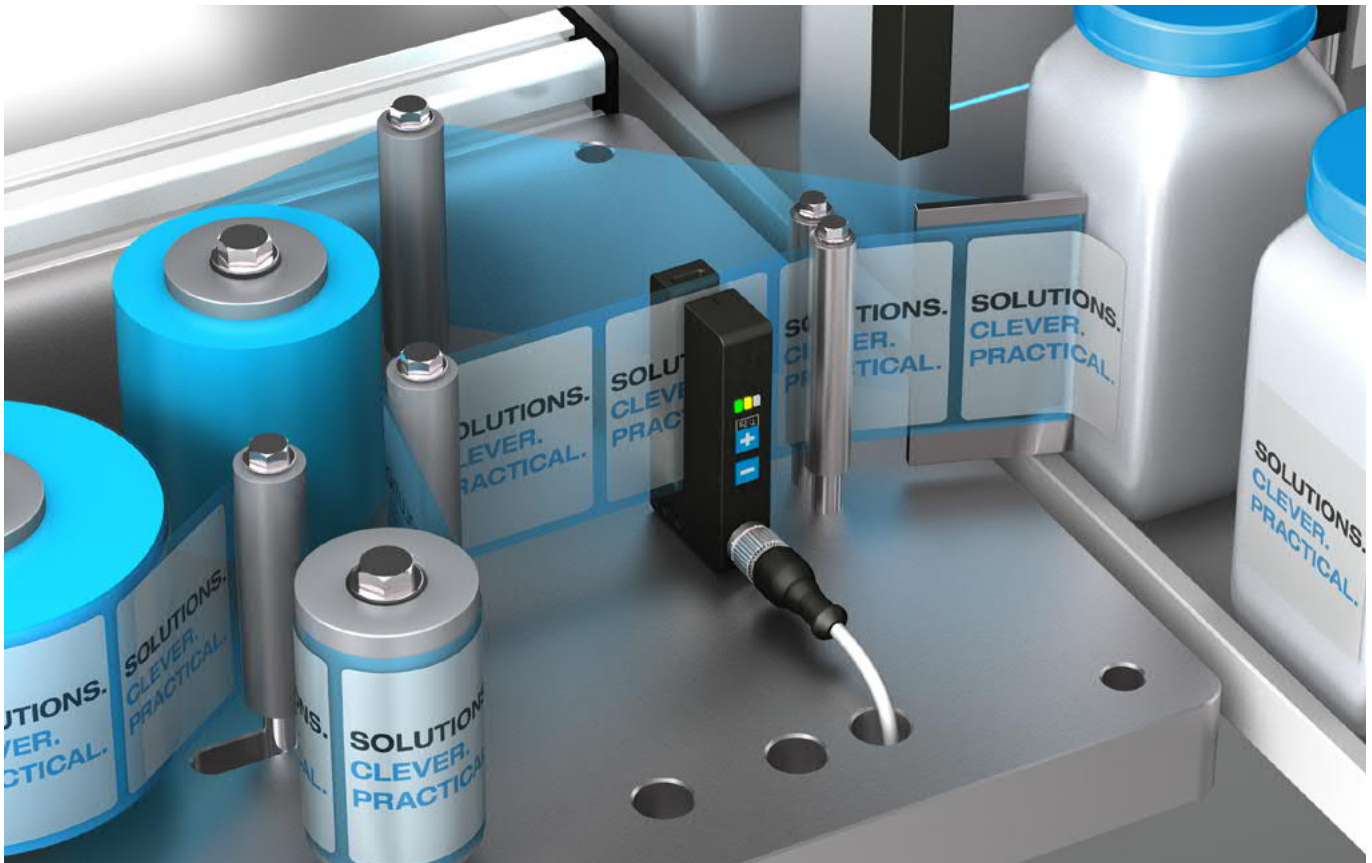


## Label sensors



When our sensors are used for label detection in a fork construction, labels can be positioned precisely at high belt speeds. They have been calibrated to a variety of different label materials (paper, metallic, transparent, thin/thick) and are available with different functional principles (optical/capacitive/ultrasonic).



 **di-soric**

OGUTI Optical	133
UGUTI Ultrasonic	134
KSSTI Capacitive	135

Detection	Optical	Capacitive	Ultrasonic
Series	OGUTI	KSSTI	UGUTI
Very small labels	✓	✓	✓
Transparent labels		✓	✓
Metallic labels	✓		✓
Very thin labels	✓	✓	✓
Thick labels	✓	✓	✓
Booklets	✓		✓
Thick carrier material		✓	✓


Special requirements			
Exact positioning	✓	✓	✓
Maximum belt speed	✓		
Maximum reproducibility	✓		
Mounting directly on the dispensing edge	✓		
IO-Link			✓
Manual teach			✓
Auto-teach	✓	✓	✓
Remote teach	✓	✓	✓
Adjustable pulse stretching (using IO-Link)			✓
Warning output			✓

## OGUTI OPTICAL

The compact, OGUTI optical label sensors detect both thin and thick paper labels with outstanding speed and precision thanks to their large fork openings. They stand out for their extremely high dispensing precision and reproducibility, making maximum belt speeds possible. Using auto-teach, they can be taught in to new materials quickly and intuitively.

Technical data (typ.)	+20 °C, 24 VDC
Service voltage	10 to 35 V DC
Ambient temperature	-10 to +60 °C
Housing material	Die-cast zinc, varnished




	Fork/slot width (mm)	Slot depth (mm)	Infrared light, 880 nm, clocked	Switching output	IO-Link interface	No-load current (mA)	Activation time (µs)	Max. belt speed (m/min)	Reproducibility (µm)	Sensitivity adjustment using teach button	Sensitivity adjustment using remote teaching	Plug connector	Connection cable (optionally available)	Product description
	2	40	■	pnp 200 mA, NO/NC		35	166	500	< 50	■	■	M8	TK ...	OGUTI 002 P3K-TSSL
										■	■		TK ... /4	OGUTI 002 FP3K-TSSL
	5	50	■	Push-pull 200 mA, NO/NC		35	166	500	< 50	■	■	M8	TK ...	OGUTI 005/50 G3K-TSSL
										■	■		TK ... /4	OGUTI 005/50 FG3K-TSSL

## UGUTI ULTRASONIC

The UGUTI ultrasonic label sensors can be used universally for a wide variety of label materials. They reliably detect not only thin and thick transparent, foil and paper labels but also metallic labels. The innovative dual operation concept—implemented using either IO-Link or auto-teach—makes it possible to put the sensors into operation quickly.



Technical data (typ.)	+20 °C, 24 VDC
Service voltage	10 to 30 V DC
Ambient temperature	0 to +60 °C
Housing material	Aluminum, black anodized

UGUTI Ultrasonic														
	Fork/slot width (mm)	Slot depth (mm)	Infrared light, 880 nm, clocked	Switching output	IO-Link interface	No-load current (mA)	Activation time (µs)	Max. belt speed (m/min)	Reproducibility (µm)	Sensitivity adjustment using teach button	Sensitivity adjustment using remote teaching	Plug connector	Connection cable (optionally available)	Product description
	6	70		2 independent outputs, push-pull, 100 mA, NO/NC	■	40	< 250	250 <sup>1)</sup>	< 200 <sup>2)</sup>	■	■	M12 M12 (radial)	VK .../5	UGUTI 6/70 G6-B5 UGUTI 6/70 G6-RB5

<sup>1)</sup> 2 mm label and 2 mm gap  
<sup>2)</sup> Depends on the label material and carrier material

## KSSTI CAPACITIVE

The KSSTI capacitive label sensors are the solution of choice for detecting thin transparent labels, foil labels and paper labels. They show their strengths particularly well wherever high tape speeds are required. Using auto-teach, they are taught in to new materials quickly and intuitively.

Technical data (typ.)	+20 °C, 24 VDC
Service voltage	10 to 35 V DC
Ambient temperature	0 to +60 °C
Housing material	Aluminum, black anodized



	Fork/slot width (mm)	Slot depth (mm)	Infrared light, 880 nm, clocked	Switching output	IO-Link interface	No-load current (mA)	Activation time (µs)	Max. belt speed (m/min)	Reproducibility (µm)	Sensitivity adjustment using teach button	Sensitivity adjustment using remote teaching	Plug connector	Connection cable (optionally available)	Product description
	0.4	50		Push-pull 200 mA, NO/NC		70	< 600	300 <sup>1)</sup>	< 150 <sup>2)</sup>	■	■	M8	TK ...	KSSTI 400 G3K-TSSL
										■	■		TK ... /4	KSSTI 400 FG3K-TSSL
	0.6	50		Push-pull 200 mA, NO/NC		70	< 600	300 <sup>1)</sup>	< 150 <sup>2)</sup>	■	■	M8	TK ...	KSSTI 600 G3K-TSSL
										■	■		TK ... /4	KSSTI 600 FG3K-TSSL
	1.0	50		Push-pull 200 mA, NO/NC		70	< 600	300 <sup>1)</sup>	< 150 <sup>2)</sup>	■	■	M8	TK ...	KSSTI 1000 G3K-TSSL
										■	■		TK ... /4	KSSTI 1000 FG3K-TSSL
	0.6	85		Push-pull 200 mA, NO/NC		70	< 600	300 <sup>1)</sup>	< 150 <sup>2)</sup>	■	■	M12	VK ... /4	KSSTI 600/80 FG3LK-IBS
	1.0	85		Push-pull 200 mA, NO/NC		70	< 600	300 <sup>1)</sup>	< 150 <sup>2)</sup>	■	■	M12	VK ... /4	KSSTI 1000/80 FG3LK-IBS
	0.6	85		Push-pull 200 mA, NO/NC		70	< 600	300 <sup>1)</sup>	< 150 <sup>2)</sup>	■	■	M12	VK ... /4	KSSTI 600/80 FG3LK-AIBS
	1.0	85		Push-pull 200 mA, NO/NC		70	< 600	300 <sup>1)</sup>	< 150 <sup>2)</sup>	■	■	M12 (radial)	VK ... /4	KSSTI 1000/80 FG3LK-AIBS

<sup>1)</sup> 2 mm label and 2 mm gap

<sup>2)</sup> Depends on the label material and carrier material