

# 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

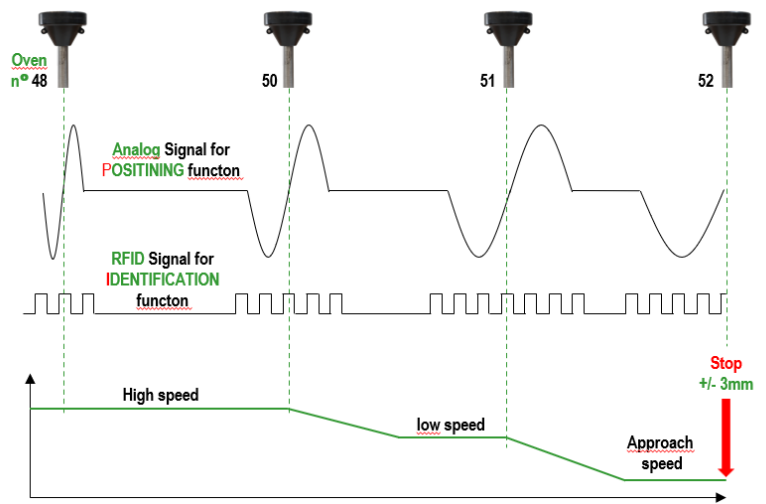
Engineered for precision...

...built for extremes

**Key Advantages**

- Resistant to harsh environments
- Resistant to ambient temperature
- Precise positioning within  $\pm 3$  mm
- Requires no maintenance or adjustment
- Absorbs rail irregularities

VEROLINE® integrates two major functions for the positioning and identification of charging machines, coke guide machines, and pushing machines operating around coke oven batteries. To ensure complete immunity to these extremely harsh operating conditions, positioning is achieved through magnetic sensors, while identification relies on RFID technology. The integration of these two technologies within a single sensor ensures high performance, robustness, environmental immunity, and excellent measurement accuracy, with positioning precision of approximately  $\pm 3$  mm.



**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

