



Technical Bulletin 038 – Small Enclosure Data Sheet

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Revision 03

Lifeline Fire and Safety Systems Limited
Falkland Close, Charter Avenue Industrial Estate,
Coventry, West Midlands, CV4 8AU

Tel: +44 (0)24 7671 2999

Fax: +44 (0)24 7642 1322

Email: sales@lifeline-fire.co.uk

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Other References

TB003	Novec 1230 MSDS
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Overview

The Lifeline Small Enclosure System is for use in equipment enclosures of between 0.5-5m³. The system is modular to allow for easy customer specification of the original system and expansion or purchase of spare parts in the future. The relatively small number of modules provides a remarkably flexible system which is suitable for many applications such as CNC machines, test cabinets and other small volume static enclosures.

The most basic configuration requires no external power source, only the replacement of the battery every year on service. A single cylinder provides enough suppressant for a maximum protected volume of 2.5m³, adding a second cylinder and link kit provides enough suppressant for a maximum protected volume of 5m³.



Specification

Description	Small Enclosure System
Contents	Novec 1230™
Activation Method	Electrical Activation
Cylinder Material	Aluminium Alloy
Temperatures	-10 to +60°C (Cylinder)

Suppressant

The system uses 3M Novec 1230 clean agent suppressant to leave no residue in the event of an accidental discharge and provides excellent fire knock down and suppression capabilities in combination with Lifelines high discharge rate twin slot nozzles. Unlike other clean agents, Novec 1230 is not an HFC and is not subject to the F-Gas phase down; it has an Ozone Depletion Potential of zero with a Global Warming Potential of one.

Activation Options





Activation of the system is either manual or with automatic activation using either Protectowire or UVIR2 detectors and service intervals are every year. To reduce downtime on the equipment being protected Lifeline can provide a fresh bottle on a simple exchange basis if required.

The table below shows the different temperatures of protectowire available. Custom lengths can be made.

Activation Temperature Ratings Available
68°C
88°C
105°C
138°C
180°C

Switch Options

The small enclosure has the ability for switches to be wired into the loom. Lifeline has a variety of switch options depending on the requirements. The table below shows the options available.

Part Number	Description	Image
942-100-002	External Waterproof Switch	
942-100-003	Protected Switch	
942-100-004	Switch - Pushbutton - Aluminium Bezel	
942-100-013	Switch - Momentary Toggle CW Cover	

Kit Part Numbers

Cylinder

Part Number	Description	Minimum Required
150-000-001	0.5-2.5m3 Enclosure Cylinder	1

Detection

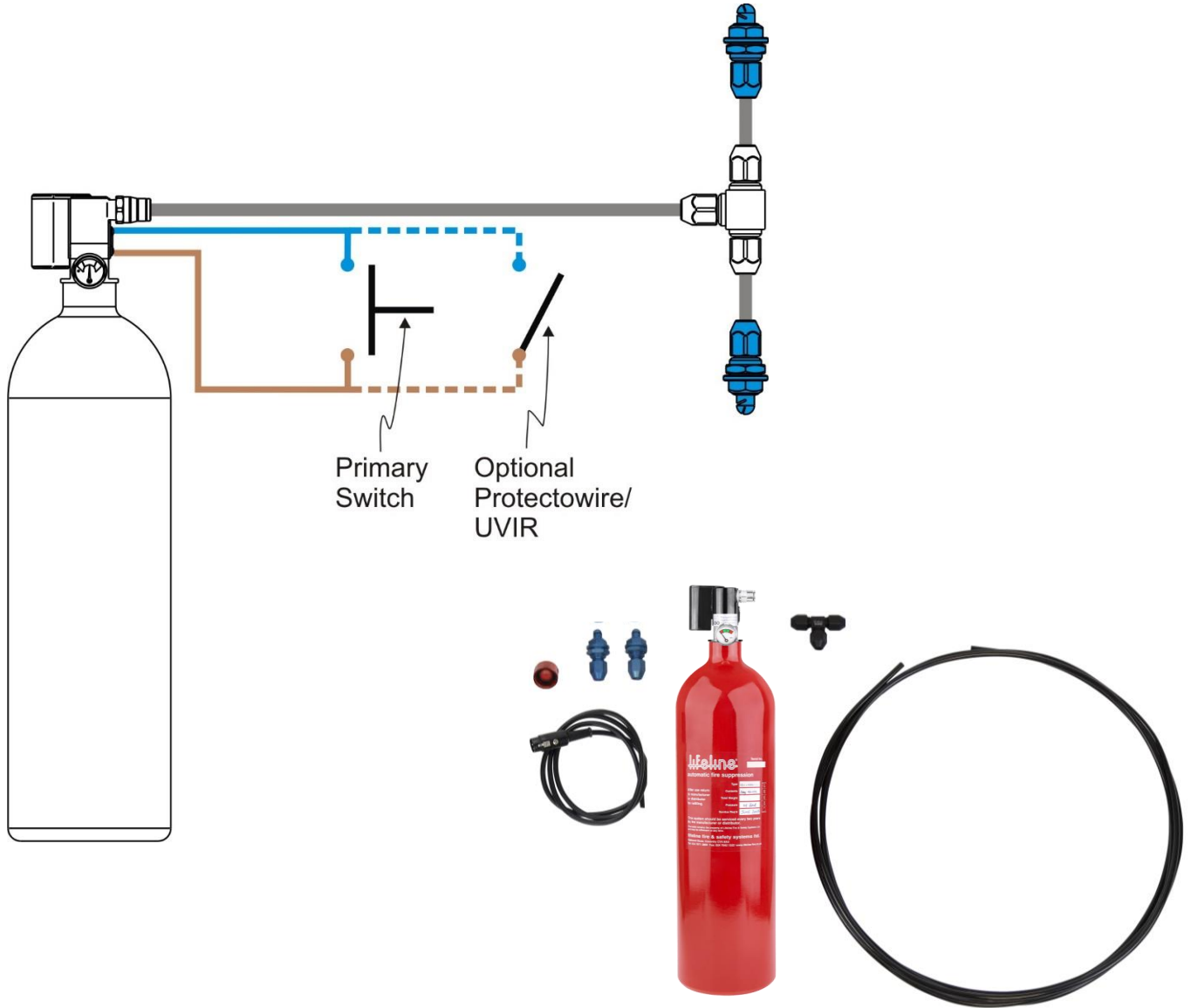
Part Number	Description	Minimum Required
150-001-001	Heat Detection Cable 68deg C - Protectowire 1m c/w Link Wire	Optional
150-001-002	Heat Detection Cable 68deg C- Protectowire 2m c/w Link Wire	Optional
150-001-003	Heat Detection Cable 68degC- Protectowire 3m c/w Link Wire	Optional

Distribution & Activation

Part Number	Description	Minimum Required
150-002-001	8mm - Polyamide Coated Aluminium Hardline - 6m Cut Length	1
150-002-002	Nozzle – Twin Slot	2/cylinder
150-002-003	Activation Switch – Aluminium Bezel	1
150-002-004	8mm Equal T Compression Connector	1
150-002-005	Rapid Discharge Kit (4 nozzles & 3 equal Ts)	Optional
150-002-006	Link Kit (4 nozzles & 4 equal Ts)	Optional
150-002-012	Plug and Lead 1m	1
150-002-013	Battery Head Inspection Plug	Recommended

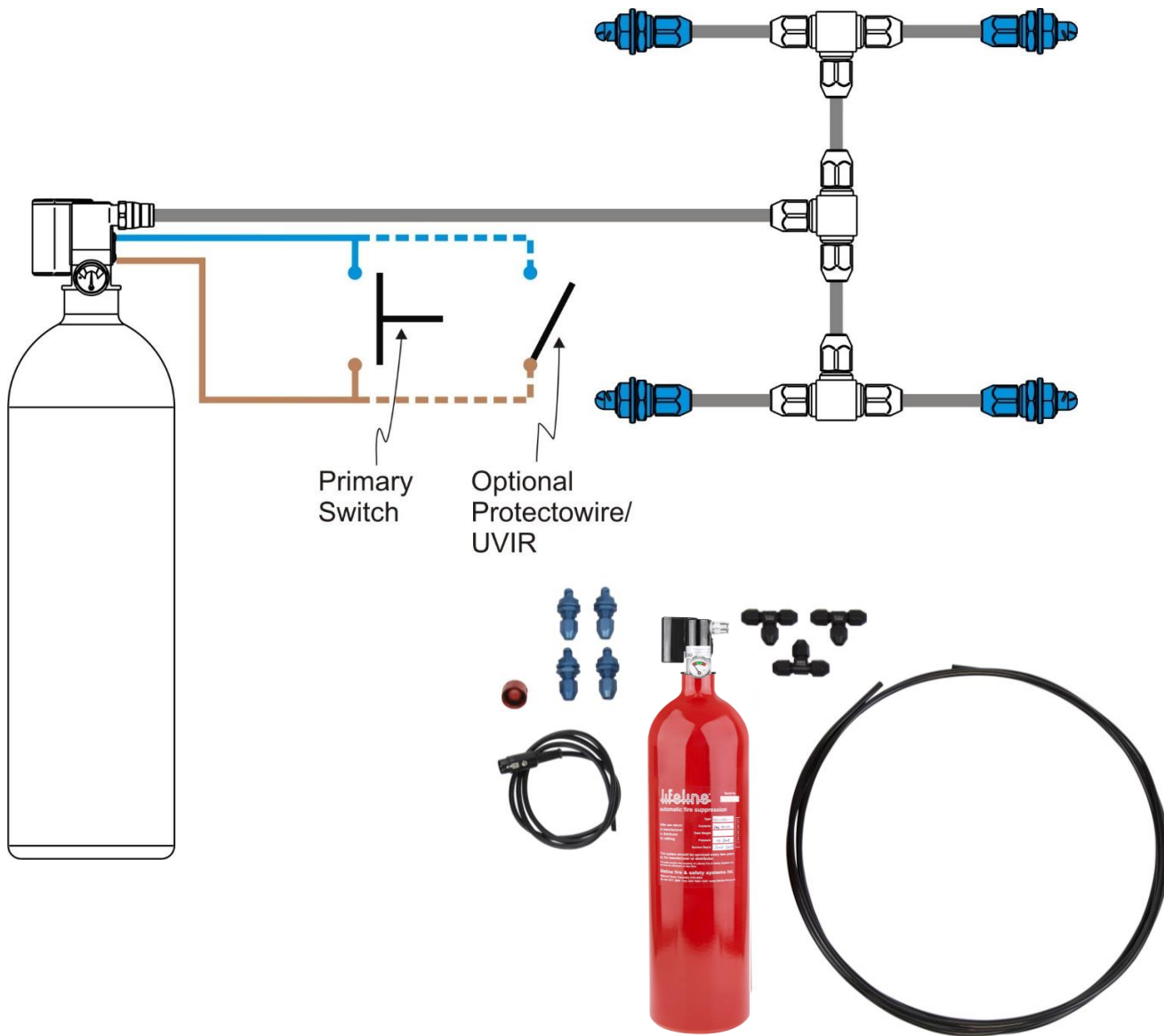
Example System Builds

Example 1 – 2 Nozzle Configuration



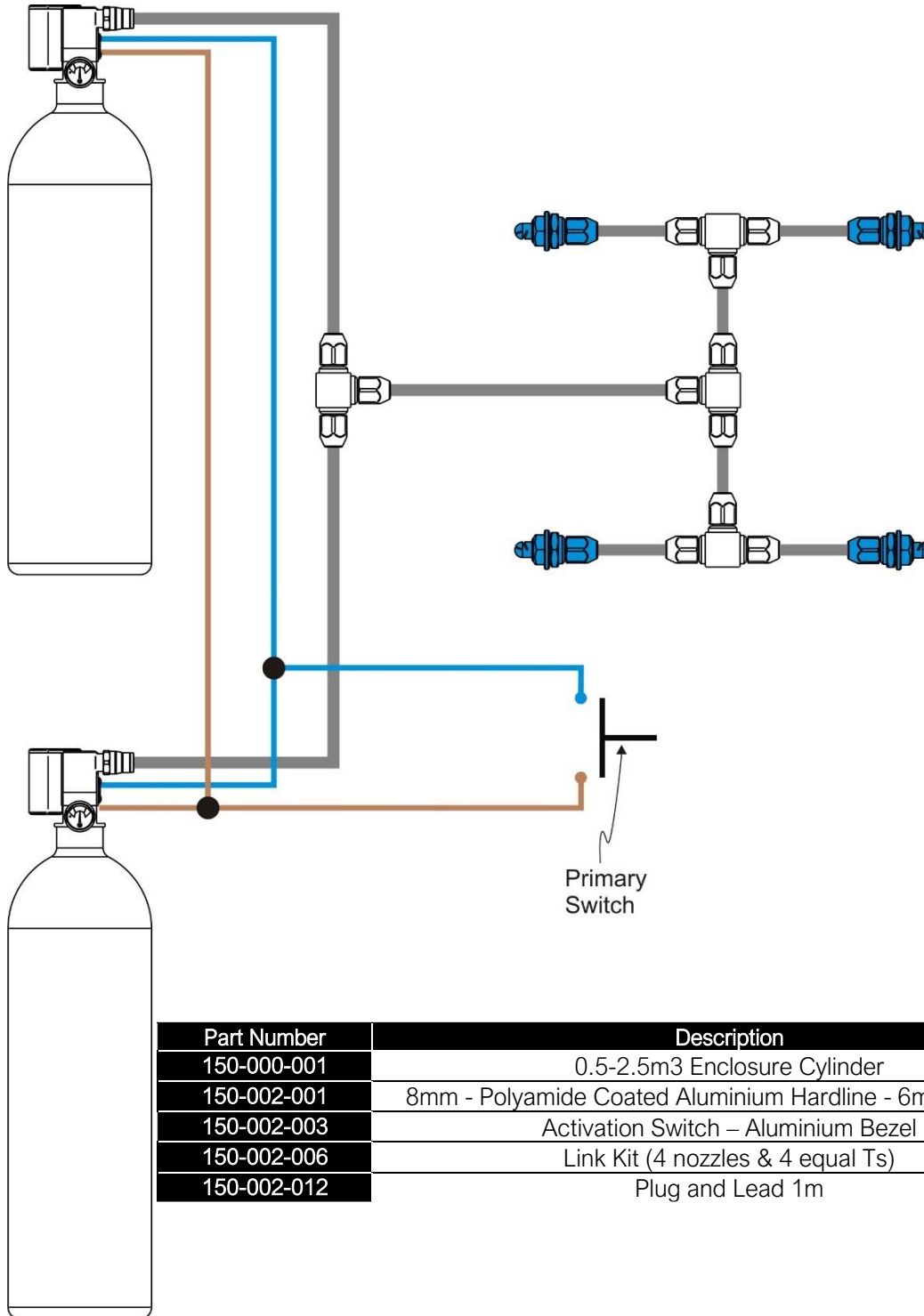
Part Number	Description	Quantity
150-000-001	0.5-2.5m ³ Enclosure Cylinder	1
150-002-001	8mm - Polyamide Coated Aluminium Hardline - 6m Cut Length	1
150-002-002	Nozzle – Twin Slot	2
150-002-003	Activation Switch – Aluminium Bezel	1
150-002-004	8mm Equal T Compression Connector	1
150-002-012	Plug and Lead 1m	1
(150-001-001)	(Heat Detection Cable 68deg C - Protectowire 1m c/w Link Wire)	(2)

Example 2 – 4 Nozzle Configuration



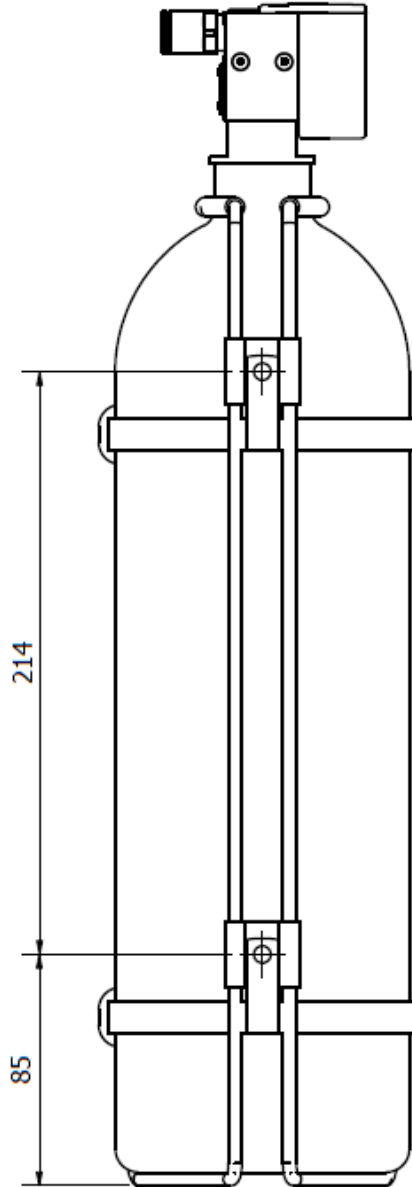
Part Number	Description	Quantity
150-000-001	0.5-2.5m3 Enclosure Cylinder	1
150-002-001	8mm - Polyamide Coated Aluminium Hardline - 6m Cut Length	1
150-002-003	Activation Switch – Aluminium Bezel	1
150-002-005	Rapid Discharge Kit (4 nozzles & 3 equal Ts)	1
150-002-012	Plug and Lead 1m	1
(150-001-001)	(Heat Detection Cable 68deg C - Protectowire 1m c/w Link Wire)	(2)

Example 3 – 2 Bottle System



Part Number	Description	Quantity
150-000-001	0.5-2.5m3 Enclosure Cylinder	2
150-002-001	8mm - Polyamide Coated Aluminium Hardline - 6m Cut Length	1
150-002-003	Activation Switch – Aluminium Bezel	1
150-002-006	Link Kit (4 nozzles & 4 equal Ts)	1
150-002-012	Plug and Lead 1m	1

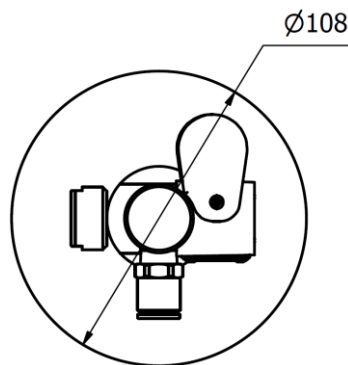
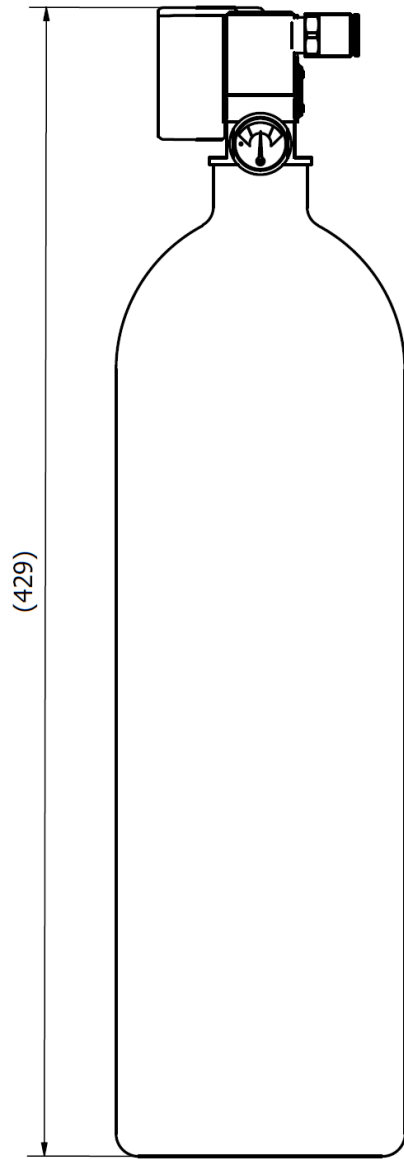
Bracket Fixing Centres



Hole Centres	
Length	195mm
Width	153 ± 2mm

Cylinder Drawings

Lifeline operates a policy of continual improvement and reserves the right to change details or advice given in this Technical Bulletin without notice. For latest advice contact Lifeline, +44 (0)24 7671 2999 or sales@lifeline-fire.co.uk



Notes