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LIGE MACHINERY

QINGDAO LIGE MACHINERY CO.,LTD.

Marine and Offshore Supplies

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Welcome to LGM

Qingdao Lige Machinery is committed to manufactures and solutions of maritime products.

Our expertise range include Anchor Chain, Anchor, Deck Fitting, Mooring Bollard and Rigging Hardware.

Also we provide design and production service upon special request, certificates of third party are able to be provided, such as ABS, BV, CCS, DNV, KR, NK, Rina, RS, etc.

Depending on over 10 years experience serving in maritime industry, from more than 30 nations customers have been successfully working with us.

Our customers rely on products to perform as expected, and it is our experience, technical expertise and integrity which provide the assurance.

Should you require additional information or require support for a solution, our maritime engineers are available around the world to satisfy your requirements.

“Committed to Quality of Service.”

Quoted Mr. Campbell, a friend of LGM.



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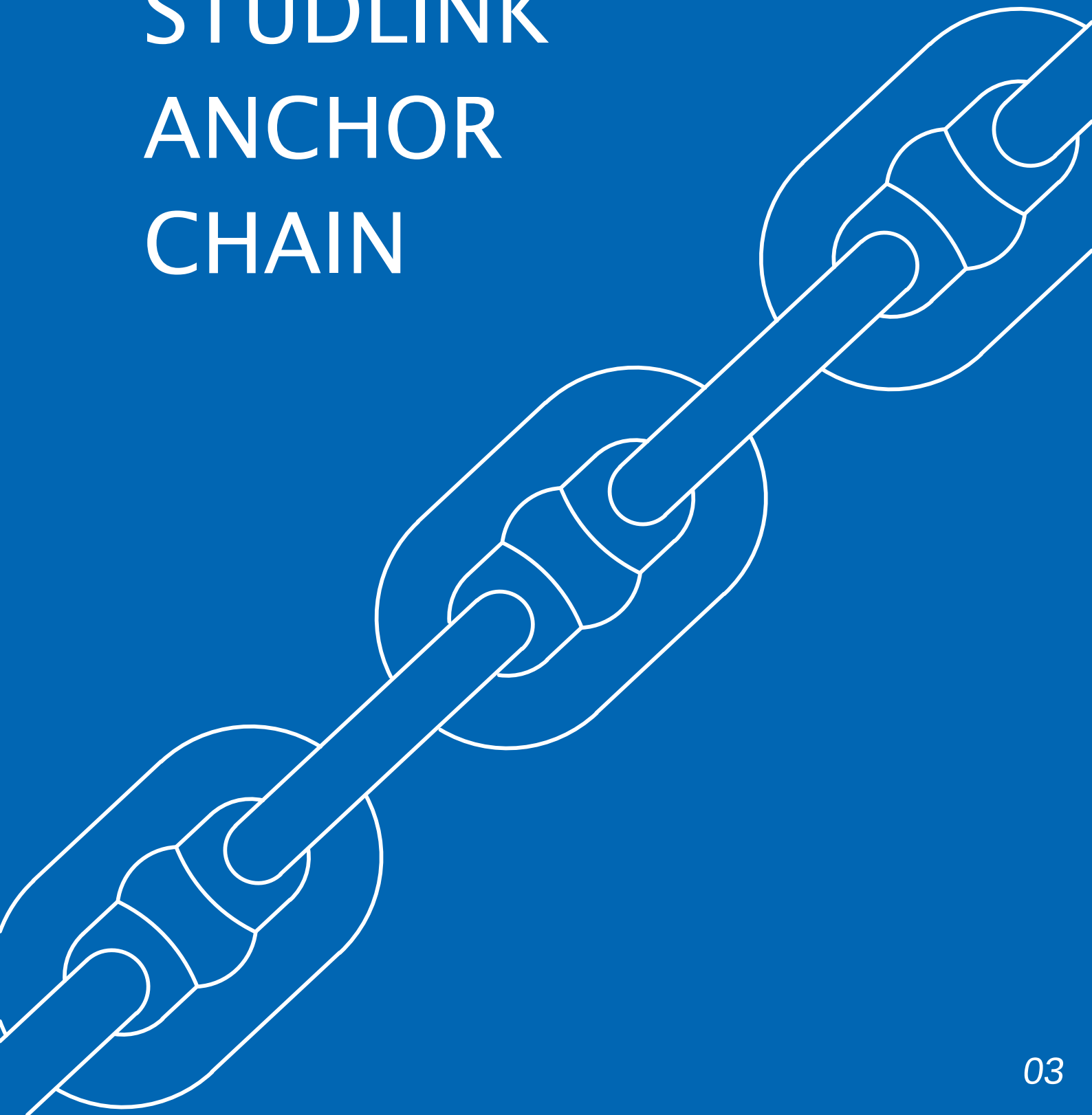
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STUDLINK ANCHOR CHAIN





Strength and Weight For Studlink Anchor Chain

Chain Diameter (mm)	Proof Load (kn)		Breaking Load (kn)		Weight kg/27.5m
	Grade U2	Grade U3	Grade U2	Grade U3	
16	107	150	150	216	158
17.5	127	179	179	256	194
19	150	211	211	301	236
20.5	175	244	244	349	269
22	200	280	280	401	322
24	237	332	332	476	370
26	278	389	389	556	431
28	321	449	449	642	496
30	368	514	514	735	564
32	417	583	583	833	635
34	468	655	655	937	712
36	523	732	732	1050	800
38	581	812	812	1160	887
40	640	896	896	1280	1032
42	703	981	981	1400	1084
44	769	1080	1080	1540	1197
46	837	1170	1170	1680	1310
48	908	1270	1270	1810	1438
50	981	1370	1370	1960	1546
52	1060	1480	1480	2110	1661
54	1140	1590	1590	2270	1791
56	1220	1710	1710	2430	1926
58	1290	1810	1810	2600	2086
60	1380	1940	1940	2770	2249
62	1470	2060	2060	2940	2361
64	1560	2190	2190	3130	2516
66	1660	2310	2310	3300	2676
68	1750	2450	2450	3500	2885
70	1840	2580	2580	3690	3010
73	1990	2790	2790	3990	3274
76	2150	3010	3010	4300	3548
78	2260	3160	3160	4500	3737
81	2410	3380	3380	4820	4030
84	2580	3610	3610	5160	4334
87	2750	3850	3850	5500	4650
90	2920	4090	4090	5840	4976
92	3040	4260	4260	6080	5199
95	3230	4510	4510	6440	5544
97	3340	4680	4680	6690	5780
100	3530	4940	4940	7060	6143
102	3660	5120	5120	7320	6398
105	3850	5390	5390	7700	6773
107	3980	5570	5570	7960	7033
111	4250	5940	5940	8480	7569
114	4440	6230	6230	8890	7983
117	4650	6510	6510	9300	8409
120	4850	6810	6810	9720	8863
122	5000	7000	7000	9990	9143
124	5140	7200	7200	10280	9598
127	5350	7490	7490	10710	9908
130	5570	7800	7800	11140	10382

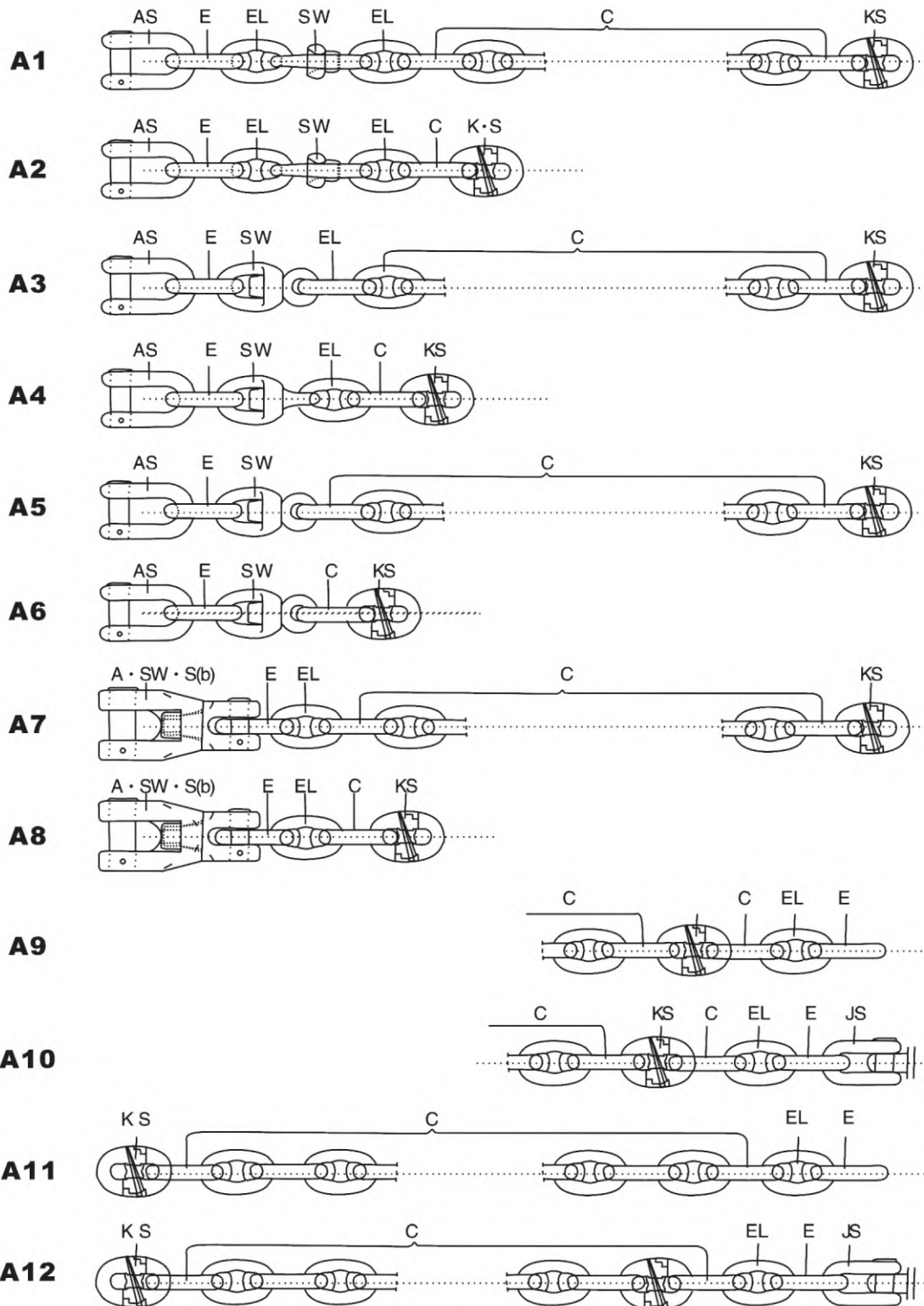


Assembling Recommendations for Chain and Anchor

Stud Link Chain Cables				Anchors for Ship		
Diameter (mm)			Total Length (Mtr)	Number	Weight (kg)	
Grade U1	Grade U2	Grade U3			Anchor	H.H.P.Anchor
14	12.5	-	220	2	180	135
16	14	-	220	2	240	180
17.5	16	-	247.5	2	300	225
19	17.5	-	247.5	2	360	270
20.5	17.5	-	275	2	420	315
22	19	-	275	2	480	360
24	20.5	-	302.5	2	570	430
26	22	20.5	302.5	3	660	495
28	24	22	330	3	780	585
30	26	24	357.5	3	900	675
32	28	24	357.5	3	1020	765
34	30	26	385	3	1140	855
36	32	28	385	3	1290	970
38	34	30	412.5	3	1440	1080
40	34	30	412.5	3	1590	1195
42	36	32	440	3	1740	1305
44	38	34	440	3	1920	1440
46	40	36	440	3	2100	1575
48	42	36	467.5	3	2280	1710
50	44	38	467.5	3	2460	1845
52	46	40	467.5	3	2640	1980
54	48	42	495	3	2850	2140
56	50	44	495	3	3060	2295
58	50	46	495	3	3300	2475
60	52	46	522.5	3	3540	2655
62	54	48	522.5	3	3780	2835
64	56	50	522.5	3	4050	3040
66	58	50	550	3	4320	3240
68	60	52	550	3	4590	3445
70	62	54	550	3	4890	3670
73	64	56	577.5	3	5250	3940
76	66	58	577.5	3	561	4210
78	68	60	577.5	3	6000	4500
81	70	62	605	3	6450	4840
84	73	64	605	3	6900	5175
87	76	66	605	3	7350	5515
90	78	68	632.5	3	7800	5850
92	81	70	632.5	3	8300	6225
95	84	73	632.5	3	8700	6525
97	84	76	660	3	9300	6975
100	87	78	660	3	9900	7425
102	90	78	660	3	10500	7875
105	92	81	687.5	3	11100	8325
107	95	84	687.5	3	11700	8775
111	97	87	687.5	3	12300	9225
114	100	87	715	3	12900	9675
117	102	90	715	3	13500	10125
120	105	92	715	3	14100	10575
122	107	95	742.5	3	14700	11025
124	111	97	742.5	3	15400	11550
127	111	97	742.5	3	16100	12075
130	114	100	742.5	3	16900	12675
132	117	102	742.5	3	17800	13350
137	120	107	742.5	3	18800	14100
-	124	111	770	3	20000	15000
-	127	114	770	3	21500	16125
-	132	117	770	3	23000	17250

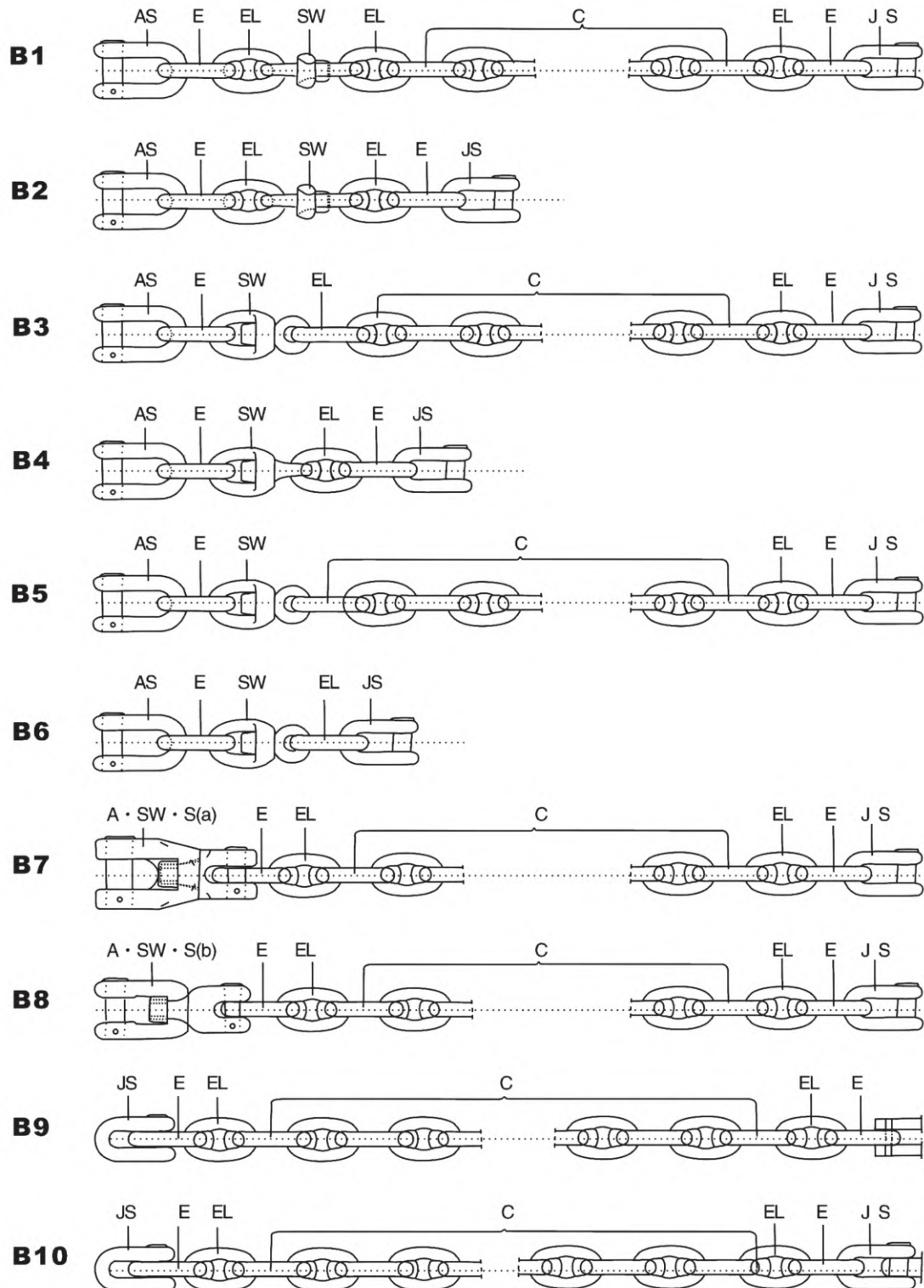
Joining Forms (A)

Arrangement Forms of anchor chain and fittings(KS)

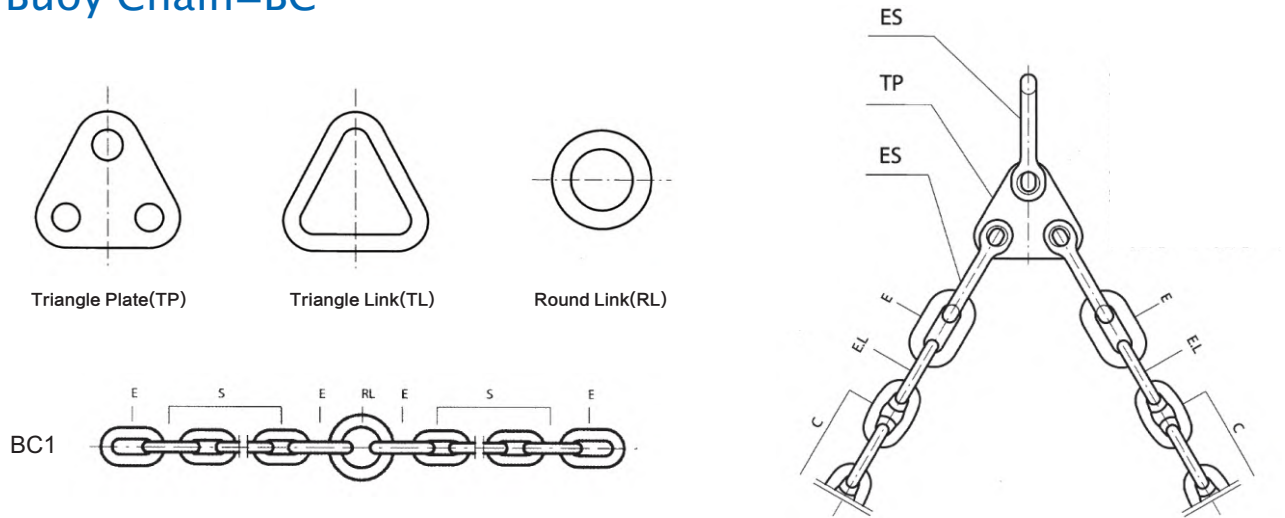


Joining Forms (B)

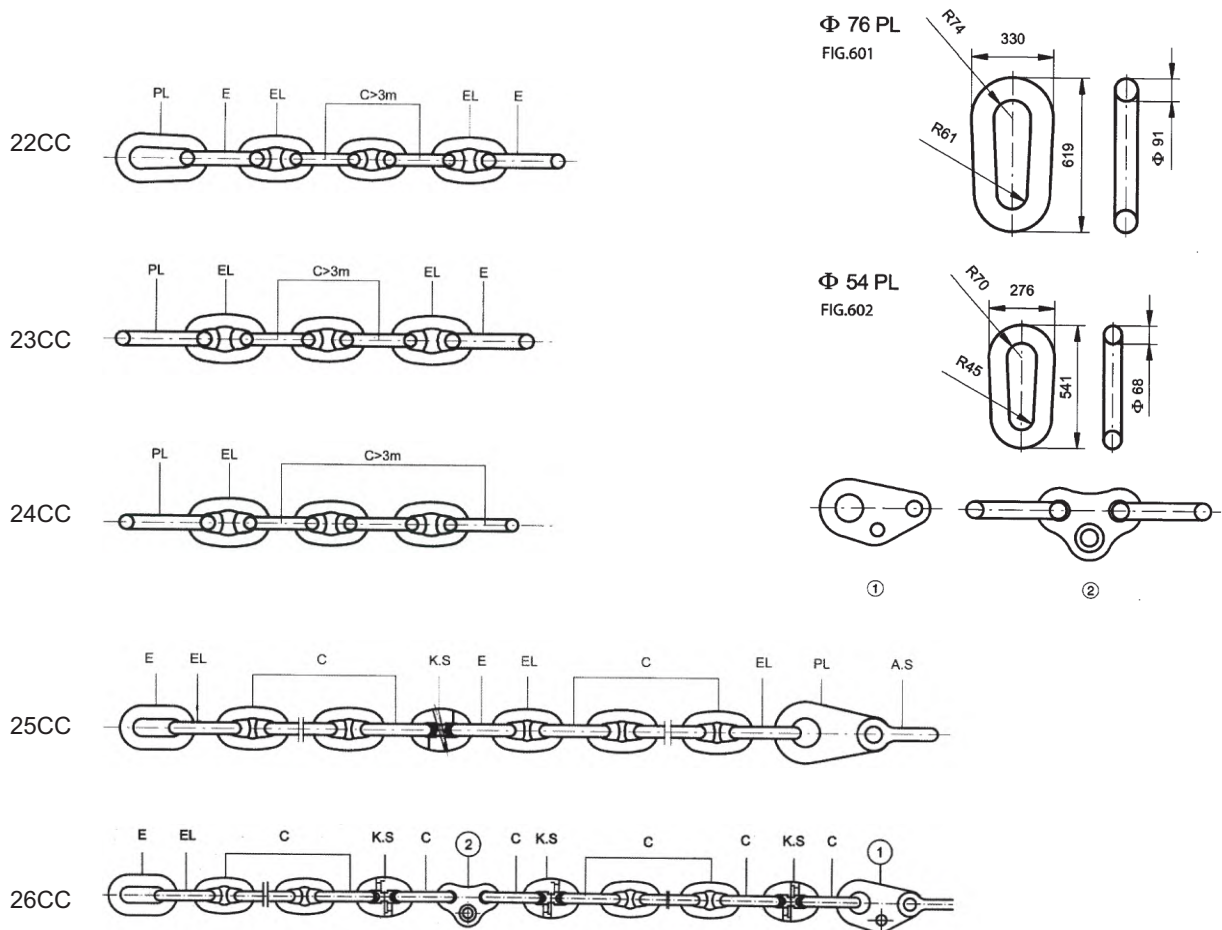
Arrangement Forms of anchor chain and fittings(JS)



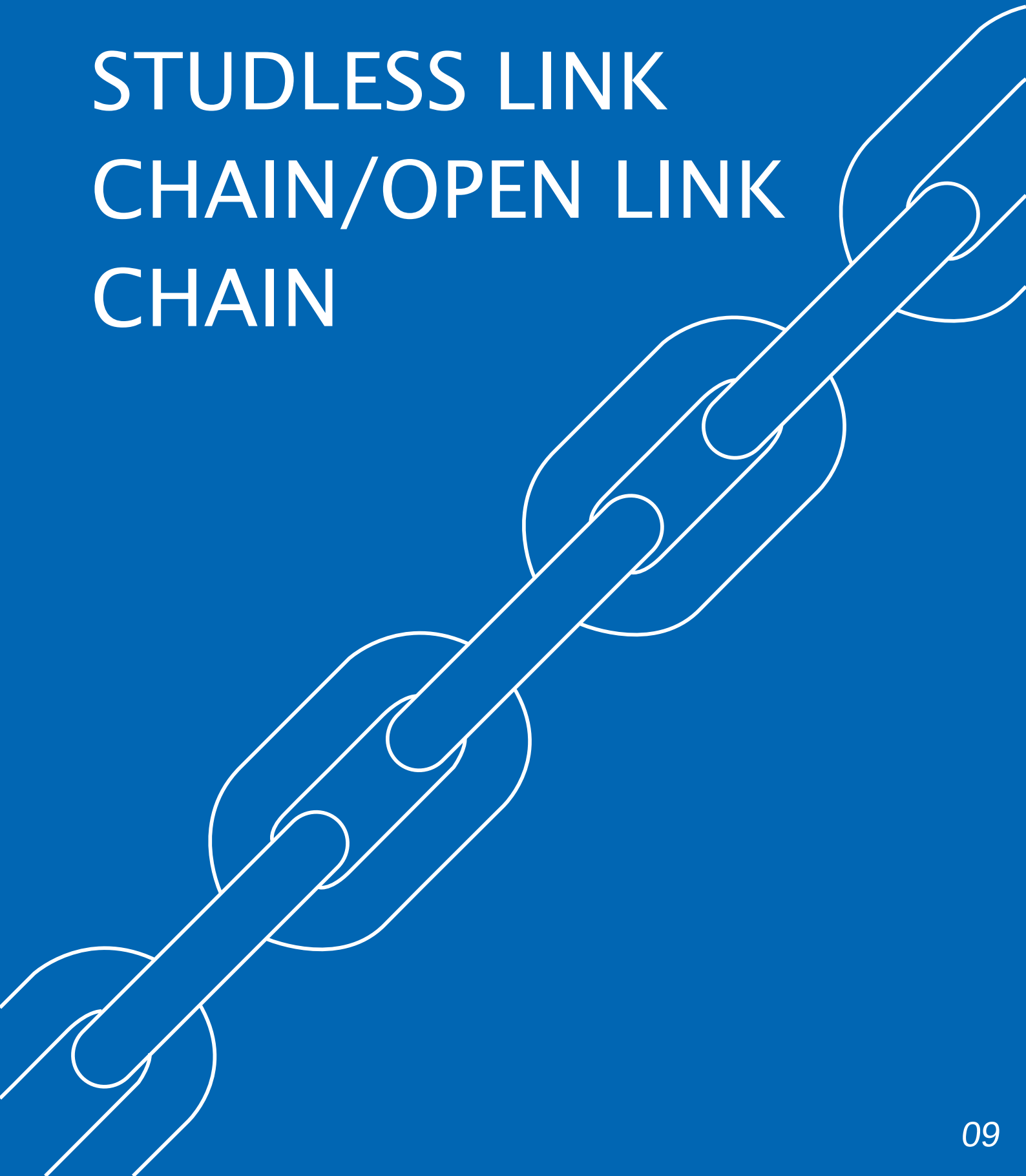
Buoy Chain=BC



Chafe Chain=CC

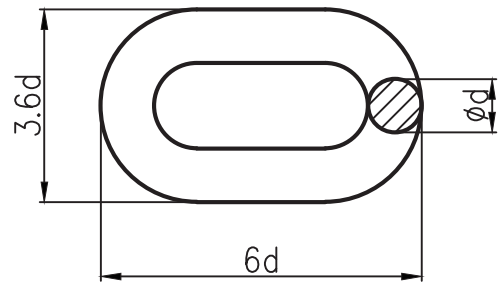


STUDLESS LINK CHAIN/OPEN LINK CHAIN



Studless Link Chain /Open link Chain

Standard of chain link
(6d x 3.6d), GB/T549-2008

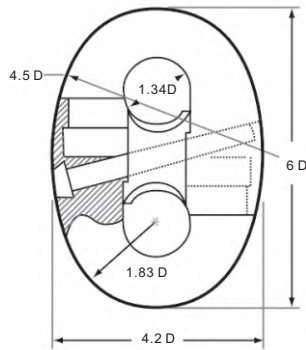


Chain Diameter (mm)	Proof Load (KN)			Breaking load(KN)			Weight (KG/1Mtr)
	Grade U1	Grade U2	Grade U3	Grade U1	Grade U2	Grade U3	
12.5	28.8	41.2	56.4	57.8	82.6	112.8	3.13
14	34.8	51.0	70.8	69.9	101.9	141.5	3.92
16	47.1	66.2	92.4	94.7	132.3	184.8	5.12
17.5-18	56.4	78.9	110.6	113.3	157.8	221.1	6.5
19	66.4	93.6	130.3	133.6	187.2	260.6	8
20.5	77.3	108.6	151.7	155.5	217.3	303.4	8.37
22	89.1	125.4	174.4	179.1	250.9	349.4	9.67
24	106.0	149.9	207.9	213.3	298.9	415.8	11.49
25	111.0	159.0	220.0	222.0	318.0	440.0	12.5
26	124.4	175.4	244.0	250.1	350.8	488.0	13.52
28	144.3	203.8	283.0	290.1	406.7	566.0	15.68
30	165.6	234.2	324.9	333.0	467.5	649.8	18
32	188.4	265.6	369.6	378.9	531.2	739.3	20.48
34	212.7	299.9	417.3	427.7	599.8	834.6	23.13
36	238.5	336.1	467.8	479.5	672.3	935.7	25.92
38	265.7	374.4	521.3	534.3	748.7	1042.5	28.88
40	294.4	414.5	577.6	592.0	829.1	1155.2	32
42	324.6	457.7	636.8	652.6	915.3	1273.6	35.28
44	356.2	502.7	698.9	716.3	999.6	1398.0	38.72
46	389.3	548.8	763.9	782.9	1097.6	1527.8	42.32
48	423.9	597.8	831.7	852.5	1195.6	1663.5	46.08
50	460.0	648.8	902.5	926.1	1239.6	1805.0	50
52	497.5	697.6	976.1	1000.5	1395.3	1952.3	54.08
54	536.5	752.3	1052.7	1078.9	1504.7	2105.4	58.32
56	577.0	809.1	1132.1	1160.3	1618.2	2264.2	62.72
58	619.0	867.9	1214.4	1244.7	1735.3	2428.8	67.28
60	662.4	928.8	1299.6	1332.0	1857.6	2599.2	72
62	707.3	991.8	1387.7	1422.3	1983.5	2775.4	76.88
64	753.7	1056.8	1478.7	1515.5	2113.5	2957.3	81.92
66	801.5	1123.9	1572.5	1611.7	2247.7	3145.0	87.12
68	850.8	1193.0	1669.3	1710.9	2386.0	3338.5	92.48
70	901.6	1264.2	1768.9	1813.0	2528.4	3537.8	98

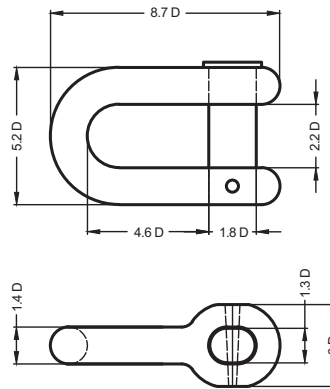
CHAIN ACCESSORIES



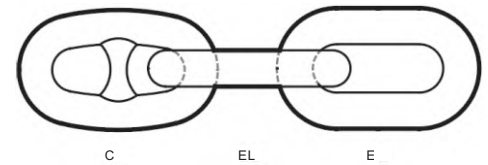
Kenter Shackle



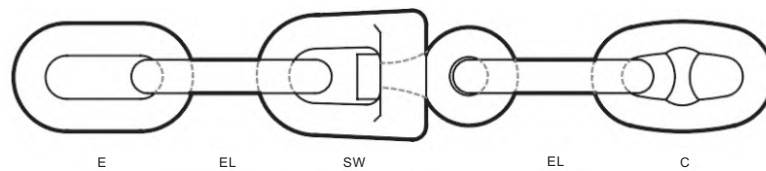
Anchor Shackle



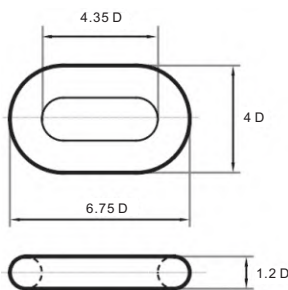
3 Links Adaptor



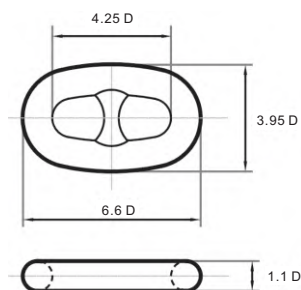
Swivel Piece(Forerunner)



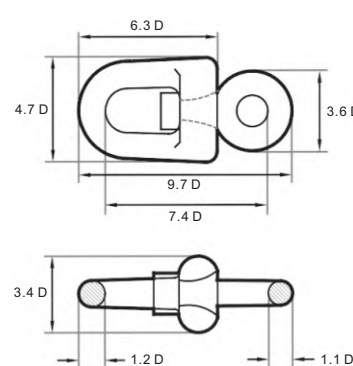
End link



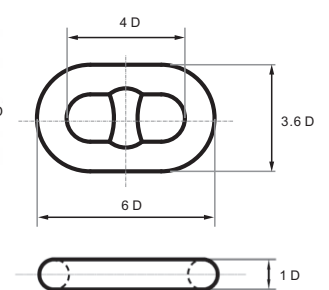
Enlarged Link



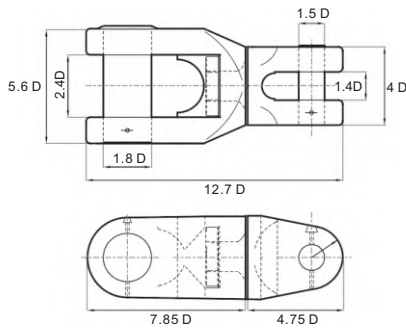
Swivel



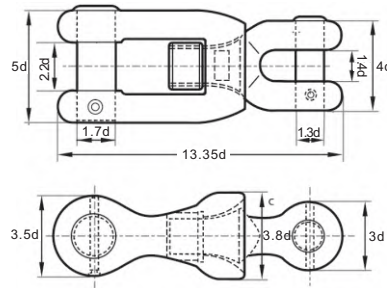
Common Link



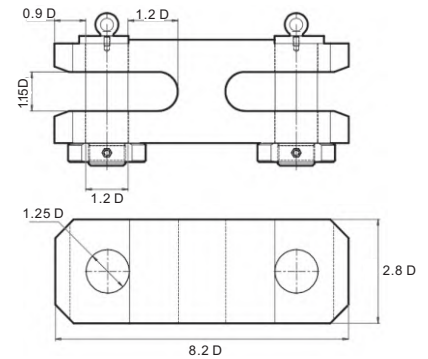
Swivel Shackle A



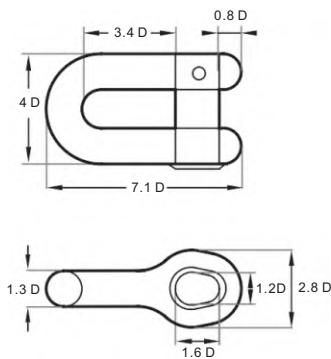
Swivel Shackle B



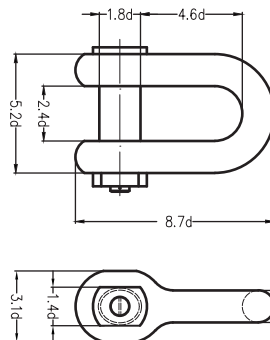
H-link Shackle



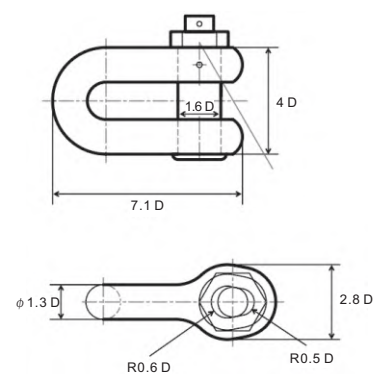
Joining Shackle Type D



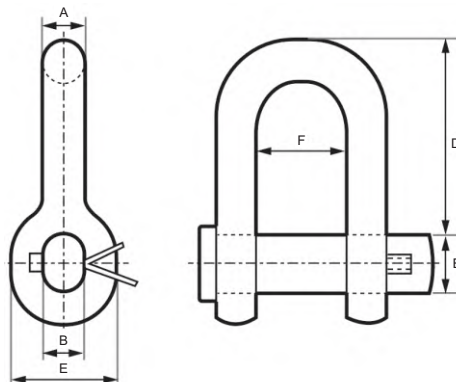
LTM Anchor Shackle



LTM Joining Shackle

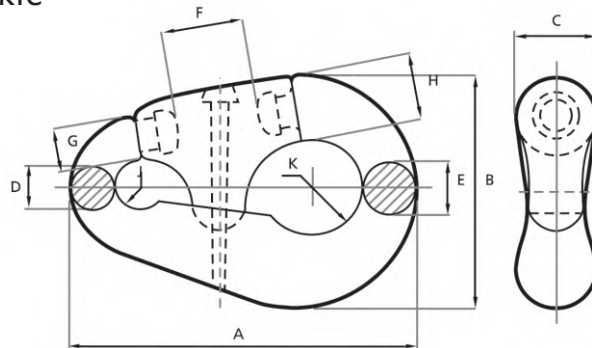


Forelock Joining Shackle



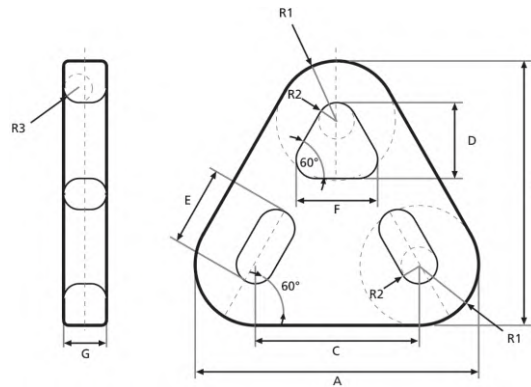
Chain dia. mm	A mm	B mm	C mm	D mm	E mm	F mm
19	26	34	26	114	42	46
22	32	39	32	132	48	52
26	38	46	38	156	56	61
32	46	57	46	192	69	76
34	48	62	48	204	74	80
38	54	69	54	228	85	92
42	59	75	59	252	92	100

Pear shaped end shackle



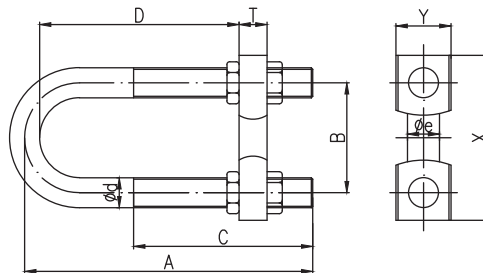
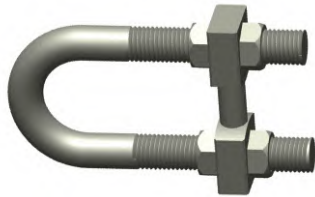
No	Chain Size mm	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	J mm	K mm	Weight Kgs	Proof-load Kgs	Break-load Kgs
2	19-24	199	136	39	26	33	58	26	39	17	30	3,6	34 000	48 500
3	25-30	245	172	47	31	40	66	37	45	19	35	6,5	53 000	75 700
4	32-40	302	206	63	41	49	83	42x47	58	26	43	13,0	91 367	130 524
5	42-51	381	263	77	52	68	100	58	74	32	52	27,0	145 513	207 512
6	52-60	462	315	94	62	81	113	64	90	38	65	49,0	197 825	282 461
7	62-79	568	379	121	81	97	153	84	116	48	76	95,0	329 674	469 987
8	81-92	658	422	139	96	135	155	112	135	54	79	150,0	434 399	619 987
9	94-95	700	440	148	98	130	159	124x114	148x134	57	89	236,0	459 892	656 697
10	97-102	900	580	194	122	168	194	130x148	181	73	108	386,0	522 095	746 432

Triplate



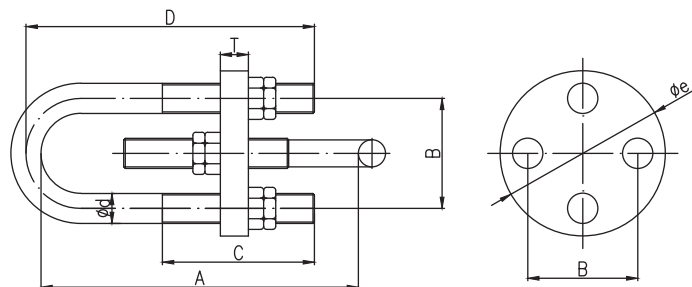
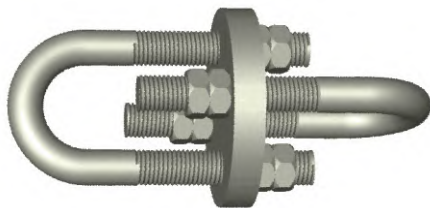
WLL Tonnes	BL Tonnes	A mm	B mm	C mm	D mm	E mm	F mm	G mm	R1 mm	R2 mm	R3 mm	Weight Kgs
9,5	57	250	230	148	70	75	75	36	51	19	14	
12	72	287	264	175	80	85	87	42	56	20	16	16,5
17	102	355	326	215	95	105	102	50	70	25	20	33,5
35	210	507	469	287	130	143	140	70	110	34	25	83,5
55	330	600	553	350	167	167	180	90	125	40	32	123
85	510	690	639	399	185	195	199	115	145	46	40	191
120	720	825	762	475	219	230	237	125	175	55	45	357
200	1200	1089	1006	627	270	300	289	165	231	73	59	830

Chain Tensioner Single type



Size	A	B	C	D	T	X	Y	d	e
M30	290	110	170-220	172	28	165	55	32	28
M36	33	125	195-260	198	32	195	65	36	32
M39	365	140	215-280	220	36	215	73	40	36
M42	400	150	240-310	237	40	230	80	42	40
M45	430	160	255-335	257	40	250	90	46	40
M48	455	170	275-355	271	45	265	95	48	45
M52	485	185	290-375	292	45	385	100	52	45
M56	52	195	310-410	312	50	300	105	56	50
M60	560	210	335-440	335	55	325	115	60	55
M64	600	225	360-470	358	60	345	120	64	60
M68	640	245	380-500	385	60	365	120	70	60

Chain tensioner Double type



Size	A	B	C	D	T	d	e
M20	230-305	70	140	200	25	20	120
M22	250-340	78	140	220	25	22	125
M24	270-350	84	160	240	30	24	150
M27	310-420	95	180	270	30	27	180
M30	345-465	106	200	300	35	30	200
M36	420-560	126	220	360	40	36	210
M42	460-650	148	315	420	50	42	250
M48	530-755	168	315	480	55	48	280
M58	450-550	196	230	390	60	56	330
M60	680-950	210	400	600	65	60	360
M64	730-1010	224	420	640	70	64	380

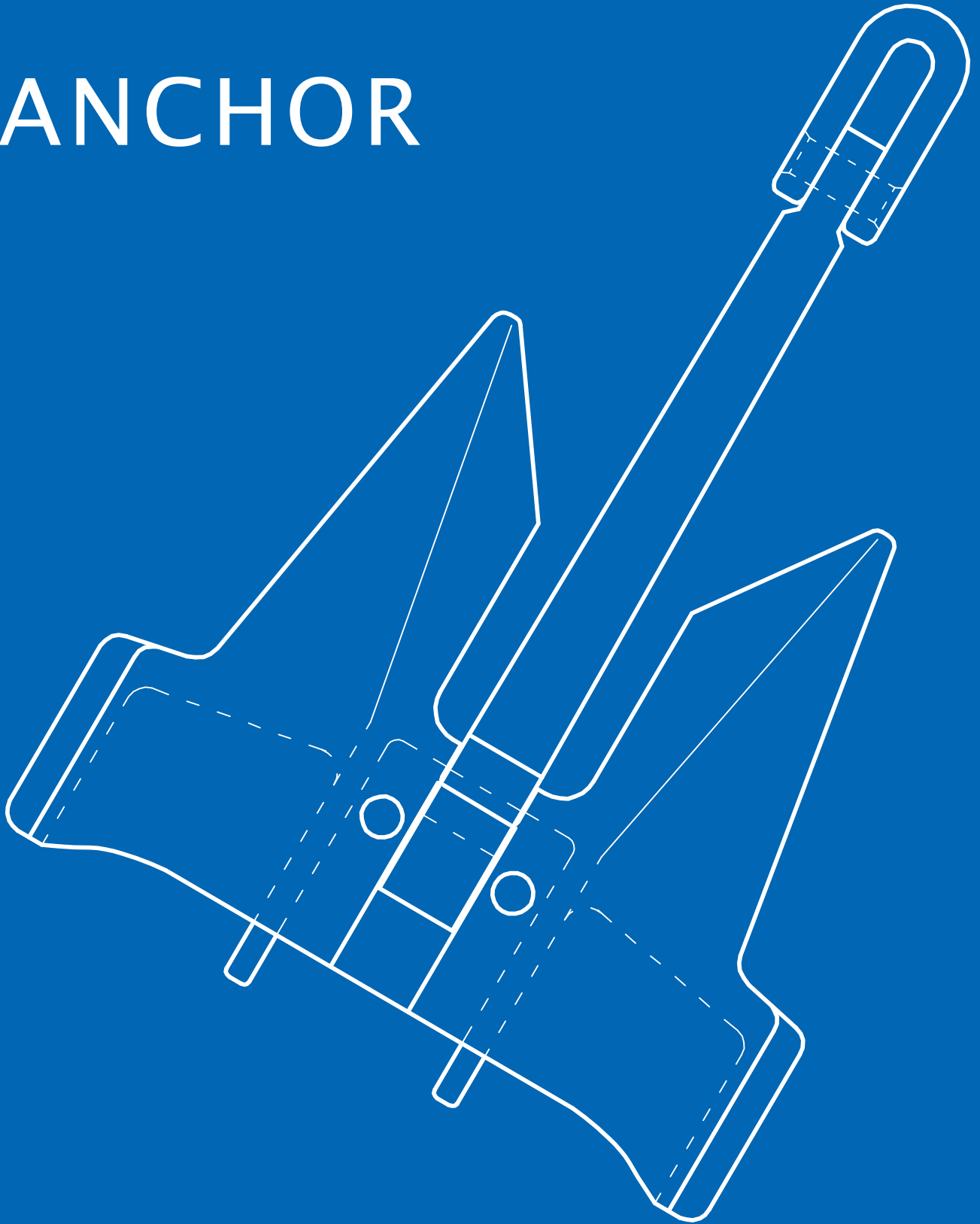
Note: *Chain Tensioner is also known as "dog bone shackle", which is suitable for chain & fender applications. Tensioner will be usually supplied hot dip galvanized according to local or international standard. Sizes, material and grades are available upon special request.



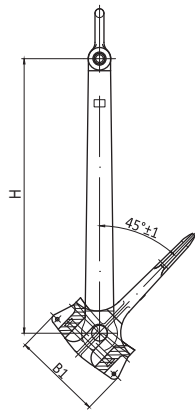
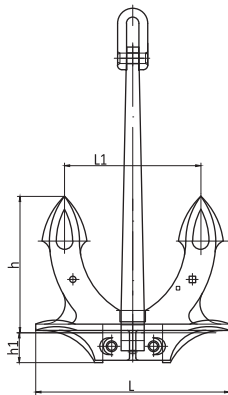
Weight of Anchor Chain Fittings

Diameter mm	Common Link kgs	Enlarged Link kgs	End Link kgs	Joining Shackle Kenter kgs	Joining Shackle Type D kgs	Anchor Shackle Type D kgs	Swivel kgs	Complete Swivel- Forerunner kgs
12.5	0.17	0.23	0.23	0.39	0.8	1.1	0.9	1.76
14	0.24	0.32	0.36	0.51	1.1	1.3	1.3	2.52
16	0.36	0.5	0.51	0.62	1.3	1.6	1.7	3.57
17.5	0.47	0.74	0.68	0.82	1.6	2.0	2.1	4.73
19	0.60	0.88	0.89	1.00	1.8	2.5	2.5	5.75
20.5	0.75	1.10	1.13	1.35	2.1	3.3	3.1	7.18
22	0.93	1.25	1.28	1.6	2.5	4.0	3.5	8.21
24	1.21	1.70	1.77	2.0	3.5	5.0	5.0	11.38
26	1.55	2.15	2.20	2.7	4.3	6.0	6.0	14.05
28	1.9	2.8	2.9	3.3	5.0	8.0	7.5	17.90
30	2.4	3.2	3.3	3.9	7.0	9.5	9.0	21.1
32	2.9	3.9	4.0	4.6	7.5	12.0	11.0	25.7
34	3.4	4.7	5.0	5.8	9.5	14.0	13.5	31.3
36	4.0	5.5	5.9	6.6	11.0	17.0	16.0	36.9
38	4.7	6.1	6.8	7.8	13.0	20.0	19.0	42.7
40	5.5	7.1	8.0	9.1	15.0	23.0	23.0	50.7
42	6.4	8.4	9.6	10.5	17.5	26.0	27.0	59.8
44	7.4	10.0	11.2	12.2	20.0	29.0	32.0	70.6
46	8.5	11.5	13.0	14.0	22.5	33	37.0	81.5
48	9.8	13.1	15.0	16.0	26.0	37	44.0	95.0
50	11	15	17	18	29	41	57	115
52	13	17	20	20	31	45	57	124
54	14	19	22	20	34	50	67	141
56	16	21	23	24	38	54	67	148
58	17	23	25	28	44	65	80	168
60	19	25	27	28	48	70	95	191
62	21	28	30	33	52	76	95	202
64	23	31	34	38	57	82	112	231
66	25	34	38	38	66	94	130	261
68	27	37	42	44	70	101	130	273
70	30	40	45	44	75	108	152	307
73	34	45	52	51	87	124	172	348
76	39	50	59	58	99	141	194	392
78	42	55	63	65	106	150	194	409
81	46	61	70	74	119	171	220	458
84	52	68	78	84	134	193	242	508
87	58	75	86	94	150	218	270	564
90	64	82	95	105	167	243	300	623
92	68	88	100	105	175	256	325	669
95	75	98	112	115	200	290	350	733
97	80	102	120	135	210	305	350	754
100	88	112	130	150	230	335	385	827
102	93	120	138	150	243	350	420	891
107	109	140	158	175	285	410	495	1042
111	120	160	175	200	305	445	535	1150
114	130	173	193	225	325	475	570	1239
117	142	185	210	225	345	505	610	1332
122	160	210	235	267	380	550	650	1465
127	182	235	260	315	420	600	720	1632
132	205	260	305	370	480	675	760	1790
137	230	285	330	390	550	750	900	2030
142	255	325	375	450	650	900	1100	2380

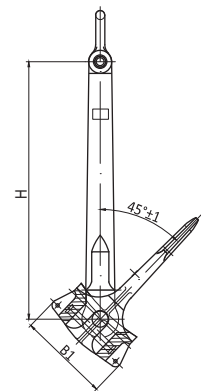
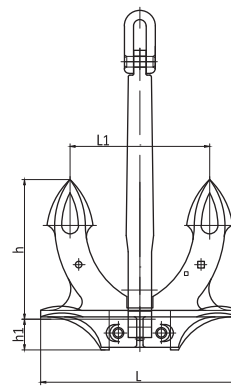
ANCHOR



Hall



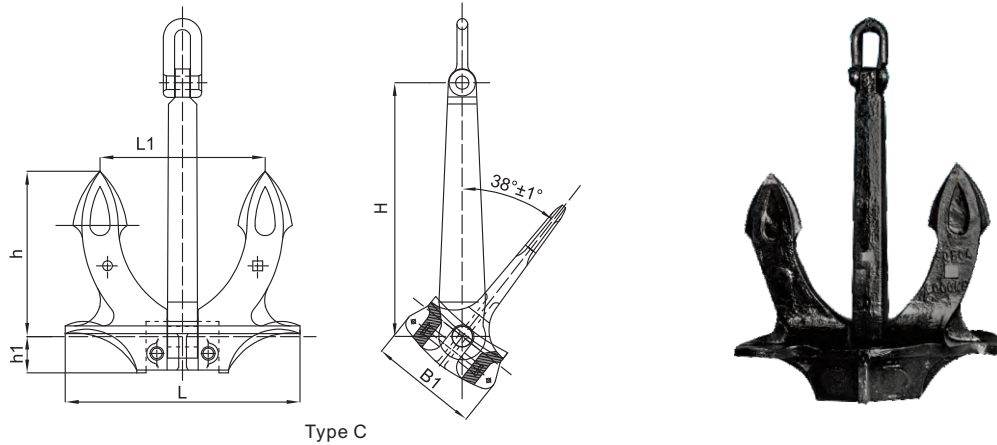
Type A



Type B

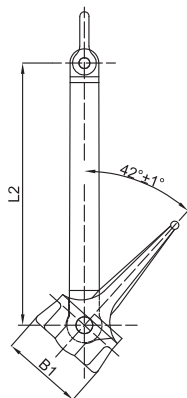
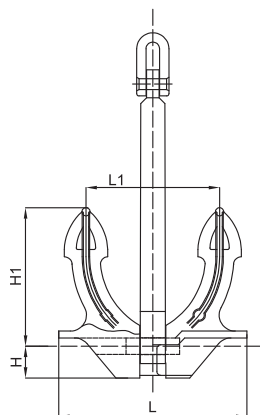
Nominal weight kg	H			h	h1	L	L1	B1
	Type A	Type B	Type C					
100	760	760	590	410	90	584	410	270
125	814	814	629	443	97	629	443	290
150	866	866	665	470	103	670	470	308
180	919	919	710	500	110	710	500	327
240	1019	1019	788	552	121	784	552	361
300	1095	1095	850	595	130	844	595	388
360	1160	1160	898	632	138	910	632	412
420	1222	1222	946	660	145	946	660	434
480	1282	1282	995	700	154	1000	700	460
570	1355	1355	1042	732	161	1042	732	481
660	1422	1422	1093	769	169	1096	769	506
780	1506	1506	1170	820	180	1170	820	540
900	1580	1580	1215	855	188	1220	855	560
1020	1645	1645	1268	885	194	1260	885	580
1140	1705	1705	1316	926	203	1319	926	605
1290	1778	1778	1378	965	211	1374	965	630
1440	1844	1844	1448	1001	219	1430	1001	655
1590	1906	1906	1511	1035	226	1475	1035	677
1740	1966	1966	1571	1070	234	1520	1070	700
1920	2031	2031	1602	1104	241	1560	1104	722
2100	2093	2093	1651	1120	245	1560	1120	732
2280	2150	2150	1716	1165	255	1657	1165	763
2460	2207	2207	1785	1200	263	1710	1200	788
2640	2259	2259	1843	1222	265	1730	1222	796
2850	2318	2318	1890	1253	271	1787	1253	822
3060	2374	2374	1970	1275	280	1820	1275	836
3300	2432	2432	1985	1317	288	1880	1317	862
3540	2480	2480	2032	1345	294	1920	1345	880
3780	2547	2547	2077	1376	302	1965	1376	902
4050	2610	2610	2125	1406	309	2008	1406	924

Hall



Nominal weight kg	H			h	h1	L	L1	B1
	Type A	Type B	Type C					
4320	2695	2695	2171	1435	316	2051	1435	943
4590	2712	2712	2216	1465	322	2093	1465	962
4890	2769	2769	2263	1498	329	2135	1498	984
5000	2800	2800	2317	1510	332	2156	1510	992
5610	2899	2899	2369	1569	345	2234	1569	1031
6000	2965	2965	2422	1610	354	2290	1610	1056
6450	3037	3037	2482	1644	361	2340	1644	1080
6900	3100	3100	2538	1681	369	2393	1681	1105
7350	3100	3100	2592	1688	370	2400	1688	1109
7800	3235	3235	2644	1752	385	2493	1752	1152
8300	3363	3363	2699	1788	393	2545	1788	1176
8500	3355	3355	2742	1800	395	2565	1800	1184
9300	3430	3430	2804	1850	417	2632	1850	1226
9900	3510	3510	2863	1896	417	2699	1896	1248
10500	3571	3571	2920	1934	425	2752	1934	1273
11100	3638	3638	2975	1970	433	2803	1970	1297
11700	3702	3702	3028	2005	441	2853	2005	1320
12300	3764	3764	3079	2039	448	2901	2039	1342
12900	3824	3824	3128	2072	455	2947	2072	1363
13500	3882	3882	3176	2104	462	2992	2104	1384
14100	3939	3939	3222	2135	469	3036	2135	1404
14700	3994	3994	3267	2165	476	3078	2165	1424
15400	4056	4056	3318	2199	483	3126	2199	1446
16100	4117	4117	3368	2232	490	3173	2232	1468
16900	4184	4184	3423	2268	498	3225	2268	1492
17800	4252	4252	3479	2308	506	3281	2308	1518
18800	4330	4330	3543	2350	516	3341	2350	1546
20000	4420	4420	3617	2399	526	3411	2399	1578
21500	4528	4528	3705	2458	539	3494	2458	1617
23000	4631	4631	3789	2514	551	3573	2514	1654

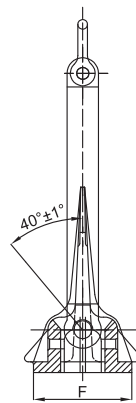
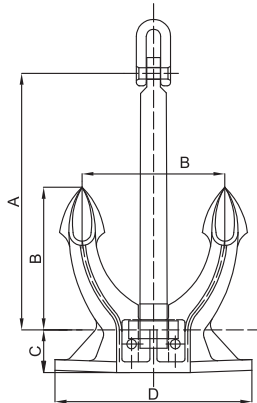
Japan Stockless Anchor



Nominal weight kg	Dimensions (mm)					
	L	L1	L2	H	H1	B1
180	650	459	910	111	480	280
240	720	510	1010	122	530	310
300	770	540	1080	131	570	331
360	820	580	1150	139	610	353
420	860	610	1200	146	640	370
480	900	640	1260	153	670	387
570	950	670	1330	162	700	408
660	1000	710	1440	170	740	430
780	1060	750	1480	180	780	456
900	1110	780	1550	189	820	477
1020	1160	820	1620	197	860	500
1140	1200	850	1680	204	890	520
1290	1250	880	1750	212	920	540
1440	1300	920	1820	221	960	560
1590	1340	950	1880	228	990	580
1740	1380	980	1930	235	1020	600
1920	1430	1010	2000	243	1060	620
2100	1470	1040	2060	250	1090	640
2280	1510	1070	2110	257	1120	650
2460	1550	1100	2170	264	1150	670
2640	1590	1120	2230	270	1180	690
2850	1630	1150	2280	277	1210	700
3060	1670	1180	2340	284	1240	720
3300	1710	1210	2390	291	1270	740
3540	1750	1240	2450	298	1290	750
3780	1790	1260	2510	304	1320	770
4050	1830	1290	2560	311	1350	790
4320	1870	1320	2620	318	1380	800
4590	1910	1350	2670	325	1410	820
4890	1950	1380	2730	332	1440	840

Nominal weight kg	Dimensions (mm)					
	L	L1	L2	H	H1	B1
5250	2000	1410	2800	340	1480	860
5610	2040	1440	2860	347	1510	880
6000	2090	1480	2930	355	1540	900
6450	2140	1510	3000	364	1580	920
6900	2190	1550	3070	372	1620	940
7350	2260	1600	3140	380	1660	960
7800	2280	1610	3190	388	1680	980
8300	2330	1650	3260	396	1720	1000
8700	2380	1670	3320	403	1750	1020
9300	2420	1710	3390	411	1790	1040
9900	2470	1740	3460	420	1820	1060
10500	2540	1800	3530	430	1880	1090
11100	2540	1800	3600	430	1880	1090
11700	2630	1855	3650	445	1945	1130
12300	2630	1855	3710	445	1945	1130
12900	2670	1885	3770	453	1975	1170
13500	2670	1885	3840	453	1975	1170
14100	2780	1960	3890	473	2050	1200
14700	2820	1990	3950	479	2080	1210
15400	2860	2020	4000	486	2110	1230
16100	2900	2050	4060	493	2140	1250
16900	2950	2080	4130	500	2180	1270
17800	3000	2120	4200	510	2210	1290
18800	3060	2160	4280	520	2260	1320
20000	3120	2200	4370	530	2300	1340
21500	3200	2260	4480	540	2360	1380
23000	3270	2310	4580	560	2410	1410
24500	3340	2360	4680	570	2460	1440
26000	3410	2410	4770	580	2520	1470
27500	3470	2450	4860	590	2560	1490

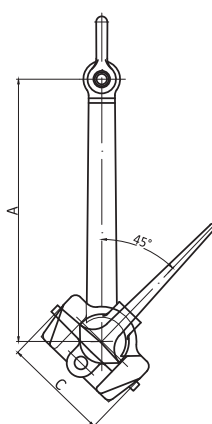
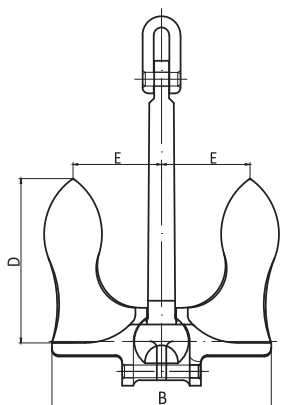
Spek



Nominal weight kg	Dimensions (mm)				
	A	B	C	D	F
100	672	373	112	515	250
150	770	428	128	590	290
180	846	470	140	640	300
240	900	500	150	690	358
300	990	550	166	760	398
360	1065	600	180	828	411
420	1080	600	180	828	431
500	1170	650	196	900	450
570	1170	650	196	900	475
660	1260	700	210	962	486
780	1355	750	225	1032	519
900	1440	800	240	1100	547
1020	1530	850	252	1170	573
1140	1620	900	268	1240	591
1290	1710	900	268	1240	620
1440	1710	950	279	1300	640
1590	1710	950	279	1300	671
1740	1800	1000	300	1378	689
1920	1850	1050	312	1454	704
2100	1890	1050	312	1454	717
2280	2010	1050	312	1454	736
2460	2010	1100	324	1514	764
2640	2070	1150	352	1584	794
2850	2070	1150	352	1584	804
3060	2160	1200	360	1650	820
3300	2155	1200	360	1650	834
3540	2350	1200	360	1650	834
3780	2430	1350	393	1850	880
4050	2430	1350	393	1850	917

Nominal weight kg	Dimensions (mm)				
	A	B	C	D	F
4320	2520	1400	413	1926	4917
4590	2520	1400	413	1926	951
4890	2520	1400	413	1926	954
5250	2610	1450	414	2000	964
5610	2610	1450	414	2000	981
6000	2700	1500	446	2060	1006
6450	2700	1500	446	2060	1028
6900	2790	1550	456	2138	1034
7350	2790	1550	456	2138	1062
7800	2920	1550	456	2138	1091
8300	3060	1700	510	2332	1126
8700	3060	1700	510	2332	1156
9300	3060	1700	510	2332	1169
9900	3160	1700	510	2332	1188
10500	3190	1770	531	2440	1188
11100	3290	1770	531	2440	1212
11700	3390	1770	531	2440	1237
12300	3440	1910	573	2632	1279
12900	3440	1910	573	2632	1279
13500	3440	1910	573	2632	1316
14100	3440	1910	573	2632	1353
14700	3690	2050	615	2824	1369
15400	3690	2050	615	2824	1369
16100	3690	2050	615	2824	1387
16900	3820	2120	636	2922	1415
17800	3950	2120	636	2922	1431
18800	3950	2190	657	3018	1461
20000	4070	2190	657	3018	1493
26000	4250	2360	716	3256	1618

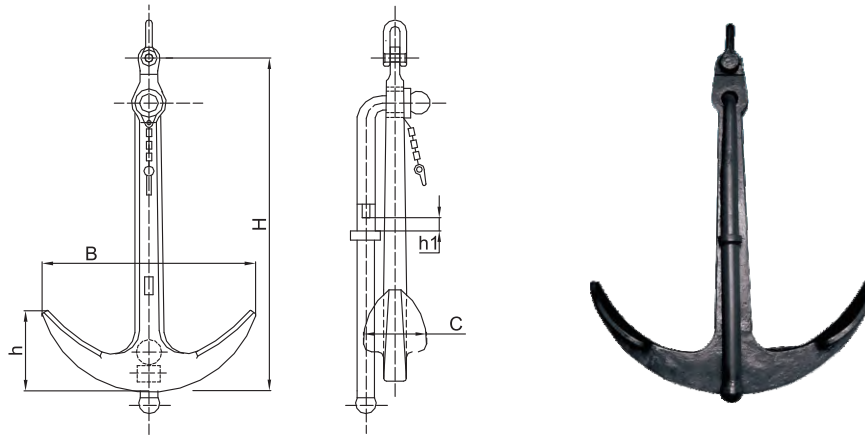
Baldt



Nominal weight kg	Dimensions (mm)				
	A	B	C	D	E
200	685	457	241	366	190.5
300	812	590	296	442	230
400	812	654	330	482	250
500	900	673	356	530	287.5
750	965	770	407	584	308
1000	1067	854	457	640	347.5
1250	1165	923	475	720	370
1500	1232	1005	515	748	392
2000	1370	1092	558	848	430
2100	1370	1092	558	848	436
2500	1473	1136	568	848	448
3000	1625	1194	648	912	483
3500	1625	1340	698	1003	500
4000	1734	1354	705	1054	518
4500	1794	1440	735	1066	563
5000	1930	1460	762	1130	588
6000	1930	1613	844	1194	641.5
6300	1930	1613	844	1194	641.5

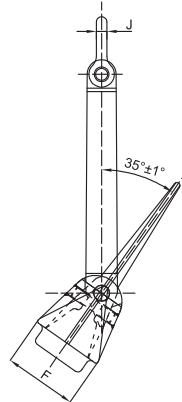
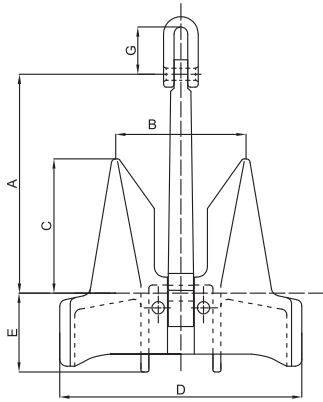
Nominal weight kg	Dimensions (mm)				
	A	B	C	D	E
7000	2082	1691	882	1263	668
8000	2265	1691	894	1276	668
9000	2438	1784	924	1314	695
10000	2438	1918	990	1470	725
11000	2438	1918	990	1473	778
12000	2438	1950	1016	1473	778
13000	2489	1949	1016	1473	799
14000	2616	2045	1118	1524	818
15000	2616	2184	1168	1600	875
16000	2738	2184	1168	1651	875
17200	2738	2184	1222	1660	875
18000	2850	2240	1232	1667	888
20000	2840	2440	1270	1866	990
25000	3048	2616	1365	1968	990
30000	3251	2794	1454	2096	1052
35000	3429	2946	1524	2210	1107
40000	3556	3073	1600	2311	1157
45000	3733	3200	1651	2388	1203

Admiralty



Nominal weight kg	Dimensions (mm)				
	H	h	h1	B	C
50	960	230	42	635	185
75	1105	266	45	710	210
100	1215	293	49	780	230
125	1310	316	52	840	245
150	1395	336	55	900	265
200	1535	370	61	990	290
250	1650	398	65	1065	310
300	1755	423	70	1105	330
400	1930	465	77	1240	365
500	2080	502	84	1335	390
600	2210	533	89	1440	415
700	2330	560	93	1500	440
800	2435	587	97	1570	460
900	2530	610	101	1630	475
1000	2620	633	104	1685	495
1250	2825	680	112	1810	535
1500	3000	725	118	1955	565
2000	3300	797	131	2140	625
2500	3550	857	138	2270	672
3000	3780	912	150	2415	715
3500	3980	960	158	2540	750
4000	4160	1000	155	2650	785
5000	4480	1100	184	2830	800
6000	4740	1113	190	3000	438
7000	5025	1180	200	3165	960
8000	5240	1280	210	3300	980
9000	5450	1330	220	3440	990
10000	5680	1340	230	3600	1085

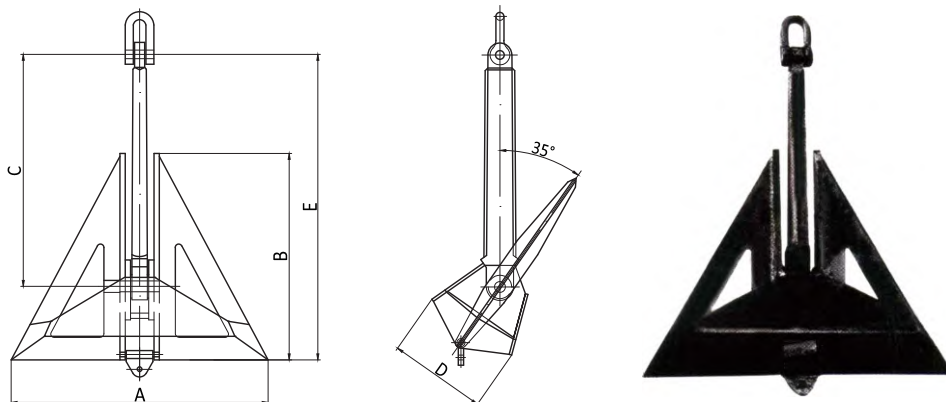
AC-14



Nominal weight kg	Dimensions (mm)							
	A	B	C	D	E	F	G	J
100	607	380	385	704	207	200	130	28
120	635	380	402	704	217	215	145	32
180	742	442	470	822	254	252	160	36
225	828	495	525	915	283	277	175	40
250	828	495	525	915	283	280	175	40
300	882	525	559	975	301	298	192	45
340	918	548	582	1015	313	310	215	48
360	918	548	582	1015	313	313	215	48
430	990	590	628	1098	339	336	215	48
495	1025	610	650	1135	350	348	235	50
585	1102	658	699	1220	376	375	235	50
675	1152	690	731	1278	394	390	255	60
765	1205	718	764	1335	411	408	255	60
855	1250	745	793	1385	427	420	280	62
970	1300	775	826	1445	444	440	280	62
1080	1350	805	855	1495	461	455	280	62
1200	1400	835	887	1545	478	470	310	68
1305	1440	858	913	1595	492	485	310	68
1440	1486	885	943	1645	507	505	310	68
1575	1534	915	972	1695	523	518	340	74
1710	1575	940	998	1745	538	532	340	74
1845	1616	965	1025	1785	552	546	340	74
1980	1650	985	1048	1830	564	560	380	82
2100	1686	1005	1070	1865	575	570	380	82
2295	1738	1035	1102	1920	593	588	380	82
2475	1780	1062	1128	1970	607	602	385	82
2655	1820	1085	1155	2018	621	615	385	82
2835	1862	1109	1180	2057	635	625	410	90

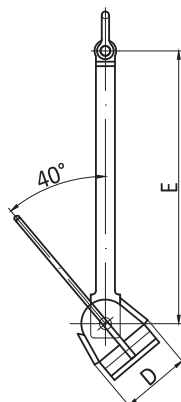
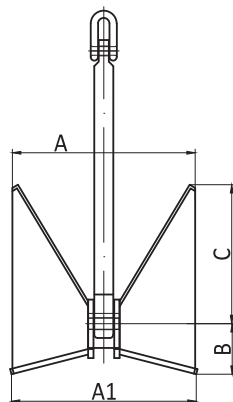
Nominal weight kg	Dimensions (mm)							
	A	B	C	D	E	F	G	J
3040	1896	1130	1204	2100	646	640	410	90
3550	2030	1198	1287	2225	693	680	415	100
3940	2080	1240	1318	2300	709	705	450	100
4500	2170	1295	1376	2405	741	735	450	100
4840	2225	1330	1410	2465	760	755	480	110
5175	2275	1358	1443	2520	777	770	480	110
5610	2339	1396	1483	2590	798	790	500	110
6000	2390	1426	1515	2646	816	810	500	110
6225	2420	1443	1534	2678	826	820	540	117
6525	2450	1462	1554	2712	836	830	540	117
6975	2507	1496	1589	2775	855	848	580	121
7350	2560	1526	1622	2832	873	866	580	121
7875	2610	1558	1655	2890	891	884	600	130
8325	2665	1590	1689	2950	909	902	600	130
8775	2707	1614	1715	2996	924	916	630	135
9300	2765	1652	1754	3064	945	936	640	140
9675	2805	1674	1778	3104	957	948	640	140
10125	2850	1700	1806	3152	972	960	640	140
10575	2880	1720	1827	3192	984	976	660	145
11025	2930	1750	1859	3247	1001	990	660	145
11700	2987	1782	1894	3308	1019	1010	700	155
12075	3010	1800	1906	3343	1027	1020	700	155
12675	3065	1812	1945	3364	1047	1028	700	155
13350	3132	1870	1986	3470	1069	1060	700	155
14100	3178	1896	2015	3520	1084	1076	730	160
14700	3228	1924	2045	3570	1099	1090	730	160
15400	3272	1954	2075	3626	1117	1108	770	170
16100	3320	1980	2110	3680	1132	1125	770	170

Triangles D-14



Nominal weight kg	Dimensions (mm)				
	A	B	C	D	E
250	1130	900	1016	430	1298
300	1200	960	1080	457	1380
500	1500	1200	1350	571	1725
750	1700	1360	1530	650	1950
1000	1875	1500	1686	714	2155
1500	2280	1800	2025	820	2556
2000	2363	1890	2124	900	2715
2500	2540	2030	2280	965	2920
2835	2650	2120	2430	1010	3094
3000	2700	2160	2430	1028	3105
4000	2975	2380	2650	1130	3395
4500	3090	2470	2780	1175	3555
5000	3250	2600	2922	1238	3735
7000	3575	2860	3216	1361	4110
7500	3650	2925	3290	1390	4210
8000	3730	2990	3360	1420	4300
9000	3950	3160	3555	1504	4543
10000	4100	3280	3690	1561	4715
12000	4300	3440	3942	1638	5017
13500	4670	3720	4195	1765	5535
15000	4845	3875	4355	1830	5513
18000	5140	4080	4610	1940	6080
20000	5330	4260	4790	2010	6310
22500	5490	4360	4905	2060	6470
25000	5740	4590	5160	2165	6532

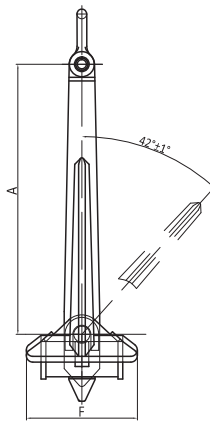
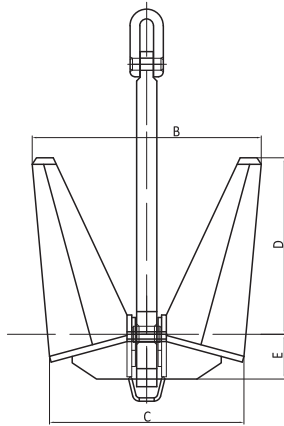
P-TW Type



Nominal weight kg	Dimensions (mm)					
	A	A1	B	C	D	E
105	648	658	252	422	240	710
125	686	697	267	447	254	750
135	705	716	274	459	261	773
145	720	730	280	470	266	788
160	746	758	290	486	276	818
180	776	787	301	505	287	850
225	836	848	325	544	309	915
270	888	902	342	573	326	965
300	920	933	357	598	340	1008
360	978	993	380	637	362	1072
400	996	1010	386	648	374	1090
450	1038	1053	403	675	390	1137
495	1086	1103	422	707	402	1190
565	1136	1153	425	740	420	1245
585	1160	1180	450	755	428	1270
675	1205	1224	468	785	446	1322
765	1257	1276	488	818	465	1378
855	1286	1306	500	841	482	1411
1000	1360	1380	528	885	503	1480
1080	1400	1420	542	915	520	1530
1130	1410	1430	547	917	521	1544
1195	1458	1479	566	949	540	1597
1305	1486	1509	579	973	556	1634
1440	1535	1560	596	1001	578	1683
1575	1584	1608	615	1032	596	1735
1710	1628	1651	632	1060	612	1782
1845	1670	1695	648	1087	628	1828
1980	1704	1731	667	1119	638	1880
2140	1754	1768	676	1135	655	1908

Nominal weight kg	Dimensions (mm)					
	A	A1	B	C	D	E
2295	1795	1822	697	1169	675	1966
2475	1841	1868	715	1199	692	2016
2665	1886	1912	732	1228	708	2064
2750	1907	1930	738	1238	715	2082
2835	1926	1955	748	1255	725	2110
3000	1972	2002	765	1285	742	2160
3240	2014	2044	782	1311	757	2205
3445	2056	2087	798	1340	774	2258
3690	2100	2130	815	1367	790	2298
3940	2150	2182	834	1400	808	2354
4210	2198	2230	853	1431	826	2406
4500	2236	2271	870	1462	836	2454
4840	2302	2336	894	1499	865	2520
5175	2318	2355	914	1555	868	2596
5250	2366	2400	918	1540	890	2590
5515	2405	2440	933	1566	905	2634
5850	2453	2489	952	1598	922	2685
6225	2504	2542	972	1632	942	2743
6525	2550	2580	987	1658	956	2807
6975	2600	2640	1010	1695	978	2849
7875	2695	2735	1050	1773	1012	2980
8325	2757	2784	1070	1806	1041	3035
8775	2797	2825	1089	1830	1056	3074
9225	2865	2894	1108	1858	1073	3121
9675	2905	2934	1126	1888	1090	3172
10125	2941	2970	1143	1918	1108	3223
10575	2979	3009	1160	1946	1124	3270
11025	3027	3057	1176	1974	1140	3317
12075	3121	3152	1212	2034	1175	3418

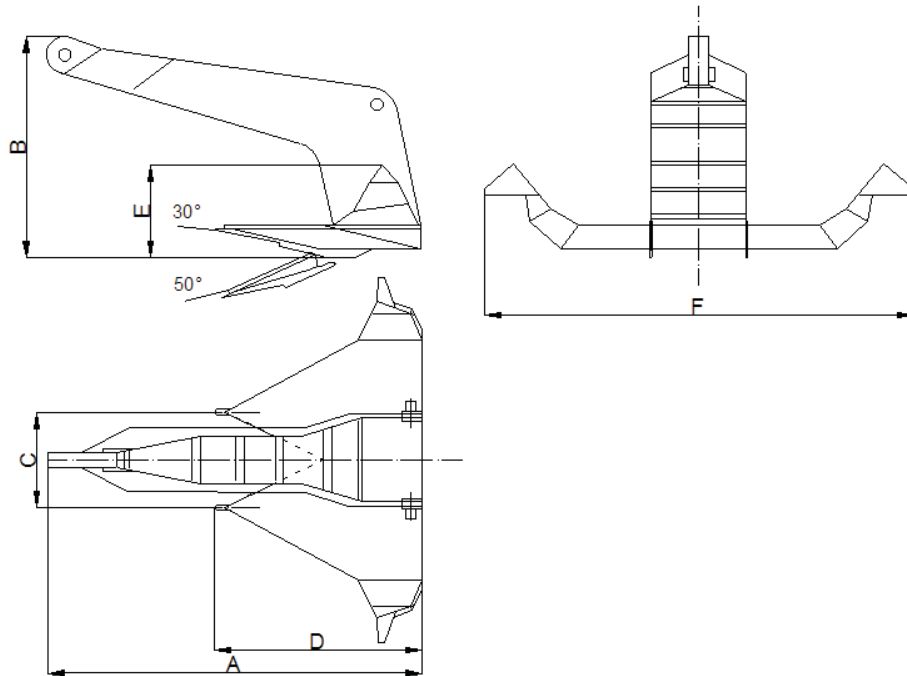
P-N Type



Nominal weight kg	Dimensions (mm)					
	A	B	C	D	E	F
100	712	655	555	440	190	320
160	835	765	650	516	223	370
200	885	825	700	546	236	400
280	1008	925	780	622	269	450
360	1096	1005	855	677	292	490
480	1186	1105	940	728	314	535
600	1300	1190	1010	802	347	580
765	1410	1290	1096	870	375	610
1000	1526	1395	1185	942	404	660
1080	1580	1446	1230	975	421	685
1195	1636	1485	1270	1010	436	708
1305	1680	1541	1308	1037	448	730
1440	1738	1592	1352	1073	464	754
1575	1769	1640	1386	1092	472	777
1710	1840	1686	1455	1137	491	798
1845	1890	1729	1469	1168	504	819
1980	1935	1770	1504	1195	516	836
2140	1986	1816	1543	1226	530	860
2295	2030	1860	1580	1254	540	880
2655	2140	1954	1684	1322	566	926
2835	2188	1996	1700	1351	580	945
3000	2238	2042	1736	1382	592	968
3240	2287	2086	1773	1412	605	988

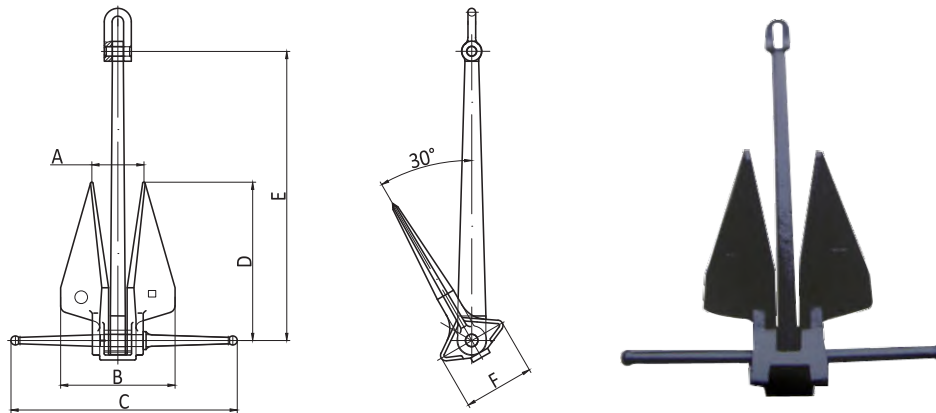
Nominal weight kg	Dimensions (mm)					
	A	B	C	D	E	F
3940	2442	2226	1892	1508	646	1055
4500	2553	2328	1976	1576	675	1103
5175	2675	2439	2072	1651	708	1155
5515	2730	2491	2116	1686	722	1180
5850	2786	2541	2159	1720	737	1204
6225	2838	2594	2204	1750	756	1229
6525	2880	2635	2239	1780	768	1248
6975	2948	2695	2290	1820	786	1276
7425	3010	2760	2338	1858	802	1303
7875	3069	2805	2384	1895	818	1329
8775	3180	2908	2471	1964	848	1376
9225	3235	2968	2512	1997	862	1401
9675	3286	3004	2553	2029	876	1423
10125	3337	3060	2592	2060	890	1445
10575	3386	3095	2630	2090	902	1468
12075	3538	3236	2748	2184	943	1533
12675	3596	3288	2794	2220	958	1556
13350	3658	3346	2842	2258	975	1585
14100	3726	3406	2894	2300	993	1614
15000	3804	3476	2954	2348	1014	1646
17250	3985	3643	3095	2460	1062	1726
20825	4240	3887	3285	2618	1130	1832
24750	4495	4109	3491	2775	1198	1947

Bruce Type



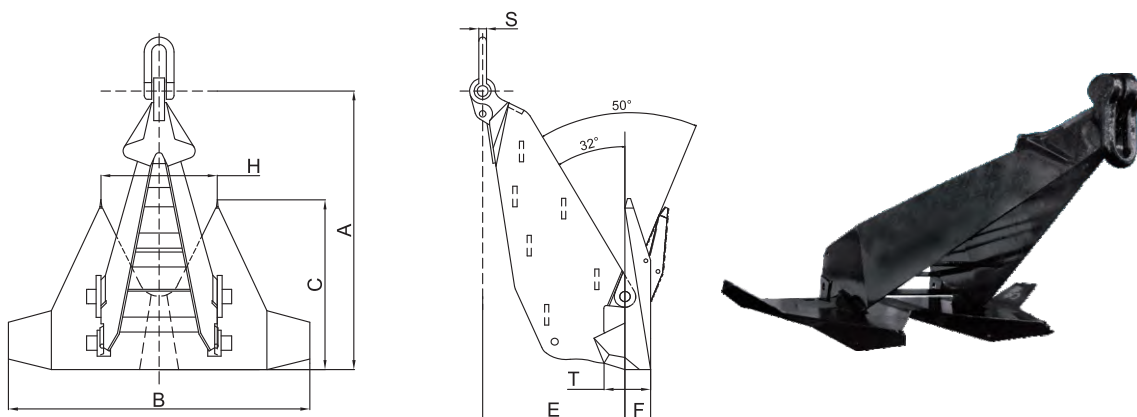
Nominal weight kg	Dimensions (mm)					
	A	B	C	D	E	F
500	1827	1280	500	1303	606	2188
1500	2648	1854	723	1888	878	3172
3000	3409	2388	931	2431	1131	4085
4500	3800	2751	1047	2733	1298	4605
5000	4029	2822	1100	2873	1336	4828
6500	4326	3131	1192	3110	1478	5242
9000	4846	3394	1324	3456	1607	5806
10000	5287	3563	1390	3628	1687	6095
12000	5437	3808	1486	3878	1803	6514
15000	5728	4012	1566	4085	1900	6864
18000	6129	4292	1674	4371	2032	7343
20000	6319	4426	1726	4507	2096	7571
30000	7225	5060	1974	5153	2396	8656

Danforth Type

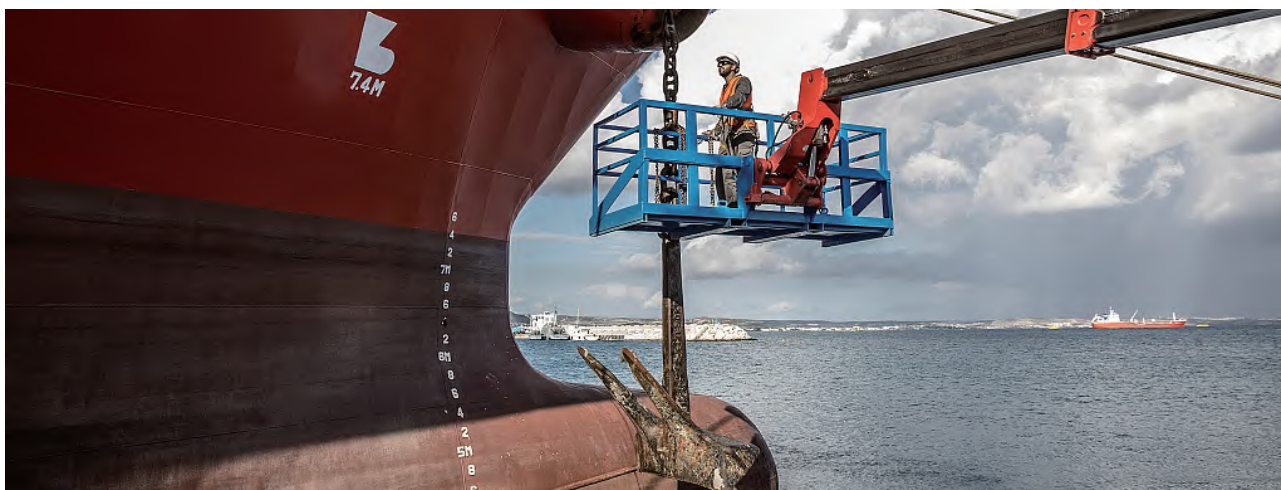


Nominal weight kg	Dimensions (mm)					
	A	B	C	D	E	F
60	186	408	755	535	985	240
75	200	450	830	590	1080	260
100	216	490	930	640	1180	290
120	220	505	970	670	1230	300
125	234	520	1000	690	1270	310
150	242	550	1060	732	1348	330
200	266	600	1150	810	1490	360
250	294	650	1240	870	1600	390
276	296	660	1250	885	1620	400
300	312	690	1320	925	1700	420
400	342	750	1460	1010	1810	460
500	368	800	1570	1100	2020	490
750	414	910	1800	1260	2300	560
1000	450	980	1980	1380	2540	620
1250	484	1070	2100	1490	2740	670
1500	512	1120	2220	1580	2850	700
2000	560	1130	2440	1730	2910	770
2500	605	1217	2628	1864	3070	830
3000	640	1290	2790	1980	3330	880
4000	700	1420	3070	2170	3590	970
5000	735	1482	3200	2270	3840	1020
6000	800	1620	3500	2480	4100	1100
7000	840	1696	3850	2590	4180	1150
8500	910	1936	3940	2600	4490	1240
10000	940	2000	4150	2900	4640	1280
13600	1046	2120	4590	3250	5378	1440
16000	1105	2240	4845	3435	5680	1520
18000	1150	2270	5000	3570	5680	1580
20000	1190	2350	5175	3695	5880	1635
25000	1280	2530	5570	3982	6330	1760

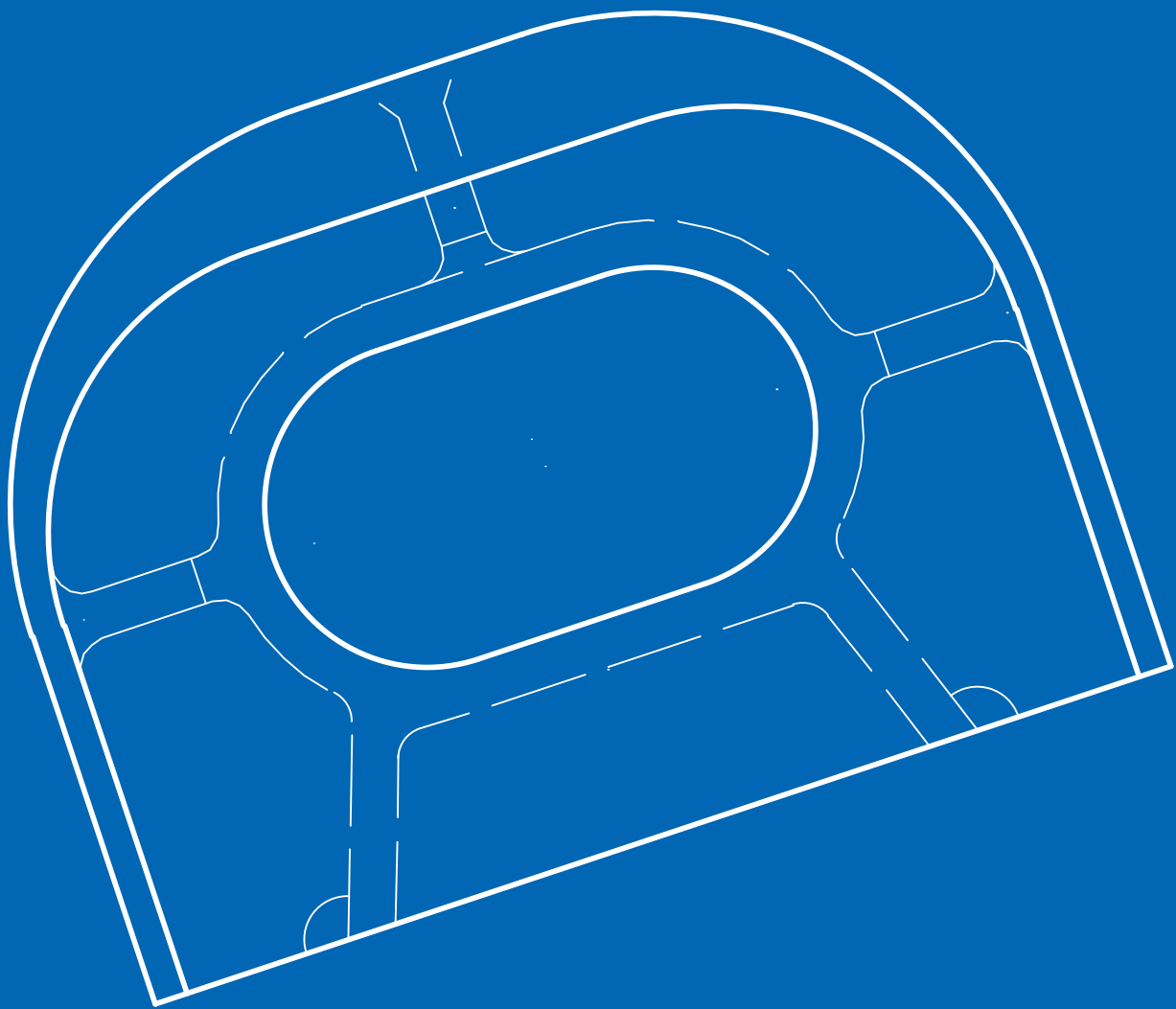
Dragging Mk-5 Type



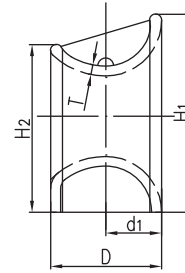
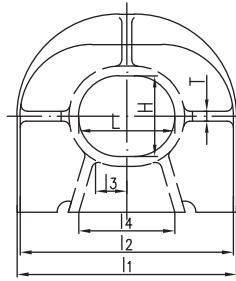
Nominal weight kg	Dimensions (mm)								Shackle model
	A	B	C	E	F	H	T	S	
1000	2580	2780	1582	1314	236	1074	430	62	a14
1500	2954	3184	1812	1505	271	1230	493	80	a17
3000	3721	4011	2283	1896	342	1550	622	90	a19
5000	4412	4756	2707	2248	406	1837	738	110	a23
7000	4910	5290	3011	2500	453	2045	825	117	a25
8000	5161	5563	3166	2629	474	2149	862	130	a27
10000	5559	5992	3410	2832	511	2315	929	140	a29
12000	5908	6368	3624	3010	543	2460	988	150	a31
14000	6219	6704	3815	3169	572	2590	1040	160	a33
15000	6364	6860	3904	3242	585	2650	1064	170	a34
18000	6763	7290	4149	3446	622	2816	1131	180	a35
20000	7004	7550	4297	3569	644	2917	1171	190	a37
22000	7230	7794	4436	3684	665	3011	1209	200	a39
25000	7545	8133	4629	3844	694	3142	1262	200	a39
30000	8018	8643	4919	4085	737	3339	1341	220	a42



DECK FITTINGS



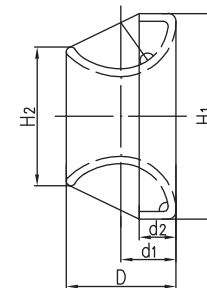
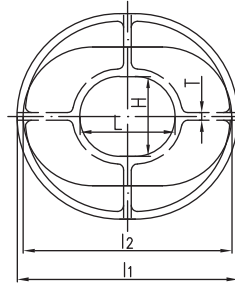
Panama Chock ISO13729 (Deck Mounted)



Material: ZG230-450 GB/T11352-2009

Product Code	Nominal size L×H×D	Dimensions (mm)									SWL (ton)	Wire rope dia(mm)	Weight (kg)
		l1	l2	l3	l4	H1	H2	H3	d1	T			
PCA001	250×200×214	488	453	76	265	427	368	108	108	22	23	18	73
PCA002	300×250×286	614	565	89	330	551	481	144	144	26	43	24	142
PCA003	350×250×333	716	660	114	403	601	525	168	168	30	56	28	222
PCA004	400×250×381	820	754	139	475	652	553	192	192	36	70	32	310
PCA005	450×250×381	870	804	164	524	652	553	192	192	36	72	32	322
PCA006	500×250×381	920	854	189	574	652	553	192	192	36	78	32	337
PCA007	400×250×428	870	796	139	500	701	609	216	216	38	90	36	434
PCA008	450×250×428	920	846	164	550	701	609	216	216	38	93	36	452
PCA009	500×250×428	970	896	189	600	701	609	216	216	38	95	36	472
PCA010	500×400×428	970	896	176	600	851	759	216	216	38	91	36	528
PCA011	500×250×525A	1068	1000	190	652	798	675	264	264	40	117	44	657
PCA012	500×400×525A	1068	1000	193	652	948	825	264	264	40	118	44	724
PCA013	500×250×525B	1074	1000	176	652	801	680	264	264	46	144	44	753
PCA014	500×400×525B	1074	1000	179	652	951	830	264	264	46	141	44	825

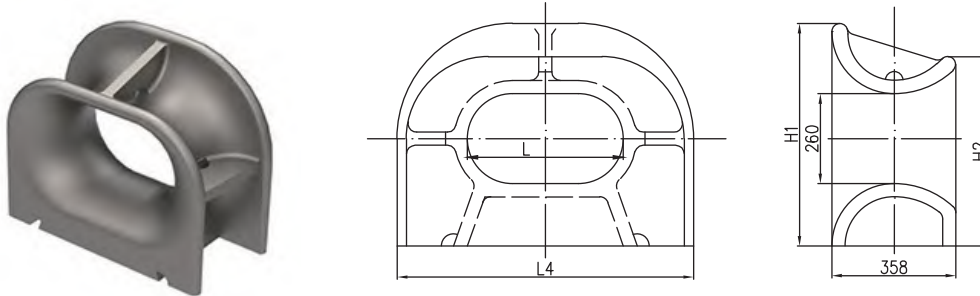
Panama Chock ISO13729 (Bulwark Mounted)



Material :ZG230-450 GB/T11352-2009

Product Code	Nominal size L×H×D	Dimensions (mm)							SWL (ton)	Wire rope dia(mm)	Weight (kg)
		l1	l2	H1	H2	d1	d2	T			
PCB001	250×200×214	516	441	466	306	108	80	12	23	18	49
PCB002	300×250×286	638	554	588	410	144	100	16	43	24	100
PCB003	350×250×333	736	646	636	449	168	120	18	56	28	141
PCB004	400×250×381	834	736	684	450	192	120	20	70	32	184
PCB005	450×250×381	884	786	684	450	192	120	20	72	32	194
PCB006	500×250×381	934	836	684	450	192	120	20	78	32	202
PCB007	400×250×428	882	778	732	515	216	120	22	90	36	264
PCB008	450×250×428	932	828	732	515	216	120	22	93	36	276
PCB009	500×250×428	982	878	732	515	216	120	22	95	36	288
PCB010	500×400×428	982	878	882	665	216	120	22	91	36	311
PCB011	500×250×525A	1078	976	828	551	264	120	24	117	44	379
PCB012	500×400×525A	1078	978	978	701	264	120	24	118	44	408
PCB013	500×250×525B	1078	976	828	554	264	120	26	144	44	405
PCB014	500×400×525B	1078	978	978	704	264	120	26	141	44	442

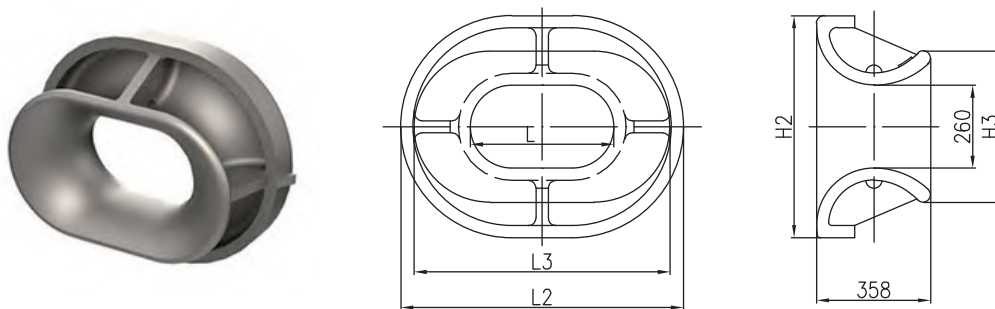
Panama Chock JIS F2017-AC (Deck Mounted)



Material: SC42 in JISG5101/ZG230-450 GB/T11352-2009

Product Code	Nominal size (mm)	Dimensions (mm)				Weight (kg)
		L	L4	H1	H2	
PCE001	310	310	708	639	541	253
PCE002	360	360	760	640	542	289
PCE003	400	400	804	642	545	323
PCE004	450	450	856	643	547	351
PCE005	500	500	908	644	549	395

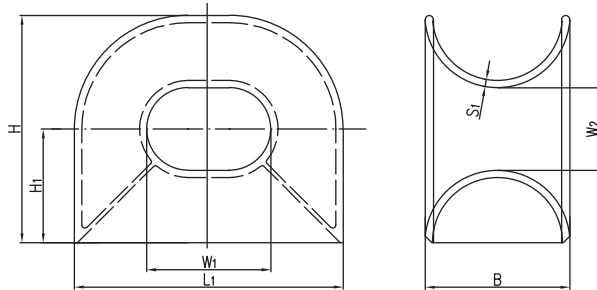
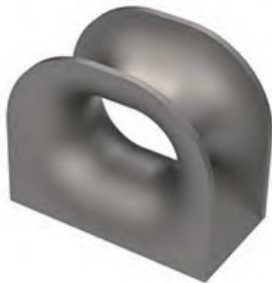
Panama Chock JIS F2017-BC (Bulwark Mounted)



Material: SC42 in JISG5101/ZG230-450 GB/T11352-2009

Product Code	Nominal size (mm)	Dimensions (mm)					Weight (kg)
		L	L2	L3	H2	H3	
PCF001	310	310	734	652	684	462	276
PCF002	360	360	788	704	688	464	305
PCF003	400	400	832	750	692	470	344
PCF004	450	450	886	802	696	474	385
PCF005	500	500	940	854	700	478	422

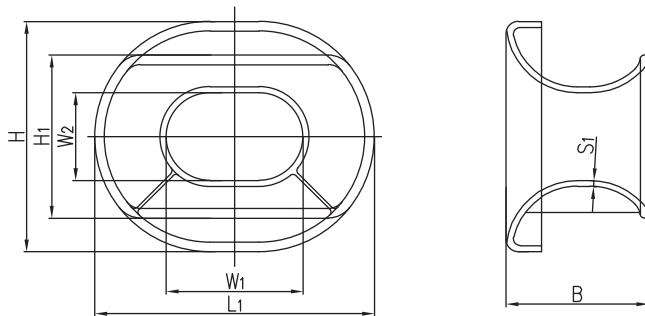
Panama Chock DIN 81915 Type C (Deck Mounted)



Material :GS-38.3 in DIN1681/ZG230-450 GB/T11352-2009

Product Code	Type	SWL (KN)	Dimensions (mm)							Weight (kg)
			W1	W2	L1	H	H1	B	S1	
PCG001	C5	50	250	180	550	480	240	300	16	85
PCG002	C8	80	320	225	680	585	292.5	360	18	136
PCG003	C12	120	400	270	840	710	355	440	20	211
PCG004	C20	200	500	320	1020	840	420	520	22	325
PCG005	C32	320	600	400	1300	1100	550	700	35	840

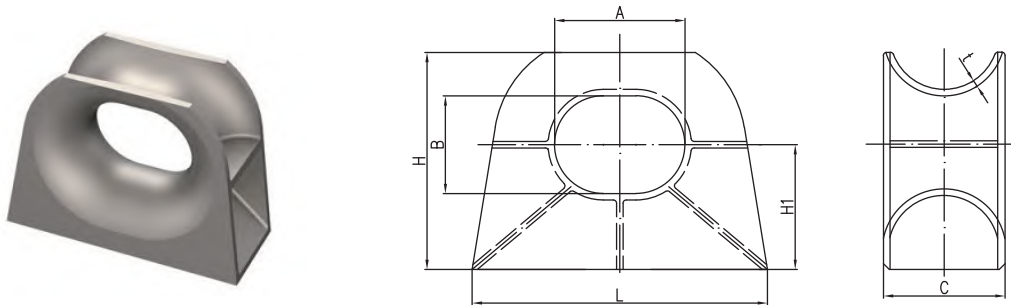
Panama Chock DIN 81915 Type A (Bulwark Mounted)



Material :GS-38.3 in DIN1681/ZG230-450 GB/T11352-2009

Product Code	Type	SWL (KN)	Dimensions (mm)							Weight (kg)
			W1	W2	L1	H	H1	B	S1	
PCH001	A5	50	250	180	550	480	340	300	16	74
PCH002	A8	80	320	225	680	585	415	360	18	120
PCH003	A12	120	400	270	840	710	500	440	20	185
PCH004	A20	200	500	320	1020	840	595	520	22	285
PCH005	A32	320	600	400	1300	1100	800	700	35	795

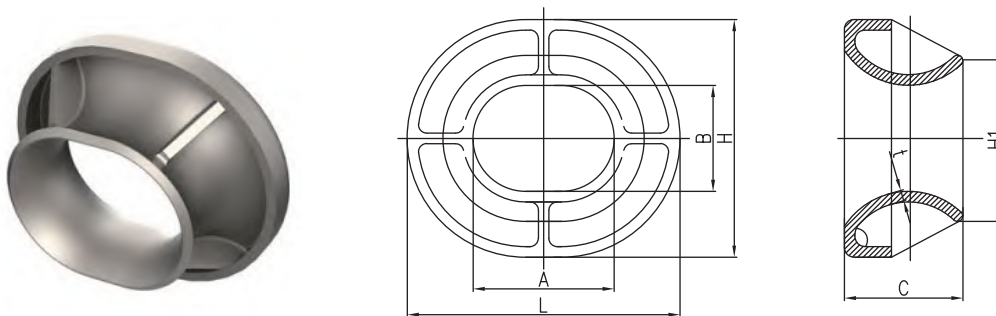
Panama Chock Type EU(Deck Mounted)



Material: ZG230-450 GB/T11352-2009

Product Code	Nominal size (mm)	SWL (KN)	Dimensions (mm)							Weight (kg)
			A	B	L	H	H1	C	t	
PCK001	600×450	1020	600	450	1360	1000	575	560	32	680
PCK002	600×450	2000	600	450	1360	1000	575	560	36	750
PCK003	600×450	2500	600	450	1360	1000	575	560	40	820

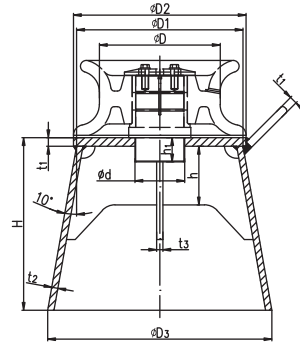
Panama Chock Type EU (Bulwark Mounted)



Material: ZG230-450 GB/T11352-2009

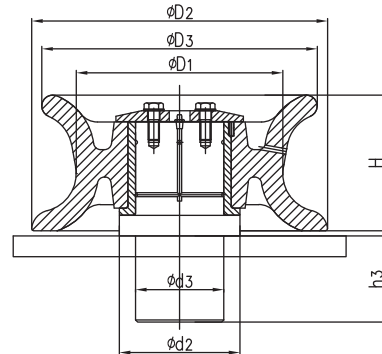
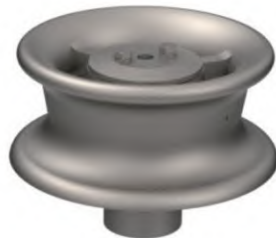
Product Code	Type	SWL (KN)	Dimensions (mm)							Weight (kg)
			A	B	L	H	H1	C	t	
PCL001	425×280	700	400	280	925	780	516	450	36	358
PCL002	600×450	1020	600	450	1160	1010	706	504	32	629
PCL003	600×450	2040	600	450	1160	1010	706	504	40	680
PCL004	600×450	2500	600	450	1160	1010	706	504	50	850
PCL005	600×450	3500	600	450	1160	1010	706	504	55	1010

Single Roller Fairlead ISO13776



Product Code	Nominal Size D (mm)	Dimensions (mm)								SWL (ton)		Weight (kg)		
		D1	D2	d	h	h1	t1	t2	t3	$\theta = 90^\circ$	$\theta = 0^\circ$	H=500	H=1000	H=1500
RFA001	150	220	230	71.5	200	100	16	10	16	27	19	55	115	198
RFA002	200	288	300	93.5			20	12	20	45	32	86	169	278
RFA003	250	357	370	113.5			22	12.5	22	59	42	113	210	335
RFA004	300	417	430	128.5	225	125	24	13	24	74	52	145	256	395
RFA005	350	472	490	145.5			26	17	26	106	75	201	358	552
RFA006	400	540	560	154.5			28	18	28	127	90	255	436	657
RFA007	450	600	620	167.5	250	150	30	20	30	163	115	344	530	791
RFA008	500	655	680	178.5			32	22	34	198	140	383	636	938

Roller ISO13755-type A



Product Code	Nominal Size D (mm)	Dimensions (mm)							SWL (ton)		Weight (kg)
		D1	D2	D3	H	h3	d2	d3	$\theta = 90^\circ$	$\theta = 0^\circ$	H=500
RA001	150	150	230	216	137	100	105	74	27	19	23
RA002	200	200	300	280	157		135	93	45	32	42
RA003	250	250	370	340	177		155	113	59	42	77
RA004	300	300	430	400	197	125	175	128	74	52	109
RA005	350	350	490	460	217		190	145	106	75	154
RA006	400	400	560	520	237		200	154	127	90	207
RA007	450	450	620	590	257	150	220	167	163	115	275
RA008	500	500	680	660	277		235	178	198	140	360

Single Roller Fairlead DIN 81907



WRP-Form A

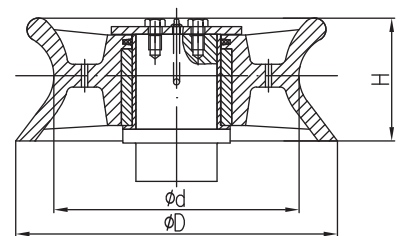


WRP-Form B

Type A	TNorminal	Socket	Socket	Total	Weight
	Pull (KN)	φ (mm)	height (mm)	height (mm)	(kg)
WRP-01	10	219.1	200	282	31
			400	482	44
			600	682	57
			800	882	70
WRP-02	20	273	200	305	43
			400	505	59
			600	705	75
			800	905	91
WRP-03	30	355.6	200	329	68
			400	529	89
			600	729	111
			800	929	132
WRP-05	50	457.2	200	363	117
			400	563	144
			600	763	172
			800	963	199
WRP-08	80	558.8	200	411	209
			400	611	242
			600	811	276
			800	1011	310
WRP-12	120	660.4	200	459	325
			400	659	370
			600	859	415
			800	1059	460
WRP-20	200	660.4	200	483	460
			400	683	516
			600	883	571
WRP-32	320	812.8	200	553	748
			400	753	810
			600	953	773

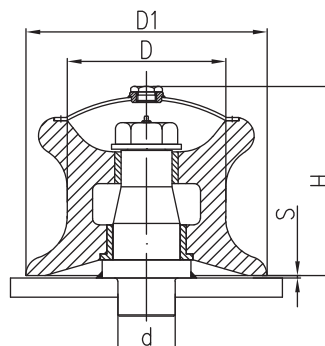
Type A	TNorminal	Socket	Socket	Socket	Total	Weight
	Pull (KN)	top φ (mm)	bottom φ (mm)	height (mm)	height (mm)	(kg)
WRP-08	80	560	825	1000	1211	426
WRP-12	120	660	925	1000	1259	568
			975	1200	1459	638
WRP-20	200	660	870	800	1083	629
			925	1000	1283	695
			975	1200	1483	764
			1030	1400	1683	838
WRP-32	320	810	1020	800	1153	953
			1075	1000	1353	1030
			1125	1200	1553	1110
			1180	1400	1753	1196

Roller DIN81906



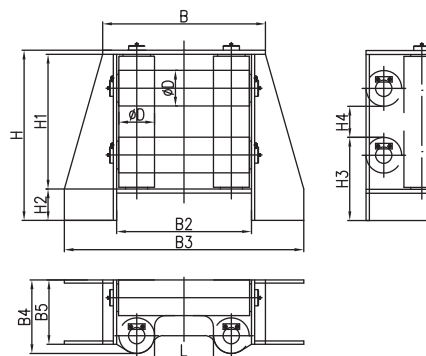
Type	Nominal Pull(KN)	Rope Dia. (mm)	Wire Dia. (mm)	Dimensions (mm)			Weight (kg)
				d	D	H	
WR-01	10	16	12	160	210	80	14
WR-02	20	22	16	200	265	102	20
WR-03	30	28	20	250	330	126	33
WR-05	50	36	24	320	420	160	72
WR-08	80	48	32	400	530	208	140
WR-12	120	60	40	450	610	256	240
WR-20	200	78	48	500	640	278	320
WR-32	320	96	48	560	780	348	580

Fairlead Roller JISF2014/CB*58-83



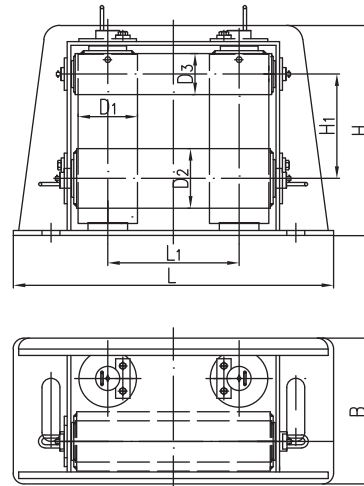
Product Code	Nominal Size D (mm)	Dimensions (mm)				Weight (kg)	Breaking Load (Tons)	Dia.of Mooring Line(Reference)			
		D1	d	H	S			Wire Rope		PP rope	Hemp rope
								6×24	6×37		
RE001	150	240	60	211	3	34	13	17	15	32	45
RE002	200	310	80	251	3	68	21	22	20	40	55
RE003	250	380	90	298	4	114	28	24	24	45	65
RE004	300	440	110	321	4	168	42	30	28	50	70
RE005	350	500	125	346	4	248	61	38	34	55	75
RE006	400	560	140	371	5	355	74	42	40	65	80
RE007	450	620	155	394	5	462	90	44	42	80	85

Rollers Fairlead DIN81902

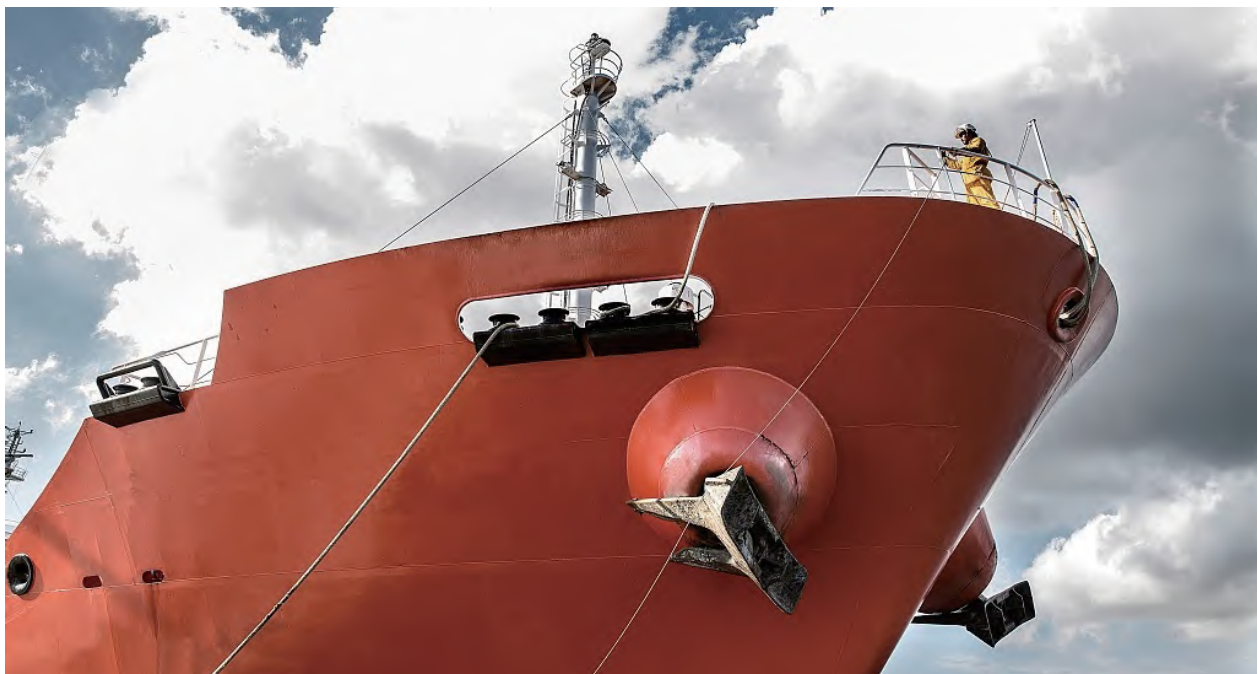


Product Code	Dimensions (mm)												Nom.pull acc. Standard DIN (KN)	SWL (KN)	Weight (kg)
	L	H	H1	H2	H3	H4	B	B2	B3	B4	B5	D			
RFF001	120	340	260	70	160	80	344	260	460	130	120	60	10	40	32
RFF002	180	454	364	80	212	100	450	364	640	174	160	82	20	80	80
RFF003	220	566	454	100	267	120	630	454	800	219	180	102	30	120	125
RFF004	249	660	524	120	312	140	700	524	900	265	240	127	50	200	250
RFF005	280	738	580	140	355	150	760	580	1000	290	260	140	80	320	400
RFF006	300	850	680	150	410	160	920	680	1200	368	320	178	120	480	670
RFF007	320	924	732	170	452	169	960	732	1300	400	350	194	160	640	835
RFF008	340	1058	856	180	518	180	1100	856	1350	500	450	244	200	800	1200
RFF009	350	1132	930	180	545	200	1130	930	1500	560	505	273	240	960	1600
RFF010	400	1271	1026	220	608	250	1300	1026	1700	608	550	298	320	1280	2200
RFF011	450	1388	1120	240	660	280	1340	1120	1800	660	600	324	520	2080	2800

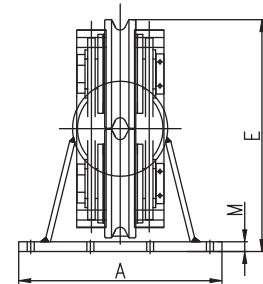
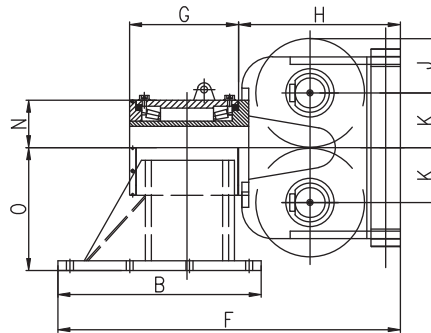
Universal Rollers Fairlead-JIS F2026



Product Code	Nominal Size (mm)	Dimensions (mm)								Opening Size (mm)	Wire Rope Dia.(mm)	SWL (TON)	4Rollers Weight (kg)	5Rollers Weight (kg)
		L	L1	H	H1	B	D1	D2	D3					
RFG001	140	805	335	542	275	355	140	140	114	148×195	18	12	216	246
RFG002	160	890	365	584	290	405	165	165	114	150×200	22.4	17	308	370
RFG003	180	960	390	636	315	455	190	190	140	150×199	25	24	410	517
RFG004	200	1049	420	680	330	505	216	216	140	152×204	28	28	565	680
RFG005	250	1303	520	824	415	610	267	267	165	199×253	35	46	1000	1234
RFG006	315	1562	620	998	420	715	318	318	216	253×302	42	60	1625	2150

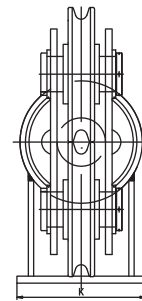
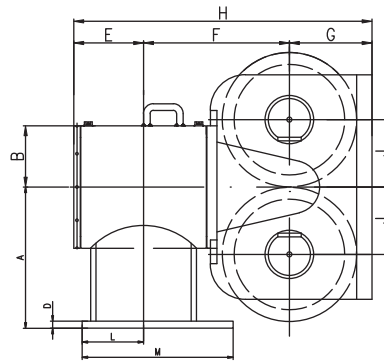


Swivel Anchor Fairleads Model YS471



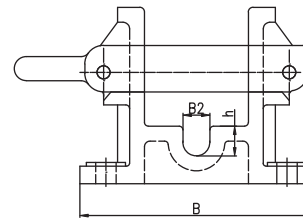
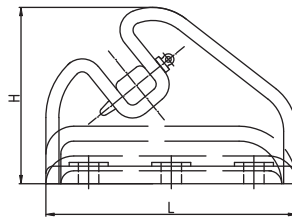
Product Code	Wire Rope Dia.		Sheave Dia(mm)	Weight each(kg)	Dimensions (mm)										
	inch	mm			A	B	F	G	H	J	K	L	M	N	O
SFA001	1"	25	250	286	422	425	658	294	364	125	127	208	25	121	360
SFA002	1-1/4"	32	305	495	650	506	869	305	409	150	152	175	30	127	357
SFA003	1-1/2"	38	406	1080	760	760	1270	406	518	200	202	219	36	174	459
SFA004	1-3/4"	44	508	2220	1015	914	1568	540	635	254	256	264	40	229	560
SFA005	2"	50	610	3750	1118	1219	1854	635	800	305	306	346	50	278	698
SFA006	2-1/2"	63	762	6300	1422	1305	2097	749	967	381	383	357	60	330	800

Swivel Anchor Fairleads Model AF457



Product Code	Wire Rope Dia.		Sheave Dia(mm)	Weight each(kg)	Dimensions (mm)											
	inch	mm			A	B	C	D	E	F	G	H	J	K	L	M
SFB001	1"	25	254	212	273	114	89	20	127	257	171	556	129	241	114	279
SFB002	1-1/4"	32	305	356	324	127	127	20	162	314	203	679	154	279	133	330
SFB003	1-1/2"	38	406	760	432	178	152	25	214	451	273	938	205	457	203	508
SFB004	1-3/4"	44	508	1240	533	229	216	25	286	557	324	1167	256	533	254	622
SFB005	2"	50	610	1920	641	279	254	32	324	673	375	1372	306	584	279	686
SFB006	2-1/2"	63	762	3687	838	330	254	50	359	797	453	1659	383	762	381	762

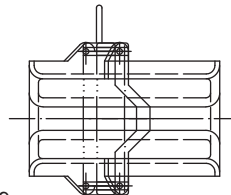
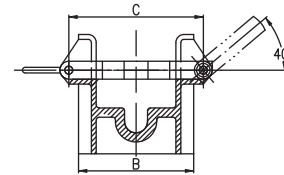
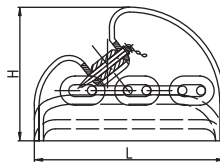
Chain Stopper JIS F2002 (Bolt Mounted)



Material: SC42 in JISG5101 / ZG230-450 GB/T11352-2009

Product Code	Normal Size (mm)	CABLE DIA.	Dimensions (mm)					Bolt			Reference Weight (kg)
			B	H	L	h	B2	Dia of the bolt	No.	Dia of hole	
CSA001	19	17-19	195	190	270	32	32	M20	4	22	22
CSA002	22	20-22	215	216	310	37	38	M20	6	22	31
CSA003	25	23-25	240	241	345	43	43	M20	6	22	44
CSA004	28	26-28	265	270	385	48	49	M24	6	26	58
CSA005	32	30-32	305	305	435	54	55	M27	6	30	89
CSA006	36	34-36	340	342	490	61	61	M30	6	33	122
CSA007	40	38-40	370	378	540	68	65	M30	6	33	160
CSA008	44	42-44	405	412	590	75	72	M33	6	36	208
CSA009	48	46-48	440	450	640	82	78	M36	6	39	272
CSA010	52	50-52	470	491	695	88	85	M33	8	36	338
CSA011	56	54-56	495	522	745	95	92	M36	8	39	414
CSA012	60	58-60	530	564	795	102	98	M39	8	42	505
CSA013	64	62-64	565	600	850	109	104	M42	8	46	618
CSA014	68	66-68	590	635	900	116	110	M42	8	46	737

Chain Stopper JIS F2015-87

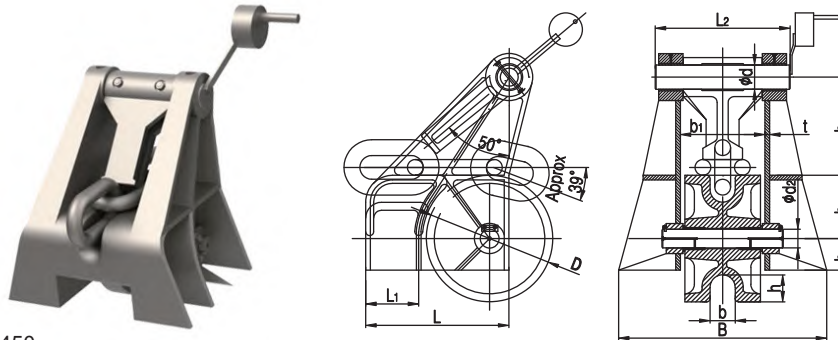


Material :SC42 in JISG5101 / ZG230-450 GB/T11352-2009

Product Code	CSB001	CSB002	CSB003	CSB004	CSB005	CSB006	CSB007	CSB008	CSB009	CSB010
Chain Dia. (mm)	38-40	42-44	46-48	50-52	54-56	58-60	62-64	66-68	70-73	76-78
L	540	590	640	695	745	795	850	900	960	1020
H	378	412	450	491	528	564	600	635	675	715
B	336	366	397	428	457	488	517	547	582	617
C	390	424	460	494	530	564	600	636	678	720
Weight(kg)	111	139	176	216	261	319	396	482	608	739

Note: * The Lever can be opened in right or left hand side

Chain Stopper JIS F2032 Roller Bar Type



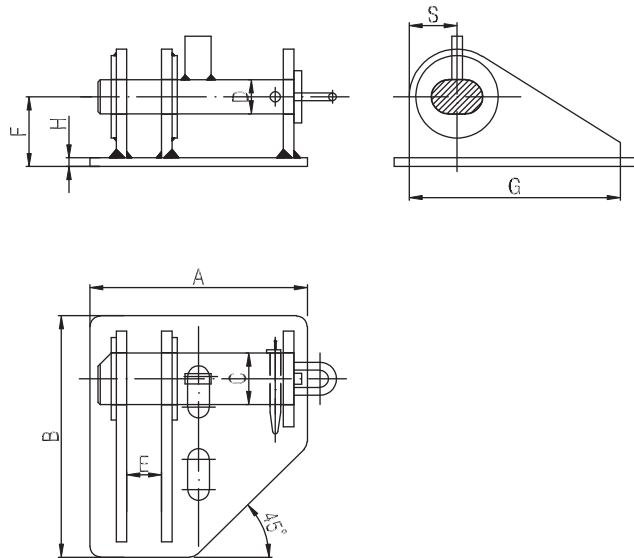
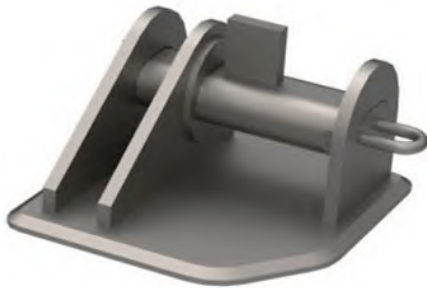
Material :Q345B/ZG230-450

Product Code	Normal Size (mm)	Dimensions (mm)											Weight (kg)
		B	L	D	d	d1	b	h	h1	h2	h3	t	
CSR001	70-73	980	660	584	116	87	118	125	422	292	146	22	997
CSR002	76-78	1040	700	624	123	93	126	133	450	312	156	23	1198
CSR003	81-84	1110	760	672	131	99	136	143	483	336	164	25	1465
CSR004	87-90	1190	810	720	139	106	146	153	515	360	180	27	1772
CSR005	92-95	1250	860	760	146	112	154	162	545	380	190	28	2073
CSR006	97-102	1320	920	816	156	120	165	175	584	408	204	30	2504
CSR007	105-107	1390	981	864	163	128	173	185	617	432	216	32	2928
CSR008	111-114	1460	1026	912	172	135	184	195	651	456	228	34	3409
CSR009	117-122	1550	1100	976	182	142	197	208	695	488	244	36	4103
CSR010	122-132	1660	1190	1056	194	154	213	225	750	528	264	40	5163

Chain Stopper-OCIMF

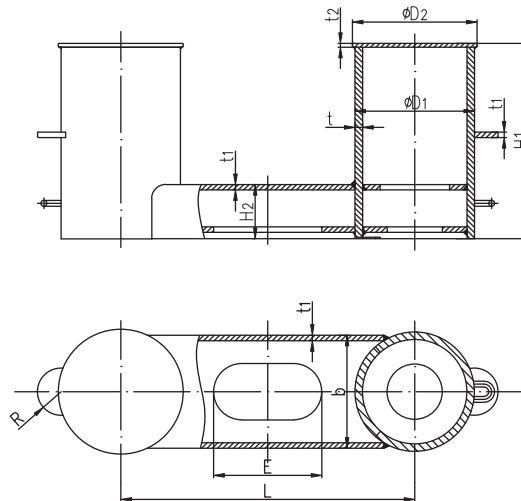
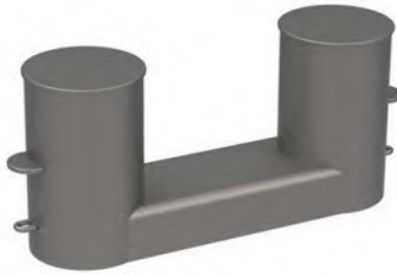


Smit Towing Bracket-OCIMF



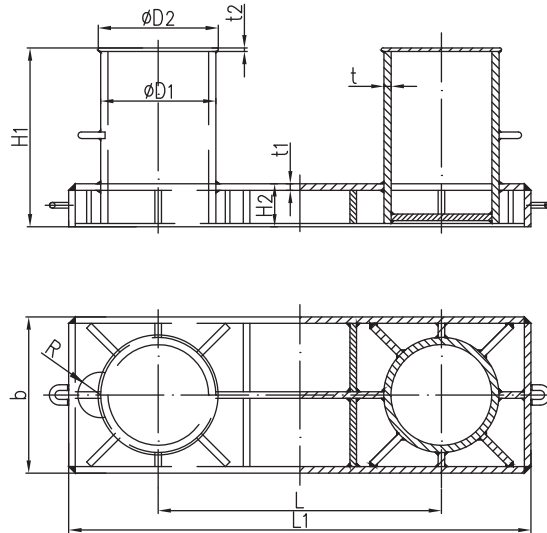
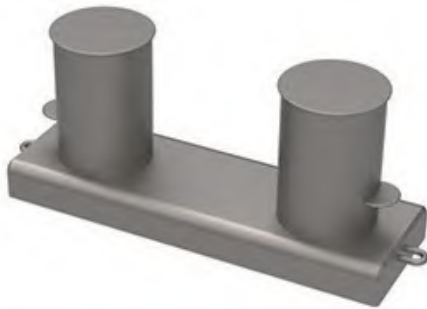
Product Code	Nominal Diameter (mm)	S.W.L (KN)	Dimensions (mm)									
			A	B	C	D	E	F	G	H	S	Weight (kg)
SB001	28	450	260	290	60	42	40	92	230	12	60	34
SB002	40	500	370	415	88	58	60	116	360	16	85	58
SB003	44	550	370	420	90	58	60	118	370	18	85	76
SB004	48	600	465	495	100	60	70	140	425	20	90	94
SB005	52	750	485	535	110	70	80	150	465	20	100	106
SB006	54	1000	500	555	118	78	80	160	485	25	110	118
SB007	60	1250	535	600	124	84	85	175	520	25	120	146
SB008	64	1500	600	625	138	92	100	180	545	25	138	184
SB009	68	1740	650	700	150	92	100	213	605	28	160	226
SB010	73	1850	675	750	160	102	100	218	655	28	160	298
SB011	76	2000	720	800	170	110	112	230	700	30	170	312
SB012	84	2250	770	830	180	118	120	245	750	35	180	446
SB013	90	2500	880	900	190	124	130	255	780	35	190	588
SB014	95	2750	940	1120	195	135	170	290	940	40	195	751
SB015	102	3000	940	1120	216	144	170	305	940	45	225	888
SB016	120	3500	1100	1180	250	162	170	340	980	50	250	1180
SB017	132	4000	1170	1300	276	182	180	380	1140	55	275	1550

Double Bollard ISO13795 Type-A



Product Code	Normal Size	Dimensions(mm)										SWL						Weight (kg)
		D1	D2	H1	H2	b	L	t	t1	t2	R	For mooring purposes				For towing purposes (Eye splice)		
												One-rope use		Two-rope use				
												KN	t	KN	t	KN	t	
DBB001	150	165.2	185	330	90	155	400	8	6	16	40	54	5.5	49	5	98	10	29
DBB002	200	216.3	240	395	115	205	500	8	6	6	50	82	8.4	65	6.7	128	13	46
DBB003	250A	267.4	290	505	135	250	630	12	9	8	60	156	16	134	14	265	27	107
DBB004	250B	267.4	290	505	135	250	630	10	8	7	60	127	13	108	11	216	22	91
DBB005	300A	318.5	340	600	150	290	800	21.5	16	9	70	332	34	306	31	206	62	281
DBB006	300B	318.5	340	600	150	290	800	12	9	9	70	186	19	161	16	353	36	166
DBB007	350A	355.6	380	685	175	340	890	26	19	11	80	443	45	418	43	834	85	431
DBB008	350B	355.6	380	685	175	340	890	14.5	10	9	80	244	25	216	22	491	50	241
DBB009	400A	406.4	430	730	185	380	1000	28	20	13	85	594	61	521	53	1040	106	570
DBB010	400B	406.4	430	730	185	380	1000	15	11	11	85	326	33	269	27	657	67	322
DBB011	450A	457.2	480	770	195	425	1100	29	21	14	90	753	77	612	62	1216	124	712
DBB012	450B	457.2	480	770	195	425	1100	14.5	11	11	90	382	39	292	30	765	78	379
DBB013	500A	508	530	830	230	480	1250	32	23	16	100	992	101	757	77	1511	154	960
DBB014	500B	508	530	830	230	480	1250	15	11	11	100	457	47	326	33	912	93	465
DBB015	550A	558.8	580	900	270	520	1380	31	22	16	110	1131	115	812	83	1619	165	1123
DBB016	550B	558.8	580	900	270	520	1380	21	16	11	110	781	80	541	55	1560	159	787
DBB017	600	609.4	630	950	300	560	1550	33	23	16	120	1401	143	948	97	1893	193	1391

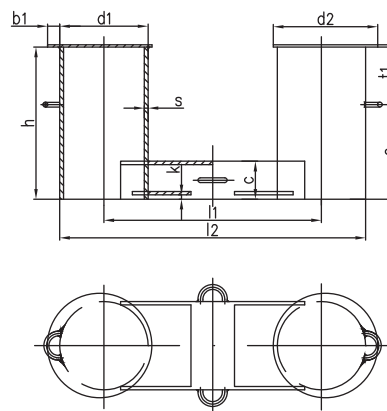
Double Bollard ISO 13795 Type-B



Material: Q235B, Q345B GB/T591-2008

Product Code	Normal Size	Dimensions(mm)										SWL						Weight (kg)
		D1	D2	H1	H2	b	L	t	t1	t2	R	For mooring purposes				For towing purposes (Eye splice)		
												One-rope use		Two-rope use				
												KN	t	KN	t	KN	t	
DBC001	150	165.2	185	320	80	225	400	8	8	6	40	54	5.5	49	5	98	10	45
DBC002	200	216.3	240	365	85	290	500	8	8	6	50	82	8.4	65	6.7	128	13	68
DBC003	250A	267.4	290	470	100	360	630	12	11	8	60	156	16	134	14	265	27	150
DBC004	250B	267.4	290	470	100	360	630	10	8	7	60	127	13	108	11	216	22	119
DBC005	300A	318.5	340	575	125	430	800	21.5	20	9	70	332	34	306	31	206	62	383
DBC006	300B	318.5	340	575	125	430	800	12	9	9	70	186	19	161	16	353	36	203
DBC007	350A	355.6	380	655	145	480	890	26	23.5	11	80	443	45	418	43	834	85	582
DBC008	350B	355.6	380	655	145	480	890	14	13	9	80	244	25	216	22	491	50	333
DBC009	400A	406.4	430	705	160	550	1000	28	26	13	85	594	61	521	53	1040	106	793
DBC010	400B	406.4	430	705	160	550	1000	15	13.5	11	85	326	33	269	27	657	67	441
DBC011	450A	457.2	480	745	170	620	1100	29	26	14	90	753	77	612	62	1216	124	979
DBC012	450B	457.2	480	745	170	620	1100	14.5	13	11	90	382	39	292	30	765	78	517
DBC013	500A	508	530	790	190	690	1250	32	29	16	100	992	101	757	77	1511	154	1321
DBC014	500B	508	530	790	190	690	1250	14.5	13	11	100	457	47	326	33	912	93	631
DBC015	550A	558.8	580	840	210	750	1380	31	28	16	110	1131	115	812	83	1619	165	1530
DBC016	550B	558.8	580	840	210	750	1380	21	19	11	110	781	80	541	55	1560	159	1059
DBC017	600	609.4	630	875	225	820	1550	33	28	16	120	1401	143	948	97	1893	193	1850

Double Bollard NS2584



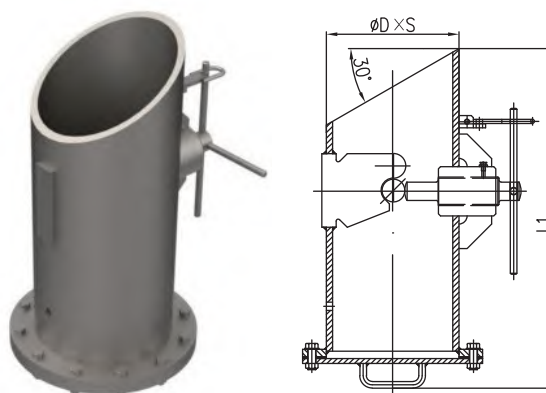
Material: Q235B, Q345B GB/T591-2008

Product Code	Normal Size	d1xs		Dimensions (mm)										SWL		Weight (kg)
		tube	plate	d2	b1	h	l1	l2	e	c	t1	k	mooring	towing		
													KN	KN		
DBF001	125	139.7x10	140x10	170	20	250	315	455	165	80	6	15	45	130	26	
DBF002	160	168.3x10	168x10	200	24	300	400	568	195	90	6	15	55	155	38	
DBF003	200	219.1x12.5	219x12	260	32	400	500	719	250	100	6	15	100	285	75	
DBF004	250	273x12.5	273x12	330	40	500	630	903	315	125	10	15	130	365	124	
DBF005	315	323.9x16	324x16	390	48	600	800	1124	375	150	10	20	205	540	230	
DBF006	400	406.4x17.5	406x16	480	56	700	1000	1406	435	175	10	20	280	740	356	
DBF007	500	508x25	508x22	600	72	830	1250	1758	515	200	12	25	510	1300	723	
DBF008	630	610x25	610x22	720	88	1000	1570	2180	615	225	16	25	615	1550	1084	
DBF009	710	711x28	711x25	830	96	1100	1750	2461	675	250	16	25	815	2150	1532	

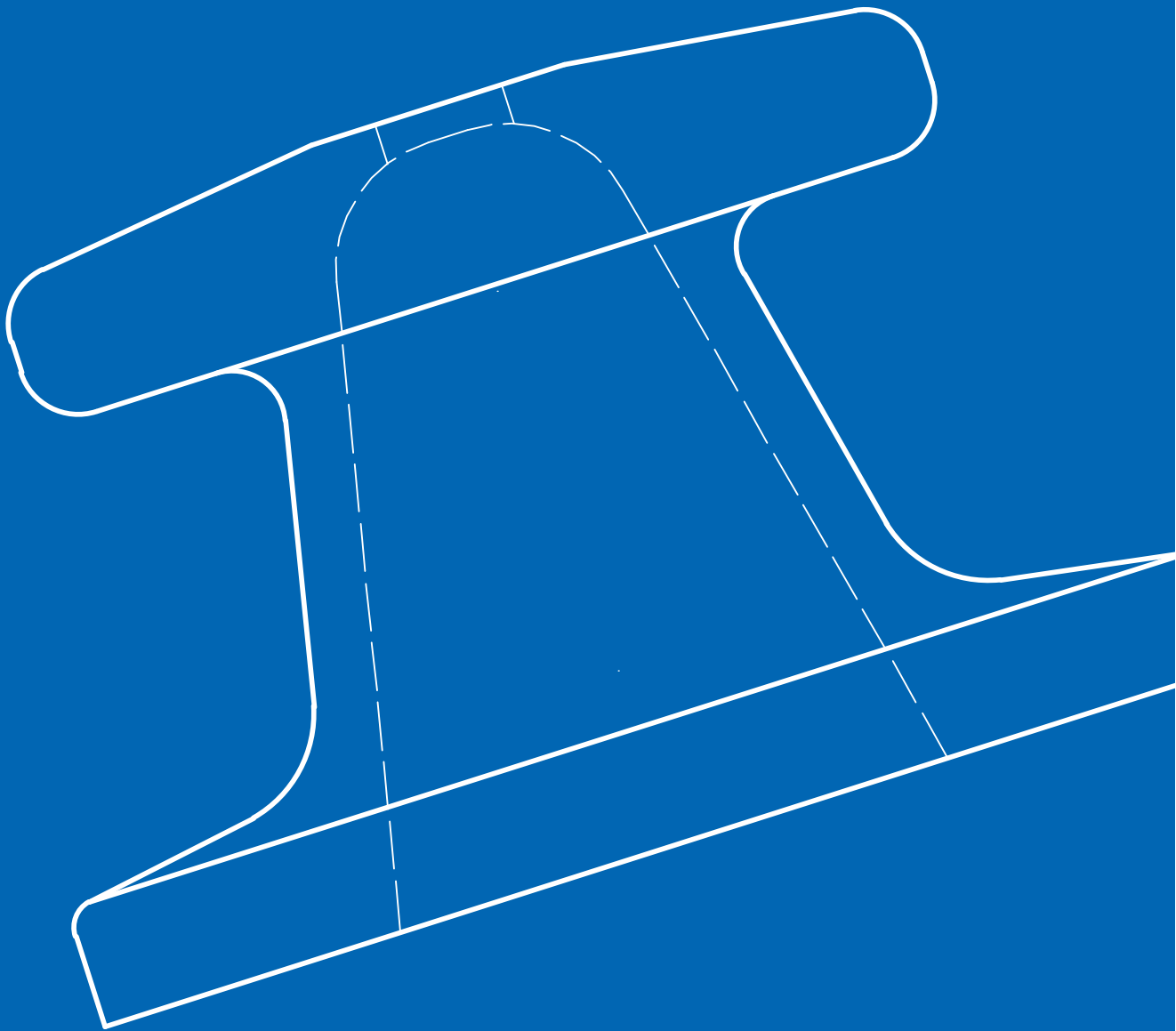
End Fastener/Quick Releaser DIN 81860(CB/T4246-2013) for Anchor Chain

Material: Q235B, Q345B GB/T591-2008

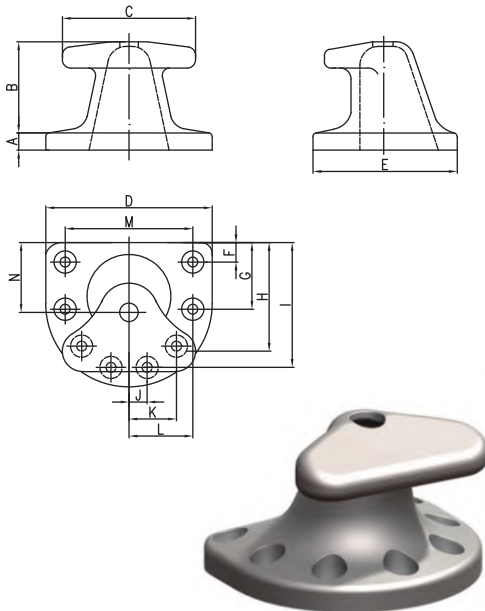
Product Code	Chain dia. (mm)	Dia. tube D×S (mm)	L1 ≈ (mm)	Mass (kg)
EFA001	36-46	Φ273×δ13	735	80
EFA002	48-56	Φ324×δ14	835	114
EFA003	58-68	Φ406×δ16	995	188
EFA004	70-81	Φ508×δ18	1245	312
EFA005	84-92	Φ508×δ18	1245	342
EFA006	95-105	Φ610×δ20	1430	495
EFA007	107-114	Φ610×δ20	1430	535
EFA008	117-127	Φ711×δ22	1615	737
EFA009	130-137	Φ813×δ22	1790	962
EFA010	142-152	Φ914×δ25	1970	1308



MOORING BOLLARD

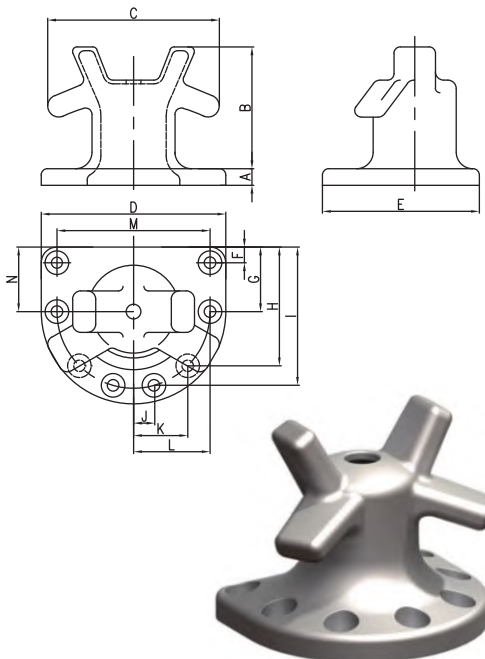


T-Head Bollard



Standard Bollard Capacity (tonnes)										
Dimension (mm)	TH10	TH15	TH20	TH30	TH50	TH75	TH100	TH125	TH150	TH200
A	45	52	54	57	70	80	80	87	93	97
B	200	220	240	250	308	355	415	460	490	520
C	305	335	350	365	450	520	610	670	720	765
D	380	420	440	460	565	650	762	838	900	950
E	330	365	380	400	490	560	660	726	780	825
F	45	50	51	53	65	75	90	100	105	110
G	-	-	-	-	-	-	305	335	360	350
H	-	-	230	245	300	300	500	550	590	560
I	240	265	330	340	420	460	570	630	675	695
J	103	115	-	-	-	105	-	-	-	120
K	-	-	152	159	196	240	195	215	230	300
L	-	-	-	-	-	-	290	320	345	365
M	292	320	336	350	435	500	585	645	690	730
N	190	208	218	226	280	320	380	415	445	475
Bolt Size	M24	M24	M24	M30	M36	M42	M42	M48	M48	M56
Bolt Length	450	450	450	450	600	600	600	750	750	915
Bolt Qty	4	4	5	5	5	6	7	7	7	8

Twin Horn Bollard(Staghorn Bollard)



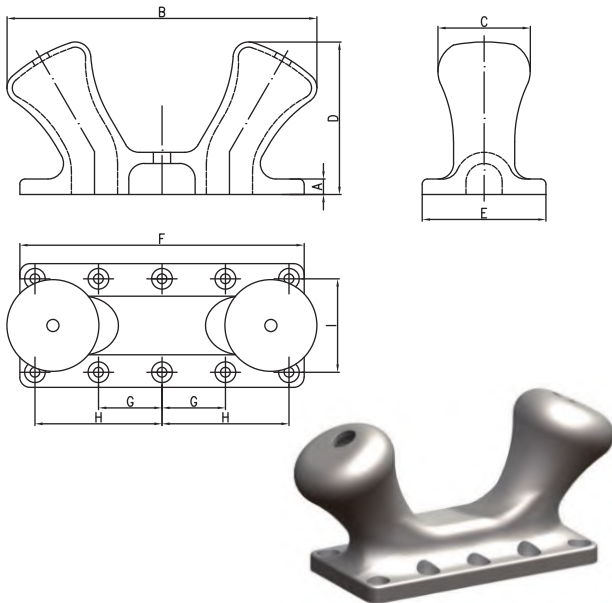
Standard Bollard Capacity (tonnes)						
Dimension (mm)	SH50	SH75	SH100	SH125	SH150	SH200
A	60	70	80	90	98	102
B	420	490	560	615	671	700
C	515	630	715	790	860	895
D	530	645	740	810	685	920
E	460	555	635	700	760	795
F	55	65	75	85	90	95
G	-	-	295	320	350	335
H	280	290	485	530	580	540
I	402	460	560	615	670	680
J	-	120	-	-	-	120
K	190	250	195	215	235	300
L	420	-	290	320	350	365
M	420	510	580	640	698	728
N	195	235	270	295	320	335
Bolt Size	M36	M42	M42	M48	M48	M56
Bolt Length	600	600	600	750	750	915
Bolt Qty	5	6	7	7	7	8

* Material: Cast Iron, Cast Steel and Ductile Iron (Spheroidal Graphite).

Mounting Hardware: Galvanized Grade 8.8 bolts, nuts and washers.

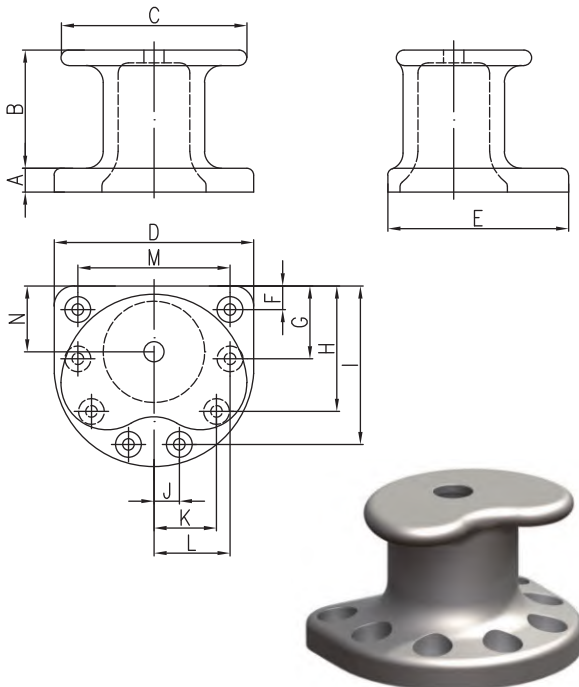
Surface and Paint: Fully painted or with rust preventative primer.

Double Bitt Bollard



Standard Bollard Capacity (tonnes)							
Dimension (mm)	DB30	DB50	DB75	DB100	DB125	DB150	DB200
A	45	56	62	73	80	90	100
B	780	940	1145	1345	1550	1685	1885
C	235	285	345	410	470	510	570
D	390	470	570	670	770	840	940
E	300	355	432	510	585	635	700
F	605	710	865	1016	1168	1270	1420
G	80	98	190	222	255	280	310
H	260	310	380	445	510	555	625
I	220	265	325	380	435	475	535
Bolt Size	M24	M30	M36	M42	M42	M48	M56
Bolt Length	450	450	450	600	600	750	915
Bolt Qty	8	8	10	10	10	10	10

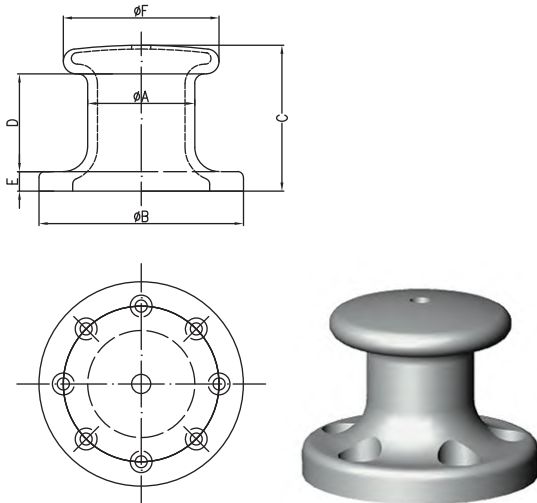
Kidney Shaped Bollard



Standard Bollard Capacity (tonnes)									
Dimension (mm)	KS15	KS20	KS30	KS50	KS75	KS100	KS125	KS150	KS200
A	40	50	55	60	70	80	90	95	110
B	195	215	260	265	300	340	375	410	460
C	275	330	385	415	480	550	605	660	760
D	325	390	455	490	570	650	715	780	900
E	290	345	400	430	500	575	635	690	795
F	50	60	70	75	90	100	110	120	140
G	-	-	-	-	240	275	300	325	345
H	-	215	260	230	380	435	480	525	545
I	215	300	350	355	440	500	550	600	675
J	88	-	-	-	-	-	-	-	112
K	-	135	155	185	145	165	185	200	285
L	-	-	-	-	220	250	275	300	345
M	250	300	350	375	435	500	550	600	690
N	125	150	175	190	220	250	275	300	345
Bolt Size	M24	M24	M30	M36	M36	M42	M48	M56	M56
Bolt Length	450	450	450	600	600	600	750	915	915
Bolt Qty	4	4	5	6	7	7	7	7	8

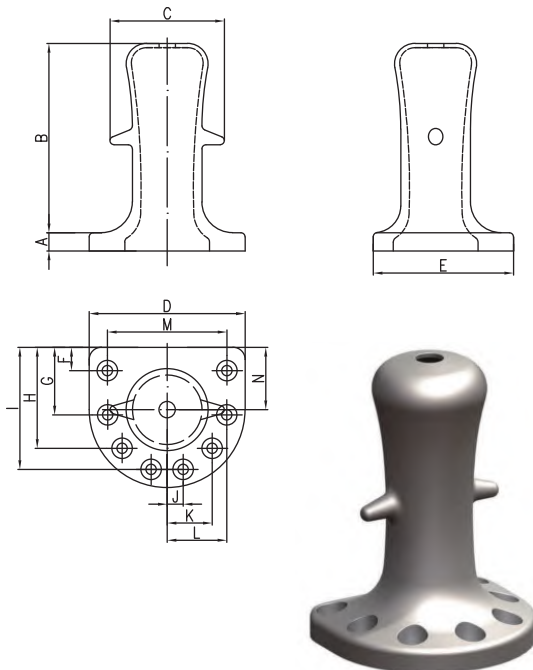
* Material: Cast Iron, Cast Steel and Ductile Iron (Spheroidal Graphite).
Mounting Hardware: Galvanized Grade 8.8 bolts, nuts and washers.
Surface and Paint: Fully painted or with rust preventative primer.

Pillar Bollard



Standard Bollard Capacity (tonnes)						
Dimension (mm)	PB15	PB30	PB50	PB75	PB100	PB150
A	229	254	305	457	559	559
B	381	559	610	914	1067	1067
C	368	426	533	864	762	762
D	254	254	305	648	510	510
E	51	83	114	102	102	102
F	356	432	508	610	813	813
Bolt Size	M24	M30	M30	M36	M45	M48
Bolt Length	450	450	450	600	800	1000
Bolt Qty	4	4	6	8	8	8

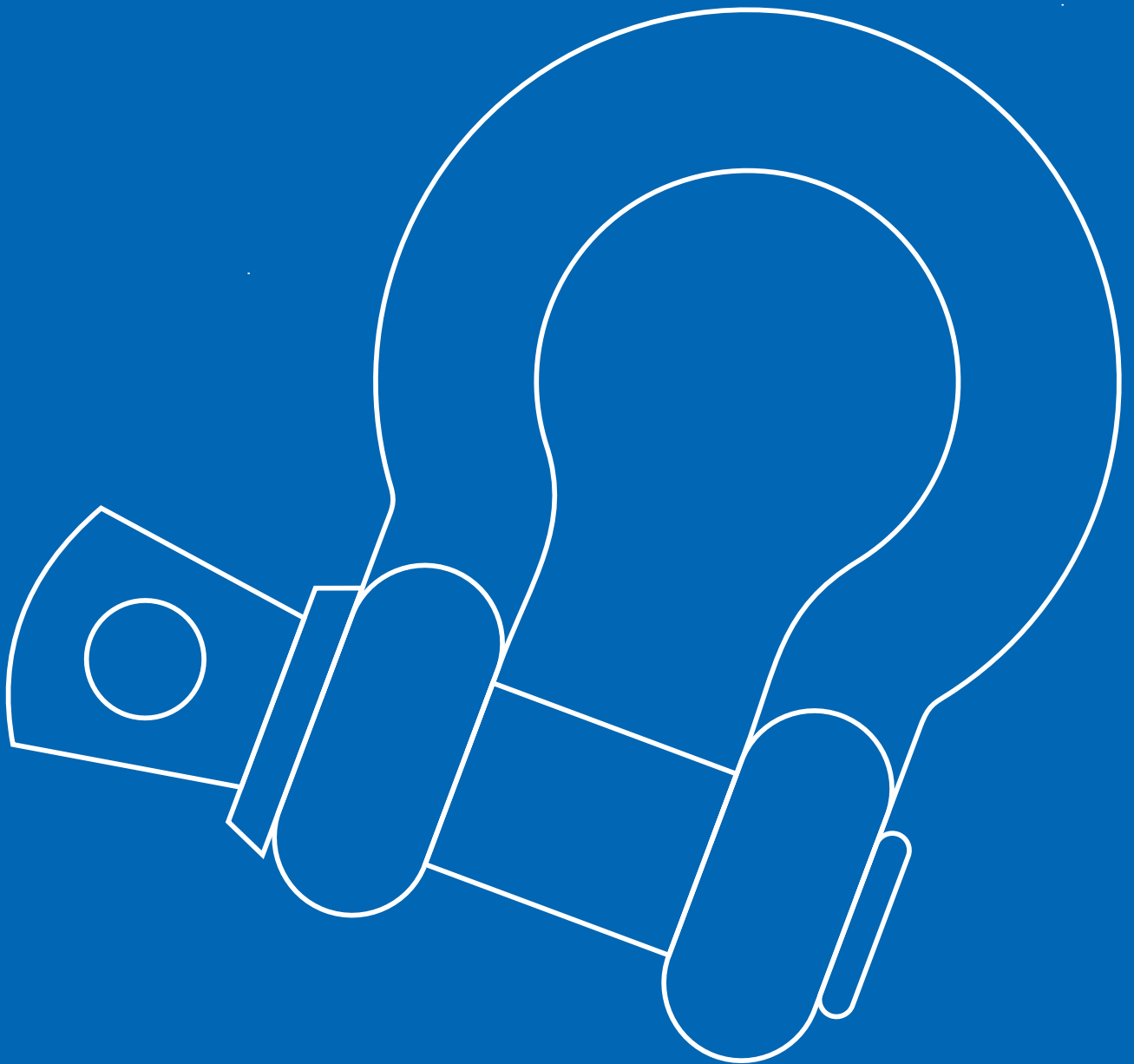
Single Bitt Bollard



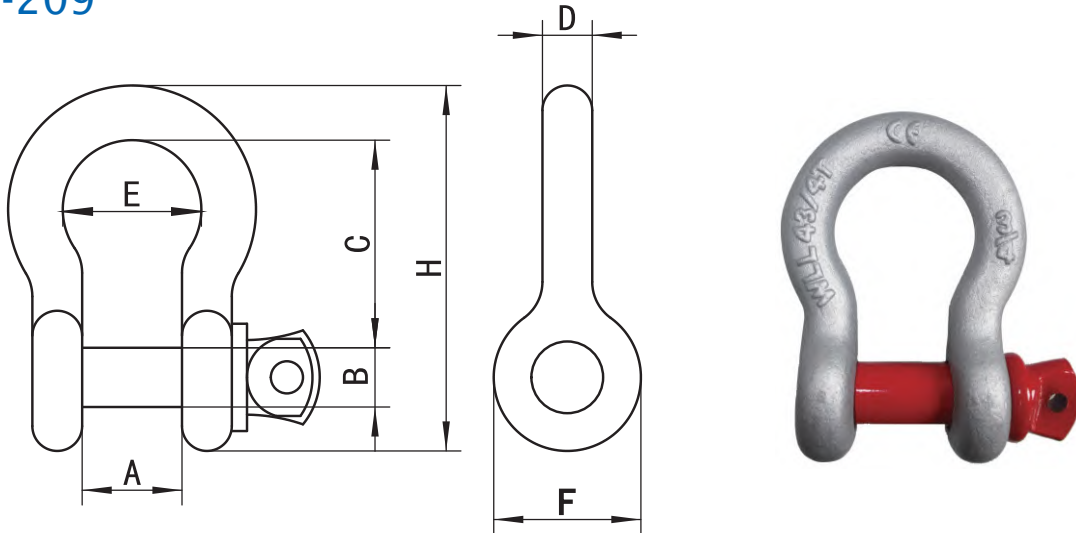
Standard Bollard Capacity (tonnes)								
Dimension (mm)	SBB20	SBB30	SBB50	SBB75	SBB100	SBB125	SBB150	SBB200
A	55	60	70	82	90	92	96	110
B	455	540	685	830	925	1057	1155	1270
C	265	310	390	475	560	605	660	725
D	360	420	535	650	762	823	900	990
E	320	380	480	580	690	740	810	895
F	55	63	80	97	115	125	135	150
G	-	-	-	-	330	357	390	395
H	200	235	255	310	525	565	615	615
I	280	330	395	480	600	645	705	755
J	-	-	96	117	-	-	-	125
K	125	145	200	245	195	210	230	310
L	-	-	-	-	290	315	345	380
M	275	320	410	500	585	630	690	760
N	145	168	215	260	305	330	360	395
Bolt Size	M24	M30	M36	M42	M48	M48	M56	M56
Bolt Length	450	450	600	600	750	750	915	915
Bolt Qty	5	5	6	6	7	7	7	8

* Material: Cast Iron, Cast Steel and Ductile Iron (Spheroidal Graphite).
Mounting Hardware: Galvanized Grade 8.8 bolts, nuts and washers.
Surface and Paint: Fully painted or with rust preventative primer.

RIGGINGS



G-209



G209 Screw Pin Bow Shackle

Available For Stainless Steel AISI 304/316

Nominal Size (in.)	Working Load Limit (tons)	Dimensions (in.)							Weight Each (kg)
		A	B	C	D	E	F	H	G-209
3/16	1/3	0.38	0.25	0.88	0.19	0.60	0.56	1.47	0.03
1/4	1/2	0.47	0.31	1.13	0.25	0.78	0.61	1.84	0.05
5/16	3/4	0.53	0.38	1.22	0.31	0.84	0.75	2.09	0.09
3/8	1	0.66	0.44	1.44	0.38	1.03	0.91	2.49	0.14
7/16	1-1/2	0.75	0.50	1.69	0.44	1.16	1.06	2.91	0.17
1/2	2	0.81	0.63	1.88	0.50	1.31	1.19	3.28	0.33
5/8	3-1/4	1.06	0.75	2.38	0.63	1.69	1.50	4.19	0.62
3/4	4-3/4	1.25	0.88	2.81	0.75	2.00	1.81	4.97	1.07
7/8	6-1/2	1.44	1.00	3.31	0.88	2.28	2.09	5.83	1.64
1	8-1/2	1.69	1.13	3.75	1.00	2.69	2.38	6.56	2.28
1-1/8	9-1/2	1.81	1.25	4.25	1.16	2.91	2.69	7.47	3.36
1-1/4	12	2.03	1.38	4.69	1.29	3.25	3.00	8.25	4.31
1-3/8	13-1/2	2.25	1.50	5.25	1.42	3.63	3.31	9.16	6.14
1-1/2	17	2.38	1.63	5.75	1.54	3.88	3.63	10.00	7.8
1-3/4	25	2.88	2.00	7.00	1.84	5.00	4.19	12.34	12.6
2	35	3.25	2.25	7.75	2.08	5.75	4.81	13.68	20.4
2-1/2	55	4.13	2.75	10.50	2.71	7.25	5.69	17.84	38.9

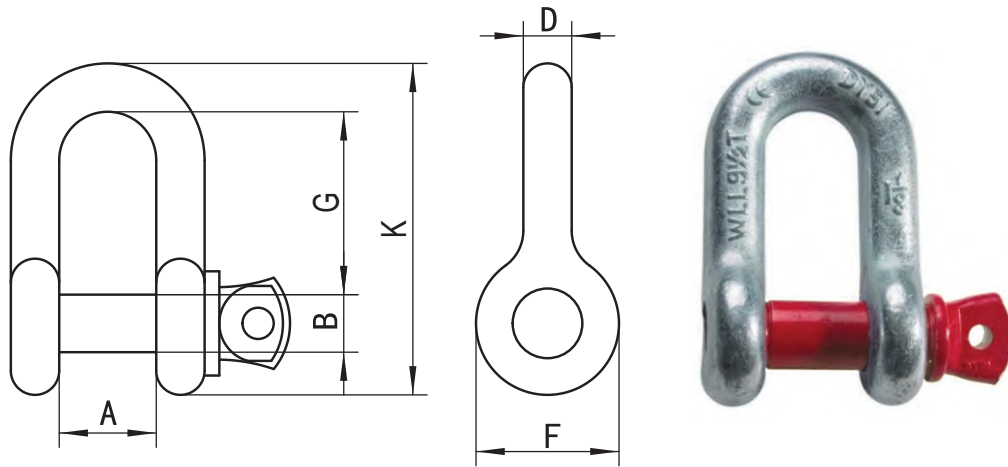
Note: * Drop Forged, Quenched And Tempered, With Alloy Pins.

* Max Proof Load Is 2.2 Times The Working Load Limit, Min Break Strength Is 6 Times W.L.L.

* 1inch=25.4mm

1kg=2.2046lb

G-210



G210 Screw Pin D Shackle

Available For Stainless Steel AISI 304/316

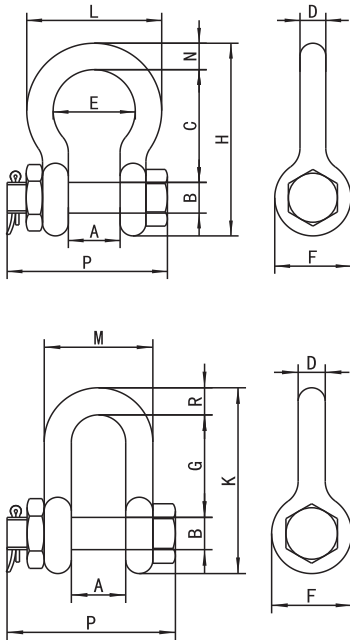
Nominal Size (in.)	Working Load Limit (tons)	Dimensions (in.)						Weight Each (kg)
		A	B	D	F	G	K	G-210
1/4	1/2	0.47	0.31	0.25	0.61	0.88	1.59	0.05
5/16	3/4	0.53	0.38	0.31	0.75	1.03	1.91	0.08
3/8	1	0.66	0.44	0.38	0.91	1.25	2.30	0.13
7/16	1-1/2	0.75	0.50	0.44	1.06	1.44	2.66	0.20
1/2	2	0.81	0.63	0.50	1.19	1.63	3.03	0.27
5/8	3-1/4	1.06	0.75	0.63	1.50	2.00	3.75	0.57
3/4	4-3/4	1.25	0.88	0.75	1.81	2.38	4.53	1.20
7/8	6-1/2	1.44	1.00	0.88	2.09	2.81	5.33	1.43
1	8-1/2	1.69	1.13	1.00	2.38	3.19	5.94	2.15
1-1/8	9-1/2	1.81	1.25	1.13	2.69	3.58	6.78	3.06
1-1/4	12	2.03	1.38	1.25	3.00	3.94	7.50	4.11
1-3/8	13-1/2	2.25	1.50	1.38	3.31	4.38	8.28	5.28
1-1/2	17	2.38	1.62	1.50	3.62	4.81	9.06	7.23
1-3/4	25	2.88	2.12	1.75	4.19	5.75	10.97	12.10
2	35	3.25	2.00	2.00	4.81	6.75	12.28	19.20
2-1/2	55	4.13	2.62	2.62	5.69	8.00	14.84	32.50

Note: * Drop Forged, Quenched And Tempered, With Alloy Pins.

* Max Proof Load Is 2.2 Times The Working Load Limit, Min Break Strength Is 6 Times W.L.L.

* 1inch=25.4mm

1kg=2.2046lb



G-2130



G-2150



Bolt Type Safety Shackle

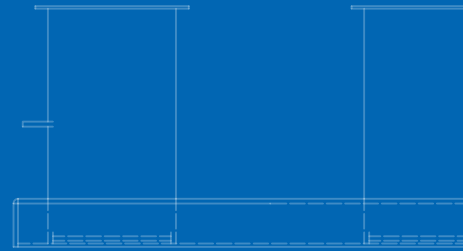
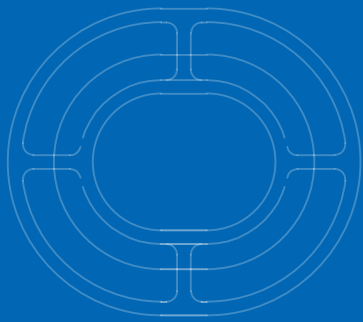
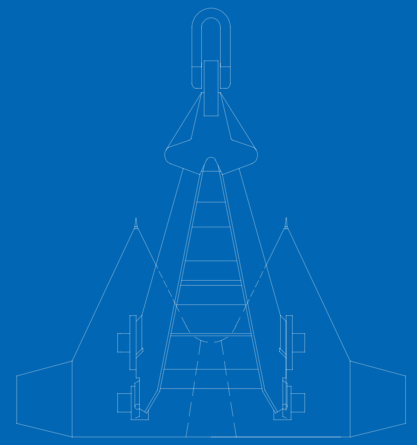
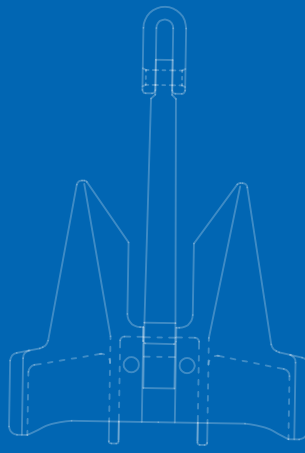
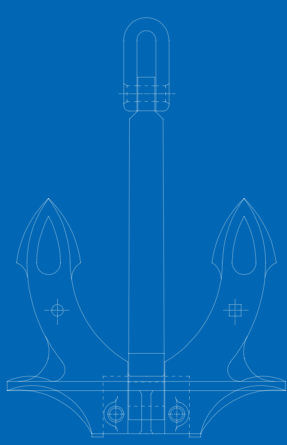
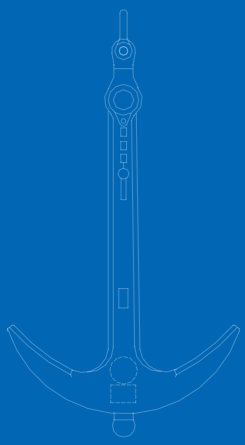
Available For Stainless Steel AISI 304/316

Nominal Size (in.)	Working Load Limit (tons)	Dimensions (in.)														Weight Each (kg)	
		A	B	C	D	E	F	G	H	K	L	M	N	P	R	G-2130	G-2150
3/16	1/3	0.38	0.25	0.88	0.19	0.60	0.56	--	1.47	--	0.98	--	0.19	1.29	--	0.03	--
1/4	1/2	0.47	0.31	1.13	0.25	0.78	0.61	--	1.84	--	1.28	--	0.25	1.56	--	0.05	0.06
5/16	3/4	0.53	0.38	1.22	0.31	0.84	0.75	--	2.09	--	1.47	--	0.31	1.82	--	0.10	0.10
3/8	1	0.66	0.44	1.44	0.38	1.03	0.91	--	2.49	--	1.78	--	0.38	2.17	--	0.15	0.15
7/16	1-1/2	0.75	0.50	1.69	0.44	1.16	1.06	--	2.91	--	2.03	--	0.44	2.51	--	0.22	0.22
1/2	2	0.81	0.63	1.88	0.50	1.31	1.19	1.63	3.28	3.03	2.31	1.81	0.50	2.80	0.50	0.36	0.34
5/8	3-1/4	1.06	0.75	2.38	0.63	1.69	1.50	2.00	4.19	3.75	2.94	2.31	0.69	3.53	0.63	0.76	0.67
3/4	4-3/4	1.25	0.88	2.81	0.75	2.00	1.81	2.38	4.97	4.53	3.50	2.75	0.81	4.07	0.81	1.23	1.14
7/8	6-1/2	1.44	1.00	3.31	0.88	2.28	2.09	2.81	5.83	5.33	4.03	3.19	0.97	4.71	0.97	1.79	1.74
1	8-1/2	1.69	1.13	3.75	1.00	2.69	2.38	3.19	6.56	5.94	4.96	3.69	1.06	5.31	1.00	2.57	2.52
1-1/8	9-1/2	1.81	1.25	4.25	1.13	2.91	2.69	3.58	7.47	6.78	5.16	4.06	1.25	5.09	1.25	3.75	3.45
1-1/4	12	2.03	1.38	4.69	1.25	3.25	3.00	3.94	8.25	7.50	5.75	4.53	1.38	6.51	1.38	5.31	4.90
1-3/8	13-1/2	2.25	1.50	5.25	1.38	3.63	3.31	4.38	9.16	8.28	6.38	5.00	1.50	7.21	1.50	7.18	6.24
1-1/2	17	2.38	1.63	5.75	1.50	3.88	3.63	4.81	10.00	9.06	6.88	5.38	1.62	7.73	1.62	9.43	8.39
1-3/4	25	2.88	2.00	7.00	1.75	5.00	4.19	5.75	12.34	10.97	8.86	6.38	2.25	9.05	2.12	15.40	14.20
2	35	3.25	2.25	7.75	2.00	5.75	4.85	6.75	13.68	12.28	9.97	7.25	2.40	10.41	2.00	23.70	21.20
2-1/2	55	4.13	2.75	10.50	2.62	7.25	5.69	8.00	17.84	14.84	12.87	9.38	3.13	13.56	2.62	44.60	38.60
3	85	5.00	3.25	13.00	3.00	7.88	6.50	8.50	21.50	16.88	14.36	11.00	3.62	16.50	3.50	70.00	56.00
3-1/2	120	5.25	3.75	14.63	3.62	9.00	8.00	--	24.63	--	16.50	--	4.12	19.00	--	120.00	--
4	150	5.50	4.24	14.50	4.10	10.00	9.00	--	25.69	--	18.12	--	4.56	19.75	--	153.00	--

Note: * Drop Forged, Quenched And Tempered, With Alloy Pins.

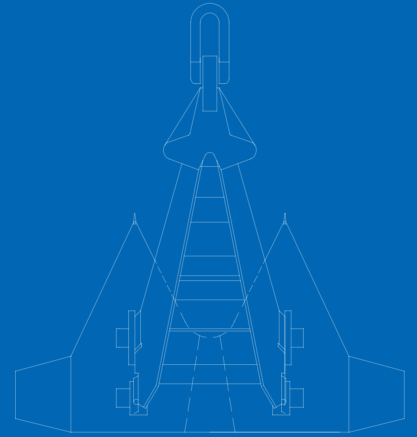
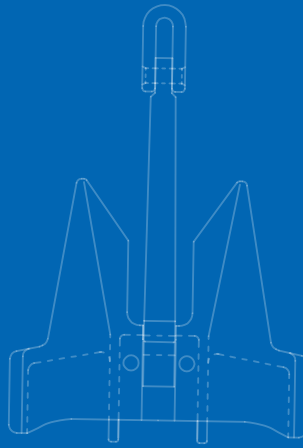
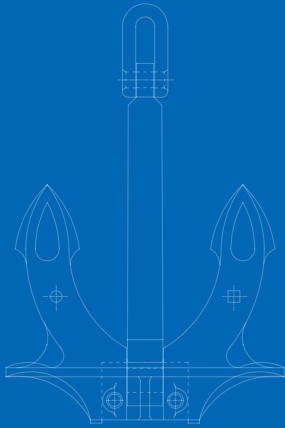
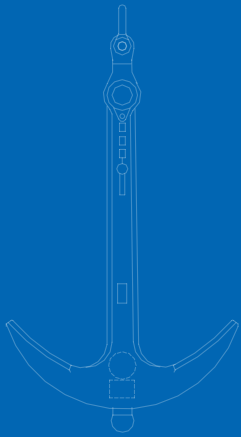
* Max Proof Load Is 2.2 Times The Working Load Limit, Min Break Strength Is 6 Times W.L.L.

* 1inch=25.4mm 1kg=2.2046lb



LIGE MACHINERY

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