



# More Precision

ELTROTEC // Industrial Endoscopes



- Ø 4.3mm to 14mm
- Lengths: 175mm to 1,505mm
- Perfect optical system
- Swivelling lens -7° to +133°
- Rotatable through 370°
- External focus ring for dioptr adjustment
- Ergonomic handle, removable



#### Description:

The unique feature of the Eltrotec MKF-D is its integrated swing-prism enabling the viewing direction to be changed between -7° and 133°. Using the hand wheel at the control element, the direction of view can be adapted with just one finger. The angular field of view of 45° provides a sufficiently large, visible region. The entire region in front of the endoscope can be inspected by moving the prism as the lens can also be rotated through 370°.

The MKF-D with a diameter of 6mm uses a mixed optical system for optimised light transport. The optical system of each endoscope is computer-calculated, thus enabling a reduction in weight and greater stability.

The object is illuminated using an external light source from our range of accessories. The endoscopes can optionally be connected to a camera system.

#### Features:

- Variable viewing direction
- Entire region in front of the endoscope visible
- Robust construction
- Perfect image sharpness
- True-color image reproduction
- Optimised light conductors for excellent image brightness
- Ergonomic design

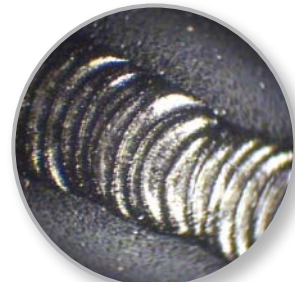
#### Operating conditions:

- Temperature in air:
  - Endoscope probe: -20°C to +100°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)

#### Application examples:



Oil filter



Inspecting a weld seam



Checking brake cylinder for burrs

Type MKF-D					
Outer-Ø mm	Direction of view	Field of View	Length mm	Rotating tube	Article no.
6	-7° to +133°	45°	175	yes	20122075
			245		20122076
			315		20122077
			385		20122078
			455		20122079
			945		20121368
8	-7° to +133°	45°	115	yes	20122080
			185		20122081
			255		20122082
			325		20122083
			395		20122084
			465		20121369
9	-7° to +133°	45°	605	yes	20121370
			205		20122085
			305		20122086
			405		20122087
			505		20122088
			605		20122089
12	-7° to +133°	45°	705	yes	20121371
			1405		20121372
			205		20122090
			305		20122091
			405		20122092
			505		20122093
14	-7° to +133°	45°	605	yes	20122094
			1005		20121373
			205		20122095
			305		20122096
			405		20122097
			505		20122098
			605		20122099
			705		20121374
			1505		20121375

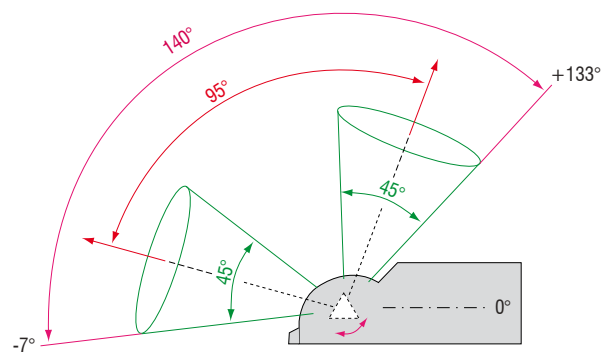
(Other dimensions on request!)



Now also available with 4.3 mm outer diameter



Swing-prism of the MKF-D



#### Accessories:

Optical fibers, TV cameras, video processors and light sources

## 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, fiber optic sensors and fiber optics



Color recognition sensors, LED analyzers and color online spectrometer



Measurement and inspection systems