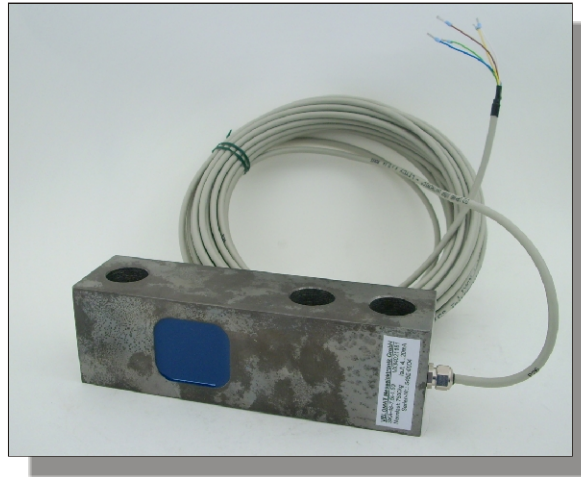


# Force Transducer SKA-48-7,5t-1.50

article-no: VX34021181  
serial-no: key 45E



## description

The force transducer works according to the principle of the shear force measurement crossways to the longitudinal axis.

The SKA-48 is suitable for use to band, containers, platform and hanging train balances but also for measuring strengths in terms of machine parts, levers, axes etc.

It is executed as a beam with a measuring cell. The beam shape and two drillings with 22 mm of diameters permit an assembly suitable for mechanical engineering. The strength introduction is carried out via a thread M20 x 1,5.

The application room for the strain gauges is spilled with a very elastic mass and therefore protected from mechanical and chemical damages.

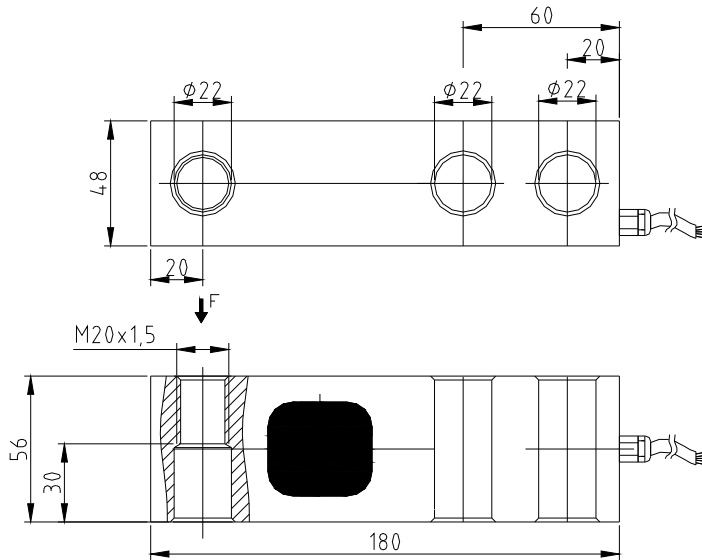
The strain gauge bridges measure the deformation caused by clipping strengths on the beam in the measuring cell. An integrated amplifier delivers the measuring signal from 4 to 20 mA.

In the unloaded state can by add-ons of the calibrating checking signal (software calibration) the nominal output current be produced. There is possible a check of the following measuring facilities with that.

The SKA-48 is provided for the direct connection to a control or a controlling switch.

The shield of the cable is not connected basically with the surface of the force transducer.

## specification



## mechanical execution

diameter, force transmission and mounting see assembly drawing

<b>weight</b>	approx. 3,36 kg
<b>material</b>	stainless steel
<b>degree of protection</b>	IP 67
<b>SKA</b>	<b>48-7,5t</b>
<b>nominal force / nominal load</b>	7,5t (73,575 kN)
<b>max. overload range / force limit</b>	150 % of nominal force
<b>breaking force</b>	400 % of nominal force

## electrical execution

<b>measuring signal (output)</b>	4 - 20 mA
<b>operating voltage</b>	12 - 24 V DC $\pm 20$ %
<b>current consumption</b>	max. 45 mA
<b>calibration tolerance</b>	< 0,50 % of final value*
<b>non-linearity</b>	< 0,25 % of final value*
<b>hysteresis</b>	< 0,15 % of final value*
<b>temperature coefficient:</b>	
<b>of zero signal</b>	$\leq 0,04$ % of final value / K
<b>of the sensitivity</b>	$\leq 0,04$ % of set point / K
<b>insulation resistance</b>	> 5.000 M $\Omega$
<b>nominal temperature range</b>	-15 °C to +70 °C
<b>operating temperature range</b>	-25 °C to +80 °C**

## cable and connection

<b>cable length / cable type</b>	1,5 m LiYCY 4 x 0,14 mm <sup>2</sup>										
<b>cable end</b>	wire-end-sleeve										
<b>wiring connections</b>	<table border="0"> <tr> <td>brown</td> <td>operating voltage U<sub>B</sub></td> </tr> <tr> <td>green</td> <td>ground / earth GND</td> </tr> <tr> <td>yellow</td> <td>measuring signal output I<sub>m</sub></td> </tr> <tr> <td>white</td> <td>calibration signal (low active) CC***</td> </tr> <tr> <td>blue</td> <td>shielding (only in the case of a shielded cable)</td> </tr> </table>	brown	operating voltage U <sub>B</sub>	green	ground / earth GND	yellow	measuring signal output I <sub>m</sub>	white	calibration signal (low active) CC***	blue	shielding (only in the case of a shielded cable)
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\* These details are depending on the fit, the resistance moment and the installation length. They are reached with favorable values.

\*\* only for the case that the cable is laid with fastening (depending on cable type)

\*\*\* This cable should be connected at the operating voltage unless the calibration signal is used. (only applicable to executions with amplifier)