



# Wire Rope Overload Guard KSW-2R

## Installation Instructions

**KSW-2R36**  
Ø 16 ... 36

**KSW-2R44**  
Ø 36 ... 44

Guard plate with 2 pieces  
M12 hex nuts

2 rope clamp with 2 pieces  
M10 hex nuts

Guard plate with 2 pieces  
M12 hex nuts



Guard plate with 2 pieces  
M16 hex nuts

2 rope clamp with 2 pieces  
M12 hex nuts

Guard plate with 2 pieces  
M16 hex nuts

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### 1. Description

The rope guard is intended for indirect measurement of the tensile force in ropes. For example at the fixed end of a rope.

The output signal is depend from the characteristic of rope and assembly. Deviations from the factory setting are possible!

Taking into account the measuring characteristics of the KSW-2R rope monitor and the properties of the rope, the rope monitor is mainly used for measuring load points.

### 2. Tools (not included in the delivery)

	Description	KSW-2R36	KSW-2R44
1	Open-end or ring spanner for loosening and tightening the two hex nuts for the (upper) rope clamping jaw	17mm-wrench	19mm-wrench
2	Open-end or ring spanner for loosening and tightening the four hex nuts used to clamp the two mudguards	19mm-wrench	24mm-wrench
3	If necessary, a safety line to hold the KSW-2R by the two handles during installation.	-	-

### 3. Installation instructions

- (1) Open the hex nuts from the rope clamp jaw and remove it. Then loose the four hex nuts and remove the two guard plates.
- (2) Place the KSW on the cable with the cable output downwards.
- (3) Mount the upper rope clamp with the two hex nuts. Tighten the two hex nuts evenly until the cable reaches the lower rope clamp.

Overview for required shims and tightening torques of nuts. The overview serves for orientation.

#### KSW-2R36

Rated force	80 kN	120 kN	160 kN	200 kN
Shim	0	2 mm	3 mm	4 mm
Tightening torque	15 Nm	15 Nm	20 Nm	20 Nm

#### KSW-2R44

Rated force	150 kN	250 kN	350 kN	500 kN
Shim	0	4 mm	6 mm	7 mm
Tightening torque	25 Nm	25 Nm	25 Nm	25 Nm

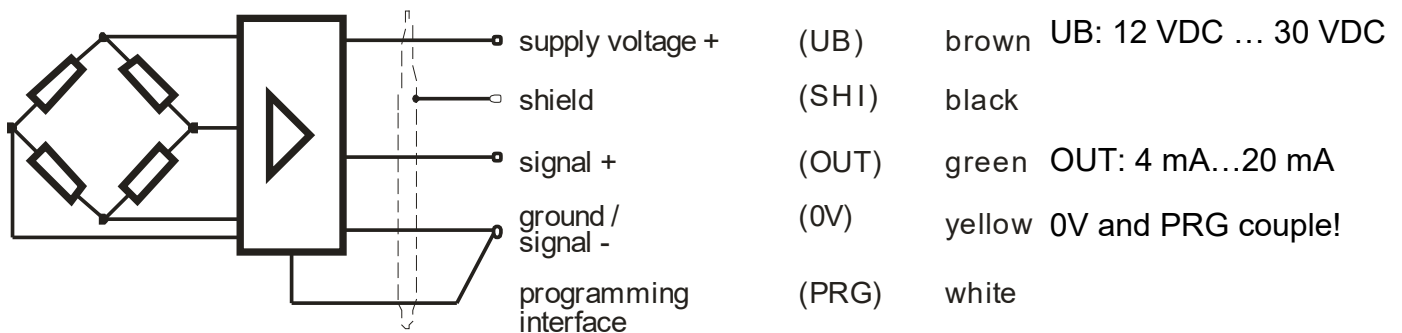
(4) Check the position of KSW-2R at the rope!

- The KSW-2R should not be damaged by the hook of the rope rolls. If necessary, correct the position of the KSW-2R on the rope.
- The rope must press during measurements on both rolls and on the bottom rope clamp.
- Especially with new ropes can be expected with a twist at the first load cycles. In this case, the position of the cable must be selected. The two protective plates are installed to prevent the rope from slipping when it suddenly becomes unloaded.

(5) Connect the cable with the following evaluation unit and check the function with load

#### 4. Connection assignment

- KSW-2R-E / ... / ... / 4-20 mA



- KSW-2R / ... / ... / 1 mV/V

