



WEBINAR

ifm PMD Profiler online Webinar for object profile checking



Questions & Answers

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Q & A

Does the colour of the object influence the measurement?

The profiler is not affected by the colour, there is just more noise on the black and green parts of the object.

Does external illumination influence the measurement?

Extraneous light on the object must be less than 20 kilolux.

Does the Profiler work on very shiny objects?

Yes, you may need to tilt the sensor slightly or adjust the sensor height.

Is the laser safe?

Yes, it is a Class 1 laser so it safe under all normal conditions, even if viewed with a magnifying glass.

What is the maximum speed of the application?

5 inspections a second with the object stationary for 20ms for each inspection.

What is the smallest object that the profiler can detect?

Measured value resolution: Height 0.2mm and Width 0.25mm

What is the accuracy of the measurement from the profiler?

±0.5mm in Height and Width.

What is Output 1 used for?

It indicates a pass (On) or a fail (Off). This output can be inverted.

What is Output 2 used for?

In "Continuous mode" it is complementary to Output 1. In "Triggered mode" it is a ready signal.

What happens if the object is not always in the same position?

Use the "Floating" option to detect the object profile anywhere along the entire length of the laser line. The height of the object can also vary.

Q & A

Why is the matching value not 100% if the taught object is measured again?

Natural fluctuations like noise and drift affect the measured matching value.

Can the trigger time be adjusted?

Yes, the start of the measurement can be delayed up to 5 seconds after the trigger signal.

Can unknown objects be compared?

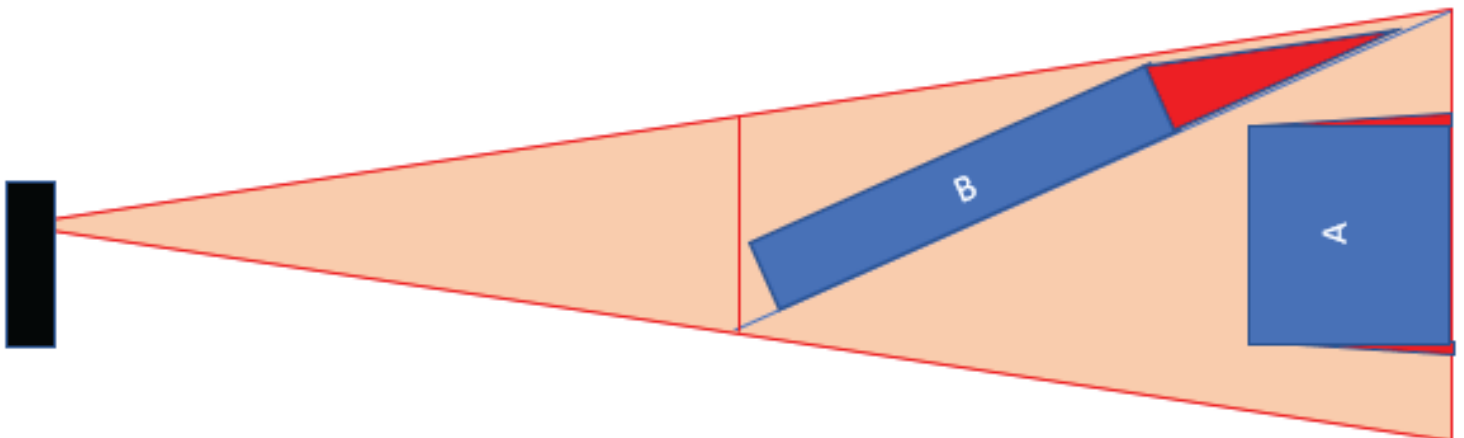
Yes, a lot more time will be required. The objects must be presented in the exact same position. Object A must be presented to the profiler and a teach must be performed via IO-Link. Then object B must be presented to the profiler to check if they are the same via the "Pass" or "Fail" status.

Can two different objects be sorted?

Yes, a standard position sensor will be required to provide a trigger signal. Object A must be the taught profile. Object A will be identified by a "triggered" and a "Pass" signal and object B will be identified by a "Triggered" and no "Pass" signal.

Is this always a perpendicular application? In other words, does the maximum of 300mm away and 90mm wide inspected surface change based on angle?

It is possible to install the profiler at an angle, which will increase the measuring line length. This will result in a larger portion of the profile being uncertain (See large RED triangle next to Block B) and limit the profile height. See drawing below.



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Do you have any questions about the products featured?



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Do you have any questions about this Webinar?



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