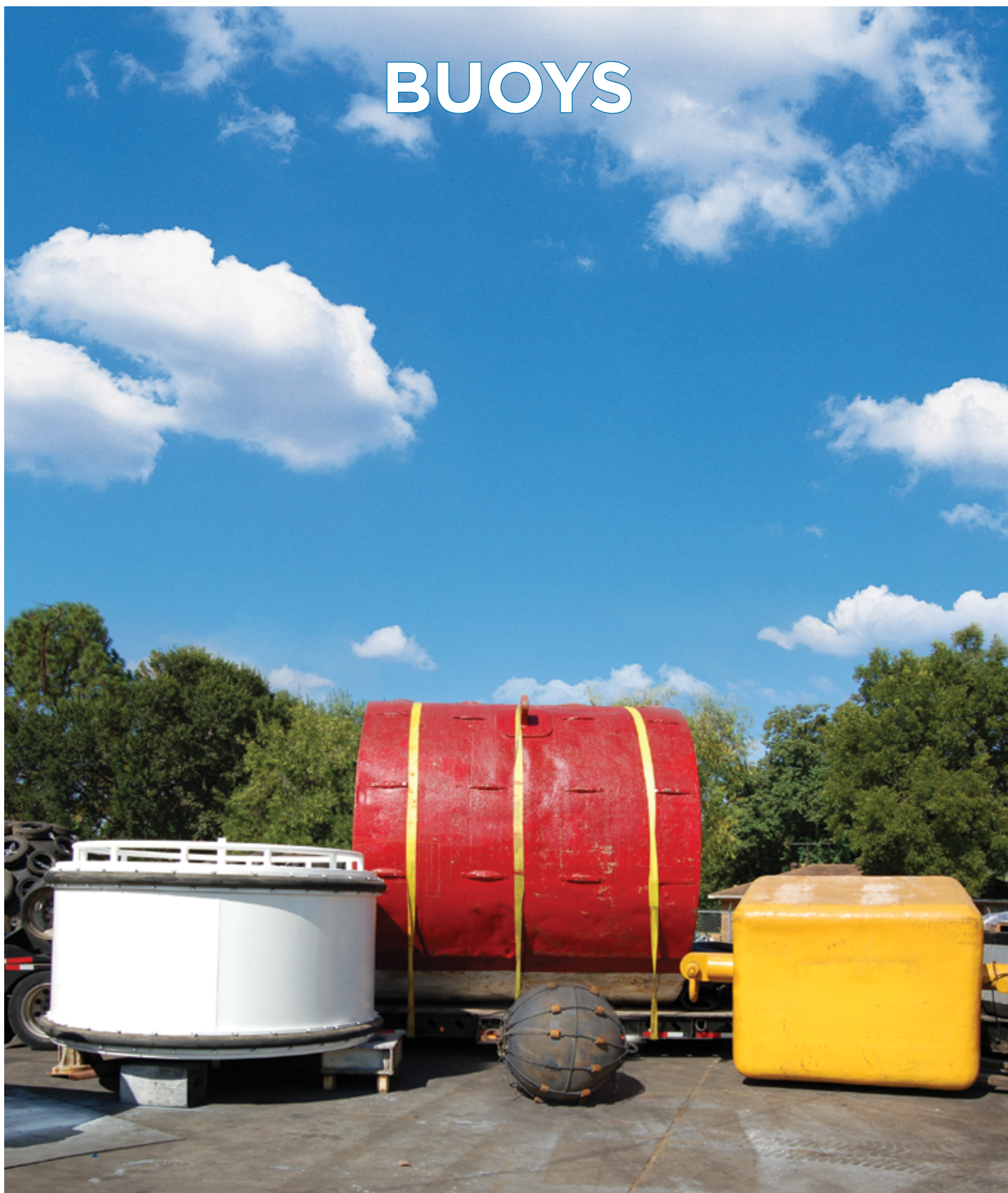


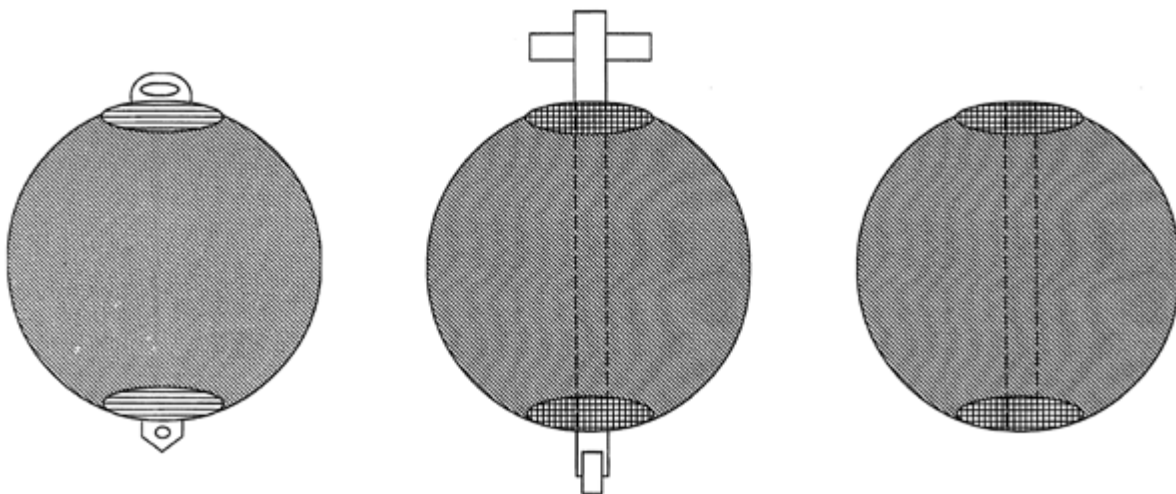
BUOYS



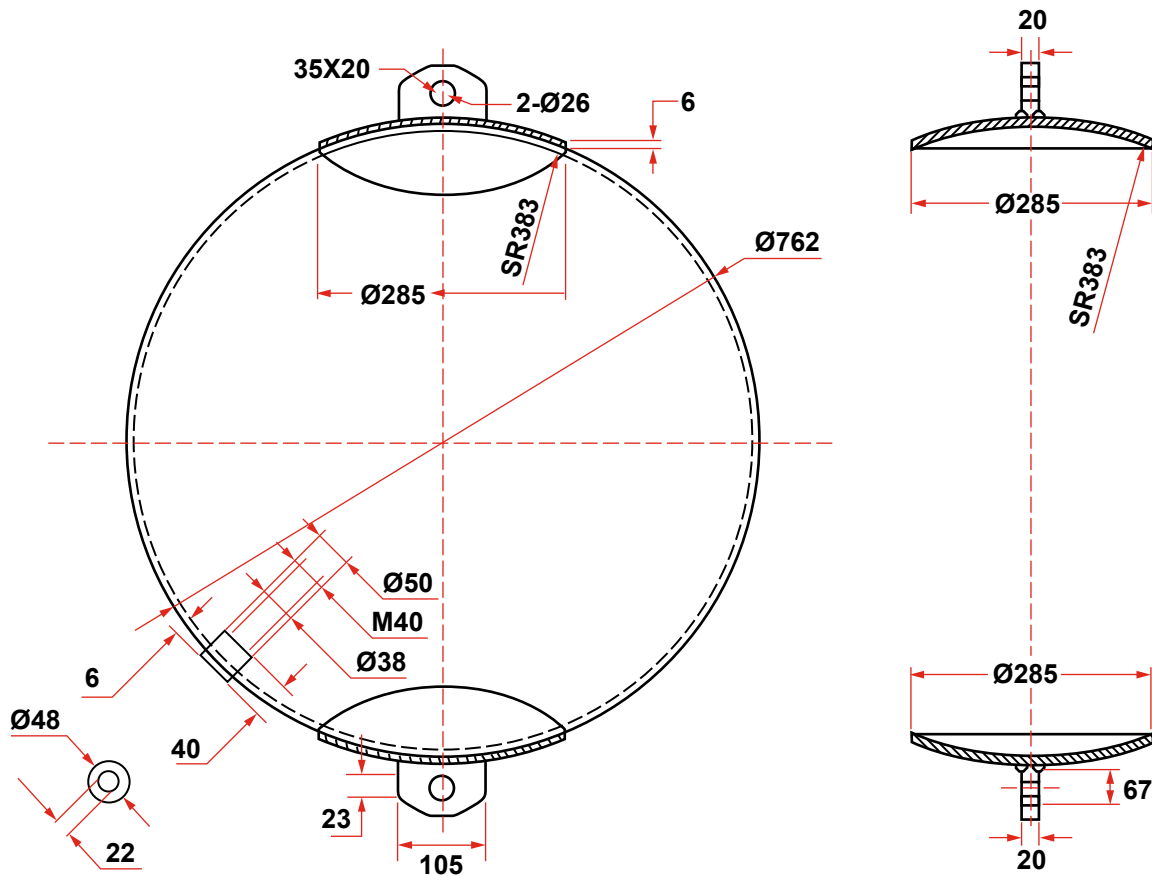
SPHERICAL TYPE BUOY



	30"	40"	58"
Buoyancy	416 lbs.	987 lbs.	3,007 lbs.
Dry Weight	198 lbs.	312 lbs.	694 lbs.
Total Liquid Capacity	58 gal	140 gal	440 gal

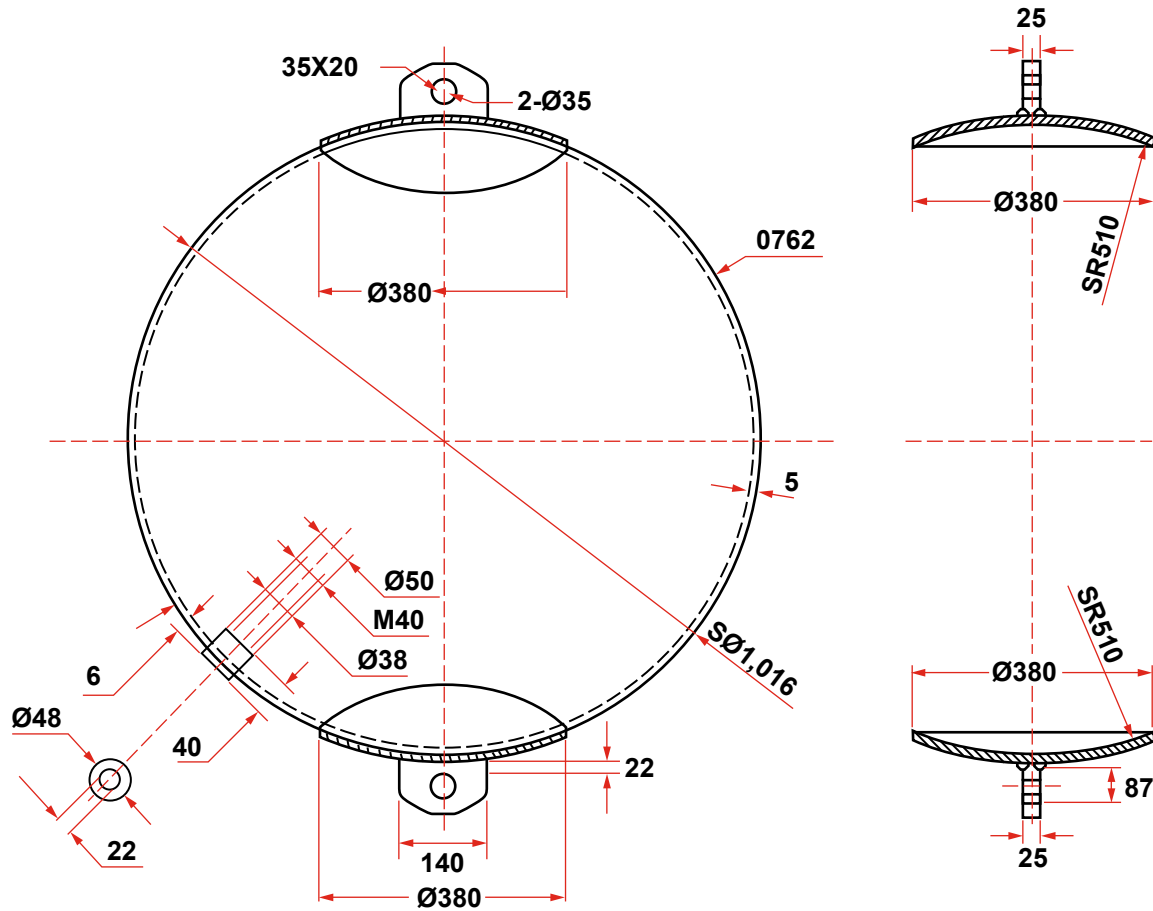


30" SPHERICAL BUOY PAD EYES EACH END



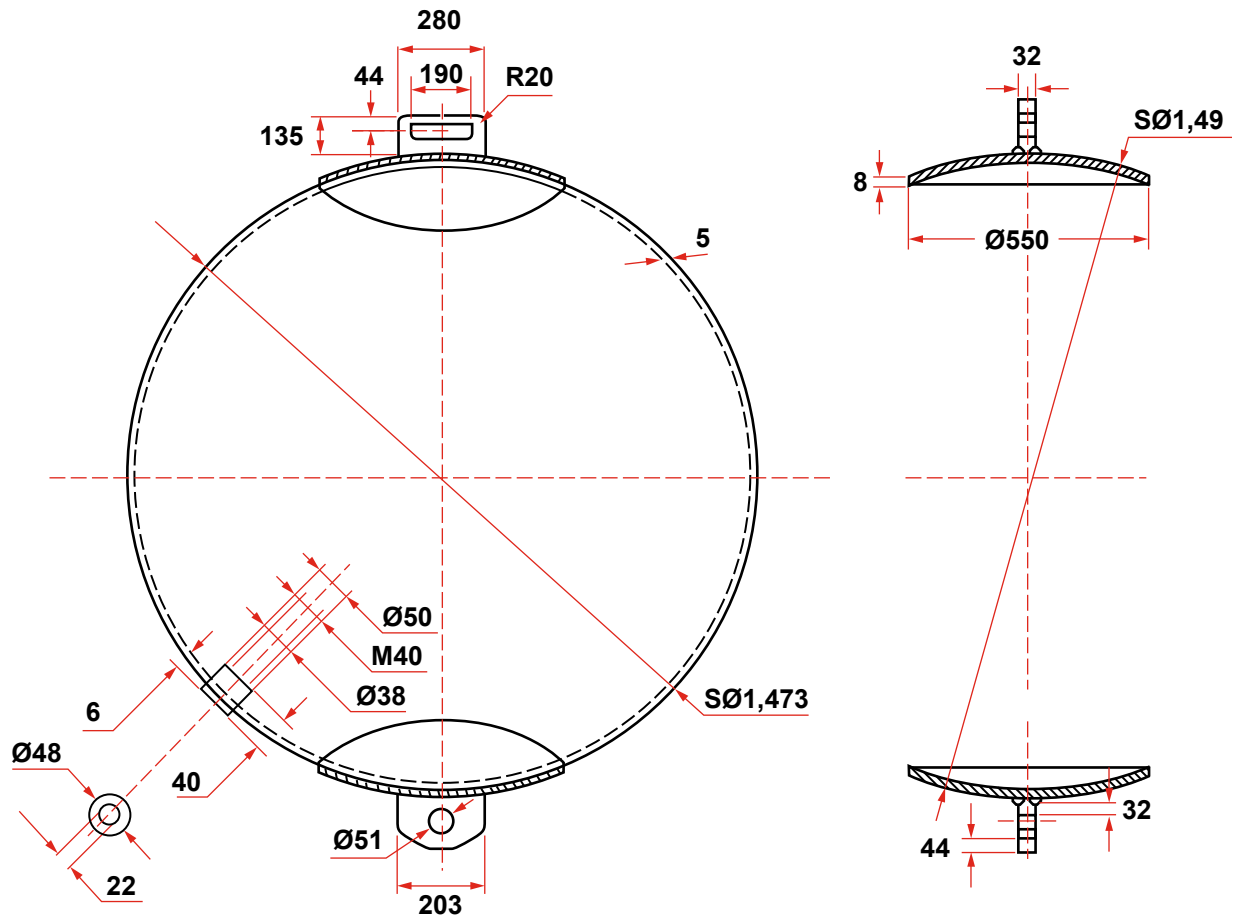
BUOYANCY: 416 LBS.
WEIGHT: 198 LBS.
CAPACITY: 58 GAL

40" SPHERICAL BUOY PAD EYES EACH END



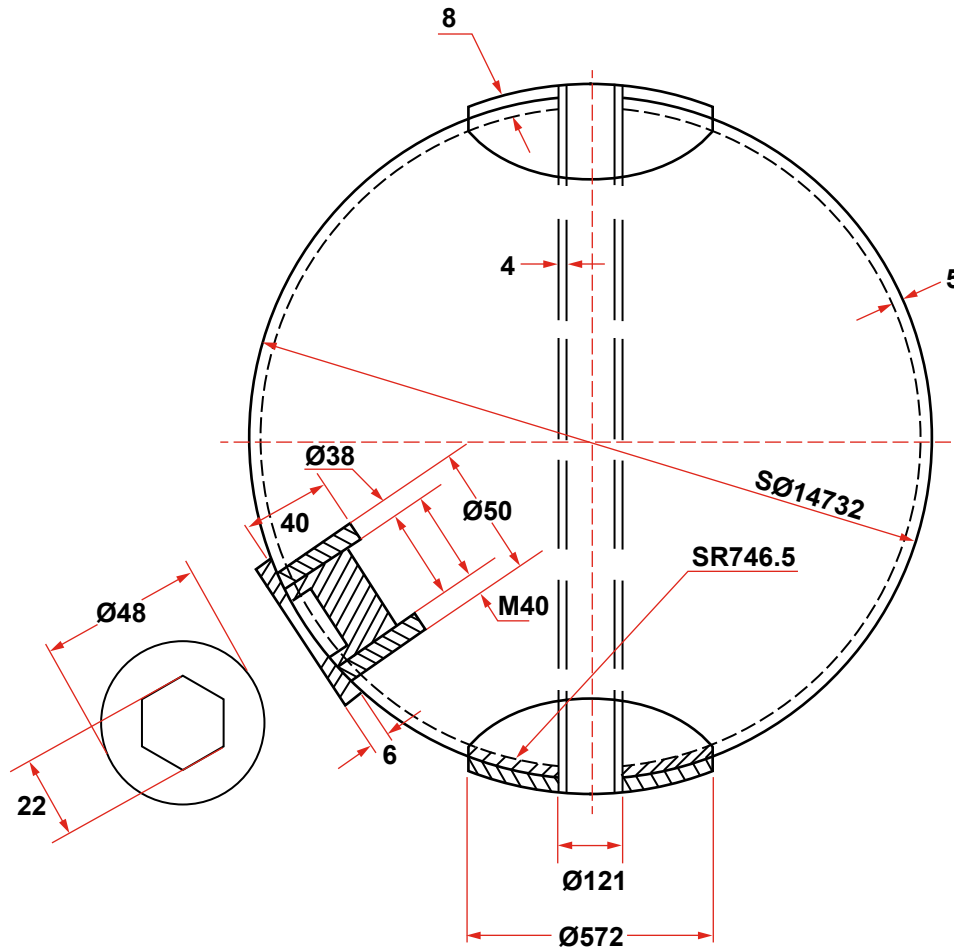
BUOYANCY: 987 LBS.
WEIGHT: 312 LBS.
CAPACITY: 140 GAL

58" SPHERICAL BUOY PAD EYES EACH END



BUOYANCY: 3007 LBS.
WEIGHT: 679 LBS.
CAPACITY: 440 GAL

58" SPHERICAL BUOY WITH PIPE THROUGH



BUOYANCY: 3007
LBS.
WEIGHT: 694 LBS.
CAPACITY: 420 GAL

CIRCUMFERENCE, AREA AND VOLUME OF CIRCLES AND CYLINDERS

Diam. in Feet	Circumference		Area of Circle		Volume of cylinder Per Foot of Height			Diam. in Feet
	Feet	Meters	Sq. Feet	Sq. Meters	U.S. Gals	Imperial Gals	U.S. Bbls (42 Gals)	
1	3.14	0.9576	0.785	.0730	5.9	4.9	0.140	1
2	6.28	1.9151	3.153	.2919	23.5	19.6	0.560	2
3	9.42	2.8727	7.069	.6567	52.9	44.0	1.259	3
4	12.57	3.8302	12.566	1.1675	94.0	78.3	2.238	4
5	15.71	4.7878	19.635	1.8241	146.9	122.3	3.497	5
6	18.85	5.7454	28.274	2.6268	211.5	176.1	5.04	6
7	21.99	6.7029	38.485	3.5753	287.9	239.7	6.85	7
8	25.13	7.6605	50.266	4.6698	376.0	313.1	8.95	8
9	28.27	8.6180	63.617	5.9102	475.9	396.3	11.33	9
10	31.42	9.5756	78.540	7.2966	587.5	489.2	13.99	10
11	34.56	10.5331	95.033	8.8289	710.9	591.9	16.93	11
12	37.70	11.4907	113.097	10.5071	846.0	704.5	20.14	12
13	40.84	12.4482	132.732	12.3312	992.9	826.8	23.64	13
14	43.98	13.4058	153.938	14.3013	1,151.5	958.9	27.42	14
15	47.12	14.3634	176.715	16.4173	1,321.9	1,100.7	31.47	15
16	50.27	15.3209	201.062	18.6793	1,504.0	1,252.4	35.81	16
17	53.41	16.2785	226.980	21.0871	1,697.9	1,413.8	40.43	17
18	56.55	17.2360	254.469	23.6409	1,903.6	1,585.1	45.32	18
19	59.69	18.1936	283.529	26.3407	2,120.9	1,766.1	50.50	19
20	62.83	19.1511	314.159	29.1864	2,350.1	1,956.9	55.95	20
21	65.97	20.1087	346.361	32.1780	2,591.0	2,157.4	61.69	21
22	69.12	21.0663	380.122	35.3155	2,843.6	2,367.8	67.70	22
23	72.26	22.0238	415.476	38.5989	3,108.0	2,587.9	74.00	23
24	75.40	22.9814	452.389	42.0283	3,384.1	2,817.9	80.57	24
25	78.54	23.9389	490.874	45.6037	3,672.0	3,057.6	87.43	25
26	81.68	24.8965	530.929	49.3249	3,971.6	3,307.1	94.56	26
27	84.82	25.8541	572.555	53.1921	4,283.0	3,566.4	101.98	27
28	87.97	26.8116	615.752	57.2052	4,606.1	3,835.4	109.67	28
29	91.11	27.7692	660.520	61.3643	4,941.0	4,114.3	117.64	29
30	94.25	28.7267	706.858	65.6693	5,287.7	4,402.9	125.90	30
31	97.39	29.6843	754.768	70.1202	5,646.1	4,701.4	134.43	31
32	100.53	30.6418	804.248	74.7171	6,016.2	5,009.6	143.24	32
33	103.67	31.5994	855.299	79.4598	6,398.1	5,327.5	152.34	33
34	106.81	32.5570	907.920	84.3486	6,791.7	5,655.3	161.71	34
35	109.96	33.5145	962.113	89.3832	7,197.1	5,992.9	171.36	35
36	113.10	34.4721	1,017.88	94.5638	7,614.2	6,340.2	181.29	36
37	116.24	35.4269	1,075.21	99.8903	8,043.1	6,697.4	191.50	37
38	119.38	36.3872	1,134.11	105.3627	8,483.8	7,064.3	201.99	38
39	122.52	37.3447	1,194.59	110.9811	8,936.2	7,441.0	212.77	39
40	125.66	38.3023	1,256.64	116.7454	9,400.3	7,827.4	223.82	40
41	128.81	39.2599	1,320.25	122.6556	9,876.2	8,223.7	235.15	41
42	131.95	40.2174	1,385.44	128.7118	10,363.8	8,629.7	246.76	42
43	135.09	41.1750	1,452.20	134.9139	10,863.2	9,045.6	258.65	43
44	138.23	42.1325	1,520.53	141.2619	11,374.4	9,471.2	270.82	44

NOTES:

- If diameters are assumed as meters, values in columns "Circumference Feet" and "Area of Circle Square Feet" will represent circumference in meters and area of circle in square meters respectively.
- If diameters are assumed as meters, values in column "Area of Circle Square Feet" will represent volume of cylinder in cubic meters per vertical meter of height.
Formula to determine capacity per foot of vertical height of cylinder.

D = Diameter in Feet. $5.875185 D^2$ = U.S. Gallons per vertical foot.
 $0.1398854 D^2$ = Barrels of 42 U.S. Gallons per vertical foot.
 $0.785398 D^2$ = D^2 = Diameter in Meters = Cubic meters per vertical meter.

$0.022240 D^2$ = Cubic Meters per vertical foot.
 $4.892148 D^2$ = Imperial Gallons per vertical foot.

OCEAN GUARD™ RESILIENT FOAM FILLED BUOYS

The Ocean Guard™ Buoy's resilient surfaces are constructed to withstand the toughest marine applications and environments the world can offer. Ocean Guard™ Buoys are constructed with the latest technology and materials and exemplify state-of-the-art technology in buoy design and functionality. Composite buoys are designed to absorb minor impacts without damaging the buoy body or vessel.

PERFORMANCE FEATURES

UNSINKABLE CONSTRUCTION

The Ocean Guard™ Buoy's closed cell foam filled construction provides a buoy that is unsinkable even if it's punctured.

IMPACT ABSORBING

The resilient outer foam layer and the reinforced elastomeric skin of the Ocean Guard™ Buoy are designed to absorb impacts of vessels without damaging the buoy or the impacting vessel.



NON MARKING

The tough, thick, reinforced elastomeric urethane skin of Ocean Guard™ Buoys is non marking, available in different colors and will not wear off.



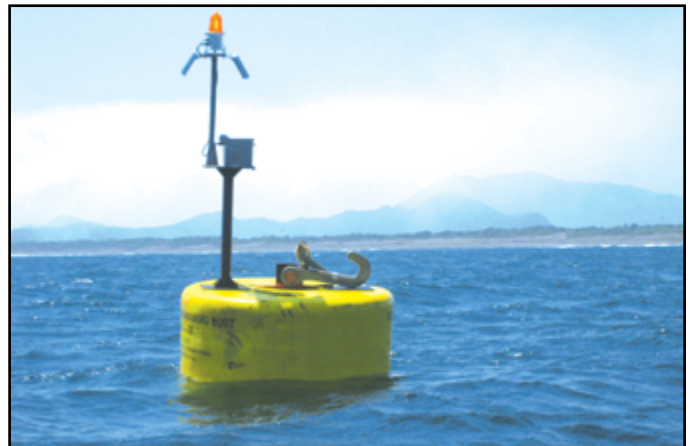
END FITTINGS

Ocean Guard™ Buoys' end fittings are available in a variety of styles including mooring tees, padeyes, quick release hooks, swivel eyes, bails, forged eyes, hawse pipe with capture plates and navigational lights.



SUPERIOR TO STEEL BUOYS

Ocean Guard™ Buoys are designed and constructed to be lighter, more corrosion resistant, less maintenance and easier to handle than conventional steel buoys. The abrasion resistant urethane skin will resist the harshest environments without corroding.



CUSTOM DESIGNS

Engineers work closely with the customer to select or custom design an Ocean Guard™ Buoy to meet their specific requirements.

CONSTRUCTION FEATURES

INTERNAL STEEL CENTRAL STRENGTH MEMBERS

The Ocean Guard™ Buoys' construction begins with an ultra heavy duty internal steel central strength member which provides excellent working load performance. The welded steel structure contains load distribution plates which provide outstanding pull-through performance.

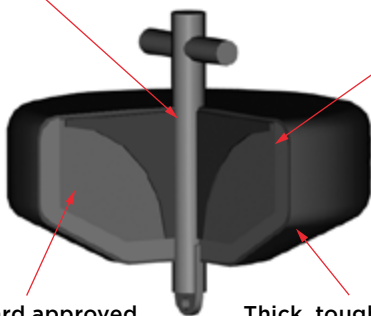


RIGID INNER CLOSED CELL URETHANE FOAM CORE

The second layer in Ocean Guard™ Buoy construction consists of a US Coast Guard compliant rigid inner 100% closed cell urethane foam core. This strong foam core has excellent buoyancy and compression strength properties. The foam is molded directly onto the internal Steel Central Strength Member which provides an unsinkable buoy.

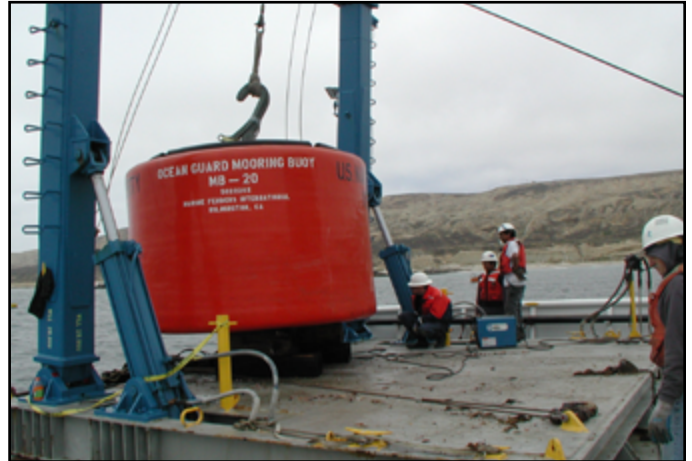
Ultra heavy duty central steel core load distribution construction

Impact absorbing, resilient heat laminated cross-linked polyethylene foam core foam



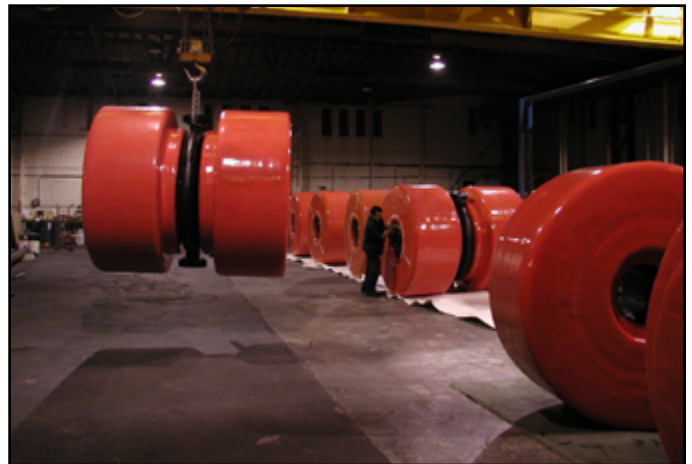
US Coast Guard approved inner closed cell rigid urethane buoyancy foam

Thick, tough filament nylon tire cord reinforced urethane skin



RESILIENT OUTER FOAM CORE

The third layer in Ocean Guard™ Buoy construction consists of an impact absorbing closed cell cross-linked polyethylene foam core. The same heat lamination process used in our Ocean Guard™ fenders produces a thermal bond between the layers of foam which is stronger than the foam itself. It will not delaminate even under the most abusive berthing conditions. This impact absorbing foam core is added to absorb vessel impacts without damaging the buoy or the impacting vessel.



REINFORCED ELASTOMERIC SKIN

The final layer is a tough, thick filament nylon tire cord reinforced elastomer skin. This non-marking, reinforced elastomer fender skin is the wear surface of the fender. The reinforcing filaments are continuously wound in a helix pattern through up to 90% of the elastomer skin and wrap around the buoy's end fittings. This continuous reinforcement of the elastomer skin not only increases the tensile and tear strength of the elastomer, but also distributes loads throughout the fender skin.

This resilient material is specially formulated to withstand the world's harshest environmental conditions, providing superior performance in extreme temperatures, toxic environments, against hydrocarbons, salt water, ozone and ultraviolet radiation.

OCEAN GUARD MOORING BUOYS

BUOY MODEL	BUOYANCY NET		BUOY WEIGHT		DIAMETER OVERALL		HEIGHT BUOY BODY		HEIGHT OVERALL		WORKING LOAD	
	LBS	KG	LBS	KG	FT	M	FT	M	FT	M	LBS	TONS
MB-25	5,512	2,500	1,756	797	6.1	1.9	3.6	1.1	7.6	2.3	100,000	45
MB-35	7,716	3,500	2,340	1,061	7.0	2.1	4.3	1.3	8.5	2.6	150,000	68
MB-50	11,023	5,000	2,371	1,075	7.5	2.3	4.9	1.5	8.6	2.6	150,000	68
MB-70	15,432	7,000	2,938	1,333	8.5	2.6	5.0	1.5	8.6	2.6	200,000	91
MB-90	19,842	9,000	4,657	2,112	10	3.0	5	1.5	8.6	2.6	200,000	91
MB-115	25,353	11,500	5,109	2,317	10	3.0	6.1	1.9	9.5	2.9	200,000	91
MB-135	29,762	13,500	6,017	2,729	10.5	3.2	6.5	2.0	10.0	3.0	300,000	136
MB-160	35,274	16,000	6,333	2,873	11	3.4	6.8	2.1	11.75	3.6	300,000	136
MB-185	40,785	18,500	6,836	3,101	11.1	3.4	7.8	2.4	12.7	3.9	300,000	136
MB-225	49,604	22,500	8,491	3,852	12.0	3.7	8.1	2.5	12.9	3.9	300,000	136
MB-250	55,116	25,000	9,469	4,295	12.5	3.8	8.3	2.5	13.1	4.0	300,000	136
MB-275	60,627	27,500	9,965	4,520	12.6	3.8	8.9	2.7	13.7	4.2	300,000	136
MB-340	74,957	34,000	11,841	5,371	13.83	4.2	9	2.7	13.8	4.2	300,000	136
MB-455	100,310	45,500	14,599	6,622	15	4.6	10	3.0	14.8	4.5	300,000	136

* Actual values for above sizes may vary +/- 15% due to variations in materials and tolerances.



OCEAN GUARD SUPPORT BUOYS

BUOY MODEL	BUOYANCY NET		BUOY WEIGHT		DIAMETER OVERALL		HEIGHT OVERALL		WORKING LOAD	
	LBS	KG	LBS	KG	FT	M	FT	M	LBS	TONS
SB-25	551	250	158	72	2.6	0.8	2.6	0.8	22,000	10
SB-50	1,102	500	285	129	3.2	1.0	3.2	1.0	22,000	10
SB-75	1,653	750	390	177	3.5	1.1	3.5	1.1	22,000	10
SB-100	2,205	1,000	475	215	3.8	1.2	3.8	1.2	40,000	18
SB-125	2,756	1,250	537	244	4.1	1.2	4.1	1.2	40,000	18
SB-150	3,307	1,500	584	265	4.3	1.3	4.3	1.3	40,000	18
SB-175	3,858	1,750	687	312	4.6	1.4	4.6	1.4	40,000	18
SB-200	4,409	2,000	819	371	4.8	1.5	4.8	1.5	40,000	18
SB-250	5,511	2,500	931	422	5.2	1.6	5.2	1.6	40,000	18
SB-300	6,614	3,000	1,200	544	5.5	1.7	5.5	1.7	45,000	20
SB-350	7,716	3,500	1,300	590	5.8	1.8	5.8	1.8	45,000	20
SB-400	8,818	4,000	1,612	731	6.0	1.8	6.0	1.8	45,000	20
SB-450	9,921	4,500	1,712	777	6.2	1.9	6.2	1.9	45,000	20
SB-500	11,023	5,000	1,945	882	6.4	2.0	6.4	2.0	45,000	20
SB-600	13,228	6,000	2,302	1,044	6.8	2.1	6.8	2.1	45,000	20
SB-700	15,432	7,000	2,500	1,134	7.2	2.2	7.2	2.2	45,000	20

* Actual values for above sizes may vary +/- 15% due to variations in materials and tolerances.



OCEAN GUARD UTILITY CYLINDRICAL BUOYS

BUOY MODEL	BUOYANCY NET		BUOY WEIGHT		DIAMETER OVERALL		BUOY HEIGHT		HEIGHT OVERALL		WORKING LOAD	
	LBS	KG	LBS	KG	FT	M	FT	M	FT	M	LBS	TONS
CB-5	110	50	55	25	1.3	0.4	2	0.6	2.8	0.9	5,000	2.3
CB-10	220	100	79	36	1.5	0.5	2.8	0.8	3.6	1.1	5,000	2.3
CB-15	331	150	93	42	1.7	0.5	3.0	0.9	3.8	1.2	5,000	2.3
CB-25	551	250	160	73	2.2	0.7	3.1	0.9	4.0	1.2	7,500	3.4
CB-45	992	450	222	101	2.5	0.8	4.0	1.2	5.1	1.5	10,000	4.5
CB-70	1,543	700	340	154	3.0	0.9	4.2	1.3	5.3	1.6	10,000	4.5
CB-100	2,205	1,000	439	199	3.3	1.0	5	1.5	6.33	1.9	20,000	9.1
CB-115	2,535	1,150	539	244	3.5	1.1	5.0	1.5	6.3	1.9	20,000	9.1
CB-140	3,086	1,400	606	275	3.5	1.1	6.0	1.8	7.3	2.2	20,000	9.1
CB-180	3,968	1,800	704	319	4.0	1.2	5.8	1.8	7.4	2.3	40,000	18.0
CB-230	5,071	2,300	868	394	4.5	1.4	5.9	1.8	7.5	2.3	40,000	18.0
CB-275	6,063	2,750	973	441	4.5	1.4	7.0	2.1	8.6	2.6	40,000	18.0

* Actual values for above sizes may vary +/- 15% due to variations in materials and tolerances.



OCEAN GUARD PENDANT BUOYS



BUOY MODEL	BUOYANCY NET		BUOY WEIGHT		DIAMETER OVERALL		BUOY LENGTH		HEIGHT OVERALL		WORKING LOAD	
	LBS	KG	LBS	KG	FT	M	FT	M	FT	M	LBS	TONS
PB-25	5,511	2,500	1,223	555	4.5	1.4	6.8	2.1	7.3	2.2	150,000	68
PB-50	11,023	5,000	2,123	963	6.0	1.8	7.2	2.2	8.7	2.7	150,000	68
PB-75	16,534	7,500	3,184	1,444	6.5	2.0	9.2	2.8	9.2	2.8	150,000	68
PB-100	22,046	10,000	2,735	1,241	6.5	2.0	11.0	3.4	9.3	2.8	150,000	68
PB-150	33,069	15,000	4,020	1,823	8.0	2.4	11.5	3.5	10.9	3.3	150,000	68
PB-200	44,092	20,000	4,922	2,233	8.5	2.6	13.5	4.1	11.5	3.5	200,000	91
PB-250	55,115	25,000	5,827	2,643	9.0	2.7	15.0	4.6	11.8	3.6	200,000	91
PB-300	66,138	30,000	6,688	3,034	9.5	2.9	16.0	4.9	12.8	3.9	200,000	91
PB-350	77,160	35,000	10,581	4,800	10.3	3.1	16.8	5.1	14.5	4.4	250,000	114
PB-400	88,183	40,000	11,449	5,193	10.5	3.2	18.0	5.5	16.3	5.0	250,000	114

* Actual values for above sizes may vary +/- 15% due to variations in materials and tolerances.

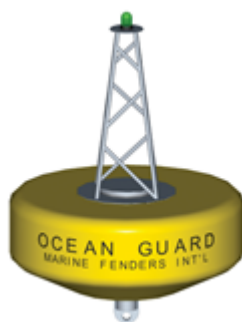
OCEAN GUARD MODULAR ANCHOR PENDANT BUOYS



BUOY MODEL	BUOYANCY NET		NUMBER OF MODULES	DIAMETER OVERALL		THROUGH PIPE DIAMETER	
	LBS	KG		FT	M	IN	MM
MAPB2-4	8,818	4,000	2	6.6	2.0	6.0	152
MAPB4-8	17,637	8,000	4	6.6	2.0	6.0	152
MAPB2-8	17,637	8,000	2	7.5	2.3	6.0	152
MAPB4-16	35,273	16,000	4	7.5	2.3	6.0	152
MAPB2-11	24,250	11,000	2	9.8	3.0	8.0	203
MAPB4-22	48,501	22,000	4	9.8	3.0	8.0	203
MAPB2-17	37,478	17,000	2	10.5	3.2	10.0	254
MAPB4-34	74,956	34,000	4	10.5	3.2	10.0	254
MAPB2-23	50,705	23,000	2	10.5	3.2	10.0	254
MAPB4-46	101,411	46,000	4	10.5	3.2	10.0	254

* Actual values for above sizes may vary +/- 15% due to variations in materials and tolerances.

OCEAN GUARD OCEANOGRAPHIC BUOYS



BUOY MODEL	BUOYANCY NET		FLOTATION WEIGHT		TOTAL WEIGHT		DIAMETER OVERALL		DIAMETER INTERNAL		FLOTATION HEIGHT		TOWER HEIGHT	
	LBS	KG	LBS	KG	LBS	KG	FT	M	FT	M	FT	M	FT	M
OG-10	2,205	1,000	60	27	513	233	5.4	1.6	2.2	0.7	2.3	0.7	5.6	1.7
OG-15	3,307	1,500	72	33	606	275	6.1	1.9	2.3	0.7	2.4	0.7	5.6	1.7
OG-20	4,409	2,000	99	45	752	341	6.5	2.0	2.5	0.8	2.6	0.8	6.1	1.9
ATLAS-3	5,000	2,268	130	59	1,200	544	7.4	2.3	3.2	1.0	3.2	1.0	7.0	2.1

* Actual values for above sizes may vary +/- 15% due to variations in materials and tolerances.

OCEAN GUARD NAVIGATIONAL AND MARKER BUOYS



BUOY MODEL	BUOYANCY NET		BUOY WEIGHT		BUOY DIAMETER		BUOY BODY HEIGHT	
	LBS	KG	LBS	KG	FT	M	FT	M
NAV-100	221	100	194	88	3.0	0.9	2.3	0.7
NAV-200	441	200	399	181	3.8	1.2	3.0	0.9
NAV-500	1,103	500	650	295	4.9	1.5	3.0	0.9
NAV-750	1,654	750	981	445	6.7	2.0	3.3	1.0
NAV-1000	2,205	1,000	1,816	824	8.5	2.6	4.2	1.3
NAV-3000	6,615	3,000	3,112	1,412	10.0	3.0	4.5	1.4
NAV-5000	11,025	5,000	4,462	2,024	10.2	3.1	6.0	1.8
NAV-7500	16,538	7,500	6,703	3,040	11.8	3.6	6.6	2.0
NAV-10000	22,050	10,000	7,845	3,558	13.2	4.0	6.0	1.8

* Actual values for above sizes may vary +/- 15% due to variations in materials and tolerances.

OCEAN GUARD CHAIN THROUGH BUOYS



BUOY MODEL	NET BUOYANCY		BUOY WEIGHT		BODY DIAMETER		BODY LENGTH		OVERALL LENGTH		THROUGH PIPE DIAMETER	
	LB	KG	LB	KG	FT	M	FT	M	FT	M	IN	MM
CTB-100	2,205	1000	1,170	570	3.6	1.1	5.8	1.7	7.0	2.1	13.0	330
CTB-150	3,307	1,500	1,345	610	4.1	1.3	5.9	1.7	7.1	2.1	13.0	330
CTB-200	4,409	2,000	1,488	675	4.5	1.4	6.2	1.9	7.7	2.4	13.0	330
CTB-225	4,960	2,250	1,842	777	4.9	1.5	6.0	2.0	7.5	2.4	15.0	381
CTB-275	6,063	2,750	2,023	840	5.1	1.6	6.6	2.1	8.0	2.6	15.0	381
CTB-350	7,716	3,500	2,698	1,060	5.1	1.6	8.6	2.9	10.0	3.4	17.0	432
CTB-400	8,818	4,000	2,791	1,159	5.3	1.7	9.0	2.6	10.3	3.1	17.0	432
CTB-450	9,921	4,500	3,076	1,395	5.5	1.8	9.2	2.6	10.5	3.1	19.0	483
CTB-550	12,125	5,500	3,440	1,560	5.8	1.8	9.8	3.2	11.0	3.7	19.0	483

* Actual values for above sizes may vary +/- 15% due to variations in materials and tolerances.

OCEAN GUARD RECTANGULAR ANCHOR PENDANT BUOYS



BUOY MODEL	BUOYANCY NET		BUOY WEIGHT		BUOY DIMENSIONS								WORKING LOAD	
	LBS	KG	LBS	KG	LENGTH		HEIGHT		WIDTH		OVERALL HEIGHT		FT	TONS
RPB-10	2,200	1000	408	185	3.0	0.9	5.0	1.5	3.0	0.9	7.3	2.2	150,000	68
RPB-20	4,400	2000	817	371	3.6	1.1	5.0	1.5	5.0	1.5	7.3	2.2	150,000	68
RPB-40	8,800	4000	1,470	667	4.5	1.4	6.0	1.8	6.0	1.8	9.9	3.0	150,000	68
RPB-60	13,200	6000	3,060	1,388	5.0	1.5	7.0	2.1	8.5	2.6	10.9	3.3	150,000	68
RPB-80	17,600	8000	3,514	1,594	5.4	1.6	7.5	2.3	8.5	2.6	11.4	3.5	150,000	68
RPB-100	22,000	10000	4,312	1,956	6.0	1.8	9.0	2.7	8.1	2.5	12.6	3.8	150,000	68
RPB-120	26,400	12000	4,641	2,105	6.5	2.0	9.5	2.9	8.4	2.6	13.4	4.1	150,000	68
RPB-140	30,800	14000	5,835	2,647	6.5	2.0	10.5	3.2	9.0	2.7	14.8	4.5	200,000	91
RPB-160	35,200	16000	6,442	2,922	6.5	2.0	10.5	3.2	10.5	3.2	14.6	4.5	200,000	91
RPB-180	39,600	18000	7,195	3,264	6.5	2.0	11.5	3.5	11.0	3.4	15.6	4.8	200,000	91
RPB-200	44,000	20000	7,533	3,417	8.0	2.4	11.0	3.4	10.7	3.3	14.8	4.5	200,000	91
RPB-250	55,000	25000	8,427	3,822	8.5	2.6	12.6	3.8	10.8	3.3	16.5	5.0	200,000	91
RPB-300	66,000	30000	9,918	4,499	8.5	2.6	14.4	4.4	11.1	3.4	18.2	5.5	200,000	91

* Actual values for above sizes may vary +/- 15% due to variations in materials and tolerances.

OCEAN GUARD UNIVERSAL BUOYS



BUOY MODEL	NET BUOYANCY (MIN)		BUOY WEIGHT		BODY DIAMETER		BODY HEIGHT		OVERALL HEIGHT	
	LBS	KG	LBS	KG	FT	M	FT	M	FT	M
UB-1500	1,500	680	710	322	4.2	1.3	2.5	0.8	4.3	1.3
UB-2000	2,000	907	801	363	4.2	1.3	3.3	1.0	5.5	1.7
UB-2500	2,500	1,134	689	313	5.0	1.5	2.9	0.9	5.0	1.5
UB-3000	3,000	1,361	929	421	5.0	1.5	3.3	1.0	5.5	1.7
UB-4000	4,000	1,814	1,488	675	6.0	1.8	3.3	1.0	5.5	1.7
UB-5000	5,000	2,268	1,570	712	6.0	1.8	3.8	1.1	6.0	1.8

* Actual values for above sizes may vary +/- 15% due to variations in materials and tolerances.

UNIVERSAL BUOY END FITTINGS



Bail Eye



Pad Eye

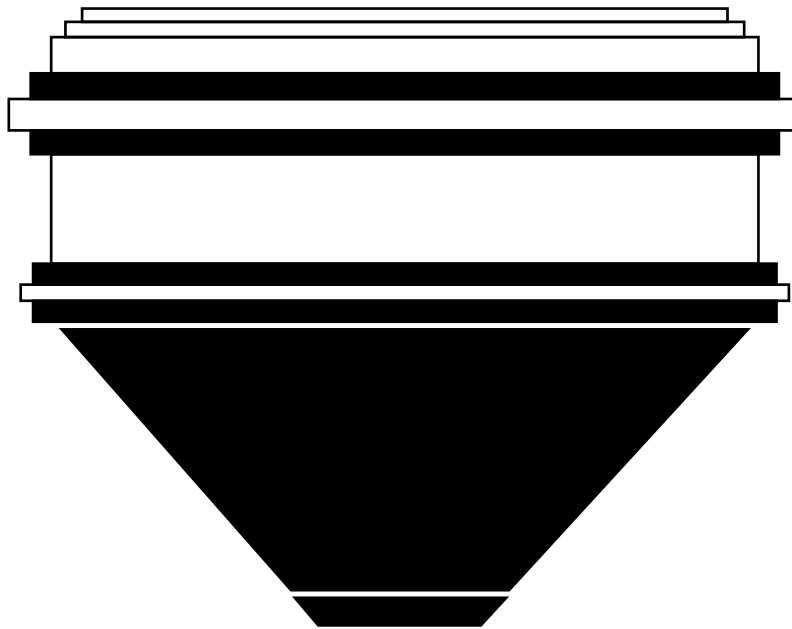


Pick-Up Tee



Swivel Eye

PEG TOP BUOY



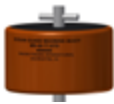
DIMENSIONS: 13'0" DIA. X 10'0" HIGH
DISPLACEMENT OF SEAWATER: 48,100 LBS.
TOTAL BUOYANCY: 35,300 LBS.
WEIGHT: 12,800 LBS.
ATTACHMENTS: RUBBER RUBBING STRIPS
TYPICAL MANWAYS



BUOY REQUIREMENTS

PROJECT DETAILS					PROJECT STATUS	
PROJECT NAME					MFI REF	
LOCATION					<input type="checkbox"/> PRELIMINARY	
CONSULTANT					<input type="checkbox"/> DETAIL DESIGN	
CONTRACTOR					<input type="checkbox"/> TENDER	
NAME		POSITION		TELEPHONE	E-MAIL	
OPERATIONAL DETAILS						
VESSEL TYPE				VESSEL SIZE		
LOCATION	EXPOSED	SHELTERED	DURATION	TEMPORARY	PERMANENT	
WATER DEPTH						
TIDAL LEVEL (H.W.L.)						
TIDAL LEVEL (L.W.L.)						
BOTTOM MATERIAL		MUD	SAND	ROCK		
OPERATING TEMPERATURE		MAX	<input type="checkbox"/> F <input type="checkbox"/> C	MIN	<input type="checkbox"/> F <input type="checkbox"/> C	
BUOY DETAILS						
NET BUOYANCY		MIN	MAX	FREEBOARD	MIN	MAX
PULL-THROUGH CAPACITY				WORKING LOAD		
BUOY END FITTINGS		TOP		BOTTOM		
FORGED SWIVEL EYE						
FABRICATED SWIVEL EYE						
PADEYE						
QUICK RELEASE HOOK						
BAIL EYE						
CRUCIFIX						
HAWSE PIPE						
HAWSE PIPE (WITH CAPTURE PLATE)						
LIGHTS (TYPE)						

☐ MOORING BUOY



☐ MOORING BUOY-PEG BOTTOM



☐ PENDANT BUOY



☐ RECTANGULAR ANCHOR
PENDANT BUOY



☐ MODULAR ANCHOR
PENDANT BUOY



☐ SUPPORT BUOY



☐ CYLINDRICAL BUOY



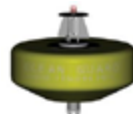
☐ CHAIN THROUGH BUOY



☐ RECTANGULAR CHAIN
THROUGH BUOY



☐ NAVIGATIONAL BUOY



☐ MARKER BUOY

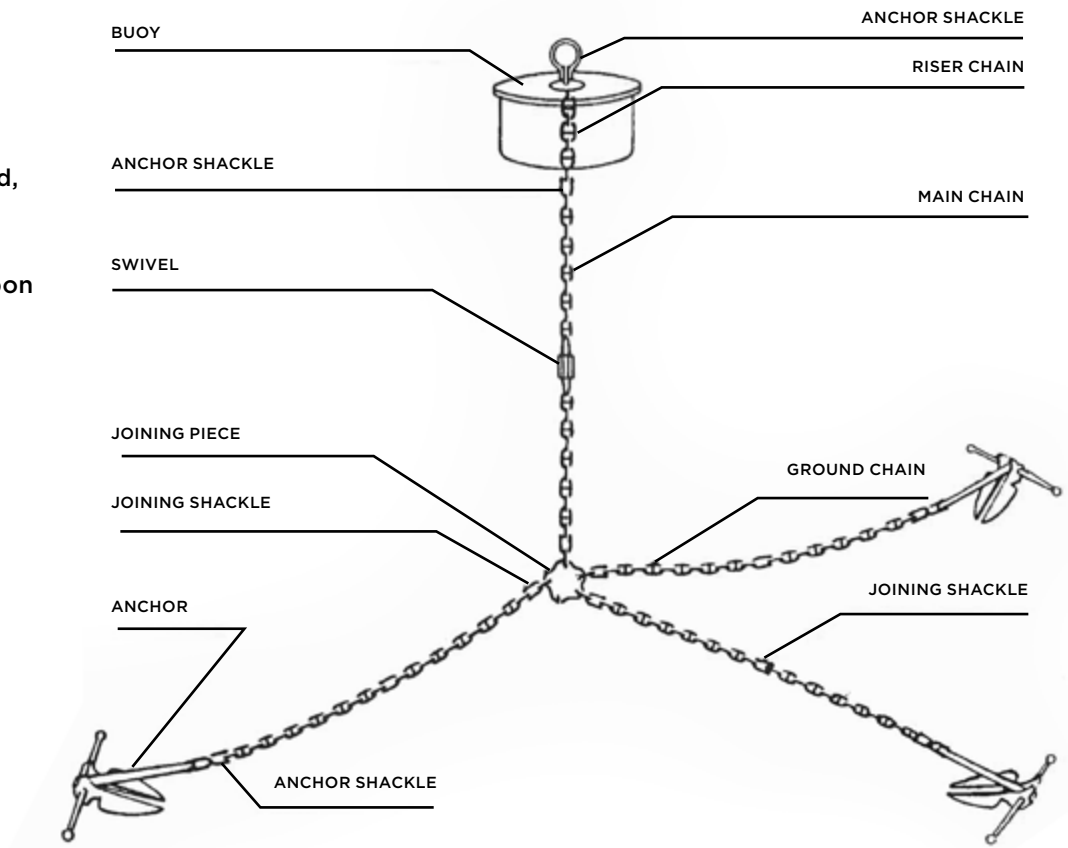


☐ OTHER



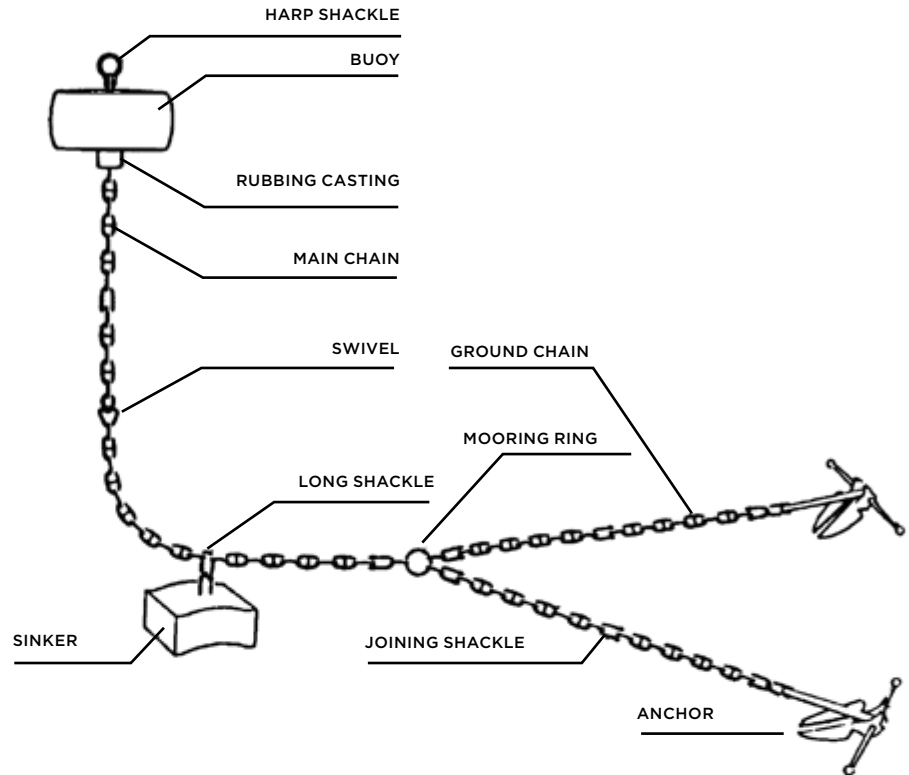
MOORING SYSTEMS AND BUOYS

Shown on the right is a typical mooring system. However, individual components may be added, deleted or rearranged to accommodate your special requirements. Application assistance is available upon request.



MOORING SYSTEMS AND FITTINGS

Shown on the right is a another typical mooring system. Again, individual components may be added, deleted or rearranged to accommodate your special requirements. Application assistance is available upon request.



MOORING SYSTEM COMPONENTS



ANCHORS



ANCHOR CHAIN



CONNECTING
LINK



ANCHOR
CONNECTING
LINK



CHAIN SWIVELS



BOLT PIN ANCHOR
SHACKLE



BOLT PIN CHAIN
SHACKLE



WIRE
ROPE

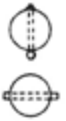
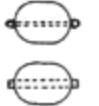
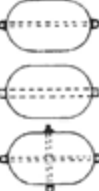
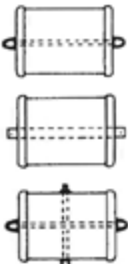






FLOUNDER
PLATE

FLOATS - UTILITY AND BARRIER

- Foam filled and ultraviolet inhibited. -- COLORS: Orange or White
- Yellow available on special order.
- Sturdy ABS hull. Models 1830 are one piece high density polyethylene.
- Reflective bands available.

Barrier Floats are attached in series to restrict boating traffic or swimmers from specific danger areas such as around dams and spillways or anywhere that hazardous conditions exist.

UTILITY FLOATS	FOR SWIM AREAS AND GENERAL	DIA. AND LENGTH	DESCRIPTION - STANDARD COLORS ARE INTENTIONAL ORANGE AND WHITE - PALIN SOLID COLOR (SPECIFY WHEN ORDERING)	SUB BUOYANCY	NET WT.
B1130-AW B1130-AO B1130-BW B1130-BO		12" Sphere	A - 3/8" Dia. galvanized steel rod thru float with steel reinforcing washers on both ends. Large 3" dia. attachment hoop. B - 1/2" Sch. 40 PVC pipe thru float. Anchored in foam to prevent movement.	30 lbs.	3 lbs.
BARRIER FLOATS	Combine with buoys in barrier systems				
B1218-AW B1218-AD B1218-BW B1218-BO		12" Dia. 18" Length	A - 1/2" Dia. galvanized steel rod thru float. Galvanized eye nut swivels on both ends. B - 1/2" Sch. 40 PVC pipe thru float. Anchored in foam to prevent movement.	55 lbs.	8 lbs.
B1830-AW B1830-AO B1830-BW B1830-BO B1830-CW B1830-CO		18" Dia. 30" Length	A - 5/8" Dia. steel rod thru float. Galvanized swivel eye nuts on both ends. B - 1" Sch. 40 galvanized steel pipe thru float. Anchored in foam to prevent movement. C - 5/8" Dia. steel rods thru float and also across dia. in center. Eye nut swivels on both ends of float and lower center rod. Extended rod at center-top for pick up eye.	200 lbs.	19 lbs. 19 lbs. 23 lbs.
B2436-AW B2436-AO B2436-BW B2436-BO B2436-CW B2436-CO		24" Dia. 36" Length	A - 3/4" Dia. steel rod thru float. Galvanized eye nuts swivels on both ends. B - 1" Sch. 40 galvanized steel pipe thru float. Anchored in foam to prevent movement. C - 3/4" Dia. steel rods thru float and also across dia. at center. Eye nut swivels on both ends of float and lower center rod. Extender rod at center-top for pick up eye.	400 lbs.	46 lbs. 46 lbs. 53 lbs.
B2400-AW B2400-AO B2400-BW B2400-BO		24" Dia.	A - 1/2" Dia. galvanized steel rod thru float. with steel reinforcing washers both ends. Large 3" dia. hoop. Completely foam filled. B - 1" dia. galvanized steel pipe thru float. Anchored in foam to prevent movement.	240 lbs.	23 lbs.
B509-RW B509-BW B139-3 B139-2	ROPE FLOATS  FLOAT CLIP  ROPE 	2-1/2" Dia. 5" Length 3/8"	Plastic floats with 7/16" Dia. hole thru. Choice of red and white or blue and white. Use with rope floats. White polypropylene rope (use with rope floats). 600 Ft Reel		12 lbs. .01 lbs. 16 lbs.

NOTE: Last letter of Model number indicated color (W-White, O-Orange)

LARGE LIGHT-READY BUOYS AND CHANNEL MARKERS

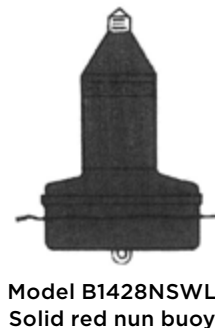
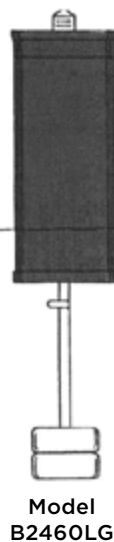
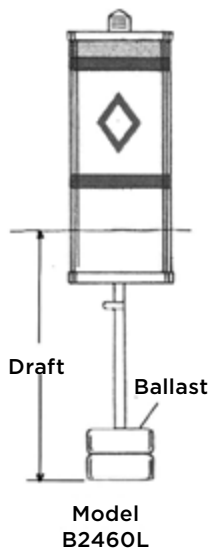
FEATURES

- Easy reconditioning of weather-worn buoys with excellent adhesion of restoration materials.
- Excellent stability and visibility
- Tough ABS exteriors
- Completely urethane foam filled
- Ultraviolet inhibited
- Photo electric cell operated

Model B2460L* B2460LG	Model B1428NSWL		Model B2460L* B2460LG	Model B2460L* B2460LG
24"	14"	Can diameter	14"	14"
60"	30"	Can height	30"	30"
-	28"	Float collar diameter	28"	28"
116"	54"	Overall height	96"	54"
48"	42"	Exp. w/light & batgteries	37"	42"
59"	10"	Draft	51"	7"
780 lbs.	310 lbs.	Submerged buoyancy	310 lbs.	280 lbs.
240 lbs.	117 lbs.	Net Weight	135 lbs.	115 lbs.
330 lbs.	135 lbs.	Shippine weight	145 lbs.	135 lbs.

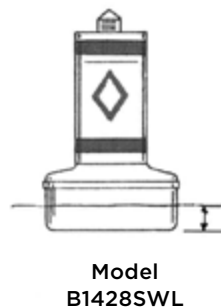
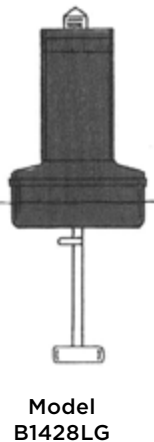
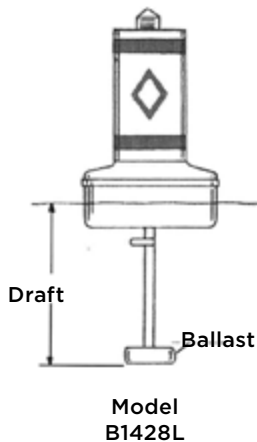
Lights not included. Order separately.

*Standard bands, symbols and messages included.



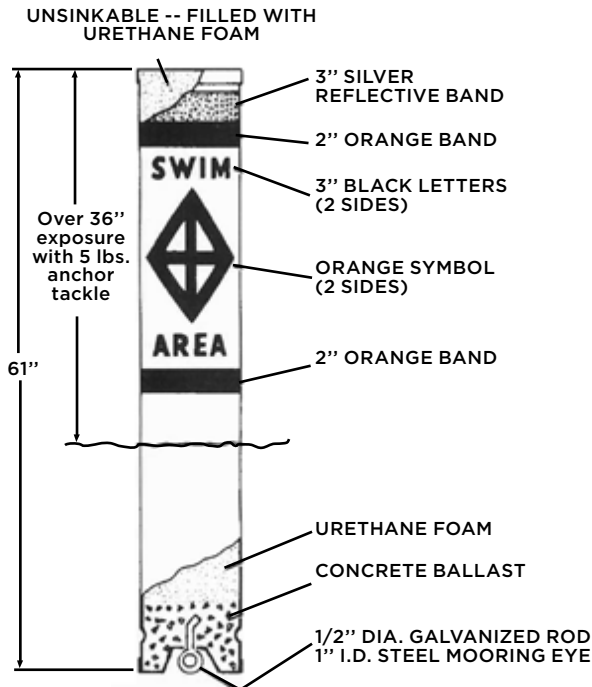
OPTIONS

- Internal radar reflectors
- Non-standard messages
- Agency and name identification
- Hi-intenisty bands and symbols
- Black and white or red and white centerline markers



Internal ballast types are ideal for still, shallow and deep water.

REGULATORY BUOYS • ABS TYPE - 9" DIA.



Approved and universally used by local, state and federal agencies to ensure water safety. Ideal for private applications.

MODEL B1147R

Includes choice of standard symbols and messages

FEATURES

- Easy reconditioning of weather-worn buoys with excellent adhesion of restoration materials.
- 9" diameter, white seamless, tough ABS plastic exterior.
- Will not rust, chip or peel. Ultraviolet inhibited.
- Completely urethane foam filled. Virtually unsinkable.
- 3" wide reflective band at top provides excellent night time visibility.
- Self-righting without tackle.
- Recessed cap allows buoy to stand upright.
- Heavy steel galvanized anchoring eye cast in an internal concrete ballast.
- Symbols and messages impregnated into buoy surface.

AVAILABLE OPTIONS

- Internal radar reflectors
- Pickup eye built into top
- Stainless steel anchoring eye for salt water applicators
- Agency or name identification
- Cone cap top
- Special non-standard messages
- 1/2" Pvc pipe thru for float line applications
- Lighted buoys

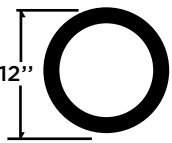
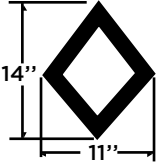
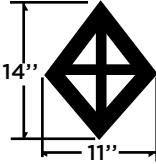
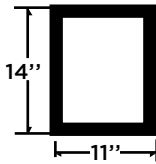
MODEL B1147R

Specify desired symbols and messages when ordering.

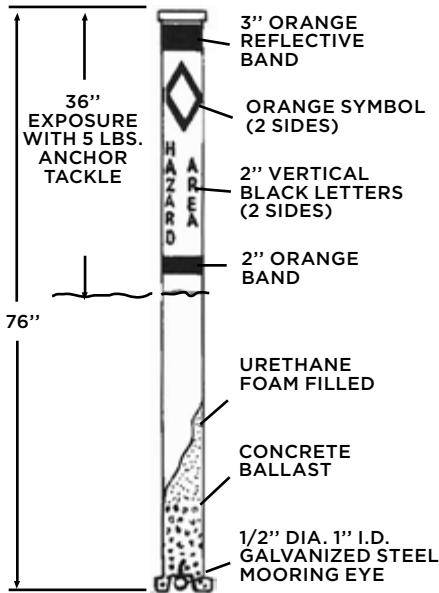
Submerged buoyancy 84 lbs.

Net weight 49 lbs.

Shipping weight 56 lbs.

STANDARD INLAND WATERWAY SYMBOLS AND MESSAGES	CONTROLLED AREA SYMBOL	HAZARD WARNING SYMBOL	RESTRICTED AREA SYMBOL	INFORMATION SYMBOL
	 <p>2" BAND WIDTH</p>	 <p>2" BAND WIDTH</p>	 <p>2" BAND WIDTH</p>	 <p>2" BAND WIDTH</p>
SPECIAL MESSAGES ARE AVAILABLE. REQUEST A QUOTATION	STANDARD MESSAGES SLOW 5 MPH SLOW NO WAKE SKI AREA NO SKI SLOW 10 MPH SPEED ZONE NO WAKE IDLE SPEED	STANDARD MESSAGES ROCK DANGER RAPIDS SHOAL STUMP SHALLOW AREA HAZARD AREA DANGER DAM	STANDARD MESSAGES SWIM AREA KEEP OUT NO BOATS BOATS KEEP OUT CLOSED AREA NO BOATING DANGER DAM	STANDARD MESSAGES REST ROOM 1 MILE STATE PARK AHEAD MARINA ENTRANCE FISH ATTRACTOR

SPAR BUOY • ABS TYPE - 5" DIA.



Lightweight, easy to handle - minimum anchor weight allows easy removal.

FEATURES

- Easy reconditioning of weather-worn buoys with excellent adhesion of restoration materials.
- 5" diameter, white, seamless, tough ABS plastic exterior. Ultraviolet inhibited, will not rust, chip or peel.
- Urethane foam filled. Virtually unsinkable.
- 3" wide reflective band at top provides excellent night visibility.
- Self-righting without tackle.
- Recessed cap allows buoy to stand upright.
- Heavy steel galvanized anchoring eye cast in an internal concrete ballast.
- In waterway making symbols with standard messages.

AVAILABLE OPTIONS:

- Internal radar reflectors
- Stainless steel anchoring eye for salt water applicators
- Special non-standard messages
- Agency or name identification

MODEL B576S

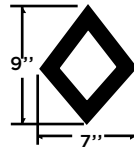
Standard symbols and messages included in price. Specify desired symbols and messages when ordering.

Submerged buoyancy 30 lbs.
Net weight 24 lbs.
Shipping weight 28 lbs.

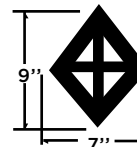
STANDARD SYMBOLS*



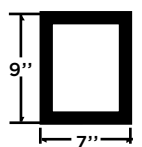
CONTROLLED AREA



HAZARD WARNING



RESTRICTED AREA



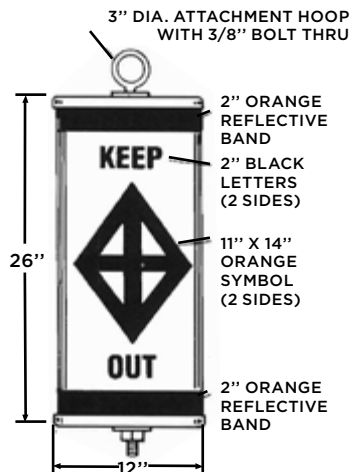
INFORMATION

*Sized for 5" Spar Buoys

CAN BUOY • ABS TYPE -- 12" DIA.

HANGING CAN BUOY SYSTEM

- Easy to recondition when necessary.
- Excellent adhesion of reconditioning materials.
- Excellent visibility.
- 12" diameter white ABS plastic exterior will not rust, chip or peel.
- Ultraviolet inhibited.
- Completely urethane foam filled.
- 2" orange reflective band at top and bottom provides excellent night time visibility.
- 3/8" galvanized attachment eyebolt.
- Choice of inland waterway marking symbols and standard messages. (2 sets).
- Special non-standard messages available.
- Cable and attaching hardware available.

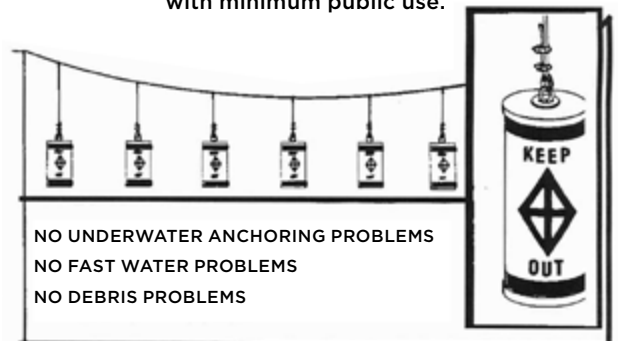


MODEL B1226

Net weight 12 lbs.
Shipping weight 18 lbs.

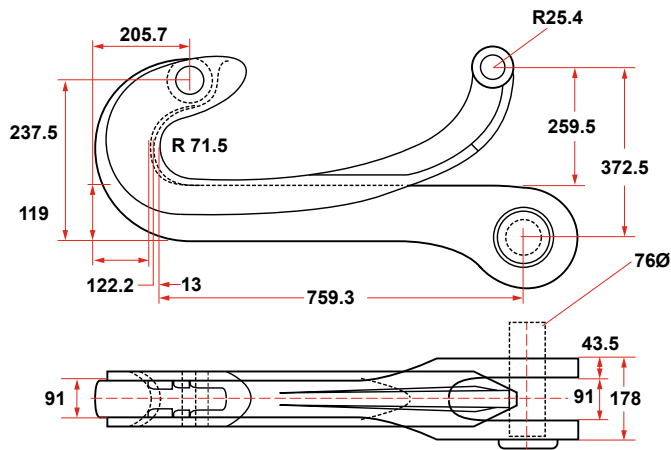
BUOYS ARE SUSPENDED FROM ABOVE

Excellent for short spans, swift water and areas with minimum public use.

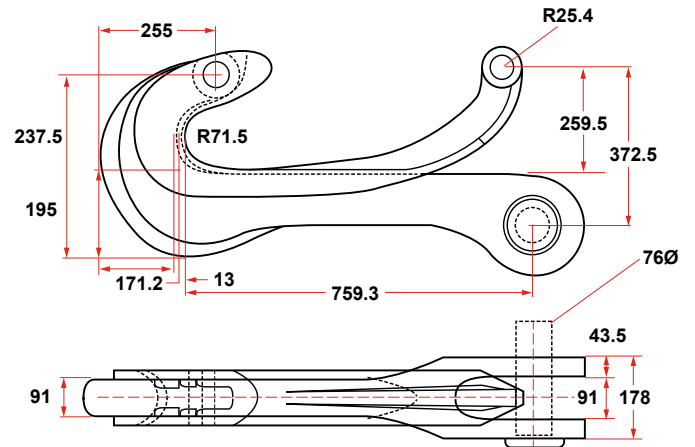


NOTE: The design and selection of a mooring system should be by a qualified professional engineer who is familiar with the specific application and local conditions. The illustrations shown are provided for informational purposes and are not intended to be suggested designs. Anchor assumes no responsibility for any mooring system based upon these illustrations.

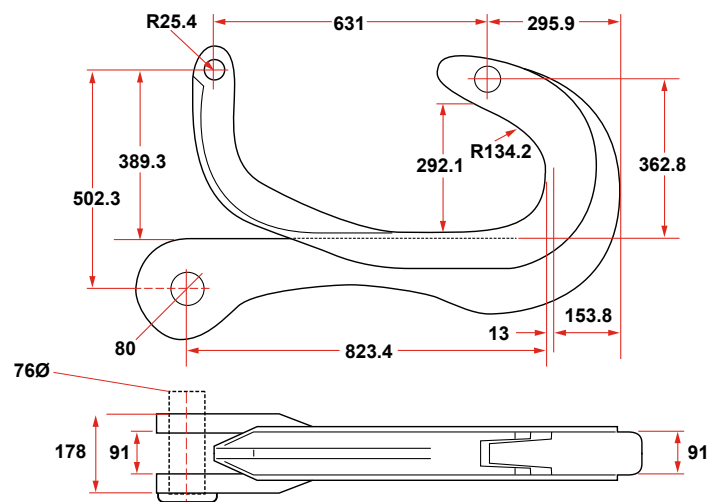
QUICK RELEASE BUOY HOOK WITH ABS CERTIFICATION



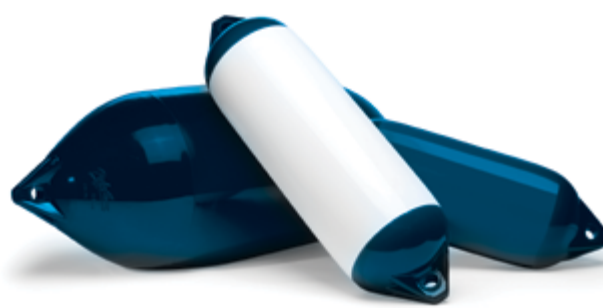
**300,000 LBS PROOF LOAD
WEIGHT: 357 LBS**



**400,000 LBS PROOF LOAD
WEIGHT: 410 LBS**



**400,000 LBS PROOF LOAD WIDEMOUTH
WEIGHT: 502 LBS**



A SERIES

THROUGHOUT THE WORLD, MORE PEOPLE RELY ON OUR A SERIES THAN ALL OTHER BUOYS.

The A Series is the product that launched the Polyform story. This all-purpose product, with the signature “blue ropehold,” has proven itself in the most adverse conditions. We’ve made a couple of changes to the legendary A-Series for 2001. There’s a new size – the A-7, with more buoyancy than any other buoy in its class, and a redesigned ropehold. The new ropehold has been incorporated into the A-5, A-6, and A-7 and features stronger ribs, a larger eye that accepts a standard shackle, and a new “dual valve” inflation-deflation system. Marking gear in heavy seas is no easy task. That’s why more fishermen use Polyform A Series than all other buoys combined. We’ve seen and heard the testimonials from our customers. You name the ocean, sea, or river, and the A Series has been there. Put your trust in Polyform’s most versatile and well-known product.

Model	Size (In) (Dia x Length)	Eye Dia. (in)	Circum. (in)	Volume (Gallons)	Pieces Per Carton
A-0	8 x 11.5	0.6	25.1	1.6	20
A-1	11 x 15	1	34.6	3.5	10
A-2	14.5 x 19.5	1.125	45.6	8.2	10
A-3	17 x 23	1.125	53.4	14.5	10
A-4	20.5 x 27	1.125	64.4	22.5	10
A-5	27 x 36	1.25	84.9	47.6	5
A-6	34 x 44	1.5	106.9	95.1	3
A-7	39 x 54	2	122.6	162	2

F SERIES

CLASSIC EUROPEAN TWIN-EYE STYLE FENDERS DESIGNED FOR THE MOST DEMANDING USE.

Polyform has been producing this fender for over 40 years and there is no comparison when it comes to quality, range of sizes and protection offered. The F Series fender has offered protection to the finest yachts and fishing vessels all over the world. Why?

Because the owners and the captains of these prestigious boats know that they can rely on Polyform’s F Series to offer the size, strength and dependability to protect their vessel from the rigors of the sea and weather. If you want the ultimate in protection for your boat, Polyform F Series is the only choice!

Model	Size (In) (Dia x Length)	Eye Dia. (in)	Circum. (in)	Volume (Gallons)	Pieces Per Carton
F-1	6 x 24	0.7	18.9	1.9	10
F-02	7.5 x 26	0.7	23.6	3.1	10
F-2	8.2 x 25	0.9	25.8	4.3	10
F-3	8.2 x 30	0.9	25.8	5.4	10
F-4	8.5 x 40.5	0.9	26.7	7.7	5
F-5	11 x 30	1	34.6	7.3	5
F-6	11 x 42	1	34.6	15.1	5
F-7	15 x 41	1	47.1	18.8	5
F-8	15 x 58	1	47.1	39.6	4
F-10	18 x 50	1	56.6	33.8	2
F-11	21.2 x 57.5	1.1	66.6	63.7	3
F-13	29 x 76.5	1.2	91.1	158.6	2