

# ZEF

Economical low tension measuring instrument for checking fibers, yarns and fine wires



## Special Features

- + Simple handling
- + »Auto-Zero setting« using a push button for measurement in different measuring positions
- + Adjustable electronic damping for better reading when tension is constantly changing
- + Slim filament guide with small guide rollers - ideal for limited access space
- + Easy to read LCD display
- + Filament guide and roller shifting mechanism ensure easy acquisition of the running material
- + Light weight
- + Battery operated

## Standard Features

- Everything in operator's view:
  - the guide rollers
  - the measured material
  - the readings
- Ball-bearing mounted, V-grooved guide rollers
- Housing made of high-strength plastic
- Specific Test Report with calibration report optionally available

## Available Models

Model	Tension Ranges cN	Measuring Head Width* mm	SCHMIDT Calibration Material**
<b>ZEF-100</b> (code 1836)	0.5-100.0	43	PA: 0.12 mm Ø
<b>ZEF-200</b>	1-200	43	PA: 0.12 mm Ø

Other units of measure are available, such as g.

\* Width of filament guide

\*\* Suitable for 95% of applications - PA = Polyamide Monofilament

## Guide Rollers

	Line Speed m/min...max	Roller Material
<b>V-grooved</b>		
<b>Standard</b>	900	Hardcoated aluminium (R10010)
<b>Code K</b>	2000	Hardcoated aluminium
<b>Code T</b>	450	Plastic (POM) black
<b>Code W</b>	450	Nickel-plated steel

## Specifications

<b>Calibration:</b>	SCHMIDT factory procedure
<b>Accuracy:</b>	±1% full scale ± 1 digit or better, typical ±0.5 % full scale
<b>Overrange (approx.):</b>	10% full scale, without accuracy guarantee
<b>Overload protection:</b>	100% of tension range
<b>Measuring principle:</b>	Strain gauge bridge
<b>Measuring roller deflection:</b>	0.5 mm max.
<b>Damping:</b>	Adjustable electronic damping (15 steps), moving averaging
<b>Signal processing:</b>	digital
<b>A/D converter:</b>	12 bit
<b>Display:</b>	3-digit LCD, 11 mm high ZEF-100 3 ½ digit
<b>Display update rate:</b>	2 times / sec
<b>Self-frequency:</b>	250 Hz
<b>Autozero:</b>	±20% full scale
<b>Auto Power off:</b>	After 2 minutes of non-use
<b>Temperature range:</b>	10-45°C
<b>Air humidity:</b>	85% RH, max.
<b>Power supply:</b>	2 size AAA batteries 1.5 V (about 30 hours of continuous use)
<b>Housing material:</b>	Plastic (POM)
<b>Housing dimensions:</b>	157 x 85 x 32 mm (L x W x H)
<b>Weight, net (gross):</b>	approx. 200 g (600 g)

Specifications subject to change without notice!

## **MESDAN-LAB** a division of MESDAN S.P.A.

Raffa di Puegnago  
BS- ITALY

Fax. +39 0365 6510 11

Export department: Tel. +39 0365 6531 42

e-mail: [sales@mesdan.it](mailto:sales@mesdan.it)

Commerciale italia: Tel. +39 0365 6531 41

e-mail: [vendite@mesdan.it](mailto:vendite@mesdan.it)

<http://www.mesdan.it>

