

# **PRODUCT CATALOGUE 2024**













## AITO

## **CORPORATE PROFILE**

#### **About Us**

AITO Firework Holding Sdn Bhd is a Malaysia Bumiputera status company, a leading fire protection company in Malaysia through years of experience and expertise in the industry.

#### **Vision**

To be a corporate company that provides professional services worldwide

### **Quality Control**

AITO FIREWORK HOLDING has been awarded ISO 9001: 2015, symbolizing our quality management system thus placed us to be the best among the best.

#### **Distributor of:**

- Portable Fire Extinguishers
- Mobile Fire Extinguishers
- Fire Hose Reels
- Landing Valves
- · Breeching Inlets
- Fire Hydrant Equipment
- Nozzles
- Smoke Alarms
- Fire Blankets
- Canvas Hoses
- Cabinets
- CO2 Fire Extinguishing System
- Smoke Detector
- BlazeCut T-Series
- Ai-LITH Lithium-Ion Fire Extinguisher
- Sensia
- Shark Robotics
- Smart Smoke Detector Tester
- Smart Home Device
- Fire Hose

#### **Our Sevices:**

- Service & Maintenance
- Supply
- Solution
- Installation
- Consultation
- Training

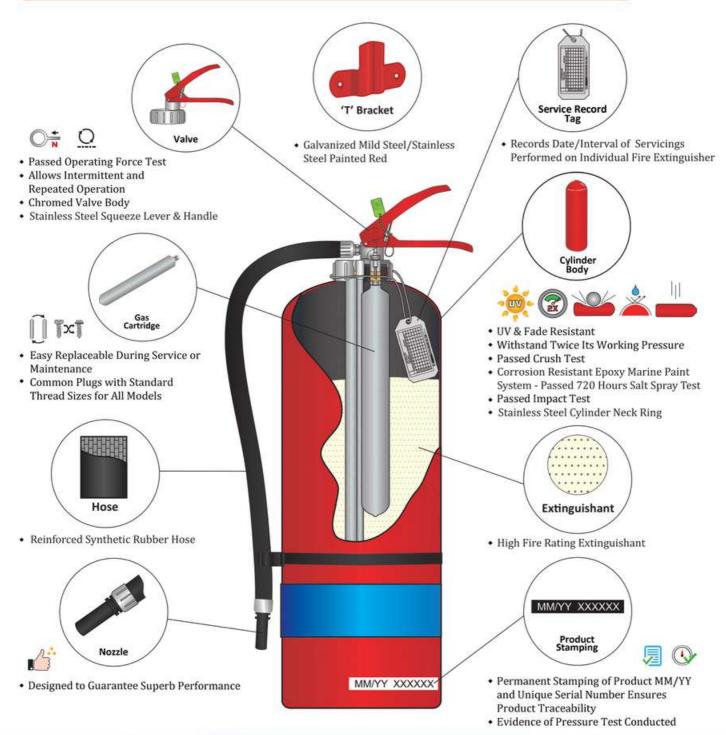




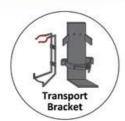
#### Corrosion Resistant (Cartridge Operated Type)

## Portable Fire Extinguisher





#### **OPTIONAL ACCESSORIES**



Secures Fire Extinguisher Firmly on Vehicles with "Quick Release" Feature (for land usage)



Ideal for industrial locations and areas.

Protecting fire extinguishers from accidental damage, where bumps and scrapes could damage fire extinguishers.



Protects Fire Exinguisher from Exposure to Extreme Environment eg. Sunlight, Seawater and etc

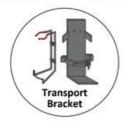
## **Corrosion Resistant (Stored Pressure Type)**

## Portable Fire Extinguisher





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## ABC Dry Powder Portable Fire Extinguisher







#### **FEATURES**

- Fully deep drawn from cold rolled steel
- Pressure tested to twice the extinguisher's working pressure
- Externally coated with polyester powder
- ✓ Passed 480 hours salt spray test



EC-1 EC-2 EC-3 EC-4 EC-6 EC-9

Model	EC-1*	EC-2*	EC-3*	EC-4	EC-6	EC-9		
Туре		Stored Pressure Type						
Extinguishant			ABC Dry	Powder				
Capacity	1 kg	2 kg	3 kg	4 kg	6 kg	9 kg		
Propellant			Nitrog	en (N <sub>2</sub> )				
Valve		Controlla	ble Non Ferrous V	alve with Pressure	Indicator			
Body Diameter	79 mm	110 mm	130mm	130 mm	158 mm	178 mm		
Overall Height	325 mm	370 mm	425 mm	525 mm	525mm	587mm		
Approx. Full Weight	1.7 kg	3.3 kg	4.9 kg	6.3 kg	9.3 kg	12.7 kg		
Working Temperature Range			-20°C to	+ 60°C				
Working Pressure			12	bar				
Test Pressure			25	bar				
Burst Pressure			Exceed	s 69 bar				
Approx. Discharge Range	2 m - 3 m	2 m - 4 m	5 m - 6 m	5 m	6 m - 7 m	6 m - 7.5 m		
Approx. Discharge Time	9 sec	12 sec	14 sec	17 sec	17 sec	20 sec		
Fire Rating (Min)	5A/21B	8A/34B	13A/55B	13A/70B	27A/144B	27A/144B		
Fire Class			A, B, C+	Electrical				
Internal Coating			Stoving Ep	oxy Primer				
Paint Finishing			Flame Red Epoxy	Carlotta and Carlotta	And the second second second			
Mounting	Plastic	Bracket			Vall Bracket			
Manufactured & Certified to			MS 1539 : P	art 1 : 2002				

<sup>\*</sup>Wire bracket mounting available upon request

## AFF Foam & Wet Chemical Portable Fire Extinguisher







#### **FEATURES**

- ✓ Fully deep drawn from cold rolled steel
- ✓ Pressure tested to twice the extinguisher's working pressure
- Externally coated with polyester powder
- ✓ Internally coated with "performance polymer alloy" to prevent corrosion
- ✓ Passed 480 hours salt spray test
- ✓ Passed the 35KV electrical conductivity test to MS 1539-1, clause 4.7.4







EEK-2s EEK-6s

Model	AF-9PS	EEK-2s***	EEK-6s	
Туре				
Extinguishant	AFF Foam (Premix)	Wet Chemical	Wet Chemical	
Capacity	9 litres	2 litres	6 litres	
Propellant		Nitrogen (N₂)		
Valve	Controllable (	Chrome Plated Brass Valve with Pres	ssure Indicator	
Body Diameter	178 mm	108 mm	158 mm	
Overall Height**	625 mm	398 mm	575 mm	
Approx. Full Weight	13.7 kg	4.6 kg	13.0 kg	
Working Temperature Range	+5°C to + 60°C	0°C to + 60°C	0°C to + 60°C	
Working Pressure		12 bar		
Test Pressure		25 bar		
Burst Pressure		Exceeds 69 bar		
Approx. Discharge Range	6 m	> 2 m	> 2 m	
Approx. Discharge Time	68 sec	14 sec	55 sec	
Fire Rating	13A/183B	5A/5F	8A/75F	
Fire Class	A, B + Electrical Safety Test*	A, F + Electrical Safety Test*	A, F + Electrical Safety Test*	
Internal Lining		Thermoplastic Powder Coating (PPA	)	
Paint Finishing	RAL 300	00 Flame Red Epoxy Polyester Powd	er Coating	
Mounting	Metal 'L' Wall Bracket			
Manufactured & Certified to	MS 1539 : Part 1 : 2002	MS 1539 : Part 5 : 2014	MS 1539 : Part 5 : 2014	

<sup>\*</sup>Safe in accidental contact with live electrical equipment. Comply with electrical conductivity test to MS 1539-1, clause 4.7.4

<sup>\*\*</sup>Overall height measured from bottom up to valve handle

<sup>\*\*\*</sup>Pending SIRIM approval

## **Cartridge Operated Type & Stored Pressure Type**

## ABC & Monnex Dry Powder Portable Fire Extinguisher





#### **FEATURES**

- ✓ Fully deep drawn from cold rolled steel
- ✓ Pressure tested to twice the extinguisher's ✓ Passed 480 hours salt spray test working pressure
- Externally coated with polyester powder





PES-9 EC-12Mx

Model	PES-9	EC-12Mx	
Туре	Gas Cartridge Type Stored Pressure Type		
Extinguishant	ABC Dry Powder	Monnex	
Capacity	9 kg		
Propellant	N/A	Nitrogen (N <sub>2</sub> )	
CO₂ Cartridge	150 g	N/A	
Valve	Controllable Chromed Plated Brass Headcap with Safety Relief	Controllable Non Ferrous Valve with Pressure Indicator	
Body Diameter	178 mm	188 mm	
Overall Height	595mm	695mm	
Approx. Full Weight	14.2 kg	14.6 kg	
Working Temperature Range	-20°C to +6	50°C	
Working Pressure	12 bar		
Test Pressure	25 bar		
Burst Pressure	Exceeds 69	bar	
Approx. Discharge Range	6 m	7 m	
Approx. Discharge Time	18 sec	23 sec	
Fire Rating (Min)	27A/144B	233B	
Fire Class	A, B, C + Electrical	B, C + Electrical	
Internal Coating	Stoving Epoxy	Primer	
Paint Finishing	RAL 3000 Flame Red Epoxy Polyester Powder Coating		
Mounting	Metal 'T' Wall Bracket Metal 'L' Wall Bracket		
Manufactured & Certified to	MS 1539 : Part 1 : 2002		





ECO-5 ECO-11H

Model	ECO-5	ECO-11H		
Туре	Stored Pressure Type			
Extinguishant	Carbon E	Dioxide (CO <sub>2</sub> )		
Capacity	2 kg	5 kg		
Operating Head / Valve	Controllable Chron	me Plated Brass Valve		
Body Diameter	114 mm	138 mm		
Overall Height**	510 mm	765 mm		
Approx. Full Weight	7.6 kg	14.8 kg		
Working Temperature Range	-20°C to +60°C			
Working Pressure	56 Bar			
Test Pressure	250 Bar			
Safety Disc Pressure	180-	200 Bar		
Approx. Discharge Range	3 m	3 m		
Approx. Discharge Time	12 sec	16 sec		
Fire Rating	218	55B		
Fire Class	B + E	Electrical		
Cylinder Specification	Steel to	o ISO 9809		
Discharge Assembly	Swivel Horn Assembly	Hose & Horn Assembly		
Mounting	Metal 'L'	Wall Bracket		
Paint Finishing	RAL 3000 Flame Red Epoxy Polyester Powder Coating			
Manufactured & Certified to	MS 1539 : Part 1 : 2002			

<sup>\*\*</sup> overall height measured from bottom up to valve handle

## Corrosion Resistant (Stored Pressure Type/Cartridge Operated Type)

# ABC & Monnex Dry Powder Portable Fire Extinguishers - Malaysian Standard











CR-EC-6 CR-EC-9 CR-EC-12Mx CR-PES-9 CR-PES-12Mx

Model	CR-EC-6	CR-EC-9	CR-EC-12Mx	CR-PES-9	CR-PES-12Mx		
Туре	Stored Pressure Type			Cartridge Operated Type			
Extinguishant	ABC Dry	Powder	Monnex	ABC Dry Powder	Monnex		
Capacity	6 kg	9 kg	9 kg	9 kg	9 kg		
Propellant / CO₂ Cartridge		Nitrogen (N <sub>2</sub> )		150g	225g		
Valve	Control	lable Chrome Plated Brawith Pressure Indicato		Controllable Chron with Safety			
Body Diameter	158 mm	178 mm	188 mm	178 mm	188 mm		
Overall Height	525 mm	590 mm	695 mm	595 mm	710 mm		
Approx Full Weight	9.3 kg	12.7 kg	14.6 kg	14.5 kg	16.4 kg		
Working Temperature Range			-20°C to + 60°C				
Working Pressure			12 bar				
Test Pressure			25 bar				
Burst Pressure			Exceeds 69 bar				
Approx Discharge Range	6 m - 7 m	6 m - 7.5 m	7 m	6 m	7 m		
Approx Discharge Time	17 sec	20 sec	23 sec	18 sec	21 sec		
Fire Rating	27A:144B	27A:144B	233B	27A:144B	233B		
Fire Class	A, B, C+	Electrical	B, C + Electrical	A, B, C + Electrical	B, C + Electrical		
External Coating	Ep	oxy Marine Paint Syste	m Over Sandblasted Sur	face (RAL 3000) Flame Re	d		
Mounting	Galvanized Painted Red Metal 'L' Wall Bracket Galvanized Painted Red Metal 'T' Wall Brack						
Maintenance Tag		Aluminium Alloy					
Manufactured & Certified to			MS 1539				

## Corrosion Resistant (Stored Pressure Type)

# AFF Foam, Wet Chemical & CO<sub>2</sub> Portable Fire Extinguishers - Malaysian Standard





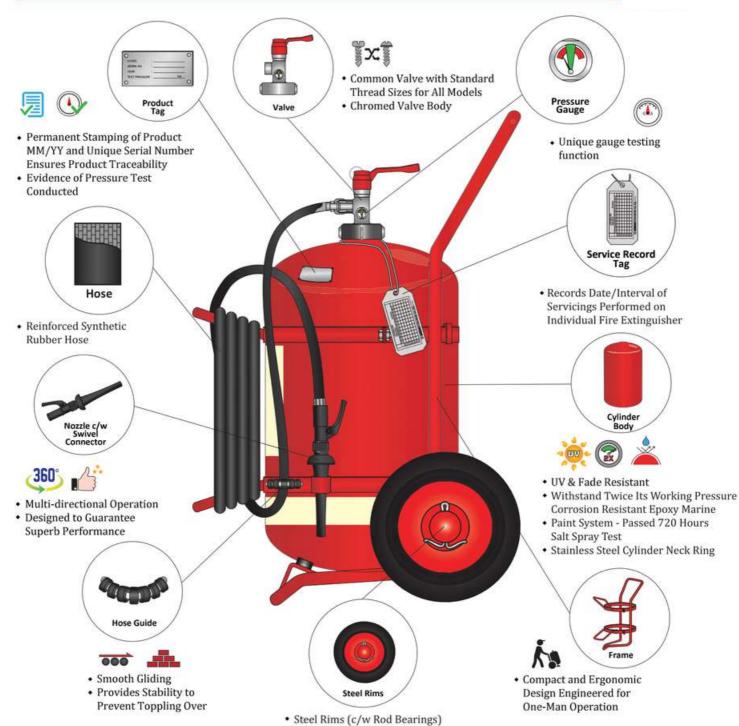
CR-AF-9Ps CR-EEK-6s CR-ECO-5 CR-ECO-11HH

Model	CR-AF-9Ps	CR-EEK-6s	CR-ECO-5	CR-ECO-11HH		
Туре	Stored Pressure Type					
Extinguishant	Premix Foam (AFFF) Wet Chemical		Carbon Dioxide			
Capacity	9 litres	6 litres	2 kg	5 kg		
Propellant	Nitr	rogen (Nz)	Carbon	Dioxide		
Valve		Chrome Plated Brass Valve Pressure Indicator		ne Plated Brass Valve rsting Disc		
Body Diameter	178 mm	158 mm	114 mm	138 mm		
Overall Height	625 mm	575 mm	510 mm	765 mm		
Approx Full Weight	13.9 kg	13.1 kg	7.6 kg	14.8 kg		
Working Temperature Range	+ 5°C to + 60°C	0°C to + 60°C	- 20°C t	o + 60°C		
Working Pressure		12 bar	56 bar			
Test Pressure		25 bar	250 bar			
Burst Pressure	Exce	eds 69 bar	N/A			
Safety Disc Burst Pressure		N/A	202.5 - 247.5 bar			
Cylinder Specifications	N	IS 1539	Steel to ISO 9809			
Discharge Nozzle	Branch Pipe	Spray	Swivel Horn Assembly	Hose & Horn Assembly		
Approx Discharge Range	6 m	> 2 m	3	m		
Approx Discharge Time	68 sec	55 sec	18 sec	22 sec		
Fire Rating	13A:183B	8A:75F	218	55B		
Fire Class	A + B	A, F + Electrical Safety Test*	B + El	ectrical		
Internal Lining	Thermosplastic	Powder Coating (PPA)	N/A			
External Coating	Epoxy N	Marine Paint System Over Sandb	lasted Surface (RAL 3000) I	Flame Red		
Mounting		Galvanized Painted Red	Metal 'L' Wall Bracket			
Maintenance Tag		Aluminiu	m Alloy			
Manufactured & Certified to		MS 15	539			

<sup>\*</sup>Safe if in accidental contact with live electrical equipment. Comply with electrical conductivity test MS 1539, Clause 4.7.4

## Mobile Fire Extinguisher





#### **OPTIONAL ACCESSORIES**



Prevents Kinking Around Bent Corners

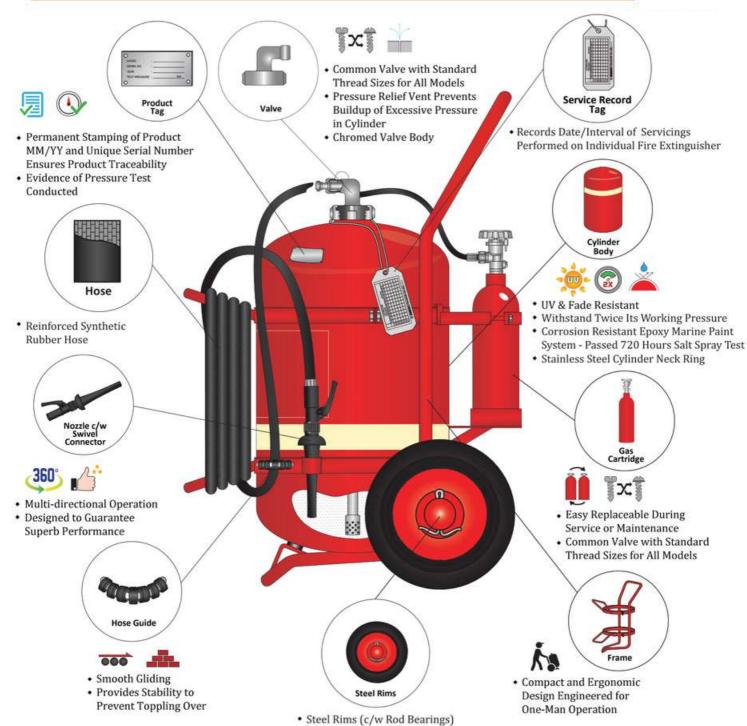


Protects Fire Exinguisher from Exposure to Extreme Environment eg. Sunlight, Seawater and etc

#### Corrosion Resistant (Cartridge Operated Type)

## Mobile Fire Extinguisher





#### **OPTIONAL ACCESSORIES**



Prevents Kinking Around Bent Corners



Protects Fire Exinguisher from Exposure to Extreme Environment eg. Sunlight, Seawater and etc





Model	CR-TPG-50Mx	CR-TPG-75Mx	CR-MPM-50Mx	CR-MPM-75Mx	CR-MFM-150	
Type	Gas Cartr	idge Type		Stored Pressure Type		
Extinguishant		Monnex	Powder		AFF Foam (Premix	
Capacity	42 kg	63 kg	50 kg	63 kg	150 Litres	
Propellant	N	/A		Nitrogen (N <sub>2</sub> )		
Valve	Brass Headcap with	Safety Relief Valve	Bras	s Valve with Pressure 0	Bauge	
CO <sub>2</sub> Cartridge	1 kg	2 kg		N/A		
Discharge Hose	16 mm x 6 m*	19 mm x 6 m*	19 mm x 6 m*	19 mm x 6 m*	19 mm x 6 m*	
Wheel Diameter	330 mm	406 mm	406 mm	406 mm	406 mm	
Frame Work			Steel Pipe / Flat Bar			
Cylinder Material			Steel			
Body Diameter	314 mm	356 mm	386 mm	386 mm	454 mm	
Overall Height	970 mm	1145 mm	1110 mm	1110 mm	1450 mm	
Width	475 mm	570 mm	570 mm	570 mm	685 mm	
Depth	565 mm	645 mm	720 mm	720 mm	930 mm	
Approx Empty Weight	54 kg	82 kg	55 kg	55 kg	113 kg	
Approx Full Weight	96 kg	145 kg	105 kg	118 kg	263 kg	
Working Temperature			-20°C to +60°C			
Working Pressure			12 bar			
Test Pressure	22.5	bar	21.5 bar 22 b			
Safety Valve Lift Pressure	18 - 2	0 bar		17 - 21 bar		
Approx Discharge Time	50 sec	60 sec	55 sec	70 sec	300 sec	
Approx Discharge Range	11 m	12 m	12 m	12 m	11-13 m	
Fire Rating	IIIB C	IVB C	IVB C	IVB C	A IVB	
Fire Class		B, C + El	lectrical		A, B	
External Coating	E	poxy Marine Paint Syster	m Over Sandblasted Surf	ace (RAL 3000) Flame R	ed	
Maintenance Tag		Aluminium Alloy				
Designed & Manufactured to		vision 1 : 2001 Upto Addenda 2003		BS EN 1866		

<sup>\*</sup>Various hose length available upon request

## Corrosion Resistant (Stored Pressure Type / Cartridge Operated Type)

## **ABC Dry Powder Mobile Fire Extinguishers - Kitemark**











Maintenance Tag



CR-MPM-25 CR-MPM-50 CR-MPG-25 CR-MPG-50

Model	CR-MPM-25	CR-MPM-50	CR-MPG-25	CR-MPG-50	
Туре	Stored Pro	essure Type	Gas Cartridge Type		
Extinguishant**		ABC Dry	Powder		
Capacity***	25 kg	50 kg	25 kg	50 kg	
Propellant	Nitrog	gen (N <sub>2</sub> )	Carbon D	ioxide (CO <sub>2</sub> )	
Valve / Headcap	Brass Valve wi	th Pressure Gauge	Brass Headcap w	ith Safety Relief Valve	
CO <sub>2</sub> Cartridge	N/	'A	0.55 kg	1 kg	
Discharge Hose	13 mm x 6 m	16 mm x 6 m	13 mm x 6 m	16 mm x 6 m*	
Wheel Diameter		300	mm		
Cylinder Material		Ste	eel		
Body Diameter	250 mm	386 mm	250 mm	386 mm	
Overall Height	895 mm	975 mm	895 mm	975 mm	
Overall Width	460 mm	570 mm	460 mm	570 mm	
Overall Depth	550 mm	730 mm	550 mm	730 mm	
Approx Empty Weight	22 kg	39 kg	28 kg	43 kg	
Approx Full Weight	47 kg	89 kg	53 kg	93 kg	
Working Temperature Range		- 20°C to	+ 60°C		
Working Pressure		12	bar		
Test Pressure		21.5	bar		
Safety Valve Lift Pressure	17 - 2	21 bar	18 -	20 bar	
Approx Discharge Time	48 sec	61 sec	52 sec	71 sec	
Approx Discharge Range	9 m	10 m	9 m	11 m	
Fire Rating	AIBC	A IIB C	AIBC	A IIB C	
Fire Class		A , B, C +	Electrical		
External Coating	Epoxy Marine Paint System Over Sandblated Surface (RAL 3000) Flame Red				
Maintenance Tag	Aluminium Alloy				
Manufactured & Certified to	BS EN 1866				

<sup>\*10</sup> meter hose length available upon request \*\*Other type of extinguishant e.g. Monnex Powder available upon request \*\*\*Other capacities available upon request







Maintenance Tag







CR-MFM-135

Model	CR-MFM-45	CR-MFM-135
Type	Stored Pre	essure Type
Extinguishant	AFF Foan	n (Premix)
Capacity**	45 litres	135 litres
Propellant	Nitrog	gen (N₂)
Valve / Headcap	Brass Valve with	Pressure Gauge
CO₂ Cartridge	N	/A
Discharge Hose	16 mm x 6 m	19 mm x 6 m
Wheel Diameter	300 mm	350 mm
Frame Work	Steel Pipe	e / Flat Bar
Cylinder Material		eel
Body Diameter	386 mm	454 mm
Overall Height	980 mm	1395 mm
Overall Width	565 mm	685 mm
Overall Depth	670 mm	930 mm
Approx Empty Weight	46 kg	101 kg
Approx Full Weight	91 kg	236 kg
Working Temperature Range	+ 5°C to	o + 60°C
Working Pressure	12	bar
Test Pressure	21.5 bar	22.5 bar
Safety Valve Lift Pressure	17 - 2	21 bar
Approx Discharge Time	109 sec	206 sec
Approx Discharge Range	10 - 12 m	11 - 13 m
Fire Rating	A IIIB	A IVB
Fire Class	A	, B
Internal Lining		xy Tank Coating
External Coating		iblasted Surface (RAL 3000) Flame Red
Maintenance Tag	Alumini	um Alloy
Manufactured & Certified to		1866

<sup>\*20</sup> meter hose length available upon request \*\*Other capacities available upon request

## AFF Foam Mobile Fire Extinguishers - Kitemark











Maintenance Tag







CR-MFG-45 CR-MFG-135 CR-MFG-150

Model	CR-MFG-45	CR-MFG-135	CR-MFG-150	
Type	Gas Cartridge Type			
Extinguishant				
Capacity**	45 litres	135 litres	150 litres	
Propellant		Carbon Dioxide (CO₂)		
Valve / Headcap		Brass Headcap with Safety Relief Valve		
CO <sub>2</sub> Cartridge	1 kg	2 kg	2 kg	
Discharge Hose	16 mm x 6 m*	19 mm x 6 m*	19 mm x 6 m	
Wheel Diameter	300 mm	350 mm	350 mm	
Frame Work		Steel Pipe / Flat Bar		
Cylinder Material		Steel		
Body Diameter	386 mm	454 mm	454 mm	
Overall Height	980 mm	1395 mm	1450 mm	
Overall Width	565 mm	685 mm	685 mm	
Overall Depth	670 mm	930 mm	930 mm	
Approx Empty Weight	52 kg	108 kg	118 kg	
Approx Full Weight	97 kg	243 kg	268 kg	
Working Temperature Range		+ 5°C to + 60°C		
Working Pressure		12 bar		
Test Pressure	21.5 bar	22.5 bar	22.5 bar	
Safety Valve Lift Pressure		18 - 20 bar		
Approx Discharge Time	162 sec	282 sec	368 sec	
Approx Discharge Range	10 - 12 m	11 - 13 m	11 - 13 m	
Fire Rating	A IIIB	A IVB	A IVB	
Fire Class		A,B		
Internal Lining		High Build Epoxy Tank Coating		
External Coating	Epoxy Marine Pa	int System Over Sandblasted Surface (RAL	3000) Flame Red	
Maintenance Tag		Aluminium Alloy		
Manufactured & Certified to		BS EN 1866		

<sup>\*20</sup> meter hose length available upon request \*\*Other capacities available upon request







Maintenance Tag



CR-MCO-25

CR-MCO-10T

Model	CR-MCO-10	CR-MCO-20	CR-MCO-25	CR-MCO-10T	CR-MCO-25T	
Capacity**	10 kg	20 kg	25 kg	10 kg x 2	25 kg x 2	
Style		Single		-	Twin	
Extinguishant			Carbon Dioxide (CO <sub>2</sub> )			
Operating Head		Pai Mark (TPED) Bra	ss Screw Down Valve v	vith Safety Burst Dis	С	
Cylinder Thread		W - 43	25E	- 2		
Discharge Hose			High Pressure Hose			
Hose Internal Diameter x Length			9.5 mm x 6 m*			
Discharge Horn		P	lastic with On / Off Val	ve		
Cylinder Specification	EN ISO 9809-1	EN 1964 P	art 1 TPED	EN ISO 9809-1	EN 1964 Part 1 TPED	
- Diameter	156 mm	229 mm	229 mm	156 mm	229 mm	
- Nominal Height	990 mm	1210 mm	1210 mm	990 mm	1210 mm	
Frame Work			Steel pipe / Flat Bar			
Overall Height	1065 mm	1210 mm	1210 mm	1040 mm	1210 mm	
Overall Width	465 mm	565 mm	565 mm	515 mm	800 mm	
Overall Depth	860 mm	1260 mm	1260 mm	1050 mm	1260 mm	
Approx Empty Weight	33 kg	80 kg	80 kg	50 kg	123 kg	
Approx Full Weight	43 kg	100 kg	105 kg	70 kg	173 kg	
External Coating	Epox	y Marine Paint Syste	m Over Sanblasted Sur	face (RAL 3000) Flan	ne Red	
Wheel Diameter			300 mm			
Working Temperature Range			- 20°C to + 60°C			
Working Pressure			56 bar			
Cylider Test Pressure			250 bar			
Approx Discharge Time	53 sec	61 sec	65 sec	83 sec	97 sec	
Approx Discharge Range	4 m	4 m	4 m	4 m	4 m	
Fire Rating	70B	89B	89B	89B	183B	
Fire Class			B + Electrical			
Maintenance Tag	Aluminium Alloy					
Designed & Manufactured to	BS EN 1866	BS EN 1866	Factory Tested	BS EN 1866	Factory Tested	

<sup>\*30</sup> meter hose length available upon request \*\*Other capacities available upon request









# Ai-LITH Lithium-Ion Fire Extinguisher









2 KG

6 KG

9 KG

Extinguisher	Ai-LITH 2 KG	Ai-LITH 6 KG	Ai-LITH 9 KG
Brim Full Capacity / ml	2,520	7,780	11,325
FillVolume / ml	2,000	6,000	9,000
Approx.Weight Agent / kg	2.2	6.6	9.9
Approx. weight of Unit / kg	3.9	10.7	15.0
Cylinder Ø / mm	110	170	170
Cylinder Height / mm	380	522	664
Unit Heiaht / mm	410	530	672
Fire Rating	5A	13A	13A
EN3 Certified	Yes	Yes	Yes
MED Approved	Yes	Yes	Yes
Propellant	Nitrogen (He Tracer)	Nitrogen (HeTracer)	Nitrogen (HeTracer)
Operating Pressure / bar	15	15	15
Operating Temperature	+5°C to +60°C	+5°C to +60°C	+5°C to +60°C
Approx. Discharge Time / s	50	120	180
Discharge Range / m	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0

## Are you prepared for a lithium-ion battery fire?







Domestic Automotive

Industrial

## **Ai- LITH Fire Fighting Gel Concentrates**

#### **Technical DataSheet**



#### SB LITHIUM +PLUS 1500

#### **EXPLANATION**

SB LITHIUM + PLUS 1500 , hydrocarbon surfactants, It consists of an effective formulation containing solvents and stabilizers. Effective in lithium-ion batteries and accumulators. It also effectively prevents re-burning. SB LITHIUM + PLUS 1500 is used for strong extinguishing as well as fire prevention.

#### **TECHNICIAL SPECIFICATIONS**

RFD Appearance  $7.4 \pm 0.5$ pH (20 oC) Viscosity (20 oC) min 1000cP  $1.03 \pm 0.01 \, \text{gr/cm}$ 3 Density (20 oC) Storage temperature Min-10° C ,Max+60° C Recipitate (20 oC) < % 0,05 Recommended Use Direct Freezing Point -10°C

Typ 18650 700Wh - 900Wh - 1500Wh

#### **APPLICATION**

SB LITHIUM + PLUS 1500 When used with low expansion gel lances, it successfully performs the extinguishing process with the stable gel cover formed.

To be used in fires such as lithium batteries and car batteries, a successful extinguishing process can be performed at 6 bar pressure and with direct precision application/ forced application methods.

#### **COMPATIBILITY**

SB LITHIUM + PLUS 1500 compatible with the following;

- Use with dry powder extinguishers
- Using with different types of fire extinguisher foams

SB LITHIUM + PLUS 1500 If it is thawed after freezing, there will be no change in its performance.

#### **STANDARDS**

National and international standards; EN 1568: 2018 TSE EN 1568:2018 ISO 9001:2015 CE DECLARATION OF CONFORMITY

#### **PERFORMANCE**

SB LITHIUM + PLUS 1500 has a very effective extinguishing performance for indoor and outdoor lithium-ion batteries and battery fires, and its adhesion to vertical surfaces is very successful. At the same time, it has a high fire cooling feature thanks to the chemicals it contains. Compared to other lithium battery extinguishers, SB LITHIUM + PLUS 1500 provides faster extinguishing, but has a very high fire-back resistance level and a stable performance.

#### **STORAGE**

SB LITHIUM + PLUS 1500 has an extremely stable structure.

It should be kept in its original package without opening.

If long-term exposure to high temperatures is prevented, its shelf life is 4 years.



EV Car Fire Blanket





# **CAR FIRE BLANKET**

#### **INTRODUCTION**

The simple but most effectively way to smother or suppress flames by cutting off the fire's oxygen supply and prevent the spread of EV car fires. Able to contain the flames, smoke, and toxic fumes in a car fire in seconds and extinguish it in minutes.

#### **PROPERTIES**

#### Flame retardant pull tape

The design of four flame-retardant pull straps is more convenient and quicker, and the operation at the accident site is more safe.

#### Silicone Coating

High temperature resistance, waterproof more sealing, softer feel, wear-resistant.

#### Fireproof Wire

Use High-quality fireproof wire, which made from Kevlar fiber

#### **SPECIFICATIONS**

Category	Description
Product Name	Car Fire Blanket
Material	100% Fiberglass Material
Coating	Silicone Coated on Both Sides
Size	6*8M, 6*9M, Customized
Thickness	0.45mm
Weight/sqm	480g/sqm (+/-20g)
Heat Resistance Temperature	Stand at 550° C Temporarily 1000° C
Testing Standard	EN 13501-1:2018 by SGS BS EN1869:2019 BY SGS
Certificate	ISO9001:2015 (Company) CE EN1869:1997 (Fire Blankets)
Packing	Soft Packing Bag (Customize) with Carton Box(60*34*28CM)
Weight Include Packing	25 KG Weight valid from difference size

#### WHERE TO USE?

- Gas Station
- Parking Lot
- Fire Brigade
- Pure Car Carrier





# **CAR FIRE BLANKET**

## **Material**

100% Fiberglass with double side silicon coating

## **Fast Effective**

Extinguishes fire in minutes, isolates fire in seconds

## **Eco-friendly**

No toxic fumes or liquids, even works on electric cars



#### **How it works**

Easily drag the Car Fire Blanket over a blazing vehicle to swiftly contain both flames and fume. In electric vehicles, lithium batteries can sustain combustion even without oxygen. For transporting EVs on a tow truck, it's advised to keep the fire blanket securely tied at tire level using a rope or load strap.

Water-Based Extinguisher	Can stop fire from spreading, but risk of re-ignition	8
Car Fire Blanket	Silicone coating seals better and quickly isolates air	
Aerosol Fire Extinguisher	There is a possibility of resurgence	×







## FIRE BLANKET & SMOKE CURTAIN



TECHNICAL DATA					
Part No.	Size(mm)	Material	Colour	<b>Coating Finish</b>	Operating Temperature
FB-4x4	1200 x 1200 (4' x 4')	Woven			
FB-4x6	1200 x 1800 (4' x 6')		White	Loomstate	Basic Fabric 600°C
FB-6x6	1800 x 1800 (6' x 6')	Fabric			

## **Smoke Curtain**



TECHNICAL DATA	
Part No.	FC
Material	Woven Fibreglass Fabric
Colour	White
Coating Finish	Loomstate
Operating	Basic Fabric 600°C
Temperature Standard	BS 476 : Part 7









## 45 kg CO2 Seamless Cylinder

Cylinder Type	Seamless	
Volume	68 litres	
CO <sub>2</sub> Capacity	45 kg	
Test Pressure	250 bar	
Working Pressure @ 20°C	56 bar	
Material	34Mn or 37Mn	
Approvals	DOT-3AA	ISO 9809



#### **Pilot Cylinder**

Cylinder Volume	3 Litre
Medium	Nitrogen
Vorking Pressure @ 20°C	50 bar
Burst Disc Pressure	60 - 70 bar
Solenoid Valve Pressure	0 - 90 bar
olenoid Valve Voltage	24V DC
Approvals	Factory Manufacturing Standard





#### **Quick Release Valve**

Model	EE-209	EE-208
Thread Size	1" BS 341	W 28.8 x 1/14"
Test Pressure	250 bar	
Material	Brass	



#### Solenoid Actuator

Туре	Direct Acting	
Size	1/4"	
Control Mode	Normally Close	
Voltage	24V DC	
Working Pressure	0 - 90 bar	
Material	Brass	
Approvals	Factory Manufacturing Standard	



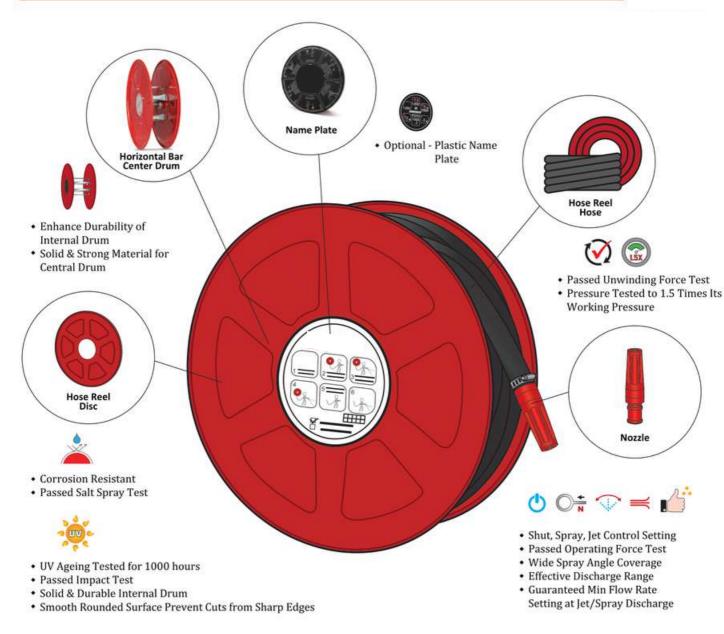
#### **Pilot T-Connection**

Application	100th Slave CO2 Cylinder	
Connection	Ø 21.7 x 14 G	
Material	Hydraulic Steel	
Finishing	Rainbow Chromed	
Approvals	Factory Manufacturing Standard	

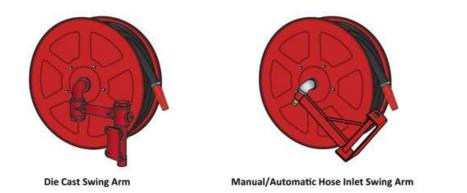






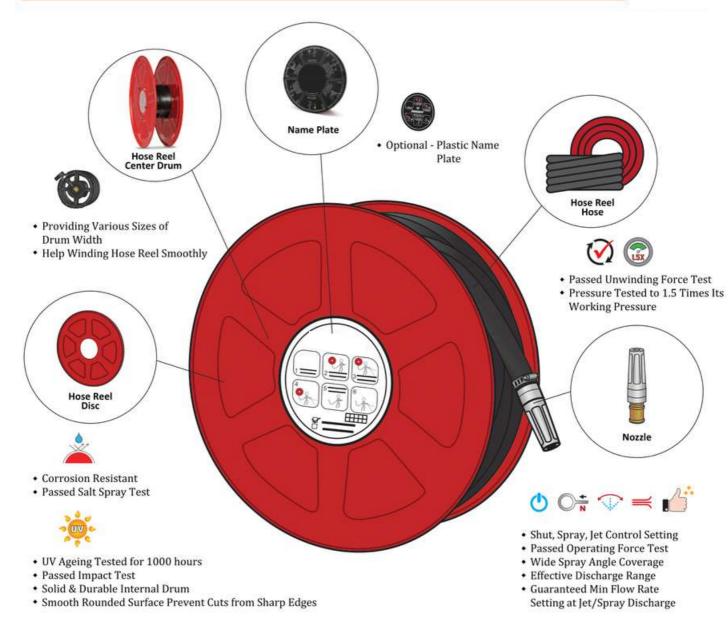


## **HOSE REEL ARM TYPES**



**Fixed Pipe** 





#### **HOSE REEL ARM TYPES**



## Manual Swing Type Fire Hose Reels - Die Cast







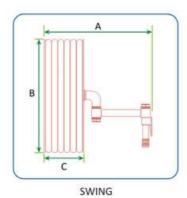


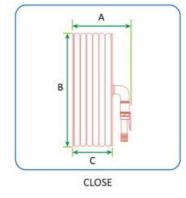


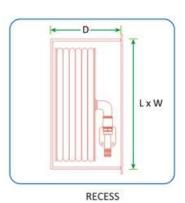












## Manual Swing Type Fire Hose Reels - Die Cast

Model	EH19-SDM-09GI*	EH25-SDM-09GI**	EH25-SDM-12GI***
Disc Diameter	565 mm	565 mm	565 mm
Inlet Connection		Die Cast Swing Arm 1" BSP	
Hose Size (Ø x Length)	19 mm x 30 m	25 mm x 30 m	25 mm x 30 m
Swing Dimension (A x B x C)	495 mm x 565 mm x 160 mm	525 mm x 565 mm x 190 mm	525 mm x 565 mm x 190 mm
Close Dimension (A x B x C)	250 mm x 565 mm x 160 mm	280 mm x 565 mm x 190 mm	280 mm x 565 mm x 190 mm
Recess Dimension (L x W x D)	700 mm x 700 mm x 290 mm	760 mm x 760 mm x 320 mm	760 mm x 760 mm x 320 mm
Maximum Working / Test Pressure	12 bar / 18 bar	12 bar / 18 bar	12 bar / 18 bar
Standard Nozzle Type		Brass or Nylon Jet / Spray Nozzle	
Nozzle Orifice	6 mm	7 mm	7 mm
Minimum Flow Rate @ 4 bar	34 L / min	44 L / min	44 L / min
Drum Finishing	RAL 300	0 Flame Red Epoxy Polyester Powder	Coating
Manufactured & Certified to	EN 671-1: 2012	MS 1447-1 : 2006	EN 671-1: 2012

<sup>\*</sup> TUV SUD PSB Approved only

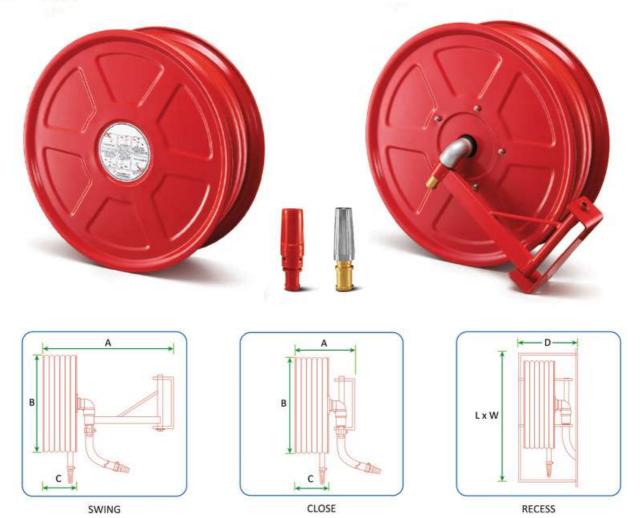
- Note: 1. Various types of nozzle and hose length available upon request, Please refer to nozzle section for selection of nozzle
  - 2. Horizontal bar hose reel available upon request
  - 3. Ø 590mm disc available upon request

<sup>\*\*\*</sup> SIRIM and Bomba Approved only
\*\*\* CE or TUV SUD PSB Approved only









## Manual Swing Type Fire Hose Reels - Hose Inlet

Model	EH19-SHM-09BR*	EH25-SHM-09BR*	EH25-SHL-12BR**
Disc Diameter	565 mm	565 mm	590 mm
Inlet Connection	Hose 25 mm x 1 m	Hose 25 mm x 1 m	Hose 25 mm x 1 m
Hose Size (Ø x Length)	19 mm x 30 m	25 mm x 30 m	25 mm x 30 m
Swing Dimension (A x B x C)	525 mm x 565 mm x 160 mm	555 mm x 565 mm x 190 mm	525 mm x 590 mm x 145 mm
Close Dimension (A x B x C)	220 mm x 565 mm x 160 mm	250 mm x 565 mm x 190 mm	210 mm x 590 mm x 145 mm
Recess Dimension (L x W x D)	700 mm x 700 mm x 250 mm	700 mm x 700 mm x 290 mm	730 mm x 730 mm x 225 mm
Maximum Working / Test Pressure	12 bar / 18 bar	12 bar / 18 bar	12 bar / 18 bar
Standard Nozzle Type		Brass or Nylon Jet / Spray Nozzle	
Nozzle Orifice	6 mm	7 mm	7 mm
Minimum Flow Rate @ 4 bar	34 L / min	44 L / min	44 L / min
Drum Finishing	RAL 3000 Flame Red Epoxy Polyester Powder Coating		
Manufactured & Certified to	EN 671-1 : 2012		

<sup>\*</sup> CE or TUV SUD PSB Approved only

<sup>\*\*</sup> CE Approved only

Note: 1. Various types of nozzle and hose length available upon request. Please refer to nozzle section for selection of nozzle

<sup>2.</sup> Horizontal bar hose reel available upon request

<sup>3.</sup> Ø 590mm disc available upon request

## Automatic Swing Type Fire Hose Reels - Hose Inlet









## Automatic Swing Type Fire Hose Reels - Hose Inlet

Model	EH19-SAM-09BR*	EH25-SAM-09BR**	EH25-SAL-12BR***					
Disc Diameter	565 mm	565 mm	590 mm					
Inlet Connection	Hose 25 mm x 1 m	Hose 25 mm x 1 m	Hose 25 mm x 1 m					
Hose Size (Ø x Length)	19 mm x 30 m	25 mm x 30 m	25 mm x 30 m					
Swing Dimension (A x B x C)	535 mm x 565 mm x 160 mm	565 mm x 565 mm x 190 mm	525 mm x 590 mm x 145 mm					
Close Dimension (A x B x C)	235 mm x 565 mm x 160 mm	265 mm x 565 mm x 190 mm	210 mm x 590 mm x 145 mm					
Recess Dimension (L x W x D)	700 mm x 700 mm x 250 mm	730 mm x 730 mm x 225 mm						
Maximum Working / Test Pressure	12 bar / 18 bar							
Standard Nozzle Type	Brass or Nylon Jet / Spray Nozzle							
Nozzle Orifice	6 mm							
Minimum Flow Rate @ 4 bar	34 L / min							
Drum Finishing	RAL 3000 Flame Red Epoxy Polyester Powder Coating							
Manufactured & Certified to	EN 671-1 : 2012							

<sup>\*</sup> TUV SUD PSB Approved only

\*\* CE or TUV SUD PSB Approved only

\*\*\* CE Approved only

Note: 1. Various types of nozzle and hose length available upon request. Please refer to nozzle section for selection of nozzle

<sup>2.</sup> Horizontal bar hose reel available upon request

<sup>3.</sup> Ø 590mm disc available upon request







# **Attack Hose - DUZ**

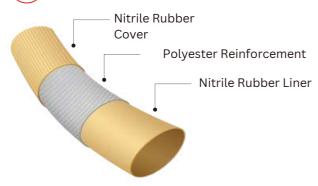
## Nitrile Rubber as cover and liner



- Ribbed cover with great abrasion resistance, smooth liner for minimum friction loss
- Resistant to weather, UV, oxidation and most chemicals or petroleum products
- Flexible to deploy and roll up, compact coil for storage
- Temperature range from -4°F to 158°F (-20°C to 70°C)
- Applicable to Brass/Alu NST/NPSH threaded couplings, other type on request
- Standard length 50', 100', 200', up to 660'
- Available with customized color, couplings and marking









- Meets or exceeds UL 19 AND BS 6391
- Within ISO-9001 quality management system

## Technical Data

Nominal Size Working Pressure		essure	Burst Pressure		Average Weight		Wall Thickness		Certification	
inch	mm	psi	bar	psi	bar	Lbs./ft.	Kg/m	inch	mm	Certification
1-1/2"	38	250,300	17, 21	750,900	51,63	0.21	0.31	0.083	2.1	UL Certifying in progress
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	
2-1/2"	65	250,300	17, 21	750,900	51,63	0.39	0.58	0.118	3.0	
3"	75	250,300	17, 21	750,900	51, 63	0.58	0.87	0.118	3.0	
Nomina	Nominal Size Working Pressure		Burst Pressure		Average Weight		Wall Thickness		Certification	
inch	mm	psi	bar	psi	bar	Lbs./ft.	Kg/m	inch	mm	Certification
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	$\qquad \qquad $
2-1/2"	65	218	15	654	45	0.383	0.570	0.118	3.0	<b>Y</b>



# **Attack Hose - FAD**

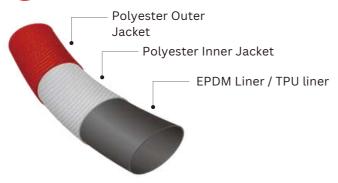
# **Double Jacket, EPDM Liner or TPU Liner**



- Polyester double jacket provides outstanding abrasion resistance, EPDM lining has good resistance to ageing and chemicals
- TPU lining is also available which provides lowest friction loss and is less-weighted
- Optional innovative Wisentec<sup>™</sup> coating of NFPA colors provides mildew protection and increases resistance to abrasion, heat, flame and petro-chemical
- Remain flexible at the temperature as low as -40°F / -40°C
- Applicable to Brass/Alu NST/NPSH threaded couplings, other type on request
- Standard length 50', 100', 200', other length on request







# Standard

- FM 2111 and UL 19 approved
- Meets or exceeds NFPA 1961
- Within ISO-9001 quality management system

# Technical Data

Nominal Size		Working F	Pressure	Test Pre	essure	Burst Pr	essure	Certification
inch	mm	psi	bar	psi	bar	psi	bar	
1-1/2"	38	400	28	800	56	1200	84	
1-3/4"	45	400	28	800	56	1200	84	FM> (ULC) (UL)
2"	52	400	28	800	56	1200	84	APPROVED (ULL)
2-1/2"	65	400	28	800	56	1200	84	
3"	75	400	28	800	56	1200	84	(L) (L)
Nominal	Nominal Size		Pressure	Test Pre	essure	Burst Pr	essure	Certification
inch	mm	psi	bar	psi	bar	psi	bar	Continuation
1-1/2"	38	300	21	600	42	900	63	(h)
2-1/2"	65	300	21	600	42	900	63	ŶĹ)



# **Attack Hose - FAS**

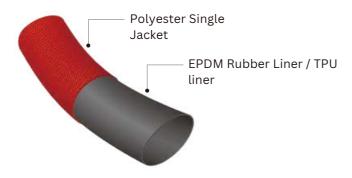
# Single Jacket, EPDM Rubber Liner



- Single jacket made from 100% high tensile strength Polyester yarns provides good resistance to abrasion, oxidation and UV
- Optional innovative Wisentec™ coating of NFPA colors provides mildew protection and increases resistance to abrasion, heat, flame and petro-chemical
- Remain flexible at the temperature as low as -40°F / -40°C
- Applicable to Brass/Alu NST/NPSH threaded couplings, other type on request
- Standard length 50', 100', 200', other length on request
- TPU lining is also available which provides lowest friction loss and is less-weighted







# **Standard**

- FM 2111 and UL 19 approved
- Meets or exceeds NFPA 1961
- Within ISO-9001 quality management system

# Technical Data

Nominal Size		Working Pr	ressure	Test Pres	sure	Burst Pre	ssure	Certification
inch	mm	psi	bar	psi	bar	psi	bar	Certification
1-1/2"	38	<b>250</b> , 300	<b>17</b> , 21	<b>500</b> , 600	<mark>34</mark> , 42	<mark>750</mark> , 900	<b>51</b> , 63	
1-3/4"	45	<b>250</b> , 300	<b>17</b> , 21	<b>500</b> , 600	<mark>34</mark> , 42	<mark>750</mark> , 900	<b>51</b> , 63	<b>⟨FM</b> ⟩
2"	52	<b>250</b> , 300	<b>17</b> , 21	<b>500</b> , 600	<mark>34</mark> , 42	<mark>750</mark> , 900	<b>51</b> , 63	APPROVED
2-1/2"	65	<mark>250</mark> , 300	<b>17</b> , 21	<b>500</b> , 600	<mark>34</mark> , 42	<mark>750</mark> , 900	<b>51</b> , 63	
Nominal Size		Working Pr	essure	Test Pres	ssure	Burst Pres	ssure	Certification
inch	mm	psi	bar	psi	bar	psi	bar	Certification
1-1/2"	38	150, 200	10, 14	300, 400	20, 28	450, 600	30, 42	
2-1/2"	65	200	14	400	28	600	42	



# **John Morris Couplings**





- 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	
inch	mm	Material Type
1-1/2"	38.1	Aluminum, Brass
2-1/2"	63.5	Atummum, brass



UL LISTED TOTAL
FLOODING CLEAN
AGENT FORE
EXTINGUISHING
SYSTEMS



# THE NAF S 125® & NAF S 227® SYSTEM APPLICATION

**EVERSAFE** NAF S 125® & NAF S 227® Fire Extinguishing Systems are designed with the ability to suppress fire in the shortest time possible, especially in enclosed areas occupied by human. Its clean and zero residue properties makes it the perfect solution to protect areas such as:



## Telecommunication Facilities

Communication Centres
Call Centres
Satellite Ground Stations
Central & Remote Cellular Sites



#### Power Generation, Transmission & Distribution Facilities

Power Plant Power Transmittor Substation Rooms Electric Rooms



#### Commercial, Institutional, Corporate & Electronic Facilities

Medical Rooms
Server Rooms
Computer Rooms
Galleries
Aviation & Hangars
Process Control Rooms



# Archives, Data Bank & Industrial Applications

Data Storage
Laboratories
Archives & Libraries
Clean Rooms
Military Installations
Pharmaceutical Facilities

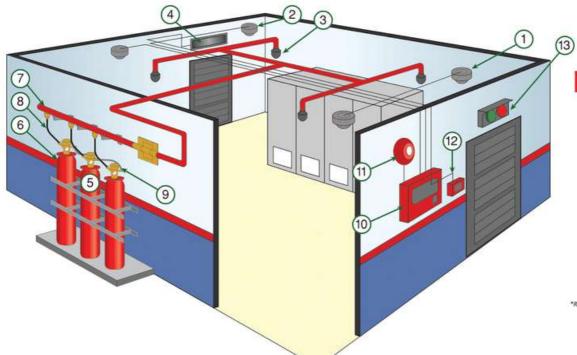


#### Marine Applications

Machinery Spaces

Cargo Pump Rooms

# GENERAL INSTALLATION OF NAF S 125® & NAF S 227®



#### **General Installation**

- 1 Heat Detector
- 2 Smoke Detector
- 3 Discharge Nozzle
- 4 LED Evacuate Sign
- 5 Slave Cylinder
- 6 Master Cylinder
- 7 Manifold
- 8 Discharge Hose
- 9 Actuation Hose
- 10 Fire Control Panel
- 11 Alarm Bell
- 12 Abort Switch/Manual Call Point
- 13 Twin Flashing Light

\*Refer to system components for details and informations





#### Seamless Steel Cylinder Valve Assembly 42 Bar Systems

Part No. NAF S 125	SH70025410	SH70025409	SH70025408
Part No. NAF S 227	SH70027410	SH70027409	SH70027408
Nominal Cylinder Capacity	5 litre	13.4 litre	26.8 litre
Discharge Valve Type		SHT V20	
Thread Valve	1" - 11.5 NPT		
Working Pressure	42 bar		
Working Temperature		-20°C to 50°C	
Overall Height	615 mm	1250 mm	1000 mm
External Diameter	140 mm	140 mm	229 mm
Finishing	RAL 3000 Flame Red Epoxy Polyester Powder Coating		
Approvals	2010/35/EU TPED, ADR, UL Listed		



#### Seamless Steel Cylinder Valve Assembly 42 Bar Systems

Part No. NAF S 125	SH70025407	SH70025412
Part No. NAF S 227	SH70027407	SH70027412
Nominal Cylinder Capacity	40.2 litre	67.5 litre
Discharge Valve Type	SHT	V25
Thread Valve	G.1	1/2"
Working Pressure	42	bar
Working Temperature	-20°C t	to 50°C
Overall Height	1370 mm	1625 mm
External Diameter	229 mm	267 mm
Finishing	RAL 3000 Flame Red Epoxy	Polyester Powder Coating
Approvals	2010/35/EU TPE	D, ADR, UL Listed



#### Seamless Steel Cylinder Valve Assembly 42 Bar Systems

Part No. NAF S 125	SH70025405	SH70025403
Part No. NAF S 227	SH70027405	SH70027403
Nominal Cylinder Capacity	75 litre	120 litre
Discharge Valve Type	SHT	V40
Thread Valve	2 ½" - 1	2UN - 2B
Working Pressure	42	bar
Working Temperature	-20°C	to 50°C
Overall Height	1785 mm	1680 mm
External Diameter	267 mm	358 mm
Finishing	RAL 3000 Flame Red Epoxy	Polyester Powder Coating
Approvals	2010/35/EU TPE	D, ADR, UL Listed



#### Welded Cylinder Valve Assembly 25 Bar Systems

Part No. NAF S 125	SH70025414	SH70025415	
Part No. NAF S 227	SH70027414	SH70027415	
Nominal Cylinder Capacity	175 litre	240 litre	
Discharge Valve Type	SHT	V65	
Thread Valve	3 ½" - 12UN - 2A		
Working Pressure	25 bar		
Working Temperature	-20°C	to 50°C	
Overall Height	1540 mm	1945 mm	
External Diameter	445 mm	445 mm	
Finishing	RAL 3000 Flame Red Epoxy	Polyester Powder Coating	
Approvals	2010/35/EU TPE	D, ADR, UL Listed	





#### Welded Cylinder Valve Assembly 25 Bar Systems

Part No. NAF S 125	SH72525408
Part No. NAF S 227	SH72527408
Nominal Cylinder Capacity	26.8 litre
Discharge Valve Type	SHT V25
Thread Valve	G ½" A
Working Pressure	25 bar
Working Temperature	-20°C to 50°C
Overall Height	750 mm
External Diameter	350 mm
Finishing	RAL 3000 Flame Red Epoxy Polyester Powder Coating
Approvals	2010/35/EU TPED, ADR, UL Listed



#### Welded Cylinder Valve Assembly 25 Bar Systems

Part No. NAF S 125	SH72525407
Part No. NAF S 227	SH72527407
Nominal Cylinder Capacity	40.2 litre
Discharge Valve Type	SHT V40
Thread Valve	2 ½" - 12UN - 2A
Working Pressure	25 bar
Working Temperature	-20°C to 50°C
Overall Height	850 mm
External Diameter	350 mm
Finishing	RAL 3000 Flame Red Epoxy Polyester Powder Coating
Approvals	2010/35/EU TPED, ADR, UL Listed



#### Welded Cylinder Valve Assembly 25 Bar Systems

Part No. NAF S 125	SH72525405
Part No. NAF S 227	SH72527405
Nominal Cylinder Capacity	75 litre
Discharge Valve Type	SHT V65
Thread Valve	3 ½" - 12UN - 2A
Working Pressure	25 bar
Working Temperature	-20°C to 50°C
Overall Height	1230 mm
External Diameter	350 mm
Finishing	RAL 3000 Flame Red Epoxy Polyester Powder Coating
Approvals	2010/35/EU TPED, ADR, UL Listed



#### Welded Cylinder Valve Assembly 25 Bar Systems

Part No. NAF S 125	SH72525403
Part No. NAF S 227	SH72527403
Nominal Cylinder Capacity	120 litre
Discharge Valve Type	SHT V65
Thread Valve	3 ½" - 12UN - 2A
Working Pressure	25 bar
Working Temperature	-20°C to 50°C
Overall Height	1750 mm
External Diameter	350 mm
Finishing	RAL 3000 Flame Red Epoxy Polyester Powder Coating
Approvals	2010/35/EU TPED, ADR, UL Listed







# Oblique Landing Valve - LPCB Approved

#### Description

EMACO Oblique Landing Valve is a type of globe pattern hydrant valve. These valves are manufactured to and are suitable for use at nominal inlet pressure up to 15 bars.

#### Features:

- Working Pressure: 15 Bar / 200 PSI
- Test Pressure: Body 22.5 Bar / 320 PSI Valve Seat 16.5 Bar / 250 PSI
- Size: 2 ½"
- Available Inlet BSP Thread or Flanged as BS 4504 Part 2:1974 Table:16/21, Outlet BS 336 Instantaneous Female

#### **Options**

flanged inlet or screwed inlet

#### **Application**

Suitable for fire hydrant systems at Internal or External places on wet risers with permanently charged water from a pressurized supply with water





# Oblique Landing Valve - Standard

#### Description

EMACO Oblique Landing Valve is a type of globe pattern hydrant valve. These valves are manufactured to comply to BS 5041 Part 1 standard with delivery hose connection. These valves are classified under low pressure.

#### **Features**

- Working Pressure: 15 Bar / 200 PSI
- Test Pressure: Body 22.5 Bar / 320 PSI Valve Seat 16.5 Bar / 250 PSI
- Size: 2 ½"
- Available Inlet BSP Thread or Flanged as BS 4504 Part 2:1974
- Table:16/21, Outlet BS 336 Instantaneous Female

#### Options

flanged inlet or screwed inlet

#### **Application**

Suitable for fire hydrant systems at Internal or External places on wet risers with permanently charged water from a pressurized supply with water







#### Description

EMACO Angle Hose valve (90 degrees pattern) features all brass construction with forged valve body with red hand wheel for rigidity and light weight. Our UL listed angle hose valves manufactured in accordance with UL 668 Hose Valve for Fire Protection Service standards as body material from ASTM B283 C37700, and hand wheel from Ductile Iron.

#### **Features**

- Working Pressure of 300 psi
- Test Pressure of 600 psi
- Size: 1 ½" and 2 ½"
- Available as Threaded FNPT x MNST or FNPT x FNPT

#### **Options**

 Finishes - polished brass, royal chrome plated, polished chrome plated

#### Application

Used with hose rack assembly or as a fire department outlet connection



#### Description

EMACO standard angle hose valves manufactured to meet Requirements of NPFA, EN and ANSI standards as Body Material from brass, and Hand Wheel from Ductile Iron. Our Angle Hose valve (90 degrees pattern) features all brass construction with forged valve body with red hand wheel for rigidity and light weight.

#### Features:

- Working Pressure of 175 psi
- Test Pressure of 300 psi
- Size: Ø 1½" and 2½"
- Available as Threaded FNPT x MNST or FNPT x FNPT

#### **Options**

Finishes - polished brass, royal chrome plated, polished chrome plated

#### **Application**

Used with hose rack assembly or as a fire department outlet connection







# Fog Nozzle- UL Listed

#### Description

EMACO industrial fog nozzles are made of cast bronze, manufactured in accordance with UL401 to handle the rigors of industrial needs and using that water flow can be controlled from shut-off to adjustable fog, straight-stream.

#### Features:

- Spray discharge adjustable fog (30° / 60° / 90°) pattern
- Operating pressure 100 PSI (Maximum)
- Discharge 130/205 GPM (Maximum) at 100 PSI
- Size: Ø 1½" and 2½"
- Available Threaded Inlet NST (NH) Female or NPSH Female (ANSI B2.4)

#### **Options**

NST to BS336 male adaptor (on demand)

#### **Application**

Used use lined fire hose in most industrial applications, including hose rack and reel assemblies and Fire Hose mounted on Standpipe Systems

# EMACO LEONST ED EX27634

# Fog Nozzle - Standard

#### Description

EMACO standard fog nozzles are Basic Spray Nozzle, made of bronze alloy, manufactured in accordance with ANSI/UL401 to handle the rigors of industrial needs and using that water flow can be controlled from shut-off to adjustable fog, straight-stream.

#### **Features**

- Spray discharge adjustable fog (30° / 60° / 90°) pattern
- Operating pressure 100 PSI (Maximum)
- Discharge 130/205 GPM (Maximum) at 100 PSI
- Size: Ø 1½" and 2½"
- Available Threaded Inlet NST (NH) Female or NPSH Female (ANSI B2.4)

#### **Options**

NST to BS336 male adaptor (on demand)

#### **Application**

Used use lined fire hose in most industrial applications, including hose rack and reel assemblies and Fire Hose mounted on Standpipe Systems





# Gate Valve - UL Listed

#### Description

EMACO UL Gate valves serve to cut the medium flow in the piping system. On opening the gate valve, the flow path is enlarged in a highly nonlinear manner with respect to percent of opening.

#### Feature:

- Material: Ductile Iron EN-GJS-450-10 /ASTM A536, 65-45-12.
- WorkingPressure: PN10/16
- TemperatureRange 0-80
- Coating:Fusion Bonded Epoxy Coating in accordance with ANSI/ AWWA C550
- Size: 2" 12"

#### Options:

End Connection: Flange by Flange, Grooved by Grooved, Grooved by flanged, F by MJ, MJ by MJ Available.

#### **Application**

Widely used in the field of potable water, water supply and drainage, sewage disposal, irrigation, air conditioning, fire protection as well as chemical and energy industry.





## Gate Valve- Standard

#### Description

EMACO Gate valves serve to cut the medium flow in the piping system. On opening the gate valve, the flow path is enlarged in a highly nonlinear manner with respect to percent of opening.

#### **Feature**

- Material: Ductile Iron EN-GJS-450-10
- Working Pressure: PN10/16
- Temperature Range: 0-80
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/ AWWA C550
- Size: 2" 12

#### **Options**

End Connection: Flange to Flange, Grooved to Grooved, Grooved to flanged, F by MJ, MJ by MJ, Available.

#### **Application**

Widely used in the field of potable water, water supply and drainage, sewage disposal, irrigation, air conditioning, fire protection as well as chemical and energy industry.

### Globe Valve

#### Description

EMACO Globe valve main characteristic of this type of valve is to ensure the total elimination of leaks from the stem. This saves energy; maintain a safe plant and a clean environment.

#### Feature:

- Nominal pressure: PN-16
- Design: EN 13709 (DIN 3356)
- Connection: DIN Flanges 2543
- Size: DN15 .... DN200
- Face to Face: DIN 3202 F1
- Test & Inspection: EN 12266-1

#### Options:

- Globe Valve with Bellow or without bellow sealed, Piston type valve Available.
- 0

#### Application:

Steam Plant, Overheated Water, Thermal fluid, Vacuum, Hot and Cold water applications.







# Butterfly Valve - UL listed

#### Description

Emaco Butterfly valves with its unique features have been used in water and fire protection Industry for many years.

#### **Feature**

- Design Standard: BS EN 593
- Top Flange standard: ISO 5211
- Working Pressure: PN10/16
- Temperature Range: 0-80
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/ AWWA C550 or painting upon request.
- Size: 2" 12"

#### **Options**

- Grooved butterfly valve with or without tamper switch Lugged wafer butterfly valve with or without tamper switch, Wafer Butterfly Valve with or without tamper switch, Threaded Butterfly Valve with or without tamper switch is available.
- End connection: Groove to ISO 6182, BS EN 1092 PN10/PN16, Thread to ISO 7-1

#### Application

Widely used in the field of potable water, water supply and drainage, sewage disposal, irrigation, air conditioning, fire protection as well as chemical and energy industry.

# Butterfly Valve - Standard

#### Description

Emaco Butterfly valves with its unique features have been used in water and fire protection Industry for many years.

#### Feature:

- Design Standard: BS EN 593
- Top Flange standard: ISO 5211
- Working Pressure: PN10/16
- Temperature Range: 0 80
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/ AWWA C550 or painting upon request.
- Size: 2" 12"

#### Options:

- Grooved butterfly valve, Lugged wafer butterfly valve, Wafer Butterfly Valve, Threaded Butterfly Valve. Flanged Butterfly Valve, Double Eccentric Flanged Butterfly Valve is available.
- End connection: Groove to ISO 6182, Flange to BS EN 1092 PN10/ PN16, Thread to ISO 7-1

#### **Application**

Widely used in the field of potable water, water supply and drainage, sewage disposal, irrigation, air conditioning, fire protection as well as chemical and energy industry.









# Check / Non-Return Valve - UL Listed

#### Description

EMACO Check valves serve to prevent the backflow of medium in the piping system for protection of important equipment.

#### Feature:

- Material: Ductile Iron EN-GJS-450-10
- Working Pressure: PN10/16
- Temperature Range: 0 80
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/ AWWA C550
- Size: DN15 to DN300

#### **Options**

- Flanged Resilient Swing check valve, Grooved Resilient Swing check valve.
- Connection Ends: Flange to BS EN 1092-2:1997, Groove to ISO 6182

#### Application:

Pumps, Industrial processes, Domestic use

# Check / Non-Return Valve - Standard

#### Description

EMACO Check valves serve to prevent the backflow of medium in the piping system for protection of important equipment.

#### Feature:

- Material: Ductile Iron EN-GJS-450-10
- Working Pressure: PN10/16
- Temperature Range: 0 80
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/ AWWA C550
- Size: DN15 to DN300

#### Optional:

- Bronze, ductile iron, iron body, bronze mounted trim (IBBM), and corrosion
- resistant materials.
- Solder, threaded, flanged, wafer, grooved end connections
- End connections for Class 125, 150, 200, 250, 300

#### Application:

Pumps, Industrial processes, Domestic use









# Strainer - UL Listed

#### Description

EMACO UL Strainers are important components of piping systems to protect equipment from potential damage due to dirt and other particles that may be carried by the process fluid.

#### Feature:

- Working Pressure: PN10/16
- Temperature Range: -10 200 (graphite gasket),0 80 (rubber gasket)
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550
- Size: 2" 12"

#### Options:

Grooved Y-strainer, Flanged Y-strainer is available.
End connection: Groove to ISO 6182, Flange to BS EN 1092 PN10/PN16.

#### **Application**

EMACO UL Strainer used in many Industries, including: Chemical processing ,Petroleum, Power generation and marine.

# UL) LISTED

## Strainer - Standard

#### Description

EMACO Strainers are important components of piping systems to protect equipment from potential damage due to dirt and other particles that may be carried by the process fluid.

#### Feature:

- Working Pressure: PN10/16
- Temperature Range: -10 200 (graphite gasket),0 80 (rubber gasket)
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/ AWWA C550
- Size: DN 15-DN 300

#### **Options**

Grooved Y-strainer, Flanged Y-strainer, Threaded type Y-strainer is available. End connection: Groove to ISO 6182, Flange to BS EN 1092 PN10/PN16.

#### **Application**

EMACO Strainer used in many Industries, including: Chemical processing, Petroleum, Power generation and marine.



# AIT@

# Foot Valve

#### Description

EMACO foot valve is virtually a second suction valve placed at the bottom or foot of the suction pipe. Foot valves are check valves that make sure that the pump is always primed.

#### **Feature**

- Suitable pressures up to 200 psi (1375 kPa)
- Optional fusion bonded epoxy
- Sizes: DN15mm- DN300mm

#### Options:

- FLANGED ANSI CLASS 125 OR CLASS 250
- Flanged and Threaded available

#### Application:

Municipal Water Treatment, Rural Fire Protection, Irrigation/Agriculture, Industrial, HVAC, Car Wash Systems.

## **Ball Valve**

#### Description

A ball valve is a form of quarter-turn valve which uses a hollow, perforated and pivoting ball to control flow through it.

#### **Features**

- Materials BS Standards
- Long life cycle
- Low torques
- Size: DN 15-DN 300

#### Options

- Body: One, two and three pieces available upon request. Materials: Brass, Bronze,
- Carbon Steel, SS is available,

#### Application

Commercial, industrial and residential applications







## Pressure Relief Valve

#### Description

This valve is used for the high building fire fighting system. When the pressure in the water supply pipeline is over the one set for pressure relieving, the pressure relieving valve is opened to prevent both pipeline and equipment from getting damaged due to an excessive pressure

#### **Feature**

- The body uses full-channel streamline design, leaving a small fluid resistance and a great flow. This valve can be used as a pressure relieving valve and also a pressure holding valve.
- Size: DN25 DN800(Globe, Angle)

#### Options:

- Type: Pilot operated, Spring loaded, Pressure Relief Valve Bellow sealed type.
- End connection: Flanged, Threaded, Grooved is available.



Used In the Fire protection system, petroleum refining, petrochemical and chemical manufacturing, natural gas processing and power generation industries, the term relief valve is associated with the pressure safety issue.





# Pressure Regulating/ Reduce Valve

Description: Adjust and control the outlet pressure of the master valve. The said pressure will not be changed along with the change with the inlet pressure, neither along with the change of the flow on the master valve outlet.

#### **Feature**

- Flow and leakage reduction
- Cavitation damage protection
- Temperature Range: Up to 80
- Throttling noise reduction
- Burst protection
- Size: DN15 to DN800(Globe, Angle)

#### Optional

- Type: Direct acting Pilot operated, Pilot Piston Operated,
- Solder, threaded, flanged, grooved end connections

#### Application

Applicable for the living water supply, fire fighting system and industrial water supply system.





# Flow Meter



Flow Meters are devices that measure the amount of Liquid, gas or vapor that passes through them. Some Flow Meters measure Flow as the amount of Fluid passing through the Flow Meter during a time period.

#### **Features**

- Patented accuracy of 0.5%
- Friction loss less than 1 psi
- Digital gauge with 4-20ma transmitter
- Reverse polarity protection
- Size: DN 25-DN 600

#### **Options**

End connection: Flanged, Grooved, Threaded, But Welded

#### **Application**

All kind of fluid flow measurement applications.

# Waste Cone

#### Description

Waste cones are designed to provide quick-and-easy visual confirmation of proper water flow in fire protection systems.

#### **Features**

- Available for Onshore and Offshore Applications
- Manufactured in Accordance with NFPA 20 Requirements
- Size: Available size client's requirements.

#### **Options**

End connection: Flanged, Grooved, Threaded, But Welded

Pressure Gauge

#### Description

Pressure measurement is the analysis of an applied force by a fluid (liquid or gas) on a surface.

#### **Feature**

- Liquid filled stainless steel case protects against vibration and pulsation.
- Highly accurate
- Size: Available size client's requirements.













# FIRE HYDRANT EQUIPMENT



HYD056-CS-150-RD

#### HIGH PRESSURE FIRE HYDRANT

Body material : Model HYD056-CI-100-YW - Cast Iron to BS 1561 Model HYD056-CS-150-RD - Carbon Steel

Test pressure : 30 bar (435 psi) Working pressure : 20 bar (300 psi)

Outlet pressure setting: 7 bar (101 psi) at static flow

Finishing : Red & Yellow

Code No.	Outlet	Inlet
HYD056-CI-100-YW	2 x 2-1/2" Pressure Regulating Control Valve with Female BS Instantaneous Outlet	4" Table E BS 10 Flange
HYD056-CS-150-RD	4 x 2-1/2" Pressure Regulating Control Valve with Female BS Instantaneous Outlet	6" Table E BS 10 Flange



HYD060-CI-100-YW

#### **2 WAY FIRE HYDRANT**

Body material : Cast Iron to BS 1561
Outlet : Copper alloy BS 1982
Test pressure : 20 bar (300 psi)
Working pressure : 15 bar (217 psi)
Finishing : Red & Yellow

Model HYD059-CI-100-YW can be fitted with an underground 4" gate valve with spindle cap (sluice valve) and operated by using a hydrant key and bar (HYD066-CI-030-BK / HYD066-LA-030-NA)

Code No.	Outlet	4" Table E BS 10 Flange 4" Table E BS 10 Flange	
HYD059-CI-100-RD	2 x (2-1/2") Male Thread NST/BSP		
HYD060-CI-100-YW	2 x 2-1/2" Control Valve with Female BS Instantaneous Outlet		
HYD060-CI-100-RD	2 x 2-1/2" Control Valve with Female BS Instantaneous Outlet	4" Table E BS 10 Flange	



# FIRE HYDRANT EQUIPMENT



HYD055-CI-150-RD

#### **3 WAY FIRE HYDRANT**

Body material : Cast Iron to BS 1561 Outlet : Copper alloy BS 1982 Test pressure : 20 bar (300 psi) Working pressure : 15 bar (217 psi)

Finishing : Red

Model HYD061-CI-150-RD can be fitted with an underground 6" gate valve with spindle cap (sluice valve) and operated by using a hydrant key and bar (HYD066-CI-030-BK / HYD066-LA-030-NA)

Code No.	Outlet	Inlet 6" Table E BS 10 Flange	
HYD061-CI-150-RD	2 x (2-1/2") Male Thread 1 x 4" Male Thread		
HYD055-CI-150-RD	2 x 2-1/2" Control Valve with Female BS Instantaneous Outlet 1 x 4" Male Thread		





### INTERNAL VALVE FIRE HYDRANT



This hydrant is operated by using a hydrant wrench to turn the operating mechanism at the top of the hydrant which will open the valve seat It is available in two sizes 4" and 6".

#### SPECIFICATION

Body : Cast Iron
Valve seat : Nylon
Valve seat ring : Bronze
Test Pressure : 20 Bar (300 psi)
Working Pressure : 10 Bar (145 psi)

Code No.	Outlet	Inlet	
HYD086-CI-100-RD	2 x (2 - 1/2") male thread, 1 x (4") male thread	4" PN16 BS 4504	
HYD087-CI-100-RD	2 x (2 - 1/2") control valve with female BS instantaneous outlet, 1 x (4") male thread	4" PN16 BS 4504	
HYD088-CI-100-RD	2 x (2 - 1/2") control valve with female BS instantaneous outlet, 1 x (4") monitor unit		
HYD086-CI-150-RD	2 x (2 - 1/2") male thread, 1 x (4") male thread	6" ANSI 150RF	
HYD087-CI-150-RD 2 x (2 - 1/2") control valve with female BS instantaneous outlet, 1 x (4") male thread		6" ANSI 150RF	

Refer to landing valve section for type of control valves Extension pipe available upon request

#### TRAFFIC IMPACT HYDRANT

The main valve will remain tightly closed even if the hydrant is accidentally damaged by traffic impact.

Code No.	Outlet	Inlet	
HYD088-CI-150-RD	2 x (2 - 1/2") control valve with female BS instantaneous outlet, 1 x (4") male thread	6" ANSI 150	

## **INDICATOR POST WITH GATE VALVE**



The Indicator Post with gate valve provides a means for operating a buried or otherwise inaccessible gate valve to controlled flow of water in buried pipe. A wrench is provided to fit on top of the unit for turning the gate valve open and shut.

Indicator Post readily and clearly indicates whether the gate valve buried is open or shut. It is suitable for gate valves from 4" up to 12".

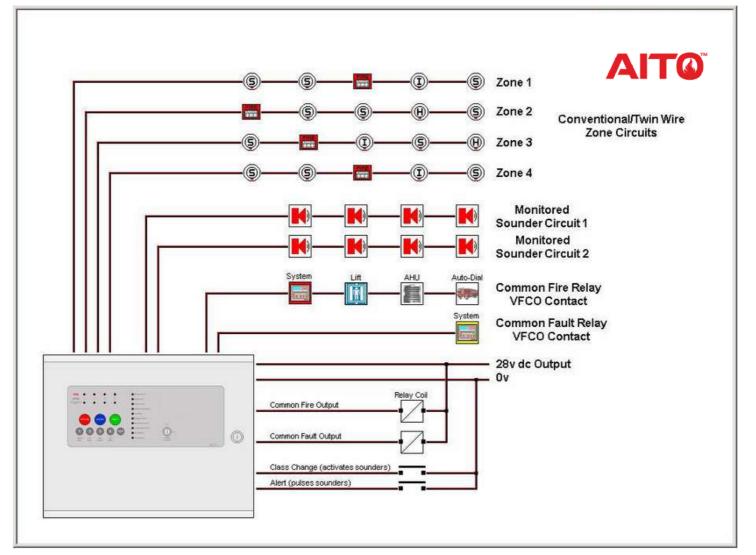
The Indicator Post is manufactured to suit various buried depth, it is also easily adjusted in the field for exact depth without disassembly. It is mounted on top of the gate valve with flange for support.

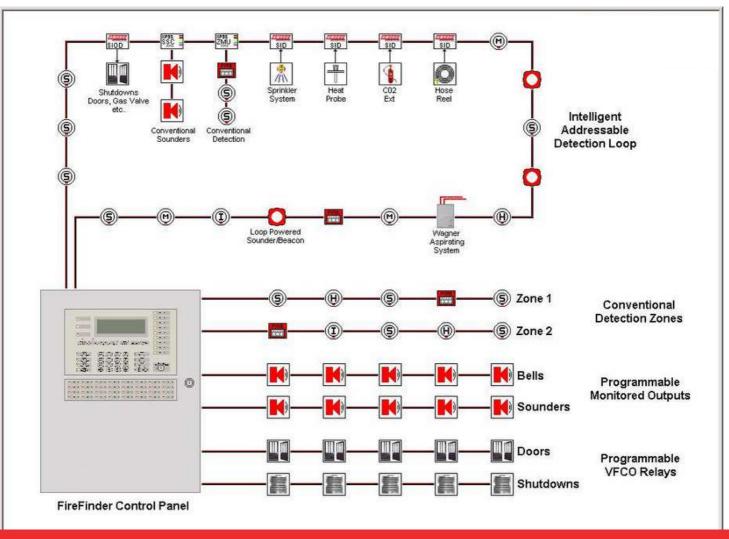
Material of construction: Cast Iron

Code No.	Gate Valve Size	
HYD090-DI-100-RD	4* (100mm)	
HYD090-DI-150-RD	6" (150mm)	
HYD090-DI-200-RD	8* (200mm)	
HYD090-DI-250-RD	10" (250mm)	
HYD090-DI-300-RD	12" (300mm)	











# ZoneSense PLUS Conventional



#### **Product Overview**

The Ampac ZoneSense PLUS Fire Alarm Control Panel is a versatile four or eight zone conventional panel. The user friendly navigation system provides simple operation during an emergency while also enabling complex cause and effect programming to be undertaken.

A range of modular panel add-on kits allows the panel to be professionally tailored to the requirements of each installation. This means small conventional panels can now be used in a wider range of applications.

ZoneSense PLUS offers you complete control. The panel can be easily upgraded and programmed on site. ZoneSense PLUS is approved to AS4428 and is available in ABS (BX1) or metal cabinets (BX20) with either four (4) or eight (8) zone conventional detection circuits

- Complies with AS4428.1
- Available in 4 Zone or 8 Zone Panels
- Up to 40 Conventional detectors per zone
- RS485 port supports a range of Add-on modules
- vailable in ABS (BX1) and Metal (BX20) cabinet versions



# ZoneSense DH4 Conventional



#### **Product Overview**

The ZoneSense DH4 Control Panel is a simple and low cost 4 zone panel. It is an ideal fire panel for any small residential applications (not requiring brigade monitoring) or can also be used as a door holder control panel. Each of the 4 zones can be connected up to 40 x high quality commercial grade conventional fire detectors to deliver a high quality detection & alarm system. It is possible to use the ZoneSense panel in 'Mains only' option mode which eliminates the need to connect back up batteries. Both ABS and Metal versions are available.

- Dual Door Holder Outputs
- Mains Only Mode
- Low Quiescent Current
- Walk Test Facility
- Alert Input
- Up to 40 Conventional detectors per Zone
- Available in ABS (BX1) and Metal (BX10) cabinet versions



## ZoneSense PLUS AR Conventional



#### **Product Overview**

The ZoneSense PLUS AR (Agent Release) Panel is a dedicated panel for agent release systems. Housed in a metal cabinet, the ZoneSense PLUS AR is available in either four (4) or eight (8) zones. Based on a ZoneSense PLUS Fire Alarm Control Panel (FACP), the AR version is fitted with an Agent Release Panel Add-on (control card and termination board) and a dual action yellow manual call point as standard. The Agent Release panel add-on option is factory set.

- Dedicated Agent Release system purpose built with a host of ancillary products to suit
- Comprehensive system status the AR panel includes a number of system status indicators that facilitates ease of operation and maintenance
- Local Control Station with control and indication mimics full status of the Agent Release panel. An outdoor version of this product is available
- User interface and operation based around Industry Fire Emergency procedures ensures that the system installed is intuitive and easy to use
- Dual action Manual Call Point the yellow MCP is a break glass type and requires a dual action to be activated i.e. lift the
  protective transparent cover and break the glass
- Agent Release Panel is compliant with AS4214



# LoopSense Intelligent



#### **Product Overview**

LoopSense is an Intelligent Analogue Addressable Fire Alarm Control Panel. Available in one or two loops, the LoopSense comes packed with options and features that facilitate flexibility, ease of installation and commissioning.

- Complies to AS7240-2:2004, AS7240-4:2004, and AS4428-3:2010 -ActivFire listed
- Clear back-lit 240 x 64 graphic LCD
- 500mA loop current
- Advanced balanced loop design for noise rejection
- Auto learn facility
- Supports extensive range of Add Ons, including the SmartTerminal Repeater
- User friendly Loopmaster programming software tool
- Laptop connection using USB2.0 or RS232 serial port
- Available in ABS (BX1) and Metal (BX10) cabinet versions







# FPA-1000 Analog Addressable Fire Panels

- Support for up to 508 points on two analog addressable loops
- Built-in Ethernet connector for web-browser based programming and Conettix Alarm-over-IP communication
- Two on-board NACs and dual-line PSTN DACT
- Peer-to-peer networking of up to eight -V2 panels in a single group
- Suited to a wide range of applications and compatible with the latest Bosch solutions including 440 Series Multi-criteria detectors
- Simple system management and free online training
- Variety of communication channels
- Gas detection



PRODUCT FAMILY

# D7030X Family LED annunciators

- Use with the FPA-1000 Analog Addressable Fire Panels or FPD-7024 FACPs
- LED indicates power, trouble, and zone status
- LED annunciates eight individual zones expandable to 64 zones
- Aesthetically appealing appearance, mounts flush to electrical box in either surface or flush mounted configurations
- UL Listed







# AITO INTERLINK SMOKE DETECTOR



#### Wireless Interlink Function:

- 1. This smoke detector can be matched program to interlink with up to 15 units of the same model smoke detector.
- 2. When one detector detects smoke and give off main alarm, all the other match programmed detectors will give off secondary alarm as well.
- 3. The smoke detector will still function as an individual standalone unit if no match program being made.

# Specifications

Brand: AITO Dimensions (in mm): 120 x 120 x 35.5 Weight: 115g

Battery life: 5 Years
Battery type: Replaceable.
Certification: CE, BOMBA
Certification



# AITO INTERLINK SMOKE DETECTOR

AITO Interlink Battery Operated Smoke Detector

Product General Specification:

- 1. Detection: Photoelectric technology
- 2. Power: 3 volt (AA battery 1.5 volt x 2 3. Alarm volume: 85 dB at 3 meter

This smoke detector uses photoelectric technology, sensitive in detecting smoldering fire which normally produced in residential fire.

The battery-powered photoelectric smoke and heat alarm is designed to protect you and your family from the dangers of smoke and fire.

The photoelectric technology, it is more sensitive in detecting slow smoldering fires which generate light smoke, little heat and may smolder for hours before bursting into flames. This smoke alarm does not contain any radioactive material.

Wireless Distance

Up tp 15 pcs interconnection

Easy installation No wiring required

Commercial and Residential Use



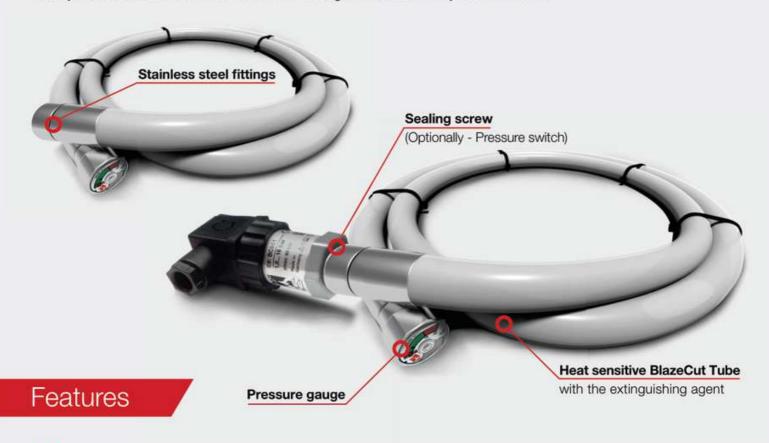


**BLAZECUT** 

# **Blazecut T-series**



The system consists of a heat sensitive BlazeCut Tube made of special plastic which is closed by a stainless steel fitting on each end. The BlazeCut Tube has both storage and detection function which means that the extinguishing agent is stored directly in the BlazeCut Tube and no additional storage device such as cylinder is needed.





Universal use: high flexibility of BlazeCut Tube and A, B, C and electrical fires class rating can protect almost any space High cost-effectivity: zero maintenance, long working life, automatic activation beats the competition in cost-effectivity



No cylinder for storage of extinguishing agent needed: the whole system can be placed inside the protected enclosure



Option to connect the pressure switch and other additional components like signaling unit to perform further functions



Clean and effective extinguishing agent: world-wide known and accepted HFC gases (HFC-227ea and HFC-236fa)



No pressurization needed: the system works by increasing pressure of the extinguishing agent when heated



Automatic operation based on increased temperature: ideal for non-occupied spaces or spaces out of sight



Fully independent: system is operational 24/7 without any power supply



No maintenance during entire working life = zero maintenance costs



Long working life: 5 - 10 years depending on the type of application



No harm to protected enclosure and people when discharged



Very simple installation: no training required for installation



Pressure gauge to monitor the pressure at any time



Low operation temperatures: up to -40°C



Activation temperature: about 120°C

# **Blazecut T-series**



Type of system	Extinguishing Agent	Amount of extinguishing agent (kg)	Length of the system (cm)	Outside diameter of the tube (mm)	Max. volume of the protected enclosure (m³)	Operation Temperature (°C)	
TD100EA	HFC-227ea	0,25	0,25 110		0,20-0,30	-40°C to +60°C	
TV100FA	HFC-236fa				0,22-0,35	-40°C to +80°C	
TD200EA	HFC-227ea	0,50	010		0,40-0,60	-40°C to +60°C	
TV200FA	HFC-236fa		212	40	0,43-0,70	-40°C to +80°C	
TD300EA	HFC-227ea	0,75	0.75	0.75	18	0,60-0,87	-40°C to +60°C
TV300FA	HFC-236fa		316		0,65-1,04	-40°C to +80°C	
TD400EA	HFC-227ea	1,00	440		0,78-1,16	-40°C to +60°C	
TV400FA	HFC-236fa		419		0,86 -1,40	-40°C to +80°C	

# **Optional Components**

Unique construction of the system allows to connect the pressure switch, which monitors the pressure inside the BlazeCut Tube, and once the system is discharged the pressure switch sends a signal to signaling unit or to external device to perform other operation (e.g. disconnect the power).

# Standard BlazeCut components







Pressure Switch BC001

pressure drops under pre-set value.

Audio-optical signaling device for applications in vehicles, machines or boats. Includes a "ready" control light

Signaling Unit BC016

Signaling Unit BC004

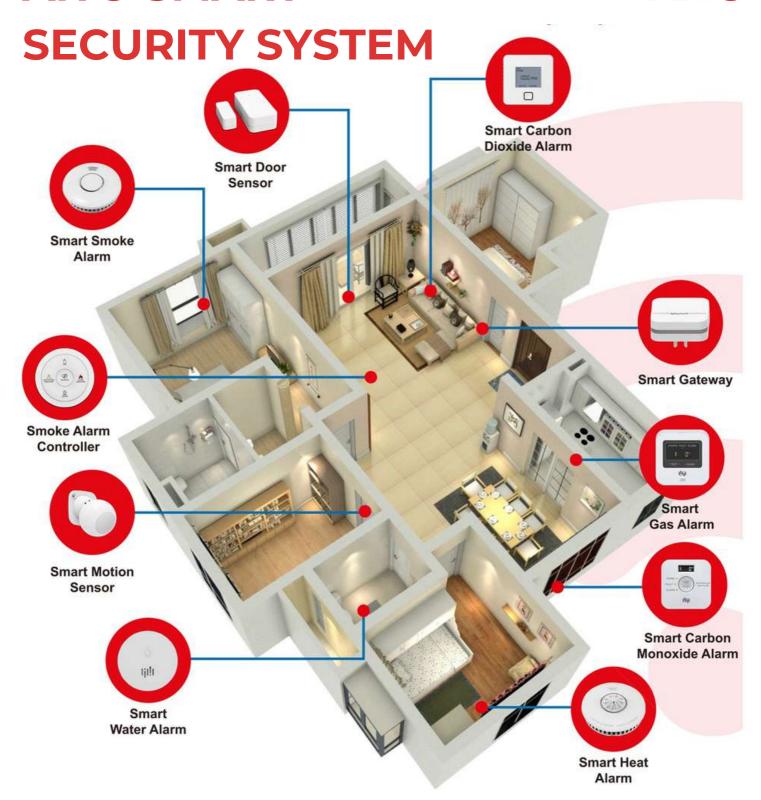
Connected to the fitting of the system, the pressure switch monitors the pressure and sends a signal in case the with a power backup battery. Simple and cost-effective audio-optical signaling device for indoor applications.





# **AITO SMART**









- ◆ Power supply: AC 100-240V 50/60MHz
- Siren function for optional
- Multi-protocol, Zigbee, RF and Bluetooth for optional
- ♦ WIFI standard: IEEE 802.11b/g/n, frequency 2.4GHz
- ◆ Compatible with TUYA App
- Temperature and humidity detection



TWS0101R

## Smart Water Alarm

- ◆ Power supply: DC3V(CR2)
- ◆ Alarm volume: ≥85dB at 1m
- ♦ Waterproof level: IP65
- ◆ Ultra thin design
- ◆ Transmission distance > 100m
- ♦ Communication protocol: Zigbee/RF 433MHZ



TSS380C-HR

- ♦ Power supply: 2\*AA replaceable battery
- Conform to EN14604:2005/AC:2008
- ◆ Alarm volume: ≥85dB at 3m
- Silence function: Approx. 8 mins
- Automatic dust compensation
- ◆ Transmission distance > 100m
- ♦ Communication protocol: Zigbee/RF 433MHZ



TCS0103R

- ♦ Power supply: 100-240V wide voltage supply
- Temperature and humidity detection function and real-time display
- Switch to sleep mode with one click
- The red, yellow, and green colors show at a glance
- ♦ Transmission distance > 100m
- ♦ Communication protocol: Zigbee/RF 433MHZ



TCS0102R

#### Smart Carbon Monoxide Alarm

- ◆ Power supply: 2\*AA battery
- ♦ Conform to EN50291-1:2018
- ◆ Alarm volume: ≥85dB at 3m
- ♦ Silence function: Approx. 8 mins
- Desk stand feature
- ◆ Transmission distance > 100m
- ♦ Communication protocol: Zigbee/RF 433MHZ



TPD0101R

#### **Smart Motion Sensor**

- ◆ Power supply: DC3V(CR123A×1)
- ♦ Detection angle: 120°
- ♦ Warm up time: 10s
- ♦ Transmission distance > 100m
- ♦ Communication protocol: Zigbee/RF 433MHZ



TGS0101R

#### **Smart Gas Alarm**

- ♦ Power supply: AC220V/ 50Hz
- ♦ Conform to EN50194
- Alarm gas: Natural Gas (Methane)
- ◆ Alarm volume: ≥85dB at 1m
- Silence function: Approx. 8 mins ♦ Transmission distance > 100m
- ♦ Communication protocol: Zigbee/RF 433MHZ



TDD0101R

- ◆ Power supply: DC3V(CR1632×1)
- ♦ Heartbeat cycle: 8~12 hours
- Universal design fits for different kinds of doors/windows
- ♦ Transmission distance > 100m
- ♦ Communication protocol: Zigbee/RF 433MHZ



THS385C-HR

#### Smart Heat Alarm

- ◆ Power supply: 2\*AA replaceable battery
- ♦ Conform to BS5446-2: 2003
- ◆ Alarm volume: ≥85dB at 3m
- Silence function: Approx. 8 mins Automatic dust compensation
- ♦ Transmission distance > 100m
- ♦ Communication protocol: Zigbee/RF 433MHZ



TWR0101R

#### Remote Controller

- Power supply: CR2450
- ◆ Test, silence, location functions
- ♦ Transmission distance > 100m
- ♦ Communication protocol: Zigbee/RF 433MHZ



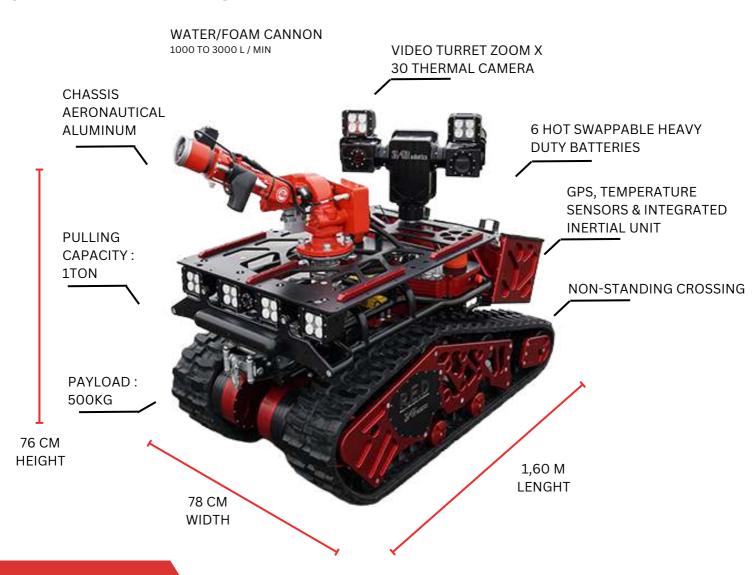






# **COLOSSUS**

# MULTI-PURPOSE FIRE FIGHTING ROBOT (500 KG RANGE)



## **Features**



**WEIGHT: 525 KG** 



**OBSTACLE CLEARANCE: UP TO 30 CM** 



**MOTORIZATION: ELECTRIC ENGINES** 

2 X 4000 W



SLOPE: UP TO 40° | SIDE SLOPE: UP TO 35°



SPEED: 5 KM/H



**WATERPROOF: IP67 EQUIVALENT** 



LITHIUM-ION: 6 SHARK ENERGY ULTRA RESISTANT BATTERIES -14S8P - 48V - 27AH



**DURATION: 12 HOURS IN OPERATIONS** 



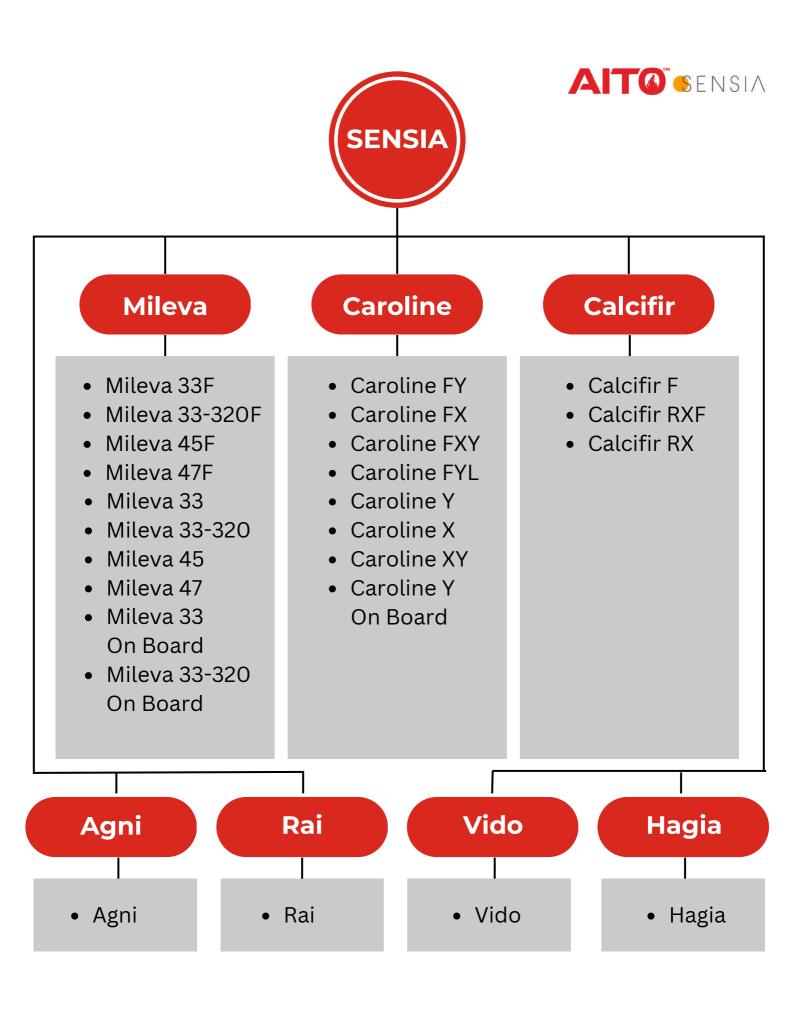








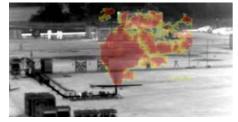






# SENSIA REDLOOK Technology

## Gas Detection



High detection probability and low false alarm rates

# Gas Quantification



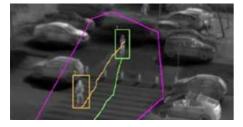
Detect, colour and quantify the mass flow rate of the leak

# M Flame Detection



The most reliable early warning system for fire

#### Surveillance



The next generation functionalities for security and safety

#### Flare Monitoring



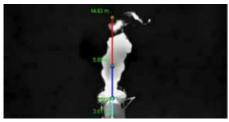
Real time performance monitoring and early detection of liquid carryover

## I. Thermography



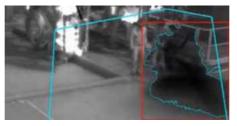
Automatic temperature control system based on high accuracy thermography

# A Flare Efficiency



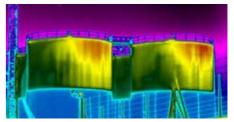
Smoke index warning destruction and removal efficiency indicator

## Spill Detection



Non-volatile hydrocarbons and spills detection

# Tank Leveling



Remote and automated tank level monitoring without opening the thief hatch

#### **SENSIA Products Certifications**











#### Mileva 47F



24/7 monitoring for carbon monoxide gas leaks

#### Agni



OGI for Flared Gases Analysis

#### Rai



24/7 infrared flame detection system

### Hagia



Fever screening system

#### **Caroline FY**



24/7 monitoring for Methane and SO2 gas leaks

#### Calcifir F



Multiple Flare Monitoring System

#### Vido



24/7 infrared surveillance system

#### Mileva 33 On Board



OGI for unmanned aircraft surveys





# **Fixed Cameras**



# **Handheld Cameras**



# **On Board Cameras**



# **Non-imaging Technology**









# FIREVIEW



# THE WORLD'S FIRST UNIFIED FIRE DETECTOR TESTING SYSTEM

AN ALTERNATIVE, QUALIFYING SOLUTION FOR YOUR SAFETY



#### WHY FIREVIEW?

#### World's first Unified System / Convenient Unified System

• Fireview combines independent heat and smoke testing function into one unified tester.

#### Lightweight and efficient portability

• The utilization of its chargable battery allows for easier procedure

#### Simple and fast test system

• Adjustable inspection pole, one button operation.

Firewiew offers less price for better quality/It beats the industry leader in both categories, Price and quality.

#### Excellent customer service for qulity assurance

• We guarantee excellent product qulity and safety with prompt and intergrated aftersales service system.

Using the remote control or smartphone.

#### 10m&6m INSPECTION POLE

Standard Inspection Pole extends from 2 to 3 meters. If long pole is nedded, 6 meter and 10 meter poles are also available for additional price. Inspection poles are used for detectors installed to high ceiling areas such as storage, auditoriums and factories.







#### **DETECTORS REMOVAL TOOLS**

Detectors need removal tools because these tools save you time, cost and even lowers the risk of falling ladders or scaffolding. we offer multiple types of detector removal tools fitted to your detector companies such as Simplex. we also offer a cutomized detector removal tools uniquely designed for your own detector.



Items	Specificaton
Testable detector	<b>Heat:</b> Rate of Rise H at Detector, Fixed Temperature Heat Detector
	Smoke: Ionizetin Smoke Detector, Photoelectric Smoke Detector
	Option: Analog Type Detector, Unexploded Type(Heat)
Head Size	150mm (Detector Inspection)
Inspection Pole Length	Minimum approx. 127cm / Maximum approx. 250cm
Weight	2.3kg
Material	Aluminum, etc
Operating Temp Range	0~40°C
Keeping Temp Range	-10 to approx. 40°C
Operating Humidity Range	O to approx. 85%, No Frost
Smoke Genarator Ability	Approx, 50 testable based on 100ml smokre detector
Battery	14.8V Li-ION
Battery Charging Time	Full charger consumes approximately 5 hours
Charger	Input: AC 100-240V, 50-60 Hz, 0.5A / Output: DC 12V2A
Tester Ability (One Time Charge)	Approximately 200 Heat Detectors
	Approximately 300 Heat Detectors

Approximately 300 Heat Detectors

# Components



## FIRE AND SAFETY SOLUTION



### AITO Firework Holding Sdn Bhd (1122958-V)

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