



CPF

SENSOR ROLLER



- ✓ Toughness, overload protection 10 times the nominal load
- ✓ Quick and easy installation
- ✓ High reliability
- ✓ No influence of other forces
- ✓ Linear signal also at low loads
- ✓ No maintenance
- ✓ Wide range of dimensions and loads

A reliable web tension control may reduce web tears in order to increase productivity. CPF sensor roller, used in a precise tension control system, is designed to carry out these delicate tasks.

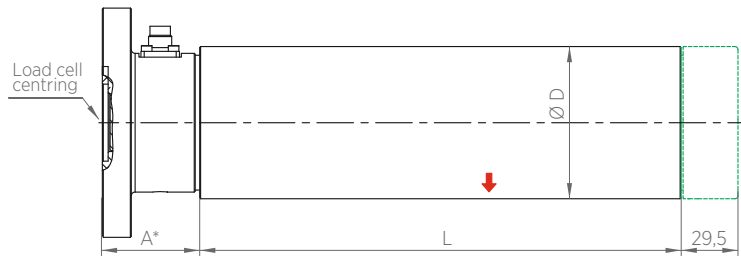
The sensor roller CPF has a high precision in detecting the web tension also because the position of the material on the roller doesn't affect the reading.

The roller is fixed quickly and easily from one side only. The connector could be installed inside the machine or outside. CPF is available with a display on the front of the roller, for an easy calibration and management of the sensor, and in a version without integrated amplifier and display.

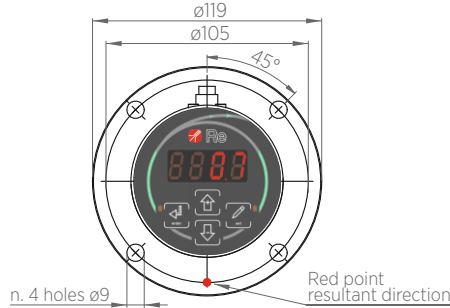
Thanks to the special design, CPF sensor roller can withstand overloads up to 10 times the maximum load and it is stable to the temperature, pressure and humidity changes.

Operating principle: CPF sensor roller 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.

TECHNICAL DRAWING



A* Ø84 A = 63 mm
 Ø100 A = 51 mm

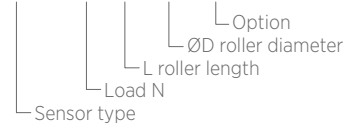


Selection model table

Code	Load N	L=250-450 Ø=84	L=300-500 Ø=100	L=500 Ø=84	L=600 Ø=84	L=600 Ø=100
CPF.5	50	✓				
CPF.20	200	✓		✓	✓	
CPF.40	400	✓	✓	✓		✓
CPF.70	700		✓			

* for other model contact our technical dpt.

CPF.A/N xx.xxx.xxx.C/P



A = with integrated amplifier
 N = without integrated amplifier

C = linear or elbow connector
 P = axial output cable gland

TECHNICAL DATA

Bridge resistance		3500hm
Temperature range		10÷50° C
Sampling speed		1 ms
Reading accuracy		10 gr
Overload protection		till 10 times the nominal load
Sensitivity		1,6 mV/V
Max flecion		0,5 mm
Power supply	With amplifier Without amplifier	24V 5-15 V
Outputs	With amplifier Without amplifier	1 can output, 1 analogue 12 bit 1,6 mV/V
Selectable outputs	With amplifier	0÷5V; 0÷10V; -5÷5V; -10÷10V; 0÷20mA; 4÷20mA; 0÷20mA
Protection class		IP40
Flange mounting		4 holes
Ball bearings		self lubricated
Material		steel body; aluminium roller

*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