

## HEAVY DUTY AIR INFLATABLE UNDER WATER LIFT \& SALVAGE BALLOONS

The Canflex Heavy Duty Air Inflated products are used worldwide for raising sunken objects, vessel salvage, marine structure stabilization, underwater equipment transport, pipeline and equipment towing, and standby emergency buoyancy. The following is our condensed information list of the lift balloons (also called lift bags) standard product line. All standard items and sizes shown are fabricated from heavy duty polyester fabric, coated with PVC to ensure excellent air retention and abrasion resistance. All body seams are electronically, high frequency (HF) welded for extra strength.
NO GLUE or sewing of coated fabric.
Lift Bag features include: Design Safety Factor 6:1; Manufactured in accordance with ISO 9001:2015 Quality Management Standard; Independently certified by ABS Consulting - Weight \& Volume Certificates available; All lift bags comply with IMCA guidelines for Underwater Lift Bags (IMCA D 016 Rev. 5 - January 2022).


BALLOON SHAPED - TOTALLY ENCLOSED/OPEN BOTTOM - LIFT BAG<br>Lift Capacities: 1 tonne thru 50 tonne

The Canflex Model (DLE) Totally Enclosed balloon style \& (DL) Open Bottom balloon style lift bags are tear drop shaped units used for supporting loads on the surface of the water or used for lifting objects from any depth, respectively.
These balloons are equipped with one positive venting relief/dump valve mounted in center of the top lift plate. This valve is spring loaded and spring pressure can be set to automatically open when overpressure or can be inverted and used as diver controlled manual dump. All DLE balloons up to 10 tonne capacity, come with a 146 mm threaded connector and an air tight cap. The use of this bottom fitting allows the bag to be either totally enclosed DLE or open bottom DL.
All balloons come with polyester lift straps treated with special coating to prevent against UV degradation and appropriate screw pin shackle for a single point of lifting. Materials used for fabrication are high tenacity PVC coated polyester fabrics that range of weight from 48 to 89 $o z / y d^{2}$.

## TETRAHEDRON SHAPED - ENCLOSED BOTTOM / OPEN BOTTOM - LIFT BAG <br> Lift Capacities: $\mathbf{1 0 0}$ kg ( 220 lbs ) thru 500 kg (1100 lbs)

The (SLE) Enclosed Bottom or (SLD) Open Bottom lift bags are tetrahedron shaped units equipped with either a positive venting air relief valve or a diver controlled manual dump valve, respectively. The Enclosed Bottom style also has a 98 mm threaded connector with an air tight cap.
ALL bags come complete with polyester lift straps treated with special coating to prevent against UV degradation and D-ring for a single lift point. Material used for fabrication is high tenacity PVC $48 \mathrm{oz} / \mathrm{yd}^{2}$ coated Polyester fabric.

## CYLINDRICAL SHAPED - PONTOON STYLE BUOYANCY UNITS Lift Capacities: 1 tonne thru 60 tonne

The Canflex Model (ELB) Pontoon bags are cylindrically shaped (totally enclosed units) used for supporting loads. These units are equipped with positive venting relief/dump valves mounted along the top. These valves are spring loaded and spring pressure set to automatically open when overpressure.
We also incorporate into our bag two drain valves with air tight caps on the bottom, these allow the bag to be easily drained if water should find its way into the pontoon.
All bags come complete with polyester lift straps treated with special coating to prevent against UV degradation and appropriate screw pin shackles. Materials used for fabrication are high tenacity PVC coated polyester fabrics in range of weight from 48 to $89 \mathrm{oz} / \mathrm{yd}^{2}$.

BALLOON SHAPED - (DLE) TOTALLY ENCLOSED \& (DL) OPEN BOTTOM - LIFT BAGS

| MODEL DLE I DL |  | LIFT CAPACITY |  | HEIGHT |  | WIDTH |  | volume |  | SHIPPING CUBE |  | DRY WEIGHT |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | kg | Ib | m | ft-in | m | ft-in | $\mathrm{m}^{3}$ | $\mathrm{ft}^{3}$ | $\mathrm{m}^{3}$ | $\mathrm{ft}^{3}$ | kg | Ib |
| * | DLE-1 | 1000 | 2200 | 1.80 | 5'-11" | 1.20 | 3'-11" | 1.00 | 35.32 | 0.15 | 5.4 | 20.41 | 45 |
| * | DLE-2 | 2000 | 4400 | 2.20 | 7'-3" | 1.50 | 4'-11" | 2.00 | 70.63 | 0.18 | 6.5 | 27.22 | 60 |
| * | DLE-3 | 3000 | 6600 | 2.60 | 8'-7" | 1.70 | 5'-8" | 3.00 | 105.95 | 0.24 | 8.4 | 34.02 | 75 |
| * | DLE-4 | 4000 | 8800 | 2.85 | 9'-4" | 1.91 | 6'-3" | 4.00 | 141.26 | 0.30 | 10.5 | 39.46 | 87 |
| * | DLE-5 | 5000 | 11000 | 3.00 | 10'-0" | 2.00 | 6'-8" | 5.00 | 176.58 | 0.40 | 14.0 | 45.36 | 100 |
| * | DLE-6 | 6000 | 13200 | 3.35 | 11'-0" | 2.31 | 7'-7" | 6.00 | 211.89 | 0.45 | 16.0 | 54.43 | 120 |
| * | DLE-8 | 8000 | 17600 | 3.56 | 11'-8" | 2.38 | 7'-9" | 8.00 | 282.52 | 0.49 | 17.3 | 63.50 | 140 |
| * | DLE-10 | 10000 | 22000 | 3.84 | 12'-7" | 2.56 | 8'-4" | 10.00 | 353.15 | 0.57 | 20.0 | 74.84 | 165 |
| * | DL-12 | 12000 | 24000 | 4.08 | 13-4'4' | 2.72 | 8'-11" | 12.00 | 423.78 | 0.68 | 24.0 | 90.72 | 200 |
| ** | DL-15 | 15000 | 33000 | 4.26 | 14'-0" | 2.98 | 9'-10" | 15.00 | 529.73 | 0.85 | 30.0 | 145.15 | 320 |
| ** | DL-20 | 20000 | 44000 | 5.96 | 19'-7" | 3.42 | 11'-3" | 20.00 | 706.30 | 1.81 | 64.0 | 172.36 | 380 |
| *** | DL-25 | 25000 | 55000 | 6.07 | 19'-11" | 3.86 | 12'-8" | 25.00 | 882.88 | 1.81 | 64.0 | 208.65 | 460 |
| *** | DL-35 | 35000 | 77000 | 6.80 | 22'-4" | 4.29 | 14'-1" | 35.00 | 1236.03 | 1.81 | 64.0 | 249.47 | 550 |
| *** | DL-40 | 40000 | 88000 | 7.32 | 24'-0" | 4.46 | 14'-8" | 40.00 | 1412.60 | 2.27 | 80.0 | 331.12 | 730 |
| **** | DL-50 | 50000 | 110000 | 7.62 | 25'-0" | 5.09 | 16'-8" | 50.00 | 1765.75 | 2.27 | 80.0 | 476.27 | 1050 |

TETRAHEDRON SHAPED - (SLE) TOTALLY ENCLOSED \& (SLD) OPEN BOTTOM - LIFT BAGS

| MODEL SLD/E |  | LIFT CAPACITY |  | HEIGHT |  | BASE |  | VOLUME |  | SHIPPING CUBE |  | DRY WEIGHT |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | kg | lb | m | in | m | in | $\mathrm{m}^{3}$ | $\mathrm{ft}^{3}$ | $\mathrm{m}^{3}$ | $\mathrm{ft}^{3}$ | kg | lb |
| * | SLEID-100 | 100 | 220 | 0.85 | 33.50 | 0.85 | 33.5 | 0.10 | 3.53 | 0.012 | 0.4 | 3.6 | 8.0 |
| * | SLE/D-272 | 272 | 600 | 1.13 | 44.75 | 1.19 | 47.0 | 0.272 | 9.60 | 0.014 | 0.5 | 4.0 | 8.8 |
| * | SLEID-500 | 500 | 1100 | 1.33 | 52.50 | 1.42 | 56.0 | 0.50 | 17.60 | 0.014 | 0.5 | 5.0 | 11.0 |

CYLINDRICAL SHAPED (TOTALLY ENCLOSED) PONTOON STYLE BUOYANCY UNITS

| MODEL ELB |  | LIFT CAPACITY |  | LENGHT |  | DIAMETER |  | VOLUME |  | SHIPPING CUBE |  | DRY WEIGHT |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | kg | lb | m | ft-in | m | ft-in | $\mathrm{m}^{3}$ | $\mathrm{ft}^{3}$ | $\mathrm{m}^{3}$ | $\mathrm{ft}^{3}$ | kg | lb |
| * | ELB-1 | 1000 | 2200 | 1.44 | 4'-8" | 0.97 | 3'-2" | 1.00 | 35.32 | 0.15 | 5.4 | 27.15 | 60 |
| * | ELB-2 | 2000 | 4400 | 1.96 | 6'-5" | 1.17 | 3'-10" | 2.00 | 70.63 | 0.18 | 6.5 | 36.20 | 80 |
| * | ELB-3 | 3000 | 6600 | 2.00 | 6'-6" | 1.40 | 4'-7" | 3.00 | 105.95 | 0.24 | 8.4 | 45.25 | 100 |
| * | ELB-5 | 5000 | 11000 | 3.40 | 11'-2" | 1.40 | 4'-7" | 5.00 | 176.58 | 0.40 | 14.0 | 60.33 | 133 |
| * | ELB-6 | 6000 | 13228 | 3.55 | 11'-8" | 1.52 | 5'-0" | 6.00 | 211.88 | 0.40 | 14.0 | 75.00 | 165 |
| * | ELB-8 | 8000 | 17600 | 3.75 | 12'-4" | 1.68 | 5'-6" | 8.00 | 282.52 | 0.49 | 17.3 | 84.46 | 186 |
| * | ELB-10 | 10000 | 22000 | 4.10 | 13'-5" | 1.90 | 6'-2" | 10.00 | 353.15 | 0.57 | 20.0 | 120.65 | 266 |
| *** | ELB-15 | 15000 | 33000 | 4.30 | 14'-1" | 2.15 | 7'-0" | 15.00 | 529.73 | 0.85 | 30.0 | 193.05 | 426 |
| *** | ELB-20 | 20000 | 44000 | 4.51 | 14'-10" | 2.43 | 8'-0" | 20.00 | 706.30 | 1.81 | 64.0 | 229.24 | 505 |
| *** | ELB-25 | 25000 | 55000 | 4.82 | 15'-10" | 2.68 | 8'-10" | 25.00 | 882.88 | 1.81 | 64.0 | 277.51 | 612 |
| *** | ELB-35 | 35000 | 77000 | 6.52 | 21'-5" | $2 . .68$ | 8'-10" | 35.00 | 1236.03 | 1.81 | 64.0 | 331.80 | 732 |
| **** | ELB-50 | 50000 | 110000 | 8.38 | 27'-6" | 2.92 | 9'-7" | 50.00 | 1765.75 | 2.27 | 80.0 | 633.44 | 1397 |
| **** | ELB-60 | 60000 | 132000 | 9.14 | 30'-0' | 3.08 | 10'-0' | 60.00 | 2118.88 | 2.30 | 82.0 | 680.39 | 1500 |

MATERIAL SPECIFICATIONS: "High Tenacity PVC coated Polyester Fabric" - with RF (HF) Welded seams
${ }^{(*)} \quad$ Material Weight $48 \mathrm{oz} / \mathrm{yd}^{2}\left(1622 \mathrm{~g} / \mathrm{m}^{2}\right)$. Tensile Strength $924 \mathrm{lbs} / \mathrm{in}(8090 \mathrm{~N} / 5 \mathrm{~cm})$; $4 \times 2$ Panama weave
(**) Material Weight $56 \mathbf{~ o z} / \mathbf{y d}^{2}\left(1884 \mathrm{~g} / \mathrm{m}^{2}\right.$ ). Tensile Strength $1260 \mathrm{lbs} / \mathrm{in}(11034 \mathrm{~N} / 5 \mathrm{~cm}) ; 4 \times 4$ Panama weave
$\left(^{* * *}\right) \quad$ Material Weight $67 \mathbf{o z} / \mathbf{y d}^{2}\left(2278 \mathrm{~g} / \mathrm{m}^{2}\right)$. Tensile Strength $2112 \mathrm{lbs} / \mathrm{in}(18500 \mathrm{~N} / 5 \mathrm{~cm}) ; 4 \times 4$ Panama weave
$\left(^{* * * *}\right)$ Material Weight $89 \mathrm{oz} / \mathbf{y d}^{2}\left(3024 \mathrm{~g} / \mathrm{m}^{2}\right)$. Tensile Strength $2258 \mathrm{lbs} /$ in $(19780 \mathrm{~N} / 5 \mathrm{~cm})$; $6 x 6$ Panama weave

## NOTES

- $1000 \mathrm{~kg}=1$ Metric Tonne = $2205 \mathrm{lbs} ; 1$ Short Ton = $2000 \mathrm{lbs} ; 1$ Long Tonne $=2240 \mathrm{lbs}$
- Fittings: Flanges made of anodized marine aluminum with stainless steel fasteners
- 1 thru 10 Tonne lift bags shipped in carry/storage bag made of $18 \mathrm{oz} / \mathrm{yd}^{2}$ PVC material ; 12 Tonne lift bags and above shipped in Clip-Lok Wood box
- All underwater lift bags are completely equipped including the appropriate quantity of automatic air relief valves with manual dump capability, lift harness of high strength polyester webbing enclosed in pockets attached to the side of the bag, and shackles attached to the bottom lift harness.

