CATALOG FIRE EQUIPMENTS

M A D E

ITALY













Fire extinguishers - Accessories for fire extinguishers - Refilling machines Chemical extinguishant products - Fire hose, cabinet & accessories - Fire doors Fixed installations HFC 227, Nytrargon, Powder, Sprinkler, CO2, Foam, Detection systems Safety equipments



a.b.s. s.r.l.

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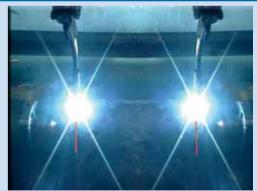
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P

Two large factories located at MILAN at side of highway







a.b.s. was founded by highly qualified staff with thirty five years experience in the national and international worldwide market.

First in Italy to receive CE PED 97/23 across the range, and also the first ever to obtain the approval of fire extinguishers according to European regulations EN3.7 and EN 1866.

Active in fire protection, gaining considerable success, offering the clients a full range of products.

a.b.s. is always looking to new markets and technological innovations, and its organizational structure enables best solutions to any requirement.

The range in which a.b.s. works varies from the fire

extinguisher, cylinders CE mark PED and T-PED or HFC and foam bladder tanks, skid mounted units, fix installations, refilling machines, fire hoses and hose reels. Very active in inert gas systems and HFC 227, UL Listed and accepted by EPA extremely safe, without any environmental impact, and no time limit on use, particularly suitable for the protection of CED, archives museums, etc. In order to consolidate its market presence a.b.s. has focused on "quality" of their products and services. Top quality products are recognized from the market and a considerable production is exported in most European countries as well the Middle East, Asia, Africa, South America.

3500 articles in stock, fast delivery







Trademarks: ABS FIRE FIGHTING
SEALFIRE, NYTRARGON, FIREKILL, EASYFIRE,
PYROKEY, FOAMEXT, NOFLAMES, SECUREBREAK
are registered and protected.

Any improper use if not authorized will be prosecuted according to the law.

We reserve the right to make technical changes and improvements to the products without prior notice.

The customer must clearly require to be informed at the order of any visual

changes, and dimensional techniques.



AN











Owing to the modern plant and machinery **a.b.s.** has the ability to produce on customer request from the smallest fire extinguisher to the largest equipment and fix installations. To achieve these objectives **a.b.s.** strictly follow directions of Quality System, certified by the RINA Italian Naval Register in according to EN ISO 9001 for manufacturing of all the range of products.









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Telephone & e-mail



Tel. +39 039.8396.31 25 lines



E-mail: export@absfire.it

Gloves

Fire proof cabinet

Eye washers, Fog fire forest, blower

Safety cabinet



Fax. +39 039 8396349 +39 039 2847452

147

148

149

150

POWDER FIRE EXTINGUISHERS **APPROVED EN 3.7**



DESIGNED AND MANUFACTURED IN ITALY

ABC Powder (made in Germany) certified ISO 9001 and EN 615 with superior quality.

Cylinders made in our company, sand blasted with metallic sand and painted with epoxy-polyester powder Red color Ral 3000 resistant to all weather conditions and to the ultraviolet rays.



Model 13166 tested and approved EN3.7 by MPA of Dresden in Germany.





100% Made in Italy

Type of powder

(mono ammonium phosphate) Several MAP grade

"BC"

(Sodium bicarbonate) (Karate) (Purple K) (Monnex)

(Potassium bicarbonate)

- "D" metal fires

stainless steel and anti-magnetic available.

Picture shows 6 KG 13166



233

13166



ABC Powder (made in Germany) certified EN 615 with superior quality raw materials with strict control

FIRE EXTINGUISHER

2 HOLDTHE HOSE

1) PULL OUT SAFETY PIN

3) SQUEEZE HANDLE AND AIM JET AT THE BASE OF FIRE

LEFORUSE ON LIVE ELECTRICAL EQUIPME

a.b.s. 14

UPTO 1000 VOLTATA DISTANCE 1 M.

AERATE THE ROOM AFTER USE

Cylinder

Manufactured according to EN 3-8 and DIR 97/23/EC, welding process according to the EN 288 / EN 1418. High quality steel, deep sand blasted and painted with epoxy-polyester powder red color Ral 3000 resistant to all weather conditions and to the ultraviolet x'rays.

Valve M30x1,5 squeeze lever

Brass chromed, marked CE as directive 97/23/EC. With safety valve and complete with a green safety seal to improve the optical check from far. Only a simple glance is enough to check if the extinguisher has been tampered.

Manometer

Made in brass, German design by EBUR, Ø 23 or 35 mm, the best quality available in the market.

Discharge hose

Highly flexible hose made in EPDM rubber with an excellent resistance, manufactured from selected synthetic materials, complete with metal discharge

Powder

Our partners are prestigious companies such us Caldic Furex and Total (Germany), Ruhl, certified ISO 9001 EN615 with superior quality raw materials. The basic components of dry powder are ammonium phosphate and ammonium sulphate with special silicone additives enabling easy discharge and avoiding any caking process.

Dry powder is not corrosive, not abrasive, not toxic for humans and animals.

Note: for refilling is not suggested to use other kind of

Certificate of conformity

Supplied in a carton box, instruction of use, guarantee for the consumer, declaration of conformity

Magnetic hose holder

20104







Optionals



Manometer 35 mm



Magnetic hose holder



Metal hose holder ring





Plastic foot



* 20034 Metal ring optional

Technical data are subject to modification for improvements without prior notice

Efficacious with high performance, professional maintenance, recomended.

1

Best quality dry powder utilize a specially fluidized and siliconized mono ammonium phosphate dry chemical (MAP) certified EN615.

It chemically insulates Class A fires by melting at approximately 170°C and coats surface to which it is applied.

It smothers and breaks the chain reaction of Class B fires and will not conduct electricity back to the operator. Excellent on class C fires.



Cheap, efficacy, multipurpose.



Dirty, it requires hard work for cleaning after use. Low visibility during discharge.

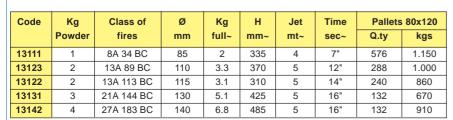




		Wire br	ackets
	Kg 1	Kg 2	Kg 2 20427_1
	Ø 80	Ø 110 21040	Ø 110
ו ח		Ø 115	
	Br	acket for	car or trucl
	With safe antivibrat	ety pin ion	
	Č		

Kg 3

20428 Ø 130





6-9-12 Kg Dry powder ABC - STORED PRESSURE - EN 3.7

Products for commercial and industrial use in 3 different capacity: kg 6 - kg 9 - kg 12.



German Powder EN615 **Best quality**





100% Made in Italy

13192

55 A 233BC

12 Kg 13172

> 55 A 233BC



21265 Hose spring



20104 Magnetic holder



Plastic foot





Hose belt



13162

34 A 233BC

13160 43A 233BC

6 Kg

13166 43 A 233BC

13169

55 A 233BC

Code	Kg Powder	Class of fires	Ø mm	Kg full~	H mm~	Jet mt~	Time sec~	Pallets Q.ty	80x120 kgs
13162	6	34A 233 BC	160	9,7	600	7	18"	72	745
13160	6	43A 233 BC	160	10	530	7	17"	72	750
13166	6	43A 233 BC	160	10	530	7	17"	72	750
13169	6	55A 233 BC	160	10	570	7	17"	72	755
13192	9	55A 233 BC	190	14	600	7	17"	40	580
13172	12	55A 233 BC	190	17.5	660	7	18"	40	730

11

ESTORIA MODEL TOP QUALITY - EN 3.7



11 0

Cylinder increased, better to have a uniform discharge and jet lenaht.

> Kg 6 34 A 13163 233BC

20052 Wall brackets



Back hook, ensure better stability. Large capacity cylinder (8.4 Lt) benefits for the longer jet and constant pressure, and foot without welding ensure insulation from ground avoiding bottom part under pressure to suffer corrosion.

20523 Large manometer

Gauge Bourdon 40 mm, thread npt unmovable.

21815 Valve M 45x1.5



Ø 45 mm Best inspection an refilling

Swivel neck ring

Foot and bottom manufactured in a single pressing process. Will never rust.

German Powder

EN615 **Best quality**



Code Kg Class of Ø Kg н Jet Time Pallets 80x120 Powder fires mm full~ mm~ mt~ sec~ Q.tv kgs 13163 34A 233 BC 160 10,5 610 18,5" 745

Check valve + locked

21161 Safety valve preassembled. Bursting disc fast release.



6-9-12 Kg Dry powder ABC INTERNAL CARTRIDGE

EXTINGUISHER 11 0



Optional squeeze valve

Kg 6

233BC



kg 6 - kg 9 - kg 12

Description

With CO2 internal cartridge professional and allows a better maintenance.

German Powder ABC EN 615.

Fire extinguishers with internal cartridge respect to the stored pressure offer several advantages.

Filling cap 74 mm allows an easy inspection for the powder and a better check for the weight of the CO2 internal cartridge.

Widely used in environments where it is necessary a professional maintain and a visual check for the state of powder extinguishant.



20052 Wall bracket

Hook is welded on the back of cylinder.





	Code	Kg	Class of	Ø	Kg	Н	Jet	Time	Pallets	80x120
		Powder	fires	mm	full~	mm~	mt~	sec~	Q.ty	kgs
Г	13167	6	34A 233 BC	160	10.7	470	7	18"	72	795
	13194	9	55A 233 BC	190	16	545	7	19"	40	670
	13173	12	55A 233 BC	190	18.5	605	7	19"	40	790

MPA Dresden Kg 6 233BC EXTINGUISHER Spare part 20131 for **13168 - 13610** 20208 for 13175 11 0

6-12 KG Special dry powder **BC High risk**

Refineries, military airports, department stores flammable.



Italy



BC PURPLE K 90% EN 615

Basic component is Potassium Bicarbonate, increased capacity for extinguishing flammable liquids and gases.

Typical applications in refineries, risks of oil, military risks.

BC KARATE RÜHL EN 615

Basic component is Potassium Sulphate, increased capacity for extinguishing flammable liquids and gases.

Typical applications in refineries, risks of oil, military risks.

Code	Kg	Class of	Ø	Kg	Н	Jet	Time	Pallets	80x120			
	Powder	fires	mm	full~	mm~	mt~	sec~	Q.ty	kgs			
	PURPLE K BC DRY POWDER											
13168	6	233 BC	160	10.7	470	7	18"	72	795			
	KARATE BC DRY POWDER											
13610	6	233 BC	160	10.7	470	7	18"	72	795			
13175	12	233 BC	190	18.5	605	7	19"	40	790			

9 Kg MONNEX Special powder BC - High risk





Description

With CO2 internal cartridge professional and allows a better maintenance. **English powder, MONNEX EN 615**.

Basic component are Potassium Sulphate and urea, Superb and excellent skills for extinguishing flammable liquids and gases.

Typical applications in refineries great risks, risks of oil, airports, power plants and nuclear weapons.



20052 Wall bracket

Hook is welded on the back of cylinder.



TOP BRAND, known as the best for high risk: Refineries, military airports, flammable department stores.

Dry Powder produced in . England



Code	Kg	Class of	Ø	Kg	н	Jet	Time	Pallets	80x120
	Powder	fires	mm	full~	mm~	mt~	sec~	Q.ty	kgs
13193	9	233 BC	190	16	605	7	19"	40	670

ABC Powder with EXTERNAL CARTRIDGE CO2

Spare part

20300

Description

Professional fire extinguisher with CO2 external cartridge allows a better maintenance and a periodic check for the powder.

The external cartridge is easy to remove for a periodic check control of the weight. Filling cap 74 mm allows an easy inspection for the powder.

German Powder ABC EN 615.





20052 Wall bracket



Hook is welded on the back of cylinder.



Spare part 20201

Code	Kg	Class of	Ø	Kg	Н	Jet	Time	Pallets	80x120
	Powder	fires	mm	full~	mm~	mt~	sec~	Q.ty	kgs
13611	6	34A 233 BC	160	12	560	7	17	40	730

SEALFIRE FIRE EXTINGUISHERS

APPROVED EN 3.7 Water + addittive

DESIGNED AND MANUFACTURED IN ITALY

Ideal for public places, lodges, stores, airports, supermarkets, hotels, etc. etc. The chemical dry powder does not allow good visibility during discharge and can create panic, foam instead is the opposite.

Sealfire allows full visibility, it has longer discharge time, and the sealing effect protect against flash back.

Special spray nozzle, allows use under electricity limited at 1,000 Volt without danger, while tested at 35,000 Volt according to EN3/7 European Standard. Considered environmentally friendly according to OECD standards and DIN ISO 9688,> 90% in 28 days. Free for PFOA (acid perfluorottanic) Certified laboratories Bilacon, Germany.

The cylinder is internally coating PLASTCOAT which could be quaranteed 2 years against corrosion.





Description

It 's the most popular in Great Britain, USA and in France > 65% of the market The extinguishing charge is a mixture of 74% water and 26% of SEALFIRE ABF® an additive concentrate.

Best result against fires of wood, textiles, paper and very efficient for flammable liquid fires.

The special spray nozzle, allows use under electricity limited at 1.000 Volt without danger, while tested at 35.000 Volt according to EN3/7 European standard

SEAL FIRE ABE® forms a thin film that floats on flammable liquid, quickly turns and prevents re-ignition of the fuel because it insulates the contact with oxvaen

The cylinder is internally coated PLASTCOAT which is guaranteed 2 years against corrosion.

Available Stainless steel cylinder guarantee 5 years against corrosion.

The additive is also called A.F.F.F. Acqueous Film Forming Foam. They offer several advantages over the fire extinguishers Powder:

- Longer time of discharge!
- Visibility the entire time of discharge
- Not dirty! Water + additive
- Ecological, biodegradable to 99,8%

Sealfire ABF®

Official fire test carried out by professional fireman as EN 3.7 233 B 6 It Sealfire® 1 minute preburning 1000° C terrifying hot

5 seconds

Test with Epthane according to EN3.7 Welded sheet steel circular 233 B diam 3 mt. After 60" ignited, discharge.

A terrifying hot 1000°C!



10 seconds

After only 10"seconds. Flames are almost down due to sealing effect.



15 seconds

After 15 second. Sealing effect is complete. Reignition is no more possible.

EXTRAORDINARY!



Control panel for fire training water/foam fire extinguishers



to 380 Volts to 1 m away, no problem of electric shock

For test and fire training.

Allows you to run training courses at customer sites and training without any danger to personnel.

With safety switch, indicator lights, complete with power cables.

Package includes power cables



Power Cable ection supplier 220 V.

Power Cable connection supplier 380 V.



Foam Sealfire ABF® AFFF fire extinguishers - STORED PRESSURE - EN 3.7

6 - 9 It for offices, hotels, hospitals, airports, schools, factories, supermarkets, garages.



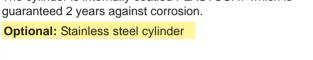
100% Made in Italy

Description:

The Sealfire ABF® is a universal product to turn off any kind of material burned. Quick off, it forms a film on flammable liquid, preventing re-ignition. Strong cooling.

Easy to use, lightweight, handy, soft jet, total visibility, zero risk. In Northern Europe is the most common fire extinguisher, over

The cylinder is internally coatied PLASTCOAT which is





Stainless steel Aisi 304

13365 Model with extending nozzle

Cheap, efficacy, visibilty, extremely low environment impact, very easy to use, almost zero damages after discharge. Free from PFOA (acid perfluorottanic)

Not efficient on gas fire class C. In this case the rule provides to close the source of gas, in order to avoid explosions for the formation of explosive mixtures.

Sealfire ABF®

The additive is also known as AFFF Acqueous Film Forming Foam. Ideal for offices, hotels, museums, archives, factories, shops, laboratories, home, garage, ecologic replacement for the halon 1211.

Non conductive Laboratory tests at 35,000 Volts

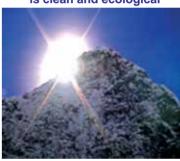
CLEAN

74% water premixed with 26% ABF (1% Sealfire X + 25% Sealfire A)

BIODEGRADABLE OECD > 90/28 days. **DIN ISO 9688** Free from PFOA

(acid perfluorottanic)

The Sealfire ABF® respects the environment is clean and ecological



Special spray nozzle from the jet is not electricity conductive





21048 Kg 6 - Ø 160

Non corrosive



Kg 9 / 12 - Ø 190

PVC coating- no corrosion

Plastic foot

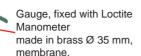
20480 Universal

Plastic belt for hose

	Code	Sealfire®	Class of	Ø	Kg	Н	Jet	Time	Pallets	80x120
		It	fires	mm	full~	mm~	mt~	sec~	Q.ty	kgs
	13363	6	43A 233B 75F	160	10.3	570	5	30"	72	755
	13363_1	6	43A 233B 75F	160	10.3	570	5	30"	72	755
	13396	9	55A 233B 75 F	190	15	635	7	38"	40	640
-	13365	6	13A 113B 75F	160	10.3	570	5	38"	72	755

Special characteristics, components, design and performance.

EXTINGUISHER



German technology.

13366



Large capacity cylinder (8.4 Lt) benefits for the longer jet and constant pressure.



21815_1 Valve M45x1.5

Valve Ø 45mm, with swivel female neck ring, best inspection and refilling.

Check valve

100% Made in Italy

Check valve + locked seal





20052 Wall brackets



Back hook, ensure better

Foot without welding ensure insulation from ground avoiding bottom part under pressure to suffer corrosion.

Foot and bottom manufactured in a single pressing process.

Will never rust.

Internal corrosion coating, guaranteed 2 years. Optional stainless steel.



21161_1

Safety valve preassembled.



Sealfire Pallets 80x120 Code Class of Kg н Time ABF[©] fires mm fullmmmt~ sec~ Q.ty It 13366 34A 233B 75F 160 10.3 600 5 30' 40 640 6 6 (-30°) 34A 233B 75F 13366 1 10.3 640

Sealfire S[®] for home and small shops

Description

The water fire extinguisher! has a good location in the houses (or is suitable in the houses)

The Sealfire S[®] is a universal product to turn off any kind of fire. Great for cooking oil fires caused by carelessness that easily creates combustion at about 330° C

Live saving accessory for housewife (or for home).

Very good and without any danger of electrical conduction, in the event of fire of television and computer appliances.

Easy to use, lightweight, handy, soft jet, total visibility, zero risks, save lives.

Polyethylene inner lining, 2 years guarantee.

Low environmental impact OECD>90/28 days, much less a wash

of some household detergents.



Sealfire ABF-30® (-30° +60° C)

Cheap, efficacy, visibilty, extremely low environment impact, very easy to use, almost zero damages after discharge. Free from PFOA (acid perfluorottanic)

Not efficient on gas fire class C In this case the rule provides to close the source of gas, in order to avoid explosions for the formation of explosive mixtures.



Class F fires involving deep fried oils and fats,

generally in restaurant kitchens etc. This products can not be extinguishing with Powder, CO2 Carbon Dioxide.

The Sealfire $S^{\mbox{\tiny \$}}$ settles softly on flammable liquid and floats preventing re-ignition.

	Code	Sealfire [®]	Class of	Ø Kg H Jet mm~ Time sec~ Pallets 80x120 410 2.75 405 2.25 42" 2.88 4.00						80x120
		It	fires	mm	full~	mm~	mt~	sec~	Q.ty	kgs
	13320	2	8A 55B 40F	110	3.75	405	3	12"	288	1.000
1	13320_30	2	5A 34B 5F	110	3.75	405	3	12"	288	1.000
	13331	3	13A 144B	130	5.2	425	4	16"	132	670

Fire extinguisher - Water Sealfire® AFFF - INTERNAL CARTRIDGE - EN 3.7

Internal cartridge CO2

Description:

Foam Sealfire AB is the best availble product for top performances in fires of class A, class B and also excelent in class F deep frying oils and restaurants kitchen fats.

Models with internal cartridges allow professional and easy maintenance. **Sealfire AB** it is a mixture of the **Sealfire S** with addittives **Sealfire A** for top performaces in all fires **A,B,and F** frying oils simultaneously. PLASTCOAT gives 2 year guarantee against internal corrosion

Optional: antifreeze -30°C for cold environments zones.

Optional: Stainless steel cylinder.

Optional: Sealfire® AB available premixed

Sealfire A and Sealfire S available in jerry can of 20 Kg.



6/9 Lt

6 Lt

13367

34 A 233B

75F

9 Lt

13394

34 A 233B



Spare part

21170_1 Sealfire A® for 6 It

21170_2 Sealfire A® for 9 It

100% environmentally friendly additive class
A. Greatly potentiates the effect on the wood, textiles, paper, etc. ...

Spare part 1x6 and 2x9 lt foam floating internal cartridge.



Lifetime at least 5 years.
The diam is 4,5 cm height 19 cm.
The seal breaks when CO2 cartridge operated and it mix immediately with water

	Code	Sealfire®	Class of	Ø	Kg	Н	Jet	Time	Pallets	80x120
		It	fires	mm	full~	mm~	mt~	sec~	Q.ty	kgs
	13367	6	34A 233B 75F	160	11.5	550	5	24	72	828
	13394	9	34A 233B 75F	190	15	550	5	35	40	600
1	3394_1	9	34A 233B 75F	190	15	550	5	35	40	600

Fire extinguisher LIFEWATER® - LT 9 -100% Biodegradable - EN 3.7

Stored pressure Premixed

Description:

LIFEWATER is a special additive added to pure water which improves performances in fires of class **A** such us, paper, textiles, woods. Typically used in schools, hotels, hospitals.



Made in Italy

9 Lt

13393



It is totally clean, without foam, 100% biodegradable and zero pollution.

Fully respect the environment.

The special nozzle discharges very fine drops of water, and has passed EN3 electricity conductivity test as EN3; suggest use until 1000 volt without any danger.

All fire extinguishers with Foam SEALFIRE or LIFEWATER, have the cylinder with internal coating PLASTCOAT which is guaranteed 2 years against corrosion.

Optional: cylinder stainless steel, antifreeze, enabling its use at very low temperature till -30°C





(*) Antifreeze -30°C +60°C



CARBON DIOXIDE FIRE EXTINGUISHERS CO2

APPROVED EN 3.7

DESIGNED AND MANUFACTURED IN ITALY

The C02: carbon dioxide is excellent for fires of class B, suitable for class A fires provided in the initial stages and in the absence of embers to turn off paper, textiles, wood; although it is most suitable and consider closing the valve of the gas supply to stop the combustion.





Cylinder CE marked PED 97/23/CE

CE marked, 84/525/EEC or EN1964-1 and 97/23/EC (PED). W.P 60 bars at 20°C and 174 bars at 60°C (maximum allowable pressure PS).

Light steel 34CrMo4, hydraulic tested up to 250 bar. All the cylinders are CE marked according to dir. 97/23/CE. Fire extinguisher are certified according ISO 9000, EN 3.9 and with batch declarations of conformity.

Deeply sand blasted with metallic sand and painted with epoxy-polyester powder Red color Ral 3000 resistant to the atmospheric agents and to the ultraviolet x'rays.

Valve squeeze lever

Brass (ST-CW617N) marked CE 97/23/CE, with safety disc set at 185±15bar complete with a green safety seal to improve the optical ceck from far.

On request only for steel cylinder version valve with safety disk EN 3.9 195-230 bar.

Only a simple glance is enough to check if the extinguisher has been tampered

Thread M25x2, not damages after dismount phase.

Discharge horn

Strong polypropylene dielectric . Inside nozzle creates a ice cloud which quickly knock down fires.

Extinguishant

Carbon dioxide is a odourless and color less gas. It weigh about 1.5 times the air; it does not wet, dirty and it does not damage objects.

The CO2 used in the extinguishers is 99% pure and it is moisture-less. CO2 is compressed in liquid phase inside the high pressure cylinder.

In normal conditions at 20°C, the pressure inside the cylinder is about 55-60 bar and 1 Kg of liquid CO2 produces approx 520 litres of vapor gas.

Discharge hose

Rubber hose reinforced SAE R100, EN 853 with a high safety grade having a burst pressure far over > 450 bar. Its length allow you to act at a safety distance from the fire.

All our CO2fire extinguishers are equipped with stronger siphone tube 100% Aluminium.

Even if test not required by the standard EN 3.7, they are, Good for extinguishing initial fire in class A.



Cheap, clean, dielectric



Rapid vaporization of the gas, so not suitable for use in open premises. However, it is recommended that the operator must be trained in the proper use of this fire extinguisher, because during the discharge in contact with the skin can be causes dangerous burns by dry ice.

Versions:

- Aluminium cylinder
 Steel Light alloy cylinder 35 CrMo4
 Anti-magnetic, for army and hospital

Anti-magnetic valve



Extinguishers Anti-magnetic, usually are used to avoid interference with the radars, computer scanner, RMA, and diagnostic equipments

Standard brackets

Suitable for hook on the brass valve





21009 Kg 2

21001 Ka 5 Wall bracket

Kg 5 Anti-magnetic

Optional

Horn holder ring and wall bracket. Maintains the cylinder adhering to the wall, prevents oscillations and accidental falls

20432 for 5 kg steel cylinder Ø 136 mm

20433 for 5 kg aluminium cylinder Ø 154 mm



Brackets boats / trucks

Made in steel, latch closure complete with safety pin.





2 kg alum. Ø 111 20047 5 kg steel

Ø 136 20915 5 kg alum.



20095

5 kg Stainless steel Ø 136

20095 1

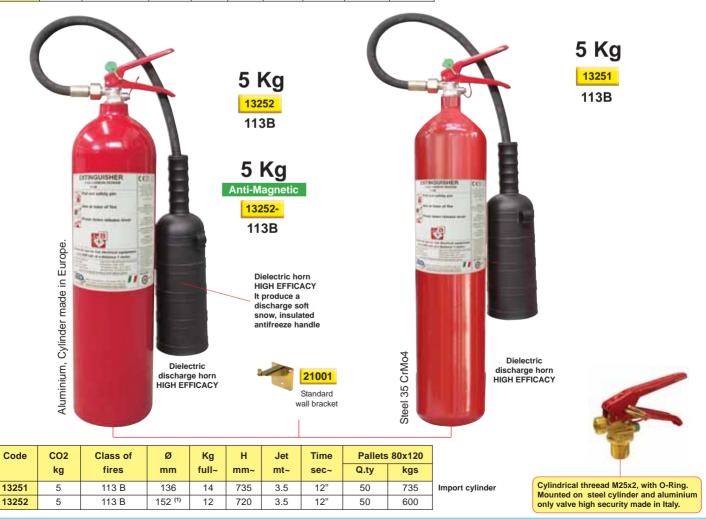
5 kg Stainless steel

Fire extinguisher - Carbon Dioxide CO2 - EN 3.7



Pallets 80x120 Code Class of Kg Jet Time fires mm full~ mm~ mtsec~ Q.ty kg kgs 13221 2 34 B 105 6.5 560 3 8" 100 810 13222 2 34 B 111 5 535 3 8" 100 810 13223 2 70 B 105 6.5 560 3 10" 100 810

Type from **2 to 5 kg** for offices, hotels, hospitals, airports, garages.



Description:

Foxer S® are extinguishant gases ecologic and clean. Main components are a blend of HFC236, HFC 227, HFC 134, recognized in the NFPA 2001 and accepted by EPA without limitations. They do not leave residuals after the discharge.

They are safe for the environments, do not damage the ozone layer and are safe for humans and live animals.

They are ideal replacements of banned BCF halon 1211.

They are not electrical conductive, do not leave any residues, do not creates thermal shocks and it is ideal and unique protection for electronic equipments.

Comparing with dry powder which leaves a lot of dirty residual, and comparing with foam that cannot be used on computers, become the unique ideal products.

These products are perfect protection for valuable places, were cleaness is essential such as, shops, museums, libraries, archives, banks, computer rooms, telecommunications facilities, switchboards.

Due to rapid vaporization of the gas they are excellent for indoor fires, and have to be limited outdoor only for critical uses. Although not tested for class **A** fires, Foxer S is as excellent as the CleanBlue, having almost the same chemical compositions.

Fire test with Foxer portable fire extinguisher, clean, no residuals.









Fire test with Powder ABC portable fire extinguisher, dirty and residuals.









ADVANTAGES

Do not leave residues. **Safe** for humans, animals. **Ecologic**.

No termal shockes on computers.

Do not have law limitations. **Excellent for indoor** use for any initial fire in offices involving paper, electronics equipments.

OZONE FRENDLY ODP = 0

Disadvantages

Rapid vaporization of the gas they have to be limited outdoor.

Costs more than other extinguishing agents.









Kg 1

5 A 34B Kg 2 13420

70B

Kg 4 13440

13 A 113B Kg 6

113B

Code	CO2	CO2 Class of Ø kg fires mm		Kg full~	H mm~	Jet mt~	Time sec~	Pallets Q.ty	80x120 kgs
13410	1	5A 34B	85	2	335	2	10	576	1.150
13420	2	70B	130	4.1	425	5	14	576	1.150
13440	4	13A 113B	140	6.8	485	3	25	132	910
13461	6	113B	160	9.7	530	5	24	132	910



Portable Fire Extinguishers Lithium D FAVORIT M Powder



Low Velocity Discharge Applicator
CE marked
For D class fires

Kg 6 - 12

The extinguisher contains

Kg 6

13162_6

Kg 12

13172_6

powder which is suitable for fires involving lithium.

Unique lance applicator designed to allow the powder to fall gently over the fire.

Highly effective against metal fires, which include fires caused by **sodium**, **magnesium** and **aluminium** when in the form of powder or swarf.

m and aluminium when

Use **D FAVORIT M** Dry Powder on 'Class D" specialist metal fires - particularly those involving Alkali metals such as Sodium, Potassium, Magnesium and Aluminium when in the form of swarf or powder (Note: **D FAVORIT M** is suitable for Lithium fires).

The unique lance applicator is designed to allow the powder to fall gently over the fire to prevent burning material from spreading.

D FAVORIT M is a Dry Powder fire extinguisher based on Sodium Chloride that has been treated with flow and moisture repellent additives.

D FAVORIT M extinguishes metal fires by fusing the powder to form a crust, which then excludes oxygen from the surface of the molten metal.

The addition of a specific agent prevents the powder from sinking into the surface of the molten metal.

Powder **D FAVORIT M** tested by



Certificate of Conformity reference number KB 116/13 with portable EN3 fire extinguishers, equipped with a class D fire applicator:

- Fire test object Magnesium acc. to annex NA of DIN EN 3-7 with 12 kg powder.
- Fire test object Sodium acc. to annex NA of DIN EN 3-7 with 12 kg powder.
- Fire test object **Lithium** (without specification) with 12 kg powder.



	Code	Kg	Class of	Ø	Kg	Н	Jet	Time	Pallets	80x120
13162_6 6 D 160 10.7 600 7 >20" 72 795		Powder	fires	mm	full~	mm~	mt~	sec~	Q.ty	kgs
	13162_6	6	D	160	10.7	600	7	>20"	72	795
13172_6 12 D 190 18.5 660 7 >25" 40 790	13172_6	12	D	190	18.5	660	7	>25"	40	790

Seize and squeeze for maximum control

Corrosion resistant high grade valve

Unique lance applicator designed to allow the

powder to fall gently upon the fire

 Highly effective against metal fires, including Lithium when in the form of powder or swarf.



CE Marked



Equiped with double Magnetic hose holder.



21136

Extending lance 60 cm hose for smoother fires of metals class "D"





Automatic valve page 43



With bulb at 68°C standard 24001

24003 With bulb at 93°C

Its activation does not require any source of energy. It is equipped with a sprinkler head with a termosensible bulb. It is normally installed just up to the fire risk area. . Tipically used in heater rooms, storage of flammable liquids, unattended areas. Standard sprinkler is 68°C, while only the 2 kg is for boat use and it is 93°C

Powder

Is highly efficient however it need a deep cleaning of the room in case of activation.

Cod.	Kg	Mq~	D mm	H mm
15103	2 2 190		190	
15105	4	4	245	350
15109	6	6	245	350
15111	10	10	245	450
15110	12	12	245	450

Foam Sealfire®

Foam is specially used in fires of flammable liquids contained in flat containers. The foam floats over the flammable liquids sealing the fire from reignition and flasback. Much more clean than powder.

Cod.	Lt	Mq~	D mm	H mm
15112	6	4	245	350
15113	10	8	245	450
15114	20	12	360	450

Bulbs color



Ecologic Gas HFC 227

Is a clean gas, does not leave any residue, no need cleaning, the gas quicly knocks down the flames in seconds. Versus foam or powder is more expensive but the time saved for cleaning worth its cost ten times.

Cod.	Kg	D mm	H mm	M ^{3*}
15109_1	6	245	350	10
15110_1	12	245	450	20
15225_1	24	360	450	40

^{*} Suggestions of choice must be given from the expertized technichian: As general rule in closed rooms: Dry powder 12 kg is good for an area of 9/10 M2 or a volume of 25 M3 - Sealfire® Foam 20 Lt is good for an area of 15 Mq Gas HFC 227 24 KG is good for a volume of 40 M3. Use only indoor. The volume protected is less if room has small aperture.

Pressure switch

Accessory for automatic fire extinguishers. When the fire extinguisher propel, allowing the automatic closing of the gas valve of the boiler room and activate an optical alarm.



23024 Pressure switch, NC-NA 10A



Fire protection systems for boiler rooms and for small kitchens of restaurants.

Available also for "F" class fire



On request special version for cooking oils fires

Kitchen





pressure gauge

- CE PED 97/23 surveillance: Bureau Veritas.
- Manufactured ISO 9001 Vision 2008, RINA surveillance.
- Best quality German Powder ABC multipurpose.
- Cylinder: Sandblasted and painted with epoxy polyurethane powder highly resistant to bumps, UV x-ray, maritime climate and industrial corrosive environment.
 - Fire class rated A IVB

Kg 25 - Kg 50 - Kg 100

Options

- Aluminium horn for 50 and 100 kg.
- Hose from 5 up to 10 mt.
- Third swivel front wheel.
- Detachable frame may be painted, red, or black.





Swivel couplingIt allows easy unrolling of the hose avoiding twisting

on 25 kg Cod. 21035_1

of the hose avoiding twisting
Discharge pistol with 3/8"
swivel coupling.
Optional on 50 kg

ws easy unrolling

ON REQUEST



Horn in aluminium 3/4' shock resistant











All types fire class approved A IVB
* Stainless steel cylinder

D = Detachable frameNo welding on the cylinder ensures better and higher safety.

W = Welded frame.
The axe and carrying handle are welded on the cylinder body.



С	apacity	Code	Type	Type	Jet	Discharge		Packing d	acking dimension W D kg~ cm~ kg~ 43 53.5 55 43 53.5 55 43 53.5 55 43 53.5 55 45 55 80 45 55 80		
	Kg		of frame	of valve	length mt~	time sec~	H cm~		_	₽ kg∼	
$\backslash \Gamma$		18130	W	2"	11	25"	102	43	53.5	55	
	25	18130_1	D	2"	11	25"	108	43	53.5	55	
		18130_5 🔆	w	2"	11	25"	108	43	53.5	55	
	50	18164	w	2"	11	43"	105	45	55	80	
	30	18164_1	D	2"	11	43"	112	45	55	80	
	100	18181	w	2"	12	99"	129	54	70	155	
	100	18181_1	D	2"	12	99"	129	54	70	155	

- Fire class rated A IVB
- CE PED 97/23 surveillance: Bureau Veritas.
- Manufactured ISO 9001 Vision 2008 RINA Surveillance.
- Best quality German powder ABC multipurpose.
- Cylinder: Sandblasted and painted with epoxy polyurethane powder highly resistant to bumps, UV x-ray, maritime climate and industrial corrosive environment.

Kg 25 - Kg 50 - Kg 100

Options

- Aluminium horn for 50 and 100 kg.
- Hose from 5 up to 10 mt.
- Third swivel front wheel.
- Cap 4",safety valve 1", check valve, inspection gauge.
- Detachable frame may be painted, red, or black.





Swivel coupling It allows easy unrolling of the hose avoiding twisting

on 25 kg

Cod. 21035_1

It allows easy unrolling
of the base avoiding twisting

Discharge pistol with 3/8" swivel coupling.
Optional on 50 kg

Cod. 21038_2

ON REQUEST

Horn in aluminium 3/4" shock resistant.











Standard cap



D = Detachable frame No welding on the cylinder ensures better and higher safety.



Optional cap



W = Welded frame.The axe and carrying handle are welded on the cylinder body.



All types fire class approved A IVB

" Stainles:	Stainless steel cylinder												
Capacity	Code	Туре	Туре	Jet	Discharge	Packing dimension							
1/0		of	of valve	length	time	Н	w	D	•				
Kg		frame	or cap	mt~	sec~	cm~	cm~	cm~	kg~				
	18131	W	2"	11	25"	102	43	53.5	60				
	18131_1	W	4"	11	25"	102	43	53.5	60				
25	18131_2	D	4"	11	25"	102	43	53.5	60				
	18131_5 🜟	D	2"	11	25"	102	43	53.5	60				
	18131_7	D	2"	11	25"	102	43	53.5	60				
	14163	W	2"	11	41"	105	45	55	85				
	14163_1	W	4"	11	41"	105	45	55	85				
50	18163_2	D	4"	11	41"	105	45	55	85				
	18163_5 🜟	D	2"	11	41"	105	45	55	85				
	18163_7	D	2"	11	41"	105	45	55	85				
	18166	W	2"	12	99"	129	54	70	166				
	18166_1	W	4"	12	99"	129	54	70	166				
100	18166_2	D	4"	12	99"	129	54	70	160				
- 3 0	18166_5 🜟	D	4"	12	99"	129	54	70	166				
	18166_7	D	2"	12	99"	129	54	70	166				

- Fire class rated A IVB
- CE PED 97/23 surveillance: Bureau Veritas.
- Manufactured ISO 9001 Vision 2008 RINA Surveillance.
- Best quality German powder ABC multipurpose.
- Cylinder: Sandblasted and painted with epoxy polyurethane powder highly resistant to bumps, UV x-ray, maritime climate and industrial corrosive environment.

Kg 25 - 50 - 100 - 150

Options:

- Aluminium horn for 50 and 100 kg.
- Hose from 5 up to 10 mt.
- Third swivel front wheel.
- Cap 4",safety valve 1", check valve, inspection gauge.
- Detachable frame may be painted, red, or black.



Standard cap



D = Detachable frame No welding on the cylinder ensures better and higher safety.





Optional cap

CE



Capacity	Code	Туре	Туре	Jet	Discharge	Packing dimension			
Kg		of frame	of valve or cap	length mt~	time sec~	H cm~	W cm~	D cm~	kg~
	18131_10	W	2"	11	25"	102	43	53.5	60
25	18131_11	W	4"	11	25"	102	43	53.5	60
25	18131_12	D	4"	11	25"	102	43	53.5	61
	18131_17	D	2"	11	25"	102	43	53.5	61
BC Karate	18135	D	2"	11	25"	102	43	53.5	61
	18163_10	W	2"	11	41"	105	45	55	85
50	18163_11	W	4"	11	41"	105	45	55	85
30	18163_12	D	4"	11	41"	105	45	55	87
	18163_17	D	2"	11	41"	105	45	55	87
	18166_10	W	2"	12	99"	129	54	55	160
100	18166_11	W	4"	12	99"	129	54	70	160
100	18166_12	D	4"	12	99"	129	54	70	166
	18166_17	D	2"	12	99"	129	54	70	166
	18150_11	W	4"	12	120"	138	54	70	230
150	18150_21	W	4"	12	120"	138	54	70	230
	18150_22	W	4"	12	120"	138	54	70	230

- CE PED 97/23 surveillance: Bureau Veritas.
- Manufactured ISO 9001 Vision 2008 RINA Surveillance.
- Top quality SEALFIRE X®, has the best sealing effect, specially developed for use in portables and trolleys extinguishers.
- Cylinder: Sandblasted and painted with epoxy polyurethane powder highly resistant to bumps, UV x-ray, maritime climate and industrial corrosive environment.

Very low environment impact, OECD>90% / 28 days. SEALFIRE X® is PFOA / PFOS free.

Lt 25 - Lt 50 - Lt 100

Options:

- Hose from 5 up to 10 mt.
- Third swivel front wheel.
- Detachable frame may be painted, red, or black.
- Antifreeze up to -30°C.





Pressure gauge

Swivel





Swivel coupling
It allows easy unrolling of
the hose avoiding twisting







All types fire class approved A IVB

- *Stainless steel 5 years guarantee
- alternative painted inside against corrosion 1 year guarantee.
- Optional: Antifreeze up to -30°C

D = Detachable frameNo welding on the cylinder ensures better and higher safety.

W = Welded frame. The axe and carrying handle are welded on the cylinder body.



Capacity	Code	Туре	Туре	Jet	Discharge	Std. pacl	king dimer	sion for tr	ansport
Lt		of frame	of valve or cap	length mt~	time sec~	H cm~	W cm~	D cm~	kg~
	18225 🜟	W	2"	8	34"	102	39	53.5	60
25	18225_1 🜟	D	2"	8	34"	102	39	53.5	61
25	18225_2	W	2"	8	34"	102	39	53.5	60
	18225_3	D	2"	8	34"	102	39	53.5	61
F 0	18226 🜟	W	2"	8	45"	114	45	55	80
50	18226_1 🜟	D	2"	8	45"	114	45	55	80
-30°	18226_2	W	2"	8	45"	114	45	55	80
	18226_3	D	2"	8	45"	114	45	55	80
	18251 🜟	W	2"	8	45"	114	45	55	80
50	18251_1 🜟	D	2"	8	45"	114	45	55	82
J U	18251_2	W	2"	8	45"	114	45	55	80
	18251_3	D	2"	8	45"	114	45	55	82
	18281 🜟	W	2"	8	99"	133	55	70	160
100	18281_1 🜟	D	2"	8	99"	133	55	70	166
100	18281_2	W	2"	8	99"	133	55	70	160
_	18281_3	D	2"	8	99"	133	55	70	166

- CE PED 97/23 surveillance: Bureau Veritas.
- Manufactured ISO 9001 Vision 2008 RINA Surveillance.
- Top quality SEALFIRE X®, has the best sealing effect, specially developed for use in portables and trolleys extinguishers.
- Cylinder: Sandblasted and painted with epoxy polyurethane powder highly resistant to bumps, UV x-ray, maritime climate and industrial corrosive environment.

Lt 50 - Lt 100 - Lt 150

Options:

- Hose from 5 up to 10 mt.
- Third swivel front wheel.
- Cap 4", CE safety valve 1", check valve, inspection gauge.
- Detachable frame may be painted, red, or black.
- Antifreeze up to -30°C.









Swivel coupling It allows easy unrolling of the hose avoiding twisting







All types fire class approved A IVB

- * Stainless steel 5 years guarantee
- alternative painted inside against corrosion 1 year guarantee.
- Optional: Antifreeze up to -30°C

2" valve 1/4" safety valve



D = Detachable frame No welding on the cylinder ensures better







W = Welded frame. The axe and carrying handle are welded on the cylinder body.



Capacity	Code	Туре	Type	Jet	Discharge	Std. packing dimension for transport					
		of	of valve	length	time	Н	W	D	1		
Lt		frame	or cap	mt~	sec~	cm~	cm~	cm~	kg~		
	18260 🜟	W	2"	8	47"	114.5	45.5	55	85		
	18260_1 🜟	W	4"	8	47"	114.5	45.5	55	85		
	18260_2*	D	4"	8	47"	114.5	45.5	55	85		
ΕO	18260_3	W	2"	8	47"	114.5	45.5	55	85		
50	18260_4	W	4"	8	47"	114.5	45.5	55	85		
	18260_5	D	4"	8	47"	114.5	45.5	55	85		
	18260_6	D	2"	8	47"	114.5	45.5	55	85		
	18260_7 🔆	D	2"	8	47"	114.5	45.5	55	85		
	18289	W	2"	8	99"	133.5	55	67	160		
	18289_1 🜟	W	4"	8	99"	133.5	55	67	160		
	18289_2*	D	4"	8	99"	133.5	55	67	166		
100	18289_3	W	2"	8	99"	133.5	55	67	160		
100	18289_4	W	4"	8	99"	133.5	55	67	166		
	18289_5	D	4"	8	99"	133.5	55	67	166		
	18289_6	D	2"	8	99"	133.5	55	67	166		
	18289_7 🜟	D	2"	8	99"	133.5	55	67	160		
	18284 💥	W	2"	8	150"	138	70	90	230		
	18284_1 🜟	W	4"	8	150"	138	70	90	230		
	18284_2 🜟	D	4"	8	150"	138	70	90	234		
150	18284_3	W	2"	8	150"	138	70	90	230		
150	18284_4	W	4"	8	150"	138	70	90	230		
	18284_5	D	4"	8	150"	138	70	90	234		
	18284_6	D	2"	8	150"	138	70	90	234		
	18284_7*	D	2"	8	150"	138	70	90	234		

- CE PED 97/23 surveillance: Bureau Veritas.
- Manufactured ISO 9001 Vision 2008 RINA Surveillance.
- Top quality AFFF SEALFIRE X®, has the best sealing effect, specially developed for use in portables and trolleys extinguishers.
- Cylinder: Sandblasted and painted with epoxy polyurethane powder highly resistant to bumps, UV x-ray, maritime climate and industrial corrosive environment.

Lt 50 - Lt 100 - Lt 150

Options:

- Hose from 5 up to 10 mt.
- Cap 4" with CE safety valve 1", check valve, inspection gauge.
- Detachable frame may be painted, red, or black.
- Antifreeze up to -30°C.





Swivel coupling
It allows easy unrolling of the hose avoiding twisting



On request available with N2 pressure reducer









All types fire class approved A IVB

- * Stainless steel 5 years guarantee
- alternative painted inside against corrosion
 1 year guarantee.
- Optional: Antifreeze up to -30°C

2" valve 1/4" safety valve



D = Detachable frameNo welding on the cylinder ensures better and higher safety.



Large cap 4", 1/4" safety valve, vent valve, gauge.



W = Welded frame.
The axe and carrying handle are welded on the cylinder body.



Capacity	Code	Тур	е Туре	Jet	Discharge	Std. packing dimension for transport				
_		of	1	length	time	Н	w	D	1	
Lt		fran	ne or cap	mt~	sec~	cm~	cm~	cm~	kg∼	
	18260_10	k W	2"	8	47"	114.5	45.5	55	85	
	18260_11	k W	4"	8	47"	114.5	45.5	55	85	
50	18260_12	k D	4"	8	47"	114.5	45.5	55	85	
	18260_13	W	2"	8	47"	114.5	45.5	55	85	
	18260_14	W	4"	8	47"	114.5	45.5	55	85	
	18260_15	D	4"	8	47"	114.5	45.5	55	85	
	18260_16	D	2"	8	47"	114.5	45.5	55	85	
	18260_17	∦ D	2"	8	47"	114.5	45.5	55	85	
	18289_10	∦ W	2"	8	99"	133.5	55	67	160	
	18289_11	∦ W	4"	8	99"	133.5	55	67	160	
	18289_12	∦ D	4"	8	99"	133.5	55	67	166	
100	18289_13	W	2"	8	99"	133.5	55	67	160	
100	18289_14	W	4"	8	99"	133.5	55	67	160	
	18289_15	D	4"	8	99"	133.5	55	67	166	
	18289_16	D	2"	8	99"	133.5	55	67	166	
	18289_17	∤ D	2"	8	99"	133.5	55	67	166	
	18284_10	∤ W	2"	8	150"	138	70	90	230	
	18284_11	∦ W	4"	8	150"	138	70	90	230	
		∤ D	4"	8	150"	138	70	90	234	
150	18284_13	W		8	150"	138	70	90	230	
130	18284_14	W	-	8	150"	138	70	90	230	
	18284_15	D	4"	8	150"	138	70	90	234	
	18284_16	D	2"	8	150"	138	70	90	234	
	18284_17	∦ D	2"	8	150"	138	70	90	234	

- CE PED 97/23 surveillance: Bureau Veritas.
- Manufactured ISO 9001 Vision 2008 RINA Surveillance.

Extremely compact and easy to move and transport. Designed for use in industrial field.

Suitable for use on live electrical equipment.

It is used to extinguish fires of flammable liquids, switchboards, benzine, oils, varnishes, alcohol, etc where fire needs extinguishing but does not have to leave traces of dirt.

Kg 10 - Kg 20 - Kg 30 - Kg 50

Replace oxygen, necessary for the combustion, with inert gas. Good jet and excellent snow horn.

Cooling quickly, snow of C02 flows at a temperature of -78°C. It is not advised to be used in small place, in presence of people. Avoid breathing CO2 gas and after the discharge always leave the area if has been used in closed rooms. Interception valve. High efficient horn.





Optional With swivel device 3/8"

98042

It allows quick and easy unrolling avoiding twisting

> All types fire class approved 233











! Longer hose up to 10 mt available and approved.

Std. packing dimension for transport Capacity Code Cylinder Type Wheels Jet Discharge diameter of valve diameter length Kg mmmm~ mt~ sec~ cmcmcmkg-18311 2 154 25 E 300 17 90 35 104.5 38 25 E 4 32' 18321_6 230 300 97 40 60 70 18322 30 230 25 E / 1 300 4 35' 114 49 115 85 18352 50 270 400 52" 140 1" 4 143.5 65





50 KG

Carrying frame standard yellow optional Red or Black

New 14716 - 14717

Trolleys Fire Extinguishers ABC & BC Powder



ABC Powder 20% BC Powder



Kg 50

Kg 50

14716 ABC Powder 20%

> Kg 50 14717 BC Powder

High quality products, designed to attack fire with maximum power. The cylinder is completely made in stainless steel AISI 304, granting high resistance to corrosion and atmospheric agents.

The large neck ring and the cap M120, allow the fire extinguisher to be easily inspected and refilled, while the safety valve set at 24±2 bar avoid excessive overpressure.



Hose is a high resistance EPDM Rubber pipe, external diameter 26 mm, designed with a burst pressure above 60 bar, more than 5 meter long, is perfect to get closer to the fire and get the best performance out of the trolley.



Stainless Steel Cylinder



The External cartridge, CO2 operated, mounts a special lever valve instead of the normal handwheel valve.

Big and solid rear wheel diameter 300 mm are made in strong plastic covered in rubber, together with high resistance front swiveling wheel, diameter 80 mm, and a perfectly balanced center of gravity, allow high maneuverability to rapidly reach the fire.

Capacity	Code Type		Туре	Jet	Jet Discharge Packing dimension				
Kg 50			length mt~	time sec~	D cm~	kg~			
50	14716	D	M 120x3	11	41"	105	50	60	88
50	14717	D	M 120x3	11	41"	105	50	60	88

Trolleys Fire Extinguishers Water + Foam A.F.F.F.



Lt 50

High quality products, designed to attack fire with maximum power. The cylinder is completely made in stainless steel AISI304, granting high resistance to corrosion and atmospheric agents.

The large neckring and the cap M120, allow the fire extinguisher to be easily inspected and refilled, while the safety valve set at 24+-2 bar avoid excessive overpressure.

Hose is a high resistance EPDM Rubber pipe, external diameter 26mm, designed with a burst pressure above 60 bar, more than 5 meter long, is perfect to get closer to the fire and get the best performance out of the trolley.



The External cartridge, CO2 operated, mounts a special lever valve instead of the normal handwheel valve.

Big and solid rear wheel diameter 300mm are made in strong plastic covered in rubber, together with high resistance front swiveling wheel, diameter 80 mm, and a perfectly balanced center of gravity, allow high maneuverability to rapidly reach the fire.



The Foam version mount a high resistance aluminum nozzle, while the powder version a plastic machine gun: they are both coupled to the hose thanks to a swiveling coupling which allows to unroll the hose perfectly, without losing time. High quality Epoxypolyester painting prevent corrosion and assures high visibility.

ſ	Capacity	Code	Туре	Туре	Jet Discharge		Packing dimension			
	Lt		of frame	of valve or cap	length mt~	time sec~	H cm~	W cm~	D cm~	
Ī	50	14726	D	M 120x3	8	45"	105	50	60	86
	50	14726_2	D	M 120x3	8	45"	105	50	60	86

14726_20 CE MARKED



Jew 14726 - 14726

1 Trolleys Fire Extinguishers Lithium D FAVORIT M Powder



Low Velocity Discharge Applicator **CE** marked For D class fires

Kg 25

Kg 50 18163_6 **Kg 75**



CE Marked

- Fire class rated D
- CE PED 97/23 surveillance: Bureau Veritas.
- Manufactured ISO 9001 Vision 2008 RINA Surveillance.
- Best quality German.

Kg 25

18131_6

Cylinder: Sandblasted and painted with epoxy polyurethane powder highly resistant to bumps, UV x-ray, maritime climate and industrial corrosive environment.

Kg 50 - 75 Kg - Kg 100

The extinguisher contains powder which is suitable for fires involving **lithium**. Unique lance applicator designed to allow the powder

to fall gently over the fire. Highly effective against metal fires, which include fires caused by sodium, magnesium and aluminium when in the form of powder or swarf.



RÜHL FEUERLÖSCHMITTEL GmbH

Use **D FAVORIT M** Dry Powder on 'Class D" specialist metal fires - particularly those involving Alkali metals such as Sodium, Potassium, Magnesium and Aluminium when in the form of swarf or powder (Note: D FAVORIT M is suitable for Lithium fires).

The unique lance applicator is designed to allow the powder to fall gently over the fire to prevent burning material from spreading

D FAVORIT M is a Dry Powder fire extinguisher based on Sodium Chloride that has been treated with flow and moisture repellent

D FAVORIT M extinguishes metal fires by fusing the powder to form a crust, which then excludes oxygen from the surface of the molten metal. The addition of a specific agent prevents the powder from sinking into the surface of the molten metal.





D = Detachable frame No welding on the cylinder ensures better



W = Welded frame. The axe and carrying handle are welded on the





Extending lance 50 cm complete with pistol for smoother fires of metals class "D"

Powder D FAVORIT M tested by MPA Dresden Certificate of Conformity reference number KB 116/13 with portable EN3 fire extinguishers, equipped with a class D fire applicator:

- Fire test object Magnesium acc. to
- annex NA of DIN EN 3-7 with 12 kg powder.
- Fire test object Sodium acc. to annex NA of DIN EN 3-7 with 12 kg powder.
- Fire test object Lithium (without specification)



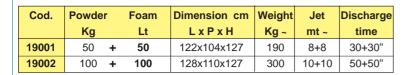
- Corrosion resistant high grade valve
- Seize and squeeze for maximum control
- Unique lance applicator designed to allow the powder to fall gently upon the fire

Highly effective against metal fires,





including Lithium when in the form of powder or swarf.



Twin Agents - Powder + Foam

Twin Agents, is composed by a single frame with mounted two cylinders, one filled with dry Powder and one with Foam. Wheels are mounted on roller bearings.

Easy manoeuvrability, designed for use by one person, allows to push the unit forward, or pulling. It can also be equipped with truck towing eye.

Dry powder may be Monnex, sodium bicarbonate, potassium bicarbonate Purple K, Potassium sulphate or ABC 90% of MAP. The combined action makes them unbeatable in the fight against the fire.

On large fires of flammable liquids, the action of the foam sealing effect Sealfire, creates a fast knock down of the flames and reduce the heat; if not totally extinguished the scene of fire can be approached easily, use dry powder and get the final positive result.

Twin agents are indicated and essential in airports, refineries, large deposits of liquid flammable dangerous goods stores and stacking flammable.

Unique system allow the pressurization in less than 10 seconds of both cylinders, than a second cylinder with a pressure reducer guarants the constant pressure, discharging completely without internal residue.

The cylinder containing the foam is made of stainless steel.

Version with towing eye and bigger sizes on request.



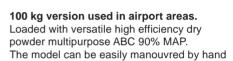
Machine guns 2 lt / Kg per sec high flow. Hoses has swivelling connectors and both can be operated by one person.

Trolley fire extinguisher special version for Airports

Made in Italy



(CE)



Optional stainless steel cylinder

Description	Cod.		
	12153a	12154a	
Nitrogen cylinder	direct	with pressure reducer	
Powder ABC kg	100	100	
Weight kg	250	250	

12153 100 KG

or car towed.

Approx weight 250 Kg

120 kg CO2 Trolley fire extinguisher special version

Made in Italy

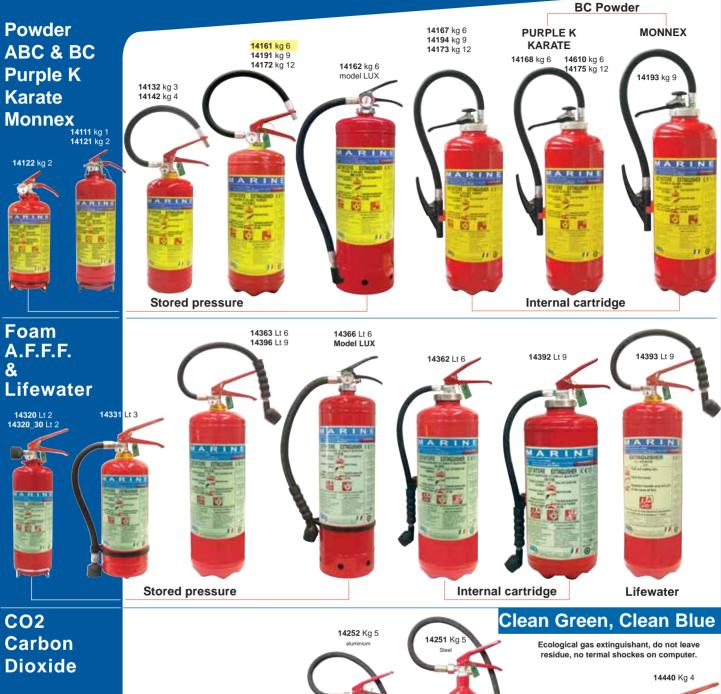




Portable fire Extinguishers Med Marine



Optional: Stainless steel cylinder, Anti-magnetic version)







The largest range of Portable Fire Extinguishers



Wheeled fire Extinguishers Med Marine



Certified MED Marine 96/98/EC & Certified EN 1866-1



Easyfire Marine approved RINA ISO 9094

Easyfire®: automatic fire extinguishing system It is an efficient and economical extinguishing system specially designed for boats and yachts. It is filled with the ECO CLEAN GAS OZONE FRIENDLY, HFC 227 better known as FM200®. It conforms to NFPA 2001, accepted by EPA. It fully respects the Ozone laver because its ODP is ZERO. Its use is permitted in rooms in the

presence of people. The gas is recognized as a clean agent and it fully respects the environment.

In case of fire, the boat's engine room is immediately safe in less than 10 sec.

The gas is transparent, absolutely clean, it does not leave residues, it does not damage the engine, and it is safe for the people and animals. The fire is extinguished immediately the gas HFC 227 is released.

It works automatically when the temperature in the engine room reaches 93°C.

It protects max 20 m3

* HFC 227 known as FM 200®,

OZONE AND ENVIRONMENTALLY FRIENDLY

CLEAN, does not damages computer equipment, not harmful for humans and animals.

The unit fully charged ready to use includes a strong wall bracket.

A pressure gauge signs in a green area the functionality of the units.

Manufactured under survelliance of Bureau Veritas



and marked CE Tested, approved and certified ISO 9094 by RINA Marine authority worldwide.

Code	Charge Kg	Diam mm	H mm	M3 Room
15230	1	110	380	1,7
15231	3	130	400	5
15232	6	160	475	10
15224	9	190	550	15
15233	12	190	600	20

at 93°C. Operated also with manual actuator.

24002 Automatic valve with

sensitive temperature set

Optional Accessories suitable for Easyfire® and Firekill

Choose only 1 accessory: Pull lever, steel wire actuator Electric actuator

88°C 47034 47035 105°C FM. listed 47036 138°C UL. listed

Termocable

Termocable act as a temperature fire detector.

With fire, It melts and the short circuit acts as switch activating the electric actuator 43001.

The control box 23023 control the integrity of the cable, its failure and indicates the immediate discharge. Standard suggested is 105°C.

Box pull cable Manual actuator need adaptor 20412 + pull lever steel wire, + a choice of box Pull lever, steel wire 41006 5 mt 10 mt Box pull cable Brass red painted Boxx pull cable Dimension: 90x60 Stainless steel 23017 41003 Brass red painted mm: 90x60 23012 Stainless steel

Stainless steel

Silver plated

Alarm pressure switch

Optional

Warns of low pressure, it actuates alarms, other safety device. 23024 Switch could be set N.O. or N.C. when low pressure or activation it will close or open the contact.

Contacts support max 220 Volt 10A



23024 Pressure switch N.C. + NO

Electronic Box pull cable

Electronic control box Includes a circuit to check, integrity, failure, discharge. Green led indicates good operating, while red indicates trouble or discharge. Emergency

push button for manual discharge.

Seal ensures that children may activate the system.

mm: 90x60 (Alternative professional control box 23023)



box 23022 or to 23023 on the next page, active the discharge. Universal voltage, 1A.

Picture in

open position

23022_1 Gold 24K

True Gold 24K

plated

Combined with an electric switch on plance or to the control

Standard

Firekill Marine approved RINA ISO 9094

Nozzle fixed on the top of the motor engine

Firekill® is a pressurized cylinder filled with clean gas HFC227, or ABC powder.

It is automatic with manual remote control. It is equipped with one thermosensitive bulb, at 93°C (or on request at 68°, and 79°C). Firekill® has a versatile valve, completely automatic without use of any source of energy. It has a manual remote control pull cable and on request an electric actuator.

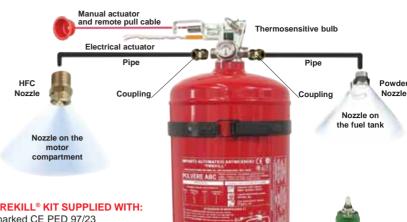
Moreover it is possible to connect a control box that controls thermocable or smoke detectors. Firekill® unique valve has two outlets, diam, 3/8" pipes, a maximum of 4 nozzles.

Its great advantage is that it may distribute the jet with precision in the effective point of the fire risk.

Assembly without the necessity to thread pipes, extremely easy and quick. Suitable also to protect mixes of varnishes,

garages, flammable liquids storage, etc. The gas is clean, does not leave residues, it is safe for humans and animals, and fully ecological with the environment.

FIREKILL® Powder							
Pro	tected	l Vol.	D	Н	Pipe		
Code kg		М3	mm	mm	mt		
15241	1	1.7	110	390	2		
15227	15227 3		140	410	4		
15228	6	10	160	485	5		
15226	9	15	190	550	6		
15229	12	20	190	610	8		



SYSTEM FIREKILL® KIT SUPPLIED WITH:

- Cylinder marked CE PED 97/23
- Automatic valve 2 outlet 3/8'
- Aluminium pipe diam. 10x1
- Special nozzle 3/8"m or 1/4"
- Remote pull cable n. 1
- Steel wire 5 mt
- Coupling rapid connection 10x1
- Bracket fo extinguisher

(Optional in Stainless steel).

	FIREKILL® HFC 227							
Pro	Protected Vol.			Н	Pipe			
Code	Code kg		mm	mm	mt			
15237	1	1.7	110	390	2			
15238	3	5.1	140	410	4			
15239	6	10	160	485	5			
15242	9	15	190	550	6			
15240	12	20	190	610	8			

It protects max 20 m3

Firekill

* HFC 227 known as FM 200®, **OZONE FRIENDLY RESPECT THE** ENVIRONMENT.

CLEAN, does not damage computer equipment, not harmful for humans and

23023 MARINE CONTROL BOX FOR FIREKILL & EASYFIRE (In alternative cheaper control box 23022)

Strong plastic housing, for best protection. It ensures an excellent heat dissipation which allows long periods of operation even at highest climate conditions.

Maximum connection distance

- With shielded twisted pair cable 150 mt.
- Maximum ease of use
- Large backlit LCD 16X2

Remote CPU -

Programmable with its 3 buttons in most European languages.

Upon system discharge, it shutdown engine, forced ventilation, fans, electrical system, actuate sound and visual alarm



Technical specifications

Power supply : 12Vdc Output relay : Max 3A Signal input : 12mA/12Vdc Microcontroller: Advanced RISC 8bit Comunication: RS485 half duplex

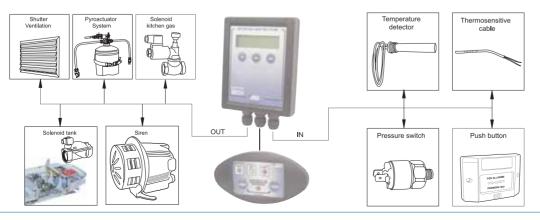
- Backlit LCD Display 16x2
- Acoustic and optical signal with led.
- Programming by buttons.

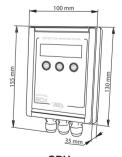
Dashboard unit.

Simple, small, safe, it controls all the functions, integrity, failures, and for emergency discharge

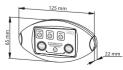
100% waterproof and sea climate environment resistant. Special circuit protects against accidental discharge, or children tampering.







CPU weight: 230 gr



Dashboard weight: 57 gr

Cabinet for trucks "LINEAR"

Security plastic internal latch to fix the extinguisher inside and to avoid accidental opening. Quick release lid for fast access to extinguisher in emergencies. Cheap, most popular, but strong, resistant, for trucks, trains, indoor and outdoor warehouses.

Made in Italy

Most popular



26325 kg 9-12

34 x 72 x 24





34 x 87 x 24

system, excelent dust and waterproof. - 30°C

Fast body-lid assembling system





Strong lid and looking.
Stress test more than 5.000 times without damage

Cabinet for trucks "ITACAB "

Super hard polipopilene Security clip against accidental opening. Strong anti-vibration through progressive tensioning ratchet strap, quick release button is highlighted in red.

Quick release lid for fast access to extinguisher in emergencies.



Cabinet for trucks " EUROPE "

Very strong plastic ABS, excellent design and finishing.



6 Kg 26308 31x61x25

Very popular, nice design, latches tested 30.000 times.

9 Kg

26323 31x68x25



Plastic cabinets for fire extinguisher



37x84x24







26307_1

Couple of brackets with clips for 6 kg Ø 160 ~ 162 mm for cabinet 26307 Avoids overturning of extinghuisher







Includes two latches, transparent window, hard rubber, European durable rubber



Cabinet for trucks "KINAS"

Polyethilene, universal use for trucks, buses, for internal and external use, resistant up to -30 °C, two latches with safety pin and tamper seal.







Dust seal



Aluminium label adhesive fire extinguisher 12x8



Nylon strap with locking steel



Double clousure, safety pin, seal.

Plastic cabinet for portable fire extinguisher Model "DIAMANT"



Technical detail

- Material: ABS
- Suitable for: 6 kg
- Dimensions: 30 x 64 x 21
- Weight: 2,10 Kg

Components:

- Transparent cover
- · Grey backside
- Anti-panic handle
- Handle look with safety seal



26314

kg 6 30 x 64 x 21



MARINE Fiber glass cabinets

61131 EXTRA LUX For extinguisher, or fire hose

Best protection against corrosion for marine or aggressive climate conditions.



69x39x26 cm

MARINE Fiber glass cabinets



Technical data are subject to modification for improvements without prior notice

61137 kg 12 30x75x22







Can be stored 3 extinguisher kg 6 or 2 fire hoses



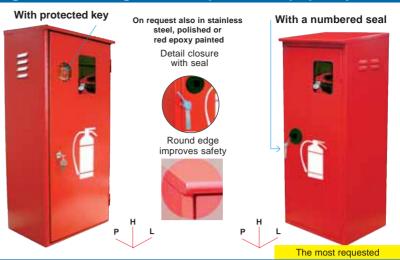
Stainless steel AISI 316 Painted
Red RAL 3000



Cabinet model SUPERSAFE 626 for extinguisher, steel, galvanized painted, top quality

Cod.	Kg	Lock type	Dimension cm L x H x P	
26213	6	key	31 x 65 x 22	
26214	6	Seal	31 x 65 x 22	
26215	12	key	34 x 78 x 24	
26216	12	Seal	34 x 78 x 24	
26209	5 CO2	Seal	30 x 85 x 18	
26229	5 CO2	Seal	34 x 85 x 18	
Stai	n I e	SS S	steel	

Red polyurethane paint resistant to any climate. Suitable for outdoor but also indoor, elegant finish. GALVANIZED STEEL, long resistance to corrosion, almost maintenance-free, in two models: with a key protected by a small plate with safety lock, or with a seal number. Viewing window. Rounded corners to meet the most demanding in quality, safety against accidental cuts.



Safety cabinet complete with safety plastic glass Easybreak

		CA	BINET	spare plastic glass				
Cod.		Kg	cm	Noflames	Easybreak	cm		
	26202 6 26201 12		30x65x20	60033_1	60033	25x54		
			30x78x25	60021_1	60021	25x71		
	26101	6	30x65x20	60018_1	60033	25x54		
	26103	6	30x65x28	60017_1	60017	21x51		
26102 12 30x79x2		30x79x28	60020_1	60020	22x67			
ı								

Epoxy paint

Complete with plastic glass Easybreak.

The plastic glass is non-flammable, protects against unwanted accidental skin cuts..

Closure with anti tamper green seal.



Elegant finishing aluminium door frame or stainless steel



SAFETY PLASTIC GLASS - see also at page 68 - 76





Fire extinguishers cabinets are equipped with plastic glasses.

Is a transparent plastic, elegant, shining dark glass like, it permits a discrete view of inside.

EASYBREAK

Is a pale yellow pleasant colored plastic glass.

It has some rows enabling easily to break it just hitting with an object or

Both protects the extinguisher from UV X'rays, and on request may be purchased on big size 2 x 1 mt so that may be cutted on custom need, or supplied on custom size.

Fire extinguisher steel cabinet kg 6 / 9 / 12 and CO2 kg 5

For indoor and outdoor epoxy painted closure with a tamper seal protection.





Green seal

26104 kgs 6, steel frame with seal 32x60x27

26105

kg 9/12/CO2 kg 5, steel frame with seal. 32x80x27

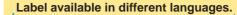


Foot stand for cabinet For fire extinguisher or hydrant cabinet 18 x 30 cm 60005 E H=80 60002 Stainless steel Red steel

Fire service cabinet book recorder

Useful to store the book recording all the periodical maintenance operation. Useful to store other important documents such as, maintenance of heaters, medical, chemicals. Locker with a key. Can be fixed on wall.

Label available in different languages.



60062 Metal box
Dim. cm : 26x36x5

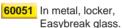






Necessary for the preservation security key for boiler rooms, fire pumps, keys lift, counters, etc..

60064 In plastic. Break glass.



60001 Made in plastic ABS, Easybreak glass









Emergency breakglass

It can break a car or truck glass in case of emergency. It save a life!



Fiberglass blanket

Resist to high temperature. Protects from heat and flames. Useful to suffucate flames of kitchen pans, restaurants, home, cars mobile homes, garages, laboratories, offices....Weight approx 420 gr/mq, thickness approx 0,40 mm. In elegant waterproof custody, fixed with Velcro for rapid use. Holes to fix in the wall or hang inside a safety cabinet. Just pull the velcro and blanket is ready to use.

Useful to abandone the fire scene in case of unexpected accident.

Rigid box

92018 Dimension 90x120 cm **92021** Dimension 180x120 cm

Flat custody







Bucket for sand

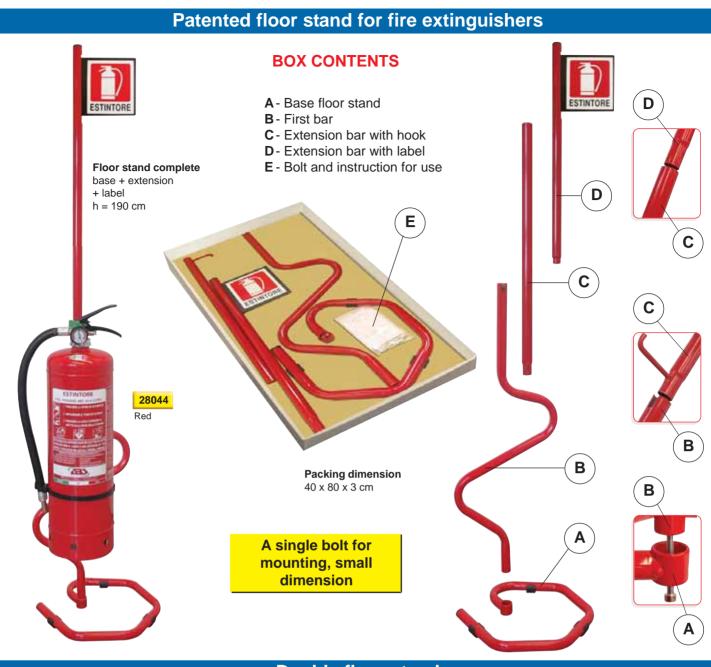
93000 Without cap.

93001 With cap.

Made in steel, painted red Rall 3000

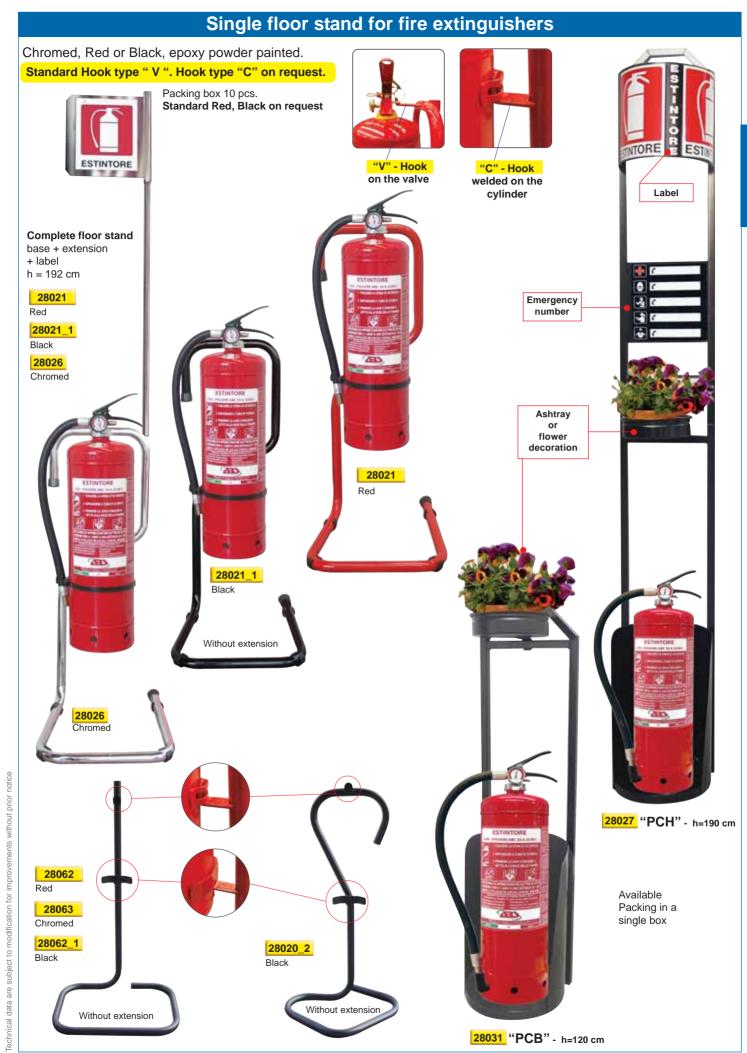


92004 90x120 cm



Double floor stand





Single stainless steel floor stand for fire extinguishers

ELECTRO
POLISHED
Stainless steel
High Quality

"C" - Hook welded on the cylinder





"V" - Hook

28058 Stand for portable fire extinguisher Powder Kg 6 - 12 - Foam L 6 - 9

28058_1 Stand for portable fire extinguisher Powder Kg 6 - 12 - Foam L 6 - 9

Single floor stand for CO2 fire extinguishers





Car brackets Cod. Type Ø 20426 kg 1 85 20427_ 110 kg 2 20427 kg 2 110 kg 2 115 21040 kg 3 | 130 20428

Brackets for racing cars

21150 4 kg diam 140

Accepted by F.I.A.

OTHER SIZE ON REQUEST



Easyfire brackets

EASYFIRE brackets with latch, safety pin antivibration.



Bracket type "C"

Bracket for cylinders with back hook type "C". Metal latch and safety.

209	19
2001	0 1

6 kg, Ø 160

9/12 kg, Ø 190

Antivibration adherent to the wall



Brass safety pin, antivibration.

Stainless steel brackets

Stainless steel

with safety pin. Hard and anti-corrosion MARINE USE.



Hard steel brackets

Hard steel For trucks and heavy machines. For fire extinguishers kg 6, 9, 12.

Rubber antivibration. Safety pin lockable. Very strong steel plate.





Brackets for cars, truck, marine use

Strong steel, latch, safety pin, horizontally or vertically.



Cod.	Kg /Lt	Ø
20907	6	160
20093	9/12	190
20918	4	140

Cod.	CO2	Ø
20061	kg 2	104 Acc.
20916	kg 2	111 All.
20915	kg 5	152 All.
20047	kg 5	136 Acc.

Brackets for powder and foam fire extinguishers kg 9/12 and 9 lt diameter 190 mm. Suitable also for extinguisher with hook welded on the back of cylinder type "C".



Universal AMERICA bracket

20920 Can firmly hold any fire extinguisher 6/9/12 KG up to 200 mm diam. Strong steel structure, 2 hard durable rubber latches







chnical data are subject to modification for improvements without pri

Wall brackets for extinguishers **Special brackets for CO2** Hose holder 21001 21009 20432 Ring to fix horn on 5 kg 20034 For kg 2 CO2 Wall brackets for valve CO2 aluminium cylinder (152 mm) Hose holder for diam 110 ~ 130 mm with hole holder type "V" extinguishers 20433 Ring to fix horn on 5 kg 35 mm Ø160 mm 6 kg 75 mm CO2 steel cylinder (136 mm) 20015 20431 Hose holder for Bracket steel extinguishers galvanized Ø190 mm 9/12 kg back cylinder fixing Bracket holder 20000 Wall bracket 20052 for extinguisher Hose holder CO2 Wall bracket for for extinguishers Anti-magnetic extinguisher with 5 kg cylinder Ø140 hook welded on the back of Horn holder cylinder type "C" **Plastic belt Plastic clips Plastic foot** 20098 Plastic Clips for kg 6-12 internal cartridge. Plastic foot diam. 160 mm available in different color. 20480 For 6 kg diam. 160 mm Black 20104 21048 Black color 20480_1 For 9-12 kg diam. 190 mm Black Magnet 21048_1 Crome color hose holder 21048_2 Cream Color 21048 3 Blue color 21048 Yellow color











Manometer M10x1 with O-ring (box 25 pcs)





20521 Ebur Ø 23

bar 7-10-18





Manometer without O-ring 1/8" npt (box 25pcs)

20519 spring 20520 membrane

Ø 23 bar 10-14-17



21511_1 Ebur Ø 23 with spring



21511 Ø 23 with spring Mpa 1-1.4-1.7



20511 Ø 23 spring american style bar 12-14-18



20518 Ebur Ø 23 membrane bar 7-10-16



21521 Ø 27 with spring Mpa 1-1,4-1,7

Mpa 1-1.4-1.7



20532 Ø 35 mm membrane Mpa 1-1,4-1,7 20532 1

Ø 35 mm membrane Mpa 0,7-1-1,8



20516 Ebur Bar 11,5-13-17



20533 Ebur Ø 35 spring, Mpa 1-1,4-1,7



20515 (box 25 pcs)

Ø 23 membrane Mpa 1,2-1,4-1,6



21531

Ø 36 with spring Mpa 1-1,4-1,7 wide scala



20531 Ebur

Mna 1-1 4-1 7 Wide scalE



20523 Ø 42 Bourdon Bar 10-14-17 npt 1/16" **BEST QUALITY**



21522 Ø 27 membrane Mpa 1,15-1,4-1,7

Ø 27 membrane bar 10-13-17



Ø 42 Bourdon bar 12,5-1,4-17,5 BEST QUALITY



20500 Small pump to test pressure gauges and manometers.



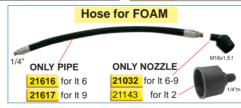
all gauges with filter to avoid contact with dry powder - gauges for foam are without filter

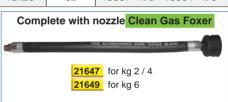
Hose for powder, water and Foxer fire extinguishers

Cod.	Connection	Ø mm	cm	for POWDER	
21648	1/4" <mark>m</mark>	13x20	45	13131 3 kg	
21654	1/4" <mark>m</mark>	13x20	52	13142 4 kg	
21612	1/4" <mark>m</mark>	10x19	53	for all 6 Kg	
21614	1/4" <mark>m</mark>	10x19	60	13192 9 kg	
21615	1/4" <mark>m</mark>	10x19	65	13172 12 kg	
21620	M16x1,5	13x22	61	13163 6 kg estoria	
	For extinguishers with internal cartridge 6/9/12 kg				
20659	1/4"M	13x20	655	for all type	

Cod.		Connection	Ø mm	cm	for FOAM
	21647	7 1/4"m 13x20		42	13331- 13420 - 13440
	21616	1/4"m 10x19 52 13		13362 - It 6	
	21651	1/4"m 10x19		105	13365 - It 6 class F
	21617	1/4"m 10x19		60	13392/3 - It 9
	21619	m16 x1.5 13x22 52		52	13366 - It 6
	21618	m16 x 14x1.5	13x20	52	13367 - lt 6 - 13394 - lt 9

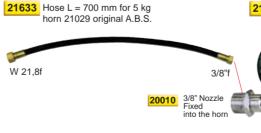






Hose and horn for CO2 portable fire extinguishers













Hose for trolley fire extinguishers Powder PS 20 PT 40 bar Burst>60 bar





Ø 21.8f swivel female

3.5

4.5

K 30

K 60 bibom

to	CO ₂	valve	

21632

21642

Connection	mt	for trolley
21,8 fg x 3/8" f	10	K 10
21,8 fg x 3/8" f	5	k 20 exp
21,8 fg x 3/8" m	5	K 20 MED
21,8 fg x 3/8" m	5	K 30 MED
21,8 fg x 3/8" m	10	MED exp
21,8 fg x 3/8" m	5	MED exp
21,8 fg x 3/8" m	6	MED exp
21,8 fg x 1/2" m	2.5	K 20
	21,8 fg x 3/8" f 21,8 fg x 3/8" f 21,8 fg x 3/8" m 21,8 fg x 3/8" m	21,8 fg x 3/8" f 10 21,8 fg x 3/8" f 5 21,8 fg x 3/8" m 5 21,8 fg x 3/8" m 5 21,8 fg x 3/8" m 10 21,8 fg x 3/8" m 5 21,8 fg x 3/8" m 5 21,8 fg x 3/8" m 6



3/4"m 45° Swivel for ball valve

3/4" Swivel to handwheel valve

Cod.	Connection	mt
20640	3/4" fgp x M18x1,5 m	5
20640_1	3/4" fgp x M18x1,5 m	10
20640_5	3/4" fgp x M18x1,5 m	5
21621	3/4" fgp x M18x1,5 m	3.7
21624	3/4" fgp x 3/4" k45 ms	4.7
21640	3/4" fgp x 1 fsp	3.7
21641	1" K45 fgp x 1" fsp	4.7
21622	3/4" fgp x 3/4" k45 ms	3.7
21623	3/4" fgp x 3/4" k45 ms	3.7



to handwheel

to ball valve

Legend: f = female s = swivel p = flat k = elbow m = male o = ogive g = swivel			
Cod.	Connection	mt	
20009	3/4" kfgp x 3/4" k45 mg	5.8	
20655	3/4" kfgp x 3/4" K45 mg	5.1	
20655_1	3/4" kfgp x 3/4" K45 mg	10	
20656	3/4" kfgp x 3/4" K45 mg	5.4	
20656_1	3/4" kfgp x 3/4" K45 mg	10	

Legend m=male f=female g=swivel p=flat seat s=flared seat k=elbow

Foam nozzie for troileys

21,8 fg x 1/2" m

1/2" fgo x 1/2" m

21006 Ø 6,5 - 50,100,150 lt 21007 Ø 12 Rapid discharge for Twin Agent 2 Lt/sec 3/4"m

Aluminium, for trolleys approved SEALFIRE

CO2 discharge apparatus 21031 98001 21015 Horn big size, Pipe + ball valve 1/2" High pressure 21127 Horn 100 mm kg 10/20/30/50 Pipe + ball valve EN 1866 and MED 3/8" High pressure 21.7 f 21127_10 Horn big size, Pipe + valve 21,7 High pressure

21000 Horn 3/8" for trolleys 30 kg

21,8

20017

Swivel horn

2 Kg side out

M10x

Horn M10x1 OR 3/8'

20025 Horn 10x1 for 5 kg CO2 20025_1

Insulated horn 10x1 for 2 kg CO2

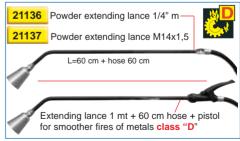


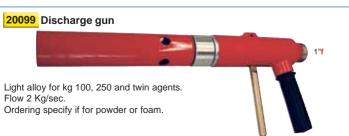


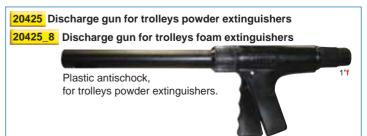














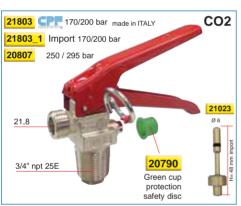




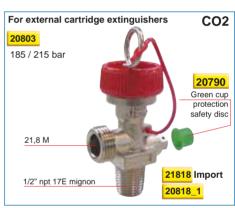




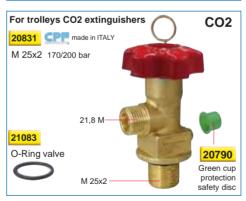






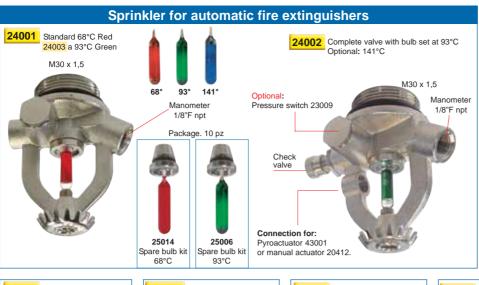














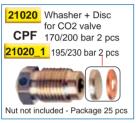












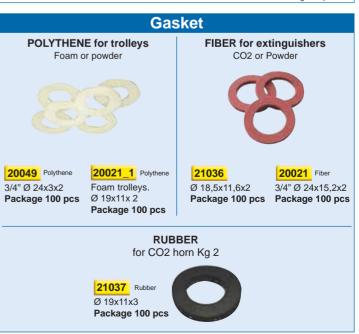




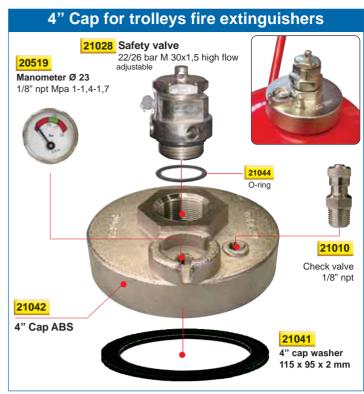










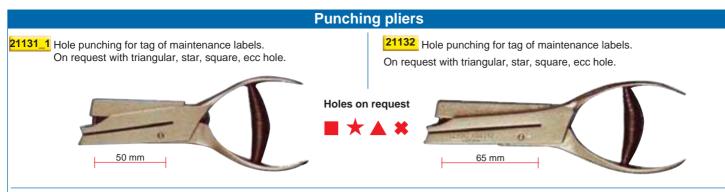






ica







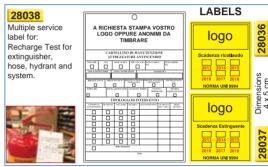
45 mm

21124 Hole punching for tag of maintenance labels.

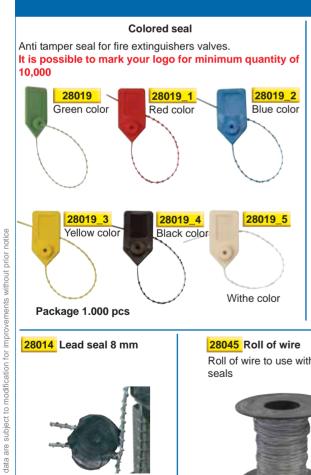


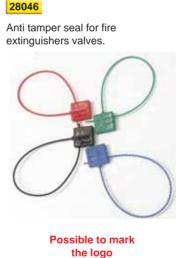


Seals

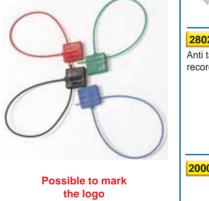


Polipropilene service label holder

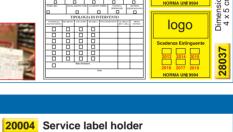




Plastic seal



Package 100 pcs



Package 1.000 pcs





Technical







Nitrogen N2 T-PED for MED / EN1866 trolley fire extinguishers

Valve 21818_1

CPF Italy Outlet W 24,32



Cod.	Volume	Press.	Ø	Н
	LT	bar	mm	mm
41231	2	105	104	445
41231_1	2	180	104	445
41231_2	2	150	104	445
41231_3	2	140	104	445

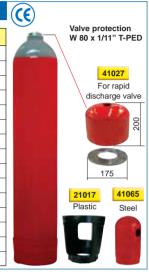
Cod.	Volume	Press.	Ø	H
	LT	bar	mm	mm
41230	3	140	104	570
41230_1	3	155	104	570
41230_2	3	160	104	570
41230_3	3	190	104	570
41230_4	3	180	104	570

Cod.	Volume	Press.	Diam	Н
	LT	bar	mm	mm
41232	7,5	90	140	770
41232_1	7,5	115	140	770
41232_2	7,5	135	140	770
41232_3	7,5	150	140	770
41232_4	7,5	190	140	770



Cod.	Filled	Diam	Н
	with kg	mm	mm
41199_1	1,3	105	570
41199	2	105	570
41236	4	136	600
41219	3,2	136	600

	CO2 Empty cylinder from kg 2 to kg 50										
Cod.	Description	Kg.	Lt.	Ø mm	Thread	Cod.	Description	Kg.	Lt.	Ø mm	Thread
21103	Ped	2	3	110	M25 x 2	20110	T-ped	10	14	170	3/4" 25E
20211	T-ped	2	3	105	3/4" 25E	20101	T-Ped	10	14	160	3/4" 25E
20109	RINA T-Ped	2	3	105	3/4" 25E	20209_1	T-Ped	10	14	154	3/4" 25E
20302	Ped	2	3	105	M25 x 2	21328	RINA T-ped	20	27	203	3/4" 25E
21105	Ped Alum.	2	3	111	M25 x 2	21330	T-ped	20	27	203	3/4" 25E
20105	T-Ped	4	5,4	105	3/4" 25E	21330_1	T-Ped	20	27	232	3/4" 25E
20204	Ped	4	5,4	136	3/4" 25E	21340	RINA T-ped	30	40	227	3/4" 25E
20205	Ped 300/450 bar	5	6,7	136	3/4" 25E	20216	T-Ped 300/450 bar	30	40	232	1" 32E
21107	Ped	5	7,5	139	M25 x 2	20147_1	T-Ped	45	60	227	25E
21108	Ped	5	7,5	136	M25 x 2	20144	T-Ped	45	60	267	1" 32E
21109	Ped	5	7,5	136	3/4"	20147	T-ped 300/450 bar	45	60	229	1" 32E
21208	Ped Alum.	5	7,5	152	M25 x 2	20146	T-ped	45	67	273	1" 32E
21210	RINA T-Ped	5	7,5	136	3/4" 25E	20146_1	T-ped	45	67	267	1" 32E
21211	T-Ped	5	7,5	136	3/4" 25E	20146_3	T-ped 300/450 bar	50	67	267	1" 32E
20206	Ped	6	8	136	M25 x 2	20146_4	T-ped 300/450 bar	50	68	273	1" 32E



	Wheels for trolleys							
Cod.	Ø	M	F	Kg max	Note			
20905	80			150	Swivel			
20947	80			150	Swivel			
20911	100			70	Swivel			
20912	150			150	Swivel			
20941	350	80	25	200	Rubber / plastic			
20942	350	80	25	200	With ball bearing			
20943	410	80	25	300	With ball bearing			
20944	400	80	25	300	With ball bearing			
21921	200	47	20	120	Rubber / plastic			
21931	300	57	20	150	Rubber / plastic			
21941	400	85	25	180	Rubber / plastic			

Swivel diam 80 , 100 and 150 mm







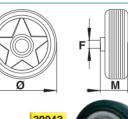


















Carryng CO2 cylinder						
Cod.	Model	Ø	Wheel			
20087	x 2 kg 30	203	400			
20045	x 1 kg 45	273	300			
21014	x 1 kg 30	227	300			
Tubular frame for						
transporting cylinders of						
compres	ssed gases.		r)			

Complete with wheels

and chains holders

NITROGEN, CO2, ACETILENE. Spare part for Co2 trolley fire extinguishers 30 / 45 kg

Siphon tube for portable and trolley fire extinguishers

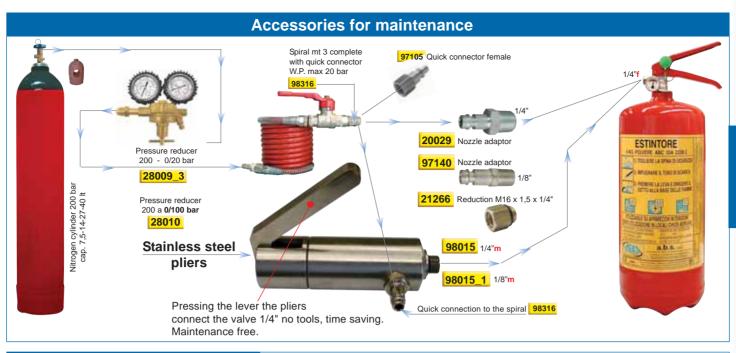
			Sipnon tu
Cod.	Ø pipe	L/mm	Ext. Type
21700	16x12x1,5	260	Powder kg 1
21734	16x12x1,5	295	P kg 2
21733	16x12x1,5	307	P kg 3
21738	16x12x1,5	380	P kg 4
21736	16x12x1,5	420	P kg 6
21713	16x12x1,5	390	P kg 6
21714	16x12x1,5	465	P Kg 9
21709	16x12x1,5	525	P Kg 12
21711	3/4"x21	760	P kg 30
21715	3/4"x21	860	P kg 50
21708	3/4"x27	1080	P kg 100

Cod.	Ø pipe	L/mm	Ext. Type
20728	M8x1x6	300	PI6 Int. cartridge
21701	14x10x1,5	400	CO2 kg 2 alum.
21702	14x10x1,5	545	CO2 kg 5 alum.
21703	14x10x1,5	590	CO2 kg 5 Steel
21742	3/8"	870	CO2 kg 10 Steel
21704	3/8"	990	CO2 kg 20 Steel
21705	3/8"	1190	CO2 kg 30 Steel
21733	16x12x1,5	307	Foam It 3
21720	16x12x1,5	460	Foam It 6
21706	27x21x3/4"	830	Foam It 50
21737	27x21x3/4"	940	Foam It 50
21730	3/4"	1220	Foam It 100

technical data sheet, check before installation Aluminium for CO2

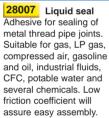
The dimensions can be subject modification, check the





Inspection lamps

21123_1 Includes batteries, inspect inside cylinders for rust, corrosion or damages. Inspection cylinder



28005 Liquid seal Medium strength for sealing hydraulic and pneumatics threads connectors up to 1 1/2". To replace P.T.F.E. tapes in the sealing of gases, water, LPG, hydrocarbons, oils and other chemicals.

data are subject to modification for improvements

Technical









Check the pressure of stored pressure extinguishers



Kit torque force spanner for CO2 and powder valve for fire extinguishers

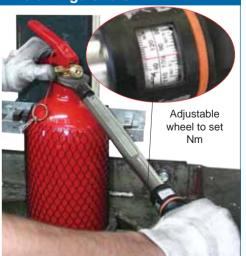
To lock valves on extinguishers according PED 97/23 standard which specify that they must be tighted with torque force specified by the manufacturer. Included shown accessories.

98023_1 Case package:

- 1 Torque force 98023 spanner from 20 to 100 Nm.
- 1 Torque force 98024 spanner from 40 to200 Nm.
- 2 Accessories powder extinguishers from 1 to 12 kg.
- 1 Accessories for trolleys and extinguishers with internal cartridge.
- 2 Accessories from 28 to 30 mm CO2 valve.

98023 Torque force spanner powder extinguishers 20/100 Nm.

98024 Torque force spanner CO2 extinguishers 40/200 Nm.



EXTINGUISHER PRESSURE TEST

The **21260** is a digital pressure gauge suitable for checking the pressure of the extinguisher during the regular maintenance.

Is possible print a receipt of the test result by the infrared printer supplied. The test results can be stored in memory.



TECHNICAL CHARACTERISTICS

Pressure range 0. +35 bar Resolution 0.1 bar Accuracy ±1% fs

Display LCD 8 characters on 2 lines

Battery Li-ion 3.6 Vdc 1.1 Ah

Average battery duration
Battery charging time 4 hours
Pneumatic connection M 10x1
Weight of the case Approx. 1.4 Kg

Printer External infrared printer;

Power 230 Vca external power supply for charging

or direct power (also for the printer).

Operating temperature -5 + 60°C Storage temperature -20 + 85°C Max applicable pressure 65 bar

AC999 conforms to the provisions of standard EN 3-7/2005

Package includes:

all the accessories shown on this page.

SIMPLY & FAST

4 hours

Litio 3.6 Vdc 1.1 Ah

Battery charging time

Remove the manometer and connect the sensor to the valve



The pressure will be shown on the display





Pressure detector







Press the print button and the multiple service label will be printed.



data are subject to modification for improvements without prior

ELECTRONIC SCALE AND DINAMOMETERS

Platform scale for trolleys 94001_1 Digital 4 cells platform scales 2.000 kg This platform with very low height profile, is ideal to measure the weight of trolleys, pallets, packing. Large display may be fixed on wall or with a stand pole. Precision 200 gr. Load cell electronic. Cable 6 mt. Over models available





Electronic balance. Load cells LIGHT, COMPACT, PRECISE Large display, stainless steel scale-pan. Maximum weight capacity : 30 Kg Weight HIGH precision 2 gr

Dim: 120 x 150 x 10 cm

: 25x25xH15cm Scale-pan dimensions Power supply: 220 Vac + battery charger included

94005

Electronic balance. Load cells, Programmable electronic display

At desidered pre-set weight will stop engine. Can be used in combination with CO2 and podwer filing machine for automatic and safe filling process. Stainless steel scale-pan.

Maximum weight capacity: 60 Kg Weight precision: 10 gr

Scale-pan dimensions : 30x40 cm Power supply: 220 Vac + battery charger included. stainless steel scale-pan.

Max weight 2.000 Kg

94002

Electronic balance. Load cells Electronic display over metallic pole and stainless steel scale-pan

Maximum weight capacity: 60 Kg Weight precision: 10 gr Scale-pan dimensions: 30 x 40 cm

Large display Power supply: 220 Vac - 50 Hz





Multi use scale

94006

Electronic balance scale.

Programmable electronic display.

At desidered pre-set weight will stop engine. Can be used in combination with CO2 and powder filing machine for automatic and safe filling process.

2 mt cable.

subject to modification for

Stainless steel scale-pan.

Rechargeables batteries Includes battery charger 220 Vac - 50 Hz



Maximum weight capacity: 200 Kg Weight precision: 100 gr

Dim: 80 x 60 cm

94001

Electronic weighing scale 300 kg Accuracy 100gr, Base 900x550x70 mm

With rechargeable battery









"CARES" Refilling powder 98200_1

98200_1 Refilling powder

NEW refilling powder "CARES", adopting a system of lifting spring, no need to operate levers or handwheels.

BEST SPEED

Suitable to fill and emptying portable and trolleys fire extinguishers.

Compact steel frame on wheels, provides excellent maneuverability.

Inspection transparent plexiglass sleeve. Effective filter, extremely clean.

Powder flows through a filter that prevent dirty or objects to go inside extinguisher.

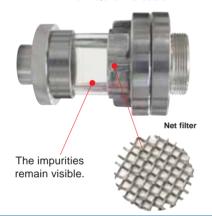
Electrical motor 220 V. 50 Hz, 1.000 W. It refill 6 kg cylinder in less than one minute. Dry powder is aspirated from the sac and poured inside cylinder.

To be combined with an electronic scale (not included in the delivery) to verify a correct and precise weight of the powder into the cylinder.

Filter Kit 98200_7 on the suction pipe

98200_7

Filter Kit for dirty and impurity for Cares, Carefill, Exxar. Quick release.





Exausted dry powder

98285

Drum for

powder

50.



Refilling portable fire extinguishers



Standard supply:

- Adaptor for stored pressure, and external cartridge.
- Electrical motor 220 V 50 Hz, 1.000 W. It refill 6 kg cylinder in less than one minute

"CARFIL" Refilling powder 98200_2

1.000 W.

98200_2 Refilling powder for vehicles









Dimensions 38x60x110 cm Weight 35 kgs

Perfect and ideal for service extinguishers and trolleys directly to the customers sites. Small compact, fast, efficient. Special version for car

service van.

EXXAR, refilling powder unit 98240

98240

EXXAR refilling machines is equipped with an external powerfull high flow pump which creates the vacuum and a faster refilling of dry powder extinguisher.

A large filter plus a secondary security filter external protects the motor.

This unit is faster than the similar CARES in previous page. Ideal for workshops with volume of 200 / 300 extinguishers per day.

Easy and faster refilling of trolleys



Electrical motor : 220V 50/60 Hz 1 Hp Flow of powder : ~ 13 - 15 kg/min

Weight : 80 kgs

Electrical motor : 380V 50/60 Hz 3 Hp
Flow of powder : ~ 20 - 30 kg/min
Weight : 110 kgs

Dimension: 500x750x1600

Standard supply includes: Adaptors M 30x1 and M 74 for cylinders

Cylinders and trolley 2".

Suction pipe L= 1200 D. 22 mm.



Secondary security filter



Emptying bag up to12 kg

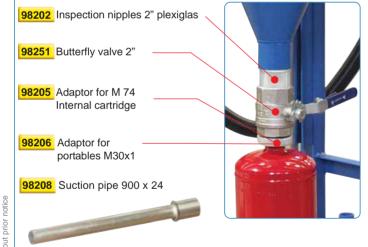


98200_6 Kit powder disposal

Fix the belt and discharge directly into a waste disposable plastic bag Use with Cares, Carfill Exxar.



Spare part accessories for CARES, CARFILL, and EXXAR refilling units.







System with the Venturi principle. Fast filling trolley with extremely clean. It can suck from the bag and weighed by subtraction or put the trolley on the scale and weighed by addition.

Trolleys refilling



"98250 MULTIPLA" AUTOMATIC REFILLING DRY POWDER

Description:

Automatically can transfer any kind of dry chemical powder from a big bag of 1.000 kg to any kind of portable and trolley fire extinguisher.

This machine can fill powder up to 25 kg/min.

Absolutely clean, no dust at all.

A special filter keeps it absolutely clean avoiding the leakage of the minimum part of powder from it.

Total dimensions:

 Height
 : 210 cm

 Width
 : 90 cm

 Depth
 : 90 cm

Work-bench dimensions:

Height : 75 cm Width : 90 cm Depth : 90 cm

Technical characteristics:

Vacuum pump: 220 Volt - 1 HP Scale 40x60 cm Precision 10 gr. Flow rate: ~ 1 kg/sec

Filling Speed

- 6 kg: ~10 sec - 12 kg: ~15/20 sec The high quality filter doesn't need any special maintenance;

The display of balance can be programmable from 1 to 200 kg.
 Fully respects the tolerances of EN3 standards.
 It stops automatically when weight set is reached.

The automatic refilling machine is complete with:

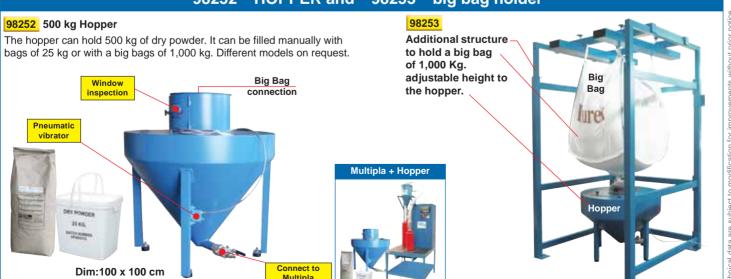
- Console is painted with epoxy-polyester powder Blue
- Electronic scale display, vacuum pump, check control panel.
- Vacuum cylinder complete with filter, inspection transparent powder pipe;
- Cylinder powder recycle capacity 12 kgs;
- Electronic scale with platform in stainless steel programmable.
- Work-bench.

Professional, absolutely clean, refills a 6 kg fire extinguishers in 10".

Do not need any tool, just lean the filling head on the cylinder, press start button, and filling is a snap. Absolutely precise and clean. It is a professional unit suitable for high volume refilling up to 150 units of 6 kg per hour.



" 98252 " HOPPER and " 98253 " big bag holder

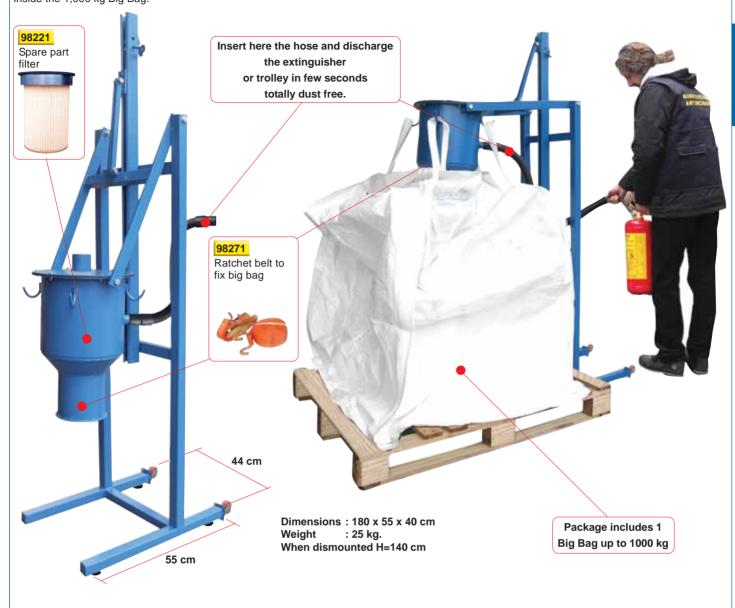


"98150" Powder disposal unit Big Bag

98150 Powder disposal unit into a Big Bag

Frame made in steel. Dust filter. No need electrical source. Clean, it simply insert the trolley fire extinguisher hose into the tube and discharge the extinguisher; within seconds the powder is disposed inside the 1,000 kg Big Bag.

COMPACT, LIGHT WEIGHT, EASY TO TRANSPORT, DETACHABLE



"98603" Compressor 20 bar with dryer dehumidifier

98603 Air Compressor 20 bar complete with side dryer dehumidifier.

Technical data are subject to modification for improvements

Any standard compressor produce compressed air but with high humidity contents, dangerous if in contact with dry powder as may cause easily its cacking. This unit solve the problem, and cuts high cost of nytrogen cylinders and their expensive managment.

PROFESSIONAL air copmpressor, produce dryed and 99,98 % dehumidified air, equivalent to nytrogen. Standard working pressure 20 bar. 98603 includes compressor and dryer.



98602 Dryer-dehumidifier stand alone, 220 V 50/60 53x30x51.

Outlet dryed air at 20 bar to pressurize extinguishers.

Includes both units

Compressor

Dimensions

Max electric power

Air flow

98601

Compressor stand alone 20 bar.

: 400 l/min

: 120 kgs

: 3 phase 4 hp

: 110 x 51 x 85

"98100" CO2 REFILLING UNIT

The C02 refilling unit is designed to transfer liquid CO2 from a main supply cylinder into a CO2 extinguisher.

Small, compact trolley mounted, easy movement.

It works also with low pressure tanks where CO2 is stored at -20°C. It is equipped with:

- High pressure compressor,
- High pressure suction and delivery hoses
- Pressure switch

- Control board
- Pressure gauge
- Swivel connection with CO2 standard thread 28,8.



Motor: 220 V 50 Hz 2HP monophase.

Flow charge rate: 4 kg / min. (higher on request)

Combined with an electronic scale with display 94005/94006 it is able to charge and stop automatically with safe and precision.

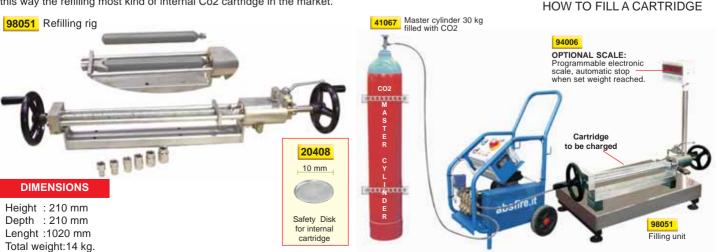


"98051" CO2 Internal Cartridge Filling Rig

Steel made, small dimensions for easy movement and transport; the easy handling and its small size permit the installation of this unit everywhere without any problem, i.e. it can be easily loaded on a small truck or van for recharge at customer's premises.

The unit is equipped with a steel made filling head and many different spanner keys which can be changed inside the filling head and permit in this way the refilling most kind of internal Co2 cartridge in the market.

On request the unit can be supplied with a precise weighing scale in order to reach the exact required charge, and, in addition to this with an electric switch on the weighing scale which stops automatically the CO2 pump at the required weight.



The unit it's composed by:

CO2 CHARGER UNIT: These unit permit to fill CO2 extinguishers from a master cylinder any syze to an empty cylinder any size.

HALOGENATES GAS CHARGER UNIT: These unit permit to fill from a master cylinder and pressurize with nytrogen.

PRESSURIZATION UNIT: With a master cylinder nitrogen, any size of stored pressure fire extinghuisher.

COMPRESSED AIR UNIT: These unit produce compressed air used to cleaning operations and operate the pneumatic clamp

PNEUMATIC CLAMP VICE UNIT: These vice is used to clamp extinguishers cylinders till 300 mm diameter for mounting valves.

TECNICALS CHARACTERISTICS

Maximum air pressure :16 bar (232 psi) :8 kg/min, max 100 bar Flow rate of CO2 Power of pump motor :1.5 Kw

Power of compressor motor

:220 V 50 Hz - (380 V 3pahses on request) Power supply

Weight :180 Kg

94002 Electronic scale manual 94005 Electronic scale automatic

"98400 Maxi" Refilling unit CO2 with clamp

98400 MAXI is a multipurpose machine recommended in any workshop for the maintenance of all kind of extinguishers. It is a unit featuring combined operation: filling CO2 extinguishers, filling halogenated extinguishers, pressurizing extinguisher with nitrogen, producing compressed air for clamping cylinders, hydropneumatic pump to test cylinders till 250 bar.

It is possible to complete the machine with some integrated optionals.



The MAXI refilling unit is equipped with:

- CO2 Refilling unit, 98100.
- Pressurizing extinguisher with nitrogen, fill extinguishers with. halogenated Foxer, HFC227, FM200.
- Air compressor up to 17 bar, for control panel and to clean valve.
- Pneumatic clamp for cylinder up to 67 litres, 300 mm diam, 98500.
- Refilling powder machine CARES, 98200.
- Hydropneumatic test for cylinder up to 250 bar, 98300.
- Refilling CO2 internal cartridge, 98051.
- Electronic scale up to 30 kg, 94004.

"97300" Valving devalving unit

Allows mechanical valving and devalving on cylinders and extinguishers. Provide with a precise regular torque setting; absence of physical effort reducing accident probability.

97300 Valving unit

Vertically adjustable shaft for easy use with any size of high pressure cylinder.

Automatic stop at preset torque force.

Cyl diam 70 / 320 mm Torque force 100 / 300 Nm Main switchboard 24V. Electrical motor 220 V 1,5 Kw Dim: 140 x 42 x 400 cm



"98300" Hydropneumatic test **Accessories** 98002 Manifold hydraulic testing enable simultaneous of 5 cylinder Water Bucket This manifold high pressure, includes hoses to test a single or simultaneously 5 cylinder at once. On request 2 models: Unit and hoses are factory tested at 750 bar. 480 bar 750 bar

It can test hydraulically one or more cylinders at a time, max 250 bar. The cylinder is filled with water, the

hydropneumatic pump compress the water inside it aspirating clean water contained in a bucket below pump head.

Max pressure of the pump is 250 bar. No electricity is needed.

It use air to drive the pump from 0,1 up to max 8,5 bar and it multiplies the pressure with a ratio

Fully in stainless steel and maintenance free. A high precise pressure reducer allow to supply air at very small steps enabling to set desired hydraulic pressure.

It can be used also to make burst a cylinder; normally dry powder cylinder blasts in a range from 60 to 90 bar.

It can be used to test also flat fire hoses, rubber high pressure hoses, hose reels.

OPTIONALS

The unit can be supplied with adaptors for extinguishers and trolleys M30 x1,5, M74x2, 2", 3/4 " 25E for CO2, 2" Storz for Hoses.

"98901" Hydraulic test and dryer machine



The hydraulic test and dry machine 5 place can be fill, test and dry cylinder.

Indicated for hydraulic test of extinguishers cylinders.

The unit can make 3 differents operations with 3 integrated units:

- 1) Pump for filling cylinders with water.
- 2) Hydraulic test of cylinders till 80 bar. (available 250 bar)
- 3) Blower for drying tanks. The unit can test 5 cylinders at once.
- Standard configuration: Chassis in painted steel sheet;
- Air/water manifold;
- Main electric panel with manual and automatics controls;
- Filling and test fast fittings;
- Water tank in stainless steel complete with filter.
- Continuous pressure set, increase step of 1 bar.

The water is recycled, no waste in drainage.

Specifications:

Filling pump:

- Maximum pressure: 4 bar
- Power supply: 220-240 Vac 50 Hz 1 Kw

Test pump:

- Maximum pressure: 80 bar
- Power supply: 220-240 Vac 50 Hz 1,5 Kw Blower:
- Power supply: 220-240 Vac 50 Hz 1,1 Kw

"98804" Drying machine 5 units

This product has the advantages of rapid drying, no dust, no pollution, convenient operation, safety and reliability

Equipped with temperature and timer adjuster.

Auto shut down at preset timer.

- Voltage : 220 V
- Power : Air Blower 250 W
 - : Heater case: 3000 W

Approx drying time 2 / 5 min, it depends from residual water inside cylinders

Dim:37x68x120 cm - Weight ~ kg 80

- Adjusting heating timer.
- Digital temperature adjuster.
- Power indicator lamp.
- Power switch.
- Buzzer
- Heating indicator lamp.

98804 drying 5 units

Drying machine 2 units

Dryer blowing machine for extinguishers tanks.

Permit to dry 2 tanks at once manually on/off.

Very light and small, indicated in small workshops or inside a service car van.

Voltage: 220 Volt 1,5 Kw



Dim: 36x55x45 cm - Weight kg 35



"98500" Pneumatic clamp for fire extinguishers and CO2 cylinder



Suitable to fix extinguishers cylinders and CO2 bottles for maintenance, mounting and dismounting valves.

Diameter from 70 to 300 mm.

Clamp are adjustable to fit any kind of cylinder.

The strong structure made of steel is designed to be fixed on the wall or to stand on the floor. Clamps pliers have with protections in special rubber in order to avoid scratches to the paint of the cylinder or bottle. Double activation push-button: needs two fingers to avoid accidents. Emergency stop and open red push-button.

Include the pressure reducer and filter with lubricator.

Pneumatic cylinder with push force up to 800 Kg for a perfect fastening also for larger CO2 bottles.

Manual clamp release

98013 Manual clamp, useful anywhere

Suitable to fix extinguishers cylinders and CO2 bottles for maintenance, mounting and dismounting valves.



Kit torque force spanner for CO2 and powder valve for fire extinguishers

To lock valves on extinguishers according to PED 97/23 standard which specify that they must be tighted with torque force specified by the manufacturer. Included shown accessories.

98023_1 Case complete with:

- 1 Torque force spanner from 20 to 100 Nm.
- 1 Torque force spanner from 40 to200 Nm.
- 2 Accessories powder extinguishers from 1 to 12 kg
- 1 Accessories for trolleys and extinguishers with internal cartridge.
- 2 Accessories from 28 to 30 mm CO2 valve.



98024 Torque force spanner CO2 extinguishers 40/200 Nm.



Trolley multipurpose for fire extinguishers

Revolving device makes possible to rotate the extinguisher completely, shaking the powder.

nd intruction

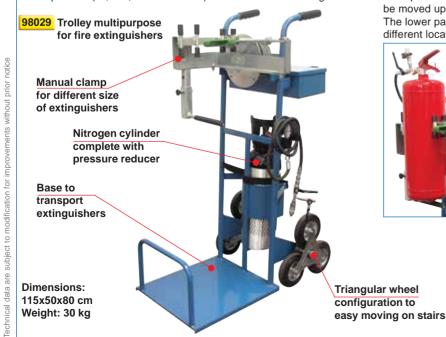
The 4 position (0°, 90°, 180° and 270°) enable the whole extinguisher to

be checked and serviced.

Includes a toolbox for the necessary accessories.

The special configuration of the three-wheeled trolley allows the unit to be moved up and down stairs easily.

The lower part of the trolley allows extinguishers to be moved easily in different location.



Revolving vice makes possible full rotation

Base to transport extinguishers



COBRA Compressors breathing apparatus

COBRA is a range of quality production of high pressure compressors for breathable air and technical gases like Nitrox, Trimix, Helium, Nitrogen

A.b.s. kept on evolving in the mechanical area continuously updating planning and designing equipment and producing ever-improving reliable products.

A.b.s. have took up the challenge of the technological evolution and export it is products all over the world also thanks to a widespread distribution network offering qualified service & repair.

A.b.s. produce portable compressors and large-sized recharge stations.

This catalogue shows the recharge station product line: with single-phase and three-phase electric motor.

A.b.s. compressors guarantee the fire fighters and varius quality breathable air and a versatile equipment.

98060 Technical characteristics

Charging rate : 215 l/min - 13 m3/h

Filling time cylinder at 300 bar:

3 lt cylinder : < 3 min
6 lt cylinder : 8 min
Working pressure : 315 bar
Rpm pumping unit : 1350

Driven by : Three-phase electric motor Power : 4.8 Kw (440/480V - 60Hz)

Dimension

Height "H" : 0.84 m (33")
Width "L" : 0.89 m (35")
Depth "P" : 0.60 m (23")
Noise : 71,9 dB ISO 3746
Dry weight : 177 kg (390 lbs)

Breathing air : DIN 3188 EN 12021 CGA E



08060 1

Automatic drain, 440V 60Hz 3 phase. With autostop

98060

Automatic drain, 400V 50Hz 3 phase. With autostop.



98060 Optional accessories

- Remote filling panel
- Extra filling hose BC valve (1,2 m) max two pieces
- 300 bar version

98060 Complete with

- Start stop switch
- Pressure switch for automatic stop
- Hourmeter
- Manual drain
- Automatic condensate drain with timer
- Oil level.
- Automatic condensate drain
- Autostop
- Electronic switchboard with hourmeter.





air H.P. 300 bar from 80 to 215 ltm

Filling station for air cylinder from 80 to 100 l/min

High pressure air compressor suitable to cahrge compressed air bottles for breathing apparatus and scuba systems. It supply deumidified air and filtrates through filtration and settling systems.

Technical characteristics

Charging rate : 100 l/min - 6 m3/h

Filling time cylinder at 300 bar:

3 It cylinder : < 9 min
6 It cylinder : 18 min
Working pressure : 315 bar
Rpm pumping unit : 2800
Driven by : Three-phase

electric motor
Power : 3 Kw - 4 HP

Dimension

Length : 0.84 m (33")
Height : 0.89 m (35")
Width : 0.60 m (23")
Noise : 83 dB ISO 3746
Dry weight : 56,7 kg COMPACT
: 37 kg BASIC

Breathing air : DIN 3188 EN 12021 CGA E

COMPACT FRAME



98062 100 lt/min, 400V 50Hz 3 phase

BASIC FRAME



Optional accessories

- Autostop
- 1,2 m extra filling hose
- Stainless steel frame
- Filter cartridge with CO2 catalyst

98067 80 lt/min, 230V 50Hz mono phase **98067_1** 80 lt/min, 230V 60Hz mono phase

98064 100 lt/min, 400V 50Hz 3 phase

98064_1 100 lt/min, 440V 60Hz 3 phase

98603 Filling station for air cylinder 215 l/min

Complete with Pressure gauge, overpressure valve, maxi filter and manual condensate drain

Technical characteristics

Charging rate : 215 l/min - 13 m3/h

Filling time cylinder at 300 bar:

3 It cylinder : < 3 min
15 It cylinder : 14 min
Working pressure : 315 bar
Rpm pumping unit : 1350

Driven by : Three-phase electric motor
Power : 4.8 Kw (440/480V - 60Hz)

Dimension

data are subject to modification for

Technical

Height "H" : 0.84 m (33")
Width "L" : 0.89 m (35")
Depth "P" : 0.60 m (23")
Noise : 71,9 dB ISO 3746

Dry weight : 100 kg

Breathing air : DIN 3188 EN 12021 CGA E





98063

Manual 400V 50Hz 3 phase

98063_1

Manual 440V 60Hz 3 phase

Optional accessories

- Automatic condensate drain
- Autostop
- Complete automatic switchboard



Powder Extinguishant **furex**







All powders are manufactured according to European standard EN 615 and ISO 7202 exceding all criterias for humidity, particle size, flow and level hygroscopic.

Most used dry powder are based on monoammonium phosphate and ammonium sulphates known as multipurpose as able to extinguish fires of class A / B / and C.

Other types are based on sodium bicarbonate, potassium bicarbonate, urea complex and inorganic salts.

Silicon additives are added to avoid chemical reaction with moisture and checking.

The action of extinguishing powder is produced by decomposition of the at high temperatures reached in the fire, giving rise to chemical effects on the flame and the production of carbon dioxide and water vapor.

The products of combustion of the powder thus separated from fuel combustion, cools the fuel and inhibit the combustion process. The dry powder used in our fire extinguishers is produced by the largest European companies and experienced leader.









Dry powder are tested an approved as EN 615/1995. Big brands like Caldic Furex, Rühl Chemie, Croda, Orchidee are European manufactures over a century of experience. Perfect mixing of chemical components, experience, severe quality control ensure the necessary physical properties of the product, such as perfect water proofness, smoothness, particle size, stability. Durability is at least 5 years if properly stored below 60°C and dry conditions.



"ABC" Furex / Rühl / Orchidee

Manufactured in Germany EN 615

	Cod.	MAP %	25 kg Bags
			Special price for pallets up to 1.000 kg
I	31129	20%	TERTIA-New , lower environmental impact, super-efficient
	31130	30%	
	31140	40%	MAP, is the abbreviation of Mono Ammonium Phosphate.
	31150	50%	The higher classes of fire during tests are obtained only by
	31170	70%	professionals with daily training experience.
	31190	90%	

Canister 25 kg	g "BC" Manufactured in Germany EN 615		
Cod.	%	Components	
31102	90%	Purple K Potassium Bicarbonate	
31110	30%	Potassium Sulphate	
31209_1	90%	Potassium Sulphate"Rühl Karate"	
31111	30%	Sodium Bicarbonate 30%	
31210_1	94%	Sodium Bicarbonate 94%	

Canister 20 kg	"D"	Manufactured in Germany EN 615	Furex / Rühl
Cod.			
31100	D f	or metal fires bucket 20 kg	

Canister 25 kg	"BC" MONNEX EN 615 Croda England
Cod.	
31101	MONNEX Potassium sulphate/bicarbonate bucket 25 kg

As a good rule, checking an extinguisher, even after many years if the powder appears fine, dry, flowable, it proves that not physical or chemical changes happened and may be considered as good as in the origin.

Dry powder is considered the cheapest and most efficient extinguishing agent to be used with portable and trolleys fire extinguishers.

According to law in force in the country should be disposed by authorized companies carefully to avoid pollution caused by reaction of water with chemical salts.

DRY POWDER HAS PASSED THE DIELECTRIC TEST UP TO 35,000 V. FOR HANDHELD AND TROLEY IS RECOMENDED THE USE UP TO 1,000 Volt AT 1 mt DISTANCE

The powder ABC 20, ABC 30 and ABC 40 are normally supplied BLUE color.











Fire test on class 233B (155 lts of heptane) with a 6 kg powder fire extinguisher

8 minutes of preburning time of a class fire type 34 A (Length of the test fire 3,4 m)

* MAP= Acronym of Mono Ammonium Phosphate.



Foam Extinguishant







CANISTER 25 KG

Approvals: Fire Brigade UL Listing MED MARINE



A.F.F.F 25 kg	
Cod.	Description
33110	AFFF 3%
33124	AFFF 6%
33124_1	AFFF 6% UL Listed EN1568 ICAO

Proteinic 25 kg	
Cod.	Description
33112	Proteinic 3%
33127	Proteinic 6%

Fluoroproteinic 25 kg	
Cod.	Description
33126_1	Fluoroproteinic 3%
33126	Fluoroproteinic 6%
33131	FFFP fluoroproteinic 3%
33125	FFFP fluoroproteinic 6%
33125_1	Universal 3% alcool resistant
33130	Universal 6% alcool resistant

Synthetic 25 kg	
Cod.	Description
33128	Synthetic 1-6%
33128 2	Synthetic 1% Forest fires

Biodegradable > 90% OECD, Free from PFOA (perfluorooctanoic acid)

DRUMS 200 KG

Approvals: Fire Brigade UL Listing MED MARINE



A.F.F.F 200 kg	
Cod.	Description
33313	AFFF 3% film forming
33326	AFFF 6% film forming
33326_1	AFFF 6% UL Listed EN1568 & ICAO

Synthetic 200 kg	
Cod.	Description
33330	Synthetic 6%
33330 1	Synthetic AR 3-6% alcool resistant

Proteinic 200 kg	
Cod.	Description
33329	Proteinic 6%
33329_1	Proteinic 3%

Fluoroproteinic 200 kg	
Cod.	Description
33328_2	Fluoroproteinic 3%
33328	Fluoroproteinic 6%
33328_1	FFFP fluoroproteinic 3% film forming
33327	FFFP fluoroproteinic 6% film forming
33327_1	Universal 3% alcool resistant
33392	Universal 6% alcool resistant

 ${\it Biodegradable > 90\%\ OECD,\ Free\ from\ PFOA\ (\ perfluorooctanoic\ acid\)}$



Guide to the foam extinguishant

Foam compound is used to fight fires class A and B solids and flammable liquids. It is used with special equipments, said mixers from 1 to 6% with remaining 99 / 94% of water. It is supplied in plastic drums of 200 kg or

portable 25 kg of plastic canister. It is indispensable to fight big fires, in industrial

and petroleum fields and refineries.

A choice of various type of foam can be made followings basic informations:



A.F.F.F

Abbreviation of Acqueous Film Forming Foam, creates a thin floating film on top of fuel surface.

It is self-sealing, therefore extremely efficient. When fire is knocked down, reignition is pratically almost impossible, being the fuel under the protective AFFF floating film.

It ca be used also with spray nozzle. Expansion Ratio 1:10

Fluoroproteinic

For low expansion. Available at 3% and 6% concentration. Great heat stability.

Suitable for long-preburn-time fires.

For petroleum products process and storage areas - Aircraft hangars - Ideal for subsurface injection systems.

It creates a resistant blanket resisting to high °C.

F.F.F.P. Fluoroproteinic

Combines the advantages of filming with those of fluoroproteinic.

SEALFIRE

It is a special A.F.F.F. superconcentrate 1% / 3% specially developed for extinguishers. It has a great stability, It creates a floating high resistant film over burning liquids.

Proteinic

Foaming liquid mixable in water at 3% or 6%. Indicated for quickly intervention on Hydrocarbons fires, and others non polar substances. Used to generate low expansion foams.

Synthetic

Synthetic foaming liquid mixable in water at 1% to 6%. Indicated for quickly intervention on Hydrocarbons fires, others non polar class A. Used to generate medium and high expansion foams.

Universal

Universal alchool resistant, foaming liquid mixable in water at 1% to 6%. Indicated for massive intervention on Hydrocarbons fires and others polar substances. Used to generate low and medium expansion foams.

Replacement spare parts Foam

The spare charges SEALFIRE® are ready to use for charging fire extinguishers approved from 6, 9 Lt and trolleys. Genuine spare parts with certificate of conformity and guarantee.

Sea	Ifire® for EN 3.7 - Med Marine & EN 1866-1	
Cod.	Description	
21135	For portable It 6 bottle 180 gr.	
21134	For portable It 9 bottle 270 gr.	
21154	For trolleys It 25 bottle 13 LT (-30°C premix)	
21154_1	For trolleys It 25 bottle 0,5 LT	
21170	For trolleys It 50 bottle 1 LT	
21178	For trolleys It 50 bottle 26 LT (-30° premix)	
21171	For trolleys It 100 bottle 2 LT	
21172	For trolleys It 150 bottle 3 LT	
21139	Canister 5 Kg super-compound	
33395	Canister 20 Kg super-compound	
:	Sealfire A® for Class A EN3.7 and MED	
21170_1	For portable It 6 bottle 0,900 gr.	
21170_2	For portable It 9 bottle 1,35 gr.	
33396	Canister 20 kg addittive class A	
	Sealfire X [®] EN 1866-1 and MED	
21180	For trolleys It 25 bottle 0,25 It (0°)	
21180_1	For trolleys It 50 bottle 0,50 It (0°)	
21180_2	For trolleys It 100 bottle 1 It (0°)	
21180_3	For trolleys It 150 bottle 1,5 It (0°)	
	Sealfire X [®] -30 EN 1866-1 and MED	
21181	For trolleys It 25 bottle 12,75 It (-30°)	
21181_1	For trolleys It 50 bottle 25,5 It (-30°)	
	Sealfire ABF® for EN3.7 and MED	
21177	For portable It 6 13363 - 14363 (0°)	
21177_1	For portable It 9 13396 - 14395 (0°)	
	Sealfire ABF® -30 for EN3.7 and MED	
21174	For portable It 6 14366 (-30°)	
21174_1	For portable It 2 13320_30 - 14320_30 (-30°)	
	Sealfire ABF® It is composed mixing	
	Sealfire X® with Sealfire A®.	
	Premixed EN3.7 and MED	
33398	"AB" - 30°C premixed class A and B (20Kg)	
33399	LIFEWATER for class A, -30°C (20 kg)	
33393	Fat fires Classe F (20 kg)	
33108	Antifreeze for foam extinguishers (20Kg)	

Sealfire X®

The fire extinguisher is filled with SEALFIRE ABF® a mixture, of water and of SEALFIRE X® + SEALFIRE A® concentrate.

Used against fires of wood, textiles, paper and very effective for flammable liquid fires. It is used on fire extinguishers approved according to European standard EN3-7 and passed the test at 35,000 volts in all European countries: like powder and CO2 it can be used on switchboards up to 1,000 volts at 1 meter distance.

SEALFIRE X® forms a thin film that floats on flammable liquid, quickly turns and prevents re-ignition of the fuel because it insulates the contact with oxygen. The additive is also called A.F.F.F.

Acqueous Film Forming Foam. It offers many advantages rispect powder fire extinguishers:

- Discharge time longer!
- Visibility for all discharge time!
- Do not dirty! Water at 99%
- Environmentally friendly,

biodegradable at 99.8%!

And 'the product best suited for offices, hotels, museums, archives, factories, shops, laboratories, home garages. Ecological alternative to halon 1211.

Sealfire X®

Sealfire A®

Sealfire ABF®

Lifewater®



5 seconds

Test with Epthane according to FN3.7

Welded sheet steel circular 233 B diam 3 mt. After 60" ignited, discharge.

A terrific heat ~1000°C!



10 seconds

After only 10"seconds. Flames are almost down due to sealing effect.



15 seconds

After 15 second. Sealing effect is complete. Reignition is no more possible. **EXTRAORDINARY!**



Replacement spare parts Powder





Canister 5 kg

er for EN3.7 and MED
Type of Powder
ABC 40% MAP 6 Kg.
ABC 50% MAP 6 Kg.
ABC 90% MAP 6 Kg.



Bottle





Powder for EN3.7 and MED	
Cod.	Type of Powder
31119	ABC 40% MAP 9 Kg.
31115	ABC 50% MAP 9 Kg.
2 x 31104	ABC 40% MAP 12 Kg.

GERMANY QUALITY EN 615

In sealed bags, ready to use, no waste, cleaner, genuine spare parts, absolute guarantee. The powder ABC 20, ABC 30 and ABC 40 are normally supplied BLUE color.



Replacement spare charges for powder and foam extinguishers Marine MED

The SOLAS Convention Chapter II-2 part C **lays the obligation** of the provision of replacement spare change for the 100% for the first 10 extinguishers installed, while the remaining fire extinguishers are needed the 50% of the replacement spare. The maximum quantity of refills shown are 60.

For powder portable extinguisher MED

Stored pressure Marine spare parts includes a box with:



O-ring, sac of dry powder 6 / 9 /12 kg and anti tamper seal.

Extinguisher type MED
14160 St. pressure kg 6
14161 St. pressure kg 6
14162 St. pressure kg 6
14169 St. pressure kg 6
14191 St. pressure kg 9
14172 St. pressure kg 12

Internal cartridge Marine spare parts includes a box with:



O-ring, sac of dry powder 6 / 9 / 12 kg, CO2 internal cartridge, strip, anti tamper seal, clips and safety pin.

Code	Extinguisher type MED	
31300_2	14167 Int. cartridge kg 6	
31300_5	14168 Int. cartridge kg 9	
31300_7	14193 Int. cartridge kg 9	
31301_1	14194 Int. cartridge kg 9	
31304_1	14173 Int. cartridge kg 12	

For powder trolleys extinguisher MED

Stored pressure

Marine spare parts includes a box with: Orings, sac of dry powder 25 kg, washers, and safety seal.



Code	Extinguisher type MED	
31302_3	14133 St. pressure kg 25	
	14164 St. pressure kg 50	
31302_6	14181 St. pressure kg 100	

External cartridge

Marine spare parts includes a box with: Orings, sac of dry powder 25 kg, washers, safety seal, Co2 or N2 external cartridge.

Code	Extinguisher type MED	
31302_4	14134_10 N2 kg 25	
31302_5	14134 CO2 kg 25	
31302	14163_10 N2 kg 50	
	14151 N2 kg 50	
31302_11	14155 N2 kg 50	
31302_2	14163 CO2 kg 50	
31302_9	14155 N2 kg 50 Monnex	
31302_7	14166_10 N2 kg 50 " "	
31302_8	14166 CO2 kg 100	

For Foam portable extinguisher MED

Stored pressure Marine spare parts includes a box with:



Sealfire AFFF foam supercompound, orings

seal.

Extinguisher type MED	
14361 - 14363	Lt 6
14393 0°C	Lt 9
14393 -30°C	Lt 9
14392_1	Lt 9
14391	Lt 9
	14361 - 14363 14393 0°C 14393 -30°C 14392_1

Internal cartridge Marine spare parts includes a box with:



Sealfire AFFF foam supercompound, orings, seal, CO2 internal cartridge, safety pin.

Code	Extinguisher type MED	
31303_16	14365	Lt 6
31303_4	14362	Lt 6
31303_7	14366 0°C	Lt 6
31303_8	14366 -30°C	Lt 6
31303_6	14392	Lt 9

For powder trolleys extinguisher MED

Stored pressure Marine spare parts includes a box with:



Sealfire AFFF foam supercompound, orings seal, filter, PVC coupling, washers.

Code	Extinguisher	type MED
31303_11	14225 0°C	Lt 25
31303_12	14225 -30°C	Lt 25
31303	14254	Lt 50
	14226 -30°C	Lt 50
31303_10	14281	Lt 100



Code	Extinguishe	r type MED
31303_13	14260	Lt 50
31303_9	14260_10	Lt 50
31303_19	14289_10	Lt 100
31303_1	14289	Lt 100
31303_18	14284_10	Lt 150
31303_2	14284	Lt 150

ACIDS ABSORBER

Neutralizing absorbent electrolyte (sulfuric acid) based calcium oxides and carbonates

Tested and certified by auhorized Italian Organization by Ministry for Environment.

This certificate makes the product suitable to be used where lead-acid batteries are present with the risk of possible electrolyte spills both liquid and jelly.

SULFURIC ACID NEUTRALIZER

ACIDS ABSORBER Has been tested and certified by auhorized Italian Organization by Ministry for Environment. This certificate makes the product suitable to be used where lead-acid batteries are present with the risk of possible electrolyte spills both liquid and jelly.

Sulfuric acid is a highly corrosive and toxic product which can cause severe skin burns; accidental spills need an immediate intervention by means of neutralizers capable of rendering the acid inert.

NEUTRALIZATION

High absorbency and gelling power to neutralize acid, toxic and corrosive features of sulfuric acid.

VISIBLE COLOR CHANGE

Different from commonly used products, ACIDS
ABSORBER features the "Visible Color change" by
which the reaction status can be controlled in order
to verify the needed product quantity.

The sorbent powder will quickly change color to signify complete neutralization of spilled acid Pls. note that the colors in present brochure are simply indicative.

USE

Gradually pour the powder and then wait for color change (check colors on the packaging)

DOSAGE

530 gr ACIDS ABSORBER are needed to neutralize 1 lt sulfuric acid.

When an acid spill occurs, you normally can't verify the exact spilled quantity; thanks to "visible color change" you can understand how much neutralizer you need: the operator just needs to compare product color changing to the identification table on the packaging to be sure the right product quantity has been used to get complete acid neutralization.

Once the neutralization has been carried out, the

ACIDS ABSORBER product can be easily disposed of as non toxic special waste.

SHELF LIFE

Grants an optimum absorbency and neutralizing power for 5 years from packaging date printed on each packaging.

530 gr ACIDS ABSORBER are needed to neutralize 1 It sulfuric acid.





33500 Acids Absorber

SOME APPLICATIONS

- Battery refilling station.
- Direct Current generation plants.
- Battery manufacturing plants.
- Battery storage warehouses.
- Industries and companies where lift trucks are needed.
- Car and mechanics industry
- Battery disposal and storage areas.

> 42

ORION

Indicated for indoor applications, condominium, factories, warehouses. Polyester lining, internally coated with PVC.



CRYSTAL GOLD

Polyester lining, high quality, internally coated with EPDM. Excellent aging and mould resistance. Good for outdoor cabinets.



STAR RED

Double coating, polyester lining, inside and outside with poliuretan, good acid resistant, easy wash, do not need dry after usage. Reinforced anti abrasion. Mould aging resistant. **EXCELLENT PRICE / QUALITY**



Weight gr/mt of hose ~

Working pressure bar

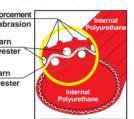
Bursting pressure bar~

mm	mt	code#	Storz	D= cm
45	20	58225	C52	32
45	25	on request	C52	34
45	30	on request	C52	36
70	20	51427	B75	35
70	25	on request	B75	37
70	30	on request	B75	39
		Co	nform to	EN 14540

Bursting pressure bar-

Reinforcement anti abrasion Yarn polyeste

Yarn polyeste



CHAMPION GOMEL

Polyester high quality, lined with Gomel PVC, Thoni quality, known and appreciated by over 30 years. anti aging, anti mould.



mm	mt	code#	Storz	D= cm
45	20	50224	C52	32
45	25	50324	C52	34
45	30	50424	C52	36
70	20	50227	B75	35
70	25	50327	B75	37
70	30	50427	B75	39

Working pressure bar

Bursting pressure bar~

Certified EN 14540

12

12

> 42

mm 45 mm 70

Weight gr/mt of hose ~ 200 400 Working pressure bar 12 12 Bursting pressure bar~ > 45 > 42

CHAMPION SUPER

mm 45 mm 70

600

12

> 42

350

12

> 45

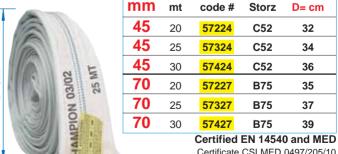
Polyester high resistance, internally coated with, Thoni quality, superb in the market appreciated by 30 years. Anti aging, anti mould.



MARINE MED SOLAS

Polyester high resistance, internally coated with EPDM. Approved MED SOLAS. Anti aging, anti mould.





Certificate CSI MED 0497/205/10

available sizes diam 38/52/75

see page 87

mm 45 mm 70

ical

Weight gr/mt of hose ~ 220 410 Working pressure bar 12 12 Bursting pressure bar~ > 42 > 45

ORION RED

virtually unaffected by climatic conditions, hot or cold. Made from high tenacity

Red Polyester filament yarn, woven on circular looms and EPDM inner lined.

HERCULES

Extruded fire hose embedding the high tenacity Polyester weaving into a Nitrile PVC compound, provides the best rubber-to-textile adhesion modern technology can achieve. Is unaffected by low/high temperatures and seawater

No drying required, mildew resistant, rot and vermin proof, flexible and very easy to maintain. Fully conform to EN 14540. Mould aging resistant.



mm code# Storz D= cm 52224 C52 38 20 45 25 52324 C52 40 30 52424 C52 42 70 52227 41 20 **B75 70 B75** 43 25 52327 30 52427 **B75** 45

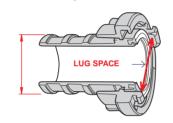
Certified EN 14540

mm	45	mm	70

Weight gr/mt of hose ~	320	640
Working pressure bar	12	12
Bursting pressure bar	> 45	≥ 42

COUPLINGS Storz, BSS

Hose diameter		
1 1/2"	38 mm	
1 3/4"	45 mm	
2"	50 mm	
2 1/2"	63 mm	
2 3/4"	70 mm	
3"	75 mm	
0:1 11 01		



Other coupling page 81



STORZ -

Cod.	Ø	Lug	storz
65302	45	59	45
65344	45	66	52-C
65345	70	89	75-B
65352	52	66	52-C
65363	63	81	65
65370	70	81	65
65371	75	89	75-B



ORION + BSS

Indicated mainly for indoor applications, condominium, factories, warehouses. Polyester lining, internally coated with PVC.



mm 70

Weight gr/mt of hose 250 140 Working pressure bar 12 12 ≥ 42 Bursting pressure bar

Hose for reel mm 25 - EN 14540:2006 - EN 694:2005

Fire hoses certified EN 14540 - on request mm 38, 52, 75.

HOSE FLAT FOR REEL

EN 14540



notice

without prior

data are subject to modification for improvements

[echnical

53222 mt 20, 25, 30 diameter 25 mm

1" 25 mm polyester and EPDM lined flat hose. WP 12 bar, Burst Pressure >45 bar

25 mm

SEMIRIGID HOSE EN 694

for reel EN 694:2005

54511 30 mt Diameter 19 mm

54221 20 mt DN 25 **54321** 25 mt DN 25 54421 30 mt DN 25

Polyester, EPDM lined, nylon spiral, light weight, Working pressure 12 bar, burst >45 bar, couplings 1" on request. Indoor light hose reel applications



RUBBER HOSE EN 694

for reel EN 694:2005

54413 20 mt DN 25, red

Working pressure 12 bar, burst >45 bar, high resistance to the abrasion. Outdoor and indoor professional hose reel application.





WATER NOZZLE, BRANCHPIPE, EN 671-2

WATER NOZZLE

Shut off - full jet - spray jet Strong aluminium in light alloy.



62046 Nozzle 2" High flow, light alloy



62048 Nozzle 2 1/2" High flow, light alloy



Storz B75



Vario High Flow

Robust but light weight, variable jet, angle max 125°, easy rotating gear shut off, full jet or spray.

Rubber coating, light alloy. Couplings Storz, other types on request. Jet length about 25 mt.



WATER CURTAIN, PROTECTS FIREMAN Shut off - full jet - spray jet

Shut off - full jet - spray jet Strong aluminium in light alloy.



BSS INSTANTANEOUS

Shut off - full jet - spray jet Strong aluminium in light alloy.



STORZ 52-C

Shut off - full jet - spray jet Strong aluminium in light alloy.

K = 79 Ø = 12 Q = 135 P = 0,3

Ø 12 mm

2" male No coupling 64226

Storz C52
64213

K=Coefficient

Ø=Nozzle diameter

- **Q**=Flow Lt/min

P=Pressure Mpa

AMERICA

Brass made, variable jet, angle max, easy rotating gear shut off, full jet or spray.

Couplings all types on request. For professionals.

Jet length about 25 mt.



WATER NOZZLE VARIO SHORT VARIO SHORT

Shut off- full jet - spray jet. Made in plastic. Basic use.

Couplings all types available



VARIO I ONO

2"1/2 BSS

64022

Shut off- full jet - spray jet. Made in plastic. Basic use.

Couplings all types available



WATER NOZZLE

Shut off -full jet - spray jet

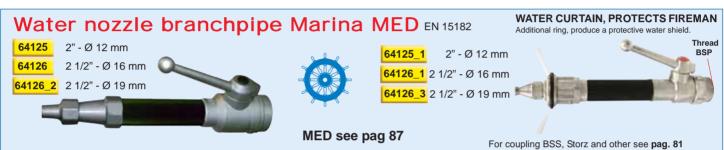


Made in Italy

WATER NOZZLE BRANCHPIPE 70mm







TURBO EASY

Turbo models, produce full or spray jet, variable angle and flow. ilt can produce very fine spray jet enabling use under electricity. Water curtain protects the fireman. Ergonomic handle and shut off valve. All types of couplings available.





Fully conform to EN 671-2



Technical characteristics for hose systems:

Certified CE EN 671-2, Directive regulation 305/2011/EU

Cabinets in 4 versions:

- a) Epoxy paint Red Ral 3000.
- b) Zinc plate + Epoxy paint Red Ral 3000.
- Stainless steel AISI 304, no paint. c)
- d) Stainless stee AISI 304 + Epoxy paint Red Ral 3000

Standard supply includes:

- Cabinet, glass, landing valve brass PN16.
- 2) Hose 1" 1/2 certified EN 14540 couplings Storz C52, binding, protective sleeves.
- Light alloy nozzles 3 position, shut off, full, spray jet.
- Hose protective holder. 4)
- 5) Seal (on request with key).

Cabinets in 4 versions:

INDUSTRY **ROUND** "626" **EDGE "BT"**



OUTDOOR

"ESS



RECESSED "IPG"



Plastic glass EASYBREAK breakable, and NOFLAMES unbreakable

EASYBREAK Is yellow transparent plastic anti UV. It is preformatted, and easy breakable, with a simple knock. NOFLAMES Is unbreakable it is fine and elegant smoked transparent, To open the door, it need breaking the seal at the pull the frame.

NOFLAMES

Unbreakable



EASYBREACK Breakable

Cabinet	Spare parts plastic glass		
	EASYBREAK	Dim.	NOFLAMES
61242	60008	325 x 525	60008_1
61243	60009	306 x 530	60009_1
61144	60010	325 x 540	60010_1
61145	60011	284 x 500	60011_1
61172	60012	422 x 570	60012_1
61271	60013	390 x 530	60013_1
61272	60014	385 x 628	60014_1
61175	60015	400 x 615	60015_1
61176	60016	365 x 580	60016_1

On request can be supplied with different dimensions (2 x 1 mt) cod. 60031



INDUSTRY MODEL "626"



See also at pag. 36 - 80

Pleasant design, great care to avoid accidental skin damages . Tamper seal. Plastic windows.



Painted

Epoxy painted, shock and scratches resistant Great care to safety.

	•
Industry	
Mod. 626	mt
62126_0120	15
62126_0220	20
62126_0520	25
62126_0320	30



epoxy paint red. 10 years guarantee

Industry		
Mod. 626	mt	
62126_2120	15	
62126_2220	20	
62126_2520	25	
62126_2320	30	

Stainless Steel

Not painted. Maintenance free. Stainless steel cabinets may have additionals red colour Ral 3000 on request

Industria		
Mod. 626	mt	
62126_1120	15	
62126_1220	20	
62126_1520	25	
62126_1320	30	

AISI 304 + additional paint epoxy red. Maintenance free. AVAILABLE aisi 316 L for very high corrosion sites.

Industria		
Mod. 626	mt	
62126_3120	15	
62126_3220	20	
62126_3520	25	
62126_3320	30	

Dimensions 38x63x18 cm

On request with couplings BSS English, NST American, Afnor French, UNI Italy, others...

MODEL "ESS" OUTDOOR

For outdoor, the **ESS** model is efficiency and economy. Inclined roof, areation slits. EASYBREAK sheet. Optional NOFLAMES unbreakable, tamper seal.



On request NOFLAMES





Painted

Epoxy powder paint Ral 3000. Impact and scratch resistant. Inclined roof.

ESS	mt
62110_0120	15
62110_0220	20
62110_0520	25
62110_0320	30

Stainless Steel

No paint. Maintenance free.

ESS	mt
62110_1120	15
62110_1220	20
62110_1520	25
62110_1320	30

Zinc plate Painted

Galvanized + Painted. 10 year warranty against corrosion.

ESS	mt
62110_2120	15 mt
62110_2220	20 mt
62110_2520	25 mt
62110_2320	30 mt

Stainless steel Painted

Stainless steel aisi 304, + paint. Maintenance free.

ESS	mt
62110_3120	15 mt
62110_3220	20 mt
62110_3520	25 mt
62110_3320	30 mt

MODEL "BT" IN AND OUTDOOR

Suitable for in or outdoor. EASYBREAK sheet. Optional with NOFLAMES sheet, tamper seal.



On request NOFLAMES



Painted

Epoxy powder paint Ral 3000. Impact and scratch resistant. Round adge, better safety.

ВТ	mt
62514_0120	15
62514_0220	20
62514_0520	25
62514_0320	30

Stainless steel

Stainless steel aisi 304. Maintenance free. Life warranty against corrosion.

ВТ	mt
62514_1120	15
62514_1220	20
62514_1520	25
62514_1320	30

Zinc plate Painted

Galvanized + Painted. 10 year warranty against corrosion.

BT	mt
62514_2120	15
62514_2220	20
62514_2520	25
62514_2320	30

Painted Stainless steel +

Stainless steel aisi 304, + paint.

Maintenance free.

BT	mt
62514_3120	15
62514_3220	20
62514_3520	25
62514_3320	30

MODEL "IPG" INDOR OR RECESSED

Wall indoor or recessed, grey primer, EASYBREACK sheet. Optional NOFLAMES sheet, tamper seal



data are subject to modification for improvements without prior notice

Aluminium frame. Grey primer



IPG	mt	
With tamper seal		
62615_0120	15	
62615_0220	20	
62615_0520	25	
62615_0320	30	

Hose system
TM aluminium frame gold.
Cod. 62615_0420 mt 20



36x56 cm

On request with couplings BSS English, NST American, Afnor French, UNI Italy, others.

Cabinet made in steel supplied in 4 differet versions:

- a) Hose reel with aluminium frame and NOFLAMES sheet.
- b) Hose reel with steel frame.
- c) Recessed hose reel with aluminium frame.
- d) Recessed hose reel with steel frame.

All the hose reel are supplied with:

- 1) Hose reel swinging at 180°, red Ral 3000
- 2) Water nozzle 1", EN 671-1.
- 3) Rubber hose, in according to EN 694 and BS 5274.
- 4) 1" brass ball valve PN16 complete with rubber hose.
- 5) Tamper seal.

Ball valve complete with manometer and 1" rubber hose, mt 1, to water supply connection .



Steel frame



Recessed hose Reel Aluminium frame



hose Reel Steel frame

Reel **Aluminium**







Reel with blind door





68x68x23 cm

Standard rubber hose

Semirigid "Optional"



6

	Cod.	mt
N	63120	20
	63125	25
	63130	30



	Cod.	mt
١	63120_1	20
1	63125_1	25
	63130_1	30

Reel with glass

Aluminium frame, NOFLAMES sheet



Other sheet see pag. 36 - 72- 80





On request Easybreakable sheet

Standard rubber hose



	Cod.	mt
	63120_2	20
	63125_2	25
/	63130_2	30

Semirigid "Optional"



iirigid Optioriai			
	Cod.	mt	
\	63120_3	20	
Л	63125_3	25	
	63130_3	30	

Reel blind door + extinguisher





On request Easybreakable

RECESSED HOSE REEL "TM"



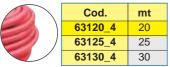






Rubber hose

Standard rubber hose



Semirigid "Optional"



Cod.	mt
63120_5	20
63125_5	25
63130_5	30





68x68x23 cm

68x68x23 cm

Rubber hose

Cod.	mt
63120_6	20
63125_6	25
63130_6	30

Semirigid hose Cod

_			
Cod.	mt	Cod.	mt
63120_7	20	63120_8	20
63125_7	25	63125_8	25
63130_7	30	63130_8	30

Semirigid hose

Cod.	mt
63120_9	20
63125_9	25
63130_9	30

HOSE REEL MADE IN STEEL RED PAINTED (on request Stainless steel)

PICTURES SHOWS CABINET IN STAINLESS STEEL AS OPTIONAL ORDERS

Wall fixed, blind door







20-25 mt 69x68x23 cm 30 mt 70x70x30 cm

Standard rubber hose



Cod.	mt	
63120	20	
63125	25	
63130	30	



	Semirigid "Optional"		
	Cod.	mt	
-	63120_1	20	
	63125_1	25	
	63130_1	30	

Wall fixed with easybreak

Unbreakable sheet NOFLAMES







On request easy breakable sheet

20-25 mt 69x68x23 cm 30 mt 70x70x30 cm

Standard rubber hose



Cod.	mt
63120_2	20
63125_2	25
63130_2	30

FIRE HOSE REEL

76x75x23 cm

76x75x30 cm



Semirigid "Optional"		
Cod.	mt	
63120_3	20	
63125_3	25	
63130_3	30	

Recessed cabinet + extinguisher







20-25 mt 102x77x23 cm 30 mt 103x77x30 cm

data are subject to modification for improvements

	Standard rubber nose		
	Cod.	mt	
\	63120_4	20	
	63125_4	25	
′	63130_4	30	



	Semirigid "C	ptional"
\	Cod.	mt
	63120_5	20
	63125_5	25
/	63130_5	30

Recessed cabinet



Standard rubber hose



25

30



Cod. 63120_6 63125_6 63130_6

Cod.	mt
63120_8	20
63125_8	25
63130_8	30

Semirigid "Optional"



Cod. 63120 7 20 **63125_7** 25 63130_7

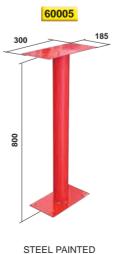
Cod.	mt
63120_9	20
63125_9	25
63130_9	30

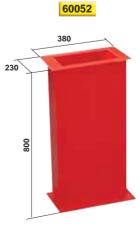
Standing foot, for hose reel and cabinet

20-25 mt

30 mt









STEEL PAINTED



The system is complete with:

- Wall brackets;
- 1" Rubber hose:
- Water branchpipe;
- Rubber hose 1" (3/4" on request)
- Ball valve complete with manometer.







Fix reel

Cod.	mt
63000	20
63000_1	25
63000_2	30

Swinging reel

Cod.	mt
63120_10	20
63120_25	25
63120_30	30

Trolley hose reel

60030

For 1 or 2 hoses Certified EN 14540 up to 30 mt. with water branchpipe EN 671-2 (not included).

Allows a quick and easy transport and use.



Hose cabinet for hydrant according to 10779 mod "INDUSTRIA CR"



SINGLE KIT or DOUBLE KIT:

- Supplied with minimum request by EN 10779:
- Hose cabinet for outdoor painted red Ral 3000 o stainless steel.
- EASYBREACK PLASTIC GLASS.
- 1 or 2 water branchpipe CE EN 671 certified.
- · Hose holder for bottom cabinet antiwetting.
- 1 or 2 Hose CE EN 14540 certified complete with coupling mt. 20, 25 or 30.
- Universal key for hydrant, coupling and foam mobile unit.

Steel painted

it
mt
20
cit
mt
20

SINGLE KIT

- 1 Water branchpipe
- Key

DOUBLE KIT

- 2 Hoses
- 2 Water branchpipe
- 1 Key

Stainless steel

Single k	it
cod.	mt
62550	20
Double k	cit
cod.	mt
62551	20

Single Kit		
cod.	mt	
62550	20	
Double k	kit	
Double k	t <mark>it</mark> mt	



Inox

Stainless steel AISI 304 On request AISI 316

On request painted red Ral 3000.

Empty hose cabinet with transparent EASYBREAK frame, and tamper seal

Model round corner Aluminium frame, for indoor or outdoor.

Tamper seal

61243 37x60x17 61272 45x69x23

Easybreak 60009

see pag. 36-72-80

Model Industrial 626/94 For outdoor use or recessed complete with temper seal. 61148_1 38x63x18 Stainless steel 61148 38x63x18 61149 37x60x20 61177 45x66x23 61178 50x68x25











IDRAKIT - Plastic cabinet Quick replacement

Universal for in or outdoor and wall applicati on without back side. Performed cut for quick replacement without removing landing valve.

61152 Quick replacement. Cabinet with sheet 60032



61152_1 Quick replacement Cabinet without sheet







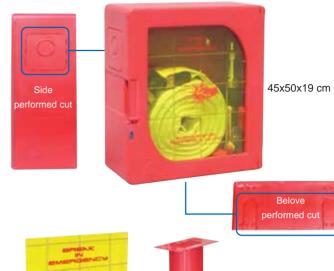
Mounting from below



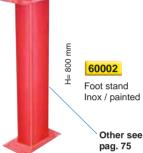
Mounting from the side



61140 Quick replacement wall cabinet with plastic base and sheet







WALLKIT - Plastic frame

WALLKIT frame with EASYBREAK sheet. It can be used to replace existings frames for recessed base cabinets.

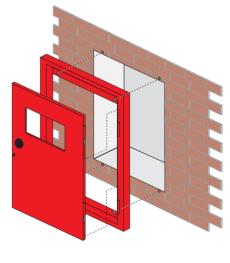


60039 50x56 h cm

Frame for steel cabinet

It can be used to replace existings frames for recessed base cabinets. Easy fixing in the wall. Transparent windows allow easy view of inside equipment. Tamper seal.

Available stainless steel shine Tamper seal 61141 41x65x2 cm 61143 49x72x2 cm



Aluminium frame with sheet for wall cabinet

Aluminium frame supplied withou sheet. Must be order separatelly.

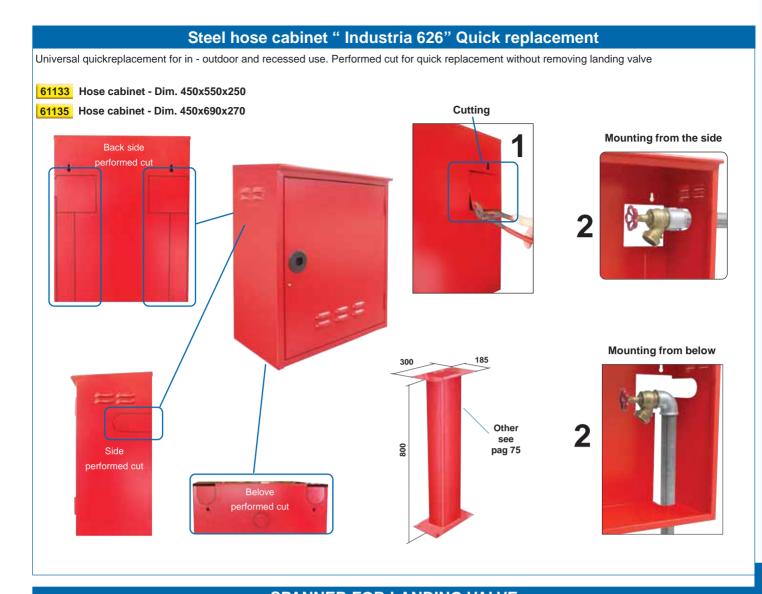


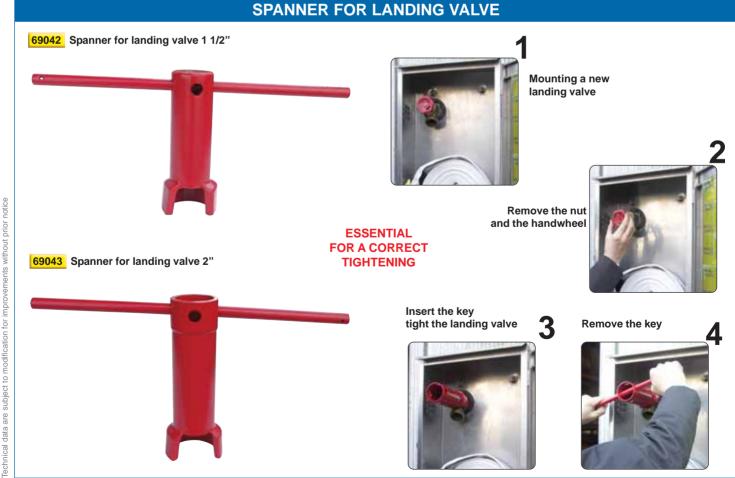


Frame	Type of cabinet	Cabinet	Sheet
69102	Wall type 343 x 567	61243	60009
69103	Wall type 426 x 672	61272	60014
69104	Outdoor 358x585	61144	60010
69105	Outdoor 438x650	61175	60015
69107	Recessed 663x457	61271	60013
69106	Recessed 560x360	61242	60008









Not	lames glass	;	Cabinet
Cod.	DN cabinet	sheet mm	Cod.
60008_1	45 Recessed	325x 525	61242
60009_1	45 Round border	306x 530	61243
60010_1	45 Stainless steel	325x 540	61144
60011_1	45 Stainless steel	284x 500	61142
60063_1	70 Outdoor	366x 575	61172
60013_1	70 Recessed	390 x 530	61271
60014_1	70 Round border	390 x 530	61272
60015_1	70 Stainless steel	400x 615	61175
60031_1	custom orders di	mensions	

NOFLAMES

Unbreakable

Plastic glass EASYBREAK, and NQFLAMES



Is breakable, with a simple knock. Yellow transparent plastic anti UV. It is preformatted, and easy



Is unbreakable it is fine and elegant smoked transparent.

To open the door, it need breaking the seal at the pull the frame.

Cutter for plastic sheet. Cutter for secure break plastic sheet. 60053 Cutter for plastic sheet. 60054 Spare blades for cut sheets 5 pcs. Rubber gaskets 60026 DN 45 60027 DN 70



Professional heavy couplings complete with gasket.



Cod.	DN	Kg∼	Thread
65251	25	0,25	M 34x3
65452	45	0,90	M 56x4
65702	70	2,20	M 85x6



Cod.	DN	Kg∼	Thread
65451	45	0,48	M 56x4
65701	70	1,65	M 85x6
65100	100	5,20	M 115x6
65125	125	6,60	M 140x6



Landing valve

Weight kg 66001 UNI 45 x 1½" 0,7 kg

6

66070 UNI 70 x 2" 1,45 kg 66071 UNI 70 x 2 ½" 2,50 kg





66073 2" x 2" 66076 2"½" x 2"½"

Heavy type PN 16 at 45°

66145 UNI 45 x 1½" Weight >0,91 kg

Long thread

66074 STORZ 52-c Lug 66 x 2" 66075 STORZ 52-c Lug 66 x 11/2"



63008 UNI 45 x 1½"



66013 2 1/2" - 2 1/2" M BSP



66072 UNI 45 x 1½" a 45° with manometer M10x1 according to EN 10779



66013_1 2 1/2" Flanged



50x1/6"

60x1/6"

65x1/6"



66027

subject to

Cod

65300

65301

65303

Adaptors Storz to pipe

2"f

2 ½" f

2 ½" f

LUG

66

81

89

UNI 45



65310

52C

66

81

89

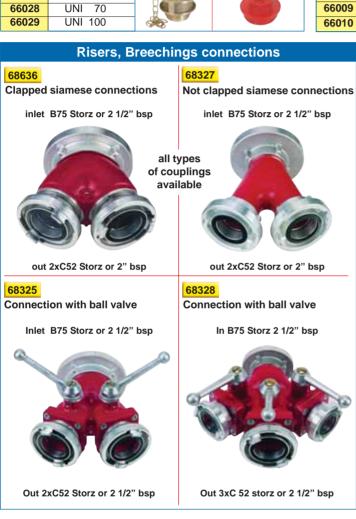
2"m

2 1/2"f 60x1/6"

2 1/2"f | 65x1/6'

50x1/6'











65304

65306

65309

Coupling, adaptors BSS instanteaneous

52C

65C

75B

66

81

89

Cod.

65305

65307

65308

Adaptors Storz -

LUG

66

81

89

Storz

LUG

31

66

81

Epoxy powder painted in red RAL 3000. Hydrant outlets Storz Din German Standard (other on request). Inlet flange as customer request.

TYPE ADR with pre-set break off point and automatic shut-off in case of breakage to prevent water escape. Above ground section 360° rotational after fitting.

Opening against pressure that guarantees an improved seal when the hydrant is closed

Pentagonal hydrant key with cap which locks onto the hydrant body to prevent tampering. Axial coupling onto the water mains.

- Surface hydrant in cast iron G 20 ISO 185 for pressures up to 16 bar.
- It is equipped with an anti-freeze drain that enables the hydrant to be emptied after use.
- All the internal components are easy to dismantle and maintain.
- Epoxy powder painted in red RAL 3000. Hydrants outlets Storz german Din Standard (other on request)
- Hydrant tested while open to 24 bar, closed to 21 bar.







Type ADR elbow 90 ° included

Cod.	DN	Outlet	Α
69101	50	2 x 2"	500
69202	70	2 x 2 1/2"	500
69204	70	2 x 2 1/2" + 4"	500
69301	80	2 x 2 1/2"	500
69303	80	2 x 2 1/2" + 4"	500
69307	80	2 x 2 1/2"	1000
69308	80	2 x 2 1/2" + 4"	1000
69401	100	2 x 2 1/2"	500
69403	100	2 x 2 1/2" + 4"	500
69407	100	2 x 2 1/2"	700
69408	100	2 x 2 1/2" + 4"	700
69503	150	2 x 2 1/2" + 4"	500
69505	150	2 x 2 1/2" + 4"	1000

Cod.	DN	Outlet	Α
69206	70	2 x 2 1/2"	500
69207	70	2 x 70 + 4"	500
69305	80	2 x 2 1/2"	500
69306	80	2 x 2 1/2" + 4"	500
69309	80	2 x 2 1/2"	1000
69310	80	2 x 2 1/2" + 4"	1000
69405	100	2 x 2 1/2"	500
69406	100	2 x 2 1/2" + 4"	500
69409	100	2 x 2 1/2"	700
69410	100	2 x 2 1/2" + 4"	700
69504	150	2 x 2 1/2" + 4"	500
69506	150	2 x 2 1/2" + 4"	1000

Cod.	DN	Outlet	Α
69301_1	80	2 x 2 1/2"	500
69303_1	80	2 x 2 1/2" + 4"	500
69401_1	100	2 x 2 1/2"	500
69403_1	100	2 x 2 1/2" + 4"	500
69503_1	150	2 x 2 1/2" + 4"	860

Coupling Storz for hydrant

			-
Cod.	d	LUG	Connection
65310	52	66	50 x 1/6" x 2"m
65311	65	81	60 x 1/6" x2 1/2"m
65312	75	89	65 x 1/6" x2 1/2"m

Cabinet for pillar hydrant see page 76

COUPLING ADAPTOR FOR HYDRANT

NH Coupling



On request

Thread adaptor for hydrant

DIN 405

52C

65C

75B

Cod.

65310

65311

65312



50x1/6'

60x1/6"

LUG thread

2"m

2 1/2"f

89 2 1/2"f | 65x1/6"

66

81

Storz coupling

Thread adaptor for hydrant

DIN	405

Cod.	d	LUG	thread
65304	52C	66	50x1/6"
65306	65C	81	60x1/6"
65309	75B	89	65x1/6"

BSS coupling



pag. 81

6

SPECIAL HYDRANT

Typically used in High risk area where does not exist freezing risk. Manufactured in various solution from 4 up to 8" and multiple outlet. Main gate valve may be fixed for each outlet or 1 underground.

The hydrant can be supplied with 2 x 2 1/2" and 2 x 4" outlets also with gate valve.

The hydrant is manufactured in cast iron G22, in cast iron with 3% nickel or in spheroidal cast iron GS 400/15.

The hydrant is equipped with a top flange which make it suitable for the possible application of monitors.



PILLAR HYDRANT 90° ELBOW

Necessaria quando si vuole installare una saracinesca.



Cod.	DN	A mm	B mm
69006	50	135	240
69007	70	150	250
69008	80	180	270
69009	100	180	300
69035	150	210	330

Gate valve for pillar hydrant

Manufactured in cast iron, suitable for water till 80°C. Typically used to control the flow in fire fighting applications. Flanges may be according international standards or to customer specifications.



Cod.	DN	
69050	50	
69051	65	
69052	80	
69053	100	
69054	150	

Gasket

Flange PN 16.

Nut and screws



Cod.	DN
69036	50
69037	65
69038	80
69039	100
69040	150



Cod.	DN	N° hole	thread	
69020	50	4	M 16	
69021	65	4	-	
69022	80	8	M 16	
69023	100	8	M 16	
69025	150	8	M 20	



I	Cod.	DN	N°
-	69026	50	4
-	69027	65	4
	69028	80	8
	69029	100	8
	69030	150	8

Underground hydrant and cover

Manufactured in cast iron, suitable for water till 80°C. Also on request DN 80 and 100 EN 14339:2006.

69004 DN 50 B45 dim 490 x 257 **69005** DN 65 B70 dim 470 x 306





69010 DN 45 240 x 390 x 310 **69011** DN 70 240 x 430 x 335

Standpipe for underground hydrant

Can be equipped with all types of couplings, Storz, BSS, UNI, Afnor, etc.



Cod.	UNI	Uscite	H mm	
	With gat	e valve		
69012	45	1 x 45	755	
69013	70	1 x 70	870	
69014	45	2 x 45	755	
69015	70	2 x 70	870	
Without gate valve				
69016	45	1 x 45	630	
69017	70	1 x 70	755	
69018	45	2 x 45	630	
69019	70	2 x 70	755	

SPANNER FOR PILLAR HYDRANTS AND HOSES



69002 Spanner for pillar hydrants.

data are

Ø 10 mm round shape



69033 Spanner for pillar hydrants.



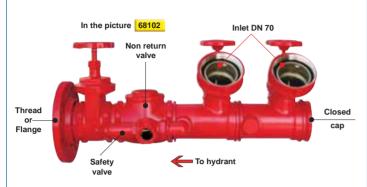


Are supplied in horizontal version.

With one or two swivel connections DN 70 - female.

They are normally supplied with flow direction from right to left, horizontal mounting. (see photo front view).

If need vertical units specify when ordering.



Cod.	DN	DN 70 inlet	Type Thread/Flange	L mm
68111	2"	1	Oriz / thread	280
68121	2 ½"	1	Oriz / thread	305
68122	2 ½"	2	Oriz / thread	445
68101	3"	2	Oriz / flanged	580
68102	4"	2	Oriz / flanged	630
68103	6"	3	Oriz / flanged	1330



For vertical units specify when ordering.

Risers cabinet

Steel door + temper seal and inspection windows. Epoxy powder painted red Ral 3000 external resistant. Recessed or outdoor mounting.



Stainless steel on request, with aluminium frame and NOFLAMESsheet.

Cod.	Туре	Dimensions mm
61301	2"	600 x 500 x 300
61302	3"	800 x 500 x 300
61306	4"	1000 x 500 x 470

Flanged backflow preventer

Reduced pressure principle prevents potentially contaminated fluid

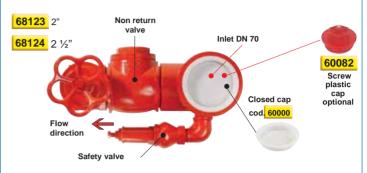
Risers, Breechings connections Delivery type according to EN 10779

Are supplied in horizontal version.

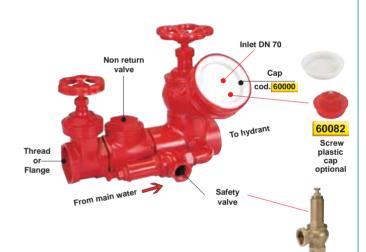
With one or two swivel connections DN 70 - female.

They are normally supplied with flow direction from right to left, horizontal mounting. (see photo front view).

If need vertical units specify when ordering.



Risers, Breechings connections according to to EN 10779



Cod.	DN	UNI 70 Tipo Thread/Flange		L mm
68111_1	2"	1	Oriz / thread	280
68121_1	2 ½"	1	Oriz / thread	305
68101_1	3"	2	Oriz / flanged	580

For vertical units specify when ordering.

Filter Y

For water systems, heating, fire prevention. Easy maintenance and cleaning.

Face to face: DIN 3202 F1 Flanges: DIN 2501, PN 16 Pressure: from 0 to 16 bar

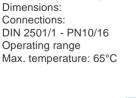
Max pressure:

DN 50÷DN 300 PN16 DN 350 PN 10 Temperature: from -10 to 120°C

Cod.	DN
45303	65
45304	80
45305	100



6



polluting the supply system.

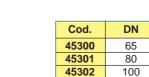
Nominal Pressure: 10 BAR

Technical characteristics

Approved EN 12729

Cast iron GG25 body

Highly reliable, easy to install and to maintain.





68002 3/4" 68001 1"

Hose roller

According to EN 671-3, hose should be tested periodically. This unit enable quick rolling of the flat hose and discharge of the inner water after its use in case of dire or for testing purpose.

98014 On wheels, indicated for car service on site.

With rewind handle



98014 1

With standing base indicated in workshops.



Manual binding unit

98058

Easy to use, small and compact, can make binding of any kind of hose and couplings. It need to be fixed in a clamp

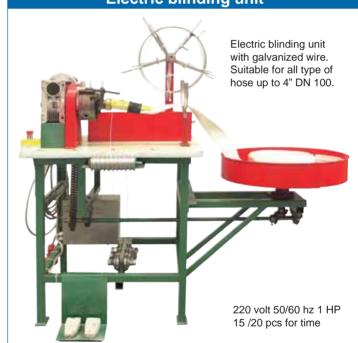
Fast, cheap, efficacious.



Fire hose testing unit EN 671-3



Electric blinding unit



Fire hose testing units EN 671-3

98030 Water pump test

This pump can test all kind of fire hose with water.

It is very fast and efficient. EN 671-3 require the test every 5 years at 12 bar.

Mounted on trolley for easy transport.

Connected to a water supply, it fill the hose quickly and the test is done in few seconds.

The pressure test can be set by rotating

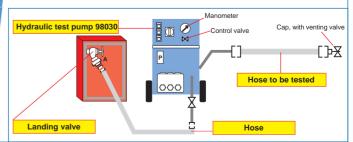
the control valve slowly to any desired pressure value.

Technical characteristics:

Motor 220 V 1,5 Kw
Max pressure >50 bar
Pressure switch from 0 to 70 bar
Manometer Ø 63 mm with oil
CE Control panel
Complete with couplings

Dim. 59 x 70 x 55 cm Weight kg 60

Suitable to test cylinder for portable and trolleys fire extinguishers in according to local regulation.



Indispensable for technicians that have to test a water pipe network. Can check and record static and dynamic pressure.

Nozzles has calibrated bore so that can read with a gauge the dynamic pressure of the water flow and compare with a table and the graphic showing the correct value needed. In case the pipe network or a pillar hydrant, or a landing valve has an obstruction can easily discovered as a result of anomalous pressure drop. A gauge 100 mm diam with oil absorbs the back hammer effect and guarantee a correct read.

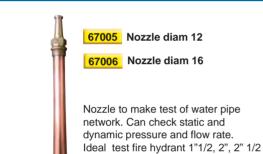
67002 Complete with:

- Nozzle calibrated Ø 16
- Nozzle calibrated Ø 12
- Ball valve
- adaptors
- Blank cap to read static pressure
- Spanner for couplings
- Manual
- Graphic chart and flow rate chart
- Conformity declaration.



Dimensions 500 x 255 x170 mm Standard Couplings are Storz, other avalaible

Water flow test nozzles



- Nozzles 12 16 mm.
- Manual
- Charts, flow and pressure
- Conformity declaration.



Cap DN 45 With gauge

Blank cap, gauge, drain valve. It permits to test the static pressure of landing valves and pillar hydrants.



60028

Standard Couplings are Storz, other available

Suitable to test hose reel flow rate.

Pitot tube for water supply test

It is a device than can check the dynamic pressure and floow speed of water, enabling to know exact flow rate.

For professional technicians

Standard Couplings are Storz, other available

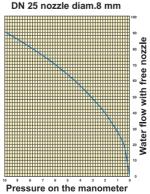
Flow diagrams DN 25 - 45 - 70, used with nozzles calibrated Ø 8 - 12 - 16 mm

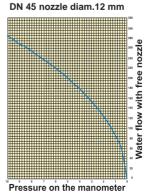


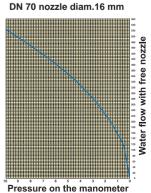
Box complete of: PITOT Pipe stainless steel Gauge 0/10bar 0-10 bar Gauge 0/25 bar0-25 bar

67008

Instructions, flow charts, conformity certificates'







ical data are subject to modification for improvements without prio

Marina MED / SOLAS equipments

ORION

Ø 38 mm

Cod.	L = mt
57115	mt 15
57215	mt 20
57315	mt 25
57415	mt 30

Ø 45 IIIII			
Cod.	L = mt		
57116	mt 15		
57216	mt 20		
57316	mt 25		

mt 30

57416

Cod.	L = mt
57118	mt 15
57218	mt 20
57318	mt 25
57418	mt 30

Ø	6	3	m	۱r	n
C-4			7		

Cod.	L = mt
57119	mt 15
57219	mt 20
57319	mt 25
57419	mt 30

Ø 70 mm

Cod.	L = mt	
57113	mt 15	
57213	mt 20	
57313	mt 25	
57413	mt 30	

The code indicates the hose without connections, specify when ordering the type of connection required.

Available in diameters of, mm 38, 45, 52, 63, 75.











Fire hose MED SOLAS

suitable also, 1 1/2" (38 mm), 2" (52 mm), 2 1/2" (63 mm), with couplings Storz, BSS, NST.

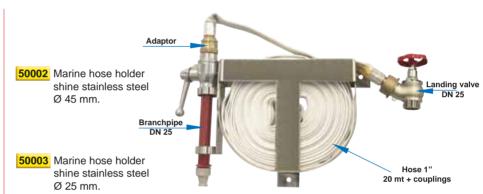
UNI

Polyester high resistance, internally coated with, Thoni quality, superb in the market appreciated by 30 years. Anti aging, anti mould.

mm 45 mm 70



HOSE HOLDER 25/45/52mm. MARINE SHINE, STAINLESS STEEL



Oth	er product	s Marina MED:	
Fire extinguishers	Pag.	Foam equipments	Pag.
- Portable	30	- Foam portable applicator	121
- Trolleys	31		
- Easyfire - Firekill		Individual protection	
		- Fire suit Med	142
Equipments recharge		- Helmet for naval Fireman	145
- Compressor breathing apparatus	62 - 63		
Fire fightings a surjuments			
Fire fightings equipments			
- Hose	68		
- Water branchpipe	71		

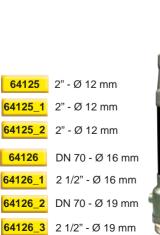
Water nozzle branchpipe Marina MED EN 15182

- Hose reel 74 - 76

WATER CURTAIN, PROTECTS FIREMAN Additional ring, produce a protective water shield.

BSS INSTANTANEOUS

Shut off - full jet - spray jet Strong aluminium in light alloy.



without prior notice

subject to modification for improvements







2 1/2" - Ø 19 mm



64125_10 Nozzle 2 1/2" High flow. Brass made



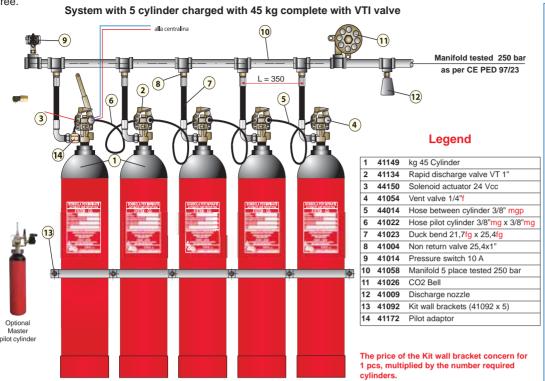






CO2 system with rapid discharge valve VT

VT valves CE marked, offer many advantages. Complete with pressure and manual actuator. They guarantee high flow, easy maintenance, leakage



Slave cylinder



Cod.	kg	Lt	Ø	Н
41148	30	40	1"	130
41149	45	67	1"	157
41171	54	80	1"	174

Rapid discharge valve type VT

Therapid discharge valve type VT are characterized by the absolute simplicity and offer numerous advantages respect the traditional rapid discharge valve type VFR (41128). The perfect seal is obtained by the adjustable lever.

Also supplied with pneumatic actuator.

Electric actuator

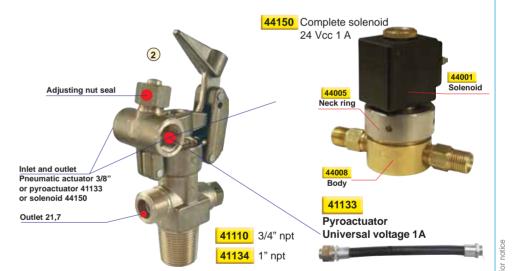
Simple and efficacious

- 1 Easy to recharge
- 2 Built-in pneumatic actuator (in and out).
- 3 The sealing pad resists dozens of actuation before being replaced and its cost is negligible.

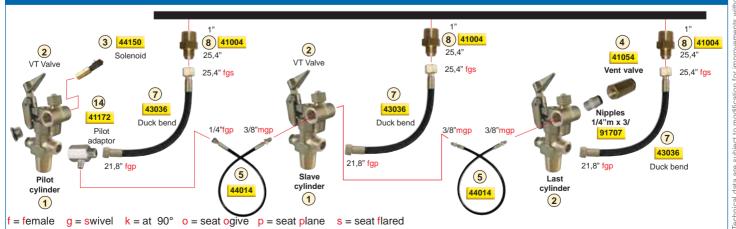
Master pilot

cylinder

- 4 Incorporates the pneumatic actuator.
- **5** For CO2, nitrogen and other gases.
- 6 W.P 250 bar and 300 bar for inert gases.
- 7 Safety pin prevents accidental discharge during maintenance.
- **8** After activation remain open open, and need manual reset.



Accessories for VT CO2 manifold

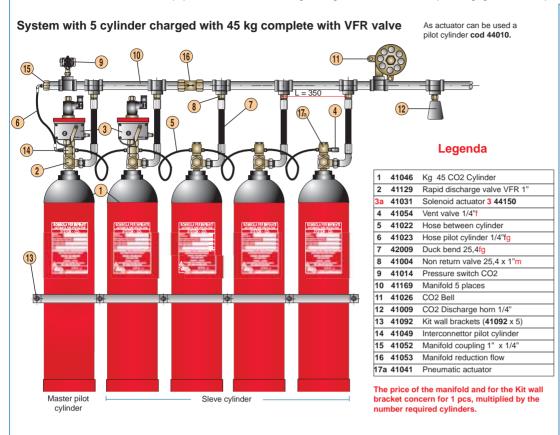


CO2 system with traditional rapid discharge valve type VFR

The extinguishing action of Carbon Dioxide (CO2) is:

- To suffocation by subtracting the oxygen in air;
- For intensive cooling caused by the rapid expansion of the gas.

It can be used on live electrical equipment. It is used to extinguishing fires of flammable liquids, eg. gasoline, oil, paint, alcohol, etc..





Cod.	kg	Lt	Ø	Н
41044	20	27	3/4"	110
41045	30	40	1"	130
41046	45	67	1"	157
41173	54	80	1"	175

With the implementation of European legislation PED 97/23, manifolds must be tested and certified. $\label{eq:percentage}$

data are subject to modification for improvements without prior notice

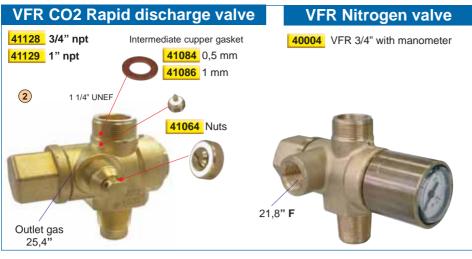
Technical

All equipment shall be subjected to hydraulic test pressure and the manifold must be marked with a CE label with all their data and issued a

certificate from the manufacturer.

ABS made manifolds according to the laws and shall issue the necessary certification. We provide piping and nozzle calculation with a specific computer software according to EN / NFPA.

Accessories for VFR CO2 manifold 9 41053 41023 15 6 16 41004 41004 25,4 mo 5 41049 41022 41049 1 5 (5) 41049 14 25,4 fgs [25,4 fgs 25,4 fgs[41186 41186 25,4 fgs 25,4 fgs 25,4 fgs f = feale g = swivel k = at 90° o = ogive seat <math>s = flaret seat



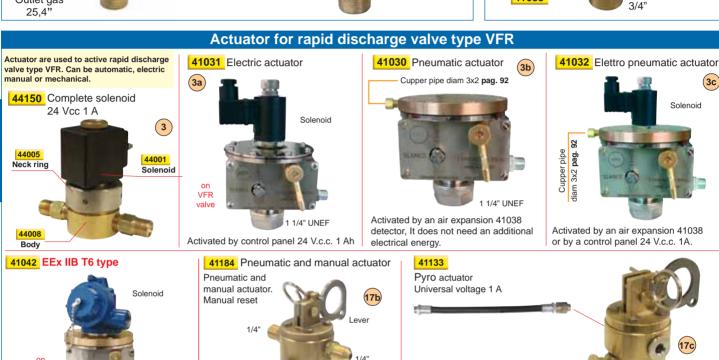


(3c)

Solenoid

VFR

valve



1 1/4" UNEF



Activated by control panel 24 V.c.c. 1 Ah

VFR

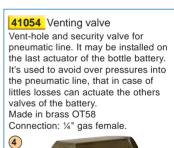




Electric actuator with

manual reset 41133

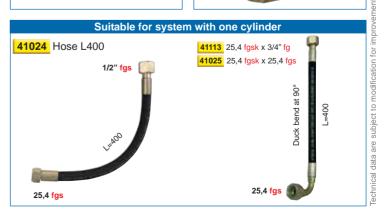
41183



1 1/4" UNEF

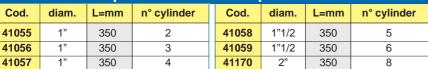






atmosphere.

CO2 Manifold preassembled complete with accesories Cod





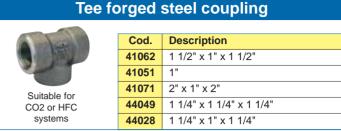
H.P Pipe for threaded manifold

Threaded at both sides.

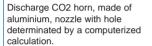
Suitable for cylinder diam. 227 or diam 273 mm. Gas CO2 / HFC.

Cod.	diam.	L=mm	n° max cylind.		
41060	1"	300	4		
41063	1 1/2"	300	8		
41112	2"	300	12		





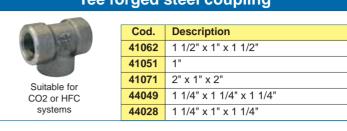






The CO2 bell is powered only with the flow of CO2 gas when system is

Do not need electrical energy,





Activated by the pressure of the CO2 gas. Can be used in all type of systems. It switch off electricity, stop fans, shut doors, remote alarms etc..

9

Pneumatic pressure switch

41014 1 contact 10 A

41018 2 contacts 10 A

41039 Scale for cylinder

Is mounted below each cylinder for added security. In case of loss of CO2 gas weight, the switch sends a signal to the control panel for an audible or visual alarm. if loss weight is more than 10%.



	Protection cap for va	lve
Cod.	Description	41027
21017	Tulip for handwheel valve, or VT.	130
21017_1	Tulip for handwheel valve, or VT.	
41027	Neck ring + aluminium cap.	(4)
41065	Steel for handwheel valve	
44086	Steel for VT valves VT	
41065	44086 21017 21017	165



Pneumatic odorizer

Due to the fact that CO2 is a colorless and odorless gas, the fragrance released the odorized allows people to detect the presence of gas in the room in case of discharge.



44200 Pneumatic odorizer 1/2"

CO2 empty cylinder				
Cod.	Lt	Kg	Ø	Inlet
21329	27	20	203	3/4"
21341	40	30	227	3/4"
21342	40	30	203	3/4"
20146	67	45	273	1"
20147	60	45	229	1"



Empty cylinder RINA			
Cod.	Lt	Kg	Inlet
20109	3	2	3/4"
21210	7,5	5	3/4"
20101	14	10	3/4"
21328	27	20	3/4"
21340	40	30	3/4"



Nitrogen cylinder				
Cod.	Lt	Ø	Inlet	
20102	2	110	3/4"	
20108	3	110	3/4"	
20107	7,5	140	3/4"	
20114	14	170	3/4"	
20127	27	203	3/4"	
20140	40	227	3/4"	



Charged cylinder with VFR valve				
Cod.	kg	lt	inlet	Н
41043	10	14	3/4"	83
41044	20	27	3/4"	110
41045	30	40	1"	130
41046	45	67	1"	157
41143	45	60	1"	180
		1	24	

Technical data are subject to modification for improvements without prior notice





Charged cylinder with VT valve				
Cod.	kg	lt	inlet	Н
41148	30	40	1"	130
41149	45	67	1"	157





Charged cylinder with handweel valve					
Cod.	Cod. Lt Kg inlet				
41119	14	10	3/4"		
41066	27	20	3/4"		
41067	40	30	3/4"		
41118	67	45	1"		







This model allow to install a completely automatic system without energy source, electric power, neither of batteries. The operation is based on the physical principle when the temperature increase, the pressure inside expands (41038) and create a small pressure activating the pneumatic detector (41030)

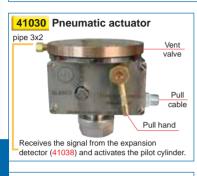
The 41037 capillary pipe diam 3x2 transmit the pressure of the air chamber to the pneumatic detector (41030).

Installed to ceiling, if the temperature increase rapidly in terms of rate of rise detectors, the pressure is sufficient to activate the discharge. If the tetemperature rise slowly then the pneumatic actuator has a vent valve to avoid accidental discharge.

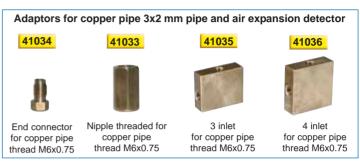
41038 Air expansion detector



The heat of the fire, warms the air that is expanded increasing the pressure transmitted with a thin capillary copper tube to the pneumatic control, (41030). It does not need no energy.



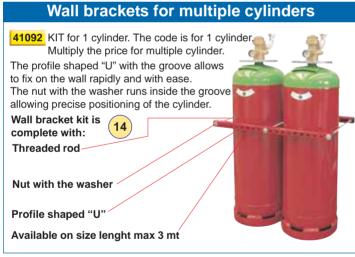








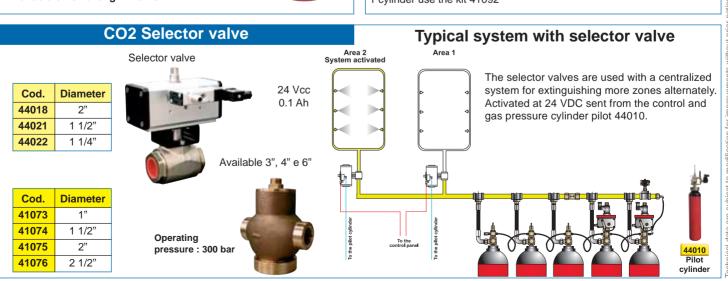






Use to fix a single cylinder on the wall.

For a system with more than 1 cylinder use the kit 41092



CO₂ Hose reel

41114 Hose reel mt 20

The reel can be wall or floor fixed. Includes 20 mt high pressure hose, high pressure interception valve and high efficiency and high flow snow horn, 2 mt hose to connect to the one or more CO2 cylinders bank. Typical use in manual applications such as plate rolling mill, painting boots, oils temper process......

(Cylinder co2 not included)





CO2 hose reel can be fixed on the wall or on the floor.

On request: cabinet



Gas liquid level indicator, CO2, HFC, FM200, Novec

98059 Ultrasonic liquid level



The 98059 is an ultrasound apparatus used to measure the level of liquid compressed gases into bottles of fire fighting systems.

Easy to use and transportable.

For CO2 cylinders is suggested to be used with temperature below 25°C.







RINA Certificate



Battery charge connector



Complete with bags, instruction of use and warranty



98048 Digital liquid level indicator for CO2, HALON, NOVEC, FM200

The PORTALEVEL is a liquid level indicator for level location and contents verification of all gaseous fire extinguishants stored in liquid state in cylinders. The Portalevel is designed for use on CO2, Halon, FM200™ and other liquid Halon replacements stored in all commonly used cylinder types. It is not designed to work on fire extinguishants that are not stored as liquid. Good result lower than 25°C

RINA APPROVED

Technical data are subject to modification for improvements without prior notice

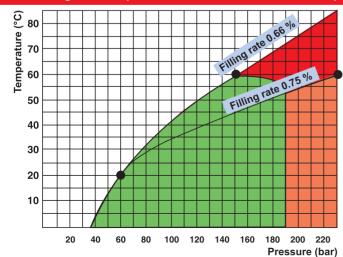


Optional accessories

98049 Extension rod for digital liquid level indicator



Diagram of the pressure variation in function of the temperature and the percentage of fill density in the CO2 cylinder.



The pressure in the cylinder charged with CO2 changes in function with the fill density and the temperature.

The graphic show how 1 liter cylinder charged with 750 grams of gas at 20 °C has a pressure of 57 bar approximately. If the temperature of the cylinder reach at 60 °C the pressure increases approximately 4 times at 235 bar taking part the safety valve if set (normally between 170 and 200 bar) or carrying the cylinder to a dangerous pressures.

In tropical and hot countries, It is advisable not to exceed the charge 2/3 with totals capacity that is 667 grams per liter.

Avoid exposure under direct sun x'rays that risk to pass a temperature of 60°C.

The sprinkler is an automatic thermo sensible valve. A small glass bulb encloses a liquid sensible to the temperature that in case of fire it expands, brokes the bulb and leaves a rain water on the surface. A single sprinkler it protects "approximately 10 mq, if placed at 3 meters height". In case the fire extends, others sprinkler take part exclusively in the zone assaulted from the fire. For the greater part of the risks the standard 3 bar waterworks pressure is sufficient, other times need to install an electric pump, and an automatic power pumps in case the demanded pressure is insufficient or there is risk of electric power lack. The sprinkler systems are most diffused fire installation to protect, supermarkets, hotel, garages, etc. The bulb is a fast response, thin just 5 millimetres. Strong reductions on the insurance policy, render a sprinkler system an economic and amortizable investment in few years.

Our tech department can assist in the engineering, computer pipe dimensioning, installation and final test complying with the regulation in force. This page shows the main, all range available in a separate catalogue

Sprinkler pendent during the discharge



Color of the bulb in degrees centigrade

939





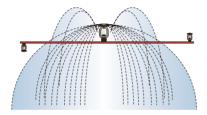
Protection Association The authority on fire, electrical, and building safety

PROTECTOR SPRINKLER

Conventional



Conventional sprinkler direct the jet also on the bearing structures of the ceiling and assure a good cooling of beams and pillar. The deflector can be mounted on the one or the other side.



Cod.	Description
45210	1/2" Chromed export 68°C
45111	1/2" export 68°C
45113	1/2" LPC 68°C
45117	1/2" LPC - FM 68°C

K 80

On request other temperature

45110 1/2" export 141°C









Cod.	Description	
45112	1/2" UL listed 68°C K80	
45220	3/4" UL listed 68°C K112	

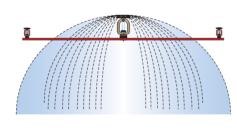


On request other temperature

Upright

The deflector can be mounted only on the side





Cod.	Description	
45114	1/2" UL listed 68°C K80	
45221	3/4" UL listed 68°C K112	

On request other temperature

Sidewall

Sidewal sprinklers.

Used near walls or bookcase.









1/2" UL listed 68°C 3/4" UL listed 68°C



other temperature

Concealed 45115

Installed indoor of false ceilings and are invisible for aesthetic reasons.

The retainer is adjustable for imperfections of false ceiling and in case of fire come down allowing the flow rain.

Connector flex for sprinkler

Connector flex for sprinkler systems Stainless steel Aisi 316L, available from 1/2" to 3/4" different lenght from 700 to 2200.

Complete with:

- Stainless steel AISI 316L / 304 flex
- 2 Nut 2 Brass
- 3 Nylon gasket
- 4 Silicon Gasket
- 5 Galvanized steel coupling
- 6 Galvanized steel Nipples
- 7 Bracket type A
- 8 Bracket type B 9 Galvanized steel bar



45046



Technical Characteristics Work pressure 200 PSI Test pressure 1000 PSI Working temperature 120 ° C Inlet connection 1" M ISO Outlet connection 1/2" F NPT Minimum bending 3" (76 mm)

(P

SPRINKLER WET VALVE PREASSEMBLED UL. FM.



gong

Supplied

45012

Optional

Pressure switch

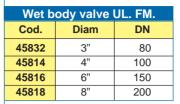
45008

Body valve 45814, preassembled trim 45043. Retard chamber **45012**, shipped in packing wood

Optional separately Gate valve 45005, Pressure switch 45008, Water motor gong 45011

This valve must be used in areas with no risk of freezing.

The pipe are always full of water. In case of fire the automatic sprinkler open, the hydraulic alarm bell set in action. The pressure switch active the pumps and other equipment.



Body valve made in cast iron flanged UL listed



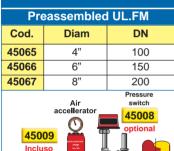


2 manometers, valve and ball valve, for drair test, thread pipe and couplings.

All inclusive in the preassembled.



SPRINKLER DRY VALVE PREASSEMBLED U.L.



notice

ica

Preassembled UL.FM

80

100

150

200

Drain

Diam

3

4

6

8"

ntional

ontional

ain gate valve cod. 45000

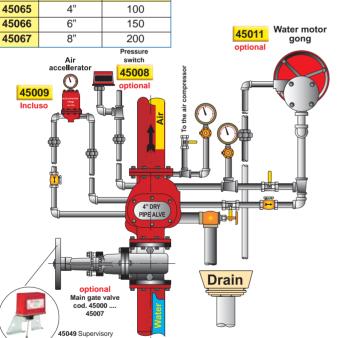
Cod

45061

45062

45063

45064



Preassembled dry valve U.L. 4' cod. 45065 complete with:

Body valve **45914**, preassembled trim **45016**, accelerator **45009**, trim accelerator preassembled, 45010 shipped in packing wood box.

Optional separately Gate valve 45005 Pressure switch 45008, Water motor gong 45011

or plants where the danger of freezing is high and therefore the system must be pressurized with compressed air. The system can also be equipped with an

This valve is particularly recommended in areas

accelerator (optional) which release the air very quickly in case of fire, even if only one single sprinkler head has opened.

Dry body valve U.L.				
Diam	DN			
4"	100			
6"	150			
8"	200			
	Diam 4" 6"			

Body valve made in cast iron flanged UL listed

, ,			
Trim for body valve			
Cod.	Description		
45016	Standard Trim 4"- 8"		
45009	Air accelerator+Antiflood		
45010	Accelerator Trim III		





Preassembled trim rim complete with: 2 manometers, valve and ball valve, for drain test, thread pipe and couplings. All inclusive in the preassembled

MAINTENANCE AIR DEVICE FOR DRY CHECK VALVE

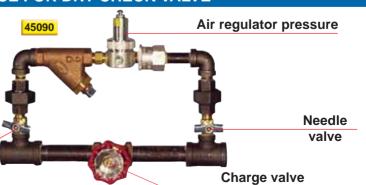
The model F and G Air Maintenance Devices are designed to provide direct filling of a Dry Pipe Sprinkler System to the required air pressure and also maintain, through a bypass arrangement, the correct air pressure in the system at all times.

The system pressure desired may be obtained by adjusting the air pressure regulator. (Refer to the Dry Pipe Valve literature for the proper air pressure required.).

The model F is used when a sprinkler system air compressor is the air source. The air pressure switch is used to control the air compressor motor and is field adjustable to the desired system air pressure.

The model G is normally used when the compressed air is supplied by the owner of the building.

Needle valve



Cou.	Diaili	DIN
45071	2 1/2"	65
45068	3"	80
45069	4"	100
45070	6"	150
Optional	8"	200

Preassembled U.L

45008 Pressure 45011 optional Water motor gong "DELUGE" is a pipe network of open sprinklers, which protect a determined area under fire risk, The valve once activated through the fire detectors it open and the area is simultaneously flooded DELUGE system is used in areas where the risk of fire is high and cannot be controlled with bulb sprinkler which open one by one on demand of increasing the fire.

One single open sprinkler misure an area coverage of approx 9 sqm.

Pipe and flow calculations are performed and computerized with an appropriate software. DELUGE system requires usually large quantity of water.

Being empty, galvanized pipes and fittings must be used.

Body valve U.L.				
Cod.	Diam	DN		
46003	2"1/2	70		
46125	3"	80		
46104	4"	100		
46106	6"	150		
46107	8"	200		
	,			

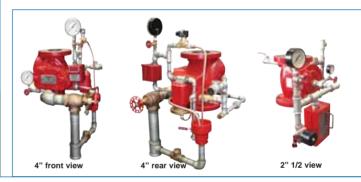


Cast iron flanged body valve UL - FM.

Trim for body valve			
Cod. Description			
46000	Universal from 2 1/2 to 6"		



Trim and necessary accessories to complete a body valve: manometers, test and drain gate and ball valves, gate, check valve, pipes, coupling.



Preassembled deluge valve U.L. 4" cod. 45069 complete with:

Body valve **46104**, preassembled trim **46005**, shipped in packing wood

Optional separately

Gate valve 45005, pressure switch 45008, Water motor gong 45011, Tamper switches 45049

Flow switch UL listed



Cod.	Diameter
45035	2"
45036	2 1/2"
45037	3"
45038	4"
45039	6"

The waterflow detector is a device that slides in the pipe and close an electrical contact useful for alarms.

Air accelerator UL listed





The air accelerator is used in the dry systems. It accelerate the air exausting quickly from the pipes, allowing water to arrive timely to the sprinkler activated by the fire.

Retarding chamber UL listed

45012 45031



It serves primarily as an hydraulic time delay to prevent most false alarms associated with fluctuation of water supply pressure. In situation where excessive water pressure surges occur, the retard chamber is needed.

Water motor gong UL listed



45011 UL

It produce a strong alarm sound when a sprinkler is activated by a fire. It no need any electrical energy. The sound continue as long as the water flows through the sprinkler network pipes.

Pressure switch UL listed



Pressure switch

N.C. and N.O. contacts support 10A. When water flows through the pipes, gives alarm, stop fan and other servicices.

Tamper switches

Supervisor switch is used on the main gate valve, that must be keept

always open.
In case of tampering of the valve it marks an alarm to the control panel.
Contact Max 10A

UL listed

45049



ical data are subject to modification for improvemer

Sprinkler cage 45041 The sprinkler headguard are used to protect the bulb if it is at risk of

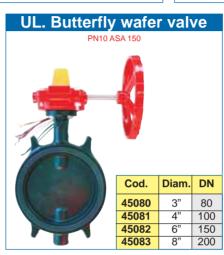
Wall escutcheons 45060 **45047** 3/4" adjustable 20 mm

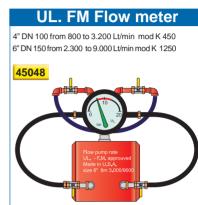
Sprinkler head cabinet UL - FM Cod. N° Pcs Ø 1/2" 48003 12 48004 24 1/2 48005 12 3/4" 48006 24 3/4" 48007 36 1/2 48008 36 3/4" head cabinet empty **48002** x 12 **48001** x 24 45109

Sprinkler wrench

Large choice plastic or chrome.

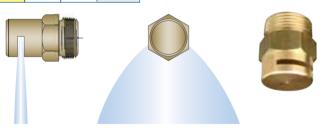


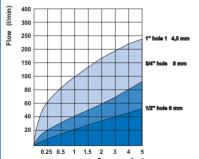




Flowmeter FM - UL approved, for water systems. Soldering type Ø 6"

Cod.	diam "	Ltm 3bar	Angle
45050	1/2"	40	120°
45051	3/4"	70	120°
45052	1"	235	120°

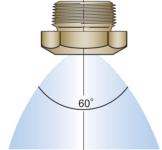




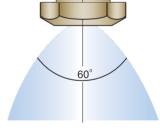
Water curtain nozzle provides a jet at 180° relatively flat They are generally used to provide a water curtain over a glass windows or apertures to prevent fire/heat penetration, to cool oil tanks and steel columns to give more resistance to the structures.

Structural Resistance

Spray nozzle









120 Flow 30 2 3 5 0.25 0.5 1 1,5 Pressure (bar) Spray nozzle are generally used in deluge systems. They provide 60° spray jet, composed by relatively fine drops.

Used in industries for multiple purposes and in fire fightings specially to protect transformers and oil containers. The fine drops are not conductive to electricity.

Available in different diameters, flow and angle jet.

Air compressor for dry system

notice

without prior

nprovements

Supplied with check valve, gate valve for connection to the dry pipe valve.

Used for filling and pressure maintenance of dry valves. Automatic 100 lt max 8 bar

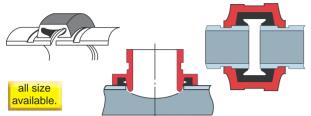


Our technical department is available for advices comprehensive planning, certifications, installations in full compliance with norms requirements.

The following table shows the advantages of grooved products compared to other pipe joint methods.

Both rigid and flexible couplings are available for the grooved piping system.

With the housing held into the groove, the rigid coupling is designed to achieve straight runs of pipe without any flex at the joint, whilst the flexible coupling accommodates expansion / contraction and deflection.



Comparative Advantages	Threaded	Flanged	Welded	Grooved
Allows angular deflection-misalignment				х
Expansion, Contraction or, no need for expansion joint				х
Reclaimable, no need for union		х		х
Allows fast connection with valves				х
Allows rotation of pipe for alignment		х		х
No Special skills required	х			х
No welding slags	х			х
No weakening of pipe at joints		х	х	х
No fire hazard during installation	х	х		х
Quick installation	х			х
Easy to maintain				х
Allows prefabrication	х	х		х
Low installation cost	х			х

45700_2 Rigid coupling



45701_2 Flexible coupling

45703_2 Heavy duty flexible coupling



Available from 1 1/4" to 6"

45705_53 Mechanichal

45709_52 Threaded reducing tee

45704_53 Grooved mechanical tee





45706_30 Strap tee



45707 52 Mechanichal cross



45708_53 Reducing tee



45714_5 Cap

45710_5 Equal cross







45713_5 Hinged flanged



45715_30 End-line reducing elbow















45723_2 Grooved equal tee



45724 Grooved concentrical reducer















45728_5 Cap with hole

PIPE MACHINERY

Grooving machine type 2"-12"

45700_1

This machine is used to chase of zinc-plated pipes, seamless pipes, stainless steel pipes and plastic-lined pipes of various sizes ranging from 2" to 12".



Three-phase Motor

Voltage (V) : 110-460 Power (W) : 750 Frequency (Hz) : 50-60 Net weight (Kg) : 123

Dimension (mm): 860x460x860

Grooving machine type 1"-4"

45700

This machine is used to chase of zinc-plated pipes, seamless pipes, stainless steel pipes and plastic-lined pipes of various sizes ranging from 1" to 4".



Single-phase Motor

Voltage (V) : 110-240 Power (W) : 750 : 50-60 Frequency (Hz)

Net weight (Kg) : 98 Dimension (mm) : 690x580x1080 **Three-phase Motor**

Voltage (V) 110-460 Power (W) 550 Frequency (Hz) : 50-60 Net weight (Kg) : 92

Dimension (mm) : 650x580x1080

Pipe cutting machine

44699

without prior notice

subject to modification for improvements

Single-phase Motor

: 110-240

: 1100

: 50-60

: 129

Dimension (mm) : 920x460x960

Voltage (V)

Power (W)

Frequency (Hz)

Net weight (Kg)

The whole construction allows quick change of cutting disc. The cutting disc while using supporting roller on cam holder: 2 1/2" - 6". The cutting disc while using supporting roller on main unit: 8" - 12".



Single-phase Motor

110-240 Voltage (V) Power (W) : 750 Frequency (Hz) : 50-60 Net weight (Kg) : 120 Dimension (mm): 660x710x960

Three-phase Motor

: 110-460 Voltage (V) Power (W) : 750 Frequency (Hz) : 50-60 Net weight (Kg) : 120 Dimension (mm) : 660x710x960

Hole cutting machine

44699_1

Stable feeding mechanism with the support of dovetail guide. Three-phase motor, contributes to high efficiency.

CAPACITY

Max. tapping Diameter (mm) : 4" Max. tapping Wall-thickness (mm) : 10 RPM (r/min) : 120



Single-phase Motor

110-240 Voltage (V) Power (W) : 550 Frequency (Hz) : 50-60 Net weight (Kg) : 24

Dimension (mm): 340x340x620

Three-phase Motor

: 110-460 Voltage (V) Power (W) : 550 : 50-60 Frequency (Hz) Net weight (Kg) : 24

Dimension (mm) : 340x340x620

Fire systems EN 15004 Inerte gas 100% ecologico.

NYTRARGON®





Used for "total flooding" application. It is a mixture of gases normally present in the air, 50% "A" Argon and 50% "N2" Nitrogen. It is classified in the international standards with the trade name Ig-55. Being gases normally present in the Earth Atmosphere, there will never be restrictions on their use. In fact the impact on pollution is zero. Dimensioning is realized using NFPA 2001, or EN 15004, requesting respectively minimum concentrations of 38% - 42%.

NYTRARGON® does not cause thermal shocks to computers.

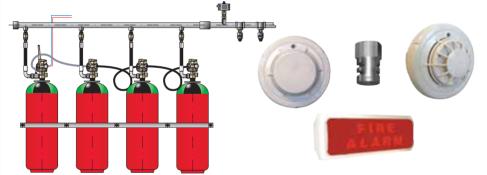
The mix of pure gases does not stratify, allowing an optimal visibility during the discharge and uniform saturation in the protected area.

NYTRARGON® has zero environmental impact (ALT, GWP, and ODP=zero) NYTRARGON® extinguishes the fire reducing the oxygen concentration in the protected volume; it is, therefore, necessary to ensure good tightening of doors and windows before discharge. For this reason after installation is highly recommended to perform the **Door Fan Test**, which discover possible leakages in the enclosures. It is efficient against all the types of fire, and is particularly used to protect great values, where others extinguishing like water, powder, or foam cannot be used because they would cause damages.

Typical uses are computer rooms, museums, telecommunication centres, banks, etc.... Normally used in closed areas, it is calculated to reduce the percentage of oxygen at 12-13% arresting the combustion after the discharge in approximately 60 sec. The system previews an acoustic/optical pre-alarm before the discharge. Presence of people in the area during and after the discharge is not a danger. They can breathe for a long time without danger, and the visibility is not reduced. No toxic gases are generated from the combustion in contact with NYTRARGON®.

Accepted from standards NFPA and EPA. It demands an accurate computer calculation in order to avoid that concentrations lower than 12% may cause an excessive breathing problems. 47039 Control panel EN 54-2/4 EN12094-1

NYTRARGON® it is a trade mark from a.b.s. S.r.l.





For system cross zone with cross zone detector. EN 54-2/4 EN 12094-1 Certified.

Professional

NFPA 2001 Table

Characteristics Chemical composition Nitrogen 50%+ Argon 50% purity 99,99% GWP, ODP, ALT 0 (zero) Dielectric rigidity at 1 atm-mmHg at +25°C (N2=1,0) 1,01

Design concentration according to NFPA or ISO 14250-14

Protection area for a cylinder 80/140 Lt..... a 300 bar M³ 43 / 75

Cylinder capacity......80/140 LT charged at 300 bar

Nytrargon quantity in the cylinder 80/140 Lt at 300 bar Nmc 22,1/39

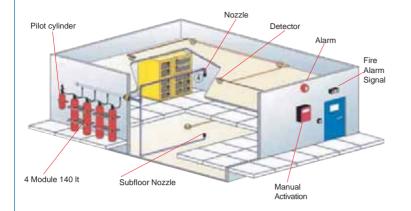
System design.......Computerized calculation Huges or VDS according to NFPA

International standard...... NFPA IG - 55 - ISO 14520-14

Application (CED - warehose - archive) Also with presence of people in a room The percentage of OXYGEN at 12/13% allows a sufficient respiration

Application Area

Control rooms, Computer rooms, Telecommunication facilities, Libraries, Museums.



Example of total flooding application ISO 14250-14:2005 (E).

Design concentration 40,3 % for a class A fire (table 4 of the current norm) at 20°C, 0,729 Kg/mc.

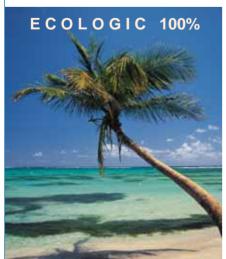
	One cylinder protection examples:						
Code	Cylinder Capacity It	Fill pressure bar	Protection room mc	Charge kg	mc gas in the cylinder		
44080	80	200	30,5	22.22	15.73		
44084	80	300	42,8	31.18	22.08		
44140	140	200	53,6	39.04	27.65		
44145	140	300	75,5	55	38.95		

For more information contact our technical office.



Advantages and benefits

- It dose not leave residual
 - Safe for the people
 - Low cost of recharge
- Electrically not conductive
- Environmental respect with ODP, ALT, e GWP = 0
- Advantage to place the cylinder at distance from protected room



47007

ALT atmosphere life time

GWP global warming potential

ODP ozone depletion

potential =Zero

Nitrogen and argon are gases normally present in air, pure, clean and dielectric; do not react when in direct contact with flames and do not produce harmful products, non corrosive and return in the atmosphere without damage to the environment.

NYTRARGON® safeguards people and really

protects delicate materials.

NYTRARGON® system uses large-capacity, 80 and 140 liters, cylinders, tested and approved CE TPED and they need to be reinspection every ten year.

The initial high pressure on the manifold through a special "ORIFICE" is reduced to 40-60

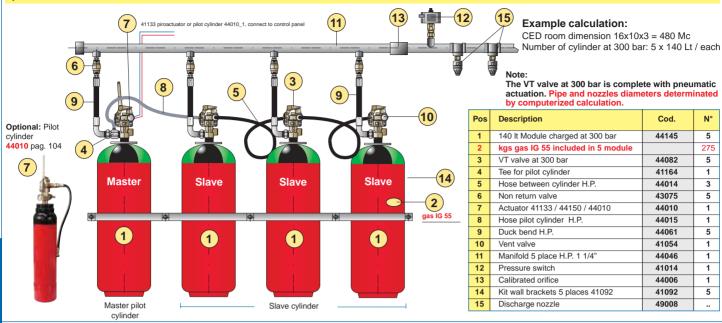
bar, enabling remarkable cost cosaving on the installation pipes. Cylinders can be placed at great distance from the enclorsureand, with the use of directional valves, it guarantees flexibility and convenience to protect with one bank of cylinders multiple areas.

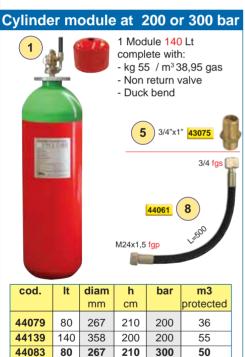
Engineering, design, computerized software calculation, installation, service.

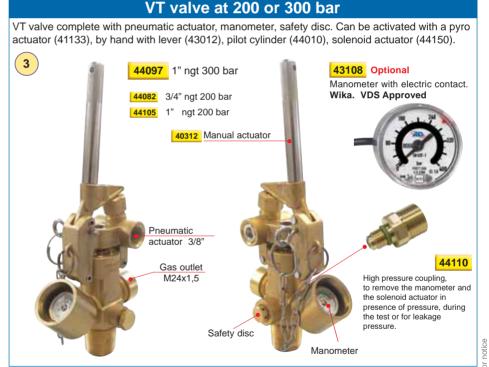
Manifold is made with pipe SCH 160 with fittings ASA 6000, while after the "calibrated orifice" are SCH 40 and fittings ASA 3000. Manifold is tested at 700 bar and certified according to PED.

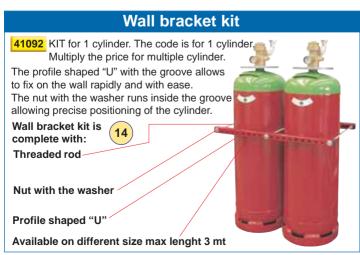
The pilot cylinder, activated by the control panel or manually with the lever, through the hoses allows to simultaneously activate all the other slave cylinders.

Separate pilot cylinder is needed to open selector valves, used to switch the discharge in different areas to be protected with a single bank of cylinders.









Presure switch

41014 1 contact 10 A 41018 2 contacts 10 A

The pressure switch, placed on the discharge manifold reveals. One contact NA and NC.

The passage of Nytrargon® sends alarms sounds, disconnects electrical circuit, stops fan ventilation, shut the doors, etc...



44144

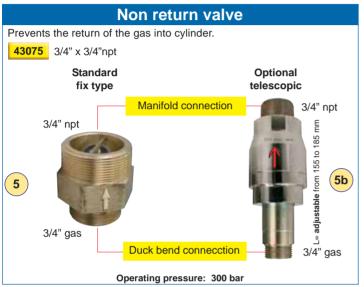
140

358

200

300

Hose and Duck bend for manifold 3/4" 4 6 43075 6 43075 6 43075 7 44050 10 10 41054 3/4 3/4 Solenoid VT Valve Vent valve 3/4" fgs 3/4" fgs 3/4" fgs 9 7 4 44061 44061 Nipples 3/8"mgp 1/4"fgp 3/8"mgp Pilot 3/8"mg 7 adanto 44061 M24x1.5 fgp M24x1.5 fap M24x1.5 fap Duck bend 8 Intermedie (5) cylinder cylinder 44015 cylinder 44014 (1) 1 (1) g = swivel k = at 90° o = ogive seat p = plane seat s = flaret seat

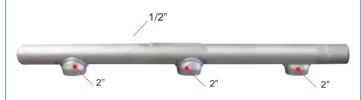




H.P. pipe type XXS diam. 2" and welded couplings. Tested and certified CE PED 97/23. Test 550 bar





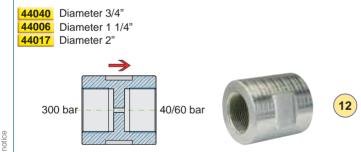


Cod.	diam Place	
44043	1"	2
44045	1"	4
44046	1 1/4"	5
44047	1 1/4"	6

Cod.	diam	Place
44048	1 1/4"	7
44062	2"	8
44062_1	2"	10
44062_12	2"	12

Calibrated orifice for manifold

Necessary to reduce gas pressure during the discharge from manifold to distribution lines, from 300 bar of the cylinder to 40 ÷ 60 bar after the orifice. Orifice size is determined by computer calculation.



Discharge nozzle

In aluminium, supplied with a calibrated hole according to computing calculation. Flaps at 90° used far from walls.



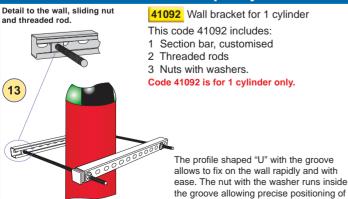


44007 1/2" 3/4" 43026 49008 1"

Flaps at 90° or 180°

Wall brackets for multiple cylinders

the cylinder.



data are subject to modification for improv

Technical

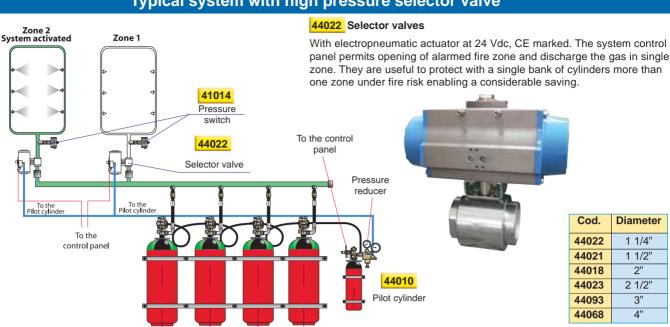
Pneumatic odorizer

Device which is installed in the discharge manifold and that releasing a characteristic smell when the system is activated. Due to the fact that CO2 is a colorless and odorless gas, the fragrance released the odorized allows people to detect the presence of gas in the room in case of discharge.

44200 Pneumatic odorizer 1/2"



Material Brass EN 12135:98tab4 Working pressure 57 bar at 20°C Connection 1/2" gas conic Odorizer charge 10 cm3 Max kg of CO2 for odorizer 1000 kg



28009

Pressure



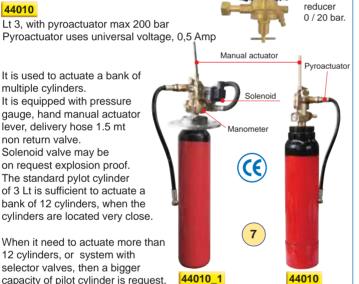
Lt 3, with solenoid max 50 bar 24 VDC 1A

It 3 Pilot cylinder complete

Lt 3, with pyroactuator max 200 bar Pyroactuator uses universal voltage, 0,5 Amp

It is used to actuate a bank of multiple cylinders. It is equipped with pressure gauge, hand manual actuator lever, delivery hose 1.5 mt non return valve. Solenoid valve may be on request explosion proof. The standard pylot cylinder of 3 Lt is sufficient to actuate a bank of 12 cylinders, when the

When it need to actuate more than 12 cylinders, or system with selector valves, then a bigger capacity of pilot cylinder is request.



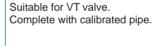


41133 Pyroactuator Universal voltage, 0,6 A.

Gun powder creates a high pressure enabling valve activation Includes protective tube; threaded both sides 1/4"m x 1/4"m Safer than solenoid which instead need critical voltage and current.







44150 Complete solenoid 24 Vcc 1 A



Door Fan Test

It is an essential test according to NFPA and ISO 14520. The fan is fitted in a door and blows into and out of the room creating a temporary pressure different not less than 25 Pa (in kg/m3).

By measuring the air flow through the fan and its effect on the air pressure in the home or office, the blower door system measures the air tightness of the entire building envelope. Additional infrared camera may be used to determine the air infiltration points to help with a more accurate evaluating indoor air leakages.







6

Kidde FM-200 FIRE SUPPRESSION SYSTEMS Kidde Fire Protection



Clean, People-Safe Fire Protection for Vital Facilities **FEATURES**

- Designed for "Drop-In" Replacement for Halon Retrofit Applications
- Well Suited for Complicated Pipe Networks and Large Area Coverage with Minimal Room for Cylinder Storage
- **Optional Liquid Level Indicator**
- **UL Listed**
- FM Approved

SYSTEM DESIGN

The Kidde GX20 system comprises a versatile range of cylinders, valves and related components which have been selected for use with FM-200® and have been subject to stringent testing procedures. Flexibility, quality and reliability make the Kidde GX20 range the world's finest in fire safety and the equipment carries third party listing through FM Global and the Loss Prevention Certification Board, UL2166 compliance and Lloyds Register of Shipping.

KIDDE GX20 CYLINDERS

A wide range of cylinder sizes from 5 to 368 litres is available, offering a choice of fill capacities to meet specific requirements and ensure maximum economy in installation. Each cylinder is manufactured from high strength alloy steel and both TPED and DOT approved cylinders are available.

KIDDE GX20 VALVES

manual release at the control head

Valves are designed for optimum system performance, allowing pipe sizes to be reduced and installation costs to be lowered. They are manufactured from tough, corrosion-resistant brass under stringent quality control standards. A pressure monitoring gauge and optional supervisory pressure switches are provided for easy servicing. Valves can be actuated by electric solenoid, pneumatic pressure, or local



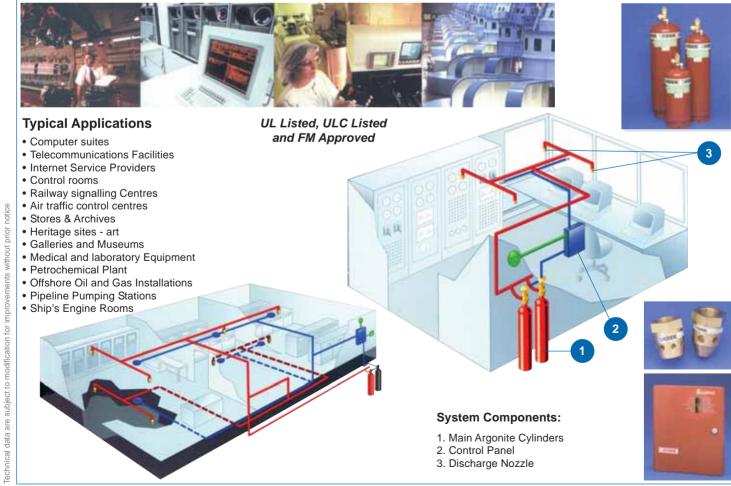
All related components from discharge nozzles to control heads are designed to be compatible allowing a complete system to be configured using FM Global and UL approved Kidde Fire Protection Equipment.

NOZZLES

Custom-designed nozzles are available with normal pipe sizes from ½" to 2", including 180° and 360° configurations.

ASSURED RELIABILITY

Kidde GX20 systems are designed to conform to NFPA 2001 and ISO 14520 requirements. An empirically-verified computer program is used to model two-phase agent flow and ensure that the correct concentration of agent is achieved within 10 seconds throughout the protected zones as required by the NFPA and ISO Standards.



The Natural Choice in Fire Protection: Kidde Argonite™ Suppression System



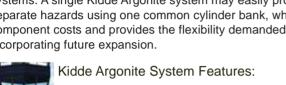
Argonite™ is an inert gas clean agent consisting of equal parts pure Argon and pure Nitrogen.

As a clean agent, Argonite will extinguish a fire without endangering personnel nor damaging business equipment or property.

With a simple two-gas mixture, local Argonite refilling sources may be found throughout the world, decreasing ownership costs and minimizing business downtime.

By using natural elements, Argonite offers an Ozone Depletion Potential (ODP) and Global Warming Potential (GWP) of zero.

Argonite provides the fire suppression agent solution for companies, industries and governments adopting environmentally-conscious policies. Simple to design with a flexible installation, the Kidde Argonite system accommodates on-site field changes more easily than other clean agent systems. A single Kidde Argonite system may easily protect multiple separate hazards using one common cylinder bank, which reduces component costs and provides the flexibility demanded by businesses incorporating future expansion.







Ozone Depletion Potential (ODP) and Global Warming Potential (GWP) of Zero



Local Refill Sources



- Automatic or Manual Actuation
- No Residue Clean-Up-Minimizes Downtime



Kidde Fire Systems Innovation in Fire Protection.







UL Listed, ULC Listed and FM Approved

Why Choose a Kidde Argonite System?

Effective. Argonite is a colourless, odourless, electricallynonconductive gas whose molecular weight is similar to that of air, therefore holdtimes are greatly increased. As a result, the need to seal the hazard area to achieve the concentration level necessary for suppression may be reduced with the use of a Kidde Argonite System.

Clean. A combination of naturally-occurring atmospheric elements, Argon and Nitrogen, Argonite dissipates into the air allowing an almost immediate return to "business as usual" without the interruption of a costly clean-up and the expense of damage to assets from suppressant residue. This results in fewer repair costs and reduced downtime.

Safe. Argonite offers an Ozone Depletion Potential (ODP) and Global Warming Potential (GWP) of zero.

In the event of a fire-related discharge, Argonite will not decompose, emit by-products or produce obscuration when exposed to a flameallowing personnel unimpeded escape during an evacuation.

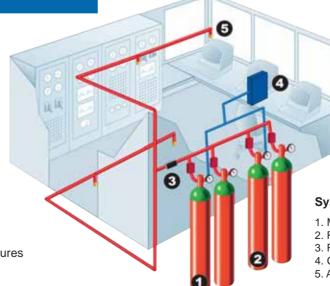
Trusted. At Kidde, we know a fire-related business interruption can keep your company from being competitive in a global market. We are committed to researching, developing and providing the most advanced fire protection technology and best customer service in the industry. We understand the marketplace demands an "up and running" business world around the clock. We are dedicated to keeping industry "in business" by keeping fires out.

Typical Applications

The Kidde Argonite System is ideal for:

- · Electronics/Data Processing Equipment
- · Pharmaceutical Facilities
- Banks/Stock Exchanges
- Museums/Art Galleries
- Colleges/Universities
- **Electrical Rooms**
- Libraries
- Control Rooms
- **Medical Facilities**
- Records/Archive Storage
- Telecommunications Facilities
- Railway/Airport Signal Traffic Controls

A Kidde Argonite System designed specifically for the hazard and operated automatically, assures immediate detection and rapid suppression.



System Components:

- 1. Main Argonite Cylinders
- 2. Reserve Cylinders
- 3. Restrictor
- 4. Control Panel
- 5. Agent Nozzle

Protecting Your Assets Today; Protecting Our Environment Tomorrow... Kidde Engineered Fire Suppression System



Designed for use with 3M[™] Novec[™] 1230 Fire Protection Fluid

Kidde Fire Protection is constantly striving to make our product offering as comprehensive as possible to ensure that we will have the right system available for your application. With that in mind, Kidde Fire Protection, together with 3M™, have designed an engineered system that is both environmentally responsible and ideal for special

3M[™] Novec[™] 1230 **Fire Protection Fluid** is stored as a liquid and discharged into the protected space as a gas.

It puts fires out quickly by a combination of heat absorption and chemical interference with the flame.





Environment Friendly

Novec 1230 fluid has a zero Ozone Depletion Potential, a Global Warming Potential of just one, and an atmospheric lifetime of only five days.

Independent scientific studies have proven that Novec 1230 fluid poses no safety risk to people in occupied spaces at the normal design concentration.

It also offers a safety margin of up to 100% - that's higher than any other type of clean fire suppression agent.

The Kidde Engineered Fire Suppression System consists of 3M[™] Novec[™] 1230 Fire Protection Fluid stored in cylinders connected to distribution pipework and nozzles



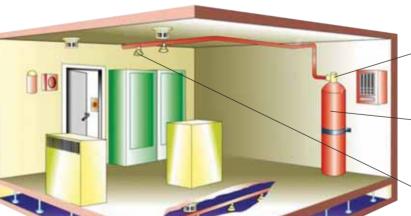
Novec 1230 fluid puts fires out quickly, before they can do any serious damage. It does this by reaching extinguishing concentrations in ten seconds or less. It is effective on a wide range of Class A, B and electrical fires.

Clean

Novec 1230 fluid discharges as a colourless, electrically nonconductive, and non-corrosive gas. It does not leave any residue behind, and there is no need for costly clean-up operations.

Cost-Effective

By using its tried and trusted range of 25 bar equipment, Kidde has produced a cost-effective Novec 1230 fluid Fire Suppression System with independent third party approvals recognised worldwide.











Applications

Archive Stores Art Galleries Museums Clean Rooms Computer Suites Operation Rooms Control Rooms Railway Signalling Centres

Air Traffic Management Centres **Data Processing Equipment Electronic Data Processing Facilities** Financial Centres and Banks Electronics and Data Processing Heritage Sites Insurance Industry Internet Service Providers

Libraries Medical and Laboratory Equipment Military Installations Offshore Oil and Gas Installations Pipeline Pumping Stations Petrochemical Plants Pharmaceutical and Medical **Facilities**

Power Generation Process Industry Control Rooms Rare Book Libraries Record Storage Substation Control Rooms Switch Rooms Telecom Centres Universities and Colleges

without prior notice

Most known is FM200®i Identified as HFC227 from the international standards as agent tor total flooding applications.

The product is safe for humans, ecologic, without restrictions being compatible with the ozone layer.

In facts, its ODP = 0 and NFPA classify it as safe for total flooding application even in presence of humans when used in the proper concentation suggested by the standards NFPA 2001 and further updates.

Concentration normally requested is 8%, means 633 gr/mc at 20°C. Do not leaves residue, ideal to protect high value equipments such as museum, banks, EDP computer servers, switching rooms, archives, caveau,

EPA, Environments Protection Agency and NFPA recognize it as one of most efficient substitute of halon 1301 available.

It is chemically very stable, and having a low ALT of 36 years it is accepted all over the world.

ADVANTAGES versus INERT GASES.

After discharge in a total flooding application oxigen concentration remain high, close to 19% enabling easy breathing also to persons with respiration chronic disease, comparing with inert gases which drop to 12%, which may cause serious breathing problems.

The extinguishing time it is less than 10 seconds, comparing to more than 1 minute of inert gases.

Lower pressure at 42 bar comparing with 300 bar.

Lower number of cylinder.

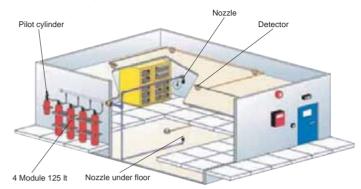
Rechargeable on site.

More service points can make a fast refilling

HFC 227 gas extinguishing system

Application Area

Control rooms, Computer rooms, Telecommunication facilities, Libraries,



Comparization to protect 1.000 m3

		р. с.сс.			
Extinguishant Agent	Discharge time sec"	Extinguish time sec"	Quantity needed Kg	Number of cyl	Total weight
HFC 227 (best known as FM200®(2))	10	> 10	633	5 da 120	1.230
Halon 1301 (out of market) — —	- 10		- 331- -	-3 of1 2 0 -	 7 15-
HFC 125	10	> 10	502	5 of 120	1.142
HFC 23 (known as PF23® o FE 13®)	⁽²⁾ 10	> 10	644	7 of 120	1.540
IG-01 (100% argon)	60	> 60	514 m ³	12 of 140	3.073
IG-55 (50% argon 50% nitrogen)	60	> 60	439m³	11 of 140	2.702
IG-100 (100% nitrogen)	60	> 60	486 m³	13 of 140	3.151
IG-541 ⁽¹⁾	60	> 60	587 m ³	21 of 80	4.275
			(0) (0)		

Sources: (1) INERGEN Tyco/Wormald - FM 200® Great Lakes - (2) (3) PF23® FE13® Dupont

Concentration %

Design concentration* % for class risk Class "A "e "B" according to NFPA

Product	volume (%)" A"	gr/mc " A" *	volume (%)"B"	gr/mc "B"**	esposure persons min
HFC 227ea	7,9	625	8	725	5'
Halon 1301§	5.0	331	5.0	331	5'
HFC 125	9	502	10.44	589	5'
HFC 23/FE13	18	644	14,4	493	5'

- * Test with" woodpile " + 20% safety factor
- ** Test " cup-burner ", hepthan +20% of safety factor

Properties HFC 227

Chemical formula:	CF3CHFCF3
Chemical name:	Heptafluoropropane
Molecolar weight:	170
Boiling point a 1,013 bar	16,4 °C
Freezeing point	127 °C
Critical Temperature	101,7 °C
Critical Pressure	29.26 bar
Critical volume	274 cm3/mol
Critical Density	573 kg/m3
Vapour Pressure 20 °C	3.90 bar
Liquid density at 20 °C	1410 kg/m3
Saturated vapor density at 2	0 °C 31,035 kg/m3
Specific volume of heated st	eam
at 1,013 bar and 20 °C	0,1374 m3/kg

Cylinders details HFC 227 or HFC 125

The modules ready for installation include: cylinder, discharge valve 42 bar, protection cap, gauge.

NOT INCLUDED: extinguishing agent, electric or pneumatic actuator.

The charge and quantity of gas (not included) depend on the computer calculation to be carried out by our technical department.

HFC 227 is calculated 0.625 kg/m3. Filling Factor: 1.15 * Kg / Lt. HFC 125 is calculated 0.502 kg/m3. Filling Factor: 0.93 * Kg / Lt. Maximum coefficient of charge: 1.1 kg / I for HFC227 and 0.93 for HFC125

The 85 and 125 Lt cylinders manufactured from A.B.S. are tested by T-PED BV The hydraulic calculation of the diameter pipes, the number of nozzles and their diameter must be done by computerized and certified calculation, which allows with absolute precision, the correct and homogeneous discharge. A.B.S. have the software certificate, and the technicians with the expertise gained in hundreds of installations in Italy and abroad.

Flows	Flows pipe kg/sec				
diameter	Min	Max			
tubi					
1/2"	0.454	1.361			
3/4"	0.907	2.495			
1"	1.588	3.855			
1 1/4"	2.722	5.67			
1 1/2"	4.082	9.072			
2"	6.35	13.61			
2 1/2"	9.072	24.95			
3"	13.61	40.82			
4"	24.95	56.7			
5"	40.82	80.72			
6"	54.43	136.1			

Gas extinguishing system with selector valve

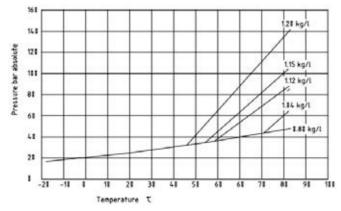
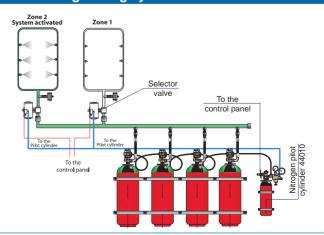
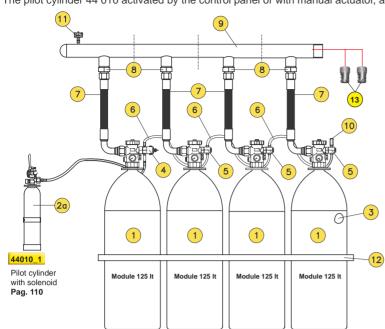


Figure 2.1 FM-200 Pressure/Temperature Curve



Example calculation

The pilot cylinder 44 010 activated by the control panel or with manual actuator, allows the opening and simultaneous discharge for all cylinders.



CED mt 20x20x3 = 1200 Mc at 42 bar Necessary Gas: 0,633 kg/m3 = Kg 760 = 8 module 125 lt

The diameter pipe, number of nozzles and orifices discharge must be calculated with the computerized calculation certificate.

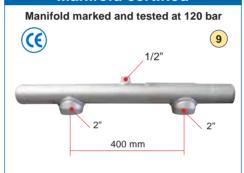
Pos	Description	Cod.	Num
1	Module 125 lt, at 42 bar	43041	8
2a	Pilot cylinder (Solenoid 24 Vdc)	44010_1	1
3	kgs gas HFC 227	43141	750
4	Pneumatic/manual actuator	41184	1
5	Pneumatic actuator	41188	7
6	Hose between cylinder 1/4"mgo	44011	7
7	Duck bend	43037	8
8	Non return valve	43069	8
9	Manifold 8 places 6"	42007_1	1
10	Venting valve	41054	1
11	Pressure switch	41014	11
12	Kit brackets 8 places 41092	41092	8
13	1 1/2" Discharge nozzle at 360°	44091	12

HFC assembled module



Cod.	Lt 1/2"	Diam mm	H~ mm		27 kg max	Empty kg~
43039	80	360	1240	42.5	67	100
43041	125	356	1650	62.5	95	85

Manifold certified



Dimension of the manifold and number cylinder. Must be checked by computer calculation

Cod.	Diam mm	Max kg	Cylinder 125 Lt
42007_0	2 1/2"	250	2
42007	2 1/2"	250	3
42007_1	3"	375	4
42007_2	4"	500	5
42007_3	5"	625	6
42007_4	6"	760	8
42007_5	2"	190	2

Nozzle

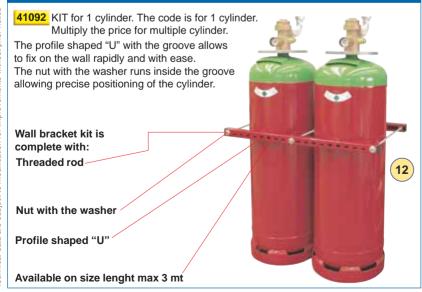
Supplied with calibrated orifice from the computer calculation.

3 model 90° - 180° - 360°



		Flow h	(g/sec
Cod.	diam	min	max
44007	1/2"	0,45	1,36
43026	3/4"	0,97	2,45
49008	1"	1,59	3,85
44090	1 1/4"	2,72	5,67
44091	1 1/2"	4,08	9,07
44092	2"	6,35	13,61

Wall bracket kit



Pressure Switch

41014 Pressure switch 1 contact NC-NO 10 A

The pressure switch, placed on the discharge manifold, shows, it's one contact NA and NC. Pressure switch throught a pneumatic system, the passage of the gas extinguisher through the distribution line and, through an electrical contact, sends alarm sounds, it disconnects the electrical circuit, etc.

41014 Pressure switch 2 contact NC-NO 10 A

On request EEx IIB T6 type

41054 Venting valve



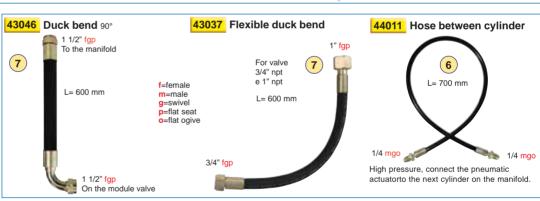




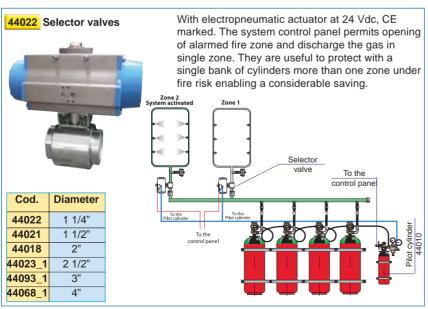
Body

Valves and actuator for gas HFC 227 / 125 43072 3/4" npt x 3/4" m Pilot cylinder 43051 1" npt x 3/4" m 44010_1 Manual actuator Pyroaduator 43052 2 1/2" f Lt 3, with solenoid max 50 bar 24 VDC 1A for cylinders 60/85/125/140 Lt Complete Outlet1 1/2" m solenoid Lt 3, with pyroactuator max 200 bar Solenoid 41031 at 24VCC, 1A 24 Vcc 1 A Pyroactuator use universal Pyroactuator 41133 VCC universal, 1A voltage, 0,5 Amp Manometei 1 1/2" m Manual e/or pneumatic 41183 Cylinder complete with valve, manometer, 43101 manual actuator, fill with nitrogen. Actuators In alternative with solenoid Manometer with or pyroactuator pressure switch On request solenoid "EEx IIB T6 type". Wika. VDS Approved Available also with: **Optional** Great capacity cylinder for system with big dimensions, with pressure reducer set at 8 bar in presence of selector valve. 44010 44010_1 41031 Solenoid actuator 24Vcc 1 A 41183 Manual actuator and 44150 Complete solenoid 41184 Pneumatic and 24 Vcc 1 A manual actuator pyro pneumatic 41138 EEx IIB T6 type Solenoid Pyro actuator Neck ring 1/4" f Manual Manual reset reset 44008

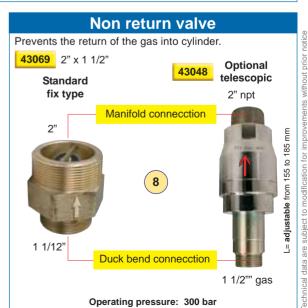




1 1/4" UNEF



1 1/4" UNEF



1 1/4" UNEF

POWDER FIRE SYSTEM

- Timeliness of extinguishing action
- Great effectiveness of extinction
- Activation less than 10 seconds
- ABC powder, or MONNEX.

Cylinder made of carbon steel, working pressure 12 bars tested and approved CE -TPED Bureau Veritas.

The main valve is activated when the tank is pressurized.

Unique technology pressurize the tank in less than 10 seconds.

All accessories are preassembled on skid.

Equipped with high pressure nitrogen bottles, rapid discharge valve, pressure reducer, actuator electrical, pneumatic and manual.

Each skid have 2 extra outlet standard to connect optionally 2 manual hose reel with machine gun nozzle flow 2 kg/sec.

Almost zero residual after discharge.

IFP POWDER SKID SYSTEM

Preassembled skids, ready to instal.

Complete with filing cap 100 mm, safety valve, pneumatic high flow ball valve, nitrogen cylinders.

Optional cylinder in stainless steel and also foam version.

On request explosion proof EEXD actuator.





Cod.	Capacity	N° Cylinders	Valve
	KG	Nitrogen LT	outlet
40030	30	1 x 3	1"
40050	50	1 x 7,5	1"
40100	100	1 x 14	1"
40250	250	1 x 14 + 1 x 27	3"
40500	500	1 x 27 + 1 x 40	3"
40xxx	1000	3 x 40 lt	4"



Characterized by great efficiency. Emploied in risks sites in presence of flammable liquids and gases, as in the industries of paints, oil platforms, warehouses, booths and paint lines, etc. Dry powder knock down the flames very rapidly.



Technical data are subject to modification for improvements without prior notice

Manufactured in various solution upon customer request

Powdersystem with selector valve

Selector valve

Cod.	Diameter
40016	1"
40010	1 1/2"
40013	2 1/2"
40006	3"

Solenoid. 24 Vcc 0.1 Ah



Max working pressure 50 bar

40014 Horn discharge powder 60°

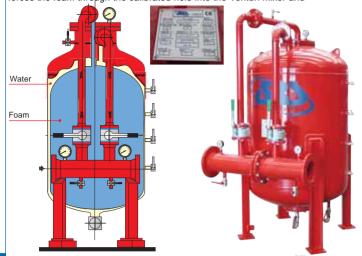
Brass open nozzle 1/2", aluminium diffuser

Enable soft drop of powder for max efficiency.



FOAM FIRE SYSTEMS

It consist, in a cylinder with a rubber diaphragm bladder inside containing the foam concentrate. The water put in pressure by a pump flows through the Venturi mixer. Part of it goes into the hollow space between tank and diaphragm and forces the foam through the calibrated hole into the Venturi mixer and



subsequently to the foam nozzles, or whatever foam equipment. It is equipped with all operating and checking devices. It can be manufactured in different models and sizes according to the custumers' request. It is commonly used for hazards which requires a big quantity of foam concentrate.

The normal work pressure is 5 - 12 bar and for this reason the premixer is particularly recommended where only low pressure is available.

Mixer average pressure loss: ~ 1 bar.

	Vertical bladder tank				
Code	Capacity It.	Diameter mm	Height mm	Depth mm	Weight Kg
83207	300	600	1100	1070	150
83208	600	800	2115	960	440
83209	1.000	1000	2195	1145	519
83210	1.500	1000	2785	1145	625
83211	2.000	1100	3045	1232	845
83215	3.000	1270	3330	1352	1137
83216	4.000	1450	3420	1506	1307
83217	5.000	1600	3495	1670	1435
83218	6.000	1750	3575	1825	1589
83219	7.000	1750	3925	1825	1741
83220	8.000	1960	3705	1967	2124
83221	9.000	2100	3795	2118	2668
83222	10.000	2200	3845	2200	2826

	Horizontal bladder tank						
Code	Capacity It.	Diameter mm	Width mm	Height mm	Depth mm	Weight Kg	
83209_1	1.000	1000	1670	1590	1200	320	
83210_1	1.500	1000	2260	1590	1200	415	
83211_1	2.000	1100	2540	1690	1300	665	
83215_1	3.000	1270	2840	1865	1435	880	
83216_1	4.000	1450	2950	2045	1575	1270	
83217_1	5.000	1600	3025	2200	1750	1440	
83218_1	6.000	1750	3110	2340	1900	1610	
83219_1	7.000	1850	3170	2495	2000	1810	
83220_1	8.000	1960	3225	2565	2100	2030	
83221_1	9.000	2100	3305	2700	2225	2650	
83222_1	10.000	2200	3365	2800	2325	2835	



Self suction mixer



Nozzle: Brass

Pick-up Pipe: PVC with reinforced spiral

Connections: Flanged

Manufactured at custom requirements and system calculations.

Code	Flow rate lt/1'-5bar	Mixing ratio %	Working pressure range applicable	Pressure loss %	Weight kg	A DN	B mm
83230	1000 - 2300	3 - 6	6 - 12	37	15	80	210
83230_1	2000 - 4000	3 - 6	6 - 12	33	15	100	275
83230_2	4000 - 6000	3 - 6	6 - 12	33	25	100	310

High expansion generator

Used to flood in very short time environments such as large storage warehouses, airport hangars, tunnels. Foam creates a barrier to oxygen, because its big bubbles incorporates a large volume of air, preventing the oxigen to be involved in the combustion, and preventing the expansion of the fire. The foam is lightweight, non-toxic and does not constitute any danger for people who can breathe in case accidentally trapped in a site wher foam is flooded. In optimal conditions one liter of water can produce from 600 to 800 liters of foam.

Cod.	DN		Foam
	mm	Ltm	M3/min
83213	40	200	150
83214	65	400	300

Example for a warehouse:
Dim 50x50x5 = 12.500 cub/mt
10 generators 300 M3/min = 3000 mc
Time in minutes 12500 / 3000 = 4',16
Water used: 400x10x4,16 = 16,64 cub/mt
Foam used 16,64x3% = 500 Lt



Expansion ratio from 1:600 to 800. Foam used: Synthetic 97% water and 3% foam Made in galvanized steel. Optiona Stainless

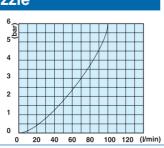
Dimensions 925x1850x925 cm.

Foam nozzle



1/2" **42001**

Spray jet 4
Low expansion 1:8
Body made in bronze 3
On request in stainless steel. 2



42000 1/2"

Foam spray nozzle

Spray jet Low expansion 1:8 Body made in bronze and stainless steel.

Low profile, small footprint, high efficiency, produce an excellent spray foam. Suitable for deluge system.

Technical data are subject to modification for

SYMPLE SYSTEMS, CHEAPER, EFFICIENT HIGH EXPANSION FOAM GENERATOR

The high expansion foam generator use a solution of 97 % water and 3% foam compound, in order to produce great quantity of foam. The foam is very light, it occupy easily the volume of the protected zone imprisoning the oxigen in its big bubble and preventing the combustion.

Expansion ratio is 1:400.

Specific weight ~ (2,2 kg to m3).

Stainless steel foam generator. Can be used also as a portable.



83200 200 lt/min 550x550x550 mm 83204 400 lt/min 700x700x700 mm Stainless steel foam generator, Wall fixed, with 100 Lt foam. Drum of 200 Lt available.



cod.	Flow Lt/min	Discharge min'	Foam m3/min'	Data at 8 bar diameter
83200	200	30	80	2" only generator
83201*	200	30	80	2" + mixer
83202*	200	30	80	2" + mixer + canister + solenoid
83204	400	15	160	2 1/2" only generator
83205*	400	15	160	2 1/2" + mixer
83206*	400	15	160	2 1/2" mixer + canister + solenoid

Example of use Cod. Generator 83202, 83206. minimum 8 bar Foam minimum 5 bar 83200 generator Solenoid Foam Room 100 lt to be protect Excellent, economical, Fixed to a wall in one piece from 400 Ltm can flood and fill a room of 100 square meters 4 meters high in about 5 minutes. From the Suitable for protecting warehouses of paper, textiles, main water The foam prevents the rapid spread of the fire by

Exapansion about 1:400. Required pressure 8 bar on the mixer inlet.

More information on the Technical bulletin.

Models **83200** and **83204**, must be feed from a solution foam coming from a mixer, or bladder tank.

isolating oxygen.

Models **83201** and **83205**, have the incorporated mixer, they inhale the foam compound directly from 100 lt foam drum.

Models **83202** and **83206** in addition to mixer and the foam cylinder have also a solenoid valve that allow automatic discharge through a control panel and fire detectors

All the models are made in stainless steel, with filter to protect the nozzle against the impurity.

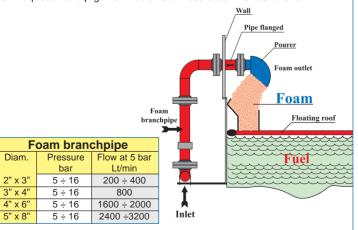
* Complete with a steel frame to be fixed on the wall and a 100 Lt Foam synthetic drum.

Oil tank foam pourer

Used to protect oil or flammable liquids tanks.

The pourer drops gently the foam inside the tank or in the edges of the floating roof.

Made in steel, painted red Ral 3000 after a deep shot sand blasting. On request hot-dip galvanized or stainless steel AISI 304 / 316.



Flanged pipe					
Diam.	Pressure	Flow at 5 bar			
	bar	Lt/min			
2" x 3"	5 ÷ 16	200 ÷ 600			
3" x 4"	5 ÷ 16	800 ÷ 1200			
4" x 6"	5 ÷ 16	1600 ÷ 2000			
6" x 8"	5 ÷ 16	2400 ÷ 3200			

without prior notice

improvements

for

are subject to modification

data

Technical

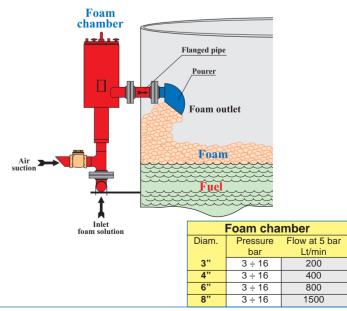
Pourer							
Diam.	Pressure	Flow at 5 bar					
	bar	Lt/min					
3"	5 ÷ 16	200					
4"	5 ÷ 16	400					
6"	5 ÷ 16	800					
8"	5 ÷ 16	1600					

Foam chamber

Used to protect flammable liquids tanks with fixed roof.

The device is equipped with a seal to avoid that vapors on the tank may return back on the pipe line.

Made in steel, painted red Ral 3000 after a deep shot sand blasting. On request galvanized or stainless steel AISI 304 / 316.



Adjustable monitor



ADJUSTABLE NOZZLE

Full jet or o spray fog adjustable. Flow up to 3.000 Litres/min. Suitable for water and spray foam.

Made in brass, on request in aluminium or stainless steel.



82500 Water branchpipe for monitor 2 1/2" made in aluminium



WATER BRANCHPIPE FOR MONITOR

Nozzle	Flo	w=lt/m	in	Jet mt		
mm	bar 8	10	12	8	10	12
25	1150	1300	1400	40	43	46
30	1700	1840	2040	45	49	53
35	2280	2480	2730	50	54	58
40	3000	3250	3600	56	60	63

82225 Foam branchpipe 1600 It with mixer



FOAM BRANCHPIPE FOR MONITOR

Nozzle	Flo	w=lt/m	nin	Jet mt			
mm	bar 8	10	12	8	10	12	
L5	800	900	1000	32	36	42	
L10	1150	1300	1400	40	44	48	
L20	2100	2350	2600	46	49	52	
L30	3200	3450	3700	49	53	56	

Monitor foam / water



2 1/2" water monitor

-75 +85° vertical

0 - 360° horizontal

Inlet 2 1/2" female.

Supplied with water branchpipe DN 70 L1

L1 and L2 only for water.

LS1 and LS2 suitable for foam complete with mixer

Nozzle	Flo	Flow=It/min			Jet / mt		
mm	bar 3	8	10	8	10	12	
L1	800	900	1000	32	36	42	
L2	1150	1300	1400	36	40	43	
LS1		800	900	26	30	35	
LS2		1200	1200	30	35	40	

On request mobile available with 1 inlet DN 70



82060 Manual control monitor in Bronze or corrosion proof light alloy

CHARACTERISTICS

Body Size

Flow rate : Less than 4500 l/min

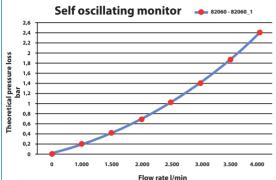
Rotation with lever . 360 : +85° -50° Vertical rotation

Horizontal throw : Dependent by compatible nozzle or branchpipes

. 3"

Design pressure 18 bar Test Pressure 27 bar Standard base flange Carbon steel

Outlet flange External diameter Ø 160 mm Final coating Polyurethanic red coat



- Painting cycles on customer's request - Third-Party Certifications

- Pressure gauge on outlet

- Drain valve

- Nozzle for thermal irradiation protection

- Elevation lever with compass system

COMPATIBLE NOZZLES OR BRANCHPIPES

- Foam and self inducing foam branchpipes
- Cod. 82072 82076
- Water branchpipe Cod. 82071
- Jet spray nozzles Cod. 82070 82070_1

Jet spray self inducing nozzles Cod. 82075 - 82075_1

Weight: Bronze ~24 Kg Aluminium ~10 Kg



82061 - 82061_1 Manual control monitor in Bronze or corrosion proof light alloy for high flow rates

CHARACTERISTICS

Body Size

Flow rate : Less than 8600 I/min

Rotation with lever : 360° +90° -50° Vertical rotation

: Dependent by compatible Horizontal throw nozzle or branchpipes

Design pressure : 18 bar Test Pressure 27 bar Standard base flange : Carbon steel

Outlet flange External diameter Ø 160 mm Final coating : Polyurethanic red coat

- Painting cycles on customer's request

- Third-Party Certifications

- Pressure gauge on outlet

- Drain valve

- Ø 240 mm outlet flange with adaptor

- Nozzle for thermal irradiation protection

Manual monitor - 82061 - 82061_1 Theoretical pressure loss 2,6 2,4 2,2 Flow rate I/min

COMPATIBLE NOZZLES OR BRANCHPIPES

Foam and self inducing foam branchpipes Cod. 82072 - 82076

Water branchpipe Cod. 82071

Jet spray nozzles Cod. 82070 - 82070 1

Jet spray self inducing nozzles Cod. 82075 - 82075_1



82062 - 82062 1 Manual control monitor in Bronze or corrosion proof light alloy with double handwheel

CHARACTERISTICS

data are subject to modification

Fechnical

Body Size

Flow rate : Less than 8600 I/min

Rotation with lever : 360° Vertical rotation +85° -60°

: Dependent by compatible Horizontal throw nozzle or branchpipes

Design pressure : 18 bar Test Pressure 27 bar Standard base flange Carbon steel

Outlet flange External diameter Ø 160 mm

or square flange 150x150 : Polyurethanic red coat

Final coating Manual monitor - 82062 - 82062_1 2,8 2,6 2,4 2,2 etical pressure loss 2 1,8 1,6 1,4 1,2 Theore

- Painting cycles on customer's request
- Third-Party Certifications
- Pressure gauge on outlet
- Drain valve
- Ø 240 mm outlet flange with adaptor
- Nozzle for thermal irradiation protection
- Elevation +90° -75°

COMPATIBLE NOZZLES OR BRANCHPIPES

Foam and self inducing foam branchpipes

Cod. 82072 - 82076 Water branchpipe

Cod. 82071 Jet spray nozzles

Cod. 82070 - 82070_1 Jet spray self inducing nozzles Cod. 82075 - 82075_1



Test in still air, length dependent on flow rate and pressure at the nozzle.

Base flange made in carbon steel

- External diameter Ø 160 mm
- Final coating (only flange) Polyurethanic red coat

Body Material

- Stainless steel and bronze
- Actuation : Manual : Fog, full Jet type



Weight: 5 Kg

1.000 l/min 1.500 l/min K Factor = 567 2,000 l/min K Factor = 756 2.500 l/min K Factor = 945 3.000 l/min K Factor = 1134

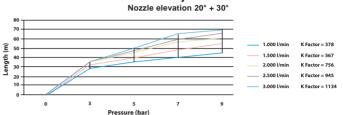
Pressure (bar

Flow rate: From 1000 to 3000 I/1' calculated at 7 bar

Horizontal throw diagram

Nozzle - 82070 - Fog jet horizontal throw Nozzle elevation 20° + 30°

Horizontal throw diagram Nozzle - 82070 - Full jet horizontal throw



EXECUTIONS ON REQUEST

- Other material types for body and base flange
- Painting cycles on customer's request
- Third-Party Certifications

82070 1 Water/Foam nozzle

Test in still air, length dependent on flow rate and pressure at the nozzle.

Base flange made in carbon steel

External diameter Ø 160 mm or Ø 240 mm

Final coating (only flange) Polyurethanic red coat

Body Material

- Stainless steel and bronze Actuation Manual

: Fog, full Jet type

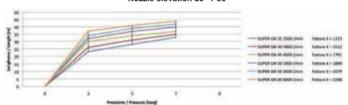


Weight: 12 Kg

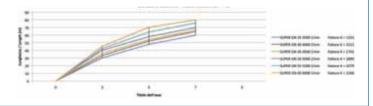
Horizontal throw diagram

Flow rate: From 3.500 to 6.000 I/1' calculated at 7 bar

Nozzle - 82070_1 - Fog jet horizontal throw Nozzle elevation 20° + 30°



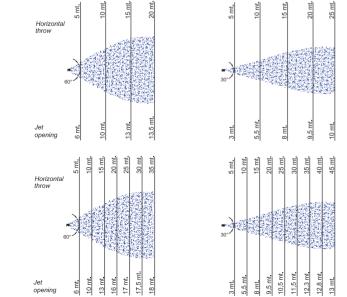
Horizontal throw diagram Nozzle - 82070_1 - Full jet horizontal throw Nozzle elevation 20° + 30°



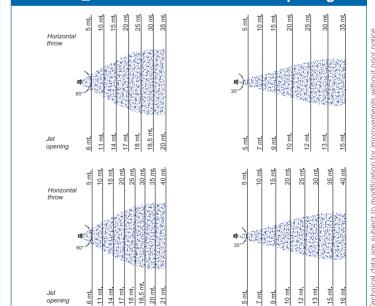
EXECUTIONS ON REQUEST

- Other material types for body and base flange
- Painting cycles on customer's request
- Third-Party Certifications

82070 Horizontal throw and Jet opening



82070_1 Horizontal throw and Jet opening



82075 Self induction water/foam nozzle

Base flange made in carbon steel

External diameter Ø 160 mm

Final coating (only flange)

Polyurethanic red coat

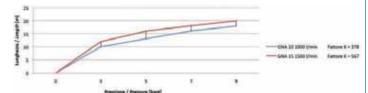
Body Material

- Stainless steel and bronze

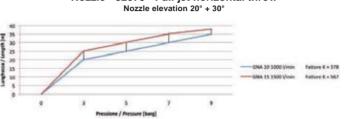
Actuation : Manual : Fog, full Jet type

Horizontal throw diagram Nozzle - 82075 - Fog jet horizontal throw Nozzle elevation 20° + 30°

Flow rate: From 1.000 to 1.500 l/1' calculated at 7 bar



Horizontal throw diagram Nozzle - 82075 - Full jet horizontal throw



Pick-up pipe



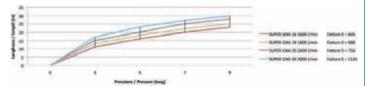
- Painting cycles on customer's request
- Third-Party Certifications
- Double mixing percentage

82075_1 Self induction water/foam nozzle

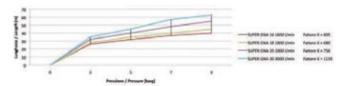


Flow rate: From 1.600 to 3.000 l/1' calculated at 7 bar

Horizontal throw diagram Nozzle - 82075_1 - Fog jet horizontal throw Nozzle elevation 20° + 30°



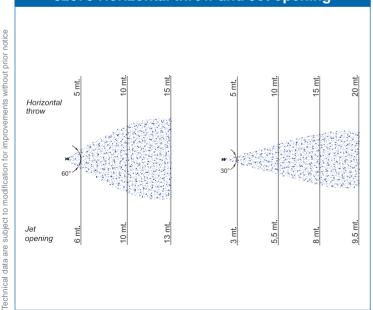
Horizontal throw diagram Nozzle - 82075_1 - Full jet horizontal throw Nozzle elevation 20° + 30°



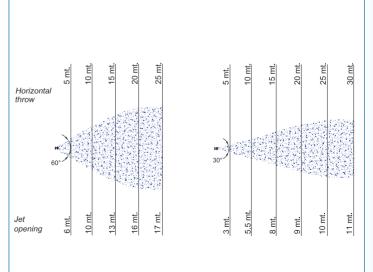
EXECUTIONS ON REQUEST

- Other material types for body and base flange
- Painting cycles on customer's request
- Third-Party Certifications
- Double mixing percentage

82075 Horizontal throw and Jet opening



82075 1 Horizontal throw and Jet opening



CHARACTERISTICS

Body size: 3", 4", 5", 6" Body material: Stainless steel Base flange made in carbon steel:

External diameter Ø 160 mm or Ø 240 mm Final coating: Polyurethanic red coat

Flow rate:From 600 to 10.000 l/1' calculated at 7 Bar

Cod.	82071	3"	from 1.000 to 2.000 lt	~7 Kg
"	82071_1	4"	3.000 lt	~8 Kg
"	82071_2	5"	4.000 to 5.000 lt	~12 Kg
"	82071_3	6"	6.000 to 10.000 lt	~16 Kg

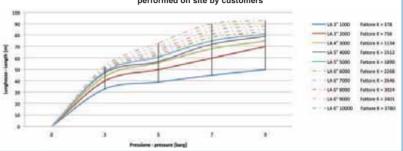
- Branchpipe body material AISI 316

- Base flange material stainless steel
- Flow rates higher than 10.000 I/13
- Painting cycles on customer's request
- Third-Party Certifications



Horizontal throw diagram - Water branchpipe - 82071

Horizontal throw tested up to 80 meters due to pump capacity, tested over 80 meters performed on site by customers



82072 Foam branchpipe for monitors

CHARACTERISTICS

Body size: 3", 4", 5", 6"

Flow rate:From 1.000 to 10.000 l/1' calculated at 7 Bar

Body material: Stainless steel

Nozzle material: High resistance PVC Base flange made in carbon steel:

External diameter Ø 160 mm or Ø 240 mm

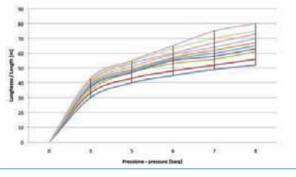
depending on requested flow rate Final coating: Polyurethanic red coat

Cod.	82072	3"	from 1.000 to 2.000 lt	~7 Kg
"	82072_1	4"	3.000 lt	~8 Kg
"	82072_2	5"	4.000 to 5.000 It	~12 Kg
"	82072 3	6"	6 000 to 10 000 lt	~16 Ka

- Nozzle material in aluminium, bronze or stainless steel
- Branchpipe body material AISI 316
- Base flange material stainless steel
- Flow rates higher than 10.000 I/1'
- Painting cycles on customer's request
- Third-Party Certifications
- Threaded connection



Horizontal throw diagram - Foam branchpipe - 82072 Horizontal throw tested up to 80 meters due to pump capacity, tested over 80 meters performed on site by customers





82076 Self induction foam branchpipe for monitors

CHARACTERISTICS

Body size:3", 4", 5", 6"

Flow rate: From 1.000 to 10.000 l/1' calculated at 7 Bar

Body material : Stainless steel
Nozzle material : Bronze or aluminium

Horizontal throw : See diagram
Suction percentage : Fixed, on customer's request

Base flange made in carbon steel

: External diameter Ø 160 mm or Ø 240 mm

depending on requested flow rate

Final coating : Polyurethanic red coat

3" Cod. 82076 from 1.000 to 2.000 lt ~11 Kg ~16 Kg 82076_1 3.000 It " 5" 82076_2 4.000 to 5.000 lt ~22 Kg 6" 6.000 to 10.000 lt 82076_3 ~27 Kg

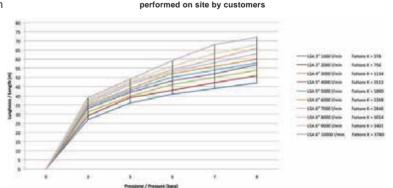
Pick-up pipe

- Nozzle material in stainless steel
- Branchpipe body material AISI 316
- Base flange material stainless steel
- Flow rates higher than 10.000 l/1'
- Painting cycles on customer's request
- Third-Party Certifications



Horizontal throw diagram - Foam branchpipe - 82076

Horizontal throw tested up to 80 meters due to pump capacity, tested over 80 meters performed on site by customers



Foam branchpipe in stainless steel



With foam mixer Cod size Lt' 5bar type Jet mt 10 - 16 82112 2 200 low 10 - 16 82114 400 low Movement restricted for the operator

Supplied 2" BSP, with storz, bss, other coupling on request

Low expansion, foam ratio 1:8.

Cod.		Without foam mixer							
	sizel	_t' 3,5ba	ar type	Jet mt					
82212	2"	200	low	10 - 16					
82214	2"	400	low	10 - 16					
hydrant	5 bar 3,5 bar bar								

Medium expansion, foam ratio 1:70



Cod.	con	con o senza miscelatore							
	size	size Lt' type Jet mt							
82122	2"	200	medium	5 - 8	With				
82124	2"	400	medium	5 - 8	mixer				
82222	2"	200	medium	5 - 8	Withou				
82224	2"	2" 400 medium 5 - 8		5 - 8	mixer				

With 200 liters of solution 194 liters of water and 6 lt of foam (3%) in 1 minute we produces 14 mc of foam.

Made in stainless steel couplings Storz or BSS 336 or others.

Epoxy paint finish in yellow polyurethane.

Low expansion foam branchpipe have the advantage of a jet longer and may be used with any

Medium expansion foam branchpipe can produce expansion ratio 1:70 only with synthetic foam.

Both may have built the mixer, economical alternative.

Mixer separated offers greater freedom of movement.

All are individually tested carefully.

The flow rate in liters' calculated at 5 bar from inlet of the mixer. The mixer and the foam branchpipe works only if they have the same flow rate.



The minimum working pressure is 3,5 max 12 bar, best 8 bar supplied 2" BSP with Storz, or BSS coupling on request.

Cod.	Size	Lt' 5bar	
81102	2"	200	
81302	2"	400	

Fix suction 3% or 6% in lega leggera Supplied complete with suction pipe 81012 Prefixed with suction at 6%

Available on request high flow rate up to 800 lt/min



Cod.	DN	DN	Lt' 5bar	1"	
81201	45	45	200		
81401	70	70	400	4-	14
Necessary with conce	if use diffe ntrations 1%	if use diffentrations 1	er from 1% to 6% rent types of foam 6, 3%, 6%.	3	

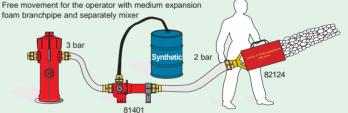
Free movement for the operator with medium expansion

medium and high expansion.

The mixers work on the Venturi principle.

The flow produces suction and mixing effect "Venturi" The minimum operating pressure is 3.5 bar, best 8 bar,

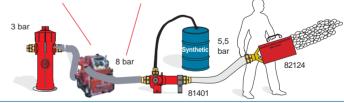
protein use that have different concentrations 1%, 3%. 6%.



Suitable for use with branchpipe and foam generator at both low and

while the drop loss and about 30% of supply pressure of the water. The brass model allows adjustment of foam from 1% to 6% and is recommended only for professionals when need both synthetic and

With motorpump cod 98604 - 5 for increasing to optimal pressure.at 8 bar



Suction pipe 1,2 mt with stainless steel filter





Cabinet foam set

84001

Essential in activities with high-risk

Has the same characteristics of the mobile foam.

The set foam is mounted in a fixed location on the wall and is quick to intervene

Foam compound autonomy is 6 minutes.

Complete with:

- n° 1 Box in steel painted with epoxy powder Red Ral 3000.
- n° 1 200 lt/min low expansion foam branchpipe 1" 1/2
- n° 1 200 lt/min medium expansion foam branchpipe 1" 1/2
- n° 1 Water branchpipe 3 effects 1" 1/2
- n° 1 Mixer 1" 1/2 complete with coupling
- n° 1 20 mt hose 1" 1/2 Couplings Storz C52 (other types on request)
- n° 2 Drum of 25 Lt synthetic foam

Flow rate 200 Ltm 5 bar



On request 2" 1/2



MOBILE FIRE UNI



EFESTO mobile foam unit is our brand new professional fire fighting tool, perfect for all those high risk situations, such as flamable liquid storages and wood/paper warehouses.

EFESTO's core is the 100 liters foaming liquid tank made in polypropylene, and everything is build around this: the system comprises a mixer, 2 high quality fire hoses, a low expansion nozzle (some models mount also a medium expansion nozzle), everything fitted in a strong and versatile structure which grants a proper handling. Water, coming from a pillar hydrant or from another similar source, passes through the mixer which, thanks to Venturi effect, it's able to draw the correct foaming liquid quantity and mix it with water: mixer is set to 3%, meaning that for every 100 liters of water, some models allow the suction to be adjust up to 6%.

EFESTO's models equipped with Synthetic and Universal AR foaming liquid, developed for a high level, professional use, are equipped with a medium expansion nozzle, designed to generate a 70:1 expansion ratio.

EFESTO is designed with DN 45 and DN 70 couplings: other standards available according to customer's request (STORZ, BSS.).



Transparent

Venting valve with filter

Cap diameter 210 mm



foam liquid pipe

with gasket



Cod. 80120

Coupling

DN

45

70

45

70

45

70

Code

80120

80120_1

80120_2

80120 3

80120_4

80120 5

Models and Technical Characteristics

1 Nozzle, Low expansion models

Foam

type

AFFF

AFFF

Fluoro P.

Fluoro P.

Proteinic

Proteinic

Induction

Rate

%

Fixed 3%

Fixed 3%

Fixed 3%

Fixed 3%

Fixed 3%

Fixed 3%

Flow

Rate

[L/min.]

200

400

200

400

200

400

Tank

Capacity

[L]

100

100

100

100

100

100

Medium expansion branchpipe

2 Nozzles, Low & Medium expansion models

Code	Coupling DN	Tank Capacity [L]	Foam type	Induction Rate %	Flow Rate [L/min.]
80120_6	45	100	Synthetic	Adjustable 3÷6%	200
80120_7	80120_7 70 100 Syn		Synthetic	Adjustable 3÷6%	400
80120_8	45	100	Universal AR Adjustable 3÷6%		200
80120_9 70		100	Universal AR	Adjustable 3÷6%	400

Minimum working pressure 3,5 bar, recommended working pressure 5/12 bar -If water pressure is below 3,5 bar is suggested the use of, a online motorpump, codes 98604 or 98605.

Standard components:

- 10 mt fire hose (to connect EFESTO to water supply)
- 10 mt fire hose (to connect EFESTO to low/med. expansion nozzle)
- 1 foam mixer
- Low expansion nozzle
- Medium expansion nozzle (only some particular models)
- Foaming liquid tank and steel structure
- Universal spanner

Weights and Dimension

1000 mm - Height: - Width: 800 mm Depth: 1100 mm Wheels diameter: 400 mm Weight: 160 ka

Foam mobile unit



Indispensable in sites where are stored great quantities of materials such us wood, paper, fabrics, plastic, rubber, oils. It is connected with a fire hore to a landing valve or a pillar

The foam mixer works with a venturi principle so that the flow creates a vacuum and the foam is inducted and mixed with the

The percentages of the foam compound is 3% or 6% and remaining 97% or 94% is water.

It is a very powerful unit.

Litres

Cod.

data are subject to modification for improvements without prior notice

ical

With a 200 lt of foam compound can have almost 30 min of discharge time covering high risk.

It is an equivalent of more than 120 trolley fire extinguisher of 50

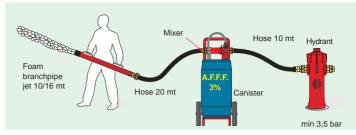
Best performance achieved with W.P 8 bar. Works at minum W.P. 3,5 bar.



				.) 0	0,0,0,0	0,0,0,0	
			type	Expansion	Min'	M3 foam	5 / 8 bar
80111	1 1/2"	100	AFFF	Low	16' / 8'	24 / 12	10 / 16
80121	1 1/2"	200	AFFF	Low	30' / 15'	48 / 24	10 / 16
80114	2"	100	AFFF	Low	8' / 4'	12 / 6	10 / 16
80126	2"	200	AFFF	Low	16' / 8'	24 / 12	10 / 16
80112	1 1/2"	100	Proteinic	Low	no / 8'	no / 12	10 / 16
80122	1 1/2"	200	Proteinic	Low	no / 16'	no / 24	10 / 16
80115	2"	100	Proteinic	Low	no / 4'	no / 6	10 /16
80124	2"	200	Proteinic	Low	no / 8'	no / 12	10 / 16
80211	1 1/2"	100	Synthetic	Medium	16' / 8'/	200 / 100	5/8
80221	1 1/2"	200	Synthetic	Medium	30' / 15	400 / 200	5/8
80212	2"	100	Synthetic	Low	8' / 4'	200 / 100	10 / 16
80222	2"	200	Synthetic	Medium	16' / 8'	400 / 200	5/8
80213	1 1/2"	100	Synthetic	Low	16' / 8'	24 / 12	10 / 16
80223	1 1/2"	200	Synthetic	Low	30' / 15'	48 / 24	10 / 16
80113	1 1/2"	100	Universal	Low/Medium	16' / 8'	24 / 12	10 / 16
80117	2"	100	Fluoroprot.	Low	8' / 4'	12 / 6	10 / 16
80116	1 1/2"	100	Fluoroprot.	Low	16' / 8'	24 / 12	10 / 16
80123	1 1/2"	200	Universal	Low/Medium	30' / 15'	48 / 24	10 / 16
80125	2"	200	Universal	Low/Medium	16' / 8'	24 / 12	10 / 16

Foam Type branch 3% / 6%

Powerful, up to 400 cubic meters of foam in 30 minutes! the unit of 200 Lt it cover an area of 4000 square meters producing a blanket of 10 cm medium expansion foam.



Foam floats over flammable liquids, it insulate the burning surface with air. Foam AFFF creates a thin film over the flammable liquids preventing the contanct with the air and therefore preventing reignition

Low expansion branchpipe has a expansion ratio 1:8 and a long jet, useful if fire is strong and operator need better protection in his action. Medium expansion branchpipe has a reduced jet but it has an expansion

ratio of 1: 70 and is used with synthetic foam to fight fires in distance 5 / mt in very short time.

The unit is supplied with:

- n° 1 10 mt hose connection between hydrant and mixer
- n° 1 20 mt hose connection between mixer and foam branchpipe
- n° 1 Mixer (Venturi effect)
- n° 1 Stainless steel foam branchpipe
- n° 1 Trolley and foam.









FOAM PORTABLE APPLICATOR RINA TYPE APPROVAL

82600 Foam portable applicator 20 lt Rina Med Approved

Equipped with:

Tank capacity 20 LT. Foam branchpipe Fire hose (on request) Spare foam liquids (on request)



3% / 6%

Trailer material : Carbon steelTypology : Single-axle trailer

Drum positioning : VerticalFlanged connection for monitor

- Working deck

- Removable side supports for easy insertion and removal of drums

Pneumatic tires

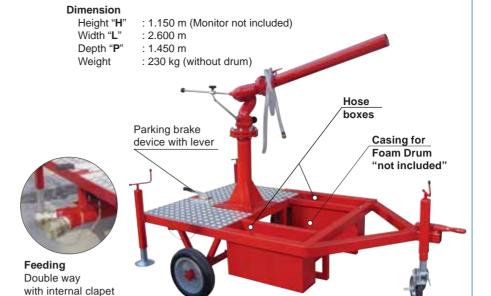
- Final coating:

Polyurethanic red coat

- Foam casing suitable for foam 200 lt foam drum.

Executions on request

- Painting cycles on customer's request
- Hot dip galvanized trailer frame
- Triple way feeding
- Solid tyres



Trailer for monitors with steel foam tank

Hose

boxes

Trailer for foam drum and monitor

Characteristics

- Trailer material : Carbon steel

- Cylinder material : Carbon steel or Stainless Steel

- Typology : Single-axle trailer

- Flanged connection for monitor.

- Front Working deck.

- Pneumatic tires

- Final coating : Polyurethanic red coat

Executions on request

- Painting cycles on customer's request

- Hot dip galvanized trailer frame

- Triple way feeding

- Solid tyres

Code

82048_05 500 lt Steel cylinder

82048_10 1.000 lt

82048_15 500 lt Stainless steel cylinder

82048_20 1.000 lt

Dimension 500 1.000

Height "H" : 1.080 m 1.230 m Width "L" : 2.600 m 3.100 m Depth "P" : 1.550 m 1.550 m Weight : 450 kg 515 kg Parking brake device with lever

Splinder

Feeding

Double way with internal clapet



Pyrokey® Sealfire Class F

Kitchen and restaurant Fire Extinguisher

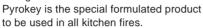
Heavy greases and sticky smokes, continuously accumulates inside the aspirating ducts, on filters and on exhaust fan of kitchen hood, are a real potential fires hazard point.

Any small sparks, caused by fans or if aspirated from the cooking top,



could break out an unexpected fire inside the ducts; this fire is practically unreachable with standard and usual portable extinguishers that are also considered ineffective on such greased film extended inside the air ducts lengths.

As before said, it is inconceivable to the use of portable powder, CO2 extinguishers due the inefficiency on these kind of extinguishants.



Our system is pre-engineered, automatic and it can be equipped with a control panel (**optional**) powered 220V 50/60Hz and rechargeable battery 12V, with optical LED and sound bell.

Pyrokey is a water based product premixed with some chemical additives;



it has a fast cooling effect on the burning area, the fat / grease material will be soaked by Pyrokey and its reactions forms a thick heat resistant foam layer that stops and prevents the combustion. After intervention, Pyrokey is easy to

remove, washing the area using water only.

Pyrokey is the safe product adopted by major fast-food networks and hotels.

In most countries all communities and restaurants is compulsory to protect their kitchen.

Pyrokey unit has a quick installation and very simple maintenance.

Foam mixture, a special formula for "class F" fires, must be replaced every 10 years only. Pyrokey system can be activated manually or automatically. It stops automatically the main gas supplying LPG to the kitchen system.

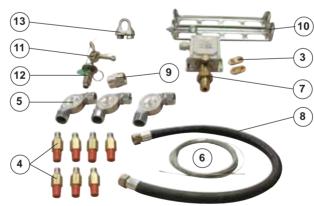


Cod.	Capacity Lt	Dimension A B C cm		Max Q.ty nozzle Supported	
15401_9	9	34	30	96	7
15401_12	12	34	30	96	7
15401_18	18	34	30	126	10
15401_30	30	41	36	153	15
15401_60	60	49,5	45,5	169,5	28



PACKAGES SYSTEM INCLUDES:





- 1) Cabinet "LUXURY";
- 2) Cylinder filled with Sealfire class F complete with valve;
- 3) Fusibles link set 138°C;
- Spray nozzles with filter and protection cap;
- 5) Pulley
- 6) Wire steel;
- 7) Pressure switch;
- 8) Hose;
- 9) Coupling 3/8" FF;
- 10) Fusible link bracket U.L.;
- 11) Manual actuator;
- 12) Valve actuator;
- 13) Fusible clamp;

OPTIONAL ACCESORIES



without prior notice

/ements

data are subject to modification for

[echnical





Remote pull cable

- 97199 Control panel with rechargeable battery 12V 2Ah including voltage transformer (from 230V to 12V);
- Connection for solenoid valve or Electric actuator;
- Red light indicate that circuit is operative;
- Green light indicate that electric actuator is operative;
- Red light indicate that extinguishers has been discharged.

470.... Solenoid valve 230 Vca or 12/24 Vcc, 1,5A shut OFF for GAS LPG Diameter available: 1/2" - 3/4" - 1" - 1 1/2" - 2":

41006 Remote manual pull actuator permits quick, sure manual actuation of the system by anyone regardless of fire fighting experience. It is equipped with a manual actuator, remote pull cable, pull box and a break rod indicating manual system operation. The remote manual pull actuator should be mounted at a point of exit and positioned at a height determined.

This is the particular requirements of the hedged fire hazards will be customized.

Fittings, hoses and fire guns are tailored to the particular quenching medium and optimized. There are three fire on this building platform media:

FOAM - POWDER - CARBON DIOXIDE.

The special feature of the quenching container LC 250 is including its dimensions 80 x 110 cm.

This allows this nimble to maneuver on steerable wheels mounted container through every door and DIN standard for buildings, factories, industrial plants, etc. for the preventative and protective fire protection ideal. Fire extinguishing container on wheel castors (cartridge) with 250 kg ABC dry powder.

Easily maneuverable containers, which by -DIN- fits standard doors.

Steel platform with fiberglass hood, retro-reflective

marking, detailed control panel drying, fire shutters, braking casters.

A heavy-extinguishing tanks including pressure relief valve in the tank top.

Includes an erasable medium optimized fast attack gun, ergonomic design, switched off.

With a scrolling form stable hose 30 m. Hose reel rückkurbelbar.

The powder extinguishing agent is foam-friendly makes it well suited for combined foam-powder-use!



Extinguishing container

- 250 kg ABC powder.
- Cartridge operated (N2).
- According to PED; CE compliant.
- With safety valve and with pressure gauge.
- With operation panel.
- With quick action device through two rotating hose reels, each with 25 m inherently high pressure hose with suppressible pistol and with hand crank.
- 690 kg gross weight.
- **Dimensions:** 1010 x 1350 x 1150 mm (W x H x D)

Extinguishing container in a container

- 250 kg ABC powder.
- Cartridge operated (N2).
- According to PED; CE compliant.
- With safety valve and with pressure gauge.
- With operation panel.
- With quick action device through two rotating hose reels, each with 25 m inherently high pressure hose with suppressible pistol and with hand crank.
- 650 kg gross weight.
- **Dimensions:** 1200 x 1350 x 800 mm (W x H x D)







Extinguishing container in a container

Extinguishing trailer

- 250 kg ABC powder.
- Cartridge operated (N2).
- Accordingto PED; CE compliant.
- With safety valve and with pressure gauge.
- With Operation panel.
- With quick action device through two rotating hose reelseach with 25 m inherently high pressure hose with suppressible pistol.
- Trailer with torsion-spring axe, adjustable brackets.
- 680 kg gross weight.
- Dimensions: 1620 x 1400 x 3200 mm (W x H x D)

Extinguishing container on wheel frame

- 250 kg ABC powder.
- Cartridge operated (N2).
- According to PED; CE compliant.
- With safety valve and with pressure gauge.
- With Operation panel.
- With quick action device through two rotating hose reels.
- 690 kg gross weight.
- Dimensions: 1010 x 1350 x 1150 mm (W x H x D)

Trolley fire extinguisher from 250 to 500 kg

Made in Italy



Description	Cod.					
·	19003	19004				
Powder ABC kg	250	500				
Lenght mm~	3.220	3.220				
Witdth mm~	1.540	1.540				
Height mm~	1.600	1.600				
Weight kg~	500	1.150				

Special model on request

Car or truck towed, equipped with lights, flashing lights indicators, brake lights.

Plug with repeating signals to the car. The cylinder is made in according to PED 97/23 and "CE" marking. Complete with two boxes galvanized steel, hose mt 10 for powder discharge and complete with interception machine gun: discharge rate 2 kg/sec.

Unique system allow immediate pressurization and constant pressure for all discharge time with almost zero residual. Complete with valve for internal cleaning of dry powder hoses after use or in case of partial discharge. The trolley is made in zinc coated steel, with two wheels diameter 145 SR -10" or 6.70 - 14".



Standard hook



Towing hook, on request



Pre-assembled skid pump and motor pump







Assembled in skid ready to install in pump fire

According to NFPA 20 Skid includes:

Jokey pump to maintain pressure.

Primary fire pump.

Diesel motor pump.

Start and stop pressure switch.

Automatically control panel.

Batteries controlled , automatic power supply. Automatic starting of the motor pump in case of failure of primary pump or lack of electricity. Manual emergency or for maintenance purpose. Possibility to operate both pumps in parallel.

The horsepower and flow rate depends on the the hydraulic software calculation.

Motorpump

Variuos versions:

Standard models 800 or 1800 Ltm 8 bar In and out coupling according to customer request.



Portable motorpumps

Cod.	Ltm	bar	Нр	Kg
98604	270	5	4	25
98605	400	7.5	5.5	28

Useful to increase the water pressure in order to be able to supply foam branchpipe or to increase the jet for the water branchpipe. Are self-priming. Honda engine, easy start.

Gasoline powered

On request other version

without prior notice

Technical data are subject to modification for improvements

DN 45 x DN 45



DN 70 x DN 70



Rigid suction pipe and accessories

66914 Internal diameter

:102 mm

Lenght : 3 mt

Working temperature : -30°C +80°C



98682 Strainer or foot valve



Coupling **DN 100**



Fire Fight

The module firefighting motor pumps are composed of membrane and piston pumps, self-priming and assembled on a welded steel frame, protected by corrosion with epoxy coating. The fire hoses, axial power supply, are in zinc steel with retractable rewinding handle and block system.

The electric rewinding system is optional.

The motor pump is also supplied with full/spayed-jet switch gun. The motor pumps can be supplied both with the traditional mixing system and the innovative FHP mixing system that allows a regular mixing, insensitive to

head losses, whatever length, roughness and diameter of the delivery pipe.

The kit is finally equipped with a PRFV or STAINLESS STEEL 304 L or 316 L monolithic tank, whose capacity ranges between 200 to 600 litres, T-shaped and L-shaped.



AUTOMATIC ACCELERATION FOR MEMBRANE MOTOR PUMPS



Innovative and revolutionary system in the sector, the motor is accelerated only when the operator supplies water. Under this condition, the water saving (resource often lacking in the operation service), the personnel saving (one operator only per motor pump can intervene) and the energy saving (reduction of the motor fuel consumption) involve the success of the system.

The system can be assembled on pre-existing motor pumps too.

Foam	
Foam Mix Volumetric Pump	
	Water
Outlet	

Motorpump	Flow	Pressure	Motor	Motor	Diameter	Pipe
			gasoline	diesel	pipe	material
	l/min	bar	hp	hp	(2)	
01 B/D	50	40	9	10	10X17 (3/8")	R1/PVC
02 B/D	70	40	9	10	10X17 (3/8")	R1/PVC
03 B/D	80	50	13	12	13X19 (1/2")	R1/PVC
04 B/D	100	50	13	12	13X19 (1/2")	R1/PVC
10 B/D	42	100	13	15	10X17 (3/8")	R1
11 B/D	42	150	18	19	10X17 (3/8")	R1

Hose diameter more or equal to 12 mm according to EN 1947



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ing Modules

FIREFIGHTING MODULES WITH FIBREGLASS TANK

Thanks to PRFV tanks, on average the module weights about 50% less than the tanks produced with other materials (stainless steel), allowing a less load on the vehicle and the possibility of increasing, for the same weight, the litre capacity of the same tank.

Cylinder Capacity Т С Shape Lt Shape Shape 100 010 Χ 200 Х 020 030 300 350 X 035 X 040 400 X Х Х 045 450 X Х 500 Х Х 050 055 550 X Χ 600 Х Х 060 065 650 080 800 Х Х 1000 100 125 1250 X 1500 Х 150 2000 200 Х 250 2500 Х

The mix of fibre glass and resin fabrics, manufactured through modern technologies, guarantees better solidity and resistance in comparison to other materials, being, at the same time, easier to be repaired (the same technology can be used for race cars, regatta sailing boats and airplanes).



FIREFIGHTING MODULES WITH STAINLESS STEEL 304 L - 316 L CYLINDER

304 L and 316 L stainless STEEL tank with thicknesses up to 15/10 and 25% weight reduction in comparison to tradition tanks.

The surface treatment is performed withpickling in acid bath and sheet metal engine turning.

Cylinder	Capacity Lt	T Shape	L Shape	C Shape
010	100			х
020	200			Х
030	300			Х
035	350	Х	Х	Х
040	400	Х	Х	Х
045	450	Х	Х	Х
050	500	Х	Х	Х
055	550	Х	Х	Х
060	600	Х	Х	Х
065	650			Х
080	800			Х
100	1000			Х
125	1250			Х
150	1500			Х
200	2000			Х
250	2500			Х

Technical data are subject to modification for improvements without prior notice



47014 Control panel 2 detection zone, 1 extinguishing chanel

Conventional fire-detection control panel series offers a 2 zone $\hbox{non-expandable.} The \ \hbox{extreme compactness, trouble-free installation,}$ uncomplicated programming procedures and simple end-user operation make this highly competitive control panel ideal for all small and medium applications, especially those applications where fast installation and programming are among the most important aspects of the system.

The numerous functions (timers, equational logic, etc.), extensive flexibility (automatic output balancing, multifunction inputs, customizable outputs, gas function integration, etc.), provide the tranquillity of knowing for sure that this powerful tool is capable of satisfying every need of every type of installation

System information is provided through the graphic display and LEDs on the control panel frontplate. These repeater panels replicate all the fire alarm system data and allow users to access and control the system in accordance with their authorized access level

- Conventional fire-detection control panel.
- Certified FN54 / FN54-2
- Certified EN12094-1 (Fire extinction)
- Supports up to 32 devices per zone
- Manages Fire Extinction board (Function EN12094-1 Approved)
- Mains power supply 230Vac
- Switching power supply/battery charger 1.4A @ 27.6Vdc
- Battery housing for two 7Ah 12V batteries (not included)
- Dimensions (HxWxD): 325x325x80mm
- Weight (without batteries): 3Kg





12V 7Ah single

47014_1 Extinguishing board 1 zone Fire extinction board.

Addition of a SmartLetLoose/ONE fire suppression board to any control panel provides the system with GAS suppression control capabilities in compliancy with EN12094-1.

47014_1 enhanced control panels provide all the functions required by the applicable normative and are capable of managing all devices required for fire extinction system management.



GUARD, Control panel 4 detection zone expandable up to 20

47054 Control panel 4 detection zone expandable up to 20

Conventional fire-detection control panel series offers a 4 zone expandable up to 20. The extreme compactness, trouble-free installation, uncomplicated programming procedures and simple end-user operation make this highly competitive control panel ideal for all small and medium applications, especially those applications where fast installation and programming are among the most important aspects of the system.

The numerous functions (timers, equational logic, etc.), extensive flexibility (automatic output balancing, multifunction inputs, customizable outputs, gas function integration, etc.), provide the tranquillity of knowing for sure that this powerful tool is capable of satisfying every need of every type of installation. System information is provided through the graphic display and LEDs on the control panel frontplate. These repeater panels replicate all the fire alarm system data and allow users to access and control the system in accordance with their authorized access level.

- Conventional fire-detection control panel
- Certified EN54 / EN54-2
- Certified EN12094-1 (Fire extinction)
- Manages Fire Extinction board (Function EN12094-1 Approved)
- Mains power supply 230Vac
- Switching power supply/battery charger 4A @ 27.6Vdc
- Battery housing for two 17Ah 12V batteries (not included)



- Dimensions (HxWxD): 325x325x80mm
- Weight (without batteries): 3Kg

47054_1 Detection board 8 zone

8 zone expansion board equipped with an additional supervised output.





47002 1 12V 17Ah single

GUARD, Control panel 4 detection zone expandable up to 36

xxxxxx Control panel 4 detection zone expandable up to 36

Conventional fire-detection control panel series offers a 4 zone expandable up to 36. The extreme compactness, trouble-free installation, uncomplicated programming procedures and simple end-user operation make this highly competitive control panel ideal for all small and medium applications, especially those applications where fast installation and programming are among the most important aspects of the system.

The numerous functions (timers, equational logic, etc.), extensive flexibility (automatic output balancing, multifunction inputs, customizable outputs, gas function integration, etc.), provide the tranquillity of knowing for sure that this powerful tool is capable of satisfying every need of every type of installation. System information is provided through the graphic display and LEDs on the control panel frontplate. These repeater panels replicate all the fire alarm system data and allow users to access and control the system in accordance with their authorized access level.

- Conventional fire-detection control panel.
- Certified EN54 / EN54-2
- Certified EN12094-1 (Fire extinction)
- Manages Fire Extinction board (Function EN12094-1 Approved)
- Mains power supply 230Vac
- Switching power supply/battery charger 4A @ 27.6Vdc
- Battery housing for two 17Ah 12V batteries (not included)



- Dimensions (HxWxD): 497x380x87mm
 - Weight (without batteries): 6Kg

47054_1 Detection board 8 zone 8 zone expansion board equipped with an additional supervised output.





47002 1 12V 17Ah single

Conventional GUARD Detector

47049_1 Smoke and Heat detector with base





The smoke and heat detector has new smoke and temperature sensing technologies. As a result, this improved-reliability detector responds well to all types of fires (especially to fast burning blazing fires involving inflammable liquids, which produce a limited amount of smoke) and is highly immune to false alarms. The smoke and heat detector can be set to the sensitivity mode which best suits the application (by means of 47058 driver).

Operating voltage: 10-30Vdc
Operating temperature: -5°C +40°C

Diameter 110 mm - Weight (without base):90g

47013_1 Heat detector complete with base





The response characteristics of the heat detector have been carefully set in A1R mode (fixed threshold at 58°C with thermovelocimetric detection).

However, it can be set (by means of 47058 driver) to operate in B mode (fixed threshold at 72°C); in A2S mode (fixed threshold at 58°C); in BR mode (fixed threshold at 72°C with thermovelocimetric detection). As a result of such flexibility, this detector is useful in places where the environment is dusty or smoky and the risk of false alarms is high.

Operating voltage: 10-30Vdc
Operating temperature: -5°C +40°C

Diameter 110 mm - Weight (without base):90g

47012_1 Optical smoke detector complete with base





The optical smoke detector is based on the Tyndall effect (diffusion of light) and provides first-rate early warning in the event of fire. It offers wide-spectrum detection of smoke particles generated by the majority of fires. The newly designed optical chamber with sealed upper-part and 500 μm holes diameter mesh insect screen ensure high immunity to false alarms. The sensitivity can be configured to suit a wide range of applications (sensitivity configurable as: 0.08dB/m; 0.10dB/m; 0.12dB/m; 0.15dB/m).

Operating voltage: 10-30Vdc
Operating temperature: -5°C +40°C

Diameter 110 mm - Weight (without base):90g

47056 Smoke detector battery operated

Specially designed for domestic applications and EN14604:2001 compliant.
Alarm LED, sounder and Output.
Battery operated 1 da 9 V.

Battery life minimum 12 months Self-employment, requires no additional power supply or control unit. Ideal for unattended premises, such as attics, closets, etc.



47057 Remote indicator

Remote indicator. LED repeater replicates the alarm signal of a detector in alarm status.



Configuration, maintenance and diagnostics system

47058

The 47058 kit comprises an EDRV1000 driver and FireGenius software. The kit lets you to take full advantage of all the unique features of the Versa++ technology integrated into IRIS series conventional detectors. The 47058 allows you to configure each detector to suit its specific environment. It also permits you to connect directly to the detector line for a complete diagnosis of each device and thus test its operating capacity, verify its real-time values, read the contamination level in the optical smoke chamber and change its sensitivity and operating mode. Each detector has a non-volatile memory which allows you to read the smoke and temperature levels measured in the period prior to the last alarm detected.

The EDRV1000 driver (included in EITK1000 kit) is capable of operating autonomously by way of its internal battery, keypad and display. When the EDRV1000 driver is connected to a PC, it is powered through the USB port, in this way, it is possible to make full use of the FireGenius software application. By means of an intuitive graphic interface, FireGenius allows you to interact with detectors, configure them, view their status and check the course of their real-time smoke/ temperature levels. The EITK1000 is the professional tool which will make your life a whole lot easier when it comes to system maintenance. The EITK1000 comes with a 24Vdc power supply, essential cables and software application CD, all contained in a handy pouch.



Suitable for detector model GUARD



Control panel 3 detection zone, 1 extinguishing chanel

47010 Control panel for detection zone and extinguishing chanel

Conventional fire control panel three lines that can control a channel rlease with inert gases, CO2. Each line allows the connection of maximum 30 detectors, while the third line is configurable for sensors or call points. Relay output for warning, alarm, fault, release, finished evacuation, disabled or fault.

Two alarm outputs controlled.

Extinguishing channel programmable single or dual consense and discharge time programable up to 90 seconds with two separate circuits of activation, the second activated by an external manual control input. The control unit may, by key, set the release automatic and manual, only manual or disabled. CPD certified according to EN 12094-1:2003, 54-2 and 54-4

Technical characteristics

Mains power supply 110-220 VAC.
Operating voltage 24VDC.
Power utilities 24 Vdc with current of 0.5 A and 0.2 A resettable.
Recharge two 12V 7Ah batteries.



CPD certified according to EN 12094-1:2003, 54-2 and 54-4.

Dimensions 382 x 357 x 94 mm

Conventional Fire Detection Panel

47010 1 Conventional control panel 4 detection zone

Control panel can support any conventional device like detectors, call points, sounders, beam detectors product range.

The panel provide 4 detection different zones to connect field Sensors and Manual Call Points.

It has four detection levels in normal operation which allow to differentiate if an alarm comes from a detector or call point or if the fault has been caused by an open circuit or a short circuit.

TECHNICAL CHARACTERISTICS

Number of zones : 4 Zones. Max. detectors by zone : 32

Connection: Plug-in terminals for 2.5mm2 cable Power Supply: 230Vac +- 15% 50/60Hz

Batteries: 2x 12V/5.7Ah

ON REQUEST

- Keyswitch for Level 2 access

Mechanical Characteristics

Dimensions (mm) 357 (h) x 382 (w) x 94 (d) Weight 5Kg, without batteries.



47010_2

4-relay board Programmable for conventional control panel. Provides contacts NO or NC (1A 30 VDC resistive load)



24V power supply unit

47016

24Vcc 4 A + 1A power supply unit with box for additional power supply in fire detection systems. Signal LED on front panel. Relay output for fault signal and relay output for delayed power supply signal. CPD certified according to EN54 part 4 (A2) standards. 2 15Ah batteries charge.

ELECTRICAL SPECIFICATIONS

- Voltage: 230 Vac +10% ÷ -15%
- Frequency: 50 Hz sinusoidal.
- Current from mains: 1,1A max. full load.
- Output: 27,6Vdc (-15% ÷ +10%).
- Minimum voltage: 20Vdc full load, without mains and low batteries.
- Threshold voltage shutdown: 20Vdc.
- Current: 5A max.
- Max charging current: 2A.
- Max loads current: 3A.
- Capability to adjust for voltage fluctuation at full load (+10% ÷ -15%): better than 1%.
- Capability to adjust for loads variations (0 ÷ 100%): better than 1%.
- Temperature compensation: 4 mV/°K.
- Protection against battery polarity reverse: Diode.
- Recommended batteries: 2 x 12V in series, 17 Ah, housing with flammability class UL-94-V2 or greater, type: YUASA NP 17-12 o equivalent.
- Alarm threshold for internal battery resistance: 10.
- Relais output: 25Vac or 60Vdc 1A MAX free voltage contact.



Rechargable battery

47059 12V 17Ah single

47060 24V 17Ah (2x12V)

Dimensions 373 x 310 x 170.

nical data are subject to modification for improve

Optical smoke and thermal detector

47049 Optical smoke and thermal detector

Optical smoke and thermal detector consists of an optical chamber sensitive to light scattering and a thermistor sensitive to heat.

Programmable sensitive through external device.

Ready for testing by remote control laser.

Alarm LED. Output for alarm repeater.

Possibility for addressing through additional module.

CPD Certificate in accordance with EN54

Part 5 and 7.

Operating voltage: 8-30Vdc

Operating temperature: -20°C +60°C

Diameter 102 mm - Weight (without base):75g Relative humidity up to 95% non-condensing.





Optical smoke detector

47012 Optical smoke detector

Optical smoke detector consists of an optical chamber sensitive to light scattering.

Programmable sensitive through external device.

Ready for testing by remote control laser.

Alarm LED. Output for alarm repeater.

Possibility for addressing through additional module. CPD

Certificate in accordance with EN54 Part 7.8

Operating voltage: 8-30Vdc

Operating temperature: -20°C +60°C

Diameter 102 mm - Weight (without base):75g Relative humidity up to 95% non-condensing.





Rate-of-rise detector

47013 Rate-of-rise detector

Rate-of-rise detector consists of a double thermistor.

Alarm temperature set at 58°C.

Ready for testing by remote control laser.

Alarm LED. Output for alarm repeater.

Possibility for addressing through additional module.

CPD Certificate in accordance with EN54 Part 5. 8

Operating voltage: 8-30Vdc

Operating temperature: -20°C +60°C

Diameter 102 mm - Weight (without base):75g Relative humidity up to 95% non-condensing.





Optical repeater for detector

47024

Optical repeater for conventional and analog fire detectors. It combines small dimensions, high efficency and low consumption.

The repeaters are controlled and powered directly by detectors.

In analog systems is possible to take external power from communication loop.

The repeater, placed outside of a room protected by fire detector, allow the early location of the alarm condition.

Repeater can be mounted in wall, ceiling mounting or flush mounting.

Current: 9,5mA @3,7Vdc



Dimensons: 70 x 35 x 23 mm.

Rechargable battery

 47000
 12V 1,9Ah single

 47001
 24V 1,9Ah (2x12V)

 47002
 12V 7Ah single

47003





Push button for alarma and discharge

47050 Conventional push button

Push button box 1contact with plastic cover Conforme to EN 54.



47051 Manual push button

Glass in the plastic housing suitable for surface mounting. In the yellow version for extinguishing command. Made in accordance with the regulations.



47006 Conventional push button

Push button break glass alarm. 2 contacts n.o. and n.c. 10 A



Signal alarm

Strobe with 2W power and consumption 100mA

47043 Red optical signal xeno 2 W

in alarm. Power supply 9-33Vdc.

Protection IP54 or IP66 used.

Dimensions: 124 x 92 x 70.

47041 Red bell with brackets 12/24Vcc

4 tones electronic sounder. CPD certified in accordance with EN54-3. Power supply 9-33Vdc. Consumption in alarm 11mA with continuous tone and maximum volume. Protection IP54 or IP66 Dimensions: 124 x 92 x 41,5.



47004 Electric bell 24Vcc

Steel, epoxy painted. Current supply: 24 Vcc 80 mA Dimensions:Ø 160 mm, depth 62 mm Sound powerness: 97 dB at 1 mt Weight: 700 gr.



47040 Siren for permises evaquation

Sound pressure: 104 dB (A) at 3 mt distance

xenon visual signalling, c/w battery.

Acustic frequency: 1500-2300 Hz

Assignable accumulator (not included):

Operation voltage: 230 Vac

Protection degree: IP 44

Red siren for premises evacuation in compliance

with regulation 626/94 and 64/98. Two-tone alarm,

Operation temperature: -25°C/+55°C (13°F/131°F)

47007 Local alarm signal device

Built with LED technology assuring high light reflection and reliability over time. Pictographs applicable on plates Technical characteristics Protection degree:IP 40 Dimensions (in mm):360x150x70 Buzzer acoustic frequency:3200 Hz Max absorption: 100 mA Flashing frequency:1 Hz Nominal supply voltage:24 V (default) or 12V



47042 Siren for permises evaquation

Self-powered electronic sounder with strobe. Requires only one battery. CPD certified in accordance with EN54-3. Sound power 100 dB at 1 meter. Power 15-33Vdc. Operating temperature -25 ° C to +55 ° C. Degree of protection IP33C. Dimensions: 330 x 210 x 115.



47047 Electronic bell 24Vcc

14 tones electronic sounder with strobe. CPD certified in accordance with EN54-3. Power supply 9-33Vdc. Protection IP54 or IP66. Dimensions: 124 x 92 x 70.



47009 Electronic siren 24Vcc

Electronic siren fan model. Made in ABS high resistence. Sound power: from 98 dB at 1 mt Current supply: 24 Vcc.



47018 Solenoid valve 1/2" 12 V DC shut off for LPG gas system

Safety electrovalve for GPL with manual rearmement.

Used to shut off gas alimentation in emergency situations.

Current supply: 12 Vcc Intervention time: 1 sec.

maximum work pressure: 550 mbar (8 psi)

Protection grade: IP 65

Flow: 6 m3/h



12 Vcc 2,1 Ah



Dimensions (HxLxD): 265x210x65 mm Weight: 2,1 Kg



Temperature detector adjustable

47019 Temperature detector preset at 68° but adjustable from 58° to 300°

The apparatus consists of two contacts mounted on two curved strips of nickel-iron low expansion coefficient, the contacts are electronically isolated from the strips, however, a complex that is called "crew" is in turn mounted in stress

conditions in a sheath consisting of a tube extruded AISI. The magnitude of the voltage is variable, depending on the position of the screw, and by the temperature at which the sheath is taken.

The unit is calibrated to the desired temperature.

The unit is calibrated to the desired temperature by turning the adjustment screw until the contacts separate.

Any change in temperature dilates the sheath, which thus increases the tension that it exerts on the plate, causing or breaking the contact, as appropriate.

47038 Temperature detector preset at 141°

The 47038 series can be supplied with normally closed contacts NC (opening up for increase in temperature), with normally open contacts NO (close for temperature rise).



Temperature detector adjustable ADPE

47020 Temperature detector 59° C adjustable 300°C EXPL PROOF

Maximum temperature detector, candle model, suitable for dirthy and polluted rooms in ADPE version (anti-explosion).

Contact: NO 10 A

Model with calibration screw.

Standard calibration 68°C (155°F). On request calibrations just to 300°C (572°F).

Certified ATEX



ULL isted 89°C

Smoke detector infrared

47029 Smoke detector infrared

Linear infrared smoke detector composed by an emitter and a receiver that if the infrared signal is interrupted from the smoke presence, it send an alarm signal to the main control panel.

Maximum distance between emitter and receiver: 50 mt

Current supply: 24 Vcc

Dimensions: 103x103x63 mm



Certified EN54 part 12

Thermosensible cable U.L./F.M.

Linear heat detector, (heat sensing cables) is a twisted double steel conductor cable with a special insulated sheath sensible to heat, wrapped with a protective tape, and overall surrounded with a special vinyl outer jacket (EPC) that has low moisture absorption, excellent resistance to UV radiation, and to a chemical agents

(Gasoline, Ammonia, Methanol, Nitric Acid), and resistance to low temperatures (-40°C).

The cable is suitable for commercial / industrial application, and both for indoor / outdoor installations.

When intervention temperature has been reached, the insulation of the conductors, fuses.

Due to the twisted condition of the steel wires, there is the necessary mechanical strength to trigger immediately short circuit conditions. Linear heat detectors, are normally used to control wide areas and/or structures, but, based upon their good performance, reliability and cost effectiveness, they can be used on each kind of installation, where a heat detection is requested.

By means of heat sensing cables, is possible to realize fire alarm systems, with the capability of command fixed extinguishing systems: linear heat detectors can be connected to all the electronic system for Fire Detection purposes.

Heat sensing cables can be installed in hazardous locations, where "ex" apparatus is required, with the insertion of power limiting devices (i.e. intrinsically safe barriers).



47033 Thermosensible cable at 105°C (Minimum 50 mt)

47034 Thermosensible cable U.L./F.M. at 88°C **47035** Thermosensible cable F.M. at 105°C

6 Thermosensible cable U.L./F.M. at 137,8°C

Technical data

Alarm Temperature:	88°C - 190°F
Conductors material:	Steel
Conductor resistances:	~ 0.66 K /Km
Operative voltage:	42 Vdc, 30 Vac max.
Insulation materials:	Heat sensing
Outer jacket:	EPC
Overal cable dia:	~ 4 mm
Approval:	UL, FM

47044 Fixing base for cable thermosensible



79007

Control panel fire door

79007 1

Control panel fire door complete with: Battery, 2 Push button, electronic bell.

79007_2

Control panel fire door complete with: Battery,



The control panel 79007 has been designed and manufactured in accordance with regulations EN 54 Part 2 and Part 4 and is particularly suitable for small size fire detection systems.

This unit allows, once detected the fire, the release of electromagnetic, closing the fire

In addition give, a signal alarm resettable manualy.

It can handle up to 4 fire doors (4 electromagnetic) 5 smoke detectors / heat and 5-push

Main panel with LED to indicate operational status of the panel 2 Auxiliary provided by 2 12Vdc 1.1/1.3 Ah batteries.

La centrale gestisce:

- Smoke and thermal detector line (max. 5 unit, compulsory, and supplied separately and EN54-5/7 certified)
- Push Button alarm remote control (min. 2 unit, compulsory, and supplied separately and EN54-11 certified)
- Remote manual electromagnetic release button(s) line
- External alarm buzzer silencing/reactivation push button following alarm condition.

- Magnetic line (Up to n. 4 at 24Vdc Max. 300 mA)
- Output connection up to 2 external electronic bell (additional electronic bell compulsory, sold separately and EN54-3 certified).
- 1 relay output on COM./N.O./N.C contacts (2 A) for external indication of out of order/fault status of the panel

Dimensions: 150 x 240 x 48 mm

Conformity: EN54-2 (control panel) and EN54-4 (alimentatore)

ATTENTION:

In base alla norma EN54-4 la centrale monozona deve essere obbligatoriamente dotata di:

nr.1 Smoke detectror or Thermal detector 47039_2 - 47013_2

Rechargeable battery 47005 nr.1

nr 2 Push button 47050

nr.1 Electronic bell 47041

47049 2 Dual heat and smoke detector

Box in white ABS

Operating voltage: 24 Vdc (10,5 - 33 Vdc) Operating temperature: - 20 to + 70 °C

Operational technology: optical, heat (in case of temperature rise,

it growing their sensibility to detect the smoke)

Supplementary detector complete with base for ceiling mount, can be connected to article 52002

Compliance: EN54-7 (smoke) Use: this dual optical and heat rate of rise detector triggers an alarm condition in case of smoke detection or heat and smoke detection

Dimensions (mm): 110 diameter x 54 height

47013_2 Thermal detector

Box in white colour plastic material

Operating voltage: 24 Vdc (10,5 – 33 Vdc)

Operational technology: heat rate of rise with trigger for increases

greater than 30°C per minute.

Operating temperature: - 20 to + 70 °C Supplementary detector complete with base for ceiling mount,

can be connected to cod 79007 Compliance: EN54-5 (heat) Use: this heat rate of rise detector triggers an alarm condition in case

of detection of a rapid rise

in temperature.



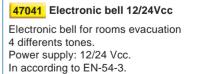
Dimensions (mm): 110 diameter x 54 height

47050 Push button box 1 contact

The buttons are equipped with a normally open contact and one normally closed. Approved in accordance with standard EN54-11.

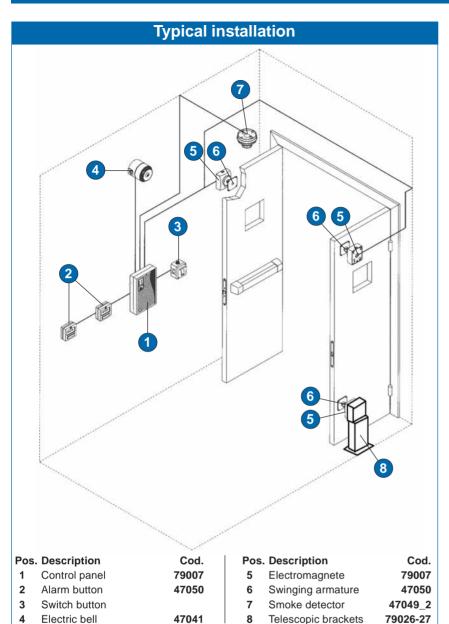












Telescopic brackets

Telescopic "wall" or "floor" mounting brackets for electromagnet.

Column extendable by section (square mm) 40 x 40 for horizontal fixing to wall or vertical to floor of the fire door electromagnets.

Body black painted steel.

Plate for fixing of the electromagnets adjustable to 180°.

79026

Lenght 140 mm (Adjustable up to 220 mm)

79027

Lenght 218 mm (Adjustable up to 360 mm) for electromagnet cod.**79002**

Horizontal fixing to wall or vertical to floor





Horizontal fixing to wall



47070 Electronic bell

Box in red colour plastic material Operating voltage: 12 / 24 Vdc – 15 mA Sound power: Max 114 dB @ 24 Vdc IP rating: IP42

32 tones selectable by internal dip switches. Compliance: EN54-3

Use: electronic bell which can be used in conjunction with single zone panel Cod. 79007



data are subject to modification for improvements

Dimensions: mm. 92,5 diameter x 94 Height

79002 Hold open electromagnet

Box in black painted steel Operating voltage:

24 Vdc / Absorbed current : 70 mA

Holding force: > 140 Kg.

Residual anti-magnetism pin on the

electromagnet body

Connector with anti-disturb varistor Provided without Armature plate

With push button release Compliance: UNI EN 1155

Use: hold open electromagnet for swing fire



79002_1 Swinging armature

Swinging Armature plate for electromagnets Base in galvanized steel

Overall dimensions:

65 x 65 of the base x h 54 Armature plate diameter: 55



Dimensions: mm. 65 x 65 x 54 Height



Available 1 hour REI 60 and 3 hours REI 180 Reversible for right or left open with a threshold removable sheet 'completely galvanized steel.

Epoxy polyester powder coating.

Can be supplied in differrent colours and with anti panic bars, and other various accessories.





- · Reversible doors LX or RX
- · Immediate delivery from stock
- Fix with anchors or expansion screws
- Adjustable hinges
- . With or without bottom frame
- Preassembled



Cerniera dotata di spinotto a molla per l'autochiusura.



Ball-bearing hinge with screw for the vertical adjustment.



Zanca da murare.



Fast wall fixing with expansion screw.

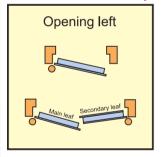




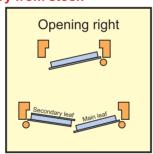
Bottom-part frame, removable.



Immediately delivery from stock



79005 Adjustable



STANDARD DOORS REI 120 approved fire resistant 120 minutes

	Wall oper	ning mm	clear pas	sage mm	external size mm		
Code	width	height	width	height	width	height	
72820	800	2050	726	2010	832	2042	
72920	900	2050	826	2010	932	2042	
72120	1000	2050	926	2010	1032	2042	
72921	900	2150	826	2110	932	2142	
72121	1000	2150	926	2110	1032	2142	

Accessories for fire doors



handle and cylinder

for fire door.

antipanic bar





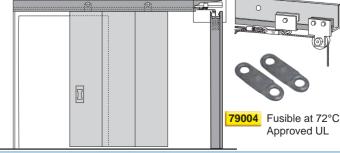






79009 Spring for fire doors

79010 Gasket for fire doors



Made in Italy

Digital Force Gauges



Standard delivery

- 4 compression adapters
- 1 traction adapters
- 1 extension rod

Cable USB & software

Battery charger

Carrying case Operation manual

Optional accessories

- Handle

Dimensions

- Clamps

- Test stands Certificate

79025 Digital Force Gauges

DESCRIPTION

Our digital portable dynamometers can measure the force weight, both in traction, both in compression, Alpha in three different scales: N, Kg, e lb.

The instruments, retrofitted to operate on stators, are equipped with a full set of accessories easy to install (flathead adapter.conical.chisel.hook.extension) RS232 interface very intuitive and a resistant case where they can be stored and transported.

TECHNICAL CHARACTERISTICS

Measuring range 500N ~50Kg Resolution 0,1N Accurancy ±0,5% Unit of measure N/Kg/Lb Display LCD Data output Si

Power supply ricaricabile Load cell Interna Operating condition 5°C÷35°C

15%÷80% RH 230x66x36mm

Working environment - Keep away from vibrations

- **Additional features**
- Hold peak function
- Automatic deletion of the peak value
- 888 memory allocations
- 5 selectable test modes
- Automatic gravity acceleration reset
- Setting maximum and minimum limits of tollerance
- Automatic conversion of the the measured value in 3 different scales
- Auto switch off
- Backlight display

Trolley tools for maintenance fire doors (empty)

79020 Trolley tools for maintenance fire doors (empty)

Modular system includes:

- Dimension 18" with two organizer inside
- Lid, tank and retractable handle.
- Metal hinges
- Fixed base single room with 18 " pocket and external fabric
- Large and sturdy wheels to ensure stability on uneven surfaces
- Handle removable aluminum-intensive use
- Load capacity 40kg











79022 Suction Cup 210 mm Ø - over 150 kg vertical lifting capacity

With integrated manual pump. Diameter: 210 mm.

Aluminum-body.

A few pushes of the manual pump make the suction cup ready for use.

Weight: 1700 g Vertical Lifting

Capacity: approx. 150 kg



79023 Small spatulas glass black.

Small spatula used to safely move windows and doors

79024 Big spatulas glass black.

Big spatula used to safely move windows and doors





To lift with ease and security doors, furniture, panels etc..

- 360 ° swivel
- With adjustable leg
- Foot-wide and milled slip
- Sustainable weight up to 200 kg
- Good relationship between leverage and scale show





Fire doors accessories

Extending Rod to test smoke detectors

47037_1 TYPE " A " MAGIC

With its length, this telescopic rod is suitable for maintenance of smoke detectors, it sprays the gas inside the black rubber cap simulating the smoke, verifying in this way the functionality of the smoke detectors and in the meanwhile cleaning it from dust.

Spray cartridge 47032_1 to be ordered separately. The rod is equipped also of a magnet suitable to check the electromagnets, generally applied on the fire doors.

47037 TYPE " B " BASIC

With its length, this telescopic rod is suitable for maintenance of smoke detectors, it sprays the gas inside the black rubber cap simulating the smoke, verifying in this way the functionality of the smoke detectors and in the meanwhile cleaning it from dust.

















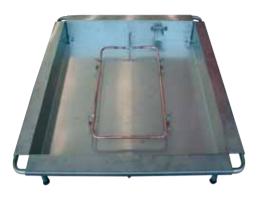
Fire testing training pan with GPL LPG

98701 Gas fire testing MAXI Dim 115x115

98701_1 Gas fire testing MINI Dim. 80x85

Fire simulator for fire fighting training composed by:

Stainless steel basin with adjustables feet, burner in copper pipe, valve with pressure reducer for LPG gas cylinder, Automatic valve of gas shut off with therostat and 10 Mt for gas LPG rubber hose.



detail thermoelectric valve



TRAINING AND EDUCATION

Lightweight, portable, ideal for training in customers company. It weighs only 40 kg.



Particular GPL cylinder with pressure regulator and safety valve



cartridge included

98707 Gas burner with bar N. 2

Piezo electric portable burner of new generation. Practic, powerfull, safe, ecologic and without risk for people and animals. Gas supply in cartridge with 7/16 valve included.

98710



98708 Cartridge spare part for burner 330g

98709 Professional fog maker machine

The fog machine FOG F1 it's a machine for creation of high density fog courtains, ideal to produce suggestion atmosphere, ideal for clubs, discotheques, concerts and spectacular events.

The liquid used for creation of the fog it's absolutely non toxic, in accordance with CEE standards.



Heating-up time: 3/5 minutes Fog output approx: 280m3/min.

Power supply: 230V″/50Hz/700VA Dimensions: 270x280x480mm Weight: 6kg

SMOKE NON TOXIC

Liquid spare charge 5 litres

TECHNICAL DATA:

Wire remote control

Heating power: 700W Heating-up time: 4 minutes Tank size: 0.8 I Fog output approx: 71m3/min. Power supply: 230V*/50Hz/700VA Dimensions: 160x170x330mm Weight: 3.5kg

98709_1 Fog maker machine

Fixed tank, level indication.

Metal housing with movable mounting bracket.

Activation supplied cable-connected remote control.



10

Dim: 27 x 28 x 48

Safety equipments cabinets

60025 Safety equipment cabinet - Red epoxy painted, 3 shelves, lockable with key 2 doors complete with Safecrash sheet.





On request with NOFLAME sheet and seal

60042 Safety equipment cabinet

Red epoxy painted, 3 shelves, lockable with key 1 door complete with Safecrash sheet.





60045 Safety equipment cabinet 1 shelve complete with EASYBREACK sheet. In stainless steel INOX 1 shelve. Suitable for outdoor.



60047 Safety equipment cabinet Red epoxy paint, 3 shelves, lockable with key 1 door.



60046 4 adjustable shelves, key lock. Made of sheet steel certified FE42 with suitable reinforcing ribs, top lever, red epoxy paint. Windows inspections in EASYBREAK



Version with 4 shelves + full side compartment for shovels, hang clothing. Safecrash sheet included.

FOOT STAND FOR CABINET 60002 Foot stand cabinet in stainless steel 185 300 h = 800 mmh = 800 mmSteel red epoxy painted RAL 3000 60005 data Suitable for: **Technical** 60042 - 60043 - 60044

60045 - 60047



Fire Cabinets, modular assembly kit

ASSEMBLY cabinets are quick and easy assembly, supported by detailed manual of instruction.

SPECIAL PACKING Packing resistant, compact, strapped on a pallet size for easy handling and a significant reduction for the transport costs.

60073 Fire cabinet 2 doors



Fireproof safe, epoxy coated red RAL3000, rounded edges prevents skin accidents, locker, blind doors, 4 shelves.



60074 2 windows doors with EASYBREAK

Dimensions.185hx107x50 cm

60076 Fire cabinet 1 door



Fireproof safe, epoxy coated red RAL3000, sheet with rounded corners, sheet, rounded edges prevents skin accidents, locker, blind door, 3 shelves.



60075 Fire cabinet 1door with EASYBREAK

Dimensions.185hx57x50 cm

60077 Fire cabinet 2 doors

Fireproof safe, epoxy coated red RAL3000, rounded edges prevents skin accidents, locker, 2 blind doors, 2 shelves.



60078 Fire cabinet 2 doors with EASYBREACK

Fireproof safe, epoxy coated red RAL3000, rounded edges prevents skin accidents, locker, 2 windws doors, 2 shelves.



Dimensions.110hx107x50 cm

60079 Fire cabinet 1door Fireproof safe, epoxy coated red RAL3000, rounded edges prevents skin accidents, locker, 2 blind doors, 2 shelves.



data are subject to modification for improvements

Technical

60080 Fire cabinet 1 door with safecrash Fireproof safe, epoxy coated red RAL3000, rounded edges prevents skin accidents, locker, 2 windows doors, 2 shelves.



Dimensions.110hx57x50 cm

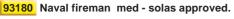
60081 Fire cabinet 1 door **EASYBREAK** Fireproof safe, epoxy coated red RAL3000, rounded edges prevents skin accidents, locker, 1 windows door, 1 shelves.



Dimensions.60hx42x30 cm



10



Complete with: jacket,trousers, gloves, helmet, boots, bags. 93180 include (93181+93182+93183+93187)

Certified MED 96/98 CE EN 531 EN 1486 type 1





included

93181 Jacket and trousers in Rayon MED Approved

93182 Protective gloves MED Approved

Heat resistant gloves, palm side of black aramid fiber silicon coating, back side aluminized aramid fiber, Lining woo/flameproof polyester, Membrane 100% polyurethane waterproof and breathable.

EN 659:2003 + A12008





93184 Knitted Balaclava, all face opened.





93183

Safety rubber boots with steel cap MED Approved (Height 38 cm)



93009 Complete firesuite approach

The suit consists of:

Firesuite complete with:

One-piece suit manufactured from 100% preoxidized para-aramidic aluminized fibre and unlined.

Front opening with double inside fastening by F.R. Velcro® fixed flap and protection covering with F.R. Velcro®. Korean style collar Comfortable set-in sleeves

INTEGRAL HOOD:

It is suitable to be used with full mask and air dispenser It is supplied with replaceable panoramic gold, temperate visor with inner polycarbonate protection.

Inner adjustable helmet conforming to EN 397.

BOOTS:

100% reinforced para-aramidic sole rear Velcro® F.R. fastenings

GLOVES:

Fingered model with total lenght:35 cm. 100% para-aramidic fabric palm 100% para-aramidic fabric aluminized back and cuff, Fire resistant coated inner Manufactured to EN 659 - EN 1486

Overall is supplied in a PVC bag

Overall is manufactured according and to EN 531 Norm- III Category



93101 Fire crossing suite

Firesuite complete with:

Overall model 93101 outer fabric made of 100% aluminized and preoxidized para-aramidic fibre;

2-layer carbon quilted insulating internal liner.

One-piece multi layer suit, maximum comfort.

Comes complete with built-in hood: designed to accommodate face shield and breathing mask, helmet according to EN 397, gold-vaporized compound glass (removable) visor with internal protection layer made of compressed polycarbonate; back pocket for holding the breathing apparatus.

Frontal opening Double internal zipper with wide flap closed with Velcro® F.R. strap completed with external cover flap with Velcro® F.R. fastening strap

Adjustable straps at ankle hems with Velcro® F.R. fastening

(over-boots) model S202 same fabric as the overall, with 100% para-aramidic fibre reinforced sole and back closure with Velcro® F.R. fastening strap

Gloves

Finger gauntlet, same fabric as the overall, completed with Velcro® F.R. fastening strap on the forearm.

Total lenght 40 cm.

The suit comes complete with PVC carrying

Designed according to EN 1486, Type 3 - Category III FIRE CROSSING



Heat protective suits

93186 Jacket in cotton Fire-Proof red color

100% cotton flame resistant, 380 gr / sqm. (red), Lining 100% modacrylic FR 200 gr / sqm. knee length, center front zip closure over zipper cover band and metal buttons, two lower pockets with flaps and snaps coverage. Inside pocket.



93035 Jacket in Nomex fiber III EN531

100% Nomex III, padded with aramid, FR cotton lining to EN 340 - EN 531, category II PPE. High collar, big side sleeves, 2 pockets and two chest pockets, zippered, reflective tapes in fireproof fabric, not self removable vest. Weight: 260 g / sqm. Washed in water at 40 ° C.



93034 Jacket + trouser with vest

JACKET

with zip fastener in the middle (or buttons) and covering, shirt-collar, arm-holed sleeves, two applied upper pockets with covering wings and Velcro and two applied lower pockets with covering wings and Velcro, seaming with aramidic yarn.

VEST

Technical data are subject to modification for improvements without prior notice

american-styled trousers with two applied front pockets with covering wings and Velcro and one applied pocket closed with Velcro on the back.

Elastic waist with openings on the hips closed with button, front under-bib closed with buttons, adjustable suspenders with quick release buckles, large pocket applied on the breast with covering wing and Velcro, seaming with aramidic yarn. Available models: 100% fireproof cotton 380 gr./sq.m.(red).

CERTIFICATION:

The I.P.D.s (jacket and vest suit) are EC certified in compliance with directive 89/686/EEC dated 21.12.1989 and L.D. 475/92 by the Notified EEC Agency no. 0302 as protection apparel of 2nd category (EN 531). The I.P.D.s (jacket and vest suit) in aramidic combined with under-overalls suit code L11MAG + L11PAN are certified in compliance with directive 89/686/EEC dated 21.12.1989 and L.D. 475/92 by the Notified EEC Agency no. 0302 as protection apparel of 3rd category (EN 531).

93010 Coverall Nomex III orange "fire brigade"

One-piece, central locking with metal hinge double slider, shirt collar, set-in sleeves two pockets above, applied with Velcro flaps, two lower pockets, applied with Velcro flaps, rear elastic waist seams with aramid yarn.



93185 Cotton overalls fireproofed 380 gr / sgm EN 531 "Fire brigade"

One-piece, central locking with metal hinge double slider, shirt collar, set-in sleeves, two pockets above (applied) with flaps and Velcro closure, two pockets lower (applied) with top flaps

and Velcro closure, elastic back in life, seams with aramid yarn.



Individual protection

93203 Winter jacket for manteiners tech, with detachable sleeves

Jacket with detachable sleeves 65% polyester 35% cotton specifications:

- Polyester padding and nylon lining
- Button closure automatic and hinge
- 2 outside pockets with flap Velcro closure and two with hinges
- 2 phone pockets
- Collar Band
- Blue color night
- Detachable sleeves
- Size: M L XL XXL



93204 Summer jacket for manteiners tech

Sleeveless quilted vests 65% polyester 35% cotton midnight blue Specifications:

- Polyester lining
- Closure with snaps and hinge
- · 2 outside pockets with flap Velcro closure
- 2 outside pockets with zipper
- Mobile phone pocket
- Collar Band
- Internal elastic armholes
- Nylon lining
- Size: M L XL XXL



93030 Breathing apparatus SOLAS/MED 6 It cylinder filled at 300 bar mask included



Proven technology for 200- and 300 bar. Unisize carrying plate of sturdy heat resistant plastic.

Carrying harness of non-flammable Modacrylic-Aramide fibres. Comfortable hip-pad for equal weight distribution.

Self-luminescent pressure gauge, or alternatively Integrated Control Unit ICU.

The compressed air breathing apparatus offers a choice of options for all requirements, like the warning signal near the ear, Quick-Fill or second connection.

The cylinder holder with variable strap permits

acomadation of one or two air cylinders with 4 to 6.8 liters.

Approvals and Standards EN 137 and MED 96/98/EC

Wherever sudden outbreaks of hazardous gases and oxygen deficiency are to be expected, in particular in industry and merchant marine, the compact is ready to immediately provide breathing air.

Other size and type available on request.

60091 Wall cabinet for autobreath



Dimension 57.5 x 50 x 105 cm

Cylinder			Air breathing				
Capacity	Pressure	Stock	Ø	Dimension mm Weight Endurance Alar			
Litres	Bar	N litres	mm	lxhxd	Kgs	min.	calibration
6	300	1670	140	310x660x220	15,6	55	55+/-5

93027 PVC safety boot

Category II, EN 345-1/92 Toe cap and steel midsole. Antistatic, for industry and agriculture.



93183 Stivale anticalore tomaio in pelle pieno fiore x VV.F.

Composite anti-perforation mid-sole Outside height (size 8): 370 mm Weight (size 8): 1900g / pair Elastomer: fireproofed NBR (fireproofed

nitrile rubber)

Reference: FIREMAN SA Boots (safety toe cap + anti-perforation mid-sole) Excellent resistance to heat flow, heat contact, fire. Excellent resistance to chemicals: fuels, oils, weak and diluted acids, solvents. Excellent resistance to abrasion and cuts.

Used with chemical protective suits (satisfy permeation tests according to EN 943-2).



- 1 Full-face gas mask
- 1 Mask filter A2 B2 E2 K2
- 2 Orange signalling lamps fringes
- 4 Batteries for lamps
- 1 PVC boots
- 1 Antiacid and anti-cut latex gloves as per EN 374
- 4 Reflecting cones H.52 cms
- 1 Fluorescent waistcoat approved EN 471
- 1 Aluminium antispark pocket lamp at intrinsic security
- 1 Protection glass
- 1 Antiacid, impermeable overalls



93187

93042 Handbag for ADR

accessories (EMPTY)

Helmet for naval fireman **MED Approved**

140°C/15 min / 250°C/30 min. Luminescent and reflective tapes, Polycarbonate anti-scratch and anti-fog coated visor. Flame retardant high temperature resistant copolymer plastic



93100 Helmet Fireman EN 443

93042_1 ADR bag kit complete with

93042_2 ADR bag kit complete with

gas not flamable

accessories class 1, Explosive

accessories class 2, compressed

140°C/15 min / 250°C/30min 1.000°C/10sec Glass fibre fire fighter's helmet with incorporated visor, leather head guard according to EN 443 adjustable size from 52 to 62.



93099 Fire helmet type Gallet F1S EN 443

140°C/15 min / 250°C/30min 1.000°C/10sec The F1 is the fire helmet used by fire brigades throughout Europe. An optimal protection of the head, the face and the neck. The F1 offers excellent shock absorption, face shields that are pulled out of the helmet when needed protect from chips and glare, an additional eye screen provides protection at general work.





93013 Semimask CE EN 140 without filter



93014

Filter for semimask (2 pieces)



93016_1

Multipurpose filter for CO



93015 Full face mask with panoramic visor.



93016

Multipurpose filter for 93015



93011 Polycarbonate face shield frame for helmet



93043 Antinoise earphone CE EN 352-1



93046 Ear caps



93069

Goggles mask CE EN 1661 B



93044 Holster safety belt according to EN 358:2000



93194 Fireman German belt DIN 14927/EN 358



93094 Nylon rope with 2 hooks



Ø 12 mm mt 20 with 2 hooks









notice

















93195 Portable torce EEX waterproof

Powered by 2 "AA" alkaline batteries Xenon gas-filled bi-pin bulb, many times brighter than conventional flashlights Up to 4,500 peak beam candlepower (9 lumens)

Runs up to 4 continuous hrs. Waterproof / IPX7

Features a wrist lanyard connection and pocket clip 15 cm / 100g



93196 Portable torce EEX waterproof

A powerful and incredibly handy flashlight that features a momentary blink or constant on tailcap switch. Powered by 3 "C" alkaline batteries 3.7 volt, 785 mA xenon gas-filled module. Up to 16,000 peak beam candle power (50 lumens)

Runs up to 5.5 continuous hrs.

21.7cm / 400g

Waterproof/Dustproof IP65

Wrist lanyard connection and a spring-loaded clip.



Road mirror

93097 Ø 600 mm **93098** Ø 900 mm



93202 Head lamp equipped with 5 LED and a krypton

Head lamp equipped with 5 LED and a krypton bulb 4 mode switch:1 LED, 3 LED's or 6 LED's



93200 Rechargeble halogen spotlight

Super bright beam bulb (12 W) 2 hours of continuous light after a complete charge Waterproof

AC230 V and DC 12 v car/boat plug Useful industry, electricians use, home use, hobby, camping and all outdoor activities

Sizes: 215x125 mm

Batteries: Bulbs Pb6V4Ah 24455 6V-12W



93199 Atex rechargable vulcan lantern

Rechargeable lantern light with powerful long range use. APPROVED ATEX EX II 3G EEX ALIIC T4ATEX FTZU 2004 0180 EX II 3G EEX

ALIIC T2 SPECIAL FEATURES LED displays battery status.

Dual power supply 12 and 220 Volt



al data are subject to modification for impr

93182 Gloves for Fireman MED Marine Approval

Description

Heat resistant gloves, palm side of black aramid fiber silicon coating, back side aluminized aramid fiber, Lining woo/flameproof polyester, Membrane 100% polyurethane waterproof and breathable.

EN 659:2003 + A12008

93149 5 finger glove NBR NITROTOUGH nylon grey

Application:

Specifically for heavy duty, industrial automotive, construction and maintenance in general. Category Risk II.



Package 10 pcs

93157 5 finger glove, made in leather cotton and polyester

Glove with palm, thumb and protection nails in flower, back made in cotton and wrist in elastic cotton.

Application:

plastic and general maintenance. Category Risk II.

> Package 10 pcs

Manipulations of wooden box, cardboard

93140 5 finger glove for welder

Glove with internal lining, safety cuff, cut resistant, abrasion, tearing and

Application:

Manual welder of metal manipulation of metallurgical products, cutting and related techniques. Category Risk II.

> Package 10 pcs



93155 Sleeve double layer 355 mm spun Kevlar up to 100 ° C

Glove with double-laver thin but Dupont Kevlar varn in 15 gauge for maximum comfort.

The sleeves have the exclusive elastic band "Stay-Up" that ensures absolute adherence to the arm.

The number of signs indicating the length in inches.

Providing protection from welding sparks and burns usual in bakeries and are used where necessary to protect the arm, especially nell'handiing of metal plates or glasses.

Application:

metallurgy.

Size: Universal

ideal for industry automotive and glass. also used in storage component metal and produce

93146 NBR glove with ventilated back

NBR glove with ventilated back

Application:

specifically for heavy-duty, automotive, construction and

maintenance in general. Risk Category II.



Package 12 pcs

93153 5 finger glove made with heavy natural rubber

Glove made with heavy natural rubber high chemical resistance against water-based substances.

Bright color for high visibility and sandblasted finish on the entire hand for an excellent grip in the wet hose with special grooves to increase ventilation and vestibllità.

Application:

Ideal for the chemical and pharmaceutical industries, laboratories,

hospitals, wood and ceramics industry.



data are subject to modification for improvements without prior notice Technical



Fire proof cabinets - data - Fire Proof for paper and data

60065 Archiver

For paper documents Certified U.L. 30'. Key look, black color.



Dim. 155x309x260 mm Weight 5,3 Kgs.

60066 Archiver

For digital and paper documents Certified U.L. & ETL. 30'. Key look, light gray color.



Dim. 357x441x437 mm Weight 23,1 Kgs.

60068 Bauletto

Per supporti cartacei e digitali Certified U.L. & ETL. 30' up to 850°C. Tubolar key look Dark gray color.



Dim. 387x159x308 mm Weight 7,7 Kgs.

60044 Classificatore

For paper and digital data. Certified U.L. & ETL





Dim. 701x438x591 mm Weight 78 Kgs.

Fire proof cabinets - data - Fire Proof for paper and data

60067 Cassaforte

For magnetic data Certified U.L. 60' - Smal model



Used to protect digital data (CD, DVD, USB key, hard disk, etc.) in case of fire up to 920°C.

Electronic lock with 5 digits. Inner shelf, interior drawer with lock, and racks for folders. Color: Light gray.

60083 Cassaforte

For paper and magnetic data Certified U.L. 60' - Big model

Used to protect digital data (CD, DVD, USB key, hard disk, etc.) in case of fire.

Electronic lock + key-lock time after entering three wrong codes. 2 shelves adjustable in height, 1 drawer with lock. Color: Light gray.

Dim. 1210x646x608 mm Weight 283 Kgs. Capacity 163 litres





Dim. 603x472x491 mm Weight 73 Kgs. Capacity 56,6 litres



Security and armored cabinets for paper and data

60086 Security cabinet

For paper data Certified ECB-S, 60'

Used to protect paper in case of fire.

Key double-locked. 180° opening 3 shelves.

Standard color: gray RAL 7024.



60087 Security cabinet

For paper and magnetic data Certified ECB-S, 120'

Used to protect paper and magnetic data in case of fire.

Key double-locked. 180° opening 1 shelf. Standard color: gray RAL 7035.

Dim. 1090x570x658 mm Weight 313 Kgs. Capacity 140 litres



Dim. 1490x686x463 mm Weight 410 Kgs. Capacity 241 litres



Safety cabinet

(Available also with folding doors)

60069 Safety cabinet 1 door according to EN 14470-1 60070 Safety cabinet 2 doors according to EN 14470-1





- Resistance to fire from 30 to 90 minutes according to EN 14470-1 (Type 30)
- GS approved, CE compliant
- Labelling according to standard EN 14470-1

Fixed shelf

- Adjustable shelves height (32 mm each)
- Shelves unmovable
- Load (distributed in uniform): approx. 75 kg Bottom recipient recover leakages
- Bottom easy removable to clean Maximum safety in case of fire!

OPTIONALS:

- Lock the door with automatic opening device integrated thermal release (Connection with fuse), closure automatic door.



Dimension L x H x P (mm) External about. 600 x 1970 x 600 Internal about. 530 x 1650 x 505 Weight: about. 200 kg



Dimension L x H x P (mm) External about. 1200 X1970 x 600 Internal about. 1130 x 1650 x 505 Weight: about. 280 kg

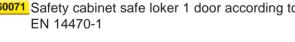
Cabinet according to EN 14470-1

Efficient storage and disposal of hazardous substances

The fire resistant cabinets are suitable in laboratories. Useful to store dangerous materilas in hospital, chemical la, industries. Fire resistant 90 minutes

Fire resistant for 90 minutes according to EN 14470-1, GS Approved CE compliant. Color RAL 7035, perforated metal sheet, collection tank bottom, sheet steel, plastic laminate and base height 30 mm.

60071 Safety cabinet safe loker 1 door according to





Dimension L x H x P (mm) External about. 1100 x 600 x 570 Internal about. 470 x 500 x 450 Weight about. 165 kg



60072 Safety cabinet safe loker 1 door according to EN 14470-1



Dimension L x H x P (mm) External about. 590 x 600 x 570 Internal about. 470 x 500 x 450 Weight about. 90 kg



Eye-washers

93096 Emergency eyewash showers

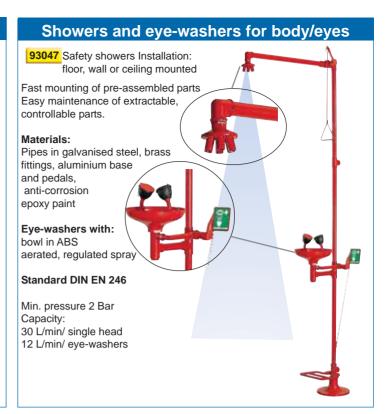
Emergency eyewash showers: Bench or wall mounted, straight or inclined, single or double

- Brass body
- Anti-corrosive epoxy coating
- · Open, regulated spray

(Standard DIN EN 246)

- Min. pressure 2 Bar
- Capacity:6 l/min (single spray head)12 l/min (double spray head)





Fog fire forest blower to carry on the back

93193 Fog fire forest blower to carry on the back

Model 93193 is provided with:

- Diaphragm carburettor and specific fitting-out to prevent accidental final leaks:
- Fuel tank in safety position with airtight closure cap;
- Blower pipe and spreader in aluminium reinforced with a steel ring;
- · All plastic materials endure heating;
- Shoulder straps in fireproof material with fast safety release;
- Accelerator, stop and liquid cock controls are situated on the safety handle on the air exit pipe;
- "Instructions and Maintenance" manuals with safety procedures (drawn up by fire figthing qualified people).



Fog fire forest blower

93192 Fog fire forest blower

Model 93192 is provided with:

- Diaphragm carburettor and specific fitting-out to prevent accidental fuel leaks (the fuel tank cap has an airtight closure);
- Air blower pipe in aluminium;
- All plastic materials endure heating;
- Shoulder straps in fireproof material with fast safet release;
- Accelerator, stop and liquid cock controls are situated on the safety handle on the air exit pipe;
- "Instructions and Maintenance" manual with safety procedures (drawn up by fire figthing qualified people).



10

Maintenance

Does not exist one standard valid on all european countries. Italian Standard UNI 9994-1:2013 is the most restrictive rule existing in Europe, requiring service every 6 months, while in most countries it is once per year, or every 2 years. Here below some good suggestions: Survelliance

Visual inspection of correct position and installation: every day.

Maintenance

Must be made by an authorized technician. Series of control and maintenance with purpose to ensure the correct functionality of the extinghuisher. Inspection of pressure, weight, integrity of all components. **Refilling**

Must be made when the extinguisher has been used even partially. When the gauge shows low pressure, and needle is in the red area, or weight is less than recorded in the service card.

Disposa

must be made according to regulation in the own country.

CO2 carbon dioxide and Halogenated FOXER do NOT need to be changed, they never change their properties when stored in the fire extinguisher.

Dry powder: in England is **required** to make a discharge test every 5 years, in Germany discharge, check for impurities or cacking, and refill after filtering, different beahviours in other countries.

A good rule is check at least every 2 years. If the powder appears fine, with a good fluidity and smootness, without any cacking, that means its chemical and phisical properties are intact, and it is still good to be used. Generally a good powder manufactured and approved according to EN615, keept in sealed fire extinguishers, within temperature -30°C + 60°C will not change its chemical and phisical properties. Replace th powder it appears start of cacking and low fluidity.

Foam: when it is a premixed solution is a good rule change and recharge with fresh solution every 3 / 5 years, better check the instructions of the manufacturer.

When the foam compound is sealead in a plastic cartridges and not in contact with sunlight and water, validity is at least 5 years. Follow the instructions of the manufacturer.

Test: Hydraulic test of cylinder, the rule valid in all Euope every 12 years for cylinders produced with CE PED mark. CO2 cilinders with CE PED or T-PED mark every 10 years.

Choice and number of extinguishers

The choice of portable fire extinguishers should be determined according to class of fire and the level of risk in the workplace.

The number and capacity of portable fire extinguishers depends on the risk, and laws in force in respective countries.

Generally risk can be: Low, Medium, High.

Extinguish ant

The chart beside is good rule, but depends also by law in force in the respective countries and therefore may be some time significantly different. Anyway: Install at least 1 fire extinguisher in each floor of the house.

Always install in a visible position and easy to be used, fixed in a wall, with a sign on top.

Distance between extinguishers never more than 30 mt.

Suface protected by 1 extinguisher					
Class	Risk type:				
of fires	Low	Medium	High		
13 A - 89 B	100 m ²	-	-		
21 A - 113 B	150 m ²	100 m ²	-		
34 A - 144 B	200 m ²	150 m ²	100 m ²		
55 A - 233 B	250 m ²	200 m ²	200 m ²		

A good suggestion: only a very good trained operator can achieve the rate of the fire class shown in the extinguisher. It is suggested to buy always a bigger size, with higher quality row material.

Unless used simultaneously, by 2 operators, 2 extinguishers of 6 kg, have less result than 1 of 12 kg. When medium and speciallly high risk area, trolley and or foam mobile units, must be severly considered.

Extinguishing mothed

Extinguishant	Advantages	Disadvantages	Extinguishing method
POWDER RÜHL RÜHL RENERGSGMITTEL GINM CRODA FIRE FIGHTING GHEMICAL	ABC Dry Powder fire extinguishers are a multi-purpose and highly effective extinguishing agent, making them an excellent choice for use in most circumstances. They are ideal for use in warehouse and factory environments and other areas where the considerable advantages offered by their effectiveness and multi-purpose application outweigh the disadvantage of their residual properties.	The downside is that they leave a fine powder residue, making the clean-up process of small fires more problematical, and causing damage to sensitive electronic equipment that the mono-ammonium phosphate extinguishing agent comes into contact with. For this reason, they should not be used in contaminant-sensitive environments such as offices or food preparation areas, etc.	ABC Dry Powder fire extinguishers work by fusing particles of blended ammonium phosphate and ammonium sulphate powder over a fire to form a barrier that starves it of oxygen and prevents re-ignition, and acts to knockdown a fire.
WATER Sealfire®	Water fire extinguishers are good for tackling class A fires involving burning wood, paper, textiles and general combustible materials. They don't contain any harmful chemicals or residual agents and they are kind to the environment. As water fire extinguishers are cleaner than other extinguishing agents, they are a good choice for assisting in the emergency egress from a building when cited along escape routes where, for example, a powder extinguishing agent could enter the eyes of the user due to forward movement into the powder residue or other factor.	of fire extinguisher must never be used on live electrical equipment. In addition, burning oils and water most definitely do	Water fire extinguishers work by cooling and quenching a fire, thereby absorbing heat from the fire and reducing its temperature below the critical level needed to sustain the fire.
FOAM Sealfire® ORCHIDEE	Foam extinguishers are especially suitable for class B flammable liquid fires such as paints, thinners, petrol, and oil spills. Foam is also very effective on class A fires such as man-made furnishings. They have a higher class A fire rating per litre than their water counterparts and can therefore be more lightweight and portable, making them a good choice for an office fire extinguisher.	Cannot be used on domestic chip or fat pan fires.	Foam fire extinguishers work by covering a fire with a film of foam that starves it of oxygen and prevents reignition, in addition to penetrating absorbent materials and having cooling and quenching properties due to the water content.
CARBON DIOXIDE	Carbon Dioxide (CO2) fire extinguishers are safe for use on electrical appliances and are non-residual, making them ideal for use in office environments where sensitive computer equipment would be damaged by using other types of extinguishing agents.	As CO2 does not cool the fire very well, there is a risk of the fire re-igniting. Fumes from CO2 extinguishers can be harmful if used in confined spaces. The horn freezes during discharge, so care must be taken not to touch it.	CO2 fire extinguishers work by displacing oxygen at the source of the fire with an inert gas, thereby starving the fire of the oxygen that is essential to the combustion process. They also have some cooling properties.
CLEAN AGENT HFC FOXER	Clean agent (Clean Green, Clean Blue, Foxer S) fire extinguishers are safe for use on electrical appliances and are non-residual, making them ideal for use in office environments where sensitive computer equipment would be damaged by using other types of extinguishing agents. Do not leave residues, and is safe for humans and animals.	Rapid vaporization of the gas they have to be limited outdoor. Costs more than most extinguishing agent.	Clean Agent fire extinguishers work by displacing oxygen at the source of the fire with an inert gas, thereby starving the fire of the oxygen that is essential to the combustion process.

Disadvantages

TERMS AND CONDITIONS OF TRADE

1. General Provisions.

- (a) The following definitions are used hereafter in this document.
- "Seller": refers to ABS s.r.l. with its office and premises in Lombardia Street, 310, 20861 Brugherio, Milan, Italy;
- "Buyer": refers to the person, firm or company the purchase order is received from.
- (b) The terms and conditions set out below (the "General Terms and Conditions of Sale") shall form part of all the agreements executed between the Seller and the Buyer for the supply of the Seller products (the "Products"), and they will prevail over any general rules submitted by the Buyer, unless accepted in writing by the Seller.
- (c) The Seller reserves the right to change, integrate or vary the General Terms and Conditions of Sale, by including such variations in the quotations or in any other written correspondence sent to the Buver.
- 2. Offers and Orders
- (a) Quotations and offers will keep in force for a period of 30 days from the date of issue, unless differently stated by the Seller in writing. Anyhow the Seller will be entitled to cancel or change the quotations or offers at any moment before issuing the written confirmation of order acceptance.
- (b) Orders placed by the Buyer shall not be regarded as accepted before these have been confirmed by the Seller in writing. If the Seller should fail to confirm an agreement in writing which it has entered into verbally, the Seller's invoice or the execution of the order by the Seller shall be regarded as confirmation. The minimum invoice amount is 350.00 Euro.
- (c) Any order, order proposal, or supply request forwarded to the Seller represents an irrevocable contractual proposal to the Seller for a period of sixty (60) days from the date of supplier's reception, being the Seller free to accept or refuse the order according to the Seller's unquestionable judgment.

Orders and/or amendments of orders placed verbally or by telephone, must be confirmed in writing by the Buyer. Otherwise the Seller does not accept any responsibility for errors or consequent misunderstandings. The proposals submitted through agents, collaborators or brokers are usually meant as received "subject to the Seller's approval".

- (d) The eventual request of modification of the order already confirmed, received more than five(5) working days from the issuance of order confirmation the involves the application at Buyer's charge of the "Burden for order modification management service", quantifiable at 50,00 Euro, even in the case of subsequent impossibility by the Seller to implement the requested modification.
- (e) The order confirmed by the Seller is irrevocable by the Buyer exceeded five (5) working days from the issuance of order confirmation. It doesn't affect the right of the Seller to accept the request to cancel the order, in that case the Buyer could be charged of the "Burden in compensation", quantified in at least 10% of the total amount of the order with a minimum of 150,00 Euro.
- 3. Prices and Terms of Payment.
- (a) The prices of the Products shall excludeany statutory VAT which shall be payable at the date of delivery or pursuant specific provisions included in the invoice. Unless otherwise stated all prices quoted in any document or correspondence issued by the Seller do not include packaging and transport costs, nor the ancillary expenses as indicated in the Seller's sales catalogue in force at the moment of the conclusion of the contract. Taxes, stamps, custom duties and any other supplementary cost are not included in the prices. Unless an exception is made, those costs and expenses will be paid by the Buyer and, in case they are paid by the Seller, their amount will be invoiced to the Buyer as well as with the quoted prices.
- The prices will be corrected in case of printing errors.
- (b) The payment of the Net Invoice Price shall be paid free of any reduction by the Buyer according to what stated in the confirmation of order and the same invoice.
- (c) In addition to other remedies permitted under the applicable law and these General Terms and Conditions of Sale, the Seller reserves the right to recover default interest on delayed payments starting from the due date, calculated at the official reference rate of the European Central Bank increased by 7 (seven) basis points.
- (d) In case of notification of faults and defects, the Buyer will not be entitled to start or continue proceedings without previously paying the total price in accordance with the contract. The payment will, in no case, be suspended or delayed: should disagreements arise, the related proceedings will not be started or continued unless the payment has been made according to the fixed terms and procedures.
- (e) The Seller will be entitled to interrupt the product delivery should, in the Seller's unquestionable opinion, the Buyer's statement of assets and liabilities put the payment at risk.
- (f) In any case, the product ownership is handed to the Buyer only with the total payment of the price is made, even if the products have already been mounted or installed in other products owned by the Buyer or third parties. Should the price not be paid, the Seller will expressly have the right to claim the ownership of the products also towards third parties or towards the Buyer, as well as the right to have the products released and returned (also with the right to obtain release and return injunctions). The Seller will have the right to disassemble and remove the products.
- (g) The Buyer shall have no right to make any compensation, retention or reduction unless the counterclaims have been conclusively accepted by the Seller.

- 4. Terms of Delivery.
- (a) Unless otherwise agreed, the delivery of the products shall be EXW (Incoterms 2010) from the Seller plant.
- (b) The Buyer shall provides the means of transport and shall be responsible for its availability on time. The Seller shall immediately be informed of any delays. Any costs arising thereof shall be at the expense of the Buyer.
- (c) All the time terms, also in relation to delivery time, return, installation, completion, etc, although defined as strict by the Buyer, will anyhow be considered as approximate by the Seller, and subject to a tolerance margin.
- Unless otherwise expressly agreed in writing any indicated time of delivery shall be non-binding for the Seller. Unless different agreement between the parties, the approximate term for the delivery is the one specified in the confirmation of order.
- (d) The delivery terms will be automatically considered as extended in the following
- (i) should the Buyer not communicate the data that are necessary for the supply within the due time or should the Buyer require changes during work execution or answer late to the request of drawing and executive layout approval;
- (ii) should the Buyer have outstanding payments;
- (e) The Seller reserves the right to reasonably delivery in installments.
- (f) Any liability to supply as a result of force majeure or other unforeseen incidents outside the Seller responsibility including, without limitation, strike, lock out, acts of public authorities, subsequent cease of export or import opportunities shall, for their duration and in accordance with their impact, relieve the Seller from the obligation to comply with any agreed time for delivery.
- (g) The Seller is not obliged to accept the Products returns, unless otherwise agreed in writing. Any costs arising thereof shall be at the expense of the Buyer.
- 5. Duty to Inspection and Acceptance of Products.
- (a) Upon taking possession of the Products, the Buyer shall immediately:
- (i) check quantities and packaging of the Products and record any objections on the delivery note; and
- (ii) conduct a conformity check on the Productscompared to the data indicated in the confirmation of order and record any objections on the delivery note.
- (b) In case of a notice of defect the Buyer shall comply with the following procedures and deadline:
- (i) the notification shall be made by no later than [5 (five) working days] from the taking possession of the Products by the Buyer. In the event of an objection to a defect which, despite a first inspection has remained undiscovered, the objection must be raised within the early of the expiry of the working day on which the defect has been discovered but in any event by no
- later than [2 (two) weeks] after take over of the Products;
- (ii) the above mentioned notice must be sent in writing to the Seller.
- Any notice by telephone conversation shall not be accepted;
 (iii) the notice must clearly specify the kind and amount of the alleged defect;
- (iv) the Buyer agrees to make available for inspection the objected Products; such inspection shall be done by the Seller or by any expert designated by the Seller.
- (c) No objections with regard to the quantities, quality, type, and packaging of the Products shall be possible unless a note has been placed on the delivery note in accordance with the above mentioned procedure.
- (d) Any Product to which objection shall not have been raised in accordance with the procedures and deadlines set out above shall be regarded as approved and accepted by the Buyer.
- 6. Terms of Warranty.
- (a) The Seller hereby represents and warrants that the Products shall be free from defect and shall comply with the technical specifications forwarded by the Seller.
- (b) Under warranty obligation, the Seller commits to replacing and/or repairing the spoilt and/or faulty defect within the limits of this contract and without any further refunding obligation deriving from direct and/or indirect and/or subsequent damage deriving to the Buyer or any third parties due to product defects (as an example, also provoking product losses, damage to things or people, etc).
- (c) The warranty shall be valid only on the products used in suitable environment and for suitable applications in appliance with what has been foreseen at the moment the project has been studied; every improper use of the products is forbidden. The Products are guaranteed for a period of 12 (twelve) months unless differently written by the Seller in the commercial offer, period which will not able to be in any event longer than 24 (twenty-four) months from the date of the shipment of the Products themselves.
- (d) Such warranty only includes the substitution or repair of the defective Products with the exclusion of any other and different obligation.
- The Product will be repaired by the seller at its own office, its secondary office or its own authorized reseller. The Buyer must request return material authorization to the Seller in writing, strictly according to the instruction contained therein, and forwarded. Only after the confirm of the return material authorization the Buyer will provide with the sending at his own expenses the defective Product with reason "return on repairing account" to the office, secondary office, or authorized reseller as indicated by the Seller. The Seller will transmit to the Buyer the new Product or the repaired Product, bearing therefore the costs of the shipment.

chnical data are subject to modification for improvements without prior no

TERMS AND CONDITIONS OF TRADE

- (e) Should the Buyer, agreeing with the Seller, require the replacement and/or repair to be carried out at the Buyer's plant, the Buyer will pay for travel expenses and accommodation for the technical staff provided by the Seller and will provide with all the equipment and auxiliary staff needed in order to carry out the intervention in the fastest and safest way.
- (f) The warranty shall not be valid if the defect or not conformity will prove to be depending on not correct on not suitable applications of the product, or if the product has been non correctly placed in operation. Any alteration, change or replacement of product parts, which has not been authorized by the Seller may represent an accident risk and therefore releases the manufacturer from any civil or penal liabilities, and makes the warranty void.

The warranty does not cover the normal products parts subject to consumption.

- (g) The repair of the product resulted as out of warranty is totally at Buyer's charge and it will be performed after approval from the latter of the estimate issued by the Seller when the amount of the same exceed 300.00 Euro:
- (h) General rule on the warranty of the fire extinguisher

A fire extinguisher is a mechanical mean intended to extinguish the onset of a fire. It is designed to work under conditions/characteristics considered in the operating instructions/user's manual and not to represent a source of danger for the user. In case of doubt about its functionality due to external appearance, corrosion or impact damage, a qualified technician will verify with his experience the fire extinguisher and in some extreme cases will perform a 30 bar hydro pressure test on all of its components to prove mechanical seal.

(i) Storage

Fire extinguisher must be stored and/or installed in a safe place, protected from rain, snow, ice, direct sunlight and corrosive environment such in a chemical plants or sea. In case of exposition to corrosive atmosphere it is important to protect the fire extinguisher with blankets, caps, cabinets or cases, waterproof and sun proof.

Corrosion of the cylinder and other components.

Devices with no signs of tampering and presenting visible/external signs of corrosion will be warranted only if the technician responsible for maintenance establishes complete inoperability, or excessive dangerousness for the user.

To consider a fire extinguisher "Unqualified/unsuitable", it is necessary to execute a normal operating Pressure test (the PT pressure test can be found in the "Declaration of Conformity" issued by the Manufacturer and is normally grooved on the cylinders). If this test is "positive" and no anomalies are found, the fire extinguisher cannot be considered subjected to warranty and corrosion will be considered normal deterioration due to usage and handling of the product.

Also the paint is covered by guarantee but only against the leaf of the paint due to the not well adhesion of the paint on the support. It is instead not considered covered under guarantee any eventual corrosion signs started from points where the paint has been damaged by hurts or very aggressive environment.

(ii) Internal Corrosion

For powder or CO2 fire extinguishers, brownish stains or spots usually don't represent sources of particular danger: they can be caused by processing residues or by chemical reactions due to decomposing gases. For AISI 304 stainless steel cylinders, filled with water and chemical foaming additives, visible brownish stains are to be considered normal processing residues and are not source of corrosion. Some foaming additives, can be source of a slight corrosion even during normal warranty time: this corrosion is not intended to be dangerous. In case of doubt anyway, technical personnel is recommended to execute a 30 bar pressure test, to verify the absence of leakage from weldings, applying a water-soap solution on them. All External accessories of AISI 304 cylinders are made in standard carbon steel and are welded using special electrodes suitable for AISI 304 stainless steel. Possible traces of external corrosion are normal and due to normal ageing.

(iii) Flexible Pipes

All flexible pipes are made with EPDM rubber plus some various additives, with textile or metallic reinforcements. Exposition to direct sunlight or corrosive atmospheres could cause visible fissures and cracks. Technical personnel, during normal periodic maintenance, can verify whether the textile reinforcement is damaged or not: in case of doubt he should run a 30 bar pressure test. If there are any visible leakage an immediate substitution is required.

(iv) Wheels

Trolleys are not intended to go upstairs or downstairs; trolleys completely filled and ready-to-use can climb a step – max. height 15cm – otherwise they could occur in some serious damage.

- 7. Limitation of Liability.
- (a) The Seller shall do its best endeavor to deliver the Products within the time agreed (if any), but it shall not be liable for any loss or damage of any kind whatsoever caused directly or indirectly by any delay in the completion of the contract or delivery of the Products.
- (b) All the drawings, photographs, illustrations, descriptions, technical data and performances or any other data and information about the products, contained in documents or drawings annexed to the Seller's offer or included in catalogues, prospects, tables, pricelists, Seller's advertising, are to be considered purely as approximate indications. Any departures or variances will not be considered as a good reason for not accepting the goods or vitiating the contract or as a good reason to lodge a complaint to the Seller.

(c) All the drawings sent to the Buyer for approval will be considered as automatically approved by the Buyer unless they are returned to the Seller with notes and comments within ten (10) working days or within the time agreed when submitted to the Buyer.

- (d) All the tables, technical data, and any other material and technical information included in the offer or provided with the supply will remain under the Seller's ownership and will not be reproduced or communicated to any third parties unless a written agreement is provided by the Seller. The Buyer will not be entitled to use them for purposes other than the ones indicated on this contract.
- (e) The Buyer declares it has freely chosen the goods from the wide range of the Seller's products according to its free and unquestionable judgment. The Seller does not know and will not be responsible for the practical use of the products by the Buyer. The Seller will not be liable for the use of the products and the suitability of the product for the use and practical purpose the product is bound to, be the product used individually or in connection with other products outside and/or inside complex systems. The Buyer freely chooses the product from the Seller's range and will have to verify the connection and functioning of the product inside the systems and complex equipment the product will be implemented in. The Seller will be exclusively responsible for the correct functioning of the supplied products in accordance with the characteristics and performance indicated by the Seller. The Seller's responsibility is limited to the replacement and/or fixing and/or refund of the invoiced value. Apart from the above-mentioned liability, the Seller will in no case be deemed as responsible for any direct and/or indirect and/or subsequent damage deriving to the Buyer or to any third parties due to defects of the product, including production losses, damage to things, people or others.
- (f) The Seller will be entitled to make changes to the product at any moment, due to production needs, provided those changes do not alter the product performance and/or specifications in a substantial way.
- 8. Retention of Title
- (a) The Product supplied shall remain in the property of the Seller until the date of the full payment by the Buyer of the entire price of the Products and of all amounts due to the Seller. Until that time the Buyer shall hold the Products as the Seller's fiduciary agent and shall keep the Product properly stored, protected and insured.

(b) In the event of any third party action against the Seller's Products delivered under retention of title, the Buyer shall notify such party of the Seller's property and shall immediately inform the Seller about such action. The Buyer shall bear the costs of any intervention.

9. Brands.

(a) Any identification brand and/or any other identification form positioned on the products which are sold by the Seller will not be removed without the Seller's written agreement. Any distortion and/or change of the brand name or technical data or labels applied by the Seller without the Seller's written confirmation, will lapse the Buyer's warranty.

10. Testing.

(a) All the products produced by the Seller are subject to a final standard test before the delivery. That test is to be considered as final and conclusive. Each additional test and/or each special test must be requested and specified by the Buyer on the purchase order, and it has to be accepted by the Seller and will be carried out at the Buyer's expense.

11. Jurisdiction.

(a) Any dispute arising between the parties in connection with the interpretation, validity or performance of the present General Terms and Conditions of Sale and of all the relevant agreements, shall be of the exclusive competence of the referred to the Court of Milan

(b) It is agreed between parties that the Seller, at its own discretion, may have the faculty to waive the exclusive jurisdiction set forth in paragraph (a) to bring an action against the Buyer in its domicile and before any court of competent jurisdiction.

Name:
Street
Zip CodeCity
VAT number
Email
Tel/fax/mobile

I/WeName of Company or Account Name)		ccept the above Terms and Conditions of Trade points 1 to	o 11
Signed in agreement:		Witness Signature:	
Full Name:	. Date:	Full Name:	Date:



