



AFCT, Inc.

Leaders in Pulse Delivery® & QuadAgent® Technology

Last Revision 12/1/2007

MK® I Series Pulse Delivery® & QuadAgent® Rapid Intervention Vehicle

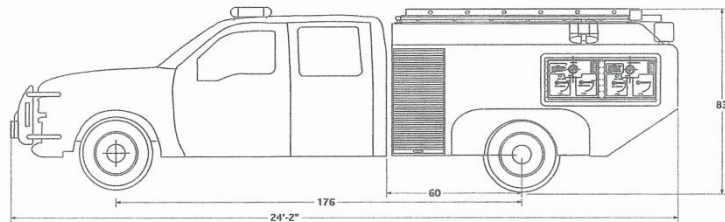
ALL PNEUMATIC SYSTEMS

120 Gallons Water

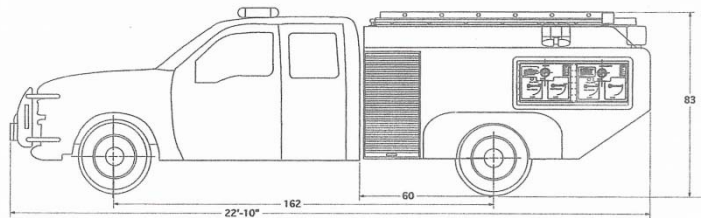
500 Lbs Dry Chemical

120 Lbs Clean Agent

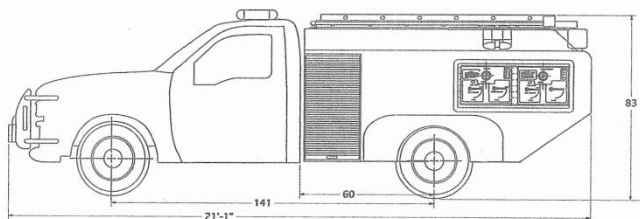
TWO - 5 Gallon Foam Concentrate Bladder Tanks
CAF



MK I OR MK III



MK I OR MK III



MK I OR MK III

Drawing for reference purposed only, dimensions subject to change.

Quick Specifications

3/17/2004

MK® I Series

Dimensions:

Standard:

2-door:

Length - 21'1"
Width - 96"
Height - 80-84"

Extended Cab

Length - 22'10"
Width - 96"
Height - 80-84"

4-door

Length - 24'2"
Width - 96"
Height - 80-84"

With Bumper turret and/or winch

2-door:

Length - 22'1"
Width - 96"
Height - 80-84"

Extended Cab

Length - 23'10"
Width - 96"
Height - 80-84"

4-door

Length - 25'2"
Width - 96"
Height - 80-84"

Cab/Chassis:

GVW – 15,000-19,000 lbs.
Recommend F450 or F550
60' cab to axle
2 door/4 door option
V-10 gas / 6.0L diesel option
2 wheel / 4 wheel drive option
Limited slip differential
Automatic Transmission
ABS brake system
Power Steering
AM/FM radio
Two heavy duty front tow eyes
Two heavy duty rear tow eyes
Tires as recommended by Cab/Chassis manufacturer

In cab controls:

Heater and defroster
Air conditioning
Two electric delay type windshield wipers
Horn button
Siren
Sun Visors
Two outside heated rear view mirrors
Windshield
Accelerator Pedal
Agent Flow Control
All-Wheel Drive control
Brake Pedal
Complimentary agent system activation
Dimmer control

- Dome light switch, manual/door
- Flashing beacon switches
- Headlight switch
- Horn control
- Ignition control
- Panel lights switch with dimmer
- Parking brake control
- Siren switch with microphone
- Starter switch
- Steering wheel, with self-canceling direction signal
- Transmission range selector
- Turret control
- Windshield Wiper and washer controls

Body:

- QuadAgent® platform fabricated from 2.2mm (.090”) aluminum alloy
- Platform constructed to allow all agents to be loaded from ground level
- All steps and running boards of non-skid type
- Hand rails/ grabs located on rear and top to facilitate safe maintenance and servicing
- 12-14’ ladder storage on top of QuadAgent® platform

Equipment Compartments:

- One – 28+ cubic foot cross compartment immediately behind cab.
- Optional storage modules available with 4 door cab/chassis for rear seat area (up to two-16 cubic foot enclosed storage each in rear seat compartment)

Plumbing:

- All pneumatic high pressure operational system

Lighting and Warning Equipment:

- A single battery master disconnect switch mounted in cab
- One battery charging system with weather proof cover
- Low profile light bar mounted on Cab/Platform
- Federal Signal Model PA-4000 electronic siren with PA system.
- Two 12 volt scene lights at rear
- One 12 volt light mounted in each body compartment and on each service panel
- Each body compartment light wired to dash mounted door ajar light.
- One red and one clear light each side at rear to function as running light, brake lights, turn signal lights and back-up lights.
- One back-up alarm

Fire Fighting Equipment:

FIREFIGHTING: The fire fighting system is the Phoenix *QuadAgent® Pulse Delivery®* skid unit. The skid unit is composed of a skid mounted dry chemical system with nominal capacity for 500 lb. Sodium bicarbonate, Monoammonium phosphate or 450 lb. Potassium bicarbonate, 120 gallon water tank, two 5 gallon foam tanks, and 120 pounds of halon replacement agent to be propelled by a six- cylinder cascade system or equal. The cascade system shall have a maximum operating pressure of 3500 psi. The skid unit is mounted on an all aluminum extruded sub frame structure for resistance to off road operation and corrosive effects of the fire fighting chemicals. All access panels are recessed in such a manner that no valve or control handles protrude past the exterior body skin. A panel is provided on the rear of the body that contains the manual backup controls to actuate the remote operated valves. The platform is

energized in less than 20 seconds and nozzle charge time (from cab while mobile) is an additional 5 seconds or less. Hose deployment time for 100 hand line is less than 20 seconds.

QUAD AGENT SYSTEM: The fire-fighting unit contains all control valves for purging, venting, activation and discharge of the hose reel. The controls are located to allow efficient hand line operation while standing on the ground. The skid unit is integrated into the body structure. The system is designed to deliver dry chemical, water/foam/CAF, and/or halon replacement agent, individually or in combination at the following rates:

Water	0-60 GPM
Water/Foam	0-60 GPM
CAF	0-45 GPM
Dry Chemical	0-8 lbs/sec to over 90 feet independently of water stream
Clean Agent	0-1 lb/sec to over 30 feet independently or over 90 feet when entrained at a rate of 1/3 lb/sec within dry chemical stream

DRY CHEMICAL TANK: The dry chemical tank has a capacity of 450 lbs. of potassium bicarbonate, Monoammonium phosphate or 500 lbs. or sodium bicarbonate dry chemical. The vessel is designed for a minimum working pressure of 400 psi, is manufactured in accordance to ASME pressure vessel code requirements, and identified with the manufacturer's data plate and serial number.

WATER TANK: The tank holds a minimum of 120 gallons of water. The vessel has a working pressure of 300 psi, is manufactured in accordance to ASME pressure vessel code requirements, and identified with the manufacturer's data plate and serial number.

HALON REPLACEMENT VESSEL: The tank holds a minimum of 120 pounds of halon replacement agent. The vessel has a working pressure of 440 psi, is manufactured of stainless steel in accordance to ASME pressure vessel code requirements, and identified with the manufacturer's data plate and serial number.

HAND LINE, REEL AND NOZZLE: One electric and manual rewind reel, 100 or 150 ft. hose and nozzle with capacity to deliver water, foam, dry chemical and halon replacement separately or simultaneously. The nozzle configuration is configured to propel dry chemical at a minimum effective distance at sea level of 90 feet without the use of a water stream. This will insure the most effective delivery of the dry chemical agent to the source of the fire. The hand line and nozzle configuration will propel halon replacement agent a minimum of 40 feet independently. Hose rollers are provided as required to provide easy hose removal from the reel. The nozzle flows up to 60 GPM.

RE-SERVICING: The entire unit and agents are re-serviced while standing at ground level for added safety. This includes re-servicing water, foam, dry chemical, and halon replacement agent. System re-servicing is accomplished in less than 30 minutes by the following means from ground level:

Dry chemical	Unique vacuum fill
Water	Hose bib or fire hydrant
Foam Concentrate	Electric suction pump
Clean Agent	Pressure transfer

FOAM EDUCTOR SYSTEM:

- a. The foam liquid proportioning system is a Robwyn eductor providing control of the ratio of foam liquid concentrate to the quantity of water being discharged.
- b. The proportioning system automatically and uniformly proportions water and foam concentrate at a ratio of between 1% to 3% (for nominal 3% AFFF) in accordance with NFPA. The eductor

system design prevents the flow of water into the foam tank under all operating conditions and attitudes of the vehicle. The foam can be aspirated (CAFS) prior to flowing through the nozzle.

BUMPER TURRET: The FoxFire® turret is a remote controlled turret located on the front bumper operated by the driver or passenger inside the cab. It is designed to discharge water, foam, dry chemical or halon replacement agent individually or in combination. The bumper configuration is designed to propel dry chemical at a minimum effective distance of 90 feet at sea level without the use of a water stream. This will insure the most effective delivery of the dry chemical agent to the source of the fire. The bumper turret propels halon replacement agent a minimum of 40 feet.

Necessary controls are provided to permit the selection of water, foam, dry chemical, or halon replacement from inside the cab. A single control lever convenient to the driver and to the crewmember control the bumper turret.

The discharge pattern is fully variable from a solid stream to a fully dispersed pattern. The foam quality is consistent with NFPA No. 414 and NFPA No. 412..

Finish:

Chassis and frame rails painted black

Exterior finish acrylic urethane high gloss enamel in user choice of single non-metallic color: lime, red, white or yellow

Straight 4" (102 mm) reflective stripe for body chassis

Optional Tropical Ziebart undercoating

Delivery:

Delivery F.O.B. Denver, Colorado, USA

Estimated in-service weight of completed unit: 14,200 – 14,800 lbs

Estimated volume of completed unit: 1232 - 1400 cubic feet

Dimensions: 8'x7'x20'1" – 24'3"

Two sets of training, maintenance and operations manuals with trouble shooting instructions

Two CD's with complete manual sets and quick operating instructions

Two sets of wiring and plumbing schematics

Three days of training will be conducted at the department by a qualified training officer

Warranties:

Manufacturers One-Year warranty of the entire unit

5-year warranty on the water tank, dry chemical tank, clean agent tank

Chassis manufacturer's standard warranty

5-year paint warranty