



## Pillard DARKSCAN<sup>™</sup> Flex Flame monitor



### Tailored-made for industrial kiln burners

- Compact design, easy to install and to store
- All in one and self checking design
- EN298 and SIL3 certified

# Fives' flexible and all-in-one flame monitor for all industrial rotary kiln burners

Pillard DARKSCAN<sup>™</sup> Flex is a flame monitor for all industrial rotary kiln burners operating with any kind of gaseous, liquid or solid fuels.

#### COMPACT AND ADAPTED DESIGN

Handling, storage, transportation and installation are made easy thanks to its "all in one" and flexible design. Due to its burner embedded design, the Pillard DARKSCAN<sup>™</sup> Flex is not affected by dusty air since the viewfinder is located near the burner nozzle which is used as an efficient cooling air system. The flame sensor, close to the flame, can be replaced rapidly thanks to its quick disassembly system equipped with a removable electrical connector. The flame controller's display allows a quick visualization of the detector's status and the flame intensity.

#### **TECHNICAL FEATURES**

Measurement principle	Differential temperature variation between 2 points of a flame
Power supply	24V DC (+10%,-15%)
Power consumption	10VA
Dimensions	130 x 250 x 1 250mm (for 1 meter)
Jacket tube diameter	48mm minimum
Weight	16Kg for 1 meter + 2Kg per meter
Flexible and mechanical parts material	Stainless steel (304L)
Length of flexible part	1 to 15m
Operating temperature	-20°C to +70°C
Digital output	2 contact relays SPDT 250V – 2A
Analog output	4-20mA, 300 Ohms max.
Digital output	RS485
Warranty	1 year
INSTRUMENT AIR	
Swooping gir flow rate	25 Nm <sup>3</sup>

Sweeping air flow rate	25 Nm <sup>3</sup>
Compressed pression air	3 bars
Sweeping air connection	3/8"NPT

#### CABLE (PROVIDED)

Standard length	10m
Material	Polyvinyl chloride
	10,2mm ± 0,3mm
	9 x 0,75mm² 4 x 0,34mm²
	-40°C to +105°C
	500m



#### ADVANCED MONITORING AND RELIABILITY

Pillard DARKSCAN<sup>™</sup> Flex ensures the safety of equipment especially during ramp up phases. The detection is based on a pyrometric measurement between two points in the flame; this comparaison of variation in real time allows to avoid all hot fixed elements in the furnace. Pillard DARKSCAN<sup>™</sup> Flex ensures a high-reliability of monitoring thanks to ultimate technology of self-checking. It is certified according to EN298 of 2012. Its configuration using the infrared remote control allows to change the settings of the flame detector without opening it.

#### CERTIFICATIONS

- EN298 (2012)
- SIL3 according to EN61508 (2010)
- IP65, protection rating according to EN60529 (1992)

#### OPTIONS

- Junction box
- Tailor-made cable lengtht

#### SERVICES

- 3-year warranty available
- Maintenance contract
- Commissioning assistance



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