



Local  
Application

“C” Series





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# ABOUT US

## Company Overview

The BlazeCut Company is a Fire Suppression System manufacturer and specialist that delivers the latest in technologies. We focus on providing top performing systems manufactured to the highest quality. BlazeCut have improved the way a system can perform and protect you and your valuable assets in harsh high risk environments. Our systems are designed specifically for an application and protect all types of equipment and fixed plant.

## Manufacturing and Development

With the BlazeCut Global Head Office in Australia, our manufacturing facility in Slovakia, Central Europe and worldwide support, we can provide cost effective fire protection solutions to customers quickly and efficiently. BlazeCut systems are manufactured according to the latest ISO9001, ISO14001, AQAP Quality management and environmental standards, tested and approved by several authorities. All systems are tested at our inhouse testing facility as well as by accredited testing institutes. We are committed to customer satisfaction. Our every inquiry is held individually to provide tailor made solutions that fit our customers needs.



## Global Network

BlazeCut focuses to build a network of distribution partners in the different regions around the world to ensure that the users get the best support possible.

BlazeCut has strategically positioned local offices and Sales support personnel around the globe.



# ABOUT US

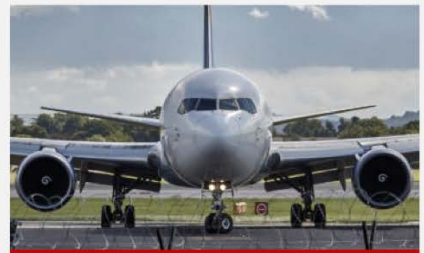
## Market & Industry Examples



Agricultural



Automotive



Airports & Aviation



Chemicals



Defense



Healthcare



Manufacturing



Marine



Mass Media



Mining



Nuclear Power



Safety & Rescue



Power Generation



Telecommunication



Renewable Energy



## PRODUCT RANGE

### T Series

BlazeCut T Series system are our advanced self contained tubular style systems that are cylinder-less and easy to install.



### C Series

BlazeCut C Series system are our modular and customisable cylinder based system with a wide range of agents and accessories



# FIRE KNOWLEDGE & FUNDEMENTALS

## Fire Classes

	Description	Europe	Australia	U.S.A	Russia
	Ordinary combustibles (wood, paper, fabric, refuse)	<b>Class A</b>	<b>Class A</b>	<b>Class A</b>	<b>Class A</b>
	Flammable liquids	<b>Class B</b>	<b>Class B</b>	<b>Class B</b>	<b>Class B</b>
	Burning gases	<b>Class C</b>	<b>Class C</b>	<b>Class B</b>	<b>Class C</b>
	Flammable metals	<b>Class D</b>	<b>Class D</b>	<b>Class D</b>	<b>Class D</b>
	Energised electrical equipment	<b>Not classified</b>	<b>Class E</b>	<b>Class C</b>	<b>Class E</b>
	Cooking oils and fats	<b>Class F</b>	<b>Class F</b>	<b>Class K</b>	<b>Not classified</b>

\*Check your local country regulations for the correct fire classes. The above information is for guidance only.

## Fire Triangle

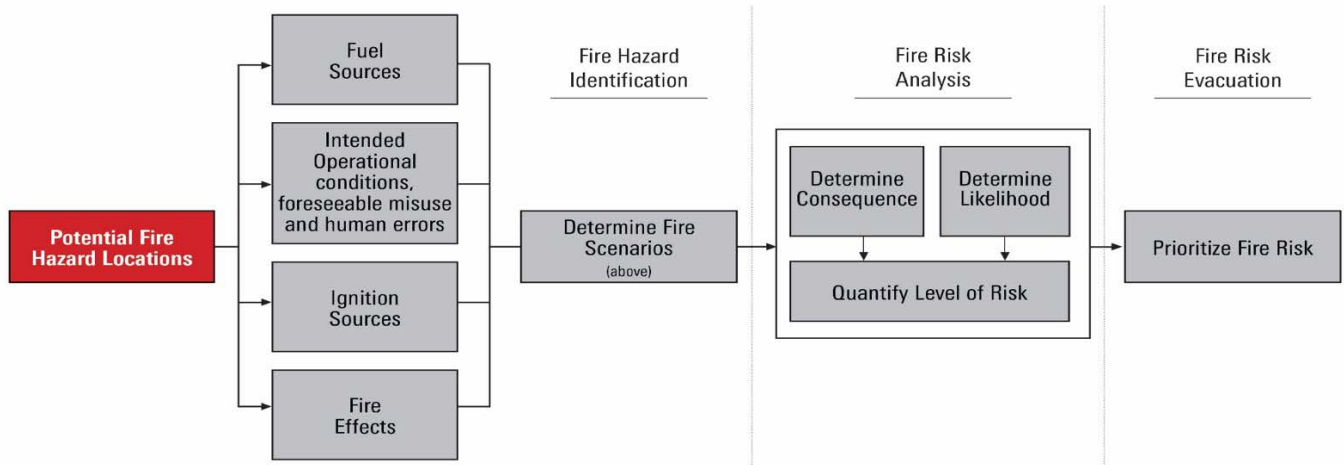


Each element of the Fire Triangle must be in place for combustion to occur. The fire is extinguished when one of the elements is removed from the reaction. The longer this takes the harder it is to suppress the fire as it transforms from a surface fire to a substance fire.

# RISK ASSESSMENTS

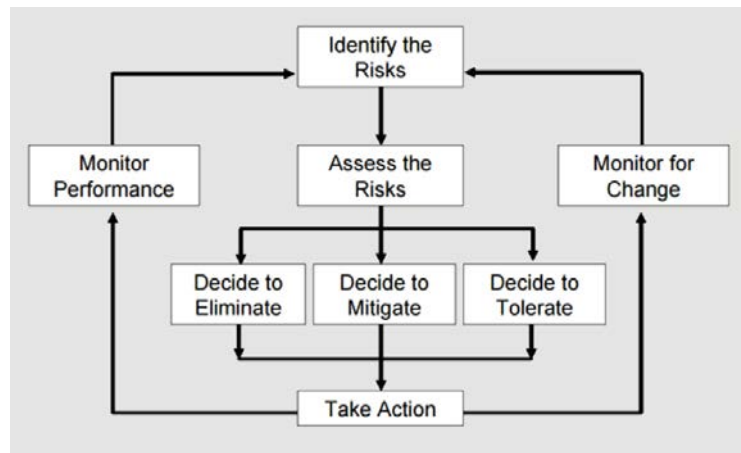
The first step before commencing any design, installation or upgrade of a fire suppression system, is to carry out a risk assessment. A Risk Assessment is an essential component of designing any fire suppression system. You need to be aware of exactly what risks need to be covered on any piece of equipment before the best solution can be achieved or the chance of something happening that will have a negative impact on the health or safety of a person and/or equipment may be increased.

A Risk assessment is the best way to identify all possible risks uniquely associated with any type of equipment assessed. Risk assessments involve a detailed and systematic examination of the equipment. The equipment's activity, location and operational system is assessed to identify any hazards.



## Risk Assessment Process

A very simple process is used to determine what is required to minimize the risks



## Risk Assessment and Control Chart

RAC Chart - Risk Assessment and Control Chart to evaluate and score the risk levels

LIKELIHOOD	CONSEQUENCE			
	CATASTROPHIC	CRITICAL	MARGINAL	NEGLIGIBLE
FREQUENT	20	18	15	5
PROBABLE	19	16	11	4
OCCASIONAL	17	13	8	3
REMOTE	14	12	7	2
IMPROBABLE	10	9	6	1
RISK SCORE	HIGH	MODERATE	LOW	VERY LOW

# EXTINGUISHING AGENTS

## HFC-227ea Clean Agent

HFC-227ea clean extinguishing agent is a liquefied gas used for volume fire suppression. HFC clean extinguishing agent is discharged as a stream of gas and liquid droplets that penetrate into the fire area, ceasing the combustion process through heat absorption and a chemical interaction. HFC clean extinguishing agent is considered environmentally accepted substitute for Halon extinguishing agents used in the past, which are harmful to the ozone layer.

### Main features

- Electrically non-conductive
- Non-corrosive
- Resistant to temperature changes
- Safe for people
- Leaves no residue
- Does not damage equipment, objects or sensitive devices
- Zero ODP (Ozone Depletion Potential)

### Approvals

- HFC-227ea: UL recognized and FM Approved



### Application

HFC clean extinguishing agent is an agent of choice for protection of enclosures where residue may be harmful to the protected sensitive devices. The agent is suitable for Class A, Class B, Class C and Class E (electrical fires).

## Powder Agent

The BlazeCut systems use a high quality powder extinguishing agent.

### Main features

- Universal applications
- Electrically non-conductive
- Resistant to temperature changes

### Approvals

- MPA Dresden Listed



### Application

Most commonly used and cost-effective extinguishing agent due to its very good extinguishing performance against Class A, Class B, Class C and Class E (electrical fires).



# EXTINGUISHING AGENTS

Each environment is different, so choosing the right agent is critical. The BlazeCut system contains commonly used and known agents such as FK-5-1-12 Clean agent, HFC-227ea gaseous clean agent, foam agent or dry chemical powder agent.

## FK-5-1-12 Clean Agent

FK-5-1-12 Clean agent fluid is a next-generation halon and HFC replacement, designed to address concerns for human safety, performance and the environment. FK-5-1-12 clean agent is stored as a liquid; however, it turns into gas upon discharge. The fluid combines the key features of HFC gases with sustainable clean agent protection.

### Main features

- Zero ODP (ozone depletion potential)
- A global warming potential of less than one
- A five-day atmospheric lifetime
- A large margin of safety for occupied spaces

### Approvals

UL recognized and FM approved

### Application

As a clean agent, FK-5-1-12 leaves no residue and will not affect sensitive electronics and devices. It is an ideal choice for the environment due to significant reduction in greenhouse gas emissions. The agent is suitable for Class A, Class B, Class C and Class E (electrical fires).



## Foam Agent/ Antifreeze Foam Agent

The BlazeCut systems use a high-end foaming agent, which is environmentally formulated and has tremendous extinguishing performance.

### Main features

- Environmentally formulated
- Non-corrosive
- 98% organic compounds
- Zero discharge of hazardous chemicals

### Approvals

- UL/ULC Listed Foam Liquid Concentrate
- UL/ULC Listed Wetting Agent
- MPA Dresden Listed
- ICAO Certificate

### Application

Recommended for Class A and Class B fires as well as for Class F (kitchen fires) due to its high extinguishing performance and perfect results against re-ignition.



# C SERIES SYSTEMS

## The BlazeCut Solution

BlazeCut C Series Systems can be installed to protect the engine compartment of any vehicle or machine ranging from standard truck or van to heavy forestry or mining machine. Systems for vehicles and machines are specially designed to sustain harsh environments and are supplied as a ready-to-install kits.

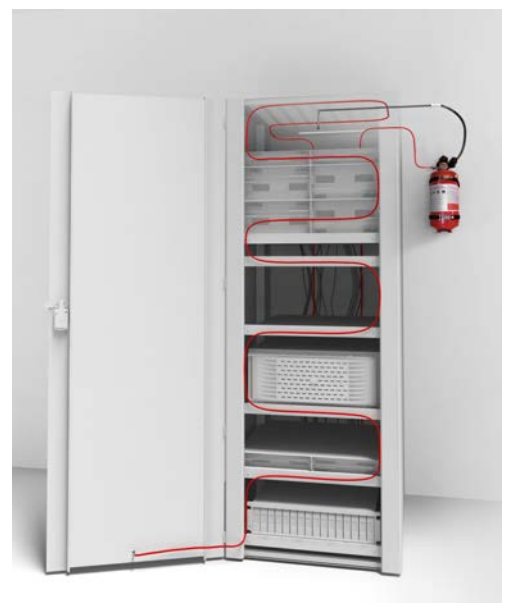
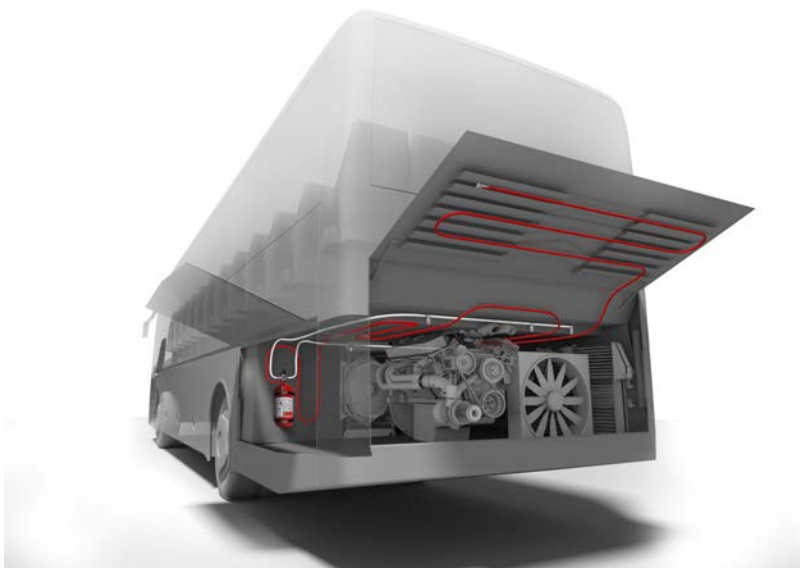
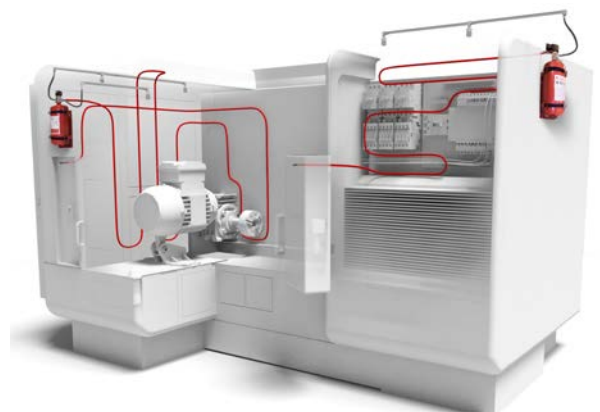
BlazeCut's fully customisable system options provide the features and functions that you require to protect your asset.

### Advantages

- Fully automatic and autonomous
- Independent of electricity
- Fast Detection
- High efficiency of extinguishing agent
- Possibility to manually activate the system
- One system can cover more space
- Harmless to humans and protected devices
- Variety of additional components
- Simple installation and maintenance
- Cost-effective life value

### Typical applications

- Electrical cabinets
- Server racks
- CNC machines
- Telecommunications equipment
- Generators
- Vending machine
- Manufacturing equipment
- Laser cutters
- 3D Printers
- Buses and coaches
- Trucks and vans
- Construction vehicles
- Agricultural machinery
- Mining machines
- Forestry machines
- Specialized military
- Emergency & police vehicles
- Marine



"C" Series

# C SERIES SYSTEMS

## Fixed / Static Applications

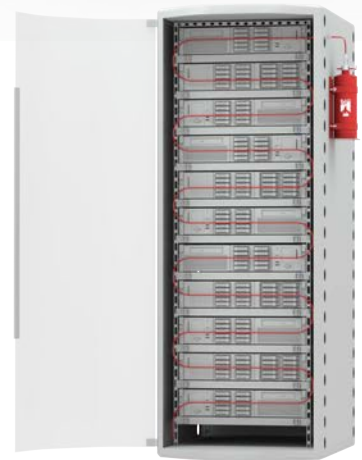
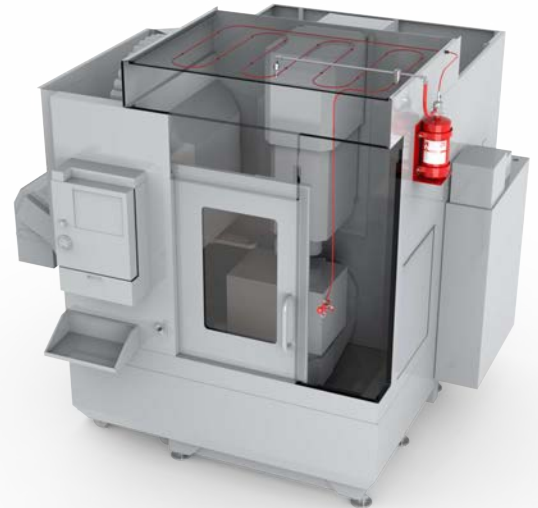
BlazeCut provides automatic fire suppression systems for indoor protection through its BlazeCut “C” Series local application systems. The systems are supplied with FK-5-1-12 or HFC-227ea clean agents, which are the best choice for protection of sensitive devices since they leave no residues after extinguishing. Additionally, the agent is completely non-corrosive, electrically non-conductive and safe for people. For special applications like commercial kitchens the systems are supplied with the foam agent.

### Typical applications include

- CNC machines
- Server racks
- Electrical cabinets
- Commercial kitchens
- Fume cabinets
- Power generators
- Telecom tower shelters
- Ventilation devices
- Elevator engine rooms
- Power supplies
- Wind turbines
- Gas and oil control stations
- Recharging stations
- Paint and chemical storage
- ATMs and ticket machines
- Other

### Advantages

- High cost-effectiveness in comparison to the value of protected assets
- Automatic operation without any power supply
- Fast detection and high extinguishing efficiency
- Easy installation
- Low maintenance costs
- High variability to protect any enclosure
- Long operation lifespan
- Designed to sustain harsh environments
- Environmentally friendly and harmless extinguishing agents
- Safe for people



“C” Series

# C SERIES SYSTEMS

## Vehicles and Mobile Equipment

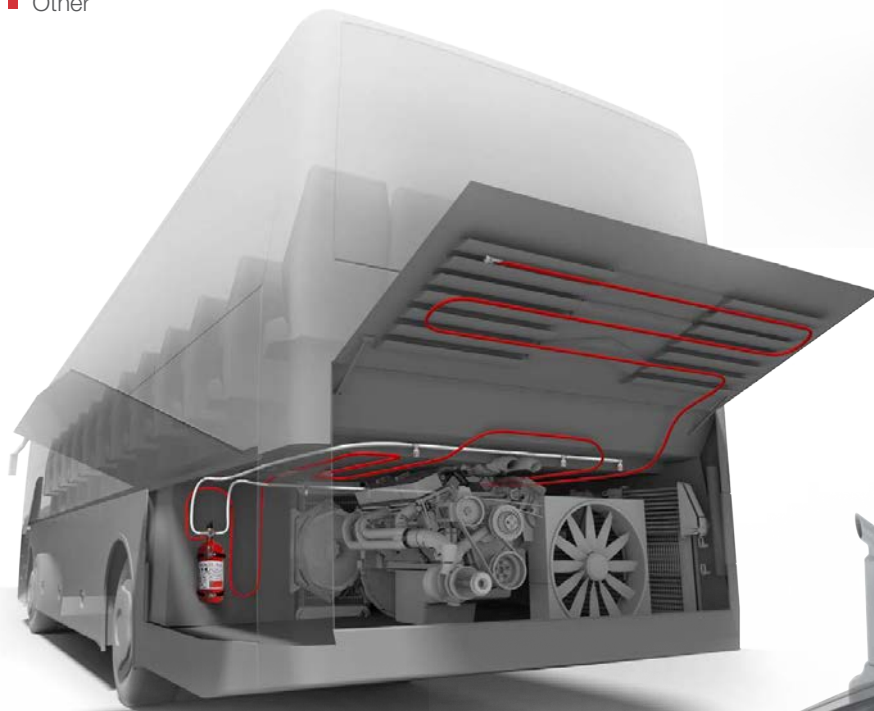
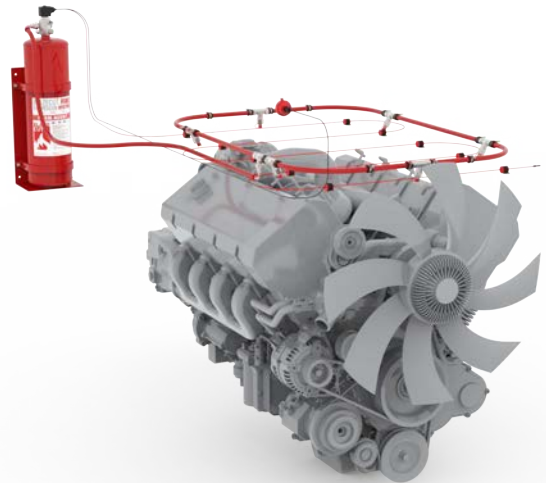
BlazeCut “C” Series Systems can be installed to protect the engine compartment of any vehicle or machine ranging from standard truck or van to heavy forestry or mining machine.

This product line is supplied in options of foam, powder FK-5-1-12 or HFC clean agents.

Systems for vehicles and machines are specially designed to sustain harsh environments and are supplied as a ready-to-install kits.

### Typical vehicle and machine applications include

- Buses and coaches
- Trucks and vans
- Construction vehicles
- Agricultural vehicles
- Mining machines
- Forestry machines
- Special army and police vehicles
- Marine
- Trains
- Other



“C” Series



## TYPES OF SYSTEMS: DLP vs ILP

BlazeCut systems are manufactured in two versions: Direct Low Pressure System and Indirect Low Pressure System. Use of each version is determined by the type and size of the enclosure.

### Direct Low Pressure (DLP) System

**This system is referred to as direct, which means that the activation and distribution of the agent is secured by the detection tube.**



The fire suppression system operates by detecting fire and applying the agent using a detection tube fastened to a cylinder valve. The detection tube is placed in the protected enclosure and is under constant pressure. In case of fire the detection

tube degrades by the effect of fire or high temperature. When the detection tube is disrupted, the agent is released through created hole. The detection system is independent of any electrical supply and operates solely on physical principles.

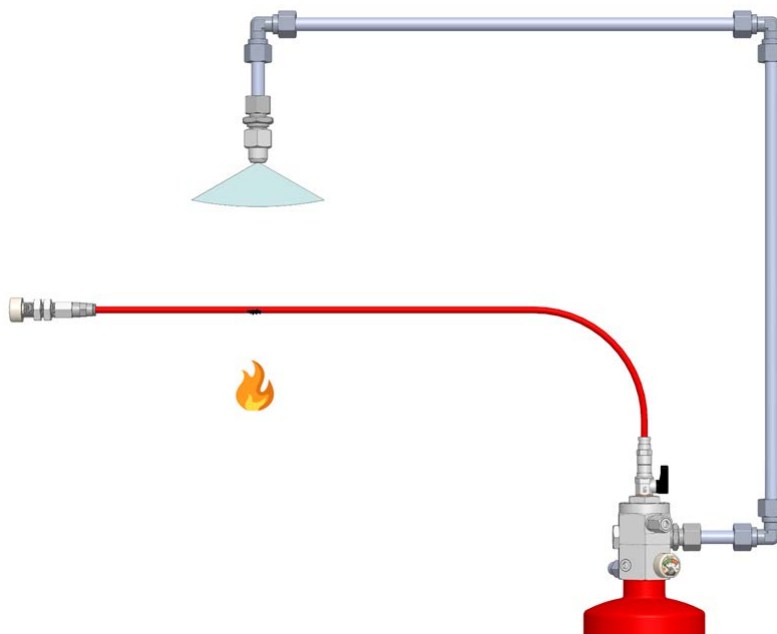
The direct system is suitable for smaller applications and combines easy installation with simple operation.

### Indirect Low Pressure (ILP) System

The fire suppression system operates by detecting heat with a detection tube connected to a valve of a cylinder. The tube is placed in the protected enclosure and is under constant pressure, whereby keeping the valve piston of the cylinder closed.

In case of fire the tube degrades by the effect thereof. The detection tube is ruptured, the pressure in it decreases and the valve piston of the cylinder opens. The fire suppression system activates and the entire extinguishing agent is released through the nozzles. The detection system is independent of any electrical supply and operates solely on physical principles.

**This system is referred to as indirect, which means that it is activated by disruption of the detection tube and the agent is distributed via separate distribution tubes to the nozzles.**



The indirect system is suitable for larger environments or where specific application of the agent is required. This system also enables various modifications by adding optional components such as manual actuation, detectors, control panels for enhanced functioning and control of the system.

# DLP - DIRECT LOW PRESSURE SYSTEMS

## Valve Types & Configuration



**DLP Valve 116 / 118**  
DLP Single outlet  
6mm (116) and 8mm (118)



**DLP Valve 126 / 128**  
DLP Twin outlet  
6mm (126) and 8mm (128)

## Features and Benefits

- **New Part numbering system:** the new generation of 100 series DLP valves use an improved part numbering system to cover all valve options available.
- **Improved safety;** we have introduced a new self resetting pressure relief valve into the valve body adding greater protection from over pressurising the cylinder.
- **Longevity;** full stainless steel construction enables the valve to withstand harsher environments without effects of deterioration.
- **Robust design,** heavy duty brackets and straps have been used on the cylinder which will allow for both wall and base mounting.
- **Pressure gauge;** visual pressure indicator shows the monitoring pressure inside the cylinder at all times.
- **Lockout tag;** to ensure the system is always active and not accidentally isolated.
- **Fire monitoring;** adding a pressure switch can signal various outputs.
- **Adaptable;** gas or powder agents can be used for fixed or mobile applications.
- **Easy installation;** Cylinders are supplied charged and ready to install.



**Ball valve lock out included  
in all systems**



**“C” Series**

# DLP - DIRECT LOW PRESSURE SYSTEMS

## Part Number Breakdown

**C EA 128-6-3**

### Product Line:

C C series Systems

### Fire Agent:

EA HFC-227ea gaseous agent

FK FK5-1-12 gaseous agent

PO Powder agent

### Valve Series:

116 DLP Single outlet 6mm

118 DLP Single outlet 8mm

126 DLP Twin outlet 6mm

128 DLP Twin outlet 8mm

### Quantity of Agent:

1 1 kg of fire agent (PO)

1.25 1.25 kg of fire agent (EA, FK)

2 2 kg of fire agent (PO)

2.5 2.5 kg of fire agent (EA, FK)

4 4 kg of fire agent (PO)

5 5 kg of fire agent (EA, FK)

### Application Variant:

(126 & 128 valve only)

0 Plug

3 M10 Adapter

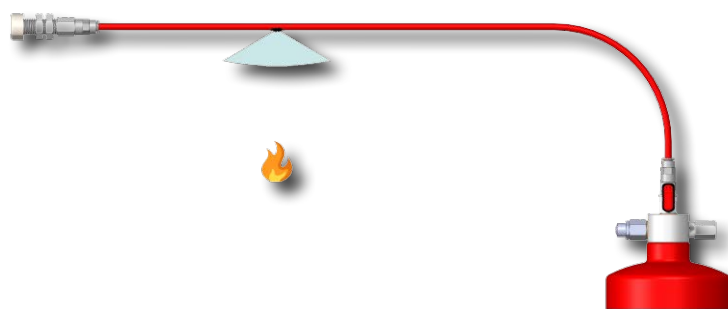
## DLP Valve Operation

The DLP valve has the sensing tube connected directly to the cylinders contents which allows a rapid release of extinguishing agent directly onto the fire. The sensing tube is set to 170°C (338°F) and can be easily routed around the risk area. Each tube can be made to length on site which allows for optimal system design.

Coupled with a pressure switch the DLP system can provide an output for an alarm to signify a fire event.

The system is supplied charged and ready for easy installation, the detection system can be routed through the risk area and simply secured into place.

Single or dual outlet variations available with either 6mm or 8mm sensing/discharge line



“C” Series

# DLP - ABC POWDER

## CPO118 Series

### Key Features

- Distribution and activation is secured by the detection tube
- Suitable for smaller and tight engine compartments
- Detection system independent of any power supply
- Signaling unit monitoring the condition of the system with a backup battery
- Easy installation and maintenance
- Economy solution
- Sound and light fire alert
- Supplied as a ready-to-install kit

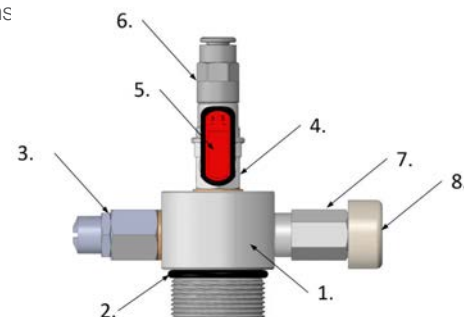


### SPECIFICATION

Type of Valve	DLP
Type Code	CPO118
Type of Agent	ABC Powder
Amount of Agent	From 1 kg to 4 kg
Detection Tube	1 outlets, Ø 8 mm
Extrusion Gas	Nitrogen (N2)
Operation Temperature	From -20°C to +60°C
System Approval	CE

### Optional components

- Pressure switch for connecting external signaling devices or controlling external systems
- Audio-optical signaling devices for alerting in case of activation of the system.



### Detail of the valve

1. Body of the cylinder valve 116, 118
2. O-ring seal of the cylinder valve
3. G1/8" outlet with a pressure relief valve APR001 and a bonded seal FVG02
4. G1/8" agent discharge outlet with a ball valve ABV001 and a bonded seal FVG02
5. Removable lever of the ball valve
6. BlazeTube outlet connector FBT1BP026 (valve 116) or FBT1BP028 (valve 118) for the BlazeTube detection
7. G1/8" outlet with a valve adaptor FVABM0210 (G1/8" to M10x1) –comes with pre-installed pressure gauge 8. as standard
8. Pressure gauge APG001 (for HFC-227ea) or APG002 (for FK-5-1-12) with an O-ring, thread M10x1



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# DLP - CLEAN AGENT FK5-1-12

## CFK116 / CFK118 Series



### Key Features

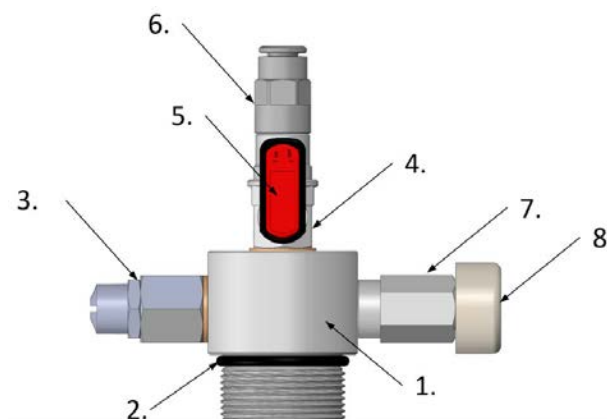
- The simplest direct system with one outlet for the detection tube Ø 6 mm or 8 mm.
- Easy-to-install kit.
- Cost-effective solution for small enclosures.

### SPECIFICATION

Type of Valve	DLP	
Type Code	CFK116	CFK118
Type of Agent	FK-5-1-12 Clean Agent	FK-5-1-12 Clean Agent
Amount of Agent	From 1.25 kg to 5 kg	From 1.25 kg to 5 kg
Detection Tube	1 outlet, Ø 6 mm	1 outlet, Ø 8 mm
System Approval	CE	

### Optional components

- Pressure switch for connecting external signaling devices or controlling external systems.
- Audio-optical signaling devices for alerting in case of activation of the system.



### Detail of the valve

1. Body of the cylinder valve 116, 118
2. O-ring seal of the cylinder valve
3. G1/8" outlet with a pressure relief valve APR001
4. G1/8" agent discharge outlet with a ball valve ABV001
5. Removable lever of the ball valve
6. BlazeTube outlet connector FBT1BP026 (valve 116) or FBT1BP028 (valve 118) for the BlazeTube detection
7. G1/8" outlet with a valve adaptor FVABM0210 (G1/8" to M10x1) –comes with pre-installed pressure gauge 8. as standard
8. Pressure gauge APG001 (for HFC-227ea) or APG002 (for FK-5-1-12) with an O-ring, thread M10x1

"C" Series

# DLP - CLEAN AGENT FK5-1-12

## CFK126 / CFK128 Series - Twin outlet



### Key Features

- Direct system with two outlets for the detection tube with Ø 6 mm (CFK126) or Ø 8 mm (CFK128).
- Detection tube with Ø 8 mm has higher flow rate which secures faster discharge of the agent from the cylinder.
- With two detection tubes one system can protect two separate enclosures.
- Integrated ball valve eliminates accidental activation.
- Ready-to-install kit.

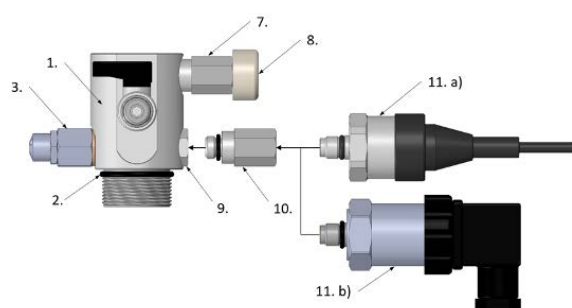
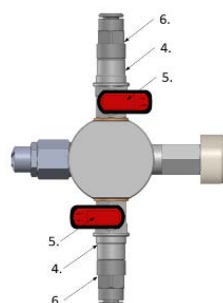
### SPECIFICATION

Type of Valve	DLP	
Type Code	CFK126	CFK128
Type of Agent	FK-5-1-12 Clean Agent	FK-5-1-12 Clean Agent
Amount of Agent	From 1.25 kg to 5 kg	From 1.25 kg to 5 kg
Detection Tube	2 outlets, Ø 6 mm	2 outlets, Ø 8 mm
System Approval	CE	

### Optional components

- Pressure switch for connecting external signaling devices or controlling external systems.
- Audio-optical signaling devices for alerting in case of activation of the system.

### Detail of the valve



1. Body of the cylinder valve 126, 128
2. O-ring seal of the cylinder valve
3. G1/8" outlet with a pressure relief valve
4. G1/8" agent discharge outlet with a ball valve
5. Removable lever of the ball valve
6. BlazeTube outlet connector FBT1BP026 (valve 126) or FBT1BP028 (valve 128)
7. G1/8" outlet with a valve adaptor (G1/8" to M10x1) – comes with pre-installed pressure gauge 8. as standard
8. Pressure gauge APG001 (for HFC-227ea) or APG002 (for FK-5-1-12) with an ring, thread M10x1
9. G1/8" outlet with a sealing plug; can be replaced with an adaptor 10. (G1/8" to M10x1) for use with 11. a) or 11. b)
10. G1/8" to M10x1 adaptor FVABM0210 – optional component
11. Pressure monitoring components
  - a) Pressure Transducer ATA100
  - b) Pressure Switch APS001



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# DLP - CLEAN AGENT HFC-227EA

## CEA116 / CEA118 Series



### Key Features

- The simplest direct system with one outlet for the detection tube Ø 6 mm or Ø 8 mm.
- Easy-to-install kit.
- Cost-effective solution for small enclosures.

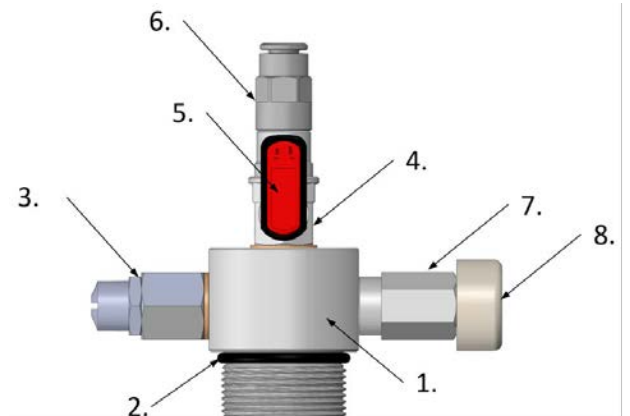
### SPECIFICATION

Type of Valve	DLP	
Type Code	CEA116	CEA118
Type of Agent	HFC-227ea	HFC-227ea
Amount of Agent	From 1 kg to 4 kg	From 1 kg to 4 kg
Detection Tube	1 outlet, Ø 6 mm	1 outlet, Ø 8 mm
System Approval	CE	

**Note:** HFC-227ea C series systems are not available to European member states. Please refer to Clean Agent FK-5-1-12

### Optional components

- Pressure switch for connecting external signaling devices or controlling external systems.
- Audio-optical signaling devices for alerting in case of activation of the system.



### Detail of the valve

1. Body of the cylinder valve 116, 118
2. O-ring seal of the cylinder valve
3. G1/8" outlet with a pressure relief valve APR001
4. G1/8" agent discharge outlet with a ball valve ABV001
5. Removable lever of the ball valve
6. BlazeTube outlet connector FBT1BP026 (valve 116) or FBT1BP028 (valve 118) for the BlazeTube detection
7. G1/8" outlet with a valve adaptor FVABM0210 (G1/8" to M10x1) –comes with pre-installed pressure gauge 8. as standard
8. Pressure gauge APG001 (for HFC-227ea) or APG002 (for FK-5-1-12) with an O-ring, thread M10x1

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# DLP - CLEAN AGENT HFC-227EA

## CEA126 / CEA128 Series -Twin Outlet



### Key Features

- Direct system with two outlets for the detection tube with Ø 6 mm (CEA126) or Ø 8 mm (CEA128).
- Detection tube with Ø 8 mm has higher flow rate which secures faster discharge of the agent from the cylinder.
- With two detection tubes one system can protect two separate enclosures.
- Integrated ball valve eliminates accidental activation.
- Ready-to-install kit.

### SPECIFICATION

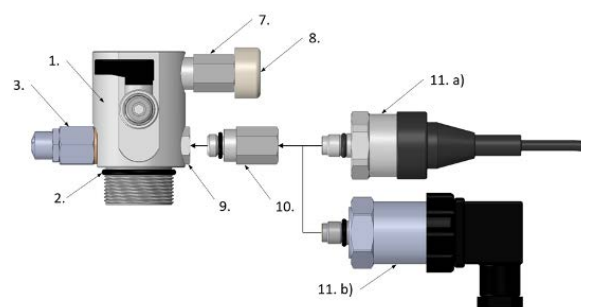
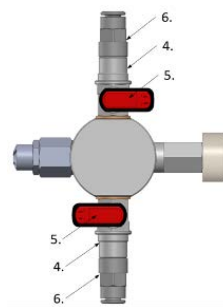
Type of Valve	DLP	
Type Code	CEA126	CEA128
Type of Agent	HFC-227ea	HFC-227ea
Amount of Agent	From 1 kg to 4 kg	From 1 kg to 4 kg
Detection Tube	2 outlets, Ø 6 mm	2 outlets, Ø 8 mm
System Approval	CE	

**Note:** HFC-227ea C series systems are not available to European member states. Please refer to Clean Agent FK-5-1-12

### Optional components

- Pressure switch for connecting external signaling devices or controlling external systems.
- Audio-optical signaling devices for alerting in case of activation of the system.

### Detail of the valve



1. Body of the cylinder valve 126, 128
2. O-ring seal of the cylinder valve
3. G1/8" outlet with a pressure relief valve
4. G1/8" agent discharge outlet with a ball valve
5. Removable lever of the ball valve
6. BlazeTube outlet connector FBT1BP026 (valve 126) or FBT1BP028 (valve 128)
7. G1/8" outlet with a valve adaptor (G1/8" to M10x1) – comes with pre-installed pressure gauge 8. as standard
8. Pressure gauge APG001 (for HFC-227ea) or APG002 (for FK-5-1-12) with an ring, thread M10x1
9. G1/8" outlet with a sealing plug; can be replaced with an adaptor 10. (G1/8" to M10x1) for use with 11. a) or 11. b)
10. G1/8" to M10x1 adaptor FVABM0210 – optional component
11. Pressure monitoring components
  - a) Pressure Transducer ATA100
  - b) Pressure Switch APS001

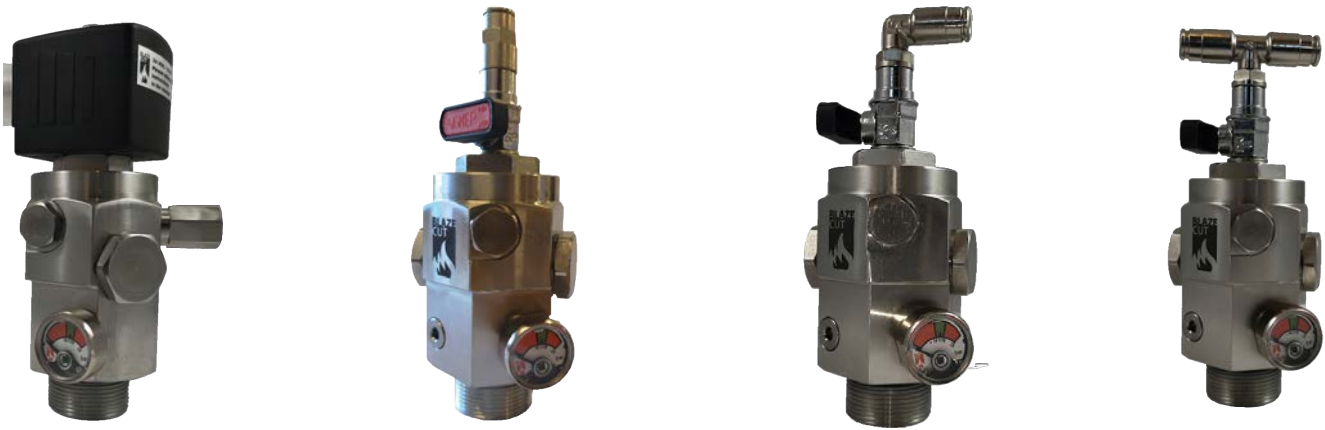


"C" Series



## ILP - INDIRECT LOW PRESSURE SYSTEMS

The BlazeCut ILP valve cover both the Electronic LHD and Pneumatic LOP range. This adaptability means that the valves can be used in a number of different applications. Each valve is assembled and tested in-house which ensures continual performance. Due to the introduction of the new valves there are also new part numbers as the selection process has changed. The following information is a guide to assist the selection process. Some levels of customisation are available so not all configurations are depicted below.



### Features & Benefits

- **New part numbering system;** new generation of 200 series ILP valves have an improved part numbering system to cover all valve options available.
- **High flow design;** the new valve has been designed to allow a higher amount of agent through the valve body, increasing the overall performance of the system.
- **Improved safety;** we have introduced a new self-resetting pressure relief valve into the valve body adding greater protection from over-pressurisation of the cylinder.
- **Longevity;** full stainless steel construction enables the valve to withstand harsher environments without effects of deterioration.
- **Robust design,** heavy duty brackets and straps have been used on the cylinder which will allow for both wall and base mounting.
- **Clever filling;** self-resetting piston is positioned to recharge with greater efficiency.
- **System configurations;** the new valve can be configured for both pneumatic and electronic system designs.
- **Pressure gauge;** visual pressure indicator shows the monitoring pressure inside the cylinder at all times.
- **Versatility;** voltage options for the electric solenoid are available in either 12 or 24 volt DC.



"C" Series

# ILP - INDIRECT LOW PRESSURE SYSTEMS

## Valve Types and Configurations



### ILP Valve 201

Pneumatic with BlazeTube  
Push-in fitting - Straight



### ILP Valve 202

Pneumatic with BlazeTube  
Push-in fitting - Elbow



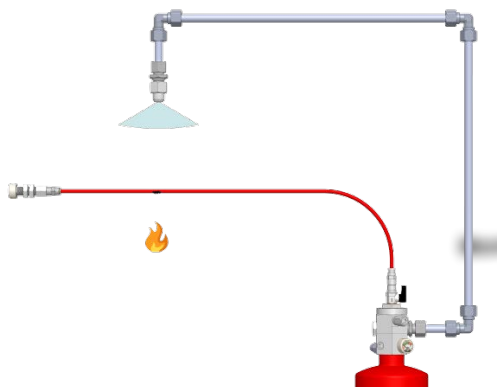
### ILP Valve 203

Pneumatic with BlazeTube  
Push-in fitting - Tee



### ILP Valve 211 / 212

Electric valve with 12V (211) or  
24V (212) Solenoid



# ILP SYSTEM PART NUMBERING

## Indirect Low Pressure system (ILP)

### Part Number Breakdown

**C PO 211-30-4-2-H-M**

#### Product line:

C C series Systems

#### Fire Agent:

EA HFC-227ea gaseous agent  
FK FK5-1-12 gaseous agent  
SF Standard foam agent  
AF Antifreeze foam agent  
PO Powder agent

#### Valve Series:

201 Pneumatic with BlazeTube Push-in Straight  
202 Pneumatic with BlazeTube Push-in 90° Elbow  
203 Pneumatic with BlazeTube Push-in Tee  
211 Electric valve with 12 V solenoid  
212 Electric valve with 24 V solenoid

#### Valve Port (L / R):

0 Plug  
1 Ball valve with BlazeTube Push-in fittin  
2 Ball valve with LOP hose fittin  
3 M10x1 adapter with a plug

#### Quantity of agent:

1	1 kg	5	5 kg	9	9 kg	16	16 kg
2	2 kg	6	6 kg	10.4	10.4 L		
3	3 kg	6.2	6.2L	12	12 kg		
4	4 kg	8	8 kg	12.8	12.8 L		

#### Quantity of nozzles:

1 | 2 | 3 | 4 | 5 | 6

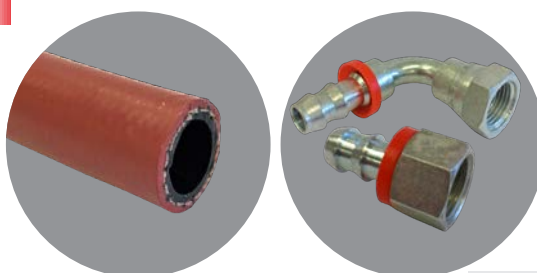
#### Type of hose/tube:

B Braided hose (Stainless)  
G Galvanised tube  
H Red fire hose (RF Hose)  
S Stainless steel tube  
GH Galvanised tube and RF hose  
SH Stainless steel tube and hose  
GB Galvanised tube and braided hose  
SB Stainless steel tube and braided hose

#### Application variant:

C Customised kit  
M Mobile application  
MC Mobile application customised  
K Kitchen system  
KC Kitchen system customised

Fast to install RF hose  
and fittings available



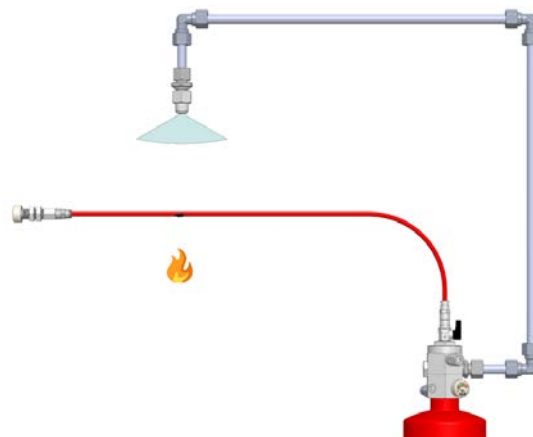
“C” Series

# ILP - FOAM AGENT / ELECTRONIC

## CSF211 / CAF211 Series

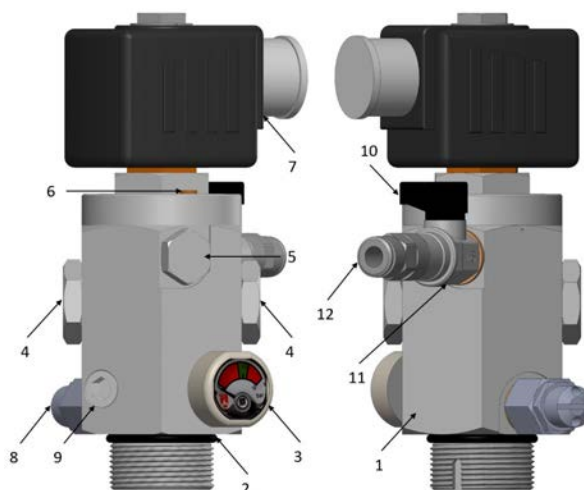
### Key Features

- Distribution of agent by separate discharge network and nozzles
- Better application of agent by nozzles and enhanced fire suppression ability
- Ideal for bigger engine compartments and harsh environments
- Control unit monitoring the condition of the system with a backup battery
- Sound and light fire alert
- Switch for manual discharge of the system
- Supplied as a ready-to-install kits
- Electric detection options of BlazeWire or smoke/heat detectors



### SPECIFICATION

Type of Valve	ILP	
Type Code	CSF211	CAF211
Type of Agent	Foam	Antifreeze Foam
Amount of Agent	From 2 l to 76 l	From 2 l to 76 l
Discharge outlets	1 or 2 outlets	
Detection options	BlazeWire - Electronic linear heat detector or BlazeTube - 1 outlet, Ø 6 mm LOP	
Expellant Gas	Nitrogen (N <sub>2</sub> )	
Operation Temperature	From 0°C to +60°C	From -20°C to +60°C
System Approval	CE	



Detail of the valve

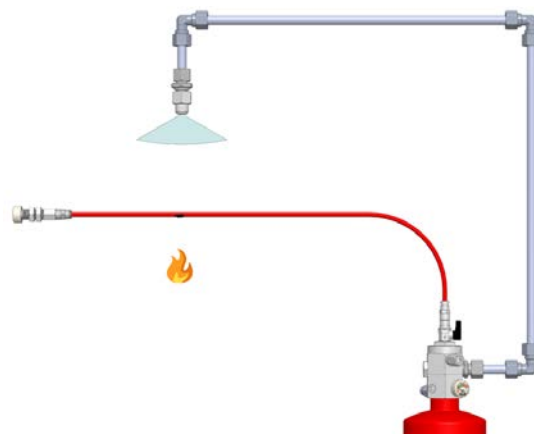
1. Body of the cylinder valve
2. O-ring seal of the cylinder valve
3. M10x1 port with pressure gauge
4. Discharge outlet ports
5. G1/8" outlet
6. Venting port cap
7. Solenoid valve 24 V DC or 12 V DC
8. G1/8" outlet with a pressure relief valve
9. M10x1 port for Pressure Switch or Pressure Transducer
10. Removable lever of the ball valve
11. G1/8" outlet with a ball valve
12. push-in connector for a Ø 6 mm BlazeTube detection

# ILP - FOAM AGENT / PNEUMATIC

## CSF201 / CAF201 Series

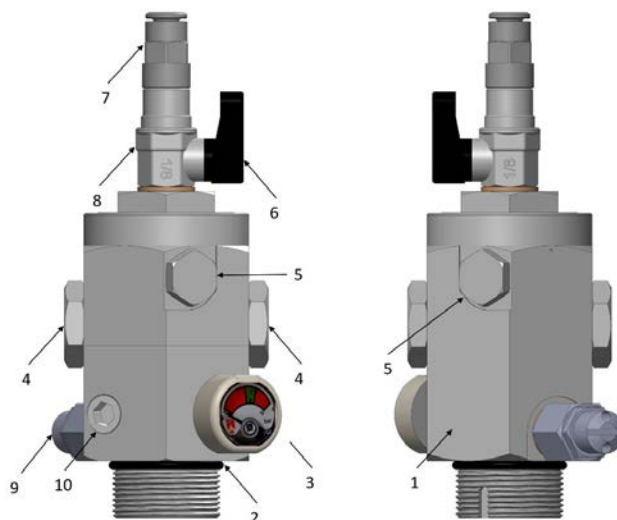
### Key Features

- Distribution of agent by separate discharge network and nozzles
- Better application of agent by nozzles and enhanced fire suppression ability
- Ideal for bigger engine compartments and harsh environments
- Detection system independent of any power supply
- Control unit monitoring the condition of the system with a backup battery
- Sound and light fire alert
- Switch for manual discharge of the system
- Supplied as a ready-to-install kits



### SPECIFICATION

Type of Valve	ILP	
Type Code	CSF201	CAF201
Type of Agent	Foam	Antifreeze Foam
Amount of Agent	From 2 l to 76 l	From 2 l to 76 l
Discharge outlets	1 or 2 outlets	
Detection options	BlazeTube - 1 outlet, Ø 6 mm LOP Pneumatic valve operation	
Extrusion Gas	Nitrogen (N <sub>2</sub> )	
Operation Temperature	From 0°C to +60°C	From -20°C to +60°C
System Approval	CE	



Detail of the valve

1. Body of the cylinder valve
2. O-ring seal of the cylinder valve
3. M10x1 port with pressure gauge
4. 2x G3/8" agent discharge outlet ports
5. 2x G1/8" outlets
6. Removable lever of the ball valve
7. Push-in connector for a Ø 6 mm BlazeTube detection
8. G1/8" outlet with a ball valve
9. G1/8" outlet with a pressure relief valve
10. M10x1 port for Pressure Switch or Pressure Transducer

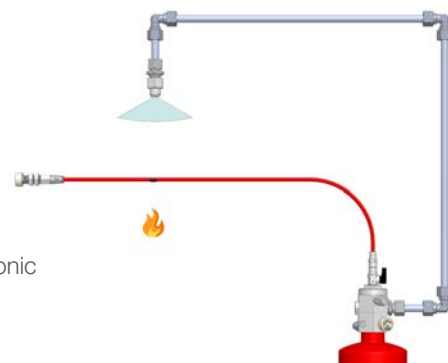


# ILP - CLEAN AGENT / ELECTRONIC

## CFK211 / CEA211 Series

### Key Features

- Indirect system with the detection tube Ø 6 mm for fire detection or with BlazeWire electronic linear heat detector.
- The system is supplied with one distribution branch or two distribution branches to cover multiple enclosures or for better coverage of the enclosure.
- Multiple nozzle combination possible for specific application of agent.
- Includes a solenoid actuator as default to connect various optional components for electrical actuation of the system.
- Multiple cylinder combination possible to protect larger enclosures.



### SPECIFICATION

Type of Valve	ILP	
Type Code	CFK211	CEA211
Type of Agent	FK-5-1-12 Clean Agent	HFC-227ea
Amount of Agent	From 1 kg to 96 kg	From 2 kg to 72 kg
Discharge Outlets	1 or 2 outlets	
Detection options	BlazeWire - Electronic linear heat detector or BlazeTube - 1 outlet, Ø 6 mm	
System Approval	CE	

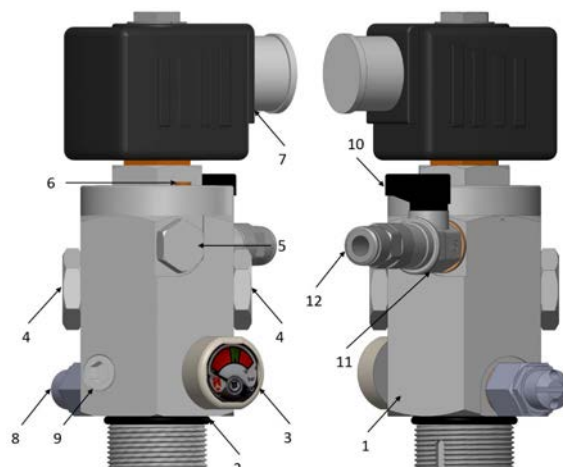
### Optional components

- Audio-optical signaling devices for alerting in case of activation of the system.
- Fire detectors – smoke, heat or combination of both for fast fire detection.
- Manual electric actuator for manual release of the agent.
- Pressure switch to connect external signaling devices or to control external systems (equipment and power shut down).
- Linear heat cable as an electrical detection option to pneumatic detection tube.
- Control panel for enhanced operation and control of the system.



### Detail of the valve

1. Body of the cylinder valve
2. O-ring seal of the cylinder valve
3. M10x1 port with pressure gauge
4. Discharge outlet ports
5. G1/8" outlet
6. Venting port cap
7. Solenoid valve 24 V DC or 12 V DC
8. G1/8" outlet with a pressure relief valve
9. M10x1 port for Pressure Switch or Pressure Transducer
10. Removable lever of the ball valve
11. G1/8" outlet with a ball valve
12. push-in connector for a Ø 6 mm BlazeTube detection

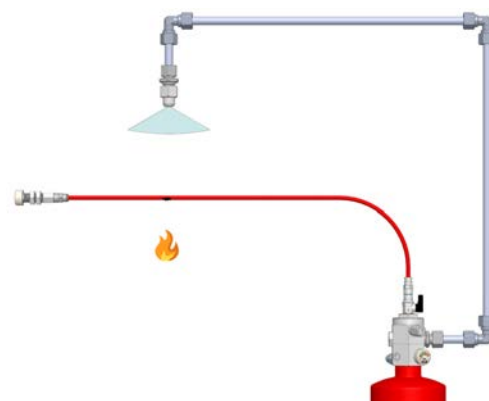


# ILP - CLEAN AGENT / PNEUMATIC

## CFK201 / CEA201 Series

### Key Features

- Indirect system with the detection tube Ø 6 mm for fire detection.
- The system is supplied with one distribution branch or two distribution branches to cover multiple enclosures or for better coverage of the enclosure.
- Multiple nozzle combination possible for specific application of agent.
- Multiple cylinder combination possible to protect larger enclosures.



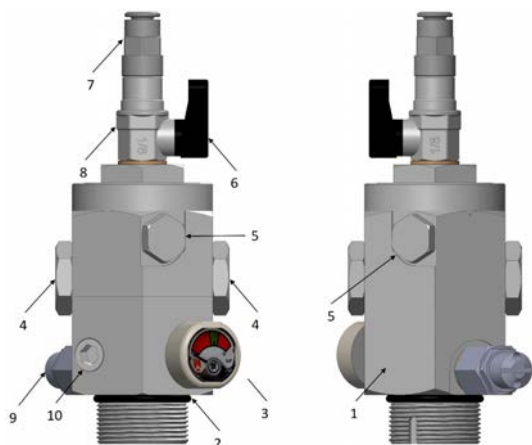
### SPECIFICATION

Type of Valve	ILP	
Type Code	CFK201	CEA201
Type of Agent	FK-5-1-12	HFC-227ea
Amount of Agent	From 2 kg to 96 kg	From 2 kg to 72 kg
Discharge Outlets	1 or 2 outlets	
Detection Options	BlazeTube - 1 outlet, Ø 6 mm	
System Approval	CE	

**Note:** HFC-227ea C series systems are not available to European member states. Please refer to Clean Agent FK-5-1-12

### Optional components

- Pressure switch to connect external signaling devices or to control external systems (equipment and power shut down).
  - Audio-optical signaling devices for alerting in case of activation of the system.
  - Manual actuator – switch for manual activation of the system independent of power supply.
  - Solenoid switch – electrical release of pressure from the detection tube after receiving signal from external device (control panel, detection device, manual electric actuator).
- Fire detectors, linear heat cable, control panel, manual electric actuator - only in combination with the solenoid switch.



### Detail of the valve

1. Body of the cylinder valve
2. O-ring seal of the cylinder valve
3. M10x1 port with pressure gauge
4. 2x G3/8" agent discharge outlet ports
5. 2x G1/8" outlets
6. Removable lever of the ball valve
7. Push-in connector for a Ø 6 mm BlazeTube detection
8. G1/8" outlet with a ball valve
9. G1/8" outlet with a pressure relief valve
10. M10x1 port for Pressure Switch or Pressure Transducer



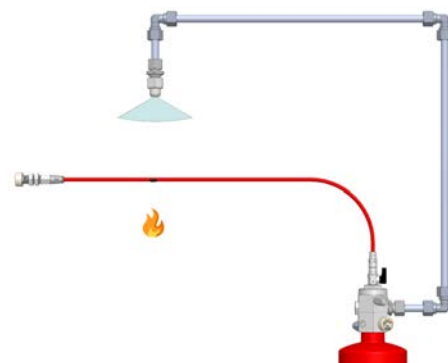
"C" Series

# ILP - ABE POWDER / ELECTRONIC

## CPO211 Series

### Key Features

- Indirect system with the detection tube Ø 6 mm for fire detection or with BlazeWire electronic linear heat detector.
- The system is supplied with one distribution branch or two distribution branches to cover multiple enclosures or for better coverage of the enclosure.
- Multiple nozzle combination possible for specific application of agent.
- Includes a solenoid actuator as default to connect various optional components for electrical actuation of the system.
- Multiple cylinder combination possible to protect larger enclosures.



### SPECIFICATION

Type of Valve	ILP
Type Code	CPO211
Type of Agent	ABC Powder
Amount of Agent	From 2 kg to 54 kg
Discharge Outlets	1 or 2 outlets
Detection options	BlazeWire - Electronic linear heat detector or BlazeTube - 1 outlet, Ø 6 mm
System Approval	CE

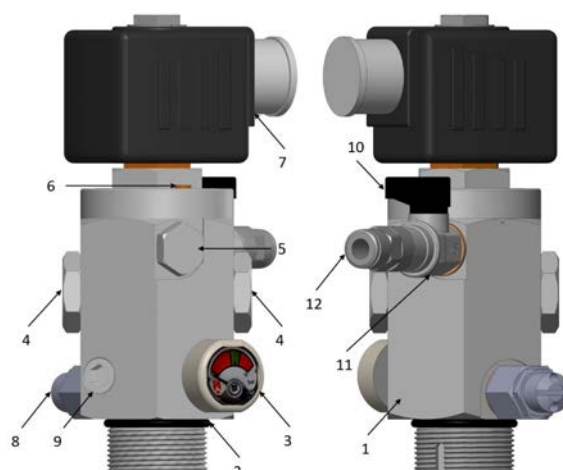
### Optional components

- Audio-optical signaling devices for alerting in case of activation of the system.
- Fire detectors – smoke, heat or combination of both for fast fire detection.
- Manual electric actuator for manual release of the agent.
- Pressure switch to connect external signaling devices or to control external systems (equipment and power shut down).
- Linear heat cable as an electrical detection option to pneumatic detection tube.
- Control panel for enhanced operation and control of the system.



### Detail of the valve

1. Body of the cylinder valve
2. O-ring seal of the cylinder valve
3. M10x1 port with pressure gauge
4. Discharge outlet ports
5. G1/8" outlet
6. Venting port cap
7. Solenoid valve 24 V DC or 12 V DC
8. G1/8" outlet with a pressure relief valve
9. M10x1 port for Pressure Switch or Pressure Transducer
10. Removable lever of the ball valve
11. G1/8" outlet with a ball valve
12. push-in connector for a Ø 6 mm BlazeTube detection

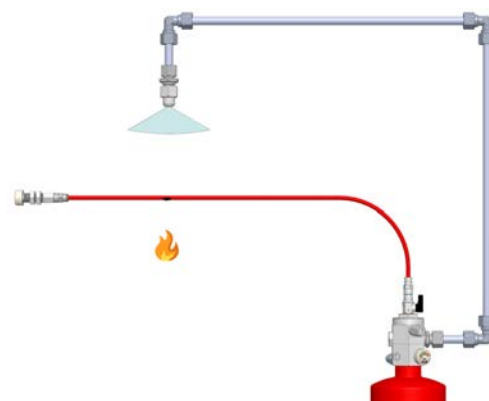


# ILP - ABE POWDER / PNEUMATIC

## CPO201 Series

### Key Features

- Indirect system with the detection tube Ø 6 mm for fire detection.
- The system is supplied with one distribution branch or two distribution branches to cover multiple enclosures or for better coverage of the enclosure.
- Multiple nozzle combination possible for specific application of agent.
- Multiple cylinder combination possible to protect larger enclosures.

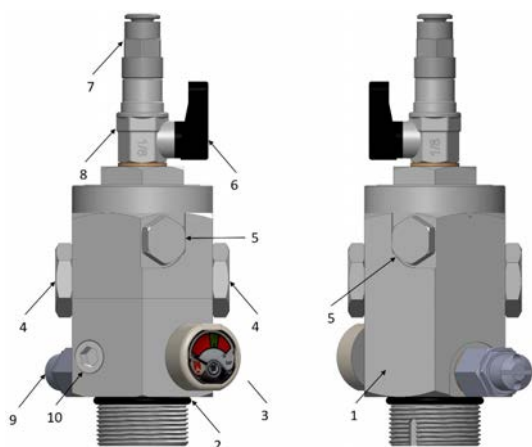


### SPECIFICATION

Type of Valve	ILP
Type Code	CPO201
Type of Agent	ABC Powder
Amount of Agent	From 2 kg to 54 kg
Discharge Outlets	1 or 2 outlets
Detection Optoins	BlazeTube - 1 outlet, Ø 6 mm
System Approval	CE

### Optional components

- Pressure switch to connect external signaling devices or to control external systems (equipment and power shut down).
  - Audio-optical signaling devices for alerting in case of activation of the system.
  - Manual actuator – switch for manual activation of the system independent of power supply.
  - Solenoid switch – electrical release of pressure from the detection tube after receiving signal from external device (control panel, detection device, manual electric actuator).
- Fire detectors, linear heat cable, control panel, manual electric actuator - only in combination with the solenoid switch.



### Detail of the valve

1. Body of the cylinder valve
2. O-ring seal of the cylinder valve
3. M10x1 port with pressure gauge
4. 2x G3/8" agent discharge outlet ports
5. 2x G1/8" outlets
6. Removable lever of the ball valve
7. Push-in connector for a Ø 6 mm BlazeTube detection
8. G1/8" outlet with a ball valve
9. G1/8" outlet with a pressure relief valve
10. M10x1 port for Pressure Switch or Pressure Transducer



"C" Series

# COMPONENTS & ACCESSORIES

## Alarm Panels and Nozzles

### AAP200 Panel

Alarm panel 9 - 36 V DC, IP65, CE, EMC tested. Simple and robust alarm panel in aluminium case. Internal or external installation. 50mm diameter **with** Fire Button



### AAP300 Panel

Alarm panel 9 - 36 V DC, IP65, CE, EMC tested. Simple and robust alarm panel in aluminium case. Internal or external installation. 50mm diameter **without** Fire button



### Warning Buzzer

Compact Warning buzzer with LED ring, approximately 25mm in diameter, 12V dc, 80dB(@1m), IP54. -20 to +50°C, stainless steel. Suitable for fixed and mobile installations.



### Foam Nozzles

Nozzles for the foaming agents. Various types available depending on the type of application.



### Powder Nozzles

Various powder nozzles with one or two slots and different angles to achieve the best application of powder.



### Clean Agent Nozzle

Three-bore nozzles for clean agent applications.



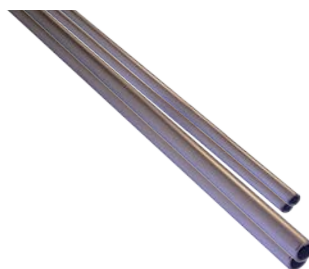
### Flexible Distribution Tube

Flexible tubing for distribution of agent to nozzles used in vehicles and spaces where fixed distribution tubing is difficult to install. The tube has very high temperature resistance and is reinforced by a stainless steel knit which provides perfect durability in harsh environments. Available in various lengths and dimensions to achieve the best flow rate.



### Fixed Distribution Tube

Stainless steel tubing for distribution of agent to nozzles. Suitable for fixed installation, high durability. Available in various lengths and dimensions to achieve the best flow rate.



### Rubber Tube

Rubber tube for connection of the valve to the distribution tubing.



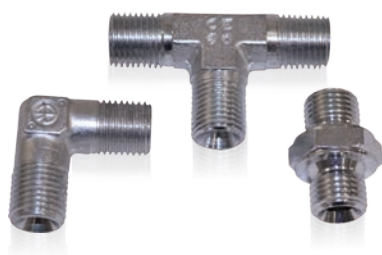


# STANDARD COMPONENTS

## Detection and Fittings

### Standard Fittings

"T", elbow or straight standard fittings for connection of rubber, flexible tubing and nozzles.



### Rotary Fittings

Wide range of rotary fittings for connection of fixed tubing.



### Reducer Fittings

Various reduced fittings between tubing and components.



### Detection Tube

BlazeTube is the the heart of each BlazeCut LOP system with Ø 6 mm or Ø 8 mm to detect fires



### End of Line Adapter

End of Line Adapter seals the end of the detection tube. It includes filling port for pressurization and pressure gauge to inspect the pressure of the system. The optional components Manual Actuator or Solenoid Switch have the same functions.



### Quick Connectors

"T", elbow or straight connectors for quick connection of Ø 6 mm or Ø 8 mm detection tube.



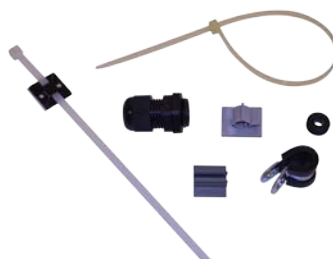
### Linear Heat Detection

BlazeWire is the the heart of each BlazeCut LHD system, Linear heat detection wire is a monitored wire that can be used in virtually any applicatoin



### Installation Material

Various cable ties, grommets, break-through panels, mounting clamps and other installation material is available for easy installation.



### Protective Spiral

Protection of the detection tube in harsh environments.



## OPTIONAL COMPONENTS

### Remote Actuators & Sounder/Beacons

#### Pressure Switch

Sends electronic signal when the pressure decreases under the required value. The pressure switch informs by sending signal to the external control unit or can control external systems and ensure performing the necessary processes by external devices (switching off electrical current, stopping operation of the system etc.).



#### Manual Actuator/Boxed

Manually releases the pressure from the detection tube, activating the suppression system and completely releasing the extinguishing agent.



#### Manual Actuator/Bulkhead

Manually releases the pressure from the detection tube, activating the suppression system and completely releasing the extinguishing agent.



#### Signalling Unit

Simple and cost effective audio-optical signaling device.



#### Beacon

Red xenon beacon for greater visibility in case of activation of the system. IP65 rated.



#### Multi Tone Sounder

Multi tone and high sound output for audible fire alert. IP65 rated.



#### Sounder and Beacon

Combined sounder and beacon provides an audio-visual warning which is suitable for places where high sound output and visual indication is required. IP44 rated.



#### Detectors

Smoke detector or combined smoke and heat detector with self-diagnostic function to prevent false alarms.



#### Electric Actuators

Provides manual release of the agent by breaking glass and pressing alarm button.



NOTES

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

## Global Head Office

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☎ +61 2 8006 1300  
🌐 BlazeCut.com

## Regional Sales Offices

Chile  
Philippines  
Singapore  
Spain  
Sweden  
Thailand  
Turkey  
USA

## Production Facility:

**BlazeCut s.r.o.**  
Slovakia



## Quality Assurance

The BlazeCut s.r.o production facility is ISO 9001, ISO 14001 and AQAP 2110 certified.



**AQAP**  
2110

## Tested and Approved Products

- CE Approval
- Certificate of Conformity with design documentation
- Performance and technical specification testing in accredited testing institute: Strojírenský zkušební ústav, s.p., Czech Republic



UNECE R107  
Approved System

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