

## Datasheet

# Heavy Load DORT Acoustic Release Transponder



### Description

The Type 8048 Heavy Load DORT (Deep Oceanographic Release Transponder) is a tough, reliable acoustic release designed for deployment in up to 7,000 metres of water.

Standard features include a Safe Working Load of 2,500Kg and a spring-assisted release mechanism. This type of release mechanism was originally developed by Sonardyne for navigation transponders supplied to the offshore industry of which there are now many thousands reliably in service around the world.

Excellent corrosion resistance is achieved by using Super Duplex stainless steel, Ferralium 255. In addition, the Heavy Load DORT is available in different housing lengths and is mechanically compatible with other standard release transponders on the market thus simplifying mechanical integration.

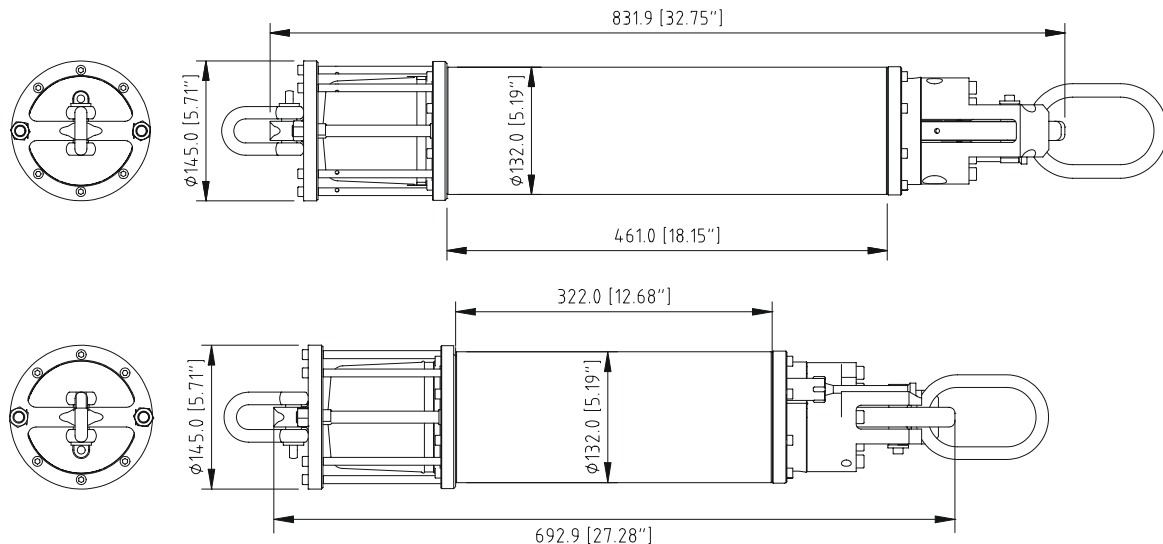
Heavy Load DORTs are controlled using frequency band specific Lightweight Command Units (LCU) which comprise of a dunking transducer connected to either a splash-proof PSION, PC running supplied software or terminal program. For security of operation, a special coding system provides protection against accidental release by noise and acoustic transmissions from other vessels.

### Key Features

- Safe Working Load of 2½ Tonnes
- 7,000 Metre depth rated
- Highly reliable, proven release mechanism
- Up to 3 years deployment
- Excellent corrosion resistance - Ferralium 255
- Compact and rugged design
- Mechanically compatible with other release transponders
- Choice of housing lengths to suit deployment scenario

## Specifications

# Heavy Load DORT Acoustic Release Transponder



Feature		Type 8048-000-01/02		
Depth Rating		7,000 Metres		
Operating Frequency		LF (7.5–15kHz)		
Transducer Beamshape		Hemispherical		
Transmit Source Level (dB re 1µPa @1m)		190dB Alkaline, 184dB Lithium		
Receive Threshold (dB re 1µPa)		85dB		
Safe Working Load (4:1)		2,500kg		
Max Safe Release Load		2,500kg		
Breaking Load		10,000kg		
Battery Life (Listening)		Alkaline	Lithium	Long-life Lithium
		9 months	24 months	36 months
Shelf Life (Battery Disconnected)		Alkaline	Lithium	Long-life Lithium
Stored at 25°C		24 months	84 months	120 months
Mechanical Construction		Ferrallium 255		
Dimensions (LxDia)	Standard Housing	832mm (32.75") x 145mm (5.7")		
	Short Housing	693mm (27.3") x 145mm (5.7")		
Weight in Air	Standard Housing	37kg		
	Short Housing	32kg		
Weight in Water	Standard Housing	27kg		
	Short Housing	24kg		
Deck Unit		Type 7667 LF Lightweight Command Unit		

### Definitions

**Safe Working Load** - The maximum recommended working load. This is set as a quarter (1/4) of the Breaking Load and makes an allowance for factors such as corrosion, fatigue and dynamic loads.

**Release Load** - The maximum in-line load that the whole assembly can release whilst guaranteeing safe and reliable operation. Note that as the load is released in water, this is determined by the maximum upthrust from the buoyancy when used in a mooring operation.

**Breaking Load** - The load that induces structural failure in one or more parts of the instrument causing the load to part from the release mechanism.