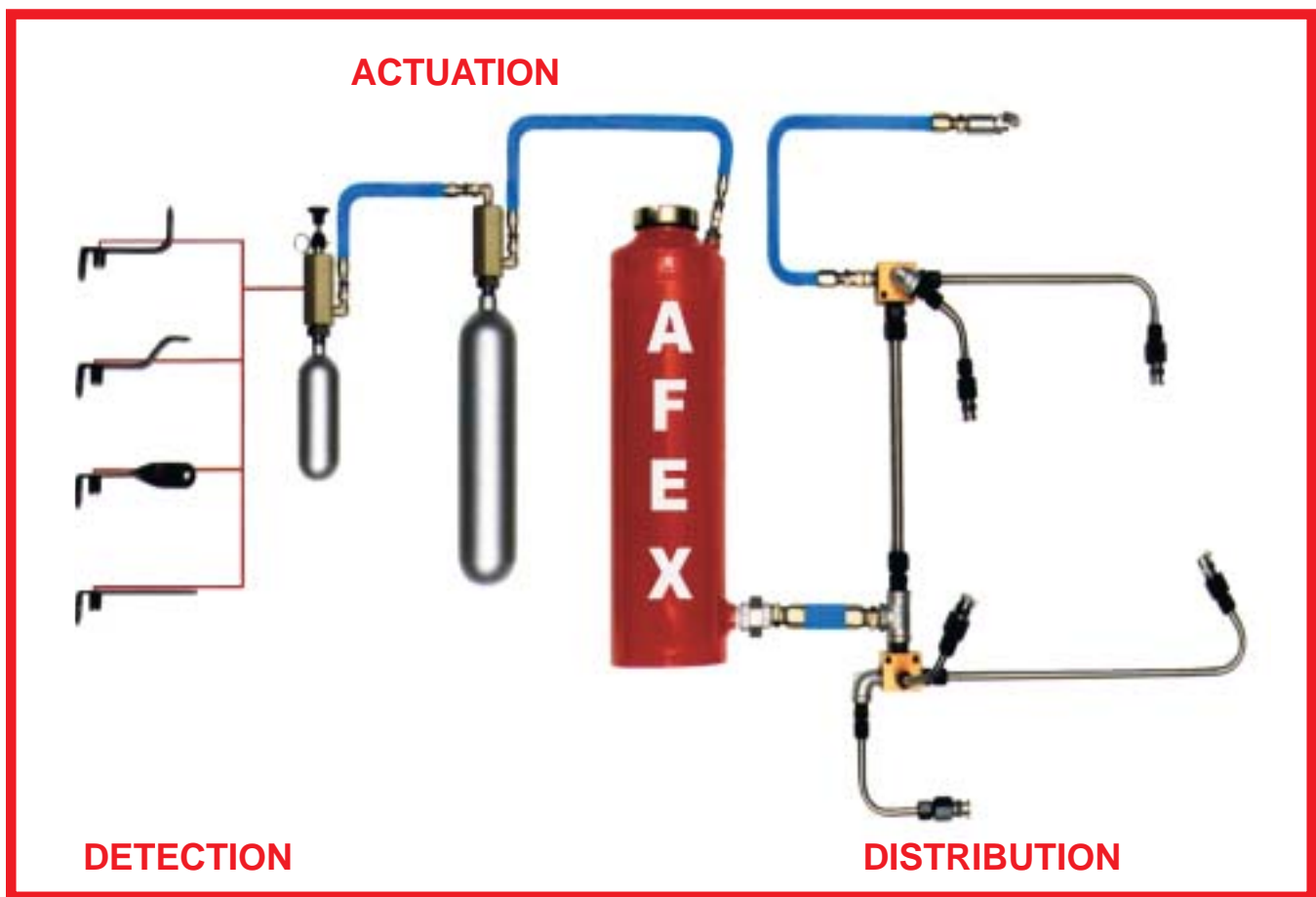


# AFEX

2000  
Series

Fire Suppression Systems

## 2000 Series Fire Suppression System



# AFEX

## Vehicle Fire Protection

Pre-Engineered Dry Chemical Extinguishing System

# AFEX 2000 Series

## Fire Suppression Systems

### Vehicle Fire Protection

Meets all standards set forth by NFPA for the protection of mobile/self-propelled equipment.

#### DETECTION

(Automatic Systems Only, A1000 Series)

The **AFEX** detector is a point thermal type that is shock and vibration resistant. The detectors are installed in and adjacent to the high hazard areas. The detector's switch contact closes at 300°F and reopens at 270°F. The detectors are wired in parallel with a shielded two wire conductor that is especially designed and constructed for **AFEX**. The detector can be encased in various types of brackets or enclosures for mounting. The vehicle battery provides power for the detection system.

The detection system may be enhanced by the addition of a Circuit Monitor Panel.

#### ACTUATION

In an automatic system, the closing of any one of the heat detectors will cause an electrical actuation of the system by discharging an explosive squib. The force from the squib powers a puncture pin which pierces the seal of a compressed nitrogen cartridge. The released gas flows to the pressurizing cartridge that charges the extinguisher cylinder.

Manual actuation is accomplished by pulling a safety pin and applying force to the push knob on a mechanical actuator assembly. This also forces the puncture pin into the seal of a compressed nitrogen cartridge. Mechanical actuators should be located in the operator cab and optionally, on the outside of the vehicle near the operator's path of egress.

#### DISTRIBUTION

The pressurizing gas enters a tube at the top of the extinguisher. The gas passes through perforations in this tube, which extends to the bottom of the extinguisher. In so doing, the gas fluidizes the powder, even when severely compacted. As the gas increases the pressure in the cylinder, it ruptures the bursting disc in the discharge outlet at the bottom, forcing the powder through the distribution network.

The distribution network consists of stainless steel tubing and/or hydraulic hose. Finally, the dry chemical is disbursed through cone spray nozzles, which permit the broad distribution of the agent that is necessary for a total flooding system. These nozzles are protected by a spring loaded cap.

### TECHNICAL SPECIFICATIONS

#### SENSORS

Contact Arrangement	Single Pole, Single Throw
Closing Temperature	300°F +/-6°F
Opening Temperature	270°F +/-8°F
Operating Temperature	-80°F to +550°F

#### SQUIB

Firing Current	3 amps
Temperature Range	-65°F to +185°F
Charge	0.125 Gram Powder

#### EXTINGUISHER

Overall Diameter	7"
Overall Height	
1015 Series	14"
1030 Series	23"
Wall Thickness	3/16"
Temperature Range	-40°F to +120°F
Agent Charge	A:B:C Multipurpose Dry Chemical (Monoammonium Phosphate)
Type	Non-pressurized, Cartridge Operated

#### TRUNK WIRE

Temperature Range	-85°F a +482°F
Conductors	16 AWG Tin Plated Copper
Primary Insulation	0.010" Tefzel
Cabling	2 Tefzel Fillers, Kevlar Binder
Protective Braid	26 AWG Tin Plated Copper
Outer Jacket	0.012" Tefzel

#### DISTRIBUTION

Tubing Material	304 Stainless Steel
Tubing Dimensions	0.75" OD x 0.049" Wall (Primary) 0.50" OD x 0.035" Wall (Secondary)
Hose	SAE 100R5, 100R1 or better
Nozzle Cover	Spring Cap (2 oz. tension)
Nozzle Spray Pattern	150° Cone
Nozzle Range	8 Feet
Maximum Imbalance Ratio	
1015 Series	1:12 (Primary) 1:8 (Secondary)
1030 Series	1:20 (Primary) 1:6 (Secondary)

### APPLICATIONS

Wheel Loader  
Crawler Loaders  
Hydraulic Excavators  
Crawler Tractors  
Haul Trucks  
Scrapers  
Landfill Compactors  
Hot Slag Equipment  
Airport Service Vehicles

Rotary Drills  
Load-Haul-Dumps  
Powder Rigs  
Scalers  
Pavers  
Highway Line Painters  
Cotton Pickers  
Grain Combines

Skidders  
Feller Bunchers  
Cut to Length Harvestors  
Log Loaders  
Garbage Trucks  
School Buses  
Passenger Buses  
Paratransit Buses  
Street Sweepers

....and many other applications, including stationary equipment