

# Oceano AR861E1S

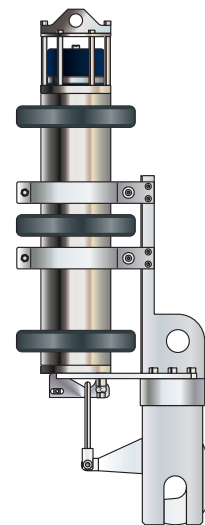
## Oceano HD15 CABLE LAY - Heavy duty acoustic release

The AR861E1S acoustic release is designed for lifting and handling of heavy structures or cables on the seabed, in deep sea conditions.

The AR861E1S cable lay comprises the well-proven and reliable AR861 series acoustic actuator fitted with a short stainless steel frame to pass over rollers and davit under tension.

The Oceano AR861E1S is specially designed and customized for use on cable ships for cable laying and maintenance operations, but also for offshore marine construction operations.

This heavy duty unit uses the well-proved secure, low frequency acoustic command code structure for reliable deep sea operations.



### FEATURES

- 15 000 kg SWL\* and 10 000 kg RL\*\* mechanism
- 6 000 m water depth
- Corrosion resistant super duplex stainless steel housing
- Individually tested and approved by certification body
- 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
- Lifting appliance in accordance with Rule Note NR526 from Bureau Veritas

### OPTIONS

- Pressure sensor
- Lithium batteries (no hardware modification)
- Release shackle in lieu of standard oval release ring

### APPLICATIONS

- Cable Laying
- Offshore marine construction operations

# TECHNICAL SPECIFICATIONS

## General

|                         |  |
|-------------------------|--|
| Ordering part number    | KAA00088   |
| Assembly drawing number | 3239301  |
| Release ring            | 15t/SWL Oval ring, drawing 515C36 (standard)<br>Optional shackle drawing 9103521                               |
| 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, 1180 x 470 x 370 mm, 91 kg   |

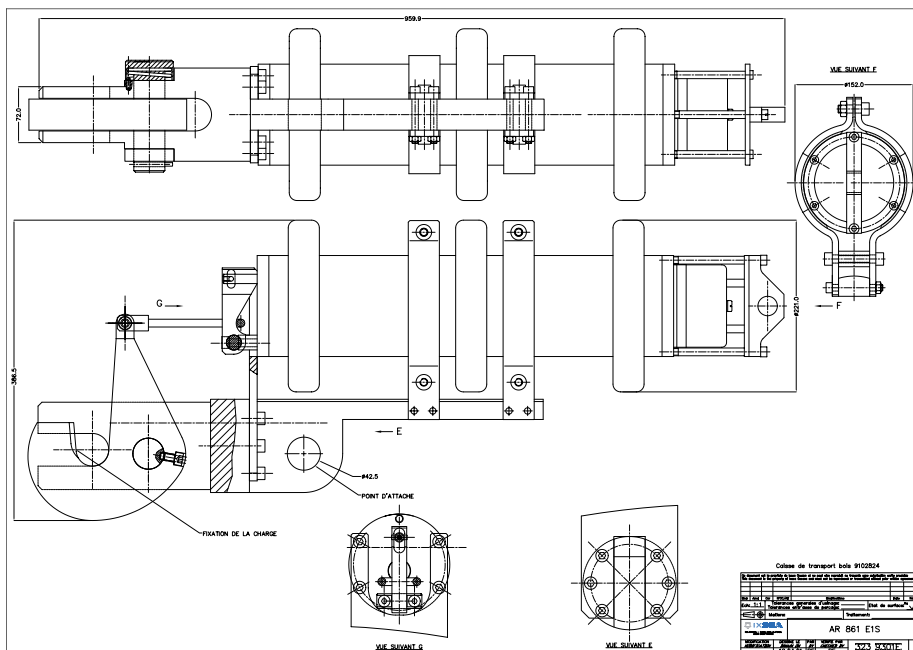
## Mechanical

|   |   |
|---|---|
| Construction                                  | Super duplex stainless steel                      |
| Load characteristics                          | 15 000 kg SWL* / 10 000 kg RL** / 30 000 kg TL*** |
| Depth rating                                  | 6 000 m   |
| Overall dimensions (L x W x H)                | 960 x 386 x 220 mm                                |
| Overall weight (air / water) with master link | 66 kg / 54 kg                                     |

## Acoustical

|                         |   |
|-------------------------|---|
| Operating frequency     | Low frequency (8.0 to 16 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<br>(16 kHz central, 3 kHz bandwidth, 25 ms wide)        |
| Operating life          | Alkaline - 50 months @ 20°C / 36 months @ 0°C<br>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).