# IES 2098 Belt Movement Sensor



### SHORTFORM DATA

Converts the movement of a belt to an analog output voltage for car crash testing, characterization of belt retractors and the characterization of seats.

- © Resolution 0.5 mm
- © Reliable optical reading
- © Guaranteed velocity response 50 m/s
- © Special designed high contrast, very adhesive stickers
- All optical elements behind easily cleaneable window
- © Low supply current, DAS sensor supply sufficient
- © Shunt test and ID-Module supported



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# **SPECIFICATIONS**

Metrics	
Dimensions	68 x 56 x 21 mm³
Weight	110 grams
Cable	6 m black EPD
Thread for attachment bracket	M6, 6 mm deep

Environment	
Temperature range	060 °C
Acceleration	Can be used in crash and sled tests
Ambient light	100000 lx

Electrical Interface	
Power supply	10 16 V, max. 0,3 W
Output resistance	100 ohms
Output signal range	+/- 2,5 V differential

Characteristics	
Belt align tolerance	+/- 5°
Measuring range	+/- 1024 mm, wrap around feature
Resolution	0,5 mm
Velocity response	guaranteed 50 m/s

Cable colors	
Black	Supply-GND
Red	Supply +10V
Green	-SIG
White	+SIG
Yellow	Shunt input. Forces output to +1024 mm resp1024 mm, when
	pulled to +10V resp. to GND. Pulling to GND also resets position
	counter.
Screen	Must be connected to GND. No internal connection.

# Check-LED's LED's A, B show a walking light pattern, while the sticker is moved. The pattern changes every 0.5 mm and repeats after 2 mm. LED's C, D extend the pattern for devices with option 0.25 mm resolution and are permanently OFF in standard devices.

## Options:

- -SM second analog output with belt speed signal
- -HR 0.25 mm resolution

Information is provided without warranty and is subject to change without notice. We reserve the right to make changes whenever necessary to improve to the product. Revision 2006-10