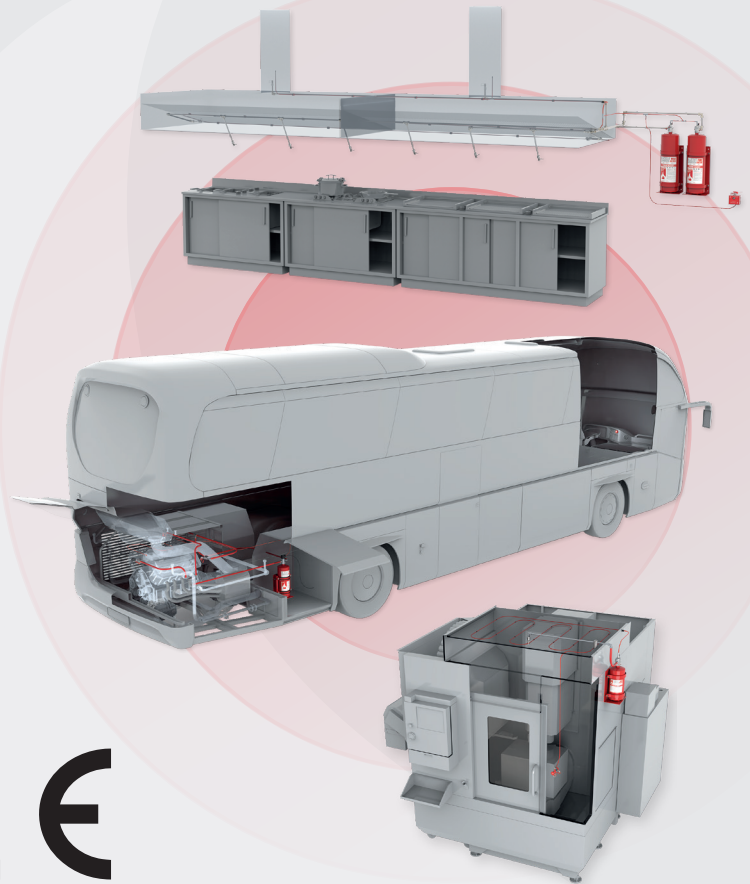




Automatic Fire Suppression Systems

C Series ILP

FOR MEDIUM AND
LARGE-SIZE
APPLICATIONS



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Approved System

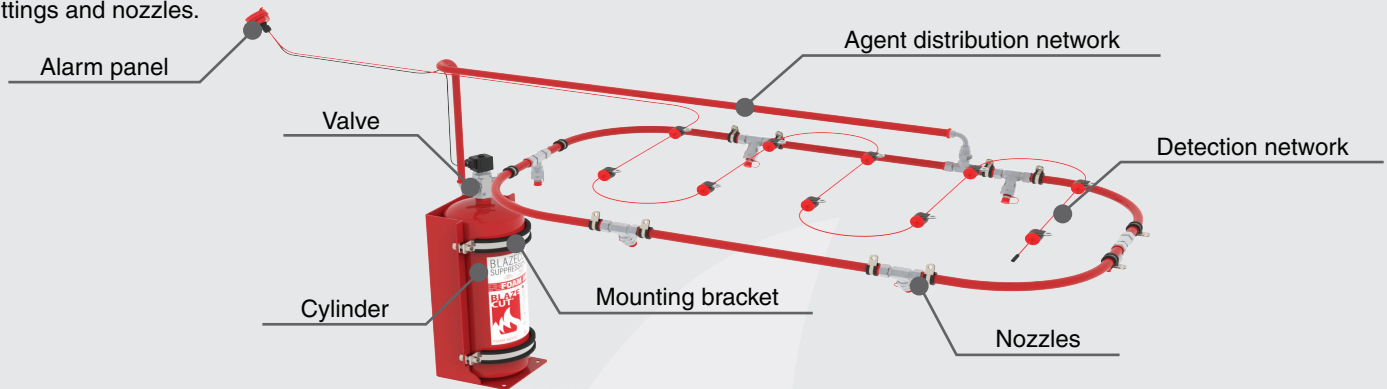
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Smarter Solutions with Cutting-Edge Technology

BLAZE CUT TECHNOLOGY

The **C Series Indirect Low Pressure (ILP) system** by BlazeCut is designed to protect closed, semi closed and open (fixed) spaces. Both the pneumatic and electric systems are referred to as indirect low pressure or ILP systems for short. The system can be activated by pneumatic detection or electric detection and the agent is distributed via discharge lines using distribution hoses/tubes, fittings and nozzles.

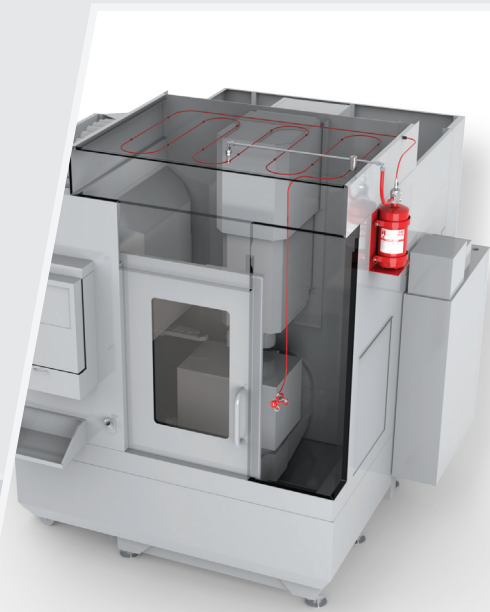
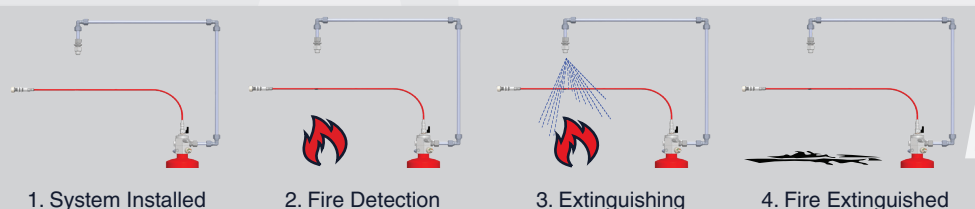


SYSTEM OPERATION

INDIRECT LOW PRESSURE SYSTEM – LOSS OF PRESSURE

The C Series ILP systems are cylinder-based fire suppression solutions, designed for medium and large, fixed and mobile installations. Application examples include buses and coaches, various industrial and rail vehicles, (mobile) heavy machinery, CNC machines, commercial kitchens, and many others. ILP systems are highly customizable. They offer options of manual or automatic actuation, a choice of extinguishing agents and optional components. Their fire detection network and suppression agent distribution network are separated. The distribution network consists of hoses, tubes, fittings, and nozzles.

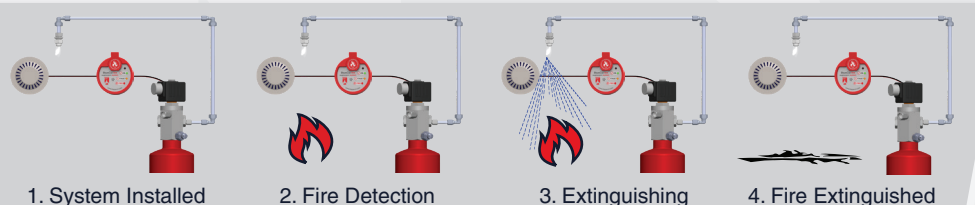
The C Series ILP LOP system is characterized by a pneumatic method of fire detection using a loss-of-pressure detection tube. The BlazeTube detection and the distribution network are placed inside the hazardous enclosure. When a fire occurs, the detection tube ruptures, releasing pressure, opening the cylinder valve, and releasing the extinguishing agent onto the fire and the whole protected area through the separate distribution network.



INDIRECT LOW PRESSURE SYSTEM – LINEAR HEAT DETECTION

The C Series ILP BlazeWire fire suppression solution is characterized by an electronic method of actuation. It detects heat, using a linear heat detector connected to an electric solenoid cylinder valve. The linear heat detector and the distribution network are both placed in the hazardous enclosure. When a fire occurs, the electrical circuit shorts, sending a signal to the solenoid and opening the cylinder valve. The extinguishing agent is subsequently released from the cylinder onto the protected area through the distribution network.

C Series ILP electronic systems can be customized for use in different operating temperatures. It can employ several different types of electronic detection methods including BlazeWire, heat probe, heat detector, smoke detector, and heat/smoke detectors. Additionally, actuating the system can be automatic, manual, or both. It is possible to delay the discharge or manual-discharge only. Numerous add-on devices are available for this system.



SYSTEM FEATURES

- ▶ Highly customizable
- ▶ Mechanical and/or electronic systems
- ▶ Use of powder, foam or clean gas agents
- ▶ Automatic and/or manual actuation
- ▶ Choice of detection options (LOP/LHD)
- ▶ Various actuation temperatures
- ▶ Optional delay of discharge (LHD)
- ▶ Shutting off separate equipment possible
- ▶ Delayed shutdown possible (LOP/LHD)
- ▶ No electricity required (LOP)
- ▶ Fast detection and extinguishing
- ▶ Minimum maintenance
- ▶ 3-year warranty

OPTIONAL COMPONENTS

The **BlazeCut C Series ILP systems** can have optional components added to the system which increase the features of the system:

- ▶ Pressure switch
- ▶ Pressure transducer
- ▶ Alarm monitoring panel
- ▶ Manual pneumatic actuators
- ▶ Manual electric actuators
- ▶ Smoke detector
- ▶ Heat detector
- ▶ Heat probe
- ▶ Audio signalling devices
- ▶ Visual signalling devices
- ▶ Audio-visual signalling devices

SPECIFICATION

The fire suppressing performance depends on many factors, including the size of the protected enclosure, the type of the flammable substances, the shape and venting of the enclosure, the restriction on placement of extinguishing nozzles, air circulation etc. In order to reach the desired extinguishing concentrations, effectiveness of the system, the choice on the type and amount of agent and what installation method to use please discuss with the supplier of the system.

Type of agent	Amount of agent	Cylinder volume	Agent distribution network	Operating temperature	Detection type	Fire class (EU)
ABC Powder	from 2 kg to 10 kg	from 2.5 L to 16 L	hoses or stainless steel tubes	-30°C to +60°C	pneumatic or electronic	A, B, C and electrical fires
HFC-227ea	from 1 kg to 12 kg	from 1.2 L to 16 L	hoses or stainless steel tubes	-20°C to +55°C		A, B, C and electrical fires
FK-5-1-12	from 1.25 kg to 12 kg	from 1.2 L to 16 L	hoses or stainless steel tubes	-20°C to +60°C		A, B, C and electrical fires
Standard Foam	from 4 L to 25.6 L	from 5 L to 32 L	hoses or stainless steel tubes	0°C to +60°C		A, B, F (kitchen fires)
Antifreeze Foam	from 4 L to 25.6 L	from 5 L to 32 L	hoses or stainless steel tubes	-30°C to +60°C		A, B
Fluorine-free Foam	from 4 L to 25.6 L	from 5 L to 32 L	hoses or stainless steel tubes	0°C to +60°C		A, B

Up to six cylinders with the same type of agent can be connected in series to protect bigger areas or volumes.

TYPICAL APPLICATIONS

- ▶ Buses and coaches
- ▶ Network racks
- ▶ Electrical cabinets
- ▶ Telecom cabinets
- ▶ Wind turbines
- ▶ Solar panel systems
- ▶ CNC machines
- ▶ Dust collectors
- ▶ Chemical storages
- ▶ Fume cabinets
- ▶ Commercial kitchens
- ▶ Power generators
- ▶ Mining machines
- ▶ Forestry machines
- ▶ Agricultural machines
- ▶ Military
- ▶ Marine
- ▶ Airport and aviation



EXTINGUISHING AGENTS

The **BlazeCut C Series ILP systems** can employ a powder, foam or clean gas agents HFC-227ea or FK-5-1-12. All agents used at BlazeCut systems are internationally recognized as top-of-the-line extinguishing agents on the market. The choice of an extinguishing agent depends on the type of fire hazard being covered. Gas, powder and foam agents have different characteristics. Each C Series ILP installation is evaluated to determine the optimal choice of agent. The following are the main advantages of using gas, powder or foam agents:

GAS (HFC-227ea, FK-5-1-12)

- ▶ A, B, C and electrical fires
- ▶ Electrically non-conductive
- ▶ Non-corrosive
- ▶ Resistant to high-temperature and low-temperature changes
- ▶ Siphons heat
- ▶ Leaves no residue
- ▶ No clean-up necessary
- ▶ No damage to the equipment
- ▶ Environmentally friendly
- ▶ Zero ozone-depleting potential
- ▶ Global warming potential <1 (FK-5-1-12)

POWDER

- ▶ A, B, C and electrical fires
- ▶ Universal application
- ▶ Non-poisonous inorganic salts
- ▶ Functions by coating the fuel surface and separating it from oxygen
- ▶ Cost-effective
- ▶ Electrically non-conductive
- ▶ Non-corrosive in dry conditions
- ▶ Resistant to temperature changes
- ▶ High quality powder 90% MAP

FOAM

- ▶ A, B and F fires
- ▶ Used for semi-open and fully open areas
- ▶ A wet agent that combines water and foaming substances
- ▶ Functions by coating the fuel surface and separating the fuel surface from oxygen
- ▶ Strong cooling effect
- ▶ Environmentally friendly
- ▶ Biodegradable
- ▶ Prevents reignition
- ▶ Fluorine-free foam option
- ▶ Antifreeze foam option



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DEALERS / DISTRIBUTORS: BlazeCut has a global network of dealers and distributors. To find your nearest dealer, or to become one, please contact BlazeCut.

