Releaser KUMQuat

KUMQuat (Quality Control Acoustic Release / Transponder) is an acoustic releaser used in instrument carriers, OBS-systems or complete moorings.

Completely made from titanium it is utmost suitable for deep-sea operations (6000m and more).

As lightweight releaser it has a release load of 250kg (option: higher) and as heavy load releaser a release load of 500kg (option: higher). For the in-line version each they are additionally equipped with two side bars for mooring mounting.

The releaser is strongly fixed to the instrument carrier while the ground weight is hung up to the release hook. After the research period an acoustic signal is sent down to the instrument and the releaser opens the hook.

As an option the release can also be effected through an integrated timer. Then the motor is supplied from the timer battery.

In addition the releaser is able to head for external instruments after having received an acoustic signal and to send answers back to the deck box.

The deck boxes PACS and 8011M, identical to the units from EdgeTech / USA, are predominantly recommendable for the proper and faultless use of the KUMQuat Releaser.

PACS (Portable Acoustic Command System) is the basic unit that already disposes of a high number of commands in the low and medium frequency range. It is equipped with a hydrophone existing of an oil-filled broadband transducer and a 20m long cable.

Deck Box 8011M with more functions offers utmost control on acoustic signals. As both bit-encoded and rate-encoded signals can be sent and received even releasers from other manufacturers can be operated using this deck box.
Releaser KUMQuat

Technical Data

Product number:  
- K/MT 562 (lightweight)  
- K/MT 563 (lightweight In-line)  
- K/MT 552 (heavy load)  
- K/MT 572 (heavy load In-line)

Material:  
- titanium

Operation depth:  
- 6000m, option: 10000m

Release load:  
- K/MT 562: 250kg (option: higher)  
- K/MT 552: 1000kg

Safe working load:  
- K/MT 562: 500kg (option: higher)  
- K/MT 552: 2500kg

Power supply:  
- 2 x 6 Alkaline C-cells (Baby), redundant arrangement

Quiescent power:  
- 270μA typical

Quiescent power consumption:  
- 2.5mW typical

Battery life:  
- 24 months (with 1.9 times safety)  
- 100x Releases, 3000x Pings

Reply frequencies:  
- 7.5 to 15 kHz (0.5 kHz increments); standard: 12 kHz

Reply pulse width:  
- 8.5ms or 17ms

Command coding:  
- FSK 16 bit, 12000 individual codes available

Commands:  
- Release, Enable, Disable, 3 individual I/O commands
- - connector to control up to 3 external devices
- - sensor input line to cause a ping from an external device

Input / Output capabilities:  
- Time Release with power supply and external programmation unit
- - Heavy Load Releaser
- - Lightweight Releaser
- - Protection cage for transducer
- - In-line Releaser

Size:  
- diameter: 110mm
- length: 625mm

Weight:  
- K/MT 562: 11,1kg air weight; 6,3kg water weight
- K/MT 552: 13,6kg air weight; 7,7kg water weight
  (incl. 12 Alkaline C-cells)

Options:  
- - Time Release with power supply and external programmation unit
- - Heavy Load Releaser
- - Lightweight Releaser
- - Protection cage for transducer
- - In-line Releaser