
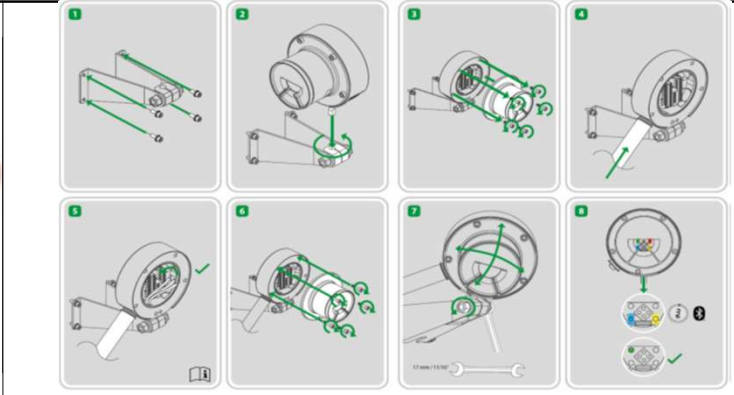


FL5000 Flame Detector Technical Specification Summary Sheet

	
Manufacturer	MSA
Model	General Monitors® FL5000
Instrument Description	The FL5000 is a Multi-Spectral Infrared (MSIR) Flame Detector with high false alarm immunity and a large field of view. Additionally, it offers an easy upgrade solution from the FL4000H, Bluetooth, and a heater. With 22 FM approved fuels listed, it is ready to cover your flame detection needs.
Mechanical	
Housing material	Polyester TGIC Powder Coated 316 Stainless Steel
Weight, FL5000 Housing Only	7.6 lbs (3.447 kg), (w/ mount bracket): 9.125lbs (4.139 kg)
Conduit entries & thread options	4 x 3/4" NPT or M25
Enclosure rating	Class I, Div. 1, Groups B, C, D T4 Class II/III, Div. 1/2, Groups E, F, G Class I, Div. 2, Groups A, B, C, D T4 (-40°C ≤ Ta ≤ +80°C) Type 6P, IP66/67 Class I, Zone 1, AEx db IIC T4 Gb Zone 21, AEx tb IIIC T135°C Db Ex db IIC T4 Gb Ex tb IIIC T135C Db -55°C ≤ Ta ≤ +80°C, IP66/67
Upgradeable Design from FL4000H	Yes
Electrical	
Nominal supply voltage	24 VDC (5.7 W with Heater 'OFF', 8.9 W with Heater 'ON')
Range	20 to 32 VDC
Maximum power consumption	6.2 W (heater 'OFF') 9.7 W (heater 'ON')
Relay Contact Ratings	8 A @ 24 VDC, Resistive MAX
Baud Rate	2400, 4800, 9600, 19200, and 38400 Baud
Analog Signal Options	HART (1.25 mA) HART (3.5 mA) HART Disabled/Off Output signal range: 1.25 – 20 mA 3.5 – 20 mA 0 to 20 mA FAULT signal: 1.25 mA 3.5 mA 0 to 0.2 mA COPM fault signal: 2.0 ± 0.2 mA 3.5 mA 2.0 ± 0.2 mA Ready signal: 4.05 ± 0.2 mA 4.05 ± 0.2 mA 4.3 ± 0.2 mA INSTANT ALARM signal: 16.0 ± 0.2 mA 16.0 ± 0.2 mA 16.0 ± 0.2 mA SUSTAINED ALARM signal: 20.0 ± 0.2 mA 20.0 ± 0.2 mA 20.0 ± 0.2 mA Bluetooth load: 3.0 mA 3.0 mA 3.0 mA
HART Communication Option	HART Rev 7
Modbus RS-485	Yes
Diagnostics	
Status Indicator	Four LEDs indicate status, fault conditions
Instrument Status LED Display	Power On/Normal=Green, Fault= Yellow, Alarm= Red, Blue = Bluetooth
Status LED indication	Yes
Wireless Connectivity	Bluetooth Low Energy (BLE)
Environmental	
Operating Temperature	*-40°F to 176°F (-40°C to 80°C) - FM3260 & ULC-ORD-C386 *-67°F to 176°F (-55°C to 80°C) - EN54-10 & DNV-CG-0339
Humidity	0% to 95% RH, non-condensing
Accessories	
Test Lamp with Charger - PN TL105-1001	Yes
Mounting Bracket - PN 71370-1	Yes
Rain Guard - PN 712006-1	Yes
Air Curtain - PN 712880-1	Yes
3/4" NPT Plug - PN 10177576	Yes
M25 Plug - PN 10203507	Yes
Thread Adapter - PN 914-196	Yes
FL4000H Upgrade Kit - PN 10242703	Yes
Approvals	
Factory Mutual (FM)	Yes
CSA	Yes
ATEX/IECEx	Yes
SIL Certification	SIL 2 & 3 Suitable