

# Strain Link Transducer DKA-30-20-1.00

article-no.: VX34020338  
serial-no.: key 070



## description

The strain link transducer DKA-30 serves for the grabbing of axial pressure strengths.

Use is carried out for including static and dynamic strengths to springs, platforms, press etc.

The robust form makes a universal use possible under rough conditions in the industry.

The DKA-30 works according to the compressing cylinder principle. The force introduction is alone carried out via the foot plate and the warped end wall.

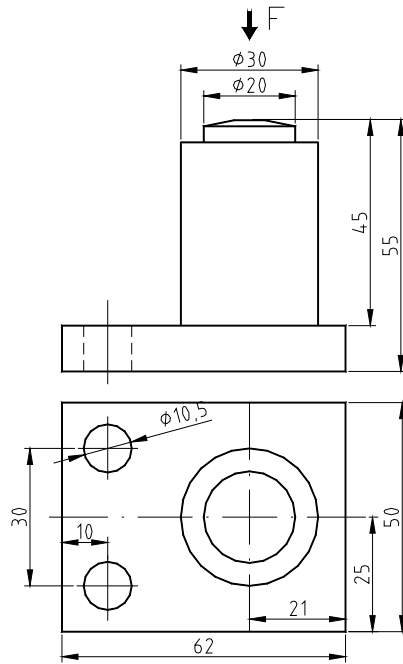
The application room for the strain gauge (dms) is spilled with a very elastic mass and therefore protected from mechanical and chemical damages.

A strain gauge-full bridge includes the deformation of the bolt which arises from pressing together.

The strap balance is on coordinated approx.  $\pm 0,01$  mV / V in the unloaded state.

The DKA-30 is provided for the connection to an amplifier.

## specification



### mechanical execution

<b>weight</b>	approx. 750 g
<b>dimension</b>	base plate 62 mm x 50 mm, diameter 30 mm
<b>material</b>	steel
<b>environmental protection</b>	IP 67
<b>DKA</b>	<b>30-20</b>
<b>nominal force</b>	20 kN
<b>max. use force</b>	150 % of the nominal force
<b>rupture force</b>	500 % of the nominal force

### electrical execution

<b>measuring principle</b>	full bridge
<b>input resistance</b>	350 $\Omega$
<b>output resistance</b>	350 $\Omega$
<b>sensitivity</b>	approx. 1,2 mV / V (see corresponding details on type label)
<b>operating voltage</b>	max. 12 V AC / DC
<b>current consumption</b>	max. 35 mA
<b>calibration tolerance</b>	< 0,50 % of the final value*
<b>nonlinearity</b>	< 0,50 % of the final value*
<b>hysteresis</b>	< 0,20 % of the final value*
<b>temperature coeff.</b>	
<b>zp.</b>	$\leq 0,04$ % of the final value / K
<b>rec.</b>	$\leq 0,04$ % of the set point / K
<b>insulation resistance</b>	> 5.000 M $\Omega$
<b>operating condition</b>	-25 °C to +80 °C**

### connection

<b>cabel type</b>	LiYCY 4 x 0,14 mm <sup>2</sup> 1,5 m										
<b>cable end</b>	wire-end-sleeve										
<b>electrical connections</b>	<table border="0"> <tr> <td>brown</td> <td>strap voltage <math>U_s+</math></td> </tr> <tr> <td>green</td> <td>strap voltage <math>U_s-</math></td> </tr> <tr> <td>yellow</td> <td>strap signal <math>U_b+</math></td> </tr> <tr> <td>white</td> <td>strap signal <math>U_b-</math></td> </tr> <tr> <td>blue</td> <td>protection</td> </tr> </table>	brown	strap voltage $U_s+$	green	strap voltage $U_s-$	yellow	strap signal $U_b+$	white	strap signal $U_b-$	blue	protection
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\* 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