

# FIXED FIRE-SAFETY SYSTEMS BONPET

## COMPOSITION

Built in extinguishing system (fixed fire extinguishing system) is made up of elements of mechanical and electrical equipment, and is classified as a low-pressure system with a working pressure up to 5 bars, which means that for a system the tubes with a low-test pressure of 7.5 bar (water lines) can be used. The volume of liquid container is determined by the assessment of the fire risk.

The system is composed by: the container with Nitrogen ( $N_2$ ), the pressure reducing valve for Nitrogen ( $N_2$ ), pressure gauge, pressure switch - adjustable signal to fire-control centre, container for liquid BONPET, the automated pneumatic ball valve with a reservoir of compressed air, pipeline, nozzles, automatic fire detectors, manual fire detection switch, sirens, switch to stop/hold fire extinguishing, etc.

The system is used for extinguishing the fires of class A, B and F.

## ACTIVATION

The operating principle of the fire-fighting is with spraying extinguishing media BONPET. The liquid is distributed by the pipeline and nozzles same as water system, the difference is in the volume of the liquid. Water systems are mainly used to hold the fire until the fire fighter's intervention, which is why the water systems have a longer time of spraying.

Spraying extinguishing liquid BONPET has the main task to extinguish the fire, because of its effectiveness the extinguishing time (liquid spraying) is significantly shorter (up to 20 seconds) in the comparison with water systems. Due to the extraordinary ability of extinguishing with BONPET liquid the calculated volume of the liquid is a relatively small.

Nitrogen as a propellant (thru the system of automatic valves) makes the pressure in the liquid tank.

The release of the extinguishing fluid BONPET in the pipeline system is carried out via an automated ball valve. Valve with pneumatic drive is opened by a signal from the fire alarm system, and thereby allow the flow of extinguishing liquid to the nozzles in the zone of extinguishing, where there has been a detection of a fire.

## HOW TO USE FIXED FIRE-SAFETY SYSTEMS BONPET

The system is suitable for fire protection of lacquering shops, electrical transformers (external and internal), hydraulic aggregates, machines for plastics (machines for vacuuming), storages of flammable liquids in the wood processing industry (filters etc.), warehouses, tunnels (in testing), etc.

