



3M™ Spyglass Open Path Combustible gas detector

Bid specification

Product Description

Spyglass is a SIL-2 compliant Open Path gas detector for combustible gas detection. It is available in 3 or 4 wire configuration with a standard 4-20 mA and MODBUS® output. It also supports HART® communication protocols. Spyglass has built in alarm and fault event logging. It also provides a user friendly 3 color status LED and is configurable with a non-intrusive magnetic switch.

Certifications

Global Approvals IECEx, ATEX, FM, FMC, SIL-2 (Third Party Certification by TUV-Rheinland), DNV

Area Classification Class I Div 1 Group BCD, Class II Div 1 Group EFG, Class III

Environmental

Operating Temperature -55° to 65° Celsius / -67° to 149° Fahrenheit

Humidity 0-95% RH (non condensing)

Transmitter Specification

Power 3 wire or 4 wire

Operating Voltage 3/4 Wire 10-32 VDC (24 VDC nominal)

Operating Voltage 2 Wire 18-32 VDC (24 VDC nominal)

Power Consumption 12 Watts max. (6.0 Watts each for Source and Detector)

Electrical Input Protection MIL-STD-1275BxEN50270

Enclosure Material 316L Stainless Steel

Enclosure Ingress Protection NEMA 250 6P, IP66 and IP68

Conduit Connections 3/4" NPT or M25 thread

Communication Protocols Standard 4-20 mA, MODBUS®, HART®

Maximum 4-20 loop load Ohms (@24 VDC) 500 Ohms

Alarms 1 alarm
3 fail safe system fault detection modes

Display One 3 color status LED:
Green – Power
Yellow – Fault
Red - Alarm

Documentation Languages English, Portuguese, Spanish

User Configuration Control Magnetic Mode selector, Winhost Software (PC), HART® hand-held Communicator, MODBUS®



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Access Control	Transmitter provides controlled access to sensor range, alarm settings and other safety functions; password protection for secure configuration control
Memory	Non-volatile memory ensures configuration parameters are retained in the event of power loss
Accessories	Commissioning Kit, Sun shield, 5" Pole Mount, HART® Hand-Held Diagnostic Unit, Winhost Software, RS485 Connector cable, Magnetic Mode Selector
Flexible Design	Allows for ease of calibration without the need to remove instruments.
Weight	11 lbs (5 kg) each Detector/Source 4.2 lbs (1.9 kg) each Tilt mount 30.4 lbs (13.8 kg) Total
Wiring	Transmitter accepts industry standard 3-wire, or 4-wire inputs
Flexible Mounting Option	Source/Detector each provides multiple conduit entry points for sensor, power, signal, and relay wiring
Tilt Mounting Flange Surface Area	4.70" x 4.70" / 120mm x 120mm
Tilt Mounting Bolt Holes	4 holes with 0.334" dia. (8.5mm) in square pattern, 3.937" (100 mm) each side of square, hole center to hole center.

Sensor Specification

Detector Type	Combustible Gas detection of Hydrocarbon Gases
Sensor Types	Detector and Infrared Flash source, source changes depending on required range: Model 20 - Detects between 7 and 20 meters (23 - 66 feet) Model 40 - Detects between 15 and 40 meters (50 - 132 feet) Model 100 - Detects between 35 and 100 meters (115 - 330 feet) Model 200 - Detects between 80 and 200 meters (265 - 660 feet)
Sensitivity Range	0-5 LEL.m

Warranty

Infrared Flash Bulb	10 Years
Complete Spyglass System	3 Years

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