



More Precision

ELTROTEC // Industrial Endoscopes





- Ø 4.0mm and 6.0mm
- Lengths: 1,500mm to 6,000mm
- Flexible probe tip articulation
- For continuous industrial operation
- Battery-powered

Description:

The Top-Line video endoscope enables you to gain new insights into the inner life of machines, plants and cavities without the need to disassemble them.

Due to flexible insertion, articulation and the excellent optics, with the video endoscope you can identify weak points and problems easily and early, enabling you to take preventative measures in a targeted manner.

Illumination is provided by a battery-powered adjustable LED light source with high light intensity.

Features:

- Effortless inspection of drill holes in series via monitor
- Easy to use with teach buttons
- No cabling work
- Flexible probe tip with locking brake
- Wide range of optional accessories

Complete set:

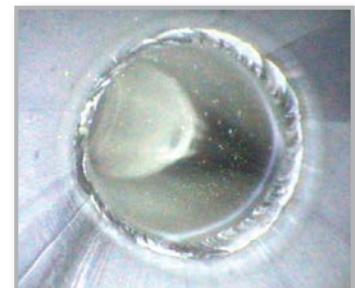
- Top-Line video endoscope
- + LED hand light source
- + Battery charger
- + 2x spare battery for LED hand light source
- + Spare monitor battery
- + Car battery charger cigarette lighter
- + Robust aluminium case



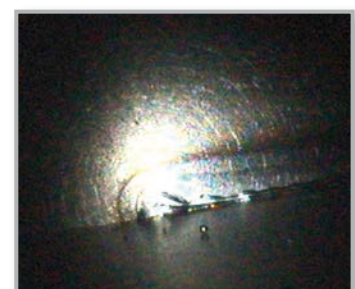
Application examples weld seam inspection:



Box



Pipeline

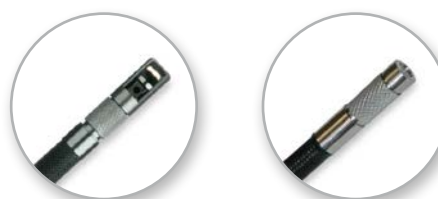


Plant engineering

| Model | Top-Line Video Endoscope | |
|----------------------------|--|---|
| Outer-Ø | 4mm | 6mm |
| Length | 1.5m / 3m | 1.5m / 3m / 6m |
| Direction of view | 0° | |
| Field of view | 70° | |
| Focal range | 15mm - ∞ | |
| Flexible probe tip | 2 times 150° up/down; 4 times 150° up/down; right/left | 4 times 150° up/down; right/left |
| Length of probe tip | 14mm | 18.3mm |
| Min. bend radius | 32mm | 45mm |
| Image sensor | CMOS | |
| Illumination | mobile adjustable LED light source, Li-Ion accumulator, approx. 2.5 hours operating time | |
| Display | 5" TFT/LCD display; rubber coating for shock absorption | |
| Interface | USB 1.1 / AV output | |
| Image storage | SD card (incl.) | |
| Image resolution | 300,000 pixels | |
| Image format | JPEG (640x480) | |
| Video format | ASF (640x480) playback with Windows Media Player | |
| Firmware | text generator; digital zoom 2x, image rotation; image mirroring, connection for external monitor, date/time; language selection; automatic switch-off | |
| Power supply | 5VDC (power supply included) | |
| Operating temperature | -25°C to +80°C; in water +10°C to +30°C | |
| Storage temperature | -30°C to +60°C | |
| Pressure resistance in air | up to 1bar | |
| Humidity | 5 - 95 % relative humidity | |
| Resistance to liquids | resistant to water up to saline solution 5% and most oils (except for hydraulic fluid) | |
| Water resistance | Probe IP54 Handle/ Monitor IP53 | |
| Weight | Length 1.5m = 0.9kg Length 3.0m = 1.0kg | Length 1.5m = 0.9kg; Length 3.0m = 1.0kg Length 6.0m = 1.3kg |
| Protective sheathing | protective tube from stainless braided tungsten with additional PU coating | |

| Outer-Ø mm | Length mm | Articulation | Article no. |
|------------|-----------|--------------|-------------|
| 4 | 1500 | 2-times | 20751776 |
| 4 | 1500 | 4-times | 20752111 |
| 4 | 3000 | 4-times | 20752112 |
| 6 | 1500 | 4-times | 20751756 |
| 6 | 3000 | 4-times | 20751757 |
| 6 | 6000 | 4-times | 20751768 |

Endoscopes with ø 4mm / 6mm optional with 90° prism head



Prism head 90°

Interchangeable close-focus head

Accessories for video endoscope

| Prism head 90° | | |
|----------------|-------------|-------------|
| Outer-Ø mm | Focal range | Article no. |
| 4 | 12mm - ∞ | 20752113 |
| 6 | 12mm - ∞ | 20752104 |

| Interchangeable close-focus head | | |
|----------------------------------|-------------|-------------|
| Outer-Ø mm | Focal range | Article no. |
| 4 | 4mm - 22mm | 20752170 |
| 6 | 4mm - 22mm | 20752171 |

| Rigidizer | | |
|------------|-------------|-------------|
| Outer-Ø mm | Ø/length mm | Article no. |
| 4 | 4.8/432 | 20752245 |
| 6 | 8.0/432 | 20752246 |

| Further accessories | Article no. |
|---|-------------|
| Stand | 20752241 |
| LED hand light source | 20752242 |
| Battery charger | 20752243 |
| Spare batteries for LED hand light source | 20752244 |
| Spare monitor battery | 20752136 |



Rigidizer



LED light source



Stand

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