

Flame sensor

Flame sensor for monitoring gas and oil flames, primarily in gas turbines or in particularly harsh environments

Features

- Self-monitoring and fail-safe in conjunction with a control unit/ burner control
- Deployable with high combustion chamber overpressure and with strong vibrations
- Connection to the D-UG 120, D-UG 660 control units and the D-GF 150 (-MB) burner control
- Optionally available with air/water cooling
- Compliant to general safety regulations
- Flame monitoring in the UV-range from 190 to 570 nm
- ATEX-approved (D-GT 800/801../Ex)

Applications

- Burners with difficult installation conditions for conventional flame sensors or on those where ambient temperature near the sighting tube is very high
- Power stations
- Chemical industry
- Refineries
- Cement plants
- Waste incinerators
- Steam generators
- Heating plants
- Gas turbines

Certifications (only D-GT 800/801)

- DVGW
- EAC
- ATEX



D-GT 800-P

Functional description

With its combination of a highly sensitive photo element and sturdy design, the D-GT 800/801 flame sensors are ideal for use in harsh environments such as in gas turbines. The photodiode used can detect almost all blue burning flames, such as gas flames having only a low radiation component in the visible range. The D-GT 800/801 is available with different photo elements for optimal selectivity when using different fuels.

Models

- Cable gland connection (-Ex)
- Axial plug (-P)
- Available with air or water cooling for very high temperatures (D-GT 800)

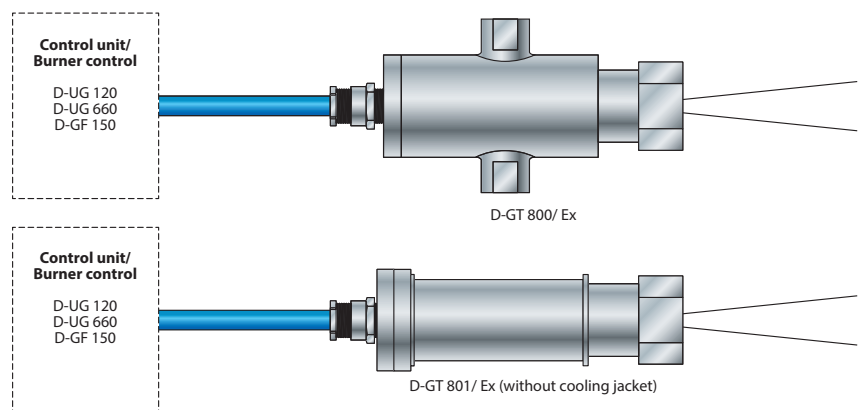
Accessories

- **UV-A, UV-B and IR test light source** 230 V/ 50 Hz (D-ZS 093)
- **Terminal box** for connecting the flame sensor (D-ZS 140, D-ZS 141)

Flame sensor selection

Flame sensor	Suitability for		Features
	Gas	Oil	
D-GT 800/801 UAF	o	++	with intensive ambient light (neighbouring burners)
D-GT 800/801 UA	+	++	at low NO _x component

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



Operational mode D-GT 800/801	Intermittent operation, continuous operation and 72-hour operation without permanent supervision	Perm. ambient temperature	Without cooling: -20°C to +120°C Air cooling: -20°C to +200°C Water cooling: -20°C to +300°C
Safety	Self-monitoring and fail-safe in conjunction with a control unit/ burner control	Vibration	10 g
		Dimensions	Ø 100 mm; length approx. 190 mm
Protection	With cable gland (D-GT 800/801 -P) IP67	Weight	Without cooling: approx. 1.5 kg
	Ex-Version (D-GT 800/801 ../Ex) IP66		with cooling: approx. 2.0 kg
Ex-Protection (D-GT 800/801../Ex)	II 2G Ex d T4/T5/T6	Max combustion chamber overpressure	30 bar
Spectral range	UV	Sighting tube connection	¾" NPT (F)
Viewing angle	6°	Cooling connection	½" NPT (F)