

## INFRARED (IR) FLAME DETECTOR LumEx4

It is a detector working on the principle of measurementand evaluating optical infrared radiation in the area of about 950nm.

The detector unit and the detector head are installed in a metal housing. The detector is connected via a multi-core shielded cable (four-wire or six-wire) through the transition box to the control panel, or to other detectors on the detection line.



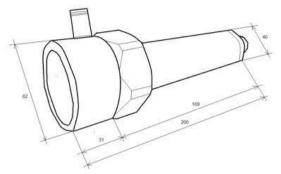
The detector is set up and parameterized via a communication converter using software from a PC or laptop. All setting and parameterization are carried out exclusively by RSBP or its authorized representative. For proper operation of the detector, blowing the detector with compressed air prescribed parameters (provided by the customer) is required to ensure the cleanliness of the cover glass

TECHNICAL PARAMETERS	
Power voltage	18 to 27 V DC
Operating voltage	8 to 27 Vss
Power input	max. 20 mA
Protection	polyswitch 200 mA, varistor 31V/ 8,6J
Power loss	□ 0,25 W
Operating temperature	- 40°C to + 200°C
IR scanning	450 – 1100 nm (peak 880 nm)
Temperature measurement	- 40°C to + 80°C, □ 3°C
Output switching	Relay with coupled resistor Umax = 48 Vss, Imax = 0,25 mA
Response time	$t = Ts \times (Cs + 1) + Tr + Tf ; \square 2ms$
Communication interface	CAN (ISO 11898), 250 kbps, CAN open (CiA DS 301)
Compressed air connection	Push-in fitting for 8 mm hose connection
Parameters of compressed air for blow – consumption	200 l/min – dry
Non-explosion design – dust	🖾 II 1D Ex op is T195°C Da – sensor
	(Ex)II 2D Ex tb IIIC T80°C Db – evaluation part
Non-explosion design – gas	🖾 II 1G Ex op is IIB T3 Ga – sensor
	🖾 II 3G Ex ec IIB T4 Gc – evaluation part
Temperature resistance	40°C to + 80°C - evaluation part
	40°C to + 200°C - sensor
Optional accessories	Adapter with use up to 500°C



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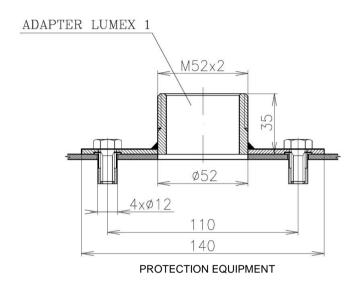


The detector is designed to identify flame and sparks in enclosed areas with explosion and fire hazard. It allows to detects the flame and sparks in the monitored technological section and to convert and amplify this impulse to a signal suitable for further evaluation and processing. It is equipment with blowout to ensure the accuracy of IR spectrum. Use only in darkened spaces.

TECHNICAL DATA	
Operating voltage	8 to 27 Vss
Current consumption	□ 45 mA
Power dissipation	□ 0,25 W
Alarm impulse	cca 1 – 240 sec.
Response time	□ 3 ms
Cover	IP 65
Spectral sensitivity IR	950 nm
Temperature range	-20°C to +80°C
Housing material	Stainless steel, Dural
Weight	1560g
Output	Resistance relay
Sensitivity degree	1 - 100%
Angle of view	110°
Dimensions	62 mm x 220 mm
Blowout air pressure	0,1 - 0,5 bar
Non-explosive design	II 1D/2D Ex tD A20/A21 T85°C II 3G Ex ic IIB T6



## **DIMENSION AND INSTALLATION OF LumEx1 ADAPTER**



## **INSTALLATION ON PIPING**

