ELSS Pod
Emergency Life Support Stores Container

The FET Perry® Emergency Life Support Stores (ELSS) containers are pressure tight pods used by Navies as part of a distressed submarine rescue system. In the event that a submarine becomes stranded on the sea bed, ELSS containers are posted into the submarine’s hatches to deliver life preserving stores to the crew until a full rescue can be mounted.

The ELSS pod is designed to be nominally 10 kg negatively buoyant in seawater, which enables it to be delivered to the Submarine by a swimmer, an Atmospheric Diving Suit (ADS), a Remotely Operated Vehicle (ROV) or the Rescue Submersible itself.

Each ELSS container comprises a cylindrical pressure vessel with a removable end cap fitted with a lifting handle. The payload of the container can be varied using a combination of ballast weights, which keep the weight in water of the container constant.

The cylindrical pressure vessel is manufactured from aluminium and coated with yellow Xylan, which is both tough and resilient to impact during deck handling and deployment.

The removable end cap is manufactured from aluminium alloy and is fitted with a stainless steel lifting handle. A pressure equalising valve ensures that the cylinder is not under or over-pressurised before being opened.

The ELSS pod is compliant with ANEP-85 “Material Interoperability Requirements For Submarine Escape And Rescue.”
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Specifications

- Maximum Overall Diameter: 350 mm Overall
- Length-Including lifting handle: 1043 mm
- Internal diameter of Main Stores Volume: 301 mm
- Length of Main Stores Volume: 705 mm
- Typical buoyancy of empty container: 26.2 kg (in seawater)
- Typical weight of container assembly: 55 kg
- Working Depth: 760 m
- Test pressure (external / internal): 96 bar / 5 bar
- Part number: A232-400-001/01

Each container is supplied with the following lead ballast weights:
- 6 off 4 kg (8.8 lb)
- 6 off 2 kg (4.4 lb)
- 4 off 1 kg (2.2 lb)