

# Self-floating Electronic Single-shot Instrument

## ■ Introduction

This tool is put down to the bottom of the survey point by the pump pressure. After survey completes, the tool will float off to the wellhead depending on its own buoyancy, no winch is needed. The self-floating series can be applied in full range of conditions. Especially the carbon fiber pontoons, it is light weight and strong buoyancy that is widely used in the vertical wells of small mud weight (can be as less as 1.0), which resolves the contradiction between inclination and mud weight when drilling in oil and gas wells of small formation pressure.

## ■ Features

- Winch is not needed
- Descending or floating up depending on mud circulation
- High precision probe with shock resistance to 3500g (7.72 lbs)
- Provide well attitude parameters
- Applicable condition: mud weight is among 0.8 to 2.0g/cm<sup>3</sup>(0.03 to 0.07 lb/in<sup>3</sup>), inclination < 40°

## ■ Application

- Monitor the well trajectory in oil drilling project

## ■ Technical Parameters

• Inclination	0 to 60°	±0.2°
• Azimuth	0 to 360°	±1.0°
• Magnetic density	0 to 100μT	±0.5μT
• Magnetic dip	-90° to 90°	±0.5°
• Temperature	Up to 125°C / 257°F	±2.0°C

## ■ Specification

Model	OD	Relative Weight	Pressure	Notes
LHE423301	Φ48mm	1.00	75MPa	Common self-floating ESS
LHE423501	Φ48mm	1.10	105MPa	Deep-well self-floating ESS
LHE423503	Φ48mm	1.17	120MPa	Super deep-well self-floating ESS
LHE423201	Φ48mm	0.97	50MPa	Strong buoyancy self-floating ESS
LHE423302	Φ49mm	0.83	75MPa	Carbon-fiber self-floating ESS
LHE423502	Φ49mm	0.97	105MPa	Deep-well carbon-fiber self-floating ESS
LHE423202	Φ49mm	0.74	50MPa	Strong buoyancy carbon-fiber self-floating ESS
LHE423303	Φ49mm	0.81	75MPa	Carbon-fiber self-floating ESS
LHE413302	Φ40mm	0.90	65MPa	Slim hole self-floating ESS
LHE413301	Φ36mm	0.95	65MPa	Slim hole self-floating ESS

