



ASN Safety Bulletin #31

The FIA standards for extinguishers may appear complex but they contain a great deal of useful information that is key for the effective use of the systems they cover and hence for the safety of competitors. It is crucial that everyone involved in an event be well aware of this information.

Specific requirements for electronic boxes approved with 8865-2015 and 8876-2022 extinguisher systems:

Both standards define design requirements for the control boxes for electronically activated systems so their function can be easily understood, no matter the manufacturer. All the boxes must have a switch with two positions ("ARM" and "TEST") and two LEDs (one orange and one red). Below is a summary of the LED functions.

With the switch in the "TEST" position, the orange LED should illuminate for 5 seconds or more to indicate the system is fully functional. With the switch in this position, any other combination of LED's indicates there is a problem with the system and it may not function.

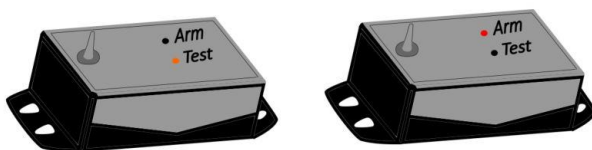
With the switch in the "ARM" position, the red LED should flash continuously to indicate the system working and is ready for activation in event of a fire. With the switch in this position, any other combination of LED's indicates there is a problem with the system and it may not function.

Whilst the FIA Standard includes these design requirements, it remains imperative for all competitors to read the manufacturers' instructions provided with all systems.

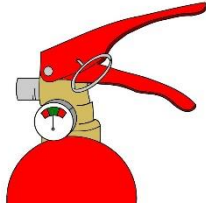
Arm the plumbed-in fire extinguisher system or remove safety pin from the mechanically activated plumbed-in fire extinguisher system:

Before taking part in an on-track session or **before leaving the service park**, competitors must:

- Arm the plumbed-in fire extinguisher system as described above if the system is of an electrical activation type.
- Remove the fire extinguisher safety pin from the mechanically activated plumbed-in fire extinguisher system.



System **armed – ready** to be used (Red LED should flash continuously)



System with safety pin - not ready to be used

Specific requirements for FIA-approved 8865-2015 extinguisher systems:

In order to ensure that the FIA-approved systems are efficient, the FIA regulates type and size of extinguisher to be used based upon both the cockpit volume and compatibility of the extinguishing medium with the fuel used in the vehicle in which the system will be installed.

Cockpit Volume

It is important that the extinguisher model selected is appropriate for the vehicle cockpit volume. If the competitor installs a system that is too small for their vehicle cockpit volume, the system will be less efficient, because the extinguishing medium concentration will be below the required concentration threshold. If the competitor installs a system too big for his vehicle cockpit volume, the system will be efficient, because the extinguishing medium concentration will be well above the minimum defined threshold, but the concentration of extinguishing medium may be too high and may cause the crew to have breathing difficulties.

Several systems are listed with different **minimum and maximum cockpit volumes**, and the way they operate will be adapted to the volume. The cockpit volume information found in Technical List n°52 is there to protect the driver from a toxic environment while ensuring the system is efficient.

FIA		Liste N°52						
Numéro homologation Homologation number	Constructeur Manufacturer	Modèle Model	Agent extincteur Extinguishing Medium	Volume habitacle Cockpit Volume	Classe de feu Class of fire	N° de bonbonnes N° of bottles	Début d'Homol. Beginning of homol.	Fin d'Homol. ⁽¹⁾ End of homol. ⁽¹⁾
EX.002.15	SPA Design	RP-D	Novec 1230	De 2.3 à 4.1 m ³ From 2.3 to 4.1 m ³	Classe III / Class III	2	10.2015	10.2020
EX.003.15	SPA Design	RP-T	Novec 1230 & F-500	De 2.3 à 4.1 m ³ From 2.3 to 4.1 m ³	Classe I / Class I Classe II / Class II Classe V-E85 / Class V-E85	2	10.2015	10.2020
EX.004.15	SPA Design	RP-S	Novec 1230 & F-500 Encapsulator	De 2.3 à 4.1 m ³ From 2.3 to 4.1 m ³	Classe I / Class I Classe II / Class II Classe V-E85 / Class V-E85	2	11.2015	11.2020
EX.005.15	Lifeline Fire and Safety Ltd	Zero 362O – 1.6-2.3 m ³	Novec 1230 & AR-AFFF+ (anti-freeze)	De 1.59 à 2.39 m ³ From 1.59 to 2.39 m ³	Classe I / Class I Classe II / Class II Classe III / Class III Classe IV / Class IV Classe V-E85 / Class V-E85	2	12.2015	12.2020
EX.006.16	SPA Design	XTREME-500	Novec 1230 & F-500 Encapsulator	De 2.3 à 4.1 m ³ From 2.3 to 4.1 m ³	Classe I / Class I Classe II / Class II Classe V-E85 / Class V-E85	2	10.2016	10.2021
EX.007.16	SPA Design	XTREME-X	Novec 1230	De 2.3 à 4.1 m ³ From 2.3 to 4.1 m ³	Classe I / Class I Classe II / Class II Classe V-E85 / Class V-E85	2	10.2016	10.2021
EX.008.16	Fire Extinguisher Valve Co. Ltd	FX G-TEC3300R	FX G-TEC FE36	De 2.8 à 4.1 m ³ From 2.8 to 4.1 m ³	Classe I / Class I	1	10.2016	10.2021
EX.009.16	Lifeline Fire and Safety Ltd	Zero 362O Fire Marshal – 2.3-4.03 m ³	Novec 1230 & AR-AFFF+ (anti-freeze)	De 2.39 à 4.1 m ³ From 2.39 to 4.1 m ³	Classe I / Class I Classe II / Class II Classe III / Class III Classe V-E85 / Class V-E85	1	12.2016	12.2021
EX.010.17	Fire Extinguisher Valve Co. Ltd	FX G-TEC3300R3	FX G-TEC FE36	De 2.8 à 4.1 m ³ From 2.8 to 4.1 m ³	Classe I / Class I Classe II / Class II Classe V-E85 / Class V-E85	1	03.2017	03.2022
EX.011.17	SPA Design	XTREME-X-1.4-2.3	Novec 1230	De 1.4 à 2.3 m ³ From 1.4 to 2.3 m ³	Classe I / Class I Classe II / Class II Classe V-E85 / Class V-E85	2	03.2017	03.2022

Technical list n°52 and cockpit volumes

Fuel Type or “Class” of Fire:

The type of fuel can greatly influence the behaviour of the fire. All plumbed-in systems (8865-2015 and 8876-2022) are approved for one or more "classes" of fire based upon fuel types, and the technical regulations of each championship will determine for which "class" of fuel the system can be used. The system is tested for each specific class it is approved for, to ensure its efficiency against that type of fire.


FIA

Liste N°52

SYSTEMES D'EXTINCTION FIXES HOMOLOGUES SUIVANT LA NORME FIA 8865-2015 PLUMBED-IN FIRE EXTINGUISHER SYSTEMS HOMOLOGATED ACCORDING TO FIA STANDARD 8865-2015

LISTE TECHNIQUE N° 52 / TECHNICAL LIST N° 52

 In compliance with: FIA Standard 8865-2015		Homologation label
Manufacturer Name: Name of Manufacturer Serial N°: xxx xxx		
Model	Model Name	Maintenance label
Homologation N°	EX.XXX.XX	
Type of Extinguishant	Extinguishing medium	
Range of Temperature	-15 °C to 40°C	
Class of Fire	Class I (Petrol in accordance with Art. 9 of Article 252 of the 2014 Appendix J)	
Weight/volume (kg/l)	xxx kg	
* Compliance	yy kg or yy lt	
* Extinguishant	yy kg or yy lt	

 Service carried out by: Name - «Name of Manufacturer» Serial N°: xxx xxx		Maintenance label
Date of Service: JAN 2019 Date of Next Service: JAN 2021		

Classification des feux :

Classe I – Essence conformément à l'Art. 9 de l'Article 252 de l'Annexe J 2014
 Classe II – Essence + jusqu'à 30% d'éthanol
 Classe III – Diesel conformément à l'Art. 9 de l'Article 252 de l'Annexe J 2014
 Classe IV – Ethanol jusqu'à 100% ou méthanol jusqu'à 100%
 Classe V – Autre carburant spécifique

Classification of fires:

Class I – Petrol in accordance with Art. 9 of Article 252 of the 2014 Appendix J
 Class II – Petrol + up to 30% ethanol
 Class III – Diesel in accordance with Art. 9 of Article 252 of the 2014 Appendix J
 Class IV – Ethanol up to 100% or methanol up to 100%
 Class V – Any other specific fuel

Couleur de fond de l'étiquette :

Classe I – blanc Classe II – jaune Classe III – argent Classe IV – vert Classe V – turquoise
 Un agent extincteur approuvé à utiliser avec plusieurs classes de feu – or

Label background colours:

Class I – white Class II – yellow Class III – silver
 Class IV – green Class V – turquoise
 An extinguishing medium approved for use on more than one class of fire – gold

Volume de l'habitacle = volume compartiment bagages + habitacle, s'il n'y a pas de cloison entre eux. Le volume de l'habitacle est le volume total dans lequel l'agent extincteur est projeté.
 Cockpit volume = cockpit + luggage compartment volume, if there is no bulkhead between them. Cockpit volume is the total volume throughout which the extinguishing medium is spread.

☞ [EN CLIQUANT ICI, VOUS POUVEZ TELECHARGER TOUTES LES FICHES DE PRESENTATION ET LES MANUELS D'UTILISATION:](#)
 ☞ [IF YOU CLICK HERE, YOU CAN DOWNLOAD ALL THE PRESENTATION FORMS AND USER MANUALS:](#)

Numéro homologation Homologation number	Constructeur Manufacturer	Modèle Model	Agent extincteur Extinguishing Medium	Volume habitacle Cockpit Volume	Classe de feu Class of fire	N° de bonbonnes N° of bottles	Début d'Homol. Beginning of homol.	Fin d'Homol. ⁽¹⁾ End of homol. ⁽¹⁾
EX.001.15	Lifeline Fire and Safety Ltd	Zero 3620 – 2.3-4.03 m ³	Novéc 1230 & AR-AFFF+ (anti-freeze)	De 2.39 à 4.1 m ³ From 2.39 to 4.1 m ³	Classe I / Class I Classe II / Class II Classe III / Class III Classe IV / Class IV	2	10.2015	10.2020

⁽¹⁾ La date de fin d'homologation représente la date limite à laquelle les produits peuvent être fabriqués. / The homologation end date represents the final date on which the products may be manufactured
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Service & homologation dates:

The FIA label on an extinguishers system displays the “Service Date” i.e., the date before which the system must be checked and serviced by a manufacturer approved service agent.

The "Homologation End Date" contained in FIA Technical List #52 and #16 only relates to the ability of a manufacturer to produce new products under this homologation.

For the avoidance of doubt, if a specific extinguisher was produced before the “Homologation End Date” and its "Service Date" has not yet passed, it can still be used.

Extinguisher manufacturers decide how many times during its life an extinguisher can be serviced, and will refuse to service extinguishers with damage, corrosion or which are deemed no longer safe to use for any other reason.

Key Points Always Be Ready



Arm the control box as you buckle up.
Remove the pin of the mechanical or hand-held system before leaving the garage.



Familiarise yourself with the system and the triggering protocol.



Activate the plumbed-in and/or hand-held fire extinguisher system at an early stage of the fire to increase effectiveness.



Stop the car and activate the extinguisher immediately when there is a fire.



For Hand-held extinguishers:



Use any hand-held extinguisher as soon as possible.
Keep a safe distance.
Protect yourself from the fire, heat and smoke.



The first activation is the most efficient,
empty the bottle completely.



Commonly hand-held extinguishers are most efficient upon the first
activation.

The extinguisher is less efficient during the second
discharge due to pressure loss inside the bottle.