







MACCAM

VHF PRODUCTS

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04 Fire Extinguishing Robot



O1 FIRE EXTINGUISHING ROBOT

MODEL NO :

FIRE EXTINGUISHING ROBOT

VHF-FFR-01

PRODUCT INTRODUCTION

The fire fighting robot can replace the fire rescue personnel to enter the scene of toxic, oxygen deficient, thick smoke and other dangerous disasters to extinguish the fire, effectively solving the personal safety of fire fighters in the above places.

Application:

It is applicable to petrochemical industry, oil tank farm, large warehouse, buildings and other places with high temperature, strong thermal radiation, easy collapse, fire fighting vehicles and personnel can't be close to for fire fighting, cooling, cleaning and decontamination of chemical pollution sites, production and storage of dangerous chemicals enterprises, etc.



PRODUCT PARAMETERS

Overall size	1440*945*1410mm	Working time	ЗН
Self weight	660KG	Operation speed	0-1.5M/s
Suspension system	Christie suspension structure	Remote control distance	1200m-1400m
Maximum obstacle crossing	220mm	Rated torque	4.6kN
Maximum ability climbing	72.7% / 30°	Protection grade	IP67

PRODUCT FEATURES

- Fire water monitor: Flow 80 L/s , water/foam dual-use, range 85m
- Image acquisition: collect 4 channels of images around the robot and send them to the control center remotely;
- Information collection: concentration of flammable gas, temperature and humidity of fire site
- Audible and visual alarm: audible and visual alarm is given when the robot body is running
- Self protection function: water curtain cooling, anti overturning, anti collision



• Lighting: double LED strong light.

06 15M Lifting Fire Fighting Robot



O2 15M LIFTING FIRE FIGHTING ROBOT

MODEL NO :

15M LIFTING FIRE FIGHTING ROBOT

PRODUCT INTRODUCTION

The lifting firefighting robot can replace fire rescue personnel to enter the scene of flammable/ explosive/ toxic/ anoxic/ thick smoke and other dangerous disasters to extinguish the fire. effectively solving the personal safety faced by the fire fighters in the above places.

Application:

It is applicable to petrochemical industry, oil tank farm, large warehouse, buildings and other places with high temperature, strong thermal radiation, easy collapse, fire fighting vehicles and personnel can't be close to for fire fighting, cooling, cleaning and decontamination of chemical pollution sites, production and storage of dangerous chemicals enterprises, etc.

PRODUCT PARAMETERS

Overall size	7500*2000*2400mm	Working time	6 hr (Extinguishing time)
Self weight	7400KG	Operation speed	0-1.2M/s
Power mode	DC drive system+hydraulic drive	Remote control distance	Wireless 600m Wired 15m or more
Lifting arm extension time	155s	Lifting time	150s
Lifting arm Max turning Angle	355₀	Protection grade	IP67

PRODUCT FEATURES

- Fire water monitor: Flow 60 L/s, with a range of 70m
- Image acquisition: the images around the robot are collected and transmitted to the control center at any time
- Information collection: concentration of flammable gas, temperature and humidity of fire site
- Audible and visual alarm: audible and visual alarm is given when the
- robot body is running Self protection function: front and rear anti-collision function of vehicle body
- Lighting: dual LED strong light lighting system





08 Diesel Power 4-Drives Fire Robot



DIESEL POWER 4-DRIVES FIRE ROBOT

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MODEL NO :

VHF-FFR-03

PRODUCT INTRODUCTION

The fire monitor or water mist fan can be remotely controlled to the required position; Effectively replace fire fighters to carry out reconnaissance, fire fighting, smoke exhaust and other operations near fire sources and dangerous places.

Application:

include but are not limited to highway (railway) tunnels, subway stations and tunnels, underground facilities and freight yards, large span and large space plants, petrochemical oil depots and refineries; It can also be used for the detection, attack and cover of targets, fire fighting and rescue of dangerous occasions in large-scale toxic gas and smoke accidents and dangerous fires.

PRODUCT PARAMETERS



Overall size	2280*1600*1350mm	Working time	10H
Self weight	2240 KG	Operation speed	12.28 KM/h
Climb ability	40°	Remote control distance	1000m
Max obstacle crossing	300mm	Tractive force	15kN

PRODUCT FEATURES

• Fire water monitor: import water/foam dual-use water monitor, 150L/s flow, range 95m

• Image acquisition: collect 3 channels of images around the robot and transmit them to the control center in real-time. The video system has 4G wireless HD transmission function

• Fault alarm: high engine oil and hydraulic oil temperature, low engine oil pressure, low oil level, blocked oil suction or oil filter, engine air filter alarm, bus communication fault, low battery voltage

- Self protection function: automatic water mist protection system
- Lighting: front and rear dual LED strong light
- Control mode: on-board panel and wireless remote control, remote control distance 1KM
- Fuel tank capacity: 80L for fuel tank and 100L for hydraulic tank
- Optional functions: obstacle removal function and video recording function

10 Explosion-proof Fire Fighting Robot



EXPLOSION-PROOF FIRE FIGHTING ROBOT

MODEL NO :

EXPLOSION-PROOF FIRE FIGHTING ROBOT

VHF-FFR-04

PRODUCT INTRODUCTION

The fire fighting robot can replace the fire rescue personnel to enter the scene of toxic, oxygen deficient, thick smoke and other dangerous disasters to extinguish the fire, effectively solving the personal safety of fire fighters in the above places.

Application:

Fire rescue forces, exploration sites and warehouses, Dangerous chemical,production enterprises,Warehouses, logistics, ports, etc. with inflammable and explosive products



PRODUCT PARAMETERS

Overall size	1900*900*1426mm	Working time	5H
Weigh	720KG	Operation speed	0-1.3M/s
Suspension	Christie suspension structrue	RC distance	1200m
Max obstacle	220mm	Rated torque	4.6kN
Max climbing	70% / 38°	Protection grade	IP67

PRODUCT FEATURES

- Imported fire water monitor: 80L/s flow, water/foam dual-use, range 85m
- Image acquisition: collect 4 channels of images around the robot and send them to the control center remotely
- Bidirectional voice: collect the sound around the robot body and call through the controller
- Lighting: double LED strong light
- Audible and visual alarm: audible and visual alarm is given when the robot body is running
- Automatic obstacle avoidance: detect obstacles in front when traveling to avoid collision
- Spray cooling: double water curtain spray cooling
- Infrared thermal imager: detect life body, fire source temperature and fire source center point
- Explosion proof sign: Ex d ib mb IIB+H2 T6 Gb

Explosion-pro of Battery Power 4-Wheels Drive Firefighting Robot

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EXPLOSION-PRO OF BATTERY POWER 4-WHEELS DRIVE FIREFIGHTING ROBOT

EXPLOSION-PRO OF BATTERY POWER 4-WHEELS DRIVE FIREFIGHTING ROBOT MODEL NO :

VHF-FFR-05

PRODUCT INTRODUCTION

Fire robot can effectively replace the trailer water cannon, mobile water cannon, using its own power to remote control the fire cannon to the required position; Effective replacement of fire rescue personnel close to fire sources and dangerous places for reconnaissance, fire fighting and other operations to avoid unnecessary casualties . Applicable situations include but are not limited to highway (railway) tunnel fire, large span and large space plant fire, petrochemical oil depot and refinery fire; It can also be used for target reconnaissance, attack and cover in large area gas and smoke accidents.

Application:

Fire and rescue force, mining site and warehouse, Hazardous chemical,production enterprises, There are inflammable and explosive products warehouse, logistics, port, etc.

PRODUCT PARAMETERS

Overall dimension	2100*1250*1300mm	Self weight	≤1200KG
Climbing ability	35°	Operating speed	5 KM/ h
Obstacle crossing	3 0 0mm	R/ C distance	1000m
Wading depth	≥ 400mm	Protect Level	IP6 7 , top part IP6 5

PRODUCT FEATURES

- Fire water cannon: Water/ foam 2 way, 100 L/s flow, range to 90m
- Image acquisition: real-time remote transmission control center of images around the robot
- Infrared thermal imager: detection of life, fire temperature and fire source center point
- Sound and light alarm: the robot body in the running state of sound and light alarm
- Automatic obstacle avoidance: detect obstacles in front of you when traveling to avoid collision
- Self- protection function: body water mist protection system
- Information acquisition: a variety of gas acquisition
- Lighting: LED strong light lamp
- Control mode: wireless remote control, remote control distance of 1 KM
- Explosion- proof level: Ex d ib IIB T4 Gb.



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PRODUCT PARAMETERS

MODEL	VHF-FFR-01	VHF-FFR-02
Power	48V DC servo motor with brake	DC drive system+hydraulic drive
Working temperature	-20C~60C	20~60
Rated power	3000W*2	5000W
Dimension size	1770*950*1430mm	7000x2000x2600mm, lifting 15M
Self weight	660kg	6500kg
Load weight/traction force	80kg, 4.5KN	
Max obstacle height	220mm	100mm
Max Climb Capability	36°	22°
Remote distance	1000M	1000M
Speed	0~1.5m/s	0-1.2m/s
Direct run deviation volume	<7%	<3%
Braking distance	<0.15m	<0.3m
Wireless image acquisition transmission	4 way	Yes
Self cooling device	Yes	1
Anti-collision function	Yes	/
audible and visual alarm function	Yes	/
Lighting	Yes	Yes
Gas detector	CO, CO2, O2, NH3, H2S, CH4	1
Temperature and humidity sensor	Optional	/
Infrared thermal \imaging	Optional	1
Water-proof function	Chassis IP67, top IP65	IP65
Working time	ЗН	>6h
Battery	48V 120AH lithium battery	48V 200AH Lead acid battery
Track material	High quality rubber embedded with Kevlar fiber and core gold	1
Drag water belt ability	2pcs 80 water belt 60M	
Water cannon	80L/S	40L/S
Rated work pressure	1.0 Mpa	0.8 Mpa
Working pressure	0.8~1.2 Mpa	65M
Fire range	Water 80M, Foam 75 M	
Max spray angle	120°	120°
Pitch-down angle	.+0°~+90°	70~50
Horizontal swing angle	≥90°	160 ~ 160

PRODUCT PARAMETERS

VHF-FFR-03	VHF-FFR-04	VHF-FFR-05
Diesel engine	48V low-voltage DC servo motor with brake	low-voltage DC servo motor with brake
-20C~60C	20C~60C	20C~60C
46.3KW	3000W*2	2000W*4
2280×1600×1350mm	1900*900*1426mm	2080*1200*1280mm
2240Kg	720kg	1200kg
16.73KN	80kg, 4.5KN	
≥500mm	220mm	560mm
≥40°	38°	35°
1000M	1000M	1000M
0~12.28km/h	0~1.3m/s	0~1.8m/s
	<5.1%	<7%
	<0.15m	
5 way	4 way	4 way
Yes	Yes	Yes
12 types of gas detection (optional function)	CO, CO2, O2, NH3, H2S, CH4	CO, CO2, O2, NH3, H2S, CH4
Optional	Yes	Yes
Optional	Yes	Yes
Chassis IP67, top IP65	Chassis IP67, top IP65	Chassis IP67, top IP65
>10h	>=5h	>=4h
12V 120AH Lead–acid battery for engine	48V 120AH Ex lithium battery	48V 100AH Ex lithium battery
High quality rubber embedded steel wire	High quality rubber embedded steel wire	High quality rubber embedded steel wire
	2pcs 80 water belt 60M	
150L/S	80L/S(Imported)	100L/S
1.0 Mpa	1.0 Mpa	
0.8~1.2 Mpa	0.8~1.2 Mpa	1.0-1.6MPa
Water 100M, Foam 95M	Water 80M, Foam 75 M	(1.0Mpa) 90M
120°	120°	120°
40~80	-15°- +90°	-20°- +90°
>180	-120°-+160°	-90°-+90°







Electric hydraulic spreading cutter is an advanced hydraulic rescue tool without tube, which has combination functions of shear, expansion and traction, which is battery-powered without cable and external power, and which is easy to carry. It is especially suitable for narrow space, outdoor environment and other emergency rescue operations, is the primary equipment for rescues.

Electric rescue four set includes electric combi tool, electric spreader, electric cutter and electric ram. Electric cutter can cut vehicle component, metal pipe and steel plate. Electric spreading cutter can shear and expand to make metal structure deformed and tear car body, etc.

Electric expander can be used to lift obstacles, pry open cracks and expand for the channel, which can be used to move heavy objects with traction chain.

Electric ram is widely used in various places of disaster relief.

It is applicable to long distance and high altitude rescue, also widely applied to traffic accidents, earthquakes, collapsed buildings.



Battery	DC 28V 5.0Ah
Rated working pressure	720 bar
Max cutting force	387 kN
Cutting diameter	32mm Q235A round steel
	16mm Q235A steel plate
Max spreading force	58.07kN
Spreading distance	360 mm
Pulling force	57 kN
Pulling distance	228 mm
Net/Gross weight	19.5/37.5 kg
Overall/Carton dim	1000 x 260 x 230/1160 x 430 x 360 mm

ELECTRIC SPREADER VHF-SP300-E

Battery	DC 28V 5.0Ah
Rated working pressure	720 bar
Max spreading force	73.24-308 kN
Max spreading Distance	737 mm
Max Pulling force	≥41 kN
Max Pulling distance	570 mm
Net/Gross weight	26.03/40.8 kg
Overall/Carton dim	1040x 350 x 260/1150 x 440 x 380 mm



ELECTRIC CUTTER VHF-CU300-E

Battery	DC 28V 5.0Ah
Rated working pressure	720 bar
Max cutting force	642 kN
Cutting diameter	36mm Q235 round steel 16 mm Q235A steel plate
Opening distance	>160 mm
Net/Gross weight	19.5/37.0 kg
Overall/Carton dim	955x 260x 230/1100 x 315x 380 mm



ELECTRIC RAM VHF-RA300-E



Battery	DC 28V 5.0Ah
Rated working pressure	720 bar
Total lifting stroke	350mm
Lifting force	127.35kn
Extension range	540-890mm
Net/Gross weight	19.72/32.5kg
Overall/carton dim	550x370x130/665 x425x250 mm

HYDRAULIC RESCUE TOOLS

- Snap joint make operation more convenient and safer
- Anti-skid control switch make the operation more accurate
- Internal two-way hydraulic lock with self-locking function for safer rescue process

HYDRAULIC COMBI TOOL VHF-C300-H

Rated working pressure	630 bar		
Max cutting force	340 kN		
Cutting diameter	Ø28 mm Q235 round steel 12 mm Q235 steel plate		
Max spreading force	33.88~43.86kN		
Spreading distance	370 mm		
Pulling force	52 kN		
Pulling distance	228 mm		
Net/Gross weight	15.6/22 kg		
Overall dim	810×230×160 mm		
Carton dim	1220×325×240 mm		

HYDRAULIC SPREADER VHF-SP300-H

Rated working pressure	700 bar		
Max spreading force	51.48-68.25kN		
Max spreading distance	700mm		
Max pulling force	41 kN		
Max pulling distance	573 mm		
Net/Gross weight	20.19/29.4 kg		
Overall dim	800x 340 x 220 mm		
Carton dim	1175 x 385 x 230 mm		



HYDRAULIC CUTTER VHF-CU300-H

Rated working pressure	700 bar		
Max cutting force	642 kN		
Cutting diameter	33 mm Q235 round steel		
Opening distance	150 mm		
Net/Gross weight	13.88/22.4 kg		
Overall dim	770x 190 x 180 mm		
Carton dim	1150x 300 x 205 mm		



HYDRAULIC RAM VHF-RA300-H

Rated working pressure	700 bar		
Total lifting stroke	498 mm		
Lifting force	142.38 kN		
Extension range	642-1140 mm		
Net/Gross weight	13.69/19.2 kg		
Overall dim	660 x 110 x 200 mm		
Carton dim	745 x 275 x170 mm		



HYDRAULIC PUMP VHF-HP63-D

Rated working pressure	630 bar		
Oil volume	1.3 L		
Low pressure output	50-100 bar		
High pressure flow	1.5 ml/times		
Low pressure flow	12 ml/times		
Max. handle force	350 N		
Net/Gross weight	12.71 kg		
Overall dim	720x150 x145 mm		
Carton dim	800x 220 x170 mm		



HYDRAULIC PUMP VHF-HP63-E



Rated working pressure	700 bar		
Working speed	3400 ± 150 rpm		
Engine power	2.2 kW		
Engine speed	3600 r/min		
High/low pressure flow	2*0.5 L/min; 2*1.8 L/min		
Oil volume	3 L		
Net/Gross weight	25.2 kg		
Overall dim	310 x 280 x 330 mm		
Carton dim	310 x 280 x 330 mm		



DB PORTABLE GAS DETECTOR



SKYLINE-3000 PORTABLE GAS DETECTOR

SKYLINE-3000 series is a high-performance portable gas detector that can detect multiple gases (Oxygen compounds VOC, combustible gas and toxic gas) at the same time and has man down alarm function.

The device has humanized operation functions such as one-key security detection, one-key storage, automatic image flipping, as well as the man down alarm function,With optional Bluetooth transmission function, allowing safety personnel to obtain real-time data and the alarm status.

It has obtained international IECEX, ATEX certification explosion-proof certification; As it passed the antistatic test, and the protection level reaches IP67, With safer product design and the module designwhich makes the detection faster, and the compact ergonomic design makes the device easy carrying, The instrument is mainly working in suction mode.

The explosion-proof Grade of the SKYLINE-3000 series is Ex ia IIC T4 Ga, which is applicable to the explosive gas mixture zone 0, zone 1, and zone 2 of the factory with grades IIA , IIB , and IIC and temperature group TI ~ T4 .





PRODUCT ADVANTAGE

RUGGED AND DURABLE

- The instrument can effectively resist a three-meter drop
- ▶ The protection level of the instrument reaches IP67
- The instrument has passed the EMC anti-static interference test and can work normally in the walkie-talkie environment

EXPLOSION-PROOF CIRCUIT DESIGN, SAFE AND RELIABLE

The instrument has got IECEX, and ATEX certificates and the explosion-proof level reaches

MULTIPLE SECURITY PROTECTION

- > The man down alarm function has upgraded the safety of underground operators
- > Password protection function prevents non-operators from modifying menu parameters
- With safety reminder function, sound and light vibration alarm function, let operators work without worries
- The high and low alarm latched function allows the operator to better capture the sudden change of the gas concentration value

SIMULTANEOUS MEASUREMENT OF MULTIPLE GASES, MULTIPLE NUMERICAL DISPLAY

- > The instrument can detect I-4 gases at the same time
- Real-time value, TWA, STEL, MAX, MIN multiple numerical display





0.125 0.0



LARGE SCREEN DISPLAY, FLEXIBLE DETECTION SYSTEM, MULTIPLE FILTERING DEVICES

- The screen can be automatically turned 180 degrees, which is convenient for viewing in special operating environments
- Built-in powerful sampling pump, fast detection speed
- Can be connected 20m sampling tube externally, which is convenient for long-distance or confined space detection
- Pump suction use, to provide operators with more reliable protection
- With a water trap filter, it can effectively filter water, oil, dust and other impurities. It can also be used in harsh industrial environments such as coal mines and petroleum field

POWERFUL FUNCTION, MORE USER-FRIENDLY OPERATION

- Beautiful and friendly user interface, reasonable and easy-to-use interactive mode
- Optional Bluetooth function, data can be transmitted to the mobile phone or PC in real time
- Standard storage function, one-click data export, convenient for users to analyz
- Unique modifiable ID identification function, convenient for users to allocate and manage the instrument
- A full range of automatic detection functions, automatic prompts for voltage, pump failure alarms, etc., more comfortable to use One-key security detection
- one-key open storage, automatic image flip
- Support PPM and mg/m3 gas unit switch, the concentration value is automatically converted by the system
- Support each channel sensor to restore the factory setting separately
- Support multi-language including English and etc.



PRODUCT SPECIFICATIONS

Sampling method	pump suction		
Gas type	02,C02,H2S,NH3,C0		
Principle	Electrochemistry(CO, H2S, O2,NH3),Infrared Ray(CO2)		
Measure range	O2: 0-30%VOL,CO2:0-30%VOL,H2S: 0-100ppm, NH3:0-1999ppm, CO: 0-1999ppm		
Resolution	1ppm(CO,NH3), 0.01%VOL(O2,CO2), 0.1ppm(H2S		
Response time	≤30 seconds		
Precsiio	≤±2%F.S except for special gases		
Language	English (More language can be customized)		
Automatically test and calibrate after power-on	Including reset, maximum value (MAX), minimum value (MIN), STEL, TWA value		
Unit	PPM and mg/m3 can be switched and displayed by one key, and the concentration value is automatically converted by the system		
Disaply	monochrome graphics (160 x96) ,screen can be automatically flipped		
Backlight	The backlight time can be manually set, and will be turned on automatically when an alarm is issued		
Data record	Can store 100,000 sets data, the storage interval is adjustable from 5 to 3600 seconds, data can be exported, with data cable		
Alarm	95dB buzzer (@30cm), vibration alarm and flashing red LED and alarm status indication on the screen, alarm latched; diagnostic alarm and battery undervoltage alarm, pump block alarm; man down alarm, with early warning and optional real-time remote Bluetooth notification function		
Battery	3.7V rechargeable lithium battery, battery capacity 2200mA		
Working hours	More than 15 hours in continuous pumping mode		
Charger	Travel charger with DC interface, charging time \geq 4 hours		
Explosion-proof grade	IECEx: Ex ia IIC T4 Ga ATEX: II 1G Ex ia IIC T4 G		
Certification(EU regulations)	2004/34/UE (ATEX)		
Protection grade	IP67		
Working temperature	-20C~+50C		
Humidity	$0\sim$ 90%RH (no condensation)		
Environmental pressure	86~106Кра		
Size	157*84.5*59.5mm (including back clip/water trap filter) (length * width * height)		
Weight	365g (including battery, belt clip and filter)		

NORMAL GAS TYPES AND PARAMATERS (OTHER GASES ARE NOT LISTED CAN BE CUSTOMIZED)

DETECTED GAS	MEASURE RANGE	OPTIONAL RANGES	RESOLUTION	RESPONSE TIME
Flammable gas (EX)	0-100%LEL	0-100%VOL	0.1%LEL/0.1%VOL	≤10S
Oxygen (02	0-30%VOL	0-25%VOL	0.01%VOL/0.1%VOL	≤10S
Carbon monoxide (CO)	0-1000ppm0-100%LEL	0-2000ppm	0.1ppm/1ppm	≤10S
Hydrogen sulfide (H2S)	0-100ppm	0-1000ppm	0.01ppm/0.1ppm	≤10S
Ammonia (NH3)	0-100ppm	0-200ppm	0.01ppm/0.1ppm	≤10S
Chlorine (CL2)	0-10ppm	0-100ppm	0.01ppm/0.1ppm	≤10S
Hydrogen Chloride (HCL)	0-20ppm	0-100ppm	0.01ppm/0.1ppm	≤10S
Nitric oxide (NO)	0-100ppm	0-250ppm	0.01ppm/0.1ppm	≤10S
Nitrogen dioxide (NO2)	0-20ppm	0-100ppm	0.01ppm/0.1ppm	≤10S
formaldehyde (CH2O)	0-10ppm	0-50ppm	0.01ppm/0.1ppm	≤10S
Ozone (O3)	0-10ppm	0-100ppm	0.01ppm/0.1ppm	≤10S
Carbon dioxide (CO2)	0-2000ppm	0-100%VOL	1ppm/0.01%VOL	≤10S





PRODUCT CONFIGURATION

STANDARD ACCESSORIES:

- Gas detector 1 piece 12V/1A DC power adapter 1 piece
- USB cable 1 piece
- User manual 1 piece
- warranty card 1 piece
- Filter 1 piece

Electronic

Aluminum suitcase l piece

APPLICATION



Other Industries







Agricultral & Environmental Protection





Petrochemical & Chemcial Industry



PROJECT CASES SKYLINE-3000









VHF-600M

MULTI GAS DETECTOR WITH BUILT-IN PUMP



TECHNICAL PARAMETERS

ALARM METHOD	SOUND/LIGHT/VIBRATION/DISPLAY/TWA/STEL		
Response time	T90<30s		
Charging time	< 5 hours		
Working time	≥ 8 hours		
Working Enviroment	-10°C~50°C,<95%RH		
Sensor life	2 Years		
Display	3.5" color LCD screen		
Product size	231*87*60mm		

VHF-600M GAS DETECTOR WITH BUILT-IN PUMP

VHF-600M pump multi-parameter detector (hereinafter refferd to as the detector) is an intelligent mult-parameter detector designed with advanced integrated circuit technology, standard intelligent technical level design technology and proprietary digital-analog hybrid communication technology. The detector adopts a built-in pump-suction sampling method for gas sampling and the sensitive element adopts a high quality gas sensor for gas detection.

It has good sensitivity and excellent repeatability, easy to use and maintain, and greatly meets the safety of the industrial site. For high reliability requirements the shell is made of high-strength engineering plastics and composite non-sliprubber, which has high-strength, good hand feeling, and is waterproof, dustproof and explosion-proof.

It can be widely used in petroleum, chemical environmental protection, smelting, refining, biochemical medicine, agriculture. Scientific research, unvirsites and other industries and fields. The detector can detect one or up to 6 gas combinations according to usage requirements.

PRODUCT FEATURES

- Detect one or six gas types at the same times
- External TF memory card stores dara
- vacum suction Imported miniature pump adopted
- Apps: Bluetooth connection, printer app
- Support alarm / timing / manual storage
- GPS positioning function



TECHNICAL DATA

Detecting Gas	Rang	Resolution	Low Alarm Point	High Alarm point
EX	0~100%	1% LEL	20% LEL	50% LEL
H2S	0~ 100 ppm	1 ppm	10 ppm	35 ppm
СО	0~1000 ppm	1 ppm	50	150 ppm
02	0.0~ 30.0% VOI	0.1% VOL	19.5% VOL	23.5% VOI
C02	0.0~ 5.0% VOL	0.01% VOL	1.00% VOL	2.00% VOL
N02	0~20 ppm	0.1 ppm	5.0 ppm	10.0 ppm

VHF-GD3600 4 IN 1 MULTIFUNCTION GAS METER portable gas detector

The instrument is an intelligent gas detector which adopts large-scale integrated circuit technology and advanced standard level of technology.

It adopts built-in pumping detection mode to achieve faster response. It is equipped with moisture and dust filter to prevent them from entering the instrument and damaging the sensor. The ammonia detector can be used in high humidity and high dust environment.

The case is made of engineering plastics featuring high intensity, perfect handle, waterproof, dustproof and explosion-proof. It can be used in fields that need continuous detection of flammable, explosive, toxic and harmful gases like petroleum, chemical industry, medicine, environmental protection, storage, home, air pollution control and other.



FEATURES: portable gas detector

- Units can be switched freely ppm, mg/m3, vol%, LEL%.
- The maximum and minimum values are recorded and displayed.
- Various interface displays. 2.8-inch color screen displays time, concentration, alarm, storage, communication and other information.
- Large-capacity data storage. The data store capacity is greater than 100,000. Support local view, delete and outputted. Storage function can be set to open or close, storage interval time can be arbitrarily set.
- The two display modes can be switched. The large fonts display the average, maximum, and minimum of the gas concentration. Graphical real-time bar chart shows average values.
- The instrument can work continuously for a long time with 3100mA large-capacity lithium battery and low-power circuit design.
- The starting and ending time can be set arbitrarily to prolong the instrument's service time.
- A variety of alarm methods. Alarm value can be adjusted. Alarm mode can be set to sound and light alarm, vibration alarm or sound and light + vibration alarm.

SPECIFICATIONS

	Range	Resolution	Accuracy	Response time	VHF-GD3600
NH3	0 to 100ppm	0.1 ppm	±3%Fs	<90s	✓
H2S	0 to 100ppm	0.1 ppm	±2%Fs	<30s	✓
CO	0 to 2000ppm	0.5 ppm	±2%Fs	<30s	✓
02	0 to 30%Vol	0.1 Vol	±2%Fs	<10s	✓
EX	0 to 100%LEL	0.1 LEL	±2%Fs	<10s	✓
Alarm point	oint Alarm for low and high value, free setting			✓	
Alarm Method	Red light + vibration + buzzer alarm, different types of combination			✓	
Detection Method	Detection method			✓	
Detection mode	Pumping test			✓	
Battery	3.7V DC recharge	able lithium battery			✓
Power supply	Micro USB DC 5V 1A			✓	
Working temperature	-20 to 40oC			✓	
Working humidity	15%-95%RH			✓	
Shell	Nonmetallic housing. Intrinsically safe explosion proof. IP65			✓	



HOT WIRE ANEMOMETER



WHF SAFETY SOLUTIONS UK

267

Anemometer VHF-GD900

Ente

51

MODEL NO :

HOT WIRE ANEMOMETER

VHF-GD-800 VHF-GD-800A

HOT WIRE ANEMOMETER

Hot Wire Anemometer makes a step forward for you into the field of precision measurement. Telescoping probe is ideal for measuring in HVAC ducts and other small vents; extends up to 20m/s.





FEATURES

FEATURES	VHF-GD-800	VHF-GD-800A
Single-point and continuous data log options	~	 Image: A set of the set of the
Velocity alarm	✓	 ✓
LED backlight	✓	 Image: A start of the start of
Auto power off	✓	 ✓
Low-battery indication	 Image: A set of the set of the	 Image: A set of the set of the
Data hold	✓	 ✓
Probe sensor cover	✓	 Image: A start of the start of
Replaceable probe sensor	✓	

SPECIFICATIONS

Air Velocity	Range	Resolution	Accuracy
m/s(meter per second)	0.1~20m/s	0.01m/s	±5%+0.03 m/s
ft/min(feet per minute)	20~3937ft/min	lft/min	±5%+6ft/min
km/h(kilometers per hour)	0.3~72km/h	0.1km/h	±5%+0.1 km/h
MPH(miles per hour)	0.2~44.7MPH	0.1MPH	±5%+0.1 MPH
Air Temperature	-20∼60℃ [-4~140°F]	0.1°C/0.1°C	0.5°C (0~45°C), 1.0°C (rest of range) 1.0°C(32~113°C),2.0°C(rest of range)

Size(HxWxD): 185mm x 65mm x 45mm

Weight: 248g

Accessories: 3.7 Li battery, USB cable, software, and Carrying case .

MODEL NO :

HOT WIRE ANEMOMETER

VHF-GD900 VHF-GD3000 VHF-GD3500

HOT WIRE ANEMOMETER

Hot Wire Anemometer makes a step forward for you into the field of precision measurement. Telescoping probe is ideal for measuring in HVAC ducts and other small vents; extends up to 4925ft/min.



FEATURES

- > Thermal anemometer, available for very low air velocity measurement.
- Slim probe, ideal for grilles & diffusers.
- > Combination of hot wire and standard thermistor, deliver rapid and precise measurements
- Records maximum/minimum readings with recall & data hold function
- Microprocessor circuit assures maximum possible accuracy, provides special functions and features.
- Super large LCD display with backlight, reading the air velocity & temp. at the same time.
- The portable anemometer provides fast, accurate readings, with digital readability
- Multi-functions for air flow measurement: m/s, km/h, ft/min, MPH, Knots & build in temperature °C / °F
- Thermistor sensor for Temperature measurement, fast response time.
- Applications: Environmental testing, Air conveyors, Flow hoods, Clean rooms, Air velocity
- Air balancing, Fans/motors/blowers, Furnace velocity, Refrigerated case and Paint spray booths.
- Data logger function (3880A)

SPECIFICATIONS

Air Velocity	Range	Resolution Accuracy		VHF-GD3000	VHF-GD3500	VHF-GD900
m/s(meter per second)	0.1~25.0m/s	0.01m/s	±5% ±0.1m/s	 Image: A second s	>	>
km/h(kilometers per hour)	0.3~90.0km/h	0.1km/h	±5% ±0.1km/h	 Image: A set of the set of the	 Image: A set of the set of the	 Image: A set of the set of the
ft/min(feet per minute)	20~4925ft/min	ft/min	±5% ±1ft/min	 Image: A start of the start of	 Image: A start of the start of	 Image: A start of the start of
MPH(miles per hour)	0.2~55.8MPH	MPH	±5% ±0.1MPH	 Image: A start of the start of	 Image: A start of the start of	 Image: A set of the set of the
Knots(nautical miles per hour)	0.2~48.5knots	0.1knots	±5% ±0.1knots	 Image: A set of the set of the	 	 Image: A set of the set of the
Air Temperature	0°C to 50°C (32°F to 122°F)	0.1°C/0.1°F	1°C/1.8°F	 Image: A second s	 Image: A set of the set of the	~

Size(HxWxD): 198mm x 78mm x 51mm (8880), 160mm x 62mm x 21mm (3880) Weight: 323g (8880), 200g (3880)

Accessories: 9V battery and Anemo probe, with carrying case. 3.7V Li-ion battery (3880), power adaptor.

CHF SOLUTIONS UK

THERMAL IMAGER

VHF-TI950





VISIBLE INFRARED THERMOMETER

MODEL NO :

VHF-TI900

VISIBLE INFRARED THERMOMETER

Mainly used in the power industry, industrial testing, fire safety, petrochemical, automotive testing, aerospace, building energy saving, tranportation application, acientific research and development, agricultural ecology.

FEATURES

- ▶ TFT color lcd display
- Center Point/hot/cold point tracking
- ▶ The cursor indicate Max/Min /Center value
- Micro USB image output
- ► High frame rate refresh image at 25HZ
- ► Adjustable emissivity from 0.1 to 1.0
- Optional color palette for double light fusion
- ▶ Rechargeable lithium battery

IMAGE EXPORT:

The captured and saved images can be viewed and exported via a Micro USB connection to a computer.

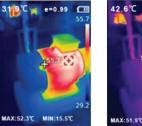
COLOR SCALE: Used to indicate the relative temperature in the field of view from low to high corresponding to the color

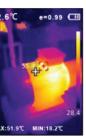


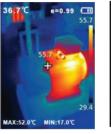
VISIBLE INFRARED THERMOMETER

MODEL NO :

VHF-TI900











SPECIFICATION

Model	VHF-TI900
Infrared image resolution	160*120
Field angle	35°×2 7°
Display screen	2.8" TFT color display
Visible light Image resolution	300,000 pixels
lighting supplement	led light supplement
lmage display mode	infrared, visible and dual light fusion
Pixel sixe	12uF
NETD	≤50mK @25º,@F/1.1
Frame rate of thermal imager	≤25HZ
Focal lengthages	3.2mm
Emissivity	Adjusable from 0.01 to 1.00
Wavelength coverage	8µm to 14µm
Temperature range	-20°C to +550°C(-4° to 1022°F)
Accuracy	±2% or reading ±2°C/3.6°F
Color palette	Rainbow, iron oxidered, cold color, black and white , white and black
Storage capacity	4G Built-in 4G
Image PC offline analysis	support
File formate	jpg/mp4
Export Memory Method	Micro USB cable connection PC export
Language	English、Italian、German
Battery	18650 battery (200mA) Removable
Automatic power-off	Selectable: 5 minutes/20 minutes/ not power off automatically
Work temperature and humidity	-10°C to 50°C / 14°F to 122°F 10% RH to 85%RH
Storage	-20°C to 60°C / -4°F to 140°F 10% RH to 85%

THERMAL IMAGER CAMERA

VHF-TI950

THERMAL IMAGER CAMERA

Mainly used in the power industry, industrial testing, fire safety, petrochemical, automotive testing, aerospace, building energy saving, tranportation application, scientific research and development, agricultural ecology.



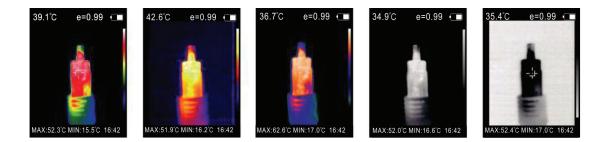
FEATURES

- Battery Level Indication
- ▶ The cursor indicate Max/Min /Center value
- ► Floating setup window
- ▶ Built-in- SD card
- ► Type-C Interface
- ▶ 3.5" High resolution color display
- ► The selectable color palette

VISIBLE INFRARED THERMOMETER

MODEL NO :

VHF-TI900 VHF-TI950



SPECIFICATION

Model	VHF-TI900
Infrared image resolution	320*240
Infrared image resolution	300,000 pixels
Display screen	3.5" TFT color display
LCD Display	320x240
Feild Angle	35°x26°
Shortest focus Length	0.15m
Thermal Sensitivity	0.07°C
Temperature Range	-20 to 300°C-4 to 572°F
Accuracy	±2% or reading ±2°C/3.6°F
Emissivity	Adjusable from 0.01 to 1.00
Frame rate of Thermal image	9Hz
Wavelength coverage	8µ to 14µ
Focus Mode	Fixed
Color palette	Rainbow, iron, cold color, black and white , white and black
Storage capacity	Built-in 3G (above 20 thousand iamge stored)
File formate	eqi
Battery	18650 and 2000mAhbattery
Automatic power-off	Selectable: 5 minutes/20 minutes/ not power off automatically
Work temperature	0°C to +50°C / 32°F to 122°F
Storage temperature	-20°C to 60°C / -4°F to 140°F 10% RH to85%
Relative Humidity	<85%RH

THERMAL IMAGER

VHF-TI950







WHE SAFETY













PRODUCT INTRODUCTION

Self contained breathing apparatus is an isolated respiratory protective equipment. It's used for the users to entering the working environment of oxygen deficit, full of toxic or harmful gas.

In normal use the internal pressure of mask is higher than the atmospheric pressure, to effectively prevent the toxic or harmful gas into the mask, ensuring the safety of user.





- -Material: PC&ABS
- -Sturdy and convenient transportation
- -5L, 6L, 6.8L, 9L for optional



▶ REDUCER

- -Balanced pressure reducing design
- -with pressure relief valve

► LUNG DEMAND VALUE

-Light,flexible and comfortable -Use KEVLAR material, tear resistant,

-With portable handwheel









-Removable lumbar pad

▶ PRESSURE GUAGE AND ALARM WHISTLE

-Whistle will make alarm sound more than 90 db when he pressure under 5Mpa -Night vision pressure gauge with explosion -proof, waterproof and shockproof function.



► GAS CYLINDER

flame retardant

-Carbon fiber composite material -high strength, light weight,Corrosion, anti-shock -3L,6.8L,9L, 12L for optional





► FULL FACE GAS MASK

-Fire resistant silicone material -Permanent double anti-fogging -Vision of more than 91%





MODEL NO :

VHF-6.8/30-0

K TYPE CONNECTOR

K Type Interface For Two People

POSITIVE PREESURE AIR BREATHING APPARATUS



FLAME RETARDANT MASK Fire resistant silicone material

Permanent double anti-fogging Vision of more than 91% 5 point headband adjustment

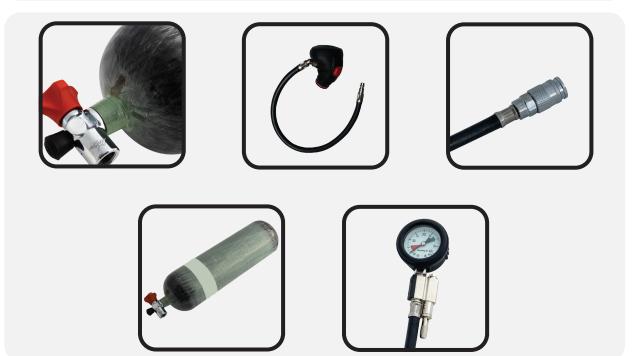


BACPLATE

Light, Flexible And Comfortable Use Kevlar Material, Tear Resistant, Flame Retardant, Removable Lumberpad



MODEL	WORK PRESSURE (Mpa)	CYLINDER VOLUM (L)	AIR DEPOSITE (L)	USING TIME (min)	ALARM PRESSURE (Mpa)	WEIGHT (kg)	PACKING SIZE (mm)
VHF5/30	30	5	1500	40-50	5.5±0.5	≤12	755x460x290
VHF6/30	30	6	1800	50-60	5.5±0.5	≤14	755x460x290
VHF6.8/30	30	6.8	2040	50-60	5.5±0.5	≤10	755x460x290
VHF9/30	30	9	2700	90-100	5.5±0.5	≤11.5	755x460x290



MODEL NO :

VHF-6.8/30-T

POSITIVE PREESURE AIR BREATHING APPARATUS

COMMUUNICATION MASK

With sound reinforcement, communication, lighting, respiratory performance testing, call for help,cylinder pressure head display and other functions,Excellent flame retardant and radiation protection

PRESSURE REDUCING VALVE

Depressurize the nigh pressure gas and perform secondary pressure reduction through the medium pressure pipe and the air supply valve.Lightweight and durable

ELECTRONIC PRESSURE GUAGE

More intuitive display of cylinder pressure and other values, Electronic pressure gauge with automatic or manual shut-off function in airless state, large dial with night vision and rubber boot

FAST CHARGE

 can reduce cylinder replacement frequency a quick inflator is attached to the bottle head valve and the gas enters the cylinder through the quick inflator









MODEL NO :

VHF-P-1 VHF-P-2 VHF-P-3

SCBA GAS MASK

The SCBA mask is lightin weight, small in size, convenient to use, easy to maintain, and stable in performance.it is an ideal personal respiratory protection device for disaster relief and fire fighting operation.



MODEL NO :

VHF-AC-100 VHF-AC-320P

HIGH PRESSURE REFILLING AIR COMPRESSORS



Charging rate : 100L/Min Working pressure: 20-30MPA Safety Valve working pressure:33MPA Medium: Air Ambient Temperature: -20~+50°C Driven: Electric Motor Engine: 2.2KW 220V Single phase/380V Three Phase 50/60HZ Compression stage: Four stage compressed Weight: 58.5KGS Packaging size: 68*42*59CM/CTN







Charging rate : 300L/Min Working pressure: 20-30MPA Safety Valve working pressure:33MPA Medium: Air Ambient Temperature: -20~+50°C Driven: Electric Motor Engine: 7.5KW 380V Three Phase 50/60HZ Compression stage: Three stage compressed Gross Weight: 239KGS Packaging size: 118*64*99CM/CTN Outlets: 4 PCS Features: PLC intelligent control system, Auto stop, pressure regulation, oil shortage stop, auto drain, Overload protection and negative pressure oil saving device

MODEL NO :

VHF-AC-450PL VHF-AC-500PI

HIGH PRESSURE REFILLING AIR COMPRESSORS



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Engine: 9KW 380V Three Phase 50/60HZ Compression stage: Four stage compressed Weight: 480KGS Packaging size: 85*90*144CM/CTN Features: PLC intelligent control system, Auto stop, pressure regulation, oil shortage stop, auto drain, Overload protection and negative pressure oil saving device





VHF-AC-500PI

Charging rate :500L/Min Fully enclosed design, silence style Working pressure: 20-40MPA Medium: Air Ambient Temperature: -20~+50°C Driven: Electric Motor Engine: 9kw 380V Three Phase 50/60HZ Compression stage:Four stage compressed Weight: 972KGS Packaging size:190*170*110CM/CTN Whole set include 5 modules: 1. High Pressure Compressor Module-compressor is installed on a stable chassis 2.BS2 safety explosion-proof inflatable box module:Can fill 2 gas cylinders at the same time, we adopting 6.8L and 9L gas cylinder design 3. High pressure gas storage tank container module: Two sets of 32L/40Mpa high pressure gas storage tanks, integrated high-pressure safety valves, high-pressure gauges, high-pressure valves, high-pressure pipes and other safety control systems 4. Final stage air filtration system module: Three sets of final air filtration systems to make sure the compressed air meet ENI2021 standard.

5.Intelligent PLC control system module : It integrates

functions such as auto start-stop, overload

protection, phase sequence protection, automatic drain,

oil shortage protection, time measurement, maintenance reminder, fast and safe inflation.

MODEL NO :

A, K, E, CO, HG, H2S

FILTER TYPE









TECHNICAL PARAMETER

	PROTECTIONR YPE	PROTECTIVE GAS	FOR EXAMPLE	Remarks
Mode	l Number			
Brown	А	Organic gas or steam	Benzene, anilines, carbon tetrachloride, nitrobenzene, chlorpirin	Common types
Yellow	K SO2, other Acid gas or steam		S02	
White	White E CO		со	
Red	со	Mercury vapor	Mercury	
Blue	HG	H2S	H2S	Confirm the Gas Type before Using
Gray	H2S	Inoraginc Gas or steam	Hydrogen cloride, Hydrocyanic acid, Chlorine	





FIRE CROSSOING SUIT

FIRE -VHF-C1

FIRE JACKET

Shell Fabric -Medium and Heavy

Brigade 750 93% Nomex} 5% Kevlar and 2% P-140 Antistatic Fiber.Plain weave, 254g/m2 (7.50z/yd2) with water repellent finish.

Color

Yellow, coffee, orange, navy blue, dark navy, khaki.

Main Features

- Sturdy and durable.
- High value.
- Made to the requirements of NFPA 1971.

Moisture Barrier

Stedair 3000E moisture barrier material is a 145 g/m* two-layer laminate comprised of an enhanced bi -component membrane and 90 g/ma Nomex/Kevlar durable blend non-woven substrate, breathable microporous structure with one-way moisture and vapor filtration ability.

Thermal Barrier with thermal liner

TenCate Q-8, 270 g/m aramid/FR-Viscose (needle punched non-woven) thermal barrier with 50/50% Metaaramid/ FR modacrylic thermal liner. TenCate Q-8 thermal barriers prove firefighters with compliant protection. With its 100% inherently flame resistant woven face cloth and non-woven batts. Wickwell Plus — Unmatched wickability moves perspiration away from the body and spreads moisture for improved dissipation, keeping you drier and more comfortable.

Shell Fabric-Light Weight

Brigade 600 RS - 93% Nomex, 5% Kevler and 2% Pl40 Antistatic Fiber Rip stop weave pattern, 203 g/m² (6.0oz/yad²), with water repellent finish. Color: yellow, coffee, orange, navy blue, dark navy, khaki

FIRE -VHF-C1

FIRE SUITS

DRD Drag rescue device, made of para aramid webbing, safe and durable. Can be easily and quickly pull out to use in case of emergency.

Detachable liner, easier to clean, maintain and inspect the condition of the moisture barrier.

Armpit triangle piece is built in to facilitate arm lifting.

Sleeve is hemmed with Arashield material to enhance abrasion resistance. Comfortable knit cuff to protect the wrist. Moisture barrier lined to keep dry.

Radio pocket on left chest, corner bartacked. Drainage holes at bag bottom.

Front storm flap closed by zipper and touch tape strip

Cargo pocket with bellow to increase capacity Drainage holes at the bag bottom Pocket corners bartacked for higher strength Pocket flap closed by flame resistant touch tapes.



FIRE -VHF-C1

FIRE SUITS

FIRE TROUSER Trouser front closed with flame resistant touch tape and securely fastened with metal hook and dee. Waist side webbing strap to adjust the waist for better fit.

Knee patched with Arashield to

enhance abrasion resistance. Leg hem in flared shape to facilitate donning of the boot.

. . . Detachable liner. easier to clean. maintain and inspect the condition of the moisture barrier.

FIRE HOOD

Made of aramid knit material, soft and comfortable, to give extra protection to fire fighter's face and neck. Pull down to talk into a radio, made according to the requirements of NFPA 1971 and EN 13911.





FIRE -VHF-C2

FIRE JACKET

Shell Fabric — Medium Weight

Aramid fabric. 93% Meta aramid. 5% Para aramid. 2% Antistatic. Twill weave. weight 210 g/m .with water repellent finish.

Color

Dark navy. navy blue. Yellow. Orange, Khaki.

Main Features

- Light weight and flexible
- ▶ Heavy duty, strong and durable. more heat insulating.
- ► Affordable price, high value
- Designed and made according to the requirements to EN469.

Moisture Barrier

Aquaerorv, made of aramid spunlace substrate laminated with flame and heat resistant PTFE membrane, 120g\m2. The functional membrane is laminated with the substrate after special stretching process to become mircroporus and water resistant, moisture permeating and breathable.

Thermal Barrier

Weight 250g/mz. made of meta aramid and para aramid spunlace material, with a sleek face cloth made of aramid and flame resistant cellulose fiber. Flame resistant. heat insulating, comfortable, and easy to put on and take off.



FIRE -VHF-C2

FIRE SUITS

Radio pocket on left chest with mic loop, Corners bartacked. Drainage holes at the bottom of the pocket. Front storm flap close by zipper and touch tape.

Armpit triangle piece is built in to facilitate arm lifting.

Flame resistant knit cuff to protect the wrist, with the thumb loop to fix sleeve position when the arm is lifted. Lined With moisture barrier to keep the cuff dry and comfortable.

OPTIONAL FEATURE

- Inspection Opening: Opening can be made in the jacket or trouser for inspecting the condition of the moisture barrier or thermal liner inside, to facilitate maintenance.
- Anti-Wicking Lining: Flame resistant antiwicking lining can be put inside the jacket hem, sleeve hem and leg hem to Stop water/moisture from travelling up to keep the garment dry and comfortable,
- DRD Drag rescue device, made of para aramid webbing, safe and durable.
 Can be easily and quickly pulled out to use in case of emergency.

MODEL NO :

FIRE -VHF-C2

FIRE SUITS

FIRE TROUSER Trouser front closed with sturdy zipper and securely fastened with flame resistant touch tape,

Form Fitting Knee & Knee Pad :

Form fitting knee design to make bending easier and more comfortable. Fiber material insert pad to absorb pressure impact while kneeling.

OPTIONAL FEATURE

Abrasion Solution :

Elbow and knee can be patched . or sleeve and leg can be hemmed, with polymer coated aramid material to enhance abrasion and water resistance and garment durability.

FIRE HOOD

Made of aramid knit material, soft and comfortable. to give extra protection to fire fighter's face and neck. Pull down to talk into a radio. made according to the requirements of NFPA 1971.





MODEL NO :

FIRE CROSSING SUIT

VHF-FCS-01

FIRE CROSSING SUIT

DESCRIPTION

protection againts high radiant / ambient heat, protection for the workers exposed to heat .

CERTIFICATION MEN 531-1995

APPLICATIONS

Foundries, Ceramic and Glass Manufacture, Power Generation and Cement Manufacture



- Outer: 100% aluminized Para-Aramid fabric
- ▶ Lining: 100% Para-Aramid felt quilted to a 100 gsm inner lining





- nside napped, outside coated with "double mirror" PET film, mat. 833.0
- Lining 1: 100% Para-Aramid non-woven, 170 g/m², mat. 837.1
- Lining 2: DuPont Nomex Comfort, 190 g/m², mat 803.1
- ▶ Temperature Range: <1,300°C radiation

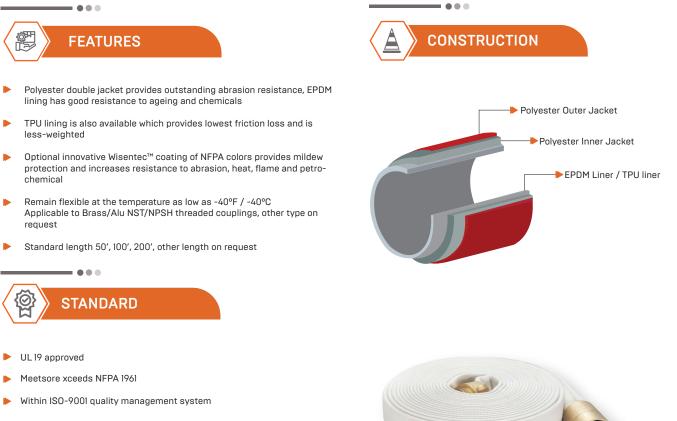




MODEL NO :

ATTACK HOSE - FH01

ATTACK HOSE - FHO1 DOUBLE JACKET, EPDM LINER OR TPU LINER





NOMIN	MINAL SIZE WORKING PRESSURE		PRESSURE	TEST PRI	ESSURE	BURST P	RESSURE	CERTIFICATION
Inch	mm	psi	bar	psi	bar	psi	bar	
1-1/2″	38	400	28	800	56	1200	84	< <u> (<u></u>) (<u>)</u> (<u>)</u> (<u>)</u></u>
1-3/4″	45	400	28	800	56	1200	84	APPROVED UP
2″	52	400	28	800	56	1200	84	
2-1/2"	65	400	28	800	56	1200	84	
3″	75	400	28	800	56	1200	84	(ŸL) (ULĈ
NOMIN	AL SIZE	WORKING	PRESSURE	TEST PRESSURE		BURST PI	RESSURE	CERTIFICATION
Inch	mm	psi	bar	psi	bar	psi	bar	
1-1/2"	38	300	21	600	42	900	63	(Ůľ)
2-1/2"	65	300	21	600	42	900	63	



TECHNICAL DATA

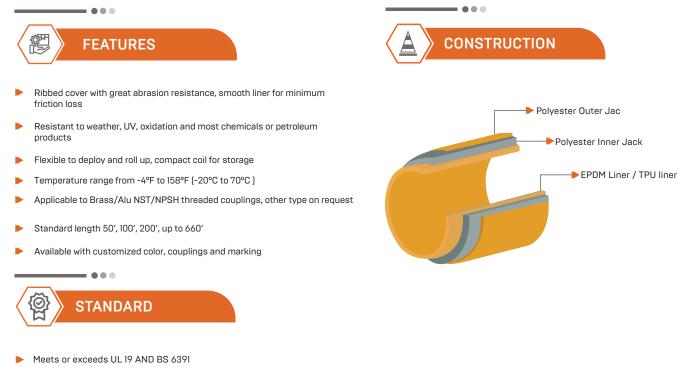
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NOMIN	AL SIZE	WORKING PRESSURE		TEST PRI	ESSURE	BURST P	RESSURE	CERTIFICATION	
Inch	mm	psi	bar	psi	bar	psi	bar		
1-1/2″	38	250, 300	17, 21	500, 600	34, 42	750, 900	51, 63		
1-3/4″	45	250, 300	17, 21	500, 600	34, 42	750, 900	51, 63	FM	
2″	52	250, 300	17, 21	500, 600	34, 42	750, 900	51, 63	ATTROLD	
2-1/2"	65	250, 300	17, 21	500, 600	34, 42	750, 900	51, 63		
NOMIN	IAL SIZE	WORKING	PRESSURE	TEST PRESSURE		BURST PRESSURE		CERTIFICATION	
Inch	mm	psi	bar	psi	bar	psi	bar		
1-1/2″	38	150, 200	10, 14	300, 400	20, 28	450, 600	30, 42	(ŲĹ)	
2-1/2"	65	150, 200	10, 14	300, 400	20, 28	450, 600	30, 42		

MODEL NO :

ATTACK HOSE - FH03

ATTACK HOSE - FH03 NITRILE RUBBER AS COVER AND LINER



Within ISO-9001 quality management system



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NOMINA	AL SIZE	WORKING I	PRESSURE	BURST P	RESSURE	AVERAGE	E WEIGHT	WALL THICKNESS		CERTIFICATION	
Inch	mm	psi	bar	psi	bar	Lbs./ft.	Kg/m	inch	mm		
1-1/2″	38	250, 300	17, 21	750, 900	51, 63	0.21	0.31	0.083	2.1		
1-3/4″	45	250, 300	17, 21	750, 900	51, 63	0.24	0.36	0.114	2.9		
2″	52	250, 300	17, 21	750, 900	51, 63	0.30	0.45	0.118	3.0	(ŲL) (VLC)	
2-1/2"	65	250, 300	17, 21	750, 900	51, 63	0.39	0.58	0.118	3.0	1	
3″	75	250, 300	17, 21	750, 900	51, 63	0.58	0.87	0.118	3.0		
NOMIN	AL SIZE	WORKING	PRESSURE	BURST PI	RESSURE	AVERAGE	E WEIGHT	WALL TH	IICKNESS	CERTIFICATION	
Inch	mm	psi	bar	psi	bar	Lbs./ft.	Kg/m	inch	mm		
1-1/2″	38	218	15	654	45	0.209	0.311	0.083	2.1		
2″	52	218	15	654	45	0.279	0.415	0.114	2.9		
2-1/2"	65	218	15	654	45	0.383	0.570	0.118	3.0		



TECHNICAL DATA

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NOMIN	AL SIZE	WORKING PRESSURE		BURST PRESSURE		WEIGHT		WALL THICKNESS		CERTIFICATION
Inch	mm	psi	bar	psi	bar	Lbs./ft.	Kg/m	inch	mm	
4″	102	250	17	750	51	0.60	0.89	0.102	2.6	
5″	127	250	17	750	51	0.80	1.19	0.110	2.8	(ŲL) (ŲLC)
6″	152	225	16	675	48	1.02	1.52	0.118	3.0	

MODEL NO :

Fire Hose - BS6391 Type1 & 2

FIRE HOSE - BS6391 TYPE1 & 2 SINGLE JACKET, EPDM RUBBER LINER



TECHNICAL DATA

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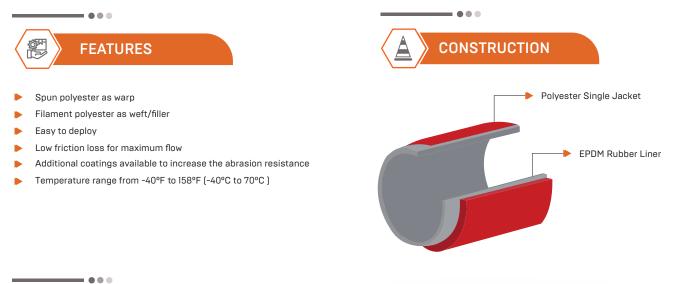
Ν	IOMINAL SIZE	WORKING	PRESSURE	TEST PR	RESSURE	AVERAGE WEIGHT		
Inch	mm	psi	bar	psi	bar	Lbs./ft.	Kg/m	
1-1/2″	38	218	15	348	24	652	45	
1-3/4″	45	218	15	348	24	652	45	
2″	52	218	15	348	24	652	45	
2-1/2″	65	218	15	348	24	652	45	
3″	75	218	15	348	24	652	45	



MODEL NO :

RACK HOSE - FH06

RACK HOSE - FHO6 SINGLE JACKET, EPDM RUBBER LINER



STANDARD

UL approved

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TECHNICAL DATA

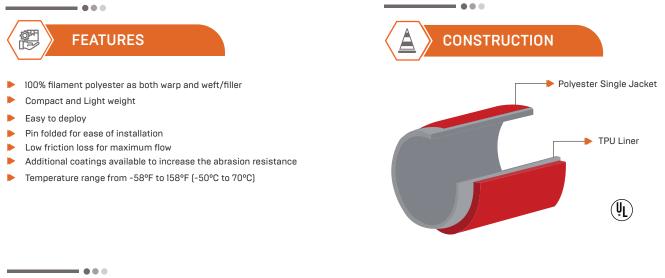
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NOMINAL SIZE		WORKING PRESSURE		TEST PRESSURE		AVERAGE WEIGHT		CERTIFICATION
Inch	mm	psi	bar	psi	bar	Lbs./ft.	Kg/m	
1-1/2"	38	218	15	348	24	652	45	
1-3/4″	45	218	15	348	24	652	45	< FM>
2″	52	218	15	348	24	652	45	APPROVED
2-1/2"	65	218	15	348	24	652	45	
3″	75	218	15	348	24	652	45	

MODEL NO :

RACK HOSE - FH07

RACK HOSE - FH07 SINGLE JACKET, EPDM RUBBER LINER





FM 2111/2131, UL, ULC219 approved

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NOMINAL SIZE		WORKING PRESSURE		TEST PRESSURE		BURST PRESSURE		CERTIFICATION
inch	mm	psi	bar	psi	bar	psi	bar	
1-1/2″	38	250	17	500	34	750	51	(UL) (ULC)
1-3/4″	45	250	17	500	34	750	51	
2″	52	250	17	500	34	750	51	FM
2-1/2″	65	250	17	500	34	750	51	

MODEL NO :

FIRE CABINET HOSE - FH08

FIRE CABINET HOSE - FH08 SINGLE JACKET, PVC LINER



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NOMINAL SIZE		WORKING PRESSURE		TEST PRESSURE		BURST PRESSURE	
inch	mm	psi	bar	psi	bar	psi	bar
1-1/2″	38	218	15	348	24	652	45
1-3/4″	45	218	15	348	24	652	45
2″	52	218	15	348	24	652	45
2 1⁄2″	64	218	15	348	24	652	45
2 ¾"	70	218	15	348	24	652	45

MODEL NO :

FIRE CABINET HOSE - FH09

FIRE CABINET HOSE - FH09 SINGLE JACKET, EPDM RUBBER LINER



NOMINAL SIZE		WORKING PRESSURE		TEST PRESSURE		BURST PRESSURE	
inch	mm	psi	bar	psi	bar	psi	bar
1-1/2″	38	218	15	348	24	652	45
1-3/4″	45	218	15	348	24	652	45
2″	52	218	15	348	24	652	45
2 1⁄2″	65	218	15	348	24	652	45
2 ¾″	70	218	15	348	24	652	45

MODEL NO :

HOSE RELL ACCESSORIES

HOSE RELL ACCESSORIES

FEATURES

- Available on Brass or Aluminum
- Assemble to hose with expansion ring
- Thread type: NH, NST, NPT, BSP

Reference Standard:

 NFPA 1963 for internal and external binding suitable for delivery and suction hose





NOMINAL SIZE	MATERIAL TYPE	
INCH		
1-1/2"× 1-11/16"		
1-1/2"× 1-3/4"		
1-1/2″× 1-13/16″	Aluminum, Brass	
1-1/2"× 1-15/16″		
2-1/2"× 2-3/4"		
2-1/2"× 2-13/16"		
2-1/2"× 3"		

MODEL NO :

HOSE RELL ACCESSORIES

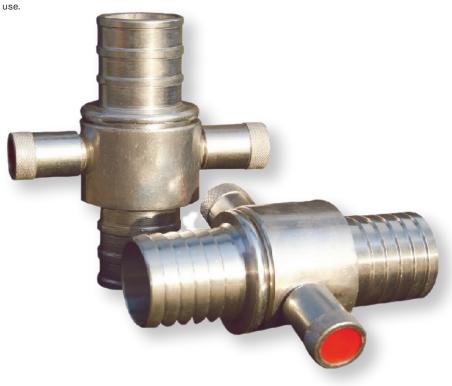
HOSE RELL ACCESSORIES



- Available on Brass or Aluminum
- Binding to hose with wires

A non-symmetrical quick connection couplings with male and female parts.

There couplings are only suitable for delivery operation. For suction operation round thread couplings are in use.



NOMINAL SIZE		MATERIAL TYPE
INCH	mm	
1-1/2"× 1-11/16"	38.1	Aluminum, Brass
1-1/2"× 1-3/4"	63.5	





