## Contact - Free Limit Switch 024.50

Limit switches are used to control, monitor and view the position of the valve or to activate other system components.

There are different versions of on/off limit switches in the market. The most common are based on the principle of mechanical switches, proximity sensors or potentiometers.

SED has designed and engineered a contact-free limit switch with magnet field measurement technology. Apart from lifetime and among other features the advanced design allows also a more reliable sealing method.

## Features

- For single and double acting valve control functions
- Suitable for linear and rotary actuators
- Power supply and programming 24 V DC or 8 V DC
- Linear stroke measurement of 3-45 mm
- Indicates two or three positions
- Backlash free stroke transmission
- Short circuit proof
- M12, 5 pin A-coded connection

Optional:

- Atex II 3G
- © IO-Link


Standard Version


Application example

## Advantages

- Contact-Free magnetic measuring design
- Colored LED light feedback of valve position visible for $360^{\circ}$
- Compact and robust design
- Hermetically sealed
- Easy mounting without additional adapter kits
- Mounts to all standard valves up to DN100
- $360^{\circ}$ adjustable mounting position
- Initial programming by light or 24V Signal (5th pin)
- Set point protection
- High switching current (not valid for IO-Link)
- High chemical resistance


# System Components and Process Automation 

samsor

## Contact - Free Limit Switch 024.50

| Technical Data |  |
| :--- | :--- |
| Material Housing | PPSU |
| Mechanical Adaption | St. Steel M12×1, M16x1 |
| Ambient Temperature | $-10^{\circ} \mathrm{C}$ to $+70^{\circ} \mathrm{C}$ |
| Maximum Pressure | 8 bar |
| Power Supply | Standard and II $3 \mathrm{G}=24 \mathrm{~V}$ <br> optional 8 V |
| Power Consumption | $0,7 \mathrm{~W}$ |
| Maximum Power Input | 30 mA |
| Electrical Connection | Multipol M12, 5 Pin, A-coded |
| Switching Current | $1 \ldots 800 \mathrm{~mA}$ |
| Stroke-/ Slewing- Range | $3-45 \mathrm{~mm} / 360^{\circ}$ |
| Accuracy | $+/-0,1 \mathrm{~mm}$ |
| Protection Class | IP67 according EN 60529 |
| Conformity according CE | EMV 2014/30/EU |
| Mounting Position | any |
| Initialization | Light or 24V Trigger/IO-Link |

Ordering Key

|  | Code |  |
| :--- | :--- | :--- |
| Assembly Thread | for Linear <br> Actuator | for Rotary <br> Actuator |
| M12x1 | 024.50 .120 | n.a. |
| M16x1 | 024.50 .160 | 024.50 .260 |

Optical Position Feedback

| Position | LED Indication |
| :--- | :--- |
| open | permanent green |
| interim, if any | permanent yellow |
|  |  |
| closed | permanent blue |
| moving open | blinking green |
| moving closed | blinking blue |

## Dimensional Drawing



## Accessories

- 2 m cable with 4 pin female plug for explosion-risk areas, Code 00311.2450.006.4
- 5 m cable with 5 pin female plug, Code 00311.2450.006.1
- 10 m cable with 5 pin female plug, Code 00311.2450.006.2


## Optional

Teach-In cable for the programming via the $5^{\text {th }}$ pin, Code 00311.2450.005
024.50.260


Electrical Connection


## Pin Configuration



5 pin, M12, A-coded

