

Datasheet

Small Seismic Transponder (SST)



Description

The Type 8035 Small Seismic Transponder (SST) has been specifically designed for Ocean Bottom Seismic cable positioning operations, where high-performance, small-size, low-cost and rugged design are important operational factors.

Available in 1,000 and 2,000 metre depth ratings, the SST is designed for use with Sonardyne's Ultra-Short Baseline (USBL) acoustic positioning systems Ranger and Ranger-Pro.

As these systems measure both range and bearing to the SST transponder, only one overhead pass of the cable is required to position the transponder. This is instead of the two passes currently required for range-only transponder systems.

The use of USBLs and SSTs in this way results in considerable savings

in vessel time, introducing new standards of efficiency for seismic operations.

Where the SST is to be left attached to a cable and then reeled onto a drum, the option of a stainless steel outer body is available. This provides increased durability and crush resistance for the unit in harsh and dangerous environments.

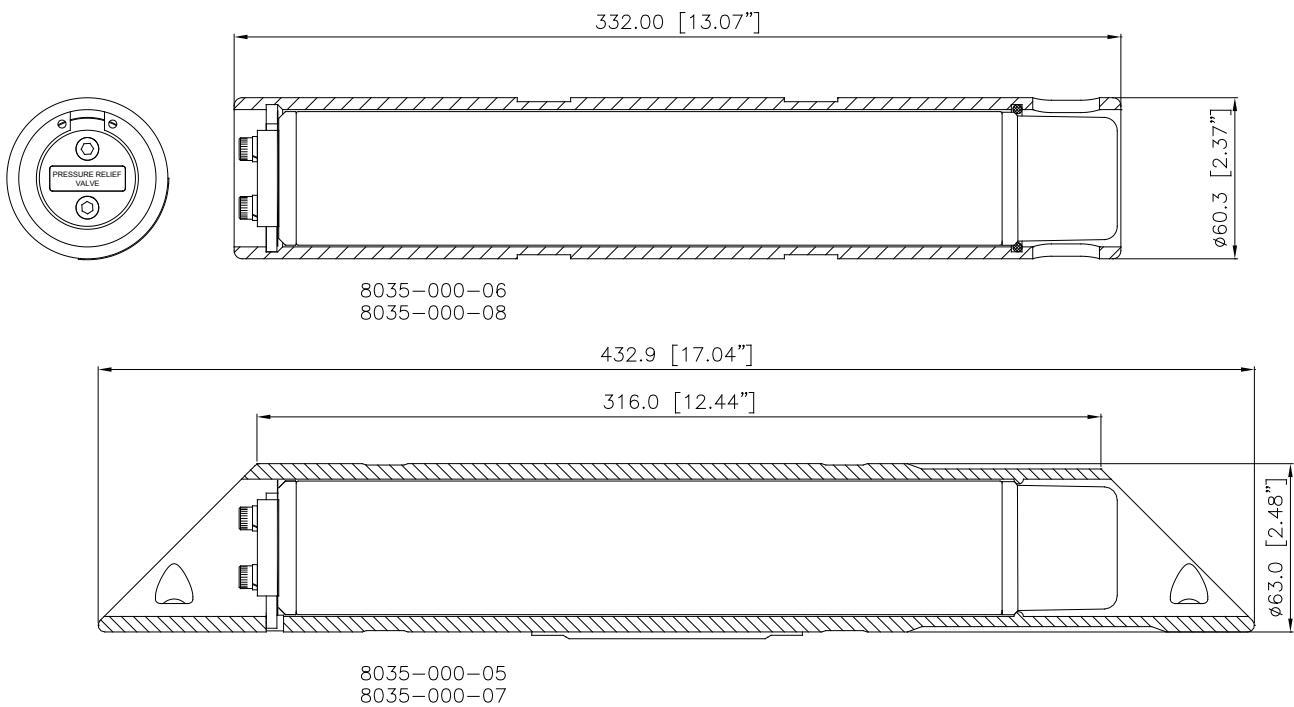
Another feature of the transponder is its programming flexibility. Any one of 410 addresses and 16 reply channels, providing 6560 identities, can be programmed using a Type 8037 MF Command Unit. This lends itself to the marking of seismic cables and other applications demanding dense coverage.

Key Features

- 'One pass' Cable positioning saves vessel time
- Programmable to one of 410 addresses and 16 reply channels, providing unique 6560 identities
- Compatible with Sonardyne's MF frequency USBL systems
- Alkaline battery packs give at least 1 year listening life
- Depth rated to 1,000 and 2,000 Metres
- Compact and rugged design

Specifications

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Feature	Type 8035-000-05	Type 8035-000-06	Type 8035-000-07	Type 8035-000-08
Depth Rating	1,000 Metres	1,000 Metres	2,000 Metres	2,000 Metres
Operating Range Frequency	MF (21-32kHz)	MF (21-32kHz)	MF (21-32kHz)	MF (21-32kHz)
Transmit Source Level (re 1µPa @1m)	185-190dB	185-190dB	185-190dB	185-190dB
Receive Sensitivity (re 1µPa)	100-105dB	100-105dB	100-105dB	100-105dB
Interrogation Address	Programmable 1 to 410	Programmable 1 to 410	Programmable 1 to 410	Programmable 1 to 410
Reply Channels	Programmable 1 to 16	Programmable 1 to 16	Programmable 1 to 16	Programmable 1 to 16
Switch On	Continuously Listening	Continuously Listening	Continuously Listening	Continuously Listening
Battery Type	Alkaline	Alkaline	Alkaline	Alkaline
Quiescent Life	12 months	12 month	12 months	12 months
Mechanical Construction				
Outer Housing:	Polypropylene	Stainless steel	Polypropylene	Stainless Steel
Inner housing:	Aluminium Alloy	Duplex Stainless Steel	Duplex Stainless Steel	Duplex Stainless Steel
Dimensions (L x Dia)	432.9mm (17.04") x 63.0mm (2.48")	332.0mm (13.07") x 60.3mm (2.37")	432.9mm (17.04") x 63.0mm (2.48")	332.0mm (13.07") x 60.3mm (2.37")
Weight in Air	1.23kg	3.15kg	1.45kg	3.95kg
Weight in Water	0.24kg	2.30kg	0.32kg	2.80kg