

Technical Information

Description

To meet the growing need for an environmentally friendly solution that requires zero clean-up Amerex has developed the ACT™ system. The ACT™ system is a gaseous fire-fighting agent that is designed and tested to suppress engine fires by total flooding and hazard specific local application in the engine compartment. The discharge leaves zero residue, requiring no clean-up after a system discharge. ACT™ has a zero Ozone Depletion Potential (ODP) making it the environmental global choice. The ACT™ agent cylinders are compatible with the existing Amerex Vehicle Systems components and are engineered to meet OEM specifications.

Application

ACT™ is the ideal choice for protecting vehicle engine compartments where a no clean up solution is required. It is suitable for Class A, Class B and Class C hazards, which are found in engine compartments and other ancillary areas of the vehicle. Combining these fire-fighting capabilities with reliable Amerex Vehicle System fire detection and actuation methods is the model alternative for clean suppression methods. ACT™ has been thoroughly tested and certified with two fire suppression system configurations for engine compartment applications.



Figure 1.a

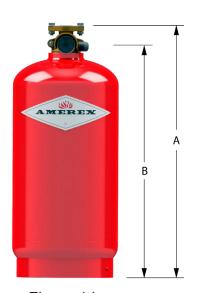


Figure 1.b

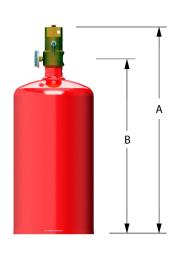


Figure 1.c

Table 1 - ACT™ Agent Cylinders

Agent Cylinder	Figure	Overall Height (A) in (mm)	Height to Discharge Opening (B) in (mm)	Diameter in (mm)	Weight lbs. (kg)
FE VH25ACT	1.a	21.8 (554)	20.3 (516)	9.0 (229)	56.25 (25.5)
FE V25ACT	1.b	21.3 (541)	19.8 (502)	9.0 (229)	56.25 (25.5)
FE V12ACT	1.c	17.9 (455)	15.2 (386)	7.0 (178)	26.5 (12.02)



Fire Suppression System – FE V25 / VH25ACT

Engine Compartment - Total Flood Protection

This fire suppression system is configured with 4 nozzles and uses the ACT™ agent exclusively. System specifications are listed below in Table 2.

Table 2

	ACT™
Agent Type	3M™ NOVEC 1230™
Classification of Fire	A:B:C
Cylinder Type	4BW-350
Operating Pressure (psi / bar)	350 / 24.13
Operating Temperature (°F / °C)	-40 to +120 / -40 to +49
Cylinder Orientation	Vertical or Horizontal
Quantity of Nozzles	4

Fire Suppression System - FE V12ACT

Engine Compartment - Local Application & Supplemental Protection

This fire suppression system is configured with 1 to 4 nozzles and uses the ACT™ agent exclusively. System specifications are listed below in Table 3.

Table 3

	ACT™
Agent Type	3M™ NOVEC 1230™
Classification of Fire	A:B:C
Cylinder Type	49 CFR 173.309
Operating Pressure (psi / bar)	240 / 16.5
Operating Temperature (°F / °C)	-40 to +120 / -40 to +49
Cylinder Orientation	Vertical
Quantity of Nozzles	1 to 4



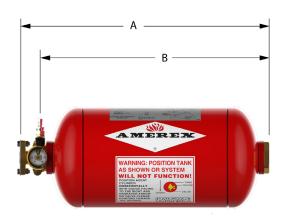
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Description

Amerex is the preferred fire suppression system in the transit, waste, mining, and agriculture industries where quality and innovative safety solutions are crucial components of the vehicles that serve them. To meet the growing need for an environmentally friendly solution, Amerex researched and developed AVT™, a blended, gaseous fire-fighting agent that is designed and tested to suppress engine fires by total flooding of the engine compartment. The discharge has minimal residue, resulting in a quick, effortless cleanup with no effect on the environment and a zero Ozone Depletion Level (ODP). The AVT™ agent cylinders are compatible with the existing Amerex Vehicle Systems components and are engineered to meet OEM specifications.

Application

AVT™ is the ideal choice for total flooding of engine compartments in vehicles, which require a cleaner solution with minimal residual powder in the event of a discharge. It is suitable for Class A, Class B, and Class C fire hazards, which are all found in engine compartments. Combining these fire-fighting capabilities with reliable Amerex Vehicle System fire detection and actuation methods is the model alternative for clean suppression methods. AVT™ has been thoroughly tested with two fire suppression system configurations for engine compartment applications. An additional agent cylinder size is available to protect ancillary areas of the vehicle.



AMEREK

SV A B G

MANUAL SV A B G

MANUA

Figure 1.a

Figure 1.b

Table 1 - AVT Agent Cylinders

Agent Cylinder	Overall Height (A) in (mm)	Height to Discharge Opening (B) in (mm)	Diameter in (mm)	Weight lbs. (kg)
AVT 2V	15.5 (394)	14.0 (356)	7.0 (178)	26.3 (11.9)
AVT 4V	17.6 (447)	16.0 (406)	9.0 (229)	44.3 (20.1)
AVT 4H	18.1 (460)	16.0 (406)	9.0 (229)	46.8 (21.2)
AVT 5V	21.3 (541)	19.8 (502)	9.0 (229)	59 (26.7)
AVT 5H	21.8 (554)	20.3 (516)	9.0 (229)	59 (26.7)



Fire Suppression System – AVT™ 5V / 5H Engine Compartment Protection

This fire suppression system is configured with 4 or 5 nozzles and uses the AVT™ agent exclusively. System specifications are listed below in Table 2.

Table 2

	AVT™
Agent Type	Proprietary Blended Solution
Classification of Fire	A:B:C
Cylinder Type	4BW-350
Operating Pressure (psi / bar)	350 / 24.13
Operating Temperature (°F / °C)	-40 to +120 / -40 to +49
Cylinder Orientation	Vertical or Horizontal
Quantity of Nozzles	4 or 5

Fire Suppression System – AVT™ 4V / 4H Engine Compartment Protection

This fire suppression system is configured with 3 or 4 nozzles and uses the AVT agent exclusively. System specifications are listed below in Table 3.

Table 3

	AVT™
Agent Type	Proprietary Blended Solution
Classification of Fire	A:B:C
Cylinder Type	4BW-350
Operating Pressure (psi / bar)	350 / 24.13
Operating Temperature (°F / °C)	-40 to +120 / -40 to +49
Cylinder Orientation	Vertical or Horizontal
Quantity of Nozzles	3 or 4

Fire Suppression System – AVT™ 2V Supplemental Protection

Note: This configuration is for use in ancillary areas of the vehicle. This fire suppression system is configured with 2 nozzles and uses the AVT agent exclusively. This configuration may be used in conjunction with the AVT 4V, 4H, 5H or 5V agent cylinder configuration for additional engine compartment coverage where necessary. System specifications are listed below in Table 4.

Table 4

	AVT™
Agent Type	Proprietary Blended Solution
Classification of Fire	A:B:C
Cylinder Type	4BW-350
Operating Pressure (psi / bar)	350 / 24.13
Operating Temperature (°F / °C)	-40 to +120 / -40 to +49
Cylinder Orientation	Vertical
Quantity of Nozzles	1 or 2

