DIMETIX LASER DISTANCE SENSORS

Glass panel position measurement

Industries:	Glass
Application type:	Position measurement

Description
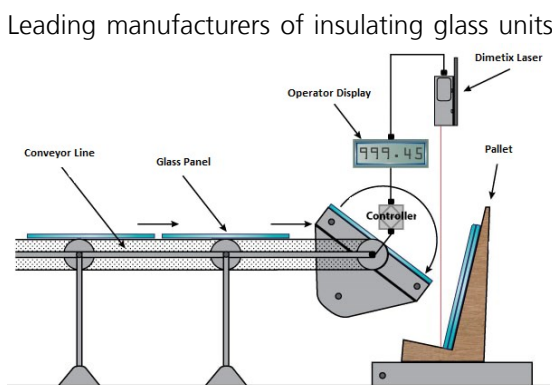
Leading manufacturers of insulating glass units

Fig 1: Fig. of application

store the glass panels in a horizontal position.

require a sensor solution that monitors and precisely adjusts glass panel positioning on a production conveyor belt, based on the exact height of non-standard pallets. These pallets are used to transport and store glass panels horizontally. Dimetix Laser Distance Sensors offer several methods of communicating to control systems commonly used in manufacturing and production applications.

In the area of the facility where glass panels are staged, a servo-driven actuator system identifies and tracks the leading edge of the glass as it moves along the facility's conveyor line. After the conveyor apparatus picks up the glass, it is unable to compensate for the non-standard height of the pallets used to transport and

Dimetix Laser Distance Sensor measure the height of the pallet and adjust a position to stop the glass panel. After the panel is halted, the machine begins tilting it onto the pallet precisely at the point where there is no chance the glass can slide or be misplaced. It is then gently placed on the pallets next to other glass panels.

Customer advantage

- Easy installation thanks to visible laser beam
- Easy configuration thanks to the free software
- Operation in the largest temperature range (-40°C to +60°C) possible
- Measuring ranges up to 100 m on natural surfaces
- Measuring ranges up to 500 m on reflective foil
- Accuracy ± 1mm
- Measurements can be acquired by a PLC or PC
- Maintenance-free operation

Dimetix Sensors – the solution for applications with high precision requirements

Thanks to the clearly arranged product portfolio the evaluation of a suitable Dimetix distance laser sensor is simple and uncomplicated.

Dimetix sensors offer numerous features, which are integrated in each and every device as standard, including, among others, various interfaces like SSI, RS-422/485, RS-232 and 2 digital outputs.
Optionally, the Industrial Ethernet interfaces PROFINET, EtherNET/IP and EtherCAT are also available. Furthermore, all devices are IP65-protected and impress with a weight of less than 500 grams!

Particularly noteworthy, however, is the accurate measurement of 1 millimeter over distances of up to 500 meters, even under the most extreme conditions. This is possible with the sensors of the types DPE, DEN and DEH.

No less interesting are sensors of types DAE, DAN and DBN. Preferably, they can be used for projects which do not require a range over 500 meters or are cost-sensitive.

	DPE-10-500	DPE-30-500	DEN-10-500	DEH-30-500
PARTNUMBER	500630	500636	500637	500638
SPECIFICATION				
Typical accuracy $\cong \pm 2\sigma$	± 1 mm	± 3 mm	± 1 mm	± 3 mm
Mensurierung range on natural surfaces	0.05…~100 m	0.05…~100 m	0.05…~100 m	0.05…~100 m
Measuring range on reflective foil	~0.5…500 m	~0.5…500 m	~0.5…500 m	~0.5…500 m
Max. measuring rate	250 Hz	250 Hz	100 Hz	100 Hz
Operating temperature	-40…+60°C	-40…+60°C	-10…+50°C	-10… +60°C

	DAE-10-050	DAN-10-150	DAN-30-150	DBN-50-050
PARTNUMBER	500633	500632	500634	500635
SPECIFICATION				
Typical accuracy $\cong \pm 2\sigma$	± 1 mm	± 1 mm	± 3 mm	± 5 mm
Mensurierung range on natural surfaces	0.05…~50 m	0.05…~100 m	0.05…~100 m	0.05…~50m
Measuring range on reflective foil	~40…50 m	~40…150 m	~40…150 m	
Max. measuring rate	100 Hz	100 Hz	100 Hz	10 Hz
Operating temperature	-40…+60°C	-10…+50°C	-10…+50°C	-10…+50°C