



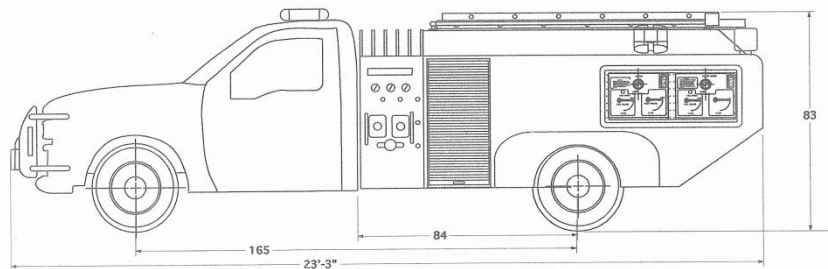
AFCT, Inc.

Leaders in Pulse Delivery® & QuadAgent® Technology

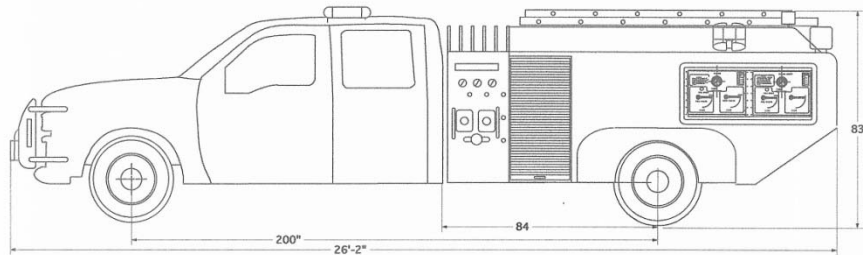
Latest Revision 12/1/2007

MK® IV Series Pulse Delivery® & QuadAgent® Quick Attack Vehicle

300 Gallons Water
250 gpm @150 psi Pump Module
450 Lbs PKP Dry Chemical
120 Lbs Clean Agent
2-20 Gallon Foam Concentrate Tanks
CAF



MK IV



MK IV

Dimensions: 84 inch Cab to Axle

Standard:

2-door:

Length - 23'3"
Width - 96"
Height - 80-84"

4-door

Length - 26'2"
Width - 96"
Height - 80-84"

With Bumper turret and/or winch:

2-door:

Length - 24'3"
Width - 96"
Height - 80-84"

4-door

Length - 27'2"
Width - 96"
Height - 80-84"

ALL Drawings for reference purposed only, dimensions subject to change.

Quick Specifications

MK® IV Series

Cab/Chassis:

Minimum GVW – 17,500 -19,000lbs.
Recommend Ford F550 or equivalent
84” cab to axle configuration
2 door/4 door cab 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' ladder storage on top of QuadAgent® platform

Equipment Compartments:

Storage compartments within platform:

- 2-8+ cubic foot cross chassis storage

Optional storage modules available with 4 door cab/chassis for rear seat area (two-18 cubic foot enclosed storage in rear seat compartment)

Optional custom design modules for 4 door cab

Plumbing:

The following systems are driven by a pneumatic high pressure operational system:

- Pulse Delivery® Dry Chemical system
- Clean Agent delivery system
- CAF system (QuadAgent® handline & bumper turret only)

Water Pump System:

- System equipped with a diesel engine driven, single stage, centrifugal water pump capable of 250 gpm @ 150 psi and 60 gpm @ 300 psi.
- The water pump shall be direct, coupled end suction centrifugal design with brass impeller Waterous CPT2 Iron Body standard (brass optional)
- Suction is 3" with 3" adapter Male NH
- Priming is a Waterous VPOS oil less primer with a manual electric valve 12 vdc
- Engine is a Deutz BF3L2011 developing 61 HP @ 2800 RPM, 3 cylinder, 4 cycle in-line diesel turbo charged
- Electrical system 12 VDC
- Engine cooling: air to oil
- In Cab Controls and start-up
- System Pump Panel and Discharges
 - 1- 3" NST (NH) male thread suction w/ cap
 - 1 – 2 1/2" discharge with w/30 deg droop w/cap and chain NST (NT) Chrome contrl with quarter turn bleeder and liquidless compound gauge
 - Tank to pump valve 3" plumbing
 - Pump recirculation / Tank fill 1.5"
 - Master drain valve
 - Pump primer control
 - Master discharge and Suction pressure gauges (liquidless)
- Water and Foam concentrate level gauges

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-300 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, 300 gallon water tank, two 15 gallon foam tanks, and 120 pounds of halon replacement agent to be propelled by a eight - cylinder cascade system. 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 handline (150 GPM bumper turret)
Water/Foam	0-60 GPM handline (150 GPM bumper turret)
CAF	QuadAgent handline & bumper turret
Dry Chemical	0-8 lbs/sec to over 90+ feet DRY independent of water stream
Clean Agent	0-1 lbs/sec to over 40+ feet independently or over 90+ feet when entrained at a rate of 1/3 lb/sec. within DRY 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 300 gallons of water (pumpable) and is constructed of POLY and carries a lifetime limited warranty and is 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 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 DRY at a minimum effective distance at sea level of 90+ feet without the use of a water stream (entrainment in 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 and over 90+ feet when entrained within dry chemical stream. 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 Foam Pro mechanical pump type providing control of the ratio of foam liquid concentrate to the quantity of water being discharged @ 3% up to 166 GPM.
- b. The proportioning system automatically and uniformly proportion water and foam concentrate at a ratio of between 1% to 3% (for nominal 3% AFFF) in accordance with NFPA. The foam pump 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 (QuadAgent handline & bumper turret only).

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 Chassis undercoating

Delivery:

- Delivery F.O.B. Denver, Colorado, USA
- Estimated in-service weight of completed unit: 16,500 – 17,400 lbs
- Estimated volume of completed unit: 1232 - 1400 cubic feet

Dimensions: 8'x7'x22'-25'3"

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