

# swivel/linear unit

## DSL-16-50-270-P-A-S20-B

Part number: 556405

FESTO

For proximity sensing. Rotary and linear movement can be actuated independently of one another. Rotary movement of 0° - 270° infinitely adjustable.



## Data sheet

| Feature  | Value   |
|--|---|
| Rotation angle adjustment range                          | 0 ... 270 deg   |
| Stroke   | 50 mm   |
| Piston diameter  | 16 mm   |
| Swivel angle   | 0 ... 272 deg   |
| Cushioning   | P: Flexible cushioning rings/plates at both ends                            |
| Assembly position  | Any   |
| Fine adjustment  | -6 deg  |
| Mode of operation  | double-acting   |
| Design structure   | Rotary vane   |
| Position detection                                       | For proximity sensor  |
| Variants   | Through, hollow piston rod  |
| Protection against torque/guide                          | with plain-bearing guide  |
| Operating pressure                                       | 2.5 ... 8 bar   |
| Max. impact speed  | 500 mm/s  |
| Max. swivel frequency at 0.6 MPa (6 bar, 87 psi)         | 2 Hz  |
| Swivel angle backlash                                    | 2 deg   |
| Repetition accuracy                                      | 1 deg   |
| Operating medium   | Compressed air in accordance with ISO8573-1:2010 [7:4:4]                    |
| Note on operating and pilot medium                       | Lubricated operation possible (subsequently required for further operation) |
| Corrosion resistance classification CRC                  | 1 - Low corrosion stress  |
| PWIS conformity  | VDMA24364-B2-L  |
| Ambient temperature                                      | -10 ... 60 °C   |
| Dynamic load torque                                      | 0.1 Nm  |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), retracting | 73.5 N  |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance    | 102.5 N   |
| Theoretical torque at 0.6 MPa (6 bar, 87 psi)            | 1.25 Nm   |
| Permissible mass moment of inertia                       | 0.000035 kgm <sup>2</sup>   |
| Product weight   | 650 g   |
| Basic weight for 0 mm stroke                             | 650 g   |
| Additional weight per 10 mm stroke                       | 33 g  |
| Mounting type  | Clamped in T-slot<br>with external (male) thread<br>Optional                |
| Pneumatic connection                                     | M5  |
| Material cover   | Wrought Aluminium alloy<br>Anodised   |
| Material seals   | TPE-U(PU)   |
| Material housing   | Wrought Aluminium alloy<br>Smooth anodised                                  |
| Material piston rod                                      | Heat-treatment steel  |