

MKM-FOGTEC KLS02

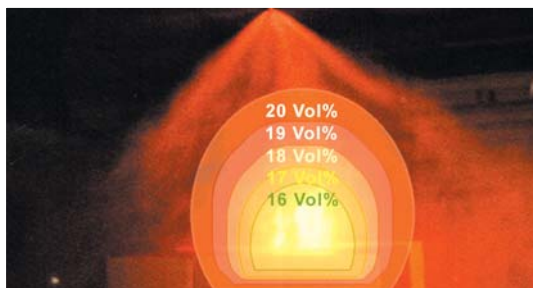
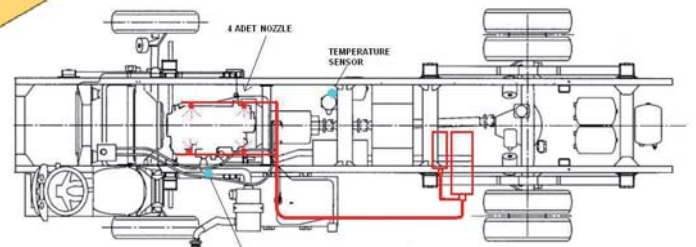
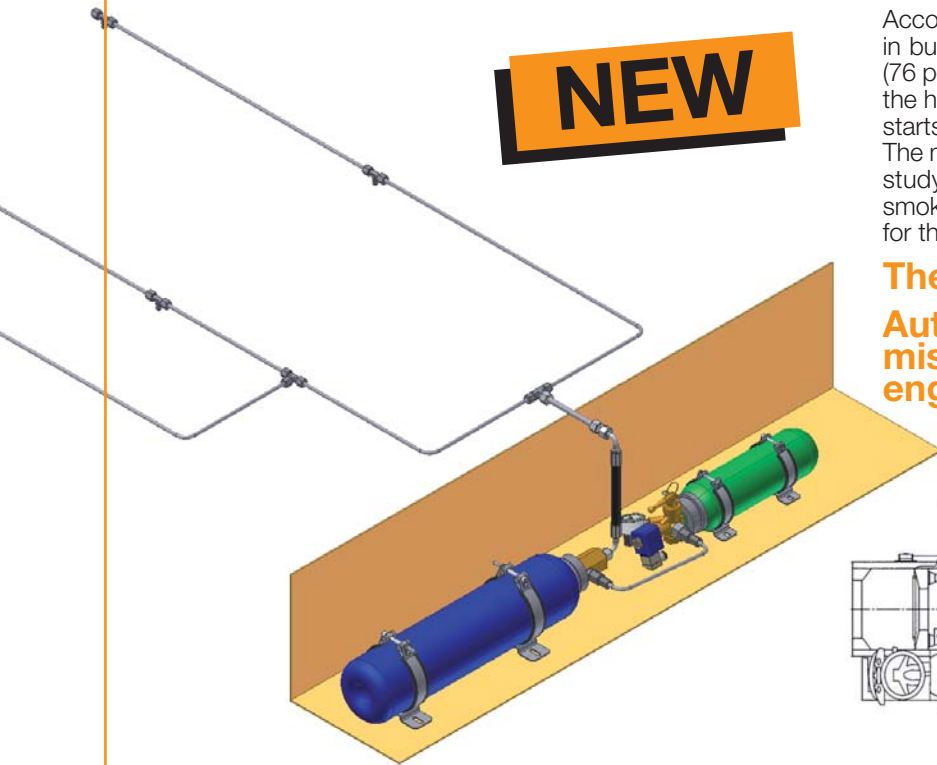
fail-safe fire detection and suppression system for engine compartment of city buses and coaches

NEW

According to a study of fire accidents of 55 coach fires in buses during the time from 1999 to 2003 most fires (76 per cent) started in the engine compartment. Besides the heat, the greatest danger for passengers and driver starts out from the spreading of poisonous flue gases. The measures of the accident research derived from this study suggest the installation of automatic fire and smoke detectors with visual and acoustic warning signal for the driver.

The better solution:

Automatic high-pressure water mist fire extinction system in the engine compartment.



How does water fog works?

Cooling effect and oxygen superseding

MKM-FOGTEC systems are fundamentally more effective comparing with conventional low-pressure systems due to the extreme temperature chock at operation. This effect is supported by the protection against heat radiation of the droplets.

Evaporating, the volume of water extends 1640 times and displaces the oxygen locally at the source of the fire similar to gas agents.



Fire detection sensors

Temperature detection in the engine compartment is provided by spot temperature sensors or a linear fire detector with IP68 protection grade, both approved accdg. EN50 155 of shock and vibration for rolling stock application. The signal assignment to the driver can be commuted by classic means or via CAN Bus.

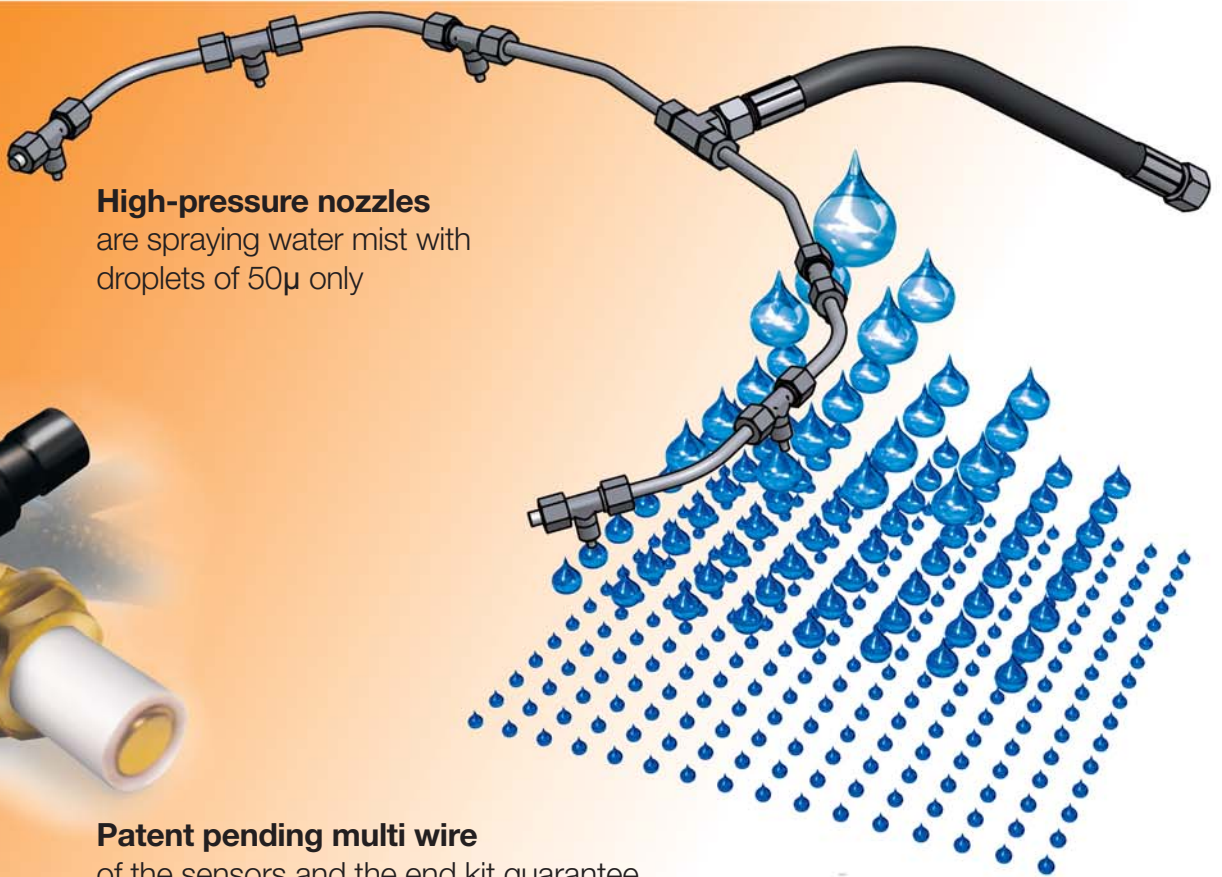
Spot fire detector with brass body
Temperature range
 $100 \pm 5^{\circ}\text{C}$ to $175 + 5 / -10^{\circ}\text{C}$

Tests of fire fighting have been carried out at the "SP Fire Technology" in Sweden based on the guideline SBF 128:1 of the "Swedish Fire Protection Association" (SBF).

Continuous checks are carried out at our own location of the research and development department and at the area of the Deutsche Luft- und Raumfahrt Forschungsanstalt DLR.



MKM-FOGTEC KLS02 fire suppression system

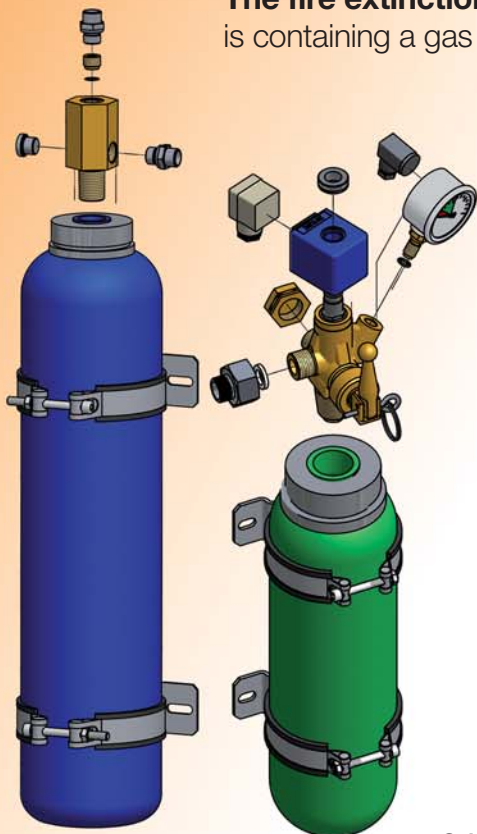


High-pressure nozzles
are spraying water mist with
droplets of 50 μ only



Patent pending multi wire
of the sensors and the end kit guarantee
the continues control of all connections

The fire extinction system
is containing a gas and a water bottle



The flexible control unit
reports every malfunction separately to the driver and therefore
avoids any faulty operation of the extinguishing part

**The result is a fail-safe maintenance-free automatic fire
suppression system**

Sole agency:

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