



# More Precision

ELTROTEC // Industrial Endoscopes





- Ø 2.4mm to 6.35mm
- Lengths: 102mm to 560mm
- Focal range from 2mm to ∞
- Bright image
- As complete set in case

**Description:**

Top-line endoscopes are highly sophisticated endoscopy devices. This mature technology provides a high light yield and sharply defined objects.

The scope of supply consists of a complete set with a 90° mirror tube and a light source in a robust metal case. No additional equipment is required.

This low cost endoscope is perfectly suitable for mobile applications.

The endoscopes can optionally be connected to a camera system.

**Features:**

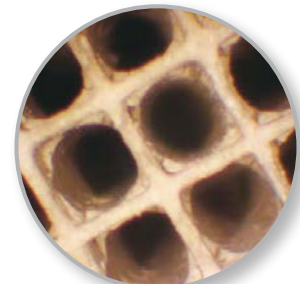
- For mobile use
- Supplied in a low cost, complete set, no additional accessories required
- Gradient index lenses for image transmission (GRIN)

**Operating conditions:**

- Temperature in air:
  - Endoscope probe: -20°C to +120°C
  - Complete endoscope: -20°C to +50°C
- Pressure resistance in air: up to 5 bar
- Resistance to liquids:
  - The endoscope probe can be immersed in the following liquids for short periods: water, saline solution (5%), kerosene, petrol, diesel, 70% alcohol
- Humidity: up to 95% at 40° (no condensation)

**As complete set in a case:**

- Top-Line endoscope
- Mini Maglite or SuperNova LED
- 90° mirror tube
- Cleaning set
- Robust carry case
- 2 x AA batteries

**Application examples:**

Catalytic converter inspection



Bearing inspection



Type	Outer-Ø mm	Direction of view	Field of View	Length mm	Article no.
Superslim	2.4	0°	40°	102	20750725
	2.4	0°	40°	185	20750733
Superslim*	2.4	0°	40°	102	20751380
	2.4	0°	40°	185	20751381
Mirror tube diameter 2.77 mm					
Slim	4.2	0°	42°	180	20750669
	4.2	0°	42°	305	20750732
	4.2	0°	42°	435	20750310
	4.2	0°	42°	560	20751667
Slim*	4.2	0°	42°	50	20751918
	4.2	0°	42°	180	20751382
	4.2	0°	42°	305	20751383
	4.2	0°	42°	435	20751384
	4.2	0°	42°	560	20751919
Mirror tube diameter 4.8 mm					
Hardy	6.35	0°	50°	180	20750811
	6.35	0°	50°	305	20750307
	6.35	0°	50°	435	20751032
	6.35	0°	50°	560	20751878
Hardy*	6.35	0°	50°	180	20751385
	6.35	0°	50°	305	20751386
	6.35	0°	50°	435	20751387
	6.35	0°	50°	560	20751920

Mirror tube diameter 8.0 mm

\* Standard kit plus SuperNova LED hand light source and charging device

Accessories	Article no.
Mini Maglite hand light source	20751054
LED hand light source	20751761
SuperNova LED hand light source	20752271



Mini Maglite hand light source



LED hand light source



SuperNova LED hand light source

Type	Outer-Ø mm	Length mm	Direction of view	Article no.
Shot-Kit	4.2	435	0°	20751759
Shot-Kit with angle adapter	4.2	435	0°	20751760
Shot-Kit	4.2	560	0°	20751762
Shot-Kit with angle adapter	4.2	560	0°	20752103

incl. Mini Maglite, carrying case, 90° mirror tube, protective tube, 2x AA batteries and cleaning set



Signs of abrasion



Scoring



Cracks due to heat

#### Shot-Kit:

Top-Line endoscopes with a  $\varnothing$  of 4.2mm are ideal for inspecting gun barrels for rust, scoring, chatter marks and signs of abrasion.

#### Inspection equipment for:

- Hunters
- Fire arms
- Forensic
- Police

#### Can be adapted to:

TV accessories, video camera Flexcam

## High performance sensors made by Micro-Epsilon



Sensors and systems for displacement and position



Sensors and measurement devices for non-contact temperature measurement



2D/3D profile sensors (laser scanner)



Optical micrometers, fibre optic sensors and fibre optics



Colour recognition sensors, LED analyzers and colour online spectrometer



Measurement and inspection systems