

Compact flame monitor

Self-monitoring and fail-safe compact flame monitor for monitoring gas, oil and coal flames with integrated UV, VIS or IR flame sensor, primarily in single burner view applications

Features

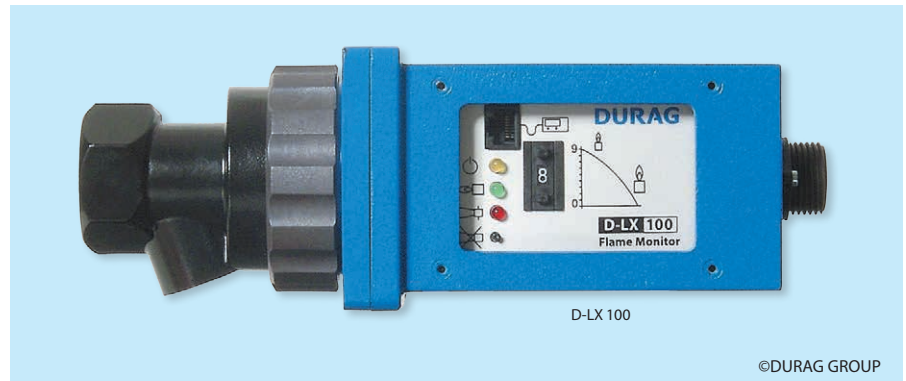
- Suitable for intermittent operation as well as continuous operation
- Compact design, flame sensor and control unit in one enclosure, takes up no space in control cabinet
- LED display for settings and operational status
- ATEX approved (D-LX 100.../94Ex for zone 1 and D-LX 100.../97Ex for zone 2)

Applications

- Power stations
- Chemical industry
- Refineries
- Cement plants
- Waste incinerators
- Steam generators
- Heating plants

Certifications

- SIL3
- DVGW
- UL 372
- FM Class 7610
- AGA: AS 4625
- EAC
- ATEX



Functional description

The D-LX 100 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.

Design

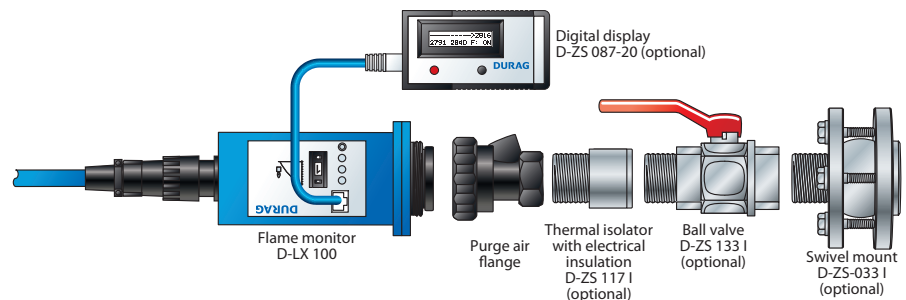
- Integrated compact device



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Accessories

- **Digital display** for optimal adjustment of the flame sensors by measuring the pulse rate and its extreme values (D-ZS 087 - 20)
- **Optical adjustment aid** for the alignment of the swivel mount on the sighting tube (D-ZS 118)
- **UV-C test light source** 230 V/ 50 Hz (D-ZS 077-10)
- **UV-A, UV-B and IR test light source** 230 V/ 50 Hz (D-ZS 093)
- **Swivel mount** for alignment of flame monitor to the flame to be monitored
- **Thermal isolator** with electrical insulation
- **Ball valve** for closing sighting tube
- **Terminal box** for connecting the flame monitor (D-ZS 140/ 141)
- **Power supply unit** to supply two D-LX 100 (D-NG 24/05)



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Operational mode	Intermittent operation, continuous operation, 72-hour operation without permanent supervision	Flame intensity	0/4 ... 20mA
Safety	Self-monitoring and fail-safe	Perm. ambient temperature	-20 °C to +60 °C
Electrical connection	24 VDC, 5 W, PELV	Dimensions Weight	90x92 mm, length approx. 350 mm/ approx. 1.8 kg
Protection class	IP67	Sighting tube connection	G 1 1/4"
Flame relay	1x NO contact, 230 VAC/ 2 A	Purge air connection	G 1/2"
Status relay	1x NO contact, 230 VAC/ 2 A	D-LX 100.../9xEx	
FFDT (safety time)	1, 3, 5 s	/94Ex	II 2G Ex de IIC T5/T6 Class I, Div. 1, Group B, C & D Class I, Div. 2, Group A, B, C & D II 3G Ex nAnC IIC T6
Spectral ranges	UV, VIS, IR	/95Ex	
Viewing angle	6°	/96Ex	
Number of ranges	1	/97Ex	
Switching threshold	0 ... 9	Protection class	IP65
Display	LED display	Dimensions Weight	Ø 130 mm, length 313 mm approx. 4.3 kg
		Sighting tube connection	G 1" (/94Ex, /95Ex) G 1 1/4" (/96Ex, /97Ex)