

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

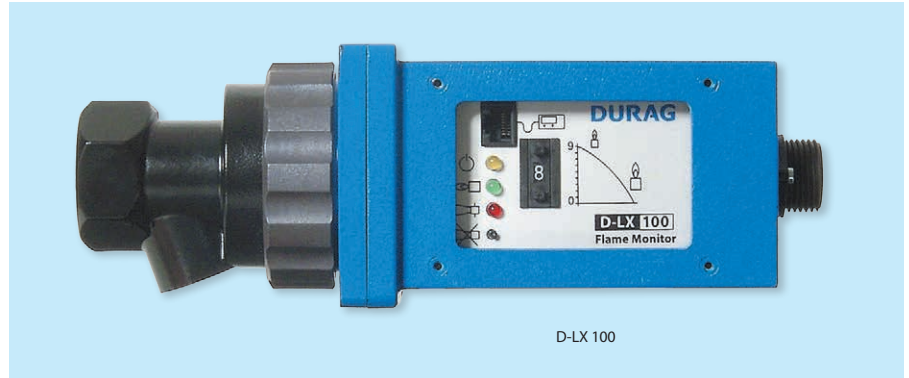
- Suitable for intermittent operation as well as continuous operation
- Compact design, flame sensor and control unit in one enclosure, takes up no space in control cabinet
- LED display for settings and operational status
- ATEX approved (D-LX 100.../94Ex for zone 1 and D-LX 100.../97Ex for zone 2)

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



D-LX 100

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

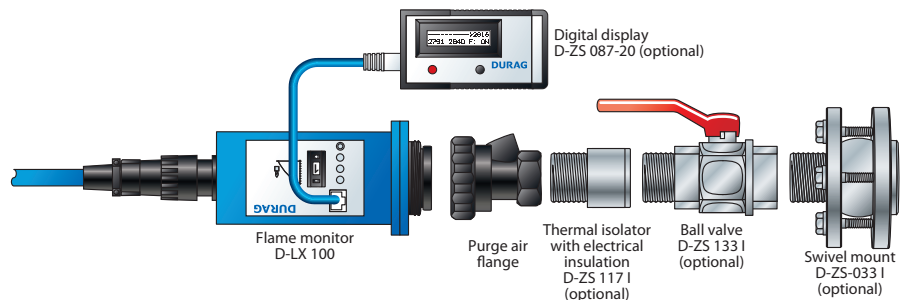
- Integrated compact device



D-LX 100.../94Ex
D-LX 100.../95Ex

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 | 90x92 mm, length approx. 350 mm/ approx. 1.8 kg |
| Protection class | IP67 | Weight | |
| Flame relay | 1x NO contact, 230 VAC/ 2 A | Sighting tube connection | G 1 1/4" |
| Status relay | 1x NO contact, 230 VAC/ 2 A | Purge air connection | G 1/2" |
| FFDT (safety time) | 1, 3, 5 s | D-LX 100.../9xEx | |
| Spectral ranges | UV, VIS, IR | /94Ex | II 2G Ex de IIC T5/T6 |
| Viewing angle | 6° | /95Ex | Class I, Div. 1, Group B, C & D |
| Number of ranges | 1 | /96Ex | Class I, Div. 2, Group A, B, C & D |
| Switching threshold | 0 ... 9 | /97Ex | II 3G Ex nAnC IIC T6 |
| Display | LED display | Protection class | IP65 |
| | | /94Ex, /95Ex | Ø 130 mm, length 313 mm approx. 4.3 kg |
| | | Dimensions | |
| | | Weight | |
| | | Sighting tube connection | G 1" (/94Ex, /95Ex) G 1 1/4" (/96Ex, /97Ex) |