

# VEROLINE® P.I. sensor Generation II

Contactless System for **P**ositioning & **I**dentification of coke plant machines as :  
Pusher car, Guide-coke and Charging car

## Evolution 2024

Motivation and Goals:

- Sustainability of the VEROLINE solution
- Compatibility with the existing VEROLINE solution
- Increased performances
- Integration of current technologies
- New configuration and control utility



### DESCRIPTION Hw

#### BOTTOM:

- 1x PS, Analog and RFID card
- 1x Jaeger card

#### LIDE:

- Clamp

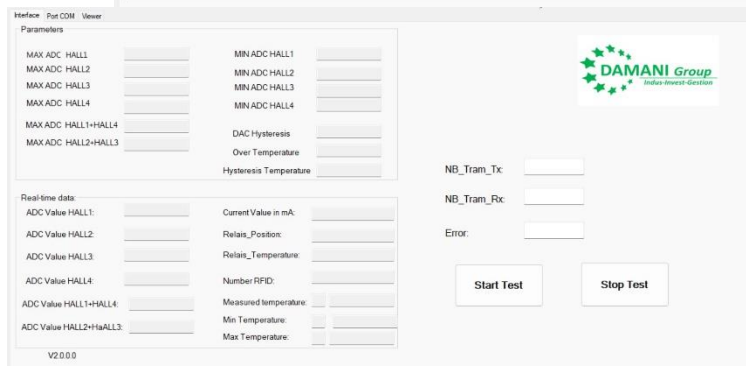
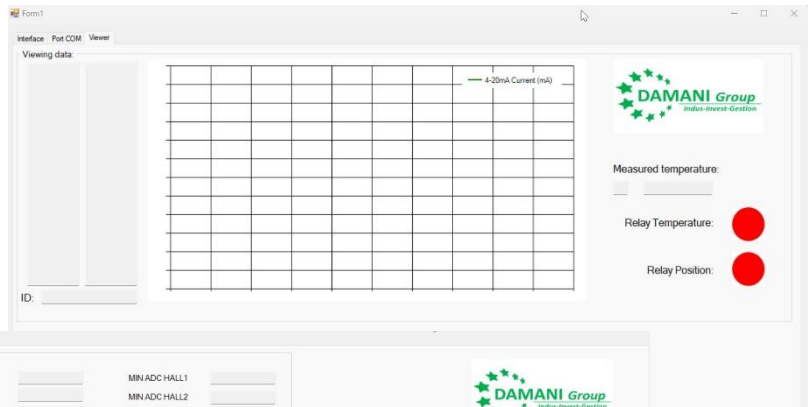
- No Internal link between BOTTOM and LIDE of box
- Jaeger Connector 17P
- 1x **LED** for PS (fix green) & RFID (blink green)  
Middle Point (fix red)
- STAINLESS STEEL Clamp

### Sw

- 4 x hall effect sensors numerics mounted in differential
- The Hall sensors are self-compensating to adapt of the temperature variations.
- Digital processing for the 4,,20ma signal
- Antenna integrated into the PCB for added performance (+20%) and stability.  
The repeatability (RFID function)of the VEROLINE PI sensor is also increased

### UTILITY

- Digital processing with adjustable range
- Graphic interface Utility for:
- Adjust the Middle Point range
- Adjust the T° level fault (range)
- Windows of Analog and RFID reading
- Recording of all data « .log »



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## Main technical data : ref. ELV2200.02

### Positioning function

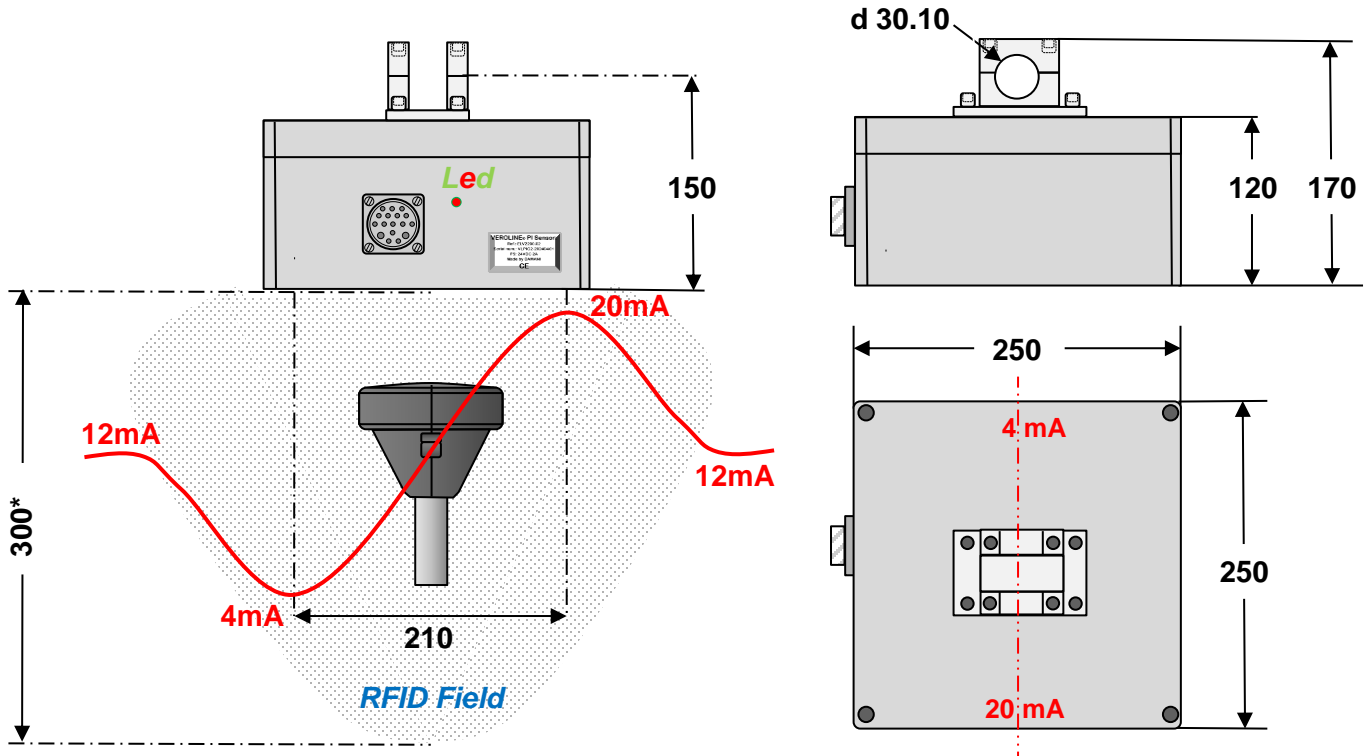
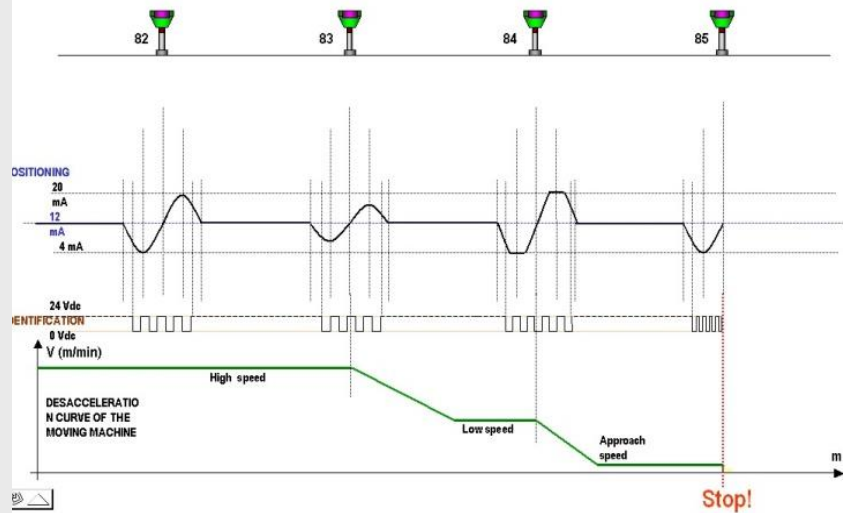
Measurement range : 210 mm max  
 Accuracy : 1 mm (nominal)  
 Resolution : 0,3 mm  
 Range (between sensor and PI head) : 90 mm nominal  
 (+/-30 mm adjusted)

Analog output : 4...20 mA / 500  
 Response time : 29 ms (95% of range)  
 Alimentation : 24 VDC / 10 % 2A  
 Operating temperature : -20° C to +60° C  
 Protection : IP 65  
 Weight : 3.680 kg

### Identification function

Serial interface : RS 485A  
 Frequency RFID : 125 kHz  
 Byte/bit user : 5/40  
 Re-writes quantity (head PI) : ilimited  
 Lecture time (typical) : 69 ms  
 Data storage : EEPROM  
 Data storage (head PI) : +20 years

OPERATING EXEMPLE : Operating principle of the VEROLINE System - Ex.: From position 22 to 25



\*Up To: depend of the conditions

DATA SHEET VLPI G2 DAM 24