



More Precision

color**SENSOR** // Sensor Configuration





- *Focusing of color and fiber optic sensors*

- *Improving the efficiency of the application*

- *Many possible applications*

Features:

- Working distances from 8 mm to 200 mm
- Scratch-resistant glass lens
- Robust aluminum housing (black anodized)
- Bundling to a small light spot
- Extension of the range with C-mount lens to a distance > 300 mm
- Minimum color change when the distance is altered
- High luminous efficiency
- Special designs according to customer requirements
- Color measurement on small objects at a relatively large distance (KI-3, KL-4)
- Recognition of highly absorbent objects (KL-5, KL-14, KL-17)

	Probe head type	Article number	Object distance (typ.)	Detection range (typ.)*	Dimensions
	KL-3-A2.0 ³⁾	10823012	8 mm - 20 mm	Ø 1 mm - 5 mm Ø 1 mm with 10 mm	L x Ø approx. 60 mm x 15 mm
	KL-M18-A2.0 ¹⁾	10823020	20 mm - 50 mm	Ø 3 mm - 10 mm Ø 3 mm with 20 mm	L x Ø approx. 51 mm x M18 x 1
	KL-M18-XL-A2.0 ¹⁾	10824358	Pos1 50 - 120 mm Pos2 10 - 180 mm Pos3 10 - 160 mm	Pos1 Ø 4-7 mm Ø 4 mm with 80 mm Pos2 Ø 7-11 mm Ø 7 mm with 110 mm Pos3 Ø 7-11 mm Ø 7 mm with 120 mm	L x Ø approx. 90 mm x M18x1 (L=50 mm)
	KL-M34-A2.0 ¹⁾	10823278	100 mm - 180 mm	Ø 15 mm - 18 mm Ø 15 mm with 100 mm	L x Ø approx. 85 mm x M34 x 1.5
	KL-M34/62-A2.0 ¹⁾	10824196	80 mm - 200 mm	Ø 3 mm - 5 mm Ø 3 mm with 120 mm	L x Ø approx. 170 mm x 62 mm
	KL-4-A1.1 ¹⁾	10823262	8 mm - 20 mm	Ø 0.6 mm - 3 mm Ø 0.6 mm with 10 mm	L x Ø approx. 60 mm x 15 mm
	KL-M18-A1.1 ¹⁾	10824140	10 mm - 50 mm	Ø 2 mm - 7 mm Ø 2 mm with 10 mm	L x Ø approx. 51 mm x M18 x 1
	KL-D-40-A2.0 ²⁾	10824143	15 mm - 25 mm	Ø 3 mm - 6 mm Ø 3 mm with 15 mm	L x W x H approx. 43.4 x 49.5 x 12 mm
	KL-D-28-A2.0 ²⁾	10824197	20 mm - 30 mm	Ø 5 mm - 8 mm Ø 5 mm with 20 mm	L x W x H approx. 31.7 x 40.5 x 15 mm
	KL-D-20-A2.0 ²⁾	10823021	10 mm - 50 mm	Ø 4 mm - 10 mm Ø 4 mm with 10 mm	L x W x H approx. 21.4 x 33 x 12 mm
	KL-D-17-A2.0 ²⁾	10823220	30 mm - 80 mm	Ø 8 mm - 25 mm Ø 8 mm with 30 mm	L x W x H approx. 36.5 x 25.5 x 15 mm
	KL-D-14-A2.0 ²⁾	10823022	60 mm - 120 mm	Ø 10 mm - 20 mm Ø 10 mm with 60 mm	L x W x H approx. 37 x 50 x 20 mm
	KL-D-6-A2.0 ²⁾	10823409	100 mm - 200 mm	Ø 15 mm - 30 mm Ø 15 mm with 100 mm	L x W x H approx. 31.1 x 45.1 x 20 mm
	KL-5-R1.1 ¹⁾	10824198	8 mm - 20 mm	2 x 0.3 mm up to 15 x 3 mm 2 x 0.3 mm with 10 mm	L x Ø approx. 60 mm x 15 mm
	KL-8-R2.1 ¹⁾	10823920	8 mm - 20 mm	4 x 0.7 mm up to 30 x 5 mm 4 x 0.7 mm with 10 mm	L x Ø approx. 60 mm x 15 mm

*The smallest figure in the table relates to the smallest typical optical diameter that is generated.

This corresponds roughly to the smallest detection area for color or fiber optic sensors.

¹⁾ Reflected-light optical fiber (FAR)

²⁾ Transmitted-light optical fiber (FAD)

³⁾ Possible with FAR-X-A2.0-0.6-XXXX-67° reflected-light optical fiber (spot size of approx. 0.2 mm)

Sensors and Systems from Micro-Epsilon



Sensors and systems for displacement, distance and position



Sensors and measurement devices for non-contact temperature measurement



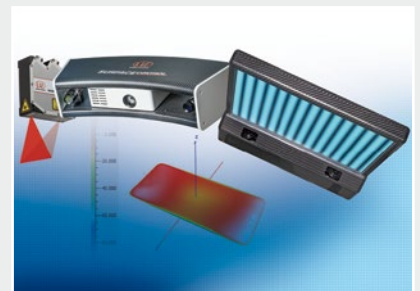
Measuring and inspection systems for metal strips, plastics and rubber



Optical micrometers and fiber optics, measuring and test amplifiers



Color recognition sensors, LED analyzers and inline color spectrometers



3D measurement technology for dimensional testing and surface inspection

