

Fire-resistant shield for horizontal sprinkler system, 120 L/min



The **120 L/min horizontal spray fire shield** is a fire protection device designed to spray water over an area at risk of fire. Thanks to its **horizontal spray pattern**, it moistens the surface to be protected and helps limit its heating in the event of a nearby fire.

This system provides supplemental protection for the perimeters of buildings, properties located at the forest-settlement interface, farms, industrial facilities, and sensitive areas. It is available in **two versions—with or without a supply hose**—to accommodate existing equipment.

Why choose a horizontal sprinkler fire shield?

Horizontal sprinkling is particularly useful when the goal is to wet a surface rather than simply create a vertical water curtain. The water is distributed in a horizontal pattern, helping to provide preventive protection for the targeted area.

This approach can be used, in particular, to wet the perimeters of buildings, exposed surfaces, or certain sensitive areas before or during a situation posing a fire risk, within the limits of the system's capabilities.

The Advantages of Horizontal Sprinkling in Fire Protection

- **Surface wetting:** delivers water to the target area to prevent it from drying out.
- **Preventive protection:** helps prepare a surface exposed to the risk of fire spread.
- **Reduction of heat buildup:** The application of water can help cool the sprayed surfaces.
- **Localized protection:** allows the spray to be concentrated on a specific area depending on the system's layout.
- **Temporary deployment:** suitable for temporary installations with a compatible water supply.
- **Integration into a protection system:** can complement other fire prevention and suppression measures.

Horizontal Sprinkling vs. Vertical Water Curtain: What's the Difference?

A **vertical water curtain** is primarily used to form a water barrier between a heat source and an area to be protected. Its main purpose is to help reduce exposure to thermal radiation.

The **horizontal spray fire shield**, on the other hand, focuses on wetting a surface. Its purpose is to deliver water

to an exposed area to help cool it and provide preventive protection.

These two spray patterns therefore address different needs and can be complementary in a fire protection strategy.

Two versions available: with or without a hose

The **120 L/min fire shield** is available in two configurations to meet the needs of professionals and users who already have a water supply system.

- **Version without a hose:** includes the connection components and the sprinkler system, without a supply hose.
- **Hose version:** includes the same components, along with a 10-meter Forex DN45 fire hose, fitted with DSP/APM couplings.

The version without a hose allows for the use of a compatible hose already available on site. The version with a hose makes it easier to assemble a complete unit that includes a 10-meter supply line.

Components of the Fire Shield System

The system incorporates the hydraulic components from the 120 L/min fire shield kit:

- **2 female-to-female 1-1/2 BSP Scotty connectors** with gaskets
- **2 DSP/APM DN40 half-couplings** without lock, 1-1/2" G male, PN16
- **1 sprinkler head** from the 120 L/min series, with 1-1/2" BSP male thread
- **1 Scotty 3-way connector** 1-1/2" × 1-1/2" × 1-1/2" BSP
- **Depending on the version:** 1 DN45 Forex hose, 10 m long, DSP/APM-mounted

Operation of the horizontal sprinkler fire shield

The system must be supplied by a **fire pump** or a compatible water line capable of providing the hydraulic conditions necessary for its operation.

Once connected and pressurized, the system disperses water in a **horizontal spray pattern** designed to wet the selected area. Its positioning must be adapted to the surface to be protected, the available water supply, and environmental constraints.

The quality of the spray depends in particular on the pressure and flow rate actually available at the device, as well as on pressure losses in the pipes and fittings.

Applications of the Horizontal Fire Shield

This device can be used for various preventive protection and humidification applications:

- Moistening the area surrounding a residence at risk of wildfire;
- Preventive protection of areas at the forest-settlement interface;
- Sprinkling of sensitive areas near buildings or outbuildings;
- Supplementary protection on a farm;

- Localized humidification at an industrial site or storage area;
- Implementation of temporary protection during fire prevention operations.

Technical Specifications

- **Designation:** fire-resistant shield for horizontal spraying
- **Rated flow rate:** 120 L/min
- **Dispersion method:** horizontal spray
- **Function:** humidification and preventive protection of an exposed area
- **Device connection:** 1-1/2" BSP male thread
- **Kit fittings:** DSP/APM DN40 and 1-1/2" BSP connectors
- **Power source:** motor pump or compatible water line
- **Available versions:** with or without hose
- **Hose for the version with hose:** Forex DN45, 10 m long, fitted with DSP/APM
- **Use:** supplemental fire protection and temporary sprinkler system

Installation and Usage Guidelines

Before commissioning, verify the compatibility of all connections, the availability of the required flow rate, and the characteristics of the water supply.

The **horizontal fire shield** must be positioned so that the spray is directed toward the surface to be wetted, without obstructing access or emergency response operations. A preliminary test allows you to verify the device's performance and the area actually covered by the spray.

This system serves **as a supplementary means of fire protection**. It does not, on its own, guarantee that the spread of a fire will be stopped, nor does it replace regulatory fire protection measures or the response of emergency services.

MMF: Fire Protection and Sprinkler Equipment

MMF offers professionals hydraulic equipment designed for fire prevention and firefighting: hoses, couplings, motor pumps, and water spray devices.

Available **with or without a hose**, the **120 L/min horizontal sprinkler fire shield** complements a temporary fire protection system by focusing on wetting exposed surfaces.