



GRAAND PRIX
BESPOKE LUXURY

FAS-DSPA

HIGH-END FIRE SUPPRESSION SYSTEMS
FROM NETHERLANDS





GRAAND PRIX
BESPOKE LUXURY



PRESENTING ULTRA LUXURIOUS
AND EXTRAORDINARY INDULGENCES
THAT REDEFINE EXTRAVAGANCE.

Welcome to the new league of luxury!

Graand Prix has been providing customized solutions in vertical transportation for the last 9 years. The key to our success lies in our ability to provide world class solutions that suit any need, complemented with exceptional after sales service and trained technicians at your call 24x7.

We know you are in constant pursuit of the most luxurious indulgences - that not only add style but also unmatched convenience. We present to you the **FAS-DSPA** – Graand Prix's revolutionary fire suppression systems from Netherlands that provide utmost protection to your precious spaces.



ABOUT **FAS-DSPA**

Suppresses fire without the use of water! This latest innovation in fire suppression technology ensures zero damage to crucial papers, electrical equipment and valuable assets even in an event of fire. Besides this, what makes the **FAS-DSPA** truly unique is its long shelf life of 15 years. Add to it the benefit of not having to refill it at all!

As you turn the pages, you will discover more extraordinary features of this breakthrough innovation in the world of fire fighting.

FAS-DSPA

FAS–DSPA.nl B.V. is one of the ten companies within the AFG Group, which is one of the largest in the field of fire extinguishing in Europe. It develops, produces and supplies highly effective and innovative aerosol fire extinguishing systems. These systems, called **FAS–DSPA**, have been designed for extinguishing early stage fires, advanced fully developed fires and for the protection of buildings against fires– by means of automatic fire extinguishing systems.

FAS–DSPA, Dry Sprinkler Powder Aerosol

Over the past few years, fires have broken out more frequently which have developed into larger uncontrollable and destructive seats of fires. Until now it seemed as if these fires could only be extinguished by means of lot of ground water and expensive (drinking) water. Such fires claim a lot of lives and cause much damage to movable and immovable property. **FAS–DSPA** brings about radical change to this situation. **FAS–DSPA** has been developed to replace Halon (BCF). The ban on Halon fire extinguishing systems stems from the Montreal Protocol which was signed worldwide in 1987. It is an intervention equipment for the fire brigade, in–house emergencies, first aid services as well as permanent fire extinguishing systems for trade, industry and govt. services.

FAS–DSPA is a Patented Technology invented and manufactured in Netherlands under the AFG Group.

How FAS-DSPA Works

Dry Sprinkler Powder Aerosol is composed of micro–sized particles of various potassium compounds.

When the **FAS–DSPA** is activated, thermally or electrically, the micro particles leave the **FAS–DSPA** unit. Solid micro particles and a gas mixture (mainly CO₂, N₂ and water vapour) are mixed to form an extinguishing mixture.

70% Gas + 30% Very Fine Particles (Less than 5 micron)

FAS-DSPA works volumetrically, just like Halon: It affects the combustion process.

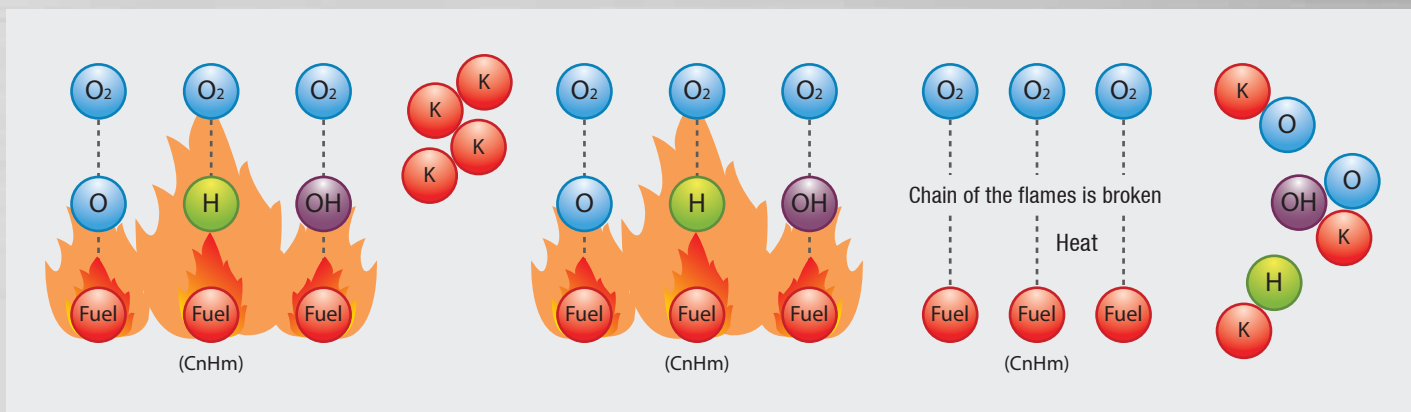
The extinguishing principle is two–sided.

Potassium compounds require the least amount of energy for ionization. Ionization is the process in which an atom loses an electron or gains an ion. A very small amount of energy is required to remove the electrons from the atoms. The required amount of energy is supplied by the abundance of energy present in the fire. The energetic content of the flames is reduced in proportion to the ionization potential.



FEATURES

- Used as an intervention tool
- Suitable for all classes of fire (A, B, C, F, E)
- Quick extinguishing & heat reduction
- Ozone & eco-friendly
- Very effective & efficient
- No pipe work or manifolds/nozzles
- Zero pressure storage
- Zero maintenance cost
- Very cost effective – cheaper than any system currently available
- No reignition & water damage
- No residue
- Non-toxic (no human hazard)
- 15 years touch free shelf life
- Zero damage to sensitive equipment
- No bulky cylinder storage
- Works volumetrically
- Can be used for early stage and advanced fires
- Reduces the fire seat temperature
- Is lightweight and very compact
- Keeps the oxygen content in the room intact
- Is released only after ignition
- Does not create an increase of pressure in the room
- Can be applied to the large temperature range of -70°C to $+70^{\circ}\text{C}$



Breaking the Chain Reaction + Heat Absorption = Fire Extinguished

FAS-DSPA is made to work as fixed fire extinguishing system and a specialised manual knockdown tool.

FAS-DSPA can be used in 2 ways:

A) Fixed fire extinguishing systems

The System can be linked, so that large spaces can be protected preventively.

Compared to conventional fire extinguishing equipment /system, **FAS-DSPA** has many advantages as listed above.

B) Manual knockdown tool

Operated by just pulling the string abruptly and throwing the **FAS-DSPA** at the seat of fire. Knocks down the flames in a matter of seconds.

- Automatic electrical, thermal, as well as manual activation possible.
- A flooding solution like none other.
- Can be integrated with any Detection Panel or BMS.

FAS-DSPA has already been implemented in over 47 countries.

Suitable for all sectors – including server rooms, nuclear plants, panels, electrical cabinets, marine, trains, automotive, chemical plants, defence, offices, etc.

FAS-DSPA 5

CHANGING THE ODDS IN THE FIREFIGHTER'S FAVOR

MAJOR FEATURES:

- Nicknamed "Extinguishing bombs"
- Suitable for A,B,C,E,F classes of fire
- Increases personal safety
- Creates time to develop further actions
- Limits the damage caused by fire and water
- Fights early stage and advanced stage fires

FAS-DSPA 5 can be used by:

- Fire Fighters • Police Personnel • Security Personnel
- Emergency Evacuation Team • Safety Squads, etc.

FAS-DSPA 5 can be installed at:

- Ultra-Premium Residences • High Rise Buildings • Jewelry Stores • Garment Showrooms and various other places.



Activation method

The unit is activated as soon as the cord is pulled abruptly. This should be done in a straight line from the unit. When the FAS-DSPA 5 has been activated, it starts producing a special sound. From that moment, the FAS-DSPA 5 must be thrown at the seat of the fire within 10 seconds.

- Does not create any increase in pressure and gives a normal oxygen content. This is of great importance in case there are victims still present in the nearby room.
- Can be used in any enclosed area to lower temperatures by as much as 700 degrees and knock down flames.
- FAS-DSPA 5 was included in Popular Science's 'Best of What's New'—2008 in the security category.

Application

Thanks to the versatility of its applications, FAS-DSPA 5 is FAS-DSPA.nl's best sold article. FAS-DSPA 5, is a portable unit: its weight and dimensions are limited. On account of its portable design, the FAS-DSPA can be applied even before the fire brigade arrives. FAS-DSPA 5 is activated by means of a cord. By throwing this type of FAS-DSPA at the seat of the fire from a distance, it is no longer necessary to come close to the seat of the fire. The round construction aids the rapid and efficient dispersal of the active material.

Dutch and Swedish tests have shown that the FAS-DSPA 5 can prevent a backdraft or a flashover for a long time. FAS-DSPA 5 is a good solution in cases when an indoor attack does not seem to be an option any more.



Figures

| | FAS-DSPA 5 | FAS-DSPA 5-3 | FAS-DSPA 5-4 |
|------------------------------|-------------------|------------------|-------------------|
| Active substance | 3.3 kg | 0.3 kg | 0.9 kg |
| Discharging time | 25 seconds | 20 seconds | 25 seconds |
| Maximum temperature at 50 cm | <170°C | 75°C | 75°C |
| Diameter | 210 mm | 135 mm | 165 mm |
| Height | 110 mm | 72 mm | 94 mm |
| Weight | 5.4 kg | 1.3 kg | 2.0 kg |
| Capacity* | 60 m ³ | 6 m ³ | 18 m ³ |

*based on a concentration of 50 gram/m³

FAS-DSPA 0.3

Application

FAS-DSPA 0.3 is the smallest generator in the **FAS-DSPA** range. It is smaller than a beer mat. This small generator is preferably applied in small rooms containing electrical equipment such as computers, telephone exchange boards, monitors, sound equipment and small switch boxes.

Activation method

FAS-DSPA 0.3 can be activated in two ways: electrically and thermally.



Figures

| | FAS-DSPA 0.3 |
|------------------|---------------------------------|
| Active substance | 0.015 kg |
| Discharging time | 5–7 seconds |
| Diameter | 71 mm |
| Height | 22 mm |
| Weight | 0.112 kg |
| Capacity* | 0.3 m ³ / 300 litres |

*based on a concentration of 50 gram/m³

FAS-DSPA 4 & 6

FAS-DSPA 4 has been developed especially for the transport sector and can be used in trains, trucks, cars and ships. **FAS-DSPA 4** is manufactured in two types: **FAS-DSPA 4-1** and **FAS-DSPA 4-2** which differ in the way in which the active material is released into the air. **FAS-DSPA 4-1** releases the substance axially while the **FAS-DSPA 4-2** releases it radially. In addition, **FAS-DSPA 4-1** is designed for plaster depth installation and **FAS-DSPA 4-2** for wall-mounted installation.

FAS-DSPA 6 has a very special appearance. The construction causes the fire extinguishing agent to be blown into the room in a circle around the device. Moreover, one of the properties of this system is that the active extinguishing substance is dispersed into the room at a low temperature.

Activation method

FAS-DSPA 4 and **6** can be activated in two ways: electrically and thermally.

FAS-DSPA 4 and **FAS-DSPA 6** can be made-to-order.



FAS-DSPA 4



FAS-DSPA 6

Figures

| | FAS–DSPA 4–1 | FAS–DSPA 4–2 | FAS–DSPA 6 |
|------------------------------|-------------------|-------------------|-------------------|
| Active substance | 1.6 kg | 1.6 kg | 3.4 kg |
| Discharging time | 43 seconds | 43 seconds | 35 seconds |
| Maximum temperature at 50 cm | <120°C | <120°C | <75°C |
| Diameter | 165 mm | 165 mm | 165 mm |
| Height | 180 mm | 180 mm | 420 mm |
| Weight | 5.3 kg | 5.3 kg | 14.3 kg |
| Capacity* | 21 m ³ | 21 m ³ | 52 m ³ |

*based on a concentration of 50 gram/m³

FAS-DSPA 8

Application

FAS–DSPA 8–1 and 8–2 are universal systems which bring a much colder extinguishing agent into the room–this gives them a wider applicability. FAS–DSPA 8 is especially designed for fighting fires of flammable liquids, such as oil products, petrol, and organic solvents, as well as of solid materials such as wood, insulation materials and plastics.

FAS–DSPA 8 should be installed in closed rooms which are difficult to access, so that in case of fire, FAS–DSPA 8 is applied as the first firefighting tool as soon as it is activated in the room.

Activation method

FAS–DSPA 8 is activated electrically.

FAS–DSPA 4, 6, and 8 can be installed at:

• Data Centres • Server Rooms • Compressor Rooms • Engine Rooms • Warehouses • Parking Lots • Electrical Hubs • Secured Areas • Fuel Storages and various other places.

Figures

| | FAS–DSPA 8–1 | FAS–DSPA 8–2 |
|------------------------------|-------------------|--------------------|
| Active substance | 3.25 kg | 6.7 kg |
| Discharging time | 80 seconds | 160 seconds |
| Maximum temperature at 50 cm | <120°C | <120°C |
| Diameter | 220 mm | 220mm |
| Height | 220 mm | 350 mm |
| Weight | 11.5 kg | 20 kg |
| Capacity* | 65 m ³ | 134 m ³ |

*based on a concentration of 50 gram/m³



FAS-DSPA 11

Application

FAS–DSPA 11 has been developed for fighting A and B type fires as well as electrical fires in industrial buildings, railways and road transport. FAS–DSPA 11 can also be applied in rooms where there are cables, electrical installations and equipment.

FAS–DSPA 11 is a series of small ‘cold’ systems, which by their dimensions can very easily be installed in small rooms, such as switch boxes and engine compartments.

FAS–DSPA 11 should be installed in closed rooms which are difficult to access, so that in case of fire, FAS–DSPA 11 is applied in the room as the first fire fighting tool.

Activation method

FAS–DSPA 11 can be activated in two ways: electrically and thermally.

FAS–DSPA 11 can be installed at:

• Electrical Panels • Expensive Electrical Equipment Rooms • High–End Vehicles • Control Rooms • Cable Trays • Air Conditioning Ducts • Elevator Rooms and various other places.



Figures

| | FAS–DSPA 11–0.5 | FAS–DSPA 11–1 | FAS–DSPA 11–2 | FAS–DSPA 11–3 | FAS–DSPA 11–4 | FAS–DSPA 11–5 | FAS–DSPA 11–6 |
|------------------------------|------------------|--------------------|--------------------|--------------------|-------------------|-------------------|-------------------|
| Active Substance | 0.045 kg | 0.11 kg | 0.17 kg | 0.3 kg | 0.9 kg | 1.4 kg | 2.4 kg |
| Discharging time | 35 sec | 9 sec | 12 sec | 20 sec | 25 sec | 40 sec | 40 sec |
| Maximum temperature at 50 cm | 80°C | 75°C | 75°C | 75°C | 75°C | 120°C | 120°C |
| Diameter | 35 mm | 122 mm | 124 mm | 135 mm | 165 mm | 187 mm | 187 mm |
| Height | 65 mm | 23 mm | 32 mm | 72 mm | 94 mm | 94 mm | 94 mm |
| Weight | 0.160 kg | 0.5 kg | 0.8 kg | 1.3 kg | 2.0 kg | 4.5 kg | 4.7 kg |
| Capacity* | 1 m ³ | 2.2 m ³ | 3.4 m ³ | 6.0 m ³ | 18 m ³ | 28 m ³ | 48 m ³ |

*based on a concentration of 50 gram/m³

FIRE-SQUID

Application

The latest in portable fire extinguishing tools by **FAS**–DSPA.nl based on aerosol technology, is the Fire–Squid. The Fire–Squid is a very effective fire extinguisher with a unique design and has a total weight of less than 1.5 kg. It has especially been designed for one–handed operation and therefore, it is easy to use. With its extinguishing time of 45 seconds and an extinguishing range of a maximum of 4 metres, the Fire–Squid is very much suited for extinguishing starting fires in the house, car, caravan, or on board ships. This innovative fire extinguisher is environment friendly and does not harm humans and animals. Moreover, the Fire–Squid is fully maintenance–free for the first 5 years.

Advantages

- Unique design
- Very effective
- One–handed operation
- Weight: less than 1.5 kg
- Extinguishing time: 45 seconds
- Extinguishing range: 3 to 4 metres
- Environment friendly
- Harmless to humans and animals
- Fully maintenance–free during the first 5 years



Installation photos



SAFETY

FAS–DSPA is very user friendly and safe for use. Depending on the type of **FAS**–DSPA, the units are activated manually, thermally or electrically.

Once activated, the system cannot be halted. It will continue as long as the active aerosol material has been fully dispersed in the air.

RESEARCH

AFG Group has its own research laboratory. At this location, quality tests and age tests are performed. **FAS**–DSPA.nl also carries out tests in close cooperation with various fire brigades. Only in this way can **FAS**–DSPA guarantee highest quality of its products.

PRODUCTS

FAS–DSPA.nl develops, manufactures and supplies various **FAS**–DSPA systems. The correct use of **FAS**–DSPA depends on the unit, its function and the room. In short, every **FAS**–DSPA unit has its own application. **FAS**–DSPA.nl has mapped out these applications on the basis of its products. Deviating different sizes and tailor–made systems can be supplied on request.

REFERENCE LIST: Few of our international customers

- KIA Car factory, Turkey
- ARGE Schacht, Switzerland
- Linth Limmern, Switzerland
- Taxi Dienste, Austria–Busses
- DAF Trucks/Paccer, Netherlands
- NEAT ARGE Ferden, Switzerland
- Dampfschiff Honentwil, Austria–Ships
- Caterpillar, Austria
- Tunneltaxis Bieler, Austria

PRODUCT PRESENCE

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North America – Canada, U.S.A.
Far East – Malaysia, South Korea

Eastern European Countries
Middle East – Dubai, Bahrain
UK, Ireland & Australia

IN INDIA

Distributor Stamp



GRAAND PRIX
BESPOKE LUXURY

407, Flying Colours, Pt. Deen Dayal Upadhyaya Marg,
Mulund (W), Mumbai - 400 080. India
Telephone: +9122 6137 7300
enquiries@graandprix.com
www.graandprix.com