


RUBBER FENDER

橡胶护舷/系船柱产品手册

白鲨国际贸易有限公司

HK WHITE SHARK TRADING LTD

SUPER CELL FENDERS

超级鼓型橡胶护舷（SC Type）

特 点 Features

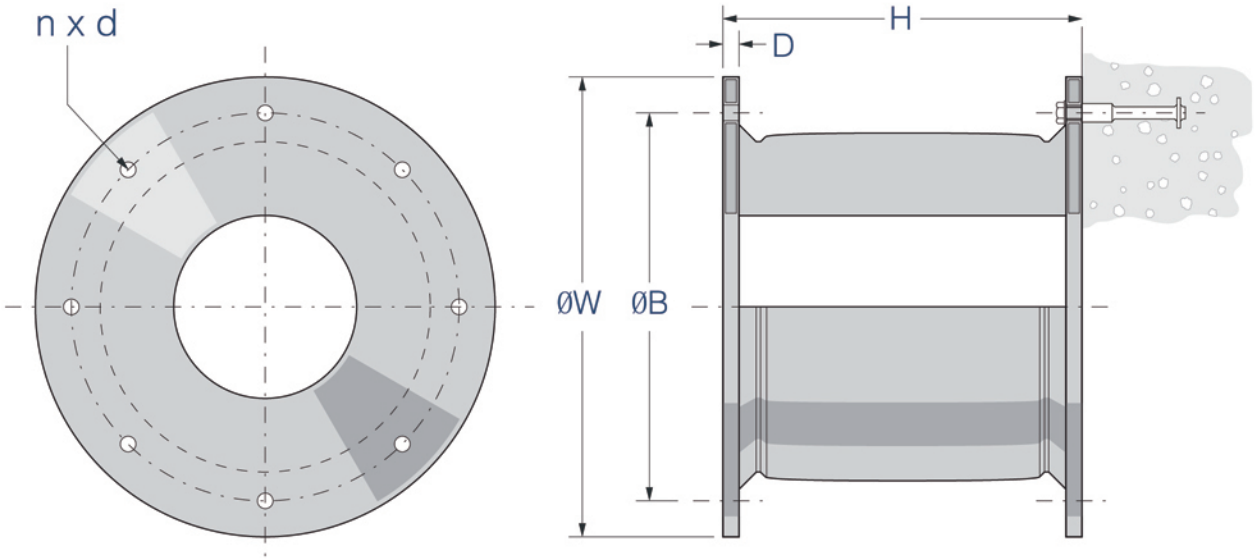
- 设计压缩变形大；
- 单位吸能量高；
- 护舷前端设有防冲钢架，从而降低船舶靠泊面压力，适用于大型港口、码头。

- More reasonable structure.
- High E/R.H value.
- Verg suitable for the large wharf

规 格 Specification

规 格 Specification	H (mm)	ØW (mm)	ØB (mm)	D (mm)	n x d (mm)	Weight (kg)
SC400H	400	650	550	25	4x30	78
SC500H	500	650	550	25	4x32	110
SC630H	630	840	700	25	4x39	230
SC800H	800	1050	900	30	6x40	410
SC1000H	1000	1300	1100	35	6x47	790
SC1150H	1150	1500	1300	37	6x50	1200
SC1250H	1250	1650	1450	40	6x53	1500
SC1450H	1450	1850	1650	42	6x61	2300
SC1600H	1600	2000	1800	45	8x61	3000
SC1700H	1700	2100	1900	50	8x66	3600
SC2000H	2000	2200	2000	50	8x74	5200
SC2250H	2250	2550	2300	57	10x74	7400
SC2500H	2500	2950	2700	70	10x74	10500
C3000H	3000	3350	3150	75	12x90	18500

[Units: mm, kg]



SUPER CELL FENDERS

超级鼓型橡胶护舷（SC Type ）

性能表 Performance List

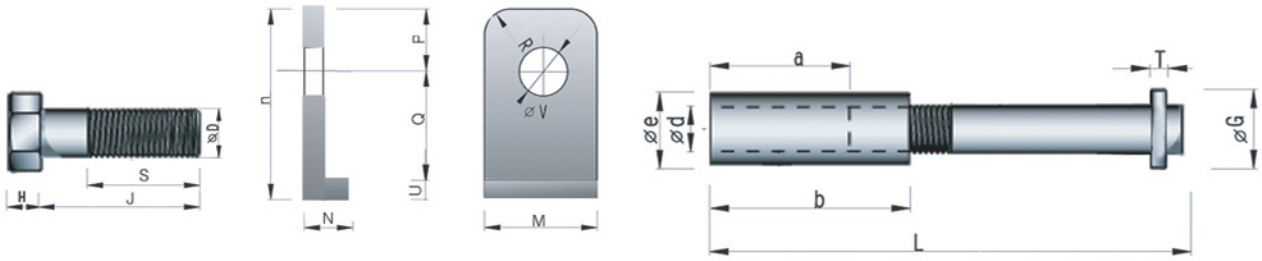
产品型号 Fender Size	性能等级 Performance Grade	压缩变形 52.5% (Rated Deflection) 反 力 Reaction Force (kN)	吸能量 Energy Absorption (kN-m)
SC400H	R3	110	19.3
	R2	96	16.7
	R1	86	14.0
	R0	70	11.0
	R01	52	8.0
SC500H	R1	181	40.2
	R0	162	35.6
	RH	160	28.0
	RS	110	22.0
	RE	90	17.0
SC630H	R1	298	82
	R0	262	72
	RH	228	63
	RS	175	49
	RE	140	39
SC800H	R1	430	154
	R0	383	137
	RH	333	117
	RS	280	98
	RE	210	75
SC1000H	R1	745	320
	R0	655	280
	RH	570	250
	RS	445	195
	RE	340	152
SC1150H	R1	975	500
	R0	870	400
	RH	780	389
	RS	589	297
	RE	479	238
SC1250H	R1	1160	656
	R0	1025	570
	RH	900	495
	RS	696	382
	RE	556	303

产品型号 Fender Size	性能等级 Performance Grade	压缩变形 52.5% (Rated Deflection) 反 力 Reaction Force (kN)	吸能量 Energy Absorption (kN-m)
SC1450H	R1	1582	1007
	R0	1400	894
	RH	1210	770
	RS	936	596
	RE	750	473
SC1600H	R1	1766	1267
	R0	1550	1119
	RH	1350	960
	RS	1140	801
	RE	893	640
SC1700H	R1	2174	1623
	R0	1930	1441
	RH	1656	1248
	RS	1287	960
	RE	1025	770
SC2000H	R1	2995	2630
	R0	2670	2346
	RH	2310	2030
	RS	1781	1564
	RE	1420	1273
SC2250H	R1	4228	4170
	R0	3752	3700
	RH	3240	3210
	RS	2502	2472
	RE	2123	2100
SC2500H	R1	5200	5720
	R0	4630	5080
	RH	4010	4400
	RS	3086	3391
	RE	2601	2880
SC3000H	R1	5750	6700
	R0	4350	5100
	RH	3730	4300
	RS	–	–
	RE	–	–

性能公差 Perormance Tolerance ±10%

预埋件 Pre–Built in Parts

序号 No	名称 Name	材质 Material
1	螺栓 Bolt	1Cr13(2Cr13)
		1Cr18Ni9Ti
		0Cr17Ni12MO2
2	垫片 Washer	Q235 热浸锌
		Q235 Hot-galv
3	预埋螺母 Nut	1Cr13(2Cr13)
		1Cr18Ni9Ti
		0Cr17Ni12MO2
4	地脚杆(板) Foot Rod(Board)	Q235



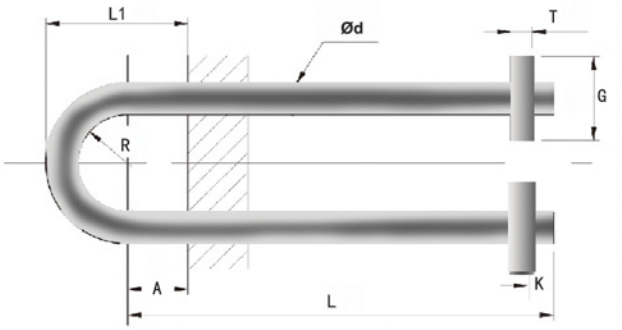
规 格 Specification

规 格 Specification	螺栓Bolt				垫片Washer								预埋部分 Nut & foot rod						
	D	H	J	S	M	n	N	U	V	Q	P	R	d	e	a	b	L	T	G
SC400H	22	75	60	19	65	109.5	19.5	4.5	34	72	33	15	22	30	75	105	330	9	75
SC500H	24	75	60	19	65	109.5	19.5	4.5	34	72	33	15	24	32	75	105	330	9	75
SC630H	30	75	60	19	65	109.5	19.5	4.5	34	72	33	15	30	38	75	105	330	9	75
SC800H	33	85	70	22	70	116.5	24	4.5	36	77	35	25	33	42	85	120	360	9	80
SC1000H	39	95	75	26	80	148	26	6	43	102	40	25	39	50	85	125	430	9	85
SC1150H	42	100	80	26	85	151	28	6	46	102	43	30	42	55	85	125	500	12	90
SC1250H	45	120	90	30	90	153	31	6	49	102	45	30	45	60	95	140	500	12	110
SC1450H	52	120	95	35	100	158	31	6	56	102	50	30	52	70	100	150	570	12	120
SC1600H	52	120	95	35	100	158	34	6	56	102	50	30	52	70	100	150	570	12	120
SC1700H	56	135	110	35	110	165	38	8	63	102	55	30	56	75	105	165	620	16	125
SC2000H	64	150	125	40	125	168	40	8	70	102	58	40	64	80	125	190	700	16	130
SC2250H	64	150	125	40	125	195	43	8	70	127	60	40	64	80	125	190	700	16	130
SC2500H	64	170	125	40	125	202	50	10	70	127	65	50	64	80	125	190	700	16	130
C3000H	76	190	145	50	140	207	55	10	84	127	70	50	76	95	135	210	800	19	135

SUPER CELL FENDERS

超级鼓型橡胶护舷 (SC Type)

U型环 U–Ring

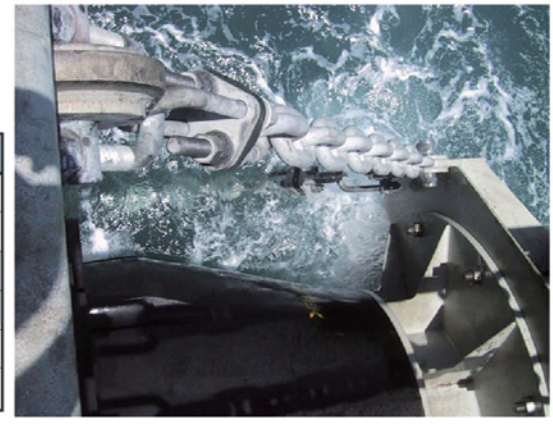


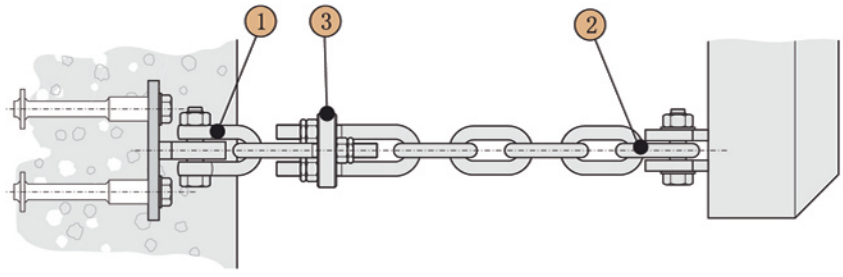
规 格 Specification

规 格	d	R	L1	L	A	T	K	G
SC400H	40	60	220	440	60	25	25	100
SC500H	40	60	220	440	60	25	25	100
SC630H	40	60	220	400	60	25	25	100
SC800H	50	75	250	650	70	30	30	120
SC1000H	60	75	250	750	70	30	30	120
SC1150H	60	75	250	750	70	30	30	120
SC1250H	60	90	250	790	70	30	30	120
SC1450H	60	90	250	850	70	30	30	120
SC1600H	60	90	250	900	70	30	30	120
SC1700H	70	90	250	1100	70	30	30	120
SC2000H	70	90	250	1220	70	30	30	130
SC2250H	80	120	300	1300	70	30	30	160
SC2500H	80	120	300	1400	70	30	30	160
C3000H	90	130	320	1500	80	30	30	180

斜拉链 Spring Chain Construction

NO.	名称Name	材质Material
1	末端卸扣	Q235热浸锌
	End Button	Q235 Hot-Galv
2	普通链环	Q235热浸锌
	Ring	Q235 Hot-Galv
3	张紧器	Q235热浸锌
	Chain adjuster	Q235 Hot-Galv





规 格 Specification

规 格 Specification	普通链环 Ring	末端卸扣 End Button	张紧器 Chain adjuster
SC630H	Ø20	M x 22	M22
SC800H	Ø22	M x 25	M25
SC1000H	Ø25	M x 28	M28
SC1150H	Ø25	M x 28	M28
SC1250H	Ø25	M x 28	M28
SC1450H	Ø28	M x 30	M30
SC1600H	Ø28	M x 30	M30
SC1700H	Ø32	M x 34	M34
SC2000H	Ø34	M x 36	M36
SC2250H	Ø34	M x 36	M36
SC2500H	Ø38	M x 40	M40
C3000H	Ø40	M x 42	M42

SUPER CELL FENDERS

超级鼓型橡胶护舷 (SC Type)

防冲板 Impingement plate

防冲板面压力按下列式计算：$FP=\frac{R}{L\times B}$

式中：FP:面压力（KN/m^2）

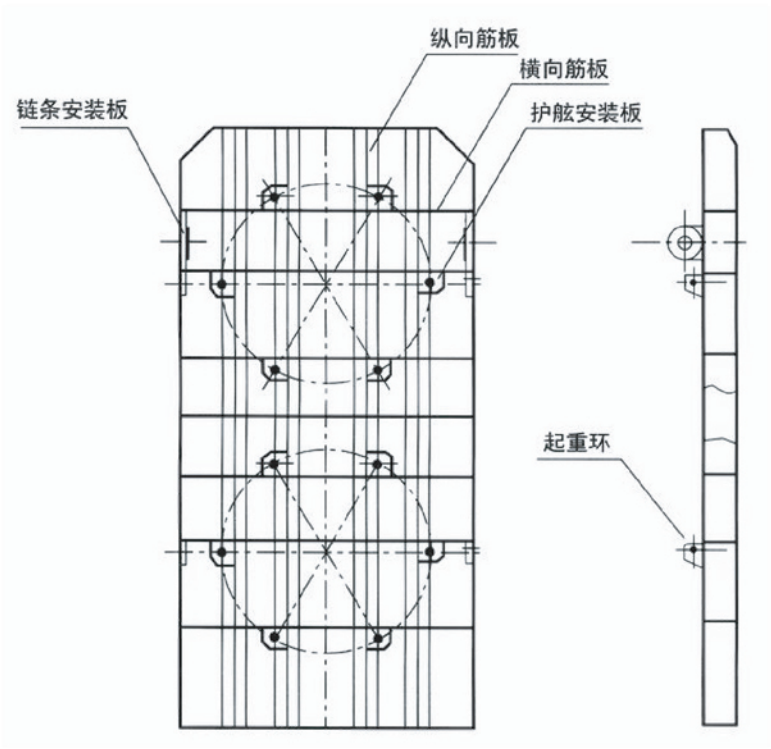
L:防冲板接触面长度（m)

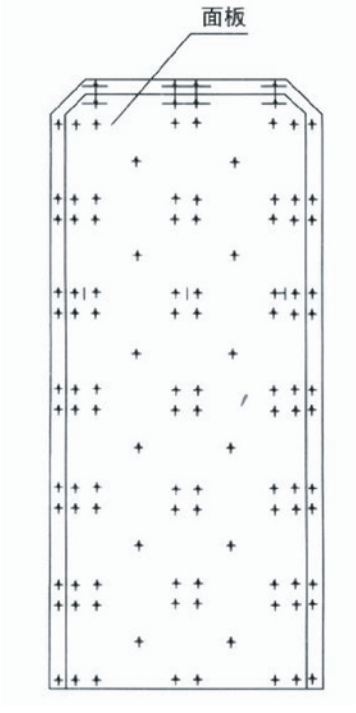
L:防冲板接触面宽度（m)

R:护舷最大反力（KN)

当防冲板长度和确定后，面压力按上式计算，当面压力首先确定时，防冲板长度和宽度可按上式计算出。防冲板最终尺寸的确定，应考虑面板系列的有效排列。(否则过多的非系列规格贴面板将导致费用增大）

防冲板应根据码头结构、水文条件、护舷布置等多种因素综合考虑设计，不宜有固定系列，设计时请与公司联系。

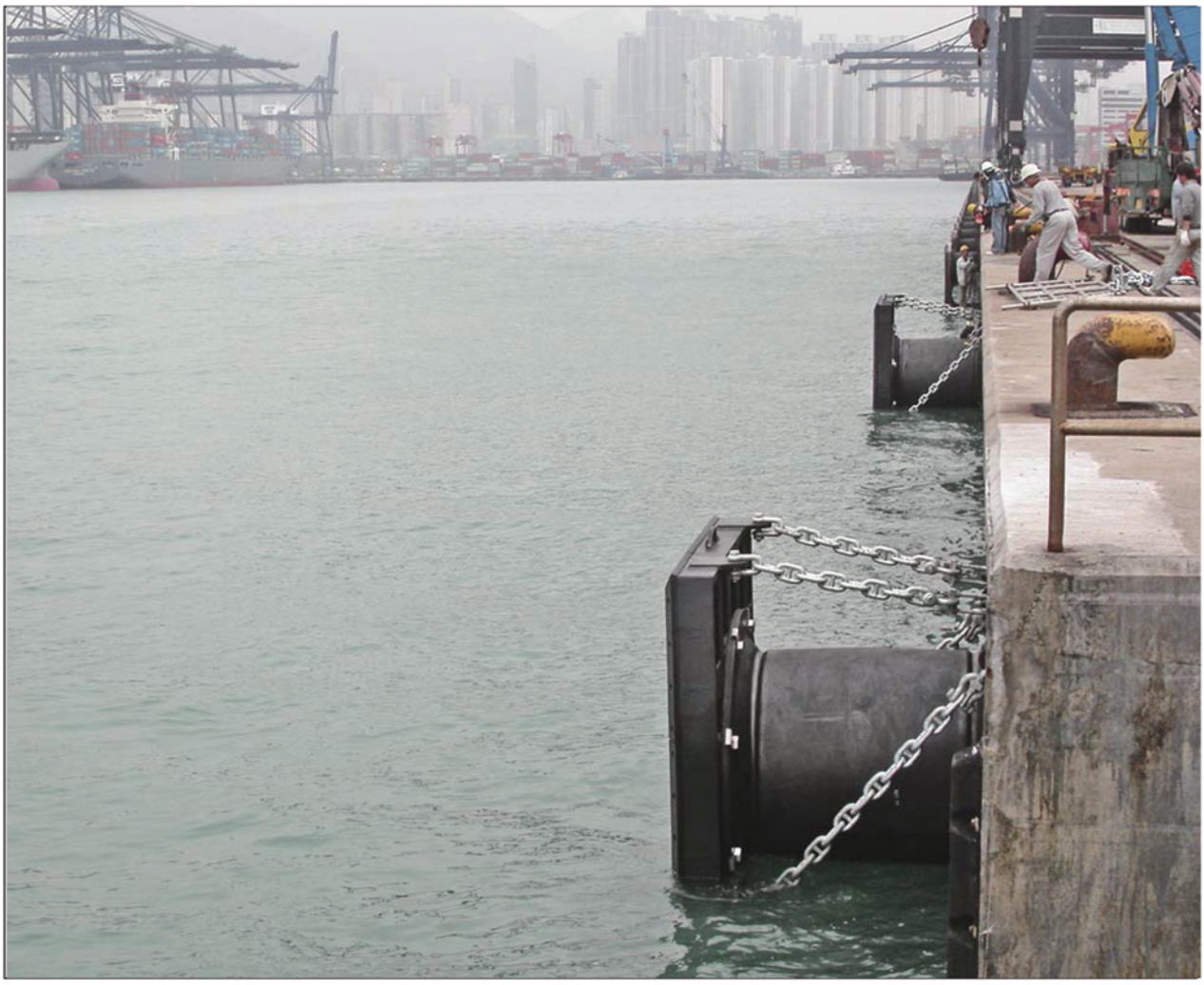




工程应用 Engineering application

◆ 辽宁丹东港大东电厂码头 SUC125H

◆ 江苏张家港矿石码头 SUC145H



◆ 广西防城港港8号码头 SUC1600H

SUPER ARCH FENDERS

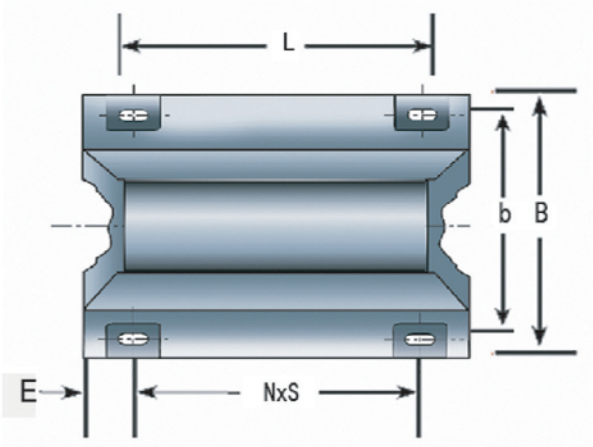
超级拱型橡胶护舷（SA–A Type ）

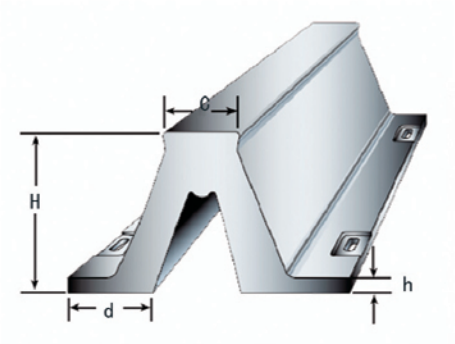
特 点 Features

- 吸能量高、反力低
- 有高应力分散性
- 安装牢固、更换方便

- High energy absorption and low reaction force;
- High stress concentration;
- Easy replacement firm for installation;

规 格 Specification





型号Model	B (mm)	b (mm)	c (mm)	d (mm)	H (mm)	h (mm)
SA-A200H	400	320	145	128	200	30
SA-A250H	500	410	175	160	250	33
SA-A300H	600	490	225	196	300	33
SA-A400H	800	670	300	260	400	40
SA-A500H	1000	840	375	325	500	45
SA-A600H	1200	1010	450	390	600	54
SA-A800H	1600	1340	600	520	800	72
SA-A1000H	2000	1680	750	650	1000	90

长度 Length	L_1=1000		L_1=1500		L_1=2000		L_1=2500		L_1=3000		L_1=3500	
	N = 4	n = 1	N = 6	n = 2	N = 8	n = 3	N = 8	n = 3	N = 10	n = 4	N = 12	n = 5
	E	S	E	S	E	S	E	S	E	S	E	S
SA-A250H	130	865	132.5	680	132.5	620	127.5	790	132.5	715	130	673
SA-A300H	140	870	140	685	137.5	625	140	790	140	715	140	674
SA-A400H	150	900	150	700	147.5	635	150	800	150	725	150	680
SA-A500H	160	930	160	715	157.5	645	160	840	160	730	160	686
SA-A600H	170	960	170	730	167.5	655	170	820	170	740	170	692
SA-A800H	180	1040	180	770	180	680	182.5	845	180	760	180	780
SA-A1000H	200	1100	200	800	200	700	202.5	865	200	775	200	720

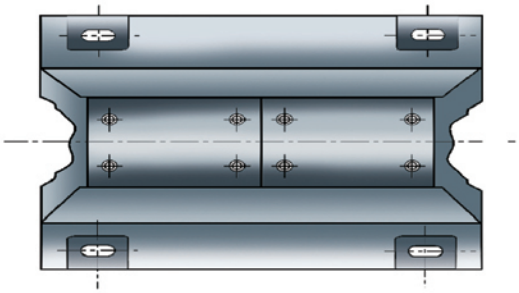
SUPER ARCH FENDERS

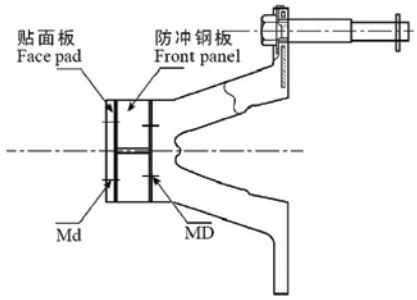
超级拱型橡胶护舷（SA–B Type ）

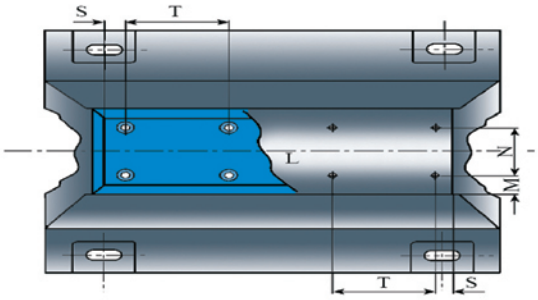
特 点 Features

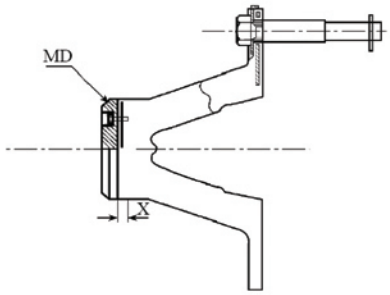
- 吸能量高、反力低;
- 适用于框架码头;
- 安装强度高，使用寿命长；
- High energy absorption and low reaction force;
- Applicable for frame duck;
- High installation stabilitylong service time;

尺 寸 Size









规 格 Specification

规 格 Specification			联结UHMW 贴面板 Connect with UHMW face pad		联结防冲板 Connect with front panet					长度 Length
	M	N	S	T	S	T	MD	Md	X	
SA-B150	49	0	60	300-400	125	250-300	M22	M16	35	1000-3500
SA-B200	50	0	60	300-400	125	250-300	M24	M16	35	1000-3500
SA-B250	50	64	60-85	300-400	125	250-300	M27	M16	35	1000-3500
SA-B300	60	105	65-85	300-400	125	250-300	M30	M16	40	1000-3500
SA-B400	60	180	65-85	300-400	125	250-300	M36	M16	50	1000-3500
SA-B500	65	245	65-85	300-400	125	250-300	M42	M16	50-55	1000-3500
SA-B600	70	310	65-85	300-400	125	250-300	M48	M16	50-55	1000-3500
SA-B800	80	440	65-85	300-400	125	250-300	M64	M16	55-60	1000-3000
SA-B1000	90	570	65-85	300-400	125	250-300	M65	M16	65-70	1000-2000

性能表 Performance List

产品型号 Fender Size	性能等级 Performance Grade	压缩变形 52.5% (Rated Deflection) 反力 Reaction Force (kN)	吸能量 Energy Absorption (kN-m)
SA-A250H	R2	278	20
	R1	249	18
	R0	190	15
	R01	118	9
SA-A300H	R2	324	41
	R1	294	31
	R0	206	26
	R01	177	22
SA-A400H	R2	432	70
	R1	332	56
	R0	276	45
	R01	235	40
SA-A500H	R2	540	110
	R1	414	85
	R0	345	72
	R01	292	62
SA-A600H	R2	646	162
	R1	478	125
	R0	412	104
	R01	350	96
SA-A800H	R2	864	290
	R1	662	222
	R0	550	185
	R01	471	159
SA-A1000H	R2	1080	453
	R1	831	349
	R0	688	289
	R01	590	247

产品型号 Fender Size	性能等级 Performance Grade	压缩变形 52.5% (Rated Deflection) 反力 Reaction Force (kN)	吸能量 Energy Absorption (kN-m)
SA-B250H	R2	275	24
	R1	196	19
	R0	165	15
	R01	144	12
SA-B300H	R2	326	35
	R1	242	27
	R0	200	21
	R01	158	16
SA-B400H	R2	413	64
	R1	316	49
	R0	261	41
	R01	229	31
SA-B500H	R2	511	102
	R1	401	78
	R0	354	64
	R01	269	54
SA-B600H	R2	613	133
	R1	462	108
	R0	386	83
	R01	299	71
SA-B800H	R2	831	265
	R1	621	200
	R0	510	150
	R01	456	126
SA-B1000H	R2	1015	417
	R1	788	312
	R0	259	262
	R01	539	221

性能公差 Perormance Tolerance ±10%

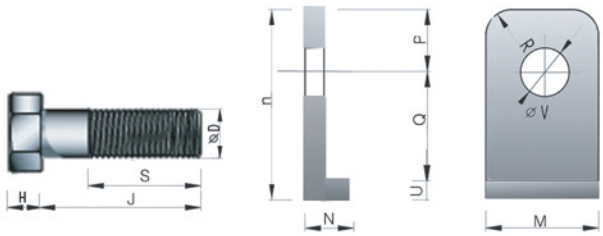
SUPER ARCH FENDERS

超级拱型橡胶护舷（SA Type ）

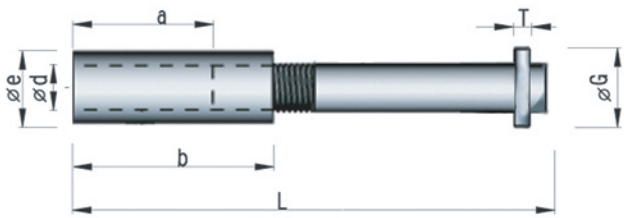
安 装 Installations

预埋件 Pre–Built in Parts

序号 No	名称 Name	材质 Material
1	螺栓 Bolt	1Cr13(2Cr13)
		1Cr18Ni9Ti
		0Cr17Ni12MO2
2	垫片 Washer	Q235 热浸锌
		Q235 Hot-galv
3	预埋螺母 Nut	1Cr13(2Cr13)
		1Cr18Ni9Ti
		0Cr17Ni12MO2
4	地脚杆(板) Foot Rod(Board)	Q235



螺栓Bolt　　垫片Washer



预埋部分 Nut & foot rod

规 格 Specification

规 格 Specification	螺栓Bolt				垫片Washer								预埋部分Nut & foot rod						
	D	J	S	H	M	n	N	U	V	Q	P	R	d	e	a	b	L	T	G
SA150H	22	55	50	14	68	109.5	12	5	24	32	23	15	22	30	75	105	330	9	75
SA200H	24	65	50	15	74	109.5	14	5	26	42	33	15	24	32	75	105	330	9	75
SA250H	27	65	60	17	88	109.5	16	5	30	48	33	15	27	38	75	105	330	9	75
SA300H	30	85	70	19	100	109.5	19	5	37	58	35	25	30	42	85	120	360	9	80
SA400H	36	95	80	23	119	126	22	6	43	68	40	25	36	50	85	125	430	9	85
SA500H	42	110	90	26	127	145	25	6	49	83	43	30	42	55	85	125	500	12	90
SA600H	48	110	100	30	139	165	28	6	52	98	45	30	48	60	95	140	500	12	110
SA800H	64	150	120	40	195	266	32	8	70	134	50	30	64	70	100	150	570	12	120
SA1000H	64	150	120	40	215	306	36	8	70	164	50	30	64	70	100	150	570	12	120

性能表 Performance List

◆ 上海漕泾电厂二期码头 SA-B800

◆ 莆田港华锦储运码头 SA-B600

◆ 温福高铁白马河特大桥 SA-A500

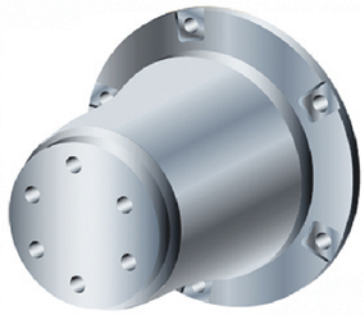
CONE FENDERS

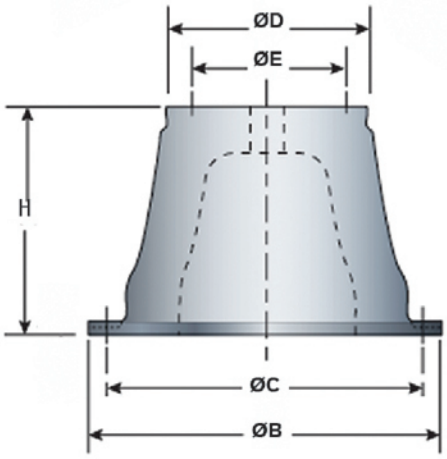
锥型橡胶护舷（CONE Type ）

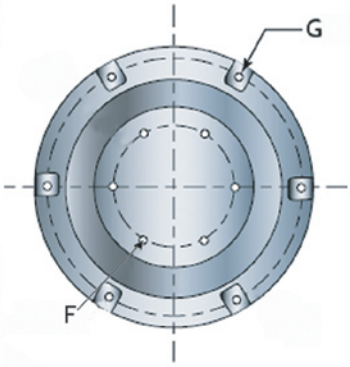
特 点 Features

- 设计压缩变形大,单位吸能量高；
- 安装便捷；
- 护舷前端设有防冲钢架，从而降低船舶靠泊面压力。
- High energy absorption and low reaction force.
- Easy and fast for installation.
- For selecting a fendering system suitable.

尺 寸 Size







规 格 Specification

规格 Specifications	H (mm)	B ø (mm)	C ø (mm)	D ø (mm)	E ø (mm)	F #xType	G #xø(mm)	Weight (kg)
CONE600H	600	900	810	510	390	6xM24	6x30	235
CONE700H	700	1050	945	595	455	6xM30	6x38	350
CONE800H	800	1200	1080	680	520	6xM36	6x44	540
CONE900H	900	1350	1215	765	585	6xM36	6x44	765
CONE1000H	1000	1500	1350	850	650	6xM42	6x50	1050
CONE1100H	1100	1650	1485	935	715	6xM42	6x50	1400
CONE1150H	1150	1725	1550	998	750	6xM42	6x50	1600
CONE1200H	1200	1800	1620	1020	780	8xM42	8x50	1950
CONE1300H	1300	1950	1755	1105	845	8xM48	8x56	2400
CONE1400H	1400	2100	1890	1190	930	8xM48	8x60	3060
CONE1600H	1600	2400	2158	1360	1040	8xM48	8x60	4600
CONE1800H	1800	2700	2428	1528	1170	10xM56	10x74	6600

性能表 Performance List

性能表	Performance List	设计压缩变形Rated Deflection 70%		最大压缩变形Rated Deflection 72%	
		反力 Reaction Force (KN)	吸能量 Energy Absorbtion (KN-M)	反力 Reaction Force (KN)	吸能量 Energy Absorbtion (KN-M)
CONE600H	超高反力型 (R2)	411	140	455	145
	高反力型 (R1)	319	100	360	100
	标准反力型 (R0)	249	79	280	80
CONE700H	超高反力型 (R2)	561	216	630	225
	高反力型 (R1)	448	168	502	174
	标准反力型 (R0)	356	130	411	135
CONE800H	超高反力型 (R2)	719	321	800	333
	高反力型 (R1)	572	243	645	255
	标准反力型 (R0)	452	185	512	194
CONE900H	超高反力型 (R2)	928	466	1035	480
	高反力型 (R1)	742	352	840	365
	标准反力型 (R0)	586	270	670	280
CONE1000H	超高反力型 (R2)	1156	626	1280	655
	高反力型 (R1)	930	475	1037	489
	标准反力型 (R0)	728	361	830	378
CONE1100H	超高反力型 (R2)	1400	830	1560	858
	高反力型 (R1)	1120	639	1260	666
	标准反力型 (R0)	878	490	1010	502
CONE1150H	超高反力型 (R2)	1764	1029	1985	1103
	高反力型 (R1)	1392	800	1470	840
	标准反力型 (R0)	1030	620	1182	651
CONE1200H	超高反力型 (R2)	1645	1054	1840	1090
	高反力型 (R1)	1302	800	1470	840
	标准反力型 (R0)	1030	620	1182	651
CONE1300H	超高反力型 (R2)	1945	1346	2100	1400
	高反力型 (R1)	1556	1030	1765	1070
	标准反力型 (R0)	1241	800	1410	820
CONE1400H	超高反力型 (R2)	2237	1700	2500	1788
	高反力型 (R1)	1800	1300	2000	1350
	标准反力型 (R0)	1430	1002	1630	1046
CONE1600H	超高反力型 (R2)	2950	2480	3300	2568
	高反力型 (R1)	2360	1940	2650	2010
	标准反力型 (R0)	1870	1470	2140	1540
CONE1800H	超高反力型 (R2)	3750	3538	4166	3686
	高反力型 (R1)	3000	2830	3333	2948
	标准反力型 (R0)	2401	2264	2667	1880

性能公差 Perormance Tolerance ±10%

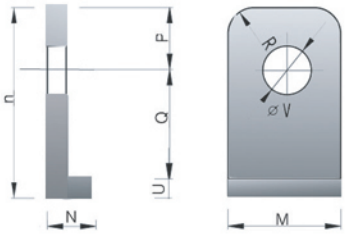
CONE FENDERS

锥型橡胶护舷（CONE Type ）

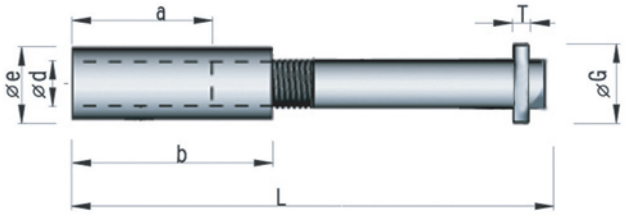
预埋件 Pre–Built in Parts

序号 No	名称 Name	材质 Material
1	螺栓 Bolt	1Cr13(2Cr13)
		1Cr18Ni9Ti
		0Cr17Ni12MO2
2	垫片 Washer	Q235 热浸锌
		Q235 Hot-galv
3	预埋螺母 Nut	1Cr13(2Cr13)
		1Cr18Ni9Ti
		0Cr17Ni12MO2
4	地脚杆（板） Foot Rod(Board)	Q235

螺栓Bolt



垫片Washer



预埋部分 Nut & foot rod

规 格 Specification

规 格 Specifications	螺栓 Bolt				垫 片 Washer								预埋螺母 Pre-built-in nut		地角杆 Foot rod		地角板 Foot board	
	D	H	J	S	M	N	n	P	Q	U	V	R	a	b	e	T	L	G
CONE600	M24	15	65	60	60	20	83	30	48	5	28	15	15	100	36	6	240	75
CONE700	M30	19	70	65	65	20	93	33	55	5	34	15	15	105	39	6	300	80
CONE800	M36	23	85	70	70	24	102	35	62	5	40	15	15	120	44	9	360	85
CONE900	M36	23	90	75	70	24	113	37	70	6	40	15	15	120	44	9	360	85
CONE1000	M42	26	95	85	85	26	126	43	77	6	46	25	25	125	59	9	420	100
CONE1100	M42	26	100	90	85	26	134	43	85	6	46	25	25	130	59	9	420	100
CONE1150	M42	26	100	90	90	28	142	46	90	6	46	25	25	130	59	12	420	100
CONE1200	M42	26	110	95	90	31	144	46	92	8	46	25	25	140	59	12	420	100
CONE1300	M48	30	120	95	105	31	158	52	100	8	52	30	30	150	65	12	480	115
CONE1400	M48	30	120	95	110	31	165	52	107	8	52	30	30	150	65	12	480	120
CONE1600	M48	30	135	110	115	34	190	52	122	10	52	40	40	165	78	16	480	135
CONE1800	M56	35	135	110	115	40	207	60	137	12	60	40	40	165	78	16	560	140

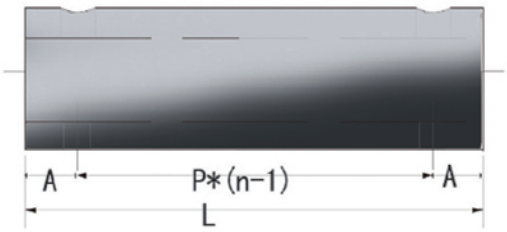
半圆型橡胶护舷（D Type）

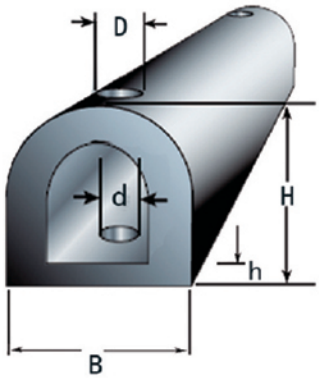
特 点 Features

- 反力、吸能量适中
- 重量较轻，安装维修方便
- 底部宽度小，适合框架式码头

- Suitable reaction force and energy absorption ;
- Low weight easy for installation and maintenance;
- Applicable for frame dock due to the smaller bottom width;

尺 寸 Size





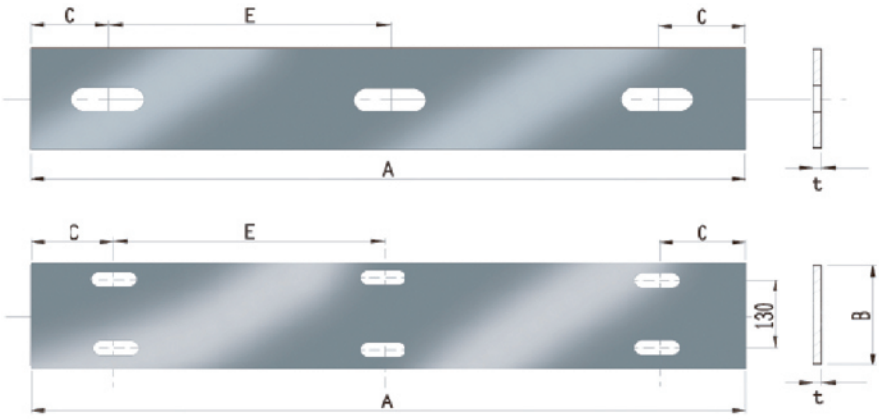
规 格 Specification

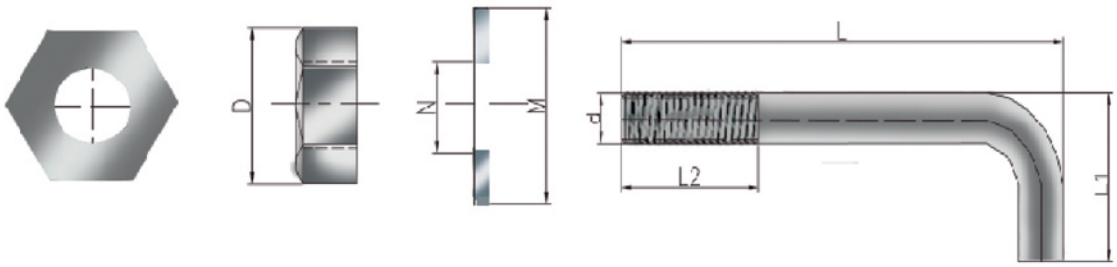
型号 Model	L (mm)	A (mm)	D Ø (mm)	d Ø (mm)	B (mm)	H (mm)	h (mm)	P (mm)	n # Fastening Points	Weight (kg)
D200H	1000	200	55	28	200	200	30	300	3	37
D200H	1500	150	55	28	200	200	30	600	3	56
D200H	2000	250	55	28	200	200	30	500	4	74
D300H	900	150	65	32	300	300	40	600	2	80
D300H	1000	200	65	32	300	300	40	600	2	67
D300H	1500	150	65	32	300	300	40	600	3	105
D300H	2000	250	65	32	300	300	40	500	4	134
D300H	1000	200	65	32	**360**	300	40	600	2	80
D300H	1500	150	65	32	**360**	300	40	600	3	120
D400H	1500	150	65	32	400	400	55	400	4	150
D400H	2000	200	65	32	400	400	55	400	5	200
D500H	1000	150	55	28	500	500	60	350	3x2	195
D500H	1500	150	55	28	500	500	60	400	4x2	298
D500H	2000	200	55	28	500	500	60	400	5x2	395

SEMI–CIRCULAR FENDERS

半圆型橡胶护舷（D Type）

金属配件 Accessories





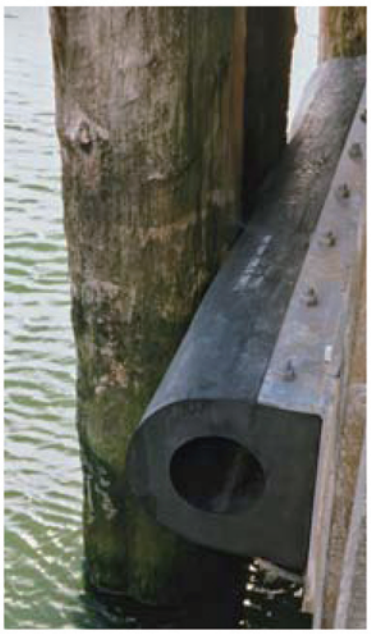
规 格 Specification

型号	压板 Impacted Plate						螺母 Nut	垫片 Washer		螺栓 Bolt			
Model	A	B	C	F	E	t	D	M	N	L	L1	L2	d
D200H x 200 x 1000L	1000	70	200	50	600	14	36	50	27	300	120	90	24
D200H x 200 x 1500L	1500	70	150	50	600	14							
D200H x 200 x 2000L	2000	70	250	50	500	14							
D300H x 300 x 1000L	1000	100	200	60	600	16	41	55	31	400	120	100	27
D300H x 300 x 1500L	1500	100	150	60	600	16							
D300H x 300 x 2000L	2000	100	250	60	500	16							
D300H x 360 x 1000L	1000	100	200	60	600	16							
D300H x 360 x 1500L	1500	100	150	60	600	16							
D400H x 400 x 1500L	1500	120	150	60	400	16	41	55	31	450	120	120	27
D400H x 400 x 2000L	2000	120	200	60	400	16							
D500H x 500 x 1000L	1000	180	150	50	350	18	36	50	27	500	120	120	24
D500H x 500 x 1500L	1500	180	150	50	400	18							
D500H x 500 x 2000L	2000	180	200	50	400	18							

性能表 Performance List

设计压缩变形 Rated Deflection 50%		
型号 Model	反力 Reaction Force (KN)	吸能量 Energy Absorbtion (KN-M)
D200H×200×1000L	207	9.1
D200H×200×1500L	311	13.0
D200H×200×2000L	294	10.2
D300H×300×900L	270	10.0
D300H×300×1000L	300	12.0
D300H×300×1500L	450	17.0
D300H×300×2000L	600	24.0
D300H×360×1000L	323	13.0
D300H×360×2000L	480	19.6
D400H×400×1500L	585	30.0
D400H×400×2000L	780	40.0
D500H×500×1000L	460	32.0
D500H×500×1500L	700	48.0
D500H×500×2000L	920	64.0

性能公差 Perormance Tolerance ±10%



CYLINDRECAL FENDERS

圆筒型橡胶护舷（Y Type）

特 点 Features

- 反力低，面压小；
- 适应性强；
- 应用范围广，安装方便；

- Low reaction forces ,little surface pressure;
- Applicable for langitudinal and ersswise sway of ships;
- Applicable for shipswith different sizes,easy for installation;

规 格 Specification

规格 Specification	长度L (mm)	外径D Ø (mm)	内径d Ø (mm)	参考重量 (kg/m)
Y150	500-5500	150	75	18
Y200		20	100	28
Y250		250	125	45
Y300		300	150	64
Y400		400	200	110
Y500		500	250	175
Y600		600	300	250
Y700		700	350	345
Y800		800	400	450
Y900		900	450	570
Y1000		1000	500	710
Y1100		1100	550	870
Y1200		1200	600	1020
Y1400		1400	700	1400
Y1600		1600	800	1800

性能表 Performance List

设计压缩变形 Rated Deflection 50%			
型号 Performance List		反力 Reaction Force (KN)	吸能量 Energy Absorbtion (KN-M)
Y150	标准型	46	1.5
	高反力型	74	2.3
Y200	标准型	62	2.7
	高反力型	97	4.3
Y250	标准型	76	4.2
	高反力型	123	6.6
Y300	标准型	92	6.0
	高反力型	146	9.7
Y400	标准型	122	10.6
	高反力型	195	17.2
Y500	标准型	152	16.4
	高反力型	245	27.0
Y600	标准型	182	24.1
	高反力型	293	38.2
Y700	标准型	212	32.2
	高反力型	342	53.3
Y800	标准型	244	42.3
	高反力型	390	69.2
Y900	标准型	273	53.1
	高反力型	442	87.3
Y1000	标准型	303	65.4
	高反力型	490	108.2
Y1200	标准型	375	98.0
	高反力型	589	155.0
Y1400	标准型	434	130.3
	高反力型	685	216.2
Y1600	标准型	495	173.5
	高反力型	785	276.4

性能公差 Perormance Tolerance ±10%

TYPE GD FENDERS

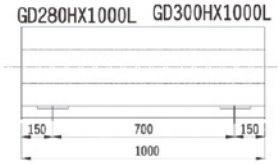
GD型橡胶护舷（GD Type）

特 点 Features

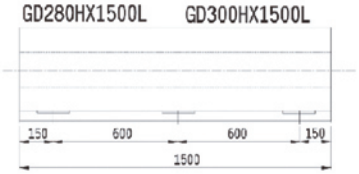
- 吸能量高、反力低;
- 适用于框架码头;
- 安装强度高，使用寿命长；
- High energy absorption and low reaction force;
- Applicable for frame duck;
- High installation stabilitylong service time;

尺 寸 Size

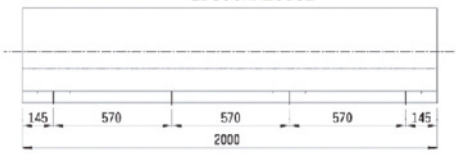
GD280HX1000L GD300HX1000L



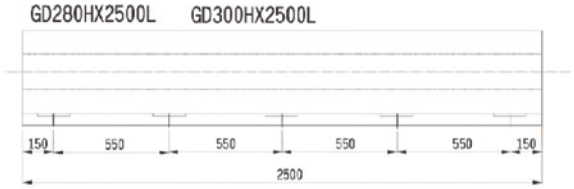
GD280HX1500L GD300HX1500L



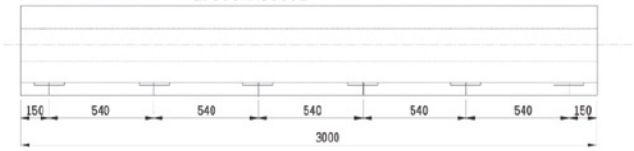
GD280HX2000L GD300HX2000L

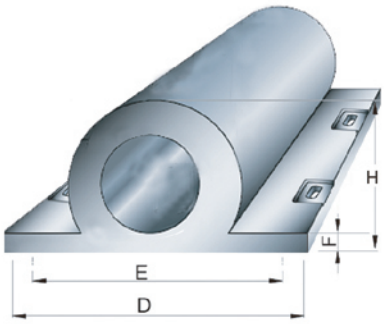


GD280HX2500L GD300HX2500L



GD280HX3000L GD300HX3000L





规 格 Specification

型号 Model	D (mm)	E (mm)	F (mm)	H (mm)	M (mm)	I (mm)	J (mm)
GD280HX1000L	540	430	40	280	M30	40	300
GD280HX1500L	540	430	40	280	M30	40	300
GD280HX2000L	540	430	40	280	M30	40	300
GD280HX2500L	540	430	40	280	M30	40	300
GD280HX3000L	540	430	40	280	M30	40	300
GD300HX1000L	600	490	40	300	M36	40	360
GD300HX1500L	600	490	40	300	M36	40	360
GD300HX2000L	600	490	40	300	M36	40	360
GD300HX2500L	600	490	40	300	M36	40	360
GD300HX3000L	600	490	40	300	M36	40	360

性能表 Performance List

型号 Model	设计压缩变形 **Rated Deflection 50%**	
	反力 Reaction Force (KN)	吸能量 Energy Absorbtion (KN-M)
GD280HX1000L	375	14
GD280HX1500L	565	21
GD280HX2000L	750	28
GD280HX2500L	940	35
GD280HX3000L	1130	42
GD300HX1000L	450	18
GD300HX1500L	675	27
GD300HX2000L	900	36
GD300HX2500L	1125	45
GD300HX3000L	1350	54

性能公差 Perormance Tolerance ±10%

TURN CELL FENDERS

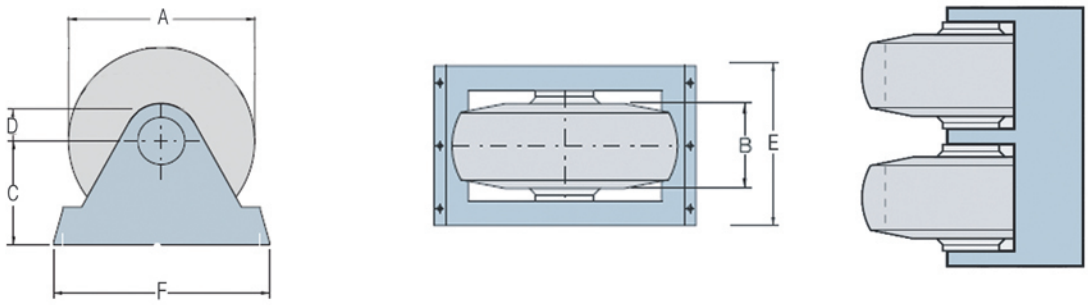
转动型橡胶护舷

特 点 Features

- 反力低，吸能量高；
- 不受船舶倾斜靠泊影响；
- 使用于船坞及码头转角；

- Low reaction force and high energy absorption;
- The fender performance is free from the influence of ship
- inclining and berthing;Applicable for dry docks .

尺 寸 Size



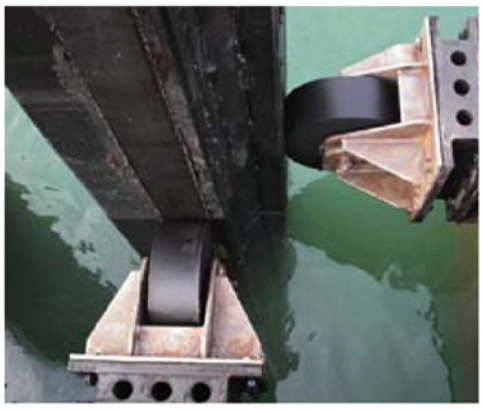
规 格 Specification

型号 Model	A Ø (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G # Turn Cells	Weight (kg)
D1-060-20	600	200	320	110	420	695	1	120
D1-075-25	750	250	400	140	510	870	1	230
D1-090-30	900	300	480	165	610	1040	1	410
D1-120-40	1200	400	640	220	820	1380	1	980
D1-150-50	1500	500	800	275	1010	1740	1	1810
D1-180-60	1800	600	960	330	1210	2080	1	3130
D1-210-70	2100	700	1155	385	1410	2440	1	4800
D1-240-80	2400	800	1280	440	1610	2770	1	6040
D2-060-20	600	200	320	110	770	695	2	210
D2-075-25	750	250	400	140	935	870	2	420
D2-090-30	900	300	480	165	1120	1040	2	775
D2-120-40	1200	400	640	220	1500	1380	2	1770
D2-150-50	1500	500	800	275	1850	1740	2	3330
D2-180-60	1800	600	960	330	2215	2080	2	5720
D2-210-70	2100	700	1155	385	2590	2440	2	9750
D2-240-80	2400	800	1280	440	2950	2770	2	12400
D3-060-20	600	200	320	110	1120	695	3	310
D3-075-25	750	250	400	140	1360	870	3	610
D3-090-30	900	300	480	165	1630	1040	3	1080
D3-120-40	1200	400	640	220	2180	1380	3	2550
D3-150-50	1500	500	800	275	2690	1740	3	4850
D3-180-60	1800	600	960	330	3220	2080	3	8400
D3-210-70	2100	700	1155	385	3770	2440	3	13670
D3-240-80	2400	800	1280	440	4290	2770	3	18390

性能表 Performance List

型号 Model	最大变形量 Max.defcection (mm)	反力 Reaction Force (KN)	吸能量 Energy Absorbtion (KN-M)
D1-060-20	125	70	2.5
D1-075-25	157	110	4.8
D1-090-30	184	150	3.8
D1-120-40	260	270	19.6
D1-150-50	325	430	38.4
D1-180-60	390	620	66.3
D1-210-70	455	840	107
D1-240-80	520	1100	157
D2-060-20	125	140	50
D2-075-25	157	210	10
D2-090-30	184	310	17
D2-120-40	260	550	39
D2-150-50	325	860	77
D2-180-60	390	1240	133
D2-210-70	455	1690	210
D2-240-80	520	2200	320
D3-060-20	125	210	7
D3-075-25	157	320	14
D3-090-30	184	460	25
D3-120-40	260	820	60
D3-150-50	325	1280	110
D3-180-60	390	1850	200
D3-210-70	455	2520	320
D3-240-80	520	3290	470

性能公差 Performance Tolerance ± 10%



TYPE I FENDERS

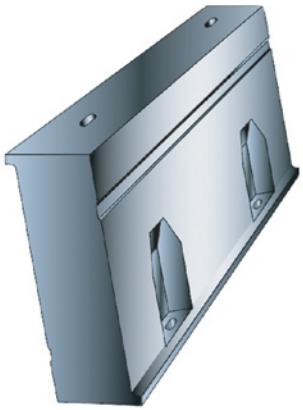
I型橡胶护舷（I Type）

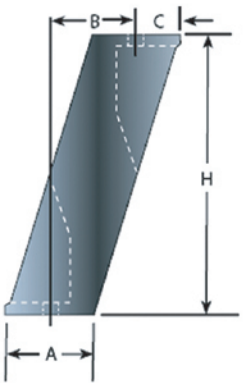
特 点 Features

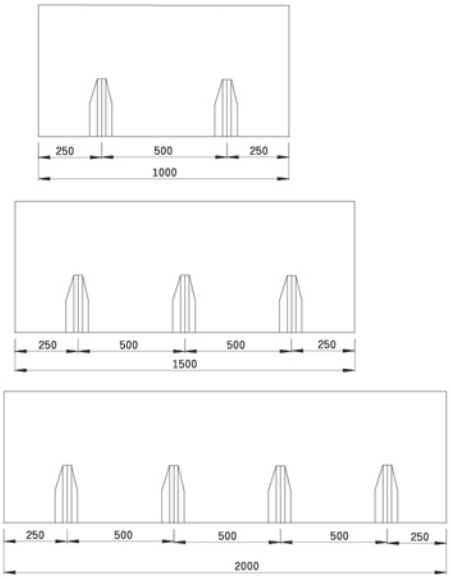
- 吸能量高于SA型橡胶护舷
- 安装尺寸小，使用范围广
- 可以竖向、横向或混合灵活布置
  前端设有防冲板

- Energy absorption is higher than that of SA type
- Installation of small size, wide range of use
- Can be vertical, horizontal or mixed flexible arrangement
  is arranged on the front end of the front panel

尺 寸 Size







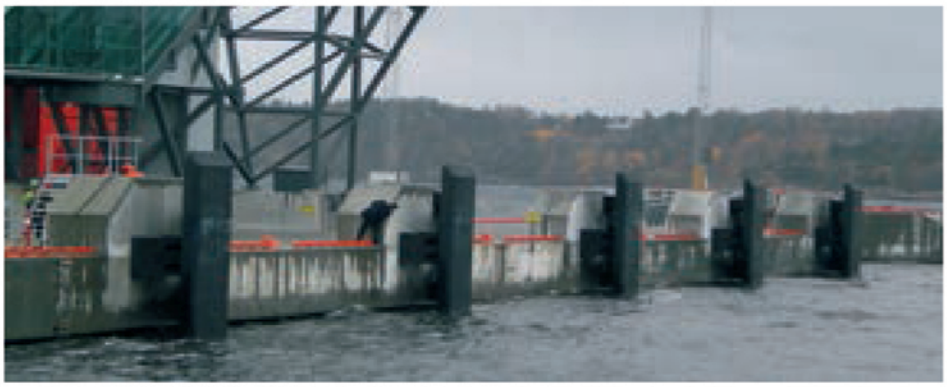
规 格 Specification

规 格 specification	H	A	B	C	Weight
I300H	300	94	94	47	44
I400H	400	125	124	63	72
I500H	500	158	142	87	111
I550H	550	172	170	87	128
I600H	600	188	199	87	149
I750H	750	235	230	118	239
I800H	800	250	240	129	266
I1000H	1000	322	310	162	430
I1250H	1250	451	388	202	627
I1400H	1400	454	454	228	888
I1600H	1600	500	480	257	1018

性能表 Performance List

规 格 specification	高反力型 High Reaction Force		标准反力型 Standard Reaction Force	
	反 力 (KN)	吸能量 (KN-M)	反 力 (KN)	吸能量 (KN-M)
I300H	160	22	110	15
I400H	210	39	150	27
I500H	265	61	187	43
I550H	294	75	206	52
I600H	320	89	224	62
I750H	400	137	282	96
I800H	428	157	299	110
I1000H	535	245	374	172
I1250H	668	383	467	268
I1400H	775	516	543	361
I1600H	855	628	599	440

性能公差 Performance Tolerance ± 10%

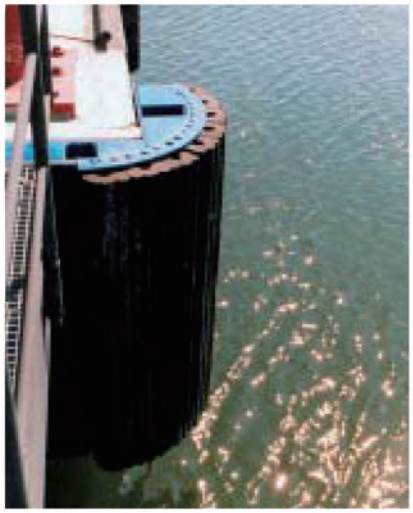


LADDER FENDERS

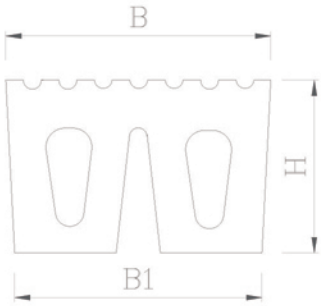
W型橡胶护舷

特 点 Features

- 反力低、吸能高
- 不受船舶倾斜靠泊影响
- 适用于船舶

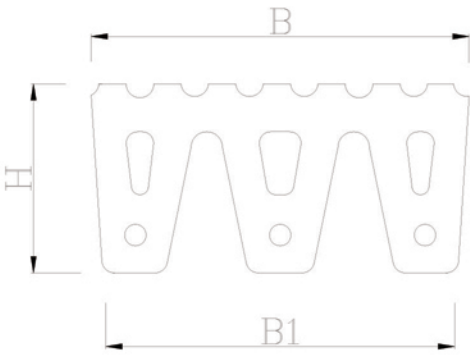


规 格 Specification



尺 寸 Measures

规 格 specification	B	B1	H	L
W300H	300	426	300	300–2000
W330H	400	420	330	300–2000
W450H	500	420	450	300–2000



尺 寸 Measures

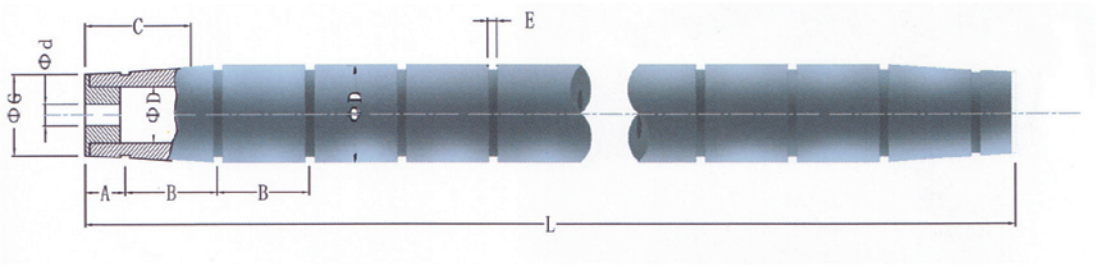
规 格 specification	B	B1	H	L
W300H	600	546	300	300–2000
W400H	600	550	400	300–2000

拖轮型橡胶护舷

特 点 Features

用途Use：拖轮橡胶护舷主要用于港作拖轮，安装于码头、船舷和船尾，从事顶、推、靠、施等作业，护舷使用整体制造，具有产品整体性能好、质量高、易安装等特点。

尺 寸 Size



规 格 Specification

规 格 Specification											
ΦD	200	250	300	350	400	500	600	700	800	900	1000
L	2-13 metres in one section or joined for longer lengths										
A	150	200	225	250	300	350	350	350	350	350	350
B(max)	530	570	600	630	670	730	800	860	930	1000	1060
C	500	500	700	800	800	900	900	1000	1000	1100	1200
E	Varies in width according to size and type of circumferential attachment										
ΦG	150	190	225	260	300	375	450	525	600	675	750
Φd	100	125	150	175	200	250	300	350	400	450	500
Φj	75	75	75	100	100	100	125	125	125	150	150

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