

Level Alert Indicator



Female Tank Fitting

TECHNICAL SPECIFICATIONS

## *True Fit* Tank Fittings Features and Benefits

- Designed for use in tanks, troughs and a wide variety of marine applications.
- Manufactured from UV Stabilised High Quality Glass Fibre Reinforced Nylon giving a weather, termite, fungi and bacterial resistance
- Material Approved for use with Potable (drinkable) Water making them ideally suited to a broad range of rural & domestic applications.
- An extensive range of fittings in sizes 15mm to 100mm (1/2" to 4")
- Precision Heavy Duty Tapered Threads give a Strong Reliable Seal
- Material is strong enough to minimise potential cross threading
- Fittings provide flexibility and versatility for new and existing installations, saving on time and money
- All materials are fully resistant to salt water making them ideally suited to marine applications.

## *True Fit* Tank Fittings Approvals

**WRAS:** Hansen *True Fit* Tank Fittings carry the WRAS approval by the Water Research Council in the UK which is the highest recognised water testing organisation in the world. A WRAS approved fitting must not cause waste, misuse, undue consumption or contamination of the water supply and must be of an appropriate quality and standard.

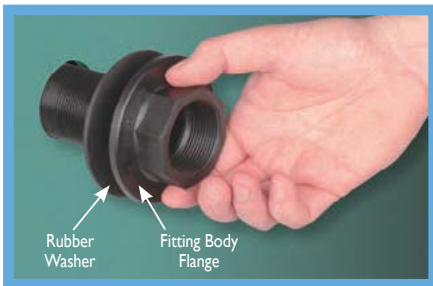
**AS/NZS 4020:** Hansen *True Fit* Tank Fittings meet the requirements for products in contact with drinking water as per AS/NZS 4020 Australia & New Zealand drinking water standard.

The equivalent standard to AS/NZS4020 is BS 6920.

## True Fit Tank Fittings Quick & Easy Installation

- Prior to installation, refer to tank manufacturers recommendations before drilling outlet in tank wall.
- All pipe work must be adequately supported.
- Use a thread sealant on all threaded connections. We recommend Loctite 5331.
- If you are using chemicals or have any special requirements that you wish to use your Tank Fittings in, go to the Tank Fitting chemical resistance page or don't hesitate to contact us.
- Please refer opposite page for minimum recommended hole sizes.
- Check the sealing surface to ensure it is free from debris and/or scratches which could cause leakage.
- To obtain proper washer compression for fitting installation ensure the face of the washers fully contacts the tank wall.
- Tighten the nut to ensure a water tight seal.
- HANSEN™ True Fit Tank Fitting can be used in conjunction with metal fittings.

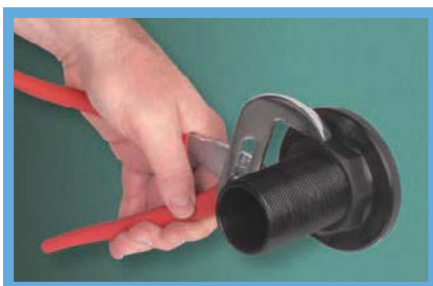
## True Fit Tank Fittings Installation Steps



1. Remove the **Back Nut** and the **Low Density Poly Washer** (the firmer of the 2 washers) from the **Tank Fitting Body**. Slide the **Tank Fitting Body** through the hole in the tank. The **Rubber Washer** must be between the **Fitting Body Flange** and the **tank wall** (ensure the ribs on the **Rubber Washer** are sealing against the tank wall).



2. On the inside of the **tank wall**, slide the **Low Density Poly Washer** back onto the **Tank Fitting Body** and then wind on the **Back Nut**.

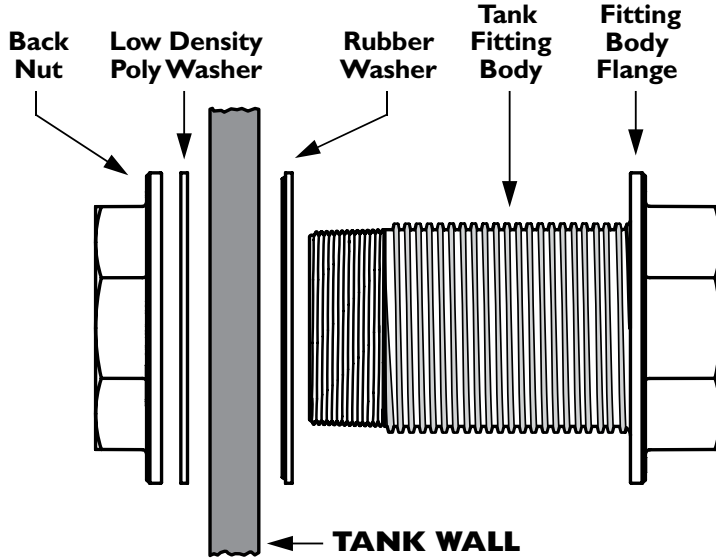


3. Tighten the **Back Nut** so that the face of both washers make full contact with the **tank wall** to obtain a water tight seal. Ensure that you comply with the tank manufacturers specifications.



4. When adding additional fittings it is recommended that either a thread sealing paste or thread sealing tape be used on all threaded connections. We recommend LOCTITE 5331.

## True Fit Tank Fittings Installation Steps



### Tank Fitting Recommended Hole Saw Size:

15mm	=	22mm	or	7/8"	Hole Saw
20mm	=	27mm	or	1 1/16"	Hole Saw
25mm	=	34mm	or	1 3/8"	Hole Saw
32mm	=	42mm	or	1 5/8"	Hole Saw
40mm	=	48mm	or	1 7/8"	Hole Saw
50mm	=	60mm	or	2 3/8"	Hole Saw
80mm	=	95mm	or	3 3/4"	Hole Saw
100mm	=	121mm	or	4 3/4"	Hole Saw

### Tank Fitting Minimum Recommended Hole Size:

Hole Size for 15mm	=	22mm
Hole Size for 20mm	=	27mm
Hole Size for 25mm	=	34mm
Hole Size for 32mm	=	42mm
Hole Size for 40mm	=	48mm
Hole Size for 50mm	=	60mm
Hole Size for 80mm	=	95mm
Hole Size for 100mm	=	121mm

## LARGE TANK FITTING



## True Fit Tank Fittings Pressure Rating

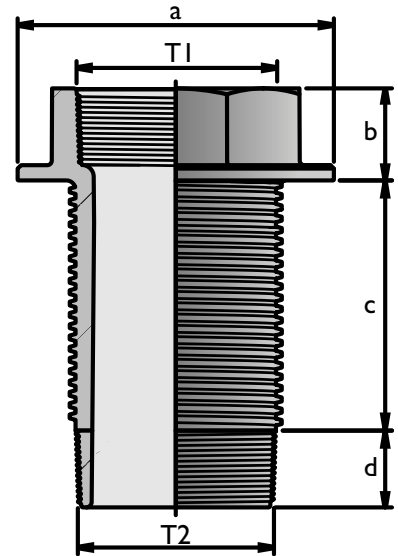
Hansen have tested all its products for use with cold water up to a maximum temperature of 60°C (140°F). We do not recommend the use of these products with temperatures higher than 60°C (140°F) as plastic expands due to temperature increases. Hansen cannot guarantee the products will perform when used with temperatures over 60°C (140°F). Hansen products that have failed in temperatures higher than 60°C (140°F) will not be covered by warranty.

Specifications and sizes may change without prior notice

Fitting Size	MAX PRESSURE @ 20 Degrees Celsius
15mm - 50mm	16 Bar (1600 kPa. 235 psi)
80mm	10Bar (1000kPa. 145 psi)
100mm	10 Bar (1000 kPa. 145 psi)

## Dimensions: Female Tank Fitting Black Code: SFTFT

Product Code	T1 BSPT	T2 BSPF	a mm	b mm	c mm	d mm
SFTFT15	1/2" (15mm)	1/2" (15mm)	57	20	97	8
SFTFT20	3/4" (20mm)	3/4" (20mm)	63.5	21	96	9
SFTFT25	1" (25mm)	1" (25mm)	73	24	95	10.5
SFTFT32	1 1/4" (32mm)	1 1/4" (32mm)	83.5	25.5	93	12
SFTFT40	1 1/2" (40mm)	1 1/2" (40mm)	92	26.7	93	12
SFTFT50	2" (50mm)	2" (50mm)	105	31	90	15
SFTFT80	3" (80mm)	3" (80mm)	140	40	110	34
SFTFT100	4" (100mm)	4" (100mm)	166	47	112	41



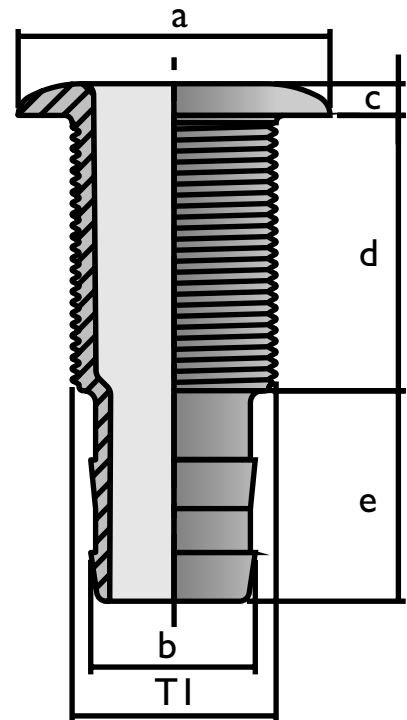
### Minimum Recommended Hole Sizes

Hole Size for SFTFT 15mm = 22mm diameter  
 Hole Size for SFTFT 20mm = 27mm diameter  
 Hole Size for SFTFT 25mm = 34mm diameter  
 Hole Size for SFTFT 32mm = 42mm diameter

Hole Size for SFTFT 40mm = 49mm diameter  
 Hole Size for SFTFT 50mm = 61mm diameter  
 Hole Size for SFTFT 80mm = 95mm diameter  
 Hole Size for SFTFT 100mm = 121mm diameter

## Dimensions: Male Tank Fitting Black Code: STF

Product Code	T1 BSPF	a mm	b mm	c mm	d mm	e mm
STF15B	1/2" (15mm)	38.5	14	5.5	55	31
STF20B	3/4" (20mm)	45	21.5	6	55	35
STF25B	1" (25mm)	54	27.5	6.5	55	38
STF32B	1 1/4" (32mm)	64	33.5	7	55	43
STF40B	1 1/2" (40mm)	72	40.5	8	55	51
STF50B	2" (50mm)	84.6	52.6	8	55	55



### Minimum Recommended Hole Sizes

Hole Size for STF 15mm = 22mm diameter  
 Hole Size for STF 20mm = 27mm diameter  
 Hole Size for STF 25mm = 34mm diameter  
 Hole Size for STF 32mm = 42mm diameter  
 Hole Size for STF 40mm = 49mm diameter  
 Hole Size for STF 50mm = 61mm diameter

## True Fit Tank Fittings Chemical Resistance Chart

CHEMICAL TYPE	RESISTANCE LEVEL		
	Good	OK But Check Further	BAD Try to Avoid
Acids Weak			X
Acids Strong			X
Organic Acids Weak		X	
Organic Acids Strong			X
Bases Weak	X		
Bases Strong		X	
Bleach			X
CHEMICAL TYPE	RESISTANCE LEVEL		
Automotive Fuel			X
Automotive Lubricants			X
Hydraulic Fluids			X
CHEMICAL TYPE	RESISTANCE LEVEL		
Solvents		X	
Hydrocarbons	X		
Halogens			X
Alcohols		X	
Aldehydes			X
Amines			X
Esters			X
Ethers			X
Ketones			X
CHEMICAL TYPE	RESISTANCE LEVEL		
Detergents	X		
Oxidising Agents			X
Weak Hydrogen Peroxide		X	
Phenols			X

PLEASE NOTE: This chart is intended as a basic guide only. The resistance to a given chemical will vary with temperature & concentrations. Some chemicals within the group mentioned may result in different rating. For further information, please email us with your specific question.





## True Fit Tank Fittings Frequently Asked Questions

### Q How tight should I tighten my fittings?

A Do not over tighten. The right way to assemble a tank fitting is hand tight plus one to two turns-no more! For more information on installation tips refer to Page 2.

### Q What type of sealant should I use?

A Use a thread sealant on all tank connections. We recommend Loctite 5331 and Ceelon PTFE or a quality thread tape.

### Q Can I use these fittings with metal fittings?

A Yes. For more information on installation tips refer to Page 2.

### Q Can I use my Hansen fittings with my swimming pool/spa pool set up?

A No, as the high concentration of chlorine used in the water for pools, will attack the material. The fitting material is only suitable for use with domestic water. Hansen products that are used in this application will not be covered by warranty.

### Q What temperature can I use Hansen fittings at?

A Hansen have tested all its products for use with cold water up to a maximum temperature of 60°C (140°F). We do not recommend the use of these products with temperatures higher than 60°C (140°F) as plastic expands due to temperature increases. Hansen cannot guarantee the products will perform when used with temperatures over 60°C (140°F). Hansen products that have failed in temperatures higher than 60°C (140°F) will not be covered by warranty.

*True-Fit* Tank Fittings Features

**PRECISION HEAVY DUTY TAPERED THREADS**

Gives a Strong Reliable Seal. Material is strong enough to minimise potential cross threading.



**MADE FROM HIGH QUALITY DURABLE MATERIALS**

Manufactured from UV Stabilised High Quality Glass Fibre Reinforced Nylon giving a weather, termite, fungi and bacterial resistance



**MAXIMUM WORKING PRESSURE**

Female Tank Fittings:  
 Sizes 15 - 50mm (1/2" to 2") 16 Bar (232 psi) @ 20°C  
 Sizes 80 - 100mm (3" - 4") 10 Bar (145 psi) @ 20°C  
 Male Tank Fittings:  
 Sizes 15 - 50mm (1/2" to 2") 16 Bar (232 psi) @ 20°C



**QUALITY WASHERS FOR A POSITIVE SEAL**

High quality, durable Thermoplastic Elastomer Rubber & Low Density Polyethylene washers for a positive reliable seal.



**DEDICATED LARGE TANK FITTINGS**

The Hansen 80 & 100mm (3" & 4") Female Tank Fittings have been especially designed for larger installations with a reverse threading backnut for a stronger more positive seal.

**COMPREHENSIVE RANGE**

Female Tank Fittings available in sizes 15mm to 100mm (1/2" to 4"), Male Tank Fittings available in Black or White & sizes 15mm to 50mm (1/2" to 2"). Tank Plugs available in 50mm (2").



**AS/NZS 4020 APPROVED POTABLE WATER**

Material Approved for use with Potable (drinkable) Water



**EASY TO INSTALL**

Installing a Hansen Tank Fitting is a simple, straight forward procedure. Below is an outline of the steps. See our website for full info including hole sizes and tips.



**1.** Drill a hole in the tank. Remove the nut and first "firmer" washer from fitting and insert the fitting in hole.

**2.** On the other side of the tank, reinsert the washer and wind the nut back on

**3.** Tighten the nut so that the face of both washers make full contact with the tank wall for a water tight seal. Your done!

**4.** When adding additional fittings, use a thread sealing paste or thread tape.

HDB156 1705

**Reliable Commercial Quality Tank Fittings**

[www.hansenproducts.com](http://www.hansenproducts.com)





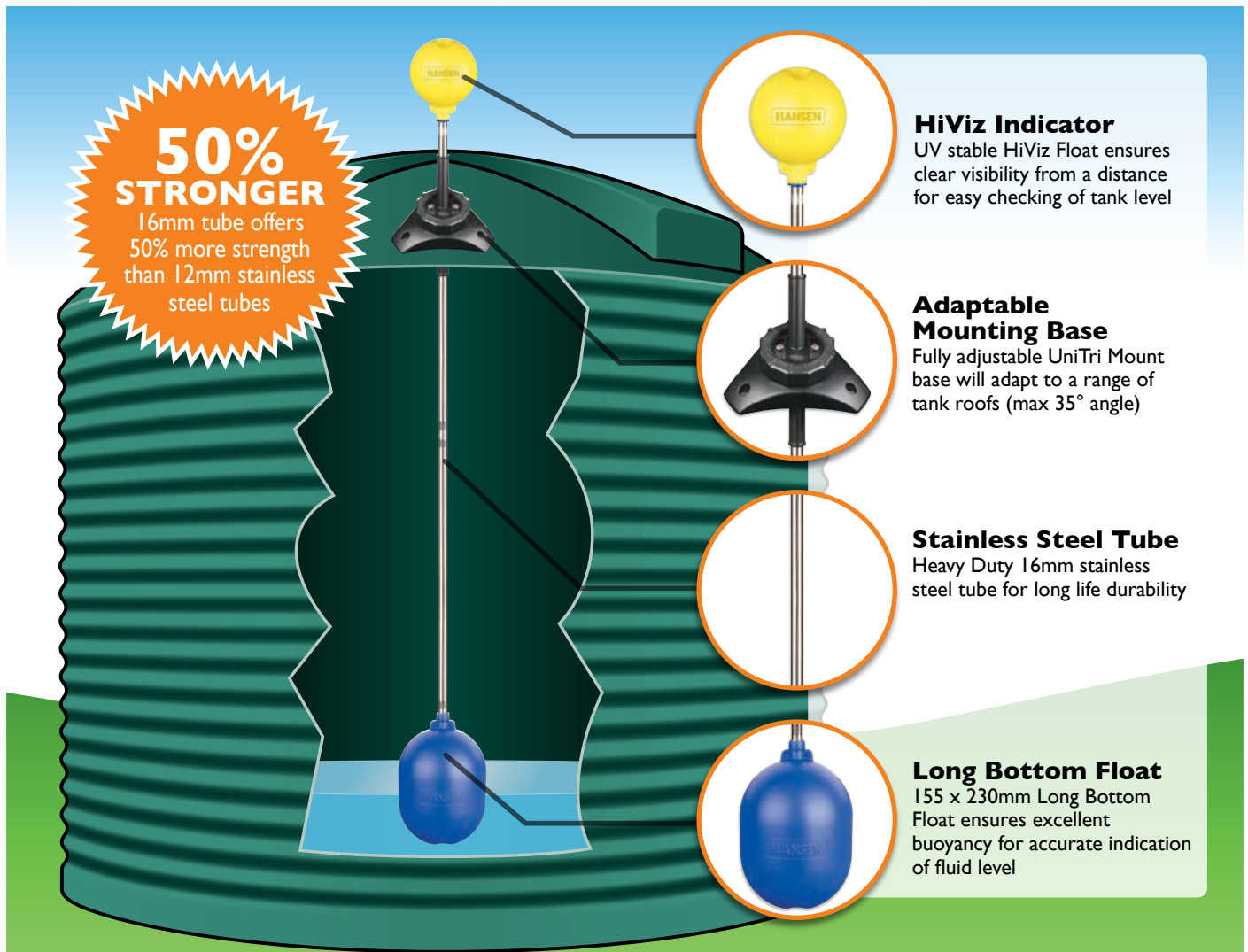
## Level Alert Features and Benefits

## Level Alert Technical Information

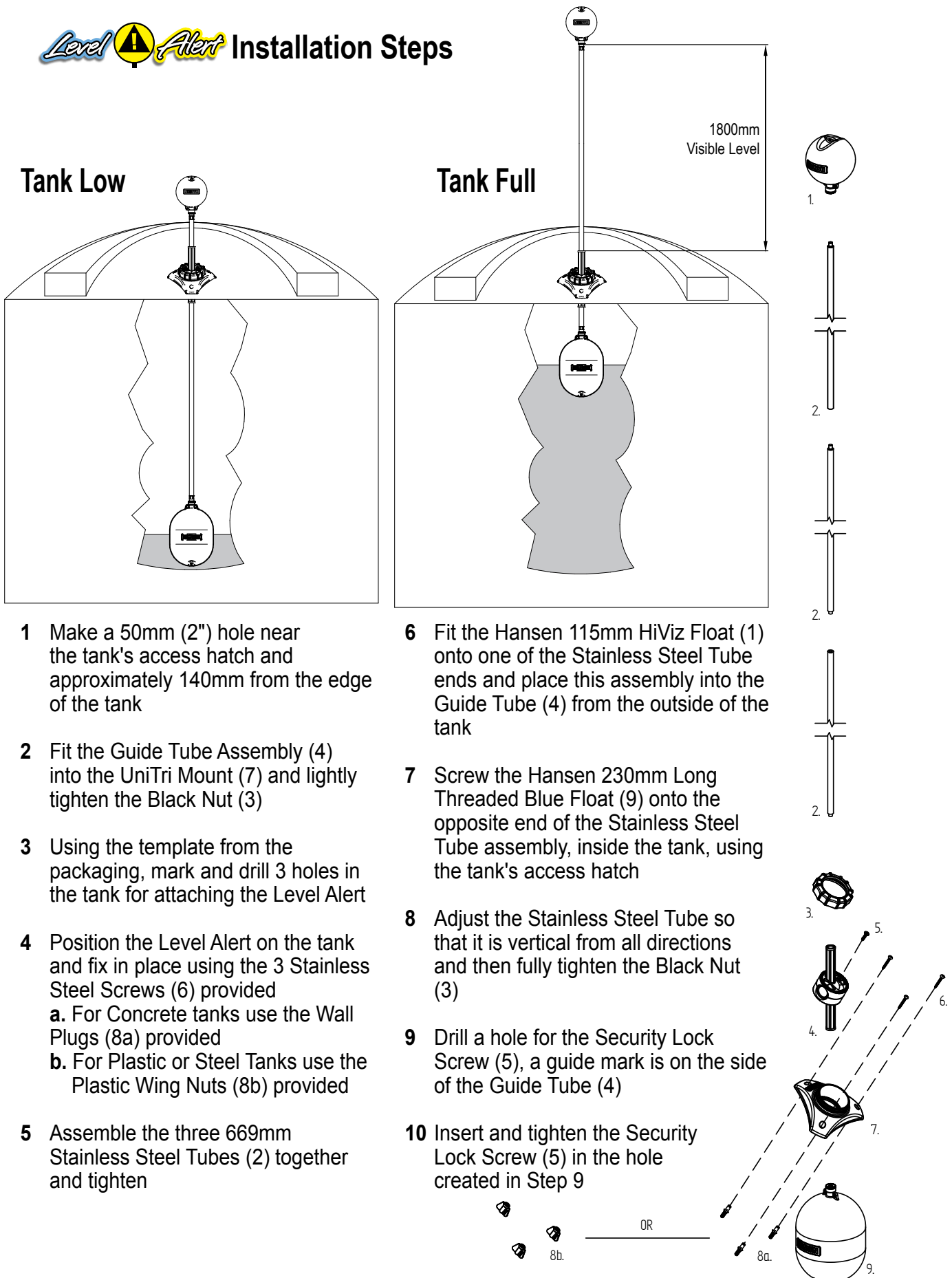
### Monitor Water Levels

- ✓ Prevent Pump Burnout caused by Dry Tank Syndrome
- ✓ See at a glance your tank water level
- ✓ Suitable for any type or size tank
- ✓ Essential part of your water management
- Fully Adjustable UniTri mounting base
- UniTri mount will adapt to a range of tank roof angles (max 35° angle)
- Suitable for Plastic, Concrete and Steel Tanks
- Manufactured from UV resistant durable, Glass Fibre Reinforced Nylon with Stainless Steel Tubes (16mm diameter) and Stainless Steel Fastenings
- Complete with all mounting fastenings for all applications
- Optional Stainless Steel Extension tubes available (669mm)
- Supplied with 3 lengths of 669mm Heavy Duty Stainless Steel Tube (16mm diameter), Stainless Steel Fastenings, 115mm Threaded HiViz Float, 230mm Long Threaded Blue Float, UniTri Mounting Base

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*Level Alert* Installation Steps



- 1 Make a 50mm (2") hole near the tank's access hatch and approximately 140mm from the edge of the tank
- 2 Fit the Guide Tube Assembly (4) into the UniTri Mount (7) and lightly tighten the Black Nut (3)
- 3 Using the template from the packaging, mark and drill 3 holes in the tank for attaching the Level Alert
- 4 Position the Level Alert on the tank and fix in place using the 3 Stainless Steel Screws (6) provided
  - a. For Concrete tanks use the Wall Plugs (8a) provided
  - b. For Plastic or Steel Tanks use the Plastic Wing Nuts (8b) provided
- 5 Assemble the three 669mm Stainless Steel Tubes (2) together and tighten

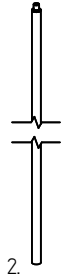
- 6 Fit the Hansen 115mm HiViz Float (1) onto one of the Stainless Steel Tube ends and place this assembly into the Guide Tube (4) from the outside of the tank
- 7 Screw the Hansen 230mm Long Threaded Blue Float (9) onto the opposite end of the Stainless Steel Tube assembly, inside the tank, using the tank's access hatch
- 8 Adjust the Stainless Steel Tube so that it is vertical from all directions and then fully tighten the Black Nut (3)
- 9 Drill a hole for the Security Lock Screw (5), a guide mark is on the side of the Guide Tube (4)
- 10 Insert and tighten the Security Lock Screw (5) in the hole created in Step 9

## Level Alert Parts List

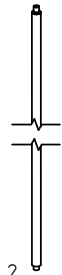
Level Alert Parts List			
No.	Product Code	Item Name	Qty
1	HFLOAT115HI	115mm HiViz Threaded Float	1
2	HLASSTUBE	669mm Stainless Steel Tube (16mm Diameter)	3
3	HLANUTB	Black Cap Nut	1
4	HLAGUIDE	Guide Tube Assembly	1
5	HLALSCREW	Security Lock Screw	1
6	HLAMSCREW	UniTri Mount Screw s	3
7	HLAUNIMOUNT	UniTri Mount	1
8a	HLAPLUGS	Wall Plugs	3
8b	HLANUTS	Plastic Wing Nuts	3
9	HFLOAT230L	155mm x 230mm Long Float Blue	1



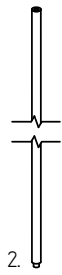
1.



2.



2.



2.



3.



4.



5.



6.



7.

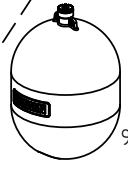


8a.

OR

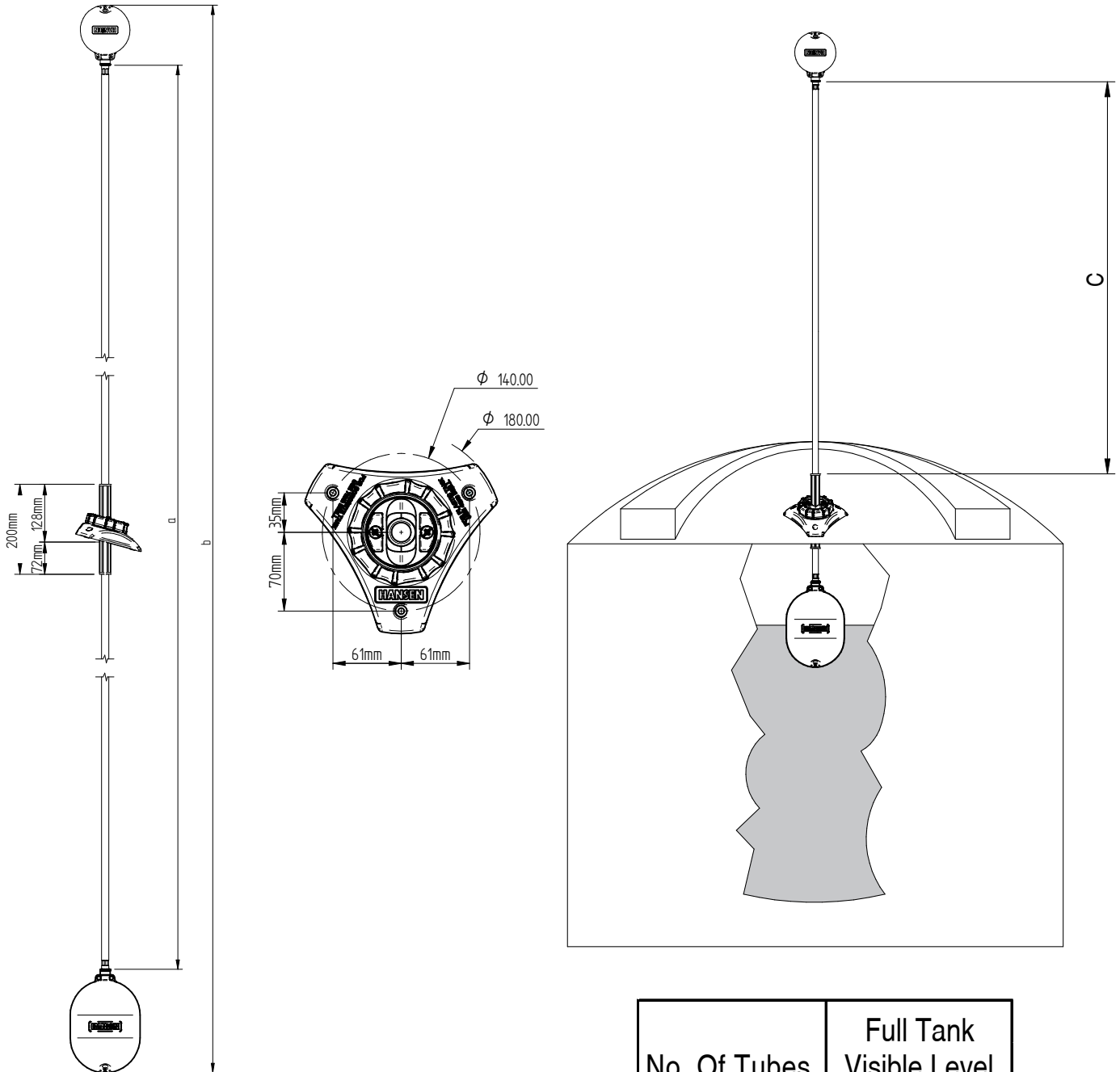


8b.



9.

*Level Alert* Dimensions



No. Of Tubes	Tube Length (a) mm	Overall Length Including Floats (b) mm
1	669	1034
2	1338	1703
3	2000	2365

No. Of Tubes	Full Tank Visible Level (c) mm
1	469
2	1138
3	1800

Specifications and sizes may change without prior notice

*Level*  *Alert* **Chemical Resistance Chart**

CHEMICAL TYPE	RESISTANCE LEVEL		
	Good	OK But Check Further	BAD Try to Avoid
Drinking Water	X		
Sea Water	X		
Bloat Remedies Diluted		X	
CHEMICAL TYPE	RESISTANCE LEVEL		
Acids Weak			X
Acids Strong			X
Organic Acids Weak		X	
Organic Acids Strong			X
Bases Weak	X		
Bases Strong			X
Bleach			X
CHEMICAL TYPE	RESISTANCE LEVEL		
Automotive Fuel			X
Automotive Lubricants			X
Hydraulic Fluids			X
CHEMICAL TYPE	RESISTANCE LEVEL		
Solvents			X
Hydrocarbons			X
Halogens			X
Alcohols			X
Aldehydes			X
Amines			X
Esters			X
Ethers			X
Ketones			X
CHEMICAL TYPE	RESISTANCE LEVEL		
Detergents	X		
Oxidising Agents			X
Weak Hydrogen Peroxide			X
Ozone			X
Phenols			X
CHEMICAL TYPE	RESISTANCE LEVEL		
Calcium Chloride			X

PLEASE NOTE: This chart is intended as a basic guide only. The resistance to a given chemical will vary with temperature & concentrations. Some chemicals within the group mentioned may result in different rating. For further information, please email us with your specific question.



## *Level* *Alert* Frequently asked Questions

**Q My existing tank level indicator will stick in a position after windy days and I've had to replace it a number of times. Will the Hansen *Level Alert* reduce this problem?**

**A** Yes, we have covered this issue in two ways, firstly by incorporating a HiViz UV stabilised low wind resistant float and secondly our Glass Fibre Reinforced Nylon Guide Tube and larger diameter Stainless Steel tube (16mm diameter) reduces the chances of it bending reducing this problem.

**Q My tank has a very steep roof angle and I cannot find a level indicator that will attach vertically, will the Hansen *Level Alert* fit my tank?**

**A** Yes, our fully adjustable UniTri mounting base will adapt to most tank roof angles, the adjustment is a full 35 degrees each way, so once installed you never need to readjust.

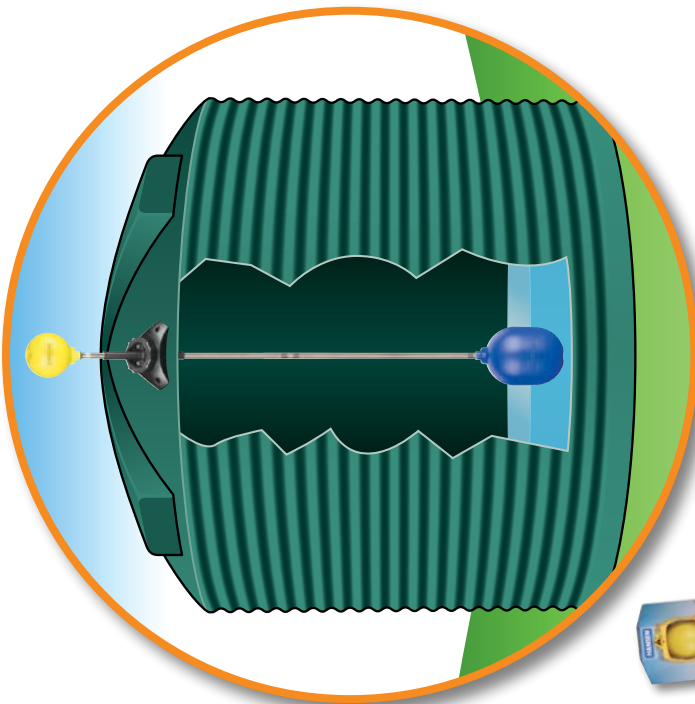
**Q I have a number of steel, plastic and concrete tanks on my property, will the Hansen *Level Alert* mount on all three types?**

**A** Yes, the Hansen *Level Alert* comes with stainless steel fasteners for installation on steel, plastic and concrete tanks.

**Q I have a number of ropes and pulleys, shafts and mounts lying around that have cost me money over the years, why would I purchase another product when I'm resigned to spending time climbing a ladder?**

**A** Great question, because Hansen understands the value of your time and with the Hansen *Level Alert* there are no ropes and pulleys, tubes or smoke and mirrors, only the time tested strength of Glass Fibre Reinforced Nylon and the proven ability of Hansen's innovative simple effective design. If you already use any of our product range you can answer the question yourself, if it can't be done we don't do it, if it can be done we do it simply but effectively.

Level Alert Features



**HiViz INDICATOR**  
 UV stable HiViz Float ensures clear visibility from a distance for easy checking of tank fluid level



**SECURITY LOCK SCREWS**  
 Screws lock the tubes into a vertical position preventing jamming in any weather conditions



**PLASTIC & CONCRETE TANK MOUNTING KITS**  
 Accessories supplied for mounting to both plastic and concrete tanks including screws, plugs, wing nuts and drill bits



**ADAPTABLE MOUNTING BASE**  
 Fully adjustable UniTri Mount base will adapt to a range of tank roofs (max 35° angle)

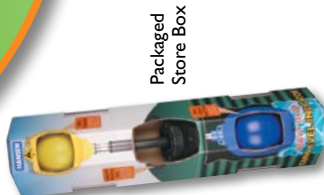


**50% STRONGER**  
 16mm stainless steel tube offers 50% more strength than 12mm tubes

**HEAVY DUTY STAINLESS STEEL TUBE**  
 16mm Stainless Steel Tube for long life durability. Versatility of 3 Tubes allows for a tank fluid level reading of up to 2 metres (additional Tubes available for taller tanks).



**LONG BOTTOM FLOAT**  
 155 x 230mm long bottom float ensures excellent buoyancy for accurate indication of fluid level



Packaged Store Box

NZ patent 596360 & registered design 415007  
 Australian patent 2012203010 & registered design 340061. Copyright 2011 Hansen Products NZ Ltd.

HDB157 1704



## Heavy Duty Tank Level Indicator



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