

# **BRIDON** | Flotation Equipment



## Chain Through Buoys [CTB]

Bridon Chain Through Buoys are widely used in SPM systems for greater security and to reduce tangling. These buoys are resistant to high impact shock loads and are virtually unsinkable.

Manufactured with a central steel tube, to allow the chain to pass through, they are fitted with either locking plates or single/double locking pins to retain the chain. Auxiliary lifting eyes are fitted at each end of the buoy to aid handling. The external steelwork is bitumastic coated for protection.

The type of end fittings required, should be specified by the customer at the enquiry stage.



**Bridon Chain Through Buoys**

Buoy Size	Nett Buoyancy	Weight	Body Length	O/A Length	Body Dia.	Tube Size
	lb	kg	m	m	m	mm
CTB20	2000	569	1.68	2.13	1.14	330
CTB30	3000	612	1.68	2.13	1.30	330
CTB40	4000	675	1.90	2.36	1.37	330
CTB50	5000	780	1.98	2.44	1.49	381
CTB60	6000	858	2.13	2.59	1.55	381
CTB80	8000	1165	2.91	3.35	1.56	432
CTB90	9000	1163	2.61	3.05	1.70	432
CTB100	10000	1397	2.61	3.05	1.82	483
CTB120	12000	1564	3.22	3.66	1.78	483

## End Terminations



## Cylindrical and Spherical Buoys [CB and SB]

Bridon Cylindrical and Spherical Buoys are used extensively for mooring, marker and pick-up applications. They have sufficient buoyancy to support heavy items of chain in SPM systems, messenger lines and hoses. The central steel tension member provides a minimum lifting force 2½ times the nett buoyancy of the buoy and comes with either galvanised shackle blocks or swivel ends.



**Bridon Cylindrical Buoys**

Buoy Size	Nett Buoyancy	Weight	O/A Length	Body Length	Body Dia.
	lb	kg	m	m	m
CB5	500	74	1.38	1.16	0.63
CB10	1000	95	1.43	1.21	0.81
CB15	1500	119	1.46	1.24	0.96
CB20	2000	201	1.48	1.22	1.10
CB30	3000	260	1.64	1.38	1.26
CB40	4000	308	2.10	1.84	1.26
CB50	5000	382	2.01	1.75	1.44
CB60	6000	439	2.03	1.77	1.56
CB80	8000	560	2.29	1.97	1.70
CB100	10000	700	2.47	2.14	1.83
CB120	12000	805	2.77	2.45	1.86

**Bridon Spherical Buoys**

Buoy Size	Nett Buoyancy	Weight	O/A Length	Body Dia.
	lb	kg	m	m
SB5	500	82	1.04	0.89
SB10	1000	107	1.22	1.08
SB15	1500	139	1.38	1.22
SB20	2000	221	1.46	1.33
SB25	2500	238	1.54	1.39
SB30	3000	269	1.67	1.49
SB40	4000	307	1.80	1.64
SB50	5000	444	1.95	1.79
SB60	6000	484	2.05	1.86

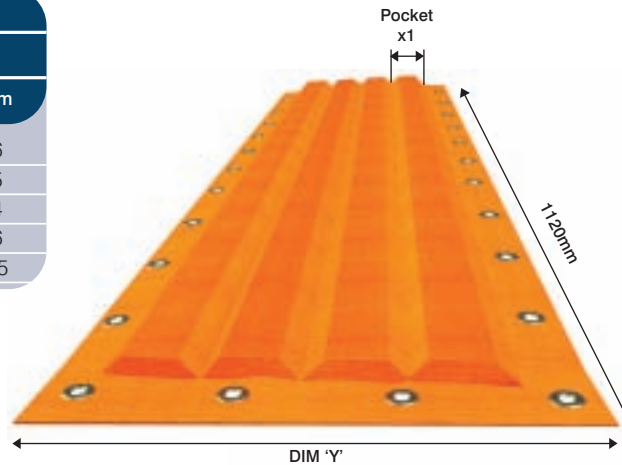
**Pick Up Buoys**

Buoy Size	Nett Buoyancy	Weight	Body Length	O/A Length	Body Dia.
	lb	kg	m	m	m
SB2	200	16	0.61	0.81	0.61
CB2	200	16	0.55	0.81	0.52

## Rope and Hose Floats

Bridon Rope and Hose Floats can be supplied in tubular or lace-up design, with internal diameter, buoyancy and overall length to suit specific customer requirements.

Tubular Floats				
Model	I/D mm	Length/Buoyancy kg		
		1.0m	1.5m	3.0m
SF13	127	22	33	66
SF15	152	25	37.5	75
SF18	178	28	42	84
SF21	203	32	48	96
SF24	228	35	52.5	105



Lace-on Floats						
No. of Pockets	Rope Size & Type	Nett Buoyancy kg		Approx Dry Weight	DIM 'Y'	Hose Size
		Per Float	Per Foot	kg	mm	inch
4	10-13 Single Leg	8.2	2.3	1.2	457	3
5	14-16 Single Leg	9.7	2.7	1.5	559	4
6	17-19 Single Leg	11.8	3.2	1.6	655	5
7	20-22 Single Leg	13.8	3.6	1.9	752	6
8	10-13 Grommet	15.9	4.3	2.0	848	7
9	14-16 Grommet	17.9	4.9	2.3	945	8
10	17-19 Grommet	19.9	5.4	2.4	1041	-
11	20-22 Grommet	21.8	5.9	2.7	1138	-
12	17-19 Grommet Splice	23.8	6.6	2.9	1234	-
	20-22 Grommet Splice					

## Anchor Pendant Buoys [APB]

Bridon Anchor Pendant Buoys or Suitcase Buoys are virtually unsinkable and are designed to be easily located and recovered by the anchor handling vessel for safe storage onboard.

The central steel tensile member incorporates an anchor handling cross or cruciform at the top, with a padeye at the bottom. Radar reflectors and high visibility reflector bands



are incorporated within the elastomer covered body of the buoy. Navigational lights can be fitted as an optional extra.

Bridon APB's are designed to withstand the harsh rigours of operational handling.

Anchor Pendant Buoys						
Buoy Size	Nett Buoyancy	Weight	Overall Height	Body Height	Body Width	Body Breadth
	Tonnes	kg	m	m	m	m
APB4T	4	815	2.60	2.01	2.01	1.40
APB5T	5	902	2.79	2.21	2.21	1.40
APB6T	6	1022	2.96	2.37	2.37	1.40
APB7T	7	1171	3.07	2.48	2.48	1.49
APB8T	8	1270	3.12	2.53	2.53	1.60
APB9T	9	1368	3.37	2.78	2.48	1.64
ARB10T	10	1449	3.52	2.93	2.48	1.72
APB11T	11	1548	3.63	3.04	2.48	1.80
APB12T	12	1647	3.78	3.19	2.48	1.87
APS15T	15	1869	3.83	3.24	2.78	2.00
APB17.5T	17.5	2073	3.85	3.26	2.93	2.17
APB20T	20	2263	3.98	3.39	3.09	2.25

## Marine Fenders [MF]

Bridon Marine Fenders are used world-wide and designed to cope with the high energy forces generated during berthing operations for all vessels and for ship to ship transfer at sea. The fenders are capable of compression in excess of the 60% design deflection.

The fender is resilient, will not absorb water and sink and is virtually maintenance free as it does not require inflation or constant pressure monitoring. The central tension member is fitted with end mooring flange and shackle attachments

to enable the fenders to be easily and swiftly deployed or moved from berth to berth.

The standard fender design is ideal for cruise or military ships hulls, where surface marking from tyres and chains is to be avoided.

A comprehensive range of standard fender sizes is available, however the length, diameter and thickness of the outer skin can be tailored to suit a client's specific application.

Marine Fenders								
Type MF					50%	50%	60%	60%
Fender Size	Actual Body Length	Length Overall	Actual Diameter	Weight	Energy Absorption	Reaction Force	Energy Absorption	Reaction Force
	m	m	m	kg	tonne m	tonnes	tonne m	tonnes
3x5	1.5	1.82	0.9	140	3.03	14.58	Not Recommended	
3x6	1.8	2.12	0.9	170	3.49	16.8	Not Recommended	
4x6	1.9	2.22	1.24	498	6.7	24.2	9.81	39.33
4x8	2.56	2.88	1.24	565	9.1	33.2	13.3	44.8
4x10	3.17	3.49	1.24	649	11.5	41.9	16.8	56.5
4x12	3.78	4.1	1.24	780	13.9	50.5	20.2	68.3
5x8	2.56	2.88	1.55	656	13.6	39.7	20	53.9
5x10	3.17	3.49	1.55	766	17.4	50.8	25.4	68.5
5x12	3.78	4.1	1.55	922	21.1	61.6	30.8	83.2
6x8	2.56	2.88	1.86	853	19.1	46.3	27.8	62.6
6x10	3.17	3.49	1.86	1004	24.5	59.4	35.6	80.2
6x12	3.78	4.1	1.86	1200	29.9	72.5	43.5	97.8
8x10	3.23	3.65	2.47	1598	41.7	75.8	60.69	102.3
8x12	3.84	4.1	2.47	1885	51.2	93	74.5	125.8
8x14	4.45	4.87	2.47	2119	61	111	89	149
8x16	5.06	5.48	2.47	2356	70	128	103	173
8x18	5.67	6.09	2.47	2639	80	146	117	196
10x16	5.06	5.48	3.09	3197	108	157	157	211
10x18	5.67	6.09	3.09	3588	122	178	178	241
10x20	6.28	6.69	3.09	3935	137	200	200	270
10x22	6.89	7.3	3.09	4281	152	222	222	300
10x28	8.72	9.13	3.09	5398	197	287	287	388
12x20	6.28	6.69	3.69	4986	194	236	283	318
12x22	6.89	7.3	3.69	5403	216	262	314	354
12x26	8.11	8.52	3.69	6394	259	315	377	424
12x28	8.72	9.13	3.69	6853	280	340	408	459

## Bridon Flotation Equipment

Bridon is, an approved BS EN ISO 9001 Company, are world leaders in rope design, pioneering the use of new specialist synthetic fibres and rope constructions.

Our Coatbridge factory in Scotland, manufactures an extensive range of flotation and fendering products together with the manufacture of fibre ropes. This combination further strengthens our engineering ability for innovative design and development of cost effective solutions, to meet the diverse demands of the marine & offshore industries.

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