

# CIA GLUE DETECTOR

## DETECTOR FOR HOT-MELT ADHESIVES

The glue detector Series CIA was especially designed and manufactured to check high-speed gluing lines. The system analyses each single drop of glue (using the passive infrared method), verifying continuity and signalling any anomaly in real time. Easy to be installed, it perfectly fits into any existing measuring system of any brand, as it is a completely independent device, able to reduce production rejects to virtually zero.

### Optical measurement head



The measurement head is provided with an automatic sighting system to ensure maximum versatility and the reduction of production rejects to "zero".

### Self-cleaning measurement head

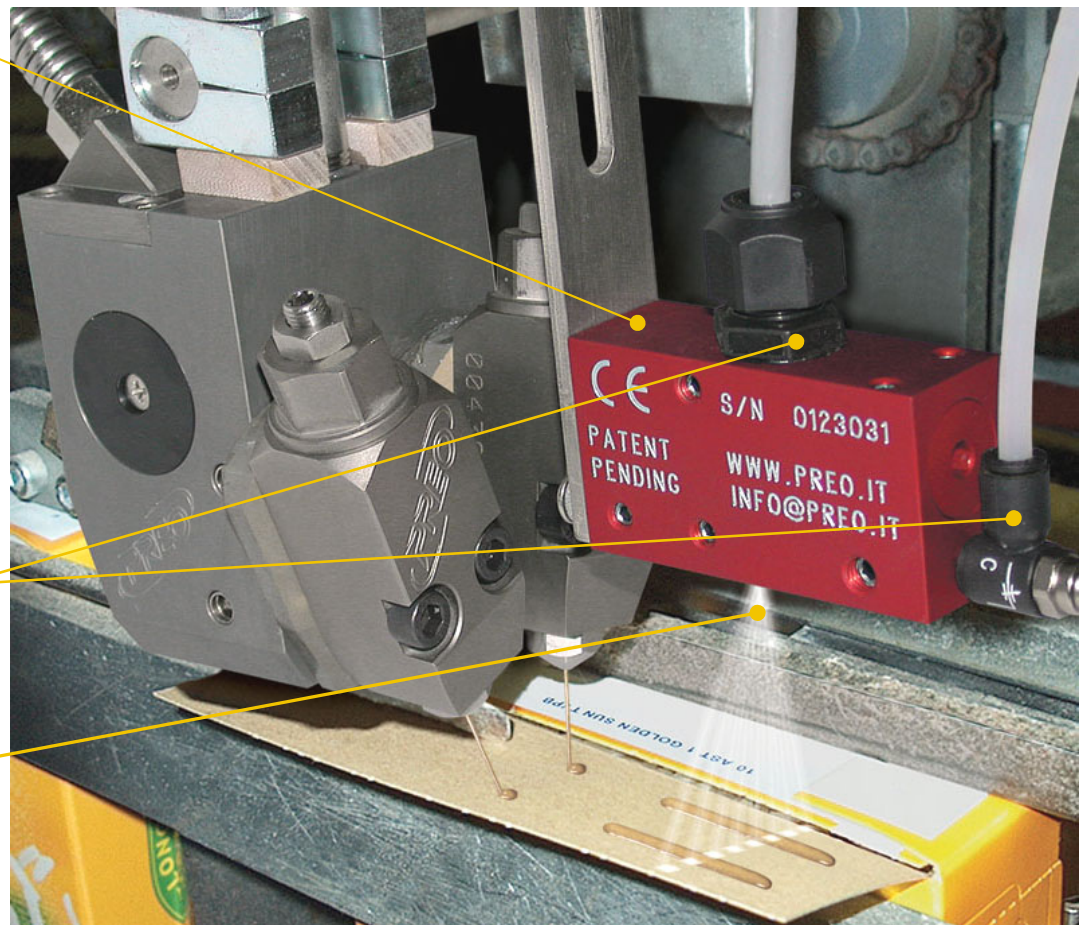


The measurement head is supplied with an air-operated self-cleaning system serving the purpose of eliminating any maintenance need even in a very dusty environment. It is connected to the control unit by means of quick-coupling connectors for easier installation.

### Glue detector



An innovative detector analyses in real time the infrared rays emitted by the glue, if present, with a measuring time less than one thousandth of a second.



The CIA digital control unit controls up to 2 optical measurement heads in a fully independent way and across all their functions, ensuring a much greater reliability than standard applications thanks to its innovative electronics.

### Connections



A terminal board with a quick-coupling connector on the back of the unit is used to connect all the signals required for the system to operate properly.

### Microprocessor

A microprocessor fully automatically controls (even on lines with a varying speed) the synchronism between readings, glue distribution and alarm signals, based on the encoder of the machine and/or the built-in quartz chronometer.

### Software

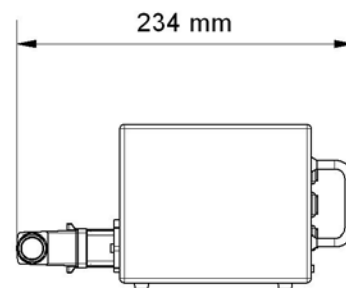
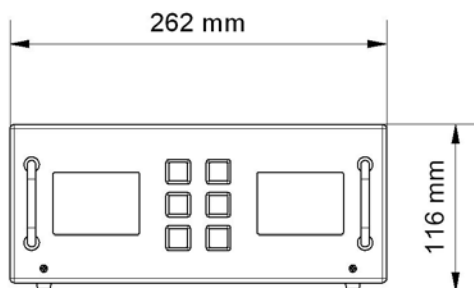
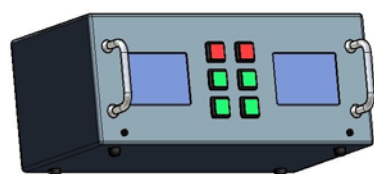
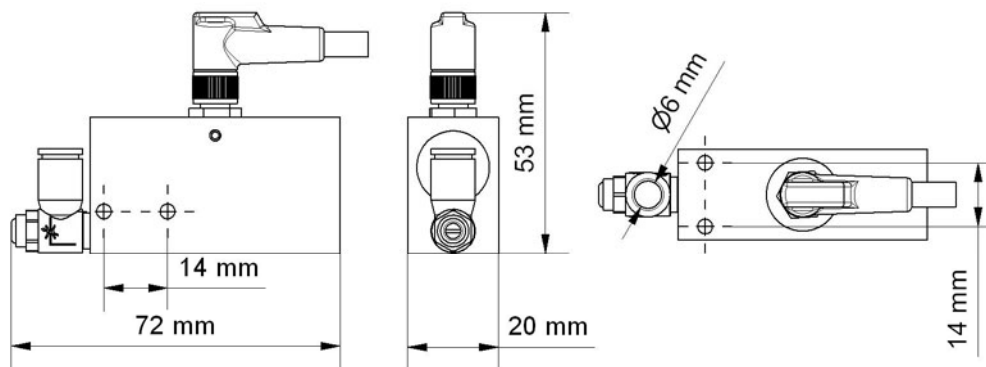
Signals in real time any anomaly and provides a diversified control of the alarms both in real time and in relation to percentages. A practical piece-counting function is part of the system.



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DATA SHEET



### GENERAL SPECIFICATIONS

HEAD WEIGHT	100 g
HEAD MATERIAL	red anodised aluminium
HEAD FIXING	8 M4 holes
MAX CONNECTING CABLE LENGTH	5 mt
CONTROL UNIT WEIGHT	2 kg
CONTROL UNIT MATERIAL	sheet iron with epoxy paint
CONTROL UNIT FIXING	4 M6 holes
PROTECTION	IP20 – IP65

### ELECTRICAL REQUIREMENTS

POWER SUPPLY	230 VAC ± 20% - 50/60 Hz - 115 VAC ± 20% (on request)
MAXIMUM POWER INPUT	20 Watt
LOW-VOLTAGE DC SUPPLY	24 VDC - max 1 A
HEAD POWER SUPPLY	5 VDC - 10 mA

### PNEUMATIC SPECIFICATIONS

COMPRESSED AIR JOINT	quick-coupling joint for hose Ø 6 mm
COMPRESSED AIR CONSUMPTION	2 ÷ 10 lt / min - 1÷8 bar

### INPUTS AND OUTPUTS

DIGITAL INPUT FOR SYNCHRONISM	1 input (12/24/48 VDC) per photocell and/or valve
INPUT INCREMENTAL ENCODER	1 input 0 ÷ 24 VDC PNP or NPN
OUTPUT FOR EJECTOR CONTROL	1 relay (230V - 1A)
OUTPUT FOR ALARM	1 relay (230V - 1A)

### OPTICAL SPECIFICATIONS

WORKING PRINCIPLE	array of passive infrared thermopiles
MEASURED SPECTRUM	8 ÷ 14 µm
SCANNING ANGLE	38°
TEMPERATURE OF THE WORKING ENVIRONMENT	0 - 50 °C
MAXIMUM SPEED OF THE LINE	no limit
MEASURABLE GLUE TEMPERATURE	70 - 300 °C
MINIMUM MEASURABLE TIME	4 ms
RECOMMENDED DISTANCE GLUE - HEAD	40 - 150 mm

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