

Force Transducer ZKA-24-3t-1.50

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serial-no: key 46C



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-24 is listed as a thread stick (on both sides M24). This permits a simple and universal fastening. About clevis is fastening possible.

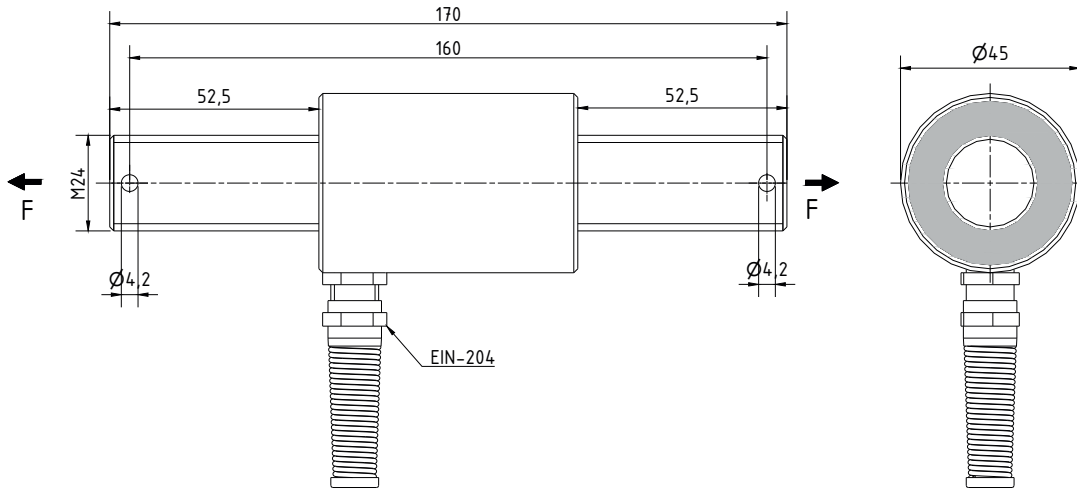
The application room for the strain gauge is protected by an aluminium tube, which is spilled with a highly elastic mass from mechanical and chemical damages.

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-24 is assigned for the direct coupling to an automatic control or a controlling switch.

The shield of the cable is connected with the force transducer.

specification



mechanical execution

diameter, force transmission and mounting see assembly drawing

weight	approx. 0,78 kg
material	rod = stainless steel / case = aluminium
degree of protection	IP 67

ZKA	24-3t
nominal force / nominal load	3000 kg
max. overload range / force limit	150 % of nominal force
breaking force	400 % of nominal force

electrical execution

measuring signal (output)	4 - 20 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	5 m SABIX D 315 FRNC 4x0,25 mm ²										
cable end	wire-end-sleeve										
wiring connections	<table border="0"> <tr> <td>brown</td> <td>operating voltage UB</td> </tr> <tr> <td>green</td> <td>ground / earth GND</td> </tr> <tr> <td>yellow</td> <td>measuring signal output Im</td> </tr> <tr> <td>white</td> <td>calibration signal (low activ) CC***</td> </tr> <tr> <td>blue</td> <td>shielding (only in the case of a shielded cable)</td> </tr> </table>	brown	operating voltage UB	green	ground / earth GND	yellow	measuring signal output Im	white	calibration signal (low activ) 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)