CK.225...

SHAFT THROUGH LOAD CELLS

- Compact design
- Easy installation
- High reliability
- Strain gauge technology
- High versatility
- Measuring range from 3000N to 10000N

A reliable web tension control may reduce web tears in order to increase productivity. CK load cells , used in a precise tension control system, are designed to carry out these delicate tasks.

They are installed in shaft through applications at the end of a measuring roller to precisely detect the resultant of the forces generated by pulling of the material depending on the wrapping angle.

CK shaft through load cells have been designed with a compact design, to easily fit them in narrow spaces, to be installed very easily and to reach a very high reliability. Depending on models CK load cells are made with single or double foil.

Operating principle: CK load cells use the strain gauge operating principle to guarantee a perfect detection of the web tension. Strain gauges resistors are mounted on a inner metal foil of a load cell and connected to each other in a ''wheatstone bridge'' able to convert a mechanical movement into an electrical signal, that must be amplified by suitable amplifiers.

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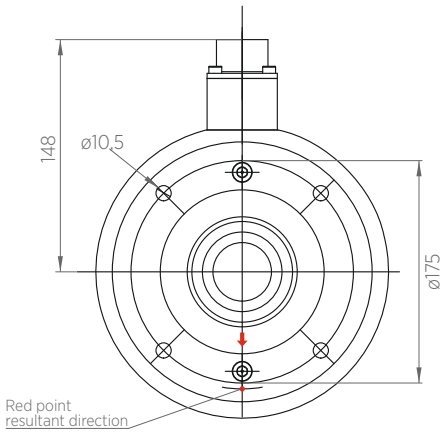
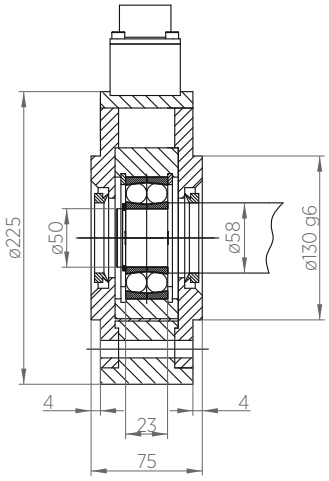
TECHNICAL DRAWING





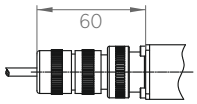
Selection model table

Code	Load N
CK.225.300.50	3000
CK.225.600.50	6000
CK.225.1000.50	10000

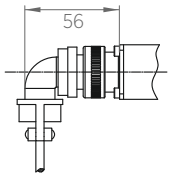
* for other model contact our technical dpt.

CK.225.xx.xx
- Hole
- Load N
- Load cell model

standard connector

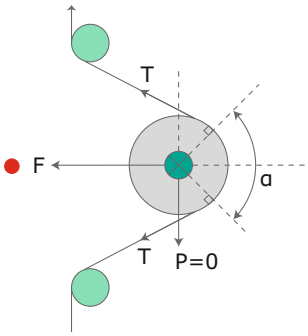


90° connector



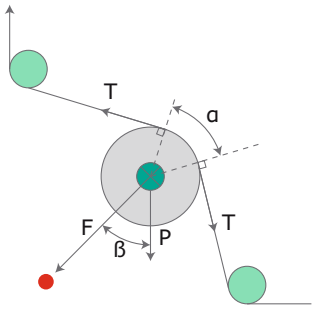
CALCULATION

HORIZONTAL RESULTANT



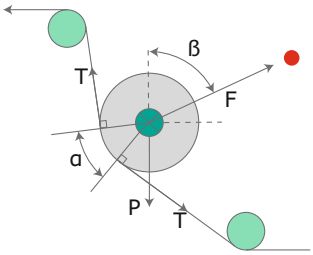
F = T sin α/2

DOWNWARD RESULTANT



F = T sin α/2 + P/2 cosß

UPWARD RESULTANT



F = T sin α/2 - P/2 cosß

TECHNICAL DATA

Precision class		0.5%
Sensitivity	Normal Supply	from 1,5mV/V to 2,0mV/V max 15V (max at full-scale value: 20 mV)
Total error-repeatability-histeresy-linearity		<0,05% full-scale value
Measuring principle		strain gauge full bridge
Strain gauge bridge resistance		350Ω Ohm
Max overload		300% full-scale value
Temperature compensation		+10°C ÷ +50°C
Working temperature		+10°C ÷ +50°C
Option		4-20 mA output

*Data are subject to technical change without notice

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