# PUNCHING ABOVE ITS WEIGHT

BY **DOUG DUKESON** 



New Zealanddesigned inflatable catamaran RIB is a compact tender.

The anchor locker and casting platform provide storage for anchors and gear, as well as a convenient step when boarding.

With a beam of 1.66 metres, the hull provides impressive stability.

Practical touches include four lifting eyes for davits and rod holders forward and aft.

limbing aboard the new Takacat T300 LX-R, the first thing you notice is how solid and well-built it feels. This New Zealand-designed inflatable catamaran RIB is a compact tender, but it carries itself with the confidence of a much larger craft. The dual 3mm alloy deck and rigid central hull give it a reassuring heft underfoot, while the oversized 1.2mm TPU tubes provide excellent buoyancy and stability

that you can feel immediately.

We set off from Manly Beach, Whangaparaoa, and right away, the 300LX-R showed its strengths. The ride is remarkably dry, both with a load and when we pushed it up on the plane; the hull and deck combination kept spray to a minimum. The T300 LX-R popped up on the plane, and at just 5 knots, and with two up, we got along at a good 11-12 knots. The















stroke engine pushed us along at a reasonable speed.

A versatile, fun little tender that punches well above its weight.

composite deck feels tough underfoot, uncluttered, and easy to clean after a morning of fishing, saltwater, and sand. With a beam of 1.66 metres, the tubes provide incredible stability, and even fully loaded with four passengers, the boat felt impressively buoyant, stable and handled well.

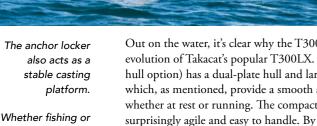
Forward, the anchor locker and casting platform prove their worth, providing easy storage and access for anchors and gear, as well as a convenient step when

boarding from another boat, jetty, or the beach. About the tender, practical touches like four lifting eyes for davits, rod holders forward and aft, and tow eyes fore and aft, all combined in 3 meters, make the LX-R feel ready for anything a three to four-meter tender would ever be asked to do, from ferrying passengers to coastal diving adventures or just an afternoon out fishing.

Lightweight, weighing in at just 68 kg, the 300LX-R can be easily lifted on and off a boat or trailer by two.

154 NOVEMBER / DECEMBER 2025 POWERBOATMAGAZINE.CO.NZ 155





Whether fishing or serving as a tender, the T300LX-R is a versatile craft. Out on the water, it's clear why the T300LX-R is an evolution of Takacat's popular T300LX. This (-R ridged hull option) has a dual-plate hull and large tubes, which, as mentioned, provide a smooth and stable ride, whether at rest or running. The compact size makes it surprisingly agile and easy to handle. By the time we returned to the dock, it was apparent that this little RIB is more than just a tender; it's a versatile, tough, and fun little boat that punches well above its weight. Certainly worth considering when shopping for your next boat or holiday home tender.







## GENERIC COMPARISON AND EXPLANATION OF PVC, HYPALON, AND TPU FABRICS FOR INFLATABLE BOATS

FEATURE	PVC (Polyvinyl Chloride)	Hypalon (CSM - Chlorosulfonated Polyethylene)	TPU (Thermoplastic Polyurethane)
MATERIAL COMPOSITION	Synthetic plastic polymer, often reinforced with polyester or nylon mesh.	Synthetic rubber with a neoprene base, coated with chlorosulfonated polyethylene.	Thermoplastic elastomer, combining flexibility and durability.
DURABILITY	Good durability; resistant to abrasions and punctures but less robust than Hypalon.	Excellent durability; highly resistant to abrasions, punctures, and harsh conditions.	Very good durability; strong resistance to abrasions, punctures, and wear.
UV RESISTANCE	Moderate; can degrade over time with prolonged sun exposure unless UV stabilizers or covers are used.	Exceptional; highly resistant to UV rays, maintaining integrity in intense sunlight.	Very good; better UV resistance than PVC, though slightly less than Hypalon.
CHEMICAL RESISTANCE	Good resistance to oils, fuels, and mild chemicals but can degrade with strong solvents.	Superior resistance to chemicals, oils, and fuels, ideal for harsh environments.	Good resistance to chemicals and oils, comparable to PVC but slightly better.
WEATHER RESISTANCE	Performs well in moderate climates but may stiffen in cold temperatures.	Excellent; withstands extreme temperatures (hot and cold) without losing flexibility.	Very good; maintains flexibility across a wide temperature range.
WEIGHT	Lightweight, making it easier to handle and transport.	Heavier than PVC, which can make boats less portable.	Lightweight, similar to PVC, enhancing portability.
соѕт	Most affordable option, ideal for budget-conscious buyers.	More expensive due to superior durability and longevity.	Moderately priced; more expensive than PVC but often cheaper than Hypalon.
REPAIRABILITY	Easy to repair with adhesive patches; widely available repair kits.	Repairable but requires specific adhesives and expertise; patches bond strongly.	Easy to repair with heat welding or adhesives; repair kits are becoming more common.
FLEXIBILITY	Good flexibility but can become brittle over time, especially in cold conditions.	Highly flexible, maintaining performance in extreme conditions.	Excellent flexibility, even in cold temperatures, with good elasticity.
ENVIRONMENTAL IMPACT	Less eco-friendly; production and disposal can release harmful chemicals.	Moderate; durable but non-recyclable, with complex manufacturing processes.	More eco-friendly; recyclable and often produced with fewer harmful chemicals.
LIFESPAN	5-10+ years with proper care, depending on usage and storage conditions.	10-20 years or more with proper maintenance; ideal for long-term use.	7-15 years, depending on quality and maintenance; a good middle ground.
BEST USE CASES	Recreational boating, calm waters, occasional use, budget-friendly applications.	Commercial, military, or heavy-duty use in extreme environments (e.g., tropics).	Versatile; suitable for recreational and semi-professional use, ecoconscious buyers.

# KEY BENEFITS SUMMARY

### PVC

- Pros: Cost-effective, lightweight, easy to repair, widely available, and suitable for casual or recreational use. Seams/Fabric can be thermally welded.
- Cons: Limited UV and temperature resistance, shorter lifespan, less eco-friendly.
- Ideal For: Budget-conscious users, inland or calm water boating, and those prioritizing portability.

### HYPALON

- Pros: Exceptional durability, UV and chemical resistance, long lifespan, and reliable in extreme conditions.
- Cons: Higher cost, heavier, and repairs require specific expertise. Seams/Fabric must be glued.
- Ideal For: Professional, commercial, or heavy-duty applications in harsh environments.

### TPU

- Pros: Lightweight, flexible, ecofriendly, good durability, and versatile across various conditions. Seams/ Fabric can be thermally welded.
- Cons: Slightly less durable than Hypalon, less common, and moderately priced.
- Ideal For: Environmentally conscious users, recreational to semi-professional boating, and varied climates.

### **ADDITIONAL NOTES**

- Maintenance: All three materials require proper cleaning, storage away from direct sunlight, and regular inspections to maximize lifespan. Hypalon demands more careful maintenance due to its cost and longevity.
- $\bullet \qquad \textbf{Customization:} \ \ \mathsf{PVC} \ \ \mathsf{and} \ \ \mathsf{TPU} \ \mathsf{are} \ \mathsf{easier} \ \mathsf{to} \ \mathsf{manufacture} \ \mathsf{in} \ \mathsf{various} \ \mathsf{colours} \ \mathsf{and} \ \mathsf{designs}, \ \mathsf{while} \ \mathsf{Hypalon} \ \mathsf{is} \ \mathsf{typically} \ \mathsf{limited} \ \mathsf{to} \ \mathsf{fewer} \ \mathsf{colour} \ \mathsf{options}.$
- Availability: PVC is the most widely used and available, followed by TPU, while Hypalon is less common due to its higher cost and specialized production.

POWERBOATMAGAZINE.CO.NZ 157