

# Automatic fire suppression system



## T Series



Independent of power supply



Long Durability



Non-toxic  
Safe for people



Automatic activation



Small & flexible



Easy Installation



Clean  
Leaves no residue



Maintenance free



Cost-effective

## The System Operation

Designed to protect small enclosed spaces with greater risks of fire. Simple and easy to install, the BlazeCut T Series system operates automatically without any external power source. The extinguishing agent is stored in a tube, which also serves to apply extinguishing agent directly to the fire at its source. When a fire occurs, the combination of heat and internal pressure causes the tube to rupture, creating a nozzle, releasing the extinguishing agent.



1. System Installed



2. Fire Breakout



3. Fire Detection



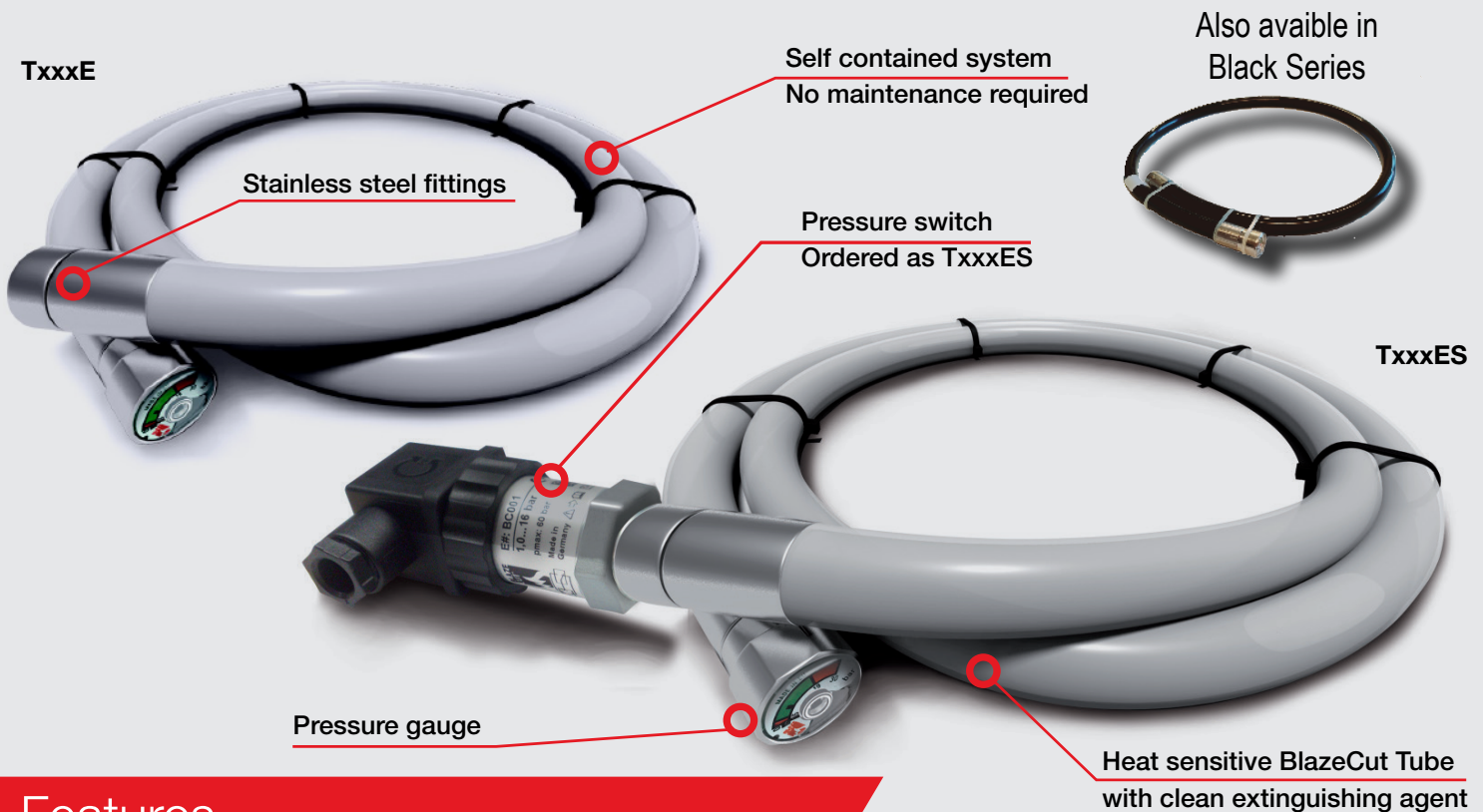
4. Extinguishing


















5. Fire Quenched

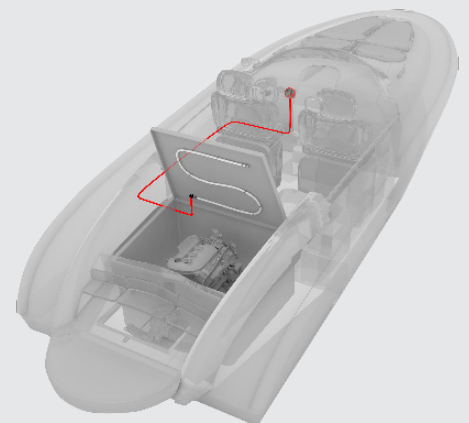
# BlazeCut Technology

The T Series system consists of a heat sensitive BlazeCut Tube made of specialised plastic which is closed by a stainless steel fittings on each end. The BlazeCut Tube has both storage and detection function which means that the extinguishing agent is stored directly in the BlazeCut Tube and no additional storage device such as cylinder is needed.



## Features

-  **Compact;** small footprint of the BlazeCut Tube with A, B, C and electrical fires class rating can protect almost any space
-  **No cylinder for storage required;** the whole system can be placed inside the protected enclosure as there is no cylinder
-  **Cost-effective;** long working life, automatic activation, zero maintenance beats the competition in cost-effectiveness
-  **Optional pressure switch;** and other additional components like signaling unit to perform further safety functions
-  **Clean and effective extinguishing agent;** world-wide known and accepted HFC gas (HFC-227ea) fire agent
-  **No pressurisation needed;** the system works by increasing pressure of the extinguishing agent when heated
-  **Automatic operation;** based on increased temperature: ideal for non-occupied spaces
-  **Fully independent;** TxxxE system is operational 24/7 without any power supply
-  **Maintenance free;** during entire working life means zero maintenance costs
-  **Long working life;** up to 10 years depending on the type of application
-  **No harm;** to protected enclosure when system discharged
-  **Simple installation;** system easily secured by cable ties or clamps
-  **Pressure gauge;** to monitor the system pressure at any time
-  **Minimum operation temperatures;** down to -40°C (-40°F)
-  **Maximum operation temperature;** up to 90°C (194°F)



# System Models and Technical Specifications

## Sizing and Selection

Applications can be calculated by a simple process, measure the sealed enclosures **Width x Height x Depth** in metres or feet and this will calculate your required volume in m<sup>3</sup> or ft<sup>3</sup>. Then refer to the chart below for the maximum volume protected for electrical or engine applications to select the suitable T Series model.

Note: the enclosure should be enclosed or have minimal ventilation. The T Series system is not suitable for open areas. For vehicle applications please refer to our application guide that can be found online at [www.BlazeCut.com](http://www.BlazeCut.com)

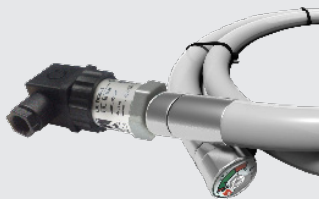
Model*	Maximum Volume Electrical Fires** @ 20°C (68°F)	Maximum Volume Engine Fires** @ 20°C (68°F)	Amount of Agent	System Length	Operation Temperature	Activation Temperature		
T025E	0.09 m <sup>3</sup> 3.18 ft <sup>3</sup>	0.09 m <sup>3</sup> 3.18 ft <sup>3</sup>	0.05 kg ± 2 g 0.11 lb ± 0.07 oz	28 cm 11.02 in	-40°C to +90°C -40°F to 194°F	105°C ± 3°C 221°F ± 5°F		
T050E	0.18 m <sup>3</sup> 6.36 ft <sup>3</sup>	0.14 m <sup>3</sup> 4.94 ft <sup>3</sup>	0.10 kg ± 2 g 0.22 lb ± 0.07 oz	53 cm 20.87 in				
T100E	0.46 m <sup>3</sup> 16.24 ft <sup>3</sup>	0.35 m <sup>3</sup> 12.36 ft <sup>3</sup>	0.25 kg ± 5 g 0.55 lb ± 0.17 oz	113 cm 44.48 in				
T200E	0.91 m <sup>3</sup> 32.14 ft <sup>3</sup>	0.69 m <sup>3</sup> 24.37 ft <sup>3</sup>	0.50 kg ± 5 g 1.10 lb ± 0.17 oz	215 cm 84.64 in				
T300E	1.37 m <sup>3</sup> 48.38 ft <sup>3</sup>	1.04 m <sup>3</sup> 36.73 ft <sup>3</sup>	0.75 kg ± 10 g 1.65 lb ± 0.35 oz	319 cm 125.59 in				
T400E	1.82 m <sup>3</sup> 64.27 ft <sup>3</sup>	1.39 m <sup>3</sup> 49.09 ft <sup>3</sup>	1.00 kg ± 10 g 2.20 lb ± 0.35 oz	422 cm 166.14 in				
T500E	2.28 m <sup>3</sup> 80.52 ft <sup>3</sup>	1.73 m <sup>3</sup> 61.09 ft <sup>3</sup>	1.25 kg ± 10 g 2.76 lb ± 0.35 oz	526 cm 207.09 in				
T600E	2.73 m <sup>3</sup> 96.41 ft <sup>3</sup>	2.08 m <sup>3</sup> 73.45 ft <sup>3</sup>	1.50 kg ± 10 g 3.31 lb ± 0.35 oz	630 cm 248.03 in				
T025ES	0.09 m <sup>3</sup> 3.18 ft <sup>3</sup>	0.09 m <sup>3</sup> 3.18 ft <sup>3</sup>	0.05 kg ± 2 g 0.11 lb ± 0.07 oz	35 cm 13.78 in			-20°C to +80°C -4°F to 176°F	100°C ± 2°C 212°F ± 4°F
T050ES	0.18 m <sup>3</sup> 6.36 ft <sup>3</sup>	0.14 m <sup>3</sup> 4.94 ft <sup>3</sup>	0.10 kg ± 2 g 0.22 lb ± 0.07 oz	60 cm 23.62 in				
T100ES	0.46 m <sup>3</sup> 16.24 ft <sup>3</sup>	0.35 m <sup>3</sup> 12.36 ft <sup>3</sup>	0.25 kg ± 5 g 0.55 lb ± 0.17 oz	120 cm 47.24 in				
T200ES	0.91 m <sup>3</sup> 32.14 ft <sup>3</sup>	0.69 m <sup>3</sup> 24.37 ft <sup>3</sup>	0.50 kg ± 5 g 1.10 lb ± 0.17 oz	222 cm 87.40 in				
T300ES	1.37 m <sup>3</sup> 48.38 ft <sup>3</sup>	1.04 m <sup>3</sup> 36.73 ft <sup>3</sup>	0.75 kg ± 10 g 1.65 lb ± 0.35 oz	326 cm 128.34 in				
T400ES	1.82 m <sup>3</sup> 64.27 ft <sup>3</sup>	1.39 m <sup>3</sup> 49.09 ft <sup>3</sup>	1.00 kg ± 10 g 2.20 lb ± 0.35 oz	429 cm 168.89 in				
T500ES	2.28 m <sup>3</sup> 80.52 ft <sup>3</sup>	1.73 m <sup>3</sup> 61.09 ft <sup>3</sup>	1.25 kg ± 10 g 2.76 lb ± 0.35 oz	533 cm 209.84 in				
T600ES	2.73 m <sup>3</sup> 96.41 ft <sup>3</sup>	2.08 m <sup>3</sup> 73.45 ft <sup>3</sup>	1.50 kg ± 10 g 3.31 lb ± 0.35 oz	637 cm 250.79 in				

\*Letter "S" in model designation stands for an integrated pressure switch that allows connection of a signaling device or to perform a shutdown operation at time of agent discharge. TxxxE does not require power.

\*\* Calculated design concentration 7% (Electrical Fires) and 9% (Engine Fires) and an ambient temperature of 20°C (68°F) for the enclosure. Please note if a lower temperature is present the coverage potential will be reduced, please contact your local BlazeCut agent for further information.

## Optional Components

The unique construction of the T Series system allows you to connect to the optional pressure switch which monitors the pressure inside the BlazeCut Tube. Once the system is discharged the pressure switch sends a signal to a signaling unit or to an external device to perform other safety operations (e.g. disconnect the power or shut down the engine).



**Pressure Switch**

The integrated pressure switch monitors the pressure and sends a signal in case the pressure drops under a pre-set value or the system discharges in the event of a fire. System must be ordered with pressure switch TxxxES



**Alarm Panel**

The compact Audio-optical AAP310 dash mounted alarm panel for applications in vehicles, machines or boats. Features "OK", "FAULT", "FIRE" LED's, 85dB fire alarm buzzer, 9-36v operation, IP67, Ø55mm and a fault monitoring system.



**Signaling Unit**

Simple and cost effective audio and/or visual signaling device for indoor and outdoor applications. Large range of options available to suit your needs.



# Typical Applications

- Engine compartment of on-road vehicles (e.g. cars, vans, SUVs, classic cars, performance cars, 4x4's)
- Engine compartment of other vehicles (e.g. quads, ride-on mowers, golf carts, farming & agricultural equipment etc.)
- Mobile Machinery (forklifts, excavators, skid steer, loaders, cranes, small generators, lighting towers etc.)
- Electrical switchboards, fuse boxes, battery compartments, MCC cabinet, electrical charging stations etc.
- IT servers, telecommunication cabinets, vending machines, ATM's, electric fuel bowsers etc.
- 3D printers, laser cutter, audio visual equipment and many more.....



# Extinguishing Agent

BlazeCut T Series system uses liquefied gas, HFC-227ea fire extinguishing agent. The extinguishing agent is a world-wide known and accepted gaseous clean agent used for total flooding fire suppression applications with very high effectivity, zero ozone depletion potential and safe to people. It is the agent of choice for protection of enclosures with advantages such as:

- Electrically non conductive
- Non corrosive
- Resistant to temperature changes
- Leaves no residue
- Does not damage equipment or objects
- Zero ozone depleting potential

HFC-227ea Extinguishing Agent is UL Recognized and FM Approved



HFC-227ea is UL Recognised and FM Approved and is an environmentally preferred substitute for Halon 1301.

## Fire Types



Ordinary combustibles (creating flames)



Flammable liquids



Burning gases



Energised electrical equipment

# Contact Details

## Global Head Office:

BlazeCut Pty Ltd  
Sydney, Australia  
sales@blazecutgroup.com

## Regional Sales Locations:

Chile	Sweden
Indonesia	Thailand
Philippines	Turkey
Singapore	United Kingdom
Spain	U.S.A

## Dealers/Distributor:

BlazeCut has a global network of dealers and distributors. To find your nearest stockist or to become a dealer please contact BlazeCut

## Manufacturing:

BlazeCut s.r.o, Bernolákovo,  
Slovakia



The contents and information contained in this brochure are believed to be accurate at the time of publication. If you believe that any content contained in this brochure is not accurate or you have any queries regarding the content, please contact BlazeCut.

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