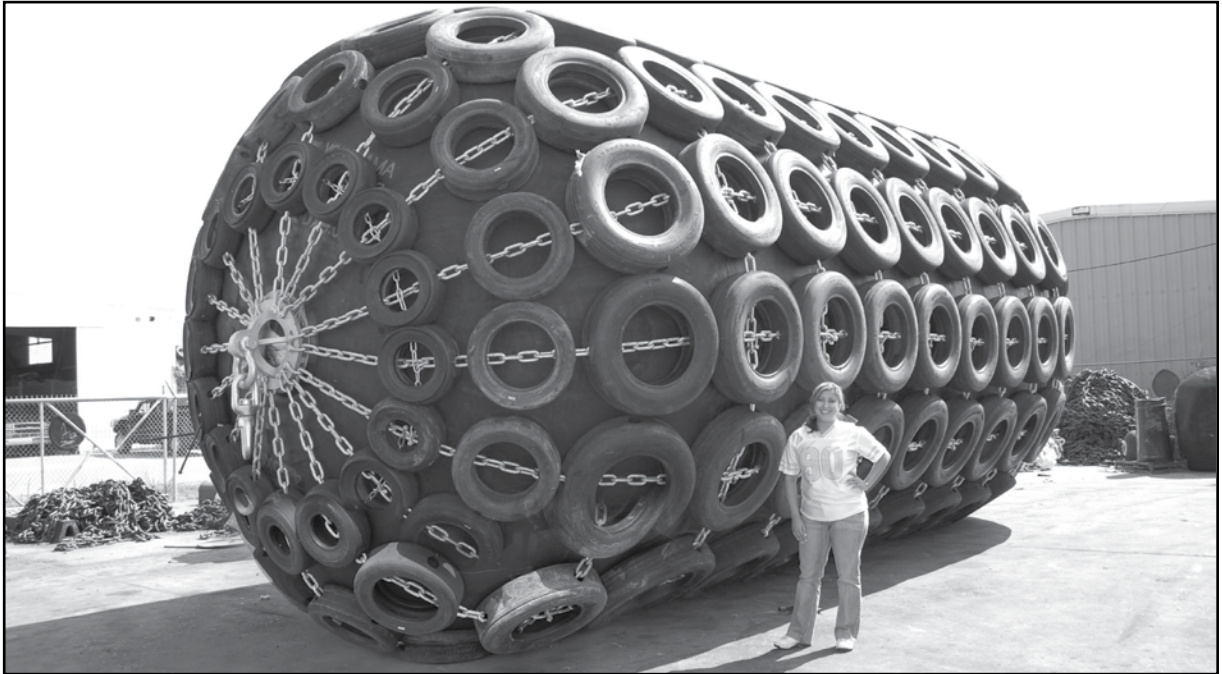




PNEUMATIC FENDERS



PNEUMATIC FENDER WITH CHAIN HARNESS



PNEUMATIC SLING TYPE FENDER

PNEUMATIC FENDERS



PNEUMATIC FENDERS

PNEUMATIC 50 (U.S. CUSTOMARY)

PNEUMATIC 50 STANDARD SIZES

| NOMINAL SIZE | | INITIAL INTERNAL PRESSURE | GUARANTEED ENERGY ABSORPTION (GEA) | REACTION FORCE AT GEA | HULL PRESSURE AT GEA | SAFETY VALUE SETTING PRESSURE | TESTING PRESSURE | WEIGHT OF NET TYPE (TYPE I) | | | | WEIGHT OF SLING TYPE (TYPE II) |
|-------------------|--------------|---------------------------|------------------------------------|-----------------------|-------------------------|-------------------------------|------------------|-----------------------------|---------------------------|---------------------|-------|--------------------------------|
| | | | | | | | | APPROX. FENDER BODY WEIGHT | APPROXIMATE WEIGHT OF NET | | | |
| DIAMETER X LENGTH | | E | R | P | | | CHAIN NET | | WIRE NET | SYNTHETIC FIBER NET | | |
| (FT X FT) | (MM X MM) | (KIPS) | (KIPS) | (KIPS) | (KIPS/FT ²) | (PSI) | (PSI) | (LBS) | (LBS) | (LBS) | (LBS) | (LBS) |
| 1.6 x 3 | 500 x 1000 | 7.3 | 4.4 | 14.4 | 2.72 | - | 29.0 | 49 | 243 | 66 | 44 | 71 |
| 2 x 3 | 600 x 1000 | 7.3 | 5.9 | 16.7 | 2.59 | - | 29.0 | 55 | 265 | 66 | 49 | 79 |
| 2.3 x 5 | 700 x 1500 | 7.3 | 12.5 | 30.8 | 2.78 | - | 29.0 | 99 | 331 | 88 | 82 | 121 |
| 3 x 5 | 1000 x 1500 | 7.3 | 23.6 | 41.0 | 2.51 | - | 29.0 | 161 | 441 | 176 | 112 | 216 |
| 3 x 6.5 | 1000 x 2000 | 7.3 | 33.2 | 57.8 | 2.72 | - | 29.0 | 194 | 485 | 309 | 126 | 249 |
| 4 x 6.5 | 1200 x 2000 | 7.3 | 46.5 | 66.8 | 2.59 | - | 29.0 | 289 | 706 | 419 | 150 | 344 |
| 4.4 x 8 | 1350 x 2500 | 7.3 | 75.3 | 96.1 | 2.67 | - | 29.0 | 441 | 772 | 441 | - | 529 |
| 5 x 10 | 1500 x 3000 | 7.3 | 113.0 | 130.0 | 2.72 | - | 29.0 | 551 | 1169 | 772 | - | 639 |
| 5.6 x 10 | 1700 x 3000 | 7.3 | 141.0 | 144.0 | 2.63 | - | 29.0 | 639 | 1279 | 970 | - | 728 |
| 6.5 x 11.5 | 2000 x 3500 | 7.3 | 227.0 | 197.0 | 2.63 | - | 29.0 | 893 | 2117 | 1411 | - | 1025 |
| 8 x 13 | 2500 x 4000 | 7.3 | 489.0 | 311.0 | 2.82 | 25.4 | 36.3 | 1989 | 2734 | 2007 | - | 2381 |
| 8 x 18 | 2500 x 5500 | 7.3 | 696.0 | 454.0 | 3.04 | 25.4 | 36.3 | 2403 | 4079 | 2558 | - | 2911 |
| 11 x 15 | 3300 x 4500 | 7.3 | 867.0 | 424.0 | 2.67 | 25.4 | 36.3 | 3219 | 3771 | 2800 | - | 4057 |
| 11 x 21 | 3300 x 6500 | 7.3 | 1339.0 | 678.0 | 3.00 | 25.4 | 36.3 | 4123 | 5667 | 4212 | - | 4961 |
| 11 x 35 | 3300 x 10600 | 7.3 | 2264.0 | 1183.0 | 3.25 | 25.4 | 36.3 | 5645 | 10275 | 7277 | - | 6747 |
| 15 x 30 | 4500 x 9000 | 7.3 | 3507.0 | 1293.0 | 3.00 | 25.4 | 36.3 | 8688 | 11885 | 7762 | - | - |
| 15 x 40 | 4500 x 12000 | 7.3 | 4777.0 | 1796.0 | 3.17 | 25.4 | 36.3 | 10562 | 15413 | 11444 | - | - |

PNEUMATIC 50 POPULAR NON STANDARD SIZES

| NOMINAL SIZE | | INITIAL INTERNAL PRESSURE | GUARANTEED ENERGY ABSORPTION (GEA) | REACTION FORCE AT GEA | HULL PRESSURE AT GEA | SAFETY VALUE SETTING PRESSURE | TESTING PRESSURE | WEIGHT OF NET TYPE (TYPE I) | | | | WEIGHT OF SLING TYPE (TYPE II) |
|-------------------|-------------|---------------------------|------------------------------------|-----------------------|-------------------------|-------------------------------|------------------|-----------------------------|---------------------------|---------------------|-------|--------------------------------|
| | | | | | | | | APPROX. FENDER BODY WEIGHT | APPROXIMATE WEIGHT OF NET | | | |
| DIAMETER X LENGTH | | E | R | P | | | CHAIN NET | | WIRE NET | SYNTHETIC FIBER NET | | |
| (FT X FT) | (MM X MM) | (KIPS) | (KIPS) | (KIPS) | (KIPS/FT ²) | (PSI) | (PSI) | (LBS) | (LBS) | (LBS) | (LBS) | (LBS) |
| 1.3 x 5 | 400 x 1500 | 7.3 | 4.4 | 19.6 | 3.11 | - | 29.0 | 51 | - | - | - | 73 |
| 2 x 4 | 600 x 1200 | 7.3 | 7.4 | 20.9 | 2.72 | - | 29.0 | 62 | - | - | - | 86 |
| 2.6 x 4 | 800 x 1200 | 7.3 | 11.8 | 26.1 | 2.51 | - | 29.0 | 107 | 529 | - | - | 128 |
| 4 x 6 | 1200 x 1800 | 7.3 | 40.6 | 59.0 | 2.51 | - | 29.0 | 271 | 684 | - | - | 326 |
| 4.4 x 11.5 | 1350 x 3500 | 7.3 | 112.0 | 144.0 | 2.90 | - | 29.0 | 562 | 1323 | - | - | 650 |
| 5 x 8 | 1500 x 2500 | 7.3 | 90.8 | 104.0 | 2.59 | - | 29.0 | 487 | 970 | - | - | 576 |
| 6.5 x 10 | 2000 x 3000 | 7.3 | 188.0 | 164.0 | 2.51 | - | 29.0 | 809 | 1985 | - | - | 942 |
| 6.5 x 15 | 2000 x 4500 | 7.3 | 309.0 | 267.0 | 2.82 | - | 29.0 | 1058 | 2646 | - | - | 1191 |
| 8 x 25 | 2500 x 7700 | 7.3 | 996.0 | 664.0 | 3.23 | 25.4 | 36.3 | 3021 | 6659 | - | - | 3528 |
| 11 x 28 | 3300 x 8600 | 7.3 | 1803.0 | 931.0 | 3.17 | 25.4 | 36.3 | 4895 | 8181 | - | - | 5998 |
| 15 x 21 | 4500 x 6400 | 7.3 | 2390.0 | 854.0 | 2.74 | 25.4 | 36.3 | 7497 | 8600 | - | - | - |

PNEUMATIC FENDERS





PNEUMATIC FENDERS

PNEUMATIC 80 (U.S. CUSTOMARY)

PNEUMATIC 80 STANDARD SIZES

| NOMINAL SIZE | | INITIAL INTERNAL PRESSURE | GUARANTEED ENERGY ABSORPTION (GEA) | REACTION FORCE AT GEA | HULL PRESSURE AT GEA | SAFETY VALUE SETTING PRESSURE | TESTING PRESSURE | WEIGHT OF NET TYPE (TYPE I) | | | WEIGHT OF SLING TYPE (TYPE II) | |
|-------------------|--------------|---------------------------|------------------------------------|-----------------------|-------------------------|-------------------------------|------------------|-----------------------------|---------------------------|----------|--------------------------------|-------|
| | | | | | | | | APPROX. FENDER BODY WEIGHT | APPROXIMATE WEIGHT OF NET | | | |
| DIAMETER X LENGTH | | | E | R | P | | | | CHAIN NET | WIRE NET | SYNTHETIC FIBER NET | |
| (FT X FT) | (MM X MM) | (KIPS) | (KIPS) | (KIPS) | (KIPS/FT ²) | (PSI) | (PSI) | (LBS) | (LBS) | (LBS) | (LBS) | (LBS) |
| 1.6 x 3 | 500 x 1000 | 11.6 | 5.9 | 19.1 | 3.58 | - | 36.3 | 53 | 243 | 66 | 44 | 75 |
| 2 x 3 | 600 x 1000 | 11.6 | 8.1 | 22.1 | 3.41 | - | 36.3 | 60 | 265 | 66 | 49 | 84 |
| 2.3 x 5 | 700 x 1500 | 11.6 | 17.7 | 40.5 | 3.64 | - | 36.3 | 104 | 331 | 88 | 82 | 126 |
| 3 x 5 | 1000 x 1500 | 11.6 | 33.2 | 53.8 | 3.29 | - | 36.3 | 168 | 441 | 176 | 112 | 223 |
| 3 x 6.5 | 1000 x 2000 | 11.6 | 46.5 | 76.1 | 3.58 | - | 36.3 | 203 | 485 | 309 | 126 | 258 |
| 4 x 6.5 | 1200 x 2000 | 11.6 | 64.9 | 87.8 | 3.41 | - | 36.3 | 298 | 706 | 419 | 150 | 353 |
| 4.4 x 8 | 1350 x 2500 | 11.6 | 105.0 | 126.0 | 3.50 | - | 36.3 | 452 | 772 | 441 | - | 540 |
| 5 x 10 | 1500 x 3000 | 11.6 | 158.0 | 171.0 | 3.58 | - | 36.3 | 611 | 1169 | 772 | - | 699 |
| 5.6 x 10 | 1700 x 3000 | 11.6 | 197.0 | 189.0 | 3.46 | - | 36.3 | 697 | 1279 | 970 | - | 785 |
| 6.5 x 11.5 | 2000 x 3500 | 11.6 | 317.0 | 259.0 | 3.46 | - | 36.3 | 911 | 2139 | 1521 | - | 1043 |
| 8 x 13 | 2500 x 4000 | 11.6 | 683.0 | 408.0 | 3.70 | 33.4 | 43.5 | 2227 | 2756 | 2007 | - | 2624 |
| 8 x 18 | 2500 x 5500 | 11.6 | 972.0 | 597.0 | 4.01 | 33.4 | 43.5 | 2712 | 4101 | 2580 | - | 3219 |
| 11 x 15 | 3300 x 4500 | 11.6 | 1210.0 | 557.0 | 3.52 | 33.4 | 43.5 | 3793 | 3793 | 2822 | - | 4608 |
| 11 x 21 | 3300 x 6500 | 11.6 | 1869.0 | 891.0 | 3.93 | 33.4 | 43.5 | 4851 | 5689 | 4388 | - | 5667 |
| 11 x 35 | 3300 x 10600 | 11.6 | 3160.0 | 1554.0 | 4.28 | 33.4 | 43.5 | 6681 | 10275 | 7277 | - | 7762 |
| 15 x 30 | 4500 x 9000 | 11.6 | 4896.0 | 1699.0 | 3.95 | 33.4 | 43.5 | 9658 | 11995 | 7894 | - | - |
| 15 x 40 | 4500 x 12000 | 11.6 | 6670.0 | 2360.0 | 4.16 | 33.4 | 43.5 | 11753 | 15501 | 11532 | - | - |

PNEUMATIC 80 POPULAR NON STANDARD SIZES

| NOMINAL SIZE | | INITIAL INTERNAL PRESSURE | GUARANTEED ENERGY ABSORPTION (GEA) | REACTION FORCE AT GEA | HULL PRESSURE AT GEA | SAFETY VALUE SETTING PRESSURE | TESTING PRESSURE | WEIGHT OF NET TYPE (TYPE I) | | | WEIGHT OF SLING TYPE (TYPE II) | |
|-------------------|-------------|---------------------------|------------------------------------|-----------------------|-------------------------|-------------------------------|------------------|-----------------------------|---------------------------|----------|--------------------------------|-------|
| | | | | | | | | APPROX. FENDER BODY WEIGHT | APPROXIMATE WEIGHT OF NET | | | |
| DIAMETER X LENGTH | | | E | R | P | | | | CHAIN NET | WIRE NET | SYNTHETIC FIBER NET | |
| (FT X FT) | (MM X MM) | (KIPS) | (KIPS) | (KIPS) | (KIPS/FT ²) | (PSI) | (PSI) | (LBS) | (LBS) | (LBS) | (LBS) | (LBS) |
| 1.3 x 5 | 400 x 1500 | 11.6 | 6.6 | 25.7 | 4.09 | - | 36.3 | 53 | - | - | - | 75 |
| 2 x 4 | 600 x 1200 | 11.6 | 10.3 | 27.5 | 3.58 | - | 36.3 | 66 | - | - | - | 90 |
| 2.6 x 4 | 800 x 1200 | 11.6 | 17.0 | 34.4 | 3.29 | - | 36.3 | 110 | 529 | - | - | 132 |
| 4 x 6 | 1200 x 1800 | 11.6 | 56.8 | 77.4 | 3.29 | - | 36.3 | 280 | 684 | - | - | 335 |
| 4.4 x 11.5 | 1350 x 3500 | 11.6 | 157.0 | 189.0 | 3.81 | - | 36.3 | 576 | 1323 | - | - | 664 |
| 5 x 8 | 1500 x 2500 | 11.6 | 126.0 | 137.0 | 3.41 | - | 36.3 | 538 | 970 | - | - | 626 |
| 6.5 x 10 | 2000 x 3000 | 11.6 | 263.0 | 215.0 | 3.29 | - | 36.3 | 827 | 1985 | - | - | 959 |
| 6.5 x 15 | 2000 x 4500 | 11.6 | 431.0 | 351.0 | 3.68 | - | 36.3 | 1076 | 2668 | - | - | 1208 |
| 8 x 25 | 2500 x 7700 | 11.6 | 1391.0 | 872.0 | 4.24 | 33.4 | 43.5 | 3418 | 6681 | - | - | 3925 |
| 11 x 28 | 3300 x 8600 | 11.6 | 2517.0 | 1223.0 | 4.16 | 33.4 | 43.5 | 5777 | 8181 | - | - | 6858 |
| 15 x 21 | 4500 x 6400 | 11.6 | 3335.0 | 1122.0 | 3.58 | 33.4 | 43.5 | 8291 | 8622 | - | - | - |

PNEUMATIC FENDERS