

Compact flame monitor with fibre optic system

- Application with**
- flexible fibre optic system (D-LL 703)
 - or rigid fibre optic system (D-LL 704)

Features

- Suitable for continuous operation and 72-hour operation according to TRD 604
- Compact design, flame sensor and control unit in one enclosure, takes up no space in control cabinet
- LED display for settings and operational status
- Self-monitoring and fail-safe compact flame monitor for the monitoring of gas, oil and coal flames with integrated UV, VIS or IR flame sensor, primarily in single burner furnaces.

Applications

- Burners with difficult installation conditions for conventional flame sensors or on those whose environmental temperature near the sighting tube is too high
- Power stations
- Chemical industry
- Refineries
- Cement plants
- Waste incinerators
- Steam generators
- Heating plants.



D-LX 700

Functional description

The D-LX 700 flame monitor analyses flame radiation using the integrated flame sensor signal.

The flame intensity is present as a current at one output 0/4...20mA for further analysis.

The D-LL 703 and D-LL 704 fibre optic system may be integrated directly into the hot area of the burner. It transfers the radiation from the flame over a fibre optic bundle to the flame sensor installed outside the burner.

Design

- Integrated compact device.

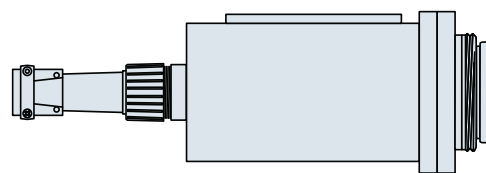
Accessories

- **Digital display** for optimal adjustment of the flame sensors by measuring the pulse rate and its extreme values (D-ZS 087 - 20)
- **UV-A, UV-B and IR test light source** 230 V/50 Hz (D-ZS 093)
- **Terminal box** for connecting the flame monitor (D-ZS 140 / 141)
- **Installation flange** for D-LL 703 for fibre optic system (D-ZS 703)
- **Welding flange** for D-LL 704 for fibre optic system (D-ZS 704).

Flame monitor selection

Flame sensor	Suitable for fuels				Features
	Gas	Oil	Coal	Wood	
D-LX 700 UAF	○	++			with intensive ambient light (neighbouring burners), gain switchover
D-LX 700 UA	+	++	+		with low NO _x component, gain switchover
D-LX 700 IS	!	+	++	+	selective single burner monitoring (coal, oil)
D-LX 700 IG	○	+	++	++	selective single burner monitoring (coal, oil, wood)

++ ideally suited + well suited ○ conditionally suited ! not permitted (from experience)



Flame sensor
D-LE 700

ATHEX bvba
www.athex.eu - info@athex.eu
 Tel: +32 (0)3 653 21 82
 Fax: +32 (0)3 653 21 61
 Vierselbaan 40 unit 10
 B-2240 Zandhoven, Belgium

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 combustion and environment

Operational mode	Intermittent operation, continuous operation, 72-hour operation without permanent supervision	Spectral ranges	UV, VIS, IR
Safety	Self-monitoring and fail-safe	Viewing angle	6°
Auxiliary supply	24 VDC	Number of ranges	1
Protection class	IP67	Switching threshold	0...9
		Display	LED display
Flame relay	1x NO contact, 230 VAC, 2 A	Flame intensity	0/4...20 mA
Status relay	1x NO contact, 230 VAC, 2 A	Perm. ambient temperature	-20...+60°C
Safety time	1, 3, 5 s	Dimensions / Weight	90 x 92 mm, length approx. 350 mm / approx. 1.8 kg

