



德能(新)私人有限公司
TECHNO-MARINE GROUP

MARINE SAFETY SUPPLIES AND SERVICES

2012 EDITION



LIFESAVING EQUIPMENT - LIFERAFTS - FIRE FIGHTING - LIFEBOATS AND DAVITS-YACHTING AND BOATING



THE TECHNO-MARINE GROUP

is a specialist in the marine safety industry with over 30 years experience.

Our business is founded on the principle of offering only quality products and service solutions.

Over the years we have built a deep understanding of the Asian marine safety industry. This places us in good stead to discern the growing needs, trends and demands of industry.

As a reliable one-stop service provider, we consistently review and innovate our product lines to meet the changing demands of the industry and our customers.

We offer a wide range of quality marine safety products at competitive prices.

Our close partnerships and networks with affiliated companies, manufacturers and suppliers provide us with strategic leverage for product distribution.

Our growing portfolio includes servicing of lifeboats, life rafts and firefighting equipment and systems.

To complement our suite of quality products, our staff constantly undergo extensive training and certification courses to ensure that we provide a high standard of service.

TECHNO MARINE GROUP OF COMPANIES

Techno-Marine (S) Pte Ltd

Marine safety ,life saving equipment and ship supply

Sea Saver Marine Pte Ltd

Sales and servicing of liferafts and rescue boats

ISO 9001:2008

Spectrum Fire (S) Pte Ltd

Servicing and maintenance of Fire extinguishers, CO2 and Halon systems

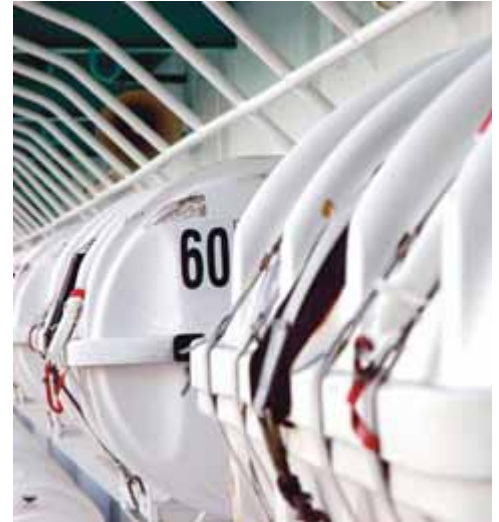
ISO 9001:2008

Techno Lifeboat Pte Ltd

Sales and servicing of lifeboats and davits

Marintech Marketing (S) Pte Ltd

Sales of yachting/boating equipment and accessories



SERVICES

SEA SAVER MARINE PTE LTD

Sea Saver Marine is accredited with internationally recognised ISO 9001:2008 quality system standards.

Our servicing facilities provide for inspection, servicing and re-certification of :

INFLATABLE LIFERAFT

- CCCP (Russian)
- CRV
- Double Happiness
- Hai Yan Pai
- Tokugawa
- You Long Pai

INFLATABLE LIFEJACKET

- Lalizas
- VSG

IMMERSION SUIT

- Huayan
- Lalizas
- Takashina, Toyo Bussan, Nihon Kyumei Kigu

Our service station is approved by **Maritime and Port Authority of Singapore, Russian Maritime Register of Shipping and Korean Register of Shipping.**

SPECTRUM FIRE (S) PTE LTD

Spectrum Fire is accredited with ISO 9001:2008, and provides quality service, maintenance, installation and commissioning of :

- Fire Extinguishers
- CO2 System
- Halon System
- Dry Powder System
- Water Mist System
- Fire Alarm Detection System
- Breathing Apparatus Set
- Emergency Escape Breathing Device
- Medical Oxygen Resuscitator Set
- Lifeboat Air Cylinder
- Air and Foam Analysis

Our services are approved by ABS, DNV, GL, LRS, NK, KR, Russian Maritime and local authorities.

TECHNO LIFEBOAT PTE LTD

Techno Lifeboat specializes in sales and service of lifeboats, rescue boats and davits for the following brands:

- Jiangsu Huaiyin Marine
- Jiangyin Wolong
- Oriental Precision
- Qingdao Beihai Shipbuilding Heavy Industry
- Sheyang Saifute Marine
- Zhenjiang Marine Auxillary



MARINE SAFETY SUPPLIES

Agent and distributor of:

COMMUNICATION INSTRUMENTS

Davis, Deuta, GME, Hammar, McMurdo, Noburu, Sealink, Uranis

COMPASS

Daiko, Ritchie, Saura, Tokugawa

COUPLING

AWG, Huayan, Haizhou

FIRE EXTINGUISHER

Eversafe

FIRE HOSE

Premier, Pyrotech, 5ELEM

FIREMAN SUIT

Flameguard, Huayan

GMDSS

Sealink, Uranis, Dolphin

HYDROSTATIC RELEASE

Hammar H20, McMurdo, Samyung, Saracom

LIFEBOAT, RESCUE BOAT, DAVIT

Jiangyin Wolong, Oriental Precision, Zhenjiang Marine, Sheyang Saifute, Qingdao Beihai, Jiangsu Huaiyin

LIFEJACKET

Safeguard, Nihon, Lalizas, VSG, Seahorse, Billy Pugh, Sterns

LIFEJACKET LIGHT

Huayan, Nihon, Lalizas

LIFEBUOY

Huayan, Nihon

LIFERAFT

CCCP, CRV, Double Happiness, Hai Yan Pai, Tokugawa, You Long Pai

NAUTICAL INSTRUMENTS

Barigo, Bushnell, Camon, Deuta, Tokugawa, Wempe

NAVIGATION LIGHTS

Aqua Signal, DHR, Liangzhou, Koito

PORTABLE CHEMICAL TOILET

Dometic

PYROTECHNICS

Comet, Huahai

RESPIRATORY PRODUCTS

Draeger, Huayan, Haizhou

SAFETY LIGHT

Daniamant, Huayan, Pelican, Wolf

STRETCHER

Huayan, Haizhou, Paraguard

WATER AND RATION

SOS

YACHTING AND BOATING

Aquameter, Cousin, Danfender, Danforth, Groco, Moonlight, Oceanair, OS, Rule, Sta-lock, So-pac, Trem



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STATUTORY ALERT

Changes to the LSA Code and SOLAS
– requirements for lifejackets

INFORMATION

Amendments to Chapter II of the International Life-Saving Appliance (LSA) Code come into effect on July 1, 2010, and introduce the following new requirements for the approval of lifejackets:

- Each lifejacket shall be fitted with a whistle firmly secured by a lanyard.
- Lifejacket lights and whistles shall be selected and secured to the lifejacket in such a way that their performance in combination is not degraded.
- Each lifejacket shall be provided with a releasable buoyant line or other means to secure it to a lifejacket worn by another person in the water.
- Each lifejacket shall be provided with a suitable means to allow a rescuer to lift the wearer from the water into a survival craft or rescue boat.

The requirements apply:

- to lifejackets provided on board ships constructed (having their keel laid) on or after July 1, 2010
and
- when providing new lifejackets to vessels with a keel laying date before July 1, 2010.

New requirements for the carriage of additional equipment, also effective July 1, 2010, have been introduced under the SOLAS Convention, as follows:

- On all ships where adult lifejackets are not designed to fit persons weighing up to 140 kg with a chest girth of up to 1,750 mm, suitable accessories are to be provided that allow the lifejacket to be secured to such persons.
- All passenger ships are to be provided with lifejackets for “infants”.

Relevant IMO resolutions and circulars

The amendments to Chapter II of the LSA Code and Chapter III of SOLAS were adopted by the IMO through resolutions MSC.207(81) and MSC.201(81) respectively.

Resolution MSC.81(70) – *Revised Recommendation on Testing of Life-Saving Appliances* (adopted on December 11, 1998) has been amended by resolution MSC.200(80) to reflect the new requirements.

However, it should be noted that *MSC/Circ.980 – Standardized Life-Saving Appliance Evaluation and Test Report Forms* has not been similarly amended; when required, these amendments will be applied and information is to be included in the relevant test report forms.

LIFE-SAVING APPLIANCES

- Lifejackets
- Inflatable lifejackets/ Lifejacket lights
- Lifebuoys
- Lifebuoy lights
- Immersion suits
- Thermal protective aid
- Chemical protection
- Pyrotechnics
- EEBD
- Rescue and medical devices

LIFE-SAVING APPLIANCES

Lifejackets



HYJ-A3

IMPA Code: 33 01 31
Approvals: EC/GL, comply with new SOLAS regulation

HUAYAN MARINE LIFE JACKET

Model HYJ-A3
Buoyancy > 15KG
Material: Polyester Oxford
 EPE Foamed
 Polyethylene



HYJ-C

IMPA Code: 33 01 31
Approvals: EC/GL, comply with new SOLAS regulation

HUAYAN MARINE LIFEJACKET - CHILD

Model HYJ-C



DY5564-1

IMPA Code: 33 01 32
Approvals: CCS/SOLAS

HUAYAN MARINE LIFE JACKET

Model DY5564-1
Buoyancy > 11KG
Material Polyester Oxford
 EPE Foamed
 Polyethylene



DY5566-A

IMPA Code: 33 01 31
Approvals: CCS/SOLAS

HUAYAN MARINE LIFE JACKET

Model DY5566-A
Buoyancy > 10.5KG
Material: Polyester Oxford
 EPE Foamed
 Polyethylene



DY5566-C

Approvals: CCS/SOLAS

HUAYAN MARINE LIFE JACKET - CHILD

Model DY5566
Buoyancy > 6.8KG
Material Polyester Oxford
 EPE Foamed
 Polyethylene



DY93-3

IMPA Code: 33 11 71

HUAYAN WORK VEST

Model DY93-3
Buoyancy > 7.5KG

LIFE-SAVING APPLIANCES

Lifejackets



DY94-3

IMPA Code: 33 11 71

HUAYAN LIFEJACKET - CHILD

Model	DY93-4
Buoyancy	> 7.5KG



70178

IMPA Code: 33 01 31

Approvals: EC/GL, comply with new SOLAS regulation

LALIZAS LIFEJACKET

Model	70178
Body Weight (KG)	> 43KG



70179

IMPA Code: 33 01 31

Approvals: EC/GL, comply with new SOLAS regulation

LALIZAS FOLDING LIFEJACKET

Model	70179
Body Weight (KG)	> 43KG



70176

IMPA Code: 33 01 32
Approvals: EC/GL, comply with new SOLAS regulation

LALIZAS INFANT LIFEJACKET

Model 70176
Body Weight (KG) > 5-15KG



70177

IMPA Code: 33 01 31
Approvals: EC/GL, comply with new SOLAS regulation

LALIZAS FOLDING LIFEJACKET – CHILD

Model 70177
Body Weight (KG) 15–43KG



RT198

IMPA Code: 33 01 34
Approvals: USCG

SAFEGUARD (USA)	RT198	RT199
User Weight	> 41KG	< 41KG
Buoyancy	> 24 lbs>	16 lbs (7.3 kg)

- Material: PE (Polyethylene), 1" Stainless Steel Snaphook, D-ring, Encircling straps
 - SOLAS-grade reflective tape
 - Reversible Design
 - Weather and fade resistant polyester
-

LIFE-SAVING APPLIANCES

Lifejackets / Inflatable Lifejackets



WV0-50

IMPA Code: 33 11 71
Approvals: USCG/SOLAS

BILLY PUGH TYPE V VINYL WORK VEST

Model WV0-50
Type V Vinyl Dipped Vest
External Webbing



WV0-100

IMPA Code: 33 11 71
Approvals: USCG/SOLAS

BILLY PUGH TYPE V WORK VEST

Type V Vinyl Dipped Vest
External Webbing
Material Heavy-duty bronze hardware



WV-10

IMPA Code: 33 11 71
Approvals: USCG

SEAHORSE TYPE V / VINYL COATED WORK VEST

Model WV-10
Buoyancy 17.5 lbs



Skipper 150

IMPA Code: 33 01 41

Approvals: EC, RINA

VSG (ITALY) INFLATABLE LIFE JACKET - SINGLE CHAMBER

Model	Skipper 150
Weight	+40KG
Chest Size	18/125CM
Buoyancy	150N



Modulo 275

IMPA Code: 33 01 41

Approvals: EC, RINA, comply to new SOLAS regulation

VSG (ITALY) MODULO 275 INFLATABLE LIFE JACKET - TWIN CHAMBER

Model	Modulo 275
Weight	+43KG
Height	+155CM
Buoyancy	>275N



CO2 Cartridge and bobbin

CO2 CARTRIDGE AND BOBBIN

LIFE-SAVING APPLIANCES

Lifejacket Lights



Lifejacket Box

LIFEJACKET BOX

Size	1013x600x550
Quantity	10-15
Material	FRP
Size	1325x1100x700
Quantity	40
Material	FRP
Size	1800x800x1080
Quantity	60
Material	FRP



YDL12

IMPA Code: 33 01 43
Approvals: EC/GL/SOLAS

HUAYAN YDL12 LIFEJACKET LIGHT

Luminous Intensity	≥0.75cd
Duration	≥8 h
Lamp-house	LED/White
Battery	Energizer® CR2 Lithium Battery
Stowage Temp.	-30°C~+65°C
Operation Temp.	-15°C~+40°C
Light Type	Flash
Flash Frequency	50~70 times/min
Validity	5 years



YDL20

IMPA Code: 33 01 43
Approvals: EC/GL/CCS/SOLAS

HUAYAN YDL20 LIFEJACKET LIGHT

Luminous Intensity	≥0.75cd
Duration	≥8 h
Lamp-house	LED/White
Battery	Energizer® CR2 Lithium Battery
Stowage Temp.	-30°C~+65°C
Operation Temp.	-15°C~+40°C
Light Type	Flash
Flash Frequency	50~70 times/min
Validity	5 years



YDG1B

IMPA Code: 33 01 43
Approvals: EC/GL/SOLAS

HUAYAN YDG1B LIFEJACKET LIGHT

Luminous Intensity	≥0.75cd
Duration	≥8 h
Lamp-house	LED/White
Battery	Alkali Battery (USA Energizer®, Lifetime: 7 years)
Stowage Temp.	-30°C~65°C
Operation Temp.	-1°C~3°C
Light Type	Flash
Flash Frequency	50~70 times/min
Validity	5 years



YD5

IMPA Code: 33 01 43
Approvals: CCS/SOLAS

HUAYAN YD5 LIFEJACKET LIGHT

Bulb:	3.8/0.4A
Battery	Dry Battery
Light Type	Flash
No battery included	



4289

IMPA Code: 33 01 43
Approvals: EC/BV/NK/USCG/SOLAS

NIHON (JAPAN) LIFEJACKET LIGHT

Battery	Lithium Battery
Light Duration	More than 8 hours
Light type	Flash
Luminous Intensity	More than 0.75 cd
Material	Polycarbonate
Watertightness	Up to 10m depth
Validity	5 years



70280

IMPA Code: 33 01 43
Approvals: EC/GL/SOLAS

LALIZAS (GREECE) SAFELITE 70280 LIFEJACKET LIGHT

Luminous Intensity	More than 0.75 cd
Duration	≥8 h
Material	Polycarbonate
Validity	5 years

LIFE-SAVING APPLIANCES

Lifebuoys



DY5555

IMPA code 33 01 51
Approvals: EC/GL/CCS/SOLAS

HUAYAN LIFEBOUY

Model	DY5555
Outer Diameter	713mm
Inner Diameter	445mm
Thickness	100 ~ 125mm
Weight	≥2.5KG
Buoyancy	≥14.5 KG



DY5555-4

IMPA code 33 01 54
Approvals: EC/GL/CCS/SOLAS

HUAYAN LIFEBOUY

Model	DY5555-4
Outer Diameter	750mm
Inner Diameter	468mm
Thickness	100 ~ 125mm
Weight	≥4.3KG
Buoyancy	≥14.5 KG



SB-25

IMPA Code: 33 01 51
Approvals: EC/BV/SOLAS

NIHON (JAPAN) LIFEBOUY

Model	SB-25
Outer Diameter	760mm
Inner Diameter	460mm
Thickness	105mm
Weight	2.8 KG
Buoyancy	23 KG
Height of Drop Test	40m



SB-40

IMPA Code: 33 01 51
Approvals: EC/BV/SOLAS

NIHON (JAPAN) LIFEBOUY

Model	SB-40
Outer Diameter	760mm
Inner Diameter	460mm
Thickness	105mm
Weight	4.5 KG
Buoyancy	21 KG
Height of Drop Test	40m



Life-buoy Bracket

STORAGE BOX FOR LIFEBOUY

Material	Fibreglass
Dimensions	880 x 160cm



Life-buoy Bracket

LIFE-BUOY BRACKET

Type	A
Material	Steel



Quick Release Case

QUICK RELEASE CASE

Size	710 x 755 x 186mm
Material	FRP

For 4.3KG lifebuoy



Lifebuoy Line

FLOATING LINE FOR LIFEBOUY

Diameter	8mm
Length	30m

LIFE-SAVING APPLIANCES

Lifebuoy Lights



QD1

IMPA code 33 03 86
Approvals: EC/CCS/SOLAS

HUAYAN LIFEBOUY SELF-IGNITING LIGHT

Model	QD-1
Light	Flash/LED
Battery	Lithium Battery
Bulb	4.8V/0.54A
Flash frequency	50 ~70 times/min
Luminous intensity	≥2.0cd



QD2

IMPA code 33 03 86
Approvals: CCS/EC/SOLAS

HUAYAN LIFEBOUY SELF-IGNITING LIGHT

Model	QD-2
Light	Flash/LED
Battery	Dry Battery
Bulb	4.8V/0.54A
Flash frequency	50 ~70 times/min
Luminous intensity	≥2.0cd



FBQD1

IMPA code 33 03 86
Approvals: CCS/SOLAS

HUAYAN LIFEBOUY SELF-IGNITING LIGHT (INTRINSICALLY SAFE)

Model	FBQD-1
Battery	4XLR20 Alkali Battery
Bulb	4.8V/0.54A
Explosion-proof Class	Ex d II CT4
Light	Flash
Flash frequency	50 ~70 times/min
Luminous intensity	≥2.0cd



FBQD2

IMPA code 33 03 86
Approvals: CCS/EC/SOLAS

HUAYAN LIFEBOUY SELF-IGNITING LIGHT (INTRINSICALLY SAFE)

Model	FBQD-2
Battery	2XLR20 Alkali Battery
Lamp-house	LED
Explosion-proof Class	Ex ia II CT4
Light	Flash
Flash frequency	50 ~70 times/min
Luminous intensity	≥2.0cd



L90



L41-B

IMPA Code: 33 03 86

Approvals: EC/MED/SOLAS

DANIAMANT (UK) LIFEBOUOY LIGHT L90

- Minimum 2 cd Light output
- Minimum 2 hour Light duration
- 2.5m lanyard included

IMPA Code: 33 03 28

Approvals: EC/MED/SOLAS

DANIAMANT (UK) LIFEBOUOY LIGHT L41-B

- Minimum 2 cd Light output
- Minimum 2 hour Light duration



L161

IMPA Code: 33 03 86

Approvals: EC/MED/SOLAS

DANIAMANT (UK) LIFEBOUOY LIGHT L161

- Intrinsically safe, for use in ALL potentially explosive zones
- Five year life. No maintenance or replacement batteries are required
- LED technology
- ATEX, IECEx, ETL, IEC60945 approvals



HYF-2



CHILD SIZE

IMPA code 33 01 69

Approvals: EC/GL/CCS/SOLAS

HUAYAN IMMERSION SUIT

Buoyancy	≥150N
Material	Neoprene 5mm
Sizes	M (170cm)
	L (190cm)
	XL (205cm)
	Child

- Thermal protectiveness: after immersing in 0°C~ +2°C water for 6h, body temperature does not fall 2°C below normal levels
- 3M reflective strips
- Whistle and light included

LIFE-SAVING APPLIANCES

Thermal Protective Aid / Chemical Protection



Neptune

IMPA Code: 33 01 69
Approvals: EC/GL/SOLAS

LALIZAS (GREECE) IMMERSION SUIT
INSULATED "NEPTUNE"

- Neoprene 5mm
- Universal Size
- Retro reflective tape



BWFY-2

INSPECTION AND REPAIR KIT FOR
IMMERSION SUIT

Model BWFY-2



HYB-2

IMPA code 33 01 75
Approvals: EC/CCS/SOLAS

HUAYAN THERMAL PROTECTIVE AID

Model HYB-2
Size 2000x960x860mm



RFH 01

IMPA Code: 33 09 81

Approvals: CCS

HUAYAN CHEMICAL SUIT

Material Rubberized fabric
Thickness 0.45±0.05mm

- Resistant to acid corrosion
- Used to protect fire fighting personnel from harmful chemicals and corrosive substances in a fire or accident



EN943-1

IMPA Code: 33 09 81

CHEMPROTECTOR DIVETEX®, EN 943-1

Chemical and gas protection suit with mask sealing.

Type Berlin 1b
Temperature Range -50°C~80°C
Zipper Gas proof
Certifications
Suit EN943-1
Boots EN345
Gloves EN374

To be used with full face mask. All masks can be used if they are in accordance to EN 136:1998 class 2 or 3. Together with Chemical protective boots (EN 345), Butyl gloves (EN 374), cuff rings.

Pyrotechnics



Rocket Parachute Flare

IMPA Code: 33 03 11
 Approvals: EC/BV/CCS/SOLAS/USCG

HUAHAI ROCKET PARACHUTE FLARE

Type	HR-3 JH1-300-86
Height of Launching	>300m
Luminous Intensity	30000cd
Flare Time	>40s
Validity	3 years
Dimensions	44 x 237mm
Weight	<0.32KG



Buoyant Smoke Signal

IMPA Code: 33 03 31
 Approvals: EC/BV/CCS/SOLAS/USCG

HUAHAI BUOYANT SMOKE SIGNAL

Type	HB-3 JH3-2-97
Smoke time	> 3min
Validity	3 years
Dimensions	Diameter 80mm x 135mm
Weight	<0.5KG



Red Hand Flare Signal

IMPA Code: 33 03 14
 Approvals: EC/BV/CCS/SOLASS/USCG

HUAHAI RED HAND FLARE SIGNAL

Type	HH-3 JH2-60-94
Luminous Intensity	15000cd
Flare Time	>60s
Validity	3 years
Dimensions	Diameter 27mm x 145mm
Weight	<0.17KG



Line Throwing Unit

IMPA Code: 33 03 09
Approvals: EC/BV/CCS/SOLAS

HUAHAI LINE THROWING UNIT

Type	HT-2 JH7-230-91
Throwing Range	>230m
Validity	3 years
Dimensions	280 x 345mm
Weight	<4KG



MOB

IMPA Code: 33 03 21
Approvals: EC/BV/CCS/SOLAS

HUAHAI MAN OVER BOARD

Type	HLS-2 & HL-2 JH8-215-92
Smoke time	>15min
Flare Time	>2h
Luminous Intensity	>2.0cd
Validity	3 years
Dimensions	90mm diameter x 450mm
Weight	4KG



SMOKE SIGNAL

IMPA Code: 33 03 23
Approvals: EC/BV/CCS/SOLAS/USCG

HUAHAI LIFEBUOY SELF-ACTIVATING SMOKE SIGNAL

Type	HL-2 JH9-15-92
Smoke colour	Orange
Smoke duration time	≥15min



THROWING DEVICE

IMPA Code: 33 16 45

COMPRESSED AIR DRIVEN LINE THROWING DEVICE

Compressed air used as propellant

Throwing Range	90 - 153m
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LIFE-SAVING APPLIANCES

Emergency Escape Breathing Device (EEBD)



CF-15

IMPA Code: 33 04 38

DRAEGER EEBD ESCAPE SET SAVER CF 15 COMPRESSED AIR BREATHING DEVICE WITH HOOD

Dimensions L 490 x W 160 x
H 250mm

- Provides breathing protection for 15 minutes
 - 3 ltr / 200 bar compressed air cylinder
 - Audible low content warning
 - Carrying bags: fluorescent orange
-



TH-15

IMPA Code: 33 04 38

Approvals: EC/GL/CCS/SOLAS

HUAYAN AIR COMPRESSED EMERGENCY ESCAPE BREATHING DEVICE

Model TH15
Air Cylinder Volume 3.2L
Normal Working Pressure 21Mpa
Duration >15mins
Weight <8KGS



THHHZ15

IMPA Code: 33 04 38

Approvals: EC/GL/CCS/SOLAS

EMERGENCY ESCAPE BREATHING DEVICE

Model THHZ15
Duration >15mins
Air Cylinder Volume 3L
Normal Working Pressure 210 Bar
Weight: < 9KG



HOOD AND RUBBER HOSE

Hood Material Flame-resistance
material coated
with aluminum
foil composite
Working Pressure of Hose 2.0



TH10-2A

PRESSURE REDUCER

Type	TH10-2A
Connection	External thread
Output pressure	0.65 ± 0.2
Output flux	40



TH10-1

IMPA Code: 33 04 36 / 33 04 39

CYLINDER ASSEMBLY (SPARE CYLINDER)

Model	TH10-1/TH15-1
Connection	External thread
Air Cylinder Volume	2.2L/3.2L
Normal Working Pressure	21Mpa



TH15-1



Pressure Gauge

PRESSURE GAUGE



Charging Connector for EEBD

CHARGING CONNECTOR FOR EEBD

Gauge Range	0-300bar
M	10x1

LIFE-SAVING APPLIANCES

Rescue and Medical Devices



Basket Stretcher, Fixed

IMPA Code: 39 13 91

Approvals: Mill Cert

BASKET STRETCHER, FIXED

- Suitable for helicopter rescue

Dimensions L 217 x W 65cm



Basket Stretcher, Divisible

IMPA Code: 39 13 91

Approvals: Mill Cert

BASKET STRETCHER, DIVISIBLE

- Safety belts
- Adjustable foot support

Dimensions (Divided) L 110 x W 65cm

Dimensions (Combined) L 210 x W 65cm



Personnel Transfer Net

Approvals: ABS

PERSONNEL TRANSFER NET

- API specification 2C Fifth Edition, April 3, 1995, 3.13 API RP54, R250LGS with design factor of 10
 - Lifting ring - 7/8" forged steel
 - Safety load line
 - Stabilizer unit covered with plastic impregnated fabric
 - Netting lines 3/4", 9950 lbs. test each
 - Top ring 30" padded
 - Bottom ring overall dimensions 72" with padding
 - Padding is shock absorbing, synthetic flotation material
 - 9 feet from bottom to top ring
 - Four entrances to net
 - Bottom of net - 5 rubber chafe pads
-



Neil Robertson Stretcher

IMPA Code: 39 13 90

Approvals: Mill Cert

NEIL ROBERTSON STRETCHER

Model	HYD3
Frame	Hardwood
Outer Material	Polyester oxford textile
Horizontal safety load	120KG
Vertical safety load	120KG



Paraguard Stretcher

PARAGUARD STRETCHER

Length	Full 182cm (92cm folded)
Width	25cm (27cm folded)
Depth	(15cm folded)
Weight with no accessories	11.5kg
Max load	136kg



Lifting Harness for Stretcher

LIFTING HARNESS FOR STRETCHER

- Bridle gear suitable for helicopter rescue
 - Adjustable straps
 - 4 snap hooks
-

LIFE-SAVING APPLIANCES

Rescue and Medical Devices



Oxygen Resuscitator 4 Ltr

IMPA Code: 33 04 01

Approvals: Mill Cert

ERIE (USA) OXYGEN RESUSCITATOR 4 LTR

- Filled with ready to use with 414 litres of medical oxygen
 - Permanently attached on/off handle - no wrench needed
 - 6 litre fix flow regulator is standard. Can also be fitted with a variable flow regulator
 - Pressure gauge in cylinder post valve
 - Refillable light weight aluminum cylinder
-



Oxygen Resuscitator P103A

IMPA Code: 33 04 01

Approvals: Mill Cert

SHARP (JAPAN) OXYGEN RESUSCITATOR P103A

2l water capacity aluminum O₂ cylinder equipped

Case Duralumin

Dimensions 210 x 650 x 280mm

Weight 15kg



First Aid Kit 1F



First Aid Kit 2F

IMPA Code: 39 01

FIRST AID KIT 1F

- 2 pks Surgifix size 1-2 for hand, wrist, arm & elbow
- 1 Surgifix size 3-4 for knee, leg, foot & shoulder
- 1 Surgifix size 5-6 for head, hip, thigh & axilla
- 2 Singlefix finger bandages
- 1 Sodium bicarbonate powder BP
- 1 Acriflavine solution 1:1000
- 1 Iodine solution BP
- 2 Triangular bandages
- 1 Crepe bandages
- 1 Adhesive plaster 1/2" x 5yds
- 2 pks First Aid dressings 10's
- 1 Water-Jel burn dressing
- 1 pk of Absorbent gauze 20's
- 1 Antiseptic lotion & 1 Antiseptic cream
- 12 Cotton wool & 1 Eye lotion
- 1 Constructive bandage
- 12 bunchs of Safety pins, assorted
- 1 pr of Dressing scissors
- 1 pr of Dressing forceps
- 1 unit One-way valve mouthpiece: "First Aid Airway"
- 1 "First Aid at work"

FIRST AID KIT 2F

- 4 Surgifix size 1-2 for hand, wrist, arm & elbow
- 2 Surgifix size 3-4 for knee, leg, foot & shoulder
- 2 Surgifix size 5-6 for head, hip, thigh & axilla
- 4 Singlefix finger bandages
- 4 Triangular bandages
- 2 Crepe bandages 2"
- 1 Crepe badages 3"
- 1 Adhesive plaster 1/2" x 5yds
- 4 pks First Aid dressings 10's
- 2 pks of Absorbent gauze 20's
- 1 Water-Jel burn dressing
- 1 Antiseptic lotion & 1 Antiseptic cream
- 24 Cotton wool & 1 Eye lotion
- 1 Acriflavine solution 1:1000
- 1 Iodine solution BP
- 2 Sodium bicarbonate powder BP
- 1 Constructive bandage
- 24 bunchs of Safety pins, assorted
- 1 pr of Dressing scissors
- 1 pr of Dressing forceps
- 1 unit One-way valve mouthpiece: "First Aid Airway"
- 1 "First Aid at work"

LIFE-SAVING APPLIANCES

Rescue and Medical Devices



Air Splints



Wooden Splint



Emergency eyewash and facewash



Emergency Safety Shower

AIR SPLINT

WOODEN SPLINT

EMERGENCY EYEBATH AND FACEWASH FOUNTAIN WITH BOWL

- Operates automatically when lid is pulled down
- Individual flow controller
- Wall mounting

Material	Shock-resistant plastic
Dimension	L 360 x W 340 x H 205mm

EMERGENCY SAFETY SHOWER

- Combined unit with eye and face wash
- Free standing
- Push flag and foot treadle activated
- Supply and waste: 1¼" IPS

FIRE FIGHTING EQUIPMENT

- Fire extinguishers
- Fire extinguisher refills
- Fire extinguisher accessories/Fireman outfit
- Fireman outfit and equipment
- Safety hand lamps
- Breathing apparatus accessories/
SCBA box/Compressor/Fire hose
- Water fog applicator/Branch pipes/
Jet spray nozzles
- International couplings, connectors
and caps (Storz)
- International couplings, connectors
and caps ((Barcelona, GOST, INSTANTANEOUS)
- International couplings, connectors
and caps (INSTANTANEOUS, MACHINO)
- International couplings, connectors
and caps (NAKAJIMA, NOR)
- International couplings, connectors
and caps (NUNAN & STOVE, FRENCH/
GUILLEMIN)
- International couplings, connectors
and caps (USA-ANSI) / International
Shore Connection / Coupling Spanners
- Coupling spanner/Fire hydrants

FIRE FIGHTING EQUIPMENT

Fire Extinguishers



KM 544838



0038



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IMPA Code: 33 10

Approvals: EC/Lloyd's

EVERSAFE ABC, MONNEX POWDER, WATER AND FOAM



Technical Specification

Model	EED-4c	EED-6c	EED-9c	EED-12c	EED-12cMX	EEW-6cs	EEW-9cs	EEF-6cs	EEF-9cs	EEF-9c
Type	Cartridge Operated Type									
Extinguishant	ABC Dry Powder				Monnex Powder	Water		AFFF Foam		
Capacity	4 kg	6 kg	9 kg	12 kg	9 kg	6 litres	9 litres	6 litres	9 litres	9 litres
CO ² Gas Cartridge	75g	110g	150g	225g	225g	55g	55g	55g	75g	75g
Valve / Headcap	CE Marked Controllable Chrome Plated Brass Headcap with Safety Relief Valve									
Body Diameter	158 mm	158 mm	178 mm	188 mm	188 mm	158 mm	178 mm	158 mm	178 mm	178 mm
Overall Height	468 mm	582 mm	624 mm	697 mm	697 mm	582 mm	624 mm	582 mm	624 mm	624 mm
Approx Full Weight	8.2 kg	10.9 kg	14.7 kg	19.7 kg	16.7 kg	11.1 kg	14.6 kg	11.1 kg	14.9 kg	14.9 kg
Working Temp. Range	- 20°C to + 60°C					+ 5°C to + 60°C				
Working Pressure	12 Bar									
Test Pressure	25 BAR									
Burst Pressure	Exceeds 69 Bar									
Approx Discharge Range	2 - 3 m	5 m	7 m	7 m	7 m	4 m	6 m	4 m	6 m	6 m
Approx Discharge Time	11 sec	21 sec	23 sec	31 sec	19 sec	32 sec	60 sec	58 sec	88 sec	50 sec
Fire Rating	13A:70B	27A:183B	34A:233B	43A:233B	233B	13A	21A	13A:144B	21A:183B	13A:183B
Fire Class	ABC + Electrical				BC	A + Electrical Safety Test*		A, B + Electrical Safety Test*		AB
Coating (Internal)	Stoving Epoxy Primer					Performance Polymer Alloy				
Paint Finishing	RAL 3000 Flame Red Polyester Powder Coating									
Mounting	Metal 'T' Wall Bracket									
Manufactured & Certified to	BS EN 3-7: 2004 + A1: 2007 and BS EN 3-8: 2006									

* Safe if in Accidental Contact with Live Electrical Equipment. Complies with Electrical Conductivity Test BS EN 3-7, Clause 9 Annex C.



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IMPA Code: 33 10 16/17/18

Approvals: EC/Lloyd's

EVERSAFE ABC DRY POWDER



Technical Specification

Model	EED-1	EED-2	EED-2h	EED-3	EED-4N	EED-6	EED-9	EED-12
Type	Stored Pressure Type							
Extinguishant	ABC Dry Powder							
Capacity	1 kg	2 kg	2 kg	3 kg	4 kg	6 kg	9 kg	12 kg
Propellant	Dry Nitrogen (N ₂)							
Valve	Controllable Chrome Plated Brass Valve with Pressure Indicator							
Body Diameter	80 mm	110 mm	110 mm	130 mm	158 mm	158 mm	178 mm	188 mm
Overall Height	332 mm	379 mm	379 mm	477 mm	453 mm	556 mm	602 mm	695 mm
Approx Full Weight	2 kg	3.4 kg	3.6 kg	5.6 kg	7.2 kg	9.7 kg	13.5 kg	18.1 kg
Working Temp. Range	- 20°C to + 60°C							
Working Pressure	12 Bar							
Test Pressure	25 Bar							
Burst Pressure	Exceeds 69 Bar							
Approx Discharge Range	2 m	2.5 m	2.5 m	4 m	5 m	5 m	7 m	7 m
Approx Discharge Time	9 sec	15 sec	13 sec	14 sec	20 sec	16 sec	18 sec	30 sec
Fire Rating	5A:34B	13A:55B	13A:70B	13A:89B	21A:113B	43A:233B	43A:233B	43A:233B
Fire Class	ABC + Electrical							
Coating (Internal)	Stoving Epoxy Primer							
Paint Finishing	RAL 3000 Flame Red Polyester Powder Coating							
Mounting	Plastic Vehicle Bracket *			Metal 'L' Wall Bracket				
Manufactured & Certified to	BS EN 3-7: 2004 + A1: 2007 and BS EN 3-8: 2006							

* Wire vehicle bracket available on request

FIRE FIGHTING EQUIPMENT

Fire Extinguishers



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IMPA Code: 33 10 62

Approvals: EC/Lloyd's

EVERSAFE AFFF FOAM & WATER



Technical Specification

Model	EEF-2s	EEF-6s	EEF-9s	EEW-6s	EEW-9s
Type	Stored Pressure Type				
Extinguishant	AFFF Foam			Water	
Capacity	2 litres	6 litres	9 litres	6 litres	9 litres
Propellant	Dry Nitrogen (N ₂)				
Valve	Controllable Chrome Plated Brass Valve with Pressure Indicator				
Body Diameter	110 mm	158 mm	178 mm	158 mm	178 mm
Overall Height	398 mm	556 mm	602 mm	556 mm	602 mm
Approx Full Weight	3.7 kg	10.3 kg	13.8 kg	10.2 kg	13.7 kg
Working Temp. Range	+ 5°C to + 60°C				
Working Pressure	12 Bar				
Test Pressure	25 Bar				
Burst Pressure	Exceeds 69 Bar				
Approx Discharge Range	1.5 m	4 m	6 m	4 m	6 m
Approx Discharge Time	26 sec	46 sec	67 sec	34 sec	71 sec
Fire Rating	5A:34B	13A:144B	21A:183B	13A	21A
Fire Class	A, B + Electrical Safety Test*			A + Electrical Safety Test*	
Cylinder Lining	Performance Polymer Alloy				
Paint Finishing	RAL 3000 Flame Red Polyester Powder Coating				
Mounting	Wire Vehicle Bracket	Metal 'L' Wall Bracket			
Manufactured & Certified to	BS EN 3-7: 2004 + A1: 2007 and BS EN 3-8: 2006				

* Safe if in Accidental Contact with Live Electrical Equipment. Complies with Electrical Conductivity Test BS EN 3-7, Clause 9 Annex C.



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IMPA Code: 33 10 65

Approvals: EC/Lloyd's

EVERSAFE CO2



EEC-2e2

EEC-5e1

EEC-2Ale2

EEC-5Ale1

Technical Specification

Model	EEC-2e2	EEC-5e1	EEC-2Ale2	EEC-5Ale1
Body Material	Cromoly Steel		Aluminum Alloy	
Extinguishant	Carbon Dioxide			
Capacity	2 kg	5 kg	2 kg	5 kg
Cylinder Diameter	105 mm	138 mm	117 mm	152 mm
Overall Height	567 mm	747 mm	502 mm	664 mm
Approx Full Weight	8.2 kg	16 kg	5.1 kg	12.1 kg
Working Temp. Range	- 20°C to + 60°C			
Working Pressure (20°C)	56 Bar			
Test Pressure	250 Bar		212 Bar	
Safety Disc Burst Pressure	180 - 200 Bar			
Approx Discharge Range	3 m			
Approx Discharge Time	13sec	23 sec	14 sec	18 sec
Fire Rating	34B	55B	34B	55B
Fire Class	B, C + Electrical			
Cylinder Specification	BS 5045 Part 7		BS 5045 Part 8	
Discharge Assembly	Swivel Horn	Hose & Fish Tail Horn	Swivel Horn	Hose & Fish Tail Horn
Mounting	Metal 'L' Wall Bracket			
Operating Head / Valve	CE Marked Controllable Chrome Plated Brass Valve			
Paint Finishing	RAL 3000 Flame Red Polyester Powder Coating			
Manufactured & Certified to	BS EN 3-7: 2004 + A1: 2007 and BS EN 3-9: 2006			

FIRE FIGHTING EQUIPMENT

Fire Extinguishers



KM 544838



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IMPA Code: NA

Approvals: EC/Lloyd's

EVERSAFE MOBILE AFFF FOAM



Technical Specification

Model	MFM-45	MFM-135	MFG-45	MFG-135	MFG-150
Type	Stored Pressure Type		Gas Cartridge Type		
Capacity	45 litres	135 litres	45 litres	135 litres	150 litres
Extinguishant	Nitrogen (N ₂)		AFF Foam (Premix)		
Propellant	Brass Valve with Pressure Gauge		Carbon Dioxide (CO ₂)		
Valve / Headcap	N / A		Brass Head Cap with Safety Relief Valve		
CO ₂ Cartridge	16 mm x 6 m		1 kg	2 kg	2 kg
Discharge Hose	300mm	350mm	300 mm	350mm	350mm
Wheel Diameter Ø	Steel Pipe / Flat Bar		Steel		
Frame Work	386 mm		386 mm	552 mm	552 mm
Cylinder Material	970 mm		970 mm	1290 mm	1380 mm
Body Diameter	535 mm		535 mm	685 mm	685 mm
Overall Height	665 mm		665 mm	930 mm	930 mm
Width	46 kg		52 kg	113 kg	118 kg
Depth	91 kg		98 kg	250 kg	270 kg
Approx Empty Weight	+ 5°C to + 60°C				
Approx Full Weight	12 Bar				
Working Temp. Range	21.5 Bar				
Working Pressure (20°C)	22.5 Bar				
Test Pressure	21.5 Bar				
Safety Valve Lift Pressure	17 ~ 21 Bar				
Approx Discharge Time	105 sec				
Approx Discharge Range	10 ~ 12 m				
Fire Rating / Class	A IIB				
Coating (Internal)	High Build Epoxy Tank Coating				
Paint Finishing	RAL 3000 Flame Red Polyester Powder Coating				
Manufactured & Certified to	BS EN 1866 : 2007				

** 20 meter hose length available on request.



KM 544838



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IMPA Code: NA

Approvals: EC/Lloyd's

EVERSAFE MOBILE CO2 FOAM



MCO-10



MCO-20



MCO-10T

Technical Specification

Model	MCO-10	MCO-20	MCO-10T
Capacity	10 kg	20 kg	2 x 10 kg
Style	Single		Twin
Extinguishant	Carbon Dioxide (CO ₂)		
Operating Head	CE Marked Brass Screw Down Valve with Safety Relief Valve		
Cylinder Thread	1" BS 341		
Discharge Hose	High Pressure Hose		
Internal Diameter x Length	9.5mm x 6 m		
Discharge Horn	Plastic with On/Off Valve		
Cylinder Specification	EN1964 Part 1 PED	EN1964 Part 1 TPED**	EN1964 Part 1 PED
- Diameter Ø	156 mm	204 mm	156 mm
- Nominal height	615 mm	815 mm	615 mm
Frame Work	Steel Pipe / Flat Bar		
Overall Height	1020 mm	1210 mm	1040 mm
Width	465 mm	565 mm	515 mm
Depth	1000 mm	1280 mm	1050 mm
Approx Empty Weight	33 kg	80 kg	50 kg
Approx Full Weight	43 kg	100 kg	70 kg
Cylinder / Frame Finish	RAL 3000 Flame Red Polyester Powder Coating		
Wheel Diameter Ø	300 mm		
Working Temp. Range	- 20°C to + 60°C		
Working Pressure (20°C)	56 Bar		
Cylinder Test Pressure	250 Bar		
Approx Discharge Time	30 sec	85 sec	60 sec
Approx Discharge Range	4 m		
Fire Rating / Class	70B C	89B C	89B C
Manufactured & Certified to	BS EN 1866 : 2007		

** Transportable Pressure Equipment Directive (TPED) approval.

FIRE FIGHTING EQUIPMENT

Fire Extinguishers / Fire Extinguishers Refill



KM 544838



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IMPA Code: NA

Approvals: EC/Lloyd's

EVERSAFE MOBILE DRY POWDER



MPM-25



MPM-50



MPG-25



MPG-50

Technical Specification

Model	MPM-25	MPM-50	MPG-25	MPG-50
Type	Stored Pressure Type		Gas Cartridge Type	
Capacity	25kg	50kg	25kg	50kg
Extinguishant	ABC Dry Powder			
Propellant	Nitrogen (N ₂)		Carbon Dioxide (CO ₂)	
Valve / Headcap	Brass Valve with Pressure Gauge		Brass Head Cap with Safety Relief Valve	
CO ₂ Cartridge	N / A		550 grams	1 kg
Discharge Hose	13 mm x 6 m	16 mm x 6 m	13 mm x 6 m	16 mm x 6 m**
Wheel Diameter Ø	300 mm			
Frame Work	Steel Pipe / Flat Bar			
Cylinder Material	Steel			
Body Diameter	250 mm	386 mm	250 mm	386 mm
Overall Height	895 mm	970 mm	895 mm	970 mm
Width	430 mm	535 mm	430 mm	535 mm
Depth	590 mm	665 mm	590 mm	665 mm
Approx Empty Weight	29 kg	47 kg	33 kg	52 kg
Approx Full Weight	54 kg	97 kg	58 kg	102 kg
Working Temp. Range	- 20°C to + 60°C			
Working Pressure (20°C)	12 Bar			
Test Pressure	21.5 BAR			
Safety Valve Lift Pressure	17 ~ 21 Bar		18 ~ 20 Bar	
Approx Discharge Time	40 sec	55 sec	40 sec	50 sec
Approx Discharge Range	9 m	10 m	9 m	11 m
Fire Rating / Class	A I B C	A I B C	A I B C	A I B C
Paint Finishing	RAL 3000 Flame Red Polyester Powder Coating			
Manufactured & Certified to	BS EN 1866 : 2007			

** 10 meter hose length available on request.



Foam concentrate

IMPA Code: 33 10

Approvals: BV

FOAM CONCENTRATE

Fluoroprotein Foam concentrate 3% for foam applicator

Volume: 200 ltr & 20ltr



AFFF foam

IMPA Code: 33 10

Approvals: BV

AFFF FOAM

Volume: 200 ltr & 20ltr



ABC powder

IMPA Code: 33 10

ABC POWDER

Weight: 2.3,4,5,6, 9, 12 & 25kg

FIRE FIGHTING EQUIPMENT

Fire extinguishers accessories



Gas Cartridge



T Wall Bracket



Heavy Duty
Transport Bracket



Foam Equipment



L Wall Bracket



Vehicle Bracket



Marine Bracket



Telescopic
Applicator

Fireman outfit and equipment

消防员装备 Fireman Equipment

装备组成:

- 国际编码: 33 09 01
- 工厂编码: 09L0026
- 认可机构: CCS/EC

consisting of:

- IMPA Code: 33 09 01
- Factory Code: 09L0026
- Approval: CCS/EC

消防头盔
Fire helmet

正压式消防空气呼吸器
Self-Contained Positive Pressure Air Breathing Apparatus

手提防爆灯
Handheld explosion-proof light

消防手套
Fireman gloves

消防员安全腰带
Fireman waistbelt

消防员短柄斧
Short fireman axe

耐火救生绳
Fire proof safeline

呼吸空气充填压缩机
Air compressor

消防隔热服
Fireman protective suit

消防长柄斧
Long handheld fireman axe

消防胶靴
Fire boots

FIRE FIGHTING EQUIPMENT

Fireman outfit and equipment



Helmet

IMPA Code: 35 09 02

HELMET

Material	Fiberglass
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Portable Explosion Proof Light

IMPA Code: 79 22 01

Approvals: CCS/ICEX

PORTABLE EXPLOSION PROOF LIGHT

Type:	4DCB
Power Source:	1.5v dry battery
Bulb:	4.8V/0.5A
Explosion-proof class	ExdIICT4
Duration	≥3h
Protective casing	IP65



Fireman axe with insulated rubber handle

IMPA Code: 33 09 62

Approvals: Mill Cert

FIREMAN AXE WITH INSULATED RUBBER HANDLE

Body Material	Steel
Electric insulation	No breakdown under 20000v for 1 min



Fireman rubber boots

IMPA Code: 19 02 06

FIREMAN RUBBER BOOTS



HYN-1

IMPA Code: 33 09 74

Approvals: CCS

FIRE PROOF LIFE LINE

Model	HYN-1 (30m)
Diameter	12mm
Strength	Static load 3.5KN for 5min



HYN-2

IMPA Code: 33 09 74

Approvals: EC/GL/CCS/SOLAS

FIRE PROOF LIFE LINE

Model	HYN-2 (30m)
Diameter	5mm
Strength	Static load 3.5KN for 5min



Fireman suit

IMPA Code: 33 09 03

Approvals: CCS/SOLAS

HUAYAN FIREMAN SUIT

Model DNXF

Each set consists of flame retardant aluminium jacket, trousers and gloves, helmet with visor and rubber boots.

- Heat Resistant
- Water proof
- Hydraulic pressure $\geq 4000\text{pa}$



Transparent visor



Head cover

IMPA Code: 33 04

VISOR / HEADCOVER

Material	Polycarbonate, flame resistant material coated with aluminium foil composite
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FIRE FIGHTING EQUIPMENT

Fireman outfit and equipment



Fireman suit

IMPA Code: 33 09 03

Approvals: EC/Lloyd's, comply with new SOLAS regulation

FLAMEGUARD (UK) FIREMAN SUIT

Flameguard Plus Suit has a two-layer construction, with the outer shell using a fire resistant substrate as a based laminated to an aluminized film. Leather gloves with Kevlar insert and cuff. Heat resistant, slash and puncture resistant.



Fireman Gloves

IMPA Code: 33 09 05

Approvals: EC/GL

FIREMAN GLOVES

Waterproof, fire resistant, insulated



Safety helmet

IMPA Code: 33 09 02

Approvals: EC/DNV

SAFETY HELMET

- With visor and leather neck protection
-



Fireman Boots

IMPA Code: 33 09 04

Approvals: EC/GL

FIREMAN BOOTS

Fire retardant, insulated, acid and alkali proof



Fire axe

IMPA Code: 33 09 61/62

FIRE AXE – 20 000V, 14"

FIRE AXE – WOODEN HANDLE, 36"

FIRE AXE – INSULATED 20 000V, 36"

LEATHER COVER FOR FIRE AXE



Fire bucket

IMPA Code: NA

FIRE BUCKET

Material	Galvanized steel (Red)
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Storage Box for Fireman Outfit

STORAGE BOX FOR FIREMAN OUTFIT

Material	Fiberglass
Size	800 x 600 x 350mm



Fireman Waist Belt

FIREMAN WAIST BELT

Length	1.1 - 1.4m
Tensile strength	≥4500n



Fire blanket

IMPA Code: 33 09 51

FIRE BLANKET

Size	6' x 4'
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FIRE FIGHTING EQUIPMENT

Safety Hand Lamps



4DC

IMPA Code: 33 06 11

Approvals: Lloyd's

WOLF (UK) 4DC

Product	Safety handlamp, dry operated
Classification (gases)	Zone 1 and 2, Temperature T4
Bulb	4.8V, 0.5A. Krypton
Intensity	7,000 cd (cp) max.
Output	Zinc D Cells – Intermittent total 3-4 hours, continuous total 2 hours



4DC-A

IMPA Code: 33 06 07

Approvals: Lloyd's

WOLF (UK) 4DC-A

Product	Safety handlamp, primary cell powered
Approval	CE marked at ATEX Directive
Classification (gases)	Zone 1 and 2, Gas Group IIA, IIB, IIC. Temperature T4
Classification (dusts)	Zone 21 and 22, Max surface temperature 135°
Bulb	4.8V, 0.5A. Halogen - Brighter white light
Output	Akaline cell 20 hours



H-251-A

IMPA Code: 33 06 07

Approvals: Lloyd's

WOLF (UK) H-251-A

Product	Rechargeable safety hand lamp
Approval	CE marked at ATEX, IECEx Directive
Classification (gases)	Zone 1 and 2, Gas Group IIA, IIB, IIC. Temperature T4
Classification (dusts)	Zone 21 and 22, Max surface temperature 135°
Bulb	3.75v Halogen - Brighter white light
Output	Up to 7 hours



H-251-MK2

IMPA Code: 33 06 07

Approvals: Lloyd's

WOLF (UK) H-251-MK2

Product Rechargeable Safety handlamp
 Classification (gases) Zone 1 and 2, Gas Group IIA, IIB, IIC. Temperature T3
 Bulb 3.6V Krypton
 Output hours 4-5 hours



Safety hand lamp TS-24/TS-26

IMPA Code: 79 22 61/62/63/64

Approvals: Lloyd's

WOLF (UK) SAFETY TORCHES

Product Safety torch, primary cell powered
 Approval ACEX, IECEx, UL listed
 Model TS-26 - Straight T6
 TR-26 - R/Angle T6
 TS-24 - Straight T4
 TR-24 - R/Angle T4
 Classification (gases) Zone 1 and 2, Gas Group IIA, IIB, IIC. Temperature T6/T4.
 Classification (dusts) Zone 21 and 22, 65°C/95°C
 Bulb 2.4v Halogen - Brighter white light



Battery charger

IMPA Code: 33 06 09

Approvals: Lloyd's

WOLF (UK) BATTERY CHARGER

PRODUCT CODE	C-251(E)	C-251 LV	C-251 HV(E)
Product description	Mains voltage battery charger	Low voltage lamp charger	Mains voltage lamp charger
Apparatus standard	EN60 335		
Insulation class	II	III	II
Enclosure	ABS	Polypropylene	Polypropylene
Input voltage	120/230Vac	12-32Vdc	120/230Vac*
Recharge time	5-7hrs	10-12hrs at 24v	8-10hrs
Ingress protection	IP 20		
Weight	1.3kg	0.5kg	0.75kg
Mounting	All chargers may be bench or wall mounted		
Compatible handlamp	H-251 Mk1	H-251 Mk2, H-251E, H-251A	

FIRE FIGHTING EQUIPMENT

Breathing Apparatus



RHZK6/30

IMPA Code: 33 04 16

Approvals: EC/GL

HUAYAN BREATHING APPARATUS RHZK6/30

Air cylinder volume	6L
Air storage capacity	1500L
Normal working pressure	30Mpa
Alarm pressure	(5.5 ± 0.5)Mpa
Weight	≤16kg



RHZK6/30-1 cylinder

IMPA Code: 33 04 17

CYLINDER ASSEMBLY RHZK6/30-1 CYLINDER



KS-8C

IMPA Code: 33 04 16

Approvals: IBC/IGC/SOLAS

KAWASAKI BREATHING APPARATUS KS-8C

Air cylinder volume	8L
Air storage capacity	1200L
Usage time	30min
Max chargable pressure	14.7Mpa
Max test pressure	24.5Mpa
Weight	16.3kg



Draeger BA (Model PA91 plus) complete set and accessories

IMPA Code: 33 04 23

Approvals: EC

DRAEGER BREATHING APPARATUS PA91 PLUS

Set consists of:

- Impact resistant backplate and adjustable straps
 - Face mask
 - Lung demand valve 9LDV)
 - Steel air cylinder and cylinder strap
 - Warning whistle and pressure gauge
 - Can be used with any Drager 200 or 300 bar cylinders, full facemask or LDV
-



Panorama Nova Facemask



F2 Facemask

IMPA Code: 33 11 37

FACE MASK

Transparent visor



Face mask

DEMAND (SUPPLY) VALVE

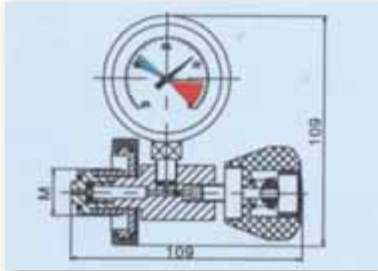
Exhalation resistance	< 700
Inhalation resistance	> 0
Static pressure	< 500



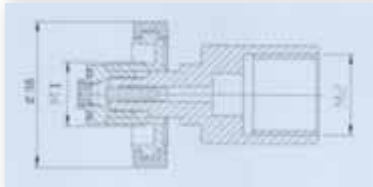
Demanding (supply) valve

FIRE FIGHTING EQUIPMENT

Breathing Apparatus Accessories / SCBA Box / Compressor



Pressure gauge unit



Inspection device for ABA



SCBA box

PRESSURE GAUGE UNIT

Joint thread	M22 x 1.5
Pressure gauge	0 ~ 40 Mpa 0 ~ 400 bar

Joint thread	G5/8
Pressure gauge	0 ~ 40 Mpa 0 ~ 400 bar

INSPECTION DEVICE FOR SCBA

M1	22 x 1.5
M2	G5/8

SCBA BOX

Size	410x281x710mm
Material	FRP

Fire Hose



Breathing Air Compressor JUNIOR II

IMPA Code: 33 04

BAUER (GERMANY) BREATHING APPARATUS COMPRESSOR

Model: Junior II

Capacity: 100ltr/min

220v or 440v, 50/60Hz

Single/three phase

Refilling pressure 300 bar with adaptor converter to 200 bar



White canvas / Tetoron fire hose

IMPA Code: 33 07

Approvals: EC/GL

WHITE CANVAS / TETORON FIRE HOSE

I.D. (Inch/mm)		Service Test Pressure (Bar/Psi)	Burst Pressure (Bar/Psi)
1-1/2"	38	21/300, 28/400	63/900, 84/1200
1-3/4"	45	21/300, 28/400	63/900, 84/1200
2"	52	21/300, 28/400	63/900, 84/1200
2-1/2"	65	21/300, 28/400	63/900, 84/1200
3"	75	17/250, 21/300	51/750, 63/900
4"	100	17/250, 21/300	51/750, 63/900



All red rubber lined synthetic fire hose

IMPA Code: 33 07

Approvals: EC/GL

ALL RED RUBBER LINED SYNTHETIC FIRE HOSE

I.D. (Inch/mm)		Service Test Pressure (Bar/Psi)	Burst Pressure (Bar/Psi)
1-1/2"	38	21/300, 28/400	63/900, 84/1200
1-3/4"	45	21/300, 28/400	63/900, 84/1200
2"	52	21/300, 28/400	63/900, 84/1200
2-1/2"	65	21/300, 28/400	63/900, 84/1200
3"	75	21/300, 28/400	63/900, 84/1200

FIRE FIGHTING EQUIPMENT

Portable hose binding apparatus / Fire Hose Box



Hose binding apparatus



Fixture for hose binding apparatus



Realing equipment for fire hose

HOSE BINDING APPARATUS

- Manual operation
- Suitable for fire hoses of any size
- Incl. galvanized wire $\varnothing 1.4\text{mm}$
- Weight: 1kg

FIXTURE FOR HOSE BINDING APPARATUS

- Suitable for couplings of size A-D
 - Weight: 4kg
-



Fire hose box

IMPA Code: 33 07 51

FIRE HOSE BOX

Type	XS-1 (turntable)
Measurement	554 x 654 x 190

Type	XS-2 (large) (w/o turntable)
Measurement	554 x 654 x 190

Type	XS-4 (small) (Water-proof)
Measurement	486 x 486 x 188

* Note: Able to customize according to different size requirements

Foam Applicators



Portable foam applicator

IMPA Code: 33 10 76

Approvals: CCS/GL

PORTABLE FOAM APPLICATOR

Size $\geq 20L$

Foam nozzle material Aluminium alloy



PQC8A

IMPA Code: 33 10 76

Approvals: CCS/GL

PORTABLE FOAM APPLICATOR WITH TANK

- Foam nozzle/branchpipe
 - Portable tank containing 20ltr foam
 - Foam Solution flow rate @5bar:480ltr
 - Ejection distance @ 5bar:22m
 - Expansion ratio : 6.5+/-10%
-



Fire Foam Monitor

IMPA Code: 33 04

Approvals: GL

Discharge agent	Foam solution (3% or 6%)
Flow rate	24L/S ($\pm 8\%$)
Throw distance	$\geq 40m$
Max. working pressure	1.6MPa
Rated working pressure	0.7~1.0 MPa
Swiveling range	Horizontal: 360° Vertical: -40° ~ 80°

FIRE FIGHTING EQUIPMENT

Water Fog Applicator / Branch Pipes / Jet Spray Nozzles



QWJ16

IMPA Code: 33 08
Approvals: GL/CCS

WATER FOG APPLICATOR

Rated working pressure	3.5bar
Flow rate	≥210L/min
Max spray angle	180 degree
Eject distance	≥4m



IMPA Code: 33 08
Approvals: EC/GL

WATER FOG/DUAL USE BRANCHPIPE

- Brass
- With and without coupling

12mm	Storz/Nakajima
16mm	Storz/Nakajima
19mm	Storz/Nakajima



Multipurpose branchpipe

IMPA Code: 33 08

Approvals: BV

MULTIPURPOSE BRANCHPIPE

- Brass



Jet/spray nozzle

IMPA Code: 33 08

Approvals: EC/GL

JET/SPRAY NOZZLE

- Brass
- Storz, Nakajima, John Morris, Machino, ANSI
- Available in sizes of 40A, 50, 65A
- Complies to SOLAS, Wheelmark and relevant EN standards



Jet/spray nozzle

IMPA Code: 33 08

Approvals: CCS

JET/SPRAY NOZZLE

- Brass



3 position jet/spray nozzle

IMPA Code: 33 08

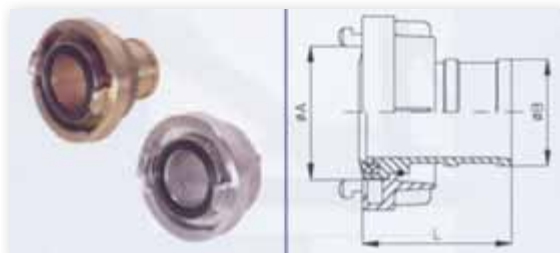
Approvals: CCS

3 POSITION JET/SPRAY NOZZLE

- Brass

FIRE FIGHTING EQUIPMENT

Storz Couplings and Caps



Delivery Hose Couplings

IMPA Code: 33 08 75/76/77

STORZ: DELIVERY HOSE COUPLINGS

Material Brass
Seal Nitrile rubber black

STORZ SIZE	MATERIAL	A = mm lug distance	B = mm	L = mm
D - 25	LA	31	25	50
D - 25	brass	31	25	50
38	LA	51	38	90
38	brass	51	38	90
C - 52	LA	66	52	55
C - 52	brass	66	52	55
65	LA	81	65	60
65	brass	81	65	60
B - 75	LA	89	75	60
B - 75	brass	89	75	60

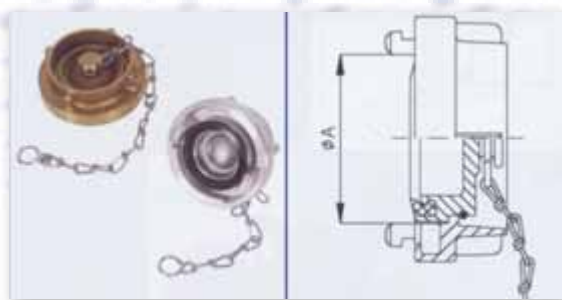


Adapter with female thread

STORZ: ADAPTER WITH FEMALE THREAD

Material Brass
Seal Nitrile rubber black

STORZ SIZE	MATERIAL	A = mm lug distance	G = inch
D - 25	LA	31	1"
D - 25	brass	31	1"
38	LA	51	2"
38	brass	51	2"
C - 52	LA	66	2"
C - 52	brass	66	2"
65	LA	81	2½"
65	brass	81	2½"
B - 75	LA	89	2"
B - 75	brass	89	2"



Blank cap with chain

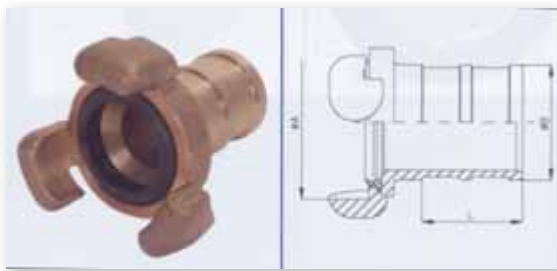
STORZ: BLANK CAP WITH CHAIN

Material	Brass
Seal	Nitrile rubber black

STORZ SIZE	MATERIAL	A = mm lugdistance
D - 25	LA	31
D - 25	brass	31
38	LA	51
38	brass	51
C - 52	LA	66
C - 52	brass	66
65	LA	81
65	brass	81
B - 75	LA	89
B - 75	brass	89

FIRE FIGHTING EQUIPMENT

Barcelona, Gost, Instantaneous Couplings and Caps

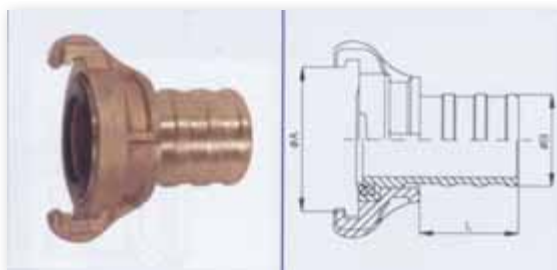


Delivery Hose Couplings

BARCELONA: DELIVERY HOSE COUPLINGS

Material	Brass
Seal	Oil and petrol resistant

SIZE	Ø A = mm	Ø B = mm	L = mm
DN 45	62	38	46
DN 70	85	64	54

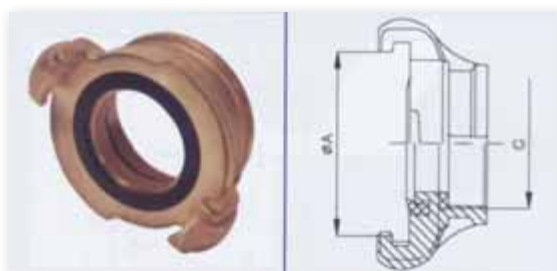


Delivery Hose Couplings

GOST: DELIVERY HOSE COUPLINGS

Material	Brass
Seal	Oil and petrol resistant

SIZE	Ø A = mm	Ø B = mm	L = mm
DN 50	79	52	63
DN 70	96	64	68

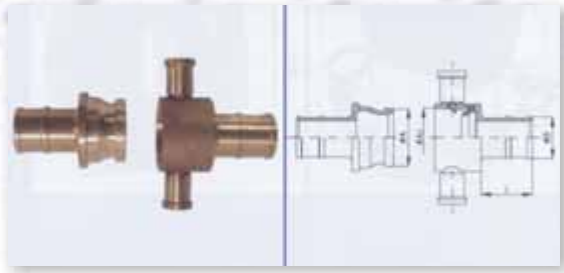


Adapters – female thread

GOST: ADAPTERS – FEMALE THREAD

Material	Brass
Seal	Oil and petrol resistant

SIZE	Ø A = mm	G = inch
DN 50	79	2"
DN 70	96	2½"



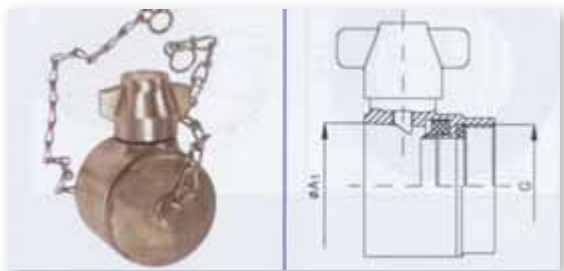
Delivery Hose Couplings – male/female

IMPA Code: 33 08 59/60/61

INSTANTANEOUS: DELIVERY HOSE COUPLINGS – MALE/FEMALE

Material	Brass
Seal	Oil and petrol resistant

SIZE	Ø A = mm	Ø A1 = mm	Ø B = mm	L = mm
DN 1½"	44	48	38	50
DN 2½"	71	74.8	38	70
DN 2½"	71	74.8	52	70
DN 2½"	71	74.8	64	70

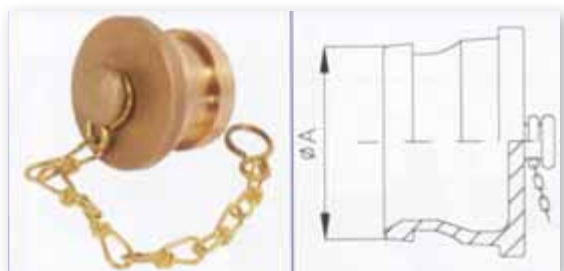


Adapters – female thread

INSTANTANEOUS: ADAPTERS – FEMALE THREAD

Material	Brass
Seal	Oil and petrol resistant

SIZE	Ø A = mm	G = inch
DN 1½"	48	2"
DN 2½"	74.8	2"



Blank Caps with Chain

BLANK CAPS WITH CHAIN

Material	Brass
Seal	Oil and petrol resistant

SIZE	Ø A = mm	G = inch
DN 1½"	44	2"
DN 2½"	71	2"

FIRE FIGHTING EQUIPMENT

Machino Couplings And Caps

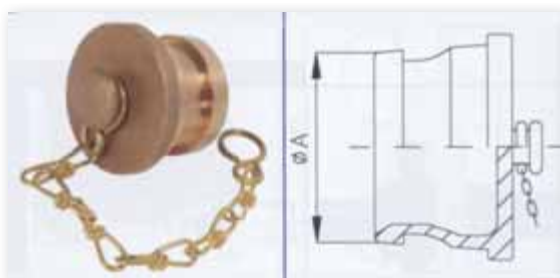


Blank caps with chain – female

INSTANTANEOUS: BLANK CAPS WITH CHAIN – FEMALE

Material	Brass
Seal	Oil and petrol resistant

SIZE	A = mm
DN1½" LA	48
DN 1½" brass	48
DN 2½" LA	74.8
DN 2½" brass	74.8



Blank caps with chain – male

INSTANTANEOUS: BLANK CAPS WITH CHAIN – MALE

Material	Brass
Seal	Oil and petrol resistant

SIZE	A = mm
DN 1½" LA	44
DN 1½" brass	44
DN 2½" LA	71
DN 2½" brass	71



Sealing rings

INSTANTANEOUS: SEALING RINGS

Oil and petrol resistant

SIZE	MATERIAL
DN 1½"	nitrile rubber
DN 2½"	nitrile rubber



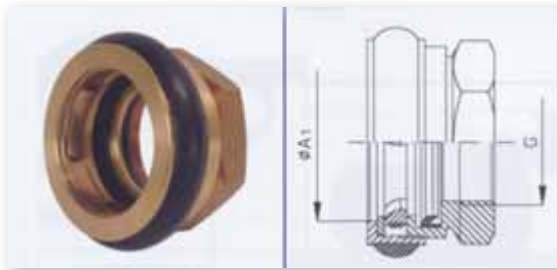
Delivery Hose Couplings – male/female

IMPA Code: 33 08 55/56/57

MACHINO: DELIVERY HOSE COUPLINGS – MALE/FEMALE

Material Brass

SIZE	MALE Ø A	x	FEMALE Ø A1	Ø D	L
DN 1½"	43.5	x	46.0	38	43
DN 2½"	68.4	x	73.0	63	65

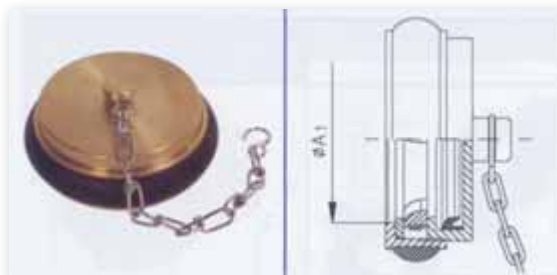


Adapters – female

MACHINO: ADAPTERS – FEMALE

Material Brass

SIZE	Ø A = mm	G = Zoll
DN 1½"	45.0	1½"
DN 2½"	71.4	2½"



Blank caps with chain – female

MACHINO: BLANK CAPS WITH CHAIN – FEMALE

Material Brass

SIZE	Ø A = mm
DN 1½"	46.0
DN 2½"	73.0



Sealing rings

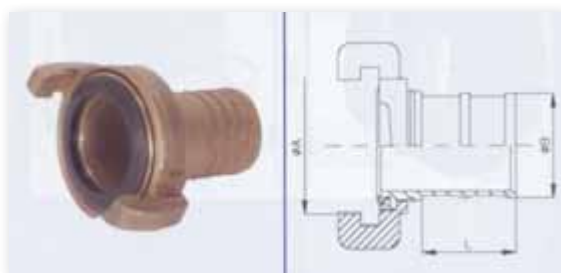
MACHINO: SEALING RINGS

Oil and petrol resistant

SIZE	MATERIAL
DN 1½"	nitrile rubber
DN 2½"	nitrile rubber

FIRE FIGHTING EQUIPMENT

Nakajima, Nor Couplings and Caps



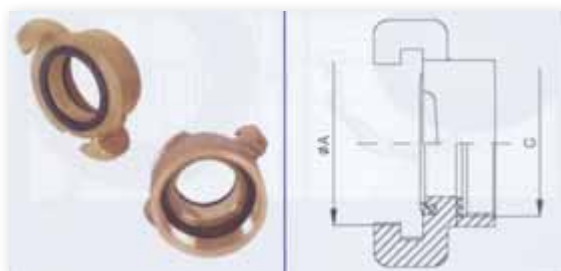
Delivery hose couplings

IMPA Code: 33 08 51/52/53

NAKAJIMA: DELIVERY HOSE COUPLINGS

Material Brass
Seal oil and petrol resistant

SIZE	Ø A = mm	Ø B = mm	L = mm
DN 40	61	38	45
DN 50	74	52	55
DN 65	92	38	58
DN 65	92	52	58
DN 65	92	64	58

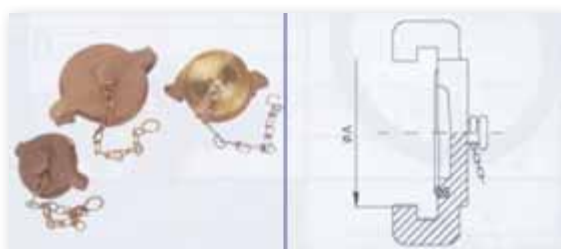


Adapters – female thread

NAKAJIMA: ADAPTERS – FEMALE THREAD

Material Brass
Seal oil and petrol resistant

SIZE	Ø A = mm	G = inch
DN 40	61	1½"
DN 40	61	2"
DN 50	74	2"
DN 65	92	2"
DN 65	92	2½"



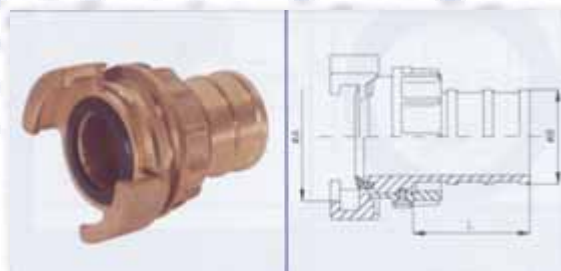
NAKAJIMA: BLANK CAPS WITH CHAIN

Material Brass
Seal oil and petrol resistant



Blank caps with chain

SIZE	Ø A = mm
DN 40	61
DN 50	74
DN 65	92



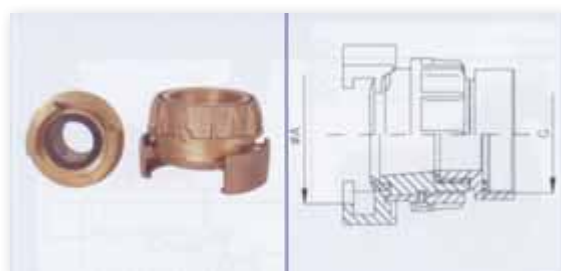
Delivery hose couplings

IMPA Code: 33 08 62/63/64

NOR: DELIVERY HOSE COUPLINGS

Material Brass
Seal oil and petrol resistant

SIZE	Ø A = mm	Ø B = mm	L = mm
DN 1½"	50	38	60
DN 2"	66	52	60
DN 2½"	83	38	60
DN 2½"	83	52	60
DN 2½"	83	64	60



Adapters

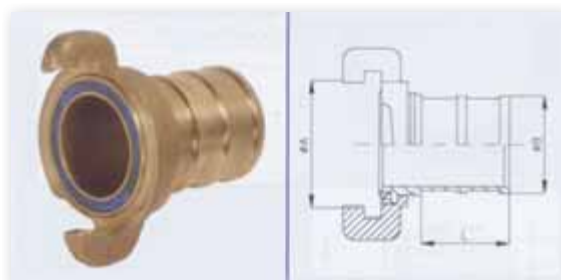
NOR: ADAPTERS

Material Brass
Seal oil and petrol resistant

SIZE	Ø A = mm	G = inch
DN 1½"	50	1½"
DN 2"	66	2"
DN 2½"	83	2"
DN 2½"	83	2½"

FIRE FIGHTING EQUIPMENT

Nunan & Stove, French Couplings and Caps

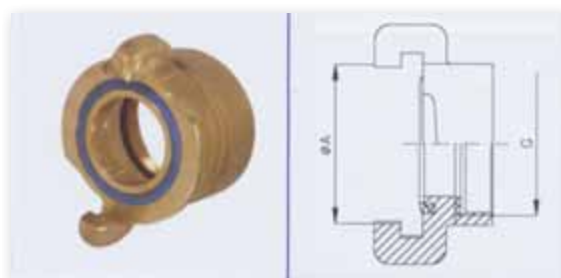


Delivery hose couplings

NUNAN & STOVE: DELIVERY HOSE COUPLINGS

Material	Brass
Seal	oil and petrol resistant

SIZE	Ø A = mm	Ø B = mm	L = mm
DN 1½"	61	38	45
DN 2"	68	52	53
DN 2½"	84	64	58

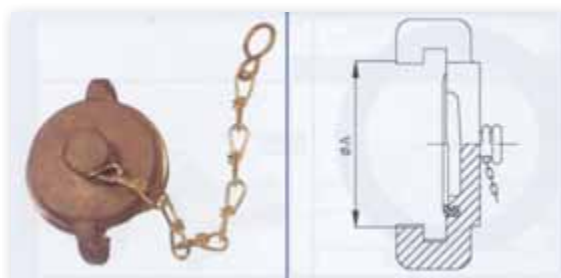


Adaptors

NUNAN & STOVE: ADAPTORS

Material	Brass
Seal	oil and petrol resistant

SIZE	Ø A = mm	G = Zoll
DN 1½"	61	2"
DN 2"	68	2"
DN 2½"	84	2"

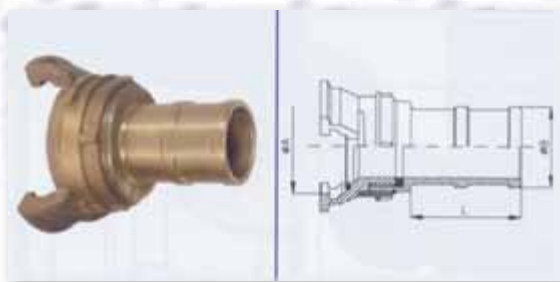


Blank cap with chain

NUNAN & STOVE: BLANK CAP WITH CHAIN

Material	Brass
Seal	oil and petrol resistant

SIZE	Ø A = mm
DN 1½"	61
DN 2"	68
DN 2½"	84

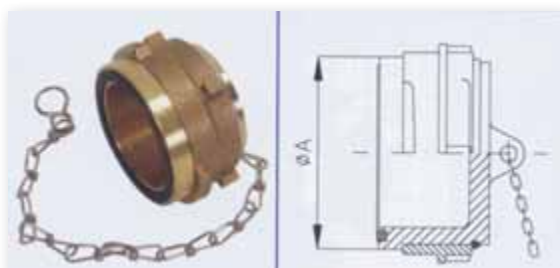


Delivery hose couplings – male/female

FRENCH/GUILLEMIN: DELIVERY HOSE COUPLINGS – MALE/FEMALE

Material	Gunmetal (GM) Brass
Seal	oil and petrol resistant

SIZE	MATERIAL	Ø A = mm	Ø B = mm	L = mm
DN 40	brass	55	38	64
DN 40	GM	55	44	64
DN 40	BZ	69	50	45
DN 40	GM	55	38	64
DN 50	LA	69	50	45
DN 50	brass	69	50	45
DN 65	GM	84	52	70
DN 65	GM	84	64	70
DN 65	GM	84	70	70



Blank caps with chain, with locking

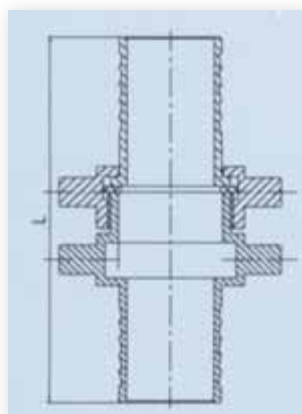
FRENCH/GUILLEMIN: BLANK CAPS WITH CHAIN, WITH LOCKING

Material	Gunmetal (GM) Brass
Seal	oil and petrol resistant

SIZE	MATERIAL	Ø A = mm
DN 40	BZ	55
DN 40	GM	55
DN 50	brass	69
DN 65	GM	84

FIRE FIGHTING EQUIPMENT

International Shore Connection



Delivery hose coupling

IMPA Code: 33 08 65/66

Approvals: CCS

USA-ANSI: DELIVERY HOSE COUPLING

Material Brass

TYPE	L (mm)
KX40B	162
KX65	230



International shore connection without coupling

IMPA Code: 33 08

INTERNATIONAL SHORE CONNECTION
WITHOUT COUPLING

- Brass
- DN40, DN50, DN60



International shore connection with Storz coupling

IMPA Code: 33 08

INTERNATIONAL SHORE CONNECTION
WITH STORZ COUPLING

- Coupling: brass

ANSI Couplings and Caps



Sealing for international shore connection



Bolts and nuts for international shore connection



International shore connection box



Coupling spanner Storz



Coupling spanner Nakajima

IMPA Code: 33 08

SEALING FOR INTERNATIONAL SHORE CONNECTION

BOLTS AND NUTS FOR INTERNATIONAL SHORE CONNECTION

- Brass
- 4 x M16 bolts with nuts and 8 washers

INTERNATIONAL SHORE CONNECTION BOX

Dimensions	210 x 210 x 180
Material	Fibreglass

COUPLING SPANNER STORZ

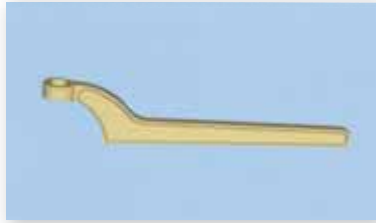
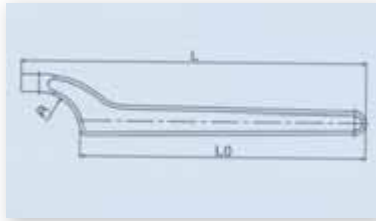
- Brass

COUPLING SPANNER NAKAJIMA

- DN40, DN50, DN65

FIRE FIGHTING EQUIPMENT

Fire Hydrants



Coupling spanner Nakajima DN 50

IMPA Code: NA

COUPLING SPANNER ANSI

Material Brass

TYPE	L0 (mm)	L (mm)	R (mm)
UB40	192	232	28
UB65	192	250	44



F Type spanner

IMPA Code: 61 59 40-47

FIRE HYDRANT WHEEL SPANNER F TYPE

Material Brass

SIZE	LENGTH
1 1/4"	300mm
1 1/2"	450mm



Fire hydrant spanner

IMPA Code: 61 12 31/32

FIRE HYDRANT SPANNER



Universal fire hydrant spanner

IMPA Code: 61 12 31/32

UNIVERSAL FIRE HYDRANT SPANNER



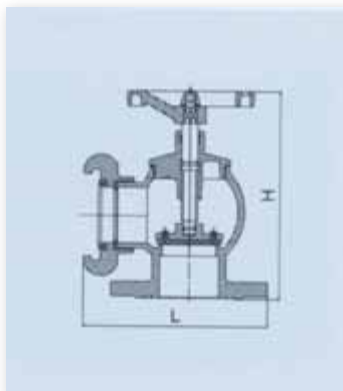
Fire hydrant

IMPA Code: 75 60

Approvals: CCS

FIRE HYDRANT STRAIGHT

Structure style	Straight / 180 degrees
Inlet	Flange / Screw thread
Material	Brass



Fire hydrant 90°

IMPA Code: 75 60

Approvals: CCS

FIRE HYDRANT ANGLED

Structure style	90 degrees
Inlet	Flange / Screw thread
Material	Brass

LIFERAFTS AND LIFEBOATS

- Liferrafts
- Lifeboats/Rescue Boats
- Davits
- Limit switch/Quick Release/HRUs
- Accessories for liferafts and lifeboats

Liferafts



TOKUGAWA LIFERAFTS

All Tokugawa liferafts – throwoverboard, davit launch and open reversible types - have been certified according to the latest 2012 IMO regulations, European Commission (EC) and German Lloyd's (GL).

Quality control in the manufacturing process and the use of quality emergency equipment ensures that TOKUGAWA liferafts are of good value in the competitive global market.

Our liferaft ranges from 6 men to 65 men.

Features:

- Liferaft emergency A Pack comply to SOLAS and flag requirements
- Galvanized cradle
- Hammer H₂O Hydrostatic release unit for automatic inflation
- Wire lashing
- Standard accessories
- Rigid container

WORLDWIDE SERVICE STATIONS

Our global network of authorised service stations:

China, India, Singapore, Malaysia, Vietnam, Philippines, Indonesia, Korea, South Africa, Mexico, Greece, Turkey, USA



DLR-A-10



DLR-A-15



DLR-A-20



DLR-A-16



DLR-A-25



IMPA Code: 33 01 01 - 33 01 05

Approvals: EC/GL/SOLAS

New IMO requirements into force on 1st January 2012

CONVENTION	REFERENCE	SUMMARY	ORIGIN
LSA Code	Ch 4	Carrying capacity of Rigid and Inflatable Liferafts to be calculated with an average mass of 82.5kg (Instead of 72kg previously).	MSC 293(87)
Res MSC.81(70)	Parts 1 & 2	Testing of LSA = Carrying capacity of prototypes to be calculated with an average mass of 82.5kg (instead of 72kg previously).	MSC 293(87)

LIFERAFTS AND LIFEBOATS

Liferafts

TOKUGAWA THROW OVER-BOARD INFLATABLE LIFERAFT

MODEL	CAPACITY	LENGTH mm	WIDTH mm	HEIGHT mm	WEIGHT kg	CONTAINER SIZE (Ø x mm)	
						C	D
CHF/DLR-A-6	6	2175	2175	1250	≤ 100	610x1100	550x1100
CHF/DLR-A-10	10	2295	3260	1300	≤ 130	685x1150	550x1100
CHF/DLR-A-15	15	2670	4070	1350	≤ 165	700x1300	660x1100
CHF/DLR-A-16	16	2700	4130	1350	≤ 175	700x1300	660x1100
CHF/DLR-A-20	20	3000	4600	1570	≤ 195	740x1500	720x1100
CHF/DLR-A-25	25	3325	5095	1650	≤ 215	740x1500	720x1100

TOKUGAWA DLR-D TYPE DAVIT-LAUNCHED INFLATABLE LIFERAFT

MODEL	CAPACITY	WEIGHT kg
DLR-D12	12	140
DLR-D15	15	170
DLR-D16	16	180
DLR-D20	20	200
DLR-D25	25	240

TOKUGAWA DLR-K TYPE OPEN REVERSIBLE INFLATABLE LIFERAFT

• HSC PACK

MODEL	CAPACITY	WEIGHT kg
DLR-K20	20	106
DLR-K30	30	127
DLR-K50	50	186
DLR-K65	65	225



EC Certificate Type Examination (Module B)



This is to certify that:

Germanischer Lloyd, a Notified Body under the terms of the Marine Equipment Directive 96/98/EC of 20 December 1996, did undertake the relevant type approval procedures for the equipment identified below which was found to be in compliance with the requirements of Marine Equipment Directive (MED) 96/98/EC as amended, subject to any conditions in the schedule attached hereto.

Certificate No.	36 855 - 11 HH
Applicant	Shanghai Cunhong Marine Lifesaving Appliance Co., Ltd. No. 60 GuYue Road, Tangwai Community, FenCheng Town, FengYian District Shanghai 201408, P.R. CHINA
Manufacturer	Shanghai Cunhong Marine Lifesaving Appliance Co., Ltd. No. 60 GuYue Road, Tangwai Community, FenCheng Town, FengYian District Shanghai 201408, P.R. CHINA
Product Description	Inflatable liferafts, CHF(DLR), throw-over-board type SOLAS A and B Pack
Product Name	CHF (DLR)-A6, -A10, -A12, -A15, -A16, -A20, -A25
Trade Name	CUNHONG, TOKUGAWA
Specified Standards	SOLAS 74/78 Reg.III/4, 13, 21, 26, 31 and 34, X/3 MSC.48(66) LSA Code I, IV, MSC/Circ.811 MSC.207(81), MSC.218(82), MSC.226(82), MSC.293(87), MSC.295(87), MSC.36(63)- (1994 HSC Code) 8, MSC.97(73)-(2000 HSC Code) 8, IMO Res.MSC 81(70)
Related Directive	2010/68/EC
Equipment Section	Life-saving appliances
Annex A.1 Item No.	A.1/1.12

Date of Issue 2012-01-02
Expiry Date 2017-01-01

Germanischer Lloyd

Notified Body No.: 0098

Page 1 of 3



Nils Wegener

LIFERAFTS AND LIFEBOATS

Liferafts



IMPA Code: 33 01 01 - 33 01 05

Approvals: EC/GL/CCS/SOLAS KHA type throw over board inflatable liferafts

YOULONG KHA TYPE THROW OVER BOARD INFLATABLE LIFERAFTS

	TYPE								
NAME	KHA-6	KHA-8	KHA-10	KHA-12	KHA-15	KHA-16	KHA-20	KHA-25	KHA-30
CAPACITY (PERS)	6	8	10	12	15	16	20	25	30
PACKING DIMENSIONS (mm)	ø 545 x 1045	ø 545 x 1045	ø 615 x 1095	ø 615 x 1095	ø 670 x 1135	ø 670 x 1135	ø 690 x 1285	ø 720 x 1450	ø 720 x 1450
TOTAL WEIGHT ≤ kg	75	85	98	109	127	135	155	170	185



IMPA Code: 33 01 01

Approvals: EC/GL/CCS/SOLAS

YOULONG KHD TYPE DAVIT-LAUNCHED INFLATABLE LIFERAFTS

	TYPE				
NAME	KHD-12	KHD-15	KHD-16	KHD-20	KHD-25
CAPACITY (PERS)	12	15	16	20	25
PACKING DIMENSIONS (mm)	ø 695 x 1285	ø 695 x 1285	ø 695 x 1285	ø 785 x 1390	ø 785 x 1390
TOTAL WEIGHT ≤ kg	125	138	140	160	185

KHD type davit-launched inflatable liferafts

IMPA Code: 33 01 01

Approvals: EC/GL/CCS/SOLAS



KHZ type self righting inflatable liferafts

YOULONG KHZ TYPE SELF RIGHTING INFLATABLE LIFERAFTS

	TYPE								
NAME	KHZ-6	KHZ-10	KHZ-15	KHZ-20	KHZ-25	KHZ-50	KHZ-100	KHZ-110	KHZ-125
CAPACITY (PERS)	6	10	15	20	25	50	100	110	125
PACKING DIMENSIONS (mm)	ø 615 x 1095	ø 670 x 1135	ø 690 x 1285	ø 720 x 1450	ø 735 x 1495	ø 895 x 2095	ø 1050 x 2400	ø 1050 x 2400	ø 1050 x 2400
TOTAL WEIGHT ≤ kg	87	109	131	180	205	350	800	860	920

IMPA Code: 33 01 01

Approvals: EC/GL/CCS/SOLAS



KHZ type open reversible inflatable liferafts

YOULONG KHK TYPE OPEN REVERSIBLE INFLATABLE LIFERAFTS

	TYPE							
NAME	KHK-6	KHK-10	KHK-25	KHK-30	KHK-50	KHK-65	KHK(HK)-72	KHK(HK)-72*2
CAPACITY (PERS)	6	10	25	30	50	65	72	72*2
PACKING DIMENSIONS (mm)	ø 520 x 1000	ø 545 x 1045	ø 615 x 1095	ø 615 x 1095	ø 720 x 1450	ø 720 x 1450	ø 680 x 1320	ø 792 x 1700
TOTAL WEIGHT ≤ kg	40	60	88	100	140	170	165	300

LIFERAFTS AND LIFEBOATS

Liferafts / Lifeboats



KHY type inflatable leisure liferafts

IMPA Code: NA

Approvals: EC/GL/CCS/SOLAS

YOULONG KHY TYPE INFLATABLE LEISURE LIFERAFTS

		TYPE				
NAME		KHY-4	KHY-6	KHY-8	KHY-10	KHY-12
CAPACITY (PERS)		4	6	8	10	12
PACKING DIMENSIONS (mm)	Valise	ø 360 x 710	ø410 x 720	ø 410 x 720	ø 410 x 820	ø 440 x 870
	Container	760 x 485 x 360	765 x 530 x 370	765 x 545 x 380	815 x 560 x 390	915 x 560 x 370
TOTAL WEIGHT ≤ kg	Valise	32	38	41	47	49
	Container	36	45	50	55	58

Lifeboats / Rescue boats



Totally enclosed lifeboat/rescue boat

IMPA Code: 33 01

Approvals: EC/BV/NK/ABS/GL

TOTALLY ENCLOSED LIFEBOAT / RESCUE BOAT

MODEL	DIMENSION (m)	PERSON	HOOK DISTANCE (m)	TOTAL HEIGHT (m)	TOTAL WEIGHT (kg)
JY50C/F	5.00 x 2.20 x 1.20	20	4.60	3.00	3702 / 3894
JY50CA/FA	5.00 x 2.20 x 1.20	30	4.60	3.00	4359 / 4679
JY57C/F	5.00 x 2.20 x 1.20	25	5.30	3.00	4180 / 4580
JY65C/F	6.50 x 2.30 x 1.20	36	6.10	3.10	5488 / 5768
JY70C/F	7.00 x 2.70 x 1.10	51	6.60	3.10	6876 / 7190

MODEL	DIMENSION (m)	PERSON	HOOK DISTANCE (m)	TOTAL HEIGHT (m)	TOTAL WEIGHT (kg)
JY80C/F	8.00 x 2.85 x 1.20	56	7.60	3.10	7230 / 7483
JY80CA/FA	8.00 x 2.85 x 1.20	72	7.60	3.10	8720 / 9060
JY85C/F	8.50 x 3.10 x 1.22	66	8.00	3.10	8526 / 8830
JY85CA/FA	8.50 x 3.15 x 1.20	85	8.10	3.10	10724 / 11066
JY93C/F	9.30 x 3.45 x 1.20	106	8.90	3.35	13000 / 13350
JY102C/F	10.28 x 3.50 x 1.30	130	8.95	3.35	14390 / 14800
JY117C/F	11.70 x 3.55 x 1.50	150	11.30	3.40	16390 / 16800

LIFERAFTS AND LIFEBOATS

Lifeboats / Rescue boats



Freefall lifeboat

IMPA Code: 33 01

Approvals: EC/BV/NK/ABS/GL

FREEFALL LIFEBOAT

CARGO SHIP

MODEL	LENGTH (m)	BREADTH (m)	HEIGHT (m)	LIGHT LOAD (kg)	FULL LOAD (kg)	PERSONS MAX
JY49CF	4.90	2.36	3.00	2610	4110	20
JY59CF	5.90	2.36	3.10	2770	4645	28
JY67CF	6.75	2.75	3.10	3715	6415	38
JY85CF	8.5	2.75	3.20	4415	8165	50
JY105CF	10.5	2.75	3.30	6750	11550	64

TANKERS

MODEL	LENGTH (m)	BREADTH (m)	HEIGHT (m)	LIGHT LOAD (kg)	FULL LOAD (kg)	PERSONS MAX
JY49FF	4.90	2.36	3.00	2950	4450	20
JY59FF	5.90	2.36	3.10	3108	4983	28
JY67FF	6.75	2.75	3.10	4015	6715	38
JY85FF	8.5	2.75	3.20	4755	8505	50
JY105FF	10.5	2.75	3.30	7100	11900	64



FRP rescue boat/fast rescue boat

IMPA Code: 33 01

Approvals: EC/BV/NK/ABS/GL

FRP RESCUE BOAT/FAST RESCUE BOAT

MODEL	DIMENSION (m)	PERSON	SPEED (KNOT)	TOTAL HEIGHT (m)	ENGINE
JY40KR	4.00 x 1.86 x 0.86	8/3	>6/>10	1185	25HP
JY45DR	4.50 x 1.70 x 0.75	8	>6	1437	28-30HP
JY45KR	4.50 x 1.86 x 0.86	6/3	>6/>10	1080	25HP
JY54KR	5.40 x 1.86 x 0.88	6/3	>6/>10	1250	25HP

MODEL	DIMENSION (m)	PERSON	SPEED (KNOT)	TOTAL HEIGHT (m)	ENGINE
JY60KR	6.00 x 2.20 x 1.05	15/3	>8/25	2260	60HP/75HP
JY65KR	6.50 x 2.20 x 1.05	15/3	>20/>25	2595	144-212HP

LIFERAFTS AND LIFEBOATS

Davits



Gravity luffing arm type davit

IMPA Code: 33 01

Approvals: EC/BV/NK/ABS/GL

GRAVITY LUFFING ARM TYPE DAVIT

MODEL	S.W.L	SUITABLE
JY-LE50	50	JY50CA
		JY50C/F JY57C/F
JY-LE65	70	JY65C/F
		JY70C/F
JY-LE85	90	JY70C/F
		JY80C/F
		JY80CA/F
JY-LE100	115	JY-85C/F
		JY85CA/FA
JY-LE150	155	JY93C/F
		JY102C/F



Single arm slewing boat/raft davit & crane

IMPA Code: 33 01

Approvals: EC/BV/NK/ABS/GL

SINGLE ARM SLEWING BOAT/RAFT DAVIT & CRANE

MODEL	S.W.L (K.N)	SUITABLE	MAX STEWING RESULTS
JY-SAF21	S.W.L 21KN 14kn for hoisting 14KN for slewing	Rescue Boat and life raft	≤ 5.4M
JY-SA23	S.W.L 23KN 14KN for hoisting 14KN for slewing 1.5T for Crane	Only for rescue boat	≤ 5M Crane: <7M
JY-SAF23		For rescue boat and liferaft	
JY-SAFC23		For rescue boat, life raft and crane	
JY-SA23S	S.W.L 23KN	Only for life raft	< 4.2M



Gravity rolling type davit

IMPA Code: 33 01

Approvals: EC/BV/NK/ABS/GL

GRAVITY ROLLING TYPE DAVIT

MODEL	S.W.L	SUITABLE
JY-RE65	65	JY50C/F
		JY50CA/FA
		JY57C/F
		JY65C/F
JY-RE85	85	JY70C/F
		JY80C/F
		JY80CA/F
JY-RE120	120	JY85C/F
		JY85CA/FA
JY-RE155	155	JY93C/F
		JY102C/F



Launching appliance for freefall lifeboat

IMPA Code: 33 01

Approvals: EC/BV/NK/ABS/GL

LAUNCHING APPLIANCE FOR FREEFALL LIFEBOAT



MODEL	S.W.L (K.N)	SUITABLE
JY-FH55	55	JY49CF/FF
		JY59CF/FF
JY-FH70	70	JY67CF/FF
JY-FH90	90	JY85CF/FF
JY-FH138	138	JY105CF/FF

LIFERAFTS AND LIFEBOATS

Limit Switch / Quick Release / Battery Charger / HRU



Limit switch

LIMIT SWITCH

- Davit, Winch limit switch



15kN quick release hook

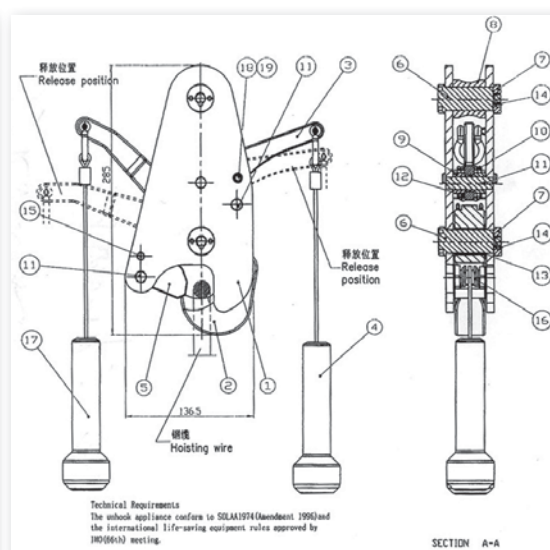
LIFEBOAT AND LIFERAFT QUICK RELEASE HOOK

Main Material

15kN, 35kN



35kN quick release hook





Lifeboat battery chargers

LIFEBOAT BATTERY CHARGERS

- 24V, 42V, 220V AC
- 2 x 12V, 2 x 5A DC
- IP56



Lifefloat

IMPA Code: 33 01 19

Approvals: CCS

LIFEFLOAT

Main Material	Outer-HDPE; Inner-Polyurathane Foam
Measurement	1500x980x2500mm
Thickness of Shell	1.5-2.8mm
Capacity	10 persons
Weight	≤ 40kg
Buoyancy	>220kg



JSQ-III

IMPA Code: 33 01 19

Approvals: CCS

HYDROSTATIC RELEASE UNITS

Model	JSQ-III
Material	Stainless Steel
Release Depth	2~4m
Breaking Strength	2.2 ± 0.4KN

LIFERAFTS AND LIFEBOATS

Accessories for Liferafts and Lifeboats



Hammar H₂O

IMPA Code: 33 01 19

Approvals: MED

HAMMAR (SWEDEN) HYDROSTATIC RELEASE UNIT

- for liferaft
- for EPIRB



Single cradle

IMPA Code: 33 01 09/10,
33 01 61/62/63/64/65

LIFERAFT CRADLES

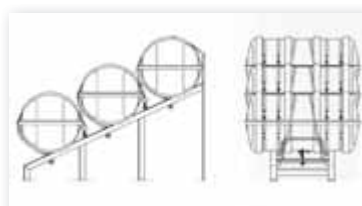
- Deck cradle
- Single cradle
- Column cradle
- Double cradle
- Triple cradle
- Customisation available upon request



Liferaft bracket (inclining)



Column cradle and double cradle



Triple cradle



Bravo liferaft pump

BRAVO LIFERAFT PUMP

- Strong resistant plastic
- Coloured PVC bellows
- 3 types of connection nozzles



Food ration

IMPA Code: 33 02 23

Approvals: SOLAS/USCG

SOS (USA) FOOD RATION

- Complies with Halal and Vegetarian requirements
- Each packet provides 2,400 kcal (10,000kJ) and contains 6 individually wrapped, fortified food bars of 400 kcal (1,667kJ)



Fresh water

IMPA Code: 33 02 26

Approvals: SOLAS/USCG

SOS (USA) FRESH WATER

- 125ml per packet
- Purified by reverse osmosis



Liferaft accessories

- Lashing belt / Wire PVC Coated
- Shackle
- Turnbuckle
- Weak link
- Pelican hook

LIFERAFTS AND LIFEBOATS

Accessories for Liferafts and Lifeboats



Painter line

PAINTER LINE

Length
twice distance from storage place to the water
line

Diameter of rope	ø22mm
End shackle size	ø22mm, Galvanized



Buoyant paddles

IMPA Code: 33 02 84

BUOYANT PADDLES



Radar reflector

IMPA Code: 33 01 90

Approvals: CCS

RADAR REFLECTOR



Fishing tackle

IMPA Code: 33 02 54

FISHING TACKLE



Wind proof match

IMPA Code: 33 02 07

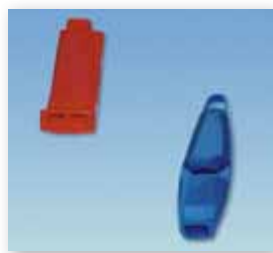
WIND PROOF MATCH



Buoyant Rescue Quoit & line

IMPA Code: 33 02 12

BUOYANT RESCUE QUOIT & LINE



Whistle

IMPA Code: 33 02 52

WHISTLE



Jack knife

IMPA Code: 33 02 50

JACK KNIFE



Daylight signal mirror

IMPA Code: 33 02 71

DAYLIGHT SIGNALLING MIRROR



Outrigger thole

IMPA Code: 33 02 02

OUTRIGGER THOLE

LIFERAFTS AND LIFEBOATS

Accessories for Liferafts and Lifeboats



Can opener

IMPA Code: 33 02 49

CAN OPENER



Hatchet

IMPA Code: 33 02 03

HATCHET

Steel hatchet for lifeboats with wooden handle



Survival manual

Approvals: EC/GL

SURVIVAL MANUAL



Manual Bilge pump

IMPA Code: 33 02 80

MANUAL BILGE PUMP

Capacity up to 43lt, long shaft



Oil lamp

IMPA Code: 33 02 05

OIL LAMP



Plastic bailer

IMPA Code: 33 02 01

PLASTIC BAILER



Sea anchor

IMPA Code: 33 02 16

Approvals: NA

SEA ANCHOR



Seasick pills

SEASICK PILLS



Signal tables

IMPA Code: 33 02 18

SIGNAL TABLES

LIFERAFTS AND LIFEBOATS

Accessories for Liferafts and Lifeboats



Morse signalling torch

IMPA Code: 33 02 61

MORSE SIGNALLING TORCH

Rubber insulated, waterproof



Flash light

IMPA Code: 33 02 64

FLASH LIGHT

Searchlight



Battery with FRP box

BATTERY

24V battery in FRP box for lifeboat searchlight



Drinking Vessel

IMPA Code: 33 02 42

DRINKING VESSEL



Buoyant Handle Knife

IMPA Code: 33 02 49

BUOYANT HANDLE KNIFE

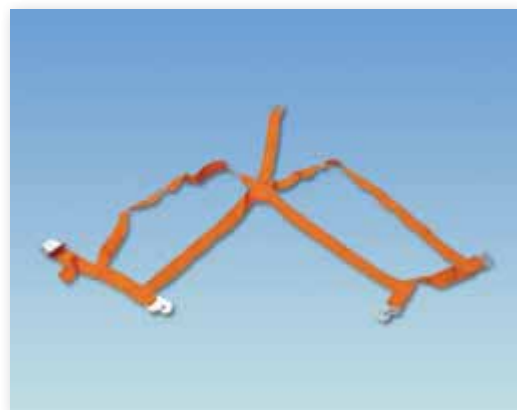
IMPA Code: 33 11 04

LIFEBOAT SEAT BELT TWO/THREE/FOUR KNOTS TYPE

Strength	150kg
Band	Polypropylene width 4.0cm
Material	Aluminium alloy and stainless steel
Colour	Orange, blue, black, red



Two knot type



Three knot type



Four knot type

NAVIGATION AND NAUTICAL EQUIPMENT

- Day Signal
- Marine clock/Chronometer/Marine tide clock/
Radio room clock
- Barometer/Barothermometer/
Clinometer/Barograph
- Chronometer/Compasses
- Reflector compass
- Clearview screen/Binoculars/Sextant
- Wind speed indicator/Wind sock/Thermometer
- Digital thickness meter/Salinometer/
Sampling bottle
- Ship bell and bracket/Gong/Charting set

Day Signal



Ball

IMPA Code: 37 05 81

BALL

Diameter 600mm / 300mm



Cylinder

IMPA Code: 37 05 82

CYLINDER

Diameter 600x1200mm

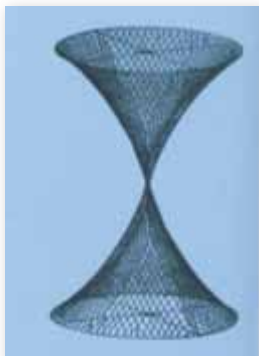


Conical

IMPA Code: 37 05 83

CONICAL

Diameter 600mm



Double Cone

IMPA Code: 37 05 84

DOUBLE CONE

Diameter 600x1200mm



Diamond

IMPA Code: 37 05 85

DIAMOND

Diameter 600x1200mm

Marine Clock / Chronometer / Marine Tide Clock / Radio Room Clock



Barigo Quartz Clock 587

BARIGO QUARTZ CLOCK 587

- Solid brass case
 - White dial Ø 150mm
-



Barigo 611

IMPA Code: 3702

BARIGO MARINE CLOCK 611

- Solid brass case 155 x 35mm
 - White dial Ø 130mm
-



Camon marine clock

CAMON MARINE CLOCK

- Stainless steel case
 - White dial Ø 250mm
-



Comfortmeter

IMPA Code: 37 02 56

CAMON COMFORTMETER

- Solid brass case
 - Dial Ø 140mm
-



Marine tide clock

IMPA Code: 37 02

MARINE TIDE CLOCK

- Solid brass case
 - Dial Ø 140mm
-



Camon radio room clock

IMPA Code: 37 02 01

CAMON RADIO ROOM CLOCK

- Solid brass case
 - Dial Ø 200mm
-

Barometer / Barothermometer / Clinometer / Barograph



111CR



111MS

IMPA Code: 37 02 46

BARIGO BAROMETER 111

- Solid brass case 155 x 35mm
 - White dial Ø 130mm
-



Camon barometer



IMPA Code: 37 02 46

CAMON BAROMETER

- Solid brass case
 - Dial Ø 140mm
-



Barigo Barometer/Thermometer 586

IMPA Code: 37 02 46

BARIGO BAROMETER/THERMOMETER 586

- Solid brass case Ø 180 x 70 mm
 - White dial Ø 150 mm
-



WOODEN/PLASTIC PENDULUM CLINOMETER

IMPA Code: NA

WOODEN/PLASTIC PENDULUM CLINOMETER



Barigo clinometer 911

IMPA Code: 37 02 41

BARIGO CLINOMETER 911

- Solid brass case Ø 155 x 35 mm,
- White dial Ø 130 mm



Camon double tube type

IMPA Code: 37 02 42

CAMON DOUBLE TUBE TYPE CLINOMETER



Heel indicator type clinometer

HEEL INDICATOR TYPE CLINOMETER

Heel Indicator consists of two bubble type spirit-filled glass tubes on 17" x 18" stainless steel graduated panel. Top tube is 0-20° each side of vertical in 1/4° divisions. Lower tube is 0-45° each side vertical in 1/2° divisions.



Barograph

IMPA Code: 37 02

BARIGO BAROGRAPH

With 8 diaphragm, case of mahogany and gold plated metal parts or matt mahogany case with black laquered metal parts, 300 x 170 x 180 mm

Chronometer / Compasses



Barigo 1220

IMPA Code: 37 02 07

BARIGO MARINE CHRONOMETER WITH BOX 1220

- Solid mahogany/brass, polished case 140 x 140mm
 - White dial Ø 100mm
-



Chronometer

IMPA Code: 37 02 07

Approvals: Mill Cert

WEMPE CHRONOMETER

- Solid mahogany case 155x155x75mm
 - Dial Ø 80mm
-



Handbearing compass

IRIS HANDBEARING COMPASS

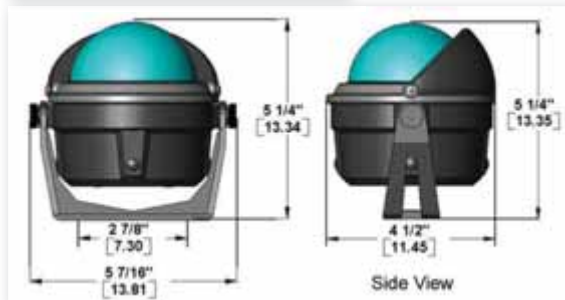
- Conical card with double reading (direct and horizontal)
 - Gimballed magnetic set: the card remains perfectly horizontal, whatever the angle of compass installation
 - 2 mobile lubber lines
 - Legendary plastimo pivot and hard stone guarantee accuracy and durability
 - Floats
-



Yu Qin compass

YU QIN COMPASS

Size 3", 2.5"



Approvals: EC/BV

RITCHIE (USA) B81 BRACKET MOUNT COMPASS

- 3" CombiDamp Dial
- Adjustable and removable with bracket and thumbscrews
- Exclusive built-in green night illumination
- Built-in compensators to easily adjust for deviation
- Scientifically matched sapphire jewel and hardened steel pivot dial movement
- Powerful directive force magnets for fast heading lock-on
- Movable sun shield
- High temperature composite construction for extended operating range
- Exclusive 5-Year Ritchie Warranty



Camon box compass

CAMON BOX COMPASS

- Bronze compass in wooden box
- Built in lighting
- Dial diameter: 150mm, 130mm, 100mm, 75mm



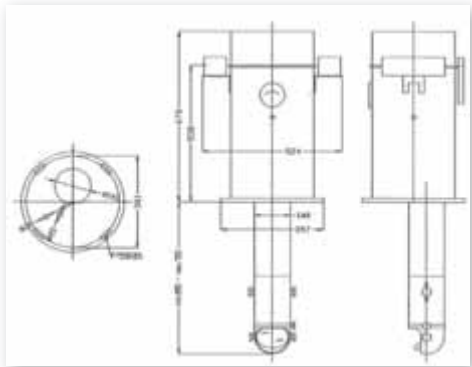
MR-150

IMPA Code: 37 25 51

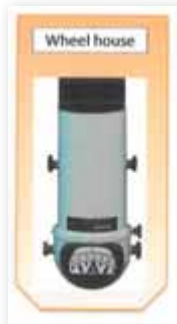
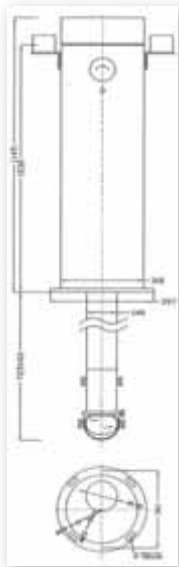
SAURA REFLECTOR COMPASS MR-150

Card	Card diameter 150mm/6in Graduated 000°~360°
Operating temperature range	-20°C~+60°C
Direction error	Within 0.5°
Fore-and-aft-marks	Provided
Bearing graduation	Provided
Periscope/optics	Length 650~720mm as standard
Power source	DC24V
Dimensions	495x360x1465(long) / 495x360x(short)
Weight	24kg

Reflector Compass



SR2-150 PK/PKK



SR2-165 PS/PSK

IMPA Code: 37 25 51

DAIKO REFLECTOR COMPASS

Model	SR2-150 PK/PKK SR2-165 PS/PSK
Accessories	Corrector plate Flinders bar Shadow pin Packing rubber Switch box
Spare Parts	Mirror Lamp(DC24V/10W) Cleaning cloth Anti-cloud oil



Sunstar (box type)



Table compass (export model)



P-100B



Azimuth circle

SUNSTAR (BOX TYPE)

MODEL	CARD Ø	BOX SIZE	WEIGHT
SSA2-75	3"	175x175x175	1.8kg
SSA2-100	4"	205x205x135	2.3kg
SSA2-130	5"	235x235x135	3.2kg
SSA2-150	6"	265x265x160	4.7kg
SSA2-165	6.5"	313x313x180	8.9kg
SSA2-180	7"	313x313x180	8.9kg
SSA2-200	8"	345x345x180	9.5kg

IMPA Code: 37 25 51

TABLE COMPASS (EXPORT MODEL)

- Each unit is provided with standard accessories
- Top-lighting, DC24V

MODEL	CARD	DIA. (mm)	A (mm)	B (mm)	C (mm)	W (kg)
T-100B	100	4"	320	390	145	5.1
T-130B	120	5"	350	420	175	5.6
T-150B	150	6"	320	450	205	6.8
T-165B	165	6.5"	385	485	235	9.4
T-180B	175	7"	385	485	235	9.4

LIFEBOAT COMPASS

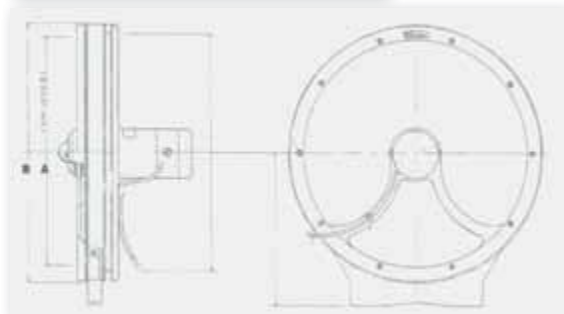
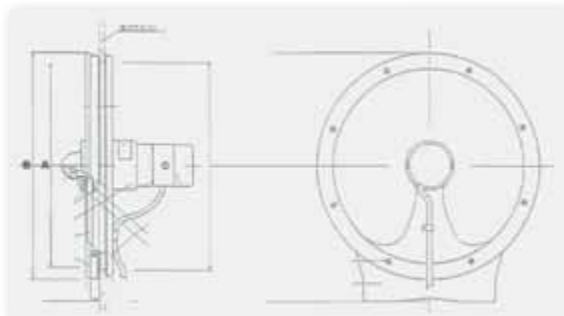
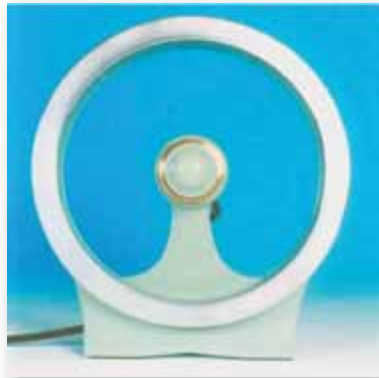
Model	P-100B
Card	100
Diameter	4"
Weight	2.6kg
Battery	1.5V DC (dry cell)

IMPA Code: 37 03 21

AZIMUTH CIRCLE

- Dial diameter: 247mm, 226mm

Clearview Screen / Binoculars / Sextant



IMPA Code: 37 20 16

Approvals: NA

DAIKO CLEARVIEW SCREEN

Model	DS-220
Visual screen diameter	220mm
Frame Diameter	265mm
Cut-out diameter	240mm
Min. glass thickness	5~8
Voltage	12V, 24V

Model	DS-250
Visual screen diameter	250mm
Frame Diameter	298mm
Cut-out diameter	270mm
Min. glass thickness	5~8
Voltage	12V, 24V, 100V, 220V

Model	DS-300
Visual screen diameter	300mm
Frame Diameter	349mm
Cut-out diameter	325mm
Min. glass thickness	5~8
Voltage	24V, 100V, 220V

Model	DS-350
Visual screen diameter	350mm
Frame Diameter	465mm
Cut-out diameter	375mm
Min. glass thickness	6~12
Voltage	24V, 100V, 220V



7X50 marine type



Night vision binoculars



Spectrum Binoculars



Marine Sextant

IMPA Code: 37 03 44

BUSHNELL (USA) 7X50 MARINE TYPE BINOCULARS

- BaK-4 porro prisms for bright, clear, crisp viewing
- Fully multi-coated optics for superior light transmission and brightness
- 100% waterproof / fogproof
- O-ring sealed and nitrogen-purged to keep out moisture
- Highly resistant to saltwater corrosion
- Non-slip, non-skid rubber armor cushions bumps and shock, prevents sliding and provides a firm grip when wet
- Hermetically sealed
- Fold-down eyecups

BUSHNELL (USA) NIGHT VISION BINOCULARS

Magnification X Obj Lens	2.5 x 42
Tripod Mount	Yes
Field of View (ft. / m)	94 / 31
Infrared Illuminator	Yes (Built-In)
Weight (oz/g)	28 / 794
Viewing Range (ft. / m)	4-600 / 1.2-183

IMPA Code: 37 03 42

SPECTRUM BINOCULARS

- Magnification x Objective lens diameter: 7x50
- Rubber coated

IMPA Code: 37 03 31

MARINE SEXTANT

TYPE	GLH130 – 20	GLH130 – 40
MEASURING RANGE	-5° ~ +130°	-5° ~ +130°
ACCURACY (PEAK-TO-PEAK VALUE)	20"	40"
FILTERS OF HORIZON GLASS	3	3
FILTERS OF INDEX MIRROR	4	4
BATTERY	2 x 1.5V	2 x 1.5V
NET WEIGHT	1.8kg bronze	1.2kg Al. alloy

Wind Speed Indicator / Wind Sock / Thermometer



Davis weather station



DAVIS (USA) WEATHER STATION

- Temperature and humidity sensors, anemometer and rain collector
- Includes windspeed and wind direction sensors
- Includes 30m cable for data transmission form integrates sensor suite to console

IMPA Code: 37 02 71

DEUTA PORTABLE HANDHELD ANEMOMETER

The handy wind gauge enables wind strength and speed to be measured.

- No power source
- Four scale ranges for different measurement units selectable (m/s, km/h, knots, Beaufort)
- Maintenance-free
- Simple to operate
- Internal thread for fixing to a stand



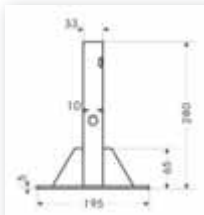
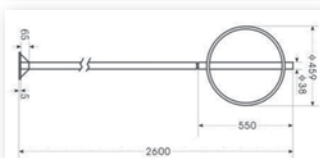
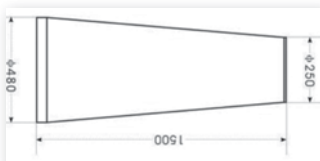
Portable handheld anemometer



IMPA Code: 37 02 71

ILLUMINATED WIND SOCK

- Silk nylon windsock, stainless steel rod and fittings
- Manually controlled light for illumination





Stevenson screen

CAMON STEVENSON SCREEN

- Dimension: 330 x 230 x 130mm
-



Camon Max & Min thermometer

CAMON MAX & MIN THERMOMETER

- -20 +50 degrees
 - Plastic 230 x 65mm
 - Push reset button
-



Camon seawater thermometer

IMPA Code: 65 17 10

CAMON SEAWATER THERMOMETER

- Copper/Plastic case
 - Dimension: 300 x 40 x 38mm
 - -30 +50 degrees
 - -5 +110 degrees
-



Test thermometer

IMPA Code: 65 17 25

TEST THERMOMETER

- Brass case
 - 0-500 degrees, 300mm
 - 0-500 degrees, 450mm
 - 0-100 degrees, 300mm
 - 32-212 Fahrenheit, 300mm
-

Digital Thickness Meter / Salinometer / Sampling Bottle



Digital thickness meter



Salinometer



Salinometer pot



Sampling Bottle



Infrared non-contact thermometer

DIGITAL THICKNESS METER

Range	1.5-00mm
Sound velocity	500-9000m/s
Accuracy	Approximately (0.5%n+0.1)

IMPA Code: 65 13 41

SALINOMETER

- Brass with chrome plated
 - 1.000 to 1.040 g/ml
-

IMPA Code: 65 13 86

SALINOMETER POT

- Copper with wooden handle
 - Glass
 - Plastic
-

IMPA Code: 65 13 71

SAMPLING BOTTLE – MOUTH COLLECTING TYPE

IMPA Code: 65 18 02

INFRARED NON-CONTACT THERMOMETER



Camon Wall mounted thermometer

IMPA Code: 65 17 01

CAMON WALL MOUNTED THERMOMETER

- Wooden/plastic case
 - -30 +50 degrees
 - -40 +50 degrees
-



Camon Wet & Dry Hygrometer

IMPA Code: 37 02 51

CAMON WET & DRY HYGROMETER



Dial Thermo-Hygrometer

IMPA Code: 37 02 56

CAMON DIAL THERMO-HYGROMETER

- Plastic case
 - White dial Ø 120mm
 - Bimetal thermometer -10+40 degrees
 - Hygrometer 0-100%RH
-



Camon whirling hygrometer

CAMON WHIRLING HYGROMETER

- Foldable type
 - -20 +50 degrees
 - Red alcohol filled
 - Dimension: 230 x 50mm
-

Ship Bell and Bracket / Gong



Bell

IMPA CODE	TYPE	DIAMETER	MATERIAL	MATERIAL OF STRIKER	APPROVALS
37 01	WZ-4	4" (100)	Brass	45# chrome plating	-
	WZ-6	6" (150)			
37 01 01	WZ-8	8" (200)			CSS
31 01	WZ-10	10" (250)			
31 01 02	WZ-12	12" (300)			

IMPA Code: 37 01 01 / 02

Approvals: CCS

SHIP BELL

Material HPb59-1

Sound pressure level $\geq 110\text{dB}$

* In accordance with the 1972 International Convention for Preventing Collisions at Sea



Bracket for ship bell

BRACKET FOR SHIP BELL

- Brass
- Dimension: 200mm, 300mm

Charting Set



Gong

Approvals: CCS

GONG

Diameter	ø404mm
Sound pressure level	≥110dB
Material	HPb59-1

* In accordance with the 1972 International Convention for Preventing Collisions at Sea



Camon chart brush

IMPA Code: 37 10 31

CAMON CHART BRUSH

- 320mm
-



Charting set

IMPA Code: 37 10

CHARTING SET

- Rolling ruler
 - Parallel ruler
 - Triangle protractor with handing
 - Circular protractor
 - Charting magnifying glass
 - Chart dividers with cap
 - Chart dividers fixed steel points
-

Ship Bell and Bracket / Gong / Charting Set



Straight pattern brass divider



Single handed divider



Chart weight

IMPA Code: 37 10 12 / 13

STRAIGHT PATTERN BRASS DIVIDER

SINGLE HANDED DIVIDER

IMPA Code: 37 10 21

CHART WEIGHT

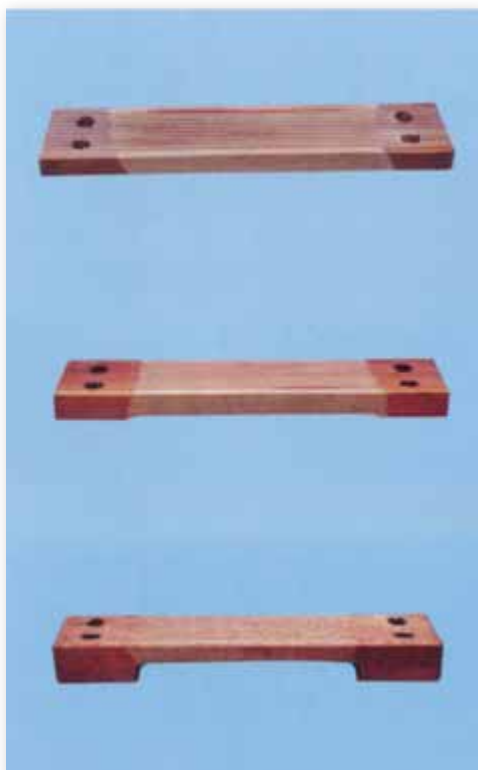
- Stainless steel 500 grams

DECK EQUIPMENT

- Embarkation ladder/Pilot ladder/
Sounding tape, lead and line
- Scupper plugs/Retro reflective tape/
Fire plan holder/Alcohol tester and
mouth pieces
- Heat detector/ Smoke detector testor/
Metal detector/Gas leak detector
- Fenders

DECK EQUIPMENT

Embarkation Ladder / Pilot Ladder / Sounding Tape, Lead and Line



Wood Step (Embarkation ladder)

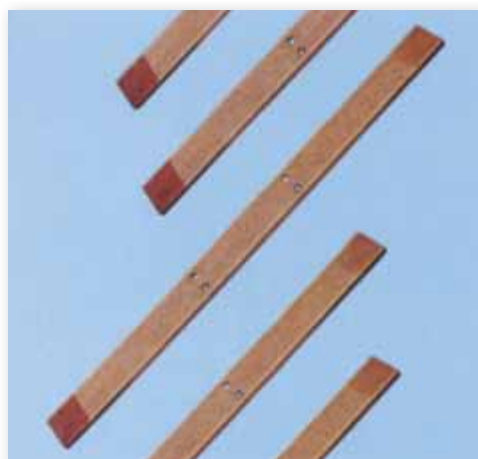
IMPA Code: 23 20

Approvals: EC/GL/CCS

WOOD STEP (EMBARKATION LADDER)

Material Wood

LENGTH = m	STEPS
4	12
5	15
6	18
7	21
8	24
9	27
10	30
11	33
12	36
13	39
14	42
15	45
16	48
17	51
18	54
19	57
20	60
21	63
22	66
23	69
24	72
25	75



Wood Step (Pilot ladder)

IMPA Code: 23 20

Approvals: EC/GL/CCS

WOOD STEP (PILOT LADDER)

Material Wood and rubber

LENGTH = m	WOODEN STEPS	SPREADER	RUBBER STEPS
2	4	1	1
3	6	1	2
4	8	2	2
5	11	2	2
6	13	2	3
7	16	2	3
8	18	3	3
9	21	3	3
10	23	3	4
11	26	3	4
12	28	4	4
13	32	4	4
14	34	4	4
15	36	5	4
16	38	5	4
17	40	6	5
18	43	6	5
19	46	6	5
20	49	6	5



Aluminum alloy step (Embarkation ladder)

ALUMINUM ALLOY STEP (EMBARKATION LADDER)

Material	Wood and Aluminum Alloy
----------	-------------------------



Rubber step

RUBBER STEP



Rope ladder

ROPE LADDER



IMPA Code: 37 03 01 / 02

SOUNDING TAPE, LEAD AND LINE

Material	Lead
Weight	3.2kg, 10kg, 12.7kg
Line	46mtr, 230mtr with marking



Sounding tape, lead and line

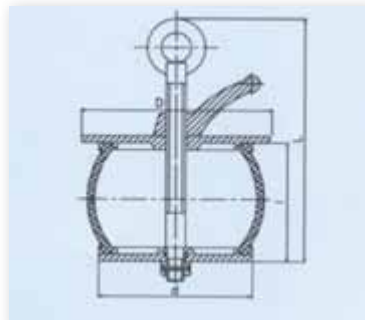
DECK EQUIPMENT

Scupper plugs / Retro reflective tape / Fire plan holder / Alcohol Tester and Mouthpieces



IMPA Code: 23 24 81

SCUPPER PLUG



IMPA CODE	TYPE	SIZE				WEIGHT (kg)	MATERIAL	APPLICABLE scupper size
		d	D	I	L			
23 24 81	PSKS-65	45	65	55	145	0.3	Brass	2" Sch-80
23 24 82	PSKS-75	52	75	55	145	0.4		2" SGP, Sch-40 2½" SGP, Sch-60, 80
23 24 83	PSKS-85	65	85	65	160	0.5		2½" SGP, Sch-40 3" SGP, Sch-40, , 60, 80
23 24 84	PSKS-110	85	110	65	160	0.6		4" Sch-60
23 24 85	PSKS-115	90	115	65	160	0.6		4" SGP, Sch-40, 80 5" Sch-60
23 24 86	PSKS-135	110	135	65	160	0.8		5" SGP, Sch-40, 80 6" Sch-60
23 24 87	PSKS-160	135	160	65	160	1.0		6" SGP, Sch-40, 80
23 24 88	PSKS-200	165	200	75	170	3.8		8" STPG-38, Sch-80, 160



Retro reflective tape

IMPA Code: 33 01 86
Approvals: EC/GL/SOLAS

RETRO REFLECTIVE TAPE

- SOLAS grade, silver
 - 3M (USA) 50mm x 45 mtr
 - JM (USA) 50mm x 50 mtr
-



Fire plan holder

IMPA Code: 33 26 11

FIRE PLAN HOLDER

Material	PVC tube
Length	750mm
Diameter	100mm



Alcohol tester AL6000

IMPA Code: 33 12 21
Approvals: DOT/USCG

ALCOMATE ALCOHOL TESTER AL6000

- No calibration required
- DOT Approved
(Accuracy +/-0.01 at 0.10% BAC)
- Easy one-button operation
- 3-Digit (.000%) LED display
- Active pressure sensor / Deep-lung Air sampling
- One-way-flow mouthpieces

Method of measure	Breath sample
Range	0.00% to 0.40%
Testing Capacity	Approx. 200 with new batteries



One-Way-Flow Mouthpieces

DECK EQUIPMENT

Heat Detector / Smoke Detector / Smoke Detector Tester / Metal Detector / Gas Leak Detector



Solo 424 heat detector

IMPA Code: 33 26 11

SOLO 424 HEAT DETECTOR

- Lightweight and portable
 - 1.13m long or up to 3 can be used to extend the Solo 100 telescopic pole
-



Smoke detector

IMPA Code: 33 10 73

SMOKE DETECTOR

- Robust – withstands the rigors of everyday use
 - Dispenser – conserves aerosol and accurate dispersion of aerosol particles
 - Spring-loaded mechanism – for effective, economic aerosol delivery
 - Touch sensitive – ideal for suspended ceilings
 - Clear cup – allows view of detector LED
-



Smoke detector tester

IMPA Code: 33 10 74

SMOKE DETECTOR TESTER

Smoke Detector Tester puts both photoelectric and ionization smoke detectors through their paces to ensure that the circuitry, alarm and power are functioning and that they are actively sampling the air for any hint of a fire.



Metal detector

SUPER SCANNER HANDHELD METAL DETECTOR

- Indicator: Visual red/green LED or sound
- Sensitivity control
- Vibrator button
- Power supply: 9V
- Accessories: Re-chargable battery and carrying case
- Battery charger



Gas leak detector

GAS LEAK DETECTOR

- For combustible gas leak
Ultimate sensitivity: 5ppm
- For refrigerant gas leak
Ultimate sensitivity: 0.5 ounce/year, SAEJ1627 stand level

DECK EQUIPMENT

Fenders



Manila rope fender

IMPA Code: 23 24 03

MANILA ROPE FENDER

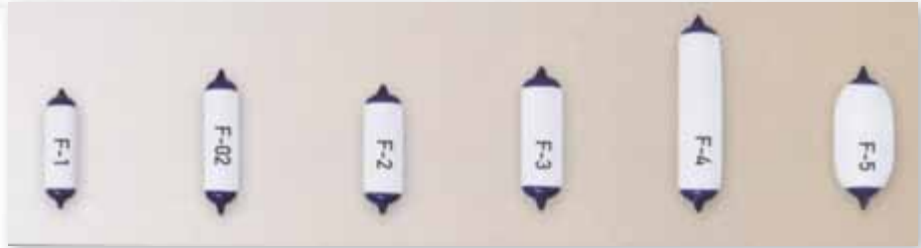
- Ball and cylinder shape
- Size: 450mm or made to order

A SERIES FENDERS



	A-0	A-1	A-2	A-3	A-4	A-5	A-6	A-7
SIZE (diameter x length)	9" x 11.5" 23 x 29cm	11.5" x 14.5" 29 x 37cm	15.5" x 19.5" 39 x 49cm	18.5" x 23" 47 x 59cm	21.5" x 28" 55 x 71cm	27.5" x 30" 70 x 92cm	34.0" x 46.5" 86 x 118cm	41.4" x 54.4" 105 x 138cm
EYE DIAMETER	0.6" 1.6cm	1.0" 2.5cm	1.125" 2.8cm	1.125" 2.8cm	1.125" 2.8cm	1.25" 3.0cm	1.5" 3.8cm	2" 5.0cm
CIRCUMFERENCE	28.3" 72.2cm	36.1" 91.1cm	48.7" 122.5cm	58.1" 147.6cm	67.5" 172.2cm	86.4" 219.8cm	106.8" 270.0cm	130.0" 329.7cm
VOLUME (gallons/liters)	1.6 gals. 5.9l	3.5 gals. 13.2l	8.2 gals. 30.8l	14.5 gals. 54.9l	22.5 gals. 84.8l	47.6 gals. 179.6l	95.1 gals. 359.2l	161.6 gals. 610.1l
PIECES PER CARTON	20	10	10	10	10	5	3	2

F SERIES FENDERS



	F1	F-02	F-2	F-3	F-4	F-5
SIZE (diameter x length)	6" x 25" 15 x 64cm	8" x 27" 2 x 68cm	9" x 25" 22 x 64cm	9" x 30" 22 x 76cm	9" x 41" 22 x 104cm	12" x 30" 30 x 76cm
EYE DIAMETER	0.7" 1.8cm	0.7" 1.8cm	0.9" 2.2cm	0.9" 2.2cm	0.9" 2.2cm	1.0" 2.4cm
CIRCUMFERENCE	18.8" 47.1cm	25.1" 62.8cm	28.3" 69.1cm	28.3" 69.1cm	28.3" 69.1cm	37.7" 95.8cm
VOLUME (gallons/liters)	2.2 gal. 8.2l	3 gal. 11.3l	3.5 gal. 13.2l	5.3 gal. 20l	9.3 gal. 34.9l	11.9 gal. 44.9l
PIECES PER CARTON	10	10	6	10	5	5



	F-6	F-7	F-8	F-10	F-11	F-13
SIZE (diameter x length)	12" x 43" 30 x 109cm	15" x 41" 38 x 104cm	15" x 58" 38 x 147cm	18.5" x 50" 47 x 127cm	24" x 57" 60 x 145cm	32" x 77" 80 x 195cm
EYE DIAMETER	1.0" 2.4cm	1.0" 2.4cm	1.0" 2.4cm	1.0" 2.4cm	1.1" 2.7cm	1.2" 3.0cm
CIRCUMFERENCE	37.7" 95.8cm	47.1" 119.3cm	47.1" 119.3cm	58.1" 147.6cm	75.4" 188.4cm	100.5" 251.2cm
VOLUME (gallons/liters)	19.8 gal. 74.8l	25.1 gal. 94.8l	39.6 gal. 149.7l	40.8 gal. 154.2l	63.7 gal. 240.4l	158.8 gal. 598.7l
PIECES PER CARTON	5	5	4	2	3	2

COMMUNICATION / SEARCH & RESCUE ELECTRONICS

- EPIRB/EPIRB hydrostatic release
- SART/VHF Radio/MOB/Navtex/Horn

EPIRB / EPIRB hydrostatic release



GME EPIRB

IMPA Code: 37 25 11

Approvals: EC/BV/GMDSS

GME EPIRB

- MT403FF – auto release
 - MT403FG – auto release and inbuilt GPS
 - 406 MHz Homer/Strobe
-



IMPA Code: 37 25 01

Approvals: EC/GL/RUSSIAN REGISTER

EMERGENCY POSITION INDICATING RADIO BEACON (EPIRB) PRO-5

- Complies to 406 COSPAS-SARSAT, IMO, GMDSS, IEC 61097, IEC 60945
 - Lithium cells, 5 years battery life
 - High performance solid state strobe
 - Release automatically at 4m depth or manually
-



IMPA Code: 33 01 19 . 26

Approvals: EC/BV/USCG

HAMMAR H20-YSE FOR EPIRB

- Accessories**
- Bolt for H20
 - Nut M8 for bolt
 - Washer for bolt

Also available: Samyung, McMurdo, Saracom



H20-YSE and accessories

COMMUNICATION / SEARCH & RESCUE ELECTRONICS

Search & Rescue Transponder (SART) / VHF Radio

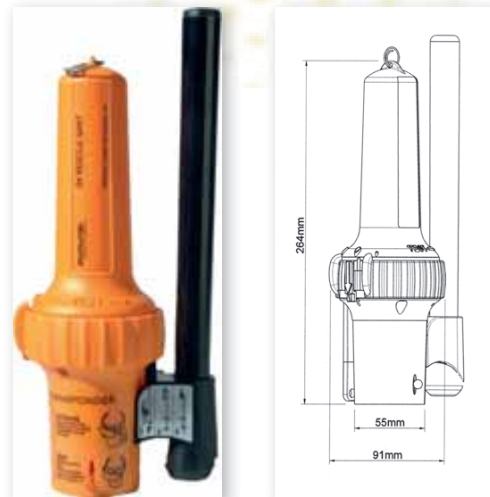


AIS SART HX5000

Approvals: CCS

AIS SART HX5000

- Tx Frequency : AIS1 161.975MHz; AIS2 162.025MHz
 - Power: 1W EIRP
 - Modulation: GMSK
 - Vertical Antenna
 - Lithium cell
 - 96H Operation
 - 3 years storage time
- Complies to IEC 61097-14, IEC 60945c(2002)
-



Mc Murdo SART S-4

MPA Code: 37 25 01

MPA Code: EC/MED/SOLAS

MCMURDO SART S-4



GMDSS R2

IMPA Code: 37 01
Approvals: EC/GL/SOLAS

MCMURDO GMDSS VHF RADIO R2

- 2.5 watts RF output
- 19 channels
- 100% waterproof
- Priority channel
- Approved SOLAS '74 to latest GMDSS, IMO, ETSI resolutions and conformity with the E.C. 96/98 directive (Ship's Wheel)



VHF radio

MPA Code: 37 01 33
MPA Code: CCS

VHF RADIO HX 1500

- Waterproof, dual frequency
 - 18 Channel
 - Tx frequency : 156.025MHz - 157.425MHz
 - +1/-3dB of +6dB/octave
- Complies to GMDSS, MSC 149 (77), 15304-94, IEC 61097-12, IEC 60945

COMMUNICATION / SEARCH & RESCUE ELECTRONICS

MOB / NAVTEX / Horn / BNWAS



DOLPHIN-600

IMPA Code: 33 28 11

Approvals: CE/FCC

MANOVRBOARD DOLPHIN-600 SYSTEM

- 2.4GHZ radio frequency to communicate between MOB Dolphin controller and maximise 99 Dolphin pendants within 30 meters at the same time
- Provides MOB viewer to monitor all pendants within coverage
- High beam LED on pendants
- High impact and UV resistant ABS material
- RF transmitter power: 1mW
- MOB Dolphin-600 system can be customised
- Can be linked to AIS transponder of same brand



Navtex Receiver HX2600

MPA Code: 37 25 06/07

Approvals: CCS

NAVTEX RECEIVER HX2600

- Dual Channel
- Frequency : 518MHz, 490KHz, 4209.50KHz
- Sensitivity : -107dBm signal level
- Display : 240 x 128 dot matrix, 144 x 104mm
- Storage : 200 messages
- Audible alarm

Complies to MSC 148(77), IEC 61097-6, IEC 60945 (2002)



Noburu electric horn SG-122

IMPA Code: 37 01

Approvals: NK

NOBURU (JAPAN) ELECTRIC HORN SG-122

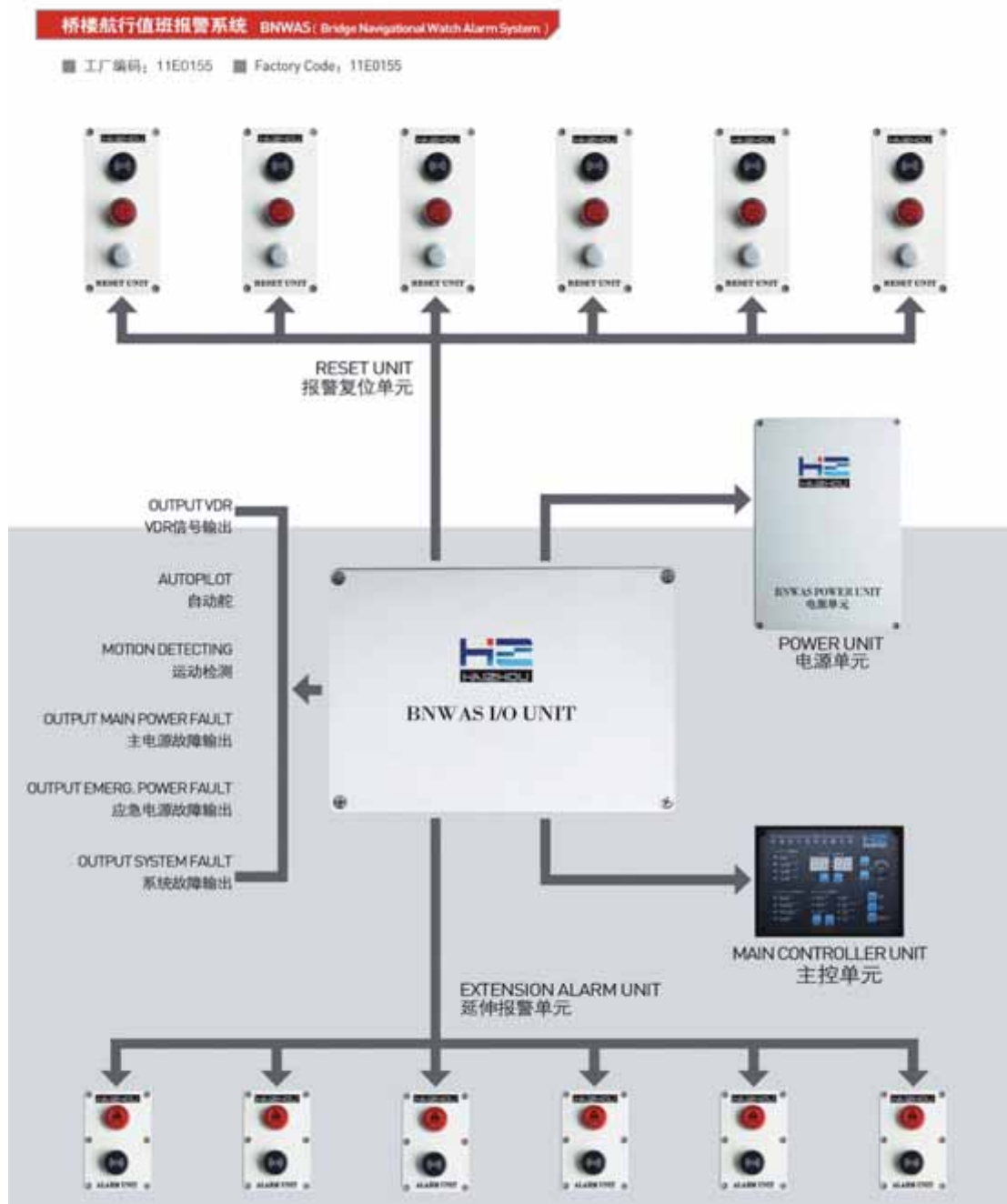
- For vessels length 20m or less
- Voltage range: DC23 to 30V
- Current: 1.2A approx
- Frequency : 650Hz
- Weather resistant
- Dimensions: 280 x 180mm,
- Approximate weight 2.8kg

Approvals: GL/DNV

BRIDGE NAVIGATION WATCH ALARM SYSTEM (BNWAS)

BNWAS monitors the watch officer's awareness and activity for early detection of emergency to minimise marine accidents. A series of alarms are transmitted to Master should watch officers fail to respond to emergency calls.

Our BNWAS model is designed and tested in compliance with the latest requirements of SOLAS Regulation 19, IMO and IEC standards, adopted in MSC 282(86).



SIGNALS AND LIGHTS

- Portable daylight signal
- Search lights
- Spot lights
- Explosion proof lights/Navigation lights
- Pendant/ceiling/wall and work lights
- Chart lamp/Water tight plug
- Marine socket/Marine watertight junction box and switch/AJ electrical key
- Flash light/Bulbs

Portable Daylight Signal



CXD 120



Telescope

FRP battery box

IMPA Code: 33 40 61

Approvals: CCS

PORTABLE DAYLIGHT-SIGNALLING LAMP CXD120

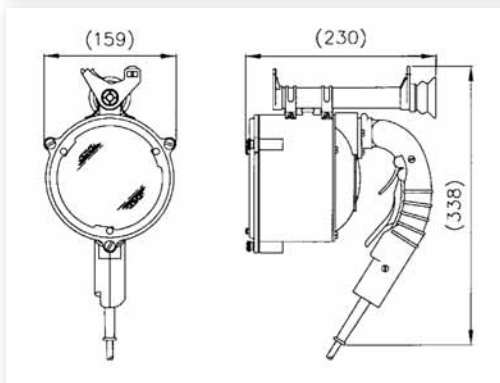
Voltage	24V
Lamp	24V/60W
Lamp holder	G6.35
Plug	P20K6Q
Telescope magnification	5
Light intensity	60000/cd
Light pillar angle	6"
Protection class	IP44
Weight	1.8kg

TELESCOPE

Magified multiple	5
Field lens	41mm
Weight	0.3kg

BATTERY BOX

Voltage	24V
Capability	7Ah
Weight	6.5kg



MK5

IMPA Code: 33 40 61

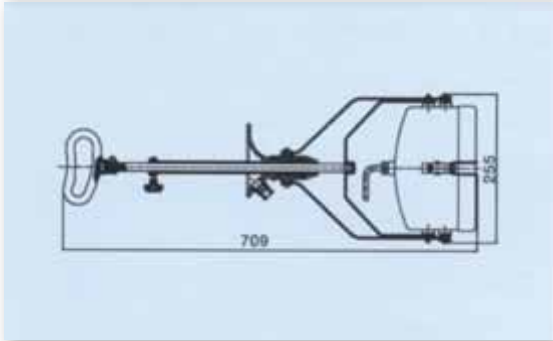
Approvals: BV

MK5 SIGNAL LAMP

- Weight 2.2kg
- Capable of maximum daylight signalling range of 8 miles
- Beam divergence of 5°
- Transmission rate of 12 words per minute
- Light reduction and colored filters provide control of light output as required
- 5.5 metres of supply cable
- All aluminum construction filled with a super purity aluminum parabolic reflector
- Tubular and V sights are fitted as standard
- Handle mounted switch
- Signals made by triggering the tubular shutter which interrupts the light from the reflector

SIGNALS AND LIGHTS

Search Lights

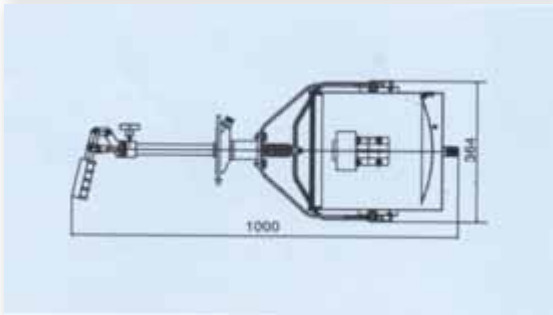


TD200

IMPA Code: 37 04 81

TD200

Max power	300W
Power & voltage	AC220~240V DC24V
Protection class	IP56
Light angle	6°
Light strength	≥500cd
Elevation	30°
Overlook angle	45°
Scope	≥180°
Weight	5 kg
Size	710 x 256 x 240mm



TD300

IMPA Code: 37 04 82

TD300

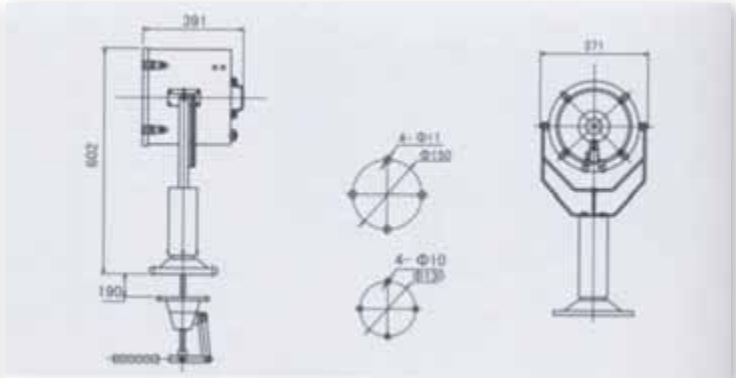
Max power	1000W
Power & voltage	AC240V AC115V
Protection class	IP65
Light angle	6°
Light strength	≥8x10 ⁵ cd
Elevation	30°
Overlook angle	45°
Scope	≥180°
Weight	15 kg
Size	1000 x 366 x 330mm

IMPA Code: 37 04 82

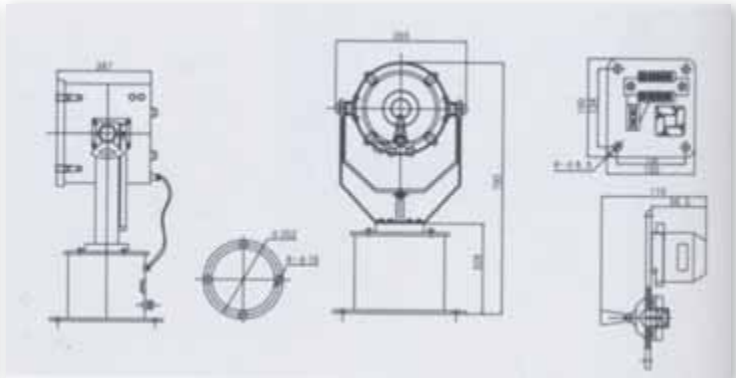
SEARCH LIGHTS



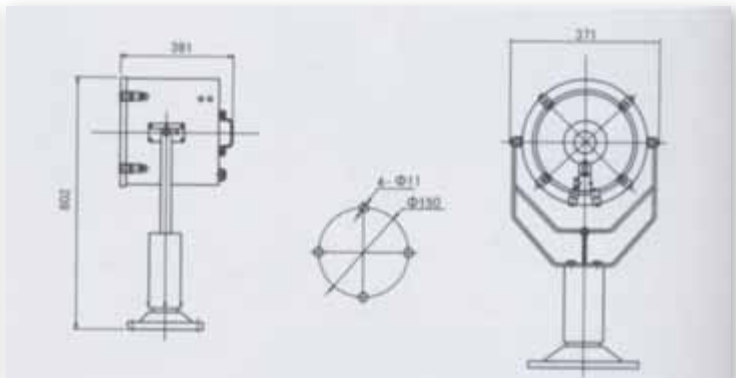
TG26, TG27



TG-26-A, TG27-A



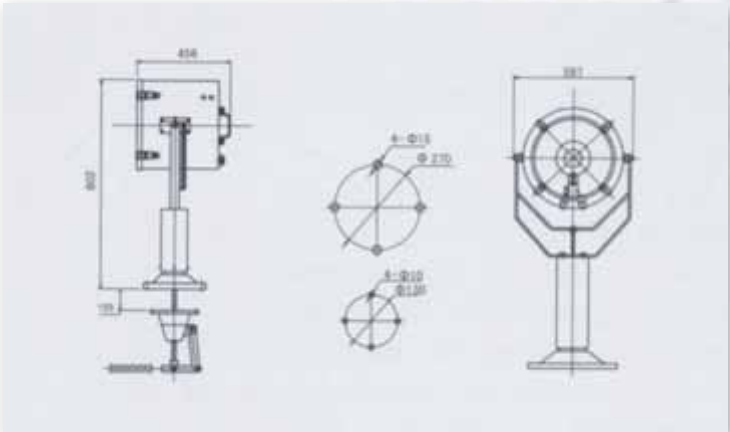
TG-26-B, TG27-B



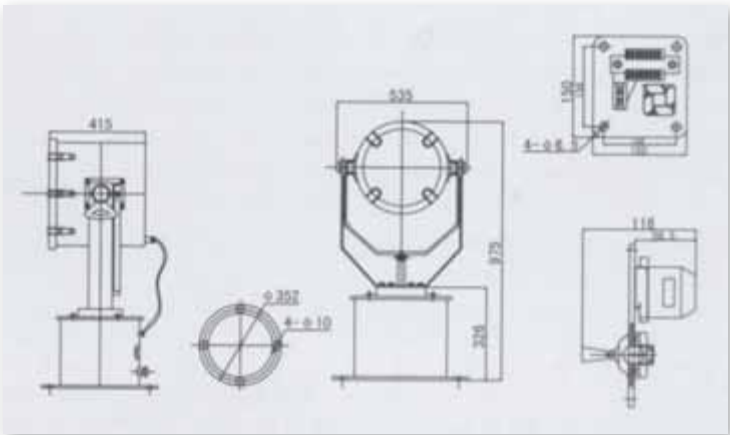
TYPE	VOLTAGE	POWER	LAMP HOLDER	ELECTRIC LIGHT SOURCE	m	LUMINOUS FLUX	WEIGHT	PROTECTION CLASS	
TG26	220V 50HZ/60HZ	300W	GY9.5	Tungsten halogen light	1175	6900	16.2kg	IP56	
		500W			1240	12500			
TG26-A		300W			1175	6900	18.5kg		
		500W			1240	12500			
TG26-B		300W			1175	6900	11.9kg		
		500W			1240	12500			
TG27		1000W				1550	23000		16.2kg
TG27-A									18.5kg
TG27-B									11.9kg

SIGNALS AND LIGHTS

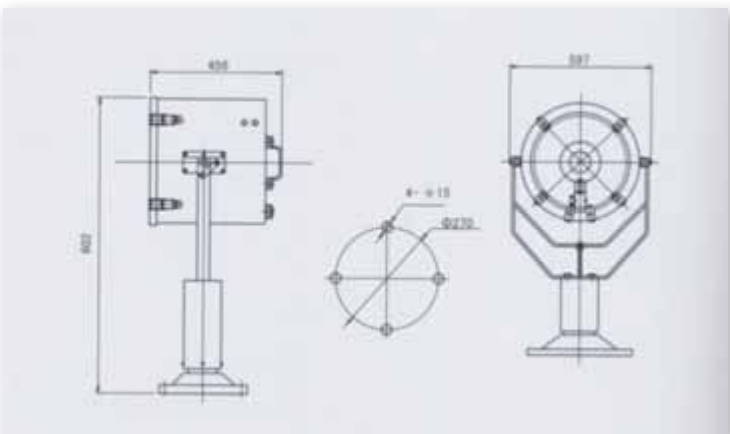
Search Lights / Spot Light



TG28

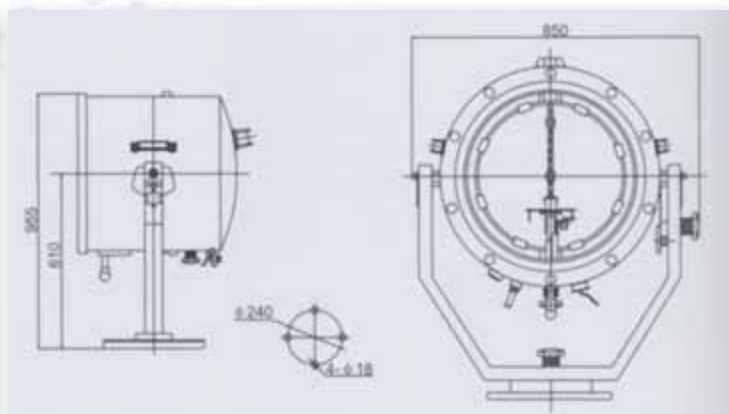


TG28-A



TG28-B

TYPE	VOLTAGE	POWER	LAMP HOLDER	ELECTRIC LIGHT SOURCE	m	LUMINOUS FLUX	WEIGHT	PROTECTION CLASS
TG27	220V 50HZ60HZ	2000W	GY16	Tungsten halogen light	2030	53000	33.7kg	IP56
TG27-A							27.4kg	
TG27-B							28.4kg	

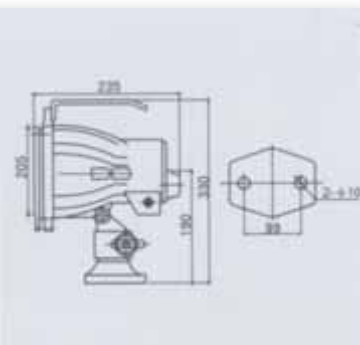


TGZ5 SUEZ Canal search light

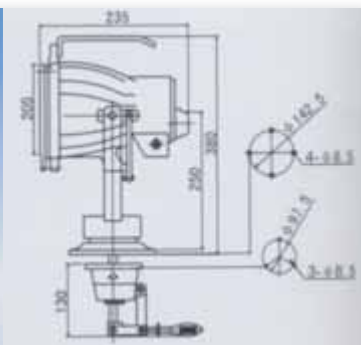
TYPE	VOLTAGE	POWER	ILLUMINANT	LAMP HOLDER	LUMINOUS FLUX	IRRADIATE DISTANCE	PROTECTION CLASS	CABLE OUTSIDE DISTANCE	WEIGHT
TZ5	200V/50HZ 200V/60HZ	2000W 3000W	Tungsten halogen light	GY16	53000lm 80000lm	>1800m	IP56	ø14 ~ ø16	29kg

IMPA Code: 37 04 82

SPOTLIGHT



TG8 spot light



TG9 spot light

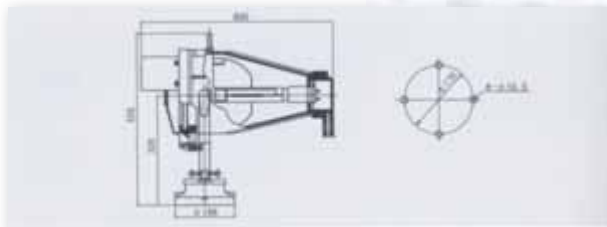
TYPE	POWER	VOLTAGE	WEIGHT	LAMP HOLDER	LUMINOUS FLUX	PROTECTION CLASS
TG8	100W/200W	12V/24V	5kg	G6.35	2000/4500	IP56
TG9	150W/200W	24V	9.5kg		2700/4500	

SIGNALS AND LIGHTS

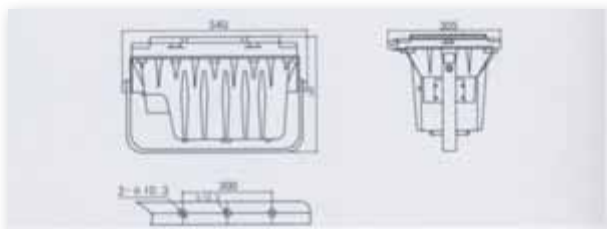
Explosion-proof Lights / Navigation Lights

IMPA Code: 37 04 82

EXPLOSION-PROOF SPOT LIGHT



CFT1



CFT2

TYPE	EXPLOSION-PROOF MARK	EXPLOSION-PROOF QUALITY CERTIFICATE NO.	VOLTAGE	POWER	LAMP HOLDER	WEIGHT
CFT1-500W	Exd II BT3	NLE06350	220V	500W	E40	15kg
CFT1-300W	Exd II BT4	NLE06319	220V	300W	E40	15kg
CFT2-400W	Exd II BT2	NLE06304	220V	400W	E40	19kg
CFT2-250W	Exd II BT3	NLE06320	220V	250W	E40	19kg



IMPA Code: 37 04 82

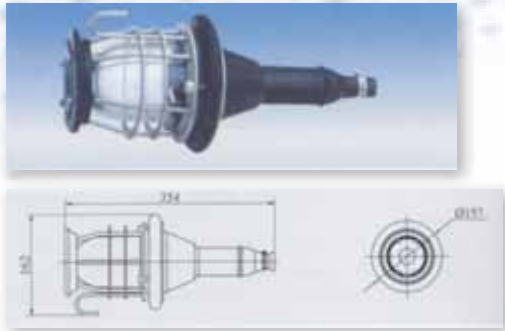
Approval: CCS

EXPLOSION-PROOF FLUORESCENT LIGHT

Complies to IEC92-306-1980

Operational in explosive zone 1 & 2 and temperature group T1 - T6

TYPE	EXPLOSION-PROOF MARK	EXPLOSION-PROOF QUALITY CERTIFICATE NO.	VOLTAGE	POWER	LAMP HOLDER	WEIGHT
CFT1-500W	Exd II BT3	NLE06350	220V	500W	E40	15kg
CFT1-300W	Exd II BT4	NLE06319	220V	300W	E40	15kg
CFT2-400W	Exd II BT2	NLE06304	220V	400W	E40	19kg
CFT2-250W	Exd II BT3	NLE06320	220V	250W	E40	19kg



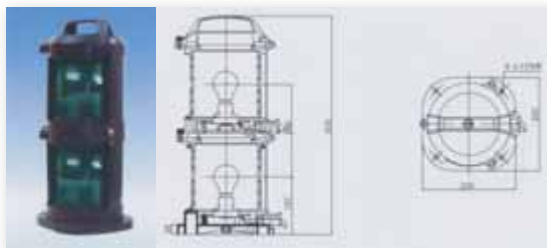
IMPA Code: 79 21 71

EXPLOSION-PROOF PORTABLE LIGHT

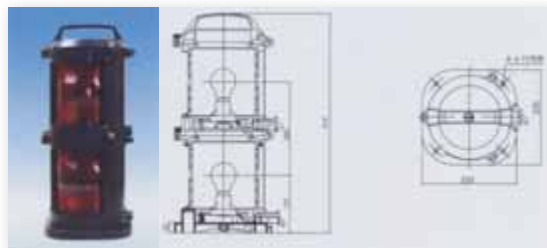
Protection Class	IP56
Voltage	220V/24V
Power	60W
Lamp Holder	E27
Cable specification	ø8
Explosion-proof class mark	Exed II AT2
Explosion -proof quality certificate number	NLE06306-X

IMPA Code: 37 04

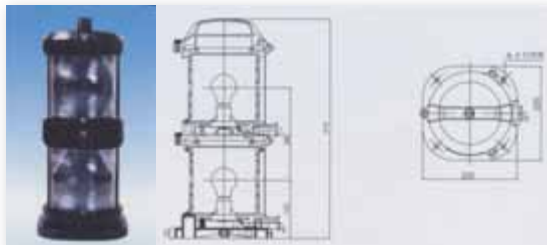
DOUBLE DECK NAVIGATION SIGNAL LIGHT



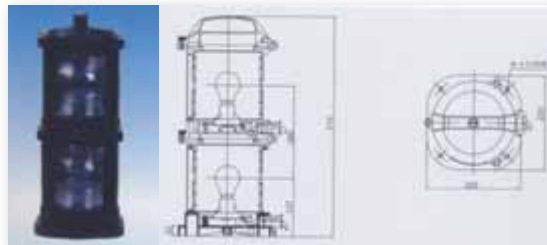
CXH1-10P Full-plastic double-deck starboard light



CXH2-10P Full-plastic double-deck port light



CXH3-10P Full-plastic double-deck masthead light



CXH4-10P Full-plastic double-deck stern light



CXH6-10P Full-plastic double-deck all-round light

TYPE	VISIBILITY	LEVEL ARC	LAMP HOLDER	BULB	PROTECTION CLASS	COLOR	WEIGHT
CXH1-10P	3n.m	112.5°	B22d	24V/60W 110V/60W 220V/65W	IP56	Green	3.8kg
CXH2-10P	3n.m	112.5°				Red	3.8kg
CXH3-10P	6n.m	225°				Transparent	3.7kg
CXH4-10P	3n.m	135°				Transparent, Yellow	3.7kg
CXH6-10P	3n.m	360°				Red, Green, Yellow	3.6kg

SIGNALS AND LIGHTS

Navigation Lights

IMPA Code: 37 04

NAVIGATIONAL SIGNAL LIGHT



CXH1-1P
Full-plastic starboard light



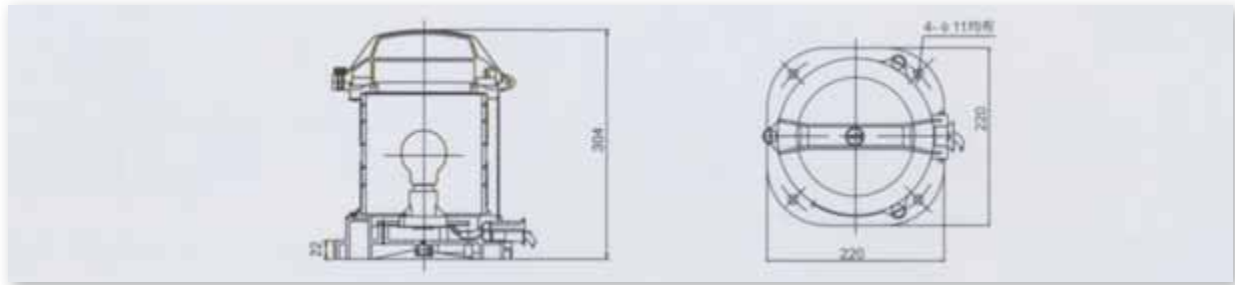
CXH2-1P
Full-plastic port light



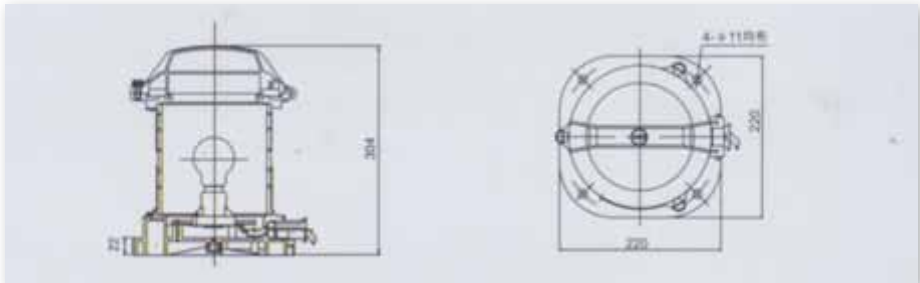
CXH3-1P
Full-plastic masthead light



CXH4-1P
Full-plastic stern light



CXH6-1P Full-plastic all-round light



TYPE	VISIBILITY	LEVEL ARC	LAMP HOLDER	BULB	PROTECTION CLASS	COLOR	WEIGHT
CXH1-1P	3n.m	112.5°	B22d	24V/60W 110V/60W 220V/65W	IP56	Green	2.6kg
CXH2-1P	3n.m	112.5°				Red	2.6kg
CXH3-1P	6n.m	225°				Transparent	2.5kg
CXH4-1P	3n.m	135°				Transparent, Yellow	2.7kg
CXH6-1P	3n.m	360°				Red, Green, Yellow	2.2kg

This lamp can be installed conveniently and its bulb can be replaced easily, the shell is made of engineering plastics which has the features of corrosion prevention and shock resistance, the lampshade adopts polycarbonate, it has the features of ultraviolet radiation resistance and does not discolor. Conform to IEC92-306-1980 standard.



CXH1-21P
Starboard light



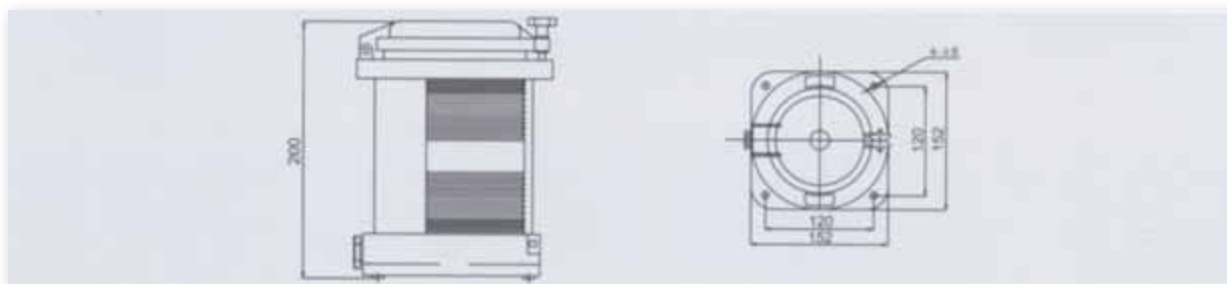
CXH2-21P
Port light



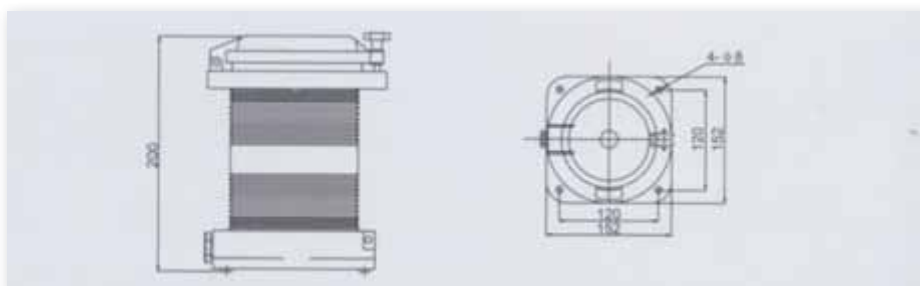
CXH3-21P
Masthead light



CXH4-21P
Stern light



CXH6-21P All-round light



TYPE	VISIBILITY	LEVEL ARC	LAMP HOLDER	BULB	PROTECTION CLASS	COLOR	WEIGHT
CXH1-21P	2n.m	112.5°	BAY15d	12V/25W 24V/25W	IP56	Green	2.6kg
CXH2-21P	2n.m	112.5°				Red	2.6kg
CXH3-21P	5n.m	225°				Transparent	2.5kg
CXH4-21P	2n.m	135°				Transparent, Yellow	2.7kg
CXH6-21P	2n.m	360°				Red, Green, Yellow	2.2kg

This lamp can be installed conveniently and its bulb can be replaced easily, the shell is made of engineering plastics which has the features of corrosion prevention and shock resistance, the lampshade adopts polycarbonate, it has the features of ultraviolet radiation resistance and does not discolor. Conform to IEC92-306-1980 standard.

SIGNALS AND LIGHTS

Navigation Lights



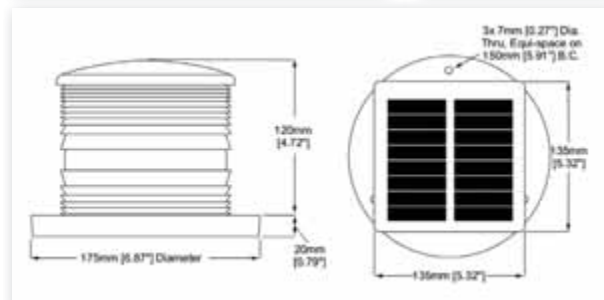
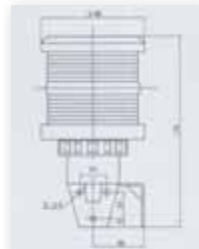
TM-70-SOLAR

NAVIGATION LIGHT 3.5NM LED SOLAR

Model	TM-70-SOLAR
Voltage	11V – 18V
Flash frequency	20 flashes per minute (adjustable)
Working environment	-40 degrees to +60 degrees
Range of light	(T=0.74) 3.5nm (Approximately 6.4km)
Lens	155mm high divergence Fresnel acrylic lens
Battery	12V/12AH – Maintenance free battery
External dimensions	360mm (L) x 280mm (W) x 530mm (H)
Installation dimensions	Flange diameter 180mm, PCD 150mm, 4 mounting holes of 11mm diameter
Available colours	Red Green Yellow White Blue

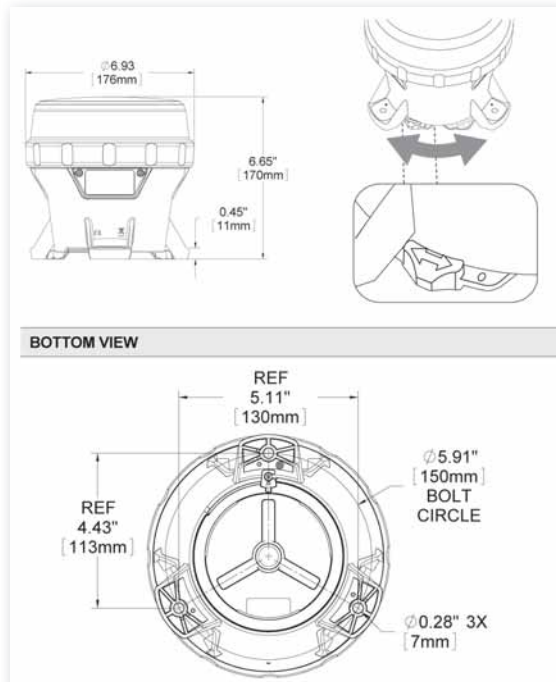
CARMANAH MODEL 601

Minimum Autonomy	300hrs
Minimum Equivalent Peak	1.5hrs
Sun Hours to Maintain Minimum Autonomy	
Illumination Technology	Ultra-bright 16 light emitting diodes
Lifespan of LEDs	Up to 100,000 hrs
Chromacity of color output	Meets IALA specs
Lens material	Polycarbonate
Battery venting	Vent at bottom of lantern
Sealing	Self-contained unit, potted with polyurethane
Weight	2.2kg (4.85lbs)
Temperature Range	-40° to +80°C (-40° to 176°F)



Carmanah model 601

TYPE	COLOR	VISIBILITY	LEVEL ARC	BULB	WEIGHT	PROTECTION CLASS
CXH1-3P	Green	2n.m	112.5°	24V/25W (B15d)	0.5kg	IP56
CXH2-3P	Red	2n.m	112.5°			
CXH3-3P	Transparent	5n.m	225°			
CXH4-3P	Transparent, Yellow	2n.m	135°	24V/15W (B15d)		
CXH6-3P	Red, Green, Yellow	2n.m	360°	24V/25W (B15d)		



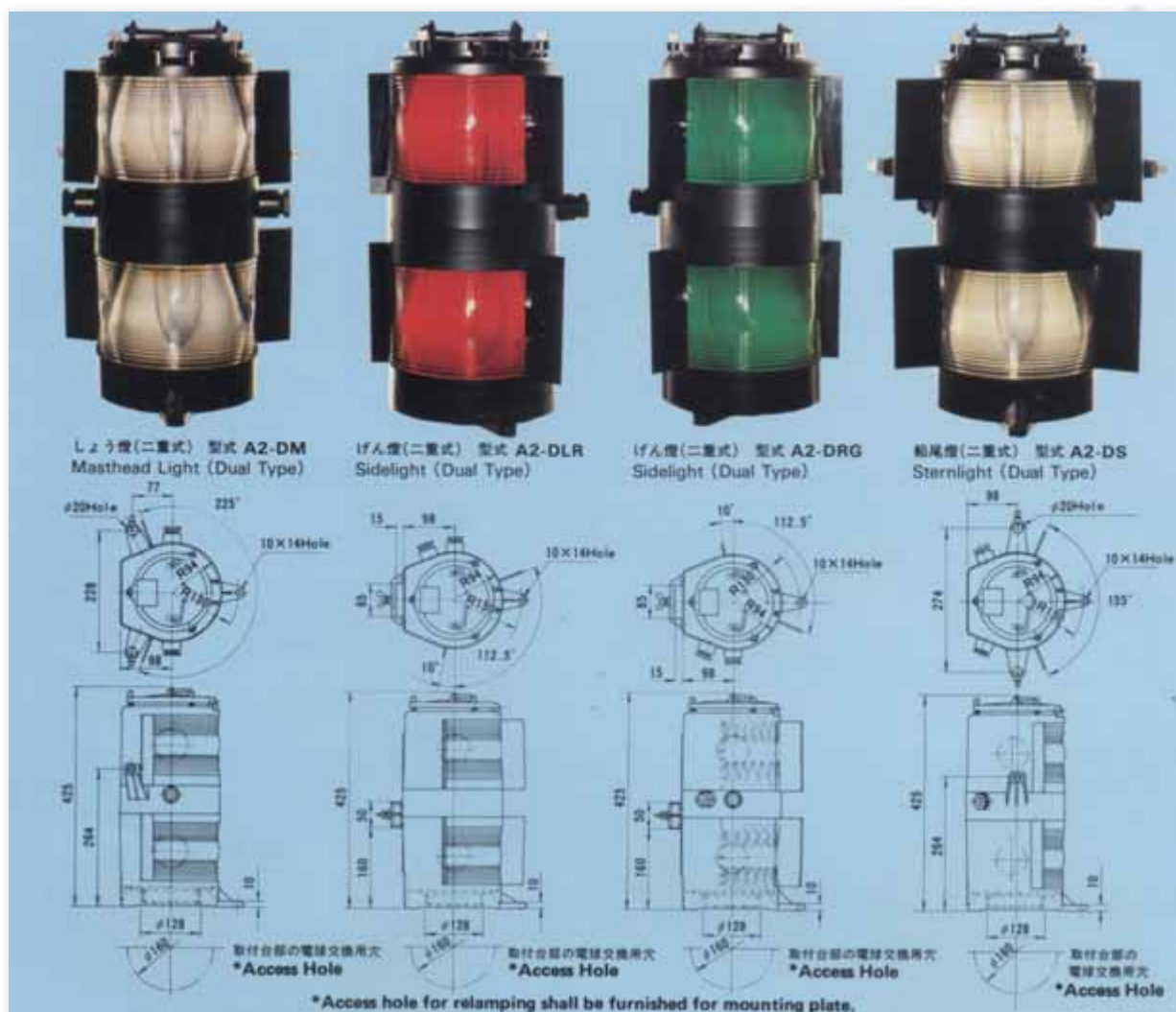
Caramanah M650 4NM

CARAMANAH M650 4NM

Solar Panel	Maximum power point tracking for optimal energy collection
Light Source	High power LED
Peak Intensity	(as per IALA rating) 44 cd (Green LEDs)
Vertical Divergence	> 8° (FWHM)
Flash Patterns	256+ (including steady-on)
Day / Night Transition	Selectable from 25 to 925 lux in 25 lux increments.
Ambient Operating Temperature	-43 to 51 °C
Storage Temperature	-43 to 80 °C
Colour Indicator	Green, Red, Yellow, Blue or White
Weight	3.5 lb (1.58 kg)
Wind Loading	140 knots (72 m/s)
Ice Loading	22kg/m ²
Automatic Light Control (ALC)	
When enabled, ALC will dynamically reduce brightness in response to unusually low amounts of sunlight to ensure continued operation.	

SIGNALS AND LIGHTS

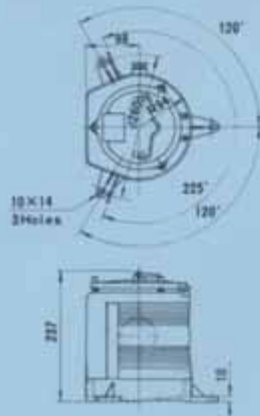
Navigation Lights



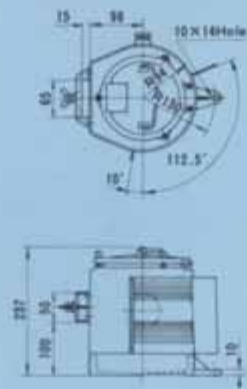
TYPE	CAT. NO.	APPROVAL NO.	LAMP	HORIZONTAL LIGHT SPREAD	VISIBLE DISTANCE (sea miles)	LENS	WEIGHT (kg)
Masthead Light, Class-A-2, Dual Type	A2-DM	1347	KN60W	225°	6	Stepped, Clear	2.1
Sidelight, Red, Class-A-2, Dual Type	A2-DLR	1330	KN60W	112.5°	3	Stepped, Red	2.1
Sidelight, Green, Class-A-2, Dual Type	A2-DRG	1333	KN60W	112.5°	3	Stepped, Green	2.1
Sternlight, Class-A-2, Dual Type	A2-DS	1328	KN40W	135°	3	Stepped, Clear	2.1
Masthead Light, Class-A-2	A2-SM	1329	KN60W	225°	6	Stepped, Clear	1.2
Sidelight, Red, Class-A-2	A2-SLR	1326	KN60W	112.5°	3	Stepped, Red	1.2
Sidelight, Green, Class-A-2	A2-SRG	1331	KN60W	112.5°	3	Stepped, Green	1.2
Sternlight, Class-A-2	A2-SS	1335	KN40W	135°	3	Stepped, Clear	1.2
Towing Light, Class-A-2	A2-ST	1327	KN40W	135°	3	Stepped, Yellow	1.2
White Light, Class-A-2	A2-SW	1336	KN40W	360°	3	Stepped, Clear	1.1
Red Light, Class-A-2	A2-SR	1332	KN60W	360°	3	Stepped, Red	1.1
Green Light, Class-A	A-SG	1334	KN60W	360°	3	Stepped, Green	1.1



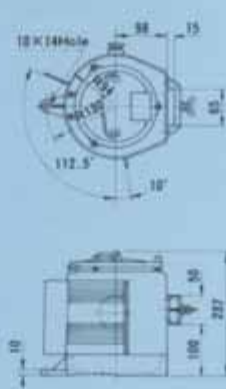
しやう燈 型式 A2-SM
Masthead Light



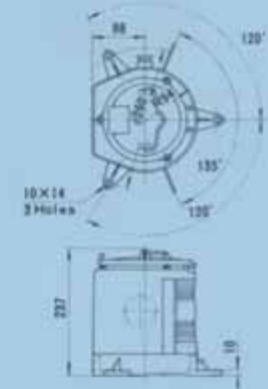
げん燈 型式 A2-SLR
Sidelight



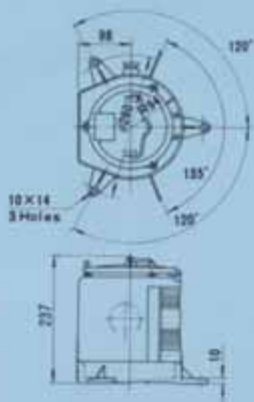
げん燈 型式 A2-SRG
Sidelight



船尾燈 型式 A2-SS
Sternlight



引船燈 型式 A2-ST
Towing Light



白燈 型式 A2-SW
White Light



紅燈 型式 A2-SR
Red Light



綠燈 型式 A-SG
Green Light

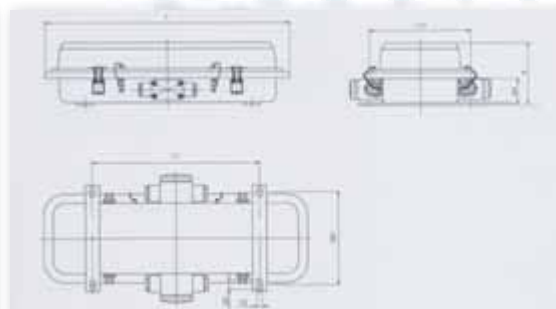


SIGNALS AND LIGHTS

Pendant / Ceiling / Wall and Work Lights

IMPA Code: 79 19 11

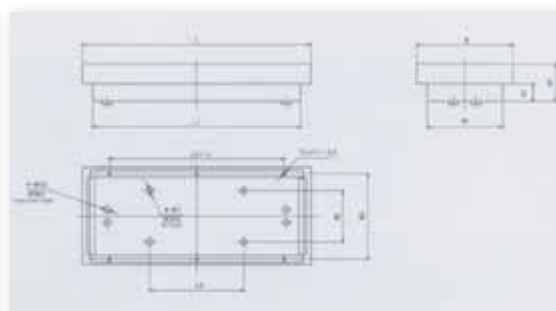
FLUORESCENT PENDANT LIGHT



CURRENT TYPE	POWER	VOLTAGE/ FREQUENCY	WEIGHT	PROTECTION CLASS	L	L1	H	PREVIOUS TYPE
ZYC23-2	20W x 2	110V/60Hz 220V/50Hz 60Hz	6.2kg	IP56	690	480	127	ZYC20-3
ZYC23-2E			6.3kg				127	ZYC20-3E
ZYC23-2EF			6.9kg				148	ZYC20-3EF
ZYC33-2	30W x 2		9.2kg		992	700	127	ZYC30-3
ZYC33-2E			9.3kg				127	ZYC30-3E
ZYC33-2EF			10kg				128	ZYC30-3EF
ZYC43-2	40W x 2		10.5kg		1294	700	127	ZYC40-3
ZYC43-2E			10.6kg				127	ZYC40-3E
ZYC43-2EF			12.3kg				148	ZYC40-3EF

IMPA Code: 79 19 03

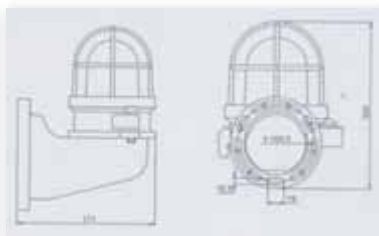
FLUORESCENT CEILING LIGHT



CURRENT TYPE	POWER	VOLTAGE/ FREQUENCY	WEIGHT	PROTECTION CLASS	L	L1	L2	L3xn	W	W1	W2	W3
ZYP15-2	15W x 2	110V/60Hz 220V/50Hz 60Hz	4.2kg	IP22	530	496	220	200x2	228	188	120	204
ZYP15-2E			4.21kg									
ZYP20-2	20W x 2		5.1kg		675	646	380	190x3				
ZYP20-2E			5.11kg									
ZYP30-2	30W x 2		8.0kg		980	945	580	210x4	256	216	175	232
ZYP30-2E			8.01kg									
ZYP40-2	40W x 2		9.1kg		1285	1250	1085	280x4				
ZYP40-2E			9.11kg									

IMPA Code: 79 20 67 / 68

WALL LAMP



WB-1

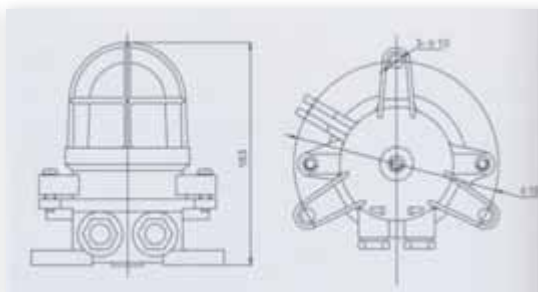


WB-2

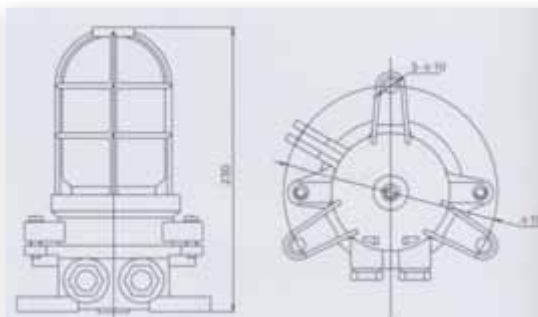
TYPE	POWER	VOLTAGE	LAMP HOLDER	MATERIAL	COLOR	PROTECTION CLASS	WEIGHT
WB-1	15W	24V	FE12, FE14, FB15	Synthetic resin	Transparent, red, green, yellow, blue	IP56	0.55kg
WB-2	60W	220V	FE26, FB22				0.85kg

IMPA Code: 79 20 53 / 57

WORK LAMP



DS7-1M



DS7-2M

TYPE	POWER	VOLTAGE	LAMP HOLDER	MATERIAL	COLOR	PROTECTION CLASS	WEIGHT
DS7-1M	15W	24V	FE12, FE14	Synthetic resin	Transparent, red, green, yellow, blue	IP56	0.55kg
DS7-2M	60W	220V	FB15				0.85kg

SIGNALS AND LIGHTS

Chart Lamp / Marine Watertight Plug



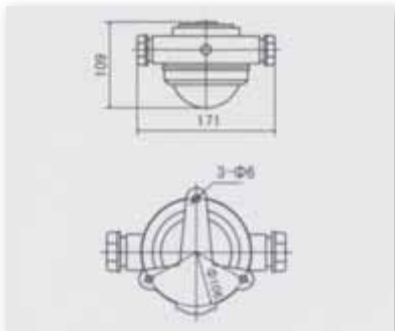
CHT4 chart lamp

IMPA Code: 79 21 21

CHART LAMP

Model	CHT4
Voltage	220V
Power	≤100W
Lamp Holder	E27
Weight	2kg
Voltage	220V
Type	Pantagraph
Transistor adaptor	30v to 218v

CHT4 is used to light on the chart desk in steering room, with steel shell. The whole lamp is mobile upside down, fore and back, left and right, and is equipped with transistor adjuster, can control steplessly, with the light adjusting range from 30V to 218V.



Candescent pendant light

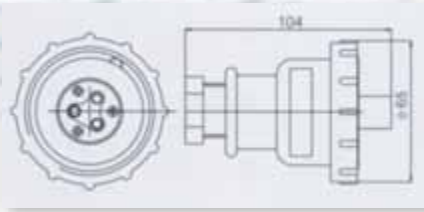
CANDESCENT PENDANT LIGHT

Model CCD 3-2, CCD 3-3

Commonly used for lifeboat interior



T-1MA



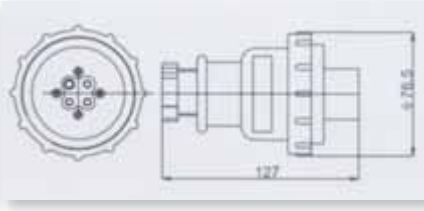
IMPA Code: 79 28 01

MARINE WATERTIGHT PLUG

Model	T-1MA
Voltage	250V
Current	20A



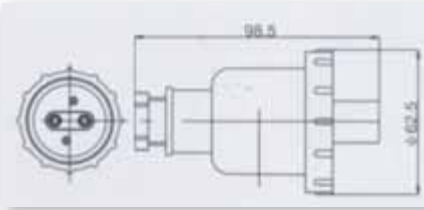
T-2MA



Model	T-2MA
Voltage	250V
Current	20A



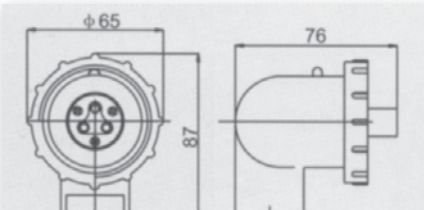
T-MA



Model	T-MA
Voltage	24V
Current	10A



T-1MB



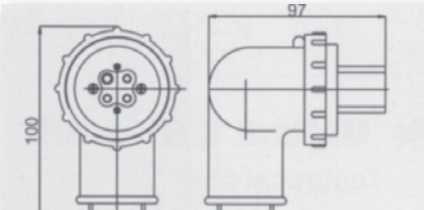
IMPA Code: 79 28 04

MARINE WATERTIGHT PLUG

Model	T-1MB
Voltage	250V
Current	20A



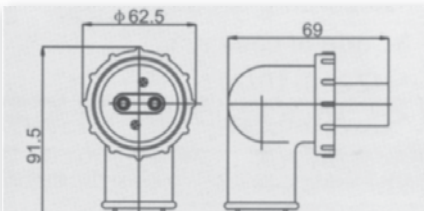
T-2MB



Model	T-2MB
Voltage	250V
Current	20A



T-MB



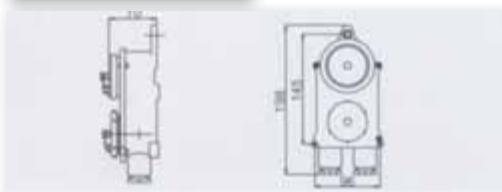
Model	T-MB
Voltage	24V
Current	10A

SIGNALS AND LIGHTS

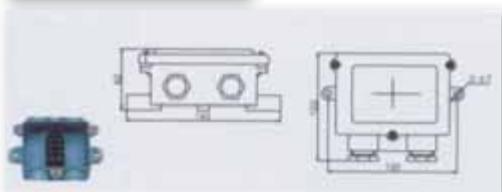
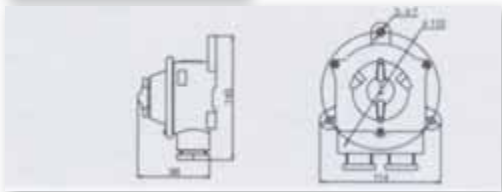
Marine socket / Marine Watertight Junction Box and Switch /
AJ Electrical Key



Z-1M



Z-2M



J-1M

IMPA Code: 79 28 06 / 07

MARINE SOCKET, SOCKET WITH SWITCH

Model Z-1M
Voltage 2P+E 250V
Current 20A

Model Z-2M
Voltage (2P+E)x2 250V
Current 15A

Model Z-2MA
Voltage 3P+E 250V
Current 15A

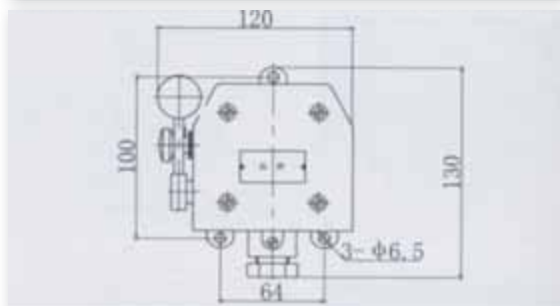
IMPA Code: 79 30 17

MARINE WATERTIGHT JUNCTION BOX
AND SWITCH

Type K-2MR
Voltage 250V
Current 10A

Type J-1M
Voltage 250V
Current 20A

Type J-2M
Voltage 250V
Current 20A

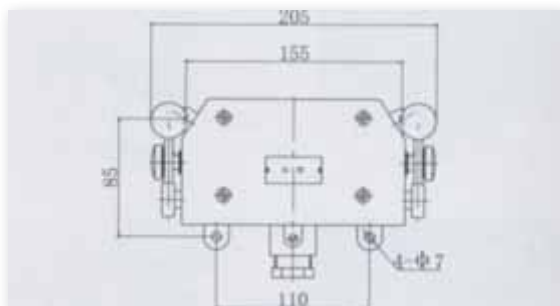


AJ1

AJ ELECTRICAL KEY

Type	AJ1
Rated Amp (A)	1.5
Rated Voltage (V)	250
Protection	IP56
Weight (kg)	1.0

Type	AJ2
Rated Amp (A)	1.5~2
Rated Voltage (V)	250
Protection	IP56
Weight (kg)	1.7



AJ2

SIGNALS AND LIGHTS

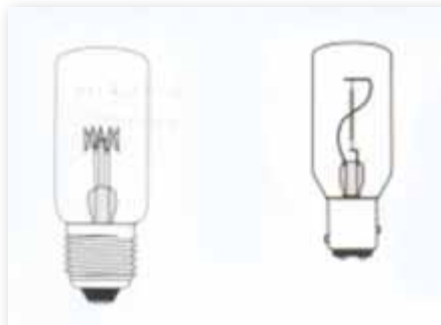
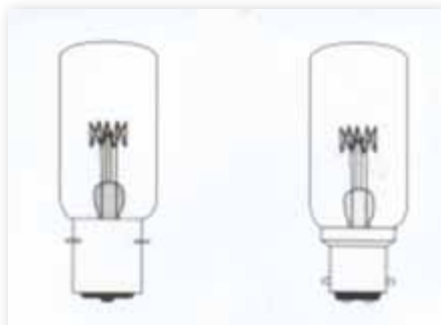
Flash light / Bulbs



SabreLite 2000

PELICAN SABRELITE 2000

Light Source	Xenon
Tested Lumen Value	33.0
Tested Lux Value(@ 1 meter)	10,000
Batteries	3C Alkaline
Battery Burn Time	5 hrs.
Watts	3.3
Voltage	4.5
Length	7.79" (19.8cm)
Weight w/ Batteries	12.8oz (0.36kg)
Weight w/o batteries	5.31 oz (0.15kg)



⚡ Approved by the Dutch: "Directorate – General, for Freight Transport Aids to Navigation Department"
ISO certified / Colreg 72 / IMO / IALA / IMPA

BULBS

TYPE	VOLT	WATT	BASE	ISSA	IMPA
⚡N,00,008	24	40	P28S	7322801	
⚡N,00,008	110	60	P28S	7322803	790432
⚡N,00,008	220	65	P28S	7322804	790434
	24	40	BA22D	7322604	790411
	110	60	BA22D	7322610	790427
	110	80	BA22D	7322612	
	220	65	BA22D	7322614	790429
	220	65	BA22D	7322617	
	24	40	E27	7322702	790401
	110	60	E27	7322705	790422
	110	80	E27	7322706	
	220	65	E27	7322708	790424
	220	85	E27	7322709	
	12	10	BAY15D	7322901	
⚡N,03,011	12	25	BAY15D	7322903	
⚡N,03,011	24	10	BAY15D	7322906	
⚡N,03,011	24	25	BAY15D	7322908	
	28	25	BAY15D	7322909	
	110	25	BAY15D	7322911	
	220	25	BAY15D	7322912	

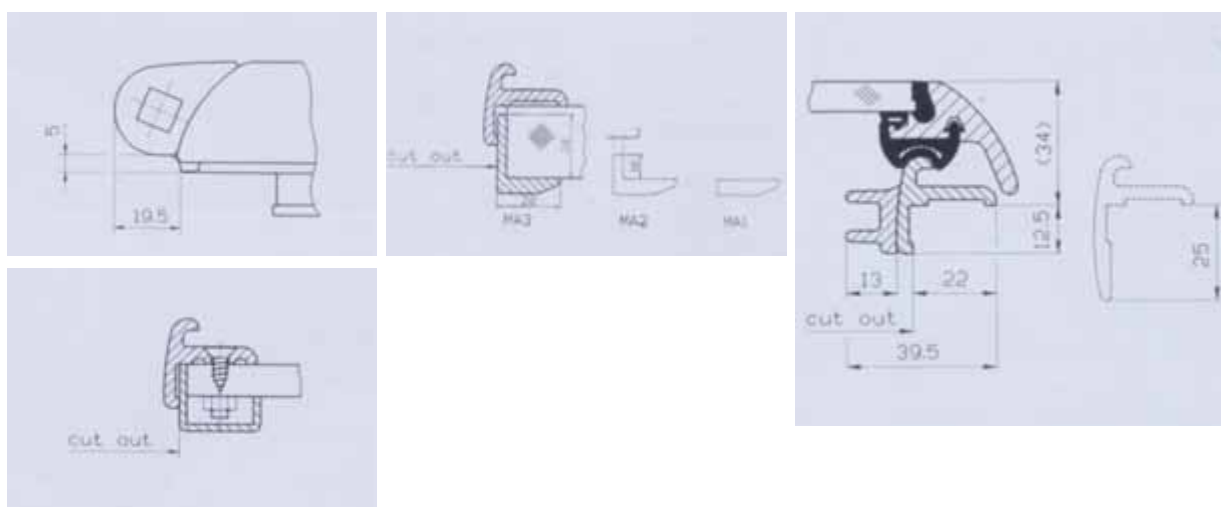
LEISURE BOAT AND YACHT EQUIPMENT

- Offshore and lowline hatches
- Bilge pumps/Bilge pump control switches/
Toilet systems
- Impeller/Raw water strainers

LEISURE BOAT AND YACHT EQUIPMENT

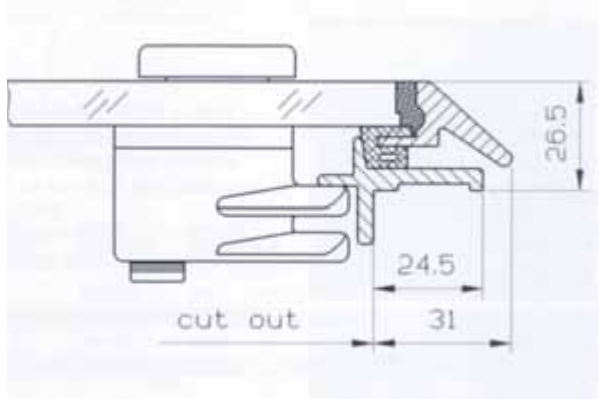
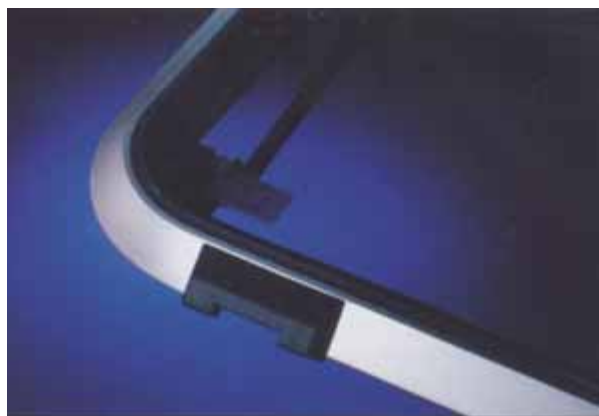
Offshore and Lowline Hatches

OFFSHORE HATCHES



SIZE NO.	HATCH 1/2" SPIGOT PART NO.	HATCH 1" SPIGOT PART NO.	CUT OUT SIZE-RADIUS (mm)	OVERALL SIZE (mm)	WEIGHT (kg)	ACRYLIC THICKNESS	PLASTIC FRAME PART NO.	FLYSCREEN PART NO.
1	622525M36	632525M36	250x250 - R36	305x305	2.3/2.4	8mm	522525	532525 M36
2	623420M36	633420M36	340x200 - R36	295x255	2.5/2.6		523420	533420 M36
3	624141M36	634141M36	415x415 - R36	470x470	4.7/4.9		524141	534141 M36
4	624532M36	634532M36	450x320 - R36	505x376	4.3/4.4		524532	534532 M36
5	624343M36	634343M36	435x435 - R36	490x490	5.2/5.4		524343	534343 M36
6	625037M36	635037M36	500x370 - R36	555x425	4.9/5.1		525037	535037 M36
7	625050M36	635050M36	500x500 - R36	555x555	6.0/6.2	10mm	525050	535050 M36
8	626262M36	636262M36	620x620 - R36	675x675	9.3/9.6		526262	536262 M36
9	674343M36	684343M36	435.5x435.5 - R36	490x490	6.1/6.3	12mm	524343	534343 M36

LOWLINE HATCHES



SIZE NO.	HATCH PART NO.	CUT OUT SIZE (mm)	CUT OUT RADIUS (mm)	OVERALL SIZE (mm)	HEIGHT MOUNTED (mm)	WEIGHT (kg)	ACRYLIC THICKNESS	PLASTIC FRAME NO.	FLYSCREEN KIT PART NO.	ESCAPE HATCH ISO 9094
1	552525 M50	250x250	50	320x320	26.5	1.51	8			
2	553420 M50	340x200		402x262		1.76				
3	554242 M50	420x420		482x482		4.50				
4	554343 M50	432x432		494x494		4.60				
5	554532 M50	450x320		512x382		3.67				
6	555037 M50	500x370		562x432		4.59				
7	555050 M50	500x500		562x562		5.80				X
8	556262 M50	620x620		682x682		7.65	10			X

LEISURE BOAT AND YACHT EQUIPMENT

Bilge Pumps / Bilge Pump Control Switches / Toilet Systems

BILGE PUMPS



1500 G.P.H.



2000 G.P.H.



3700 G.P.H.

BILGE PUMP CONTROL SWITCHES



Rule-A-Matic float switch



Rule-A-Matic Plus float switch



SuperSwitch float switch



DOMETIC 970 SERIES PORTABLE TOILET

- High-strength plastic portable toilet
- Self-contained 5-gallon and 2.6-gallon holding tank models
- Push-button pressurized flush
- Easy-view prismatic tank level indicator
- Uses less than 1 pint per flush



Piston rod and seal assembly



Regular and compact size



Electric toilet

TWIST N LOCK MANUAL TOILET

Fitting	Connections for 19mm ID inlet hose, 38mm ID outlet hose
Size	Compact: 45x41x34cm Regular: 47x48x35cm
Weight	Compact: 9.3kg Regular: 11.6kg

ELECTRIC TOILET

Fitting	Connections for 16- 19mm ID inlet hose, 25mm or 38mm ID outlet hose
Size	Compact: 35x43x35cm Regular: 38x47x37cm
Weight	Compact: 15.4kg Regular: 17.3kg

LEISURE BOAT AND YACHT EQUIPMENT

Impeller / Raw Water Strainers



Jabasco impeller



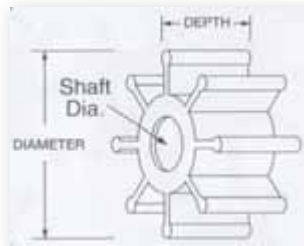
JABSCO IMPELLER

Jabasco flexible impellers can be fitted to most makes and models of bronze flexible impeller engine cooling, bilge, transfer and general purpose pumps.

- Neoprene impellers for engine cooling
- Nitrile impellers for bilge pumping



Flexible impeller removal tool



FLEXIBLE IMPELLER REMOVAL TOOL

The Flexible Impeller Removal Tool is the easiest way to remove impellers, especially when the pump is mounted in tight and cramped conditions.

Size 6" x 1" x 8" max
Weight 0.5kg

- Simple three stage operation easily removes the impeller
- Removes the risk of expensive damage to the pump
- Manufactured from corrosion resistant cast aluminium and stainless steel
- Two models fit all impellers



Groco arg strainer

GROCO ARG STRAINERS

#304 STAINLESS BASKET	NON-METALLIC BASKET	MONEL BASKET	PIPE SIZE	A	B	C	D	E	F	G	WEIGHT	RATIO*	PKG
ARG-500-S	ARG-500-P	ARG-500	1/2"	6.38	4.50	5.25	1.50	1.00	1.07	3.50	3.5#	54:1	4
ARG-755-S	ARG-755-P	ARG-755	3/4"	6.38	4.50	5.25	1.50	1.00	1.07	3.50	3.5#	24:1	4
ARG-750-S	ARG-750-P	ARG-750	3/4"	8.38	4.50	5.25	1.50	1.00	1.07	5.50	3.7#	36:1	4
ARG-1000-S	ARG-1000-P	ARG-1000	1"	9.00	5.75	6.50	2.00	1.13	1.19	5.88	5.75#	28:1	2
ARG-1210-S	ARG-1210-P	ARG-1210	1-1/4"	9.19	5.75	6.50	2.00	1.13	1.19	5.88	6.1#	18:1	2
ARG-1250-S	ARG-1250-P	ARG-1250	1-1/4"	10.63	5.75	6.50	2.25	1.13	1.19	7.88	6.4#	24:1	2
ARG-1500-S	ARG-1500-P	ARG-1500	1-1/2"	11.38	7.25	7.75	2.50	-	1.00	6.50	9.6#	20:1	1
ARG-2015-S	ARG-2015-P	ARG-2015	2"	12.00	7.25	7.75	2.75	-	1.00	6.50	11.1#	11:1	1
ARG-2000-S	ARG-2000-P	ARG-2000	2"	14.00	7.25	7.75	2.75	-	1.00	8.00	12.2#	14:1	1
ARG-2515-S	ARG-2515-P	ARG-2515	2-1/2"	12.70	7.25	7.75	2.75	-	1.00	7.75	13.5#	7:1	1
ARG-2520-S	ARG-2520-P	ARG-2520	2-1/2"	14.64	7.25	7.75	3.25	-	1.00	8.00	13.5#	9:1	1
ARG-2500-S	ARG-2500-P	ARG-2500	2-1/2"	17.00	7.25	7.75	3.25	-	1.00	10.00	14.15#	11:1	1
ARG-3015-S	ARG-3015-P	ARG-3015	3"	13.25	7.25	7.75	3.25	-	1.00	6.50	15.0#	5:1	1
ARG-3020-S	ARG-3020-P	ARG-3020	3"	15.19	7.25	7.75	3.25	-	1.00	8.00	15.75#	6:1	1
ARG-3025-S	ARG-3025-P	ARG-3025	3"	17.37	7.25	7.75	3.25	-	1.00	10.00	16.5#	8:1	1
ARG-3000-S	ARG-3000-P	ARG-3000	3"	19.75	7.25	7.75	3.25	-	1.00	12.00	17.25#	9:1	1

HELIDECK

■ Helicopter crash kit

HELIDECK

Helicopter Crash Kit



Rescue equipment

Approvals: SOLAS

HELICOPTER CRASH KIT

The following rescue equipment is required for any vessel with helicopter deck according to SOLAS II-2 regulation:

- Adjustable wrench
 - Fire blanket
 - Blot cutter 60cm
 - Grab / salvage hook
 - Metal hacksaw, heavy duty, complete with 6 space blades
 - Ladder (will be packed separately)
 - Rescue line ø5mm, 15m long
 - Wire cutting pliers
 - Set of assorted screwdriver
 - Harness knife complete with sheath
 - Equipment packed in GRP storage box
-



Fire fighting equipment

Approvals: SOLAS

FIRE FIGHTING EQUIPMENT

The following fire fighting equipment is required for any vessel with helicopter deck according to SOLAS II-2 regulation:

- Two powder extinguishers with a total of 45kg extinguishing agent
 - One CO² extinguisher of at least 18kg or equivalent extinguisher
 - One foam applicator incl. foam monitor to reach all parts of helicopter deck
 - Two branchpipes incl. hose
 - Two sets of personal fire fighting equipment
-



OILY WATER SEPARATORS

OILY WATER SEPARATORS

MARINE OILY BILGE SEPARATOR



	CYF0.05m³/h	CYF0.1m³/h	CYF0.25m³/h
CAPACITY	0.05m³/h	0.1m³/h	0.25m³/h
DISCHARGE STANDARD	<15mg/L		
WORKING PRESSURE	<0.15	<0.2	<0.2
PUMP	DZ-50	DZ-100	DZ-250
OIL-DRAINING CONTROL	manual	Automatic and manual	
POWER SUPPLY	AC380v50Hz or to be decided according to user's requirement		
OVERALL DIMENSION	470 x 320 x 760	889 x 417 x 663	1100 x 417 x 873
WEIGHT	37	125	170

MARINE OILY WATER SEPERATOR - BILGE ALARM

- 15pp Bilge Alarm
- Capacity: 0.25m³ / h, 0.5m³ / h, 1.00m³ / h



YWC - 0.25



YWC - 0.5



YWC - 1.00

OIL POLLUTION EQUIPMENT

- Oil Spill Response Kit/Oil Sorbent Pads/
Oil Spill Mats Roll/Oil Spill Absorbent Socks/
Oil Spill Absorbent Booms
- Oil absorbent pillows/Spark free hand scoop

OIL POLLUTION EQUIPMENT

Oil Spill Response Kit / Oil Sorbent Pads / Oil Spill Mats Roll / Oil Spill Absorbent Socks / Oil Spill Absorbent Booms



Oil Spill Response Kits

BOS-KIT 6

- 6.5 gallon drum
- 10 pads, 16" x 20"
- 2 socks, 3" x 4"
- 1 pair goggles
- 1 pair gloves
- 1 disposal bag
- Absorbency: 5 gallons

BOS-KIT 20

- 20-gallon overpack salvage drum
- 1 sock oil-only, 3" x 4"
- 15 pads, 16" x 20"
- 2 pillows, 16" x 20"
- 5 disposal bags and ties
- 1 emergency response guidebook
- 1 pair nitrile gloves
- 1 pair goggles
- 1 spill instruction guide
- Absorbency: 18 gallons

BOS-KIT 30

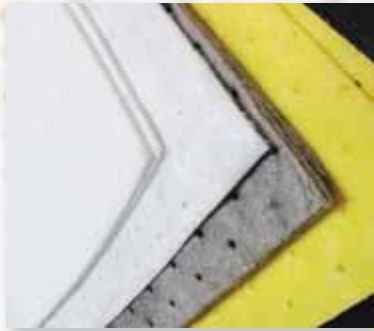
- 30-gallon overpack salvage drum
- 6 socks oil-only, 3" x 4"
- 4 pillows, 16" x 20"
- 35 pads, 16" x 20"
- 5 disposal bags and ties
- 1 emergency response guidebook
- 1 pair nitrile gloves
- 1 pair goggles
- 1 spill instruction guide
- Absorbency: 25 gallons

BOS-KIT 55

- 55-gallon lever lock X-rated drum
- 5 socks oil-only, 3" x 4"
- 50 pads, 16" x 20"
- 4 pillows, 16" x 20"
- 5 disposal bags and ties
- 1 emergency response guidebook
- 1 pair nitrile gloves
- 1 pair goggles
- 1 spill instruction guide
- Absorbency: 50 gallons

BOS-KIT 95

- 95-gallon overpack salvage drum
 - 10 socks oil-only, 3" x 4"
 - 75 pads, 16" x 20"
 - 8 pillows, 16" x 20"
 - 10 disposal bags and ties
 - 1 emergency response guidebook
 - 1 pair nitrile gloves
 - 1 pair goggles
 - 1 spill instruction guide
 - Absorbency: 90 gallons
-



Oil sorbent pads

OIL SORBENT PADS

ITEM CODE	200	250	300	350	400
SIZE (cm*cm)	40*50	40*50	40*50	40*50	40*50
COUNT & PACKAGING	200 pcs	150 pcs	150 pcs	100 pcs	100 pcs
ABSORBENCY	120	115	135	105	120



Oil spill mats roll

OIL SPILL MATS ROLL

ITEM CODE	200 / 200D	250 / 250D	300 / 300D	350 / 350D	400 / 400D
SIZE (cm*M)	40*50 / 80*50	40*50 / 80*50	40*50 / 80*50	40*50 / 80*50	40*50 / 80*50
COUNT & PACKAGING	1R	1R	1R	1R	1R
ABSORBENCY	60/120	75/150	90/180	105/210	120/240



Oil spill absorbent socks



OIL SPILL ABSORBENT SOCKS

ITEM CODE	7612	7624	7636
SIZE	ø 7.6cm x 1.2M	ø 7.6cm x 2.4M	ø 7.6cm x 3.6M
COUNT & PACKAGING	20 socks	10 socks	7 socks
ABSORBENCY	85	85	85



Oil spill absorbent booms

OIL SPILL ABSORBENT BOOMS

ITEM CODE	12730	12760	20030	20060
SIZE	ø 12.7cm x 3M	ø 12.7cm x 6M	ø 20cm x 3M	ø 20cm x 6M
COUNT & PACKAGING	4 booms	2 booms	4 booms	2 booms
ABSORBENCY	106	106	206	206

OIL POLLUTION EQUIPMENT

Oil Spill Absorbent Pillows / Hand Scoop Spark Free



Oil spill absorbent pillows

OIL SPILL ABSORBENT PILLOWS

ITEM CODE	2025	2540	3550	4050
SIZE	20cm x 25cm	25cm x 40cm	35cm x 50cm	40cm x 50cm
COUNT & PACKAGING	30 pillows	24 pillows	12 pillows	10 pillows
ABSORBENCY	65	105	65	65

IMPA Code:

61 59 51/52/53

SHOVEL SPARK FREE



Shovel spark free

IMPA Code:

61 59 65

HAND SCOOP SPARK FREE



Hand scoop spark free

OCCUPATIONAL SAFETY

- Helmets/Full harness/Full face mask
- Oil absorbent pillows/Spark free hand scoop

V-GARD SAFETY HELMET

- Colour: white, red, yellow



Safety helmet



Full harness

IMPA Code: 33 11 04

FULL HARNESS BODY TYPE

- D-ring in the back
- Leg loops
- 45mm polyester strap



Full face mask Panorama Nova Standard P

IMPA Code: 33 11 37

DRAEGER FULL FACE MASK PANORAMA NOVA STANDARD P

- Material: EPDM rubber
- Thread connector
- Five-point head harness
- May be combined with safety harness

TYPE	CLASS
particle filter	P3
combined filter	A2 – P3
combined filter	A2 – B2 – E2 – K1 – P2

STAINLESS STEEL WIRE ROPES AND PRODUCTS

■ Wire ropes/Stainless steel chain

STAINLESS STEEL WIRE ROPES AND PRODUCTS

Wire Ropes / Stainless Steel Chain

STAINLESS STEEL WIRE ROPE



STAINLESS STEEL WIRE ROPE WITH PVC COATED



Stainless steel chain

ASSORTED STEEL PRODUCTS



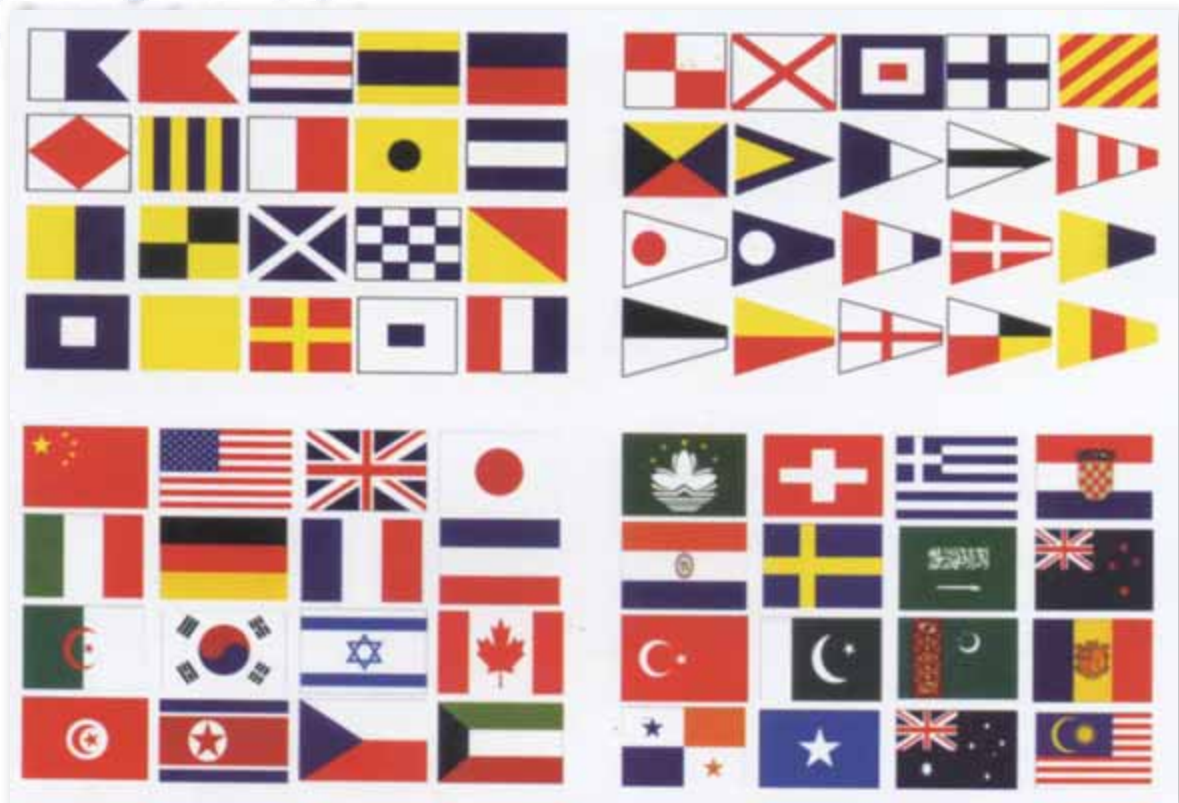


IMO SIGNS AND SYMBOLS

- International codes and flags/Flag hooks
- IMO symbols and safety signs/
- Fire and safety pictograms/
- IMO Fire control symbols/
Direction signs
- Safety and training posters

International Codes and Flags / Flag Hook

INTERNATIONAL CODES AND FLAGS



FLAG HOOKS

Material

Brass
Plastic

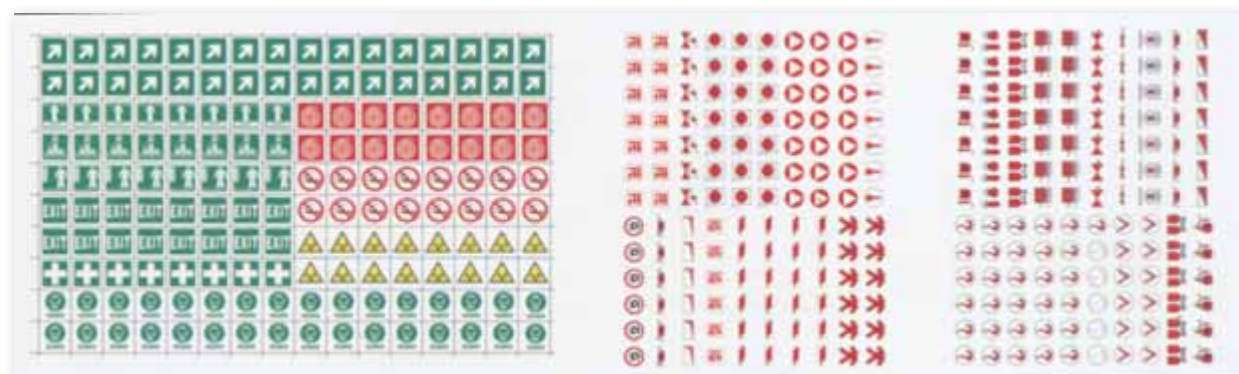
IMO SIGNS AND SYMBOLS

IMO Symbols and Safety Signs / Fire and Safety Pictograms / IMO Fire Control symbols / Direction Signs

IMO SYMBOLS AND SAFETY SIGNS

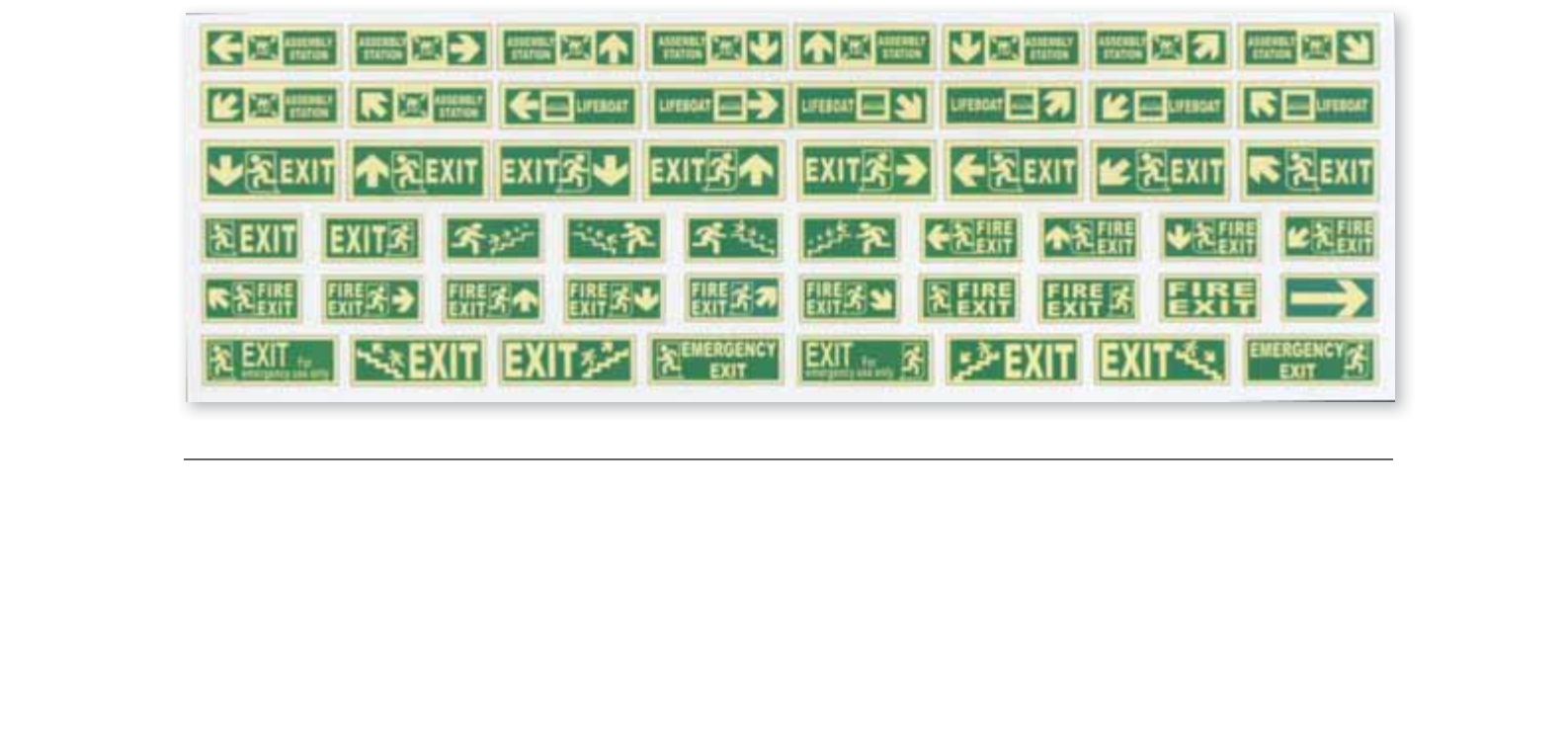


FIRE AND SAFETY PICTOGRAMS





DIRECTION SIGNS



IMO SIGNS AND SYMBOLS

Safety and Training Posters

SAFETY AND TRAINING POSTERS



Lifeboat launching
330 x 480 mm



Liferaft launching
330 x 480 mm



Vital actions after liferaft launching
330 x 480 mm



Lifeboat launching in a safe atmosphere
330 x 480 mm



Lifeboat launching in a dangerous atmosphere
330 x 480 mm



Enclosed space entry
330 x 480 mm



Enclosed space entry safety signs
330 x 480 mm



Preventing oil spills
330 x 480 mm



Electric Shock, drowning
330 x 480 mm



Accommodation ladders
330 x 480 mm



Gangways
330 x 480 mm



Man overboard
330 x 480 mm



Abandon ship
330 x 480 mm



Enclosed space and tank rescue
330 x 480 mm



Free fall lifeboat launching
330 x 480 mm



Towing
330 x 480 mm



Bunkering
330 x 480 mm



Post oil spill actions
330 x 480 mm



Hot work
330 x 480 mm



Working aloft or outboard
330 x 480 mm



Required boarding
arrangements for pilots
407 x 290 mm



Fire extinguisher types
297 x 210 mm



Personal protective equipment
330 x 480 mm



Craneage safety
330 x 480 mm

IMO SIGNS AND SYMBOLS

Safety and Training Posters



Fire and explosion rescue
330 x 480 mm



Gas bottle safety
330 x 480 mm



Welding and Flamecutting
330 x 480 mm



Light, shape and sound signals
330 x 480 mm



Engine Room Safety
330 x 480 mm



IMO Safety signs
330 x 480 mm



Galley Safety and Hygiene
330 x 480 mm



Davit Launched Liferails
330 x 480 mm



Self contained
breathing apparatus
330 x 480 mm



SOLAS Life Saving Signals
600 x 425 mm



Solas 2 card,
Solas Life Saving Signals
210 x 180 mm



Mooring
300 x 420 mm

TECHNO MARINE GROUP OF COMPANIES

www.technomarine.com.sg

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Tel 6747 4419

Fax 6747 2660

Email seasaver@singnet.com.sg

Spectrum Fire (S) Pte Ltd

Blk 1048, Eunos Avenue 6 #01-139 Singapore 409627

Tel 6291 3077

Fax 6291 1279

Email spectrumfire@technomarine.com.sg

Techno Lifeboat Pte Ltd

Blk 32 Cassia Crescent #01-64 Singapore 390032

Tel 6447 4163, 6447 4164

Fax 6447 4904, 6447 1729

Email lifeboat@technomarine.com.sg