

# swivel/linear unit

## DSL-20-80-270-CC-A-S2-B

Part number: 556445

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   |
|--|---|
| Cushioning angle                           | 12 deg  |
| Rotation angle adjustment range            | 0 ... 246 deg   |
| Stroke                                     | 80 mm   |
| Piston diameter                            | 20 mm   |
| Swivel angle                               | 0 ... 246 deg   |
| Cushioning                                 | CC: Shock absorber at both ends<br>P: Flexible cushioning rings/plates at both ends |
| Assembly position                          | Any   |
| Fine adjustment                            | -3 deg  |
| Mode of operation                          | double-acting   |
| Design structure                           | Rotary vane   |
| Position detection                         | For proximity sensor  |
| Variants                                   | Through 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 6 bar             | 1 Hz  |
| Swivel angle backlash                      | 2 deg   |
| Repetition accuracy                        | 0.1 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  |
| Ambient temperature                        | -10 ... 60 °C   |
| Dynamic load torque                        | 0.2 Nm  |
| Theoretical force at 6 bar, return stroke  | 120.5 N   |
| Theoretical force at 6 bar, advance stroke | 159 N   |
| Theoretical torque at 6 bar                | 2.5 Nm  |
| Permissible mass moment of inertia         | 0.0012 kgm <sup>2</sup>   |
| Additional weight per 10 mm stroke         | 52 g  |
| Basic weight for 0 mm stroke               | 1,130 g   |
| Product weight                             | 1,130 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  |