



CKF.125...

SHAFT THROUGH LOAD CELLS



- ✓ Compact design
- ✓ Easy installation
- ✓ High reliability
- ✓ Strain gauge technology
- ✓ High versatility
- ✓ Double fixing possibility:
3 or 4 holes
- ✓ Measuring range from
400N to 1500N

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.

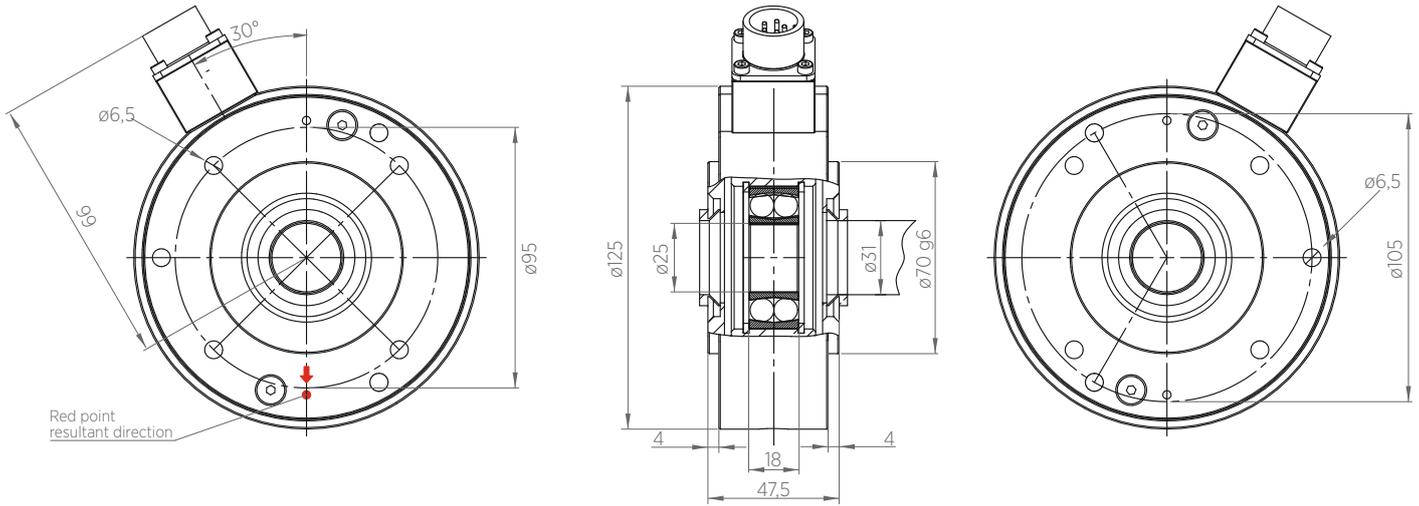
They are installed in shaft through applications at the end of a measuring roller to precisely detect the resultant of the forces generated by pulling of the material depending on the wrapping angle.

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.

CKF.125 load cells have a double fixing possibility with 3 or 4 fixing holes in order to be installed in all kind of applications.

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 an 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.

TECHNICAL DRAWING



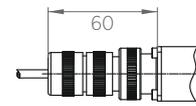
Selection model table

Code	Load N
CKF.125.40.25	400
CKF.125.75.25	750
CKF.125.150.25	1500

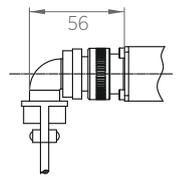
* for other model contact our technical dpt.

CKF.125.xx.xx ACC
 └───┬───┬───┬───┬───
 Hole Load N Material
 Load cell model

standard connector

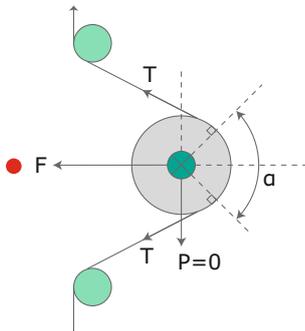


90° connector



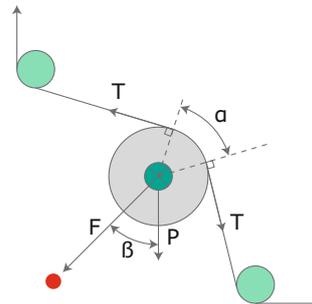
CALCULATION

HORIZONTAL RESULTANT



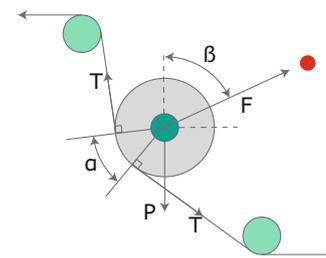
$$F = T \sin \alpha/2$$

DOWNWARD RESULTANT



$$F = T \sin \alpha/2 + P/2 \cos \beta$$

UPWARD RESULTANT



$$F = T \sin \alpha/2 - P/2 \cos \beta$$

TECHNICAL DATA

Precision class	0.5
Sensitivity	Normal Supply from 1,5mV/V to 2,0mV/V 10V - max 15V
Total error-repeatability-hysteresis-linearity	< ± 0,05% end scale value
Measuring principle	strain gauge full bridge
Strain gauge bridge resistance	350Ω Ohm
Max overload	300%
Temperature range	0°C/+60°C
Option	4-20 mA output
Material	steel

*Data are subject to technical change without notice



Re S.p.A.
 via Firenze 3
 20060 Bussero (MI) Italy

T +39 02 9524301
 F +39 02 95038986
 E info@re-spa.com

Assistenza tecnica
 Technical support
 T +39 02 952430.300
 E support@re-spa.com

Assistenza commerciale
 Sales support
 T +39 02 952430.200
 E sales@re-spa.com