

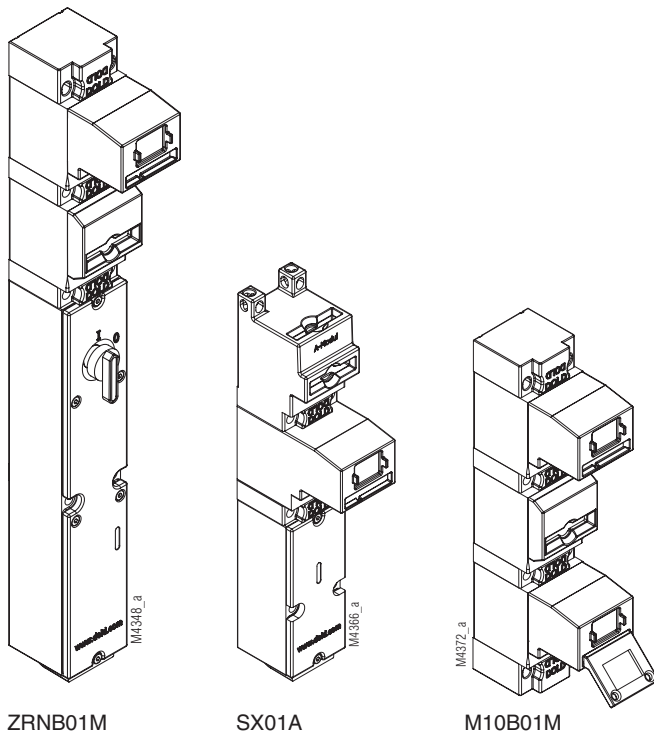
### STS-System Benefits

- EU-Test certificate according to the directive 2006/42/EG, annex IX
- For safety applications up to PLe/Category 4 according to EN/ISO 13849-1
- Modular and expandable system
- Rugged stainless steel 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°
- Especially suitable for inverted function at difficult mounting position and additional electrical actuator monitoring

### Installation Examples



### Approvals and Marking



### Application

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!**

### 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 SX01A

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:	Stainless steel VA4 / AISI 316L
Ambient temperature:	- 40°C bis + 100°C
Version:	<ul style="list-style-type: none"><li>• Key module 01: <b>Removal</b> of the key to release the upper module and lock the lower module</li><li>• Key module 10: <b>Inserting</b> the key to release the upper module and lock the lower module</li></ul>

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

## Ordering Designation

Key module 01  
Article number: 0061871

Key module 10  
Article number: 0061870

Key module 01S  
Article number: 0063372

Key module 10S  
Article number: 0063373

Key module R1  
Article number: 0062930

## 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 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 or 10S.

### Examples of devices with protective cover:

M10SA, M11SBM, SX02SM.

### Special design R1 module

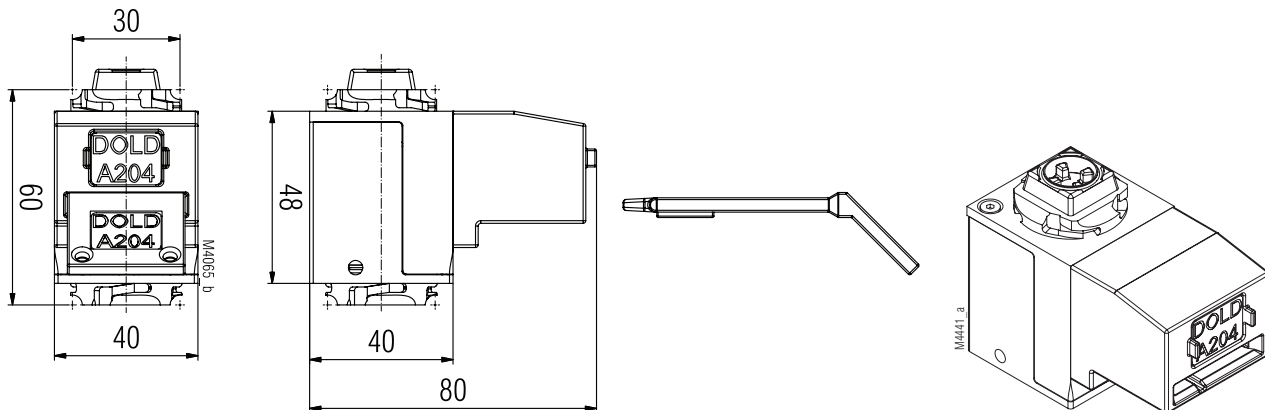
This module functions like key module 01, the key is not fixed in its position when inserted but is ejected again with spring force.

This module is used, for example, in inching mode.

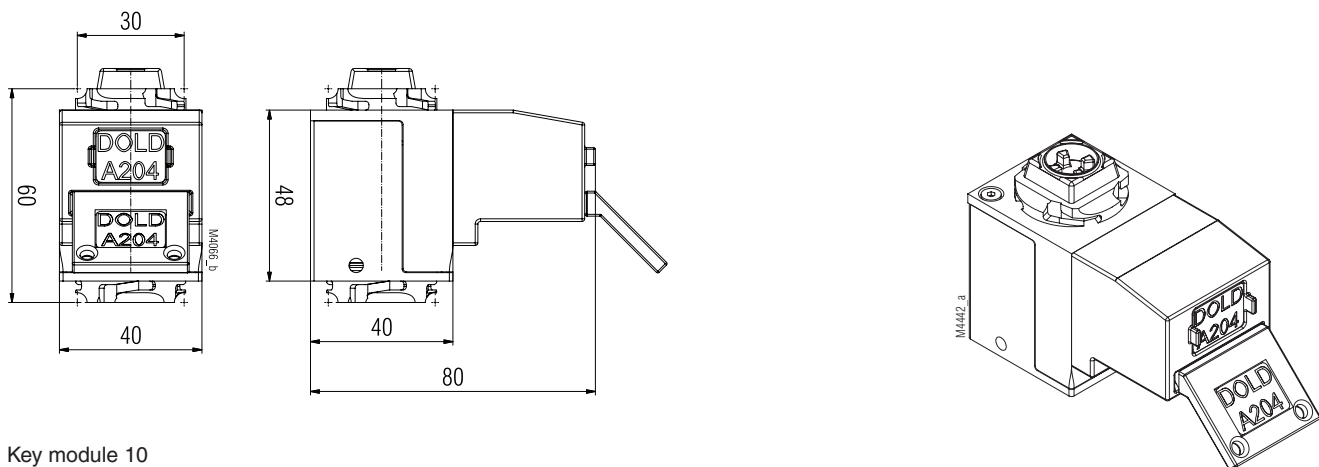
### Example for a unit with ejection spring:

SXR1.

## Dimensional Drawings [mm]



Key module 01



Key module 10