

## Optical smoke detector IQ8Quad Ex (i) w/o isolator



**Part-No.: 803371.EX**  
**Approval: VdS, ATEX**

Scattered-light smoke detector for reliable early recognition of fires. Responds well to slow-burning, smouldering fires. Intelligent fire detector with decentralized intelligence, automatic function self-test, emergency mode, storage of alarm and operating data, alarm display. Soft addressing and separate operational display is only possible when operating an esserbus / esserbus-PLUS IQ8Quad detector without loop isolator, especially for usage in explosion zones. Operation with individual addressing at Ex barrier Part No. 804744 and as standard detector at Ex barrier Part No. 764744.

### Data according to ATEX

Max. Input Voltage ( $U_i$ )	21 V DC
Max. Input current ( $I_i$ )	252 mA
Max. Output current ( $I_o$ )	10 mA
Max. internal capacity ( $C_i$ )	1 nF
Ambient temperature ( $T_a$ )	-20 °C ... 70 °C
EC-type examination certificate	TÜV 09 ATEX 554910
Ex-category	II 2G (with Ex barrier Part No. 804744 or 764744)
Ex. protection	Ex ib IIC T4 Gb

### Common technical data

Operating voltage	8 ... 42 V DC
Quiescent current @ 19 V DC	50 $\mu$ A
Alarm current @ 9 V DC	18 mA
Area to be monitored	110 m <sup>2</sup>
Height to be monitored	12 m
Application temperature	-20 °C ... 70 °C
Storage temperature	-25 °C ... 75 °C
Air humidity	< 95 %
Type of protection	IP 40 with base, up to IP 43 incl. base + option
Material	ABS
Color	white, similar to RAL 9010
Weight	approx. 110 g
Detector specification	EN 54-7:2006
Dimensions	Ø: 117 mm H: 49 mm (62 mm incl. base)
Declaration of Performance	DoP-20914130701

**i** Intrinsically safe fire detection equipment is defined as "equipment and wiring which is incapable of releasing sufficient electrical or thermal energy under normal or abnormal conditions to cause ignition of a specific hazardous atmosphere mixture in its most easily ignited concentration". This basically means that intrinsically safe equipment and wiring operates using electrical and thermal energy below the level that would be required to spark an explosion in a hazardous area such as an oil refinery, Oil Rigs/Platforms, FPSO's. Fully addressable devices for installation in hazardous areas with direct connection of the Ex barrier (Part No. 804744) on the loop, without spending a loop address for the connection via a transponder as in case of the conventional connection. Additional detectors for the explosion zones can be found in the chapters manual call points and special detectors. Detailed information about installation and operation can be found in the documentation (Part No. 798920) on our website. All of the following IQ8Quad intrinsically safe fire detectors must be operated with the Part No. 805590 base, except for FM approved IQ8Quad intrinsically safe fire detectors, they must be operated with the Part No. 805590.IN. In the case of operation in standard zones, no individual addressing is possible! For usage in zone 1 and zone 2 in case of operation - with individual addressing the Ex barrier Part No. 804744, - in conventional zones the Ex barrier Part No. 764744 must be used! The Ex barrier separates intrinsically safe and non-intrinsically safe circuits before the explosion prone area to be monitored (explosion zone). To determine the battery capacity of a FACP, the detector data "Quiescent current @ FACP battery" can be added.

### Accessories:

805590 Standard detector base for IQ8Quad