

**RAPTOR**  
**detex**



2021 introduction

# The Raptor Series

**Automatic Fire Protection Systems**

The **Raptor Series** is developed for a high-end customer that needs a **quality product and a value offer** for its fleet.

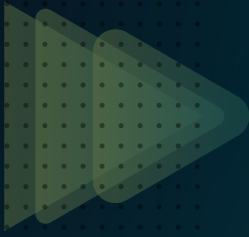
**Price and quality** demand meet each other in one **extremely efficient** product, made with the top end **German Technology** and research, with the unique solution **patented by protecfire**.

Raptor detex is a robust system that is electricity-free, **has no pressure in the piping and hoses**, works on a single line (detection and extinguishing).

**high quality entry level systems**

***A new predator is on the loose***





## Some of the Sectors we Protect



and much more!

Automatic Fire Protection System for Vehicles

Off-Road and On-Road Vehicles | Other Equipments

**RAPTOR**  
**detex**

## UNIQUE TECHNOLOGY

German Engineering

## Automatic Fire Protection System Solution

Autonomous & Self Contained



# Technical Specifications



Name	Raptor Detex
Temperature Range	-30 to 80C
Detection Technology	Rise of Pressure
Detection & Ext. Line	One integrated line
Detector Line Pressure	No pressure
Detection Technology	Stainless steel SPY86
Trigger Temperature	Glass ampoule, 9 independent temperatures
Life of Detectors	Up to 10 years
Nozzle type	X1 or S1
Extinguishing Agent	Tiborex Absolute
Extinguishing Agent Volume	4L, 6L, 10L, 20L, 30L, 50L
Extinguishing Technology	Fine Spray technology
Extinguishing Container (pressure)	Pressurized
Product Material	Stainless Steel
Alarm Signal Switch	Yes
Maintenance Inspection	Yearly
Parts Replacement Duration	Up to 10 years

According to NFPA 17a , NFPA 96-17A , NFPA 750 , NFPA 850

## Installation

The Raptor System is a “pre-engineered” system.

No electric components.

All the parts are fixed by clamps and screwed into fixing places.

The maximum distance from the tank is 15 meters.

The tank can be placed in any position (Vertical / Horizontal).

## Maintenance

Visual Check all the elements (detector, piping, manual trigger, alarm).

6 Months Maintenance - Tank pressure check.

## How it Works

The Raptor Tank is pressurized, though the piping network is not.

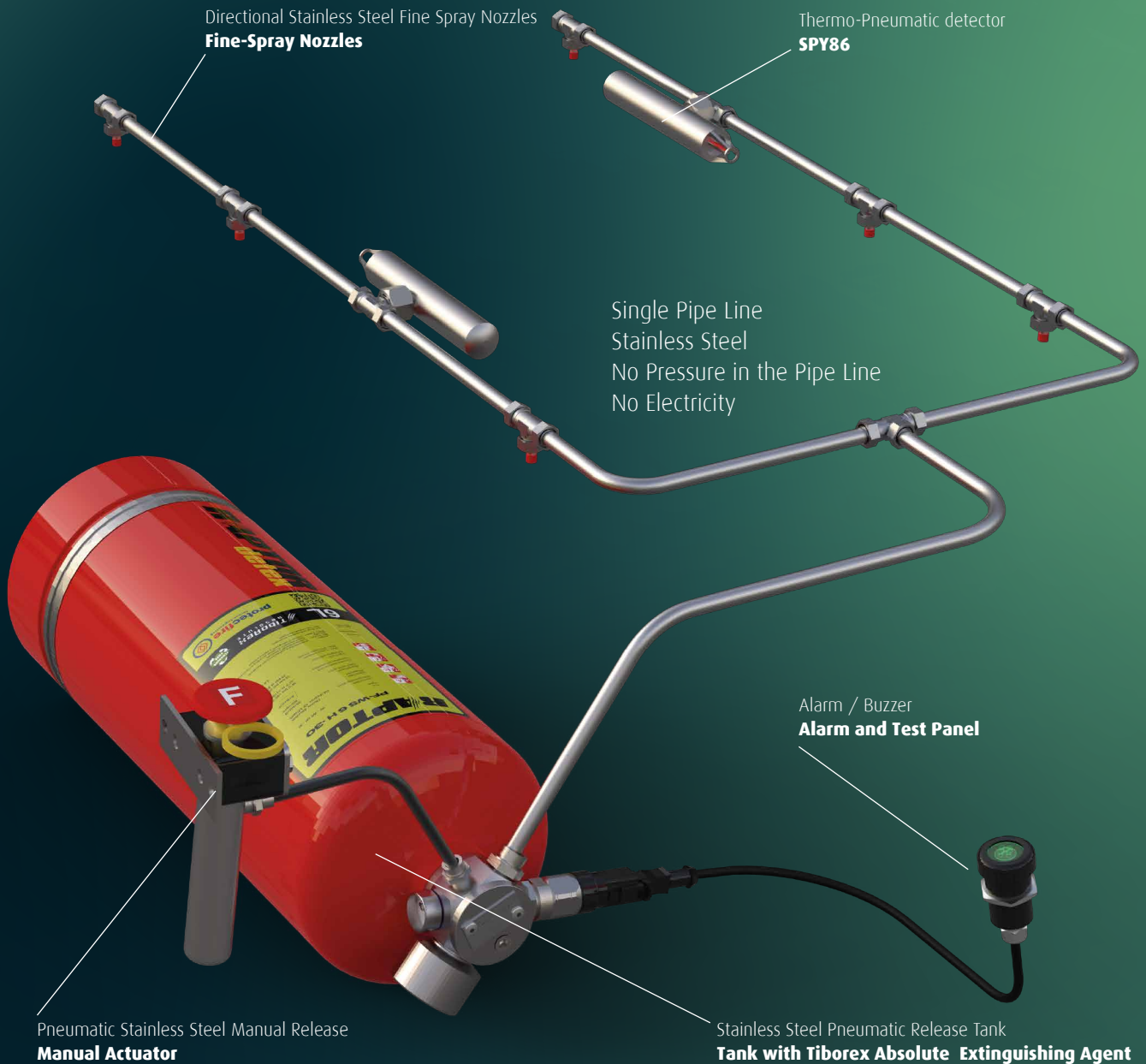
SPY86 Detectors will activate through thermal detection hence releasing pressure into the pipeline and to the cylinder Control Valve which then activates the release of the extinguishing agent.

Fine spray nozzles will disperse the Tiborex Absolute providing the cooling effect and effectively extinguishing fires in the first seconds.

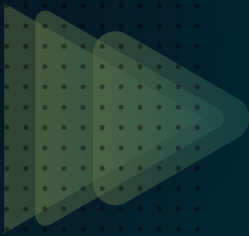
It can be remotely manually activated.

An alarm/buzzer and test button can be installed.

# System Components



**Example of a pre-engineered Raptor Kit**



## System Components



### SPY86 Thermo-Pneumatic Detector

Patented Unique Detector  
No Electricity Required  
Stainless Steel CNC Machined

Available Detection Temperatures  
57°C 、 68°C 、 79°C 、 93°C 、 110°C、 141°C、 182°C、 230°C、 260°C



### Fine Spray Nozzle Bars / X1 Nozzles

Patented Unique Nozzle Solution  
Easy and fast to install - Reduces installation time by 70%.  
Very Small - virtually fits anywhere  
Stainless Steel  
S1 0.5 Factor - Fine Spray Technology / K1.5 factor on X1 Nozzles  
Up to 120° Spray Pattern  
High Quality and Resistant Nozzle Caps



Fine Spray Bars - s1 Nozzles

X1 Fine Spray Nozzles



### Extinguishing Agent Tank

Patented - Unique Pneumatic Release System  
Can be placed in any position (vertical or horizontal)  
Stainless Steel with Powder Coating Finish Paint Ral3000  
Patented - Stainless Steel Valve System

Liquid Agent: Tiborex Absolute - Exclusive protectfire Clean Agent  
Effective against Liquid, Solid, and Grease fires



### Pneumatic Manual Actuator

Patented Unique Pneumatic Activation System  
Stainless-Steel  
Safety Lock System  
Argon Gas Activation



### Alarm / Test Panel

Easy to install  
One button Operation for testing  
Buzzer for Alarm  
Optical Led light for Test / Alarm



### Liquid Extinguishing Agent

Ultra-Fast Extinguishing  
Quenching Effect  
Blanketing Effect  
Environmental Friendly (non toxic | Biodegradable)  
Fluorine Free  
Residue Monitoring by Uv Light

# TiboRex Absolute Extinguishing Agent Comparison Table

FIRE EXTINGUISHING AGENTS COMPARISON	Tiborex Absolute	Water	Foam	Wetting Agent	Powder	Gas
Fast Temperature Reduction	+	-	-	-	-	-
Surface Blanketing	+	-	+	+	-	-
Quenching Effect	+	-	+	-	-	+
Fine-Spray Technology	+	+	-	+	-	-
Fluorine Free	+	+	-	-	-	+
Temperature Range -50°C to +80°C	+	-	-	-	+	-
Danger to Persons	+	+	-	-	-	-

### Ultrafast extinguishing

Only small amounts of extinguishing agent required  
The object to be protected remains almost undamaged

### Ultrafast cooling

Enormous reduction of surface temperature  
Avoidance of re-ignition  
Reduced effect of fire  
Quick interruption of combustion process

### Quenching effect

Rapid removal of thermal energy therefore removing heat hence no combustion or fire in hidden cavities.

### Blanketing fat and oil fires

When cooking fats and oils burn, Tiborex Absolute uses chemical reactions to form a closed, gas-proof protective layer quenching the fire and protecting the hot fat or oil from re-ignition by cooling them down very quickly.

### Residue monitoring and guaranteed quality

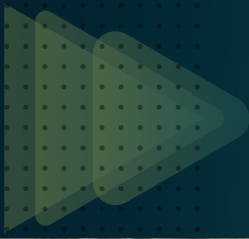
Residues of the extinguishing agent on the object can be identified with the help of ultraviolet light. A chemical analysis (DNA) can verify and confirm that the original TiboRex Absolute was used.

### Environmental friendliness

Ecological and 100% fluorine-free extinguishing agent  
Biodegradable  
Non toxic to humans and animals



**NEW AND ABSOLUTE PREDATOR**



## Automatic Fire Protection System for Vehicles

Off-Road and On-Road Vehicles | Other Equipments

# RAPTOR detex

# Revolutionary Fire Protection Systems



representative stock photo of possible product applications. Credit: iStock.com/stock images



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