

## SKIN FITTINGS

Designed and made in New Zealand, Tru-Design Skin Fittings are the superior composite thru-hull solution.



The Skin Fitting body and nut are moulded from glass fibre reinforced nylon composite. High strength, high-modulus glass fibres impregnated into the nylon provide dramatic strength, stiffness, toughness and dimensional stability. These properties allow a significant weight reduction over metallic fittings.

Tru-Design Skin Fittings eliminate the corrosion and electrical bonding problems associated with metallic fittings.

Our Skin Fittings meet ISO International Standards giving added assurance of performance in the harsh marine environment.

# **MODELS**

| Part # | Description                  |
|--------|------------------------------|
| 90425  | Skin Fitting 1/2" BSP White  |
| 90432  | Skin Fitting ¾" BSP White    |
| 90423  | Skin Fitting 1" BSP White    |
| 90421  | Skin Fitting 11/4" BSP White |
| 90419  | Skin Fitting 11/2" BSP White |
| 90429  | Skin Fitting 2" BSP White    |

| 90424 | Skin Fitting ½" BSP Black    |
|-------|------------------------------|
| 90431 | Skin Fitting ¾" BSP Black    |
| 90422 | Skin Fitting 1" BSP Black    |
| 90420 | Skin Fitting 11/4" BSP Black |
| 90418 | Skin Fitting 1½" BSP Black   |
| 90428 | Skin Fitting 2" BSP Black    |



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## **STANDARDS**

Tru Design Skin Fittings are certified by the International Marine Certification Institute (IMCI) to meet;

ISO 9093-2 Small craft -- Seacocks and through-hull fittings -- Part 2: Non-metallic

\*Note  $-\frac{1}{2}$ " Skin Fittings do not meet ISO 9093-2





In meeting ISO 9093-2, our skin fittings have been tested with a 155kg load hanging off a ball valve and hose fitting as shown.

## **KEY FEATURES**

| Feature :                                                                  |                                                                                                                                                                                                                       |  |
|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Manufactured from a glass reinforced nylon composite                       | High strength and light weight.                                                                                                                                                                                       |  |
| Compatible with all hull types                                             | Can be used on aluminum, steel, wood or FRP hulls.                                                                                                                                                                    |  |
| Immune to corrosion and electrolysis                                       | Long life with no concerns over decreased performance due to corrosion.                                                                                                                                               |  |
| Chemical resistant                                                         | Impervious to diesel, petrol and antifouling paints.                                                                                                                                                                  |  |
| UV resistant                                                               | These fittings will not break down with ultraviolet light or discolour from the sun.                                                                                                                                  |  |
| High quality surface finish                                                | Will not discolour with green film as similar bronze fittings do.                                                                                                                                                     |  |
| Paintable                                                                  | Can be painted with all types of antifouling. Antifouling paint stays adhered to the skin fitting, alleviating the chore of grinding and cleaning back flaked paint from bronze fittings before applying antifouling. |  |
| Fits Tru-Design Ball Valves & BSPP threads                                 | Universal compatibility to other Tru-Design fittings, and other marine components.                                                                                                                                    |  |
| Large operating temperature range                                          | Suitable for all marine environments, from -40°C to +110°C.                                                                                                                                                           |  |
| Supplied in individual plastic bags with header card and information sheet | Header card states IMCI Certification, size of hose tail and comes with instructions in the bag as per IMCI regulations.                                                                                              |  |

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## **SPECIFICATIONS**

#### **HULL COMPATIBILITY**

The Tru-Design Skin Fittings are suitable for installation in all types of hull construction; steel, aluminium, fibreglass - cored and solid, wooden sandwich.

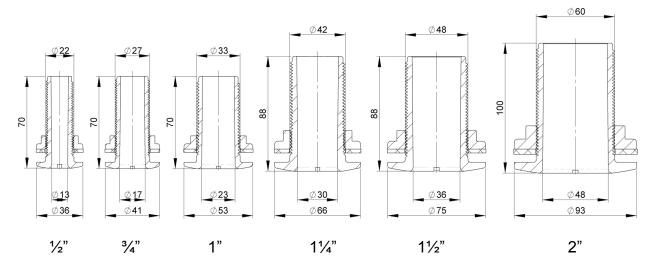
Tru-Design Skin Fittings are also able to be used on caulked solid wood hulls – care should be taken to only locate the skin fitting in the centre of any individual plank.

#### FLOW DIAMETER & HULL THICKNESS

| Size     | Minimum I.D. | Maximum Hull Thickness |
|----------|--------------|------------------------|
| 1⁄2" BSP | 12mm         | 28mm                   |
| 3/4" BSP | 17mm         | 28mm                   |
| 1" BSP   | 23mm         | 28mm                   |
| 1¼" BSP  | 30mm         | 30mm                   |
| 1½" BSP  | 36mm         | 30mm                   |
| 2" BSP   | 48mm         | 40mm                   |

## **DIMENSIONS**

All dimensions in mm. All dimensions nominal.



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### INSTALLATION

Full installation instructions are supplied with the Skin Fitting.

It is recommended that all Skin Fittings are placed in a protected location to minimize the chance of inadvertent damage.

A packer may be required to provide a flat surface on the inside of the hull.

Note: Do not use with tapered thread valves or fittings.

The thread type on all Tru-Design Skin Fittings is a British Standard Pipe Parallel thread (BSPP). The thread is a mechanical fastening with sealing provided by thread tape. This method gives a secure mechanical joint between Skin Fitting and connected components. A tapered thread cannot provide this strong connection. Mixing tapered and parallel threads can result in damage to either of the components.

**Note:** There is no need to tie Tru-Design Skin Fittings electrically together as there are no corrosion or electrolysis problems as can be experienced when using bronze fittings.

### **SERVICING**

As composite Skin Fittings are immune to corrosion, minimal servicing is required.

Skin fittings should be checked for secure fitting into the hull and to other fittings at regular intervals. Upon hauling out, the exterior of the fitting should be checked for damage.

If fittings are removed, the old thread tape should be removed and replaced.

Tru-Design Plastics Ltd. accepts no responsibility for Products which are improperly installed or tampered with. Although the information presented in this product information sheet is believed to be accurate and reliable, no responsibility for inaccuracies can be assumed by Tru-Design Plastics Ltd. This performance data is typical only and variations due to component manufacturing tolerances are normal. Tru-Design Plastics Ltd. reserves the right at any time to change performance characteristics or specifications without prior notice.

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