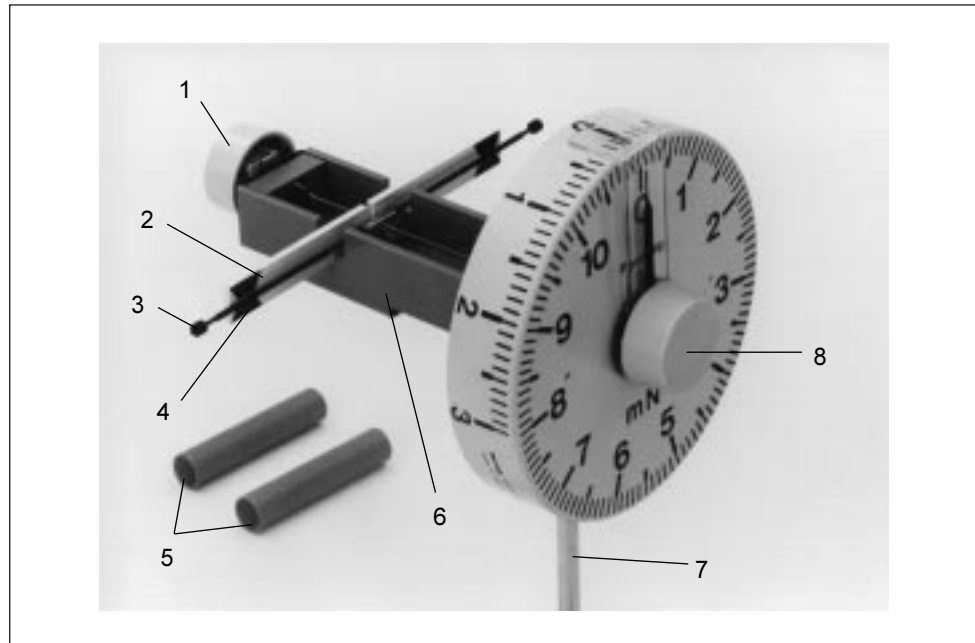




Torsion dynamometer 0.01 N

02416.00

Operating instructions



1 PURPOSE

The 0.01 N torsion dynamometer allows to measure small forces with little friction and without displacement. A force acting on lever arm 4 is compensated through the torsion force of a metallic band (torque comparison).

2 DESCRIPTION

- 1 Zero setting knob
- 2 Zero indication for lever arms
- 3 Suspension system
- 4 Lever arm
- 5 Protective tube for lever arms
- 6 Eddy current attenuation, shortens setting time
- 7 Rod for holding with standard support material
- 8 Force indication knob

3 HANDLING

- Couple measurement object to the end of a lever arm without that the force to be measured acts
- Set force indication knob 8 to zero
- Set lever arms to the middle of zero indication for lever arms 2 by means of zero setting knob 1
- Let force to be measured act and compensate deflection by means of force indication knob 8 (that is, bring the lever arm to the middle of the zero indication). Now the size of the force to be measured is set on the scale.

During setup, make sure the eddy current attenuation disk 6 can move freely. Protective tubes 5 are pushed over the lever arms when the instrument is stored.

4 TECHNICAL SPECIFICATIONS

Measuring range	10 mN
	scale division 0.1 mN
Response sensitivity	0.05 mN
Preliminary force compensation through zero shift	approx. 10 mN
Maximum lever load	0.2 N

5 EXPERIMENTING LITERATURE

Versuchseinheiten Physik,	
Das elektrische Feld 1	16100.01
University laboratory experiments	00067.72