



GENERAL CATALOGUE 2024



FLUATEX

COMPANY PROFILE

Founded in 1976, located in Provaglio d'Iseo (BS) Italy occupying a 70.000 sq.ft. site with a 40.000 sq.ft covered area for the factory and office complex, FLOATEX s.r.l. is currently one of the leading companies in buoyancy and fendering for coastal and offshore marine products. FLOATEX interest in the production of different plastic products, processing technology and application, has been of great benefit for different markets, from aids to navigation to offshore specialized materials, from deep-water application to fish farming technology. Since 1976 FLOATEX pioneers the application of rotomoulded products and technology in the offshore fields. The continuous prototype testing procedures and field applications gave the company the opportunity to acquire an unparalleled and successful field experience.



FLOATEX

During these years the company has flourished and diversified and now comprises several divisions which are well represented all over the world by experienced agents and representative offices. Moreover, FLOATEX, offers its customers an internal Quality Control service to guarantee of the final product. The quality control service avails itself of an in-house fully equipped laboratory facility, making out a test certificates to be release to the customer in accordance with internationally known nominated inspection agencies such as LLOYD'S REGISTER, A.B.S., R.I.NA and others.



FLOATEX s.r.l. is the firm leader in the technology and production of compound materials, design, study, realisation and supply components for racing cars.



FLOATEX



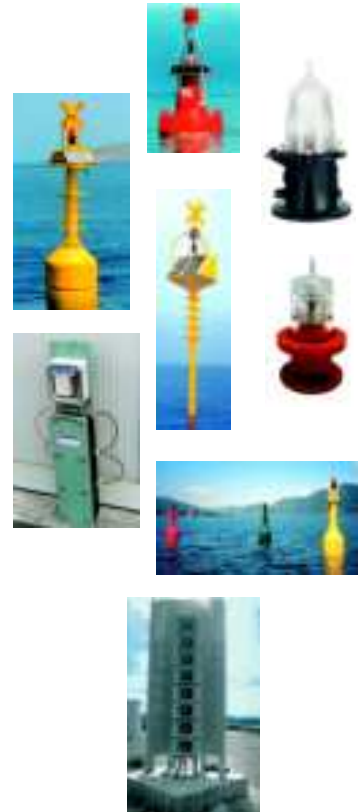
FLOATEX NAVIGATIONAL AIDS DIVISION

For many years FLOATEX has been deeply involved in the design and manufacture of a wide range of navigational aids. The traditionally constructed steel buoys are still manufactured in addition to those built with the latest and most updated rotomoulded P.E. Rotomoulded expanded PU foam or GRP technology and materials.

FLOATEX elastic beacons are designed and produced with the aid of a dedicated fully computerized stability and performance calculation program.

FLOATEX produces as well a variety of pole beacons, GRP or rotationally moulded P.E. towers and other accessories. Particular care has been taken in the design and manufacture of the marine lanterns and their electronics, fully equipped with different power sources such as primary batteries, main power or solar energy systems.

All those materials and equipment are designed and produced in accordance to the IALA recommendations and specifications as well as quality tested with the assistance of qualified third party inspections and laboratory facilities such as the Italian military navy or the D.G.S.M. in the Netherlands.



FLOATEX OIL OFFSHORE AND DREDGING DIVISION

The knowledge and experience gained in the production of composed plastic materials and the laboratory extensive research, gives FLOATEX the capacity to fulfill the offshore industry requirements on special dedicated buoyancy materials.

Technique of resilient foam covered with a thick skin abrasion resistant elastomer, is widely utilised in the in-line production of fenders, bead floats, anchor pendant, pick-up and chain support buoys. Rotationally moulded technology is utilised for the production of hinged type deepwater floats manufactured in accordance with the latest OCIMF specifications and recommendations as well as special modules for the dredging industry.

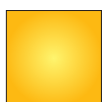
FLOATEX internal laboratory facility enables independent inspection agencies to witness the test certificates issued.





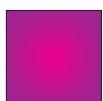
FLOATEX OIL POLLUTION CONTROL SYSTEMS

The scope of FLOATEX's interest in composed plastic materials, processing technology and application has been developed in a wider range of products as the oil pollution control systems such as oil boom barriers with fast boom deployment system.



FLOATEX SPECIAL PRODUCTS

Floatex realizes floating constructions for various kinds of use, among which: floating farms for fish breeding; landing-places for pleasure-craft; platforms and end floating rafts; platforms for suction and pumping of water and temporary floating pedestrians bridges.



FLOATEX OFF-SHORE PLATFORM/BUOY FOR THE MARINE ENVIRONMENT CONTROL

Floatex s.r.l., in collaboration with the most important companies in the field of environmental monitoring systems, supplies a floating elastic beacon or monit buoy for phisycal/chemical and metereological monitoring.



NAVIGATIONAL AIDS

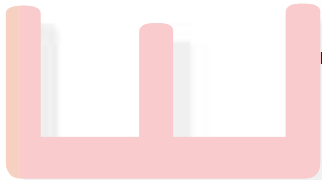
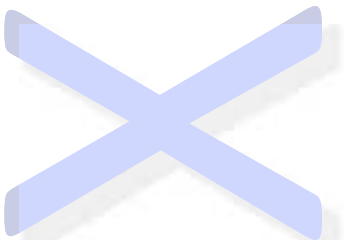


Buoys

Batteries

Foghorn

Marine lanterns



OFFSHORE PRODUCTS



Ancillary equipment

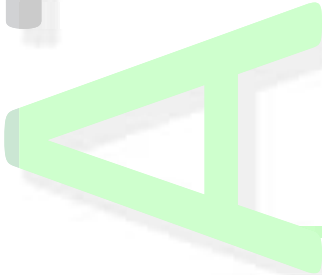
Plastic floats

Protective system

Dredging products

Floaters

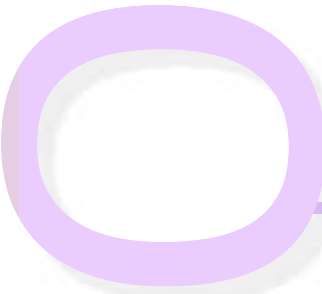
Bead floaters



ANTI-POLLUTION PRODUCTS



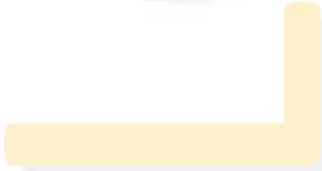
Barriers



MARINE ENVIRONMENT SYSTEMS



Floating meteomarine systems



SPECIAL PRODUCTS



Floating structures

Mussel floats



QUALITY ASSURANCE



Quality assurance manual

Certify of conformity



NAVIGATIONAL AIDS



OFFSHORE PRODUCTS



ANTI-POLLUTION PRODUCTS



MARINE ENVIRONMENT SYSTEMS



SPECIAL PRODUCTS



QUALITY ASSURANCE



EXETER
FLOTH

LED60 -ML MARINE LANTERN

FLOATEX has designed the Marine Lantern for short light signalling requirements and occasional respectively provisional applications.

It has specifically been designed for application on buoys and pontoons in inland waterways, estuaries, harbours or for use on small buoys in open sea conditions.

Its reduced size allows easy installation on any structure, and the comparatively low cost makes it the very equipment for secondary lighting for emergency purposes.

It is extremely sturdy due to the use of high-grade material, ABS for the base and acrylic for lensing, and offers a perfect water tightness due to the gasket fitting.

The feeding cable passage can be positioned either under the lantern base or side.

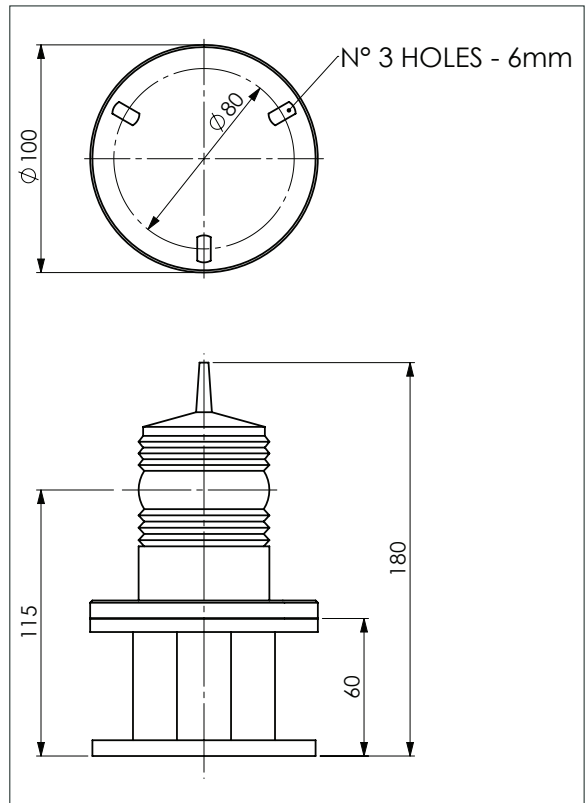
The sun switch is mounted on the lampholder cup, ensuring lighting only during the night time.

The solid structure as a whole and easy lens interchangeability make ES60 a many-sided signalling assembly which is easy to install.



ES60 MARINE LANTERN

LED60-ML MARINE LANTERN



TECHNICAL DATA	
LENS	60 mm fresnel lens at 360°
LED COLOURS	White, red, green, amber, (IALA specifications)
LEDs TYPE	star side model Verticla divergence>12°@50% Life 100.000 hours
FLASHER	FBL-016 adjustable characteristic set by bridge pin
VOLTAGE	6 V
MATERIALS	Lens: acrylic Base: ABS Fixing bolts: stainless steel
RANGE	From 3.8 to 4.5 nautical mle depending on pulse setting

LEDs	CANDELAS
BL-G	36
BL-R	38
BL-Y	37
BL-W	29

LED 120 MARINE LANTERN

The LED120 Marine Lantern system has been designed for applications where a very small signalling system is required.

The system is formed by new lantern with 120 mm clear polycarbonate lens and reinforced nylon base, fixed together with locking screws.

The internal electrical light system is composed by a programmable flasher and light emitters diodes.

The LED120 Marine Lantern signalling system can be applied on poles, docks or small buoys or can be modified for other applications.



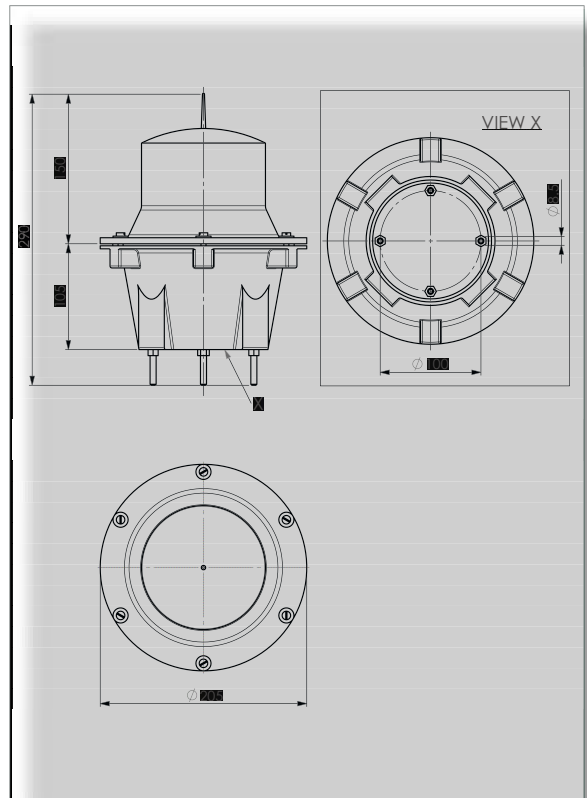
FANALE MARINO LED 120

LED120 MARINE LANTERN



TECHNICAL DATA	
COLOURS	White - Red - Green - Amber
LED SOURCE	CL-12 LED (two disks) CL-24 LED (two disks) CL-48 LED (four disks)
FLASHER	FBL064 or FBL256 electronic state flasher whit selectable characteristics
MATERIALS	Lens: clear acrylic Base: nylon reinforced Fixing bolts: stainless steel

LED	RANGE (nm)	
TYPE	CL12	CL24
GREEN	2.2	3.3
RED	2.0	3.0
WHITE	2.0	2.2
YELLOW	2.3	3.3





120 SEC MARINE LANTERN

The 120SEC Marine Lantern system has been designed for applications where a complete small signalling system is required.

The system is formed by new lantern with 120 mm clear polycarbonate lens and reinforced nylon base, fixed together with locking screws.

The internal electrical light system is composed by a 6 light emitters diodes, simple flasher, sunswitch, battery and solar power module.

It has a small solar panel on the top of the lantern and has an internal battery.

The 120SEC Marine Lantern signalling system can be applied on poles, docks or small buoys.

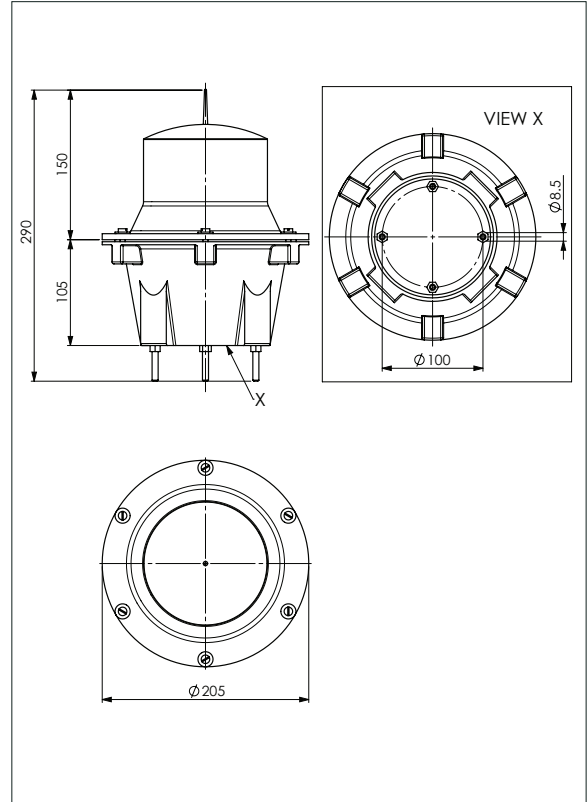


120SEC MARINE LANTERN

120SEC MARINE LANTERN



SOLAR PANEL VIEW



TECHNICAL DATA

TYPE	120SEC-1	120SEC-2
COLOURS	Amber (Yellow) - Red - Green - White	
LAMP	Tier 6 LEDs	Tier 12 LEDs
BATTERY	9000 mAh	
SOLAR MODULE	1.03 W (7 V)	
FLASHER	FBL-016	
MATERIALS	Lens: clear polycarbonate Base: nylon reinforced Fixing bolts: stainless steel	
WEIGHT	1.8 Kg	

RANGE NM

COLOUR	120SEC-1	120SEC-2
Y	1.2	1.6
G	1.3	2.1
R	1.5	2.5
W	1.4	1.8



FLOATEX

www.floatex.com



LED155-BL MARINE LANTERN

LED155-BL Marine lantern system has been designed for the applications where a very small signalling is required.

The system is formed by lantern model FLOATEX 155 with clear acrylic cover and reinforced nylon base, fixed together with hinged and locking hubs.

The internal electrical light system is composed by a programmable flasher, sunswitch and ultra bright emitters diode.

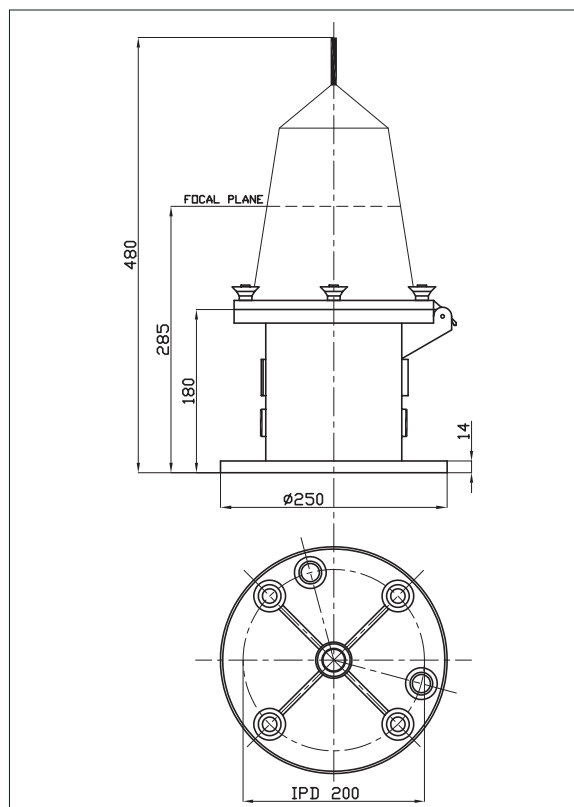
The led marine signalling system can be applied on ole, docks or small boats or can be modified for other applications.



FANALE MARINO 155-BL



LED155-BL MARINE LANTERN



CARATTERISTICHE TECNICHE

COLORI LED	Bianco-Verde-Rosso-Ambra specifiche IALA
TIPO LED	Modello Star side Divergenza Verticale > 12" @ 50% Life 100.000 hours
FLASHER	FBL064 or FBL256 ciclatore elettronico statico con ritmi luminosi selezionabile
MATERIALI	Lente: acrilico trasparente Base: nylon rinforzato Sistemi di fissaggio: acciaio inox

LED

CANDELE

BL-G	204
BL-R	212
BL-Y	208
EL-W	155



LAF - 6

LAF-6 is one of the world's most efficient range lanterns utilising, high performance, light emitting diodes (LEDs).

Visual ranges between 5 and 10 NM can be achieved with power consumption lower than ever thought possible.

Range lantern is available in low and high power options.

Both power options feature variable power settings for field intensity control.

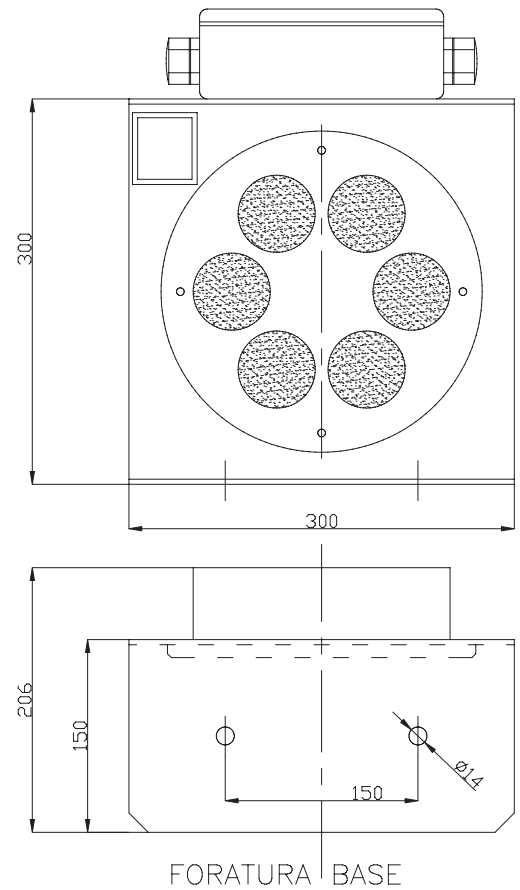
Designed to mark channels, rivers, canals or navigational areas, the LAF-6 provides assistance to maritime traffic.

Standard installations utilises two LAF-6; one positioned above and behind the other so that mariners can establish.

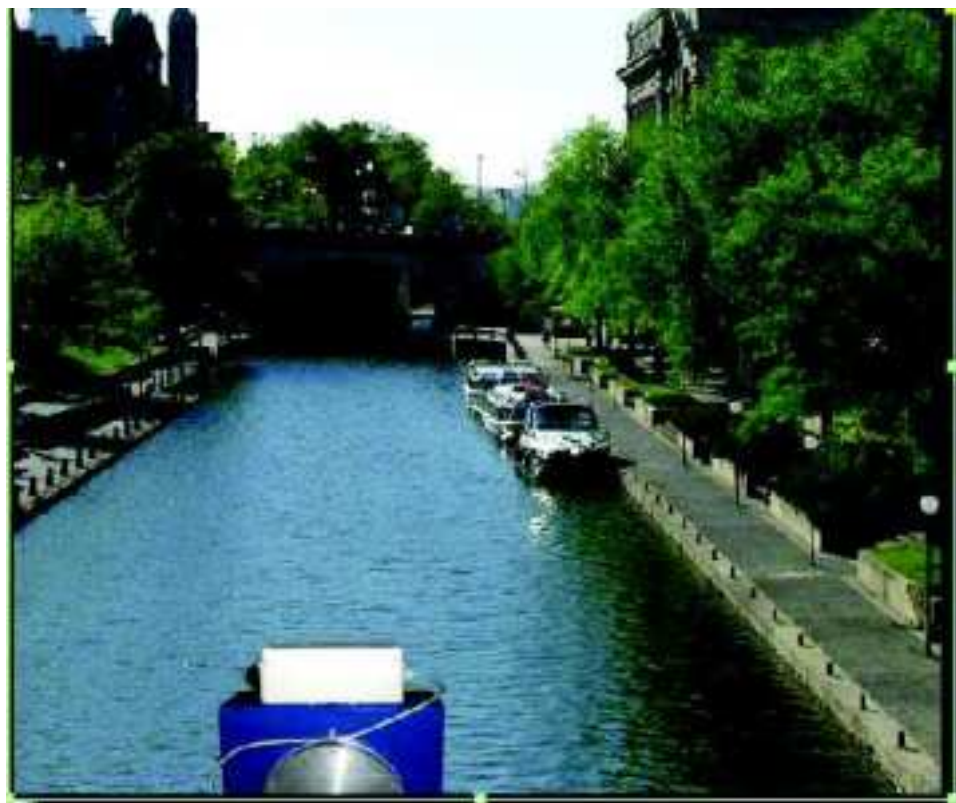


LAF-6 RANGE LANTERN

TECHNICAL DATA	
Protection class	IP 55 (DIN 40500)
Weight approx	8.2 Kgs
Operational temperature	-20°C to +60°C
Input Voltage	12V DC to 18V DC
LED	8 Watt
Overall angle each LED (horizontal\vertical)	42°
Fixing points	See drawing
Luminous intensity	see table 1



COLOURS	RED	GREEN	WHITE	BLUE
LEDs NUMBER	CANDELAS			
6	N A	N A	3600	8900
3	N A	N A	2800	4200





FBL-064 ELECTRONIC FLASHER

FBL-064 electronic flasher is one of the elements constituting the standard electronic system as self-contained in the FLOATEX lanterns.

This flasher has been studied to grant maximum efficiency and, in installations on buoys, gives full reliability and high resistance.

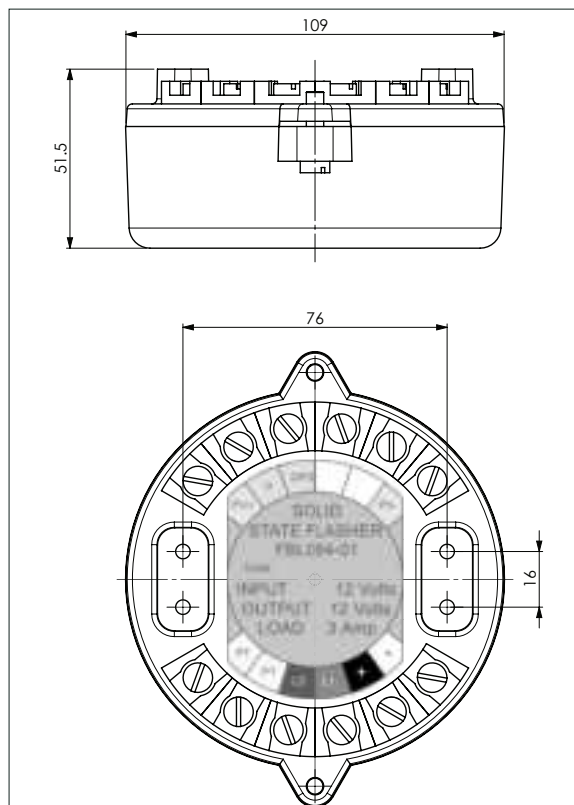
The electronic schedules of the flasher are lodged in an appropriate aluminium and plastic container from where the electric connections put out.

The whole has extremely reduced dimensions, which make that the flasher can be housed even in very restricted spaces.

Main characteristic of the flasher FBL-064 is the programmability of the light characteristics in most used sequences required by the international IALA standard norms.



FBL-064 ELECTRONIC FLASHER



TECHNICAL DATA

LAMP VOLTAGE	12 V
MAXIMUM LAMP CURRENT	3 A
OPERATING VOLTAGE	10.5 V TO 18 V
SELECTABLE SECOND OUTPUT	Lamp charger or 2nd Filament
IDLE CURRENT	<6 mA
SELECTABLE RHYTHMS	64 programmable
SYNCHRONIZATION	Yes
TEMPERATURE RANGE	-40° ... -85° C
WEIGHT	346 g
ELECTRIC PROTECTION	Polarity inversion - short circuit - overload



FLCG-256 ELECTRONIC FLASHER

This electronic flasher is one of the elements constituting the standard electronic system as self-contained in the FLOATEX lanterns.

This flasher has been studied to grant maximum efficiency and, in installations on buoys, gives full reliability and high resistance.

The electronic schedules of the flasher are lodged in an appropriate aluminium and plastic container from where the electric connections put out.

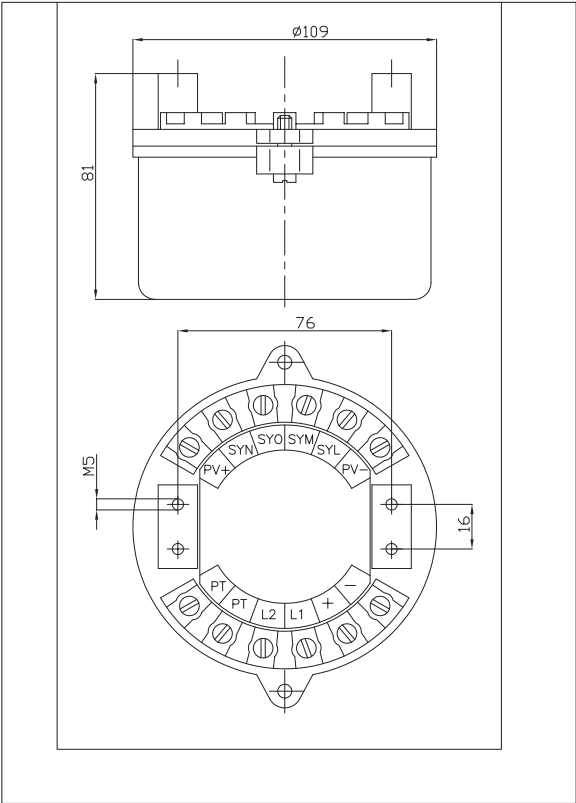
The whole has extremely reduced dimensions, which make that the flasher can be housed even in very restricted spaces.

Main characteristic of the flasher FLCG-256 is the programmability of the light characteristics in all the possible sequences required by the international IALA standard norms.

The flasher FLCG-256 has been studied and manufactured according to U.S.C.G. requirements.



FLCG-256 ELECTRONIC FLASHER



TECHNICAL DATA	
LAMP VOLTAGE	12 V
RATED LAMP CURRENT	0,2 ...10 A
MAXIMUM LAMP CURRENT	10 A
OPERATING VOLT-AGE	10.5 V ... 18 V
SELECTABLE SEC-OND OUTPUT	Lamp charger or 2nd Filament
IDLE CURRENT	<10 mA
SELECTABLE RHYTHMS	256 programmable
SYNCHRONIZA-TION	Yes
TEMPERATURE RANGE	-40° ... -85° C
WEIGHT	346 g
ELECTRIC PRO-TECTION	Polarity inversion - short circuit - over-load



LUMINOUS INTENSITY AND RANGE

GEOGRAPHICAL RANGE TABLE

Height of light above sea level	Height of observer above sea level					
	0 m	5 m	8 m	11 m	15 m	
3 m	3,6	8,3	9,5	10,5	11,7	Geographical range in nautical miles
5 m	4,7	9,3	10,5	11,6	12,7	
7 m	5,5	10,2	11,4	12,4	13,6	
10 m	6,6	11,2	12,5	13,5	14,6	
15 m	8,1	12,7	13,9	15,0	16,1	
20 m	9,3	14,0	15,2	16,2	17,4	
30 m	11,4	16,0	17,3	18,3	19,4	
40 m	13,2	17,8	19,0	20,1	21,2	
50 m	14,7	19,4	20,6	21,6	22,8	
60 m	16,1	20,8	22,0	23,0	24,2	
70 m	17,4	22,1	23,3	24,3	25,5	
80 m	18,6	23,3	24,5	25,5	26,7	
90 m	19,7	24,4	25,6	26,6	27,8	
100 m	20,8	25,5	26,7	27,7	28,9	

The ranges given above are calculated according to the formula:
 $x = 2.08 (\sqrt{h_e} + \sqrt{h_i})$

where x=geographical range in nautical miles
 he= height of the observer A.S.L. in metres
 hi= height of the light A.S.L. in metres

INTENSITY/RANGE TABLE FOR DAYLIGHT

Atmospheric transmission (T) of 0,74 and 0,85

Range in nautical miles	Intensity in candelas	
	T= 0,74	T= 0,85
1	7300	6500
2	39000	30000
3	120000	80000
4	285000	170000
5	600000	300000
6	1200000	500000
7	2100000	800000
8	3800000	1250000
9	6500000	1900000
10	11000000	2700000

NOTE:

These intensities are calculated on the basis of ambient bright weather conditions with the sun nearly in the observer's eye.

Transmissivity of 0.74 is equal to a visual range of 10 nautical miles.

Transmissivity of 0.85 is equal to 18 nautical miles.

INTENSITY RANGE TABLE FOR DARKNESS

Atmospheric transmission (T) of 0,74 and 0,85

Intensity in cande- las	Range in nautical miles		Intensity in cande- las	Range in nautical miles		Intensity in candelas	Range in nautical miles	
	T= 0.74	T= 0.85		T= 0.74	T= 0.85		T= 0.74	T= 0.85
1	1,0	1,1	100	5,4	6,9	1900	10,7	15,3
2	1,4	1,5	110	5,5	7,1	2000	10,8	15,5
3	1,6	1,8	120	5,6	7,2	2200	11,0	15,8
4	1,8	2,1	130	5,8	7,4	2400	11,2	16,1
5	2,0	2,3	140	5,9	7,6	2700	11,4	16,5
6	2,2	2,4	150	6,0	7,8	3000	11,7	16,9
7	2,3	2,6	160	6,1	8,0	3500	12,0	17,5
8	2,4	2,7	170	6,2	8,1	4000	12,2	17,9
9	2,5	2,9	180	6,3	8,3	5000	12,7	18,8
10	2,6	3,0	190	6,4	8,4	6000	13,1	19,5
11	2,6	3,1	200	6,5	8,5	7000	13,5	20,0
12	2,7	3,2	220	6,7	8,8	8000	13,8	20,5
13	2,8	3,3	240	6,8	9,0	9000	14,1	21,0
14	2,9	3,4	270	7,0	9,3	10000	14,3	21,4
15	3,0	3,5	300	7,2	9,6	15000	15,2	23,0
16	3,1	3,6	330	7,3	9,8	20000	15,9	24,1
17	3,2	3,7	360	7,5	10,0	30000	16,8	25,8
18	3,2	3,8	400	7,7	10,4	40000	17,5	27,0
19	3,3	3,9	450	7,9	10,6	50000	18,1	28,0
20	3,3	4,0	500	8,1	11,0	70000	18,9	29,4
21	3,6	4,3	550	8,2	11,3	100000	19,8	31,0
30	3,8	4,6	600	8,4	11,6	150000	20,8	32,8
35	4,0	4,8	650	8,6	11,8	200000	21,5	34,1
40	4,1	5,1	700	8,7	12,0	300000	22,6	35,9
45	4,3	5,3	800	8,9	12,4	400000	23,3	37,2
50	4,4	5,5	900	9,2	12,8	500000	23,9	38,3
55	4,6	5,7	1000	9,4	13,2	700000	24,8	39,9
60	4,7	5,8	1100	9,6	13,5	1000000	25,7	41,5
65	4,8	6,0	1200	9,8	13,8	1500000	26,8	43,5
70	4,9	6,1	1300	9,9	14,1	2000000	27,6	44,9
75	5,0	6,2	1400	10,1	14,3	3000000	28,6	46,8
80	5,1	6,4	1500	10,2	14,5	4000000	29,4	48,2
85	5,2	6,5	1600	10,3	14,7	5000000	30,0	49,4
90	5,3	6,7	1700	10,5	15,0	7000000	31,0	51,0
95	5,4	6,8	1800	10,6	15,2	10000000	31,9	52,8



PRIMARY ALKALINE BATTERY PACK

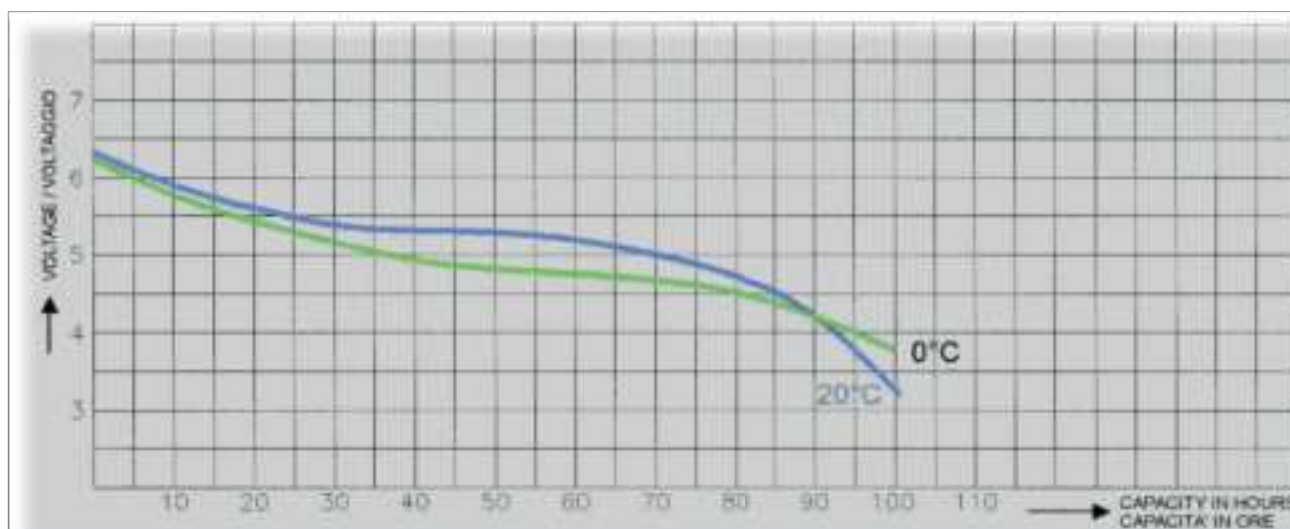
FLOATEX is specialized in assembly and realization of primary batteries packs with different capacities.

FLOATEX, is able to offer the most complete range of batteries for their navigational aids materials.

FLOATEX development, research and service departments, are at your disposal to solve any requirements.



PILE ALKALINE FLOATEX



PRIMARY ALKALINE BATTERY PACK

GENERAL SPECIFICATIONS	
VOLTAGE	6 V - 12 V
CASE	Plastic
TUBE DIAMETER (mm)	80-140-160
CONNECTOR	200 mm wire cable
CELL TYPE OPERATING	LR20 - Zn-MnO ₂ (Alkaline)
TEMPERATURE	-10°C +50°C
STORAGE	8% self discharge rate/years
MAXIMUM CONTINUOUS DRAIN CURRENT	2 ampere

TYPE	NOMINAL CAPACITY (Ah)	VOLTAGE (V)	OUTSIDER DIAMETER (mm)	TOTAL LENGTH (mm)	WEIGHT (Kg)
PB06-100	100	6	ø 160	170	5
PA06-100	100	6	ø 80	800	5
PM06-200	200	6	ø 140	550	10
PM06-400	400	6	ø 140	1100	25
PA12-200	200	12	ø 160	1100	25
PA12-100	100	12	ø 160	550	10

NOTE

These are only typical example of our standard production. Upon request FLOATEX is ready to design and develop MARINE BATTERIES in compliance with custom specifications.



BATTERY CHARGERS

Battery chargers are used to convert energy from an AC source into a DC level for storage in a rechargeable battery. Generally the energy is alternating current from a commercial source.

This energy is modified to Direct Current at the proper voltage.

The chargers are constant voltage devices which regulate the current depending on the state of charge of the battery.

As the battery discharges, more current is supplied to recharge it.

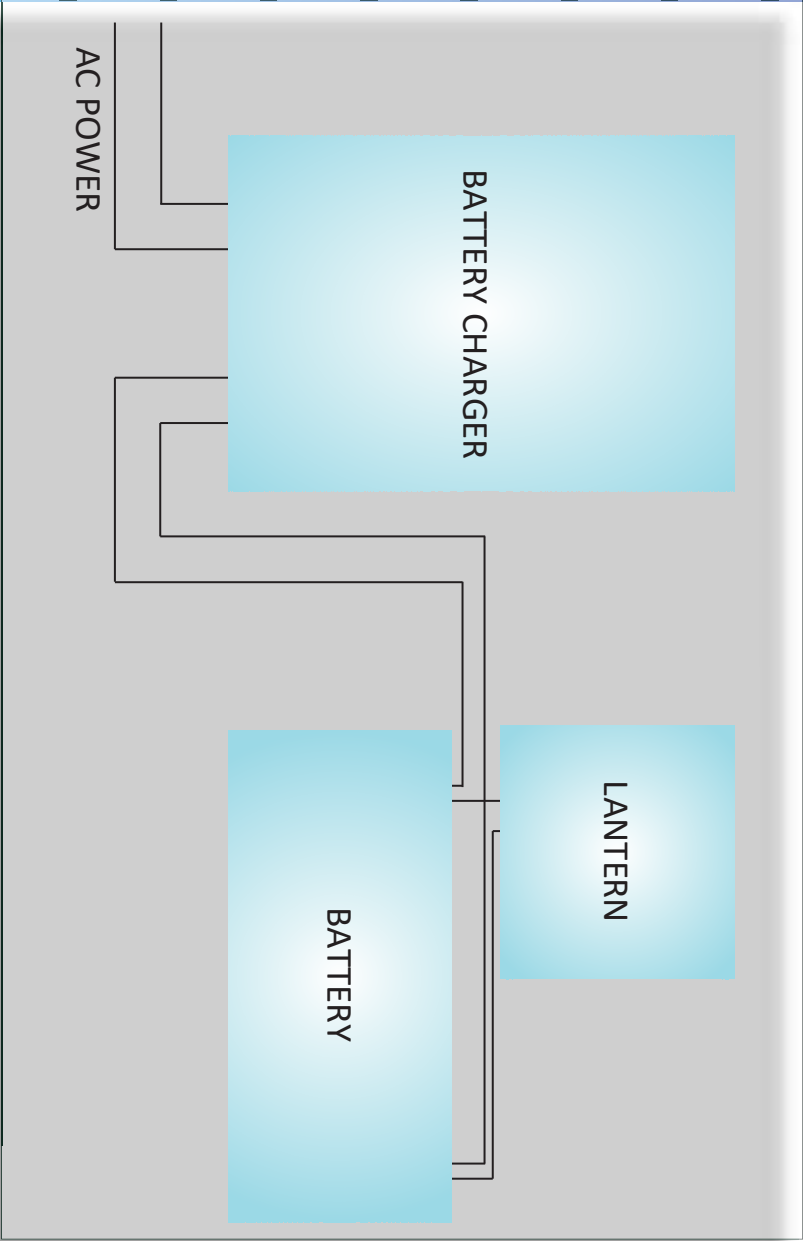
Should AC power fail, the charger won't consume energy from the battery.

CB- series chargers are all solid state regulated with no moving parts. This assures full stand-by service from the battery to the load.

All components are conservatively rated and the entire charger is designed for use in the marine environment. Optional accessories include LED spy and fuses.



BATTERY CHARGERS



TYPE	AC Volts	DC Volts	DC Amp
CB 1205	240 V 50 Hz	12	5
CB 1210	240 V 50 Hz	12	10
CB 1215	240 V 50 Hz	12	15



SOLAR ENERGY CONVERTER

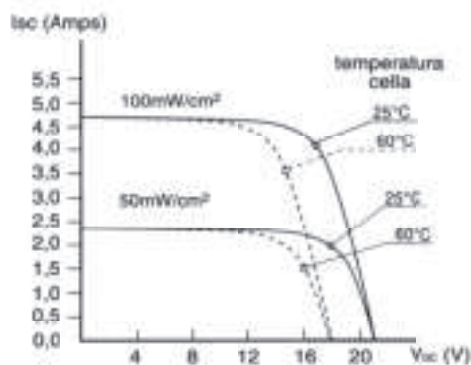
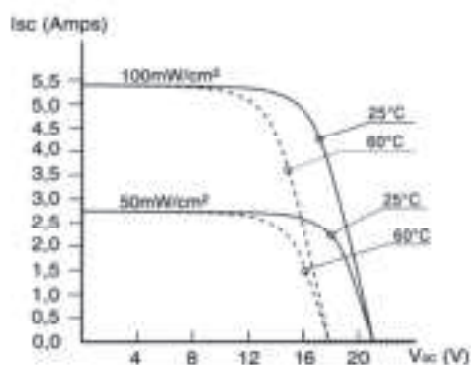
The solar energy converter by photovoltaic modules are composed of polycrystalline or monocrystalline silicon cells connected in series and assembled by lamination.

Floatex uses and installs, over 40 years, solar panels on navigational maritime systems.

For continuous variations on dimensions, feel free to contact us for technical informations.



EXAMPLE OF SOLAR MODULE



SOLAR CHARGE REGULATOR



TECHNICAL DATA

Typical current :	17 mA
Disconnection of solar panels:	14.5 V
Voltage reconnection of solar panels:	12.3 V
Voltage exclusion of the load:	10.5 V
Reconnection voltage load:	12.1 V

MEANING OF COLORS OF LED

LED red	Battery Uncharged
LED yellow	Battery in charge
LED green	Battery fully charged

TYPE	NOMINAL POWER [W]	NOMINAL VOLTAGE [V]	SOLAR MODULES CURRENT [A]	STANDARD BOX DIMENSIONS [mm]
FL 15	180	12	15	240 x 190 x 90
FL 30	360		30	300 x 220 x 160
FL 35	400		35	300 x 220 x 160
FL 50	600		50	300 x 250 x 160
FL 70	800		70	425 x 310 x 160



FLOATEX ELASTIC BEACON

A many years of experience have proven the value of this type of marine signalling device. FLOATEX Elastic Beacons have numerous advantages over the traditional buoy signalling systems, such as:

ACCURACY IN SIGNALLING THE POINT TO BE MARKED.

The Elastic Beacon is limited in its movements due to its particular structure.

This ensures a remarkable accuracy in signalling the point to be marked when compared to the traditional chain or cable mooring system, calling for a length equal to twice or three times the water depth, which obviously leads to considerable displacements of the buoy in respect to the mooring point.

HEIGHT OF THE FOCAL PLANE.

Thanks to its special configuration the Elastic Beacon offers the advantage of the marine lantern having the possibility to be positioned at a considerable height above the sea level.

In normal buoys, the focal plane is much lower as the buoy usually has a very low metacentre. In very bad weather conditions, a light on an elastic beacon will always be visible between two waves, while a buoy stays invisible in a similar situation.

STABILITY.

The Elastic Beacon shows characteristics of notable stability due to the vertical uplift ensured by the submerged float.

The stability also translates into an advantage for maintenance operations to the appliances as these are located on a platform plane easy to approach and which can be moved by the operator.

MAINTENANCE.

Compared to the traditional systems, the Elastic Beacon only needs reduced maintenance due to the absence of chain sections and relevant surfaces exposed to the action of the water-line.

The Elastic Beacon proves to be the ultimate system for sounding physical or environmental parameters.

The great stability as well as the surfaces available on the platform plane, permit easy installation of instruments and wireless system for the transmission of data.



THE ELASTIC BEACON CONSISTS OF THE FOLLOWING ELEMENTS:

- Shot blasted and galvanized tubular steel structure.
- Rotomoulded polyethylene full filled by polyurethane foam.
- Tower for signalling.
- Elastic joint for mooring to the sinker.
- Shackle joint.

main power as they don't rotate.

For major mooring guarantee, a steel cable connecting the tubular section to the sinker runs inside through this tube.

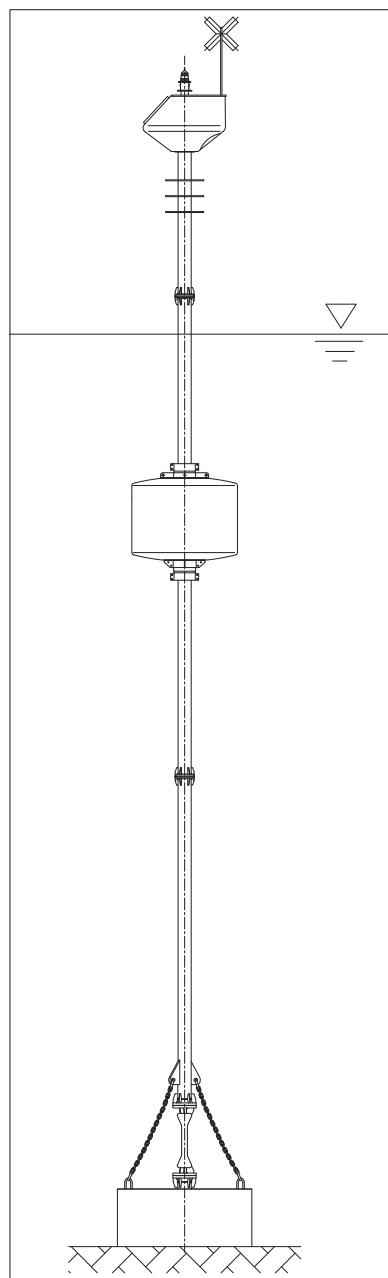
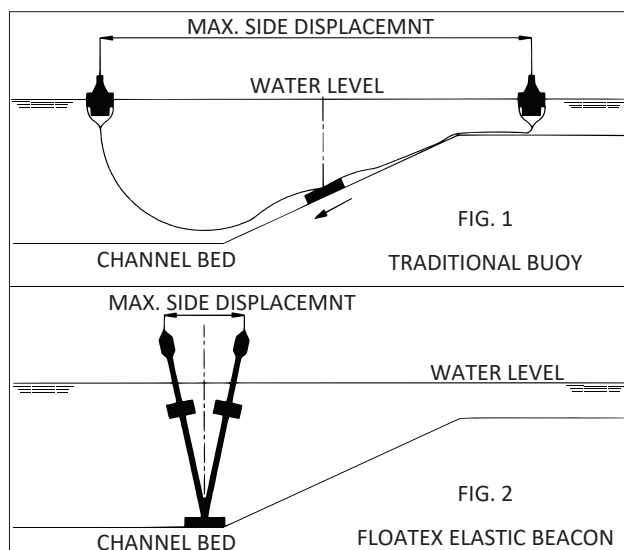
FLOATEX advises to use this structure for water depths from minimum 18 m to maximum 50 m, and keeps at customers' disposal mathematic calculations of the dynamic behaviour of the beacon, guided by the necessary meteorological marine conditions previously supplied.

This calculation program shows the maximum angle of heeling expected to occur under the worst conditions prevailing at site, the periods of oscillation and the minimum distance at which the top platform is found to be located in respect to the sea level.

FLOATEX Elastic Beacon is the best navigation system for marking canals, dredged areas, harbour entrances, etc.

FLOATEX has patented the special system of mooring by elastic tubular rubber joint, which besides effecting a notable elasticity, ensures the absorption of any vibrations to which the system may be subjected, making it electrically insulated.

Elastic Beacons can be connected with



CETMEF 2008

Strait of Bonifacio,
South Corsica

Cardinal Beacon

Focal plane: 10 m

Water depth: 30 m







MARKER BUOYS- BEACH SIGNAL BUOY

Floatex marker buoys series "BOETTE IALA" is a low cost aids to navigation easy to deploy and suitable for landing channel in tourist coastal areas.

These buoys are composed by rotomoulded linear virgin polyethylene, UV stabilized, totally recyclable, and upon request can be filled with polyurethane. All marker buoys are completed with stainless steel mooring eye.



TYPE	DISPLACEMENT	WEIGHT (kg)	MAX SUPPORTED MOORING (kg)
SFECON-6	125	12	30
CILCON-6	100	12	30
BICON-	70	10	31





SIG40 LIGHT BUOYS

The FLOATEX buoy type SIG40 belongs to the ultimate generation of navigational aids. The buoy start-up project took in consideration the necessity of lowering costly maintenance programs, typical of steel buoys, creating a product from environmentally friendly materials such as regenerated steel, old paint, galvanized coatings, and sandblasting process usually related with the traditional steel products.

The SIG40 buoys outer shell is made in UV-stabilized linear virgin polyethylene. The polyethylene used in manufacturing process is completely recyclable (Eco-friendly), it's fully compatible with the marine environment, and has a high resistance to UV rays.

Being linear has the advantage that it can be melted and hence repaired by hot fusion welding. The colour pigment is moulded-in and consequently not added as a coating ensuring greater life of the colour and a big help to the environment as it never requires additional paintings, avoiding toxic dispersions in the water.

Floatex polyethylene require a minimal maintenance.

R&D laboratory daily perform test on production samples such as tensile test, hardness test, abrasion test, UV test and Cold temperature test, colour test and other ordinary tests in the aim to ensure the quality and the reliability of Floatex polyethylene.

The SIG40 buoys are then filled with closed-cell polyurethane foam. The polyurethane foam ensure great resistance to the leakage of air or water, ensuring unsinkability to the buoy also in case of accidental breaks of outer shell. The polyurethane foam is 100% made and tested before by our R&D laboratory.

The buoy design, construction and material combination allow for the sig 40 product to be installed anywhere: open sea sheltered bays, channels, rivers and protected areas. The buoys are usually complete with fixed steel plate on the bottom part for the connection with the mooring line. The top part of the buoy can be equipped with marine top-mark made from marine grade aluminium.

The SIG40 buoys in combination with the achieved stability at sea may give a focal plane height varying from 2.8 to 3 meters.

The buoy normally comes equipped with LED self-powered marine lantern.



TECHNICAL DATA**DIMENSIONS**

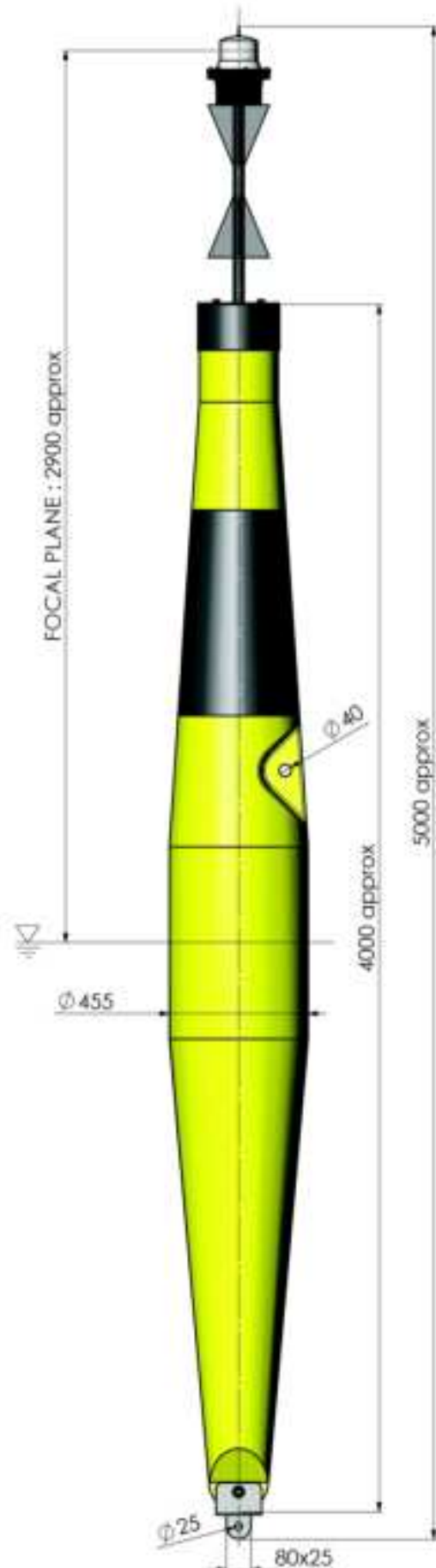
Buoy Body Diameter (nominal)	455 mm
Thickness minimum	7 mm
Focal plane	From 2.8 to 3 m
Displacement per dm/immersion	16 Kg
Draught (Without mooring)	1900 mm
Air Weight	120 kg

STANDARD EQUIPMENT

Marine lantern max supported weight:	5 kg
Top Mark	Aluminum (optional)
Float	Shell: rotomoulded polyethylene Core: polyurethane foam (all IALA colours available)
Mooring eye	S275JR or equivalent

RECOMMENDED MOORING

Open link chain size	14 mm
Max supported mooring:	100 Kg
Sinker approx. (in sea water):	250 Kg





GAV80115-LIGHT BUOYS

The FLOATEX light buoy type GAV80115-SEC is specifically designed to give a small nice looking navigations aids for the ports, protected sea areas, bays, channels, rivers and other sea applications.

The GAV80115-SEC buoys are bi-conical made in UV-stabilized linear virgin polyethylene.

The Polyethylene used in the manufacturing process is completely recyclable (Eco-Friendly), it's fully compatible with the marine environment, and has a high resistance to UV rays. Being linear has the advantage that it can be melted and hence repaired by hot fusion welding.

The colour pigment is moulded-in and consequently not added as a coating ensuring greater life of the color and a big help to the environment as it never requires additional paintings, avoiding toxic dispersions in the water. Floatex polyethylene require a minimal maintenance.

R&D laboratory daily perform test on production samples such as tensile test, hardness test, abrasion test, UV test and Cold temperature test, colour test and other ordinary tests in the aim to ensure the quality and the reliability of Floatex polyethylene.

The GAV80115-SEC buoys are then filled with closed-cell polyurethane foam.

The polyurethane foam ensure great resistance to the leakage of air or water, ensuring unsinkability to the buoy also in case of accidental breaks of the outer shell. The polyurethane foam is 100% made and tested before production by our R&D laboratory.

The buoys come complete with a counter balancing weight that guarantees their stability during the mooring, even if the products should break free from its mooring, as per IALA norm requirements.

The buoy is usually complete with fixed steel plate on the bottom part for the connection with the mooring line.

A steel bar passes through the center of the buoys and is equipped on one end with a mooring eye, and on the opposite end with a small mounting plate for the signalling equipment. All the metal parts are sandblasted, galvanized and painted with marine grade polyurethane paint to ensure a longer life of the colour.

The solar charged marine beacon is equipped with a yellow lens, and can be customized with specific lighting requirements that clients might have.

It normally comes equipped with a LED self-powered marine lantern.



BICON 80115 LIGHT BUOY

TECHNICAL DATA

DIMENSIONS

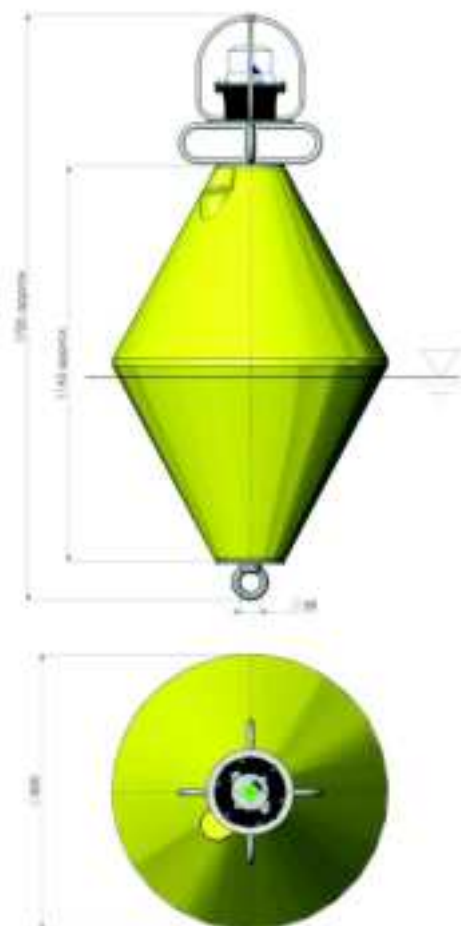
Body Diameter (nominal)	800 mm
Thickness minimum	7 mm
Focal plane (Minimum)	0,9 m
Draught (without mooring)	560 mm
Air weight	60 kg

STANDARD EQUIPMENT3

MARINE LANTERN PROTECTION	GALVANIZED STEEL
MARINE LANTERN	Max supported weight 5 kg
MOORING RING	GALVANIZED STEEL
FLOAT	SHELL: Rotomoulded polyethylene CORE: Polyurethane foam (All IALA colours available)
MOORING EYE M30	GALVANIZED STEEL

RECOMMENDED MOORING

Chain size	14 mm
Max supported mooring	115 kg
Sinker (in sea water)	300 kg



ALSO AVAILABLE
SHORT VERSION



FLOATEX

www.floatex.com



FL 900-GARDA LIGHT BUOYS

The FLOATEX light buoy type FL 900 is specifically designed to give a small niceFLi looking navigations aids for the ports, protected sea areas, bays, channels, rivers and other sea applications.

The 900GARDA-SEC buoys are conical made in UV-stabilized linear virgin polyethylene.

The Polyethylene used in the manufacturing process is completely recyclable (Eco-Friendly), it's fully compatible with the marine environment, and has a high resistance to UV rays.

Being linear has the advantage that it can be melted and hence repaired by hot fusion welding.

The colour pigment is moulded-in and consequently not added as a coating ensuring greater life of the color and a big help to the environment as it never requires additional paintings, avoiding toxic dispersions in the water. Floatex polyethylene require a minimal maintenance.

R&D laboratory daily perform test on production samples such as tensile test, hardness test, abrasion test, UV test and Cold temperature test, colour test and other ordinary tests in the aim to ensure the quality and the reliability of Floatex polyethylene.

The FL900 buoys are then filled with closed-cell polyurethane foam.

The polyurethane foam ensure great resistance to the leakage of air or water, ensuring unsinkability to the buoy also in case of accidental breaks of the outer shell. The polyurethane foam is 100% made and tested before production by our R&D laboratory.

The buoys come complete with a counter balancing weight that guarantees their stability during the mooring, even if the products should break free from its mooring, as per IALA norm requirements.

The buoy is usually complete with fixed steel plate on the bottom part for the connection with the mooring line.

A steel bar passes through the center of the buoys and is equipped on one end with a mooring eye, and on the opposite end with a small mounting plate for the signaling equipment.

All the metal parts are sandblasted, galvanized and painted with marine grade polyurethane paint to ensure a longer life of the colour.



TECHNICAL DATA

DIMENSIONS

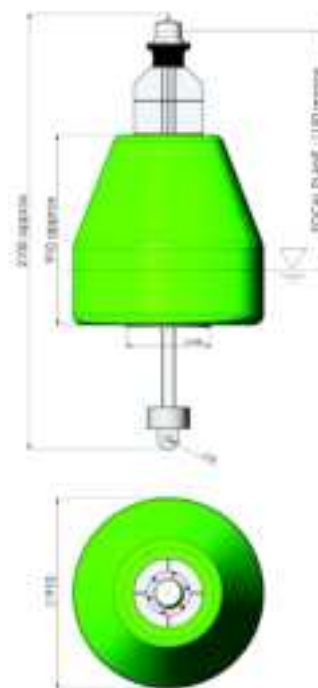
Body Diameter (nominal)	910 mm
Thickness minimum	7 mm
Focal plane	1.2 m
Draught (without mooring)	750 mm
Displacement per dm/immersion	65 kg
Air weight	98 kg

STANDARD EQUIPMENT

MARINE LANTERN	5 kg max supported weight
STRUCTURE + RADAR REFLECTOR	GALVANIZED STEEL
FLOAT CON9/9	SHELL: Rotomoulded polyethylene CORE: Polyurethane foam (All IALA colours available)
MOORING EYE	GALVANIZED STEEL

RECOMMENDED MOORING

Open link chain size	16 mm
Max supported mooring	78 kg
Sinker (in sea water)	300 kg



REGION A LATERAL MARKS



FLOATEX

www.floatex.com



FL600 SMALL LIGHT BUOYS

The **Floatex FL600** buoy with small body diameter is considered as much as offering good stability and resistance with comparatively reduced dimensions.

They can be anchored in open sea for applications requiring a focal plane of less than 1.2 meters from the sea-level.

PL buoys can be provided with latest technology compact self powered marine lantern to achieve light ranges between 1 and 3 nautical miles.

Radar reflector is built-in upper part of steel buoy.

Top mark is available as optional

The buoy body is filled with expanded foam as a major guarantee for unsinkability.

All metal parts of the buoys are sandblasted, galvanized with metalization and coloured with polyurethane marine paint.

Floatex light Buoy type FL600 is composed by:

- Steel tubular structure, galvanized and painted .
- Counterweight on the bottom for a better stability of the buoy.
- Two eyes on the float for lifting.



FL600 SMALL LIGHT BUOYS

TECHNICAL DATA FL600

DIMENSIONS

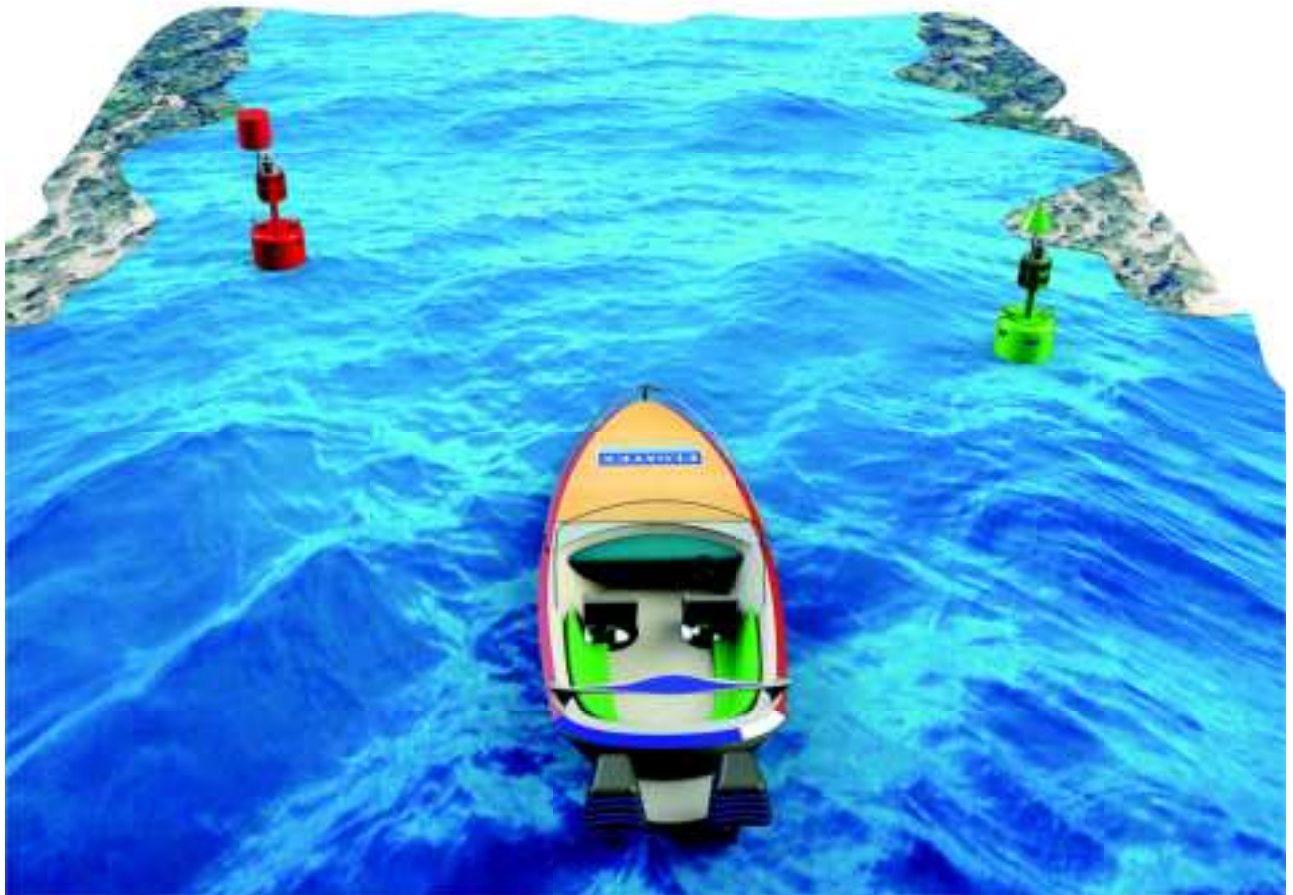
Body Diameter (nominal)	650 mm
Thickness minimum	7 mm
N° of floats	1
Focal plane	1.25 m.
Draught (without mooring)	1.64 m.
Displacement per dm/immersion	29 kg
Air weight	147 kg

STANDARD EQUIPMENT

MARINE LANTERN	5 kg max supported weight
STRUCTURE + RADAR REFLECTOR	GALVANIZED STEEL
FLOAT SD 160-7	SHELL: Rotomoulded polyethylene CORE: Polyurethane foam (All IALA colours available)
MOORING EYE	GALVANIZED STEEL

RECOMMENDED MOORING

Open link chain size	14 mm
Max supported mooring	15 kg
Sinker (in sea water)	100 kg





PE 800

The FLOATEX buoy type PE 800 belongs to the ultimate generation of navigational aids. The buoy start-up project took in consideration the necessity of lowering as much as possible costly maintenance programs, typical of steel buoys, creating a product from environmentally friendly materials thus reduce waste materials such as old paint, zinc coating and sandblasting processes usually related with the traditional steel products.

The PE 800 buoys outer shell are made in UV-stabilized linear virgin polyethylene. The polyethylene used in the manufacturing process is completely recyclable (ECO-friendly), it's fully compatible with the marine environment, and has a high resistance to UV rays. Being linear has the advantage that it can be melted and hence by hot fusion welding.

The colour pigment is moulded-in and consequently not added as a coating ensuring greater life of the colour and a big help to the environment as it never requires additional paintings, avoiding toxic dispersion in the water. Floatex polyethylene requires a minimal maintenance.

The PE 800 buoys are then filled with closed-cell polyurethane foam. The polyurethane foam ensures great resistance to the leakage of water, ensuring unsinkability to the buoy also in case of accidental breaks of the outer shell. The polyurethane foam is 100 % made and tested before production by our R&D laboratory.

The buoy design, construction and material combinations allow for the PE 800 product to be installed anywhere : open sea, sheltered bays, channels, rivers and protected areas.

The buoys are usually complete with fixed steel plate on bottom part for the connection with the mooring line. The top part of the buoys can be equipped with marine top-mark from marine grade aluminium (optional).

The PE 800 buoy is normally equipped with a LED self-powered marine lantern.



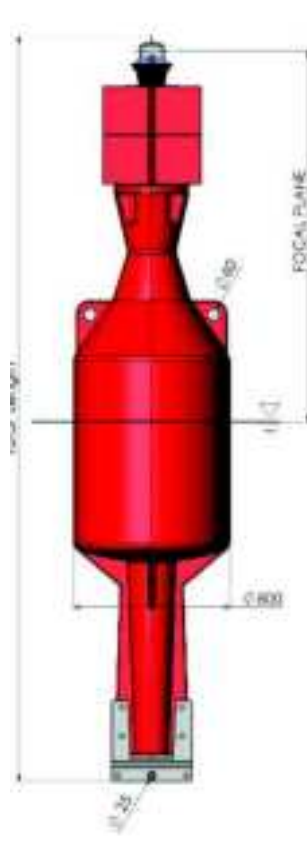
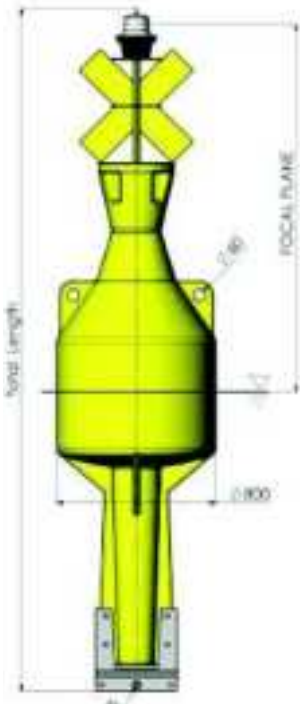
TECHNICAL DATA

DIMENSIONS		MATERIALS	
Buoy Body Diameter (nominal)	800 mm	Buoy Body:	POLYETHYLENE
Thickness average	9 mm	Filling:	POLYURETHANE FOAM
Focal plane	From 1,8 to 2,5 m	Top Mark:	Aluminium (optional)
Displacement per dm/immersion	48 Kg	Mooring Plate	S275jr or equivalent
Draught (Without mooring)	1350 mm	Colour	ALL IALA
STANDARD ELECTRICAL EQUIPMENT		Max weigth supported 5 kg	

TYPE	PE800-D
FOCAL PLANE	1870
TOTAL LENGTH	3440
CHAIN SIZE	16
MAX SUP-PORTED MOORING	80
SINKER IN SEA WATER	500 KG
AIR WEIGHT	125 KG

TYPE	PE800-S
FOCAL PLANE	2220
TOTAL LENGTH	3820
CHAIN SIZE	16
MAX SUP-PORTED MOORING	110 KG
SINKER IN SEA WATER	500 KG
AIR WEIGHT	214 KG

TYPE	PE800-L
FOCAL PLANE	2825
TOTAL LENGTH	4420
CHAIN SIZE	16
MAX SUP-PORTED MOORING	110 KG
SINKER IN SEA WATER	500 KG
AIR WEIGHT	220 KG





PL 900 SERIES

The series PL buoys with small body diameter are considered to be the most versatile of the whole range in as much as offering good stability and resistance with comparatively reduced dimensions.

They can be anchored in open sea for applications requiring a focal plane of less than 2.48 meters from the sea-level.

PL buoys can be provided with latest technology compact self powered marine lantern to achieve light ranges between 1 and 3 nautical miles.

The steel superstructure allows for easy installation of solar panels and rechargeable batteries to make this signalling buoy self-supporting for energy.

The buoy body is filled with expanded foam as a major guarantee for unsinkability.

All metal parts of the buoys are sandblasted, galvanized with metalization and coloured with polyurethane marine paint.



PL900 SERIES SMALL LIGHT BUOYS

TECHNICAL DATA	
DIMENSIONS	
Body Diameter (nominal)	900 mm
Thickness minimum	7 mm
N° of floats	2
Focal plane	2.48 m
Draught (without mooring)	2900 mm
Displacement per dm/immersion	65 kg
Air weight	475 kg
STANDARD EQUIPMENT	
MARINE LANTERN	5 kg max supported weight
STRUCTURE + RADAR REFLECTOR	GALVANIZED STEEL
FLOAT CON9/9 FLOAT CIL 9/9	SHELL: Rotomoulded polyethylene CORE: Polyurethane foam (All IALA colours available)
MOORING EYE	GALVANIZED STEEL
RECOMMENDED MOORING	
Open link chain size	16 mm
Max supported mooring	158 kg
Sinker (in sea water)	1000 kg



REGION A LATERAL MARKS



REGION B LATERAL MARKS



FLOATEX

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FL-1250 MULTI -PURPOSE BUOY

FL-1250 is Floatex buoy oriented to continue development of high performance low maintenance, cost effective multi -purpose buoys for use in all marine environments. The design of this buoy allows it to be used in a wide variety of applications that include shallow water, channel edges, rivers with up to 7 knots current and fast current tidal zones.

FEATURES

.UV-STABILIZED POLYETHYLENE-

Rotationally moulded float sections and super-structure which are 9.5 mm thick and able to withstand knocks and/or collision. This rugged material is abrasion resistant and repels marine growth, eliminating costly sandblasting and painting.

.LONG-TERM STRENGTH

FL-1250 is equipped with a galvanised steel core which provides additional strength as well as integral lifting and mooring eyes. FL-1250 is filled with Polyurethane foam to prevent any significant water ingress in the event of a puncture. As with Floatex polyethylene buoys minor punctures are on station repairable. The float collar on the FL-1250 is in two separate pieces which enables a seriously damaged float section to be replaced whilst the buoy is at sea.

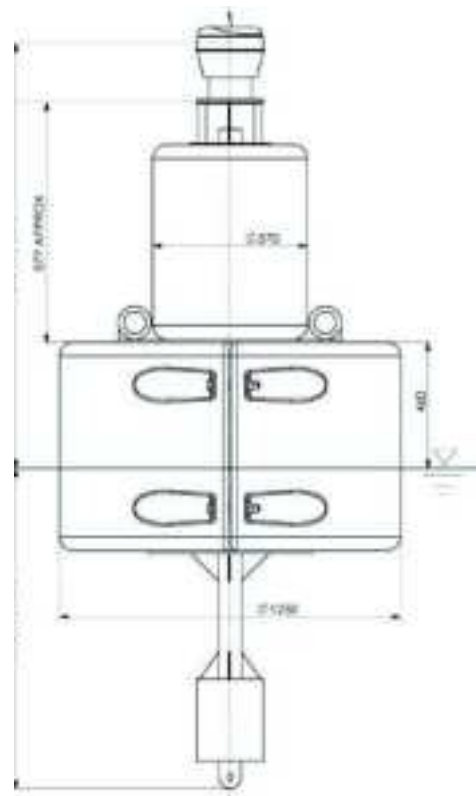
.OPTIONS

Topmarks, self contained lanterns and buoy monitoring system.



FL-1250 MULTI PURPOSE BUOY

TECHNICAL DATA	
DIMENSIONS	
Body Diameter (nominal)	1250 mm
Thickness minimum	9.5 mm
Focal plane	1500 m
Draught (without mooring)	1170 mm
Displacement per dm/immersion	122 kg
Air weight	360 kg
STANDARD EQUIPMENT	
MARINE LANTERN	10 kg max supported weight
STRUCTURE + RADAR REFLECTOR	GALVANIZED STEEL
FLOAT	SHELL: Rotomoulded polyethylene CORE: Polyurethane foam (All IALA colours available)
MOORING EYE	GALVANIZED STEEL
RECOMMENDED MOORING	
Open link chain size	16 mm
Max supported mooring	220 kg
Sinker (in sea water)	1000 kg





IB1200-Ice Buoy

IB-1200 is a product of Floatex's continued development of high performance, low maintenance and cost effective buoys with its European partner, Floatex s.r.l. The unique design of the buoy allows it to be deployed in a variety of applications including the arduous conditions found in arctic waters.

FEATURES

- **UV-STABILISED POLYETHYLENE - IB-1200** comprises three rotomoulded, UV stabilized polyethylene sections; upper body, central body and lower hull. Utilising a bonding technology all three sections are welded together to provide three completely independent sections, isolated from each other. This combination provides a high impact resistance and structural elasticity.

In addition, the lower hull section is moulded with a second internal chamber to provide floatation in the event the buoy is damaged.

All three sections are moulded with different wall thicknesses designed to provide maximum impact resistance, along with the best stability, in varying currents and sea conditions.

- **LONG-TERM STRENGTH**

- Equipped with galvanised steel mooring and lifting eyes making the buoy easy to handle.

- **TESTED**

- Able to exceed DIN EN ISO 4892-3-2006 UV stability.

- **COLOURS**

- IB-1200 is available in all recommended IALA colours.

- **LANTERN**

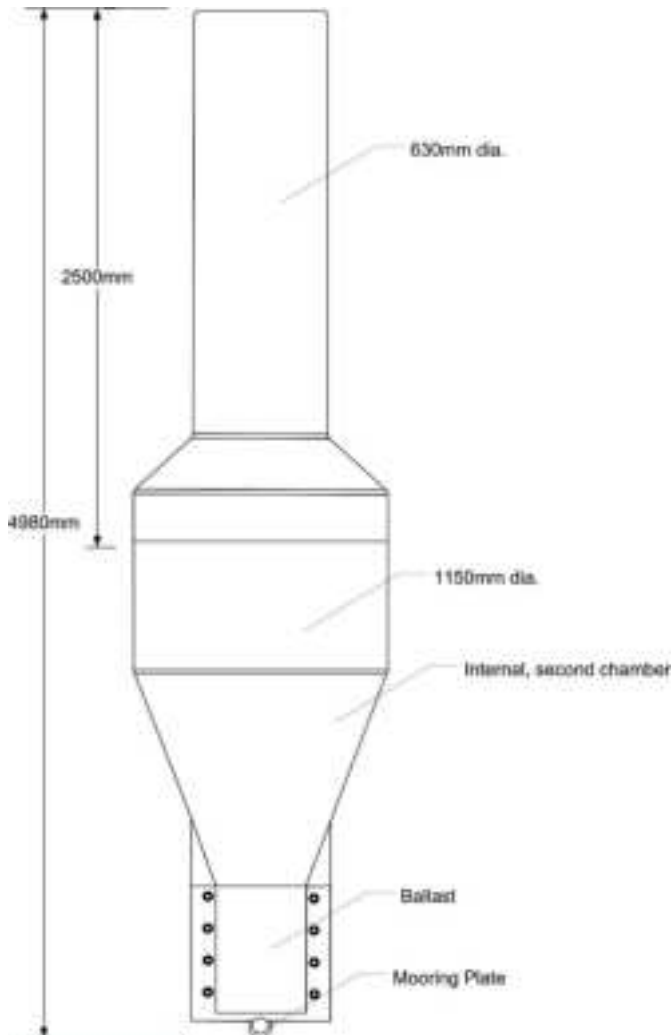
- A self contained lantern can be fitted to the buoy or alternatively it can be equipped with an ice buoy light with an internal battery pack.



IB-1200 LIGHT BUOYS

SPECIFICATIONS

Application	Rivers, Estuaries, Harbours and Channels - Ice Locations
Construction	Rotationally moulded, UV stabilised polyethylene
Air Weight	910kg
Wall Thickness	Upper body 15mm Central body 20mm Lower hull 25mm
Diameter	Maximum 1200mm
Overall Length	4980mm
Nominal Focal Plane Height	2500mm
Draft	2310mm
Submergence	10.4kg/cm
Radar Reflector	10m ² (X-band) Optional
Radar Range, nominal	4 to 5NM
Colour	As Specified and according to IALA recommendations
Lantern	Self contained lantern or ice buoy lantern with an internal battery pack
Ballast	600kg adjustable
Maximum Mooring Load	346kg
Maximum Current	6 knots
NOTE: Specifications are subject to change.	





LIGHT WEIGHT BUOY

The light weight buoys "BL" series have been designed to ensure a greater visibility of the buoy, especially where cardinal signals are required.

The buoy is composed by a floating module at sea level made in high strength virgin polyethylene, completely recyclable and filled with closed cell polyurethane foam to ensure unsinkability also in bad sea conditions or in case of small accidents. The colour pigment is placed to the virgin polyethylene during molding process; this ensures a greater life of the colour and a big help to the environment as it never requires painting and so no toxic dispersions in the water. We have designed several possibilities in diameter from 1200mm till 2200mm giving to our clients a full range of choose in base of their necessity.

A big Day Mark is installed on the top of the floating module. This is the main purpose of these kind of buoys as this special day mark ensure a greater visibility of the buoy and, as well, the possibility to make cardinal signals thanks to its interchangeable construction.

These series of buoys generally arrive with self powered marine lantern. The designed focal plane of buoys is 3000mm.

Floatex "BL" series have been designed to work also in open sea conditions with high water depths.

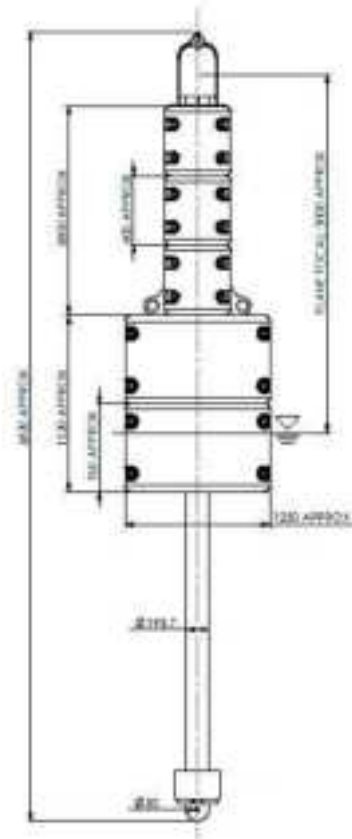
To facilitate lifting and mooring operations two lifting eyes are installed on the top of the floating module and one mooring eye on the bottom of the buoy.



LIGHT WEIGHT BUOY

1212 BL TECHNICAL DATA

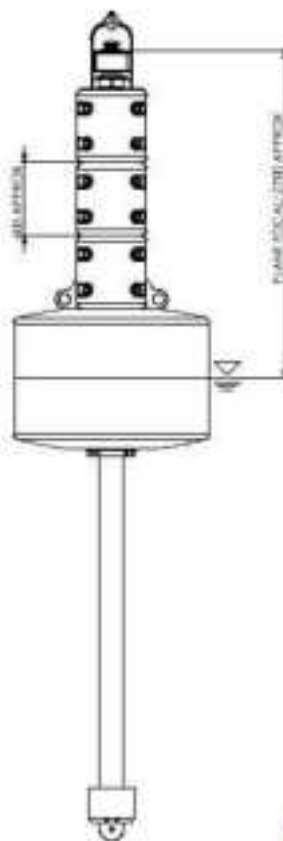
DIMENSIONS	
Buoy Body Diameter (nominal)	1250 mm
Thickness of body	8 mm
Focal plane height	3000 mm approx.
Draught (without mooring)	3360 mm
Displacement per dm/immersion	119 Kg
Lateral surface	2.3 m2
Air weight approx.	620 Kg
MATERIALS	
Buoy Body:	PE rotomoulded + expanded PU
Metal part:	Galvanized Steel
Top mark	Galvanised steel (optional)
Lantern max supported weighth	10 KG
MOORING	
Open link chain	22 mm
Max. supported mooring:	525 Kg
Sinker (in sea water)	1000 kg



FLOATEX

**1612 BL TECHNICAL DATA**

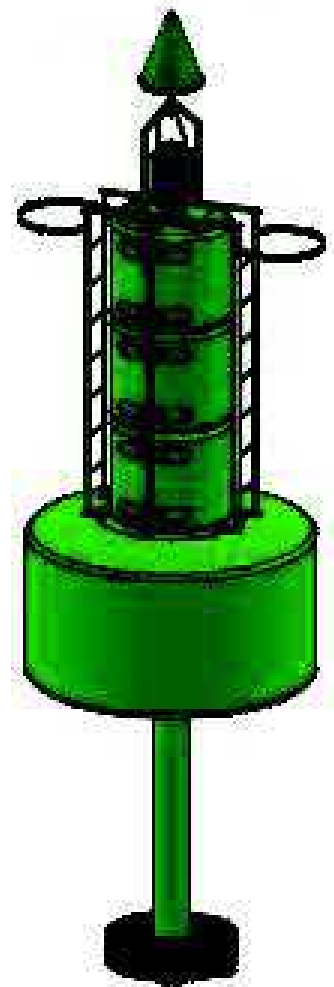
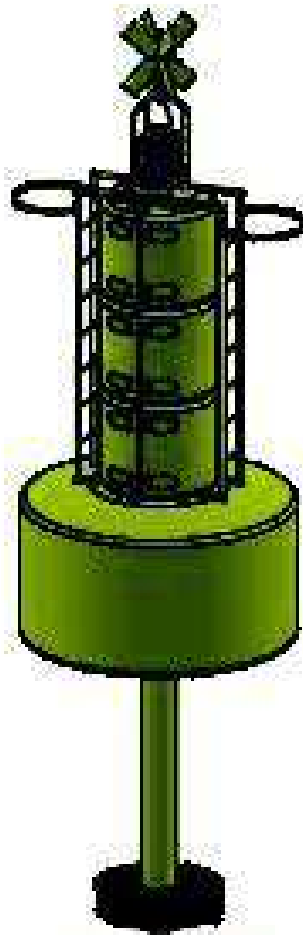
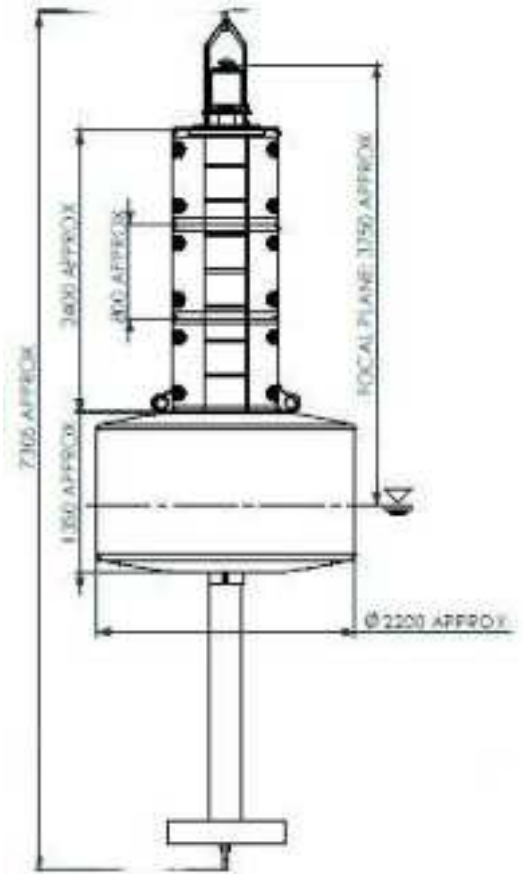
DIMENSIONS	
Buoy Body Diameter (nominal)	1600 mm
Thickness of body	9 mm
Focal plane height	2700 mm approx.
Draught (without mooring)	3370 mm
Displacement per dm/immersion	200 Kg
Lateral surface	2 m ²
Air weight approx.	600 Kg
MATERIALS	
Buoy Body:	PE rotomoulded + expanded PU
Metal part:	Galvanized Steel
Top mark	Galvanised steel (optional)
Lantern max supported weight	10 KG
MOORING	
Open link chain	22 mm
Max. supported mooring:	475 Kg
Sinker (in sea water)	2000 kg



LIGHT WEIGHT BUOY

2213 BL TECHNICAL DATA

DIMENSIONS	
Buoy Body Diameter (nominal)	2200 mm
Thickness of body	7 mm
Focal plane height	3700 mm approx.
Draught (without mooring)	3110 mm
Displacement per dm/immersion	380 Kg
Lateral surface	5.2 m2
Air weight approx.	2257 Kg
MATERIALS	
Buoy Body:	PE rotomoulded + expanded PU
Metal part:	Galvanized Steel
Top mark	Galvanised steel (optional)
Lantern max supported weighth	20 KG
MOORING	
Open link chain	28 mm
Max. supported mooring:	414 Kg
Sinker (in sea water)	2600 kg



FLOATEX

SPECIAL MARK www.floatex.com

STARBOARD



1200 FL LIGHT BUOYS

The buoys with 1200 mm body diameter are considered to be the most versatile of the whole range offering stability and resistance with comparatively reduced dimensions.

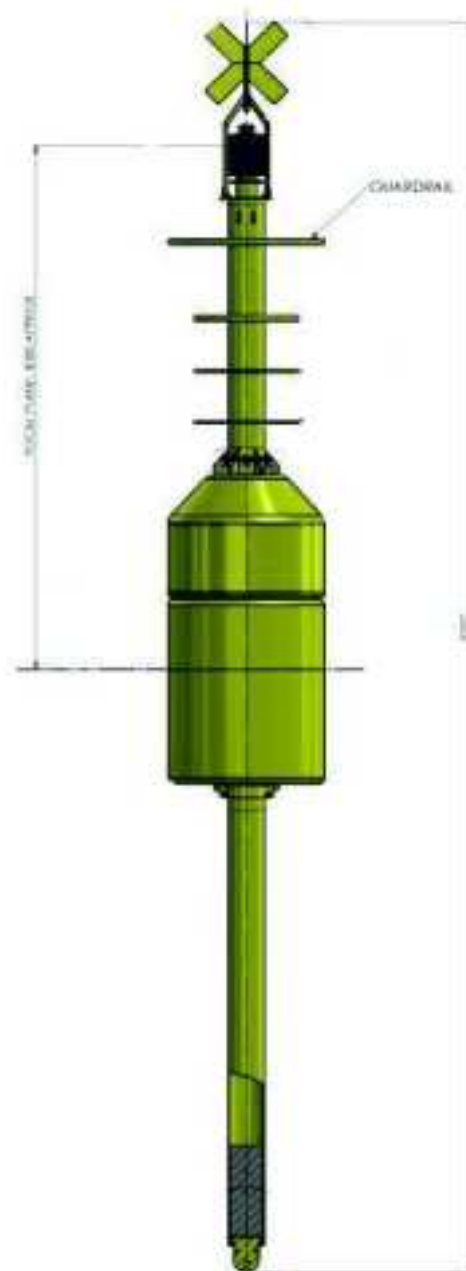
They can be anchored in open sea for applications requiring a focal plane of up to 3 meter from the sea-level.

The 1200 FL is a buoy qualified for compact self powered marine lantern. (photovoltaic module configuration 1200 GS is available)

The final treatments of FLOATEX product consist of shot blasting to metal, galvanizing the complete system and subsequent painting in IALA colours by means of polyurethane marine paint.

To guarantee unsinkability, the buoy body is filled with expanded floating foam.

Visibility during day time is ensured through a metal day-mark of large dimensions positioned on top of the tower, with provisions by special construction arrangements for passive radaring.



TECHNICAL DATA	
DIMENSIONS	
Body Diameter (nominal)	1200 mm
Thickness minimum	9.5 mm
Focal plane	4000 mm
Draught (without mooring)	4600 mm
Displacement per dm/immersion	110 kg
Air weight	1200 kg
STANDARD EQUIPMENT	
MARINE LANTERN	20 kg max supported weight
STRUCTURE + RADAR REFLECTOR	GALVANIZED STEEL
FLOAT	SHELL: Rotomoulded polyethylene CORE: Polyurethane foam (All IALA colours available)
MOORING EYE	GALVANIZED STEEL
RECOMMENDED MOORING	
Open link chain size	22 mm
Max supported mooring	465 kg
Sinker (in sea water)	2000 kg

1300 PL LIGHT BUOYS

The buoys with a 1300 mm body diameter are considered to be the most versatile of the whole range offering stability and resistance with comparatively reduced dimensions.

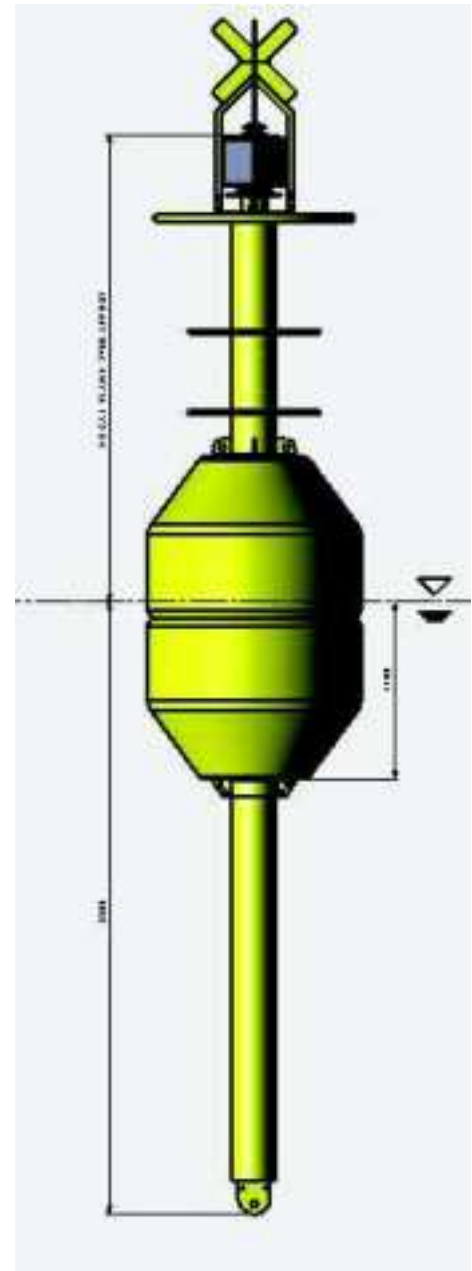
They can be anchored in open sea for applications requiring a focal plane of up to 3 meter from the sea-level.

The 1300 FL is a buoy qualified for compact self powered marine lantern (photovoltaic module configuration 1300PL is available)

The final treatment of FLOATEX product consist of shot blasting to metal, galvanizing the complete system and subsequent painting in IALA colours by means of polyurethane marine paint.

To guarantee unsinkability, the buoy body is filled with expanded floating foam.

Visibility during day time is ensured through a metal day-mark of large dimensions positioned on top of the tower, with provisions by special construction arrangements for passive radaring.



TECHNICAL DATA	
DIMENSIONS	
Body Diameter (nominal)	1300 mm
Thickness minimum	9.5 mm
Focal plane	3300 m
Draught (without mooring)	3444 mm
Displacement per dm/immersion	132 kg
Air weight	910 kg
STANDARD EQUIPMENT	
MARINE LANTERN	20 kg max supported weigth
STRUCTURE + RADAR REFLECTOR	GALVANIZED STEEL
FLOAT	SHELL: Rotomoulded polyethylene CORE: Polyurethane foam (All IALA colours avaible)
MOORING EYE	GALVANIZED STEEL
RECOMMENDED MOORING	
Open link chain size	20 mm
Max supported mooring	482 kg
Sinker (in sea water)	2000 kg



1600 RIVER LIGHT BUOY

The FLOATEX buoy 1600 RIVER belong to the ultimate generation of navigational aids.

The necessity of reducing costly maintenance programs, typical of steel products to avoid negative ecological ambient impact (such as old paint, zinc coating and sandblasting) inspired FLOATEX to develop and realize the 1600 RIVER buoy.

The colour of the buoy is not obtained by painting but is embedded in the plastic, so that no painting is necessary for almost the whole buoy life.

The design of the buoy and the combination of the materials utilized allows the FLOATEX buoy 1600 RIVER to be installed in sheltered areas as well as channels and specially river locations. Originally designed to be installed in rivers with medium current, the FLOATEX buoy type 1600 RIVER can be utilised as well in shallow waters locations due to the high stability achieved.

Exposed metal parts have been reduced to nearly none and bolting systems are all in stainless steel.

The unsinkability of the buoy is obtained by the latest FLOATEX foam filling technique by 100% closed cell expanded floating foam.

Two big lifting eyes on top of the buoy body ensures easy lifting and temporary mooring of the maintenance boat.

FLOATEX buoy 1600 RIVER is normally equipped with latest compact solar powered marine lanterns.

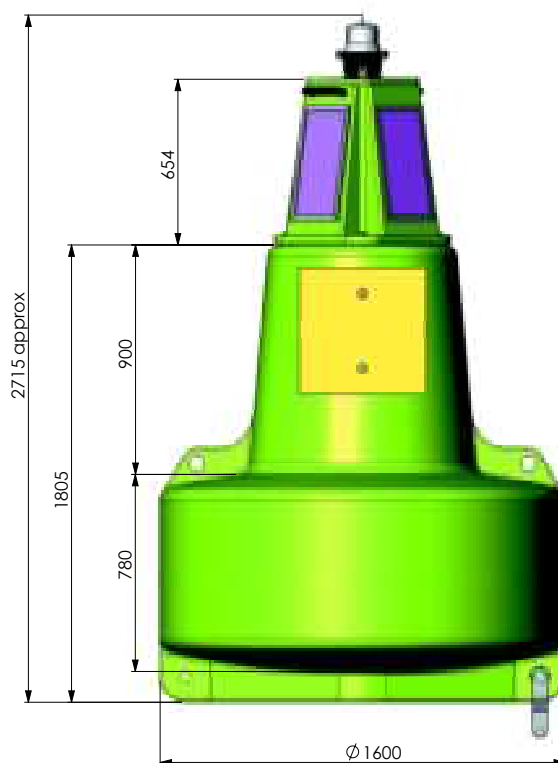


1600 RIVER LIGHT BUOY



TECHNICAL DATA

DIMENSIONS	
Buoy Body Diameter (nominal)	1600 mm
Thickness minimum	8 mm
Focal plane height standard	2100 mm
Draught (Without mooring)	500 mm
Displacement per dm/immersion	200 Kg
Total length	2700 mm
Total weight approx.	440 Kg
Lateral surface	1.6 m2
MATERIALS	
Buoy Body:	POLYETHYLENE
Filling:	POLYURETHANE FOAM
MARINE LANTERN ELECTRICAL EQUIPMENT	
20 kg max supported weight	
RECOMMENDED MOORING	
Open link chain size	16 mm
Max supported mooring:	200 Kg
Sinker approx. (in sea water):	800 Kg





FL 1500 MULTI PURPOSE BUOY

The FL1500 is a cost effective multi purpose buoy for use in all marine environments. Design of this buoy allows it to be deployed in a wide variety of application that include shallow water, channel edges, rivers up to 6 knots current, deep harbours and fast current tidal zones. Through a unique mould design and controlled process, an increased thickness is formed major stress point. Mooring eye and lifting eye are a passing through steel rod removable, as per latest IALA requirements.



- FL-150 buoy is polyurethane foam filled to prevent significant water ingress in event of puncture.
- Unique keel and hull system with 160 kg of internal ballast keeps the buoy stable, upright and tracking.
- Available in all recommended IALA COLORS.
- Fading of the color tested in our laboratory

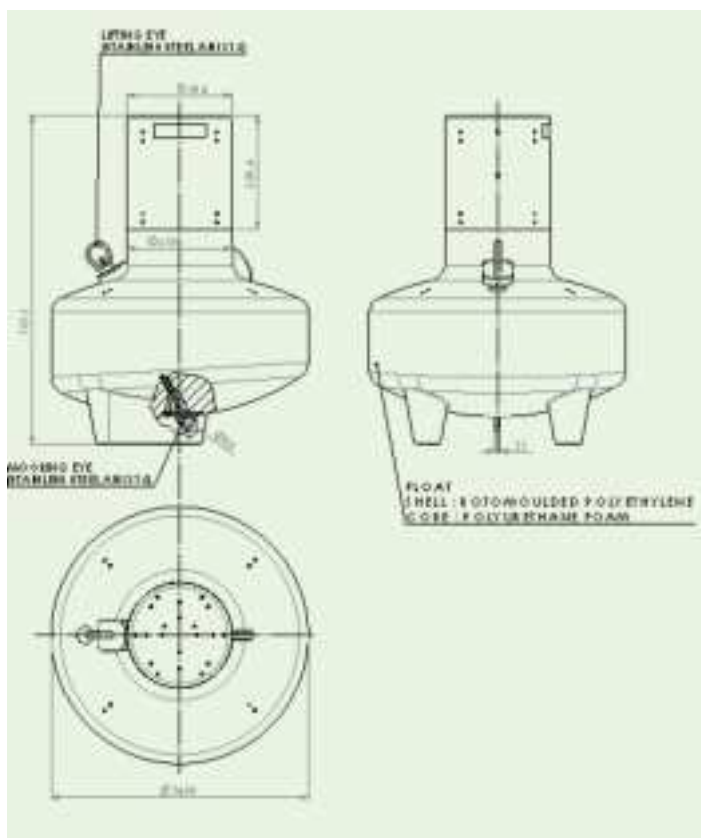
LIGHT BUOY FL1500

TECHNICAL DATA FL1500

DIMENSIONS	
Buoy Body Diameter (nominal)	1480 mm
Thickness minimum	9 mm
Focal plane height standard	1760 mm
Draught (Without mooring)	419 mm
Displacement per dm/immersion	17Kg/cm
Total length	1894 mm
Total weight approx.	261 Kg
Lateral surface	8 m2
MATERIALS	
Buoy Body:	POLYETHYLENE
Filling:	POLYURETHANE FOAM
MARINE LANTERN ELECTRICAL EQUIPMENT	
50 kg max supported weight	
RECOMMENDED MOORING	
Max supported mooring:	540 Kg
Open link chain size	22 mm
Sinker approx. (in sea water):	500 Kg



STAINLESS STEEL CENTRAL PART REMOVABLE!





FL1750 THALASSA

The FL1750 is Floatex product enhanced performance, low maintenance, cost effective marine aids to navigation. The FL1750 THALASSA buoy utilises the benefits of the latest in materials, manufacturing processes and technology, which provided a rugged, lightweight buoy with exceptional station-keeping and long life, while reducing the long term maintenance expense of floating aids to navigation.

Mooring eye and lifting eye are a passing through steel rod removable, matching latest IALA requirements.



- Available in all recommended IALA COLORS.
- Laboratory in house color controlled fading parametric tested
- FL-1750 THALASSA buoy is polyurethane foam filled to prevent significant water ingress in event of puncture.
- UV STABILISED POLYETHYLENE- Rotationally moulded to form a seamless body, 9.5 mm thick. Colour of the buoy is not obtained by painting but is embedded in the plastic, so that no painting is necessary for almost the whole buoy life.
- DIVIDED INTO THREE SECTIONS- A float section, middle section and navaid section form an abrasion resistant, shock absorbing buoy able to withstand knocks and/or collisions.
- MATCHING OR ALTERNATING SECTIONS- Easily makes bifurcation buoys, either red or green as required. Cardinal buoys can be assembled using the same method with yellow and black sections.

Details

FL1750 THALASSA

FL1750 can be equipped with a range of self contained lanterns.

Specifications

Buoy body	Rotationally moulded in medium density UV stabilised virgin polyethylene 9.5 mm average thickness
Foam filling	38 kg /m3 expanded polyurethane
Mooring eye- lifting	Stainless steel. Removable.
Diameter	1750 mm.
Focal plane heighth*	2290 mm.
Draft	751 mm
Freeboard	305 mm.
Submergence	24 kg/cm
Air weight	454 kg.
Surface colour	As specified
Maximum mooring load	540 kg
Maximum current	6 knots





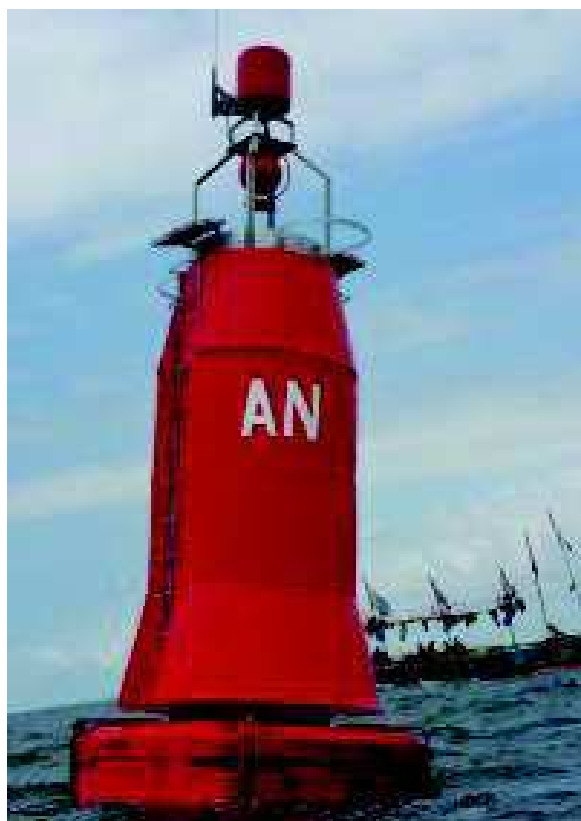
3017 FL-FD LIGHT BUOY

The light buoy type 3017 FL- FD is formed by a floating body composed of 4 polyethylene rotomoulded shells floats with more than 20 mm wall thickness, Floatex construction of wall ensure high mechanical resistance to the floats . The bouy can be filled with rigid polyurethane foam.

The central structure is a polyethylene tube that connect every part of the buoy: floats, counterbalance and the superior part. The length of the central structure can be varied, so the focal plane and the stability can change slightly. A big "day mark" increases the visibility of buoy 3017 FL - FD and ensures the access to the marine lantern.

Different signalling systems as well can be used. The buoy type 3017 FL - FD has been designed to work in open sea with a relative high focal plane and relative big water depth.

The buoy, almost in plastic materials, permits a very limited maintenance. Utilization of solar panels and LEDs ensures extended operating electrical system. Easy-handling provision is granted by two lifting eyes on top of the floats. Other two eyes are fixed onto the lower section of the floats for attachment to the mooring sling.



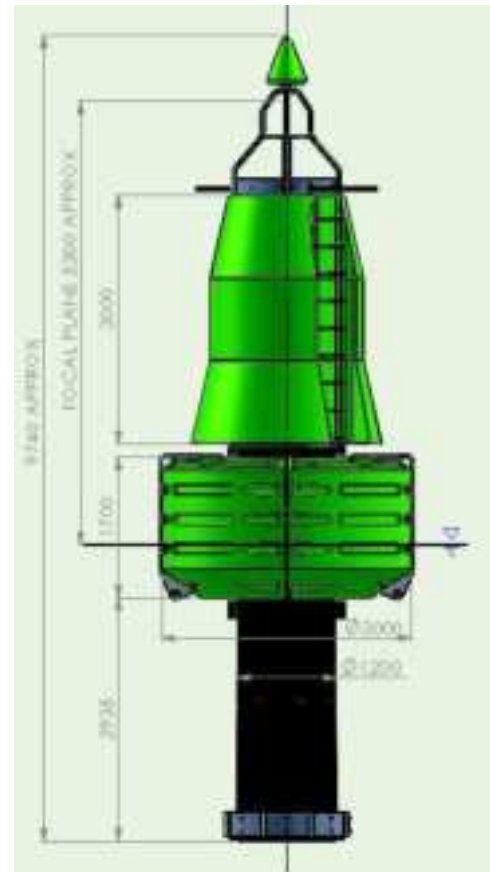
TECHNICAL DATA 3017FL-FD4

DIMENSIONS	
Buoy Body Diameter (nominal)	3000 mm
Thickness minimum	21 mm
Focal plane height standard	4000 mm
Draught (Without mooring)	2612 mm
Displacement per dm/immersion	700 Kg
Total length	7740 mm
Total weight approx.	3150 Kg
Lateral surface	8 m2
MATERIALS	
Buoy Body:	POLYETHYLENE
Filling:	POLYURETHANE FOAM (OPTIONAL)
MARINE LANTERN ELECTRICAL EQUIPMENT	
50 kg max supported weight	
RECOMMENDED MOORING	
Max supported mooring:	1400 Kg
Open link chain size	28 mm
Sinker approx. (in sea water):	8000 Kg



TECHNICAL DATA 3017FL-FD5

DIMENSIONS	
Buoy Body Diameter (nominal)	3000 mm
Thickness minimum	21 mm
Focal plane height standard	5300mm
Draught (Without mooring)	3448 mm
Displacement per dm/immersion	700 Kg
Total length	9740 mm
Total weight approx.	3820 Kg
Lateral surface	10 m2
MATERIALS	
Buoy Body:	POLYETHYLENE
Filling:	POLYURETHANE FOAM (OPTIONAL)
MARINE LANTERN ELECTRICAL EQUIPMENT	
50 kg max supported weight	
RECOMMENDED MOORING	
Max supported mooring:	1400 Kg
Open link chain size	28 mm
Sinker approx. (in sea water):	8000 Kg





TBP REINFORCED POLYESTER

To facilitate the landing and approach to any type of ports, FLOATEX is involved, over many years, in the design and in the manufacture of a wide range of lattice tower, beacon and structure for navigation lightening systems.

For installations, especially in hard places, where normal cranes can't work, FLOATEX builds these signalling typ. For this reason Floatex take really in consideration the weight and the soundness. The beacon towers type TPB are built with modular fibreglass elements of various heights up to arrive to requested focal plane.

The minimum height is 4.5 meters at the balustrade while the maximum height is 15 meters.

The tower includes:

- a) One base element with internal place to hold power supply equipment: batteries, batteries charge, control panels etc. This element is equipped with a pad locking door wave resistant.
- b) One or more intermediate modules or elements conical or cylindrical in relation of the tower high.
- c) A top platform with balustrade and walk way for marine lantern installation and maintenance.
- d) Internal aluminium ladder.



TBP REINFORCED POLYESTER



DIMENSIONS AND WEIGHT

BASE ELEMENT

Diameter at the base :	1,8 m
Height :	3,5 m
Weight :	230 Kg

INTERMEDIATE CONE

Diameter at the base :	1,8 m
Upper diameter :	1,2 m
Weight :	120 Kg

INTERMEDIATE CYLINDER ELEMENT

Height :	1,0 m
Diameter :	1,2 m
Weight :	90 Kg

ROOF AND BALUSTRADE

Height :	1,0 m
Diameter at the base :	1,8 m
Balustrade diameter :	1,8 m
Weight :	120 Kg

TECHNICAL DATA

Materials:	Fibreglass reinforced polyester resin, with variable thickness from 10 mm at the base and 6 mm on the upper part.
Maximum permanent load on the top	300 Kg
Wind resistance	Up to 200 Km/h
Wave resistance	Up to 2 meters
Bolts and nuts for connections are made by high thickness of galvanized steel.	



NOTE: The above mentioned data are indicative and should be pass through modifications in relation with design calculations and on a customer special request.



POLYETHYLENE BEACON TYPE PETB

Floatex Polyethylene beacon PETB is designed to minimize as much as possible the maintenance on the beacons and to ensure a great visibility also during the day light hours. The beacons are manufactured from an outer shell made in UV-stabilized linear virgin polyethylene. The Polyethylene used in the manufacturing process is completely recyclable (Eco-Friendly), it's fully compatible with the marine environment, and has a high resistance to UV rays.

The PE being linear has the advantage that it can be melted and hence repaired by hot fusion welding. The colour pigment is moulded-in and consequently not added as a coating ensuring greater life of the colour and a big help to the environment as it never requires additional paintings, avoiding toxic dispersions in the water. Floatex polyethylene requires a minimal maintenance.

R&D laboratory daily performs tests on production samples such as tensile test, hardness test, abrasion test, UV test and Cold temperature test, colour test and other ordinary tests in the aim to ensure the quality and the reliability of Floatex polyethylene.

The beacons have a diameter of 800mm and may vary in height in base of clients requirements.

The power supply for the light assembly is mounted in a separate rotationally moulded polyethylene unit with a pyramidal shape type CSP. This unit house the battery pack, the solar charge regulator and is equipped with small solar panels that serve the purpose of recharging the batteries. Floatex PETB beacons are usually equipped on the top with LED marine lantern with colour and flashing characteristics in accordance with IALA recommendations. The colour and the flash can be selected in accordance with clients requirements.

The focal plane, which is the distance between the center of the lantern and the beacon base, available for these series are from 3 to 7,5 meters. The beacon can be equipped also with Top Mark in accordance with IALA recommendations.

In base of the height, the beacon are equipped with a fixed ladder with protected cage in conformity with safety regulations. The ladder ensure easy and safety maintenance on the electrical equipment and electrical circuits located at the top of the pole. An additional aluminium portable ladder is provided to access to the fixed one.



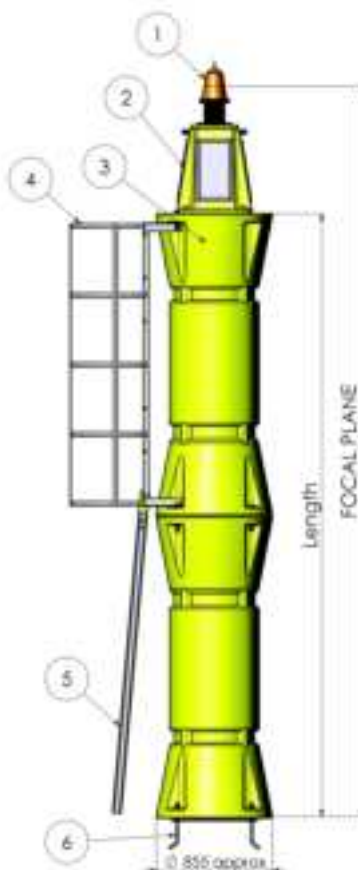
PETB

N.	DESCRIZIONE	MATERIALE
1	FANALE MARINO	LENTE 155mmLUCE led
2	CSP 410	FLOATEX spec.
3	PETB	POLIETILENE ROTAZIONALE
4	SALVAUOMO	ACCIAIO GALVANIZZATO
5	SCALA ASSPORTABILE	ALUMINIO
6	DIMA FONDAZIONE	ACCIAIO GALVANIZZATO

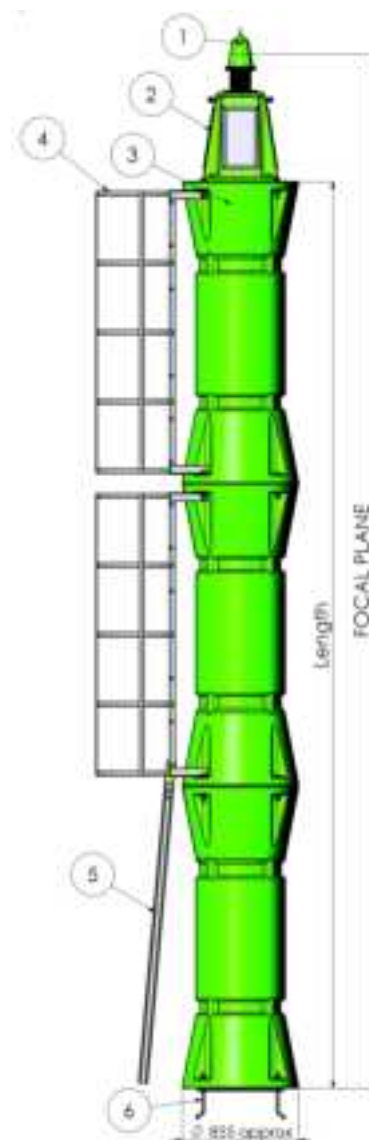
TYPE	ALTEZZA (mm)	PIANO FOCAL (mm)
PETB-1	2230	3100 approx
PETB-2	4460	5330 approx
PETB-3	6690	7560 approx



PETB-1



PETB-2



PETB-3



STEEL POLE TYPE CSP-SP

FLOATEX CSP-SP steel poles are designed to supply a very simple steel pole with good visibility, especially in the upper part where is fixed the pyramid shape box which house the electrical equipment. The pole is composed by a steel base and a steel pipe with different diameter and thickness in base of the client necessities.

The pole is equipped with a fixed ladder with protected cage in conformity with safety regulations. The ladder ensure easy and safety maintenance on the electrical equipment and electrical circuits located at the top of the pole. An additional aluminium portable ladder is provided to access to the fixed one.

The power supply for the light assembly is mounted in a separate rotationally moulded polyethylene unit with a pyramid shape type CSP. This unit house the battery pack, the solar charge regulator and is equipped with small solar panels that serve the purpose of recharging the batteries.

Floatex CSP-SP steel poles are usually equipped on the top with LED marine lantern with colour and flashing characteristics in accordance with IALA recommendations. The colour and the flash can be selected in accordance with clients requirements.



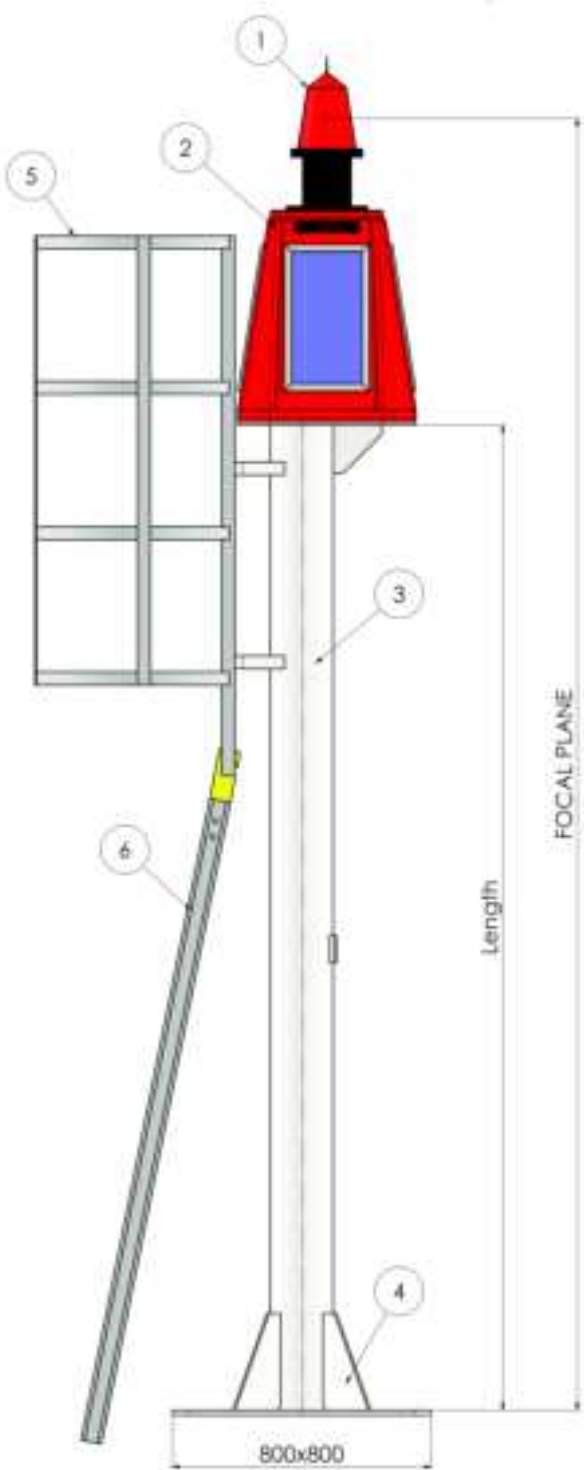
The focal plane, which is the distance between the center of the lantern and the pole base, available for these series are from 3 to 6 meters. The pole can be equipped also with Top Mark in accordance with IALA recommendations.

All the metal parts are sandblasted, galvanized and painted with marine grade polyurethane paint to ensure a longer life of the colour.



N.	DESCRIPTION	MATERIAL
1	MARINE LANTERN	155mm Lens Filaments or LED light
2	CSP 410	FLOATEX spec.
3	STEEL PIPE Ø194	API 5L gr.B or equivalent
4	BASE	S275JR or equivalent
5	MANGUARD	GALVANIZED STEEL
6	MOBILE LADDER	ALUMINIUM

TYPE	Length (mm)	FOCAL PLANE (mm)
SP-03-A	2065	3000 approx
SP-04-A	3065	4000 approx
SP-05-A	4065	5000 approx
SP-06-A	5065	6000 approx





MARKER -PICK-UP BUOY -SMALL MOORING- ROTOMOULDED TYPE

FLOATEX produces a wide range of pick-up, small mooring, marker buoys.

Pick-up, marker buoys are utilised to mark the position of the hose pick-up chain to lift the pipeline. Small mooring buoys are manufactured for several uses; mooring of small boat, barges etc. Moreover can be used for mooring area to ensure great quality level inside the ports.

Outer shell of the buoys is rotomoulded high impact resistant polyethylene. Colour imbedded, UV rays resistance.

The material used for the foam filling is chosen in base of the operative water depth the buoy need to withstand, using rigid monocellular polyurethane up to 700 m, or syntactic foam up to 4000 meters.

Each buoy is complete with inner steel structure for the operation of lifting and mooring. FLOATEX offer as standard 3 different type of ending connection and 4 possibilities of SWL.



MARKER -PICK-UP BUOY -SMALL MOORING- ROTOMOULDED TYPE

TYPE	O. D. (mm)	Length (mm)	L.O.A. (mm)
BIC 4575	430	750	1010



TERMINAL	SWL (TONS)	DEPTH (METERS)	N.B. (KG)
	1.5	10	63
		50	59
		110	55
		4000	16
	4.75	10	63
		50	59
		110	55
		4000	16
	4.75	10	60
		50	56
		110	51
		4000	13

Operative w.d. available from surface up to 4000

TYPE	O. D. (mm)	Length (mm)	L.O.A. (mm)
BIC 4595	430	950	1210



TERMINAL	SWL (TONS)	DEPTH (METERS)	N.B. (KG)
	1.5	10	89
		50	84
		110	78
		4000	25
	4.75	10	89
		50	84
		110	78
		4000	36
	4.75	10	86
		50	81
		110	75
		4000	22

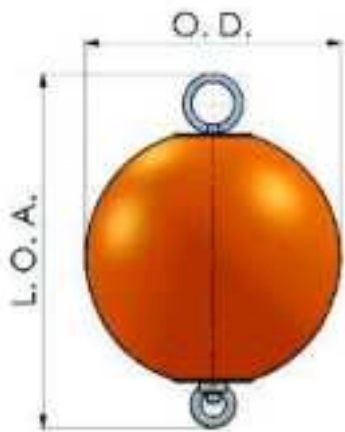
Operative w.d. available from surface up to 4000

FLOATEX

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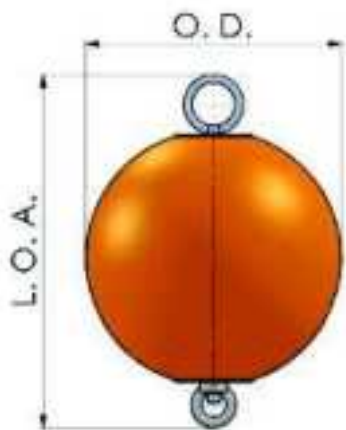
TYPE	O. D. (mm)	Length (mm)	L.O.A. (mm)
SFE 57	570	540	800



Operative w.d. available from surface up to 4000

TERMINAL	SWL (TONS)	DEPTH (METERS)	N.B. (KG)
	1.5	10	76
		50	71
		110	66
		4000	20
	4.75	10	76
		50	71
		110	66
		4000	20
	4.75	10	73
		50	68
		110	63
		4000	17
	9	10	73
		50	68
		110	63
		4000	17

TYPE	O. D. (mm)	Length (mm)	L.O.A. (mm)
SFE 60	600	580	840

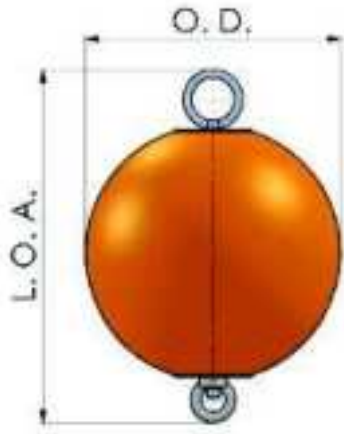


Operative w.d. available from surface up to 4000

TERMINAL	SWL (TONS)	DEPTH (METERS)	N.B. (KG)
	1.5	10	91
		50	86
		110	80
		4000	26
	4.75	10	91
		50	86
		110	80
		4000	26
	4.75	10	88
		50	83
		110	77
		4000	23
	9	10	85
		50	80
		110	74
		4000	20

MARKER -PICK-UP BUOY -SMALL MOORING- ROTOMOULDED TYPE

TYPE	O. D. (mm)	Length (mm)	L.O.A. (mm)
SFE 80	770	710	975



Operative w.d. available from surface up to 4000

TERMINAL	SWL (TONS)	DEPTH (METERS)	N.B. (KG)
	1.5	10	206
		50	195
		110	182
		4000	69
	4.75	10	206
		50	195
		110	182
		4000	69
	4.75	10	203
		50	192
		110	179
		4000	66
	9	10	199
		50	188
		110	175
		4000	62



TYPE	O. D. (mm)	Length (mm)	L.O.A. (mm)
ROV 4350	430	500	762



Operative w.d.available from surface up to 4000

TERMINAL	SWL (TONS)	DEPTH (METERS)	N.B. (KG)
	1.5	10	35
		50	32.5
		110	30
		4000	7.5
	4.75	10	34.5
		50	32.5
		110	30
		4000	7.5

TYPE	O. D. (mm)	Length (mm)	L.O.A. (mm)
ROV 6068	600	677	939



Operative w.d.available from surface up to 4000

TERMINAL	SWL (TONS)	DEPTH (METERS)	N.B. (KG)
	1.5	10	116
		50	109
		110	102
		4000	35
	4.75	10	116
		50	109
		110	102
		4000	35
	4.75	10	113
		50	106
		110	99
		4000	32
	9	10	108
		50	102
		110	94
		4000	28

MARKER -PICK-UP BUOY -SMALL MOORING- ROTOMOULDED TYPE

TYPE	O. D. (mm)	Length (mm)	L.O.A. (mm)
ROV 6080	600	800	1062



Operative w.d.available from surface up to 4000

TERMINAL	SWL (TONS)	DEPTH (METERS)	N.B. (KG)
	1.5	10	148
		50	140
		110	130
		4000	47
	4.75	10	148
		50	140
		110	130
		4000	48
	4.75	10	145
		50	137
		110	127
		4000	44
	9	10	140
		50	132
		110	122
		4000	40

TYPE	O. D. (mm)	Length (mm)	L.O.A. (mm)
ROV 8093	770	930	1192



Operative w.d. available from surface up to 4000

TERMINAL	SWL (TONS)	DEPTH (METERS)	N.B. (KG)
	1.5	10	304
		50	288
		110	270
		4000	107
	4.75	10	304
		50	289
		110	270
		4000	107
	4.75	10	300
		50	285
		110	266
		4000	104
	9	10	296
		50	280
		110	261
		4000	99



TYPE	O. D. (mm)	Length (mm)	L.O.A. (mm)
CIL 5750	570	500	760



Operative w.d. available from surface up to 4000

TERMINAL	SWL (TONS)	DEPTH (METERS)	N.B. (KG)
	1.5	10	99
		50	93
		110	86
		4000	26
	4.75	10	99
		50	93
		110	86
		4000	39
	4.75	10	96
		50	90
		110	83
		4000	23
	9	10	92
		50	86
		110	79
		4000	19

TYPE	O. D. (mm)	Length (mm)	L.O.A. (mm)
CIL 5770	570	720	982



Operative w.d. available from surface up to 4000

TERMINAL	SWL (TONS)	DEPTH (METERS)	N.B. (KG)
	1.5	10	145
		50	136
		110	127
		4000	42
	4.75	10	144
		50	134
		110	127
		4000	42
	4.75	10	141
		50	133
		110	123
		4000	39
	9	10	137
		50	129
		110	119
		4000	34

MARKER -PICK-UP BUOY -SMALL MOORING- ROTOMOULDED TYPE

TYPE	O. D. (mm)	Length (mm)	L.O.A. (mm)
CIL 57150	570	1500	1760

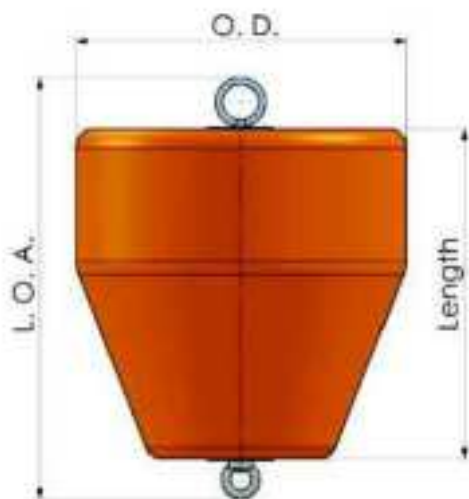


Operative w.d. available from surface up to 4000

TERMINAL	SWL (TONS)	DEPTH (METERS)	N.B. (KG)
	1.5	10	326
		50	309
		110	288
		4000	106
	4.75	10	326
		50	309
		110	288
		4000	106
	4.75	10	323
		50	306
		110	285
		4000	103
	9	10	315
		50	298
		110	277
		4000	96



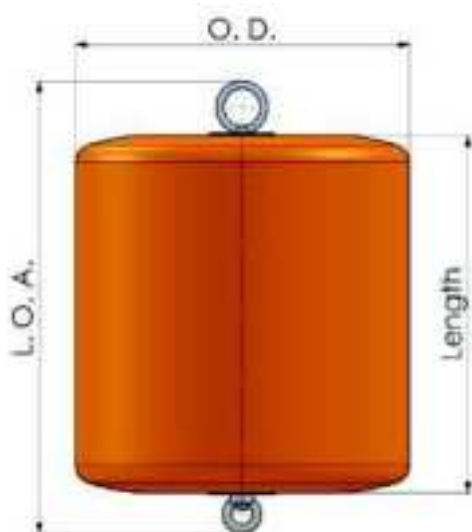
TYPE	O. D. (mm)	Length (mm)	L.O.A. (mm)
CON 0909	910	940	1200



Operative w.d. available from surface up to 4000

TERMINAL	SWL (TONS)	DEPTH (METERS)	N.B. (KG)
	1.5	10	408
		50	387
		110	362
		4000	143
	4.75	10	408
		50	387
		110	362
		4000	161
	4.75	10	405
		50	384
		110	359
		4000	140
	9	10	400
		50	379
		110	353
		4000	135

TYPE	O. D. (mm)	Length (mm)	L.O.A. (mm)
CIL 0910	910	980	1240

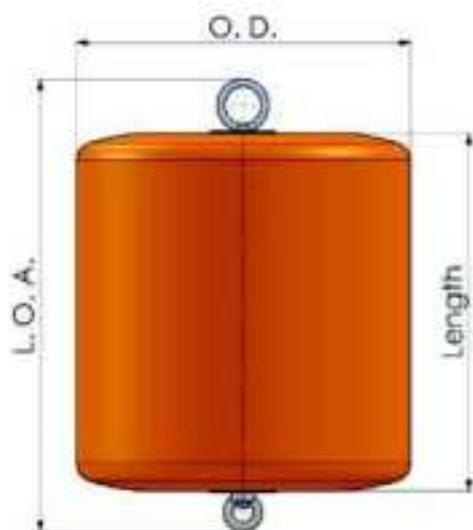


Operative w.d. available from surface up to 4000

TERMINAL	SWL (TONS)	DEPTH (METERS)	N.B. (KG)
	1.5	10	567
		50	538
		110	503
		4000	200
	4.75	10	567
		50	538
		110	503
		4000	220
	4.75	10	564
		50	535
		110	500
		4000	197
	9	10	559
		50	529
		110	494
		4000	191

MARKER -PICK-UP BUOY -SMALL MOORING- ROTOMOULDED TYPE

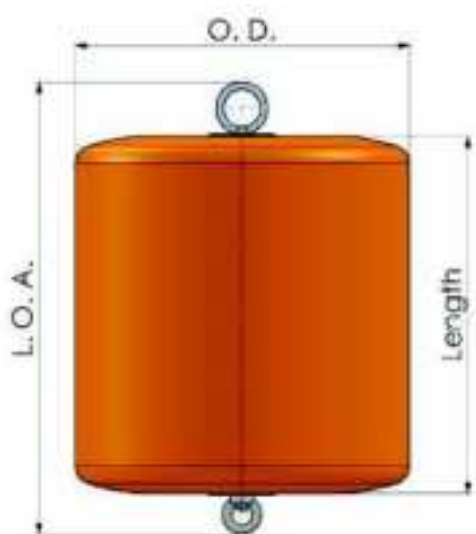
TYPE	O. D. (mm)	Length (mm)	L.O.A. (mm)
CIL 0912	910	1180	1440



Operative w.d. available from surface up to 4000

TERMINAL	SWL (TONS)	DEPTH (METERS)	N.B. (KG)
	1.5	10	689
		50	653
		110	611
		4000	246
	4.75	10	689
		50	653
		110	611
		4000	246
	4.75	10	685
		50	650
		110	608
		4000	243
	9	10	679
		50	644
		110	602
		4000	236

TYPE	O. D. (mm)	Length (mm)	L.O.A. (mm)
CIL 0913	910	1280	1540



Operative w.d. available from surface up to 4000

TERMINAL	SWL (TONS)	DEPTH (METERS)	N.B. (KG)
	1.5	10	750
		50	702
		110	666
		4000	270
	4.75	10	750
		50	711
		110	666
		4000	269
	4.75	10	747
		50	708
		110	663
		4000	266
	9	10	740
		50	701
		110	656
		4000	260



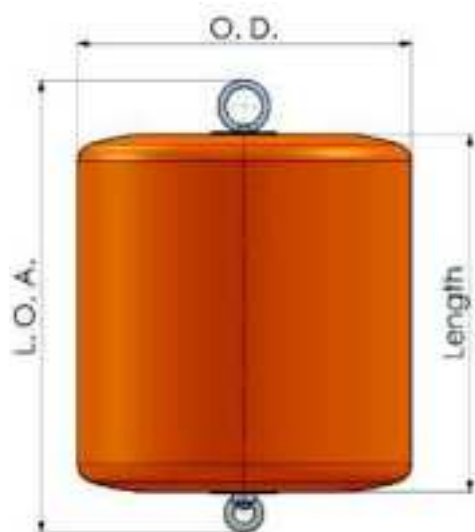
TYPE	O. D. (mm)	Length (mm)	L.O.A. (mm)
CIL 0915	910	1480	1740



Operative w.d. available from surface up to 4000

TERMINAL	SWL (TONS)	DEPTH (METERS)	N.B. (KG)
	1.5	10	870
		50	825
		110	773
		4000	315
	4.75	10	870
		50	825
		110	773
		4000	315
	4.75	10	867
		50	822
		110	770
		4000	312
	9	10	859
		50	815
		110	762
		4000	304

TYPE	O. D. (mm)	Length (mm)	L.O.A. (mm)
CIL 0918	910	1790	2040

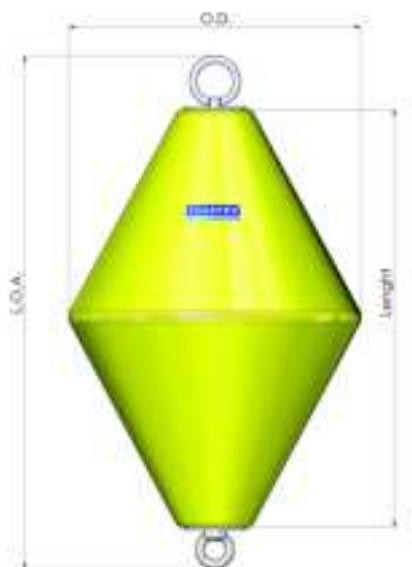


Operative w.d. available from surface up to 4000

TERMINAL	SWL (TONS)	DEPTH (METERS)	N.B. (KG)
	1.5	10	1070
		50	1016
		110	952
		4000	395
	4.75	10	1070
		50	1016
		110	951
		4000	420
	4.75	10	1067
		50	1013
		110	948
		4000	391
	9	10	1058
		50	1004
		110	939
		4000	382

MARKER -PICK-UP BUOY -SMALL MOORING- ROTOMOULDED TYPE

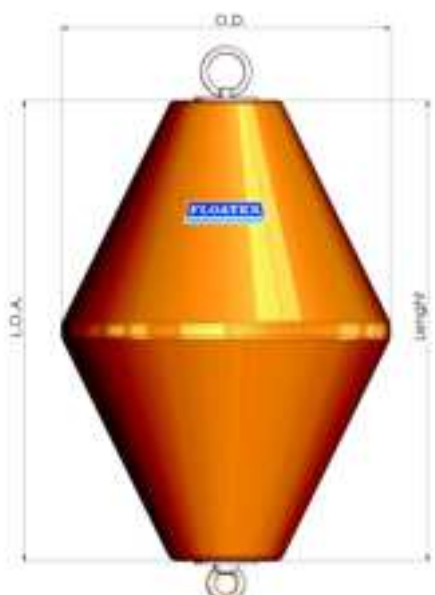
TYPE	O. D. (mm)	Length (mm)	L.O.A. (mm)
BIC 80	800	1150	1410



Operative w.d. available from surface up to 4000

TERMINAL	SWL (TONS)	DEPTH (METERS)	N.B. (KG)
	1.5	10	222
	4.75	10	220
	4.75	10	217
	9	10	210

TYPE	O. D. (mm)	Length (mm)	L.O.A. (mm)
BIC 90	900	1260	1520



Operative w.d. available from surface up to 4000

TERMINAL	SWL (TONS)	DEPTH (METERS)	N.B. (KG)
	1.5	10	360
	4.75	10	360
	4.75	10	357
	9	10	350



MOORING MODULAR BUOY

FLOATEX manufacture a wide range of mooring- midline buoy.

Buoys are available with bollard, pad eye or swivel, and with combination of several S.W.L., buoyancies and water depths ensuring Floatex to offer a complete range solutions to satisfy all client's requirements.

GENERAL DESCRIPTION

Outer shell of the buoy:

Floating modules made in UV-stabilized linear virgin polyethylene.

The Polyethylene used in the manufacturing process is completely recyclable (Eco-Friendly), it's fully compatible with the marine environment, and has a high resistance to UV rays.

Being linear has the advantage that it can be melted and hence repaired by hot fusion welding.

The colour pigment is moulded-in and consequently not added as a coating ensuring greater life of the color and a big help to the environment as it never requires additional paintings, avoiding toxic dispersions in the water. Floatex polyethylene require a minimal maintenance.

R&D laboratory daily perform test on production samples such as tensile test, hardness test, abrasion test, UV test and Cold temperature test, colour test and other ordinary tests in the aim to ensure the quality and the reliability of Floatex polyethylene.

Inner filling of the buoy:

The modules is filled with closed-cell able to withstand the hydrostatic pressure at OPERATING WATER DEPTH requested.

The polyurethane foam ensure great resistance to the leakage of air or water, ensuring unsinkability to the buoy also in case of accidental breaks of the outer shell. The polyurethane foam is 100% made and tested before production by our R&D laboratory.

Steel hardware:

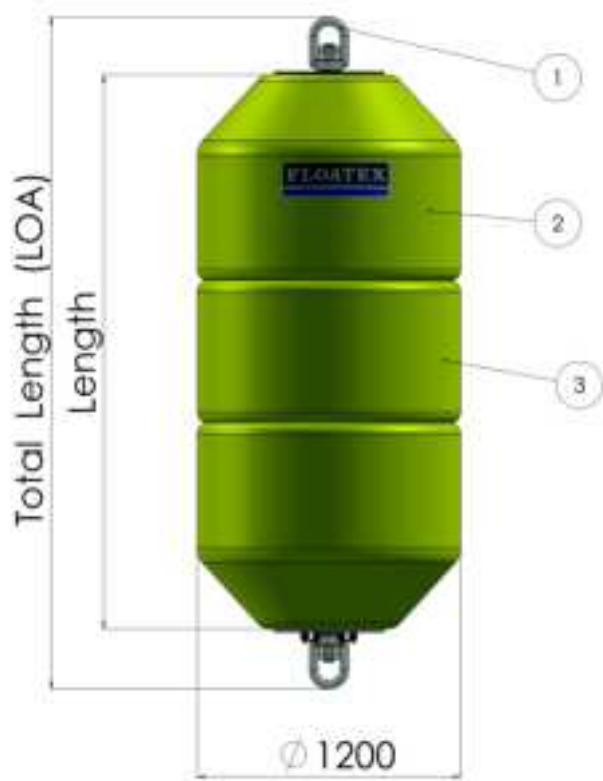
Central steel rod c/w locking plates at both end of the floating module.

BOLLARD, PAD EYE OR SWIVEL EYE at both ends to facilitate the operation of handling and the connection with the chain/rope.

The metal parts are HOT DEEP GALVANISED.

BUOY SERIES MMB-12

SWIVEL



Material List		
Item	Description	Material
1	EYE NUT TYPE S4028 CROSBY OR EQUIVALENT	ZINC SPRAYED FORGED STEEL
2	FLOAT TYPE CON12/9	Shell : ROTOMOULDED POLYETHYLENE Core : POLYURETHANE FOAM
3	FLOAT CIL 12/6	Shell : ROTOMOULDED POLYETHYLENE Core : POLYURETHANE FOAM
4	FLOAT TYPE CIL 12/14	Shell : ROTOMOULDED POLYETHYLENE Core : POLYURETHANE FOAM



MOORING MODULAR BUOYS MMB12-SWIVEL

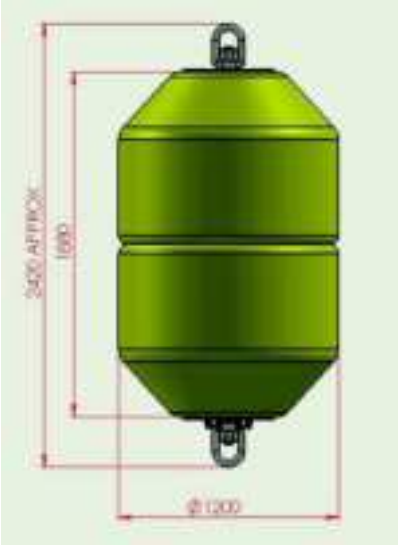
MMB1206			
Water Depth (M)	Weight (Kg)	N.B. (Kg)	S.W.L. (tons)
10	183	526	17
50	251	494	17
110	253	456	17
250	306	403	17
4000	583	126	17

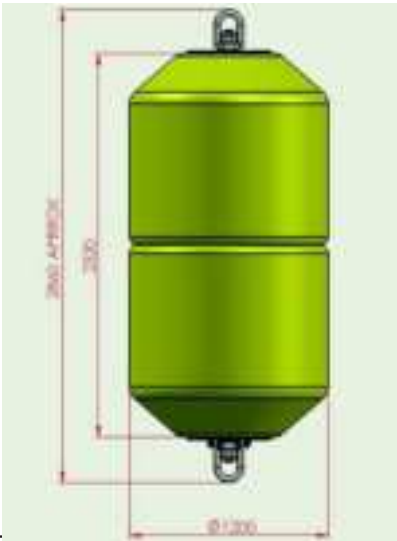
MMB1209			
Water Depth (M)	Weight (Kg)	N.B. (Kg)	S.W.L. (tons)
10	222	637	17
50	261	598	17
110	307	552	17
250	371	488	17
4000	707	152	17


MMB1211			
Water Depth (M)	Weight (Kg)	N.B. (Kg)	S.W.L. (tons)
10	256	884	17
50	308	833	17
110	369	772	17
250	454	686	17
4000	900	241	17

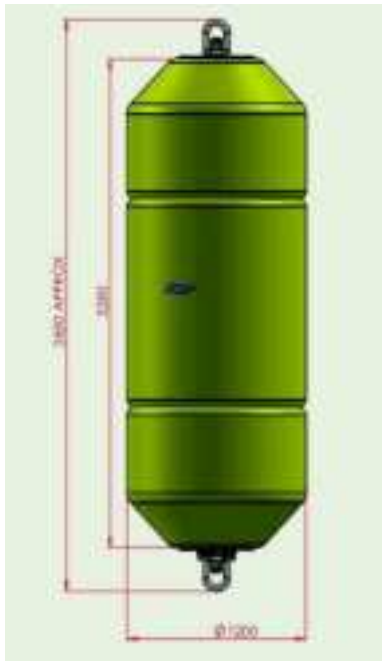
MMB1214			
Water Depth (M)	Weight (Kg)	N.B. (Kg)	S.W.L. (tons)
10	294	1294	17
50	363	1165	17
110	449	1083	17
250	560	968	17
4000	1156	372	17

MOORING MODULAR BUOYS MMB12-SWIVEL

MMB120909			
Water Depth (M)	Weight (Kg)	N.B. (Kg)	S.W.L. (tons)
			
10	345	1373	17
50	426	1295	17
110	515	1203	17
250	643	1075	17
4000	1315	403	17

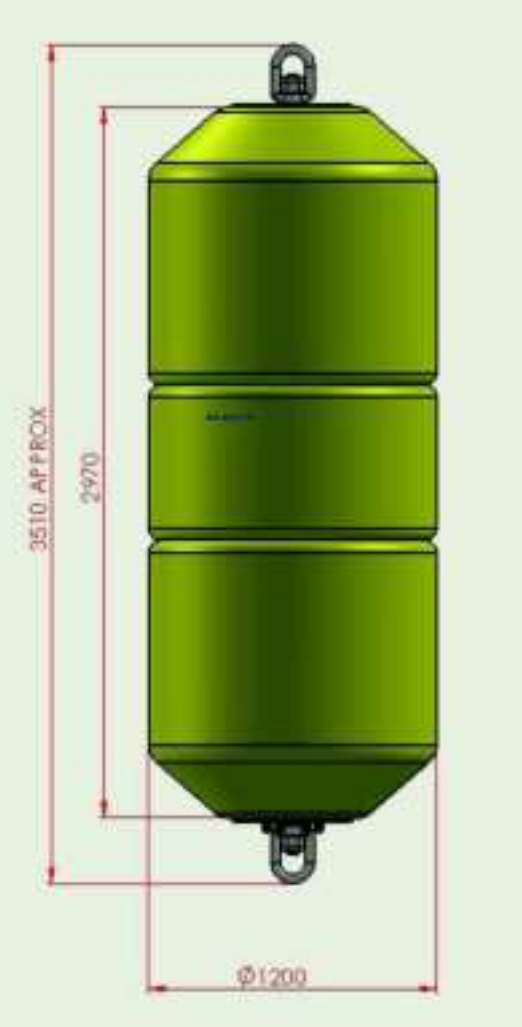
MMB121111			
Water Depth (M)	Weight (Kg)	N.B. (Kg)	S.W.L. (tons)
			
10	183	526	17
50	251	494	17
110	253	456	17
250	306	403	17
4000	583	126	17

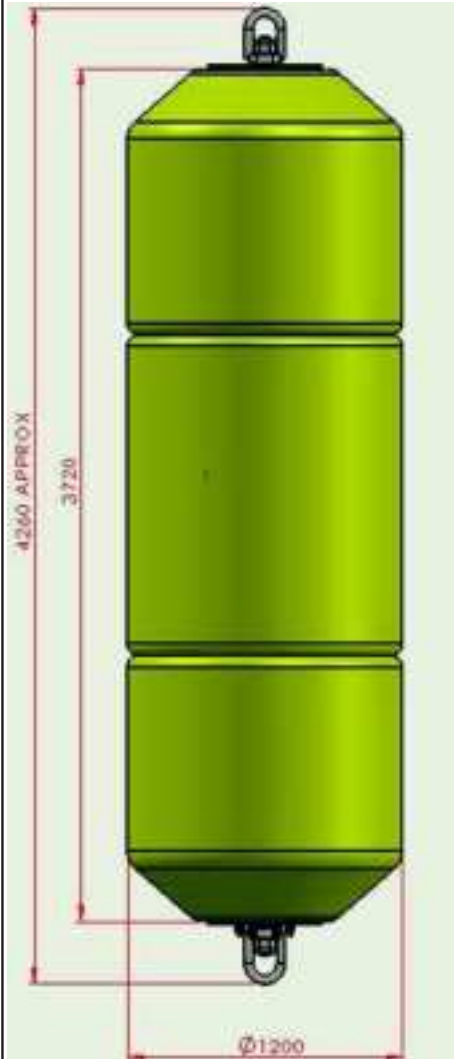
MMB12090609			
Water Depth (M)	Weight (Kg)	N.B. (Kg)	S.W.L. (tons)
			
10	445	1982	17
50	555	1872	17
110	658	1472	17
250	866	1561	17
4000	1815	612	17

MMB12091409			
Water Depth (M)	Weight (Kg)	N.B. (Kg)	S.W.L. (tons)
			
10	543	2703	17
50	690	2556	17
110	868	2382	17
250	1107	2139	17
4000	2375	471	17



MOORING MODULAR BUOYS MMB 12 SWIVEL

MMB12110611			
Water Depth (M)	Weight (Kg)	N.B. (Kg)	S.W.L. (tons)
			
10	504	2485	17
50	640	2351	17
110	800	2191	17
250	1023	1966	17
4000	2192	799	17

MMB12111411			
Water Depth (M)	Weight (Kg)	N.B. (Kg)	S.W.L. (tons)
			
10	639	3197	17
50	829	3026	17
110	1062	2822	17
250	1369	2535	17
4000	3007	1049	17

BUOY SERIES MMB-12

PAD-EYE



Material List		
Item	Description	Material
1	MOORING EYE	Fe 510 B-UNI-7070-82 or equivalent
2	FLOAT TYPE CON12/9	Shell : ROTOMOULDED POLYETHYLENE Core : POLYURETHANE FOAM
3	FLOAT CIL 12/6	Shell : ROTOMOULDED POLYETHYLENE Core : POLYURETHANE FOAM
4	FLOAT TYPE CIL 12/14	Shell : ROTOMOULDED POLYETHYLENE Core : POLYURETHANE FOAM



MOORING MODULAR BUOYS MMB 12 PAD EYE

MMB1206			
Water Depth (M)	Weight (Kg)	N.B. (Kg)	S.W.L. (tons)
10	153	556	6.5-9.5-12
50	185	524	6.5-9.5-12
110	223	486	6.5-9.5-12
250	276	433	6.5-9.5-12
4000	553	156	6.5-9.5-12

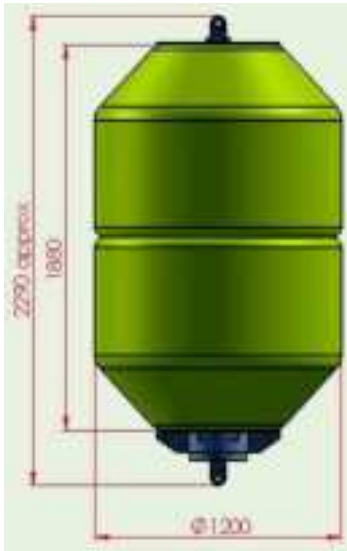
MMB1209			
Water Depth (M)	Weight (Kg)	N.B. (Kg)	S.W.L. (tons)
10	166	693	6.5-9.5-12
50	205	654	6.5-9.5-12
110	251	608	6.5-9.5-12
250	315	544	6.5-9.5-12
4000	651	208	6.5-9.5-12

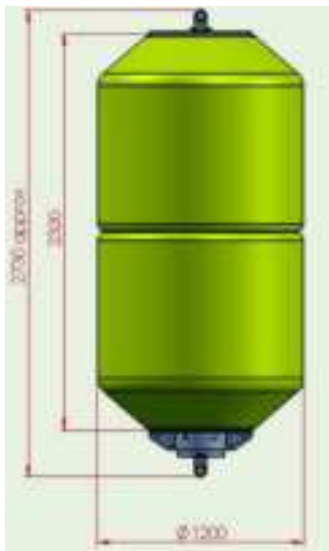
MMB1211			
Water Depth (M)	Weight (Kg)	N.B. (Kg)	S.W.L. (tons)
10	192	948	6.5-9.5-12
50	244	896	6.5-9.5-12
110	305	835	6.5-9.5-12
250	390	750	6.5-9.5-12
4000	836	305	6.5-9.5-12

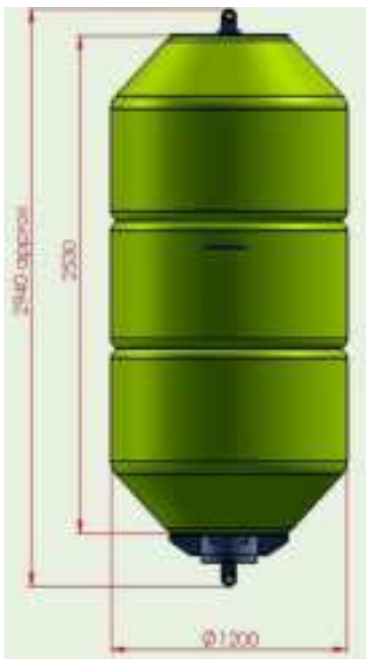
MMB1214			
Water Depth (M)	Weight (Kg)	N.B. (Kg)	S.W.L. (tons)
10	222	1306	6.5-9.5-12
50	291	1237	6.5-9.5-12
110	377	1155	6.5-9.5-12
250	488	1040	6.5-9.5-12
4000	1084	444	6.5-9.5-12


FLOATEX s.r.l.

MOORING MODULAR BUOYS MMB 12 PAD EYE

MMB120909			
Water Depth (M)	Weight (Kg)	N.B. (Kg)	S.W.L. (tons)
			
10	270	1448	6.5-9.5-12
50	348	1370	6.5-9.5-12
110	440	1278	6.5-9.5-12
250	568	1150	6.5-9.5-12
4000	1240	478	6.5-9.5-12

MMB121111			
Water Depth (M)	Weight (Kg)	N.B. (Kg)	S.W.L. (tons)
			
10	322	1958	6.5-9.5-12
50	426	1854	6.5-9.5-12
110	548	1732	6.5-9.5-12
250	718	1562	6.5-9.5-12
4000	1610	672	6.5-9.5-12

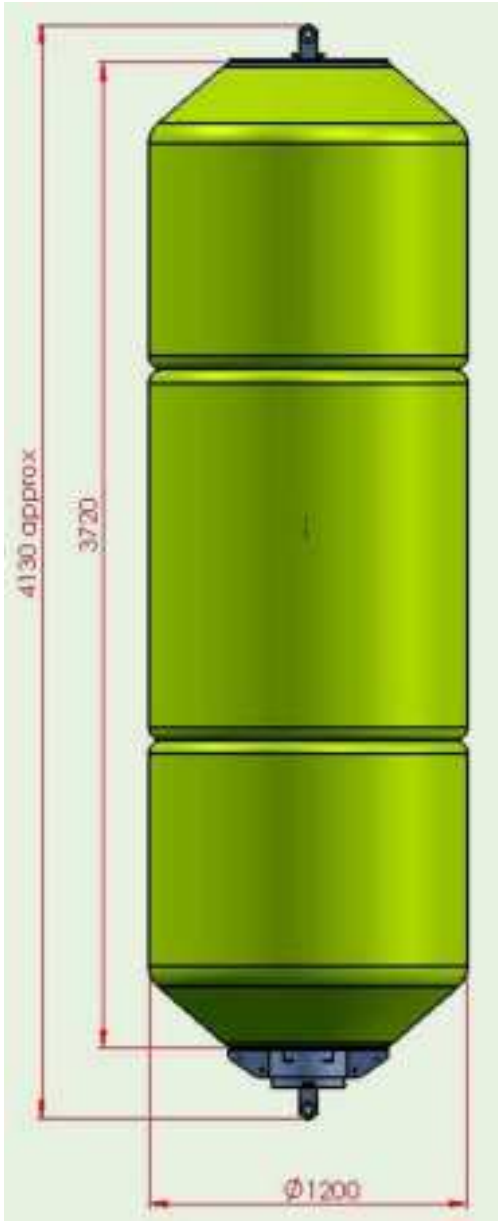
MMB12090609			
Water Depth (M)	Weight (Kg)	N.B. (Kg)	S.W.L. (tons)
			
10	361	2066	6.5-9.5-12
50	471	1956	6.5-9.5-12
110	601	1826	6.5-9.5-12
250	782	1645	6.5-9.5-12
4000	1731	696	6.5-9.5-12

MMB12091409			
Water Depth (M)	Weight (Kg)	N.B. (Kg)	S.W.L. (tons)
			
10	430	2816	6.5-9.5-12
50	577	2669	6.5-9.5-12
110	755	2495	6.5-9.5-12
250	994	2252	6.5-9.5-12
4000	2262	984	6.5-9.5-12



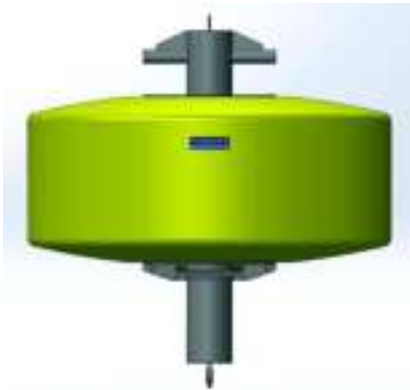
MOORING MODULAR BUOYS MMB 12 PAD EYE

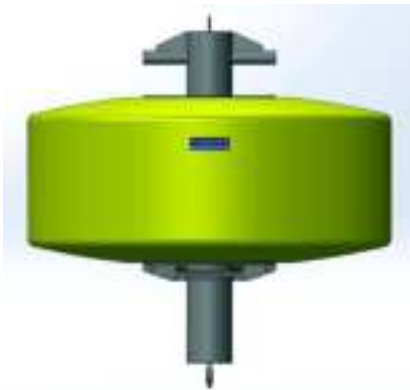
MMB12110611			
Water Depth (M)	Weight (Kg)	N.B. (Kg)	S.W.L. (tons)
			
10	413	2576	6.5-9.5-12
50	549	2440	6.5-9.5-12
110	709	2280	6.5-9.5-12
250	932	2057	6.5-9.5-12
4000	2101	890	6.5-9.5-12

MMB12111411			
Water Depth (M)	Weight (Kg)	N.B. (Kg)	S.W.L. (tons)
			
10	482	3326	6.5-9.5-12
50	655	2949	6.5-9.5-12
110	863	2949	6.5-9.5-12
250	1144	2664	6.5-9.5-12
4000	2632	1178	6.5-9.5-12

BUOY SERIES MMB-16

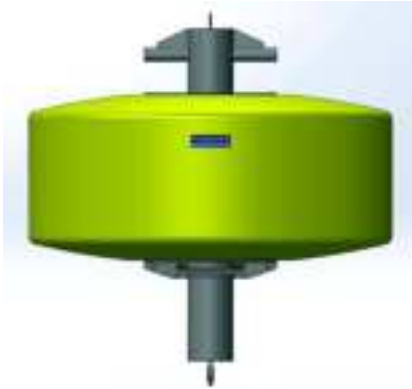
MOORING MODULAR BUOYS MMB 16 BOLLARD

MMB 16 P SERIES					
TYPE	Nett. buoyancy (Kg)	Weight (Kg)	Diam. (mm)	L.O.A. (mm)	S.W.L. (tons)
					
1608 P9.5	1193	307	1600	1575	9.5
1608 P17	1175	325	1600	1595	17
1608 P25	1154	346	1600	1615	25
1608 P 35	1132	368	1600	1615	35

MMB 16 P SERIES					
TYPE	Nett. buoyancy (Kg)	Weight (Kg)	Diam. (mm)	L.O.A. (mm)	S.W.L. (tons)
					
1611 P9.5	1829	378	1600	1925	9.5
1611 P17	1809	398	1600	1945	17
1611 P25	1783	424	1600	1965	25
1611 P 35	1755	452	1600	1965	35



MOORING MODULAR BUOYS MMB 16 BOLLARD

MMB 16 P SERIES					
TYPE	Nett. buoyancy (Kg)	Weight (Kg)	Diam. (mm)	L.O.A. (mm)	S.W.L. (tons)
					
1616 P9.5	2644	471	1600	2375	9.5
1616 P17	2623	492	1600	2395	17
1616 P25	2591	524	1600	2415	25
1616 P 35	2556	559	1600	2415	35

MOORING MODULAR BUOYS

MOORING MODULAR BUOYS MMB 16 PAD EYE

MMB 16 E SERIES						
TYPE	Nett. buoyancy (Kg)	Weight (Kg)	Diam. (mm)	L.O.A. (mm)	W.D. (m)	S.W.L. (tons)
						
1608 E9.5	1240	236	1600	1220	10	9.5
1608 E9.5	1170	302	1600	1220	50	9.5
1608 E9.5	1090	382	1600	1220	110	9.5
1608 E9.5	590	493	1600	1220	250	9.5
1608 E9.5	400	1071	1600	1220	4000	9.5
1608 E17	1220	253	1600	1300	10	17
1608 E17	1160	319	1600	1300	50	17
1608 E17	1080	399	1600	1300	110	17
1608 E17	970	510	1600	1300	250	17
1608 E17	390	1088	1600	1300	4000	17
1608 E25	1210	270	1600	1300	10	25
1608 E25	1140	337	1600	1300	50	25
1608 E25	1060	416	1600	1300	110	25
1608 E25	950	527	1600	1300	250	25
1608 E25	375	1105	1600	1300	4000	25
1608 E35	1190	288	1600	1300	10	35
1608 E35	1120	354	1600	1300	50	35
1608 E35	1040	434	1600	1300	110	35
1608 E35	935	545	1600	1300	250	35
1608 E35	350	1123	1600	1300	4000	35



MOORING MODULAR BUOYS MMB 16 PAD EYE

MMB 16 E SERIES						
TYPE	Nett. buoyancy (Kg)	Weight (Kg)	Diam. (mm)	L.O.A. (mm)	W.D. (m)	S.W.L. (tons)
1611 E9.5	1890	287	1600	1570	10	9.5
1611 E9.5	1790	386	1600	1570	50	9.5
1611 E9.5	1670	502	1600	1570	110	9.5
1611 E9.5	1510	666	1600	1570	250	9.5
1611 E9.5	660	1516	1600	1570	4000	9.5
1611 E17	1860	308	1600	1650	10	17
1611 E17	1770	407	1600	1650	50	17
1611 E17	1650	523	1600	1650	110	17
1611 E17	1490	687	1600	1650	250	17
1611 E17	640	1537	1600	1650	4000	17
1611 E25	1840	331	1600	1650	10	25
1611 E25	1740	430	1600	1650	50	25
1611 E25	1630	546	1600	1650	110	25
1611 E25	1460	710	1600	1650	250	25
1611 E25	610	1560	1600	1650	4000	25
1611 E35	1820	354	1600	1650	10	35
1611 E35	1725	453	1600	1650	50	35
1611 E35	1600	569	1600	1650	110	35
1611 E35	1445	735	1600	1300	250	35
1611 E35	595	1583	1600	1300	4000	35

MOORING MODULAR BUOYS

MOORING MODULAR BUOYS MMB 16 PAD EYE

MMB 16 E SERIES						
TYPE	Nett. buoyancy (Kg)	Weight (Kg)	Diam. (mm)	L.O.A. (mm)	W.D. (m)	S.W.L. (tons)
						
1616 E9.5	2715	360	1600	2020	10	9.5
1616 E9.5	2570	490	1600	2020	50	9.5
1616 E9.5	2410	660	1600	2020	110	9.5
1616 E9.5	2180	890	1600	2020	250	9.5
1616 E9.5	980	2090	1600	2020	4000	9.5
1616 E17	2680	387	1600	2100	10	17
1616 E17	2540	525	1600	2100	50	17
1616 E17	2380	690	1600	2100	110	17
1616 E17	2150	921	1600	2100	250	17
1616 E17	950	2121	1600	2100	4000	17
1616 E25	2660	414	1600	2100	10	25
1616 E25	2520	552	1600	2100	50	25
1616 E25	2350	717	1600	2100	110	25
1616 E25	2120	948	1600	2100	250	25
1616 E25	920	2148	1600	2100	4000	25
1616 E35	2630	445	1600	2100	10	35
1616 E35	2490	583	1600	2100	50	35
1616 E35	2325	748	1600	2100	110	35
1616 E35	2090	978	1600	2100	250	35
1616 E35	890	2178	1600	2100	4000	35



MOORING BUOY TYPE RM16

FLOATEX produces a wide range of pick-up, small mooring , marker buoys.

Buoy TYPE RM16 are utilised to moor boat and yacht of medium size. A ring on the top of the buoy facilitates mooring and handling operation.

Foam fender covered with urethane protect boat and buoy against collision and avoid stains on the boats.

Outer shell of the buoys is rotomoulded high impact resistant polyethylene. Colour imbedded, UV rays resistance.

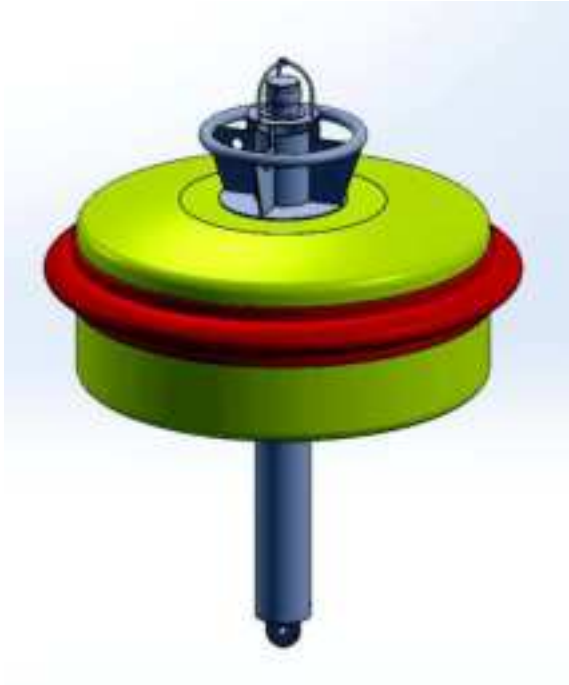
The material used for the foam filling is chosen in base of the operative water depth the buoy need to withstand , using rigid monocellular polyurethane.

Each buoy is complete with inner steel structure for the operation of lifting and mooring. FLOATEX offer as standard 14 tons SWL.

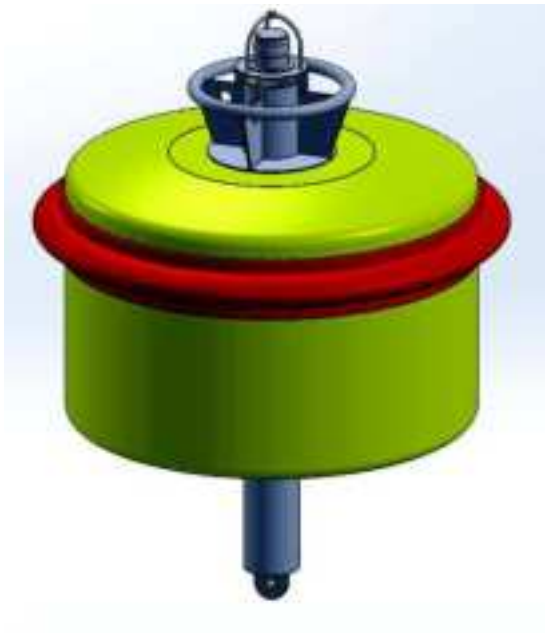




TYPE	Nett. buoyancy (Kg)	Weight (Kg)	Diam. (mm)	Max mooring weighth (mm)	L.O.A. (mm)	S.W.L. (tons)
RM1608	1125	325	1600	500	2400	14



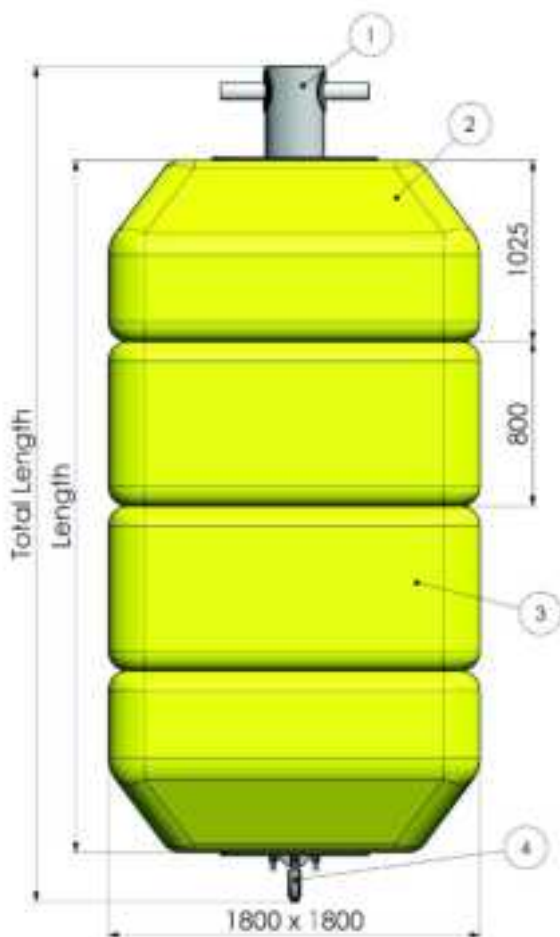
TYPE	Nett. buoyancy (Kg)	Weight (Kg)	Diam. (mm)	Max mooring weighth (mm)	L.O.A. (mm)	S.W.L. (tons)
RM1611	1764	366	1600	1140	2400	14





BUOY SERIES MMB-18

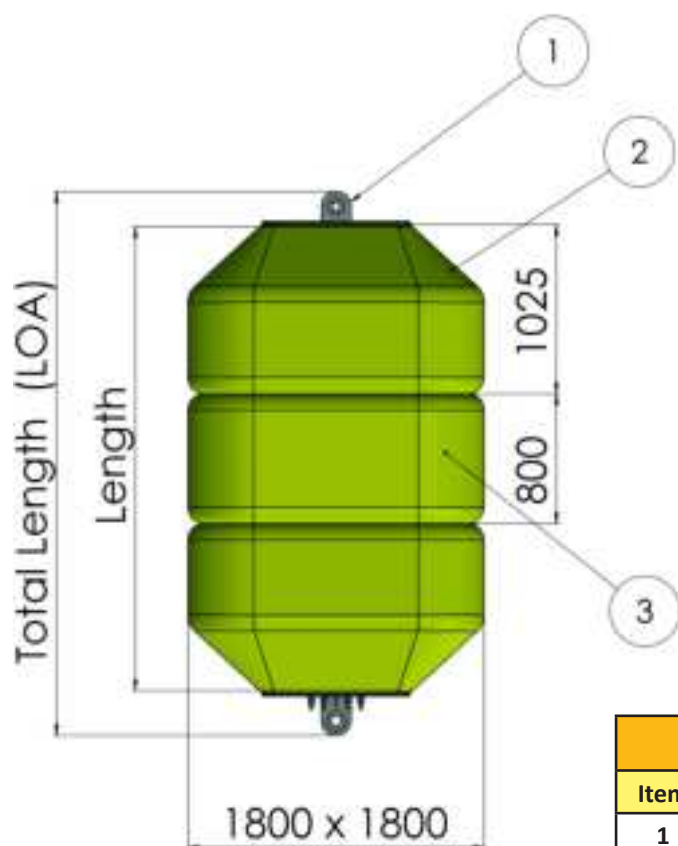
MOORING MODULAR BUOYS MMB 18 BOLLARD



Material List		
Item	Description	Material
1	STRUCTURE	S275JR or equivalent
2	PEM 18/TC	Shell : ROTOMOULDED POLYETHYLENE Core : POLYURETHANE FOAM
3	PEM 18/CIL	Shell : ROTOMOULDED POLYETHYLENE Core : POLYURETHANE FOAM
4	MOORING EYE	275JR or equivalent

Series MMB18-P								
TYPE	N. PEM 18/TC	N. PEM 18/CIL	Length (mm)	Total Length (mm)	SWL (tons)	W.D. (m)	WEIGHT (kg)	N. B. (kg)
MMB 18/2-P	1	-	1030	1925	25	10	718	1973
MMB 18/4-P	2	-	2060	2955	25	10	1037	4345
MMB 18/6-P	2	1	2860	3755	25	10	1325	6554
MMB 18/8-P	2	2	3660	4555	25	10	1614	8823
MMB 18/10-P	2	3	4460	5355	25	10	1902	10973
MMB 18/12-P	2	4	5260	6155	25	10	2191	13182

MOORING MODULAR BUOYS MMB 18 PAD-EYE



Material List

Item	Description	Material
1	MOORING EYE	275JR or equivalent
2	PEM 18/TC	Shell : ROTOMOULDED POLYETHYLENE Core : POLYURETHANE FOAM
3	PEM 18/CIL	Shell : ROTOMOULDED POLYETHYLENE Core : POLYURETHANE FOAM

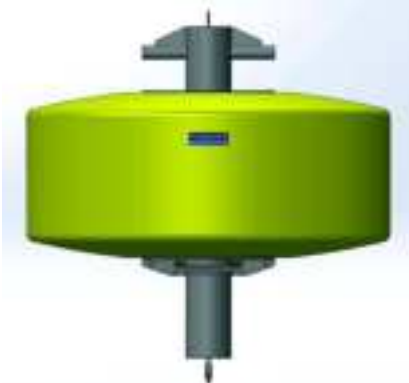
Series MMB18-E


TYPE	N. PEM 18/TC	N. PEM 18/CIL	Length (mm)	Total Length (mm)	SWL (tons)	W.D. (m)	WEIGHT (kg)	N. B. (kg)
MMB 18/2-E	1	-	1030	1948	17-35	10-80	658	2033
MMB 18/4-E	2	-	2060	2510	17-35	10-80	982	4400
MMB 18/6-E	2	1	2860	3310	17-35	10-80	1270	6609
MMB 18/8-E	2	2	3660	4110	17-35	10-80	1559	8818
MMB 18/10-E	2	3	4460	4910	17-35	10-80	1847	11028
MMB 18/12-E	2	4	5260	5710	17-35	10-80	2136	13237



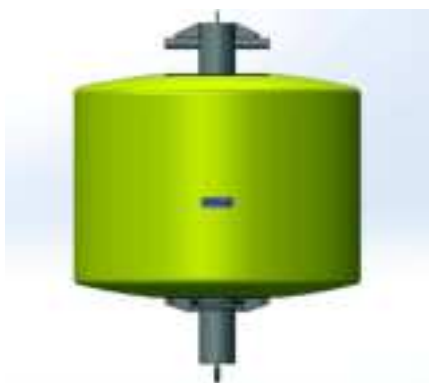
BUOY SERIES MMB-22

MOORING MODULAR BUOYS MMB 22 BOLLARD

MMB 22 P SERIES					
TYPE	Nett. buoyancy (Kg)	Weight (Kg)	Diam. (mm)	L.O.A. (mm)	S.W.L. (tons)
					
2210 P17	2950	530	2200	2255	17
2210 P35	2893	592	2200	2255	35
2210 P55	2815	670	2200	2255	55

MMB 22 P SERIES					
TYPE	Nett. buoyancy (Kg)	Weight (Kg)	Diam. (mm)	L.O.A. (mm)	S.W.L. (tons)
					
2214 P17	4200	630	2200	2505	17
2214 P35	4128	697	2200	2505	35
2214 P55	4040	785	2200	2505	55

MOORING MODULAR BUOYS MMB 22 BOLLARD

TYPE	Nett. buoyancy (Kg)	Weight (Kg)	Diam. (mm)	L.O.A. (mm)	S.W.L. (tons)
					
2217 P17	5635	800	2200	2855	17
2217 P35	5290	874	2200	2855	35
2217 P55	5190	975	2200	2255	55



MOORING MODULAR BUOYS MMB 22 PAD-EYE

MMB 22 E SERIES						
TYPE	Nett. buoyancy (Kg)	Weight (Kg)	Diam. (mm)	L.O.A. (mm)	W.D. (m)	S.W.L. (tons)
						
2210 E17	3060	425	2200	1510	10	17
2210 E17	2903	582	2200	1510	50	17
2210 E17	2716	769	2200	1510	110	17
2210 E17	2454	1031	2200	1510	250	17
2210 E17	1094	2391	2200	1510	4000	17
2210 E35	3018	467	2200	1510	10	35
2210 E35	2861	624	2200	1510	50	35
2210 E35	2674	811	2200	1510	110	35
2210 E35	2412	1073	2200	1510	250	35
2210 E35	1052	2433	2200	1510	4000	35
2210 E55	2968	517	2200	1510	10	55
2210 E55	2811	674	2200	1510	50	55
2210 E55	2624	861	2200	1510	110	55
2210 E55	2362	1123	2200	1510	250	55
2210 E55	1002	2483	2200	1510	4000	55

MOORING MODULAR BUOYS MMB 22 PAD-EYE

MMB 22 E SERIES						
TYPE	Nett. buoyancy (Kg)	Weight (Kg)	Diam. (mm)	L.O.A. (mm)	W.D. (m)	S.W.L. (tons)
						
2214 E17	4309	516	2200	1860	10	17
2214 E17	4091	734	2200	1860	50	17
2214 E17	3832	993	2200	1860	110	17
2214 E17	3470	1355	2200	1860	250	17
2214 E17	1587	3238	2200	1860	4000	17
2214 E35	4259	566	2200	1860	10	35
2214 E35	4041	784	2200	1860	50	35
2214 E35	3782	1043	2200	1860	110	35
2214 E35	3420	1405	2200	1860	250	35
2214 E35	1537	3288	2200	1860	4000	35
2214 E55	4195	630	2200	1860	10	55
2214 E55	3977	848	2200	1860	50	55
2214 E55	3718	1107	2200	1860	110	55
2214 E55	3356	1469	2200	1860	250	55
2214 E55	1473	3352	2200	1860	4000	55



MOORING MODULAR BUOYS MMB 22 PAD-EYE

MMB 22 E SERIES						
TYPE	Nett. buoyancy (Kg)	Weight (Kg)	Diam. (mm)	L.O.A. (mm)	W.D. (m)	S.W.L. (tons)
						
2217 E17	5497	668	2200	2210	10	17
2217 E17	5219	946	2200	2210	50	17
2217 E17	4888	1277	2200	2210	110	17
2217 E17	4425	1740	2200	2210	250	17
2217 E17	2019	4146	2200	2210	4000	17
2217 E35	5436	729	2200	2210	10	35
2217 E35	5158	1007	2200	2210	50	35
2217 E35	4827	1338	2200	2210	110	35
2217 E35	4364	1801	2200	2210	250	35
2217 E35	1958	4207	2200	2210	4000	35
2217 E55	5362	803	2200	2210	10	55
2217 E55	5084	1081	2200	2210	50	55
2217 E55	4753	1412	2200	2210	110	55
2217 E55	4290	1875	2200	2210	250	55
2217 E55	1884	4281	2200	2210	4000	55

MOORING MODULAR BUOYS MMB 22 PAD-EYE

MMB 22 E SERIES						
TYPE	Nett. buoyancy (Kg)	Weight (Kg)	Diam. (mm)	L.O.A. (mm)	W.D. (m)	S.W.L. (tons)
						
2220 E17	6230	740	2200	2710	10	17
2220 E17	5916	1055	2200	2710	50	17
2220 E17	5542	1429	2200	2710	110	17
2220 E17	5018	1952	2200	2710	250	17
2220 E17	2298	4672	2200	2710	4000	17
2220 E35	6155	815	2200	2710	10	35
2220 E35	5841	1130	2200	2710	50	35
2220 E35	5467	1504	2200	2710	110	35
2220 E35	4943	2027	2200	2710	250	35
2220 E35	2223	4747	2200	2710	4000	35
2210 E55	6064	906	2200	2710	10	55
2210 E55	5750	1221	2200	2710	50	55
2210 E55	5376	1595	2200	2710	110	55
2210 E55	4852	2118	2200	2710	250	55
2210 E55	2132	4838	2200	2710	4000	55



MOORING MODULAR BUOYS MMB 22 PAD-EYE

MMB 22 E SERIES						
TYPE	Nett. buoyancy (Kg)	Weight (Kg)	Diam. (mm)	L.O.A. (mm)	W.D. (m)	S.W.L. (tons)
						
2224 E17	7475	835	2200	2960	10	17
2224 E17	7100	1210	2200	2960	50	17
2224 E17	6654	1656	2200	2960	110	17
2224 E17	6030	2280	2200	2960	250	17
2224 E17	2787	5523	2200	2960	4000	17
2224 E35	7399	911	2200	2960	10	35
2224 E35	7024	1286	2200	2960	50	35
2224 E35	6578	1732	2200	2960	110	35
2224 E35	5954	2356	2200	2960	250	35
2224 E35	2711	5599	2200	2960	4000	35
2224 E55	7299	1011	2200	2960	10	55
2224 E55	6924	1386	2200	2960	50	55
2224 E55	6478	1832	2200	2960	110	55
2224 E55	5854	2456	2200	2960	250	55
2224 E55	2611	2699	2200	2960	4000	55

MOORING MODULAR BUOYS MMB 22 PAD-EYE

MMB 22 E SERIES						
TYPE	Nett. buoyancy (Kg)	Weight (Kg)	Diam. (mm)	L.O.A. (mm)	W.D. (m)	S.W.L. (tons)
						
2227 E17	8669	981	2200	3210	10	17
2227 E17	8234	1416	2200	3210	50	17
2227 E17	7716	1934	2200	3210	110	17
2227 E17	6991	2659	2200	3210	250	17
2227 E17	3225	6424	2200	3210	4000	17
2227 E35	8565	1085	2200	3210	10	35
2227 E35	8130	1520	2200	3210	50	35
2227 E35	7612	2038	2200	3210	110	35
2227 E35	6887	2763	2200	3210	250	35
2227 E35	3121	6528	2200	3210	4000	35
2227 E 55	8465	1185	2200	3210	10	55
2227 E 55	8030	1620	2200	3210	50	55
2227 E 55	7512	2138	2200	3210	110	55
2227 E 55	6787	2863	2200	3210	250	55
2227 E 55	3021	6628	2200	3210	4000	55



MOORING MODULAR BUOYS MMB 22 PAD-EYE

MMB 22 E SERIES						
TYPE	Nett. buoyancy (Kg)	Weight (Kg)	Diam. (mm)	L.O.A. (mm)	W.D. (m)	S.W.L. (tons)
						
2228 E17	8737	913	2200	3310	10	17
2228 E17	8302	1348	2200	3310	50	17
2228 E17	7784	1866	2200	3310	110	17
2228 E17	7059	2591	2200	3310	250	17
2228 E17	3294	6536	2200	3310	4000	17
2228 E35	8642	1008	2200	3310	10	35
2228 E35	8207	1443	2200	3310	50	35
2228 E35	7689	1961	2200	3310	110	35
2228 E35	6964	2686	2200	3310	250	35
2228 E35	3199	6451	2200	3310	4000	35
2228 E55	8533	1117	2200	3310	10	55
2228 E55	8098	1552	2200	3310	50	55
2228 E55	7580	2070	2200	3310	110	55
2228 E55	6855	2795	2200	3310	250	55
2228 E55	3090	6560	2200	3310	4000	55

MOORING MODULAR BUOYS MMB 22 PAD-EYE

MMB 22 E SERIES						
TYPE	Nett. buoyancy (Kg)	Weight (Kg)	Diam. (mm)	L.O.A. (mm)	W.D. (m)	S.W.L. (tons)
						
2231 E17	9919	1071	2200	3560	10	17
2231 E17	9424	1566	2200	3560	50	17
2231 E17	8834	2156	2200	3560	110	17
2231 E17	8009	2981	2200	3560	250	17
2231 E17	3720	7270	2200	3560	4000	17
2231 E35	9833	1157	2200	3560	10	35
2231 E35	9338	1652	2200	3560	50	35
2231 E35	8748	2242	2200	3560	110	35
2231 E35	7923	3067	2200	3560	250	35
2231 E35	3634	7356	2200	3560	4000	35
2231 E55	9700	1290	2200	3560	10	55
2231 E55	9205	1785	2200	3560	50	55
2231 E55	8615	2375	2200	3560	110	55
2231 E55	7790	3200	2200	3560	250	55
2231 E55	3501	7489	2200	3560	4000	55



MOORING MODULAR BUOYS MMB 22 PAD-EYE

MMB 22 E SERIES						
TYPE	Nett. buoyancy (Kg)	Weight (Kg)	Diam. (mm)	L.O.A. (mm)	W.D. (m)	S.W.L. (tons)
2234 E17	11108	1221	2200	3910	10	17
2234 E17	10553	1777	2200	3910	50	17
2234 E17	9891	2439	2200	3910	110	17
2234 E17	8966	3365	2200	3910	250	17
2234 E17	4153	8177	2200	3910	4000	17
2234 E35	10999	1330	2200	3910	10	35
2234 E35	10444	1886	2200	3910	50	35
2234 E35	9782	2548	2200	3910	110	35
2234 E35	8856	3474	2200	3910	250	35
2234 E35	4044	8286	2200	3910	4000	35
2234 E55	10867	1462	2200	3910	10	55
2234 E55	10312	2018	2200	3910	50	55
2234 E55	9650	2680	2200	3910	110	55
2234 E55	8724	3606	2200	3910	250	55
2234 E55	3912	8418	2200	3910	4000	55



MARKER/ PICK-UP BUOYS

Marker Buoys are designed to mark the presence of the pipeline but can be used also for different type of application in the marine market.

The buoy is composed by a inner core of water tight (non-absorbing) expanded closed-cell polyethylene foam. The layers of expanded polyethylene are heat sealed to reach the necessary buoy volume.

Expanded polyethylene (EPE) has excellent energy absorption and high strength properties. It is a flexible and lightweight material, environmentally-friendly, which can be recycled easily, 100% non-toxic. EPE provide outstanding energy absorption characteristics, weight to strength ratio, high thermal resistance and resistant to water, oils and most chemicals.

The material can withstand multiple impacts without significant damages. The inner core is covered with an outer thickness of elastomer polyurethane foam. The elastomer polyurethane is the result of a chemical reaction between isocyanate and polyol, 100% made and tested before production by our R&D laboratory.

The elastomer polyurethane ensures excellent protection against abrasion, impacts and ultra-violet rays. Moreover ensure an excellent adhesion with the EPE and steel. A heavy duty steel bar passes through the center of the buoy providing high linear load capacity for the buoy's hook-up points which can include a swivel eye, a fixed eye or a Pad Eyes in accordance to clients requirement.

The metal parts are sandblasted, galvanized and painted with marine grade polyurethane paint.

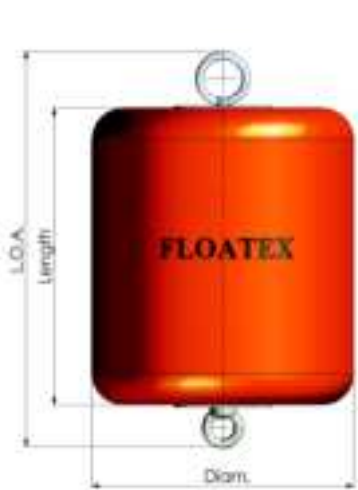


MARKER -PICK-UP BUOY S

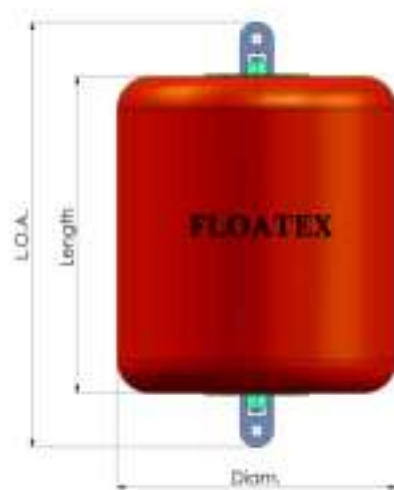
TYPE	Nett. buoyancy (Kg)	Weight (Kg)	Diam. (mm)	Length (mm)	L.O.A. (mm)	S.W.L. (tons)
MB 1	100	25	600	510	765	1.5
MB 1-5	150	31	660	610	865	1.5
MB 2	200	37	670	760	1015	1.5
MB 3	300	46	750	860	1115	1.5
MB 4	400	52	820	910	1165	1.5
MB 5	500	60	890	955	1210	1.5

MB 1 E	100	25	600	510	770	4.75
MB 1-5 E	150	31	660	610	870	4.75
MB 2 E	200	36	670	760	1020	4.75
MB 3 E	300	45	750	860	1120	4.75
MB 4 E	400	52	820	910	1170	4.75
MB 5 E	500	61	890	955	1215	4.75

MB 1 S	100	28	600	510	840	4.75
MB 1-5 S	150	34	660	610	940	4.75
MB 2 S	200	39	670	760	1090	4.75
MB 3 S	300	48	750	860	1190	4.75
MB 4 S	400	55	820	910	1240	4.75
MB 5 S	500	64	890	955	1285	4.75



Series MB



Series MB-E



Series MB-S



POLYETHYLENE EXPANDED BUOY

Floats are high-quality buoys designed expressly for a marine environment.

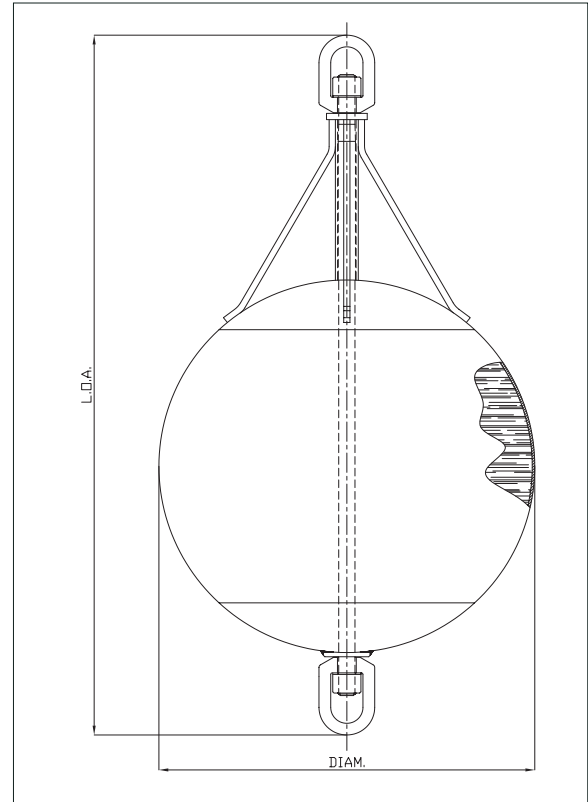
The inner core of the floats is filled with a non-water absorbing closed-cell foam. This material is a rigid foam which permits the buoys to retain buoyancy even if submerged. The high quality buoys outer foam layer is semi-flexible and is specifically designed to absorb impacts. The foam is covered by a thick layer of reinforced elastomer specifically formulated for wear and abrasion resistance and for use in a marine environment. A heavy-wall steel pipe through the axis of the floats provides a high pull through load capability.



12SF-S BUOY

POLYETHYLENE EXPANDED BUOY

TYPE	Nett. buoyancy (Kg)	Weight (Kg)	Diam. (mm)	L.O.A. (mm)
12SF-S	670	235	1200	2300
13SF-S	900	300	1300	2360





CBS -CHAIN SUPPORTING BUOY

FLOATEX CBS-CHAIN SUPPORTING BUOY have been designed to withstand the severe operating conditions associated with offshore operations. To achieve these characteristics the inner buoyancy core is realized applying spiral bending sheets of expanded cross-linked polyethylene. The full closed-cell expanded Polyethylene used, guarantees the unsinkability of the buoy, also in case of accidental serious damages occurred during operations. The outer Polyurethane skin provides the necessary abrasion and ultra-violet rays resistance to the buoy.

Standard outer colour is marine orange, but if requested, buoys can be manufactured in different colours.

Core: Cylindrical body of expanded closed-cell polyethylene foam, density 40-45 Kg/m³. The layers of expanded polyethylene are heat sealed to reach the necessary buoy volume. Expanded polyethylene (EPE) has excellent energy absorption and high strength properties. It is a flexible and lightweight material, environmentally-friendly, which can be recycled easily, 100% non-toxic. EPE provide outstanding energy absorption characteristics, weight to strength ratio, high thermal resistance and resistant to water, oils and most chemicals. The material can withstand multiple impacts without significant damage.

Skin: Outer cover with 8 mm thickness of elastomer polyurethane foam ORANGE colour. The elastomer polyurethane is the result of a chemical reaction between isocyanate and polyol, 100% made and tested before production by our R&D laboratory. The elastomer polyurethane ensures excellent protection against abrasion, impacts and ultra-violet rays. Moreover ensures an excellent adhesion with the PE and steel.

Steel part: The buoy is complete with a passing through steel tie rod, one steel plate and stiffeners at both ends, one marine swivel at both ends **SWL 17 Ton** for the connection with the chain. The swivels are locked with the tie-rod through a couple of nuts at both ends. The metal parts are sandblasted, galvanized and painted with marine grade polyurethane paint.



CYLINDRICAL SUPPORTING CHAIN BUOYS

CYLINDRICAL SUPPORTING BUOYS						
TYPE	Nett. buoyancy (Kg)	Weight (Kg)	Diam. (mm)	Length (mm)	L.O.A. (mm)	S.W.L. (ton)
CBS-1.5	150	86	650	750	1290	17
CBS-2	200	92	700	800	1340	17
CBS-2.5	250	96	740	850	1390	17
CBS-3	300	102	780	900	1440	17
CBS-4	400	122	900	920	1460	17
CBS-5	500	130	920	1000	1540	17
CBS-6	600	150	1000	1000	1540	17
CBS-7	700	185	1000	1200	1750	17
CBS-10	1000	213	1100	1350	1900	17
CBS-12	1200	254	1220	1350	1900	17
CBS-16	1600	280	1300	1470	2020	17
CBS-18	1800	330	1420	1470	2020	17
CBS-20	2000	315	1330	1700	2250	17
CBS-22	2200	360	1420	1700	2250	17
CBS-25	2500	410	1500	1700	2250	17
CBS-27	2700	435	1550	1700	2250	17
CBS-27 LONG	2700	430	1450	2000	2550	17
CBS-30	3000	480	1580	1850	2400	17
CBS-32	3200	490	1610	1850	2400	17
CBS-35	3500	515	1700	1850	2400	17
CBS-36	3600	520	1730	1850	2400	17
CBS-38	3800	530	1760	1850	2400	17
CBS-40	4000	545	1730	2000	2550	17
CBS-45	4500	585	1850	2000	2550	17
CBS-50	5000	655	1950	2000	2550	17





CHAIN THROUGH BUOY

All FLOATEX cylindrical, supporting and mooring buoys have been designed to withstand the severe operating conditions associated with offshore operations.

To achieve these characteristics the inner buoyancy core is realized applying spiral bending sheets of expanded cross-linked polyethylene.

The full closed-cell expanded Polyethylene used, guarantees the unsinkability of the buoy, also in case of accidental serious damages occurred during operations.

The outer Polyurethane skin provides the necessary abrasion and ultra-violet rays resistance to the buoy.

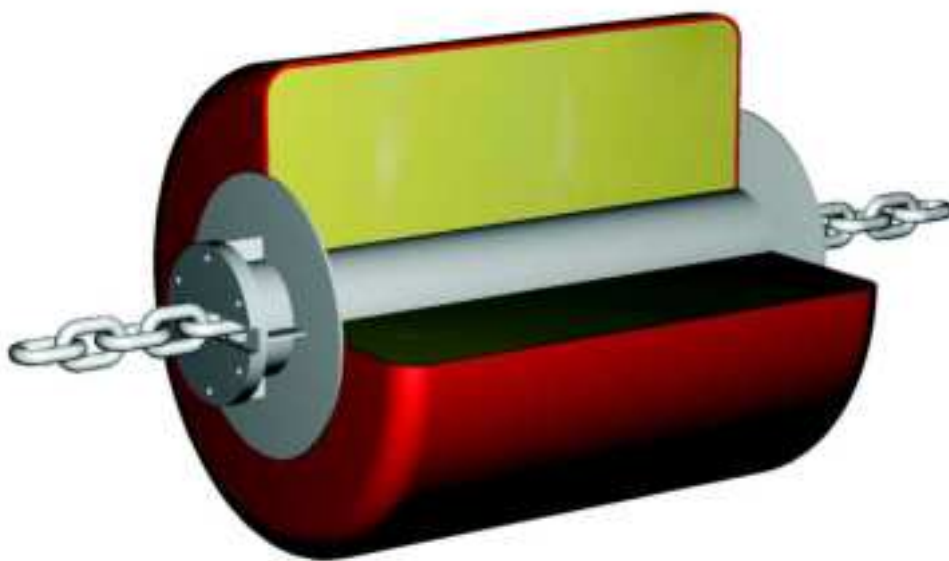
Standard outer colour is marine orange but, if requested, buoys can be manufactured in different colours.



CHAIN THROUGH BUOYS

CHAIN 76 mm THROUGH BUOYS

TYPE	Nett. buoyancy (Kg)	Weight (Kg)	Diam. (mm)	Length (mm)	L.O.A. (mm)
CB-C 10	1000	490	1150	1600	1940
CB-C 15	1500	530	1340	1600	1940
CB-C 18	1800	570	1350	1800	2140
CB-C 20	2000	590	1420	1800	2140
CB-C 23	2300	605	1500	1800	2140
CB-C 25	2500	640	1480	2000	2340
CB-C 27	2700	650	1520	2000	2340
CB-C 30	3000	670	1600	2000	2340
CB-C 35	3500	700	1700	2000	2340
CB-C 40	4000	735	1800	2000	2340
CB-C 45	4500	775	1800	2200	2540
CB-C 50	5000	815	1900	2200	2540



CHAIN 90 mm THROUGH BUOYS

TYPE	Nett. buoyancy (Kg)	Weight (Kg)	Diam. (mm)	Length (mm)	L.O.A. (mm)
CB-C 23	2300	640	1520	1800	2140
CB-C 25	2500	675	1500	2000	2340
CB-C 27	2700	685	1540	2000	2340
CB-C 30	3000	710	1620	2000	2340
CB-C 35	3500	740	1720	2000	2340
CB-C 40	4000	770	1820	2000	2340
CB-C 45	4500	820	1830	2200	2540
CB-C 50	5000	855	1920	2200	2540



ANCHOR PENNANT BUOYS

This special type of buoy are produced by FLOATEX with the specific intent to provide a high degree of energy absorption and high resilience.

The general construction scheme consists of a central galvanized steel structure, an expanded rigid core, laminated resistant expanded PE around the inner core and a final elastomer PU cover. The outer elastomer cover will, in some cases, be reinforced by the application of special yarns blended into the layer, ensuring a higher tear strength to the outer protective skin.

The heavy operating conditions foreseen for this type of buoy, can occasionally cause damages to the outer cover and to the floating expanded material. FLOATEX welcomes requests of repair on site, having developed a special portable equipment to regenerate damaged urethane covers and replace parts of broken expanded material.

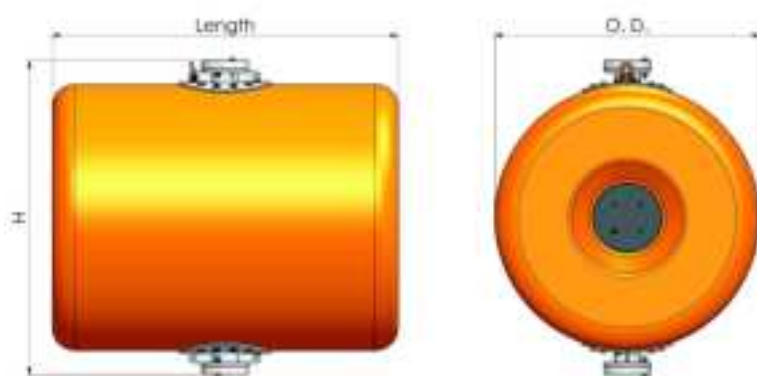


Floatex anchor pennant buoys can be supplied with different type of terminal for different purpose; like pad eye, crucifix type, cable passing through and chain passing through.



ANCHOR PENNANT BUOYS

PASSING THROUGH TYPE					
TYPE	N. B. (Kg)	Weight (Kg)	O. D. (mm)	Length (mm)	H (mm)
PB - HT 3	3000	1300	1650	2100	2000
PB - HT 4	4000	1400	1850	2150	2200
PB - HT 5	5000	1550	1950	2200	2250
PB - HT 6	6000	1700	2100	2300	2450
PB - HT 8	8000	1900	2200	2700	2550
PB - HT 10	10000	2150	2300	3000	2650
PB - HT 12	12000	2450	2350	3400	2700
PB - HT 15	15000	2900	2500	3700	2850
PB - HT 17	17000	3200	2650	3700	3000



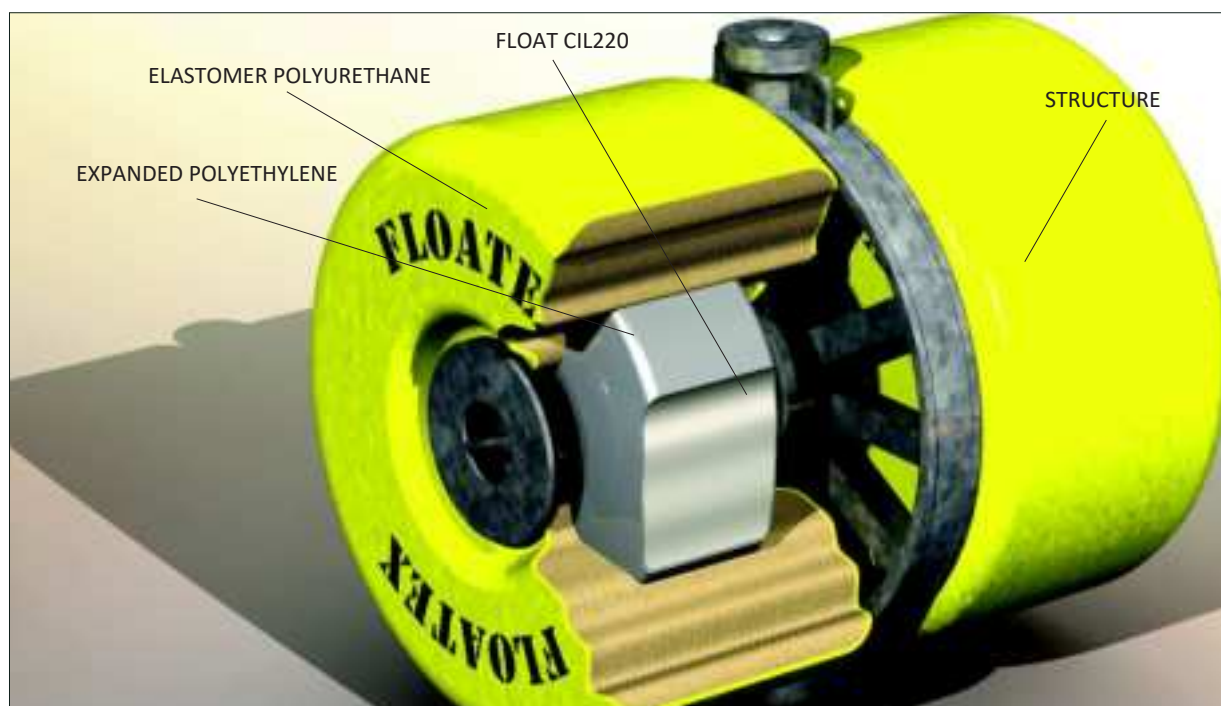


ROTATIVE ANCHOR PENNANT BUOY

This rotative type of buoys are produced by FLOATEX with the specific intent to provide a high degree of energy absorption and high resilience.

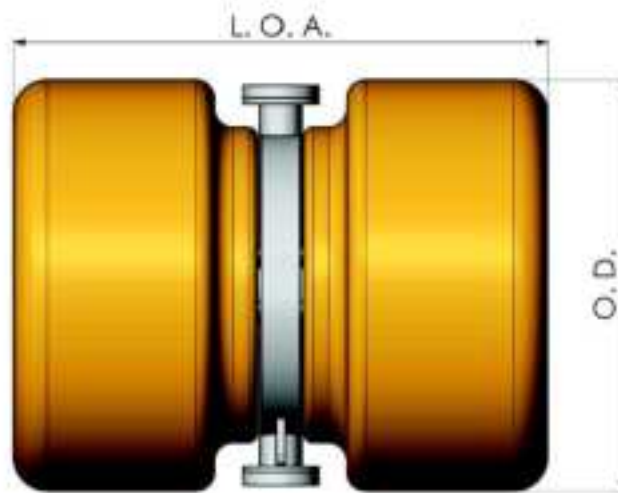
The general construction scheme consists of a central galvanized steel structure suitable to mount two separated floats made by laminated resistant expanded PE around the inner core and a final elastomer PU cover. The outer elastomer cover will, in some cases, be reinforced by the application of special yarns blended into the layer, ensuring a higher tear strength to the outer protective skin.

The heavy operating conditions foreseen for this type of buoy can occasionally cause damages to the outer cover and to the floating expanded material. FLOATEX welcomes requests of repair on site, having developed a special portable equipment to regenerate damaged urethane covers and replace parts of broken expanded material.



ROTATIVE ANCHOR PENNANT BUOY PBHT

MODULAR ROTATIVE TYPE				
TYPE	Nett Buoyancy (Kg)	Weight (Kg)	Diam (mm)	L.O.A. (mm)
PBHT 4 R	4000	1980	2000	2440
PBHT 6,5 R	6500	2700	2150	2840
PBHT 8 R	8500	2870	2300	3040
PBHT 9,5 R	9500	3900	2600	3095
PBHT 15 R	15000	5040	2800	3600





GIANT BUOY EXA 48/56-40

FLOATEX is specialised in production of Modular Buoys.

The production of this type of buoys is based on our special know-how and technology.

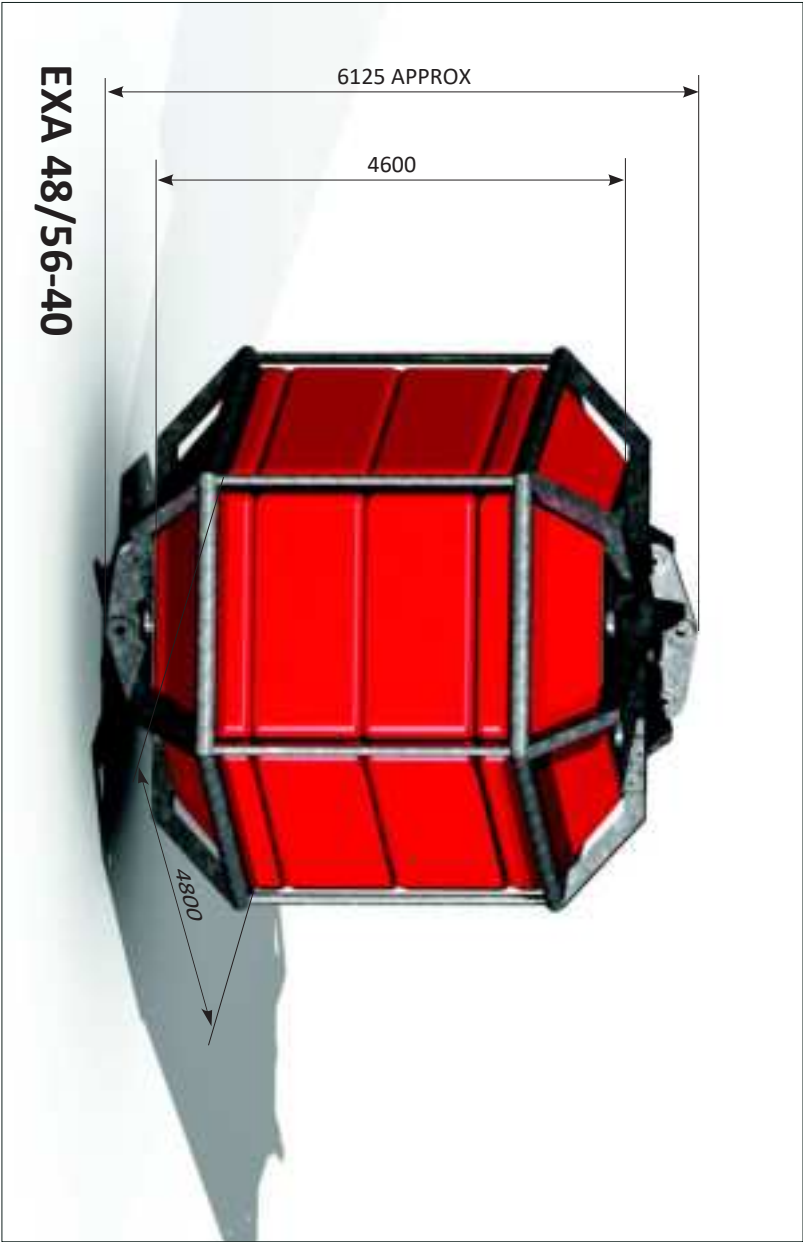
Therefore, we are able to offer a greater variety of sized and dimensions for this model.

GIANT MODULAR BUOYS are built for all offshore applications where great buoyancy capacity are required.

These modular buoys are built up of interchangeable modules of plastic materials able to be transported and shipped by container system to minimize logistic problems.

The materials used are rotomoulded polyethylene shells duly filled with polyurethane closed cell foam.





GIANT BUOY EXA 48/56-40



MMB 4300 MOORING BUOY SERIES

Floating Modules

Each module of the Floatex mooring buoy is made in rotomoulded UV-stabilized linear virgin polyethylene. The Polyethylene used in the manufacturing process is completely recyclable (Eco-Friendly), it's fully compatible with the marine environment, and has a high resistance to UV rays. Being linear has the advantage that it can be melted and hence repaired by hot fusion welding. The colour pigment is moulded-in and consequently not added as a coating ensuring greater life of the color and a big help to the environment as it never requires additional paintings, avoiding toxic dispersions in the water. Floatex polyethylene require a minimal maintenance.

Each module is filled with closed-cell polyurethane foam.

The polyurethane foam ensure great resistance to the leakage of air or water, ensuring unsinkability to the buoy also in case of accidental breaks of the outer shell.

The polyurethane foam is 100% made and tested before production by our R&D laboratory. Thanks to its construction the modules are completely interchangeable.

Furthermore, the modular configuration ensures that, in case of accidental breakage of one module, The mooring buoy maintain enough buoyancy to continue his work at that moment.

Fender modules protection

The upper line of the modules is equipped with horizontal elastomer polyurethane fender to protect the buoy to any accidental small crash or mooring of barge boat or tugs. Using polyurethane fender instead of rubber fender has the advantage to avoid the dispersion of colour which often happen with rubber fenders causing stains on the boats. The polyurethane has the advantage to leave slide the water decreasing at maximum the friction between the fender and the barge ships.



Metal Part

Central metal frame in steel, sand-blasted, galvanized and marine painted with grade polyurethane. All the floating modules are fixed on the central steel frame with passing through steel pipes complete of tightening hardware to avoid trembling between central steel frame and the floating modules. Central steel balanced rod allows mooring chain connection through suitable pad eye configuration. The standard SWL of the buoy is 180 Tons but different load can be applied upon request.



Connection with the vessel

For the connection between the buoy and the vessel, the buoy can be equipped, upon request, with Quick Release Mooring Hook, Standard Pelican Mooring Hook, Pad eye, Crucifix Bollard or Mooring Ring.

Lantern and passive radar reflector

Floatex mooring buoys can be provided with radar reflector and self-powered lantern with relative support piles. The lantern ensure an aids to navigation during the night hours while the passive radar reflector allows to better reflect the electromagnetic waves and highlight them on the onboard radar screen.

Lifting auxiliary eyes

Floatex mooring buoys are equipped with 3 eyes on the upper part of the buoy and 3 eyes on the lower part of the buoy to facilitate lifting and handling operations during the installation.

Zinc anodes

In order to preserve at maximum the metal parts of the buoy and allow a longer life of the same, each of Floatex mooring buoys is provided with sacrificial anodes in zinc.





MMB 4300 MODULAR MOORING BUOYS

TYPE	Nett. buoyancy (Kg)	Weight (Kg)	S.W.L. (ton)
MMB 4311	12150	3170	180
MMB 4314	15845	3685	180
MMB 4322	25500	5100	180
MMB 4325	29000	5620	180
MMB 4328	32900	6150	180



NOTE:

Standard buoys are offered with 180 tons SWL pad-eye at both end.
Other terminal and SWL are available upon request.



Advantages Polyethylene Hybrid Buoys Against Steel Buoys

1) The Polyethylene used in the manufacturing process is completely recyclable (Eco-Friendly), it's fully compatible with the marine environment, and has a high resistance to UV rays. Being linear has the advantage that it can be melted and hence repaired by hot fusion welding. The colour pigment is moulded-in and consequently not added as a coating ensuring greater life of the colour and a big help to the environment as it never requires additional paintings, avoiding toxic dispersions in the water common with the steel buoys.

2) The polyethylene buoys, compared to the steel buoys require very low maintenance, almost reduced to zero. It is always recommended and useful to perform annual maintenance of the buoys for cleaning the floating modules and control the metal parts.

3) The Polyethylene used in the manufacturing process is high quality products and compared to the steel is less affected from plant life reducing as much as possible the maintenance related to the external cleaning of the module.

Moreover the colour RAL used by Floatex is in compliance with recommended IALA scale chart.

Floatex has the possibility to test the grade of the colour of its polyethylene thanks to the spectrometer which is daily used by Floatex laboratory to test the manufactured pieces.

4) The weight of the polyethylene buoy compared to a steel buoy is lighter facilitating the operation of handling, assembling and installation.

5) The polyethylene buoys compared to the steel buoys offer the possibility to replace also only one floating module, in case of occasional damage, in a simple and fast way.

This operation is not possible with a steel buoy; if a damage occurs it is mandatory to replace it completely or perform operation of welding onsite.

6) The freight of a Floatex polyethylene hybrid buoy, as stated above, can be carried in standard containers or trucks avoiding the high cost and timing of the oversize trucks.

7) Polyethylene buoy does not need such tests as steel buoy.

For example the polyethylene buoy does not need Hydraulic test as the floating modules are totally independent and ensure the floatability of the buoy also in case of small damages.

8) Last but not least, aesthetically Floatex hybrid polyethylene buoys provide a visible colour for many more years than steel buoys.

Floatex, moreover, performs aging tests on samples of polyethylene to ensure an excellent quality of the same product in the course of the years.



CATAMARAN MOORING BUOY

This mooring buoy is designed for most of mooring projects.

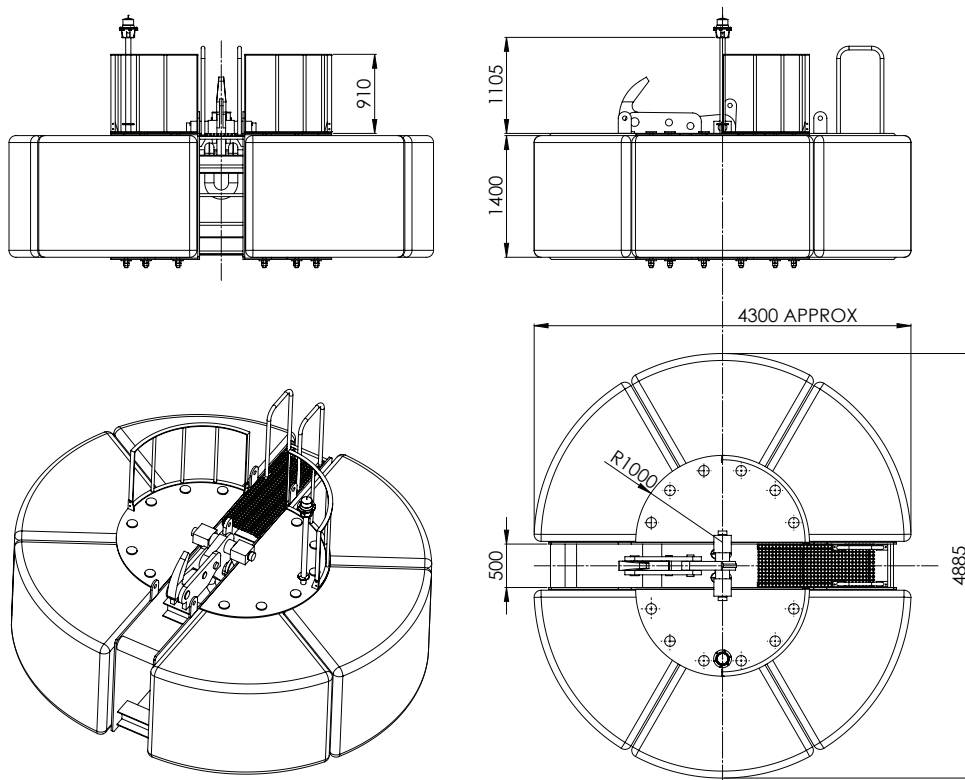
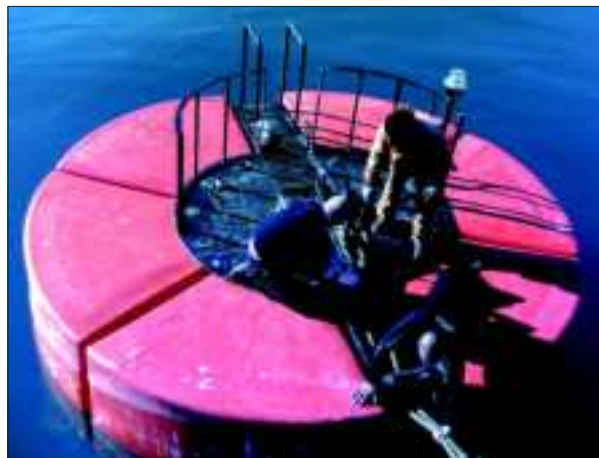
These mooring buoys are built with interchangeable modules that are suitable to be transported and shipped into containers to reduce logistic problems.

We can also mount more modules to change the buoyancy and consequently the height of the float body..

The floats used for this buoy are made with rotomoulded polyethylene shells filled with polyurethane foam.

The metallic structure is made in galvanized steel and has the important duty to support the modular floats and release the mooring hooks.

The production of this type of buoy is based on our special know-how and technology.











HINGED BOLTED FLOATS

Floatex Hinged Bolted Floats are designed to provide buoyancy to submarine hose lines in order to maintain the proper flotation requirement for different style hoses and to guarantee the underwater configuration.

The floats are composed by two halves made in UV-stabilized linear virgin polyethylene. The Polyethylene used in the manufacturing process is completely recyclable (Eco-Friendly), it's fully compatible with the marine environment, and has a high resistance to UV rays. Being linear has the advantage that it can be melted and hence repaired by hot fusion welding.

The colour pigment is moulded-in and consequently not added as a coating, ensuring greater life of the colour and a big help to the environment as it never requires additional paintings, avoiding toxic dispersions in the water. Floatex polyethylene requires a minimal maintenance.

R&D laboratory daily perform tests on production samples such as tensile test, hardness test, abrasion test, UV test and Cold temperature test, colour test and other ordinary tests in the aim to ensure the quality and the reliability of Floatex polyethylene.

The floats are filled with closed-cell polyurethane foam with different density in base of the hydrostatic pressure the floats need to withstand. The polyurethane foam ensure great resistance to the leakage of air or water, ensuring unsinkability to the buoy also in case of accidental breaks of the outer shell.

The polyurethane foam is 100% made and tested before production by our R&D laboratory.

The two halves are hinged together at one side, and bolted at the other side to ensure optimal clamping with the pipe and facilitate the installation on side even in sub-sea operations.

All the metal parts are in AISI 316 stainless steel. All the floats are clearly marked and registered in accordance to current norms and established regulations. These floats are duly tested in accordance to our internal Quality Control and Quality Assurance procedures, and conforming to GMPHOM specifications and requirements.



Test certificates are issued following final test results. Floatex Hinged Bolted floats are splitted in two main categories in base of the operative water depth, 0-40mt and 40-80mt.

Clearly Floatex floats are able to withstand also deeper water depths upon request of the client.

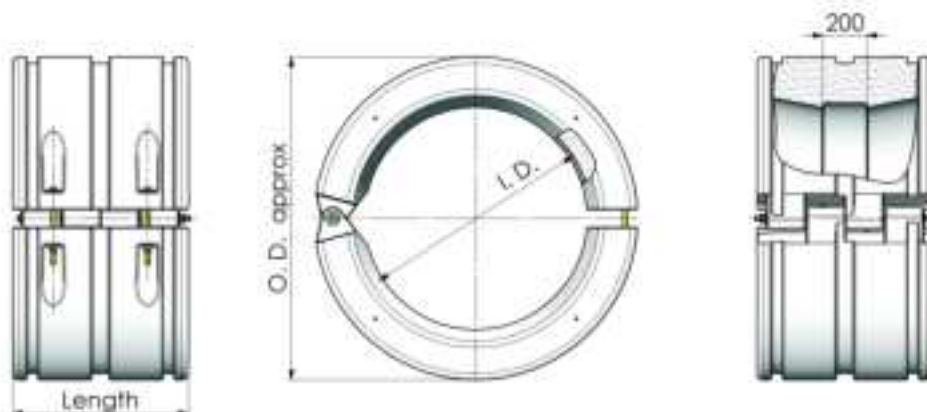
Floats can be ballasted to add weight at pipeline or to ensure neutral buoyancy to the float itself

HINGED BOLTED FLOATS

Nominal diameter in accordance with GMPHOM 2009							
FLOAT TYPE	SIZE			WATER DEPTH			
	O. D. (mm)	I. D. (mm)	Length (mm)	0 - 40 m		40 - 80 m	
				Weight (Kg)	N.B. (Kg)	Weight (Kg)	N.B. (Kg)
24" HE-S	1470	1050	800	140	468	180	428
24" HE-D	1350	946	800	140	427	172	395
24" HE	1350	876	600	114	350	139	325
24" HB	1230	799	600	94	270	110	254
20" HE-S							
20" HE	1130	697	600	84	230	102	212
16" HE-S	1050	581	550	74	215	93	196
12" HB-E	710	471	550	38	70	44	64
12" HB	692	420	550	37	71	43	65
10" HE							
10" HB	650	370	400	26	56	31	51
8" HE							
8" HB	580	310	400	23	47	27	43
6" HE							
6" HB	650	270	550	38	104	45	97

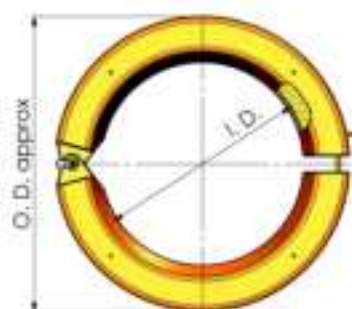
Note:

Dimensions and weights are nominal
Tolerance: $\pm 5\%$ on weight --- $\pm 5\%$ on buoyancy
Other dimensions are available on request.

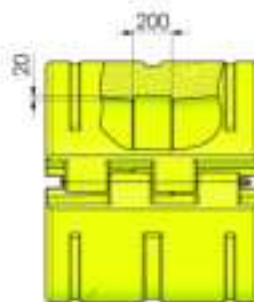
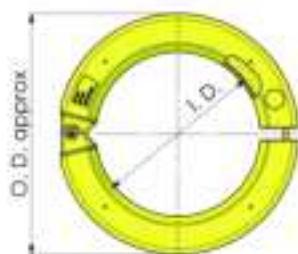
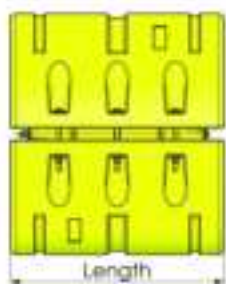




Nominal diameter out of GMPHOM 2009							
FLOAT TYPE	SIZE			WATER DEPTH			
	O. D. (mm)	I. D. (mm)	Length (mm)	0 - 40 m		40 - 80 m	
				Weight (Kg)	N.B. (Kg)	Weight (Kg)	N.B. (Kg)
20" HB	1050	630	550	76	198	88	186
16" HE							
16" HB	920	520	550	60	156	66	150
12" HE							
12" HB-S	850	490	500	51	124	60	115



Nominal diameter out of GMPHOM 2009 - Series FLAT							
FLOAT TYPE	SIZE			WATER DEPTH			
	O. D. (mm)	I. D. (mm)	Length (mm)	0 - 40 m		40 - 80 m	
				Weight (Kg)	N.B. (Kg)	Weight (Kg)	N.B. (Kg)
24HE-F	1240	956	1100	150	371	162	359
24HB-F	1240	886	1100	162	432	172	422



"SANDWICH" CONSTRUCTION SHELL

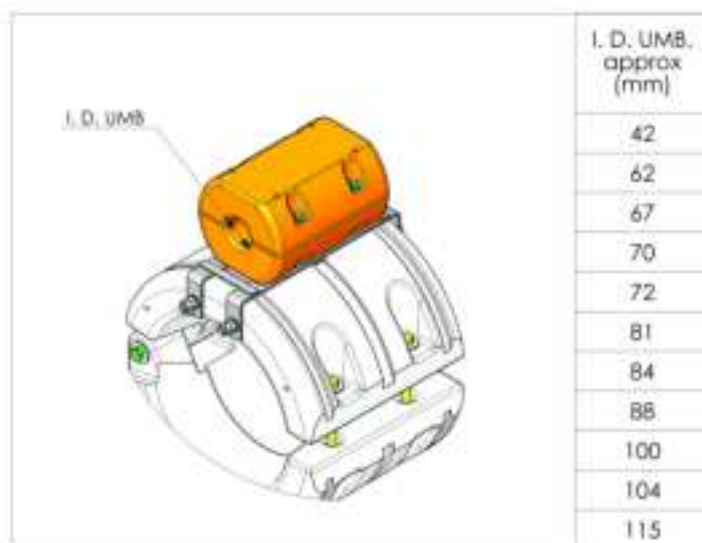
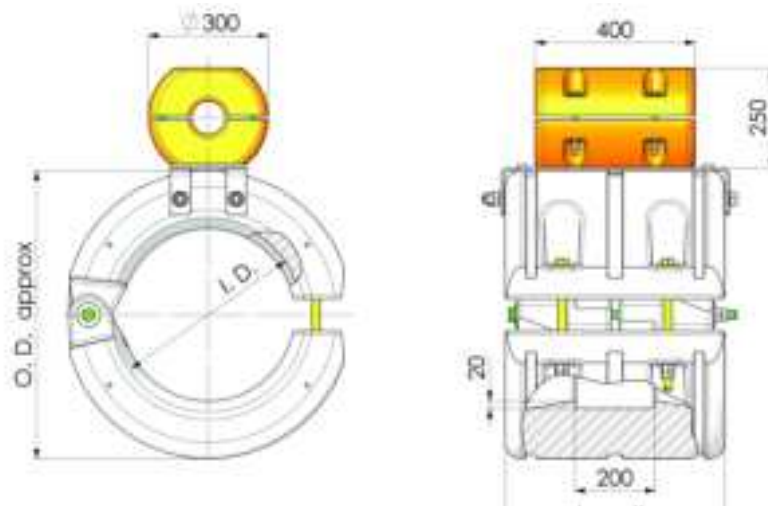
ROTOMOULDED
INNER CLOSURE
SHELL

ROTOMOULDED
OUTSIDE PE SHELL

ROTOMOULDED
EXPANDED PE
INNER FOAM CORE

HINGED BOLTED FLOATS

Nominal diameter in accordance with GMPHOM 2009 with umbilical							
FLOAT TYPE	SIZE			WATER DEPTH			
	O. D.	I. D.	Length	40m		80m	
	(mm)	(mm)	(mm)	With Umbilical		With Umbilical	
				Weight (Kg)	N.B. (Kg)	Weight (Kg)	N.B. (Kg)
24" HE-S	1470	1050	800	178	451	218	411
24" HE-D	1350	946	800	178	410	210	378
24" HE	1350	876	600	152	333	177	308
24" HB	1230	799	600	132	253	148	237
20" HE-S							
20" HE	1130	697	600	122	213	140	195
16" HE-S	1050	581	550	112	198	131	179
12" HB-E	720	471	550	73	57	79	51





HINGED TURNBUCKLE FLOATS

Floatex Hinged Turnbuckle Floats are designed to provide buoyancy to submarine hose lines in order to maintain the proper flotation requirement for different style hoses and to guarantee the underwater configuration.

The floats are composed by two halves made in UV-stabilized linear virgin polyethylene. The Polyethylene used in the manufacturing process is completely recyclable (Eco-Friendly), it's fully compatible with the marine environment, and has a high resistance to UV rays.

Being linear has the advantage that it can be melted and hence repaired by hot fusion welding. The colour pigment is moulded-in and consequently not added as a coating, ensuring greater life of the colour and a big help to the environment as it never requires additional paintings, avoiding toxic dispersions in the water. Floatex polyethylene requires a minimal maintenance.

R&D laboratory daily perform tests on production samples such as tensile test, hardness test, abrasion test, UV test and Cold temperature test, colour test and other ordinary tests in the aim to ensure the quality and the reliability of Floatex polyethylene.

The floats are filled with closed-cell polyurethane foam with different density in base of the hydrostatic pressure the floats need to withstand. The polyurethane foam ensure great resistance to the leakage of air or water, ensuring unsinkability to the buoy also in case of accidental breaks of the outer shell. The polyurethane foam is 100% made and tested before production by our R&D laboratory.

The two halves are hinged together at one side, and fastened at the other end by means of an adjustable turnbuckle device to ensure optimal clamping with the pipe. All the metals parts are in AISI 316 stainless steel.

All the floats are clearly marked and registered in accordance to current norms and established regulations. These floats are duly tested in accordance to our internal Quality Control and Quality Assurance procedures, and conforming to GMPHOM specifications and requirements. Test certificates are issued following final test results.

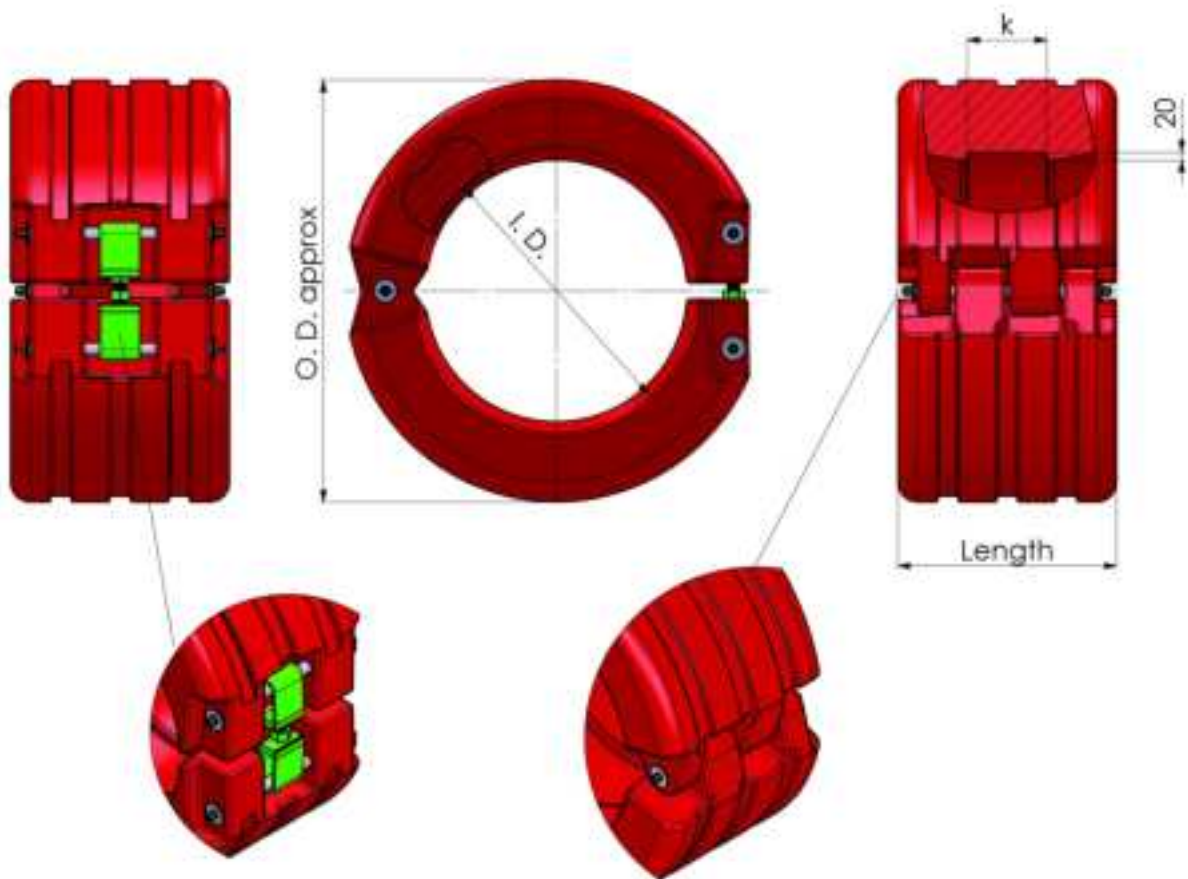


Floatex Hinged Turnbuckle floats are splitted in two main categories in base of the operative water depth, 0-40mt and 40-80mt.

Clearly Floatex floats are able to withstand also deeper water depths upon request of the client.

HINGED TURNBUCKLE FLOATS

FLOAT TYPE	SIZE						WATER DEPTH			
	O. D.	I. D.	Length	k	Adjustable range I. D. (mm)		0 - 40 m		40 - 80 m	
	(mm)	(mm)	(mm)	(mm)			Weight (Kg)	N.B. (Kg)	Weight (Kg)	N.B. (Kg)
24" HE	1400	946	850	200	925	965	157	430	189	398
24" HB	1240	774	600	200	755	780	100	295	124	271
20" HE										
20" HB-S	1070	697	550	200	680	720	75	175	85	165
20" HB	1055	649	550	152	630	650	75	197	90	182
16" HE										
16" HB	915	525	450	152	510	540	60	123	70	113
12" HE										



NOTE: Dimensions and weights are nominal
Tolerance: $\pm 5\%$ on weight
 $\pm 5\%$ on buoyancy
Other dimensions are available on request.



SUPER HINGED FLOAT

Floatex Super Hinged Floats are designed to provide buoyancy to submarine hose lines in order to maintain the proper flotation requirement for different style hoses and to guarantee the underwater configuration.

The design of these special floats differ slightly from the standard Hinged Bolted Floats mainly for the engineering of smoothed angles to ensure greater impact resistance in case of lateral crash/friction with a near line of floats. Another difference is the design of special hole to permit the end user to fit a steel counterweight in case of necessity during the installation.

The floats are composed by two halves made in UV-stabilized linear virgin polyethylene. The Polyethylene used in the manufacturing process is completely recyclable (Eco-Friendly), it's fully compatible with the marine environment, and has a high resistance to UV rays.

Being linear has the advantage that it can be melted and hence repaired by hot fusion welding. The colour pigment is moulded-in and consequently not added as a coating ensuring greater life of the colour and a big help to the environment as it never requires additional paintings, avoiding toxic dispersions in the water. Floatex polyethylene require a minimal maintenance.

R&D laboratory daily perform test on production samples such as tensile test, hardness test, abrasion test, UV test and Cold temperature test, colour test and other ordinary tests in the aim to ensure the quality and the reliability of Floatex polyethylene.

The floats are filled with closed-cell polyurethane foam with different density in base of the hydrostatic pressure the floats need to withstand. The polyurethane foam ensure great resistance to the leakage of air or water, ensuring unsinkability to the buoy also in case of accidental breaks of the outer shell. The polyurethane foam is 100% made and tested before production by our R&D laboratory.

The two halves are hinged together at one side, and bolted at the other side to ensure optimal clamping with the pipe and facilitate the installation on side even in sub-sea operations. All the metals parts are in AISI 316 stainless steel. All the floats are clearly marked and registered in accordance to current norms and established regulations.



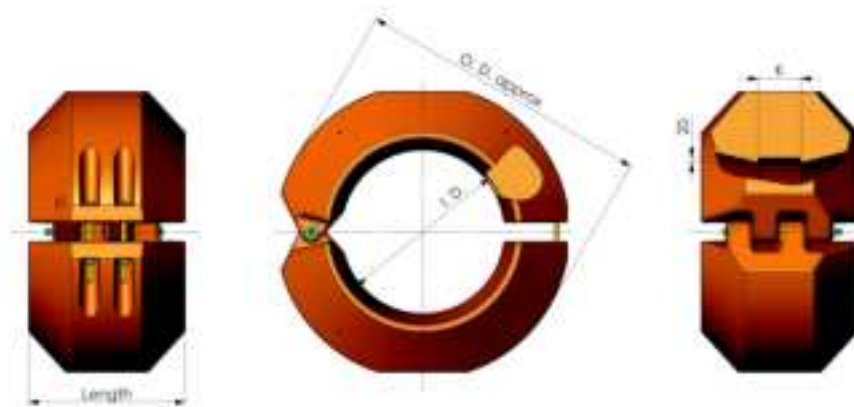
These floats are duly tested in accordance to our internal Quality Control and Quality Assurance procedures, and conforming to GMPHOM specifications and requirements. Test certificates are issued following final test results.

Floatex Hinged Bolted floats are splitted in two main categories in base of the operative water depth, 0-40mt and 40-80mt.

Clearly Floatex floats are able to withstand also deeper water depth upon request of the client.

SUPER HINGED FLOAT

TYPE	SIZE				WATER DEPTH			
	O. D.	I. D.	Length	K	0 - 40 m		40 - 80 m	
	(mm)	(mm)	(mm)	(mm)	Weight (Kg)	N.B. (Kg)	Weight (Kg)	N.B. (Kg)
20HE-DC	1490	946	800	200	134	415	164	385
20HB-DC	1370	799	730	200	110	330	130	310
8HE-DC	660	360	550	200	30	66	34	62



Note:

Dimensions and weights are nominal
Tolerance: $\pm 5\%$ on weight --- $\pm 5\%$ on buoyancy
Other dimensions are available on request.



Floatex performed, with positive results, special LDDT (Lateral Dart Drop Test) using two Super Hinged Floats in order to simulate the possible crashes on site and verified the good design of these floats.

FLOATEX

www.floatex.com



BEAD FLOATS AND INTEGRAL FLOATATION

Bead or ring floats and integral flotation for oil suction and discharge hoses have been in FLOATEX production program for a long time.

The ring floats are made of expanded cross-linked closed cell polyethylene foam, covered and protected by a layer of compact elastic polyurethane elastomer.

This flotation system is particularly useful for the application on gas-transport rubber hoses, allowing a high percentage of the hose outer surface to remain free for the natural gas transpiration through the rubber.

Rubber hose manufacturers are enthusiastic about the application of ring floats, as FLOATEX is capable to fit all sizes, having a complete hose mandril set and a specific equipment for this type of work.

The same technology adopted to apply an integral flotation on O.S. & D. hoses has been successfully used for the rebuilding and repair of used oil hoses. This application can be of value to dredging industry.



ANCILLARY EQUIPMENT FOR S.P.M. SYSTEM

Oil hose manufacturers and Oil terminals often refer to FLOATEX for the production and assembling of the various ancillary elements necessary to complete hoses strings for Single point Mooring System (S.P.M.).

Items like butterfly valves, Camlock coupling, ropes etc. not produced by FLOATEX are collected and then assembled with in house produced pick-up buoys, mooring buoys, blind flanges, winkerlights, diverters, etc.

This service is appreciated by clients desiring to group a number of small orders for different ancillary items for evident economical and practical reasons.





FLOATING CONCENTRIC REDUCER AND "Y" PIECES

FLOATEX produces a full range of "Y" pieces and concentric reducers for floating O.S. and D hoses strings, starting from 6" inner diameter up to a 24".

Steel part: Inner steel pipes complete of reduction, welded together to create reduction "concentric" configuration.

Floatex steel part is duly designed to ensure greater oil flow velocity and less fluid shock on the welds, extending the life time of the connections.

All the welds are 100% radiographed.

Hydraulic test is carried out on each steel part.

The steel parts are sandblasted, galvanized and painted with marine grade polyurethane paint.

Outer floating body is made of expanded cross-linked polyethylene foam covered by a layer of elastomeric high impact resistant urethane.

Below, a table shows the indicative dimensions and weight data for the whole range of floating reducers and "Y" pieces with a 25% minimum reserve buoyancy.



TYPE	Diameter (mm)	Length (mm)	Weight (Kg)
12"/10"	680	1500	200
16"/12"	815	1500	260
20"/12"	920	1600	340
20"/16"	920	1600	350
24"/16"	1020	1700	450
24"/20"	1070	1700	480

Other dimensions are available upon request



FLOATING REDUCER AND "Y" PIECES

TYPE	Diameter (mm)	Width (mm)	L.O.A. (mm)	Weight (Kg)
16"/2x12"	850	2680	2400	800
20"/2x12"	950	2780	2500	950
20"/2x16"	950	2780	2500	1100
20"/2x20"	950	2780	2500	1150
24"/2x12"	1050	2880	2500	1250
24"/2x16"	1050	2880	2500	1350
24"/2x20"	1050	2880	2600	1400
24"/2x24"	1050	2880	2600	1450



FLOATEX

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NEW FLOATATION FOR "Y" PIECES

Floatex recently developed a new range of floating "Y" pieces. The main difference is the outer structure which is completely made in rotomoulded polyethylene, splitted into two modules joined together with stainless steel bolts AISI 316.

The modules are mounted on a steel structure duly studied by our technicians to guarantee a greater oil flow velocity.

The steel structure is sandblasted and galvanized by Metco system. Zinc anodes may also be added upon request.

100% radiography is made on all welding parts involved.

The polyethylene modules are duly filled with closed cell polyurethane foam to guarantee unsinkability. The Minimum reserve-buoyancy is 25%.

The new floating "Y" piece has the following advantages:

- The floating modules, thanks to its construction, are easily removable.
- The floating modules can be replaced or simply repaired directly on site.
- The steel structure can be controlled, repaired, treated or changed simply removing the floating modules.

Floating modules and / or steel parts are available as separate items.

FLOAT TYPE A



FLOAT TYPE B



NEW FLOATATION FOR "Y" PIECES TYPE A

TYPE	SUITABLE FOR
A	Y 20"x2x12" (ASA 150)
A	Y 20"x2x16" (ASA 150)
A	Y 20"x2x16" (ASA 300)
B	Y 24"x2x16" (ASA 150)
B	Y 24"x2x16" (ASA 300)
B	Y 24"x2x20" (ASA 150)

PATENT PENDING





SPWL A-B-C WINKERLIGHTS FOR FLOATING HOSES

The new Solar Powered WinkerLight (SPWL), type A ,B or C is available in three configurations, tall, short and medium , and has been designed as a special signalling device easy to mount on the flanges of floating sealines.

A set of opposite attachments allows to fix the lantern body to the flange of any hose diameter.

Three different models can be offered by FLOATEX the A model with highest focal plane, B model with lowest focal plane or C model is the medium focal plane.

It is up to the user to make a choice between these three types according to the distance of mooring cables floating lines in the vicinity of the installation.

An electronic circuit ensures low consumption even in proportion to the light range of 2 nm, whereas the use of high-thickness shot blasted and galvanized steel structure provides for suitable resistance.

The winkerlight SPWL type for floating lines basically consist of three sections:

- Top steel plate complete with bow for lantern protection.
- Central section ending at the top with a flange for the fitting of the lantern and at the bottom with locking bolts which fix bracket flange.
- A special semi circular steel piece with eyelet holes and different diameters suited for the hose on which to mount the lantern, provides for connection between the lantern and the flange of the floating line to be marked.

All steel materials are shot blasted to white metal, galvanized cover and painted with grade marine paint.

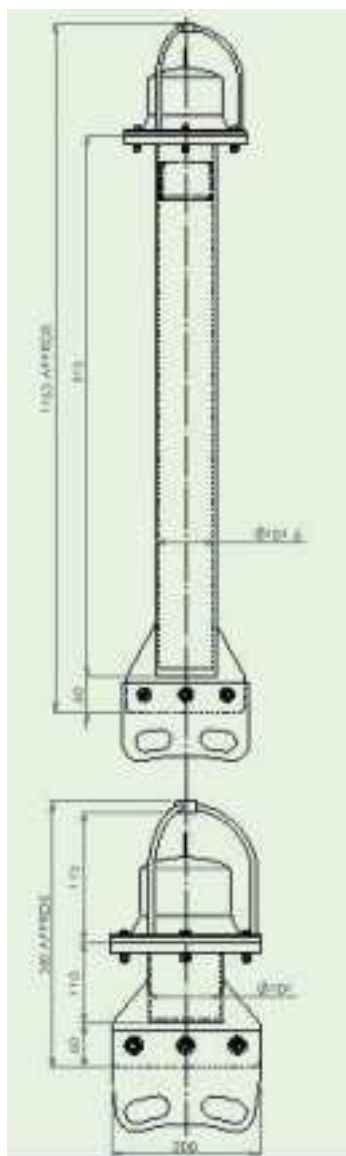


SPWL B

SPWL A - B - C WINKERLIGHTS FOR FLOATING HOSES



SPWL A



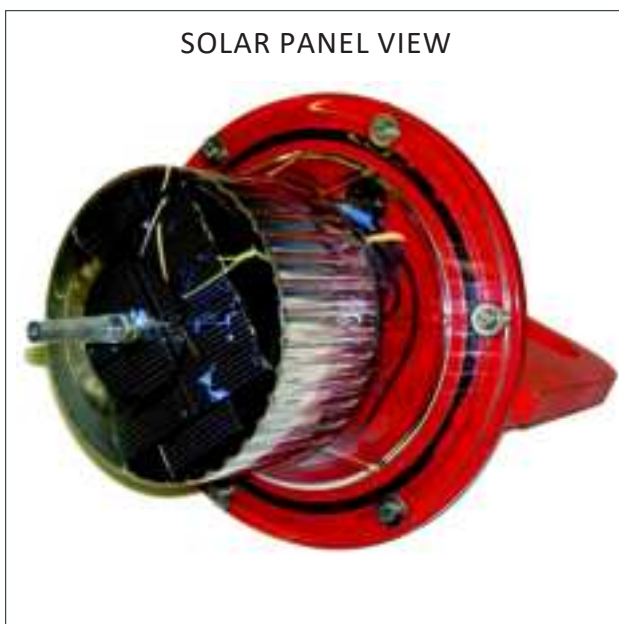
SPWL A

SPWL B

TECHNICAL DATA

LENS	120 mm lens at 360°
LEDs COLOURS	White, amber (IALA specifications)
RANGE	2.5 nm
FLASHER	FBL-016 Standard 12 flash per minute
MATERIALS	Lens: polycarbonate Base: galvanized steel Fixing bolt: stainless steel

SOLAR PANEL VIEW



SPWL C



WL60 A - B WINKERLIGHTS FOR FLOATING HOSES

The WL60 winkerlight is available in two configurations, tall and short, and has been designed as a special signalling device easy to mount on the flanges of floating sealines.

A set of opposite attachments allows to fix the lantern body to the flange of any hose diameter.

Two different models can be offered by FLOATEX one with tubular battery container and high focal plane or another with box type battery container and lower focal plane.

It is up to the user to make a choice between these two types according to the distance of mooring cables floating in the vicinity of the installation.

To reduce the minimum for battery replacement to a minimum, FLOATEX has designed this type of light signal with a considerable working autonomy, and with a sturdy solid structure.

An electronic circuit ensures low consumption even in proportion to the light range of 1 nm, whereas the use of high-thickness shot blasted and galvanized steel structure provides for suitable resistance.

The winkerlight WL60 type for floating lines basically consist of three sections:

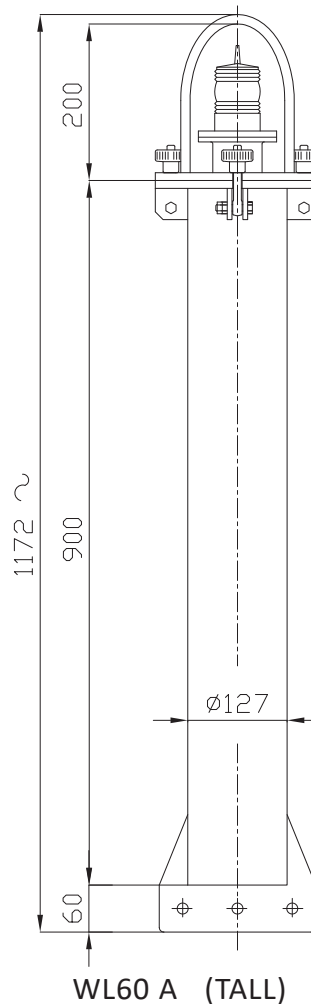
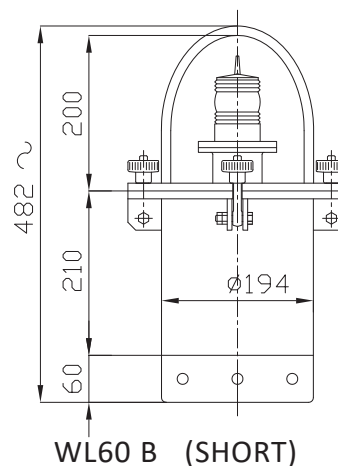
- Top steel plate complete with bow for lantern protection
- Tubular section (battery container) ending at the top with a flange provided with a gasket, complete with locking bolts which fixes the top flange to insure watertightness
- A special semi circular steel piece with eyelet holes and different diameters suited for the hose on which to mount the lantern, provides for connection between the lantern and the flange of the floating line to be marked.

All hardware shot blasted to white metal, hot-dipped galvanized and PU marine painted to the required colour.



WL60-B

WL60 A - B WINKERLIGHTS FOR FLOATING HOSES



TECHNICAL DATA

LENS	60 mm fresnel lens at 360°
LENS COLOURS	White, red, green, amber, (IALA specifications)
LAMP	Prefocalized filament type C8 Bayonet connection P15s. Bulbs S8 or S11
FLASHER	FBL-016 standard 12 flash per minute
MATERIALS	Lens: acrylic Base: galvanized steel Fixing bolts: stainless steel

BULBS	CANDELAS
6 V - 0,25 A	8
6 V - 0,46 A	18

NOTE:

FOR RED LENS MULTIPLY THE DATA x 0,30
FOR GREEN LENS MULTIPLY THE DATA x 0,32
FOR AMBER LENS MULTIPLY THE DATA x 0,68



DREDGING FLOATS

Floatex "SD" floats series are designed to be applied on HDPE or steel pipe while Floatex "RD" floats series are designed to be applied on rubber pipes.

Floatex dredging floats are composed by two halves made in UV-stabilized linear virgin rotomoulded polyethylene. The Polyethylene used in the manufacturing process is completely recyclable (Eco-Friendly), it's fully compatible with the marine environment, and has a high resistance to UV rays. Being linear has the advantage that it can be melted and hence repaired by hot fusion welding.



The colour pigment is moulded-in and consequently not added as a coating ensuring greater life of the colour and a big help to the environment as it never requires additional paintings, avoiding toxic dispersions in the water. Floatex polyethylene require a minimal maintenance.

R&D laboratory daily perform test on production samples such as tensile test, hardness test, abrasion test, UV test and Cold temperature test, colour test and other ordinary tests in the aim to ensure the quality and the reliability of Floatex products. The floats can be filled with closed-cell polyurethane foam with different density in base of the hydrostatic pressure the floats need to withstand.

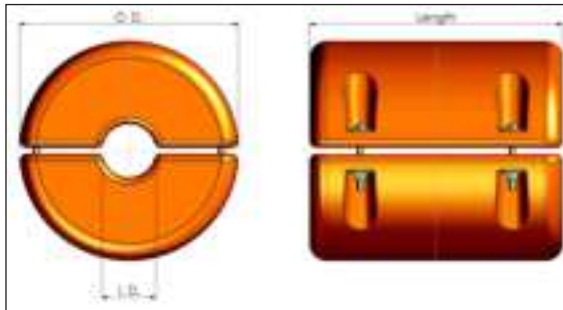
The polyurethane foam ensure great resistance to the leakage of air or water, ensuring unsinkability to the buoy also in case of accidental breaks of the outer shell. The polyurethane foam is 100% made and tested before production by our R&D laboratory.

The two halves are connected each other on the pipe through four steel bolts, two each side to ensure optimal clamping with the pipe. For certain applications, for surface use only, the floats can be supplied also empty, without inner filling.

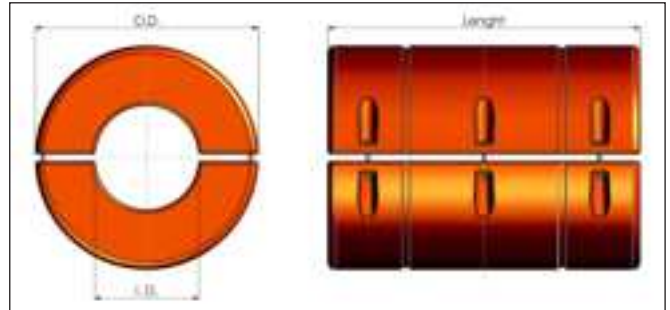


DREDGINGFLOATS

TYPE "SD - FLOAT"							
TYPE	INSIDE DIAMETER (mm)	OUTSIDE DIAMETER (mm)	Length (mm)	WEIGHT (Kg)		BUOYANCY (Kg)	
				EMPTY	FILLED	EMPTY	FILLED
SD 130/10	130	920	1000	50	75	556	531
SD 160/7	160	650	750	27	36	190	180
SD 170/10	170	520	1000	27	35	145	135
SD 200/7	200	650	750	27	35	170	160
SD 225/7	225	650	750	27	35	165	155
SD 250/7	250	650	750	27	35	165	155
SD 250/12	250	750	1200	44	61	395	380
SD 280/7	280	800	700	33	47	265	250
SD 300/7	315	800	700	33	47	255	245
SD 350/8	350	900	800	41	55	380	365
SD 350/12	350	1000	1200	61	95	720	690
SD 400/8	420	1000	800	45	64	435	415
SD 450/8	450	1180	780	55	84	630	600
SD 500/8	500	1180	780	55	84	620	595
SD 570/9	570	1300	980	71	116	925	875
SD 630/7	630	1977	721	100	165	1688	1623
SD 700/21	710	1500	2100	157	275	2605	2490
SD 920/21	920	1500	2100	226	320	1990	1895



TYPE "SD"



TYPE "SD 700-920/21"

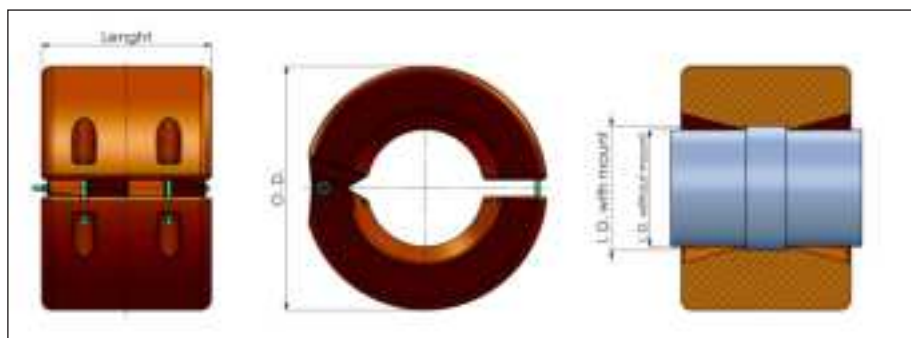


FLOATEX

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TYPE "RD - FLOAT"								
TYPE	I. D. without mount (mm)	I. D. with mount (mm)	O. D. (mm)	Length (mm)	WEIGHT		BUOYANCY	
					(Kg)		(Kg)	
					EMPTY	FILLED	EMPTY	FILLED
RD 390/7	350	390	820	700	33	44	227	216
RD 550/8	510	550	1150	800	52	76	508	484
RD 590/8	550	590	1150	800	52	74	488	466
RD 840/7	800	840	1500	700	64	96	696	664







CABLE- SMALL BORE HOSE FLOATS

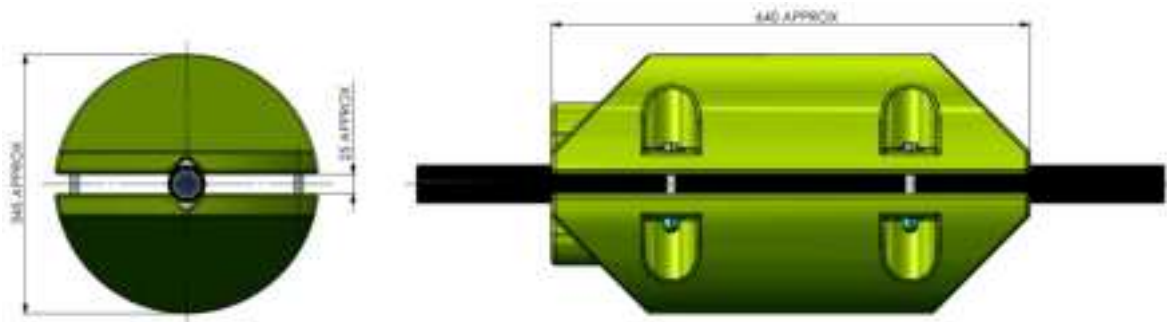
Cable floats represent another important production line within the Floatex range of manufactured goods.

These are very similar to the dredging floats, but are thought for installation on pipes or cable of small dimensions. The hereunder reported table perfectly shows both the dimensions where these floats can be used and the several water depths these floats are able to reach, depending on the customer's needs.

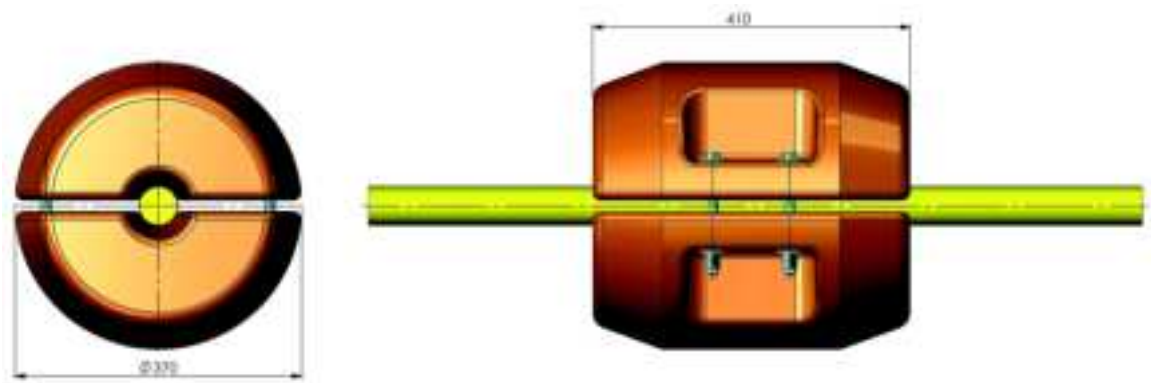
Where the floats have to be used up to 500 m, the internal filling is made with polyurethane. Where the floats have to be used up to 2500 m, the internal filling is made with syntactic material. Of course, even deeper water depths can be reached upon client request.

CABLE -SMALL BORE FLOATS

CABLE AND SMALL BORE						
TYPE	WATER DEPTH	INSIDE DIAMETER (mm)	OUTSIDE DIAMETER (mm)	Length (mm)	WEIGHT (Kg)	BUOYANCY (Kg)
CF 50-640	EMPTY	50	345	640	6	42
	-10	50	345	640	8	40
	-40	50	345	640	10	38
	-90	50	345	640	12.8	35
	-150	50	345	640	14.3	34
	-240	50	345	640	16.8	31
	-340	50	345	640	19	29
	-500	50	345	640	21	26
	-2500	50	345	640	34	14

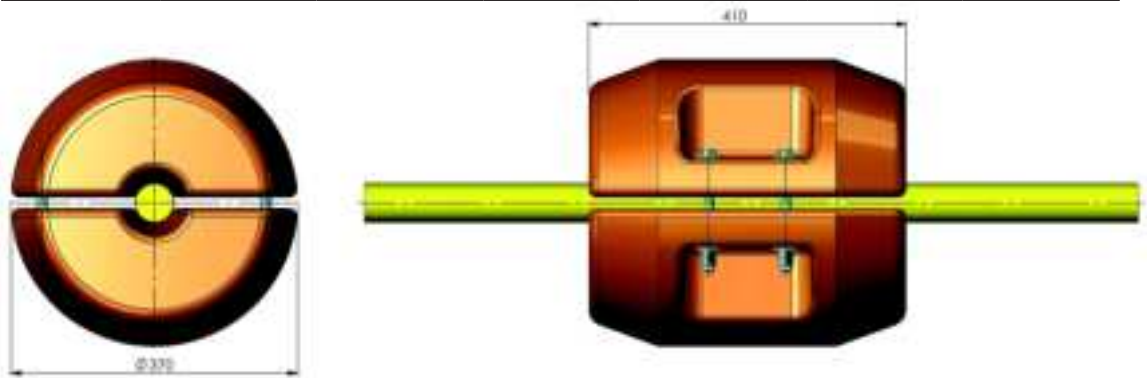


CABLE AND SMALL BORE						
TYPE	WATER DEPTH	INSIDE DIAMETER (mm)	OUTSIDE DIAMETER (mm)	Length (mm)	WEIGHT (Kg)	BUOYANCY (Kg)
CF 50-410	EMPTY	50	370	410	6	30
	-10	50	370	410	7.5	28.5
	-40	50	370	410	9.1	27
	-90	50	370	410	11	25
	-150	50	370	410	12.2	24
	-240	50	370	410	14.1	22
	-340	50	370	410	15.7	20.4
	-500	50	370	410	16.6	18.5
	-2500	50	370	410	27	9

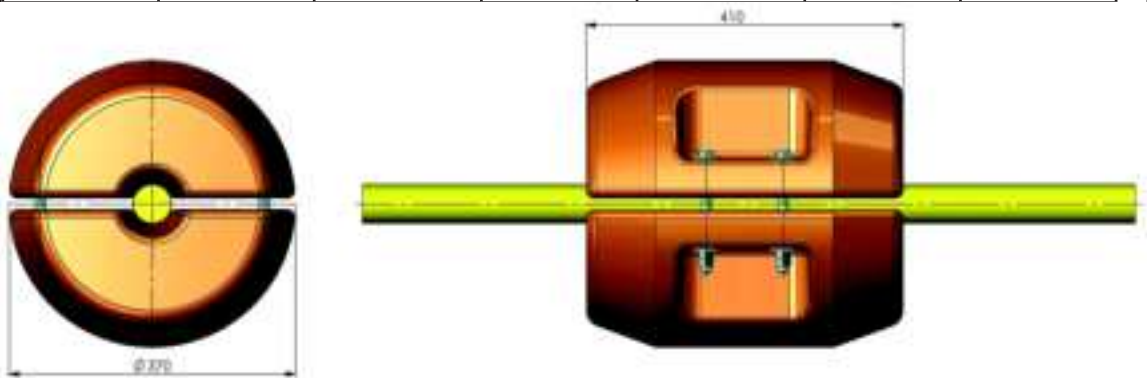




CABLE AND SMALL BORE						
TYPE	WATER DEPTH	INSIDE DIAMETER (mm)	OUTSIDE DIAMETER (mm)	Length (mm)	WEIGHT (Kg)	BUOYANCY (Kg)
CF 85-410	EMPTY	85	370	410	6	28
	-10	85	370	410	7.5	27.6
	-40	85	370	410	9.1	27
	-90	85	370	410	11	25
	-150	85	370	410	12	24
	-240	85	370	410	14	22
	-340	85	370	410	14.7	20.4
	-500	85	370	410	17.6	18.4
	-2500	85	370	410	27	9

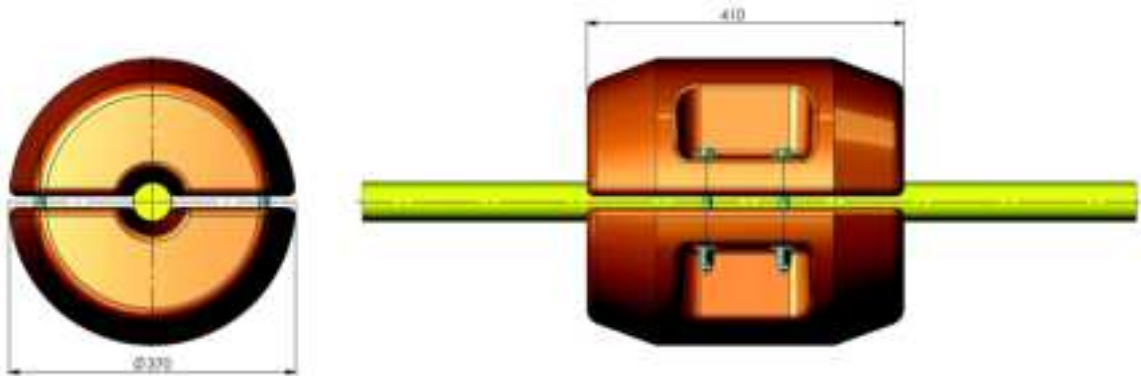


CABLE AND SMALL BORE						
TYPE	WATER DEPTH	INSIDE DIAMETER (mm)	OUTSIDE DIAMETER (mm)	Length (mm)	WEIGHT (Kg)	BUOYANCY (Kg)
CF105-410	EMPTY	105	370	410	6	28
	-10	105	370	410	7.5	27.6
	-40	105	370	410	9.1	27
	-90	105	370	410	11	25
	-150	105	370	410	12	24
	-240	105	370	410	14	22
	-340	105	370	410	15.7	20.4
	-500	105	370	410	17.6	18.4
	-2500	105	370	410	27	9



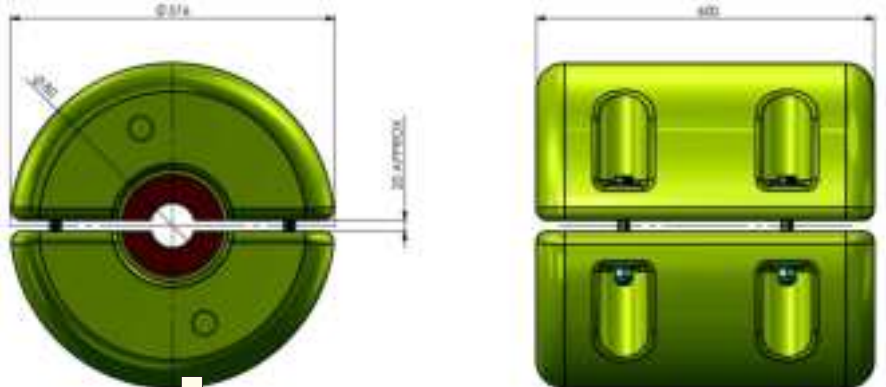
CABLE -SMALL BORE FLOATS

CABLE AND SMALL BORE						
TYPE	WATER DEPTH	INSIDE DIAMETER (mm)	OUTSIDE DIAMETER (mm)	Length (mm)	WEIGHT (Kg)	BUOYANCY (Kg)
CF 160-410	EMPTY	160	370	410	6	23
	-10	160	370	410	7.2	21.7
	-40	160	370	410	8.5	20.4
	-90	160	370	410	10	19
	-150	160	370	410	11	18
	-240	160	370	410	12.5	16.4
	-340	160	370	410	13.8	15.1
	-500	160	370	410	15.3	13.6
	-2500	160	370	410	23	6



CABLE AND SMALL BORE						
TYPE	WATER DEPTH	INSIDE DIAMETER (mm)	OUTSIDE DIAMETER (mm)	Length (mm)	WEIGHT (Kg)	BUOYANCY (Kg)
CF200-570	EMPTY	200	570	600	16	112
	-10	200	570	600	22	106
	-40	200	570	600	28	99
	-90	200	570	600	36	96
	-150	200	570	600	40	86
	-240	200	570	600	48	79
	-340	200	570	600	55	73
	-500	200	570	600	62	65
	-2500	200	570	600	100	27

A SPECIAL URETHANE CLAMP REDUCER CAN BE INSERTED INSIDE FLOAT "220-570" TO ENABLE OF CABLE OR HOSE FROM 50 TO 160 MM OUTSIDE DIAMETER





EXPANDED POLYETHYLENE FENDERS

The FLOATEX expanded foam fenders have been developed to provide for maximum protection from damage by crushing to occur when operating under extremely difficult conditions such as side-by-side moorings in open sea or for cushioning off-shore oil platforms.

What these fenders offer in comparison with the alternative pneumatic rubber ones are the advantages of a major shock-absorbing capacity, a much more contained reaction force and full unsinkability.

The specific structure, being expanded foam covered with a relevant layer of polyurethane elastomer, for high abrasion resistance, requires a reduced turn off of interventions for maintenance.

A further asset is the use of different densities of expanded polyethylene for the core which enables FLOATEX to adjust the characteristics of energy absorption and reaction force to the specific technical requirements of individual circumstances.

The diagram below shows the behaviour of the expanded polyethylene when subject to compression and gives evidence of the very high performances offered by this product.

FLOATEX is also in a position to offer fenders shaped to customers' specification, having available in-house the special equipment needed to manufacture pieces of different and complicated shapes.

Among the particular applications expected to occur are protection of mooring wharfs, vessels with special elements or parts to be cushioned, protection of lock entrances etc.

The cylindrical standard type of fenders is manufactured with an expanded polyethylene core wrapped up in overlapping and crossing layers, with a final covering of self pigmented polyurethane elastomer.

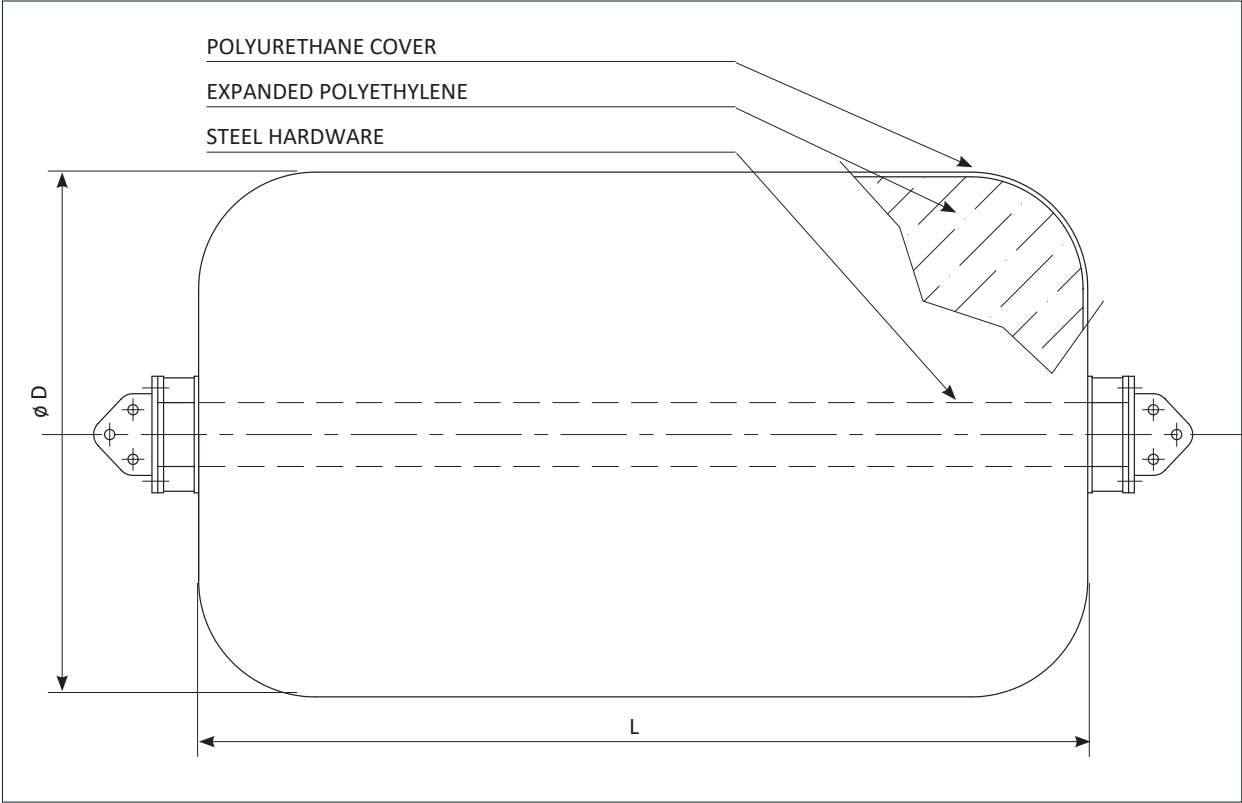
This type of construction ensures a notable resistance and reduces the frequent and bur-



densome number of interventions to a minimum.

According to customers' requirements FLOATEX offers different types of attachment for their fenders: steel tube for mooring with heavy chain, with shackles, with flanges and double mooring eye.

EXPANDED POLYETHYLENE FENDERS



TECHNICAL CHARACTERISTICS OF FLOATEX FENDERS					
DIMENSIONS Diam. x Length (m)	WEIGHT (Kg)	50% COMPRESSION		60% COMPRESSION	
		Energy Absorbed (Ton m)	Reaction Force (Ton)	Energy Absorbed (Ton m)	Reaction Force (Ton)
0.90 x 1.3	240	3	12	4.5	18
1.22 x 2.0	480	9	26	12	38
1.22 x 2.6	550	12	34	16	49
1.52 x 1.9	520	14	31	19	45
1.52 x 2.5	600	18	41	25	60
1.83 x 2.4	1100	24	47	33	68
1.83 x 3.0	1300	30	58	41	85
2.44 x 2.9	2200	53	76	74	112
2.44 x 4.1	2900	75	108	104	158
2.8 x 3.2	2800	102	127	140	186
2.8 x 4.8	3900	117	145	161	212
3.05 x 4.0	3700	115	132	159	193
3.05 x 5.2	4600	150	172	207	250
3.40 x 5.5	6000	244	250	336	365

NOTE: Upon request we can also supply fenders with other dimensions

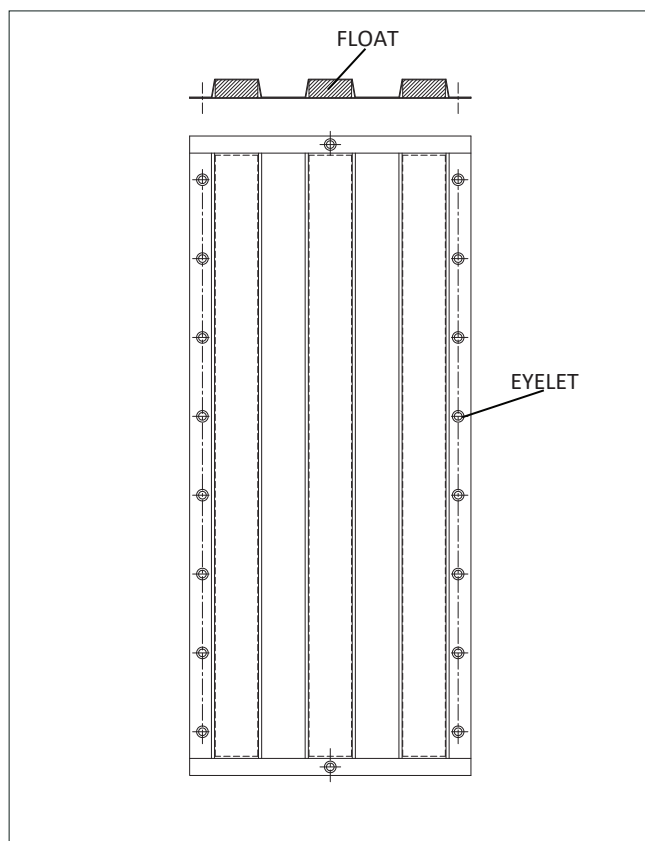


HAWSERS FLOTATION COLLAR

FLOATEX lace-on rope flotation collar in an easy to handle rope buoyancy aid, designed to suit the complete range of mooring hawsers. Available for both single and doubled (grommet) mooring hawsers.

The flotation collar is composed of a support cloth in polyester with high resistance to wear and tearing, covered with PVC stabilised to light and treated to be class 2 flame resistant. Floating of the hawser collar is obtained by polyethylene foam strips inserted directly in prepared pockets of the flotation collar sleeves. The minimum buoyancy reserve obtained on 1 meter length of sleeve is 15 Kg.

The length and the buoyancy can be modified on client request.



TUBULAR FLOATS

The FLOATEX provide also the construction of particular Tubular floats utilized on the hawsers to increase their life-span in excess of 12 months.

The tubular floats are composed of a polyethylene foam as core and orange polyurethane as skin.



ROPE SIZE (mm)	INSIDE DIAMETER (mm)	OUTSIDE DIAMETER (mm)	BUOYANCY (Kg)		
			LENGTH		
			1,0 m	1,5 m	3,0 m
80	127	228	22	33	66
96	152	254	25	37,5	75
120	178	279	28	42	84
144	203	305	32	48	96
168	228	330	35	52,5	N/A



PLASTIC FLOATS

Outer shell : Float made in UV-stabilized linear virgin polyethylene.

The linear material has the advantage that it can be melted and hence repaired by hot fusion welding.

The colour pigment is moulded-in and consequently not added as a coating ensuring greater life

of the color and a big help to the environment as it never requires additional paintings, avoiding toxic dispersions in the water. Floatex polyethylene require a minimal maintenance.

R&D laboratory daily perform test on production samples such as tensile test, hardness test, abrasion test, UV test and Cold temperature test, colour test and other ordinary tests in the aim to ensure the quality

and the reliability of Floatex polyethylene.

Inner filling : The float is filled with closed-cell polyurethane foam with different densities in base

of the hydrostatic pressure it need to withstand.

The polyurethane foam ensure great resistance to the leakage of air or water,

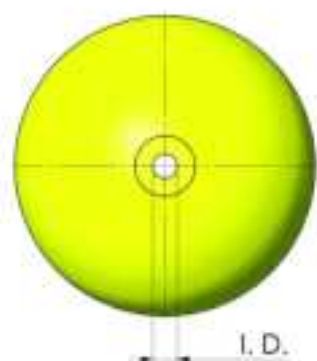
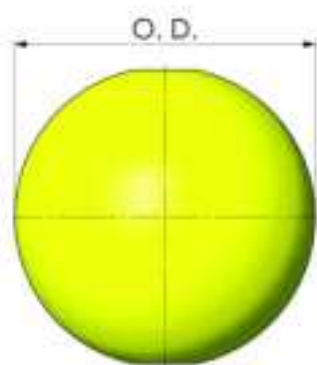
ensuring unsinkability to the buoy also in case of accidental breaks of the outer shell.

The polyurethane foam is 100% made and tested before production by our R&D laboratory.

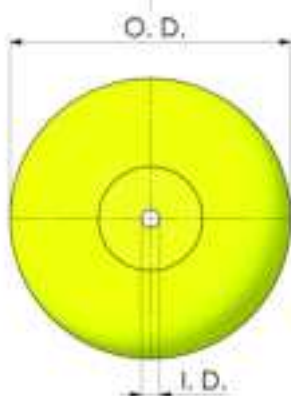
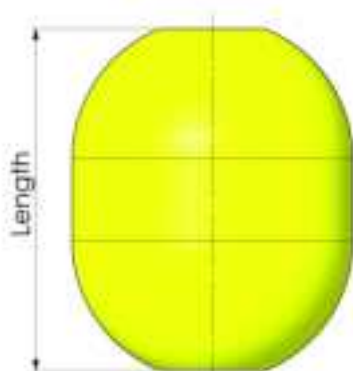
Passing through hole: The float is complete with passing through hole with different diameter available upon request.



PLASTIC FLOATS

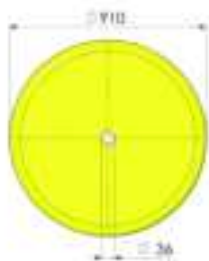
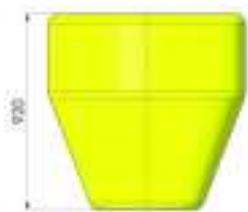


TYPE	O. D. (mm)	I. D. (mm)	Weight (kg)	N. B. (kg)
SFE 390	390	23	5	26
SFE 570	570	43	13	96
SFE 600	600	43	15	98
SFE 800	770	43	24	213

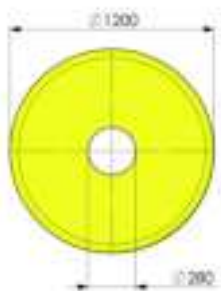


TYPE	O. D. (mm)	I. D. (mm)	Length (mm)	Weight (kg)	N. B. (kg)
BAR 43/50	430	43	500	7	43
SFE 60/67	600	43	670	18	125
SFE 60/80	600	43	800	21	153
SFE 80/94	770	43	940	35	317

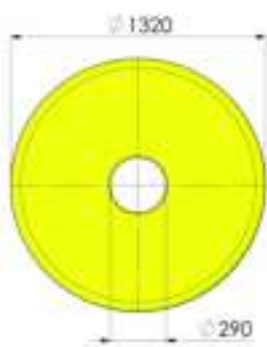




TYPE	Weight (kg)	N. B. (kg)
CON 9/9	58	411

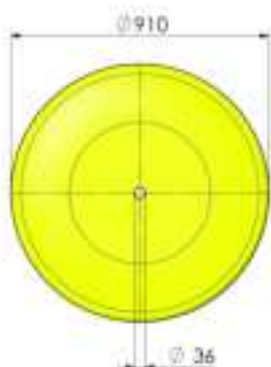
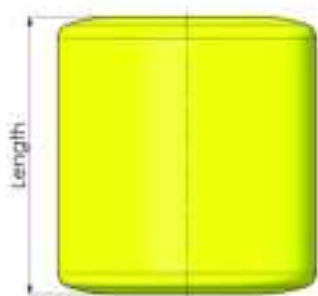


TYPE	Length (mm)	Weight (kg)	N. B. (kg)
CON 12/8	850	78	680
CON 12/9	940	85	759
CON 12/12	1160	107	1011

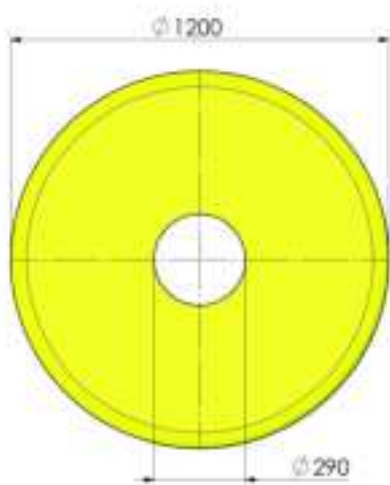
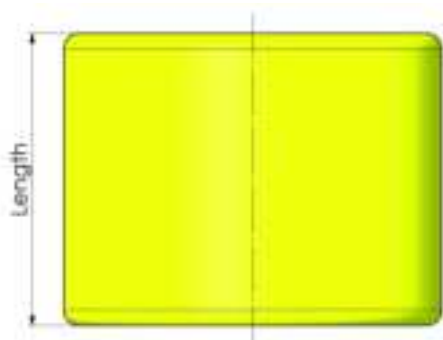


TYPE	Length (mm)	Weight (kg)	N. B. (kg)
CON 13/7	750	75	645
CON 13/10	1000	100	946

PLASTIC FLOATS

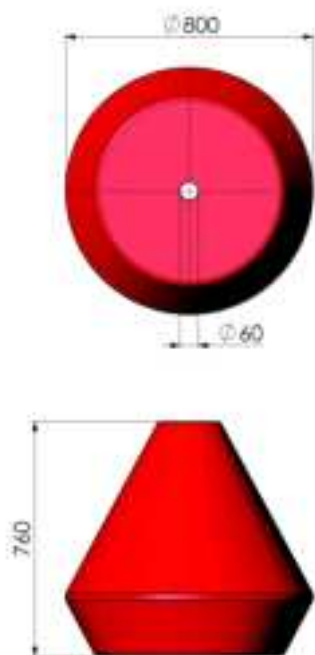


TYPE	Length (mm)	Weight (kg)	N. B. (kg)
CIL 9/10	980	60	576
CIL 9/12	1180	70	696
CIL 9/13	1280	76	756
CIL 9/15	1480	86	875
CIL 9/18	1790	102	1061

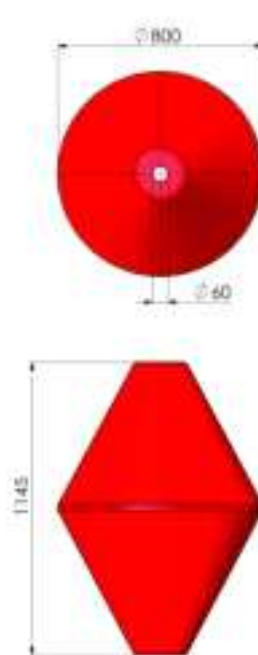


TYPE	Length (mm)	Weight (kg)	N. B. (kg)
CIL 12/5	580	67	550
CIL 12/6	650	73	619
CIL 12/10	930	97	893
CIL 12/14	1400	138	1353

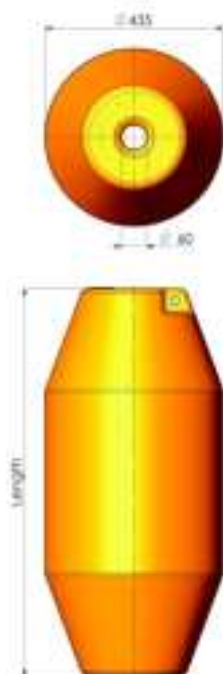




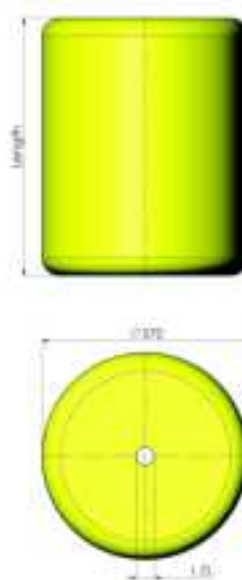
TYPE	Weight (kg)	N. B. (kg)
BICON 8075	26	173



TYPE	Weight (kg)	N. B. (kg)
BICON 80115	32	222

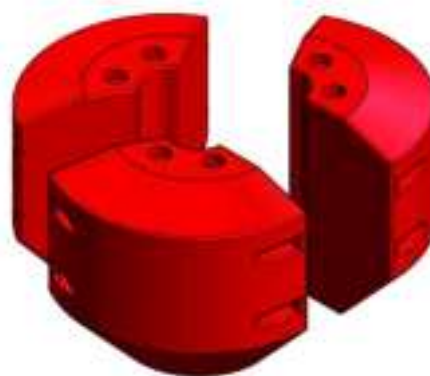


TYPE	Length (mm)	Weight (kg)	N. B. (kg)
BICON 45/75	750	12	70
BICON 45/95	950	15	95

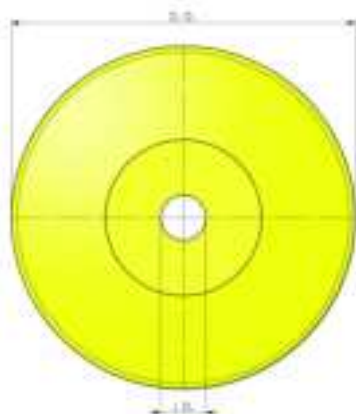


TYPE	Length (mm)	I. D. (mm)	Weight (kg)	N. B. (kg)
CIL 57/50	500	50 ÷ 170	17	99
CIL 57/70	700	50 ÷ 170	22	140
CIL 57/150	1500	50	44	305

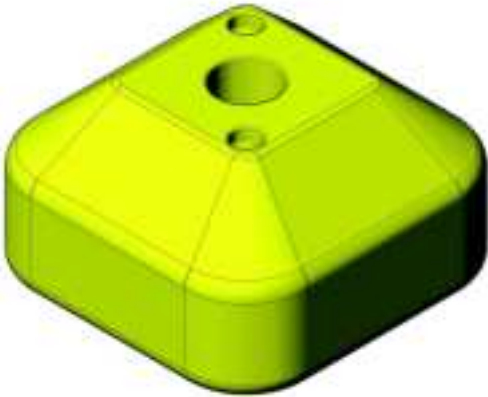
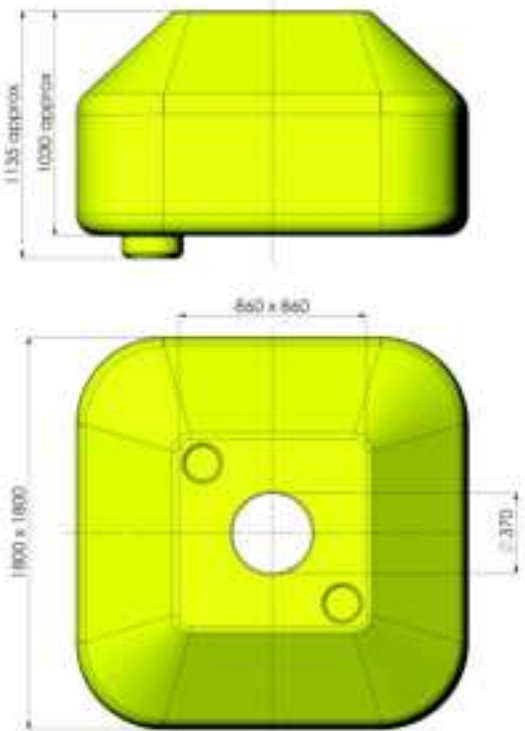
PLASTIC FLOATS



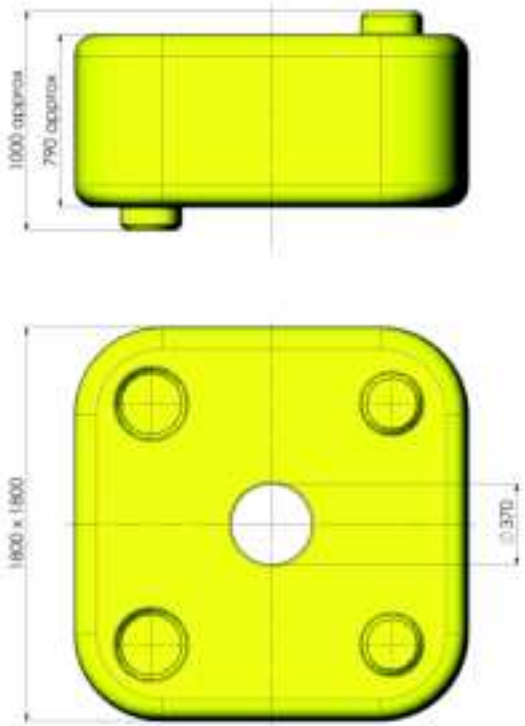
TYPE	Weight (kg)	N. B. (kg)
MD4000	400	3600



TYPE	O. D. (mm)	Length (mm)	I. D. (mm)	Weight (Kg)	N. B. (Kg)
CIL 160/080	1600	800	280	155	1285
CIL 160/115		1150	30	163	1905
CIL 160/160		1600	30	220	2703
CIL 220/100	2200	1000	280	360	3020
CIL 220/140		1350	280	470	4200
CIL 220/170		1700	280	560	5350

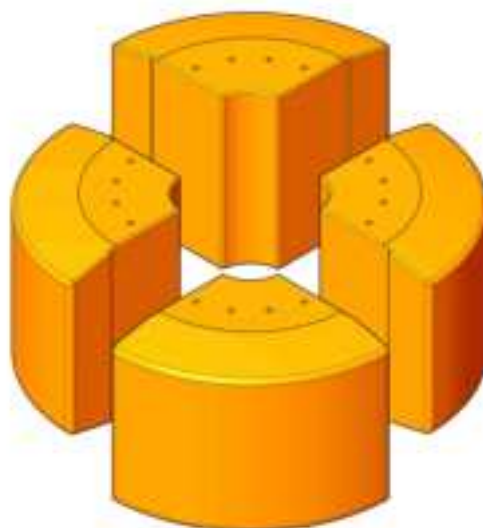
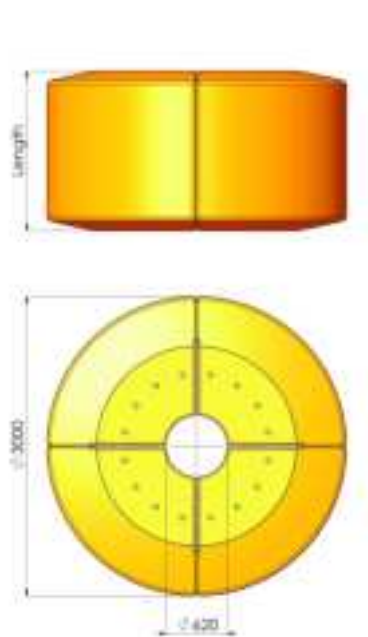


TYPE	Weight (kg)	N. B. (kg)
PEM18/TCC	280	2220

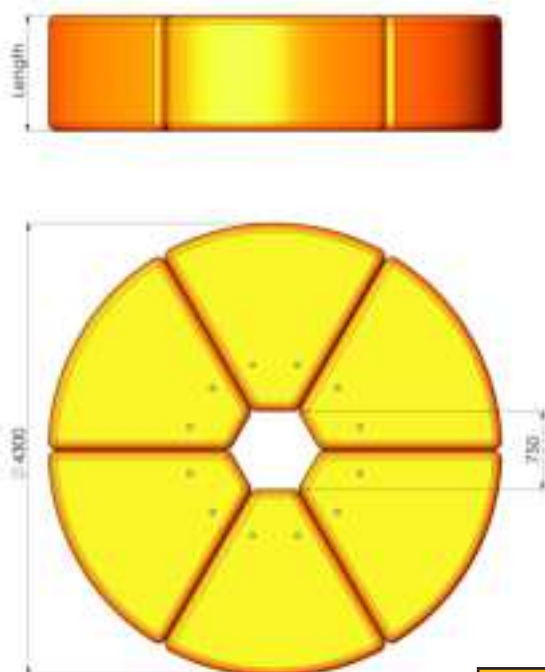


TYPE	Weight (kg)	N. B. (kg)
PEM18/CIL	290	2045

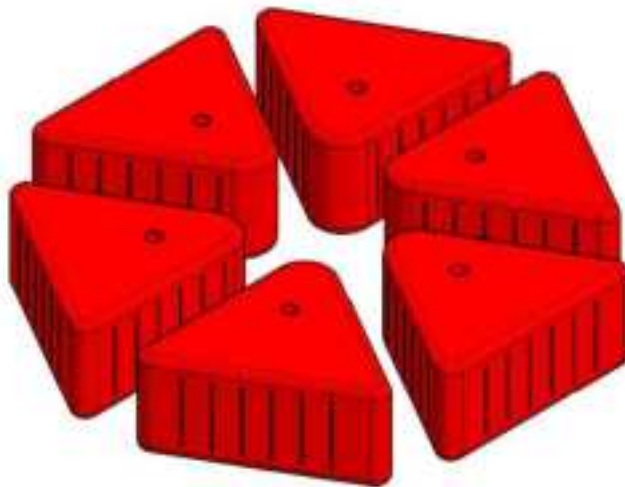
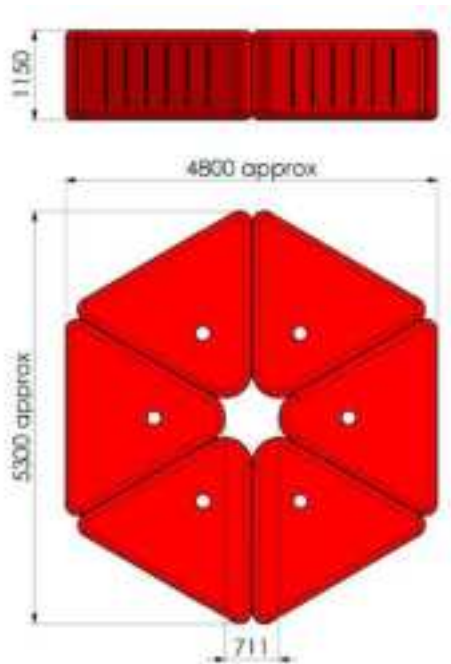
PLASTIC FLOATS



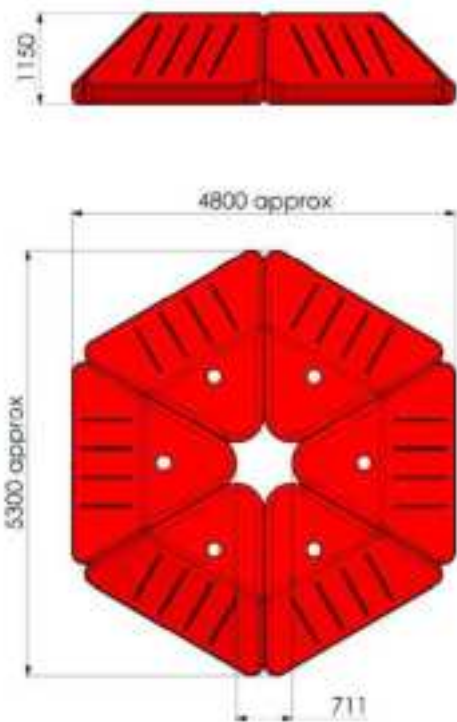
TYPE	Length (mm)	Weight (Kg)	N. B. (Kg)
FLOAT 3000/11	1120	750	6270
FLOAT 3000/16	1600	1060	9210
FLOAT 3000/20	2000	1330	11650



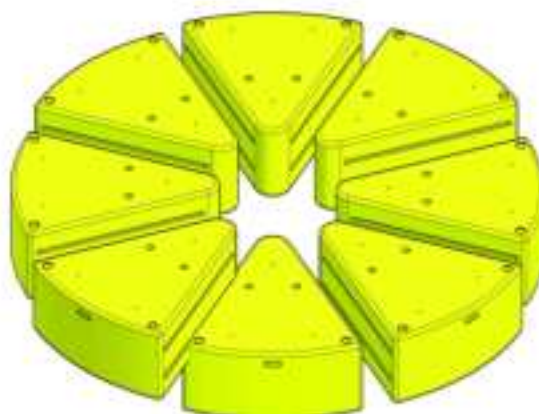
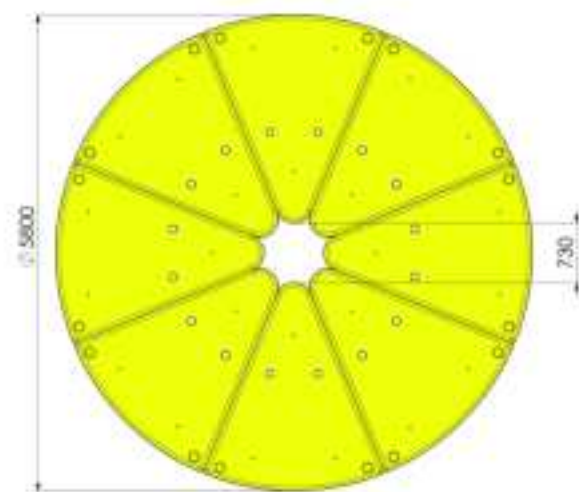
TYPE	Length (mm)	Weight (Kg)	N. B. (Kg)
FLOAT 4300/11	1100	2020	13210
FLOAT 4300/14	1400	2330	17200



TYPE	Weight (kg)	N. B. (kg)
FLOAT 4800 CYL	3090	18760



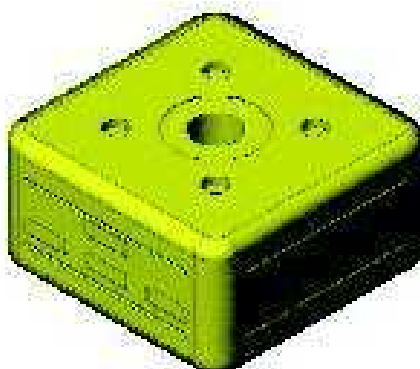
TYPE	Weight (kg)	N. B. (kg)
FLOAT 4800 CON	2410	13560



TYPE	Weight (kg)	N. B. (kg)
FLOAT 5800	2660	23050



TYPE	Weight (kg)	N. B. (kg)
FLOAT 3017	816	7532



TYPE	Weight (kg)	N. B. (kg)
SQU22/11 CIL	445	4866



PIPE LAYING FLOATS- PARAL SERIES

These series of floats are used to break down the immersion velocity during pipe laying operations, as well as avoiding excessive bending of the pipes at time of deployment at sea.

The floats are manufactured from an outer shell made in UV-stabilized linear virgin polyethylene. The Polyethylene used in the manufacturing process is completely recyclable (Eco-Friendly), it's fully compatible with the marine environment, and has a high resistance to UV rays.

Being linear has the advantage that it can be melted and hence repaired by hot fusion welding. The colour pigment is moulded-in and consequently not added as a coating ensuring greater life of the colour and a big help to the environment as it never requires additional paintings, avoiding toxic dispersions in the water. Floatex polyethylene requires a minimal maintenance.

R&D laboratory daily performs tests on production samples such as tensile test, hardness test, abrasion test, UV test and Cold temperature test, colour test and other ordinary tests in the aim to ensure the quality and the reliability of Floatex polyethylene.

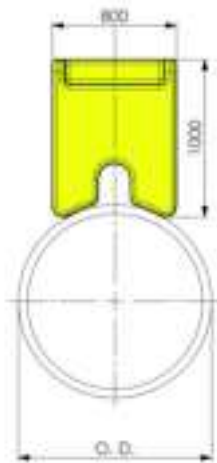
The floats are filled with closed-cell polyurethane foam with different density in base of the hydrostatic pressure the floats need to withstand. The polyurethane foam ensures great resistance to the leakage of air or water, ensuring unsinkability to the buoy also in case of accidental breaks of the outer shell. The polyurethane foam is 100% made and tested before production by our R&D laboratory.

Floats are fastened to the pipe by two straps (steel or nylon). Once the floats finish their works, can be eventually released by divers or by automatic self-releasing systems allowing the recovery of the floats at surface level.

Particular attention has been given during the design process, to develop elements with adequate dimensions that can fit in standard shipping containers in the aim to contain transport costs all over the world.

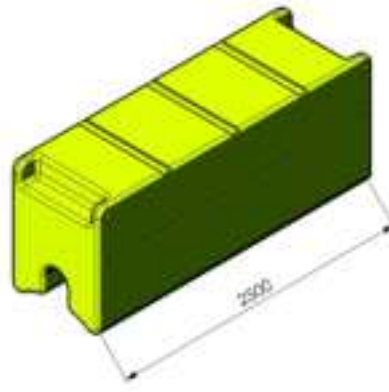


PIPE LAYING FLOAT- PARAL SERIES

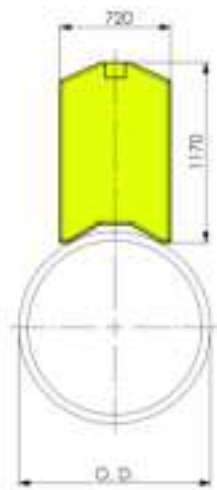


Min. O.D. : Ø 400 mm

Max O.D. : Ø 1500 mm

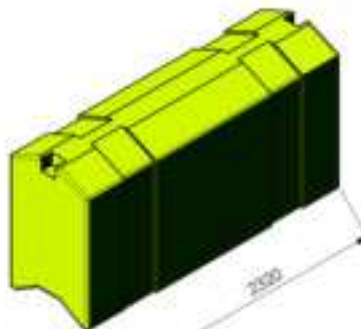


PARAL15/25		
WATER DEPTH	WEIGHT (kg)	N. B. (kg)
0 ÷ 20m	218	1546
20m ÷ 50m	276	1488
50m ÷ 100m	376	1388



Min. O.D. : Ø 400 mm

Max O.D. : Ø 1500 mm



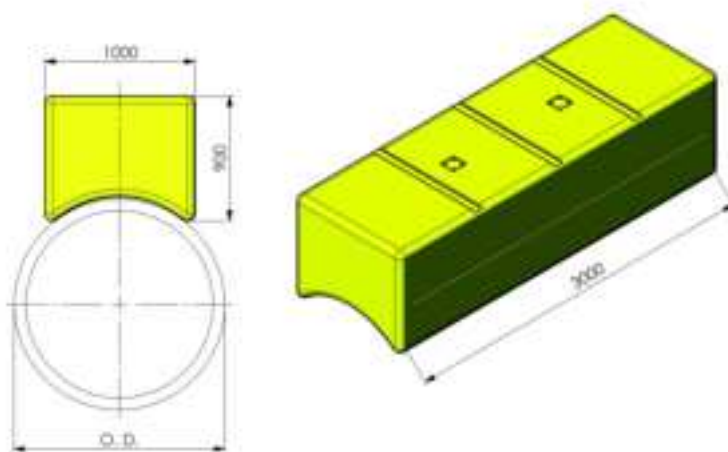
PARAL18/23		
WATER DEPTH	WEIGHT (kg)	N. B. (kg)
0 ÷ 20m	189	1609
20m ÷ 50m	243	1534
50m ÷ 100m	333	1444





Min. O.D. : Ø 400 mm

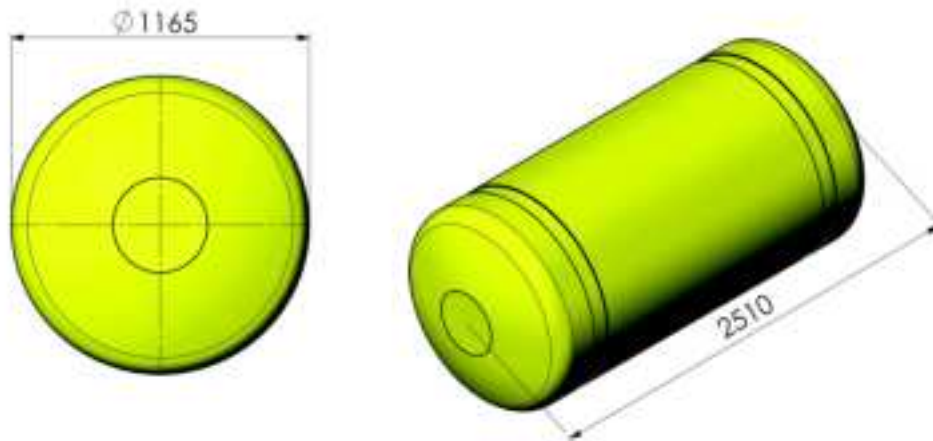
Max O.D. : Ø 1500 mm



PARAL19/30		
WATER DEPTH	WEIGHT (kg)	N. B. (kg)
0 ÷ 20m	261	1933
20m ÷ 50m	334	1860
50m ÷ 100m	454	1740



PIPE LAYING FLOAT- PARAL SERIES



TIE-IN 12/25		
Water Depth	Weight (kg)	N. B. (kg)
0 - 20m	260	2270
20m - 50m	343	2187
50m - 100m	482	2048





PIPE LAYING FLOATS-OVAL SERIES

These series of floats are used to break down the immersion velocity during pipe laying operations, as well as avoiding excessive bending of the pipes at time of deployment at sea.

The floats are manufactured from an outer shell made in UV-stabilized linear virgin polyethylene. The Polyethylene used in the manufacturing process is completely recyclable (Eco-Friendly), it's fully compatible with the marine environment, and has a high resistance to UV rays.

Being linear has the advantage that it can be melted and hence repaired by hot fusion welding. The colour pigment is moulded-in and consequently not added as a coating, ensuring greater life of the colour and a big help to the environment as it never requires additional paintings, avoiding toxic dispersions in the water. Floatex polyethylene requires a minimal maintenance.

R&D laboratory daily performs tests on production samples such as tensile test, hardness test, abrasion test, UV test and Cold temperature test, colour test and other ordinary tests in the aim to ensure the quality and the reliability of Floatex polyethylene.

The floats are filled with closed-cell polyurethane foam with different density in base of the hydrostatic pressure the floats need to withstand. The polyurethane foam ensures great resistance to the leakage of air or water, ensuring unsinkability to the buoy also in case of accidental breaks of the outer shell. The polyurethane foam is 100% made and tested before production by our R&D laboratory.

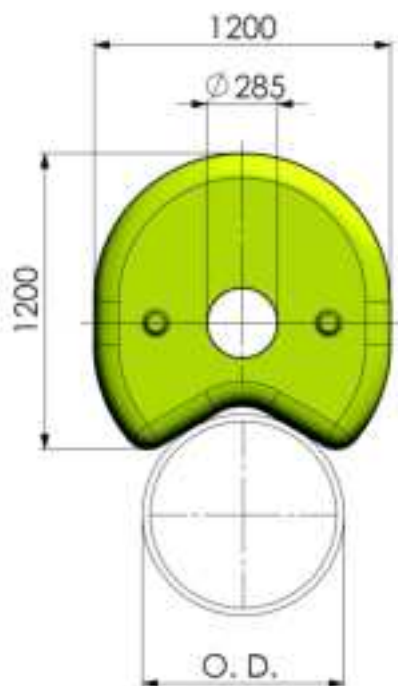
Floats are fastened to the pipe by means of straps (steel or nylon).

OVAl floats, thanks to their modular construction, can house a connection steel pipe, covering different ranges of buoyancy in base of client's requirements. Once the floats finish their works, can be eventually released by divers or by automatic self-releasing systems allowing the recovery of the floats at surface level.

Particular attention has been given during the design process, to develop elements with adequate dimensions that can fit in standard shipping containers in the aim to contain transport costs all over the world.



PIPE LAYING FLOAT-OVALSERIES



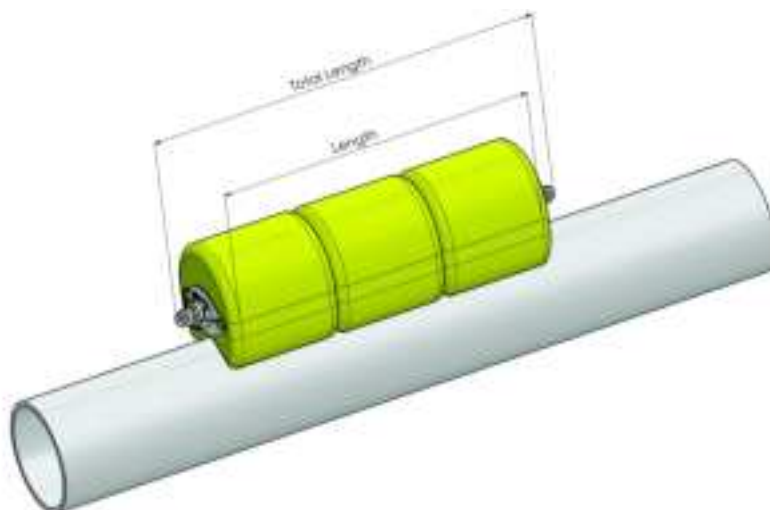
TYPE	Length (mm)
OVAL10	1060
OVAL12	1200
OVAL13	1350

Min. O.D. : Ø 400 mm

Max O.D. : Ø 1600 mm

Water Depth	OVAL10		OVAL12		OVAL13	
	Weight (kg)	N. B. (kg)	Weight (kg)	N. B. (kg)	Weight (kg)	N. B. (kg)
0 - 20m	133	1020	146	1161	172	1301
20m - 50m	176	977	190	1117	220	1253
50m - 100m	239	914	244	1063	300	1173









OVAL10 with metallic structure					
N. Float	Water Depth	Length (mm)	Tot. Length (mm)	Weight (kg)	N. B (kg)
	0 - 20m	1060	1716	335	895
	20m - 50m			370	860
	50m - 100m			435	795
	0 - 20m	2120	2766	530	1915
	20m - 50m			605	1840
	50m - 100m			730	1715
	0 - 20m	3180	3836	720	2940
	20m - 50m			835	2825
	50m - 100m			1025	2635
	0 - 20m	4240	4896	915	3960
	20m - 50m			1065	3810
	50m - 100m			1320	3555

OVAL12 with metallic structure					
N. Float	Water Depth	Length (mm)	Tot. Length (mm)	Weight (kg)	N. B (kg)
	0 - 20m	1200	1856	350	1040
	20m - 50m			395	995
	50m - 100m			465	925
	0 - 20m	2400	3056	560	2210
	20m - 50m			645	2125
	50m - 100m			790	1980
	0 - 20m	3600	4256	765	3380
	20m - 50m			900	3245
	50m - 100m			1110	3035
	0 - 20m	4800	5456	975	4550
	20m - 50m			1150	4375
	50m - 100m			1435	4090

PIPE LAYING FLOAT-OVALSERIES

OVAL13 with metallic structure					
N. Float	Water Depth	Length (mm)	Tot. Length (mm)	Weight (kg)	N. B (kg)
	0 - 20m	1350	2006	385	1180
	20m - 50m			430	1135
	50m - 100m			510	1055
	0 - 20m	2700	3356	625	2495
	20m - 50m			725	2395
	50m - 100m			885	2235
	0 - 20m	4050	4706	870	3805
	20m - 50m			1015	3660
	50m - 100m			1255	3410
	0 - 20m	5400	6056	1110	5110
	20m - 50m			1300	4920
	50m - 100m			1625	4595





SUPPORTING FLOATS - PONT SERIES

These series of supporting floats and "PONT" floats are all manufactured following the latest technologies and using high quality raw materials which characterize Floatex products.

The floats are manufactured from an outer shell made in UV-stabilized linear virgin polyethylene. The Polyethylene used in the manufacturing process is completely recyclable (Eco-Friendly), it's fully compatible with the marine environment, and has a high resistance to UV rays.

Being linear has the advantage that it can be melted and hence repaired by hot fusion welding. The colour pigment is moulded-in and consequently not added as a coating ensuring greater life of the colour and a big help to the environment as it never requires additional paintings, avoiding toxic dispersions in the water. Floatex polyethylene require a minimal maintenance. R&D laboratory daily perform test on production samples such as tensile test, hardness test, abrasion test, UV test and Cold temperature test, colour test and other ordinary tests in the aim to ensure the quality and the reliability of Floatex polyethylene.

The floats are filled with closed-cell polyurethane foam with different density in base of the hydrostatic pressure the floats need to withstand. The polyurethane foam ensure great resistance to the leakage of air or water, ensuring unsinkability to the buoy also in case of accidental breaks of the outer shell. The polyurethane foam is 100% made and tested before production by our R&D laboratory.

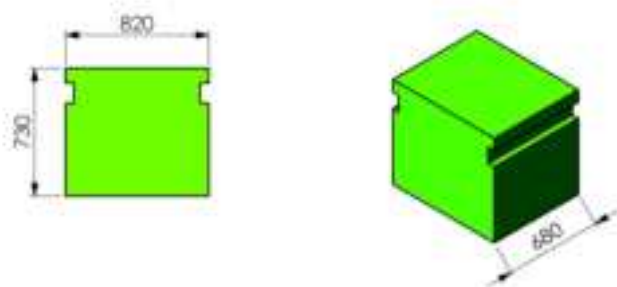
These series can be used for different applications such as:

- Floating of the platforms(PONT 33 and PONT 18).
- Floating of the "Finger" on the modular piers.
- Floating of the pontoons (PONT 4).

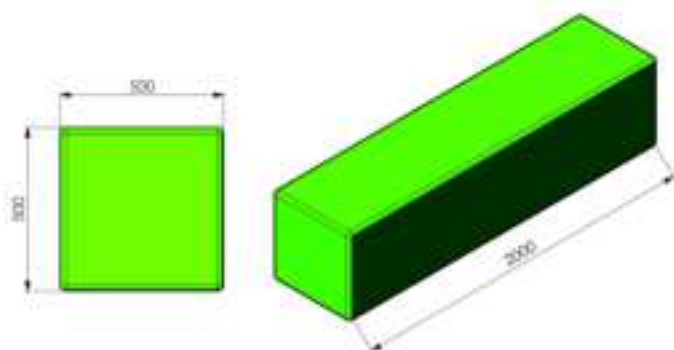
The float PONT 500 and PARAL1100 are utilized for several uses from the construction of rafts to the supporting for the pipe laying.



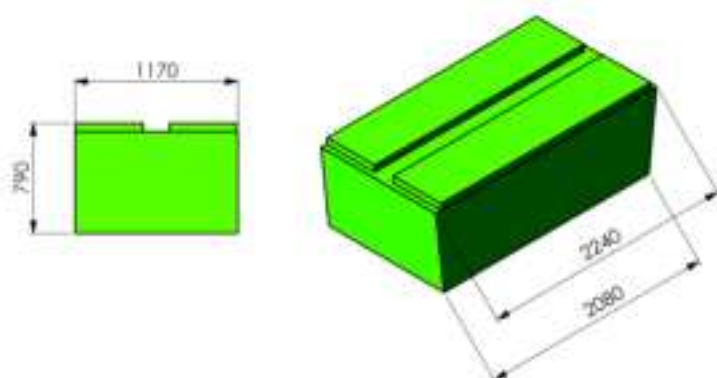
SUPPORTING FLOATS - PONT SERIES



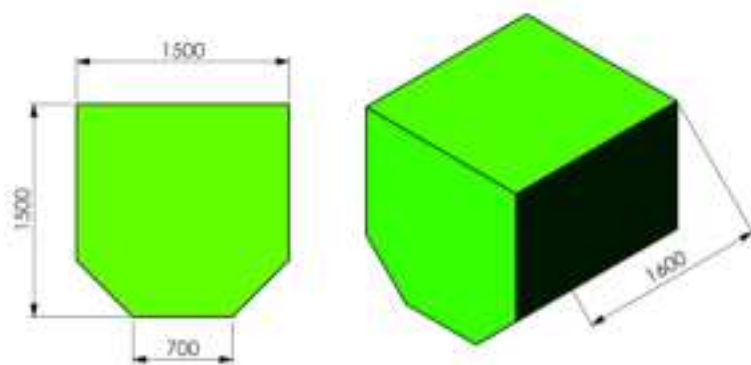
PONT4		
WATER DEPTH	WEIGHT (kg)	N. B. (kg)
0 ÷ 10m	42	327



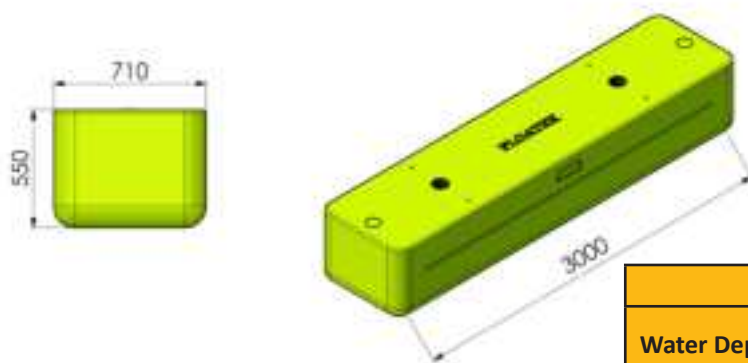
PONT500		
WATER DEPTH	WEIGHT (kg)	N. B. (kg)
0 ÷ 10m	51	448



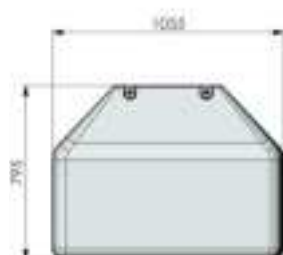
PONT18		
WATER DEPTH	WEIGHT (kg)	N. B. (kg)
0 ÷ 10m	163	1805



PONT33		
WATER DEPTH	WEIGHT (kg)	N. B. (kg)
0 ÷ 10m	250	3090

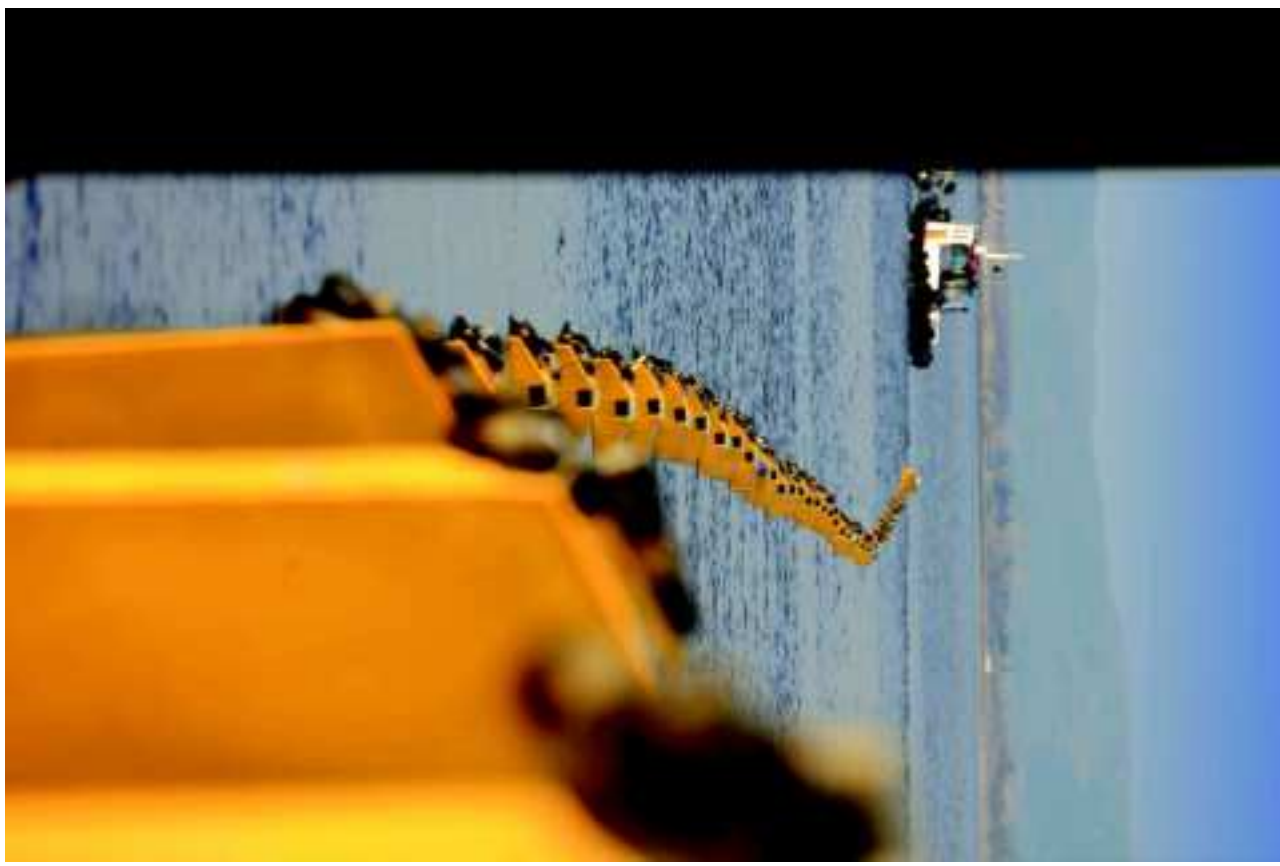


PAR 1100		
Water Depth	Weight (kg)	N. B. (kg)
0 - 10m	116	1020



FINGER		
Water Depth	Weight (kg)	N. B. (kg)
0 - 10m	27	214







TPR OIL BOOM

TPR series Floatex oil booms, realised in standard length of 25,0 meters each with total height of 1,0 meter of which 0,3 m approx. freeboard and 0,7 m approx. immersed, are suitable for use as permanent oil boom in exposed areas.

The oil boom is composed by a support cloth in polyester with high resistance to tear and tearing, covered with PVC stabilised to the light and treated to be flame resistant following class 2.

Floating of the barrier is obtained by the application of special horizontally fixed floats giving the oil boom a buoyancy of approx. 30 Kg/m.

Floats are realised in two halves made in linear medium density rotomoulded polyethylene shells, filled with rigid closed cell expanded polyurethane.

These floats are applied to the sheet by means of stainless steel bolts, to permit easy disassembly if damaged parts must be replaced, and also to permits a more rational transport and storage.

The lower part of the sheet submerged is ballasted with lead loads applied by means of stainless steel bolts, to guaranty the verticality and stability to the boom.

The connection of various elements is realised using suitable quick hooks in stainless steel applied to the cloth by means of stainless steel bolts.

Assembling operations are easily made directly on site by means of only two keys for closing of bolts.

The dimensions of TPR oil boom listed in the accompanying table are indicative and FLOATEX can produce special sizes to meet customer specifications.

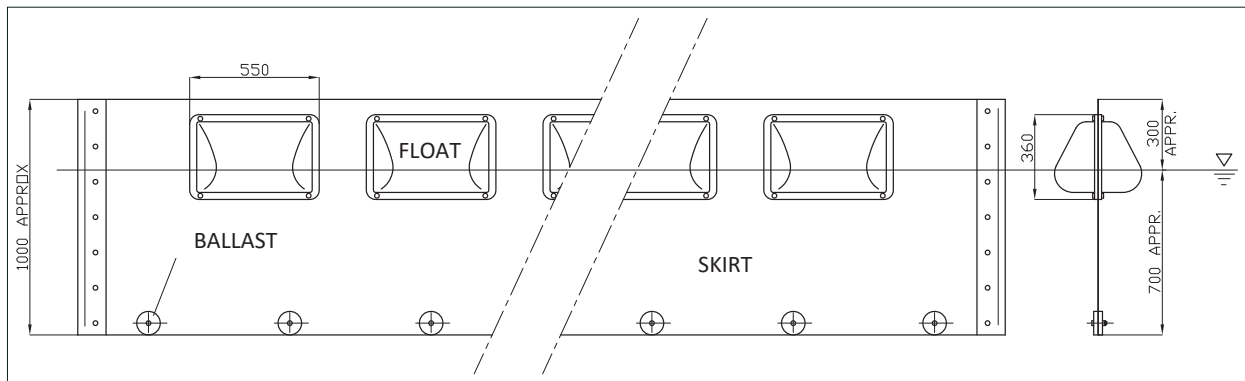


TPR OIL BOOM



TECHNICAL DATA

Utilisation:	Permanent/ Off-Shore
Draught:	700 mm
Freeboard:	300 mm
Total height:	1,0 m *
Standard length:	25 m *
Weight:	15 Kg/m
Reserve Buoyancy:	30 Kg/m
Ballast:	3,3 Kg/m
End connections:	Inox 304 / 316
Floats:	P.E. filled P.U.
Cloth:	Polyester PVC coated
Tension strength:	100 Kg/cm *
*Other dimensions and tear strength available upon request	





TPR PE OIL BOOM

TPR 300 PE Floatex oil booms, realised in standard length of 3,0 meters each with total height of 1,0 meter of which 0,3 m approx. freeboard and 0,7 m approx. immersed, are suitable for use as permanent oil boom in exposed areas.

The oil boom is composed by a rigid polyethylene plate.

Floating of the barrier is obtained by the application of special horizontally fixed floats giving the oil boom a buoyancy of approx. 30 Kg/m.

Floats are realised in two halves made in linear medium density rotomoulded polyethylene shells, filled with rigid closed cell expanded polyurethane.

These floats are applied to the sheet by means of stainless steel bolts, to permit easy disassembly if damaged parts must be replaced, and also to permits a more rational transport and storage.

The lower part of the sheet submerged is ballasted with lead loads applied by means of stainless steel bolts, to guaranty the verticality and stability to the boom.

The connection of various elements is realised using suitable metallic hinged system.

The dimensions of TPR oil boom listed in the accompanying table are indicative and FLOATEX can produce special sizes to meet customer specifications.





TECHNICAL DATA

Utilisation:	Permanent
Draught:	700 mm
Freeboard:	300 mm
Total height:	1,0 m *
Standard length:	3 m *
Weight:	15 Kg/m
Reserve Buoyancy:	30 Kg/m
Ballast:	3,3 Kg/m
End connections:	Metallic
Floats:	P.E. filled P.U.
Body:	P.E.
*Other dimensions and tear strength available upon request	





FLOATING BARRIER REEL TYPE SERIES PBAV

The FLOATEX anti-pollution barriers of the PBAV series are designed for temporary open-sea installation in long continuous lines.

The barrier is constructed of a PVC covered material with high resistance to tearing, marine agents, ultraviolet light and a large range of pollutants. Floatation is provided by specially designed elements of closed cell expanded Polyurethane.

The floatation modules, with moulded-in ballast, are fitted into vertical pockets in the skirt, their rigidity ensuring the vertical stability of the barrier.

This construction has permitted FLOATEX to realize an extremely compact streamlined barrier with no external elements which may be torn off during installation or form propagation points for marine organism growth. The thickness of the skirt material and the quick release connection system in stainless steel between sections ensures a high tension resistance.

If required, FLOATEX will supply a mechanical reeling system for barrier storage, dimensioned to suit the barrier length in question. The reel, constructed in galvanized steel, may be powered with an all electric system or electro-hydraulic system.

The dimensions of the PBAV series, listed in the accompanying table, indicate the extreme versatility of the barrier, which may be launched from a wharf, tug boat or antipollution vessel for emergency pollution containment, or can be employed as a fixed barrier with minor modifications.

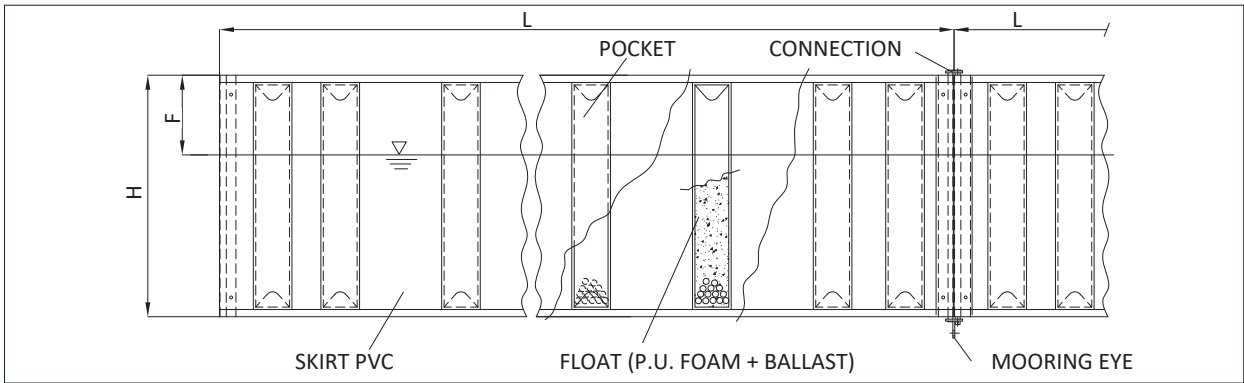


FLOATING BARRIER REEL TYPE SERIES PBAV



TECHNICAL DATA

MODEL	Freeboard (F) (mm)	Overall Height (H) (mm)	Weight (Kg/m)
PBAV210	210	650	9,3
PBAV300	300	850	10,3
PBAV330	330	1000	12,4
PBAV350	350	1200	13,8
FLOATATION		EXPANDED POLYURETHANE	
SKIRT		P.V.C.	
CONNECTION		AISI 304 STAINLESS	





MONIT-MED

The system consists in an offshore station for automatic data collection installed on elastic beacons. The platform provides real surveillance both in case of accidental pollution (rapid evolution of the phenomena) making oceanographic and meteo data instantly available. Monit-Med can be installed in open sea on 18 up to 100 m of water depth; the power shall be provided by photovoltaic cells. The mechanic characteristics of the Monit-Med (MEDA) allows for on-site positioning of different instruments for the monitoring of ecological and oceanographic parameters or for area surveillance; Additionally, it is possible to install a TV or Infrared (IR) camera for surveillance of the marine area or the nearby coast (fire alert). A dedicated on-board computer provides automatic management of the sensors package for sampling at different depths and for data collection and processing, checking for chlorophyll in the eutrophic or hypertrophic areas (chronic pollution) or for accidental environmental pollution. A GPS will also be installed, and for data transmission a GSM system can be used.

METEOMARINE MONITORING SYSTEMS

To realize the data acquisition systems, FLOATEX have selected and widely tested a broad range of instruments to guarantee long efficiency and uniform reliability of measurements combined with reduced maintenance. Several type of sensors are available, each of superior quality, to be able to meet all customer requirements. FLOATEX is leader in the production of oceanographic buoys and seamarks and can supply complete monitoring systems for marine environments.

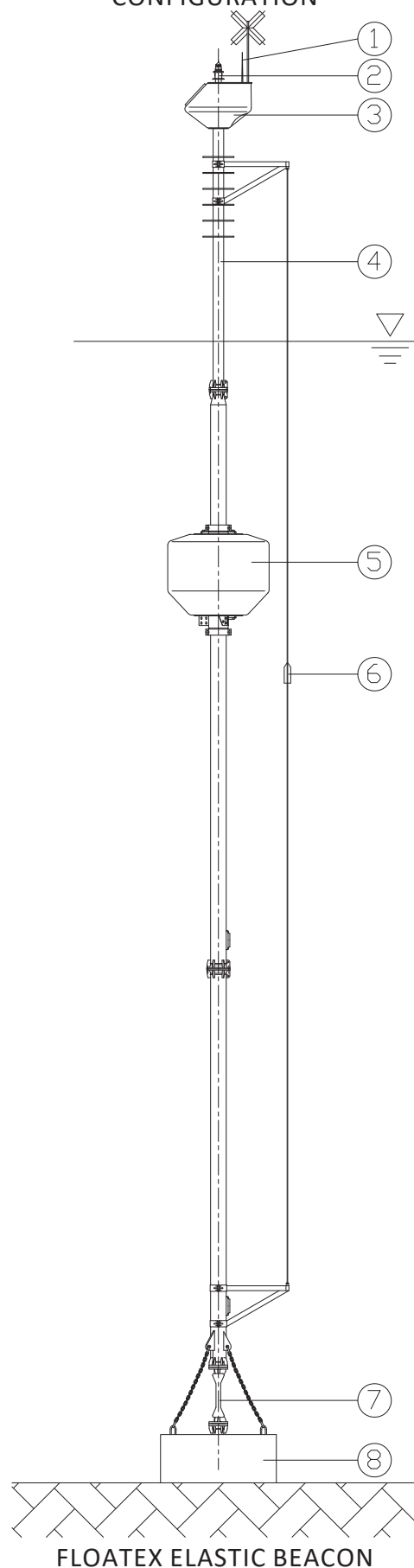
FLOATEX is available to study and realize systems for every field of application where data acquisition and process control are the solution of customer's needs.




MONIT-MED Characteristics:

1 - Antenna
2 - Navigational aid lantern
3 - Monitoring instruments payload
4 - Galvanized steel structure
5 - Rotomoulded PE floats filled with expanded foam
6 - Sensor
7 - Elastic joint
8 - Concrete block

On MONIT-MED platform, a communication system (radio or telephone line) allows a bidirectional connection with the ground stations for the exchange of data and controls.


ELASTIC BEACON STANDARD CONFIGURATION




MONIT-BOA

The floating buoy system makes MONIT-BOA suitable either for shallow water or lagoons areas or no sheltered deeper sea sites.

This buoy have important advantages and features, as :

- On line aerial data transmission (radio or telephone line)
- Easy assembling and installation
- Low cost
- Solar panels maintenance free for the power supply.

This buoy is supplied in three different configurations according to client's requirements.







MUSSEL FLOATS

FLOATEX products range includes mussel floats.

Using latest technology applied in all fields of our production we are able to manufacture products with service life between two and three times longer than mussel floats manufactured with different technology.

The FLOATEX mussel floats outer shell is made in UV-stabilized linear virgin polyethylene, that is completely recyclable (Eco-friendly), and it's fully compatible with the marine environment and has a high resistance to UV rays.

The floats can be supplied empty or filled with PU in base of customer scope of work.

The float is filled with closed-cell polyurethane foam with different densities in base of the hydrostatic pressure it needs to withstand. The polyurethane foam ensure great resistance to the leakage of air or water ensuring unsinkability to the buoy also in case of accidental breaks of the outer shell. the polyurethane foam is 100% made and tested before production by our R&D laboratory.



FLOAT TYPE	SIZE		WATER DEPTH			
	O. D. (mm)	Length (mm)	0 - 10 m		10 - 20 m	
			Weight (Kg)	N.B. (Kg)	Weight (Kg)	N.B. (Kg)
42/70	420	700	6	51	6,7	50,3
42/80	420	850	8	70	9	69
42/180	420	1760	16	99	17	98
48/105	480	930	12,5	100,5	14	99
48/120	480	1050	15	120	17	118
50/90	500	895	7,4	67,6	8,4	66,6
60/115	570	1130	22	188	24	186
SFE57	570	545	12	83	13	82
SFE77	770	715	27	209	29	207
BIC 45/75	430	750	9	68	10,5	66,5
BIC 45/95	435	950	12,5	97,5	13,5	96,5





SPECIAL PRODUCTS FLOATING: RAFTS - PONTOONS - QUAYS

Utilizing floating elements of the FLOATEX products range, floating structures for various applications can be manufactured to client specifications in order to solve any problems in designing and positioning these structures, FLOATEX can offer their technical and practical experience to ensure full functionality of the installation.

Most common structures are Floating farms for fish breeding, landing sites for pleasure-craft; platforms and floating rafts; platforms for suction and water pumping stations.

The floating pontoons of various lengths are generally composed of a hot -dipped galvanized steel frame structure, and buoyancy is ensured by rotationally moulded PE floats which are filled with expanded polyurethane to guarantee unsinkability.

The modules can be fastened together by means of hot-dipped galvanized steel hinges, or by blocks of anti-abrasion and no-noise elastomer polyurethane.



FLOATING HOUSE ARCHEOLOGICAL MONITORING



FLOATING BOATS QUAY



FLOATING PONTOON ASSEMBLY



FLOATING QUAY ASSEMBLY



PONTOONS AND SPECIAL FLOATING CONSTRUCTIONS

Making use of the most appropriate floating elements within the wide range of own production, FLOATEX realizes floating constructions for various kinds of use, among which: Floating farms for fish breeding; Landing-places for pleasure-craft; Platforms and floating drafts; Platforms for suction and pumping of water.

The floating pontoons in various lengths are generally composed of a hot-dipped galvanized steel frame structure, and the buoyancy is ensured by rotationally moulded PE floats which are filled with expanded polyurethane to guarantee unsinkability.

The modules can be fastened to each other by means of hot-dipped galvanized steel hinges, or by means of suitable blocks in elastomer polyurethane.

For fish culture in particular areas or artificial ponds, FLOATEX produces modular floating structures. The table below shows the standard dimensions of every single module.



PONTOONS AND SPECIAL FLOATING CONSTRUCTIONS

STANDARD DIMENSION OF FLOATING PONTOONS COMPONENTS				
MODEL	LENGTH (m)	WIDTH (m)	FLOATS N°	NET BUOYANCY (Kg)
PG560	5.60	0.80	2	900
PG700	7.00	0.80	3	1.350
PG780	7.80	0.80	3	1.350
PG1200	12.00	0.80	10	4.500
PG1200L	12.00	2.40	4	7.400



FLOATING PLATFORM FOR WATER PUMPING



ENVIRONMENTAL CONTROL UNIT



FLOATING PONTOONS

QUALITY

All Floatex products are designed and manufactured under quality system in accordance with ISO 9001. Floatex is recognised as international leader in the design and production of buoyancy material equipment for all applications from seawater surface up to ocean depth. The quality system applies to, and interacts with, all activities pertinent to the quality of the products, to satisfy our clients as Ministry of Defence, Ministry of Environmental, Ministry of Transport, major off-shore oil companies and their associated suppliers, Netherlands D.G.S.M. and all fishing companies.



Accreditations to ISO 9001 records that management procedures have been established and are followed

to ensure consistent product quality. Floatex recognises that its customers require high value for money quality and is not content simply maintaining accreditation to ISO 9001 but continually seeks to improve. Floatex has an independent quality department that follows Quality Assurance and Quality Control step by step.

QUALITY ASSURANCE:

The quality assurance adheres to the formal Quality System to UNI EN ISO 9001.2000. All interfaces with other departments are through written procedure of which the Quality Assurance Department holds all master copies. All departments are regularly audited to ensure that their procedures are being adhered to. Any non-compliance found during audits is formally recorded and remedial action must be taken to ensure that the problem is corrected and cannot recur. All amendments to procedures are documented and have to be authorised by the Quality Assurance manager prior to implementation.

QUALITY CONTROL:

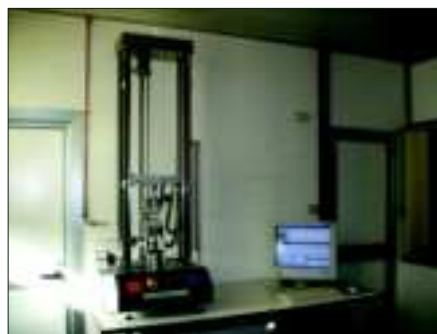
Moreover, FLOATEX offers their customers an internal quality control service for major guarantee of the final product and the quality control service avails itself of the in-house fully equipped laboratory facility making out test certificate to be released to the customer.

In order to insure a constant good quality of its products, Floatex effects a series of Quality Tests on the raw materials, to certify the conformity to the required Standards. These tests are made, for plastic materials, directly in Floatex's laboratory, while for the steel materials we rely on an external test bed an the Mill Certificate that are required of the steel suppliers.



STEEL MATERIALS

Parts subject to tensile stress work, i.e. the central tie rod of the chain support buoys and pick up buoys are Released on the Mill Certificate of the steelworks, in conformity with international material standard.



PLASTIC PARTS TEST

ELASTOMER POLYURETHANE

Compact flexible material with high tear, high abrasion resistance and great elasticity. The high elasticity and the high resistance to U.V. Rays and to hydrolysis makes this material ideal for the cover of all manufactured articles, giving resistance to the expanded products

TYPICAL APPLICATIONS

Casing material for buoys, fenders, hoses and floats.

CHARACTERISTICS

The below mentioned tests are effected on polyurethane samples, prepared during the covering of the buoy and reticulated in a room temperature for 24 hours and then put in an oven with 110°C. for 2 hours. To simulate the behaviour of the polyurethane in sea water, the same tests are repeated on material samples subjected to hydrolysis for 7 days with temperature 70°C. in water with a NaCl content of 3%. When this period is finished, the values resulting from the tests, must not suffer losses more than 20% in respect to the values obtained on the sample tested before the hydrolysis test.

Elastomer polyurethane				
	Test method	Min values required		Value
		A	B	
Tensile strength	Bs 903 PART A2	20	16	N/mm ²
Hardness	Din 53505	75	70	Shore A
Elongation at break	Bs 903 PART A2	400	360	%
Modules 100 %	Bs 903 PART A2	5	4	N/mm ²
Moulut 300 %	Bs 903 PART A2	10	8	N/mm ²
Tear strength	Bs 903 PART A3	45	43	N/mm ²
Abrasion resistance	Din 53516	Max 120		mm ³

NOTE WELL:

- a) Test result after 2 hrs cured at 110°C.
- b) Test result after 7 days in salt water (3 % NaCl) at 70 °C.





EXPANDED POLYETHYLENE

Soft flexible expanded chemically inert material. Available in slabs and strips to be welded together so as to provide finished products of large sizes. Several densities from 25 to 180 kg/m³ with characteristics of strong resiliency and absolutely waterproof.

TYPICAL APPLICATION

Inside of fenders (shock absorbers);
Collars for hoses;
Making oil and dredging hoses fully self-floating;
Anchor pennant and pick-up buoys;
Making concentric reducer and Y pieces reducer fully self-floating.

CHARACTERISTICS

During the phases of the application of the polyethylene, some samples of materials will be subject to the following test:

Example PE 40			
	Test method	Min values required	Unit
Density	DIN EN ISO 845	40	Kg/m ³
Tensile strength	ISO 1798	0.30	N/mm ²
Elongation at break	ISO 1798	110	%
Compression stress 30%	DIN EN ISO 3386-1	100	KPa
Compression stress 50%	DIN EN ISO 3386-1	140	KPa
Compression set 25%			
Immediate release	ISO 1856	21 max	%
After 1/2 hour release	ISO 1856	17 max	%
After 24 hours release	ISO 1856	13 max	%
Compression set 50%			
Immediate release	ISO 1856	35 max	%
After 1/2 release	ISO 1856	30 max	%
After 24 hours release	ISO 1856	25 max	%



FLOATEX



EXPANDED POLYURETHANE

Expanded rigid material with close-cell-percentage varying according to density.

Mixing up two liquid compounds in free or controlled expansion with densities varying from 35 to 500 Kg/m³ produces it.

Expanded polyurethane mixed with special spheres can reach 1000 m water depth.

TYPICAL APPLICATION

Filling material for metal and plastic buoys, deepwater, dredging floats.

CHARACTERISTICS

If the use of an expanded rigid polyurethane core is expected, during the casting a sample of the material will be taken off and will be subjected to the following tests.

EXAMPLE PU 45 $\rho=38\text{Kg/m}^3$			
	Test method	Min values required	Unit
Density	DIN EN ISO 845	35	Kg/m ³
Tensile strength	DIN 53430	0.3	N/mm ²
Compression strength DIN 53421			
Perpendicularly to the growth	-	0.10	MPa
Parallel to the growth	-	0.15	MPa

ROTATIONALLY MOULDED POLYETHYLENE

Semi-rigid compact material characterized by high resistance properties. Can be made in several even very high thicknesses as needed for the manufacture of shells, can be applied to various type of products. It pigments easily and offers an excellent resistance to u.v. Rays and hydrolysis.

TYPICAL APPLICATIONS

Shells for mooring or marker buoys shell for deepwater and dredging float.

CHARACTERISTICS

Samples of material obtained from products similar or to those that are under are subject to following tests:

Rotationally moulded polyethylene			
	Test method	Min values required	Value
Tensile strength	UNI EN ISO 527-1 UNI EN ISO 527-2	7	N/mm ²
Hardness	DIN 53505	50	Shore D
Elongation at break	UNI EN ISO 527-1 UNI EN ISO 527-2	55	%
Abrasion resistance	Din 53516	Max. 50	mm ³





FLOATEX S.R.L.

Via Cave, 12 - 25050 PROVAGLIO D'ISEO (BS) - Italy

Certified site:

Via Cave, 12 - 25050 PROVAGLIO D'ISEO (BS) - Italy

Bureau Veritas Italia S.p.A. certifies that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standards detailed below

ISO 9001:2015

Scope of certification

Design and manufacturing of: aids to navigation, lighted, unlighted and mooring buoys, elastic and fixed beacons, oil booms, floating fenders, floats for offshore and dredging pipes and hoses, marine lanterns, fog-horns.

IAF sector: **14,19**

Original cycle start date:

10-September-2015

Expiry date of previous cycle:

09-September-2021

Certification / Recertification Audit date:

07-September-2021

Certification / Recertification cycle start date:

09-September-2021

Subject to the continued satisfactory operation of the organization's Management System, this certificate expires on:

09-September-2024

Certificate No.: **IT310171**

Version: **1**

Issue Date:

09-September-2021

GIORGIO LANZA-FABRIS - Local Technical Manager



SIGQ N° 059A

Member degli Accordi di Mutual Recognition RA, IR e GAC
Agreement of IR, IR and GAC Mutual Recognition Agreements

Certification body address:

Bureau Veritas Italia S.p.A., Viale Monza, 347 - 20126 Milano, Italia

Further clarifications regarding the scope of this certificate and the applicability of the management system requirements may be obtained by consulting the organisation.

To check this certificate validity please refer to the website www.bureauveritas.it





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