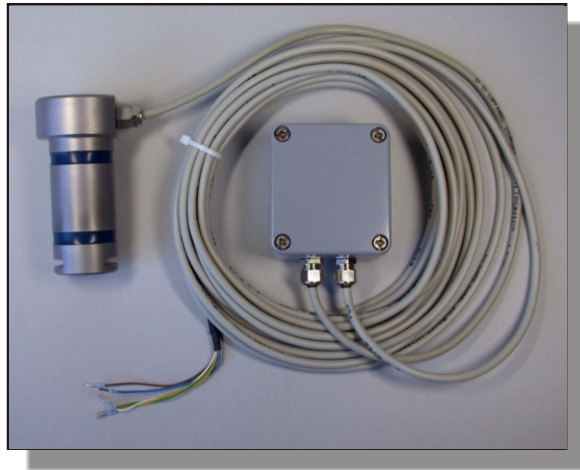


Force Transducer SB-32-50-1.60

article-no: VX34020911
serial-no: key 35T



description

The load pin works according to the principle of the clipping strength measuring transverse basis to the longitudinal axis.

The SB-32 was developed especially by work stages, cranes and conveyor technology for use at hydraulics cylinders.

The SB-32 is carried out as a locking pin with two grooves for the shear force. It is fixed by a flange on one side and on the others side by a two grooves.

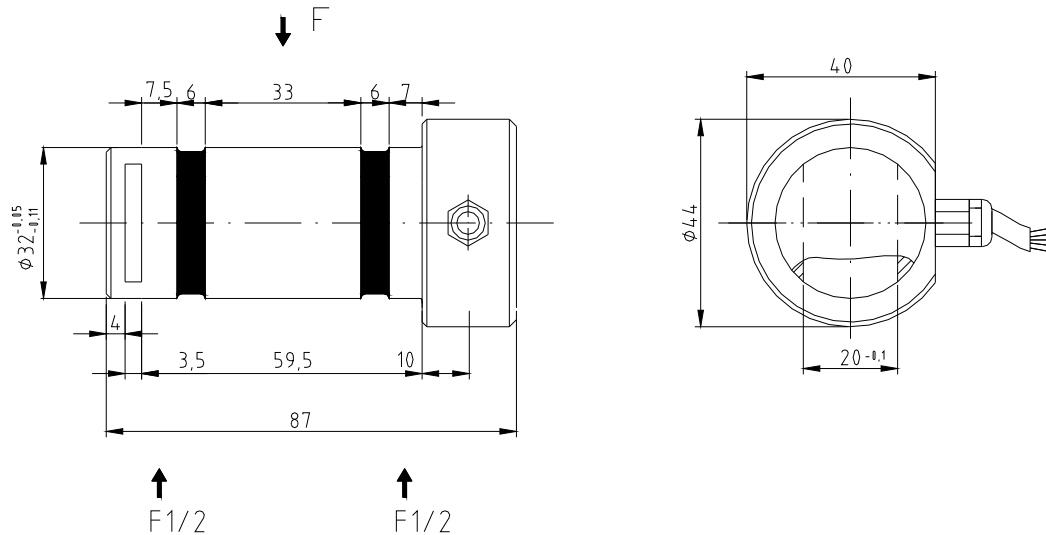
The application room for the strain gauge is spilled with a very elastic mass and therefore protected from mechanical and chemical damages.

The strain gauges full bridges measure these in the measuring cell by clipping strengths on the bolt for caused deformation. An external amplifier delivers the measuring signal by 4 and 20 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 plate load cell with the amplifier and the following measuring facilities is possible with that.

The SB-32 is provided for the direct connection to a control.

specification



mechanical execution

diameter, force transmission and mounting see assembly drawing

weight	approx. 0,60 kg
material	stainless steel
degree of protection	IP 67
SB	32-50
nominal force / nominal load	5.000 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:											
sensor - amplifier	0,5 m FD CP 4 x 0,14 mm ² UL/CSA										
amplifier - cable end	6,0 m FD CP 4 x 0,14 mm ² UL/CSA										
cable end	wire-end-sleeve										
wiring connections	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">brown</td> <td>operating voltage U_B</td> </tr> <tr> <td>green</td> <td>ground / earth GND</td> </tr> <tr> <td>yellow</td> <td>measuring signal output I_m</td> </tr> <tr> <td>white</td> <td>calibration signal (low active) CC***</td> </tr> <tr> <td>blue</td> <td>shielding (only in the case of a shielded cable)</td> </tr> </table>	brown	operating voltage U _B	green	ground / earth GND	yellow	measuring signal output I _m	white	calibration signal (low active) 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)