

## Flame sensor

Flame sensors for the monitoring of gas, oil and coal flames, primarily in single burner furnaces.

### Features

- Self-monitoring and fail-safe in conjunction with a control unit/burner control
- Flame sensors for every spectral range of flame monitoring from UV to IR
- Connection to D-UG 120 and D-UG 660 control unit as well as D-GF 150 burner control
- Uniform output signal thus mutually interchangeable
- Compliance to general safety regulations.

### Applications

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

### Certifications

- DVGW
- APAVE
- UL 372
- FM Class 7610
- AGA: AG 210
- GOST-R.



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**DURAG GROUP smart solutions for combustion and environment**



D-LE 103...

### Functional description

The photo element in the flame sensor generates a signal which is proportional to the flame radiation intensity. The output signal of the flame sensor is used as an input signal to a control unit or a burner control.

The D-LE 103 flame sensor is available with different photo elements for optimal selectivity when using different fuels.

### Models

- Cable gland (-CG)
- Axial plug (-P).

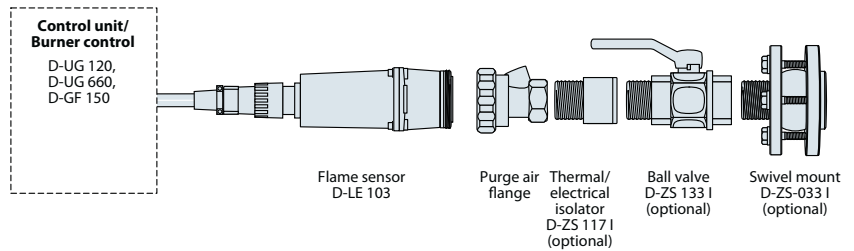
### Accessories

- **Optical adjustment aid** for 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 sensor to the flame to be monitored (D-ZS 033 - I)
- **Thermal isolator** with electrical insulation (D-ZS 117 - I)
- **Ball valve** for closing sighting tube (D-ZS 133 - I)
- **Terminal box** for connecting flame sensor (D-ZS 140)

### Flame sensor selection

Flame sensor	Suitable for fuels			
	Gas	Oil	Coal	Wood
D-LE 103 UL	++	+		
D-LE 103 UAF	o	++		
D-LE 103 UA	+	++	o	+
D-LE 103 IS	!	++	++	+
D-LE 103 IG	o	++	++	++

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



Operational mode	Intermittent operation, continuous operation and 72-hour operation without permanent supervision	Viewing angle	6°
Safety	self-monitoring and fail-safe in conjunction with a control unit/burner control	Perm. ambient temperature	-20...+60°C
Protection	with cable gland (D-LE 103...-CG) IP65, with axial plug (D-LE 103...-P) IP67	Dimensions Weight	Ø80 mm, length approx. 350 mm approx. 1 kg
Gain	pre-set	Sighting tube connection	G 1¼"
High-pass filter	pre-set	Purge air connection	G ½"
Spectral ranges	UV, VIS, IR		

