MICRO-EPSILON

More Precision

ELTROTEC Panoramascope // Surface inspection of bore holes

Eltrotec Panoramascope

- Ø 6 mm and 11 mm

- Lengths: 80 mm to 400 mm

- Exchangeable panorama lens

- External focus ring

- Stainless steel design

- 360° all-round view

Time-saving inspection of hollow bodies due to 360° all-round view in one workflow

A special feature of the Micro-Epsilon Eltrotec Panoramascope is the drop-shaped 360° quartz glass lens. This lens records the surface image of a cylindrical bore and transfers this image to the eyepiece via an optical system.

A large number of illuminating fibers ensures optimal illumination, allowing for short exposure times when using image processing software.

The user can choose between different C-/CS-mount lenses.

Features:
- Outer diameter: 6 and 11 mm
- External focus ring
- Stainless steel design
- 360° all-round view
- Focal range: 2 mm to ∞
- Repair-friendly due to exchangeable panorama lens

Operating conditions:
- Temperature in air:
  - Endoscope probe:
    Ø 11 mm: -20 to +100 °C
    Ø 6 mm: -20 to +70 °C
  - Entire endoscope:
    -20 °C to +50 °C
- The endoscope is splash-proof and the panorama lens is exchangeable

Applications
- Sleeves/fittings
- Brake cylinder
- Connecting rod
- Piston
- Punctures
- (Ball) bearing

Typical surface defects
- Blowholes
- Burrs
- Cracks
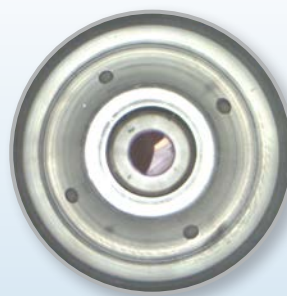- Impurities
- Damage
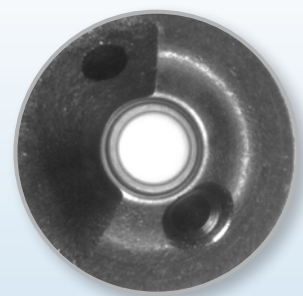- Porosity
- Coating
- Edge breakouts

Application examples:

Burr inspection	Quality control	Checking for burrs	Casting defects

Model	Eltrotec Panoramascope	
Outer-Ø	6 mm	11 mm
Length	80 / 130 / 180 / 230 / 280 mm ±10 mm	160 / 240 / 320 / 400 mm ±10 mm
Image resolution	depending on camera, > 0.05mm	
Aperture angle	approx. 90°	
Direction of view	approx. 90°	
Focal range	2 mm to ∞	
Impermeability	Endoscope is splash-proof and the panorama lens is exchangeable	
Illumination	Fiber optic connector for external light source	
Temperature resistance	-20 °C to +70 °C	-20 °C to +100 °C

Outer-Ø mm	Length mm	Article no.
	80	20062322
	130	20062315
6	180	20062317
	230	20062314
	280	20062316

Outer-Ø mm	Length mm	Article no.
	160	20062305
11	240	20062289
	320	20062306
	400	20062307

Accessories	Article no.
EL 1/3 1800 MEP/S optical fiber	20712529
Panorama lens with reflector	20062530
Panorama lens without reflector	20062334

Accessories	Article no.
EL 1/6 1800 MEP/S optical fiber	20712291
Panorama lens with reflector	20062531
Panorama lens without reflector	20062235

Ø24

Ø11

107±10

Length

Focussing ring

Fibre optic connector

Panorama lens

Light

Field of view 90°,
360° all-round view

Direction of view 90°

Panorama lens
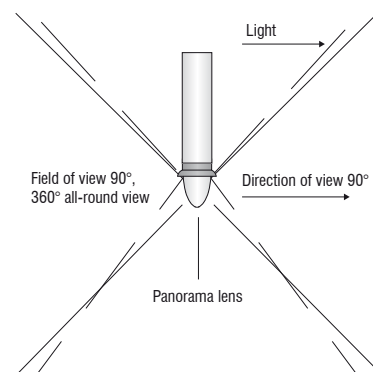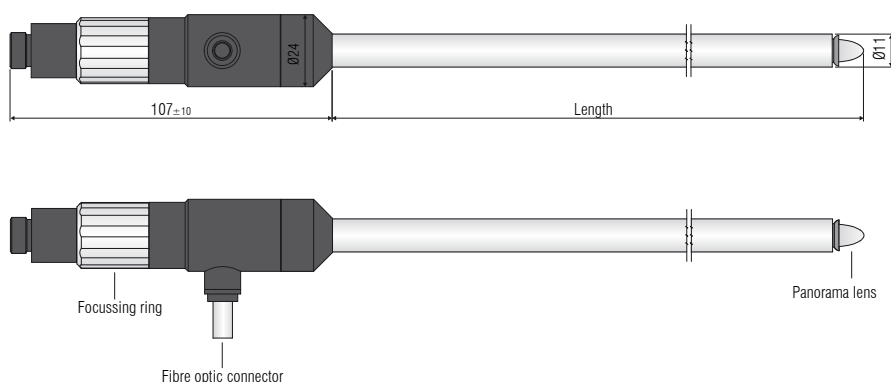
Accessories	Article no.
Eltrotec Endolight FOT LED 3000 light source	20912166
TV lens zoom with quick release (f: 18 - 35 mm), C-mount	20962209
TV lens with fixed focal length (f: 35 mm), C-mount	20962501
TV lens with fixed focal length (f: 28 mm), C-mount	20962502

Eltrotec Endolight FOT LED

Fiber optics

Lens

Sensors and Systems from Micro-Epsilon

Sensors and systems for displacement, distance and position

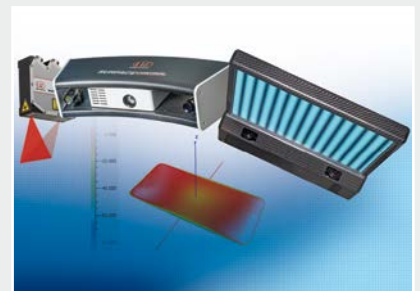Sensors and measurement devices for non-contact temperature measurement

Measuring and inspection systems for metal strips, plastics and rubber

Optical micrometers and fiber optics, measuring and test amplifiers

Color recognition sensors, LED analyzers and inline color spectrometers

3D measurement technology for dimensional testing and surface inspection