

MECHANICAL OVERLOAD SWITCH SM4067 SM4068



USERGUIDE

IMPORTANT INFORMATION



IT IS IMPORTANT NOT TO INSTALL THE SELECTED UNIT ON A NEW WIRE WITH DIFFERENT DIAMETER, THAN THE FIRST INDICATED. THIS COULD RESULT IN THE UNIT IS NOT WORKING PROPERLY. PLEASE CONTACT VETEC FOR ADVICE.

Example of label on a SM4067 unit with 2 springs.



MODEL: SM4067-2 = build for 6-13 mm wire 2 springs in this unit
UL 500V: = voltage approval on switch
HYSTERESIS 4%: = distance from the point where the unit switches on and when it will turn off
S/No: = unique serial number on this unit
Rope Size: = can be used from 6 to 13 mm wire
LOAD: = 0-800 KG (in this unit the crane has 2 revings (a 1,6T crane))

These instructions are solely directed towards qualified installers. The information shall not be handed to end users.

READ THE INSTALLATION INSTRUCTIONS CAREFULLY BEFORE MOUNTING AND INSTALLING THE PRODUCT.

The instructions that contain information on the installation and configuration of the unit are not intended to be passed on to the end user. The machine manufacturer is obliged to produce an operating manual for the machine. Only such information may be passed on to the end user, that is needed to operate the machine correctly.

According to the European law, instructions directed to end users shall be produced and submitted from the operator that can overlook the final usage of the products. When parts of machines are joined together, they become a new machine and should no longer be looked at as separate machines.

- Allow only licensed or qualified personnel to install the product.
- Use undamaged cables. No cables should hang loose.
- Avoid installing in areas affected by strong vibrations.
- Make sure that the user is following the instructions.
- Make sure that the user has reached the certified age to operate the equipment.
- Make sure that the user is not under the influence of drugs, alcohol and medicines.
- Make sure that the user keeps a good overview of the work area.
- Always contact your representative for service and maintenance work.
- Keep the instructions for future reference.

GENERAL

This manual describes how the operation of the SM4067/68 (2-6) can / should occur. Overload protection SM4067/68 (2-6) function is to ensure that you do not overload the crane.

Overload Switch

Mechanical Overload Switch

Product Description

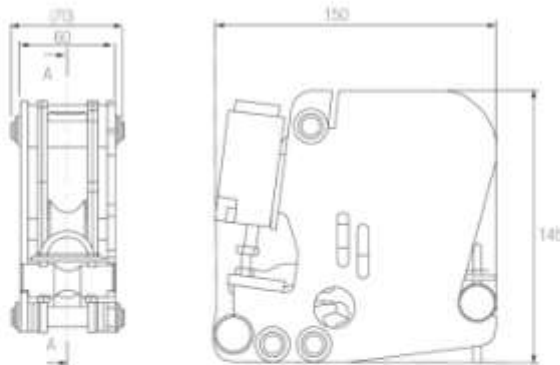
SM4067/SM4068 is standart delivered with 2 retraction point in use for crane-certificale(for example 5&10T crane overload limits)



Specifications

Article number:	SM4067, SM4068	
Application areas:	Mechanical overload switch for hoisting equipment	
Hysteresis:	max. 4% FS	
SM4067	for wire: Ø6-13mm	
SM4068	for wire: Ø13-20mm	
Maximum load:	50 KN	
Size (w x h x l):	SM4067/68:	70 x 145 x 150
Weight:	SM4067/68:	3,7 kg

- Minimal lifting height reduction / very compact size (only 150mm length)
- Quick and precise installation with simple tools
- Mounted on the dead end of the wire rope
- An opening to the spring makes possible to see when the switch is adjusted correctly
- Available ex. stock (DK)
- The same model can be adjusted to fit different wire sizes and kg/ton



ATEX / IECEx Approved to
Ex ia IIC T6
Ex tD A20 IP68 T85C



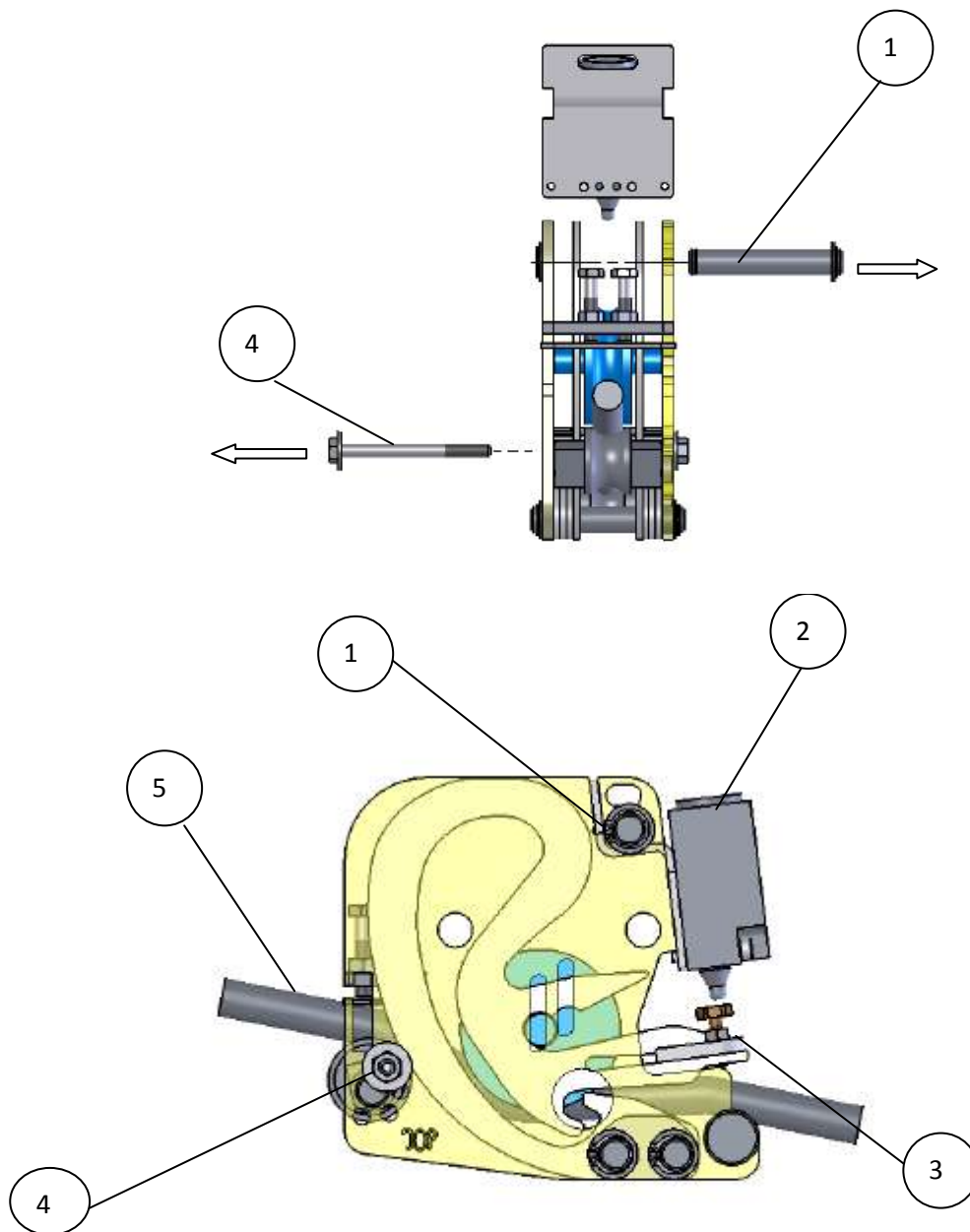
VETEC APS · DENMARK

Phone: +45 85 91 88 02 · Fax: +45 85 91 88 02
Email: post@vetec.dk · www.vetec.dk

VETEC ASIA PACIFIC PTE. LTD. · SINGAPORE

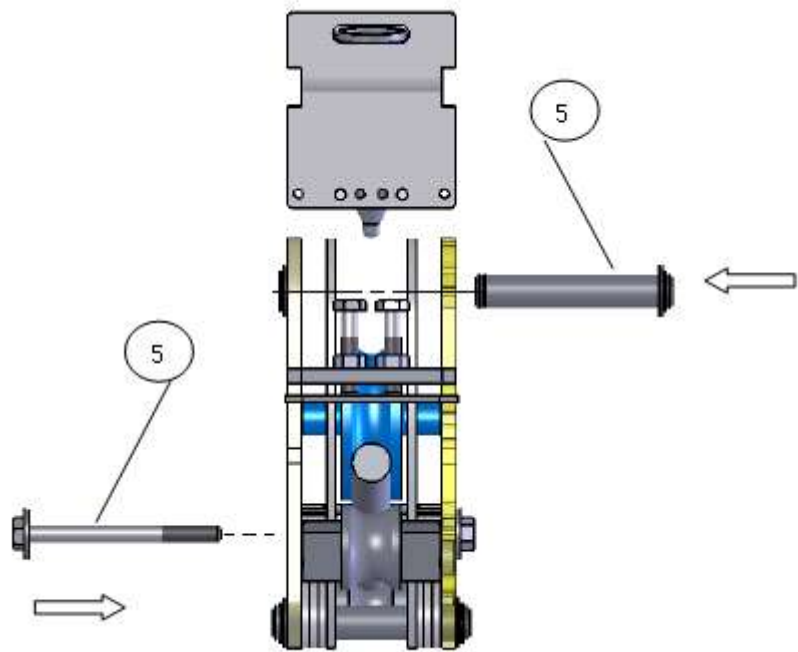
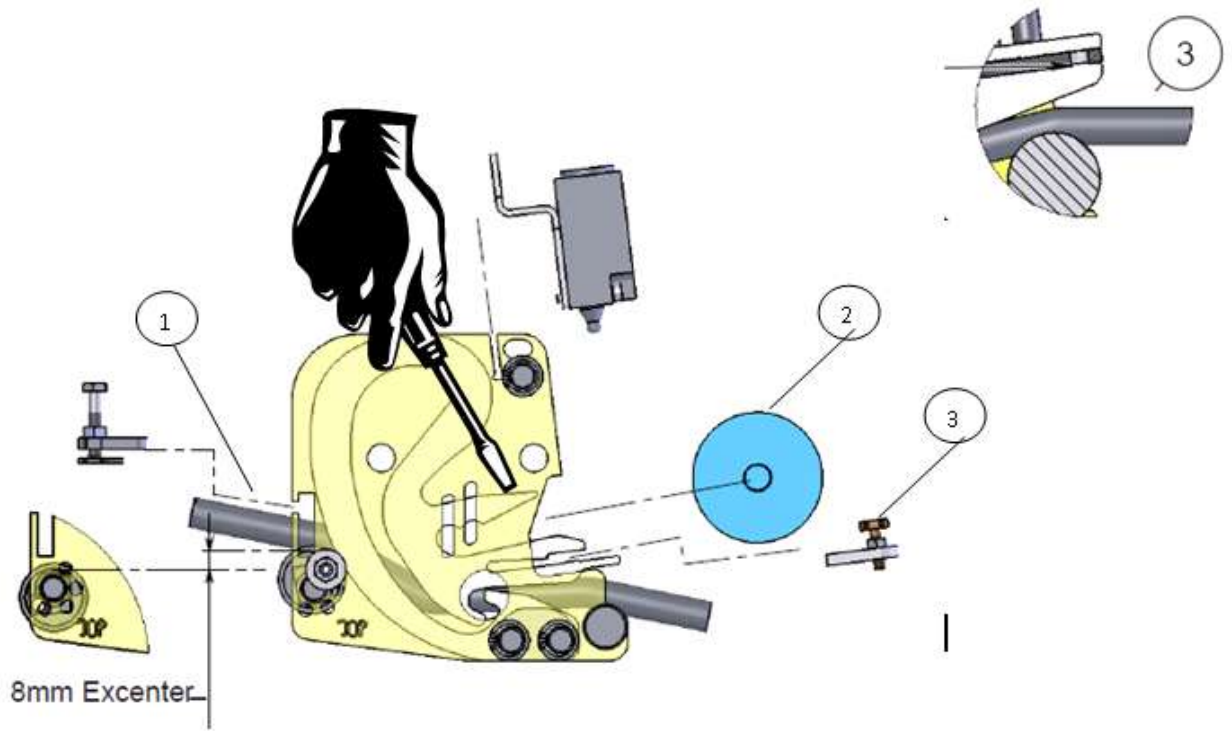
Phone: +65 81 27 90 82 · Hp: +65 81 27 90 82
Email: ls@vetec.sg · www.vetec.sg

MOUNT/INSTALL: Disassemble in order to mount the wire

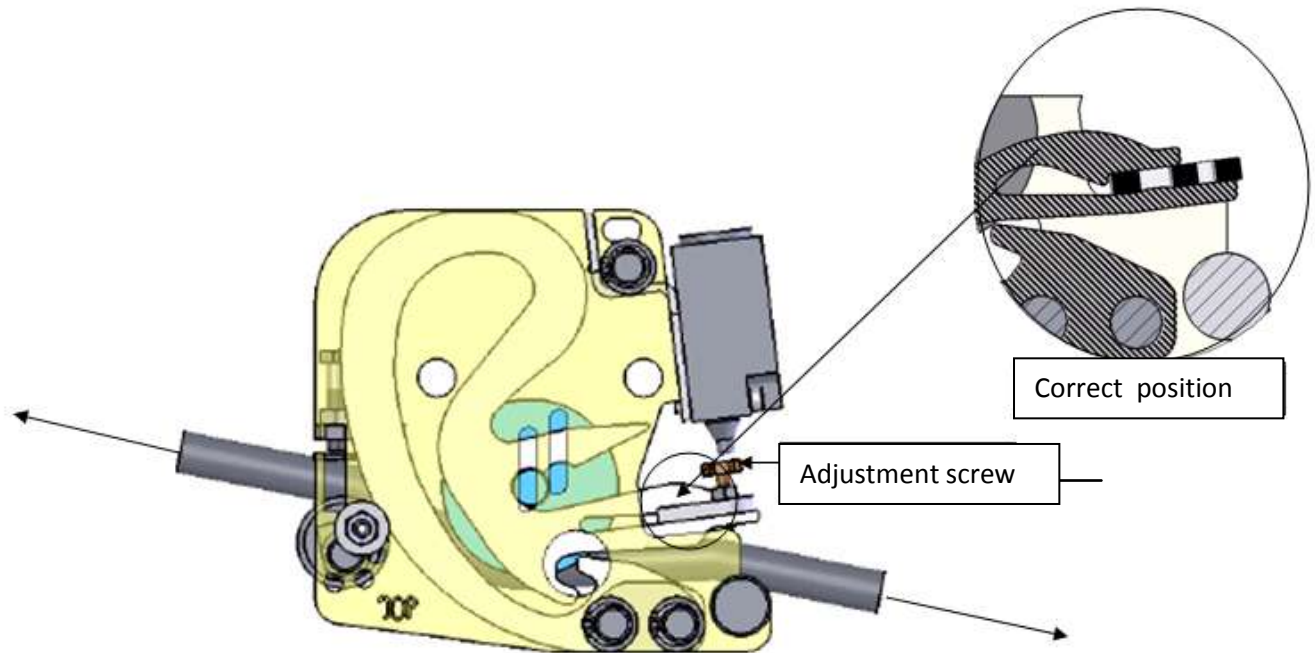


1. Lock ring of axle is removed, axle is pulled out
2. Positioning block lifted free of the control devices
3. Sensing plate with adjustment screw is pulled free
4. Pulley wheel removed
5. The unit is placed on the wire

MOUNT/INSTALL: Assemble for mounting the wire



1. Wire should be located as shown in the illustration
2. (1) The thin support plate secured with the help of the 2 allen screws.
3. (2) Wire wheel pressed into place (using the appropriate wrench, remember to grease or oil)
4. (3) plate is pushed.
5. (4) plate with sensor switch mounted again
6. (5) Lock Pin, to be locked again with the locking ring ..

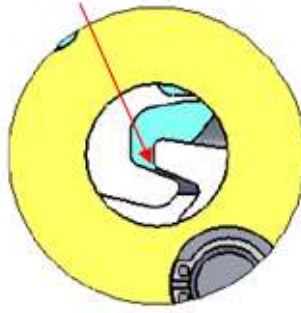


Operating the SM4067/68

1. Check that all components are properly Attach see Fig above
2. Connect the switch make sure that wire is not pinched (see also. Description)
3. Adjust the switch using the adjustment screw see Fig
4. Check visually that the springs do not reach their maximum load see Figure below If spring is near max load mount additional 2 spring which must always be paired an equal number of springs on each side of the pulley wheels and max 3. If the spring is near max. load there must be mounted additional springs on each side of the pulley wheel.



No. 1 open position

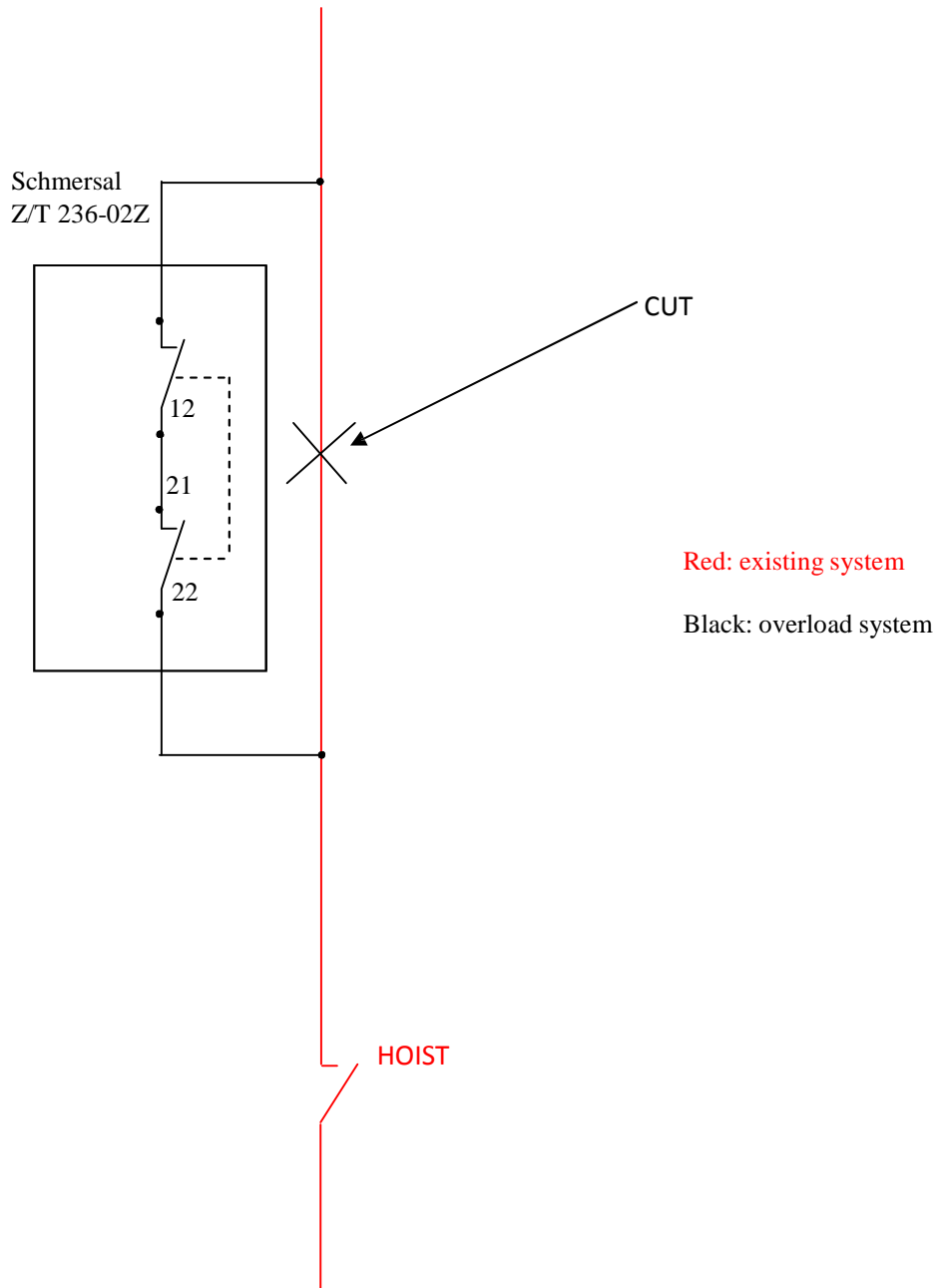


No. 2 Locking position



The adjustment is correct is there is air between the Springs see. Fig 2.

PRINCIPAL DIAGRAM



Principal diagram for implementing mechanical overload to Existing crane system

Only for theoretical use, existing crane diagram needs to be Taking in mind when implementing overload system

MAINTENANCE MANUAL

The following sections review the maintenance of Overload Protection SM4067/68(2-6)

The following is recommended to be checked:
Services and Control Point

Daily routine-check

1. Search the Overload safety for any visual fractions or deformations.
2. Make sure that the switch is functional.
3. The wire must be in the pulley, and the Overload safety should be firmly attached.

Monthly routine-check and maintenance

4. Make sure the spring profile is not in locking position, when the device is at maximum load.
5. Lubricate the wire roll, wire and spring profile with KK-2002 Chain oil or something similar.

DISPOSAL

If SM 4067/68 (2-6) must be dismantled for scrap, the following are observed: SM4065-N (2-8) contains components that must be disposed of in accordance with the country's relevant environmental regulations on the destruction and disposal at the disposal of hazardous waste.

These rules apply to:

- Mechanical Components
- Plastic and rubber components
- Components are surface treated
- Electrical components

GUARANTEE

Vetec's products are covered by a guarantee against material, construction or manufacturing faults. During the guarantee period, Vetec may replace the product or faulty parts with new. Work under guarantee must be carried out by Vetec or by an authorized service centre specified by Vetec.

The following faults are not covered by the guarantee:

- Faults resulting from normal wear and tear.
- Parts of a consumable nature.
- Products that have been subject to unauthorized modifications.
- Faults resulting from incorrect installation or use.
- Damp or water damage.

SERVICING & REPAIRS

Make sure that repairs and maintenance are only carried out by qualified personnel. Use only spare parts from Vetec. Contact your dealer if you want to make a complaint about a product or require other service. Always have the following details at hand when you contact a dealer about a complaint or service issue: Name of the system, model and a description of the problem. If you need to return a product, the invoice number and delivery date should be included.

CARING

- Keep the product in a dry, clean place.
- Make sure that contacts are kept clean.
- Wipe off dust using a slightly damp, clean cloth.
- Never use cleaning solutions or high-pressure water.

INFORMAITON:

Incorporated
Machinery

Vetec M

Is manufactured

• Ma
by
of 2

The following nation

- DS / EN 1207

Part-machine should not be
consistently assessed and fou
20

Datasheet - TS 236-02Z

Position switch / 236 thermoplastic enclosure - DIN EN 50047 with Actuator / 236 Plunger S



Image

Preferred typ



- thermoplastic enclosure
- Good resistance to oil and petroleum spirit
- Wide range of alternative actuators
- 30 mm x 58,5 mm x 30 mm
- 1 Cable entry M 20 x 1,5
- Double-insulated
- Mounting details to EN 50047
- Actuator heads can be repositioned by 4 x 90°

(Minor differences between the printed image and the original product may exist!)

Ordering details

Product type description	TS 236-02Z
Article number	1163385
EAN code	4030661203454

Approval

Approval



Classification

Standards	EN ISO 13849-1
Box Normally-closed contact (NC)	20.000.000
Mission time	20 Years
notice	$MFTF_{90} = \frac{B_{90}}{0,1 \times n_{90}}$ $n_{90} = \frac{d_{90} \times f_{90} \times 3600 \text{ s/hr}}{t_{c90}}$

Global Properties

For further questions please
ask Vetec for help:
Tel: +4565905802

Vetec Weighing & Radio
Technology
Lucermarken 18a
DK-5260 Odense S

MICRO SWITCH: