

## Technical Bulletin

### 071 – Zero EV Data Sheet



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Revision 01

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## Technical Bulletin 071 –

Other References	
TB029	Zero EV Installation Guide
TB003	Novec 1230 MSDS

### Overview

The Lifeline Zero EV is based on an award-winning design concept from Lifeline. The Zero EV fire suppression system is homologated to FIA 8865-2015 and using 3M™ Novec™1230 fire suppression fluid, is accepted by the FIA for use in hybrid and fully electric vehicles as a non-conductive extinguishant as per Appendix J article 253 section 18.23. It has also been extensively tested against a variety of fuels including bio and carbon neutral fuels.



## Specification

Description	Zero EV
FIA Homologation	EX.029.21, EX.032.22
Contents	Novec 1230
Weight of Cylinder	6.2kg
Discharge System	Electrical
Cylinder Material	Aluminium
Temperatures	-15 – 80°C
For Cockpit Volumes	1.7 – 3.13 m <sup>3</sup> , 0.96 – 1.7m <sup>3</sup>

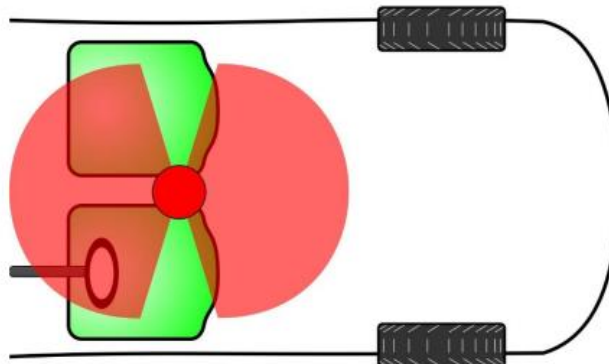
## Class of Fire

The Zero EV has been tested and approved to the class of fuels below.

Class I	Petrol in accordance with Art.9 of Article 252 of the 2014 Appendix J
Class II	Petrol + up to 30% Ethanol
Class IV	Ethanol up to 100% or Methanol up to 100%

## Cockpit Nozzle

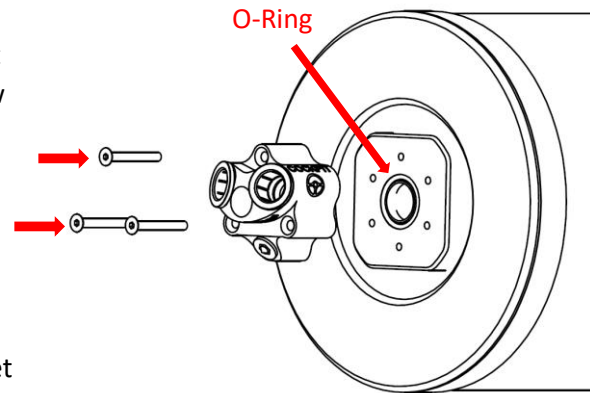
The cockpit side of the Zero EV utilises the same unique technology as the Zero 275. With the use of fluid dynamics and Lifeline's motorsport engineering philosophy the Zero EV uses 1 cockpit. The nozzle allows the Novec 1230 to distribute out of both sides of the nozzle allowing for almost a full 360-degree coverage.



### Zero EV Outlet

On the outlet there is clear indication to whether it is the engine side or the cockpit side. This will allow there to be an outlet on only 1 side of the bottle.

The Zero EV also has the ability to change the orientation of the outlet depending on the requirement of the vehicle. To do this simply remove 3 screws on the outlet and rotate the outlet to the desired position.



### Weights and Dimensions

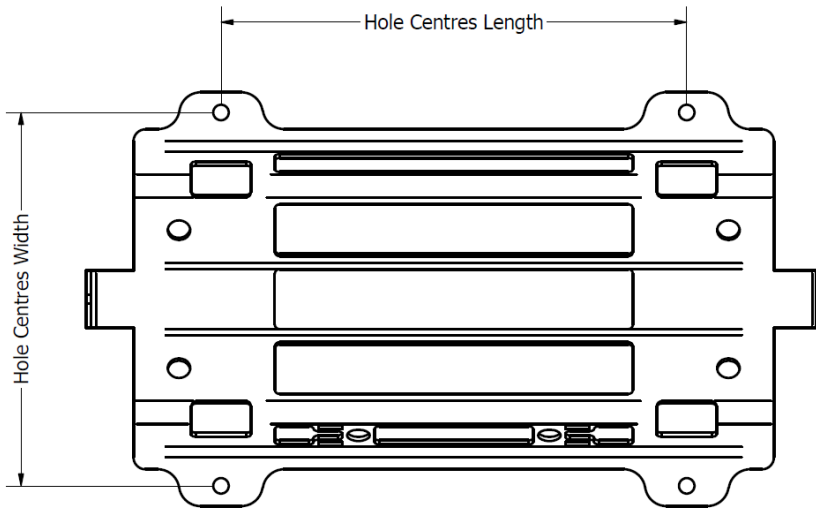
Part Number	Description	Cockpit Volume	Cylinder Weight	Cylinder Dimensions (Length x Diameter)
105-001-020	Zero EV 1.4-4m <sup>3</sup>	1.4-3.13m <sup>3</sup>	6.2kg	330 x 127mm
105-001-026	Zero EV 0.96-1.7m <sup>3</sup>	0.96-1.7m <sup>3</sup>	6.2kg	330 x 127mm

**Kit Contents**

Item	Part Number	Description	Qty
1.0	920-101-003-FIA	Retraining Strap	2
2.0	920-106-002	Bracket Assembly – Zero EV	1
3.0	943-101-005	Plug and Lead – Binder 2 Pin	2
4.0	951-101-020	10mm - Polyamide Coated Aluminium Hardline - 6m Cut Length	1
5.0	951-101-023	8mm - Polyamide Coated Aluminium Hardline - 3m Cut Length	1
6.0	990-100-001	Decal Pack	1
7.0	941-000-040	Control Box – FIA 8865 – Binder	1
8.0	942-100-004	Switch – Pushbutton – Aluminium Bezel	2
9.0	943-101-044	Binder 4 Core M8 Lead 2m	1
10.0	952-410-001	10mm Equal T Connector	1
11.0	952-410-033	10mm Male to 8mm Female Reducer	2
12.0	955-300-012	Nozzle – Twin Slot - 8mm	2
13.0	955-300-025	Nozzle – Petal – 10mm	1
14.0	990-304-005	Cable Tie – Reusable – 200mm x 7.5mm	2

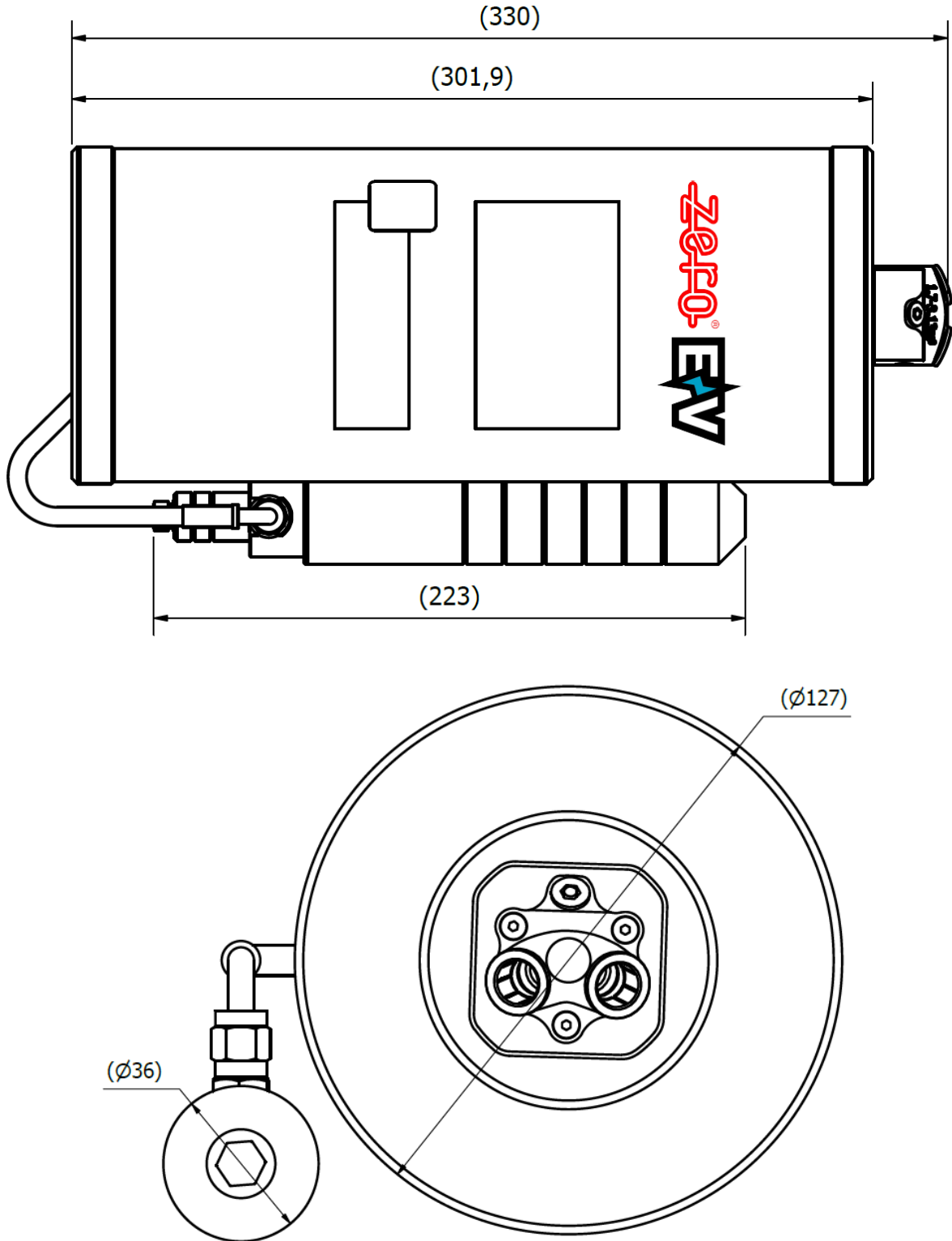


## Bracket Fixing Centres

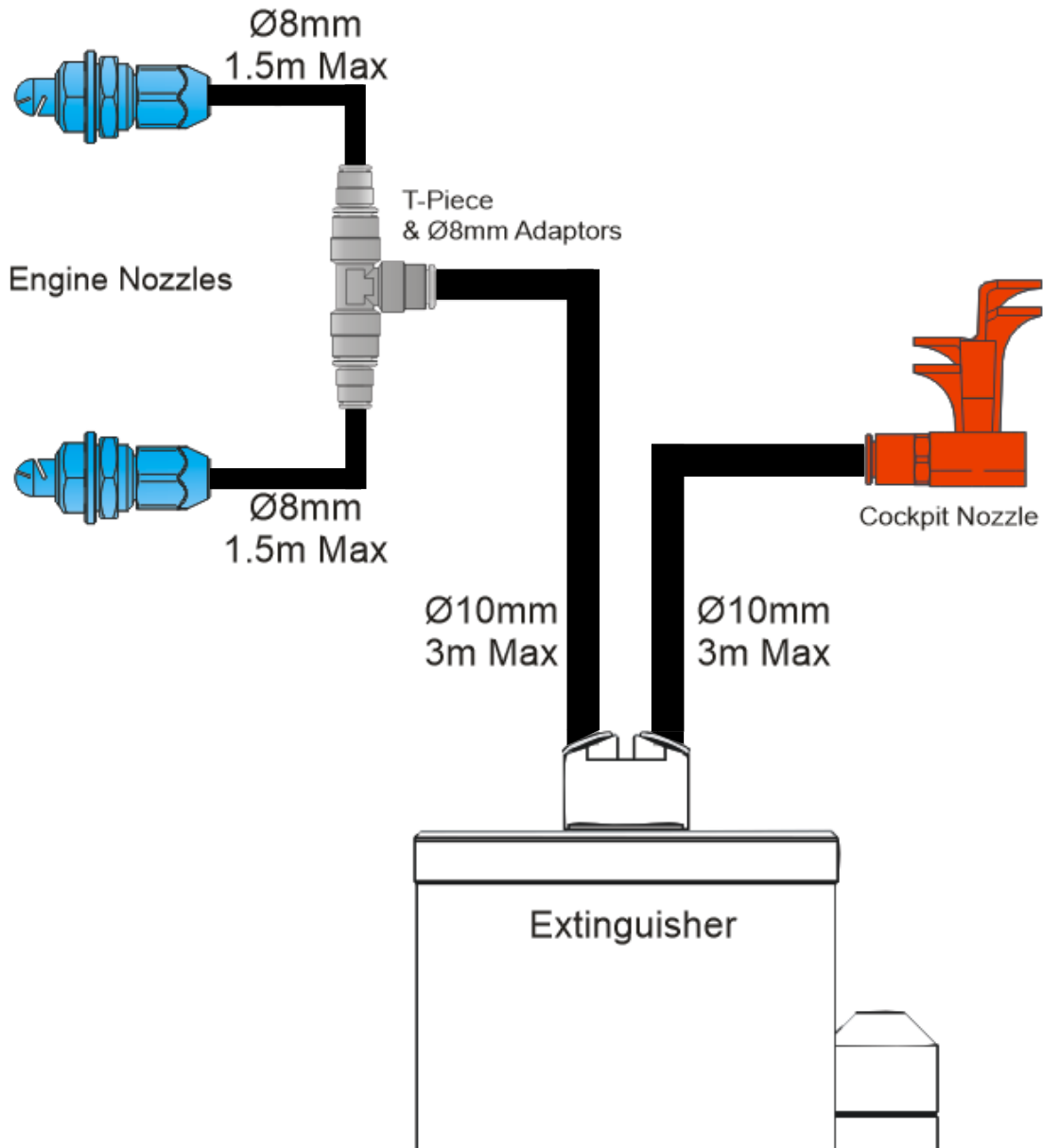


Hole Centres	
Length	195mm
Width	153 ± 2mm

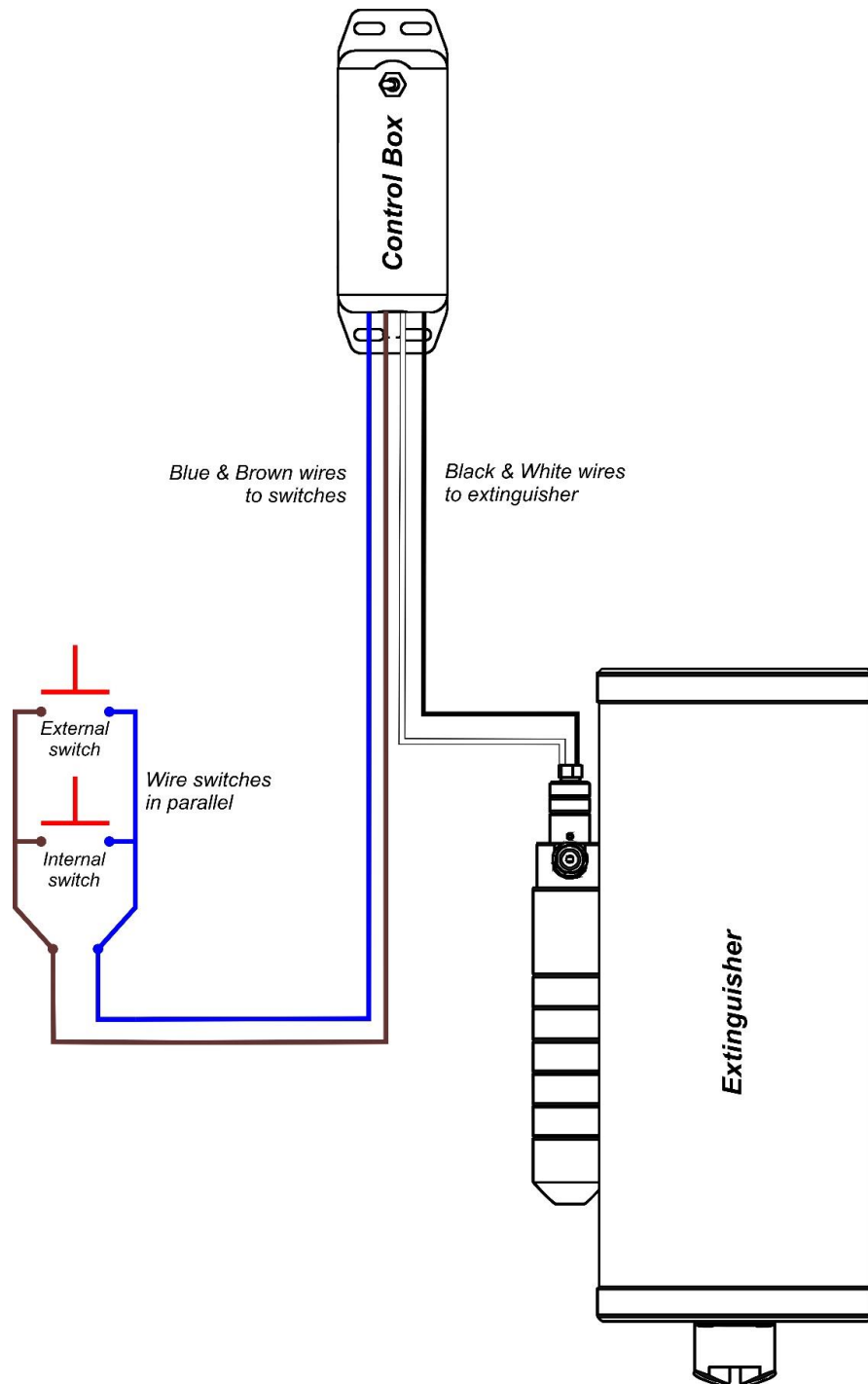
**Cylinder Drawings**



Schematic Drawings





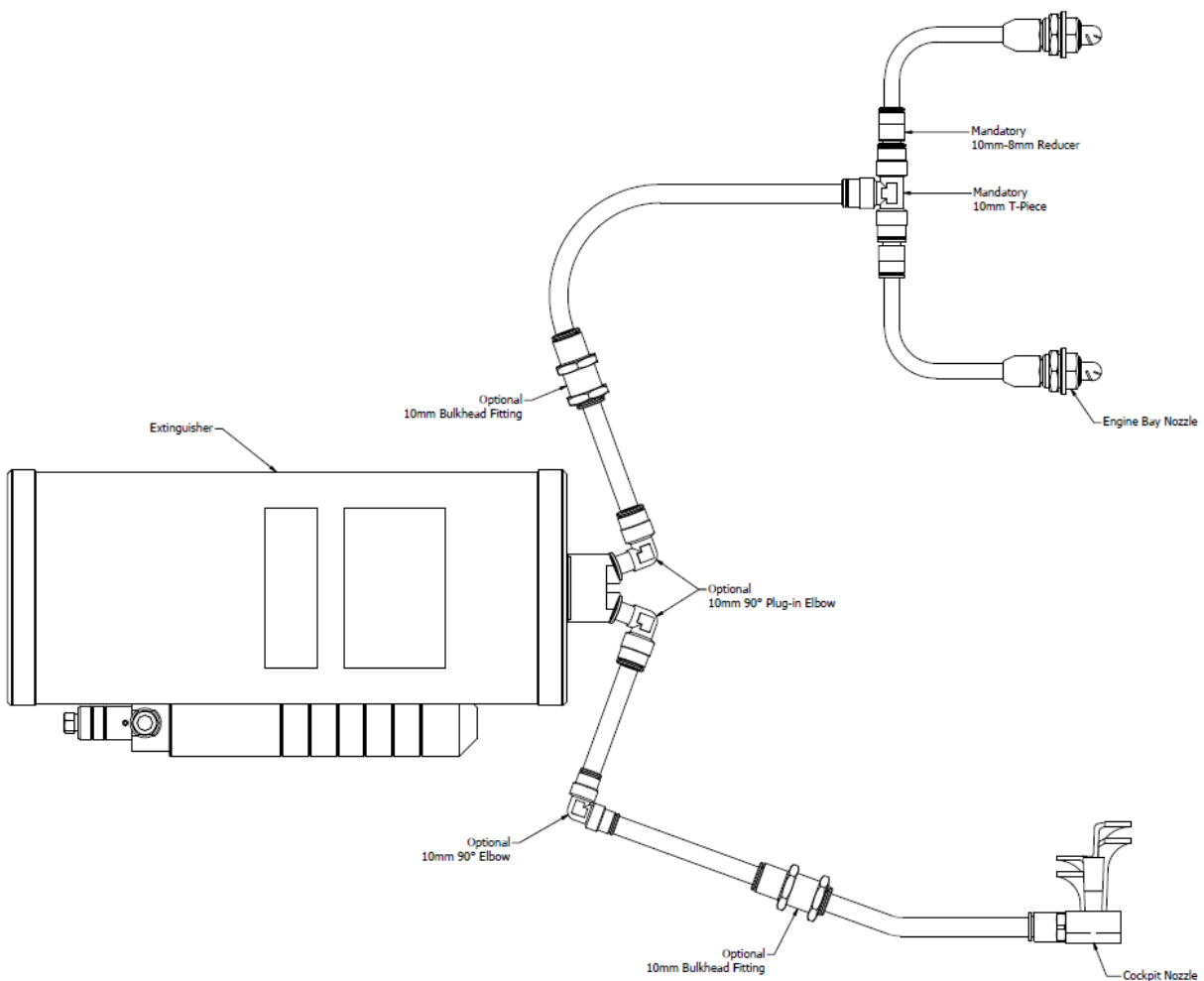


### Wiring Colours and Pin Outs

- 1 – **BROWN** = SWITCH
- 2 – **WHITE** = EXTINGUISHER
- 3 – **BLUE** = SWITCH
- 4 – **BLACK** = EXTINGUISHER

**Optional Fittings**

Part Number	Description	Qty
952-410-009	10mm Plug-in elbow	2
952-410-004	10mm -10mm 90-degree elbow connector	1
952-410-027	10mm Bulkhead Connector	2



## Notes