

Oceano AR861DS

Oceano 5000S - Oceanographic acoustic release

The Oceano AR861DS is a robust, reliable and field-proven acoustic release which is designed for deployment down to 6 000 m water depth and constructed of high tensile strength super duplex stainless steel with excellent corrosion resistance.

The compact yet durable design of the Oceano AR861DS acoustic release is ideal for long term deployment, heavy moorings and harsh working conditions.

The standard features include a safe working load of 5 000 kg for lifting operations and a 5 000 kg well proven release mechanism, long ranging capability as well as pinger mode and diagnostic built-in functions.

The Oceano AR861DS acoustic release is controlled using the LF surface telecommand deck set (TT801 or any older product) associated to a dunking transducer.



FEATURES

- 5 000 kg SWL* and 5 000 kg RL** mechanism
- 6 000 m water depth
- Corrosion resistant super duplex stainless steel housing
- Side bar loading
- Secure 8-bit FSK 2-state command coding system
- Acknowledgment of received and executed commands
- Very low power consumption
- Off-the-shelf alkaline batteries
- Back-up cell for release mechanism.

OPTIONS

- Remote transducer head configuration
- Lithium batteries (no hardware modification)
- Tandem coupling kit

APPLICATIONS

- Oceanographic moorings
- Long-term instrumented moorings
- Ultra-deep moorings
- Extreme environmental conditions
- Acoustic actuators (hydraulic shackle or cable cutter)

TECHNICAL SPECIFICATIONS

General

Ordering part number	KAA00086
Assembly drawing number	3929300
Release ring	5t/SWL Oval ring drawing 9103235
Operating temperature	-5°C to +40°C
Storage temperature	-20°C to +70°C
Acoustic commands	Ranging, release, release with pinger, pinger mode ON/OFF, diagnostic (verticality status and battery voltage)
Shipping	Plywood transit case, 1070 x 380 x 370 mm, 54 kg

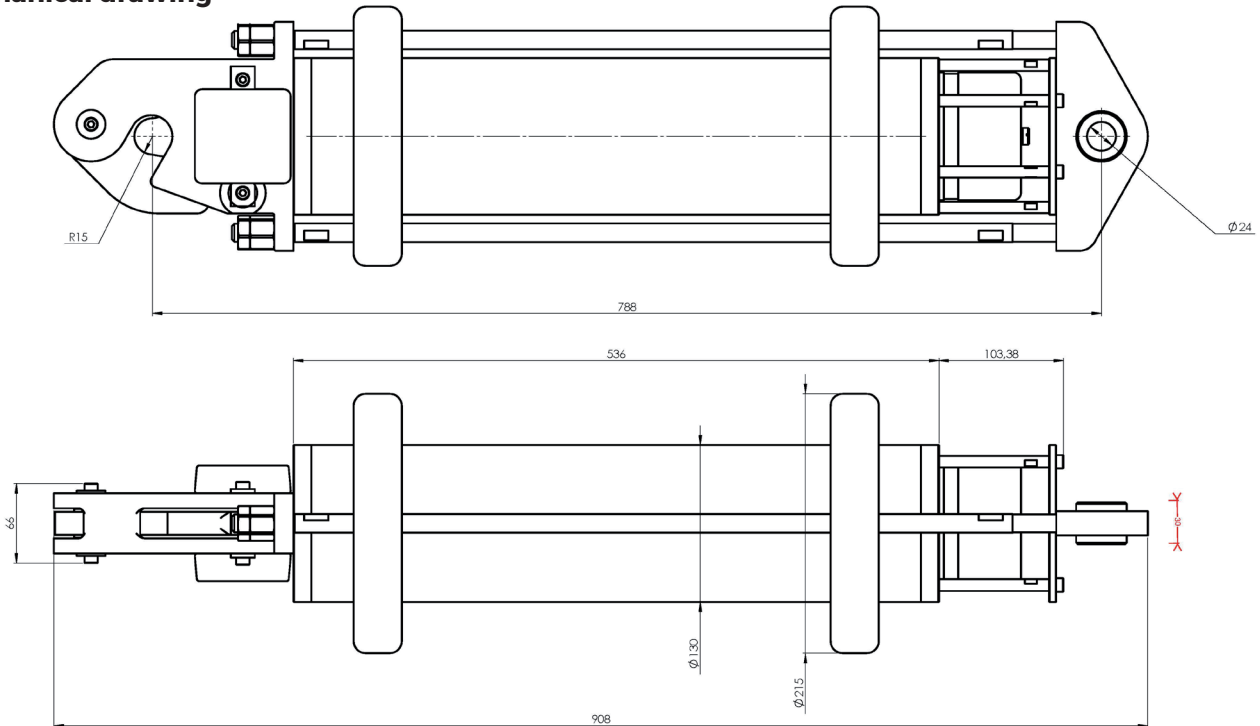
Mechanical

Construction	Super duplex stainless steel
Load characteristics	5 000 kg SWL* / 5 000 kg RL** / 10 000 kg TL***
Depth rating	6 000 m
Overall dimensions (dia x L)	215 x 908 mm
Overall weight (air / water)	40 kg / 31 kg

Acoustical

Operating frequency	Low frequency (8.0 to 17.5 kHz)
Transducer beam pattern	Omnidirectional
Transmit source level	191 +/-4 dB ref. 1µPa @ 1 m constant across battery life
Transmit pulse	Tonal pulse (10 ms) or MFSK-POSI code (16 kHz central, 3 kHz bandwidth, 25 ms wide)
Operating life	Alkaline – 50 months @ 20°C / 36 months @ 0°C Lithium – 96 months @ 20°C / 84 months @ 0°C
Ranging	In excess of 10 000 m in good sea conditions

Mechanical drawing



*SWL Safe Working Load. The maximum static or dynamic load that can be supported by the instrument in normal operating conditions with no release command in progress.

**RL Release Load. The maximum load that can be supported by the hook while it is activated (DC motor rotating).

***TL Test Load. The maximum load that can be supported by the instrument without permanent damage or water ingress (not to be used in normal operation mode).