

PRODUCT CATALOGUE



PROTEK

Protek Engineering Ltd. is established in Istanbul in 2005. Today, works directly as importers with more than 15 "producers" and "suppliers" in 10 different countries. There are liaison offices in London and Baku. Protek operates in the field of "Fire-Security-Integration" systems in Turkey and neighbour countries with its staff of 35 people with up to 50 people together with worksite teams.

In principle, we cooperate with world leader companies that make continuous investments for "Innovation". Innovative "Technological" solutions offering products with appropriate quality documents (EN, NFPA, IMO etc.) to "national" and "international" standards (LPCB, VdS, UL, FM, etc.).

Our company has ISO 9001 Quality Management Certificate, ISO 14001 Environmental Management System Certificate and ISO 18001 OHSAS Occupational Health and Safety Management System Certificate. While presenting all these services, we are always aware of the fact that "Fire and Security" is about protecting the direct human life and the accumulation of our savings. We are always aware that we are saving your life, your money, your business, your values, your savings.

We believe that due to our social responsibility, our work is, of course, a "sacred" side to deal with, not just a "commercial" based approach. First of all, we are part of a universal camian who fights with the fire in our country and in the world, and fares for saving lives. This soul is the most important force that motivates us in our daily work and ensures our success.

It is essential for us to treat each project or system as an engineering problem to be solved with the awareness that there may be hidden details in itself and to serve technical and customer-oriented alternatives and to serve "Project-Private-Customer Focused". We specialize in the protection of private spaces, devices and values.

OUR SCOPE OF WORKS

- Fire Protection / Engineering
- Automatic Fire Extinguishing Systems
- Fire Detection and Alarm Systems
- Air Sampling Smoke Detection System for High Precision
- Flame, Beam, Heat, Camera Smoke Detection (Exproof, Industrial) Detectors
- Gas Detection System (for Industry and Car Parks),
- Addressable Lighting and Guidance
- Oxygen Reduction Active Fire Prevention Sytem
- Water Mist Extinguishing Systems
- Passive Fire Protection and Isolation Systems



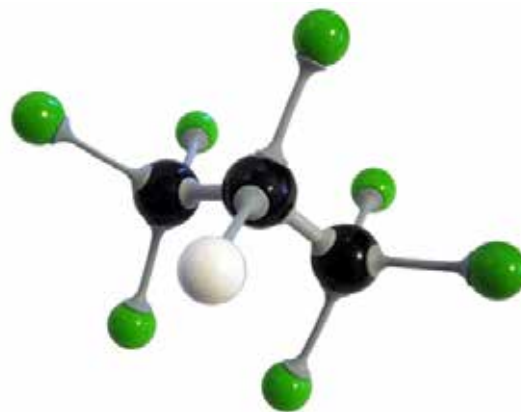
Deutsche
Akkreditierungsstelle
D-ZM-16058-01-00



PRO²²⁷ SUPERIOR WATERLESS FIRE SUPPRESSION SYSTEMS

HFC-227ea is the world's most widely selected extinguishing clean gas agent, for use in new applications and widely accepted as a substitute to Halon. It is suitable for use in a wide range of fire extinguishing applications, including total flooding and inerting.

PRO²²⁷ HFC-227ea systems are safe for use in occupied spaces and can reach extinguishing levels in 10 seconds or less, stopping ordinary combustible, electrical, and flammable liquid fires before they cause significant damage. PRO²²⁷ HFC-227ea systems are designed to prevent the damage that can be caused by water by putting out the fire before it gets out of control. Several seconds can mean the difference between a minor inconvenience and a business stopping fire. When fire is extinguished quickly, it means an extra margin of safety for the people, less damage, and lower repair costs. It also means less disruption and downtime for business.



HFC-227ea agent has been validated by independent agencies, recognised from Underwriters Laboratories (UL) and approved by Factory Mutual Research Corporation (FM). HFC-227ea is listed as an acceptable agent for the replacement of Halon 1301 and new applications in the United States Environmental Protection Agency's (EPA's) Significant New Alternative Policy (SNAP) program in total flooding systems. HFC-227ea has a zero ozone depletion potential (ODP) and is the environmentally preferred alternative to Halon 1301. HFC-227ea is included in the National Fire Protection Association (NFPA) 2001 Clean Agent Standard and the International Standards Organization (ISO) 15004 Clean Agent Standard.

PRO²²⁷ HFC-227ea systems extinguishes fires mainly by physical means, but also by some chemical means. PRO²²⁷ HFC-227ea total flooding systems may be used for extinguishing fires of all classes within the limits specified in EN 15004-1:2008 and NFPA 2001.

Because HFC-227ea agent is electrically non-conductive agent (it is also odourless and colourless), that protects people, high value assets, and the continuity of business operations. HFC-227ea is effective both in the protection of electrical hazards such as computer rooms, electrical rooms and data centers. Furthermore, it is suitable for Class A fires (fires including solid material), as well as for Class B fires (flammable liquids) and Class C fires (flammable gases).

APPLICATIONS

Total Flooding of Surface Class A and Higher Class A Hazards:

HFC-227ea agent is an ideal choice for applications involving Surface Class A (plastic, cellulosic, solid) and Higher Class A hazards. HFC-227ea is suitable for use in Class A and Higher Class A applications where people are normally present (normally occupied spaces). Examples of applications where PRO²²⁷ HFC-227ea systems are excellent choice for a total flood fire suppression system where people are present include in certain instances, equipment remains electrically energized during and after fire extinguishing system activation like computer rooms, telecommunication switch stations and facilities, semiconductor manufacturing facilities, data processing centers, clean rooms, industrial process control rooms, museums, libraries, and historical sites.

Total Flooding of Class B and Class C Hazards:

HFC-227ea agent is suitable for the protection of Class B (liquid) and Class C (gas) fire hazards. Examples of these applications are: engine compartments, enclosed oil transformers, petrochemical facilities, chemical storage rooms, paint lockers, enclosed gas turbines and generator rooms and other areas where hydrocarbon-based materials are stored or handled.

TOXICOLOGY

HFC-227ea agent is characterized by very low acute toxicity. The 4 hour (rat) LC50 of HFC-227ea agent is greater than 800,000 percent (>80% v/v). The threshold cardiac sensitization, lowest observed adverse effect level (LOAEL) for HFC-227ea is 105,000 ppm (10.5%) and the no observed adverse effect level (NOAEL) is 90,000 ppm (9.0%) as determined in epinephrine-challenged dogs. The physiologically-based pharmacokinetic methodology has demonstrated that human exposure to HFC-227ea for up to 5 minutes at concentrations of up to 10.5% v/v does not produce a blood level of HFC-227ea associated with cardiac sensitization in epinephrine-challenged dogs.

PHYSICAL CHARACTERISTICS

| | |
|--|------------------------------------|
| Chemical name | 1,1,1,2,3,3,3 - Heptafluoropropane |
| Chemical formula | CF ₃ CHFCF ₃ |
| Compliance with ISO 14520, UNE 23570 and NFPA 2001 | HFC-227ea |
| Molecular weight | 170.03 |
| Boiling point | -16.36° C |
| Freezing point | -131.00° C |
| Density | 1388 g/cm3 |
| Vapour pressure at 25 °C | 457.7 kPa |
| Maximum filling density | 1.15 kg/100 l |
| Design concentration for surface fires Class A | 7.9% |
| Design concentration for higher Class A Hazard | 8.5% |
| Typical Design Concentration for heptane | 8.6% |
| NOAEL | 9.0% |
| LOAEL | 10.5% |
| Ozone depletion potential | 0 |
| Appearance | Colorless Liquefied gas |
| Purity | 99,9% (min) |
| Moisture | 10 ppm (max) |
| Acidity | 1 ppm (max) |

MAIN ADVANTAGES

The discharge valves, release devices and discharge accessories are approved by VdS (Germany).
 Hydraulic calculations are performed by VdS Software (Germany).
 Cylinders are all PED and TPED certified and sizes are available from 8 l up to 250 l capacity with min test pressure of 69 bar.
 Nozzles from 3/8" up to 2" and made of brass. 180 or 360 degrees models available.
 HFC 227ea agent is UL and FM Approved.





Data Centers



Electrical Rooms



Transformer Rooms



Power Plants



Battery Rooms



Archive Rooms



Clean Rooms



Control Rooms



Marine Engine Rooms



Chemical Storages



Electronic Storages



Bank Vaults



Museums



Libraries



Medical Rooms

DISCHARGE VALVES - 49 mm ORIFICE

Extra large orifice (49 mm) valve for PRO²²⁷ Fire Suppression Systems

KEY FEATURES

- Extra large 49 mm orifice for high flow and rapid discharge
- Available with or without solenoid
- Choose from a large range of manual, pneumatic and electronic actuators

| Product Code | Without Solenoid | | With Solenoid | |
|---------------------|------------------|-----------|---------------|-----------|
| | B04810124 | B04810110 | B04810119 | B04810109 |
| Discharge Type | Total | Total | Total | Total |
| Working pressure | 25 bar | 42 bar | 25 bar | 42 bar |
| Orifice size | Ø 49 mm | Ø 49 mm | Ø 49 mm | Ø 49 mm |
| Inlet connection | 3" male | 3" male | 3" male | 3" male |
| Outlet Connection | 2 ½" male | 2 ½" male | 2 ½" male | 2 ½" male |
| Burst disc pressure | 50 bar | 78 bar | 50 bar | 78 bar |
| Valve Body | Brass | Brass | Brass | Brass |
| Certification | VdS | VdS | VdS | VdS |



DISCHARGE VALVES - 33 mm ORIFICE

Large orifice (33 mm) valve for PRO²²⁷ Fire Suppression Systems

KEY FEATURES

- Large 33 mm orifice for high flow and rapid discharge
- Available with or without solenoid
- Choose from a large range of manual, pneumatic and electronic actuators

| Product Code | Without Solenoid | | With Solenoid | |
|---------------------|------------------|-------------|---------------|-------------|
| | B04810124 | B04810110 | B04810119 | B04810109 |
| Discharge type | Total | Total | Total | Total |
| Working pressure | 25 bar | 42 bar | 25 bar | 42 bar |
| Orifice size | Ø 33 mm | Ø 33 mm | Ø 33 mm | Ø 33 mm |
| Inlet connection | 2,5" male | 2,5" male | 2,5" male | 2,5" male |
| Outlet Connection | 1 7/8" male | 1 7/8" male | 1 7/8" male | 1 7/8" male |
| Burst disc pressure | 49 bar | 78 bar | 49 bar | 78 bar |
| Valve Body | Brass | Brass | Brass | Brass |
| Certification | VdS | VdS | VdS | VdS |



DISCHARGE VALVES - 12 mm ORIFICE

Compact 12 mm valve with flexibility of actuation methods for PRO™227 Fire Suppression Systems.

KEY FEATURES

- Space/efficient 12mm valve with chain nut
- ATEX-approved versions available on demand
ATEX versions not for use with electromagnetic actuators
- Choose from a large range of manual, pneumatic and electronic actuators

| | |
|---------------------|--------------------|
| Product Code | B04803005 |
| Discharge type | Total |
| Working pressure | 42 bar |
| Orifice size | Ø 12 mm |
| Inlet connection | 25E EN-629-1 |
| Outlet connection | W21,8x1/14"DIN 477 |
| Burst disc pressure | 78 bar |
| Valve Body | Brass |



RELEASE DEVICES

Devices to actuate the release of PRO²²⁷ Fire Suppression Systems

KEY FEATURES

- Several release options as manual, pneumatic and selenoid to actuate the release of extinguishing agent.



| | Manual | Manual / Pneumatic | | Pneumatic | |
|----------------------------|---------------|--------------------|------------------|---------------|---------------|
| Product Code | B04420100 | B04420065 | B04420116 | B04420066 | B04420076 |
| Technology | Single Piston | Single Piston | Single Piston | Single Piston | Single Piston |
| Max. pressure | 300 bar | 300 bar | 300 bar | 300 bar | 300 bar |
| Valve connection | M 42 x 1,5 | M 42 x 1,5 | M 42 x 1,5 | M 42 x 1,5 | M 42 x 1,5 |
| Pneumatic connection | - | G1/8" | G1/8" | G1/8" | G1/8" |
| Actuation force / pressure | < 150 N | < 150 N / 20 bar | < 150 N / 10 bar | 20 bar | 10 bar |
| Body material | Brass | Brass | Brass | Brass | Brass |
| Height | 54 | 136,5 | 156,5 | 50 | 71 |
| Diameter | 050 | 050 | 050 | 050 | 050 |

ELECTROMAGNETIC RELEASE DEVICES

Devices to electrically actuate the release of PRO²²⁷ Fire Suppression Systems

KEY FEATURES

- Most commonly used as a master valve to actuate the system electronically, such as with connection to a smoke or heat detection device
- Electronically actuates the release of extinguishing agent

| | B04425131 | B04425132 | B04425109 | B04425129 |
|-----------------------|------------|---------------|------------|---------------|
| | With diode | Without diode | With diode | Without diode |
| Valve connection | M42 x 1,5 | M42 x 1,5 | M42 x 1,5 | M42 x 1,5 |
| Nominal voltage | 24 VDC | 24 VDC | 24 VDC | 24 VDC |
| Electrical connection | - | - | PG 9 | PG 9 |
| Nominal current | 0,5 A | 0,5 A | 0,5 A | 0,5 A |
| Protection Class | IP65 | IP65 | IP65 | IP65 |
| Height | 135 mm | 135 mm | 135 mm | 135 mm |
| Diameter | 0 65 mm | 0 65 mm | 0 80 mm | 0 80 mm |



RESET TOOL FOR ELECTROMAGNETIC ACTUATOR

Used to reset the electromagnetic actuator piston when putting the system back in active service after system discharge.

| | |
|--------------|------------|
| Product code | 029210064 |
| Connection | M 42 x 1,5 |
| Material | Brass |



MONITORING SWITCH

Monitors that the actuator is properly in place to actuate the system
Connects to the alarm box Mandatory according to NFPA 2001 Standard on Clean Agent Extinguishing systems – 2015 edition

KEY FEATURES

- Compact design: remains in the cylinder diameter
- Easy installation: simply clamps around the valve base



| | | | |
|--------------|------------------------|------------------------|------------------------|
| Product code | 029905201 | 029905202 | 029905200 |
| Description | Mounted on B0481 valve | Mounted on B0482 valve | Mounted on B0480 valve |



BLEED VALVE

To vent overpressure and prevent false system discharge in the event of a small pressure leak from the cylinders into the pneumatic actuators.

| | |
|----------------------|------------------------|
| Product code | 029730040 |
| Pneumatic connection | G 1/8" |
| Closing pressure | between 0,7 to 1,5 bar |
| Flow at p=0.6 bar | 6 liters/min |



Mounts on all pneumatic release devices



PRESSURE GAUGES WITH PRESSURE SWITCH

Measures and displays the cylinder pressure to verify that cylinders are properly filled and charged with extinguishing agent HFC-227ea

KEY FEATURES

- Integrated pressure switch for low pressure signal for extinguishing control panel.
- Choice of NC or NO.



| Product Code | B04810124 | B04810110 | B04810119 | B04810109 |
|---------------------|-------------|-------------|-------------|-------------|
| Discharge Type | Total | Total | Total | Total |
| Working pressure | 25 bar | 42 bar | 25 bar | 42 bar |
| Orifice size | Ø 49 mm | Ø 49 mm | Ø 49 mm | Ø 49 mm |
| Inlet connection | 3" male | 3" male | 3" male | 3" male |
| Outlet Connection | 2 1/2" male | 2 1/2" male | 2 1/2" male | 2 1/2" male |
| Burst disc pressure | 50 bar | 78 bar | 50 bar | 78 bar |
| Valve Body | Brass | Brass | Brass | Brass |
| Certification | VdS | VdS | VdS | VdS |



PRESSURE GAUGES

Measures and displays the cylinder pressure to verify that cylinders are properly filled and charged with extinguishing agent HFC-227ea

KEY FEATURES

- Choice of 0 to 60 bar or 0 to 100 bar



| Product code | 029720232 | 029720120 |
|------------------|---------------|---------------|
| Scale | 0-60 bar | 0-100 bar |
| Connection | Rear | Rear |
| Connection | No connection | No connection |
| Diameter | 0 40 mm | 0 39 mm |
| Valve connection | M 10 x 1 | M 10 x 1 |



PILOT HOSES

Hose to connect multiple cylinders in a series. Connects a master valve or a pneumatic actuator with an other pneumatic actuator

KEY FEATURES

- Both ends have a straight fitting
- 400 bar working pressure
- With O-rings

| | Product code | Length l | Connection | Bending radius |
|----------|--------------|----------|------------------|----------------|
| A2 | B06920212 | 700 mm | 2 x M12 x 1,5 | 75 mm |
| AdapterB | 029510006 | | M12 x 1,5 / G1/8 | |

SPECIFICATIONS

| | | | |
|-------------------------|----------|--------------------------|----------------------|
| Working pressure | 400 bar | Temperature Range | -40°C to 100°C |
| Burst pressure | 1600 bar | Material | Synthetic rubber oil |
| Torque | 20-25 Nm | Interior diameter | 1/8" |



DISCHARGE HOSES

Hose to connect the cylinder valve to the manifold, check valve or pipe directly for PRO™227 Fire Suppression Systems.

KEY FEATURES

- For connection to a manifold, check valve or can be used to connect to a pipe with flexible capability
- No need fittings for connection

| | FOR VALVE SERIES B0481 | FOR VALVE SERIES B0482 | FOR VALVE SERIES B0480 & B0439 |
|------------------------------|------------------------|------------------------|--------------------------------|
| Product Code | B06920222 | B06920221 | B06920226 |
| Product code | 53 bar | 53 bar | Max. 380 bar |
| Working pressure | 159 bar | 159 bar | 1520 bar |
| Burst pressure | -40°C to 100°C | -40°C to 100°C | -40°C to 100°C |
| Temperature range | 38 - 42 Nm | 38 - 42 Nm | 38 - 42 Nm |
| Torque | Synthetic rubber | Synthetic rubber | Synthetic rubber |
| Material | EN853 2 SN | EN853 2 SN | EN853 2 SN |
| Norm | 2 1/2"12-UN | 1 7/8" 12-UN | W21,8 x 1/14" |
| Valve connection (inlet) | R 2" | R 1 1/2" | G 3/4" |
| Manifold connection (outlet) | 640 mm | 510 mm | 130 mm |



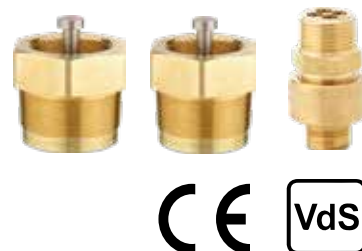
CHECK VALVE

Prevents backflow into the cylinder.
Required for each hose attachment to the discharge manifold.

KEY FEATURES

- Extra large 49 mm orifice for high flow and rapid discharge

| Product code | B04600009 | B04600010 | B04600008 |
|-------------------|-----------|-----------|-----------|
| Inlet connection | Rc 2" | Rc 1 1/2" | G 3/4" |
| Outlet connection | R 2 1/2" | R2" | R1" |
| Working pressure | 53 bar | 53 bar | < 360 bar |
| Material | Brass | Brass | Brass |
| Hex | 80 mm | 65 mm | 42 mm |



PNEUMATIC DIRECTIONAL VALVE

Pneumatic or manual actuation Valve and actuator assembly to isolate separate protection zones from the same cylinder rack Includes valve & bracket & pneumatic actuator & manual wrench Permits discharge only in the zone

KEY FEATURES

- Choice of 5 diameters: 1" - 1 1/2" - 2" - 2 1/2" - 3"
- 2-way ball valve
- User-defined installation position and flow-direction
- Stainless steel ball valve with steel housing

| Product code | B05511050 | B05511150 | B05511250 | B05511350 | B05511450 |
|-----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Size | 1" | 1 1/2" | 2" | 2 1/2" | 3" |
| DN | 25 | 40 | 50 | 65 | 80 |
| Nominal pressure | 140 bar | 140 bar | 140 bar | 140 bar | 140 bar |
| Actuation pressure | 8 bar +/- 2 bar | 8 bar +/- 2 bar | 8 bar +/- 2 bar | 8 bar +/- 2 bar | 8 bar +/- 2 bar |
| Actuation medium | N2 | N2 | N2 | N2 | N2 |
| Temperature range | -20° C to 50° C | -20° C to 50° C | -20° C to 50° C | -20° C to 50° C | -20° C to 50° C |
| Length | 209 mm | 221mm | 221mm | 298 mm | 298 mm |
| Height | 371,5 mm | 433 mm | 447 mm | 583,5 mm | 600 mm |
| Width | 110,5 mm | 120 mm | 120 mm | 137 mm | 137 mm |
| Pipe Connector length | 113 mm | 130 mm | 140 mm | 220 mm | 226 mm |
| Seal material | POM (greased), NBR | POM (greased), NBR | POM (greased), NBR | POM (greased), NBR | POM (greased), NBR |



NOZZLES

Pre-bored and preassembled discharge nozzles for PROTM227 Fire Suppression Systems.

KEY FEATURES

- Flexible size options from 1½" to 2"
- 180° or 360° models available.

| Size of Thread | Product Codes | |
|----------------|---------------|-----------|
| | 360° | 180° |
| ½" | B04612000 | B04612001 |
| ¾" | B04612100 | B04612101 |
| 1" | B04612200 | B04612201 |
| 1¼" | B04612300 | B04612301 |
| 1½" | B04612400 | B04612401 |
| 2" | B04612500 | B04612501 |



360°

180°



PRESSURE & FLOW DETECTOR SWITCH

Used to send a signal that the system is discharging.
Pressure Activated

KEY FEATURES

- Sends a signal to a control panel or alarm box at the earliest phase of discharge
- Actuated at 2 bar pressure
- Flexible Voltage/Amp power source

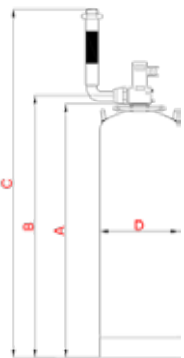
| | |
|------------------|--------------|
| Product code | PRO_227-PDS |
| Opening Pressure | 2 bar |
| Connection | G¼" |
| Power Source | 240 VAC / 3A |
| Protection | IP65 |



CYLINDERS

KEY FEATURES

- Seamless cylinders options from 8lt to 20lt
- Welded cylinders options from 32lt to 250lt
- Seamless cylinders tested to 345 bar
- Welded cylinders tested to 69



CE T_P PED



| Part No | Type | Volume (lt.) | A (mm) | B (mm) | C (mm) | D (mm) | Test Pressure (bar) | Valve | Valve Outlet (mm) | Hose Length (mm) |
|---------------------------|----------|--------------|--------|--------|--------|--------|---------------------|-------|-------------------|------------------|
| PRO TM 227-C1 | Seamless | 8 | 690 | 730 | 1.160 | 139 | 345 | B0439 | Ø 7 | 450 |
| PRO TM 227-C2 | Seamless | 16 | 705 | 740 | 1.170 | 204 | 345 | B0439 | Ø 7 | 450 |
| PRO TM 227-C3 | Seamless | 20 | 845 | 880 | 1.310 | 204 | 345 | B0439 | Ø 7 | 450 |
| PRO TM 227-C4 | Welded | 32 | 815 | 850 | 1.315 | 254 | 69 | B0482 | Ø 33 | 500 |
| PRO TM 227-C41 | Seamless | 32 | 1000 | 1035 | 1465 | 229 | 345 | B0482 | Ø 33 | 500 |
| PRO TM 227-C5 | Welded | 52 | 1.248 | 1.290 | 1.755 | 254 | 69 | B0482 | Ø 33 | 500 |
| PRO TM 227-C51 | Seamless | 52 | 1550 | 1585 | 2015 | 229 | 345 | B0482 | Ø 33 | 500 |
| PRO TM 227-C6 | Welded | 80 | 1.230 | 1.265 | 1.730 | 315 | 69 | B0482 | Ø 33 | 500 |
| PRO TM 227-C7 | Welded | 106 | 1.005 | 1.085 | 1.575 | 405 | 69 | B0481 | Ø 49 | 550 |
| PRO TM 227-C8 | Welded | 147 | 1.335 | 1.415 | 1.905 | 405 | 69 | B0481 | Ø 49 | 550 |
| PRO TM 227-C9 | Welded | 200 | 1.175 | 1.270 | 1.760 | 510 | 69 | B0481 | Ø 49 | 550 |
| PRO TM 227-C10 | Welded | 250 | 1.440 | 1.540 | 2.030 | 510 | 69 | B0481 | Ø 49 | 550 |

ROOM INTEGRITY TEST



An Integrity test predicts how long fire suppressant agents take to descend to a given level in the room without having to release the agent itself. The Integrity test is carried out using:

- Modular adjustable panels for the door frame which adjusts to fit a wide variety of door sizes.
- Calibrated Fan(s) and range configuration
- Calibrated gauge(s)
- Laptop Computer
- Enclosure Integrity Software

EXTINGUISHING CONTROL PANELS



Designed and manufactured to the highest standards in a quality controlled environment with European EN12094-1 approvals and UL/FM approved alternatives for special requirements. The extinguishant releasing panel offers outstanding value and performance for all fixed fire suppression installations.

- Multiple detection zones as standard
- Configurable detection delays
- Compatible with I.S barriers
- Countdown timer shows time remaining until release
- Supports remote status indicators



POINT TYPE DETECTORS

Smoke, heat, combined, flame and beam fire detectors, form a range of elegantly designed, aesthetic, low profile detectors which blend unobtrusively into modern working environments. All detectors incorporate 'FIRE' LED indicator. All detectors are interchangeable with a variety of base options.

- Enhanced sensitivity to a wide range of fire types
- High resistance to false alarm
- Ultra low quiescent current
- Various types of warning devices



ASPIRATING FIRE & SMOKE DETECTORS



Several types of aspirating detector available to identify the optically invisible fire particulate by utilising the unique 'Cloud Chamber Detection' (CCD) and LED based superior smoke detection technologies.

Depending on the materials burning, particularly in the many modern applications for aspirating detection systems, some fires burn with only a small amount of visible smoke, whereas others burn with greater volumes of visible smoke.

- Hybrid 'Combined Fire & Smoke' Aspirating Detector type offers superior detection
- LED based Optical 'Scatter Chamber Detectors offers fast detection
- Independent and integrated intelligent alarm signal decision making on both types
- The largest sensitivity range aspirating detector Zero% obs/m to 20% obs/m available
- HYBRID 'Smart Signal' to verify alarms and discriminate false alarms
- Wide range from LED indicator to 7" full colour multi-function touch screen LCD displays



Distributor:

All rights reserved. Copying, modification and distribution without the permission of the PROTEK Mühendislik ve Teknolojik Sistemler San. Tic. Ltd. Şti. is prohibited.

ISTANBUL - LONDON - BAKU



PROTEK Mühendislik ve Teknolojik Sistemler San. Tic. Ltd. Şti

A : Girne Mah. Irmaklar Sok. Küçükyalı İş Merkezi, B Blok, No: 72-5B 34853 Maltepe İstanbul / Turkey

T : +90 (216) 489 49 99 / F : +90 (216) 489 99 74

www.pro227.com