic weight for 0 mm stroke                                 | 1338 g                                                                                     |
| Additional weight per 10 mm stroke                           | 37 g                                                                                       |
| alternative connections                                      | See product drawing                                                                        |
| Type of mounting                                             | Via swivel mounting on bearing cap<br>With accessories                                     |
| Pneumatic connection                                         | Rc1/4                                                                                      |
| Material rod clevis                                          | Cast steel<br>Tempered steel                                                               |
| Note on materials                                            | RoHS-compliant                                                                             |
| Material wiper                                               | Bronze                                                                                     |

| Feature                  | Value                                |
|--------------------------|--------------------------------------|
| Material cover           | Die-cast aluminium<br>Anodised       |
| Material seals           | NBR                                  |
| Material piston rod      | Tempered steel<br>Hard-chrome-plated |
| Material cylinder barrel | Wrought aluminium alloy<br>Anodised  |