



EM-FCS – SPARK DETECTION AND EXTINGUISHMENT



- MODEL: EM-FCS-CU1610. BASE UNIT IS CAPABLE OF PROTECTING UP TO 5 DUCTS
 - Includes IP55 rated (Dust Tight) enclosure, battery back-up as well as audible and visual alarms
 - Allows for double security protection in 5 ducts (E.G. Detect / Extinguish / Detect / FireBreak)
 - Modular design allows for easy installation of additional modules for larger systems.
 - Can be connected to abort gates on return air lines for simultaneous abort or by re-detection after the Dust Collector.
 - Can be connected to shut down dust collection equipment and to a building fire alarm system.
- SPARK DETECTORS OPERATE ON “PULSE COUNT” FEATURE TO ALLOW FOR INSTALLATION IN METAL WORKING APPLICATIONS WITH HIGH NUMBER OF SPARKS
- OPTIONAL THERMAL MONITORING CONTROLS AND SENSORS
- COMPLETE EXTINGUISHING SOLUTIONS
- CURRENTLY BEING FM APPROVED AND IS ATEX CERTIFIED



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EM-FCS-SD, SPARK DETECTORS ARE IP65 RATED (OUTDOOR) OPERATE ON INFRARED LIGHT AND FEATURE INTERNAL TEST LAMP FOR FUNCTIONALITY.



EM-FCS-TL, EXTERNAL TEST LAMPS IP65 RATED (OUTDOOR) AND AN AVAILABLE OPTION TO TEST IF THE DETECTOR LENS IS COMPRISED BY A BUILD UP OF DUST



EM-FCS-MK, MOUNTING KITS ARE REQUIRED FOR THE INSTALLATION OF THE SPARK DETECTORS AND TEST LAMPS

EM-FCS-TP, THERMAL PROBE FOR ACTIVATION ON RAPID TEMPERATURE RISE AND/OR THRESHOLD



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POSITIONING AND SIZING SPARK DETECTORS

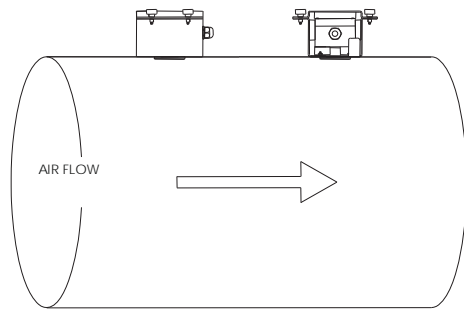


Fig.8 - PLACEMENT (long side of the support):

- 1) parallel to the duct (air flow)
- 2) perpendicular to the duct (air flow)

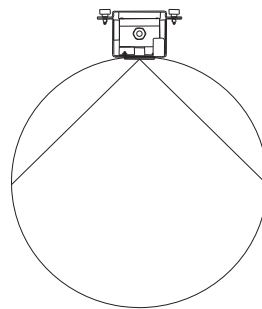


Fig.9 - DUCT D. 150-500mm

- n° 1 Detector (position
on the top or on the sides)

6" thru 20" *

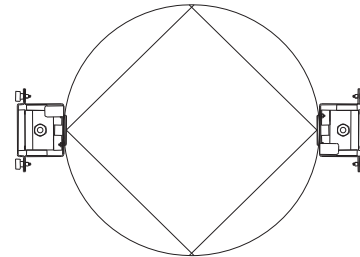


Fig.10 - DUCT D. 500-1000mm

- n° 2 Detectors (opposed, over 90°
recommended 3, see Fig.11)

20" thru 40"

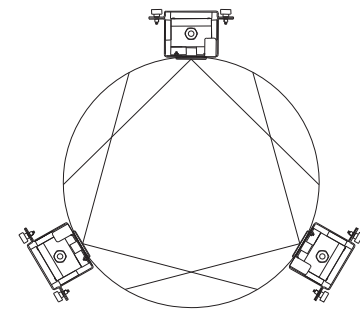


Fig.11 - DUCT D.> 1000mm

- n° 3 Detectors
(opposed at 120°)

**40" +
Recommended 33"+**

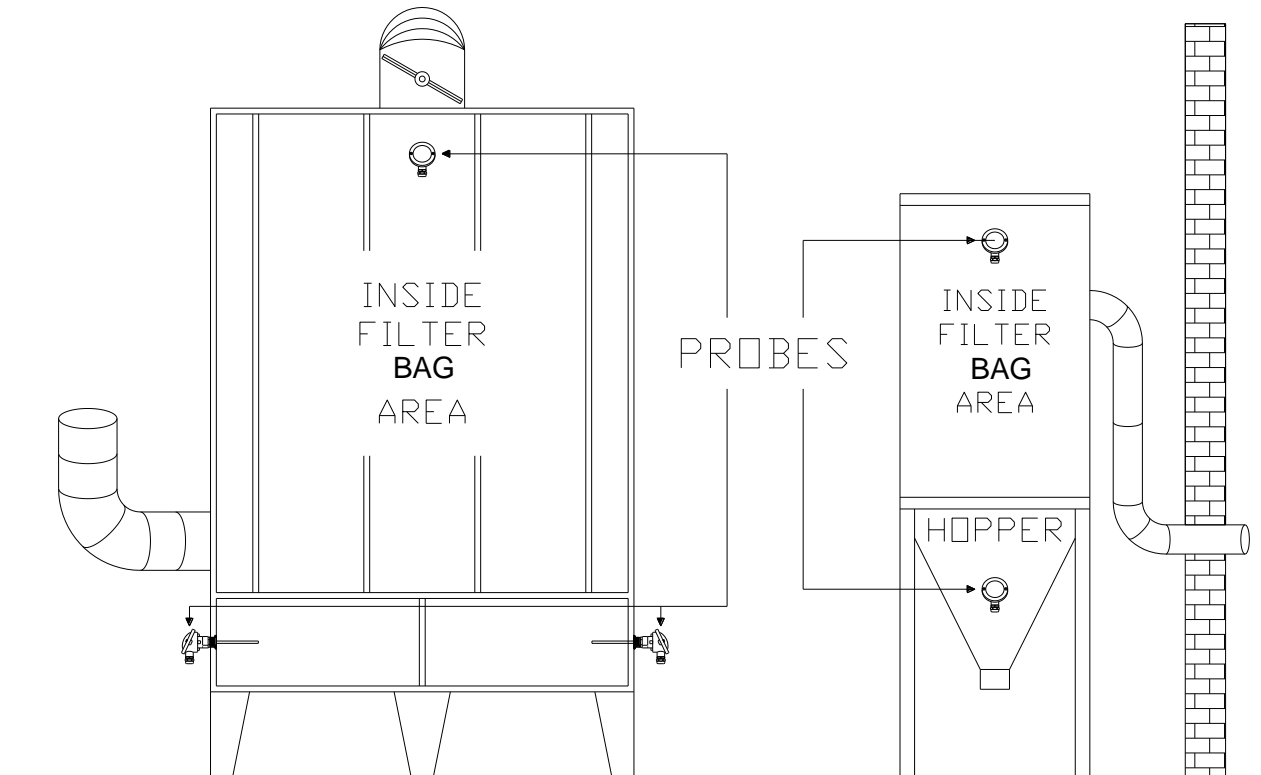
- For best results, it is recommended that at least 2 detectors be mounted on opposing sides of the ductwork

SPARK DETECTORS DETECT INFRARED LIGHT
"PULSE COUNT" FEATURE AVAILABLE IN CENTRAL CONTROL FOR APPLICATIONS WITH HIGH NUMBER OF SPARKS
SPARK DETECTORS MUST BE INSTALLED WITH EM-FCS-MK MOUNTING KIT



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EXAMPLE THERMAL PROBE LOCATIONS FOR DUST COLLECTORS AND SILOS



A minimum of 2 probes to be installed in as follows:

- 1) Dirty air inlet and air clean air outlet
- 2) 2 opposing probes installed in clean air plenum (above filter bags)
- 3) 1 probe in clean air plenum (above filter bags) and 1 in the dust collector hopper
- 4) Silos require 1 probe in clean air plenum (above filter bags) and 1 in the internal storage area.

N.B. 1 Dust collectors longer than 16.5 ft (5m) should install of 4 probes that are equally divided between filter and hopper sections.

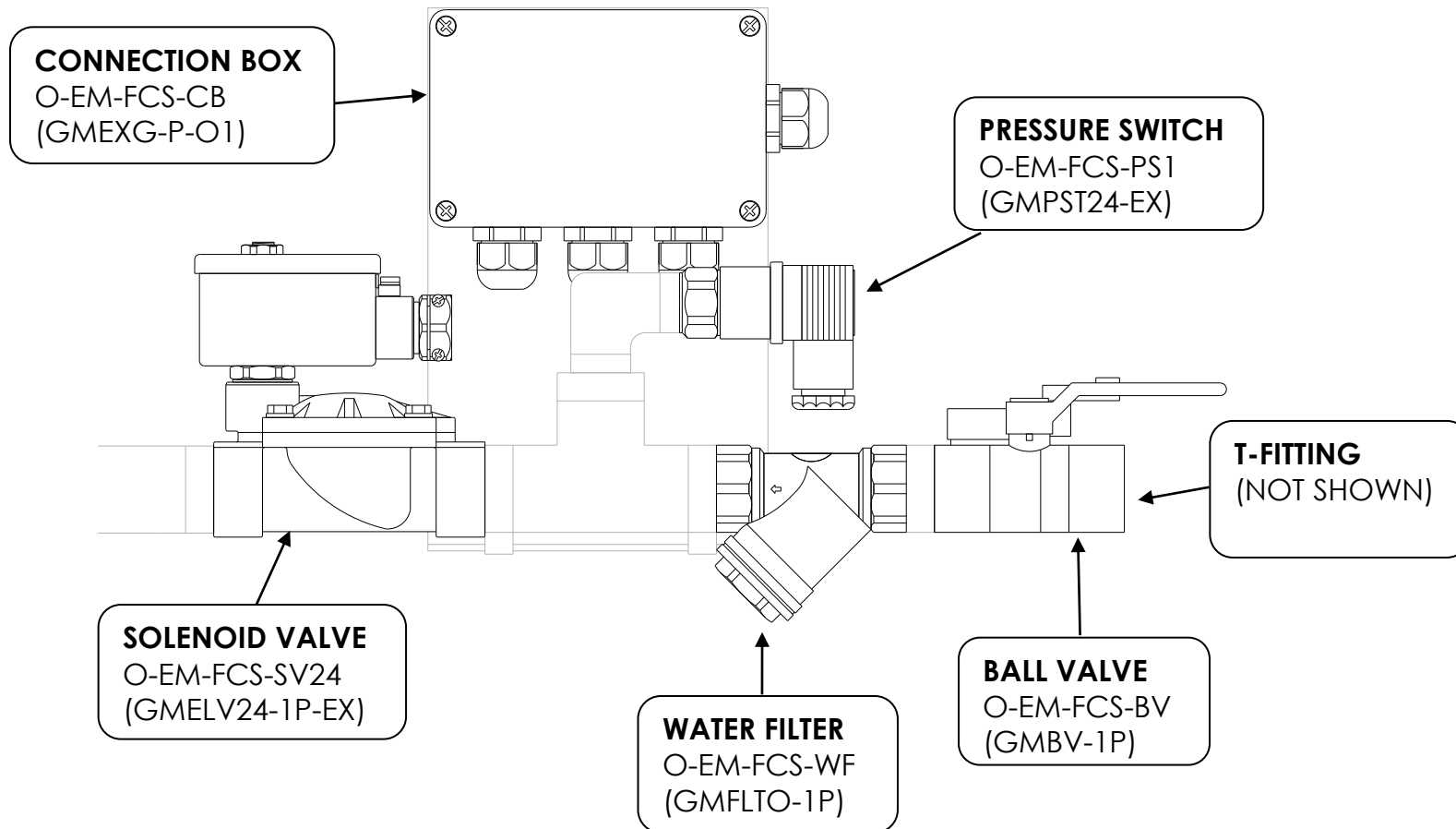
N.B. 2 for Silos / Dust Bins larger than 13 ft (4m) should install 4 probes that are equally divided between filter and storage sections

THERMAL PROBES MAY BE INSTALLED IN DUCTS.
Regardless of diameter, we recommend installing a probe every 23 – 26 feet (7-8 meters)



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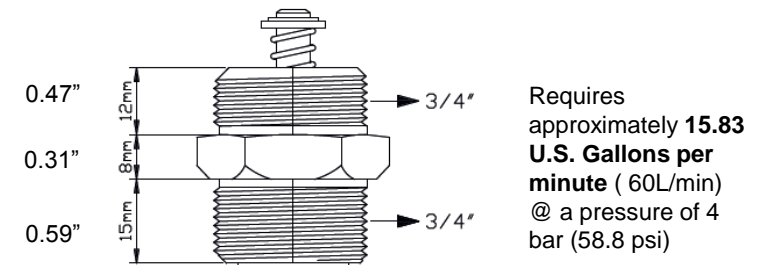
EXTINGUISHING GROUP EM-FCS-EG1



EM-FCS-EG1, COMES PREPLUMBED WITH T-FITTING AS SHOWN

(2) O-EM-FCS-SSN34, 3/4" NOZZLE WITH SHUTTER ARE PROVIDED ARE TO BE FIELD CONNECTED BY THE INSTALLER.

LAYOUT / DIMENSIONS



Shutter Closed



Shutter Open

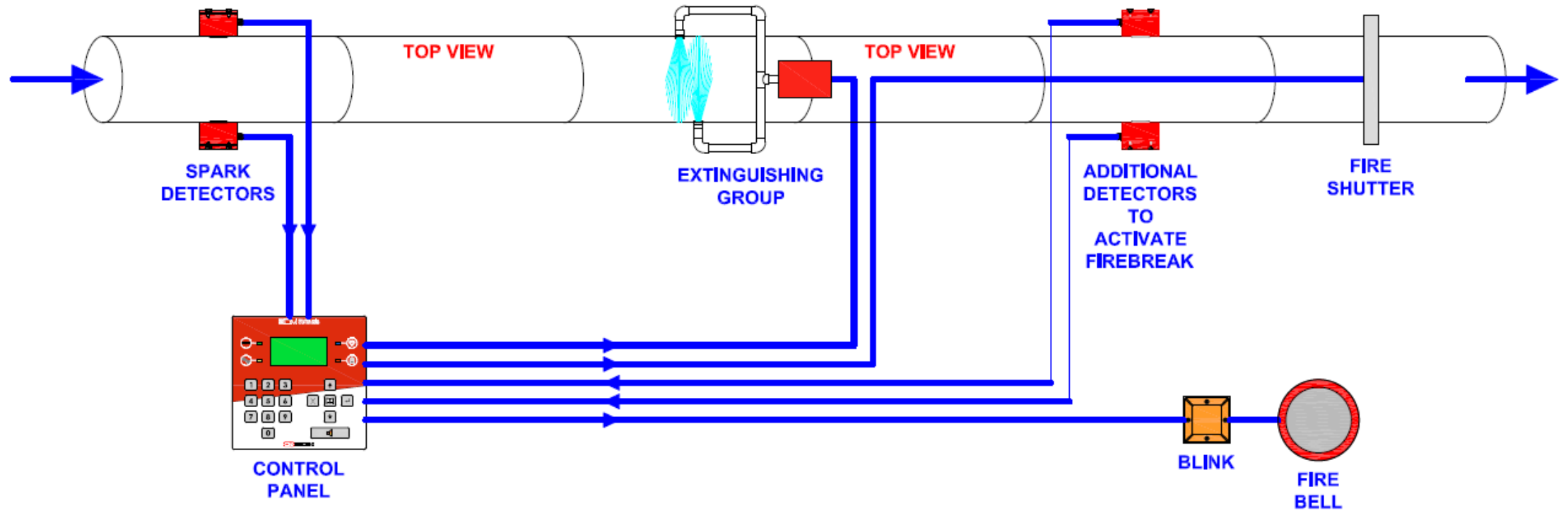


Spray Detail



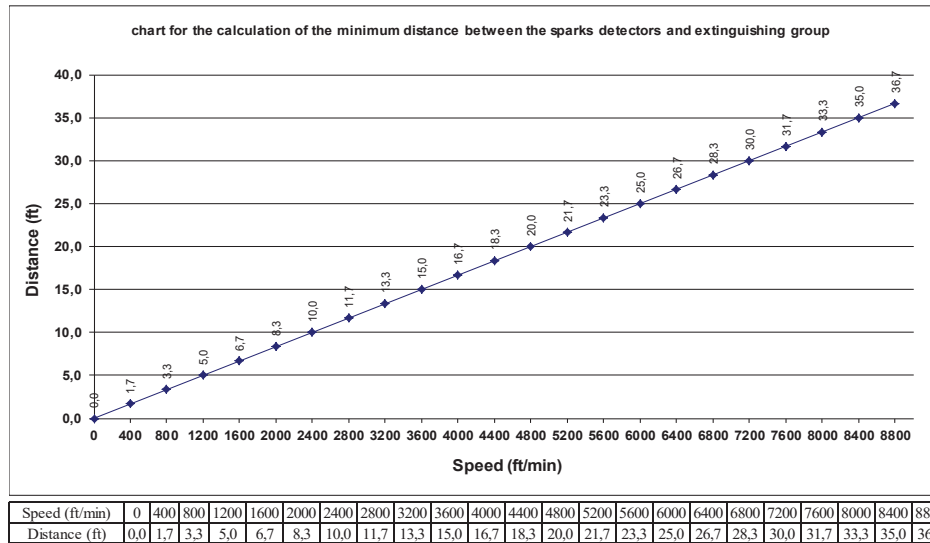
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DESIGNED FOR DOUBLE SECURITY PROTECTION STANDARD – DETECT/EXTINGUISH/DETECT/FIREBREAK
CAN BE USED AS STANDARD DETECT AND EXTINGUISH ONLY OR DETECT AND ISOLATION BY FIREBREAK





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Response time is based on solenoid at no more than 3.28 ft (1 meter) from water supply.

