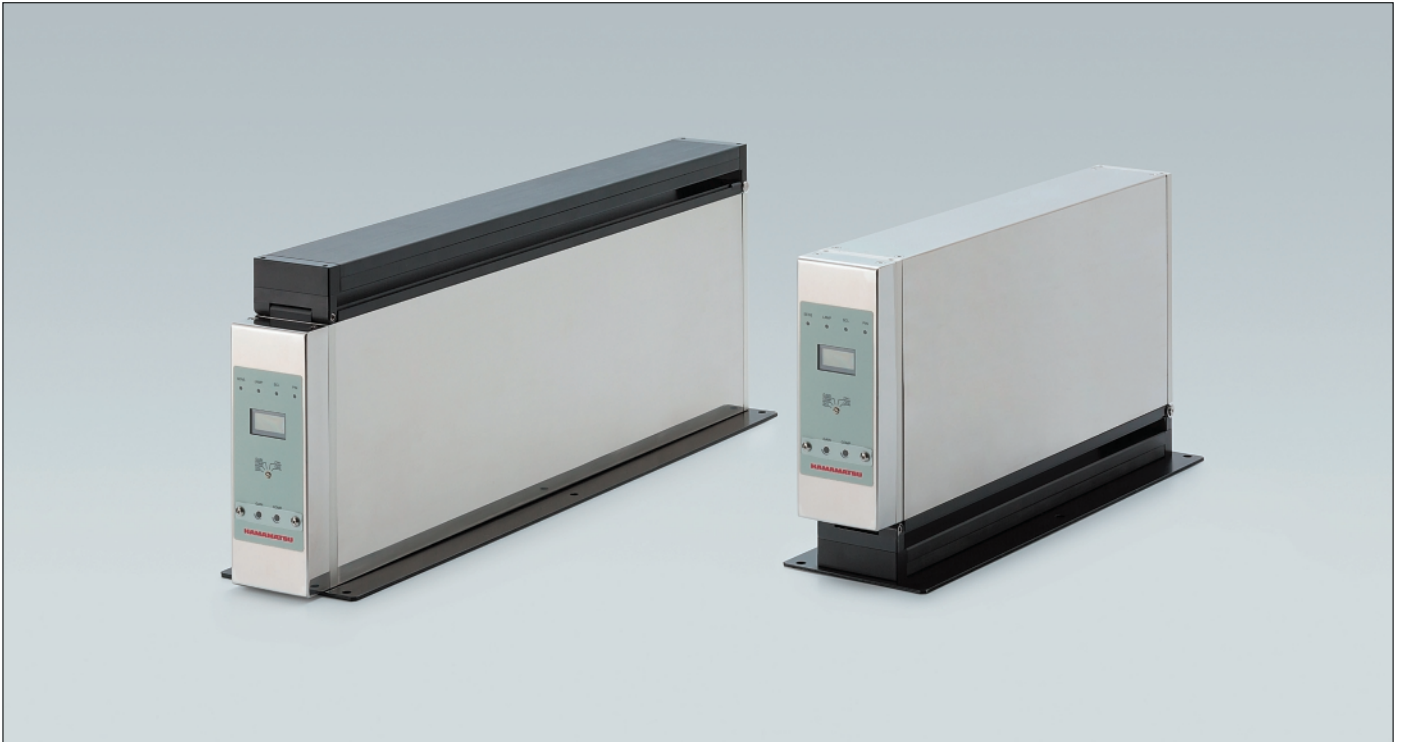


For laminate films and metal foils

OPTICAL PINHOLE INSPECTION UNIT C12570 SERIES



▲Left: C12570-03, Right: C12570-11

OVERVIEW

The C12570 series is a pinhole inspection unit designed to detect pinholes in laminate films and metal foils. Since non-contact optical detection is used, the samples being inspected are not exposed to stress from liquid or special environments such as electric fields, magnetic fields, and electrolytic solution.

The C12570 series uses a photomultiplier tube with high sensitivity that allows detecting tiny pinholes with high accuracy.

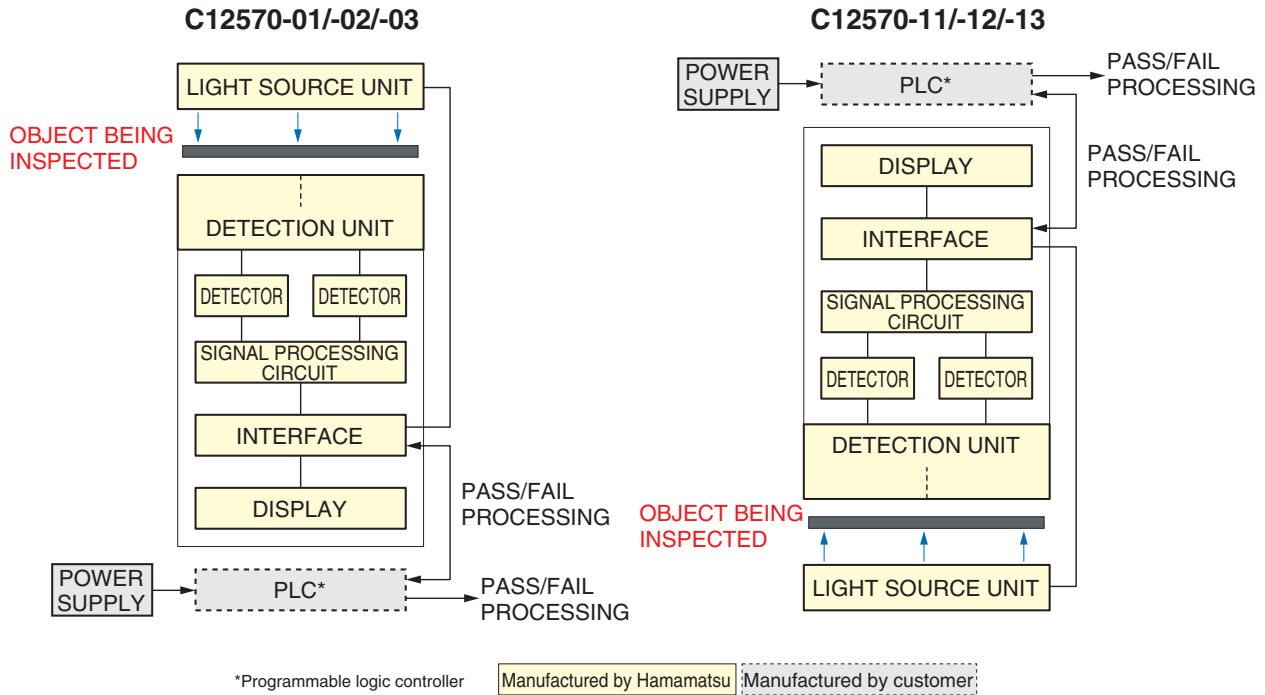
FEATURES

- **Non-contact detection applies no stress or impact to workpiece**
- **Detecting tiny pinholes with high accuracy**
Using a high-sensitivity photomultiplier tube allows detecting tiny pinholes of a minimum of 2 μm in diameter at a maximum rate of 30 meters per minute, which has not been possible to detect by image sensor image analysis.
- **Pinhole determination based on threshold (any value) ①**
Detection sensitivity and pinhole pass/fail threshold are adjustable to any value from front panel.
- **Self-diagnosis function**
Checks detector operation to ensure high reliability of inspection results
- **Safeguard circuit to protect the unit from excessive light**
Includes a safeguard circuit that minimizes damage to the detector even when excessive light enters the unit.
- **Two types with different light source positions are available to match your application**

NOTE: ① The quantity, size and positions of pinholes cannot be identified.

DETECTION PRINCIPLE

The light source emits light onto the inspection target and the detection unit on the opposite side detects any light leakage from pinholes.



NOTE: The detector sensitivity and the threshold for pinhole detection can be adjusted at the front panel.

SPECIFICATIONS

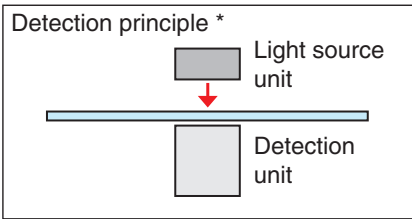
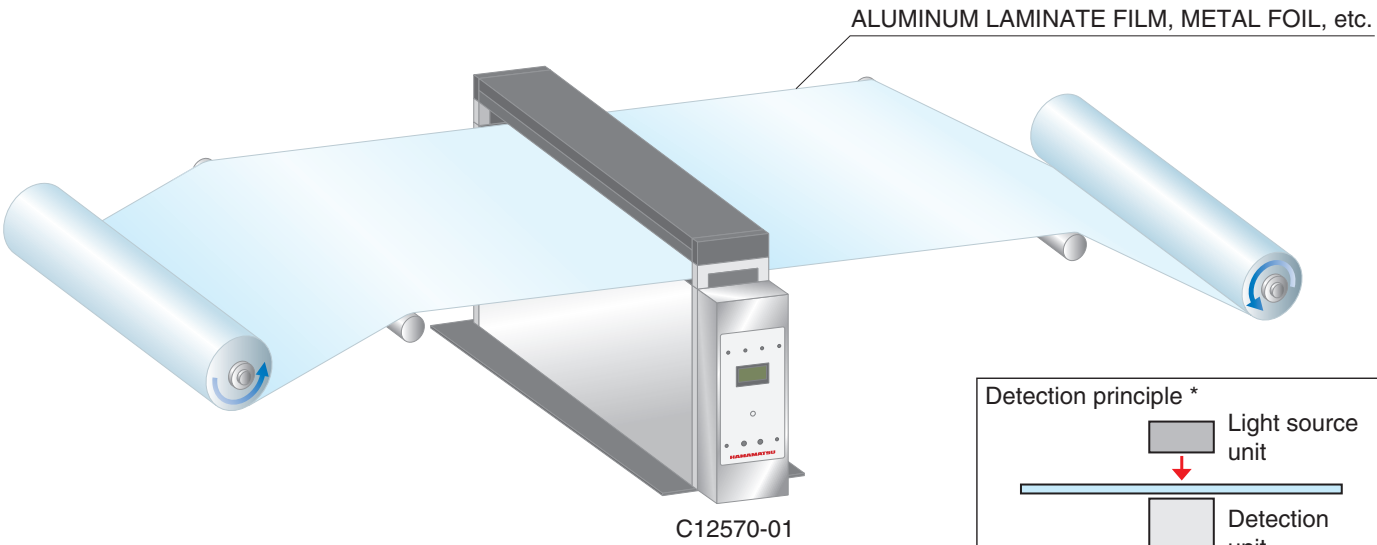
Parameter	Description / Value		
Suffix	-01/-11	-02/-12	-03/-13
Detection pinhole size ①	2 μm		
Maximum detection speed	30 m/min		
Detection width	300 mm	150 mm	450 mm
Detector channels	2	1	2
Light sensor	Photomultiplier tube		
Light emitter / Emission wavelength	LED/644 nm (Typ.)		
Input voltage (DC)	24 V		
Maximum current consumption	0.8 A		
Operating temperature range	+10 °C to +40 °C		
Storage temperature range	0 °C to +50 °C		
Operating / Storage humidity range	35 %RH to 85 %RH (no condensation)		
Applicable standard	IEC 61326-1: Group 1, Class A		

NOTE: ①Detection pinhole size depends on light intensity and installation environment.

Supplied: Control input / output connector, light source connection cable and pinhole sample plate (pinhole size 2 μm)

INSPECTION TARGET

- Aluminum laminate films
- Metal foils

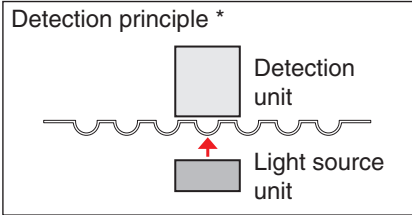


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● Aluminum blister packaging materials

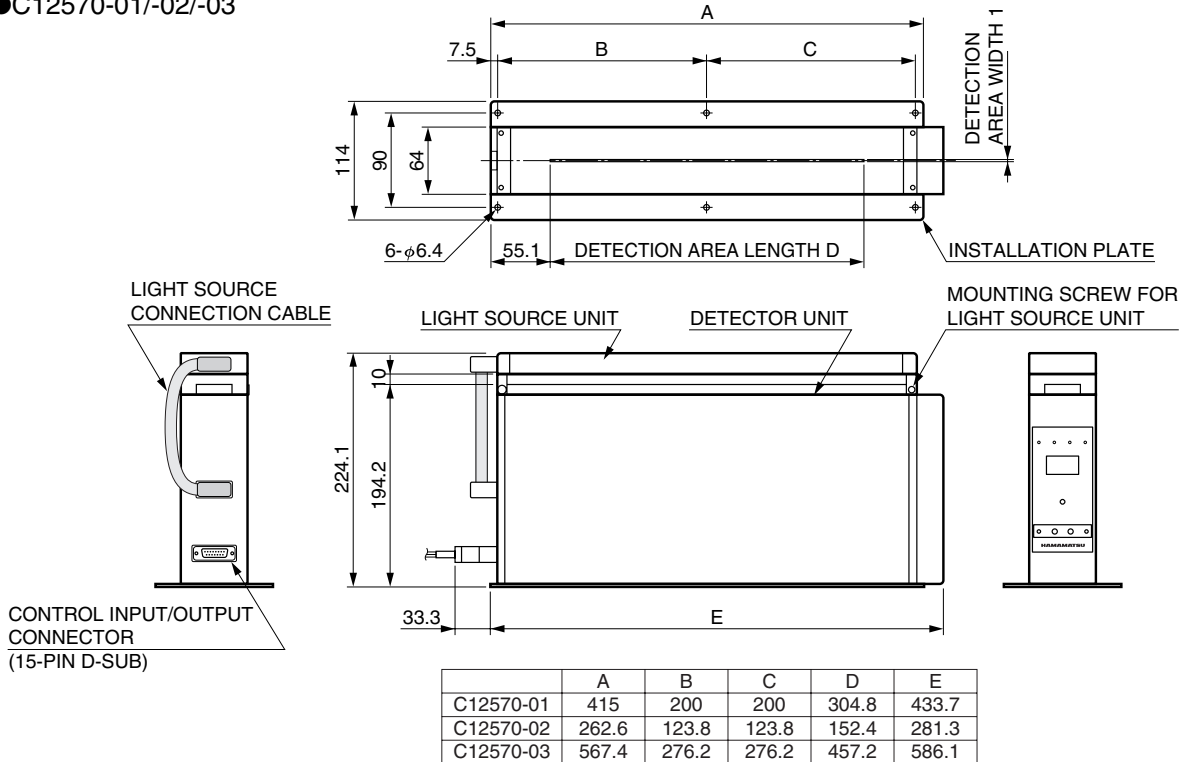


* The inspection object should be positioned as close to the detection unit as possible to boost detection performance and prevent fluctuating ambient light from entering the detectors. For example, when inspecting aluminum blister packaging materials, the molded convex side should preferably face the light source unit and the concave side face the detection unit.



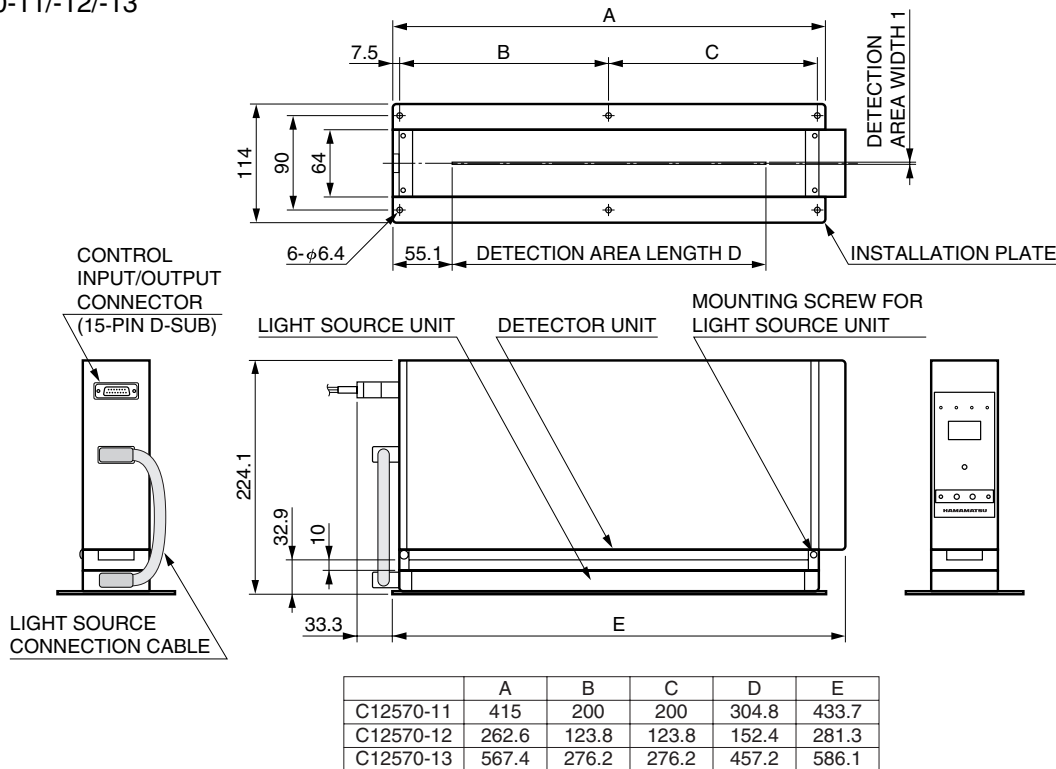
DIMENSIONAL OUTLINES (unit: mm)

●C12570-01/-02/-03



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●C12570-11/-12/-13



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