

6.2.3 Pneumatic 50 (U.S. Customary)

Table 6-3(a) Pneumatic 50 Standard Sizes

Nominal Size		Initial Internal Pressure	Guaranteed Energy Absorption (GEA)	Reaction Force at GEA	Hull Pressure at GEA	Safety Valve Setting pressure	Testing Pressure	Weight of Net Type (Type I)				Weight of Sling Type (Type II)
								Approx. Fender Body Weight	Approx. Weight of Net			
Diameter × Length		E	R	p			Chain Net		Wire Net	Synthetic Fiber Net		
(ft × ft)	(mm × mm)	(kips)	(kips)	(kips)	(kips/ft ²)	(psi)	(psi)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)
1.6 × 3	500 × 1000	7.3	4.4	14.4	2.72	-	29.0	49	243	66	44	71
2 × 3	600 × 1000	7.3	5.9	16.7	2.59	-	29.0	55	265	66	49	79
2.3 × 5	700 × 1500	7.3	12.5	30.8	2.78	-	29.0	99	331	88	82	121
3 × 5	1000 × 1500	7.3	23.6	41.0	2.51	-	29.0	161	441	176	112	216
3 × 6.5	1000 × 2000	7.3	33.2	57.8	2.72	-	29.0	194	485	309	126	249
4 × 6.5	1200 × 2000	7.3	46.5	66.8	2.59	-	29.0	289	706	419	150	344
4.4 × 8	1350 × 2500	7.3	75.3	96.1	2.67	-	29.0	441	772	441	-	529
5 × 10	1500 × 3000	7.3	113	130	2.72	-	29.0	551	1169	772	-	639
5.6 × 10	1700 × 3000	7.3	141	144	2.63	-	29.0	639	1279	970	-	728
6.5 × 11.5	2000 × 3500	7.3	227	197	2.63	-	29.0	893	2117	1411	-	1025
8 × 13	2500 × 4000	7.3	489	311	2.82	25.4	36.3	1989	2734	2007	-	2381
8 × 18	2500 × 5500	7.3	696	454	3.04	25.4	36.3	2403	4079	2558	-	2911
11 × 15	3300 × 4500	7.3	867	424	2.67	25.4	36.3	3219	3771	2800	-	4057
11 × 21	3300 × 6500	7.3	1339	678	3.00	25.4	36.3	4123	5667	4212	-	4961
11 × 35	3300 × 10600	7.3	2264	1183	3.25	25.4	36.3	5645	10275	7277	-	6747
15 × 30	4500 × 9000	7.3	3507	1293	3.00	25.4	36.3	8688	11885	7762	-	-
15 × 40	4500 × 12000	7.3	4777	1796	3.17	25.4	36.3	10562	15413	11444	-	-

Table 6-3(b) Pneumatic 50 Popular Non Standard Sizes

Nominal Size		Initial Internal Pressure	Guaranteed Energy Absorption (GEA)	Reaction Force at GEA	Hull Pressure at GEA	Safety Valve Setting pressure	Testing Pressure	Weight of Net Type (Type I)				Weight of Sling Type (Type II)
								Approx. Fender Body Weight	Approx. Weight of Net			
Diameter × Length		E	R	p			Chain Net		Wire Net	Synthetic Fiber Net		
(ft × ft)	(mm × mm)	(kips)	(kips)	(kips)	(kips/ft ²)	(psi)	(psi)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)
1.3 × 5	400 × 1500	7.3	4.4	19.6	3.11	-	29.0	51	-	-	-	73
2 × 4	600 × 1200	7.3	7.4	20.9	2.72	-	29.0	62	-	-	-	86
2.6 × 4	800 × 1200	7.3	11.8	26.1	2.51	-	29.0	10	529	-	-	128
4 × 6	1200 × 1800	7.3	40.6	59.0	2.51	-	29.0	271	684	-	-	326
4.4 × 11.5	1350 × 3500	7.3	112	144	2.90	-	29.0	562	1323	-	-	650
5 × 8	1500 × 2500	7.3	90.8	104	2.59	-	29.0	487	970	-	-	576
6.5 × 10	2000 × 3000	7.3	188	164	2.51	-	29.0	809	1985	-	-	942
6.5 × 15	2000 × 4500	7.3	309	267	2.82	-	29.0	1058	2646	-	-	1191
8 × 25	2500 × 7700	7.3	996	664	3.23	25.4	36.3	3021	6659	-	-	3528
11 × 28	3300 × 8600	7.3	1803	931	3.17	25.4	36.3	4895	8181	-	-	5998
15 × 21	4500 × 6400	7.3	2390	854	2.74	25.4	36.3	7497	8600	-	-	-

Note : 1. Figures on the table comply with requirements of ISO17357.

2. Weight of fender body and net may vary ±10%.

3. Special sizes are available upon request.

6.2 Performance Table

6.2.1 Pneumatic 50 (Metric)

Table 6-1(a) Pneumatic 50 Standard Sizes

Nominal Size Diameter × Length	Initial Internal Pressure	Guaranteed Energy Absorption (GEA)	Reaction Force at GEA	Hull Pressure at GEA	Safety Valve Setting pressure	Testing Pressure	Weight of Net Type (Type I)				Weight of Sling Type (Type II)
							Approx. Fender Body Weight	Approx. Weight of Net			
								Chain Net	Wire Net	Synthetic Fiber Net	
(mm × mm)	(kPa)	(kNm)	(kN)	(kPa)	(kPa)	(kPa)	(kg)	(kg)	(kg)	(kg)	(kg)
500 × 1000	50	6	64	132	-	200	22	110	30	20	32
600 × 1000	50	8	74	126	-	200	25	120	30	22	36
700 × 1500	50	17	137	135	-	200	45	150	40	37	55
1000 × 1500	50	32	182	122	-	200	73	200	80	51	98
1000 × 2000	50	45	257	132	-	200	88	220	140	57	113
1200 × 2000	50	63	297	126	-	200	131	320	190	68	156
1350 × 2500	50	102	427	130	-	200	200	350	200	-	240
1500 × 3000	50	153	579	132	-	200	250	530	350	-	290
1700 × 3000	50	191	639	128	-	200	290	580	440	-	330
2000 × 3500	50	308	875	128	-	200	405	960	640	-	465
2500 × 4000	50	663	1381	137	175	250	902	1240	910	-	1080
2500 × 5500	50	943	2019	148	175	250	1090	1850	1160	-	1320
3300 × 4500	50	1175	1884	130	175	250	1460	1710	1270	-	1840
3300 × 6500	50	1814	3015	146	175	250	1870	2570	1910	-	2250
3300 × 10600	50	3067	5257	158	175	250	2560	4660	3300	-	3060
4500 × 9000	50	4752	5747	146	175	250	3940	5390	3520	-	-
4500 × 12000	50	6473	7984	154	175	250	4790	6990	5190	-	-

Table 6-1(b) Pneumatic 50 Popular Non Standard Sizes

Nominal Size Diameter × Length	Initial Internal Pressure	Guaranteed Energy Absorption (GEA)	Reaction Force at GEA	Hull Pressure at GEA	Safety Valve Setting pressure	Testing Pressure	Weight of Net Type (Type I)				Weight of Sling Type (Type II)
							Approx. Fender Body Weight	Approx. Weight of Net			
								Chain Net	Wire Net	Synthetic Fiber Net	
(mm × mm)	(kPa)	(kNm)	(kN)	(kPa)	(kPa)	(kPa)	(kg)	(kg)	(kg)	(kg)	(kg)
400 × 1500	50	6	87	151	-	200	23	-	-	-	33
600 × 1200	50	10	93	132	-	200	28	-	-	-	39
800 × 1200	50	16	116	122	-	200	48	240	-	-	58
1200 × 1800	50	55	262	122	-	200	123	310	-	-	148
1350 × 3500	50	152	641	141	-	200	255	600	-	-	295
1500 × 2500	50	123	464	126	-	200	221	440	-	-	261
2000 × 3000	50	255	727	122	-	200	367	900	-	-	427
2000 × 4500	50	418	1188	137	-	200	480	1200	-	-	540
2500 × 7700	50	1350	2951	157	175	250	1370	3020	-	-	1600
3300 × 8600	50	2443	4138	154	175	250	2220	3710	-	-	2720
4500 × 6400	50	3238	3796	133	175	250	3400	3900	-	-	-

Note : 1. Figures on the table comply with requirements of ISO17357.

2. Weight of fender body and net may vary ±10%.

3. Special sizes are available upon request.