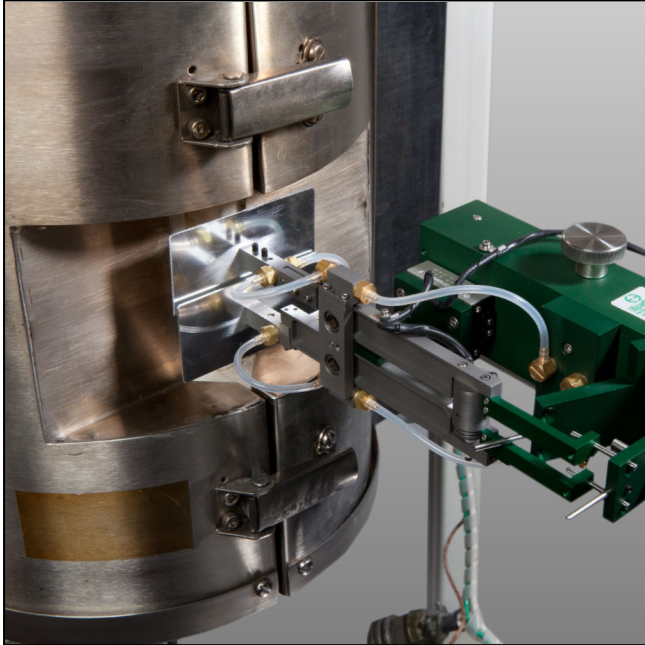


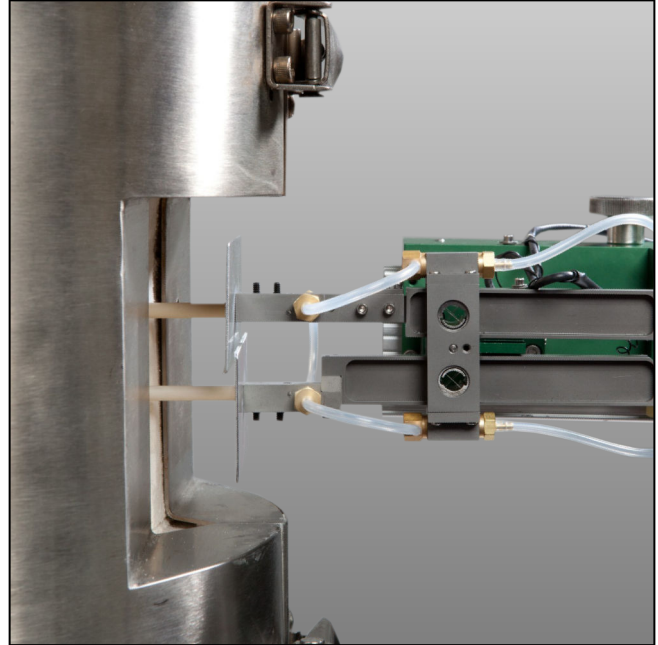
## Product Information

### High-temperature extensometers for dynamic applications

CTA: 94974 94975



Extensometer: oblique view, with rail system



Extensometer: side view

#### Range of application

Special extensometers are required for dynamic applications in the high-temperature range. Low-cycle fatigue tests place particularly severe demands on the extension measurement system. Small displacement measurements and high resolutions are called for, while extensometer influence on the specimen must be kept to a minimum.

#### Advantages and features

- The extensometer is mounted on a system of rails and can be attached after heating of the specimen.
- Designed with emphasis on applications requiring displacement measurements in the range of  $\pm 2.5$  mm.
- Suitable for use in high-temperature hinged furnaces.
- Accuracies as per ASTM B-1 and ISO 9513, Class 0.5 are guaranteed.
- Dynamic strain measurement possible in both tensile and compression directions.
- Mechanical stops prevent overrunning of maximum measurement travel.
- Capacitive measuring system in conjunction with innovative design achieves high-resolution strain-measurement unequaled in the high-temperature range.
- Low-noise output signal (0 to  $\pm 10$  V DC)
- Can remain on specimen up to break.
- Ideal for strain-controlled testing.
- Various initial gage-lengths and measurement travels available.
- Can be used in temperature range up to  $1200^{\circ}\text{C}$ .
- With water-cooled mounting-plate.
- Additional set of sensor arms included in delivery.
- Optional initial gage-lengths, measurement travels and temperature ranges available.

## Product Information

### High-temperature extensometers for dynamic applications

#### Technical data

Extensometer type Item No.	TE0010.10.04 085820	
Initial gage-length <sup>1)</sup>	10	mm
Displacement measurement <sup>2)</sup>	±10	%
Temperature range <sup>3)</sup> , max.	1200	°C
Linearity	0.15	%
Adjustable contact pressure, max.	150	g
Standard contact pressure	<10	g
Output voltage	±10 or ±5	V
Accuracy class	ASTM B-1, ISO 9513 Class 0.5	
Measuring principle	capacitative	

1) Optional initial gage-lengths: 12.5 / 25 / 50 mm

2) Optional displacement measurement: 0.5 / 1 / 5 / 20 (max. displacement ±2.5mm)

3) Optional temperature range: max. 1600°C

#### Dimensions

Description	Value	
Length without guide-frame and probe	205.9	
Length incl. guide frame	406.4	mm
Width incl. guide frame	125.9	mm
Height incl. guide frame	76.2	mm
Guide profile	25.4 x 50.8	
Guide profile length	406.4	mm

#### Accessories

##### Ceramic probe

- Ceramic probe with conical tip, wedge tip and V-shaped tip