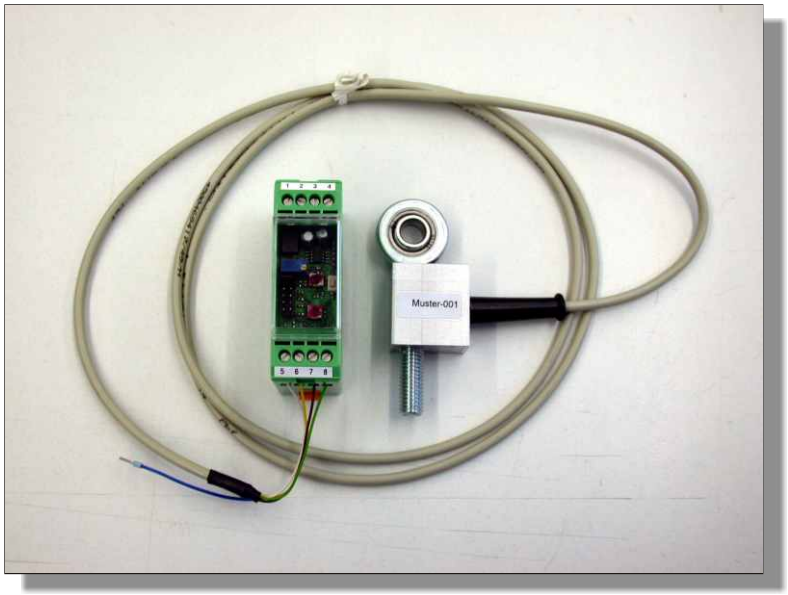
Force Transducer
ZKAG-10-4-1.XX

VELOMAT MESSELEKTRONIK



description

The force transducer works after the principle of the force measurement in the direction of the longitudinal axis.

Tractive forces are able to do it in lifts, cranes, gondolas as well as bracings at masts, towers, platforms and a. m. are registered.

The force transducer ZKAG-10 is a joint eye with a left-hand thread M10.

The application room for the strain gauges (dms) is protected by a rectangular case which is poured with a highly elastic mass before mechanical and chemical damages.

The strain gauge full bridges measures the elongation and transverse strain which is caused of tractive forces on the sensor.

An external amplifier produce the measuring signal of 4 - 20 mA. Optionally other electric executions are also possible.

A tare load can be stored by switching of the zero comparison signal on "Low".

The ZKAG-10 is planned for the direct connection with an automatic control or a controlling switch.

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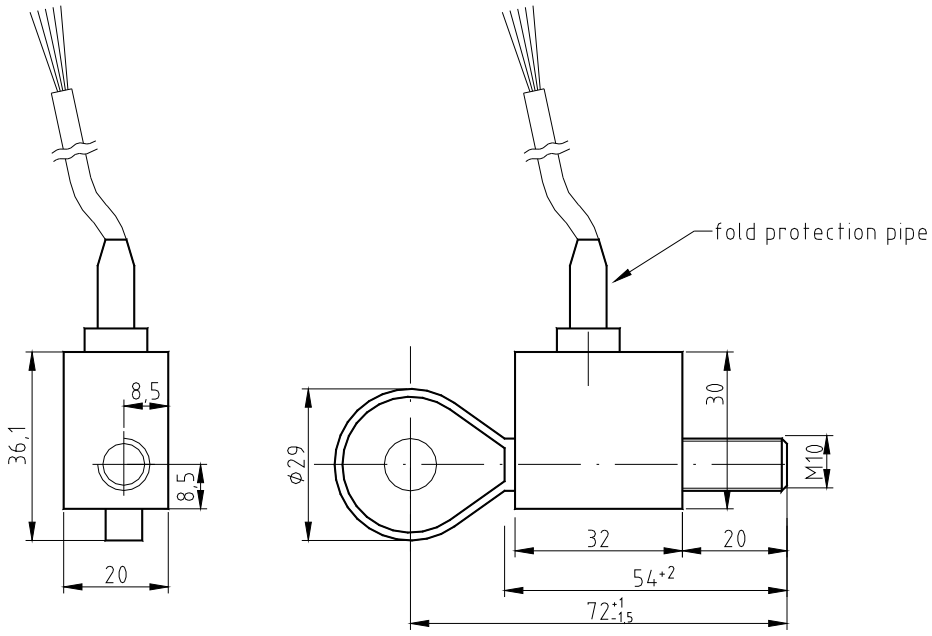
specification



mechanical execution

weight	approx. 150 g
dimension	length = 86,5 mm, width = 20 mm, height = 50 mm
material	tool steel / aluminium case
mounting	1 x left-hand thread M10
environmental protection	IP 67
ZKAG	**10-4**
nominal force	4.000 N (± 2.000 N)
max. use force	150 % of the nominal force
rupture force	400 % of the nominal force

electrical execution

sensor:	
input resistance	350 Ω
output resistance	350 Ω
operating voltage	max. 12 V AC / DC
amplifier:	VMV 0023.01
measuring signal	4 - 20 mA
operating voltage	20 - 28 V DC
current consumption	max. 45 mA
calibration in	kN
calibration tolerance	< 1 % of the final value
operating condition	-25 °C to +80 °C**

connection

cable	1,5 m	LiYCY 4 x 0,14 mm² wire-end-sleeve (example)
electrical connections	brown	strap voltage Us+
	green	strap voltage Us-
	yellow	strap signal U_D+
	white	strap signal U_D-
	blue	protection

** in case the laid cable is fixed