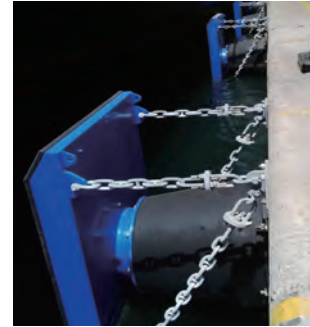


System Fender

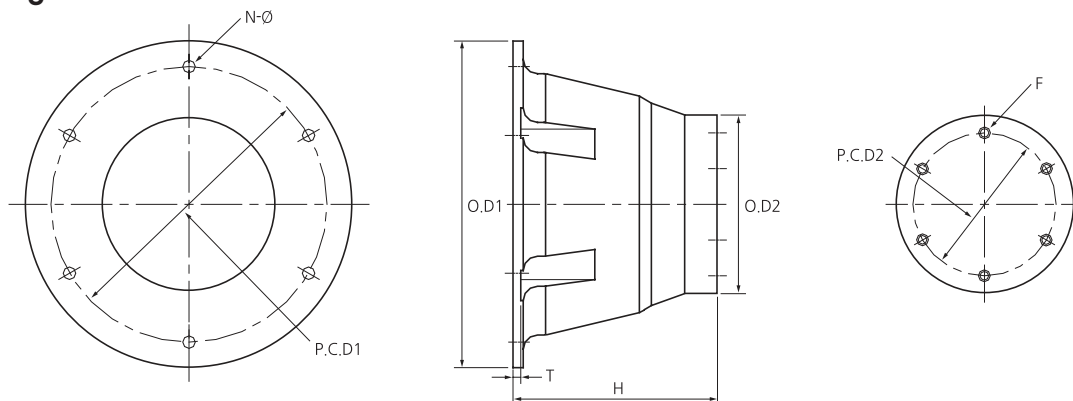
Cone Fender(YCN)



Feature

1. YMI's cone fender design meets the most demanding conditions of berthing due to its higher energy absorption and lower reaction force ratio.
2. Ideal Fender for High Hull pressure requirements.
3. Simply & easy installation

| Drawing |



| Dimension |

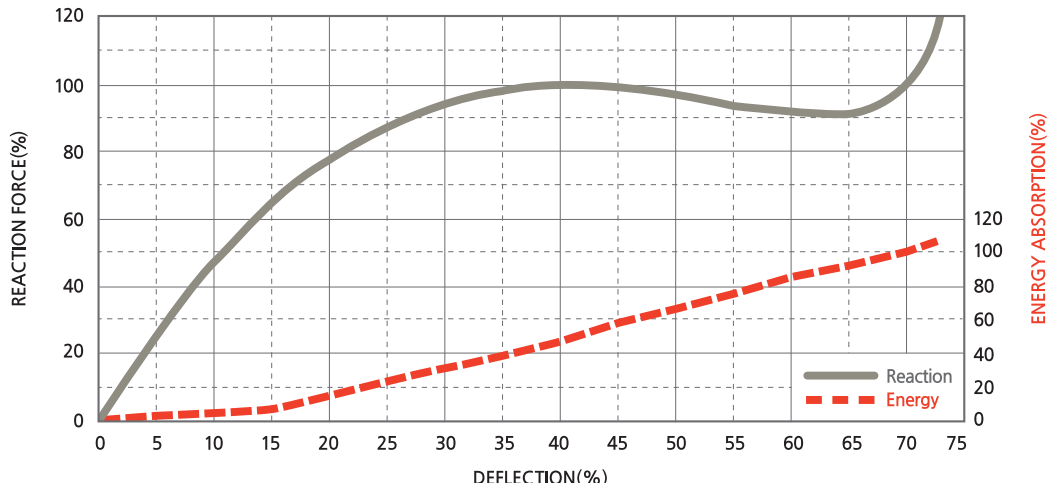
Unit : mm

Dimension	F	O.D1	P.C.D1	O.D2	P.C.D2	T	N-Ø
Height							
YCN 300H	M20(3/4")	500	440	262	210	18	4-26
YCN 350H	M20(3/4")	575	510	306	245	20	4-26
YCN 400H	M20(3/4")	650	585	350	280	20	4-26
YCN 500H	M24(1")	820	730	436	350	22	4-30
YCN 600H	M24(1")	900	810	525	420	23	4-30
YCN 700H	M30(1 1/4")	1120	1020	615	490	26	4-38
YCN 800H	M36(1 1/2")	1250	1165	700	560	31	6-44
YCN 900H	M36(1 1/2")	1450	1313	785	630	36	6-44
YCN 1000H	M42(1 3/4")	1600	1460	875	700	38	6-50
YCN 1150H	M42(1 3/4")	1850	1550	1000	805	41	6-50
YCN 1200H	M42(1 3/4")	1920	1750	1050	840	46	8-50
YCN 1300H	M48(2")	2080	1900	1140	910	50	8-60
YCN 1400H	M48(2")	2240	2040	1230	980	53	8-60
YCN 1600H	M48(2")	2500	2330	1400	1120	80	8-60
YCN 1800H	M56(2 1/4")	2880	2620	1575	1260	90	10-70
YCN 2000H	M56(2 1/4")	3200	2920	1700	1400	100	10-70

Notes

- Above detail dimension of components can be changed depending on owner specification and local environment condition.
- Detail dimension will be guided by our drawing and specification.

| Performance Curve |



| Performance of Intermediate Deflection |

Deflection(%)	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%	72.5%
Reaction(%)	25%	46%	62%	76%	86%	93%	98%	100%	99%	97%	94%	92%	90%	100%	120%
Energy(%)	1%	4%	9%	15%	23%	31%	39%	48%	57%	66%	75%	83%	91%	100%	104%

| PIANC Factors |

Angle Factor	
Angle	AF
0°	1.000
3°	1.000
5°	1.000
8°	0.991
10°	0.982
15°	0.935
20°	0.876

Velocity Factor	
TIME(sec)	VF
1	1.048
2	1.025
3	1.014
4	1.006
5	1.000
6	1.000
8	1.000
10	1.000

Temperature Factor	
TEMP	TF
-30°	1.205
-20°	1.165
-10°	1.128
0°	1.092
10°	1.054
20°	1.000
30°	0.975
40°	0.945
50°	0.935

System Fender

Performance Table

	Grade	YCN 300		YCN 500		YCN 600		YCN 700		YCN 800		YCN 900		YCN 1000		YCN 1100		YCN 1150		YCN 1200		YCN 1300		YCN 1400		YCN 1600		YCN 1800		YCN 2000	
		R kN	E kN-m	R kN	E kN-m	R kN	E kN-m	R kN	E kN-m	R kN	E kN-m	R kN	E kN-m	R kN	E kN-m	R kN	E kN-m	R kN	E kN-m	R kN	E kN-m	R kN	E kN-m	R kN	E kN-m	R kN	E kN-m	R kN	E kN-m	R kN	E kN-m
G430	0.7	52.3	8.7	145	40.7	209	70.6	285	111	372	166	470	236	581	324	703	431	768	492	836	560	982	711	1138	889	1486	1327	1882	1889	2324	2591
G420	0.8	53.7	9.0	149	41.8	215	72.4	293	114	382	170	482	242	597	333	722	443	788	505	859	575	1008	731	1168	913	1527	1362	1933	1940	2386	2661
G410	0.9	55.1	9.2	153	42.9	220	74.2	300	117	392	175	495	249	612	341	741	454	809	519	881	590	1035	750	1199	937	1567	1398	1984	1990	2449	2730
G400	G1	56.5	9.5	157	44	226	76	308	120	402	179	508	255	628	350	760	466	830	532	904	605	1061	769	1230	961	1607	1434	2035	2041	2512	2800
G390	1.1	57.9	9.7	161	45.1	232	77.8	316	123	412	184	521	261	644	359	779	478	851	545	927	620	1088	788	1261	985	1647	1470	2086	2092	2575	2870
G380	1.2	59.3	9.9	165	46.2	237	79.6	323	126	422	188	534	268	659	367	798	489	872	559	949	635	1114	807	1292	1009	1687	1506	2136	2143	2638	2939
G370	1.3	60.8	10.2	169	47.3	243	81.4	331	129	432	193	546	274	675	376	817	501	892	572	972	650	1141	827	1322	1033	1728	1541	2187	2193	2700	3009
G360	1.4	62.2	10.4	173	48.4	248	83.2	338	132	442	197	559	281	691	385	836	512	913	585	994	665	1167	846	1353	1057	1768	1577	2238	2244	2763	3078
G350	1.5	63.6	10.6	177	49.5	254	85	346	135	452	202	572	287	707	394	855	524	934	599	1017	681	1194	865	1400	1168	1808	1613	2289	2295	2826	3148
G340	1.6	65.0	10.9	180	50.6	260	86.8	354	138	462	206	585	293	722	402	874	536	955	612	1040	696	1220	884	1415	1104	1848	1649	2340	2346	2889	3218
G330	1.7	66.4	11.1	184	51.7	265	88.6	361	141	472	211	598	300	738	411	893	547	976	625	1062	711	1247	903	1446	1128	1888	1685	2391	2396	2952	3287
G320	1.8	67.8	11.3	188	52.8	271	90.4	369	144	482	215	610	306	754	420	912	559	996	638	1085	726	1273	923	1476	1152	1929	1720	2442	2447	3014	3357
G310	1.9	69.2	11.6	192	53.9	276	92.2	376	147	492	220	623	313	769	428	931	570	1017	652	1107	741	1300	942	1507	1176	1969	1756	2493	2498	3077	3426
G300	G2	70.7	11.8	196	55	282	94	384	150	502	224	636	319	785	437	950	582	1038	665	1130	756	1326	961	1538	1200	2009	1792	2009	1792	3140	3496
G290	2.1	72.4	12.0	201	56	289	95.8	394	153	515	228	652	325	805	445	974	593	1064	678	1158	770	1359	979	1576	1223	2059	1826	2607	2598	3218	3563
G280	2.2	74.2	12.3	206	57	296	97.6	403	156	527	233	668	331	824	454	997	604	1090	690	1186	785	1392	998	1615	1246	2109	1860	2670	2647	3297	3630
G270	2.3	75.9	12.5	211	58	303	99.4	413	159	540	237	683	337	844	462	1021	615	1116	703	1215	799	1425	1016	1790	1412	2160	1894	2734	2696	3375	3698
G260	2.4	77.7	12.7	216	59	310	101	423	162	552	241	699	343	863	471	1045	626	1142	716	1243	814	1458	1034	1692	1292	2210	1928	2797	2745	3454	3765
G250	2.5	79.5	12.9	221	60	318	103	433	165	565	246	715	350	883	479	1069	638	1168	729	1271	828	1492	1053	1730	1315	2260	1963	2861	2794	3532	3832
G240	2.6	81.2	13.2	225	61	325	105	442	167	578	250	731	356	903	487	1092	649	1193	741	1299	842	1525	1071	1768	1337	2310	1997	2924	2843	3610	3899
G230	2.7	83.0	13.4	230	62	332	107	452	170	590	254	747	362	922	496	1116	660	1219	754	1327	857	1558	1089	1807	1360	2360	2031	2988	2892	3689	3966
G220	2.8	84.8	13.6	235	63	339	108	462	173	603	258	762	368	942	504	1140	671	1245	767	1356	871	1591	1107	1845	1383	2411	2065	3051	2940	3767	4034
G210	2.9	86.5	13.8	240	64	346	110	471	176	615	263	778	374	961	513	1163	682	1271	779	1384	886	1624	1126	1884	1406	2461	2099	3115	2989	3846	4101
G200	G3	88.3	14.1	245	65	353	112	481	179	628	267	794	380	981	521	1187	693	1297	792	1412	900	1657	1144	1922	1429	2511	2133	3178	3038	3924	4168
G190	3.1	90.5	14.4	251	66.6	362	115	493	183	644	274	814	389	1006	534	1217	710	1329	812	1447	922	1699	1172	1970	1465	2574	2186	3258	3114	4022	4271
G180	3.2	92.7	14.8	257	68.2	371	118	505	188	659	280	834	399	1030	547	1246	727	1362	831	1483	945	1740	1201	2018	1500	2637	2239	3337	3189	4120	4374
G170	3.3	94.9	15.1	264	69.8	379	120	517	192	675	287	854	408	1055	560	1276	745	1394	851	1518	967	1782	1229	2066	1536	2699	2292	3417	3264	4218	4478
G160	3.4	97.1	15.5	270	71.4	388	123	529	197	691	293	874	418	1079	573	1305	762	1427	871	1553	990	1823	1258	2114	1571	2762	2345	3496	3339	4316	4581
G150	3.5	99.3	15.8	276	73	397	126	541	201	707	300	894	427	1104	586	1335	779	1459	891	1589	1012	1865	1286	2163	1607	2825	2398	3575	3415	4414	4684
G140	3.6	101.5	16.5	282	74.6	406	129	553	205	722	307	913	436	1128	598	1365	796	1491	910	1624	1034	1906	1314	2211	1642	2888	2451	3655	3490	4512	4787
G130	3.7	103.7	16.5	288	76.2	415	132	565	210	738	313	933	446	1153	611	1394	813	1524	930	1659	1057	1948	1343	2259	1678	2951	2504	3734	3565	4610	4890
G120	3.8	105.9	16.9	295	77.8	423	134	577	214	754	320	953	455	1177	624	1424	831	1556	950	1694	1079	1989	1371	2307	1713	3013	2557	3813	3640	4708	4994
G110	3.9	108.1	17.2	301	79.4	432	137	589	219	769	326	973	465	1202	637	1453	848	1589	969	1730	1102	2031	1400	2355	1749	3076	2610	3893	3716	4806	5097
G100	G4	110.3	18	307	81	441	140	601	223	785	333	993	474	1226	650	1483	865	1621	989	1765	1124	2072	1428	2403	1784	3139	2663	3972	3791	4904	5200

Notes

- Above detail performance of components can be changed depending on owner specification and local environment condition.
- Detail performance will be guided by our drawing and specification.
- Values shown are for standard 70% deflection.
- Maximum deflection - 72.5%
- Tolerance - $\pm 10\%$