Leuze

GSX14E: World's first combined fork sensor Detect any label type with a single sensor



The GSX14E fork sensor from our new product range of fork sensors is the world's first sensor of its kind and combines the two detection methods of ultrasonics and light in a single housing. It thus merges the advantages of the two methods and reliably, quickly, and position-accurately detects all types of labels, regardless of their material and characteristics.

Advantages for you at a glance

- The reliable detection of labels made from a wide range of materials and various characteristics ensures high machine throughput and prevents downtime
- No reconfiguring of the sensor is required when switching label rolls. Shorter setup times result in higher production volumes
- The sensor is set up quickly by simply teaching in the label-carrier combination with the teach button.
 Only one mounting position is required for all objects
- Reliable operation even in case of contamination and variations in terms of label / carrier materials through automatic readjustment of the switching threshold
- IO-Link for easy integration of additional functions in the machine control, e.g., simple format changeover when changing rolls via recipe management, remote teaching of the sensor, or locking of the buttons

Detection principle	Ultrasonic + optical
Switching frequency	Ultrasonic: ~2 kHz Optical: ~9 kHz
Response time	Ultrasonic: <0.2 ms Optical: <0.05 ms
Operation	2 buttons
Teach options	EasyTeach, static teach
IO-Link	V1.1 (SmartSensorProfile, COM3)
Housing dimensions $(L \times W \times H)$	$96 \times 22 \times 46.9 \text{ mm}$
Housing material	Metal, galvanically nickel-plated
Mouth width/depth	4 mm / 80 mm

The Sensor People

New and extensive fork sensor product range for your application

Which sensor is right for which label-carrier combination?

				3			AN A	
		Label	Not transparent	Transparent	Metalized	Booklet	Cavitated BOPP	
		Base material						
	GS63B, GS61	Optical	Not transparent	•		•	•	•
			Transparent	•		•	•	•
	GSU12, (I)GSU14E <mark>NEW</mark>	Ultrasonics	Not transparent	•	•	•	•	
			Transparent	•	•	•	•	
	GSX14E NEW	Ultrasonic + optical	Not transparent	•	•	•	•	•
			Transparent	•	•	•	•	•

The new all-round carefree GSX14E fork sensor

- Universal use for the detection of all types of label materials, even inhomogeneous cavitated BOPP material
- Perfect for labeling machines that are operated with changing label types
- A single sensor replaces multiple fork sensors of different types
- Space-saving, less effort required, and reduced costs for mounting, commissioning, and label changeovers

Biological Biological

Configuration and recipe management made easy for fork sensors thanks to IO-Link

- Quick and easy remote teaching or locking of the buttons via IO-Link interface
- Convenient format changeover to a different label type by uploading the respective parameter set including teach value to the forked sensor
- No setup time and no re-teaching of the forked sensor when changing rolls
- Easy format change by selecting the appropriate parameter set for the corresponding label format
- Convenient selection of the parameter set directly via the HMI (Human Machine Interface)

