

CF.85 FLANGE LOAD CELLS



- ✓ Compact design
- Easy installation
- ✓ High reliability
- Strain gauge technology
- Measuring range from 50N to 2000N

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

They are installed 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.

CF 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.

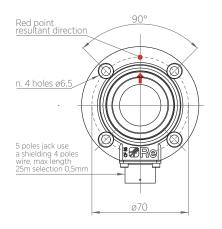
Operating principle: CF load cells use the strain gauge operating principle to guarantee a perfect detection of the web tension. Strain gauges resistors are mounted on a inner metal foil of a load cell and connected to each other in a "wheatstone bridge" able to convert a mechanical movement into an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

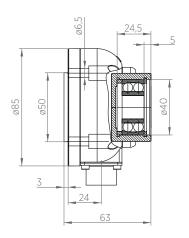




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TECHNICAL DRAWING





Selection model table

Code	Load N	bearing size
CF.85.5.40	50	40x17
CF.85.15.40	150	40x17
CF.85.25.40	250	40x17
CF.85.50.40	500	40x17
CF.85.100.40	1000	40x17
CF.85.200.40	2000	40x17

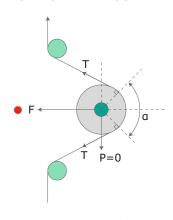
^{*} for other model contact our technical dpt.

CF.85.xx.xx

L_{Load N} Ball bearing size Load cell model

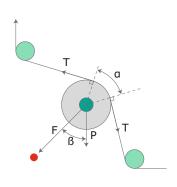
CALCULATION

HORIZONTAL RESULTANT



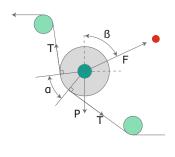
 $F = T \sin \alpha/2$

DOWNWARD RESULTANT



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

UPWARD RESULTANT



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

TECHNICAL DATA

	0.5
Normal Supply	from 1,5mV/V to 2,0mV/V $10V - max 15V$
	< ± 0,05% end scale value
	strain gauge full bridge
	350 Ω Ohm
	300%
	0°C/+60°C
	4-20 mA output

^{*}Data are subject to technical change without notice





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