

Force Transducer ZKA-20-3,25t-1.50

article-no.: VX34020711
serial-no.: key 27T



description

The force transducer works according to the principle of the strength measuring in the direction of the longitudinal axis.

Tractive forces can be included among others at lifts, cranes, gondolas as well as at braced of masts, towers, platforms etc.

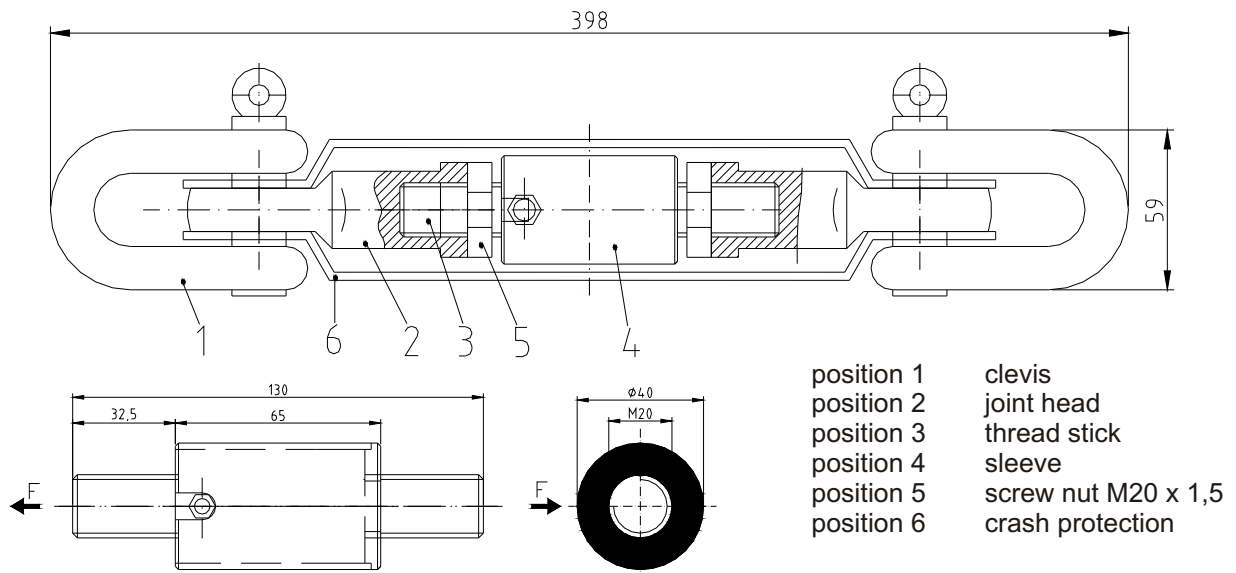
The force transducer ZKA-20 is listed as a thread stick (on both sides M20). This permits a simple and universal fastening. About clevis is fastening possible.

The application room for the strain gauge is protected by an aluminium tube, which is spilled with a highly elastic mass from mechanical and chemical damages.

The strain gauge bridges measuring the length change and crossways stretching (vertical and horizontal expansion) caused by pulling forces on the force transducer. An integrated amplifier provides a measuring signal of 4 - 20 mA.

The ZKA-20 is assigned for the direct coupling to an automatic control or a controlling switch.

specification



position 1	clevis
position 2	joint head
position 3	thread stick
position 4	sleeve
position 5	screw nut M20 x 1,5
position 6	crash protection

mechanical execution

weight	approx. 3,1 kg
dimension	thread stick = M20, sleeve = 40 mm length stick = 140 mm, length over all = 398 mm
force introduction	axial (see applikation sketch)
material	steel stick / aluminium sleeve
environmental protection	crash protection = V2A IP 67
ZKA	20-3,25t
nominal force	3,25 t
max. use force	200 % of the nominal force
rupture force	600 % of the nominal force

electrical execution

operating voltage	9 - 30 V DC
current consumption	max. 45 mA
measuring signal	4 - 20 mA
calibration to	t
calibration tolerance	< 0,50 % of the final value*
nonlinearity	< 0,25 % of the final value*
hysteresis	< 0,15 % of the final value
temperature coeff.	
zp.	≤ 0,04 % of the final value / K
rec.	≤ 0,04 % of the set point / K
operating condition	-25 °C to +80 °C**

connection

cable type	LiYCY 4 x 0,14 mm ²										
cable length	1,5 m										
cable end	wire-end-sleeve										
electrical connections	<table border="0"> <tr> <td>brown</td> <td>operating voltage</td> </tr> <tr> <td>green</td> <td>GND</td> </tr> <tr> <td>yellow</td> <td>measuring signal output</td> </tr> <tr> <td>white</td> <td>calibration signal (low activ)***</td> </tr> <tr> <td>blue</td> <td>protection</td> </tr> </table>	brown	operating voltage	green	GND	yellow	measuring signal output	white	calibration signal (low activ)***	blue	protection
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blue	protection										

* These details are depending on the fit, the resistance moment and the installation length. They are reached with favorable values.

** in case the laid cable is fixed

*** If the calibration signal is not used, then this cable should be clamped together with the brown wire at the operating voltage.