



# More Precision

**ELTROTEC** // Industrial Endoscopes





- 6mm to 14mm
- Lengths: 175mm to 1,505mm
- Direction of view  $-7^{\circ}$  to  $+133^{\circ}$
- Rotatable through  $370^{\circ}$

#### Description:

The unique feature of the Eltrotec MKF-D is its integrated swing-prism enabling the viewing direction to be changed between  $-7^{\circ}$  and  $133^{\circ}$  as desired. Using just one finger the viewing direction can be altered using the hand wheel on the control element. The angular field of view of  $45^{\circ}$  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  $370^{\circ}$ .

With the MKF-D with a diameter of 6mm, a mixed optical system for the optimisation of light transport is used. The optical system of each endoscope is calculated by software, thus enabling a reduction in weight and greater durability.

#### Features:

- Variable viewing direction
- Entire region in front of the endoscope visible
- Large range of lengths for different tasks
- Robust construction
- Ergonomic design

#### Operating conditions:

- Temperature in air:  
Endoscope probe:  $-20^{\circ}\text{C}$  to  $+100^{\circ}\text{C}$   
Complete endoscope:  $-20^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$
- Pressure resistance in air: up to 2 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  $40^{\circ}$   
(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 ptube	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

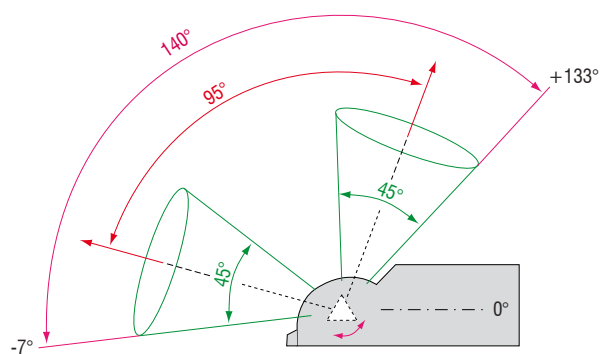
(Further dimensions on request!)



Now also available with 4.3 mm outer diameter



Swing-prism of the MKF-D



#### Accessories:

Fibre optic cables, 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



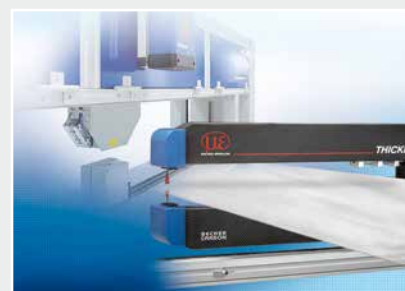
2D/3D profile sensors (laser scanner)



Optical micrometers, fibre optic sensors and fibre optics



Colour recognition sensors, LED analyzers and colour online spectrometer



Measurement and inspection systems



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