# **S** SCHMERSAL



Operating instructions. . . . . . . . . . page 1 Translation of the original operating instructions

#### About this document

This operating instructions manual provides all the information required for the mounting, set-up and commissioning to ensure the safe operation and disassembly of the safety switchgear. The operating instructions must be available in a legible condition and a complete version in the vicinity of the device.

All operations described in this operating instructions manual must be carried out by trained specialist personnel, authorised by the plant operator only.

The machine builder must carefully select the harmonised standards to be complied with as well as other technical specifications for the selection, mounting and integration of the components.

#### General safety instructions

The user must observe the safety instructions in this operating instructions manual, the country-specific installation standards as well as all prevailing safety regulations and accident prevention rules. The information contained in this operating instructions manual is provided without liability and is subject to technical modifications.

There are no residual risks, provided that the safety instructions as well as the instructions regarding mounting, commissioning, operation and maintenance are observed.



# Warning about misuse

In case of inadequate or improper use or manipulations of the component, personal hazards or damage to machinery or plant components cannot be excluded.

### **Exclusion of liability**

We shall accept no liability for damages and malfunctions resulting from defective mounting or failure to comply with this operating instructions manual. The manufacturer shall accept no liability for damages resulting from the use of unauthorised spare parts or accessories.

For safety reasons, invasive work on the device as well as arbitrary repairs, conversions and modifications to the device are strictly forbidden; the manufacturer shall accept no liability for damages resulting from such invasive work, arbitrary repairs, conversions and/or modifications to the device.

# Product description

Position switches and limit switches serve as a functional component for detecting the position as well as monitoring moving parts of a whole system or machine.

It is the responsibility of the manufacturer of a machine or plant to ensure the correct functionality of the entire machine or plant. The entire concept of the control system, in which the safety component is integrated, must be validated to the relevant standards.



The currently valid declaration of conformity can be downloaded from the internet at www.schmersal.net.



Technical information can be found in the Schmersal catalogues or in the online catalogue on the Internet: www.schmersal.net.

#### Mounting

#### Mounting of the position switches

The fixing screws of the switchgear must be protected against unauthorised tampering. The enclosure must not be used as an end stop. Any mounting position. To ensure a proper functioning, the switch must be installed so that the required switch travel is obtained.

All components have sufficient after-travel to compensate for inaccuracies in the guidance of the actuating system. The actuation of the switch beyond its end stop however must be avoided.



Please observe the remarks of the standard EN 60204-1.

# Electrical connection



The electrical connection may only be carried out by authorised personnel in a de-energised condition.

For the cable entry, suitable cable glands with an appropriate degree of protection must be used. After wiring, dust and soiling must be removed from the wiring compartment.

The constructor must provide for the necessary strain relief. Unused cable entries are to be sealed using sealing screws with suitable protection. Uniformly tighten the cover screws.



Information about the contact variants and switch travel can be gleaned from the Schmersal catalogues and the online catalogue on the internet at www.schmersal.net.

#### Set-up and maintenance

The function of the component must be tested. The following conditions must be previously checked and met:

- 1. Check the switch enclosure for damage
- 2. Check the free movement of the actuating element
- 3. Check the integrity of the cable entry and connections

We recommend carrying out a visual inspection and functional test at regular intervals.

Damaged or defective components must be replaced.

#### Disassembly and disposal

The switchgear may only be removed when de-energised, professionally and in accordance with national rules and regulations.

#### K.A. Schmersal GmbH & Co. KG

Möddinghofe 30, D - 42279 Wuppertal Postfach 24 02 63, D - 42232 Wuppertal

Phone: +49 - (0)2 02 - 64 74 - 0
Telefax: +49 - (0)2 02 - 64 74 - 1 00
E-Mail: info@schmersal.com
Internet: http://www.schmersal.com

EN)



