

**SAFEMASTER STS/K**  
**Safety Switch- and**  
**Key Interlock System**  
**Key Module**  
**01/K and 10/K**

**Translation**  
**of the original instructions**

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**E. Dold & Söhne GmbH & Co. KG**  
 Bregstraße 18 • 78120 Furtwangen • Germany  
 Phone: +49 7723 654-0 • Fax +49 7723 654356  
 dold-relays@dold.com • www.dold.com

**0278801**

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## Symbol and Notes Statement



**DANGER:**  
Indicates that death or severe personal injury will result if proper precautions are not taken.



**WARNING:**  
Indicates that death or severe personal injury can result if proper precautions are not taken.



**CAUTION:**  
Indicates that a minor personal injury can result if proper precautions are not taken.



**INFO:**  
Referred information to help you make best use of the product.



**ATTENTION:**  
Warns against actions that can cause damage or malfunction of the device, the device environment or the hardware / software result.

## General Notes

The product hereby described was developed to perform safety functions as a part of a whole installation or machine. A complete safety system normally includes sensors (SAFEMASTER STS/K System), evaluation units, signals and logical modules for safe disconnections. The manufacturer of the installation or machine is responsible for ensuring proper functioning of the whole system. DOLD cannot guarantee all the specifications of an installation or machine that was not designed by DOLD. The total concept of the control system into which the device is integrated must be validated by the user. DOLD also takes over no liability for recommendations which are given or implied in the following description. The following description implies no modification of the general DOLD terms of delivery, warranty or liability claims.

## Notes



**Risk!**  
**Danger to life or risk of serious injuries.**

- Hazards must be ruled out before a key can be entered and the movable part of the guard can then be opened!



**INFO**

- For information regarding use in the system and validation according to EN ISO 13849-2, see SAFEMASTER STS application guide.
- Take advantage of the advice of the **E. Dold & Söhne GmbH & Co. KG** specialists regarding the choice of units and combination of a system.



**ATTENTION !**

- To avoid wrong usage (e.g. by overload, mounting position or usage in acid, alkaline or other hostile ambient conditions) the limitations of the product have to be observed. Please check in advance if your application requires the usage of the more robust stainless steel model of SAFEMASTER STS. The requirements of the mounting and operating instruction must be fulfilled.



Before installing, operating or maintaining this device, these instructions must be carefully read and understood.



The installation must only be done by a qualified electrician!



The installation must only be done by a qualified mechanic!



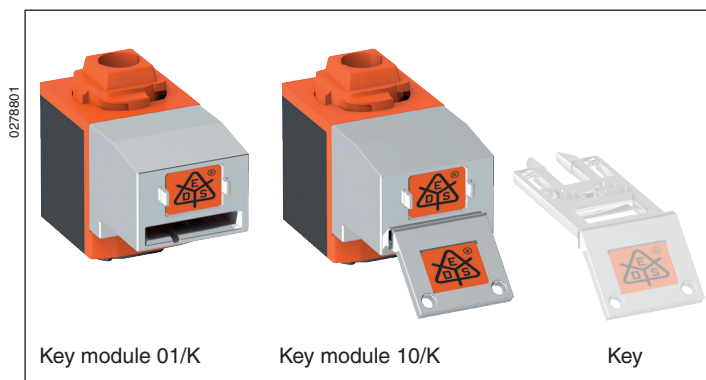
Do not dispose of household garbage!  
The device must be disposed of in compliance with nationally applicable rules and requirements.



Storage for future reference.

To help you understand and find specific text passages and notes in the operating instructions, we have important information and information marked with symbols.

### SAFEMASTER STS/K Safety Switch- and Key Interlock System Key Module 01/K and 10/K



#### STS/K-System Benefits

- EU-Test certificate according to the directive 2006/42/EG, annex IX
- For safety applications up to PLe/Cat. 4 according to DIN EN/ISO 13849-1
- Modular and expandable system
- Rugged stainless steel and plastic design
- Wireless mechanical safeguarding
- Easy installation through comprehensive accessories
- Protection against lock-in
- Coding level low, medium, high according to DIN EN ISO 14119:2014-03

#### Features

- Key modules to force operating sequences
- Module expansions possible below and above the module
- With or without protective cover installed
- Facilitate protection against lock-in
- Reduces wiring work and analysis function in the switching cabinet
- Choice of direction in 4 increments of 90°
- This module is also available in stainless steel

#### Product Description

The key module is built together with other modules to form a STS-unit. The key is used thereby for unlocking or locking of functions. The module can be installed in 4 positions, each rotated by 90°.

#### ATTENTION !



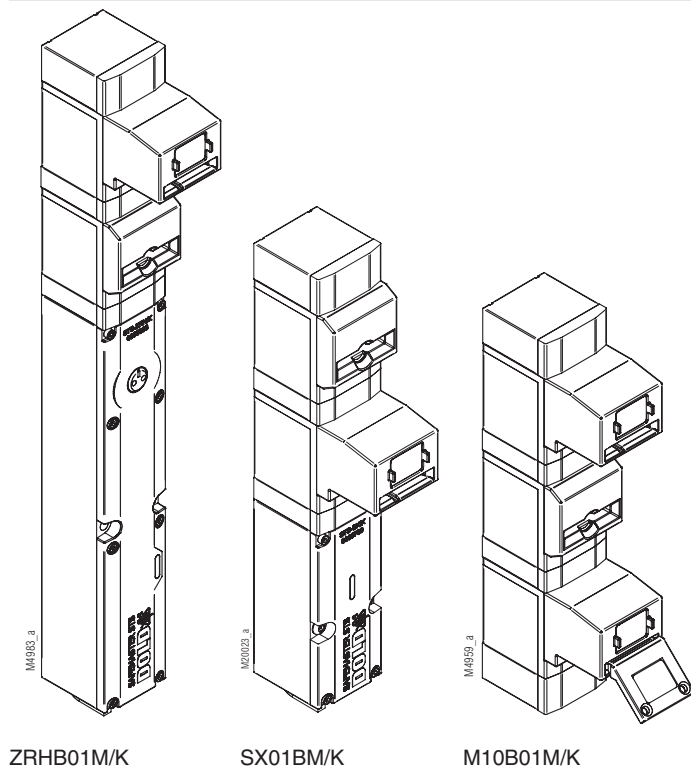
**Mechanical function modules can be installed above and/or below the key module!**

**Electrical modules can only be installed below the key module!**

#### Approvals and Markings



#### Installation Examples



#### Design and Operation

This is an extremely robust and flexible key module, which mechanically monitors the safeguarding of a function in the system, for instance, opening or locking a guard or door and thereby forcing a process.

The monitoring function is achieved in combination with additional function modules such as switch, door lock or actuator modules. The essential functions of key modules consist of ensuring a determined operating sequence. Securing separating guards is the main application. Releasing or blocking certain functions in a predefined sequence is thereby decisive.

#### Example SX01BM/K

The switch module is deactivated and blocked by removing the key. Access is released. The removed key in this case serves as prevention against lock-in and allows further mechanically secured entries to open in the system. It is also secured again with key modules. They may also consist only of mechanical units.

The insertion or removal of a key from the key module determines whether a guard door or door lock can be opened or closed or if switching circuits can be activated or deactivated

## Technical Data

Enclosure: PA + GF  
 Internal parts and inserting slots: Stainless steel V4A / AISI 316 / AISI 630  
 Ambient temperature: - 25 °C bis + 60 °C  
 Variant:

- Key module 01:  
**Removal** of the key to release the upper module and lock the lower module
- Key module 10:  
**Inserting** the key to release the upper module and lock the lower module

Coding level high according to DIN EN ISO 14119:2014-03

## ATTENTION !



To avoid wrong usage (e.g. by overload, mounting position or usage in acid, alkaline or other hostile ambient conditions) the limitations of the product have to be observed. Please check in advance if your application requires the usage of the more robust stainless steel model of SAFEMASTER STS. The requirements of the mounting and operating instruction must be fulfilled.

## Ordering Designation

Key module 01/K  
 Article number: 0065892

Key module 10/K  
 Article number: 0066313

Key module 01S/K  
 Article number: 0066982

Key module 10S/K  
 Article number: 0066983

## Variants and Accessories

### Key modules with protective cover

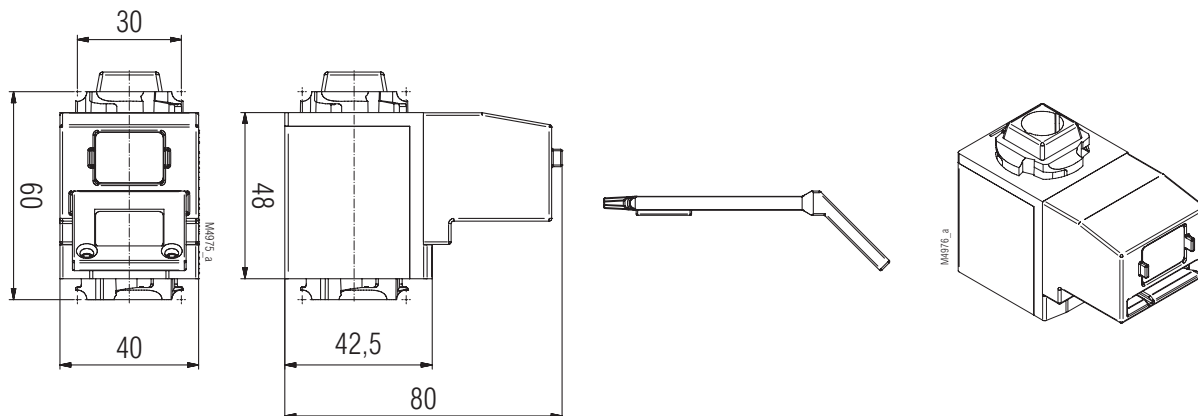
The key modules can be alternatively equipped with a protective cover. It is located in the key insertion opening. When the key is pulled out it offers protection from penetrating dirt like sand and dust. Since the SAFEMASTER STS/K for key coding works with a coding barrel and not with delicate pins, this protective cover together with the lateral cleaning holes is sufficient as protective measure against most of the dirt. The protective cover offers only limited protection against the penetration of fluids.

The key modules with protective covers receive an additional „S“ at the end of their normal type designation. Therefore, their full designation is 01S/K or 10S/K.

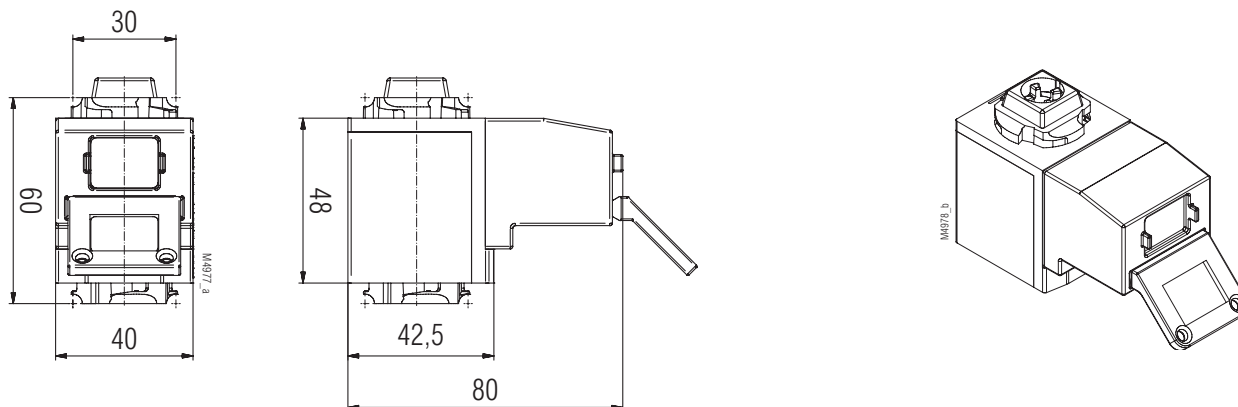
### Examples of devices with protective cover:

M10SBM/K, M11SBM/K, SX02SM/K.

## Dimensions [mm]

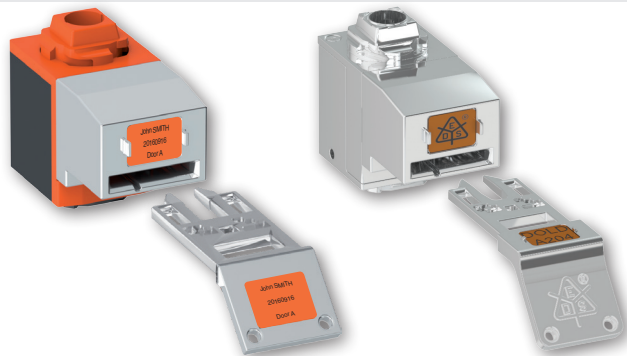


Key module 01/K



Key module 10/K

## Key Labelling and Colours



### Labelling

The keys and keys modules of the safety switch and key transfer system SAFEMASTER STS can be labeled individually.

SAFEMASTER STS is supplied with orange-coloured and black lettered standard labels.

There are max. 3 lines with 13 letters each (upper and lower case) at your disposal.

The maximum font height is 4 mm.

Usually the manufacturer name of the machine, machine number and the door identification is indicated (see example).

The labelling can be made to customer specifications within the above-mentioned possibilities.

### Labelling Example:

Line 1: Manufacturer name  
Line 2: Machine number  
Line 3: Door identification

John SMITH  
20160916  
Door A

## Choice of Colors <sup>1)</sup>

Type plate	Font color	Code / Article number
Orange	Black	FC 01 0063001
Yellow	Black	FC 02 0063004
Red	White	FC 03 0063003
White	Black	FC 04 0063002
Black	White	FC 05 067022
Light blue	White	FC 06 068233
Blue	White	FC 07 063005
Dark Blue	White	FC 08 067025
Apple green	White	FC 09 067024
Green	White	FC 10 0063006
Almond	Black	FC 11 067019
Brown	White	FC 12 067023
Dark brown	White	FC 13 067021
Light grey	Black	FC 14 067020
Brown-grey	White	FC 15 067018
White	Red	FC 16 068234
White	Light blue	FC 17 068765
Yellow	Red	FC 18 068766
Black	Gold	FC 19 068767

<sup>1)</sup> The colours shown are non-binding print reproductions. They can deviate from real serial patterns.





