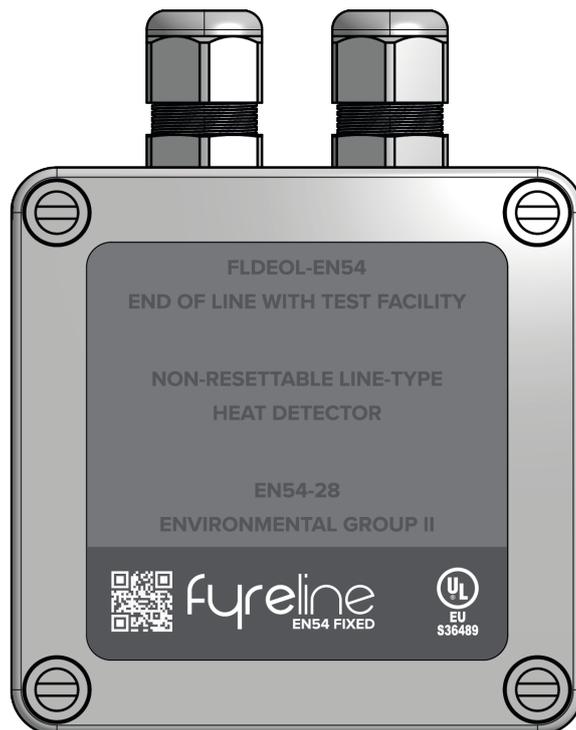


FyreLine EN54 Fixed End of Line Installation Guide



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Scope

The installation guide provides a comprehensive description of the FyreLine EN54 Fixed End of Line.

This guide introduces the FyreLine FLDEOL-EN54 features, technical specifications and gives an understanding of its components and their function. You will also find instructions on installing, cabling and testing.

This guide is for anyone involved with the design, maintenance and purchasing of a FyreLine EN54 Fixed system with FLDEOL-EN54. It is assumed that anyone using this product has the knowledge and appropriate certification from local fire and electrical authorities.

Document Conventions

The following typographic conventions are used in this document:

Convention	Description
Bold	Used to denote: Emphasis.
<i>Italics</i>	Used to denote: References to other parts of this document or other documents.

The following icons are used in this document:

Convention	Description
	Recommended guideline: Advising to do so.
	Caution: Not appropriate to do so or; care taken to avoid danger or mistakes.

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1 Important Guidelines

Please read this instruction leaflet thoroughly before commencing installation.

	Install the FyreLine EN54 Fixed End of Line (FLDEOL-EN54) accordingly to meet local and country installation requirements.
	The FLDEOL-EN54 must be installed in accordance with BS 5839-1 (or country equivalent) and IEC 60364 and authorities having jurisdiction.
	Ensure the product is installed, commissioned and maintained by persons according to good engineering practices and who have received sufficient training on the unit.
	Only use FyreLine EN54 Fixed Linear Heat Detection cable with the FyreLine EN54 Fixed End of Line.
	Test the fixed LHD cable on the reel, before installation and after installation but before connecting to the FLDEOL-EN54, using a multimeter.
	Ensure the maximum ambient temperature rating of the FLDEOL-EN54 will not be exceeded during storage or normal operating conditions.
	Ensure any cable glands used are tightened to form a secure and moisture proof seal around the detection cable.

	Do not connect lengths of linear heat detection cable in 'T' connections or spurs.
	Do not paint the FLDEOL-EN54.
	Do not place the detection cable under excessive tension or crush the cable by over-tightening of the cable glands.

2 Overview

The FyreLine EN54 Fixed End of Line (FLDEOL-EN54) has been approved to EN54-28 for use with the FyreLine EN54 Fixed Controller (FLDC-EN) and FyreLine EN54 Fixed range of Linear Heat Detection cables. It is designed to effectively terminate up to two zones of FyreLine EN54 Fixed LHD cable in a secure, weatherproof enclosure. Furthermore, the built in switches for testing a fault and alarm condition allow the integrity of the whole system to be functionally checked in situ, providing comprehensive testing and maintenance of the system.

With the ability to terminate up to two zones of fixed LHD cable, the FLDEOL-EN54 is ideally suited for use with the FyreLine FLDC-EN54, especially when used in interlock mode to prevent false alarms. In this mode, two fixed LHD cables are run sideby-side and an alarm is only activated on the fire alarm control panel when both cables trigger. In this situation the FLDEOL-EN54 provides a cost and space saving over separate termination enclosures.

2.1 Product Features

- EN54-28:2016 approved for use with the FyreLine FLDEOL-EN54 and FyreLine EN54 Fixed LHD cables.
- Provides a simple and straightforward method to carry out a functional test on the system.
- Quickly simulate a fault condition.
- Quickly simulate an alarm condition.
- Secure, weatherproof enclosure.
- Supplied with 2 IP67 rated cable glands.

3 Technical Specification

Construction	IP66* ¹ Rated Enclosure supplied with 2 IP67* ¹ Rated Cable Glands
Dimensions (W x H x D)	94mm x 94mm x 57mm
Approvals	EN54-28:2016
Environmental Group	II
UL Model Number	FLDEOL-EN54
UL File Number	S36489
Part Number	18-137
Terminal Blocks	
End of Line	2 x 5mm Rising Clamp
LHD Cable	2 x Removable Header 5mm Rising Clamp
Ambient Temperature Rating	-35°C to +55°C* ²

*¹ Outside the scope of EN54-28:2016, not verified by UL.

*² Verified by UL to EN54-28:2016 Environmental Group II between -10°C to +55°C

4 Typical System Configuration

The FyreLine EN54 Fixed End of Line (FLDEOL-EN54) is intended to be installed at the end of a zone of FyreLine EN54 Fixed LHD cable. Two end of line resistors, one for each zone, are provided with the FyreLine EN FLDEOL-EN54. These should be securely screwed into the end of line resistor terminals on the FLDEOL-EN54 PCB. The FyreLine EN54 Fixed cable should be screwed into the Zone 1 or Zone 2 terminals as required and the cable gland tightened (avoid excessive tightening) around the cable to create a secure, waterproof connection. To simulate an alarm, press and hold the push switch for the corresponding zone until the FLDEOL-EN54 (and fire alarm control panel) triggers an alarm. To simulate a fault condition, toggle the test fault switch down. The FLDEOL-EN54 (and fire alarm control panel) should register a fault condition. Return the toggle switch to the normal position to clear the fault.

4.1 Typical Addressable System Wiring

PSU and Modbus connections not shown.

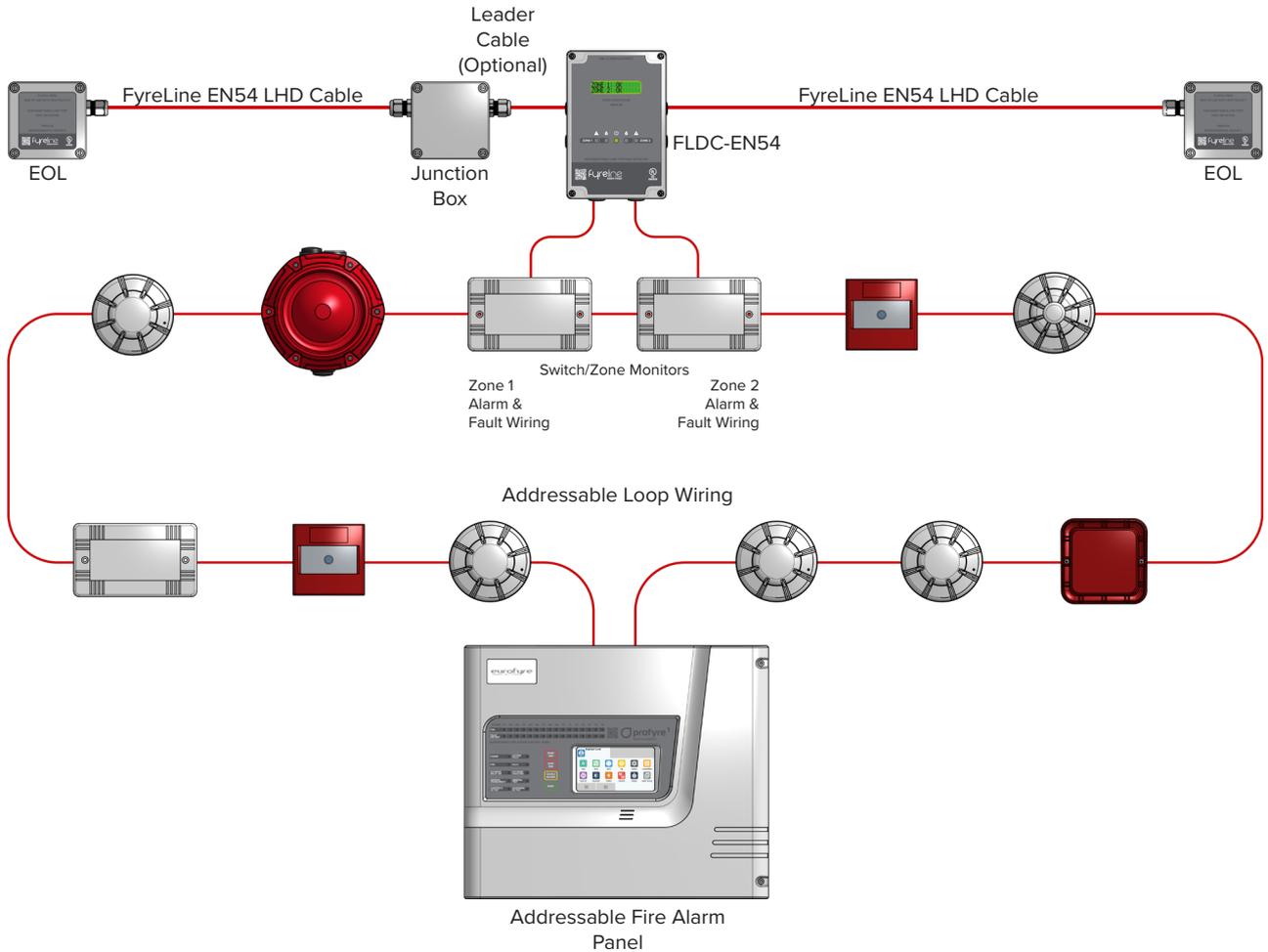


Figure 1: Typical Installation of the FyreLine EN54 Fixed Controller on a Addressable System

4.2 Typical Conventional System Wiring

PSU and Modbus connections not shown.

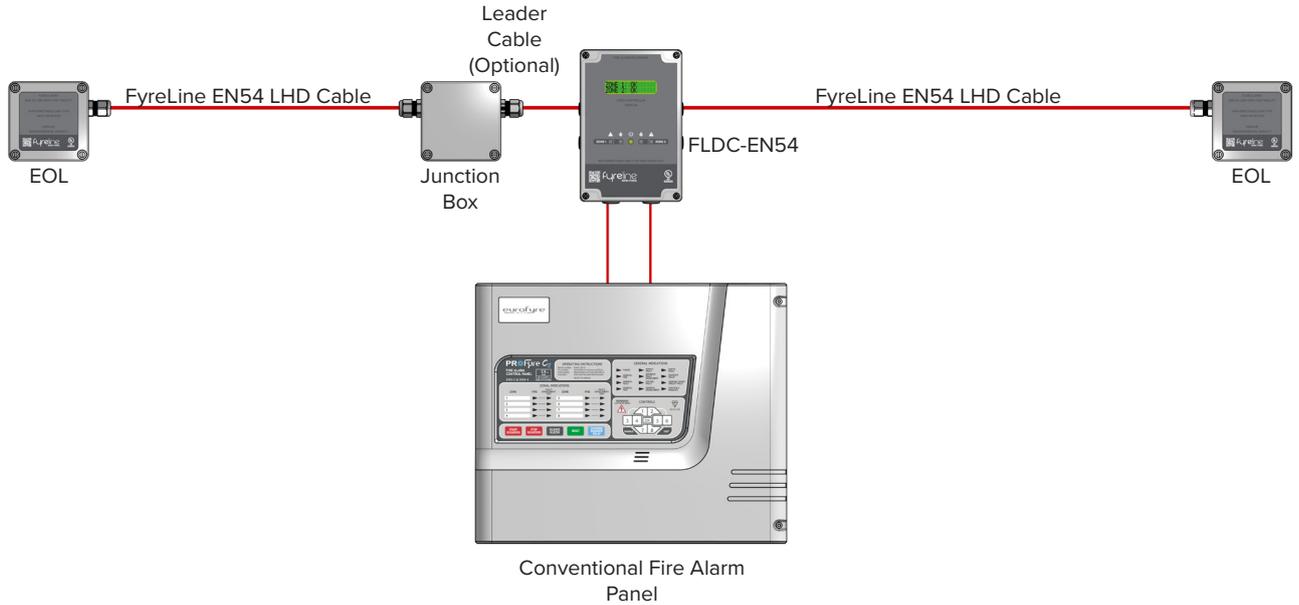


Figure 2: Typical Installation of the FyreLine EN54 Fixed Controller on a Conventional System

5 Mounting Dimensions

The FyreLine EN54 Fixed End of Line (FLDEOL-EN54) is intended to be wall mounted. 4 holes should be drilled according to the mounting dimensions shown in figure 3. The corresponding mounting holes on the FLDEOL-EN54 are found by removing the lid and are located in the same place where the lid screws fix into the base. Suitable screws for the type of wall the FLDEOL-EN54 is to be mounted on will need to be provided separately. The minimum head diameter is 5.5mm and the maximum head diameter is 8mm. The maximum screw thread diameter is 5mm.

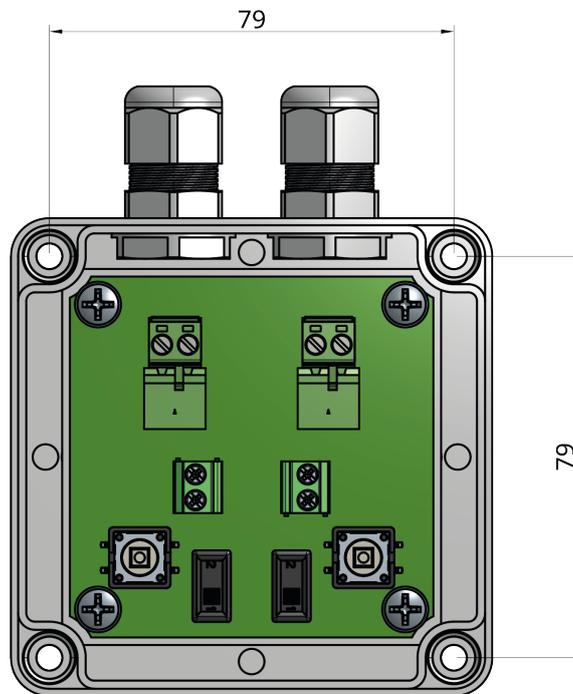


Figure 3: FLDEOL-EN54 Mounting Dimensions

6 Wiring Diagram

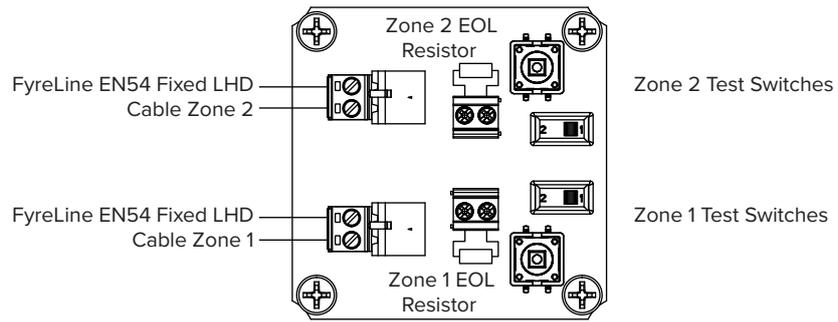


Figure 4: Detailed wiring diagram for the FyreLine FLDEOL-EN54

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