

**KUS**

# Rudder Angle Sensor

User's Manual



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## ***Revision History***

Revision	Description
1.0	Original Document

# 1. General

## 1.1 Introduction

ProductDescription:RudderSensor

Partnumber:KE41000

Signal:Resistance double signal output

Resistance Range: 0~190Ω

Working Temperature: 40~85°C

Maximum Ratings: P=500mW

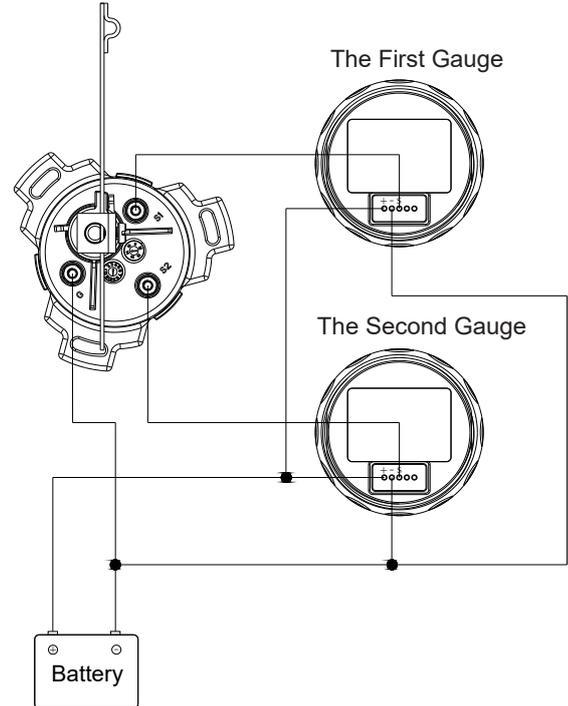
### I. Electrical Connection:

The rudder sensor has double signal output: S1 terminal and the G terminal connect with the first gauge;

S2 terminal and the G terminal connect with the second gauge.

### Note:

Above wire connection is only for reference. Wire connection of the gauge shall be according to the real gauge and practical use.



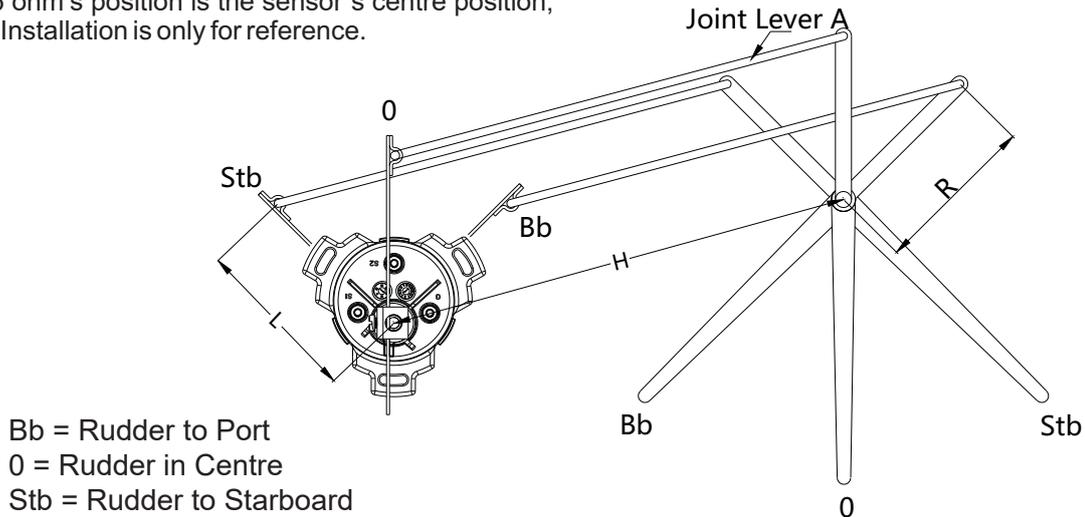
## 2. Rudder Sensor Installation Instructions

### II. Connection and Installation with Rudder:

#### Installation:

1. Install the rudder sensor next to the rudder on boat, connect the R with the spindle L on rudder sensor with joint lever A (joint lever A is prepared by user). Length of the joint lever A is almost the same as the distance between the rudder and the axis of the sensor (H).
2. When the installation position of the sensor and the length of joint lever A are fixed, you can adjust the spindle L to the same length as that for rudder R.
3. After connecting the parts, adjust the position of rudder sensor and make sure that rudder sensor output is 95 ohm when the rudder is in its zero position, and then make sure the other positions are right.
4. The rudder will not move towards the full rudder direction when the sensor displays full rudder to prevent the sensor from being damaged and giving wrong indications.

**Note:** The 95 ohm's position is the sensor's centre position;  
Above Installation is only for reference.

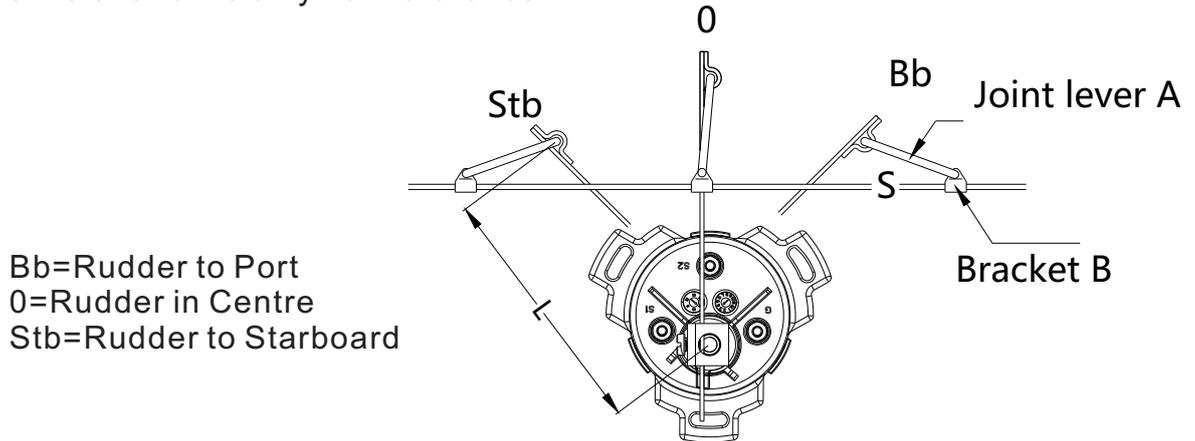


### III. Connection with the Cable:

#### Installation:

1. Install the rudder sensor in the proper position, connect the sensor and cable S with joint level A and bracket B (joint level A and bracket B are prepared by users).
2. When the installation position of the sensor and the length of joint lever A are fixed, you can adjust the spindle L to the same length as that of joint lever A.
3. After connecting the parts, adjust the position of rudder sensor and make sure that rudder sensor output is 95 ohm when the rudder is in its zero position, and then make sure the other positions are right.
4. Cable S will not move towards the full rudder direction when the sensor displays full rudder to prevent the sensor from being damaged and giving wrong indications.

**Note:** The 95 ohm's position is the sensor's centre position;  
Above Installation is only for reference.



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