# SPECIALIZED AIRPORT FIRE TRUCK AERODROME RESCUE and FIRE FIGHTING VEHICLE

# in accordance with ICAO and Civil Aviation Regulations

### **GENERAL**

QUANTITY	DESCRIPTION
1	Specialized Airport Fire Truck General
	The ARFF-vehicle is primarily intended to actively combat aircraft fires and to assist and protect the airport rescue team during evacuation of passengers. Fast and safe vehicle response to the emergency site as well as effective agent discharge are essential for a successful mission. These design features will ensure that this important task can be achieved. The careful selection of components, like high performance 4-stroke diesel engine, automatic power shift transmission system, permanent all-wheel-drive, high performance coil spring suspension system and single-wheel configuration.
	Rapid acceleration due to high horsepower to weight ratio, excellent maintained top speed, extreme mobility (off-road and paved-road operation) and reliable braking system type ABS will allow the emergency crew to safely reach the scene of an accident even under toughest conditions.
	A high-performance primary agent system, including a centrifugal pump, a variety of available turret options including high-reach extendible turrets stinger, high volume low attack turret HVLA and a fully automatic foam proportioning system with instant change of proportioning rate, offers powerful firefighting capabilities.
	A spacious cab design with aluminium structure, large opening doors and convenient stairway entry on both sides offer safety and comfort for the crew members during standby, travel modes and during emergency firefighting operations.
	A large glare-reducing curved windscreen with insulating, laminated safety glass provides best visibility for driver and turret operator.

# **Quality Standards**

1x	Quality standards
	Quality Management System according to ISO 9001:2015
	Environmental Management System according to ISO 14001:2015
	Compliance Management System according to ISO 37301:2021
	Occupational Health and Safety Management System according to ISO 45001:2018
	Energy Management System according to ISO 50001:2018

# Warranty/Guarantee

1x	Warranty conditions 24 months
	A twenty-four (24) months warranty - bumper to bumper – must be provided in accordance with manufacturer warranty conditions and maintenance manuals supplied with the vehicle. The spare parts (or substitutes) availability for vehicle and equipment mounted must be confirmed from the day of final at-site acceptance for a period of not less than 15 years.
1x	Delivery time: not exceeding eight (8) months

# Design

### **Painting and Corrosion Protection**

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1 x	Rims RAL 9005 jet black
1 x	Springs RAL 9005 jet black
1 x	Upper parts of superstructure RAL 3000 flame red  The upper part of the superstructure as well as the design parts of the cab must be painted RAL 3000 flame red, plain (two-pot painting).
	All light alloy parts inside and on top of the roof remain unpainted. Cab, body roof and hinged steps must be covered with anti-skid composite material.  The edges inside and outside the body, which are not welded or sealed, must be covered with automotive sealant to prevent moisture from entering any of the body panels.  Underbody coating must be provided on all chassis and body parts, wherever required.
1 x	Lower part of superstructure, colour same as upper parts of superstructure  The lower part of the superstructure as well as the design parts must be painted in the same colour as the upper parts of superstructure, plain (two-pot painting).
1 x	Front bumper RAL 7016 anthracite grey The front bumper must be painted in RAL 7016 anthracite grey, fine structure. The design part of the front bumper will be painted according to the colour of the upper superstructure.

Lett	ering
1 x	Turret design cover - same colour as upper parts of superstructure
1 x	Standard lettering
	The lettering is done according to ICAO standard.
	"FT01" (confirm with airport ahead of final design)

Roller shutters made of aluminium RAL 7016 anthracite grey

### **Documentation**

# **Operating Manual**

1	Х	Documentation in English
		The documentation must be in English including delivery of digital files, sealed in moisture proof
		plastic, must be delivered with the fire truck.
1	Х	Operating Manual (hardcopy)
		Operating manual for chassis and firefighting system (hardcopy)
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1	Χ	Operating Manual (data carrier)
		Operating manual for chassis and firefighting system (data carrier)

### **Maintenance Manual**

1 x	Documentation in English
	The documentation in English including delivery of digital files, sealed in moisture proof plastic,
	will be delivered with the fire truck.
1 x	Maintenance Manual (hardcopy)
	Maintenance manual for chassis and firefighting system (hardcopy)

1	Х	Maintenance Manual (data carrier)
		Maintenance manual for chassis and firefighting system (data carrier)

### **Spare Parts List**

	1 x	Spare parts catalogue, interactive online
ſ		A spare parts catalogue for the chassis and firefighting superstructure must be supplied as an
		interactive online spare parts catalogue in English.

### **Additional Documentation**

1 x	Offer drawing
	An offer-drawing of the vehicle with main dimensions, 1-fold, on data carrier in English must be added to the documentation.

# **Performance, Weights and Dimensions**

1x	Performance, weights and dimensions TRUCK 6x6 Performance
	Acceleration from 0-80 km/h: within 32 sec. at approx. 36,000 kg operation weight
	up to an altitude of 800 m above sea level
	Top speed: approx. 115 km/h
	Gradient: 50 %
	Turning diameter: wall to wall 31.5 m with drum brakes wall to wall 28.1 m with disc brakes
1x	Weights
	Permissible axle weight ratio front/1st rear/2nd rear axle: 12,330 kg / 12,330 kg / 12,330 kg Total permissible GVW: 37,000 kg
	Anticipated Actual Operation Weight: The anticipated operation weight must be shown in the
	axle weight distribution diagram.
1x	Dimensions
	Overall Length: without bumper turret and without rear access ladder: approx. 11,230 mm If specified: with bumper turret RM15: approx. 11,520 mm with bumper turret RM35: approx. 11,770 mm for rear access ladder: + approx. 230 mm
	Overall Width: without rear mirrors: approx. 3,000 mm with rear mirrors: approx. 3,400 mm Overall Height:
	If specified: with roof turret RM80: approx. 3,650 mm
	with HRET: approx. 3,650 mm Angle of approach/departure: 30° / 30°
	Inter axle clearance angle: 12°
	Underbody clearance: min. 490 mm
	Under axle clearance: approx. 380 mm
	Fording ability: 400 mm
1x	Tilt angle 30°

### **CHASSIS** and **CAB**

### **CHASSIS**

CHAS	CHASSIS - GENERAL	
1 x	Chassis frame - jet black	
	The chassis frame and the outside step frames are painted in RAL 9005 jet black (two-pot painting).	
1 x	Chassis Model - 6x6	
	Wheel base: 4,800 mm + 1,600 mm	

A high performance chassis, well-suited for the special demands of ARFF operations. Extraordinary performance at high speed and outstanding driving stability on a paved road as well as off-the-road. Easy accessibility to all major and minor service points, a dedicated chassis module electric cabinet as well as usage of commercially available components and parts enable maintenance with little effort and therefore ensure lowest life cycle costs. 1 x Axles System - All-wheel-drive Front Axle: The front axle is of the front driving/steer type with suitable reduction gearing via planetary gears at the hubs (double reduction). A driver operated differential lock must be provided. 1st / 2nd Rear Axle: Double reduction with suitable reduction gearing via planetary gears at the hubs. Driver operated differential locks and an inter-axle lock on the first rear axle must be provided. 1 x Suspension The vehicle must comprise of a high-performance coil spring system. A variable rate coil spring in combination with a 4-link V-rod / trailing rod system over bar axle provides superior off-road capabilities. Front and Rear Suspension: Type: High mobility off-road / paved road suspension Design: Variable rate coil spring suspension with shock absorbers and stabilizer bar 1X Frame A box section welded ladder frame construction with a box section rail and tubular cross members offers an exceptional distortion stiffness. 1X **Towing Connections** In the front two (2) supports for screw in towing eyes, in the rear two (2) supports for shackles in the frame rails must be provided. Breakdown coupling without braking connections 2 x Shackle in the rear Two (2) shackles for rear mounting must be delivered with the vehicle. 1 x Chassis tool set A tool set, consisting of: one (1) hammer, 16 oz. one (1) crescent wrench, 10" one (1) crescent wrench, 12" one (1) screwdriver, 6", flat blade one (1) screwdriver, 8", flat blade one (1) screwdriver, 12", flat blade one (1) screwdriver TORX #15 one (1) screwdriver TORX #20 one (1) screwdriver Phillips, head 6" one (1) screwdriver Phillips, head 8" one (1) slip joint pliers, 8" one (1) vise-grip wrench with wire cutter one (1) grease gun 6000 psi one (1) tool box, 15", plastic material one (1) lug nut wrench one (1) hydraulic bottle jack, 12 tons must be delivered with the chassis.

#### **ENGINE**

Engine braking system
The engine brake is activated by pressing the brake pedal. The system can be deactivated by
pressing an ON/OFF switch located on the dashboard.
Engine Model
High performance diesel engine with electronically controlled fuel injection system, Euro V emission ratio certified.
No. of cylinders: 6, in line
Aspiration: turbocharger, charge air cooling, 4-cycle
Engine output: 700 HP (515 kW) at 1,800 rpm
Maximum torque: 3,150 Nm at 1,200 rpm
Displacement: 16.1 liters
Exhaust system: Stainless steel pipe and muffler with integrated diesel catalytic converter and
vertical exhaust tip with rain flap.
Engine and gearbox pre-heater
Heating elements with power supply by a quick disconnect plug/socket ensure full engine power
performance immediately after start-up.

Engine: AC 230 V / 1,500 W heater
Transmission: 230 V / 300 W heater
Engine cooling system
The water-cooling system is designed for ambient temperatures from -25°C to +50°C.  Construction: heavy duty type cooler, transmission oil cooler included in water cooling cycle; remote mounted semi-transparent reservoir tank for easy filling access; reservoir is visible from an access door at the top of the vehicle.  Air flow: Thermostatically controlled pusher fan is providing fresh air to radiator.

# **Transmission**

1 x	Twin Disc Gearbox
	Fully automatic 6-speed gearbox with TDEC 500 control system, integral transfer case and
	separate torque converter.
	Make/Model: Twin Disc TD61-1179
	Location: Mid-mounted on the chassis, lowered between the frame rails guaranteeing excellent
	ground clearance and a low center of gravity of the chassis. Torque converter:
	Make/Model: Twin Disc 8MLW-1758-1
	Lock up clutch with torsion damper, effective in all ranges.

### **Fuel Tank**

1 x	300 litres fuel tank
	The ECE-certified, with filter element and pump equipped fuel tank is mounted on the right side of the chassis in front of the first rear axle, maintaining an optimal weight distribution. Capacity: 300 litres (nominal)  Material: Polyethylene (PE)
1 x	Ad-Blue tank
	On the right side of the chassis in the rear compartment the Ad-Blue tank for operation of the Euro 5 engine is located. Capacity: 40 litres (nominal) Material: Polyethylene (PE)

### **Brakes**

1 x	Drum brakes
	Front Brakes:
	Type: duplex wedge type drum brakes
	Dimension: 410 mm x 180 mm with type 18 chambers Rear Brakes:
	Type: simplex wedge type drum brakes
	Dimension: 410 mm x 180 mm with type 20/24 chambers Parking Brake:
	Type: spring apply, pneumatic activated release; acting on rear axle(s); two chambers per axle; parking brake warning light indicator on cab dashboard CA146-CB07
1 x	Braking system EBS

Dual circuit brake system (complies with ECE-R 13) type EBS; brakes directly mounted onto hub and wheel; vehicle can still be stopped safely also in case of a drive shaft failure. With the integration of the EBS type brake system, the deceleration requirement of the driver is forwarded electronically by the system to all brake components. This leads to shorter reaction times of the components as well as more equal wear of brake pad and discs (load depending on brake force distribution). Following functions must be included in the system:

- ELB (Automatic load depending on brake force distribution)
- ABS (Anti Blocking System)
- ABS Offroad Mode (changed reaction times of ABS for optimized brake performance offroad) air tanks with drain valves; air compressor discharge line made of stainless steel/Teflon; reservoir capacity approximately 150 liters; air dryer with heated element.

#### Actuations:

Service brake: hinged treadle foot valve Parking brake: dash mounted lever valve

Service brake performance: exceeding NFPA/ICAO requirements

32 km/h - 0 in less than 12 m 64 km/h - 0 in less than 49 m

Holding capacity of service brake: min. 50% slope Holding capacity of parking brake: min. 20% slope

Pneumatically operated firefighting functions are supplied from a separately dedicated, pressure

protected accessory reservoir.

### Wheels (rims and tires)

#### 1 x Tires 16.00 R 20

On all axles Single wheels for optimal off-road performance are mounted; tires with high mobility non-directional tread; all wheels are interchangeable (without restrictions)

Rim type: steel, 10.00 - 20 two-part design, bolted

Tire type: 16.00 R 20 XZL

#### 1 x | Spare wheel

One (1) spare wheel 16.00 R 20 XZL will be delivered loose.

### **Steering System**

#### 1 x | Steering system

A ram-assisted power steering system in ECE-compliant design is installed. An additional back-up pump, to supply hydraulic pressure in the event of a failure of engine driven pump, is driven directly by the transfer case.

### Electrical system of chassis/vehicle

#### 1 x Electrical system 24 V Electrical

harness:

The electrical wiring is circuit/function numbered for easy identification and the wiring terminals are crimped properly. Wiring harness is neatly routed with proper radius. Looms or conduits are used where necessary. The chassis wiring is installed on the chassis frame rail and is clamped to minimize wear.

Batteries:

Two (2) x 12 V / 190 Ah, maintenance free batteries, are mounted in a battery case on the left rear side of the vehicle. A battery disconnector/isolator switch to fully disconnect the vehicle's battery supply is mounted in the rear of the vehicle.

1 x Alternator 24V / 150A

#### **CAB GENERAL**

1 x	Right-off-centre steering system
	Position of steering: right-off-center
	Steering column: tilt-telescoping type, pneumatically locked
	Steering wheel: four-spoke type with diameter 457 mm
	Steering column stalk with following functions: light, horn button, indicator and windshield wiper
1 x	Cab Specification
	The cab must be a Panorama Safety Cab should be certified according to the latest legal regulations ECE R29-3 and must be tested in a real crash test to ensure inevitable stiffness. High-strength, two–door cab must be made from aluminium profiles in combination with (shaped) aluminium sandwich panels. A-pillar and roof pillars must be made from aluminium extrusion profiles guarantee the structural rigidity of the cab.  A panorama-view windscreen in combination with full glass side walls as well as the compact dashboard provide an excellent range of vision also from the rear crew seats. The roof window must offer a perfect view to the roof turret. The windscreen must be made of laminated safety glass, side and roof windows are made of tempered safety glass.  The grand scale entrance with a low positioned outside step, integrated steps and wide opening doors allow for a safe access and offer more space for equipment in the cab and in the additional compartment integrated in the step. Access to the roof turret through a roof hatch must be possible by using the rear wall mounted steps. Gas springs must support the opening of the hatch and keep it in safe position even in windy conditions.  Hydraulically damped cab bearing elements must guarantee a maximum comfort also on worse road conditions.
1 x	Exterior Cab Equipment
	A heavy-duty steel bumper must be covered with elements made of glassfibre-reinforced material (GRP) to protect the lower cab section. For service needs these elements may easily be tilted down.
	<ul> <li>Two (2) daytime running lights according to ECE regulations with integrated indication- and positioning lights</li> </ul>
	Two (2) pairs of high intensity headlights (high beam and low beam) as well as
	One (1) pair of fog lights integrated in the bumper
	Rear mirror system (compliant to ECE R46) consisting of a main, wide angle and front mirror, heated; main mirror electrically adjustable
	Three (3) windscreen wipers with jet washers, wipers appropriate for low temperature application
	21 litres reservoir located in the bumper, easily accessible.

1 x	Interior Cab Equipment
	The ergonomically designed instrument panel must be equipped with all necessary controls, instruments and warning lights, clustered in driving instruments (left and right of the steering wheel) and controls/switches for the firefighting system on the center console.  All switches, displays and turret controls are equipped with background and function lights. Controls are arranged in a way to enable a single man operation of the vehicle.  The center console can be tilted up to open an access path between driver's and co-driver's seat.  Interior must be inclusive of:
	uniform colour-coded grab handles
	<ul> <li>floor mats must be out of PU/PE, non-slip, sound and cold insulating, removable for easy cleaning</li> </ul>
	two (2) grab handles for passenger entry assistance
	four (4) grab handles on the roof liner
	• two (2) sun visors
	three (3) dome lights, two colours (selectable)
	<ul> <li>combined heater and air condition, control on the instrument panel</li> </ul>
	two (2) coat hooks on the c-pillar left/right

### Seats

Total	1 driver and 4 crew members
1 x	<b>Driver's seat</b> Air-suspended, fixable and vinyl covered seat with multiple adjustments (horizontal, vertical, tilt, backrest, headrest) and 3-point safety belt.
1 x	Co-driver seat Vinyl covered turret operator's seat with 3-point safety belt and integrated bracket suitable for SCBA.
1 x	Seat left side at the rear A vinyl covered, flip-up type, crew member's seat, complete with 3-point safety belt and integrated bracket suitable for SCBA, is mounted on the left side of the cabin.
1 x	Seat on rear bench A further crew member's seat, complete with 3-point safety belt and SCBA brackets, is mounted left in the rear.
1 x	Seat on rear bench A further crew member's seat, complete with 3-point safety belt and SCBA brackets, is mounted right in the rear.

# **Brackets for breathing apparatus**

	2 x	Back upholstery for seats with SCBA brackets
Γ	1 x	Type of SCBA bracket
		Type of SCBA bracket: for 1 single cylinder, made of steel, diameter 140 mm, 6 litres

### **Doors**

2 x	Hinged doors
	Large safety doors must be provided, on the left and on the right side of the vehicle. The doors are equipped with huge glass elements to ensure a perfect view. To provide a maximum safety for the crew members, also with SCBA's, the doors can be opened up to 90° and the antiskid steps into the cabin are placed at an ergonomic height. The doors are equipped with manually operated sliding type windows.
1 x	Ramp mirror, right side
1 x	Ramp mirror, left side

# Electrical appliances in cab

1 x	Windscreen electrically heated
1 x	Combined air conditioning / heating system, manually operated  The combined heating/air-conditioning system is divided into two (2) modules, which allows optimal air conditioning/heating of the cabin. One module is positioned at the left backside of the cab roof and one module is positioned in the area of the cab floor. By manually operating of the heating/air conditioning system, the temperature can be effectively adjusted to the individual needs. The cooling performance of the modules is 2x 9,5 kW
1 x	Map reading lamp on cab's dashboard right side
1 x	Socket 12 V in cabin One (1) socket 12 V (without cigarette lighter) is installed in the dashboard area.
2 x	Mounting of portable searchlight incl. charger, left side
2 x	Mounting of portable searchlight incl. charger, right side
1 x	Interior lighting of cab Colour of dome lights can be changed over from white to red. The dome lights can be switched off permanently / switched in automatic mode / permanently switched on by means of a switch in the cabin. When set to automatic mode, the dome lights are switched depending on opening / closing the doors

# **Additional options**

1 x	Additional cover for wash water filling
	In order to protect the screw cap of the wash water filling reservoir from dirt an additional cover
	must be provided.

# Control panel for driving operation

1 x	Driver display
	All information necessary for driving operations is shown on a driver display in the driver's
	perfect field of vision.
	Information:
	- Speedometer (electronic)
	- Tachometer (electronic)
	- Transmission mode (N / active gear / R)
	- Odometer
	- Transmission oil temperature
	- Coolant temperature

Dual air pressure (indication and warning) Differential locks activated Fuel level Ad-blue level Voltmeter External temperature Clock (Local time and UTC) Indicator left/right Lights (low beam / high beam, fog lights, rear fog lights) Additional brake system deactivated Warnings: Engine oil pressure low Coolant temperature high Coolant level low Transmission oil temperature high Park brake engaged Fuel level low Exhaust system Engine check/stop ABS deactivated Brake pads worn out (only disc brakes) Quick release air pressure system activated Information must be classified in warnings (amber colour) and fault indications (red colour), a text message in the driver's display must be shown in addition to the symbol. Indicator of speed in km/h 1 x 1 x Indicator of pressure in bar Indicator of temperature in °C 1 x 1 x Indicator of volume in liters 1 x Display language English All information shown in the driver's or pump display will be in English language.

### Control panel for firefighting operation in cab

1 x	Control system RBC LCS
	The control of the superstructure and extinguishing system is performed via the RBC LCS Display 10" in a structured menu navigation. All necessary operating elements are designed as buttons in the respective menu. A status LED and the display indicate activated buttons. The following buttons must be located below the display:
	<ul> <li>Screen selection for message overview: all active indications, warnings and errors at a glance.</li> </ul>
	<ul> <li>Function button for warning lights:</li> <li>Activation/deactivation of all warning lights.</li> </ul>
	<ul> <li>Function button for acoustic warning device (for integrated system):         Activation/deactivation of the sequential horn (only available with active caution lights).     </li> </ul>
	<ul> <li>Screen selection for pump operation:         Opening/closing of the pressure outlets, display of the current position of the roof mounted turret. It is automatically switched to this image when the water pump is started in "Pump and Roll" mode.     </li> </ul>
	<ul> <li>Screen selection for foam operation:         Operation of the foam proportioning system with preselection of the foam function at the first button press.     </li> </ul>
	<ul> <li>Screen selection for water supply / manual pump operation:</li> <li>Operation of water supply as well as drainage, pressure governor.</li> </ul>

Function button scene lighting:     Activation/deactivation of the complete scene lights	
, , ,	
Screen selection Vehicle information (start/home screen):	
Vehicle status indicators such as open doors or hatches, water tank level,	
foam tank level, extinguishing system status, function button for switching off the	
front flashlights when the emergency warning lights are active Additional screen	
(cameras, operating hours, chassis status, service, settings) in the display conta	
detailed information on the individual systems. The pump pressure must be sho	√n
on all screens on the top operating level.	
The display automatically adapts to the ambient conditions by means of brightness of the display and adapts to the adiables at the second state of	
adjustment and colour switching. In the display settings menu, it is possible to s	/itcn
between the available display languages. In addition, the units can be changed	
directly in the display.  1 x	
Activation and deactivation of the fire pump (automatic mode) as well as engine speed	
adjustment is done via LCS-Digipot.	
Pressing the "Start"-button activates an automatic mode (Pump and Roll) with following	
functions:	
- Activation of PTO of torque converter	
- Increase engine speed	
- Open water tank suction valve	
- Engage priming pump (if specified)	
Engine speed is infinitely variable via turn switch.	
1 x Display with touch functionality	
All functions on the individual menus can be operated both via the hardware keys on the s	de
and via touch on the icons on the display	
1 x Flip switch for pressurizing dry chemical powder unit	
Activation of propellant for dry chemical powder unit via safety switch in cab	
1 x Gauge for dry chem vessel pressure	
The vessel pressure of the dry chem system is shown in the pump display by means of a	ar
graph in combination with the absolute value.	
1 x Gauge for dry chem cylinder pressure	
The cylinder pressure (expellant) of the dry chem system is shown in the pump display by	
means of a bar graph in combination with the absolute value.	

# **BODY**

# **Body - General**

1 x	Superstructure modules general
	Materials of the superstructure must be of a high loading capacity at optimized weight.
	Modules must be of aluminium, plastics (PP, ABS) and glassfibre reinforced plastic (GRP).
	The construction of superstructure and water/foam tanks as well as the arrangement of
	fastenings must be designed to guarantee best and safe on- and offroad performance.
	The vehicle production is performed to the highest standard.
1 x	Preparation for roof guard rails
	Mounting brackets for the installation of fixed or plug in type roof guard rails are provided

### **Lower Compartments**

1 x	Lower compartments
	On the left and right side in front of the (first) rear axle underneath the water/foam tank one (1) storage locker each is located. They are closed by means of roller shutters. Compartments are made of bolted, glued Aluminium panels. The storage lockers are well ventilated.  The lights installed are activated automatically on door opening.

# **Pump Compartments**

1 x	Pump compartment
	The pump compartment must be located between cab and water/foam tank and incorporates
	the fire pump, foam proportioning system and its manifolds (as well as the dry chemical powder unit, if specified).
	Pump and piping must be mounted to the pump compartment with flexible rubber joints in order
	to reduce vibration transfer and the resulting noise emission. The structure consists of glued and bolted self-supporting bent aluminium plates. Dust- and weatherproof aluminium roller shutters with lockable bar-lock system must be used. The dual-skinned design guarantees that the roller shutters can always be opened, even if a tool has come off its bracket, which
	normally would block the roller shutter. The profiles are embedded in a special type of polyester material, low on noise and moving smoothly.
	Additional space is provided on both sides to store firefighting and rescue equipment.
	The lighting must automatically activate when the roller shutter is opened.

# **Rear Compartments**

1 x	Rear compartment
	The engine-/rear compartment must consist of glued and bolted self-supporting bent aluminium
	plates. The compartment is flexibly mounted onto the chassis frame by means of rubber cone
	bearing and closed by a two-piece hatch, the lower part of the hatch also serves as a step. The
	outside covering of the compartment and door is made of plastic (ABS) and glass fibre
	reinforced polyester composite material (GRP).
	The design of the engine-/rear compartment must offer a good ventilation.
	Removable panels provide easy access to the engine for maintenance. The compartment
	offers sufficient space to store firefighting and rescue equipment.
	The lighting must automatically activate when the door is opened.
1 x	Rear-mounted access ladder
	One (1) access ladder in the rear of the vehicle for roof access. Hand grips are provided where
	necessary.

# **Brackets for Equipment in Body**

Set	Brackets for equipment acc. to ICAO Cat. 6
	Heavy duty brackets for mounting a set of firefighting and rescue equipment delivered with the
	fire truck are provided.

### **WATER/FOAM TANKS**

### **Water Tank**

1 x	Water tank, capacity 12,500 litres
	Capacity: values in litre usable content according to NFPA 414
	Material: polypropylene (PP)
	Baffle plates: longitudinal and transversal Manhole:
	450 mm inside diameter; covered with hinged, spring loaded quick opening lid (also acting as overpressure safety device)
	Overflow venting: consisting of overflow dome, drainage pipe incorporated in the tank and extension hose directed to the ground below the chassis frame
	Drainage: with drainage hose mounted and extended below the chassis frame onto the left side of the vehicle; ball type valve DN50, manually actuated, mounted onto the drainage hose. Tank sump: of sufficient size to minimize swirl
	Tank level sensor: type "Fludometer"
	The water tank is flexibly mounted onto the chassis frame by means of rubber cone bearings.
1 x	Water tank drainage line
	The water tank is drained with a drain hose that is extended below under the chassis frame onto the left side under the lower/equipment compartment. The positioning of the manual ball valve DN50 is mounted onto hose directly

# Water tank filling connections, left side

1x	External tank filling line(s)
	One (1) external tank filling connection, consisting of:
	Non-return valve mounted on the tank flange
	One (1) filling line DN100 divided into two (2) filling connections DN65 with butterfly type valve
	manually actuated, strainer and fix and blind coupling CCA00-BS22
2 x	Coupling BSS 2 1/2" male incl. blind cap made of light alloy

# Water tank filling connections, right side

1 x	External tank filling line(s)
	One (1) external tank filling connection, consisting of:
	Non-return valve mounted on the tank flange
	One (1) filling line DN100 divided into two (2) filling connections DN65 with butterfly type valve
	manually actuated, strainer and fix and blind coupling CCA00-BS22
2 x	Coupling BSS 2 1/2" male incl. blind cap made of light alloy

### Foam Tank

1 x	Foam tank, capacity 1500 litres
	Capacity: values in litres usable content
	Location: integrated in water tank
	Material: polypropylene (PP)
	Baffle plates: transversely
	Manhole: 450 mm inside diameter; covered with a hinged, spring-loaded quick opening lid
	Overflow venting: consisting of overflow dome, drainage pipe incorporated in the tank and
	extension hose directed to the ground below the chassis frame
	Drainage: Standard "foam tank filling line".
	Tank level sensor: "Fludometer"

1 x	Filling and drainage line foam tank
	One (1) foam compound tank filling and drainage line DN40 with hose and manually operated ball type valve extended below the chassis frame onto the left side of the vehicle.
1 x	Coupling Storz 38 incl. blind cap made of brass

# FIRE FIGHTING SYSTEM

1 x	Fire extinguishing system in general
	The water/foam system has been developed, designed and manufactured to perfectly match the pump and foam proportioning performance to achieve the output requirements specified herein.
	Static and dynamic pressure tests will be done accordingly in the testing department prior to delivery.
	This vehicle concept provides fully independent pump-and-roll operation and stationary operation mode.

# **Water Pump**

1 x	Truck-mounted fire pump in light alloy
	The single stage centrifugal fire pump must meet and exceeds the requirements of NFPA Material: Pump housing, impellers and diffusers are made of aluminium light alloy, pump shaft made of high-grade stainless steel.  Rated capacity: 8,000 l/min at 10 bar tank suction operation  Maximum capacity: 9,000 l/min at 12 bar tank suction operation  The pump output must be capable of discharging the total requirement of specified roof turret,
	bumper turret or ground sweep nozzles, hand line nozzles and under truck nozzles discharging simultaneously at designed pressures. An overheating protection, guided below the vehicle, must be provided.
	An engine driven power divider with modulated clutch must be incorporated in the torque converter housing to achieve the specified discharge requirements while the vehicle is driven under operating conditions.
	A power take-off (PTO) mounted onto the power divider housing to drive the fire pump and perform the pump capacity specified under Item "Water Pump".  PTO rotation: opposite engine
	The power dividing system must be be engaged / disengaged by the buttons on the LCS Digipot mounted in the cab and the external pump operation panel at any time.
	In pump-and-roll mode, the PTO clutch must engage and vehicle's engine speed is raised to a pre-set revolution to achieve the specified pump output. The vehicle speed and tractive effort is controlled by the throttle pedal. It activates the converter input modulated clutch which is allowed to slip as necessary to control the vehicle speed from stand-by operation up to a driving speed depending on the transmission range selected and throttle pedal position. It will not affect the pre-set pump discharge volume and pressure while shifting from forward to reverse motion. Pump-and-roll speed acc. to NFPA 414: forward motion: 0 - 16.1 km/h reverse motion: 0 - 8.0 km/h
1 x	Piston priming pump KAP210P (profession) automatic with pneumatic priming control
	The function of the piston priming pump is as followed: Ball valve in suction line is opened pneumatically - controlled by a pressure switch - mounted in the pressure outlet of the centrifugal pump; when opening the ball valve in suction line, the Vbelt is stretched by a spring and priming procedure may start.
	As soon as the priming pump is delivering water and the pressure exceeds approx 1.5bar, the ball valve is automatically locked and the V-belt is released from tension by a pneumatic cylinder - priming procedure is completed. If required, the pressure switch can be overridden by a push- button on the control panel.

	The suction valve is closed in case of pump operation in idling speed, feeding or when working with lowest pressure.
1 x	Priming performance: 30% vacuum in 4 seconds: for a volume of 100 liters (26.4 gallons) 70% vacuum in 17 seconds: for a volume of 100 liters (26.4 gallons) The volume of the pump, pump module (piping) and suction hoses must be calculated to determine the priming performance.
1 x	Pressure governor
	An electronically working pressure control unit (pressure governor) maintains the pump pressure constant during stationary operation, independent of the required water volume. The engine speed must be adjusted fully automatically by the pressure governor according to the pressure setting.  The pressure governor must detect rapid flow rate changes and control the pump accordingly. This function relieves the operator who no longer needs to actively control the pump pressure in stationary operation.

### **Foam Proportioning System**

<ul> <li>0 to +30%: = 1%</li> <li>0 to +25%: &gt; 1% to 3%</li> <li>0 to +15%: &gt; 3% to 6%</li> <li>0 to +10%: &gt; 6%</li> <li>alculation of the proportioning rate (according NFPA 412):</li> </ul>	Allowed	deviation of the proportioning rate (PR):
<ul> <li>0 to +15%: &gt; 3% to 6%</li> <li>0 to +10%: &gt; 6%</li> <li>alculation of the proportioning rate (according NFPA 412):</li> </ul>	•	0 to +30%: = 1%
• 0 to +10%: > 6% alculation of the proportioning rate (according NFPA 412):	•	0 to +25%: > 1% to 3%
alculation of the proportioning rate (according NFPA 412):	•	0 to +15%: > 3% to 6%
	•	0 to +10%: > 6%
oportioning rate = 100 / (water + foam) * foam		
operationing rate reer (water ream)	'roportio	ning rate = 100 / (water + foam) * foam

#### **FIXMIX**

#### Around the pump foam system FIXMIX 2.0 A made out of light alloy, with 3 proportioning 1 x The proportioning rate must be electro-mechanically controlled, the adjustment of the foam compound flow rate works mechanically based on the current water flow rate in order to keep the proportioning rate constant within the specified constraints. The pre-adjusted proportioning rate can be changed at any time without interruption of the extinguishing operation. Three (3) proportioning rates can be selected (e.g. 1%, 3% and 6%). The system will be pre-calibrated and adjusted for foam compounds with a viscosity up to 60 cSt (higher viscose foam compounds on request) Material: housing made out of corrosion resistant light alloy, foam proportioning unit made out of brass, plastics and stainless steel Measuring range water: 100 l/min up to 500 l/min with an accuracy of 0 to +50% above 500 l/min up to the nominal output of the pump with an accuracy of 0 up to +30% (max. 1%point absolute) Foam compound flow: 5 up to 500 l/min (for a viscosity up to 60 cSt) Flushing system for FIXMIX 2.0 1 x An automatic foam flushing mode is incorporated to clean the foam system with fresh water after having closed the foam suction valves.

### **Pump System**

### **Pump connections**

1 x	Piping water lines galvanized steel and foam lines stainless steel
	All water piping and pump connections are made of corrosion-resistant, hot-dip galvanized
	steel or rigid rubber hoses or flexible rubber joints.
	All foam piping and pump connections are made of high-grade stainless steel or rigid rubber
	hoses or polyester material.
	Where necessary, pipes are connected with the pump compartment by means of flexible
	rubber joints.
	All remote controlled valves are equipped with a manually actuated emergency override
	system.

#### Water tank suction line

1 x	Water tank suction line
	One (1) water tank suction line DN200 with electro-pneumatically operated butterfly type valve

#### Foam tank suction line

1 x	Foam tank suction line
	One (1) foam tank suction line DN65 with electro-pneumatically operated butterfly type valve

### External water suction line, left side

1 x	External suction line, left side  One (1) lateral water suction line DN125 with fix and blind coupling and with a manually actuated butterfly type valve. Use of suction line requires a priming pump.
1 x	Coupling BSRT 5 1/2" male incl. blind cap made of light alloy

### External water suction line, right side

	1 x	External suction line, right side
ſ		One (1) lateral water suction line DN125 with fix and blind coupling and with a manually actuated
		butterfly type valve. Use of suction line requires a priming pump.
	1 x	Coupling BSRT 5 1/2" male incl. blind cap made of light alloy

### External foam suction line, left side

1 x	External foam suction line, left side
	One (1) lateral foam suction line DN50 with fix and blind coupling and with a manually actuated ball type valve. The external suction line is also used as flushing line.  External suction capacity depending on the coupling used (Storz C = 420 I, Storz 38 = 370 I).
1 x	Coupling Storz 38 incl. blind cap made of brass

### Supply lines

1 x	External foam suction hose  An external foam suction hose, length 3 m with coupling suitable for external foam suction line on side is stored in the vehicle.
1 x	Recirculation line (pump to water tank) One (1) water tank filling line via pump (churn line) DN50 with electro pneumatically operated ball type valve
1 x	Roof turret connection line One (1) roof turret supply line DN125 with electro-pneumatically operated butterfly type valve
1 x	Bumper turret connection line for RM15 One (1) bumper turret supply line DN65 with electro-pneumatically operated butterfly type valve
1 x	Connection line to under-truck nozzles  One (1) under-truck nozzle supply line DN50 with electro-pneumatically operated ball type valve.

### Normal pressure outlets, left side

2 x	Normal pressure discharge for hose reel or hose tray, left side  One (1) discharge line DN38 normal pressure on the left side of the vehicle, with ball type valve electro-pneumatically actuated, (for hose reel or hose tray, whatever specified)
1 x	One normal pressure discharge DN65 with manual operated butterfly type valve
1 x	One normal pressure discharge DN65 with pneumatically operated butterfly type valve
1 x	One pressure regulator for normal pressure discharge DN65

### Normal pressure outlets, right side

1 x	Normal pressure discharge for hose reel or hose tray, right side
	One (1) discharge line DN38 normal pressure on the right side of the vehicle, with ball type valve electro-pneumatically actuated (for hose reel or hose tray, whatever specified)
1 x	One normal pressure discharge DN65 with manual operated butterfly type valve
1 x	One normal pressure discharge DN65 with pneumatically operated butterfly type valve
1 x	One pressure regulator for normal pressure discharge DN65
4 x	Coupling BSS 2 1/2" female incl. blind cap made of light alloy

# **Pump Unit Control Panel**

1 x	Push-button for foam proportioning rate 1%
1 x	Push-button for foam proportioning rate 3%
1 x	Push-button for foam proportioning rate 6%
1 x	Push-button for water tank suction
1 x	Push-button for foam tank 1
1 x	Push-button for external foam suction
1 x	Push-button for water tank filling via pump (recirculation)

1 x	Push-button for pneumatic normal pressure discharge, pressure regulated, left side
1 x	Push-button for normal pressure discharge, pressure regulated, right side
1 x	Pump operation panel for pump module, left side
	An additional pump operation panel is located in the pump compartment.
	This consists of:
	<ul> <li>LCS Digipot (Start/Stop fire pump, engine speed adjustment)</li> </ul>
	<ul> <li>LCS Digiview (Display of informations like water-/foam tank level) as well as</li> </ul>
	additional buttons mentioned below
	water-activated pressure gauges
	Following actions can be activated in stationary mode:
	start the water pump
	open the tank suction valve
	start of the priming pump
	change of the pump speed
	activate foam system
	Discharges are normally manually operated. If pneumatic discharges are chosen, these can also be
	operated via the pump panel.
1 x	Mano-Vacuumeter and NP-Manometer left side
1 x	Push-button for priming
1 x	Push-button for drainage
1 x	Push-button for surround field illumination
1 x	Push-button for internal flushing

### **Quick Attack Water/Foam**

### Hose reel in lower compartment, left side

1 x	Hose reel in lower compartment, left side
	A quick-attack hose reel is mounted in the compartment underneath the tank for easy access. The
	flanged side walls and the drum are made of high-quality lightweight plastic material.
1 x	Normal pressure hose reel
	The hose reel included in the scope of delivery is designed for normal pressure
1 x	Hose reel on swiveling device mounted
	Hose reel mounted on a hinged swing out type frame with 45° and 90° locking position. An electric
	drive to rewind the hose is provided and incorporated in the hose drum in order to save space. The
	manual crank for emergency override is fixed adjacent to the hose reel.
1 x	Rubber hose pre-connected to hose reel
	A 40 m rigid rubber hose with 32 mm inside diameter is pre-connected to the hose reel.
1 x	Branch pipe RB 101 NFPA
	A Rosenbauer pistol grip type Select Flow Nozzle model RB 101 is connected to the hose. It is
	made of hard anodized light alloy, meets the NFPA 1964 requirement and can be adjusted to an
	output of 115, 230, 360 or 475 l/min.
_	Operating pressure: 7 bar
1 x	Foam barrel for RB 101
	A quick clamp-on foam tube for RB101 will be fixed in an easy accessible bracket adjacent to this
	nozzle.
1 x	Valve control for hose reel A button for the actuation of the electro-pneumatically operated valve
	is mounted adjacent to the hose reel.

#### Hose tray in pump compartment, left side

1 x Hose tray in pump compartment, left side

One (1) hose tray for holding hoses is mounted in the pump compartment.

1 x Fire hose C 52

One (1) collapsible fire hose (length 30m, coupling Storz C) is bedded in the hose tray to enable a fast deployment.

1 x Branch pipe RB 101 NFPA

A Rosenbauer pistol grip type Select Flow Nozzle model RB 101 is connected to the hose. It is made of hard anodized light alloy, meets the NFPA 1964 requirement and can be adjusted to an output of 115, 230, 360 or 475 I/min.

Operating pressure: 7 bar

1 x Foam barrel for RB 101

A quick clamp-on foam tube for RB101 will be fixed in an easy accessible bracket adjacent to this nozzle.

1 x | Control lever for automatic release of hose tray, left side

An automatic opening valve is mounted on one of the normal pressure discharge lines. The hose is connected to this outlet permanently.

#### Hose tray in pump compartment, right side

1 x Hose tray in pump compartment, right side

One (1) hose tray for holding hoses is mounted in the pump compartment.

1 x Fire hose C 52

One (1) collapsible fire hose (length 30m, coupling Storz C) is bedded in the hose tray to enable a fast deployment.

Branch pipe RB 101 NFPA

A Rosenbauer pistol grip type Select Flow Nozzle model RB 101 is connected to the hose. It is made of hard anodized light alloy, meets the NFPA 1964 requirement and can be adjusted to an output of 115, 230, 360 or 475 l/min.

Operating pressure: 7 bar

1 x Foam barrel for RB 101

A quick clamp-on foam tube for RB101 will be fixed in an easily accessible bracket adjacent to this nozzle.

1 x Control lever for automatic release of hose tray, right side

An automatic opening valve is mounted on one of the normal pressure discharge lines. The hose is connected to this outlet permanently.

### **Dry Chemical Powder Unit**

#### 1 x Dry chemical powder unit PLA 250

Design:

- one (1) dry powder container
- · corrosion-resistant
- unfilled

Working pressure: 12 to 13 bar, overpressure safety valve is preset at 14 bar Standards: The unit fulfils European standard. A test certificate from German Federal Technical Supervision Agency (TÜV) will be provided.

#### 1 x Dry powder BC foam compatible, 225 kg filling

Dry chemical powder unit will be fill with type BC foam compatible powder.

#### 1 x Discharge expelling agent

Expelling agent valve is opened electro-pneumatically

One (1) discharge electro-pneumatically actuated for hose reel / collapsible hose.

#### 1 x Operational controls, right side

Operating/actuating elements for the functions mentioned below are located on the right side.

- Pressure build-up for powder container
- Powder discharge
- · Powder flushing and pressure discharge
- · Pressure gauge for powder container
- Pressure gauge for nitrogen cylinder

#### 1 x Expelling gas system

one (1) nitrogen cylinder, capacity 25 litres, filled at a pressure of 200 bar; test pressure 300 bar; cylinder is painted according to manufacturer's standard; pressure build-up time for the container is approx.15 seconds

#### **Quick Attack Powder**

#### Powder hose reel in pump compartment, right side

#### 1 x Powder hose reel in pump compartment, right side

One (1) quick-attack hose reel for dry chemical powder is installed in the stated location of the vehicle for easy access. The flanged side walls and the drum are made of high-quality lightweight plastic material.

#### 1 x Powder hose reel, rigidly mounted

Hose reel is fix mounted on a coated steel frame. An electric drive to rewind the hose is provided and incorporated in the hose drum in order to save space. The manual crank for emergency override is fixed adjacent to the hose reel.

#### 1 x Dry powder pistol

One (1) trigger operated powder nozzle is pre-connected to the powder hose.

Output: 2,5 kg/sec

Throw range:approx. 8 m, no wind

#### 1 x Hose for dry chemical powder, non-collapsible, 1 x 30 m DN32

One (1) rigid, antistatic hose, with Storz-C (52 mm) light-alloy couplings, with anti twist lock Length and internal diameter of hose as stated.

### Turret(s)

#### Turret on cab roof

#### 1 x Roof turret, Model RM80C, aspirated

#### Configuration:

- Air-aspirated, with foam barrel and deflector Two (2) LED spotlights are integrated.
- Two (2) LED flashlights showing that the turret is in active mode according to EN1846-3.
- A turret pressure manometer is mounted directly on the turret. Throw ranges are depending on temperature of foam and ambient air. Maximum throw ranges at 100 % discharge rate: Full jet water: far point 100 m, no wind
- Full jet foam (AFFF): far point 90 m, no wind
- Dispersed pattern / fog stream: far point 25 m and width 12 m, no wind

Expansion rate: using AFFF air-aspirated according to NFPA 412 Test method or equal to 5:1 25 % drainage time: using AFFF air-aspirated according to NFPA 412 Test method B or equal to 2.25 min

Figures above relate to tests made with Sthamex and Fomtec, each AFFF 3 % foam compound according to NFPA. They vary when using different brands or products produced under license.

Rotation: 270°

Elevation:0 - 70°

Depression:0 - 15° (depending on cab contour)

A roof hatch and a platform is provided inside the cab to be able to reach hand wheels mounted directly on the turret for manual emergency control.

#### 1 x Nozzle setting water/foam

Discharge rates:

- Full discharge: 9,000 l/min at 10 bar (water operation)
- Reduced discharge rating: 4,500 l/min

#### 1 x Pistol grip for roof turret

The pistol grip is mounted on the centre console within a comfortable reach of driver and codriver.

All necessary switches for turret operation are mounted directly on the pistol grip or nearby. Buttons are backlit to guarantee an easy identification also during night operation.

The turret is equipped with an electronic control device in order to synchronize the pistol grip movement with the turret movement. The light-guide function of the pistol grip indicates the position of the turret.

The following functions must be pre-programmed:

- Automatic attack mode: The turret automatically moves to the same attack direction as the pistol grip is positioned.
- Automatic storage mode: The turret moves to transport position and is locked automatically.
- Contour following function: The contour of the vehicle's roof can be programmed in a simple teach-in mode. This allows the turret to avoid contact with any obstacles mounted on the roof, such as rotating beacons or speakers.

#### **Turret on bumper**

### **Bumper turret, Model RM15C** 1 x Configuration: non-air-aspirated, without foam barrel One (1) LED light is integrated in the bumper turret. Actuation: electrically remote controlled from inside the cab by means of a joystick and manually operated by means of hand wheels. Throw ranges are depending on temperature of foam and ambient air. Maximum throw ranges: Full jet foam (AFFF): far point 60 m, no wind Full jet water: far point 65 m, no wind Dispersed pattern / fog stream: far point 15 m and width 9 m, no wind Expansion rate: using AFFF non-air aspirated according to NFPA 412 Test method B or equal to 3:1 \*) 25 % drainage time: using AFFF non-air aspirated according to NFPA 412 Test method B or equal to 0.75 min \*) \*) Figures above relate to tests made with Sthamex and Fomtec, each AFFF 3 % foam compound according to NFPA. They vary when using different brands or products produced under licence. Rotation: 180° (depending on cab contour) Elevation: 0-80° Depression: 0-40° Nozzle setting water / foam Full discharge rate: 2,000 l/min at 10 bar, 530 gal/min at 145 psi Joystick for bumper turret Model RM15C One (1) joystick is mounted on the centre console within a comfortable reach of driver and codriver. All necessary switches for turret operation are mounted directly on the joystick or nearby. Buttons are backlit to quarantee an easy identification also during night operation. The control of the turret is speed proportional, larger movements of the joystick result in higher speed of turret movement. The following functions can be pre-programmed: Automatic attack mode: The turret automatically moves to the same attack direction as the pistol grip is positioned. Automatic storage mode: The turret moves to transport position and is locked automatically. Contour following function: The contour of the vehicle can be programmed in a simple teach-in mode. This allows the turret to avoid contact with any obstacles on the vehicle's front, such as mirrors for example.

#### **Self-Protection Nozzles**

#### 1 x Ground sweep + under-truck nozzles

Ground sweep nozzles:

- three (3) in front of front axle,
- discharge rate per nozzle: approx. 100 l/min at 10 bar Under-truck nozzles:
- one (1) behind front axle
- one (1) in front of 1st rear axle
- one (1) between 1st and 2nd rear axle discharge rate per nozzle approx. 50 l/min

Pattern: dispersed

Control: One (1) button on the LCS 2.0 control display inside the cab to actuate all nozzles at the same time. The valves are operated electro-pneumatically.

# **ELECTRICS, PNEUMATICS**

# Lighting

1 x	Traffic lighting acc. to European standard Traffic lights are
	compliant to ECE regulations.
l l	Front headlights, halogen
	Four (4) front headlights (halogen) consisting of two (2) low beam lights and two (2) high beam lights
1 x	Fog light, halogen
	Two (2) fog lights are mounted in the lower section of the front bumper.
1 x	Scene lights, LED
	Five (5) high intense LED scene lights on the right and five (5) on the left side of the vehicle,
	mounted in the upper part of the superstructure
1 x	Scene lights, LED, 2 pcs rear mounted
1 x	Roof illumination LED
	Two (2) LED lights installed on the roof to illuminate the body roof.

# **Warning Device**

### Warning lights

1 x	Visual warning lights Visual warning lights in red colour
1 x	Flashlights cab roof Two (2) LED flashlights located on top of the cab, integrated in roof cover.
1 x	Flashlights rear compartment Two (2) LED flashlights integrated in the top corners of the rear compartment.
1 x	Airfield obstruction lights on cab roof  One (1) LED amber flashing beacon on the cab's roof including quick connection support and power supply will be installed.
1 x	Airfield obstruction lights on rear compartment  One (1) LED amber flashing beacon on the rear compartment including quick connection support and power supply will be installed.

# Acoustic warning

1 x	Reverse buzzer
1 x	Acoustic warning device, Model PA 300
	One (1) acoustic warning device with public address system including hand microphone and external loudspeaker.
	Electric sirens provide different types acc. to country specific requirements, i.e. wail / yelp / hi-lo.

#### Communication

2 x Preparation for radio installation, 1 set

Preparation for installation of one (1) radio set (mounting of voltage converter and cable for antennas, radio device is not included).

### Camera(s)

1 x | Reversing camera

By selecting the reverse gear, the pump display will automatically change to the view of the reversing camera.

### **External Power Supplies**

1 x External power supply, CEE plug

One (1) socket for external power supply type CEE 230 V / 50 Hz, mating plug will be supplied loose with the vehicle

1 x External power supply at rear compartment, left side

#### **Electrical Installations**

1 x Battery charger

One (1) battery charger 230 V / 50 Hz is installed

1 x Socket 24 V in lower compartment, left side

One (1) socket 24V, with supply from the vehicle's power system, installed in the underbody compartment

1 x Socket 24 V in lower compartment, right side

One (1) socket 24V, with supply from the vehicle's power system, installed in the underbody compartment

### **Compressed Air Supply and Connections**

1 x External compressed air supply, on rear compartment

### **EQUIPMENT ICAO REQUIREMENTS**

#### QTY x 1 FORCIBLE ENTRY AND RESCUE TOOL PRY-AXE WITH METAL CUTTING CLAW

It's a lightweight, multi-purpose, slam and ram tool designed to pry, twist, chop, cut metal, twist off locks or latches and much more. This efficient tool allows forcible entry by a single person when time is critical. Pry Axe head and claw assemblies are separate sections forged from high alloy steel and heat treated for maximum strength. Solid steel shaft extends the axe to 710 mm (28") and rubber sleeve provides a sure grip. Weight

3.6 kg (8 lbs.)



#### QTY x 1 CROWBAR 1000MM LONG



QTY x 1 CROWBAR 1800MM LONG



QTY x 1 CRASH OR FIRE AXE (PICKHEAD) WITH FIBREGLASS HANDLE, INSULATED

Length: 910 mm. Weight: 2.75 kg.



#### QTY x 2 AXE SERRATED - INSULATED FOR 20,000 V

Serrated cutting edge, made to US Air Force specifications. Length 38 cm. The handle is insulated up to 20,000 Volt. Weight: 1.36 kg.



#### QTY x 2 BOLT CUTTER 620 MM LONG

Cuts wire, bolts, rivets, bars and nails with a hardness of max. 150 kg/mm<sup>2</sup>, up to 10 mm diameter. Insulated rubber grips. Weight: 3.5 kg. Head and scissor blades made of special steel.



#### QTY x 2 CLUBHAMMER 2000 G WITH FIBER HANDLE 9001

# QTY x 2 FLAT CHISEL 250MM LONG, 28MM BLADE WIDTH, WITH HAND PROTECTOR

#### QTY x 1 WEBER BATTERY SPREADER SP 44 AS E-FORCE 3 WITHOUT BATTERY

Technical specifications: Spreading width: 610 mm

Spreading force (in the working area): 44 - 857 kN

Max. crushing force: 149,0 kN

Pulling width: 465 mm Max. pulling force: 68,0 kN Weight (incl. battery): 17,3 kg

Dimensions (LxWxH): 877 x 239 x 241 mm

Nominal pressure: 700 bar

EN classification (EN 13204)\*: AS44/610-17,3



#### QTY x 1 WEBER BATTERY CUTTER RSU 180 PLUS E-FORCE 3 WITHOUT BATTERY

Technical data:

Opening width: 185 mm Weight (incl. battery): 20,6 kg

Dimensions (LxWxH): 898 x 236 x 241 mm

Nominal pressure: 700 bar

EN classification (EN 13204)\*: BC185J-20,6 EN cutting class (EN 13204)\*: 1J-2K-3K-4K-5K NFPA cutting class (NFPA 1936): A8-B9-C7-D9-E9



#### QTY x 2 BATTERY 28 V/5 AH/126 WH, LI-ION FOR E-FORCE MILWAUKEE



#### QTY x 3 ON-VEHICLE-CHARGER 12/24 VOLT, FOR ONE BATTERY OF THE E-FORCE SERIE

#### ON-VEHICLE CHARGER for E-FORCE batteries

For Charging 28V batteries (M28BX, Li28V, Li-Ion 7INR)

Compatible with MILWAUKEE 28V batteries

Charging time: approx. 150 min for a 5,0 Ah battery

Input voltage: 12-24V

Charge current: 1,8A +/- 0,2A

Protection class: IP 20

Operating temperature: +5°C to 40°C

Delivered with 1,5 meter cable and plug dimensions: approx. 200x130x110 mm

weight: approx. 1 kg

#### QTY x 1 MULTI-PURPOSE SAW "STIHL TS 800"

Complete with synthetic resin cutting-wheel 400 mm diameter.

Power output: 5.0 kW / 6.8 HP Displacement: 98.5 cm<sup>3</sup> Total length: 89.0 cm

Weight: 13.0 kg (power head without cutting assembly)



#### QTY x 1 ACCU RECIPRO SAW MILWAUKEE 28 V TYPE HD 28 SX 5.0 AH SET

Milwaukee®'s high performance motor delivers maximum power whilst (optimising) maximising the power to weight ratio

Individual battery cell monitoring optimises tool run time and ensures long term pack durability Fuel gauge displays remaining charge

REDLITHIUM-ION™ battery pack provides superior pack construction, electronics and fade-free performance to deliver more run time and more work over pack life

REDLINK™ overload protection electronics in tool and battery pack deliver best in class system durability Milwaukee® patented FIXTEC clamp for fast and easy keyless blade change

Gear protection clutch - protects the gearbox in case of blade lock ups

Counter balance mechanism to reduce vibrations

28.6 mm stroke length, 3000 spm for extremely fast cutting

Tool free, adjustable shoe quickly adjusts blade depth

Convenient two-speed selection for best cut control in different materials

Soft grip gripping surfaces for maximum comfort and control

Technical Data:

Battery Voltage 28V/5Ah

Stroke rate under no load 1st gear 0-2000 min-1 Stroke rate under no load 2nd gear 0-3000 min-1 Lengths of stroke 28,6 mm

Weight with battery 4,1 kg Set consisting of:

Set consisting of:

2 x 28V/5.0 AH Red Li-Ion batteries

Battery charger M28 C 2 x saw blades carrying case



# QTY x $\,16\,$ DELIVERY HOSE PROFESSIONAL 65 MM $\,30\,$ M $\,$ BS $\,2\,$ 1/2", LIGHT ALLOY, $\,16\,$ KG, WITH BINDING PADS

Premium inside and outside-rubberised delivery hose in a class of its own.

Fabric ply: High-strength polyester/polyamide yarn, endless-woven and completely embedded in the rubber. Inside and outside rubberisation: Top-grade nitrile rubber, pressed through the fabric ply during extrusion; ribbed on the outside so as to give excellent abrasion-resistance and protection against contact heat.

Characteristics: Very sturdy and durable hose; resistant to oil, petrol (gasoline) and chemicals; heat and weather proof; no cleaning and drying needed.

Temperature range: -20°C up to +100°C. Up to size 75 mm: Testing pressure: 25 bar; Bursting pressure: 50 bar.

Certifications: DIN 14811:2007; British Standard BS 6391/Type 3 and other national standards for delivery hose.

Length: 30 m Colour: red Weight: 16 kg



#### QTY x 2 FOAM-MAKING BRANCHPIPE, ADJUSTABLE S4 - M4 WITH BS COUPLINGS 2 1/2"

Like medium foam making branch pipes but with adjustable from medium foam to heavy foam. Tube made of stainless steel. Weight: 7.8 kg.



#### QTY x 4 SELECT-FLOW NOZZLE "RB 101 NFPA"CPL. BS 2 1/2"MALE 115-230-360-475 L/MIN

- High performance, maximum protection
- Durable, light-weight construction
- Ergonomic design

#### Features:

- 1) Spinning teeth made of stainless steel: for superb fog pattern when using "water curtain"-setting.
- 2) Stream adjustment: within 100° rotation adjustment from straight stream to fog pattern.
- 3) Ergonomic pistol grip: for better handling and reduced fatigue.
- 4) Shock-resistant pattern adjustment bumper: with integrated pointer.
- 5) Rugged, ergonomic on/off handle: glass-fibre reinforced and additionally light alloy reinforcement on both sides.
- 6) High-quality materials: Body hard anodised light alloy, water carrying components corrosion-resistant materials (brass, aluminium and manmade materials).



QTY x 2 ADAPTER BS 336, 2 1/2" FEM. - 2 1/2" FEM. LIGHT ALLOY, 1,2 KG

QTY x 2 ADAPTER BS 336, 2 1/2" MALE - 2 1/2" MALE LIGHT ALLOY, 0,5 KG

#### QTY x 8 PROPAK WITH VISION 3 FULL FACE MASK AND ONE STEEL CYLINDER 6 L / 300 BAR

Certified as to EN 137:2006 class II. The Scott ProPak is an open circuit self contained compressed air breathing apparatus, positive pressure type.

- Proven tempest demand valve
- Trusted high performance pneumatics
- 100% Kevlar webbing
- · Easy adjust parachute style buckles
- · New rapid adjust cylinder band design
- · Easy upgrade path

The Propak consists of back plate, flame retardant harness and a pneumatic system consisting of cylinder connector, reducer, pressure gauge, whistle and demand valve.

#### **FURTHER CERTIFICATIONS**

- Lloyds Register of Shipping (SOLAS 1983)
- Austrian Standard AS1716
- MED certifications

Comes complete with Vision 3 full face mask and one 6 l/300 bar (45 min. nominal duration), made of steel, delivered empty. Weight: 14.6 kg



# QTY x 8 COMPRESSED-AIR CYLINDER 6 L/300 BAR MADE OF STEEL WITH VTI-VALVE EMPTY



#### QTY x 8 BREATHING FACE MASK VISION 3, POSITIVE PRESSURE

Certified as to EN 136. Features injection moulded liquid silicone outer mask, thermoplastic elastomer (TPE) inner mask and an impact and scratch resistant double curvature visor with double coating. Low profile, quick lock, bayonet demand valve connection, integral spectacle frame mounting and superior speech reproduction. Weight: 0.63 kg

#### QTY x 8 BREATHING MASK TR82

Modern auto-defog mask, certified as to EN 136:1998, class 2. Only suitable in areas where the contaminated air contains at least 17% of oxygen. Made of soft moulded natural rubber-EPDM mix, which improves comfort and facial seal. Comes with an inner mask with 2 check valves which prevent the visor from steaming up. Two exhalation valves. Features a 5 strap adjustable head harness. Exchangeable visor, made of impact resistant polycarbonate, offering a wide field of vision. High efficiency speech membrane allows for improved communication while wearing the face piece. Protects against a concentration of contamination up to 400 x TLV. Suitable for use with a screw-in type filter cartridge with knuckle thread as per EN 148-1, but comes without a filter cartridge, that is available at extra cost. Weight: 0.7 kg



#### QTY x 8 MULTIPURPOSE GAS/PARTICLE FILTER 203 A2B2E2K2P3

Screw-in type filter, suitable for face masks with knuckle thread as per EN 148-1.

It filters out all particles by means of filter papers and provides additional protection from organic and inorganic gases, Hydrogen Dioxide, Hydrogen Chloride and Ammonia by means of an activated charcoal filter. Typical for fire-fighters and to protect civil-defence forces.

Colour: white / brown / grey / yellow / green.

Weight: 0.37 kg



# QTY x 2 EXTENSION LADDER - 2 SECTIONS 8 M, LADDER LOCKS MADE OF METAL

Certified as to EN 1147 and Austian Standard ON F 4047. Aluminium heavy-duty extension ladder. Especially designed for fire fighting and rescue operations. Comes with special rope brake for more safety and special slides for easy pulling.

#### Comes with:

- 2 sections
- rope pull with rope brake
- setting up assistance with 2 spikers at the bottom for enhanced stability
- wall rubber castors
- automatic ladder locks
- slip resistant round rungs

The ladder may be used by two persons with a maximum weight up to 216 kg. Transportation dimensions: 4,73 x 0,47 x 0,14 m. Weight: 34 kg.



#### QTY x 1 MULTIPURPOSE LADDER

Certified as to EN 1147 and Austrian Standard ÖNORM F 4047. Combination step and sectional ladder. Numerous applications, especially suitable for outdoor use. Comes with patented fittings. Rubber safety shoes on bottom section. 3 parts. Light-alloy.

• Transport dimensions (L x W x H): 2650 mm x 418 mm x 164 mm

• Base width: 795 mm

· Weight: 16 kg

The ladder can be used as follows:

- 1. One-part pitching laddeer
- 2. Double ladder, without extending part
- 3. Double ladder, with extending part
- 4. Two-part pitching ladder
- 5. Three-part pitching ladder, extended lengtn: 5.38m



# QTY x 8 FIRE HELMET HEROS-SMART HIGH VISIBILITY YELLOW RAL 1026 WITH FACE SHIELD AND NECK PROTECTOR

- Tested and certified as to EN 443:2008, Type A/3b, E2E3C\*\*\*, CE 0158
- Outershell of the helmet is made of unique new glass fibre composite material for greater impact and penetration resistance, keeps the helmet stable even at extreme temperatures
- Helmet size easily adjustable from outside even when wearing gloves the required setting can be changed quickly depending on the operation
- Ergonomic, optimised 3-point chin and neck strap made of heat and flame resistant material
- New inner lining, made of washable material, heat and flame resistant provides maximum safety and excellent wearing comfort
- Comfortable padding inside for excellent wearing comfort during long lasting operations
- The helmet allows for installation of integrated communication systems and accepts all common types of SCBA facemasks.

Weight (incl. Face shield, without neck protector): approx. 1.35 kg



#### QTY x 8 CLEAR SAFETY GOGGLES HELICO

Certified as to EN 166.

One piece soft flexible PVC body with one piece tough impact resistant clear Polycarbonate lens.

Frame adapts to any face shape.

Adjustable flexible headband.

Indirect ventilation.

Comfortable to wear in connection with optical glasses.

Weight: 0.04 kg UV Protection

Class: 2-1.2 UG 1 BT N CE



#### QTY x 8 PROTECTIVE HOOD

This dark blue hood is certified as to EN 13911: 2017. The double layer hood is heat and fire resistant and made of 100 % NOMEX® III, approx. 245 g/m² material.

The hood has a fully hemmed face opening and bottom as well as sewn throughout with KEVLAR® and NOMEX® thread. It can be worn in combination with fire helmets and SCBA facemasks.

One size

Color: darkblueWeight: 0.1 kg



#### QTY x 2 FIRE BLANKET MADE OF ARAMIDE

Used for extinguishing small fires on persons or on objects. Two hand holding triangles for ease of handling and automatic gravity deployment. Dimensions: 160 x 200 cm. Comes complete with plastic carrying bag. Weight: 1.3 kg



# QTY x 2 RESCUE ROPE 1/2 ", 50 M COLOUR YELLOW

Certified as to EN 1891 A. Made of patented parallel braided "GRS Paraloc-rope".

- Humidity absorbtion : < 5 %.
- · Material: PA.
- · Length: 50 meter with 2 light alloy-karabiners packed in polybag
- Diameter 12 mm
- Breaking load 33 kN
- Knot strength 22 kN
- Sewn endconnection 27 kN.

- $\bullet$  Amount of falls, (factor 1) 80 kg / 176 lbs: > 15, stretch 50 / 150 kg / 330 lbs: < 2.5 %
- Colour: lemon (yellow) with black marking lines.



# QTY x 2 STORRAGE BAG FOR ROPE LENGTH 60 M MADE OF POLYPROPYLENE

Suitable for accomodation of rescue ropes and lines, with a maximum length of 60 m. Made of synthetic fibre. Comes with adjustable carrying belt. Bag can be closed with a string. With carrying handles. Dimensions: 520 x 360 mm. Weight: 0.2 kg



#### QTY x 2 RESCUE LINE 30M WITH BAG

Rescue lines, 30 m long. Made of high-quality polyester, 12 mm diameter. Breaking strength 1000 kgs. One end is fitted with light-alloy carabine hook. Comes complete with carrying bag.



#### QTY x 2 BREATHING APPARATUS PERSONNEL LINE WITH BAG

The line is 4 mm diameter, and 6 metres in length. It comes in two sections, with a clip which releases to extend it to full length. The first section is 1.25 metres and the second 4.75 metres. It is used for firemen to attach to each other, or to a guideline, or both.

Weight: 1 kg



#### QTY x 2 HAND HELD RADIO MOTOROLA DP2400 VHF/FM, 136-174MHZ



# QTY x 2 TRUCK CHARGING UNIT WTC 636 12/24 V FOR MOTOROLA DP 2400, XIR P6600

# QTY x 4 TORCH ADALIT L-3000 LED EXPLOSION PROOF ATEX II 1G EX IA IIC GA, II 1D EX IA IIIC T85 DA

Professional rechargeable torch, explosion proof.

- · High intensity LED's
- Rechargeable ultra light Li-ion battery
- Indication of the remaining time of light duration
- · Low level battery warning
- ATEX explosion proofed zone 0 (category G1 and D1) for all explosion areas
- Swivelling head at 3 positions for hands free or hands held as a conventional torch
- Made of thermoplastic resin of high resistance to shocks, extreme temperatures, liquids and corrosive substances
- Safety certification for use in potentially explosive atmospheres zones 1 and 2 **Technical data:**

5 h with 100 % Power, 10 h with Light duration: low power

Real hours/minutes by means of a Battery level indication: display

Flashes at the end of the

Low battery warning: discharge, 15 minutes before disconnection

Operating hours and charging

Real hours on charge 5h - 10 h status indication: Light sources: High power intensity LED's Luminous flux: 2 LED's with 300 Lumen

Battery: Li-Ion 3.7 V Measures (length x diameter 225 mm x 70 mm max): Weight: 0.5 kg

Continuoues operation temperature -20°C till +40°C according ATEXcertificate.

The battery is protected against deep discharge by electronic cut. The chargers are available for single or three torches 220/240 V (order no.: 306410/306411) and 12/24 V (order. no.: 306420/30642001/306421).



#### QTY x 4 CHARGER FOR 1 TORCH 12/24 V FOR ADALIT L-3000/ L-2000 LB ATEX

Weight: 0.3 kg

#### QTY x 2 PORTABLE LED LIGHTING SYSTEM RLS2000 RECHARGABLE 12/24 V, UP TO 1.8 M

#### RLS2000 - the smart and fleible LED lighting system

The LED portable worklight RLS2000 with its 3 lightheads is used wherever supplying the right light is difficult. With only 12.2 kg, it ensures a lighting duration of 3 hours at 100 % luminous flux (10 min at 150 % "power boost" luminous flux), entirely without an external energy supply. The Quick Lock (quick-release) extension poles built into the device allow the spotlight to be set up at different heights up to a maximum of 1.80 m. More details:

- Flexible turnable light heads allows movement in all directions
- High performance LEDs with specially designed lens system and multicolor LEDs
- 2 operating modes:

Work light: with spot beam or flood light stepless adjustable Flash light in 4 colours: changeable in red, green, amber and blue for different use, such as for road accidents, sign for operation chief, SCBA collecting place...

- Comes with charger 12/24 V, 2 m with plug for cigarette lighter
- Intelligent monitoring system prevents over- and discharge and protects own and vehicle battery
- 2 integral tripod stabiliser legs give a sturdy stable base for mast at full extension
- Technical data:
- 3 lightheads infinitely adjustable
- Color temperature: 6.500 K (similar daylight)
- Lamp type: 12 x High Power / Flux SMD LED's, power consumption 70 W
- Flash light with 4 colours: green, blue, red, and amber
- \*Powerboost for 10 min at 150 % light power
- Battery: 12 V 22 Ah SLA Gel
- Protection class: IP54 (light head RLS2000 only IP65)
- Dimensions: 430 x 215 x 255 mm
- Weight: 12.2 kg



#### QTY x 2 FLAT SHOVEL

Forged with round point. Beechwood handle 1600 mm long. Weight 1.9 kg



#### QTY x 1 FIRE-FIGHTER'S TOOLBOX

Certified as to DIN 14881. Light alloy box, with compartments.

#### Comes complete with the following tools:

- 4 Screwdrivers (2.5 mm, 4 mm, 6.5 mm and 8 mm)
- 3 Phillips-Screwdrivers (no.: 1, 2 and 3)
- 1 Cranked wrench key A1 x 5.5
- 1 Cranked wrench PH 1 x 2
- 9 Allen wrenches DIN 911 (SW1.5, SW2, SW2.5, SW3, SW4, SW5, SW6, SW8 and SW10)
- 8 Hexagon wrenches keys (Torx) (T10, T15, T20, T25, T27, T30, T40, T45)
- 17 Combination wrenches SW

#### 8/10/11/12/13/14/15/16/17/18/19/21/22/24/27/30 and 32

- 1 Adjustable end wrench 200 mm
- 1 Set of socket wrenches
- 1 Key for new buildings
- 1 Key for switch cabinets
- 1 Machinists hammer 500 g
- 1 Splint pin driver unit 4 mm
- Cutting plier 250 mm
- 1 Diagonal cutting plier 160 mm
- 1 Combination plier 160 mm VDE
- 1 Long nose plier with cutter 200 mm
- 1 Locking plier 250 mm
- 1 Groove joint plier 250 mm
- 1 Corner work pipe-wrench plier 1-1/2"
- 1 Metal saw bow
- 10 Saw blades 300 x 25 x 32
- 1 Pinch bar 400 mm
- 1 Flat chisel 200 mm
- 1 Cutter
- 1 Measuring stick
- 1 Pair of goggles Dimensions: 600 x 400 x 150 mm

Weight of the complete box: 23.5 kg



#### QTY x 2 FIRST AID SHOULDER BAG

Tough water resistant shoulder bag with five internal storage compartments, double zip closure, and adjustable shoulder strap.

First Aid Guidance Leaflet HypaGuard Foil Blanket HypaPlast Microporous Tape Burns Sachets HypaCover Eye Dressings Self Seal Waste Bags
HypaGuard Face Shields
HypaClens Eye Wash Pods (20ml)
HypaBand Triangular Bandages
HypaTouch Disposable Gloves (pair)
HypaClens Eye Wash Bottles (250ml)
Dressing Scissors
HypaBand Safety Pins
Clothing Cutters
HypaClean Sterile Wipes
Instant Cold Pack
HypaCover First Aid Dressings, 12x12cm
HypaCover First Aid Dressings, 18x18cm
HypaPlast Washproof Plasters
HypaPlast Fabric Plasters

#### QTY x 2 DEFIBRILLATOR MODEL LIFEPAK 1000

Basic life support (BLS) tool, fully customisable, cprMAX technology is high flexibility. Protection level IP55. Biphasic technology provides a full range of energy up to 360 jouls. With a large screen, graphics and text are clear and easy to read at a distance.

The LCD screen can provide both graphical and ECG displays. The advanced battery system in the LIFEPAK 1000 defibrillator provides more power for your patients. A visible and accessible battery gauge gives you the ability to assess battery readiness with the quick touch of a button. Weight: 3 kg.



#### QTY x 2 OXYGEN APPARATUS 2 LITRE ADJUSTABLE

High-speed oxygen delivery for immediate care and emergencies where oxygen therapy is required. Simple, constant flow type of oxygen administrator, providing approx. 100 minutes of oxygen supply from a fully charged cylinder. The unit consists of a 2 litre water capacity, charged to a pressure of 200 bar and containing a free compressed oxygen capacity of 400 litres. The integral cylinder valve and regulator is fitted with a pressure contents indicator. The complete apparatus is housed in a hard wearing orange nylon carrying bag (430 x 320 x 180 mm), complete with shoulder strap. Dangerous goods as per UN1072, class 2.2. Weight: 5 kg.



#### QTY x 1 WEBER SUPPORT SYSTEM STAB-FIX BASIC - SET

Various elements out of recycled PE for variable and secure stabilisation of objects.

- Maximum load capacity up to 110 kg/cm²
- Durable and shatterproof
- Oil- and chemical resistant Consisting of:
- 1 x Stab-Fix block 25 (230 x 230 x 25 mm)
- 1 x Stab-Fix block 50 (230 x 230 x 50 mm)
- 2 x Stab-Fix wedge 75 (215 x 75 x 80 mm)
- 2 x Stab-Fix chock (640 x 140 x 280 mm)
- 1 x carrying bag Weight: 19 kg



#### QTY x 2 TARPAULIN PE 4 X 4 M COLOUR BLUE

#### QTY x 1 THERMAL IMAGING CAMERA FLIR K2

**Robust and reliable**: The FLIR K2 is designed to meet tough operating conditions. It can withstand a drop from 2 m (6.5 ft.), is water resistant to

IP67 and is fully operational up to 55 °C (135 °F), operational up to +85 °C (+185 °F) for 15 minutes, +150 °C (+302 °F) for 10 minutes, and +260 °C (+500 °F) for 3 minutes. Image frequency: 9 Hz

**Innovative**: The FLIR K2 utilizes the patented technology MSX, where a thermal sensor is combined with a visual camera sensor to give detailed image information in many user situations.

**Easy-to-use**: Easily used in a gloved professional hand. An intuitive and simple user interface allows you to focus on the job. The FLIR K2 can be controlled by just one large button on top of the unit.

#### List of contents:

- Infrared camera
- Battery (2 ea.)
- Battery charger
- Lanyard strap
- Power supply
- Printed documentation
- USB cable



#### QTY x 1 TRUCK CHARGER FOR THERMAL IMAGING CAMERA FLIR K2

The in-truck charger is intended to be mounted on a flat surface in the cab, in one of the equipment lockers or in another suitable compartment on the fire engine.

The in-truck charger has two vertical ports for cable routing — one up and one down.

Power supply: 12/24V DC

