

# Swivel/linear unit

## DSL-20-100-270-P-S2-CC

Part number: 163048

FESTO

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

The maximum rotary angle play at the piston rod is 2°. When mounting additional components on the drive shaft, never exceed the maximum permitted tightening torque of 5.5 Nm.



## Data sheet

| Feature                                    | Value   |
|--|---|
| Cushioning angle                           | 12 deg  |
| Rotation angle adjustment range            | 270 deg   |
| Stroke                                     | 100 mm  |
| Piston diameter                            | 20 mm   |
| Swivel angle                               | 238 deg   |
| Cushioning                                 | CC: Shock absorber at both ends<br>P: Flexible cushioning rings/plates at both ends |
| Assembly position                          | Any   |
| Fine adjustment                            | 1.5 deg   |
| Mode of operation                          | double-acting   |
| Design structure                           | Rotary vane   |
| Position detection                         | For inductive sensors<br>For proximity sensor                                       |
| Variants                                   | S2: 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  |
| Operating medium                           | Dried compressed air, lubricated or unlubricated                                    |
| Ambient temperature                        | -10 ... 60 °C   |
| Cushioning length                          | 5 mm  |
| Torque at 6 bar                            | 2.5 Nm  |
| Theoretical force at 6 bar, return stroke  | 121 N   |
| Theoretical force at 6 bar, advance stroke | 159 N   |
| 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  |
| Materials information for cover            | Wrought Aluminium alloy<br>Anodised   |
| Materials information for seals            | TPE-U(PU)   |
| Materials information, housing             | Wrought Aluminium alloy<br>Smooth anodised  |
| Materials information for piston rod       | Heat-treatment steel  |