

# Micro Vision Systems

## imaging systems compact design



**High resolution images and an extremely small diameter make our customized Micro Vision Systems ideal for a wide variety of applications where invisible niches become visible. FISBA's progressive mindset and dedication to detail are evident once more.**

### Example specifications of a Microcamera

- Diameter without illumination: 1.6 mm
- Diameter with illumination: 1.95 mm
- Length without illumination:  $\leq 4$  mm
- Length with illumination:  $\leq 6$  mm
- Field of view (diagonal):  $120^\circ$
- Working distance: 5 – 50 mm
- Resolution: 400 x 400 px
- F-number: 6
- Wavelength: 400 – 700 nm
- Illumination concept: integrated illumination given by LED, directed through glass fibers from a separate control box

### Your Benefits

- Excellent optical performance
- Very compact, light weight and modular
- Customization upon request
- Industrial availability and scalability

### Industries & Applications

- Endoscopy
- Life Sciences
- Medical Devices
- Industrial Inspection

### FISBA Capabilities

- Professional project management and optical in-house design
- Modern and high tech production facilities
- Manufacturing from prototypes to large series
- Handling of customer-specific sensors, e.g. 200 x 200 px, leading to smaller diameters

# Example Specifications Customized Microcamera

	without illumination Ø 1.6 mm	with illumination Ø 1.95 mm
<b>Optical parameters</b>		
FoV (Field of View) diagonal	120°	
Working distance	5 – 50 mm	
Resolution	400 x 400 px	
F-number	6	
Wavelength range	400 nm – 700 nm	
Illumination	n/a	LED, fibers
Illumination power	n/a	≥ 100 mW
<b>Electrical parameters</b>		
Cable length	up to 2.5 m	
Frame rate	30 fps	
<b>Mechanical parameters</b>		
Length	≤ 4 mm	≤ 6 mm
<b>Environmental conditions</b>		
Operating temperature	+25 °C to +40 °C	
Storage temperature	-20 °C to +80 °C	
Waterproof rating	IP67	