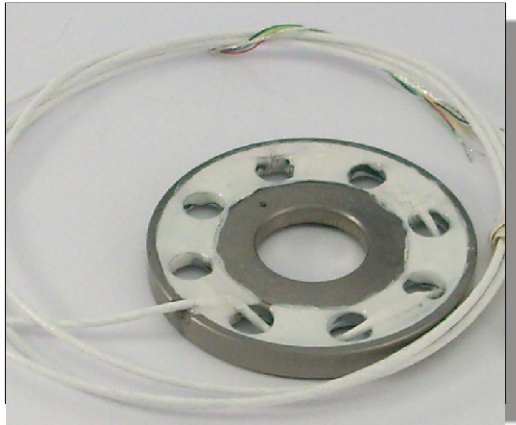


Force Transducer BKA-50-5-1.00

article-no: VX34021032
serial-no: key 8N



description

The force transducer works according to the principle of the bending stress measurement. The force transmission follows axial to the longitudinal axis.

BKA-50 is developed special for the measuring of axial forces in shafts, axes, spindles etc.

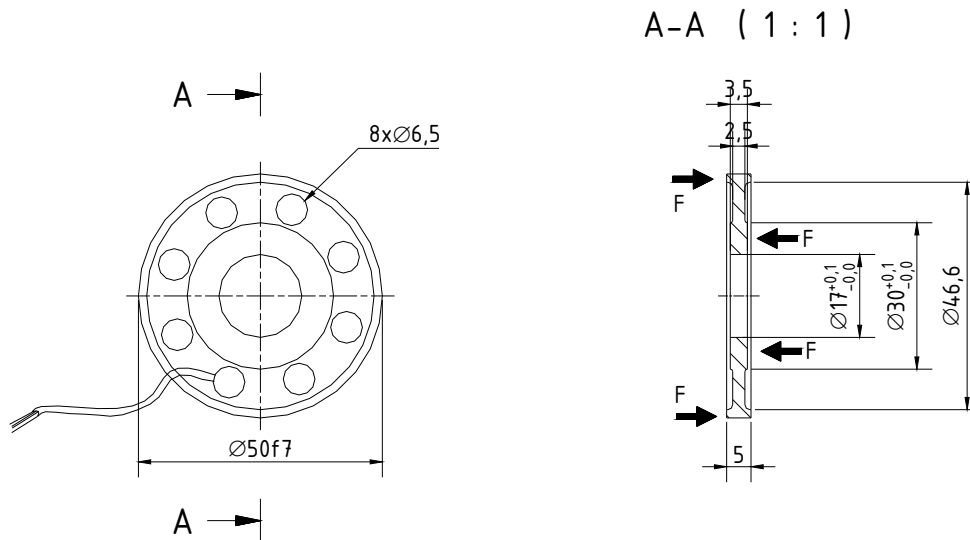
The strain gauge full bridge measures the deformation which is caused of bending forces on the measuring cell .

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

The BKA-50 is planned for the connection with an amplifier.

The shield of the cable is not connected basically with the surface of the force transducer.

specification



mechanical execution

diameter, force transmission and mounting see assembly drawing

weight approx. 0,4 kg
 material stainless steel
 degree of protection IP 64

BKA **50-50**
 nominal force / nominal load 5 kN
 max. overload range / force limit 150 % of nominal force
 breaking force 400 % of nominal force

electrical execution

measuring principle wheatstone full bridge of strain gauges
 input / output resistance 350 Ω / 350 Ω
 nominal sensitivity approx. 1,0 mV / V (accurate value: see type label / banderole)
 excitation voltage max. 12 V AC / DC
 current consumption max. 35 mA
 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 1,0 m STC-36T-6 6 x 0,04 mm²
 cable end tinned
 wiring connections
 red / brown excitation voltage Us+ / B+
 black / white excitation voltage Us- / B-
 green signal Ud+ / S+
 yellow signal Ud- / S-
 transparent 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)