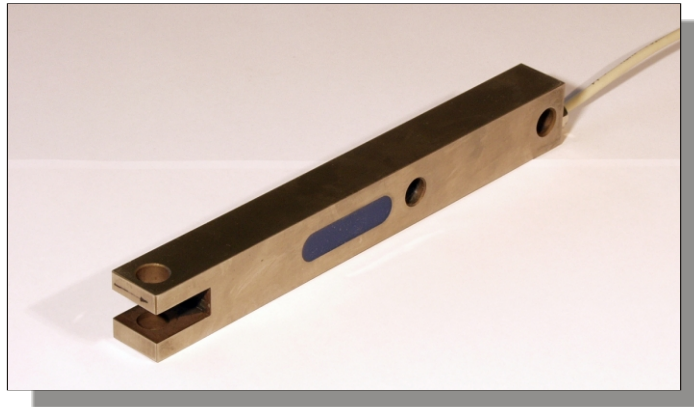


Force Transducer SKA-24-0,4t-1.00

article-no: VX34020199
serial-no: key 26A



description

The force transducer works according to the bending force measurement principles.

The SKA-24 is designed for application at conveyor scales, bin-type weighing devices, platform scales and overhead conveyor scales, but can also be used for measuring the powers applied on machine parts, levers, axles etc.

The device has been designed as a bending beam with two measuring cells. Due to the beam shape and two 11 mm size boreholes, all machine building requirements will be met when mounting this component.

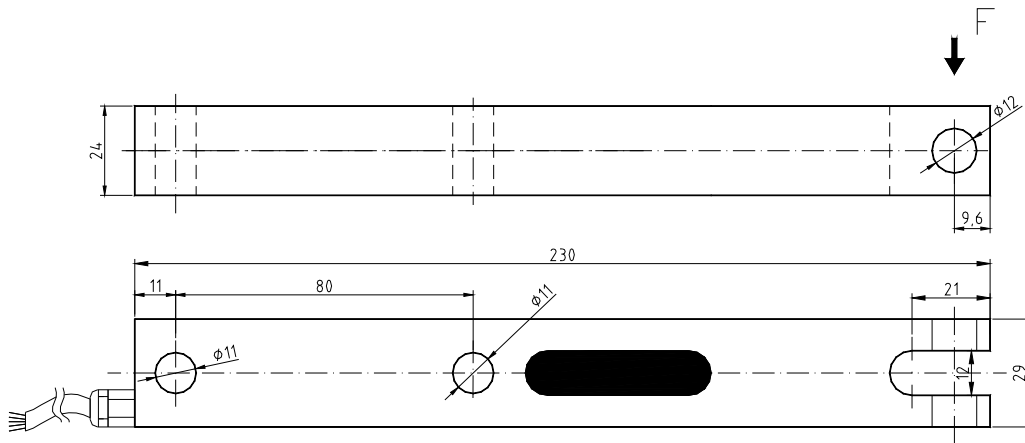
The force transfer is carried through by use of a borehole \varnothing 12 mm (forked introduction).

The measuring cell for the strain gauge has been cast with a high-elastic compound and is thus protected against mechanical or chemical damages.

The strain gauge bridges measure the caused deformation in the measuring cell due to the bending powers at the beam. The strap balance is 1,5 mV / V.

The SKA-24 is planned for the direct connection with an amplifier.

specification



mechanical execution

diameter, force transmission and mounting see assembly drawing

weight approx. 1,0 kg
 material stainless steel
 degree of protection IP 67

SKA **24-0,4t**
 nominal force / nominal load 400 kg
 max. overload range / force limit 150 % of nominal force
 breaking force 500 % of nominal force

electrical execution

measuring principle wheatstone full bridge of strain gauges
 input / output resistance 350 Ω / 350 Ω
 nominal sensitivity approx. 1,4 mV / V (accurate value: see type label / banderole)
 excitation voltage max. 12 V AC / DC
 current consumption max. 35 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 2,0 m LiYCY 4 x 0,14 mm²
 cable end tinned
 wiring connections
 brown excitation voltage Us+ / B+
 yellow excitation voltage Us- / B-
 green signal Ud+ / S+
 white signal Ud- / S-
 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)