

LKH-162 RELEASE LINK - SubSeaSonics (FOR USE WITH AR-60-E Acoustic Release)

(Nov. 30, 2012) (file=LKH-162_DATA_SHEET.doc)

Description: Release link for use with AR-60-E acoustic release. Light load release link. Release hoops made with stainless steel wire alloy 316L. Faster to release, but withstands less load (vs. LKH-262). See next paragraph on 'crevice corrosion'.

Crevice Corrosion: A recent hoop failure has been identified as a result of 'crevice corrosion'. It caused one of the two hoops to release early. Accordingly consider deployment of all stainless steel release links with a single line passed through both hoops so that if one hoop releases early the other will most likely hold.

Alternatively, for the utmost corrosion resistance, use one of the high nickel content links such as the LKH-202-NI or the new LKH-172-NI. The down side on the LKH-202-NI is that it takes longer to release.

Load limit: 160 lb (73 kg) plus 80 lb (36 kg) surges. Load should be on-axis if surging.

Hoop size: Large enough to pass a 1/8 inch diameter line.

Wire metal: Stainless steel alloy 316L. Corrosion resistant as long as surface is exposed to normal sea water dissolved oxygen.

Use: Replaceable release link for use with AR-60-E acoustic release.

Method of release: Electrolytic erosion of wire at exposed points.

Hoop construction wire diameter (excluding paint): 0.035 inch (0.89 mm)

The following table gives approximate release erosion times with 12 Energizer L91 lithium AA batteries installed internal to the AR-60-E in the special BH-60L battery holder provided:

HOOP PAINT ALL SCRAPED OFF - WORST CASE (Lithium batteries)	HOOP PAINT INTACT (Lithium batteries)
4 minute @ 21°C (70°F)	2 minute @ 21°C (70°F)
6 minute @ 5°C (41°F)	3 minute @ 5°C (41°F)
8 minute @ 0°C (32°F)	4 minute @ 0°C (32°F)

Note: Bio fouling can extend these times by restricting the water path for ion flow.

Release erosion time with 12 **alkaline** AA batteries in place of lithium's: Up to three times as long.

Battery "energy" used in one release for worst case of all paint scraped off: 150 mA-Hr. One set of 12 lithium batteries should give 1.0 year including 10 releases or 0.5 year including 15 releases.

Reference Information: Lithium battery capacity = 3000 mA-Hr. Maximum battery current while ON and listening for a command equals 0.220 mA.