

# D-LX 110

## Compact flame monitor

Optical monitoring of individual burner flames

- Consistent technology for worldwide applications
- Functional Safety up to SIL 3
- Local display (visible also for Ex versions)



## Features

- **Large temperature range**  
Deployable without change, certified and without need of accessories for isolation, heating or cooling
- **Two channel control unit module**  
Highest safety simultaneously with highest availability
- **Two flame ON/OFF contacts**  
1x normally open, 1x normally closed
- **D-LX 110 and D-LX 710**  
Variants for direct view or for combination with fibre optic systems, also for hazardous areas
- **Low maintenance requirements**  
Easy exchange of consumable parts
- **Local display**  
Operational status and settings visible at a single glance, for complete temperature range and all variants

## Benefits

- **Easy adjustment**  
Direct access to available settings shortens commissioning times
- **Versatile detection**  
Choice of available detectors allows for monitoring of flames of all fuels within same device family
- **Versatile for most variable applications**  
Same device technology can be used for most different geographical regions and based on varying systems of standards
- **Flexible for changed requirements**  
If requirements for plant change (Ex zones, need for fibre optic systems) adaptation via a replacement within same device family usually possible
- **Flexible operation support**  
Possibility to adapt device settings outside of factory enables fast local replacements with smaller local stocks

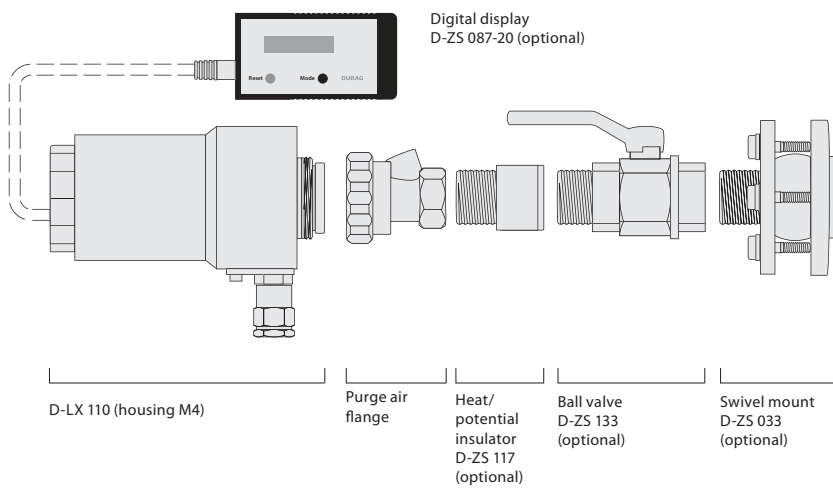
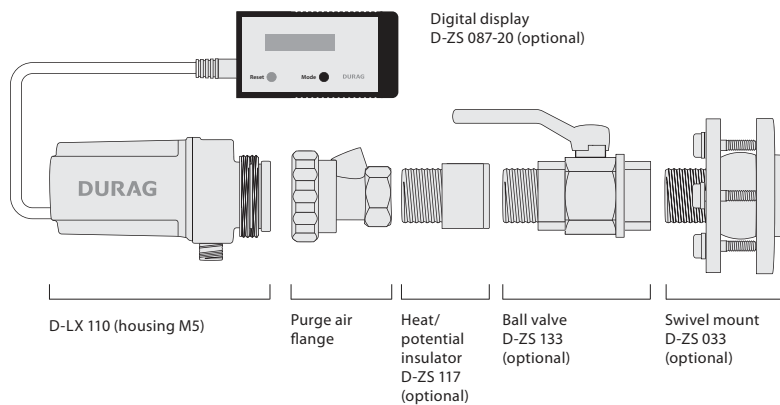
## Technical data

<b>Spectral sensitivity</b>	UL: 185 ... 260 nm UAF: 280 ... 410 nm UA: 190 ... 520 nm IS: 300 ... 1100 nm IG: 780 ... 1800 nm
<b>Operating mode</b>	Intermittent and continuous operation
<b>Functional Safety</b>	Self-monitoring and fail-safe, supports safety chains up to SIL 3
<b>Switching threshold</b>	Flame intensity
<b>Local display</b>	LEDs, always visible at a single glance for all versions
<b>Flame failure detection time (FFDT)</b>	0.5 ... 5 s (in steps of 0.5 s)
<b>Flame ON/OFF contact</b>	Normally open: active when flame ON Normally closed: active when flame OFF
<b>Ready-for-operation contact</b>	Normally open: active when no error
<b>Switching capacity</b>	Relay contacts: Max. 24 V $\overline{\sim}$ , 0.5 A Max. 250 V $\sim$ , 2.0 A for 250 V / cos $\varphi$ = 1.0
<b>Analogue output</b>	0/4 ... 20 mA (selectable), Load max. 750 Ohm
<b>Opening angle</b>	6° Version UL: 6° horizontal, 12° vertical

<b>Electrical data</b>	24 V $\overline{\sim}$ , 7 W, PELV
<b>Ambient conditions</b>	-40 ... +75 °C; Version UL: -40 ... +70 °C
<b>Degree of protection</b>	IP66/IP68, NEMA 4X IP65, NEMA 4X (/MP7) IP66, NEMA 4X (Ex versions)
<b>Connections</b>	Sight tube G 1¼" or NPT 1¼", F Purge air G ½" or NPT ½", F
<b>Dimensions</b>	Housing M5 100 x 100 x 260 mm Housing M4 Ø120 mm, length approx. 310 mm
<b>Weight</b>	Housing (without cable) M5 approx. 1.3 kg M4 approx. 3.0 kg

<b>Explosion protection</b>	<b>D-LX 110/710 ../M4/84Ex</b> II 2G Ex db IIC T6 or T5 Gb II 2D Ex tb IIIC T85 °C or T100 °C Db
	<b>D-LX 110/710 ../M4/85Ex</b> Cl. I, Div. 1, Gr. A, B, C, D T6/T5 Cl. II, Div. 1, Gr. E, F, G T6/T5; Cl. III
	<b>D-LX 110/710 ../M5/86Ex</b> Cl. I, Div. 2, Gr. A, B, C, D T6/T4 Cl. II, Div. 2, Gr. E, F, G T6/T4; Cl. III
	<b>D-LX 110/710 ../M5/87Ex</b> II 3G Ex ec nC IIC T6 or T4 Gc II 3D Ex tc IIIC T80 °C or T130 °C Dc

## D-LX 110 COMPACT FLAME MONITOR FOR DIRECT VIEW | CONFIGURATION OF ACCESSORIES FOR MOUNTING



## D-LX 710 COMPACT FLAME MONITOR | USE WITH FIBRE OPTIC SYSTEM

