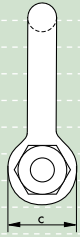
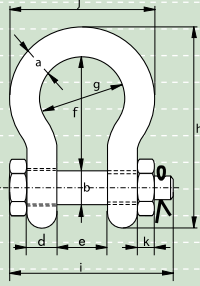


G-5163



Green Pin® Polar Shackles

bow shackles with safety bolt, for use under extreme climatic conditions

- **Material** : bow and pin alloy steel, Grade 8, quenched and tempered
- **Safety Factor** : MBL equals 8 x WLL
- **Standard** : EN 13889 and
meets performance requirements of US Fed. Spec. RR-C-271 Type IVA Class 3, Grade B
- **Finish** : hot dipped galvanized
- **Temperature Range** : -40 °C up to +200 °C
- **Certification** : at no extra charges this product can be supplied with works certificate, 3.1 material certificate, manufacturer test certificate, EC Declaration of Conformity and/or DNV 2.7-1 certificate.
- **Note** : for shackles with WLL 55 and 85 tons the MBL equals 6 x WLL
for details on dimensions and tolerances please consult our CAD drawings, these are available on request.

| working load limit | diameter bow | diameter pin | diameter eye | width eye | width inside | length inside | width bow | length bow | length bolt | width bolt | thickness nut | weight each |
|--------------------|--------------|--------------|--------------|-----------|--------------|---------------|-----------|------------|-------------|------------|---------------|-------------|
| t | a | b | c | d | e | f | g | h | i | j | k | kg |
| 2 | 13.5 | 16 | 34 | 13 | 22 | 51 | 32 | 89 | 82 | 58 | 13 | 0.42 |
| 3.25 | 16 | 19 | 40 | 16 | 27 | 64 | 43 | 110 | 98 | 75 | 17 | 0.74 |
| 4.75 | 19 | 22 | 46 | 19 | 31 | 76 | 51 | 129 | 114 | 89 | 19 | 1.18 |
| 6.5 | 22 | 25 | 52 | 22 | 36 | 83 | 58 | 144 | 130 | 102 | 22 | 1.77 |
| 8.5 | 25 | 28 | 59 | 25 | 43 | 95 | 68 | 164 | 150 | 118 | 25 | 2.58 |
| 9.5 | 28 | 32 | 66 | 28 | 47 | 108 | 75 | 185 | 166 | 131 | 27 | 3.66 |
| 12 | 32 | 35 | 72 | 32 | 51 | 115 | 83 | 201 | 178 | 147 | 30 | 4.91 |
| 13.5 | 35 | 38 | 80 | 35 | 57 | 133 | 92 | 227 | 197 | 162 | 33 | 6.54 |
| 17 | 38 | 42 | 88 | 38 | 60 | 146 | 99 | 249 | 202 | 175 | 19 | 8.19 |
| 25 | 45 | 50 | 103 | 45 | 74 | 178 | 126 | 300 | 249 | 216 | 23 | 14.22 |
| 35 | 50 | 57 | 116 | 50 | 83 | 197 | 138 | 334 | 269 | 238 | 26 | 19.85 |
| 42.5 | 57 | 65 | 130 | 57 | 95 | 222 | 160 | 377 | 301 | 274 | 29 | 28.33 |
| 55 | 65 | 70 | 145 | 65 | 105 | 260 | 180 | 433 | 330 | 310 | 32 | 39.59 |
| 85 | 75 | 83 | 162 | 73 | 127 | 329 | 190 | 527 | 380 | 340 | 40 | 62 |

In inch

| working load limit | diameter bow | diameter pin | diameter eye | width eye | width inside | length inside | width bow | length bow | length bolt | width bolt | thickness nut | weight each |
|--------------------|--------------|--------------|--------------|-----------|--------------|---------------|-----------|------------|-------------|------------|---------------|-------------|
| t | a | b | c | d | e | f | g | h | i | j | k | lbs |
| 2 | 1/2 | 5/8 | 1 11/32 | 1/2 | 7/8 | 2 | 1 1/4 | 3 1/2 | 3 7/32 | 2 9/32 | 1/2 | 0.92 |
| 3.25 | 5/8 | 3/4 | 1 9/16 | 5/8 | 1 1/16 | 2 17/32 | 1 11/16 | 4 11/32 | 3 27/32 | 2 15/16 | 21/32 | 1.62 |
| 4.75 | 3/4 | 7/8 | 1 13/16 | 3/4 | 1 7/32 | 3 | 2 | 5 3/32 | 4 1/2 | 3 1/2 | 3/4 | 2.59 |
| 6.5 | 7/8 | 1 | 2 1/16 | 7/8 | 1 13/32 | 3 9/32 | 2 9/32 | 5 21/32 | 5 1/8 | 4 1/32 | 7/8 | 3.9 |
| 8.5 | 1 | 1 1/8 | 2 5/16 | 31/32 | 1 11/16 | 3 3/4 | 2 11/16 | 6 15/32 | 5 29/32 | 4 21/32 | 31/32 | 5.69 |
| 9.5 | 1 1/8 | 1 1/4 | 2 19/32 | 1 3/32 | 1 27/32 | 4 1/4 | 2 15/16 | 7 9/32 | 6 17/32 | 5 5/32 | 1 1/16 | 8.06 |
| 12 | 1 1/4 | 1 3/8 | 2 27/32 | 1 1/4 | 2 | 4 17/32 | 3 9/32 | 7 29/32 | 7 | 5 29/32 | 1 3/16 | 10.81 |
| 13.5 | 1 3/8 | 1 1/2 | 3 5/32 | 1 3/8 | 2 1/4 | 5 1/4 | 3 5/8 | 8 15/16 | 7 3/4 | 6 3/8 | 1 5/16 | 14.42 |
| 17 | 1 1/2 | 1 5/8 | 3 15/32 | 1 1/2 | 2 3/8 | 5 3/4 | 3 29/32 | 9 13/16 | 7 15/16 | 6 7/8 | 3/4 | 18.06 |
| 25 | 1 3/4 | 2 | 4 1/16 | 1 25/32 | 2 29/32 | 7 | 4 31/32 | 11 13/16 | 9 13/16 | 8 1/2 | 29/32 | 31.34 |
| 35 | 2 | 2 1/4 | 4 9/16 | 1 31/32 | 3 9/32 | 7 3/4 | 5 7/16 | 13 5/32 | 10 19/32 | 9 3/8 | 1 1/32 | 43.77 |
| 42.5 | 2 1/4 | 2 9/16 | 5 1/8 | 2 1/4 | 3 3/4 | 8 3/4 | 6 5/16 | 14 27/32 | 11 27/32 | 10 25/32 | 1 5/32 | 62.46 |
| 55 | 2 1/2 | 2 3/4 | 5 23/32 | 2 9/16 | 4 1/8 | 10 1/4 | 7 3/32 | 17 1/16 | 13 | 12 7/32 | 1 1/4 | 87.27 |
| 85 | 3 | 3 1/4 | 6 3/8 | 2 7/8 | 5 | 12 15/16 | 7 15/32 | 20 3/4 | 14 31/32 | 13 3/8 | 1 9/16 | 136.69 |

