



# More Precision

**Eltrotec** // Industrial Endoscopes





- Ø 2.5 mm to 5 mm
- Lengths: 700 mm to 1200 mm
- Resolution up to 18,000 pixels
- Probe tips can be angled on 2 sides
- Complete set in a handy case
- External focus ring for diopter adjustment

Flexible Top-Line endoscopes are ideal for narrow radii, curved components or hard-to-reach places, as the probe is very flexible. The probe tip deflection is controlled manually. The angular position can be fixed with a parking brake. The probe is very robust with the protective sheathing made of stainless tungsten braiding.

A mirror or prism head is optionally available from a diameter of 3.3 mm. The endoscopes can be operated independently of the mains with a hand lamp or with an external light source. The connection to a camera system is possible.

#### Operating conditions:

- Temperature in air:
  - Endoscope probe: -20 °C to +60 °C
  - Complete endoscope: -20 °C to +50 °C
- Pressure resistance in air: up to 5 bar
- Resistance to liquids:
  - The endoscope probe may be immersed in the following liquids for a short time: water, saline solution (5 %), kerosene, gasoline, diesel, 70 % alcohol
- Humidity: up to 95 % at 40° (non-condensing)

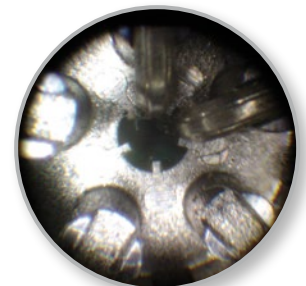
#### Complete set:

- Top-Line flexible endoscope
- 90° mirror head (with Flexible Pro ø 5 mm, optional 90° prism head)
- SuperNova LED
- Robust aluminum case
- Li-Ion battery with charging device

#### Application examples:



Position of a screw



Position check



Top-Line	Flexible Pro				
Outer-Ø	2.5 mm	2.5 mm	3.3 mm	4 mm	5 mm*
Length	700 mm	1200 mm	850 mm		
Resolution	7,000 pixels		18,000 pixels		
Direction of view	0° / 90°		0°		
Aperture angle	60°		45°		
Focal range	5 mm to ∞				
Mirror head	-				90° mirror head
Probe tip angle (articulation)	2 times, 120° each				
Bending radius	35 mm	35 mm	40 mm		
Temperature resistance	≤ 60°				
Part number	20751770	20751771	20751886	20751893	20751639

\*90° prism head available

Accessories	Article no.
90° mirror head for Flexible Pro, only with ø 5 mm	20751641
90° prism head for Flexible Pro, only with ø 5mm	20751678



90° mirror head



90° prism head (optional)



SuperNova LED hand light source



Information about other flexible endoscopes with numerous different diameters can be received on request.

Please contact us - we will advise you on the selection of the optimal solution tailored to your needs.

## 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



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Industrial endoscopes, light sources