

Datasheet

ORT and DORT Acoustic Release Transponders



Description

Oceanographic Release Transponders (ORTs) and Deep Oceanographic Release Transponders (DORTs) are tough, reliable acoustic releases designed for deployment in either 2,000 metres or 6,000 metres of water.

The units are commonly used to moor oceanographic instrument strings on the seabed for periods of up to 24 months. However, their compact size allows them to be easily incorporated into subsea instrument frames or installed on towfish and AUVs to enable ballast to be dropped in an emergency.

Standard features include a Safe Working Load of 1,275 kg (at 4:1) 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.

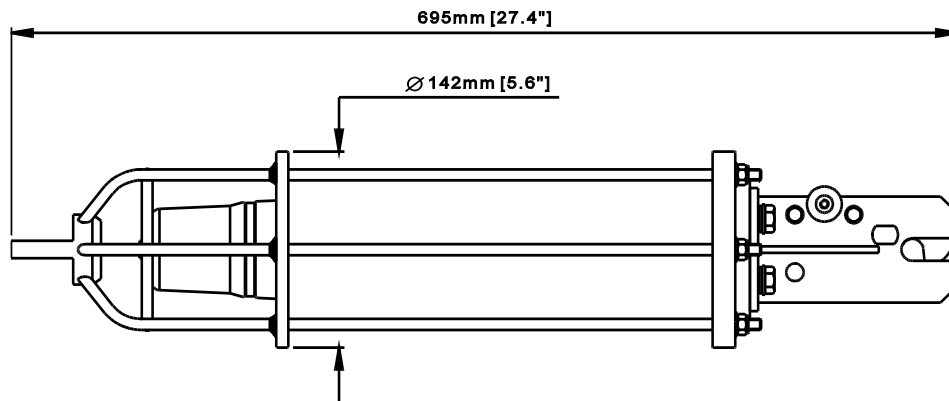
ORTs and DORTs are controlled using frequency band specific Lightweight Command Units (LCU) which comprises of a dunking transducer connected either to a spray-proof Pision or, via supplied software, to any PC. For security of operation, a special coding system provides protection against accidental release by noise and acoustic transmissions from other vessels.

Key Features

- Safe Working Load of 1,275 kg (Options for heavier loads)
- 2,000 Metre or 6,000 Metre depth rated options
- Highly reliable release mechanism
- Up to 2 years deployment
- Excellent corrosion resistance
- Compact and rugged design

Specifications

ORT and DORT Acoustic Release Transponders



Feature	Type 7409	Type 7710
Depth Rating	2,000 Metres	6,000 Metres
Operating Frequency	LMF (16-19kHz)	LF (9-12kHz)
Transducer Beamshape	Hemispherical	Hemispherical
Transmit Source Level (dB re 1µPa @1m)	186dB	190dB Alkaline, 184dB Lithium
Receive Threshold (dB re 1µPa)	<90dB	85dB
Safe Working Load (4:1) (Standard Release Mechanism)	1,275 kg	1,275 kg
Breaking Load	5,100 kg	5,100 kg
Max. Safe Release Load	1,700 kg	1,700 kg
Battery Life	Alkaline 9 months Lithium 24 months	Alkaline 9 months Lithium 24 months
Shelf Life Battery	Alkaline 24 months	Alkaline 24 months
Disconnected @ 25°C	Lithium 84 months	Lithium 84 months
Operating Temperature	-20 to + 45°C	-20 to + 45°C
Storage Temperature	-30 to + 70°C	-30 to + 70°C
Mechanical Construction	Aluminium Bronze, Stainless Steel	Aluminium Bronze, Stainless Steel
Dimensions (LxDia)	695 mm (27.4") x 142 mm (5.6")	695 mm (27.4") x 142 mm (5.6")
Weight in Air	22 kg	22 kg
Weight in Water	17 kg	17 kg
Deck Unit	Type 7663 MF LCU	Type 7667 LF LCU
Accessories	Parallel Release Kit Heavy Duty Release Frame	Parallel Release Kit Heavy Duty Release Frame