

# Installation and Operating Instructions for Limit Switch Type 055.010.6 (Mechanical Operation, Multi-directional)

(B.0550106.GB)

## Manufacturer's Declaration

This product is intended for installation in a machine or system, based on the machine directive 2006/42/EC. It is forbidden to start use of the product until the machine or system into which it should be built is operating in accordance with the EC directives.

The product corresponds to the low voltage directive 2006/95/EC.

## Safety Regulations



### Danger!

To prevent injury or damage, only professionals and specialists should work on the devices, following the relevant standards and directives. Please read the Installation and Operational Instructions carefully before installation and initial operation of the device.

- Danger of death on touching voltage-carrying cables and components
- Please check switch adjustments for function by simulating operating conditions before initial start-up



### Warning:

Without a conformity inspection, this product is not suitable for use in areas where there is a high danger of explosion. This statement is based on directive 94/9 EC (ATEX directive).

## Application

The limit switch is used to monitor and measure axial or radial mechanical movements and adjustments e.g. on EAS®-clutches. The device is suitable for clutches with a minimum stroke of 1,1 mm with radial actuation and 0,9 mm with axial actuation.

## Function

By actuating the metal tappet, contacts 11 – 12 are opened.

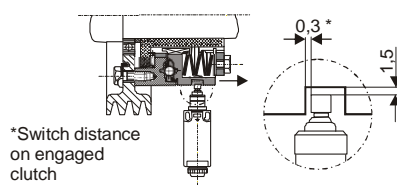
## Electrical Connection (Terminals)

11 – 12 NC contact

## Technical Data

|                          |   |
|--------------------------|---|
| Contact                  | 1 x NC contact, positive opening contacts ⊕   |
| Contact (special design) | additional 1 x NO contact, terminals 23 – 24, galvanically separated (Zb)             |
| Contact-opening          | see switching travel diagram  |
| Contact-closing          | see switching travel diagram  |
| Contact load             | NC contact 250 VAC/2,5 A<br>24 VDC/1 A  |
| Contact distance 250 VAC | min. 12 VDC/10 mA   |
| Contact distance 24 VDC  | >1,25 mm (actuation travel until forced disconnection)                                |
| Contact material         | <1,25 mm, min. 0,5 mm   |
| Max. input current       | Ag90Ni10  |
| Metal tappet travel      | acc. to DIN EN 60947-5-1  |
| Switching frequency      | AC15/DC13   |
| Mechanical lifetime      | max. 4 mm axial or radial   |
| Conductor cross section  | max. 100/Min.   |
| Ambient temperature      | 1 x 10 <sup>6</sup> switching cycles, unloaded  |
| Protection               | 1,5 mm <sup>2</sup> / AWG 16  |
| Protection insulation    | -30 °C up to +80 °C   |
| Housing                  | IP 65   |
| Weight                   | acc. to protection class II □<br>thermoplastic, self extinguishing<br>acc. to UL94-V0 |
|                          | 120 g / 4,2 oz  |

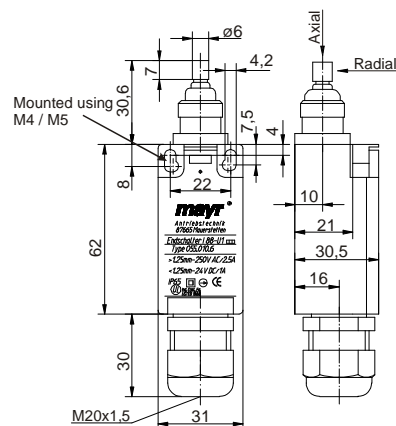
## Installation



\*Switch distance on engaged clutch

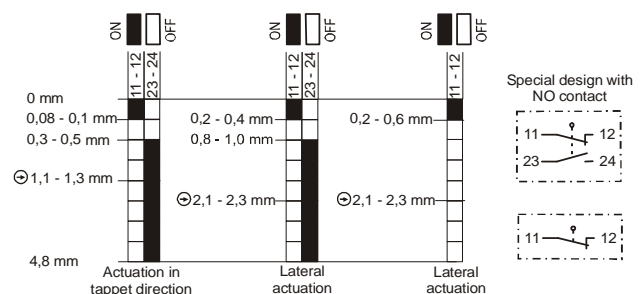


## Dimensions (mm)



Fixed positioning for safety application with fixing screws 2 x M5 (DIN 912).

## Switching Travel Diagram



**Warning!** Do not install switch so that it drags and observe max. actuation travel (travel of metal tappet)