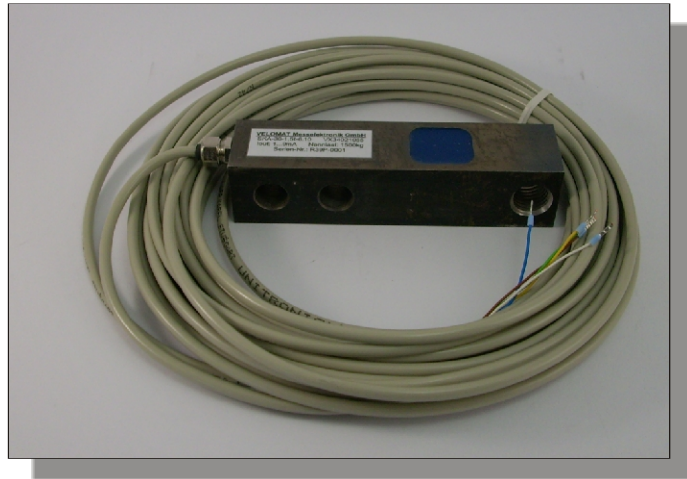


Force Transducer SKA-30-1,5t-6.10

article-no: VX34021055
serial-no: key 39P



description

The force transducer works according to the principle of the clipping strength measuring crossways to the longitudinal axis.

The SKA-30 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 measuring cells. The beam shape and two drillings with 13 mm of diameters permit an assembly suitable for mechanical engineerings. The strength introduction is carried out via a thread M16.

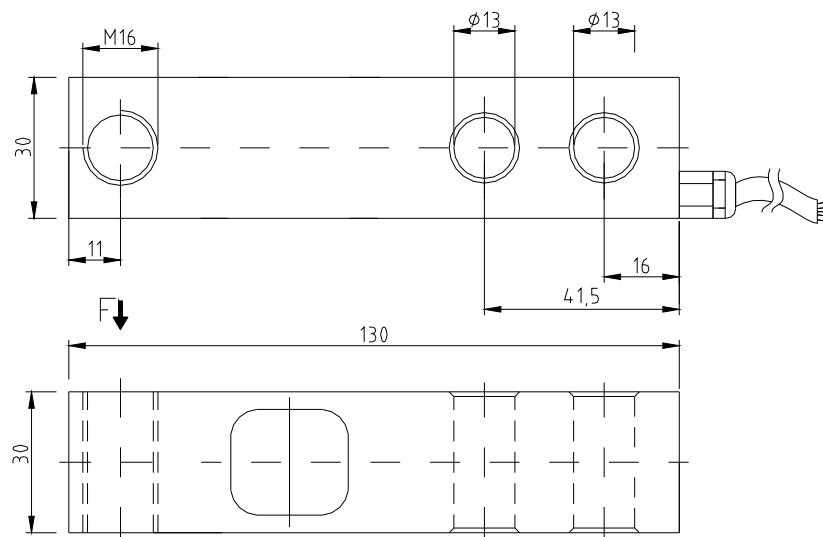
The application room for the strain gauges is spilled with a very elastic mass and therefore protected from mechanical and chemical damages.

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 1 to 9 mA.

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

The SKA-30 is provided for the direct connection to a control or a controlling switch.

specification



mechanical execution

diameter, force transmission and mounting see assembly drawing

weight approx. 1,00 kg
material stainless steel
degree of protection IP 67

SKA **30-1,5t**
nominal force / nominal load 1500 kg
max. overload range / force limit 150 % of nominal force
breaking force 400 % of nominal force

electrical execution

measuring signal (output) 1 - 9 mA
operating voltage 12 - 24 V DC ± 20 %
current consumption max. 45 mA
calibration tolerance $< 0,50$ % of final value*
non-linearity $< 0,25$ % of final value*
hysteresis $< 0,15$ % of final value*
temperature coefficient:
of zero signal $\leq 0,04$ % of final value / K
of the sensitivity $\leq 0,04$ % of set point / K
insulation resistance > 5.000 M Ω
nominal temperature range -15 °C to +70 °C
operating temperature range -25 °C to +80 °C**

cable and connection

cable length / cable type 10 m LiYCY 4 x 0,14 mm²
cable end wire-end-sleeve
wiring connections
brown operating voltage U_B
green ground / earth GND
yellow measuring signal output I_m
white calibration signal (low activ) CC***
blue shielding (only in the case of a shielded cable)

* 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)