

MHG 282

Optical Smoke Detector

The MHG 282 Optical Smoke Detector is designed for the automatic detection and indication of smoke of arising fire within LITES fire detection and alarm system.



A robustly built detector operating on the principle of infra-red light scattering on smoke particles is primarily intended for explosion and fire hazardous areas with combustible gas, fumes, dust and explosives as well. It is also well-suited for common environments where higher mechanical and weather resistance is required.

The MHG 282 Detector is available in two variants:

MHG 282.049 with voltage characteristic

MHG 282.050 with current characteristic

Both detector types irrespective to which kind of environment they are used for may be connected to LITES MHU I06 and MHU I08 Conventional Control Panels directly. When connected to LITES MHU I09 Addressable Control Panel the MHY 409 Addressable Unit is indispensable.

The detectors are to be connected to the fire loop wiring by means of the MHY 703 Mount Base.

The MHS 407.I23 Remote Indicator or other LITES models are also available for parallel signalling with the MHG 282.049 Detector and the MHS 407.I24 Remote Indicator to be used with the MHG 282.050 Detector version.

The detector has been approved for use by The Ministry of Internal Affairs of The Czech Republic, Head Administration of The Fire Guard Corps and meets EN 54 - 7 , ČSN EN 50014, 50019 and 50020 standards.

Technical Specifications

Supply Voltage Range	16 - 24 V dc
Nominal Supply Voltage	21,5 V dc
Maximum Supply Voltage	30 V dc
Quiescent Current	70 µA max.
Alarm Current	100 mA max. *See Note below
	20 ⁺¹ ₋₅ mA
Alarm Voltage	6 - 8 V at 10 mA
Smoke Sensitivity complying EN 54-7	m = cca 0,15 dB/m (response to aerosol at tunnel test at v = 1m/s)
	100 mg (response to burning of lime wood in 1 m ³)
	complying ČSN 342710
Response Time	3 - 8 s
Alarm Indication	red LED
Remote Indicator	LITES Type
IP Rating complying ČSN EN 60529	
Detector Body connected to Mount Base	IP 54
Detector Sensor	IP 32
Workmanship according to ČSN EN 50014, 50019	E Ex e II T6
Safety Class to ČSN 341010	III
Interference Suppression to ČSN 334200 and ČSN EN 55022	class B
Size of Detector dia x heigh	147 x 75 mm
Weight	650 g

Working Conditions

Inner spaces with no aggressive substances

Operating Temperature Range

-25 to +70 °C

Relative Air Humidity

95% max. at 40 °C (3 x 21 days per year)

Atmosphere Pressure Range

86 to 106 kPa

* Note

The current at alarm state is reduced automatically provided LITES control panels are used. Using other types of control panels the current is to be reduced so as not to exceed \square 100 mA.

Verze 03/2017

