

MARINE Products Catalogue

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KUS

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INTRODUCTION



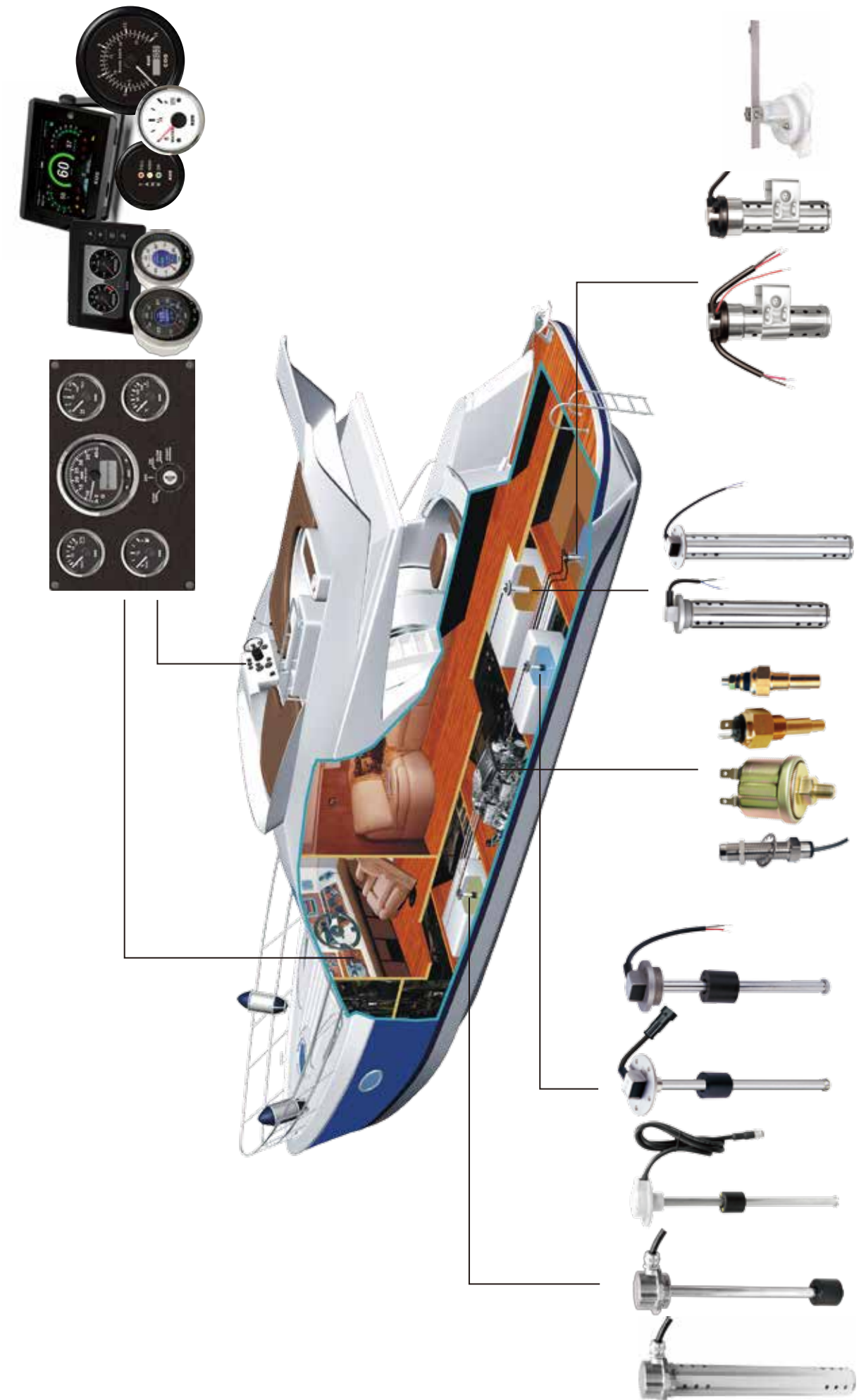
Founded in Taiwan in 2004, KUS is a global auto, marine and gen-set parts supplier integrating R&D, production, sales and service.

As a global corporation, KUS Group has nearly 5,000 employees, 12 branches in the USA, Mexico, the Netherlands, India and China along with a worldwide partner network.

- **Product Range:**
Tank level sensors, temperature and pressure sensors, urea sensors, etc.
Gauges for fuel/water level, engine monitoring.
- **Facilities:**
German TÜV-certified production lines, more than 80 injection molding machines, more than 240 CNC machines, advanced blow molding Machine, high-quality brazing wire, automated SMT, high-performance automatic wave soldering, etc. More than 95% of the key components have been self-made, with one-stop product manufacturing capabilities from raw material processing to finished product assembly, ensuring that the company's products can satisfy customers' various needs for flexibility.
- **Certificates:** IATF 16949, ISO 9001, ISO 14001, CE certification, TED's PED and AD 2000 certification, etc.
- **Our Customers Include :**
Bayliner, SeaRay, Hallberg Rassy, Moeller etc. yachts and accessories companies.
Cummins, SWT, Powerlink, Himoina, Zings, MPMC etc. power genset manufacturers.
Volvo, Mercedes-Benz, Iveco, MAN, Nissan, Renault, Scania etc. vehicle companies.
- **Development:**
KUS has many years of experience in developing and manufacturing mechanical and electronic parts for vehicles, especially level sensors and gauges. We have a strong design team of more than 300 professional engineers who are always ready to offer the best solution for your vehicles and yachts. Furthermore, KUS is entering the new energy field and become a new energy solution provider.



Marine Parts Illustration



ABOUT KUS I



KUS' story begins with a fuel level sender. In 1984, Mr. Jan had become unsatisfied after encountering a series of unreliable fuel level senders in the market. He then developed the world's first reed switch liquid level sender for marine applications. The product took off and quickly became a top seller due to its reliability, accuracy, and durability. After the global success of KUS' initial reed switch level sender, a series of product innovations followed.



Foundation of KUS at new production plant in DongGuan/China.



KUS plant put into use, realizing stepwise growth



KUS OVERSEA
SUB-BRANCH GRADUALLY
ESTABLISHED



2019: KUS Mexico branch established

2016: KUS Netherlands, a service support location in Europe

2015: KUS India, a service base in South Asia

2013: KUS Taiwan Research Branch, a cutting-edge technology R&D base

2012: KUS USA established



CHINA INLAND KUS
NEW PLANTS
CONTINUALLY EXPANDS

2021: Shandong branch, set up one branch for WEICHAH and SINO TRUCK

2021: Guangzhou branch was established.

2017: Hefei Branch was established

2017: Extended to the field of ADAS and new energy vehicles



HISTORY OF KUS MARINE

1984

2007 - ~

- ◆ Production of boat gauges and sensors for well-known brand in Northern Europe begins.
- ◆ Cooperated with famous marine wholesaler, KUS instruments were introduced to Noridc market.



2004

2009 - 2010

- ◆ KUS developed new markets in Russia, Turkey and Middle-East by selling KUS gauges and providing OEM service.
- ◆ Start of production for two major China outboard engine manufacturers.
- ◆ Opened up the market in Ukraine.



2008

2011

- ◆ Launched out the world's first GPS speedometer.



2012 - 2019

2012

- ◆ Development of SEA Q series gauges for construction machineries.
- ◆ Production of instruments for Dutch and Germany famous brands.
- ◆ Cooperated with the largest marine wholesaler of Southern Europe.



2013

- ◆ Launched out the first series of NMEA 2000 gauges-SEA N series.
- ◆ Set up the new distributors in South America and Australia.



2017 - 2021

2014 - 2015

- ◆ Penetration into the European markets, KUS started to provide OEM service for a famous engine brand in Netherland.
- ◆ Set up new distributors in UK, France and Spain for KUS instrument promotion.
- ◆ Developmemnt of gauge panel for motorboat manufacturer.



HISTORY OF KUS MARINE I



- ◆ Development and production of color TFT display for Marine application.
- ◆ Production of fuel level sensor for YAMAHA Europe Boat manufacturer starts.

2016



- ◆ KMG instrument-first development for marine application.

2018



- ◆ Development and production of touch version instrument for Marine application.

2019



- ◆ First development of multi-functional TFT KMG-20T with wireless settings, and it comes with SMG-13 with stepper motor +TFT screen, depth meter and rudder angle sensor of NMEA 2000.
- ◆ OEM instrumentation for Indian construction machinery manufacturer and a well-known Japanese Marine engine manufacturer.
- ◆ Production of engine monitoring panel for biggest engine manufacturer in China.

2020 - 2021

Ongoing research and development of KUS smarter marine products continues.

2022 - ~

NEW

Level | Temperature | Voltmeter | TRIM
Pressure | Tachometer | Speedometer | ...

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Water Level Gauge
Tachometer
Oil Pressure Gauge
Voltmeter
Speedometer
Water Temp. Gauge
Holding Tank Gauge
NKC43/NKC42 Convertor
NJ/JN Gateway/GPS Receiver/Set Up Tool
NMEA Gateway

27 - 49 **Sea V Series**
Fuel Level
Water Level/Voltmeter
Water Temperature/Oil Temperature
Trim Gauge/Oil Pressure
Holding Tank
Rudder Angle
Ammeter/Clock
Digital Voltmeter
Digital Water Temperature
Digital Ammeter
Digital Oil Pressure
Digital Fuel Level
Hourmeter
Digital 3 in 1 Multifunction
Digital GPS Speedometer(52mm)
8 LED Water Level Gauge
8 LED Fuel Level Gauge
8 LED Holding Tank Gauge
Navigation Indicator
3 LED Alarm Indicator
4 LED Alarm Gauge
Exhaust Temp. Meter & Sensor
Tachometer with 4 LED Alarm
Tachometer
Digital Tachometer
Speedometer
GPS Speedometer
Digital GPS Speedometer(85mm)
Rudder Angle
3 in 1 Multifunction(110mm)
4 in 1 Multifunction(110mm)
60MPH Speedometer(110mm)
0-6000RPM Tachometer(110mm)
Digital 4 in 1 Multifunction(85mm)
Gauge Holder/Gauge Bezel
Tachometer(for HONDA)
Trim(for HONDA)

50 - 59 **Sea Q Series**
Fuel Level Gauge
Water Level Gauge
Holding Tank Gauge
Water Temp. Gauge
Oil Temp. Gauge
Voltmeter
Oil Pressure Gauge
Rudder Angle Gauge
Trim Gauge
Digital Voltmeter
Digital Water Temp. Gauge
Digital Ammeter
Hourmeter
Digital Oil Pressure Gauge
4 LED Alarm Gauge
Digital Fuel Level Gauge
GPS Speedometer
Tachometer
Rudder Angle Gauge
Speedometer

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KUS is renown for its 30 years of experience in the global marine instruments market. KUS exports its products worldwide, mostly to Europe and United States.

All of KUS's gauges have received the CE mark and meet the criteria of the strictest testing standards for vibration, environmental, pressure, etc.



All the gauges can be classified into two types: 52mm (2") and 85mm (3 3/8"). As per its operating principle, Zheng Yang gauge can be classified into cross coil, stepper motor, LCD & LED types. We recommend the cross coil type except for tachometers and speedometers.

According to your waterproof requirements, you can choose Zhengyang gauges with completely waterproof function, or with semi-waterproof function. Both body plates are waterproof, and the SeaV series gauges can even work in the water.

The color of the panel can be black or white; the color of the needle can be white or red. Our default color combinations are red needle to white panel or white needle to black panel. The lens had undergone anti-fog treatment and been reinforced for strength. One can choose between curved or flat lens, and choose between red or yellow backlight.

KUS utilizes advanced techniques and equipments in the production of the gauges. This assures our gauges' superior qualities and long service lives.



Manufacturing



Wave soldering production line



Antistatic workshop



Plastic injection

Through decades of development and continuous investments in manufacturing, KUS has built a wide range of comprehensive production processes and equipment. KUS production processes are vertically integrated, and in-house capabilities range from raw material processing to final assembly. KUS capabilities include German TÜV validated tube-forming lines, plastic injection, CNC, furnace brazing and annealing line, automatic SMT, and automatic wave soldering. More than 95% of key components are made in-house. This ensures product quality and adaptability to project schedules communicated by customers. KUS is the one stop turnkey solution for customer requirements.

Quality Assurance

- High quality aluminum, plastic, and stainless steel material.

Price Assurance

- Product accessories such as tubes, machining parts, etc are manufactured in-house.

Delivery assurance

- Systematic management, and progressive assembly line provide the flexibility for quick product change over.

The KUS facility consists of 15 manufacturing workshops. Advanced processes and strict quality system ensure the quality and performance of our sensors and gauges. All products are tested for functionality under extreme environment conditions.

KUS is equipped with a fully functional tooling facility with 150 design and manufacturing employees. The majority of our production tooling for processes such as the ones used in plastic injection molding, stamping, die-casting, rubber molding, etc., are designed and manufactured in-house. This in-house capability means that KUS can produce rapid-prototypes with flexible development schedules to meet customer's new project requirements.



Pipe forming



CNC machining



Urea Sensor Production Line

Laboratory Validation



Durability lab



Vibration lab



Aging & Salt Spray Test

KUS technology center is experienced in performing tests and validations. Ranging from initial product research and development to full product life validation according to international testing standards, KUS validation capabilities include :

- Design structure validation
- Electric performance testing
- Mechanical performance testing
- Low/high temp simulation testing
- Salt spray testing
- Sine/random vibration testing
- Metal material elemental analysis
- Metallurgical analysis
- Intergranular corrosion analysis

The KUS technology center was setup in 2007 spanning 1600 square meters, the facility includes:

- Vibration lab
- Electronics lab
- Aging lab
- Durability lab
- Mechanics lab
- Chemical lab
- Measurement center

KUS leads the sensing industry through research, innovation, and consistent high quality products. Since inception, KUS strives on its core policy on quality, management, and innovation. New product design are validated through a series of rigorous tests and strict process controls.

- Each batch of raw material is tested in our laboratory to ensure the material meets the high quality standards of KUS products.
- Engineering support throughout manufacturing process guarantees the reliability and stability of KUS products.
- Multi-dimensional validation throughout new product development ensures product performance in harsh environments.
- The successful market positioning is continued through strong employee awareness of product quality and processes.



Measurement center



Electronics lab



Quick chemical analysis



KMG-20T

The KMG-20T marine gauge is a multifunctional digital instrument developed specifically for boats, yachts, and marine applications. The instrument integrates major displaying functions such as voltmeter, fuel level, water level, water temperature, oil temperature, oil pressure, holding tank and trim in one device. The robust and compact design allows users to have more important information available at the same time, the instrument comes in a stainless-steel cover to ensure the corrosion resistance of the product. Dial, displaying and instances can be set correspondingly through the touch screen or the mobile app. The unit is compatible with J1939,NMEA 2000 and Analog signal to meet you different requirements.



Key Features

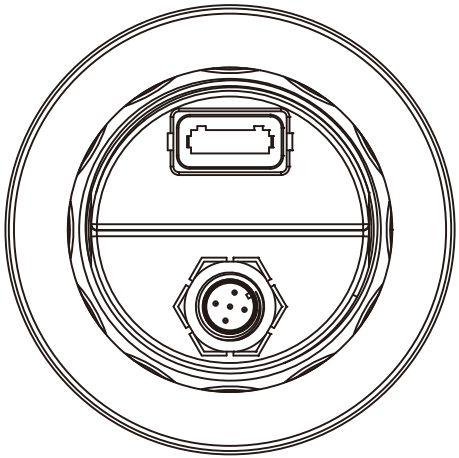
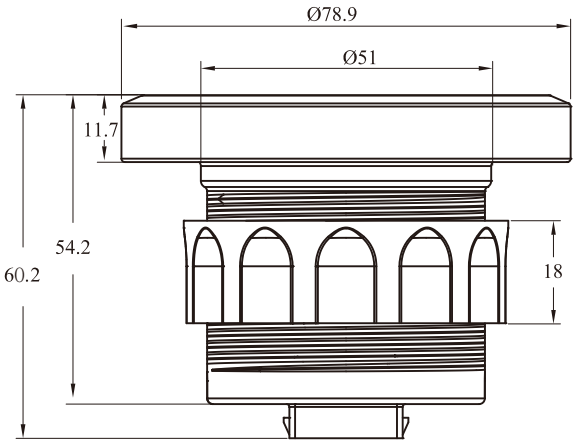
1. Integrates ten different instruments function and choose one to display;



2. Compatible with J1939 & NMEA 2000 & 2 Analogue (1 for resistance, 1 for speed.)
3. Gauge dial color can switch into white and black;
4. Touch screen or download mobile app to complete the instrument instances and firmware upgrade.
5. Alarm function can be customized:
- Voltmeter(10 V)
 - Fuel(10%)
 - Water level(10%)
 - Water temperature(95°C)
 - Oil temperature(100°C)
 - Oil pressure(1.0Bar)
 - Holding tank(80%)
6. Backlight Brightness: 10% ~ 100%;
7. IP67 protection rating;
8. Enjoy faster speed to start-up, low power consumption and high frequency.

Product Specification

- ◆ Model: KMG-20T
- ◆ Art No.: JMC00009
- ◆ Dimension: 2.0 inches
- ◆ Mounting Dimension: 52 mm
- ◆ Working Voltage: 9-32V DC
- ◆ Working Current: ≤80mA(12V)
- ◆ Resolution: 320 x 320 pixels
- ◆ Operation Method: Touch Screen & Mobile app
- ◆ Working Temperature: -20°C~+70°C(-4°F~158°F)
- ◆ Storage Temperature: -30°C~+80°C(-22°F~176°F)
- ◆ Accessories: 1.5M cores CAN cable, Analogue cable, Specifications





KMG-30

The KMG Button marine gauge is a multifunctional digital instrument developed specifically for boats, yachts, and marine applications. The instrument integrates major displaying functions such as oil level, oil pressure, tachometer, speedometer, and oil and water temperature in one device. The robust and compact design allows users to have more important information available at the same time. The instrument comes in a stainless-steel cover with a black dial and two styles of display interfaces, touch screen or button, to meet your different requirements. The connection of KMG Button can be altered by both CAN-BUS and analog signal input according to customer requirements; displaying data and instances can be set accordingly as well. The unit is compatible with J1939 and NMEA 2000 systems.

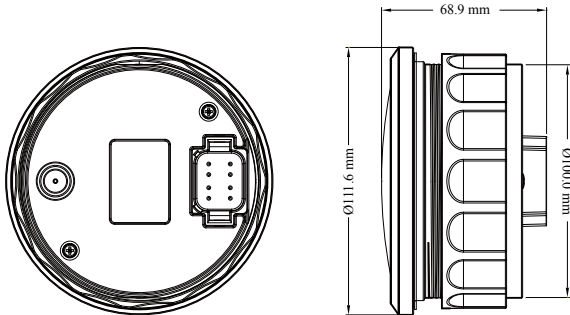


Key Features

- ◆ Compatible with J1939 & NMEA 2000, and supporting 4 different Analog signals input (Tacho sensor, Fuel, Water temperature and Oil pressure sensor) 6 or 10 Analog signals can be customized.
- ◆ For NMEA 2000, the instance number need to be set up on the KMG.
- ◆ Supports night cruise mode and DM1 Diagnostics
- ◆ Alarm Function : Fuel (10%), Water temperature (95°C/203°F), Oil pressure (0.7bar/10.15psi), can be customized.
- ◆ Panel color switch can be allowed, and black and white for option.
- ◆ Backlight Brightness: 10%~100% & IP67 protection rating

Product Specification

- ◆ Model: KMG
- ◆ Dimension: 3.0 inches
- ◆ Mounting Dimension: 100mm
- ◆ Working Voltage: 9-32V DC
- ◆ Working Current: ≤170mA(12V)
- ◆ Resolution: 432x432 pixels
- ◆ Operation Method: Front Button (Up-Model-Down, 3 buttons to set up the function)
- ◆ Working Temperature: -30°C~+85°C(-22°F~185°F)
- ◆ Storage Temperature: -30°C~+85°C(-22°F~185°F)
- ◆ Accessories: 1M 5 cores CAN cable, 1M 6 cores Analog cable, manual.



KMG-30KP-H				
Art. No.	Model 1	Model 2	Model 3	
JMC00004	• RPM(4K/6K/8K) • Fuel level • Engine temperature • Trim meter • Engine work hours • GPS speed • 7 alarm icons from HONDA engine ECU	• RPM(4K/6K/8K) • Fuel level • Engine temperature • Trim meter • Engine work hours • 7 alarm icons from HONDA engine ECU	• RPM(4K/6K/8K) • GPS speed • Fuel level • Engine temperature alarm • Oil pressure alarm • Engine work hours • 7 alarm icons from HONDA engine ECU	
	7 alarm icons: 			
Remark: for Honda engine.				

KMG-30KP			
	Art. No.	Model 1	Model 2
JKE00444	• RPM(4K/6K/8K) • GPS speed • Fuel level • Engine temperature • Oil pressure • Engine work hours	• RPM(4K/6K/8K) • Fuel level • Engine temperature • Oil pressure • Engine work hours	• RPM(4K/6K/8K) • GPS speed • Fuel level • Trim • Engine temperature low alarm • Oil pressure low alarm • Engine work hours
JKE00520	Same function as above but without GPS.		



KMG-30T

The KMG Touch marine gauge is a multifunctional digital instrument developed specifically for boats, yachts, and marine applications. The instrument integrates major displaying functions such as oil level, oil pressure, tachometer, speedometer, and oil and water temperature in one device. The robust and compact design allows users to have more important information available at the same time. The instrument comes in a stainless-steel cover with a black dial and two styles of display interfaces, touch screen or button, to meet your different requirements. The connection of KMG Touch can be altered by both CAN-BUS and analog signal input according to customer requirements; displaying data and instances can be set accordingly as well. The unit is compatible with J1939 and NMEA 2000 systems.

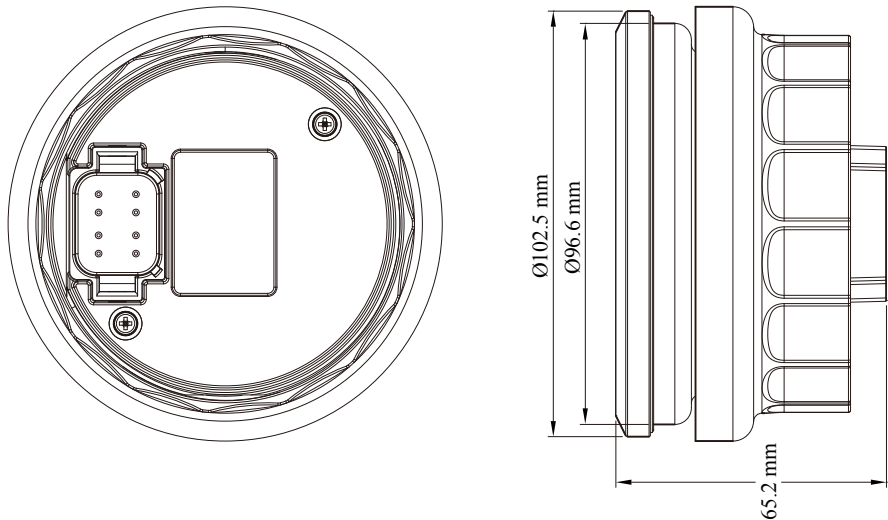


Key Features

- ◆ Two display styles option
 - Model 1: Speed, COG, Voltage, Fuel level, Engine temperature, Oil pressure, Engine work hours
 - Model 2: RPM, Voltage, Fuel level, Engine temperature, Oil pressure, Engine work hours
- ◆ Compatible with J1939 & NMEA 2000, and supporting 4 different of Analog signals input (Tacho sensor, Fuel, Water temperature and Oil pressure sensor)
- ◆ For NMEA 2000, the instance number need to be set up on the KMG
- ◆ For Analog signal, optional scope can be set up by customer
 1. Fuel level (0~190ohm, 240~33ohm or customized)
 2. Oil pressure (10~185ohm or customized)
 3. Water temperature (301~23ohm or customized)
 4. Speed ratio: (0.5-250.0)
- ◆ Alarm Function : Fuel (10%), Water temperature (95°C/203°F), Oil pressure (0.7bar/10.15psi), can be customized
- ◆ Backlight Brightness: 10%~100%
- ◆ IP67 protection rating
- ◆ Enjoy faster speed to start-up, Low power consumption, and high frequency.

Product Specification

- ◆ Model: KMG
- ◆ Art No.: JKE00482
- ◆ Dimension: 3.0 inches
- ◆ Mounting Dimension: 97.5 mm
- ◆ Working Voltage: 9-32V DC
- ◆ Working Current: ≤170mA(12V)
- ◆ Resolution: 432x432 pixels
- ◆ Operation Method: Touch Screen
- ◆ Working Temperature: -30°C~+85°C/-22°F~185°F
- ◆ Storage Temperature: -30°C~+85°C/-22°F~185°F
- ◆ Accessories: 1M 5 cores CAN cable, 1M 6 cores Analog cable, manual.



NEW

KMG-42T

The KMG Touch marine gauge is a multifunctional digital instrument developed specifically for boats, yachts, and marine applications. The instrument integrates major displaying functions such as oil level, oil pressure, tachometer, speedometer, and oil and water temperature in one device. The robust and compact design allows users to have more important information available at the same time. The instrument comes in a stainless-steel cover with a black dial and two styles of display interfaces, touch screen or button, to meet your different requirements. The connection of KMG Touch can be altered by both CAN-BUS and analog signal input according to customer requirements; displaying data and instances can be set accordingly as well. The unit is compatible with J1939 and NMEA 2000 systems.

KMG IP67 Multifunctional LCD Instrument

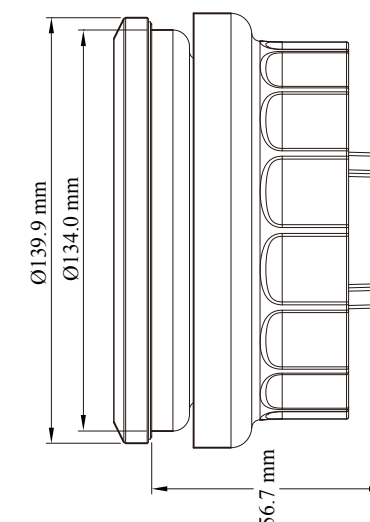
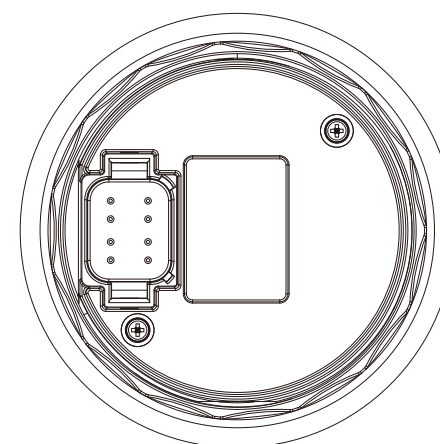


Key Features

- ◆ Operation method: Touch screen
- ◆ Two display styles option:
 - Model 1: Speed, RPM, Voltage, Fuel level, Engine temperature, Oil pressure, Engine work hours, Time ;
 - Model 2: Speed, RPM, Voltage, Fuel level, Engine temperature, Oil pressure, Engine work hours, Time ;
- ◆ Compatible with J1939 & NMEA 2000, and supporting 4 different of analog signals input (Tacho sensor, Fuel, Water temperature and Oil pressure sensor) ;
- ◆ For NMEA 2000, the instance number need to be set up on the KMG ;
- ◆ For analog signal, optional scope can be set up by customer ;
 1. Fuel level (0~190ohm, 240~33ohm or customized) ;
 2. Oil pressure (10~185ohm or customized) ;
 3. Water temperature (301~23ohm or customized) ;
 4. Speed ratio: (0.5-250.0) ;
- ◆ Alarm function : Fuel (10%), Water temperature (95°C/203°F), Oil pressure (0.7bar/10.15psi), can be customized ;
- ◆ Backlight Brightness: 10%~100% ;
- ◆ IP67 protection rating ;
- ◆ Enjoy faster speed to start-up, low power consumption, high frequency.

Product Specifiaction

- ◆ Model: KMG
- ◆ Art No.: JKE00483
- ◆ Dimension: 4.2 inches
- ◆ Mounting Dimension: 134.5 mm
- ◆ Working Voltage: 9-32 VDC
- ◆ Working Current: ≤330 mA(12V)
- ◆ Resolution: 720 x 720 pixels
- ◆ Working Temperature: -30°C~+85°C/-22°F~185°F
- ◆ Storage Temperature: -30°C~+85°C/-22°F~185°F
- ◆ Accessories: 1M 5 cores CAN cable, 1M 6 cores analog cable, manual.





SMG-13

SMG-13 is a multi-function combination instrument combining around LCD screen and a stepping motor. The instrument integrates functions fuel level, oil pressure, water temperature, rotation speed, speed, etc.; compatible with NMEA 2000 signals, J1939, analog signals; supports multiple styles and dial color options.

Features

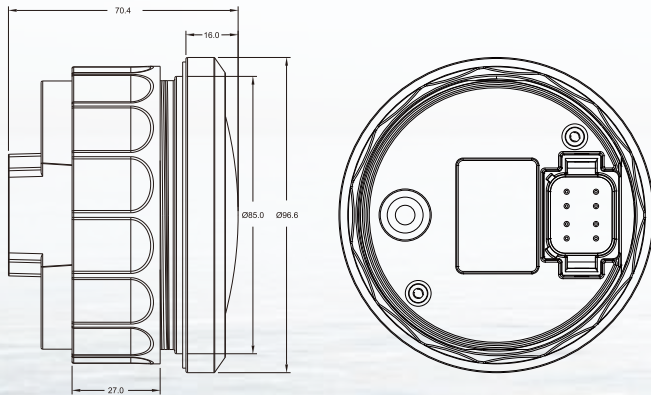
- 1. Various styles of display ;



- 2. Compatible with NMEA 2000 signal and J1939 signal, supports 4 different analog signals (speed, fuel level, water temperature, oil pressure), and supports GPS speed reception.
- 3. Analog signal, custom settings are allowed.
 - * Fuel level (0-190ohm/240-33ohm/custom)/trim (0-190ohm/160-10ohm/custom)
 - * Oil pressure alarm (low switch signal alarm)
 - * Water temperature alarm (low switch signal alarm)
 - * Speed ratio (0.1-24.0)
- 4. Waterproof and dustproof grade: IP67

Specification

- ◆ Model: SMG-13
- ◆ Material number: JMC00010
- ◆ Display size: 1.28 inches
- ◆ Display resolution: 240*240 pixels
- ◆ Installation size: 85mm
- ◆ Working voltage: 9-32v
- ◆ Working current: <180mA(12V)
- ◆ Operation mode: Front Button
- ◆ Working temperature: -30℃~+70℃(-22℉~158℉)
- ◆ Storage temperature: -40℃~+80℃(-40℉~176℉)
- ◆ Accessories: 1 meter 5 core CAN wire harness, 1 meter 6 core analog signal wire harness, GPS antenna, manual



Depth Gauge & Sensor

The depth gauge is a set of products that includes a depth sensor and a depth gauge, with function including depth detection, water speed measurement and water temperature detection, etc; compatible with NMEA 2000 network to transmit data; supports perform unit switching, alarm value settings and keel offset settings.

Features

- 1. Integrated multi-function sensor with depth, water speed, temperature detection function;
- 2. Compatible with tandard NMEA 2000 network;
- 3. Temperature detection accuracy: ±0.5℃ (±1.8℉), temperature detection range: -10℃ to 40℃ (14℉ to 104℉);
- 4. Minimum detection depth: 0.5 meters, maximum detection depth: 100 meters;
- 5. Alarm function: shallow alarm value (2.0M), deep alarm value (50M), also can be customized by customers
- 6. Keel offset setting: Customers can make keel offset setting according to the draft of the boat to ensure that the boat is in safe.

Specification

- ◆ Model: Depth Gauge
- ◆ Material number: JKE00616
- ◆ Installation size: 52mm (instrument), 75mm (sensor)
- ◆ Working voltage: 9-32v
- ◆ Working current: <30mA (instrument), <200mA (sensor)
- ◆ Setting method: front button
- ◆ Working temperature: -40-70℃
- ◆ Storage temperature: -40-80℃
- ◆ Accessories: depth gauge, depth sensor





KMB-43 Series

The KUS KMB is an Integrated Data Monitor with an advanced TFT (Thin Film Transistor) screen. The unit is compatible with J1939 and NMEA 2000 systems. The KMB displays real time network information including engine output, fluid levels, and speed. KUS can also customize the unit to meet customer requirements. The KMB is a perfect fit for marine applications that monitor information over the J1939 or NMEA 2000 network.



Integrated Data Monitor





Display Modes



Monitoring Data

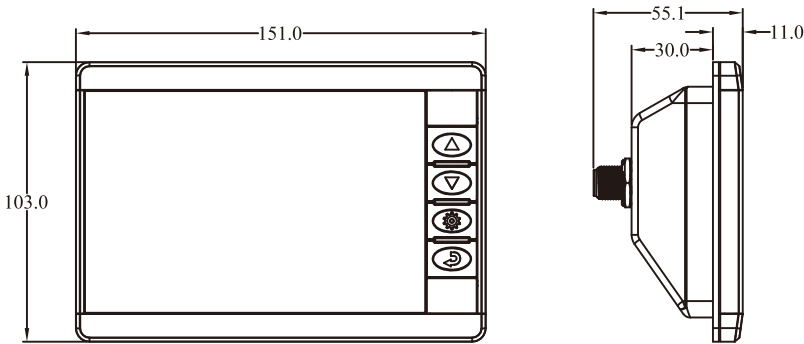
- ◆ **Engine** : Speed, Trim, Coolant Water Temperature, Oil Pressure, Hours
- ◆ **Navigation**: Course Over Ground(COG), Speed Over Ground(SOG)
- ◆ **Fluid Management**: Fuel Level, Fresh Water Level, Black Water Level
- ◆ **Rudder Position and Battery Voltage**

Specification

- ◆ Model: KMB-43
- ◆ Art No.: JKE00333
- ◆ Dimension: 4.3 inches
- ◆ Resolution: 480x272 pixels
- ◆ Operation Voltage: 9-32V DC
- ◆ Operation Current: 300mA (12V)
- ◆ Operation Temp.: -20°C ~ +70°C(Touch screen: -20°C ~ +60°C)
- ◆ Cable Accessories: Standard equiped with 1m length cable 0.5M/2M/4.5M/10M

Key Features

- ◆ 32-bit Cortex-M3 core + high-speed FPGA framework ;
- ◆ Fast start-up speed ;
- ◆ An easy to use and switchable interface that supports multiple languages ;
- ◆ A bright high-resolution screen display that can be seen in direct sunlight ;
- ◆ Compatible with J1939 & NMEA2000 including KUS Sea N series products .





KMB-70 Series

The KUS KMB is an Integrated Data Monitor with an advanced TFT (Thin Film Transistor) screen. The unit is compatible with J1939 and NMEA 2000 systems. The KMB displays real time network information including engine output, fluid levels, and speed. KUS can also customize the unit to meet customer requirements. The KMB is a perfect fit for marine applications that monitor information over the J1939 or NMEA 2000 network.



Display Modes



Monitoring Data

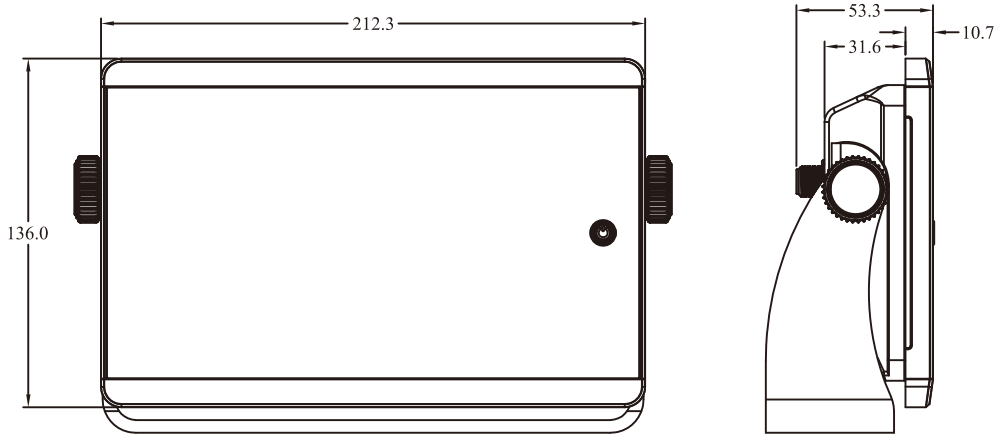
- ◆ **Engine** : Speed, Trim, Coolant Water Temperature, Oil Pressure, Hours
- ◆ **Navigation**: Course Over Ground(COG), Speed Over Ground(SOG)
- ◆ **Fluid Management**: Fuel Level, Fresh Water Level, Black Water Level
- ◆ **Rudder Position and Battery Voltage**

Specification

- ◆ Model: KMB-70
- ◆ Art No.: JKE00334
- ◆ Dimension: 7.0 inches
- ◆ Resolution: 800x480 pixels
- ◆ Operation Voltage: 9-32V DC
- ◆ Operation Current: 400mA (12V)
- ◆ Operation Temp.: -20°C ~ +70°C(Touch screen: -20°C ~ +60°C)
- ◆ Cable Accessories: Standard equipped with 1m length cable 0.5M/2M/4.5M/10M

Key Features

- ◆ 32-bit Cortex-M3 core + high-speed FPGA framework ;
- ◆ Fast start-up speed ;
- ◆ An easy to use and switchable interface that supports multiple languages and datas ;
- ◆ Brightness adjustment: 10%-100% ;
- ◆ A bright high-resolution touch screen display that can be seen in direct sunlight ;
- ◆ Compatible with J1939 & NMEA 2000 including KUS Sea N series products .





The Sea N Series consists of 8 analog instrumentations that are connected to the NMEA 2000 & J1939 network:

- Fuel Level Gauge
- Water Level Gauge
- Holding Tank Level Gauge
- Voltmeter
- Water Temperature Gauge
- Oil pressure Gauge
- Speedometer
- Tachometer

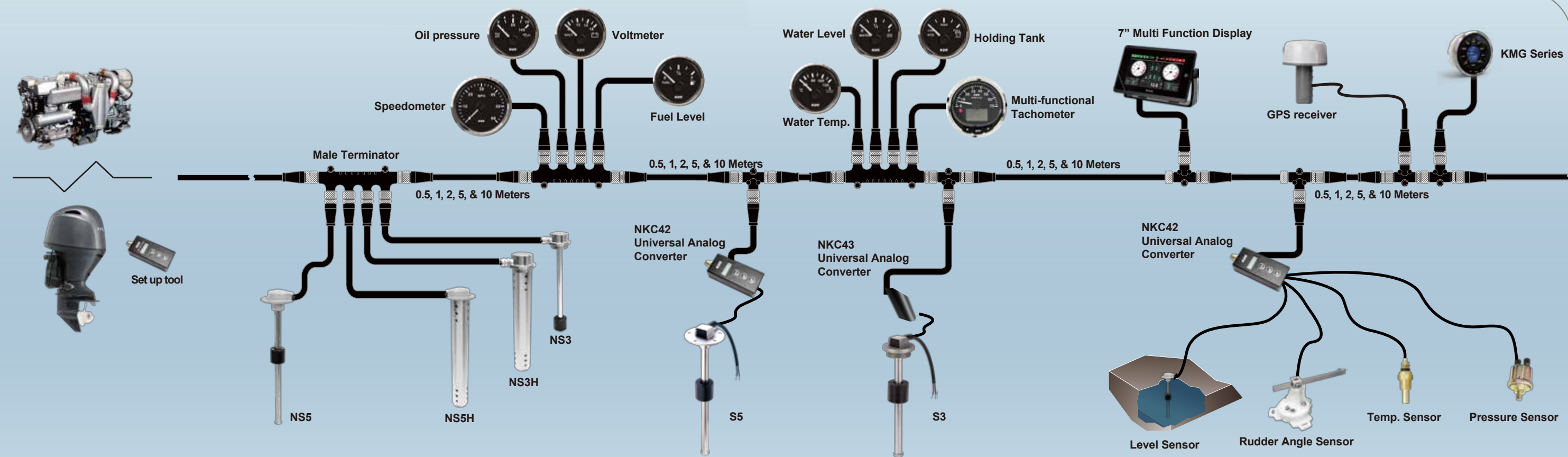
In addition to providing analog RPM display, the Sea N Tachometer also includes a LCD screen that monitors real time performance data such as:

- Engine Trim
- Battery Status
- Engine Temperature
- Engine Hour
- Oil Pressure
- Fuel Consumption
- Alarm

Features:

- NMEA 2000 and J1939 Compatible ;
- LCD displays all available data and alarms on NMEA 2000 and J1939 engines ;
- Tachometer, Speedo and all 2" gauges data from the CANbus ;
- KEY engine parameters supported ;
- Double layer reinforced anti-fogging glass ;
- Red background light; blue background light can be customized ;
- IP67 Waterproof ;
- Fully sunlight readable display ;
- Plug and play connectors .

NMEA 2000/J1939 Network Integration System



FUEL LEVEL								
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KN00001	NMFR-BS	NMEA 2000 & J1939		SS 316	Empty-Full	12V/24V	Φ52mm	
KN00200	NMFR-WS							

OIL PRESSURE								
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension	
KN05000	NMPR-BS-0-10	NMEA 2000 & J1939		SS 316	0 ~ 10bar	12V/24V	Φ52mm	
KN05100	NMPR-WS-0-10							

WATER LEVEL								
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KN01000		NMWR-BS	NMEA 2000 & J1939		SS 316	Empty-Full	12V/24V	Φ52mm
KN01100		NMWR-WS						

VOLTMETER								
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KN03000	NMVR-BS-8-16	NMEA 2000 & J1939		SS 316	8~16V	12V/24V	Φ52mm	
KN03100	NMVR-WS-8-16							

TACHOMETER								
	Art. No.	Model	Parameters Supported	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KN07000	NMHB-BS-7KL	Engine RPM/ Coolant temperature/ Engine Hours/ Oil pressure/ Trim/Fuel rate/ Fuel Tank1、 Tank2、 Tank3、 Tank4		SS 316	0~7000rpm	12V/24V	Φ85mm	
KN07100	NMHB-WS-7KL							

SPEEDOMETER								
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KN08000		NMOB-BS-60	NMEA 2000		SS 316	0~60MPH	12V/24V	Φ85mm
KN08100		NMOB-WS-60						

WATER TEMP.								
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KN04000	NMTR-BS-40-120	NMEA 2000 & J1939		SS 316	40~120°C	12V/24V	Φ52mm	
KN04100	NMTR-WS-40-120							

HOLDING TANK								
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
	KN02000	NMGR-BS	NMEA 2000		SS 316	Empty-Full	12V/24V	Φ52mm
KN02100	NMGR-WS							

NEW

RUDDER ANGLE

Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
JMN00062	NMRR-BS	NMEA 2000		SS 316	R-L	12V/24V	Φ52 mm
JMN00063	NMRR-WS						Φ85 mm
JMN00064	NMRB-BS						
JMN00065	NMRB-WS						



NMEA2000 Rudder Angle Gauge & Sensor

KUS NMEA 2000 rudder angle sensor is a high-precision angle sensor that outputs NMEA 2000 digital signals. The rudder angle gauge drives the stepping motor to indicate 0-±165 degrees rudder angle through the received NMEA 2000 digital signals from sensor.



Features

- 1. Non-contact sensing, long service life
- 2. Standard NMEA2000 network transmission
- 3. 12-bit angular resolution
- 4. Fast and convenient installation

Specification

- ◆ Model: NMEA 2000 rudder angle sensor
- ◆ Measuring Range: ±165 degrees
- ◆ Working Voltage: 9-32V
- ◆ Working Current: < 60mA
- ◆ Working Temperature: -40°C~85°C
- ◆ Protection Rating: IP67

Accessories

Item	Product Name	Art Code	Description	Photo
1	Female connector cable	JXE00240	0.5M(±10MM)	
2		JXE00168	1M(±40MM)	
3	Double Conn with male connector cable	JXE00169	1M(±40MM)	
4	Double Conn with female connector cable	JXE00170	1M(±40MM)	
5	Double Conn with male connector and female connector cable	JXE00251	1M(±40MM)	
6	NMEA 2000 cable, one end with M12 5pin male connector, and other one end with 4 core of shielded cable.	JXE00238	0.5M(±10MM)	
7		JXE00189	1M(±40MM)	
8		JXE00236	5M(±60MM)	
9		JXE00242	10M(±100MM)	
10	Extended NMEA 2000 cable, with male and female connector for 52mm Sea N series gauge.	JXE00239	0.5M(±10MM)	
11		JXE00190	1M(±40MM)	
12		JXE00257	5M(±60MM)	
13		JXE00243	10M(±100MM)	
14	NMEA 2000 cable , two end with female connector.	JXE00237	0.5M(±10MM)	
15		JXE00191	1M(±40MM)	
16	T Backbone connector 90 degre	JXE00195	39.3mm*20mm	
17	T Backbone connector 180 degree	JXE00192	55.8mm*20mm	
18	Male Terminal resistors	JXE00193	Ø12*44.4mm	
19	Female Terminal resistors	JXE00194	Ø12*43.3mm	



NKC42/NKC43 Universal Analog Convertor

- NKC series attaches directly into J1939 and NMEA 2000 networks of compatible engines, transmissions, and gen-sets and converts the resistance signals to the NMEA 2000 or J1939 CAN bus data.
- IP67 Waterproof standard.
- J1939 & NMEA 2000 output for use with other onboard device.
- NKC series can be used to get engine data, tank levels, alarm status, generic pressure and temperature indications from any resistive sensors.

Product Name	NKC42 4 Channels Convertor	NKC43 Convertor	NKC42-6 Convertor
Item No.	JKE00233	1 Channel JX200066(0-190 ohm) 1 Channel JX200067(240-30 ohm)	JMC00008
Dimension	NKC42 90*40*25mm	NKC43 70*Ø27mm	NKC 93*42*25/90*40*25mm
Protection Rating	IP67		
Signal Output	NMEA 2000 / J1939 Network Messages		
Operating Voltage	8~32V		9~16V
Connector	Male "Micro-C" Pinout		
Operation Temperature	-40°F ~ +185°F (-40°C~+85°C)		-31°F ~ +167°F (-30°C~+75°C)
Max Current	50mA		

NJ/JN Gateway

NJ gateway can be used to convert the engine speed, oil pressure, temperature and voltage data in NMEA 2000 network into the corresponding information in J1939 network JN gateway is used for converting the engine speed, oil pressure, temperature and voltage data in J1939 network into the corresponding information in NMEA 2000 network.

Dimension	93.8 x 39.6 x 32.3 mm
Product Name	JN/JX200068(J1939-NMEA 2000) NJ/JX200069 (NMEA 2000-J1939)
Weight	76g
Operating Voltage	9~16V
Power Consumption	<50mA
Load Equivalence Number(Len)	1
Operating Temperature	-30~+75°C
Storage Temperature	-40~+80°C
Protection Rating	IP65



Set Up Tool



Art. No.: JX200021
KUS Sea N series gauges and level sensors have several configurable parameters, which are shown below including the default values. If you are not using the default values, you will need to use the set up tool to configuring gauge and level sensor.

Gauge

- Fuel Level Meter/Water Level Meter/Holding Tank Meter.
Tank Number(instance) - Default is tank 0.
The Gauge supports up to sixteen tanks(0~15).
- Coolant Temp. Meter/Oil Pressure Meter.
Engine Number(instance) - Default is engine 0.
The Gauge supports up to sixteen engines (0~15).

Sensor

- Tank Type-Default is Fuel. You can reconfigure the sensor for any of these tank types, such as Fuel, Fresh Water, Waste Water, Live Well, Oil, Black Water.
- Tank Number(instance)-Default is tank 0. The sensor supports up to sixteen tanks(0~15) for a given type of tank.
- Tank Capacity-Default is No tank Capacity Transmitted.

GPS receiver

GPS receiver receives the satellite signal and provide high-precision real-time location information to NMEA 2000 and J1939 network.

NMEA 2000	JKE00169
J1939	JKE00229





The NGW is one type of Plug and Play Bluetooth NMEA 2000™ gateway.

The NMEA 2000 Wi-Fi Gateway can send the real-time engine usage data by Bluetooth, all data can then be transferred to an App that can view all data from a NMEA 2000 marine digital network on Android device, such as PC or smart phone.

With it, you get marine network data including Fuel/water tank level, engine data, voltage, vessel course, speed, position, wind speed and direction, water depth and etc. from vessels and aircrafts and other navigation data in popular software applications.

Features

- ◆ Built-in Blue tooth, easy installation, with the standard Micro-connector;
- ◆ Simple to use, Plug and Play without any other devices;
- ◆ Customized data, to send the needed data to the user;
- ◆ Wi-Fi or Bluetooth transfer way can be personalized;
- ◆ Compatible with Smart Phones, Pad in Android system.

Specification

- ◆ Model: NGW
- ◆ Art No.: JX200065
- ◆ Dimension: 60x40x20 mm
- ◆ Material: Plastic
- ◆ Power Supply: 9~16V
- ◆ Power Current: 45mA
- ◆ Installation Way: Micro-C
- ◆ Waterproof standard: IP67

Sea V series



Features:

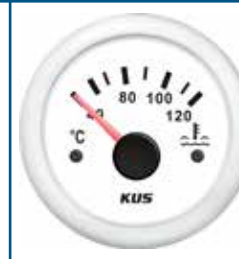
- IP67 protection rating for the entire gauge; can work up to 1m underwater;
- Double layer reinforced anti-fogging glass;
- 316 Stainless steel bezel with convex glass;
- Easy installation with multi-plug socket connection design;
- Selection of red or yellow backlight;
- Default working voltage: 12V
 - Compatible also with 24V for stepping motor and LCD type gauges;
 - Require an extra resistor to work with 24V for cross coil type gauge.

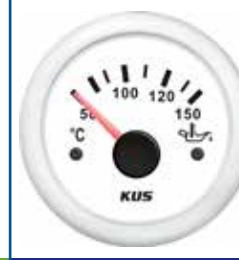
FUEL LEVEL										
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension			
KY10005	CPFR-BS-0-190	0~190Ω		SS 316	Empty-Full	12V/24V	Φ52mm			
KY10004	CPFR-BS-240-33	240~33Ω								
KY10100	CPFR-WS-0-190	0~190Ω								
KY10101	CPFR-WS-240-33	240~33Ω								
KY10002	CPFR-BN-0-190	0~190Ω		SS 316 in black						
KY10003	CPFR-BN-240-33	240~33Ω		plastic in black						
KY10200	CPFR-BB-0-190	0~190Ω								
KY10201	CPFR-BB-240-33	240~33Ω		plastic in white						
KY10300	CPFR-WW-0-190	0~190Ω								
KY10301	CPFR-WW-240-33	240~33Ω								

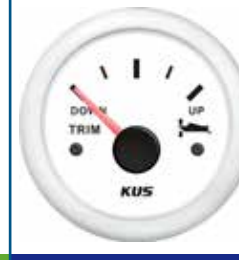
WATER LEVEL							
Art. No.	Model	Signal	Picture Indicating	Bezel	Indicating Range	Working Voltage	Installation Dimension
KY11004	CPWR-BS-0-190	0~190Ω		SS 316	Empty-Full	12V/24V	Φ52mm
KY11001	CPWR-BS-240-33	240~33Ω					
KY11100	CPWR-WS-0-190	0~190Ω					
KY11101	CPWR-WS-240-33	240~33Ω					
KY11002	CPWR-BN-0-190	0~190Ω		SS 316 in black			
KY11003	CPWR-BN-240-33	240~33Ω					
KY11200	CPWR-BB-0-190	0~190Ω		plastic in black			
KY11201	CPWR-BB-240-33	240~33Ω					
KY11300	CPWR-WW-0-190	0~190Ω		plastic in white			
KY11301	CPWR-WW-240-33	240~33Ω					



VOLTMETER							
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KY13000	CPVR-BS-8-16	8~16V		SS 316	8~16V	12V	Φ52mm
KY13100	CPVR-WS-8-16			SS 316 in black			
KY13013	CPVR-BN-8-16			plastic in black			
KY13200	CPVR-BB-8-16			plastic in white			
KY13304	CPVR-WW-8-16						
KY13001	CPVR-BS-18-32	18~32V		SS 316	18~32V	24V	
KY13101	CPVR-WS-18-32			SS 316 in black			
KY13012	CPVR-BN-18-32			plastic in black			
KY13201	CPVR-BB-18-32			plastic in white			
KY13305	CPVR-WW-18-32						

WATER TEMP.							
							
							
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KY14004	CPTR-BS-40-120	Matched with KUS temperature sensor		SS 316	40~120°C	12V/24V	Φ52mm
KY14100	CPTR-WS-40-120						
KY14002	CPTR-BN-40-120			SS 316 in black			
KY14200	CPTR-BB-40-120			plastic in black			
KY14304	CPTR-WW-40-120			plastic in white			

OIL TEMP.							
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KY14005	CPYR-BS-50-150	Matched with KUS temperature sensor		SS 316	50~150°C	12V/24V	Φ52mm
KY14102	CPYR-WS-50-150						
KY14000	CPYR-BN-50-150			SS 316 in black			
KY14202	CPYR-BB-50-150			plastic in black			
KY14305	CPYR-WW-50-150			plastic in white			

TRIM							
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KY09205	CPIR-BS-0-190	0~190Ω		SS 316	DOWN-UP	12V/24V	Φ52mm
KY09103	CPIR-WS-0-190						
KY09204	CPIR-BN-0-190			SS 316 in black			
KY09206	CPIR-BB-0-190			plastic in black			
KY09207	CPIR-WW-0-190			plastic in white			

TRIM										
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension			
KY09028	CPIR-BS-0-190	0~190Ω		SS 316	UP-DOWN	12V/24V	Φ52mm			
KY09115	CPIR-WS-0-190									
KY09116	CPIR-BN-0-190			SS 316 in black						
KY09220	CPIR-BB-0-190			plastic in black						
KY09312	CPIR-WW-0-190			plastic in white						
KY09043	CPIR-BS-160-10	160~10Ω * To match with mercury or force engine.		SS 316	UP-DOWN	12V/24V	Φ52mm			
KY09123	CPIR-WS-160-10									
KY09044	CPIR-BN-160-10			SS 316 in black						
KY09228	CPIR-BB-160-10			plastic in black						
KY09314	CPIR-WW-160-10			plastic in white						



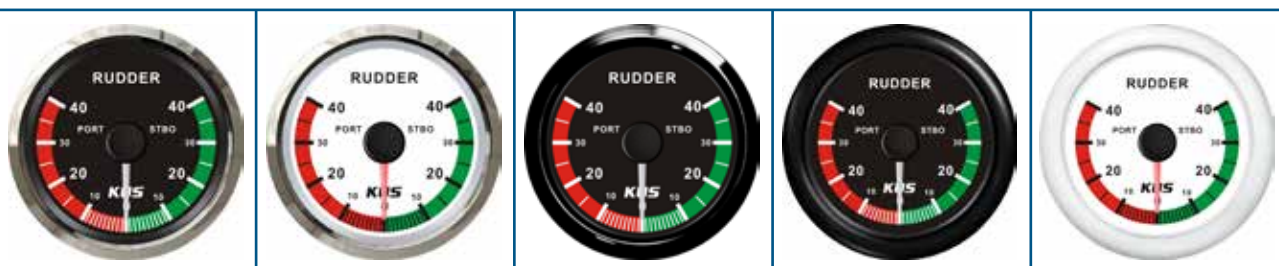
OIL PRESSURE											
Art. No.	Model	Signal	Picture Indicating	Bezel		Display Range	Working Voltage	Installation Dimension			
KY15000	CPPR-BS-0-5	10~184Ω		SS 316		0~5Bar	12V/24V	Φ52mm			
KY15100	CPPR-WS-0-5			SS 316 in black							
KY15001	CPPR-BN-0-5			plastic in black							
KY15201	CPPR-BB-0-5			plastic in white							
KY15300	CPPR-WW-0-5			plastic in black							
KY15006	CPPR-BS-0-10			SS 316		0~10Bar					
KY15103	CPPR-WS-0-10			SS 316 in black							
KY15008	CPPR-BN-0-10			plastic in black							
KY15202	CPPR-BB-0-10			plastic in white							
KY15303	CPPR-WW-0-10			plastic in black							

HOLDING TANK								
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KY12002	CPGR-BS-0-190	0~190Ω		SS 316	LOW-FULL	12V/24V	Φ52mm	
KY12102	CPGR-WS-0-190							
KY12003	CPGR-BN-0-190							SS 316 in black
KY12202	CPGR-BB-0-190							plastic in black
KY12302	CPGR-WW-0-190							plastic in white
KY12000	CPGR-BS-240-33	240~33Ω		SS 316				
KY12100	CPGR-WS-240-33							
KY12001	CPGR-BN-240-33							SS 316 in black
KY12200	CPGR-BB-240-33							plastic in black
KY12300	CPGR-WW-240-33							plastic in white

RUDDER ANGLE									
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension	
	KY09002	CMRR-BS-87-900	87~900Ω, Matched with JSM4480 rudder angle sensor.		SS 316	R-L	12V/24V	Φ52mm	
	KY09102	CMRR-WS-87-900							
	KY09004	CMRR-BN-87-900							SS 316 in black
	KY09201	CMRR-BB-87-900							plastic in black
	KY09305	CMRR-WW-87-900							plastic in white
	KY09011	CMRR-BS-0-190	0~190Ω, Matched with KE41000 rudder angle sensor.		SS 316				
	KY09106	CMRR-WS-0-190							
	KY09018	CMRR-BN-0-190							SS 316 in black
	KY09209	CMRR-BB-0-190							plastic in black
	KY09309	CMRR-WW-0-190							plastic in white



NEW
RUDDER
ANGLE



Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
JMV00842	CMRR-BS-0-190	0~190Ω, Matched with KE41000 rudder angle sensor.		SS 316	R-L	12V/24V	Φ52mm
JMV00843	CMRR-WS-0-190						
JMV00844	CMRR-BN-0-190			SS 316 in black			
JMV00845	CMRR-BB-0-190			plastic in black			
JMV00846	CMRR-WW-0-190			plastic in white			

AMMETER



Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KY06007	CMAR-BS±50	Matched with KUS 50A current shunt unit		SS 316	±50 A	12V/24V	Φ52mm
KY06103	CMAR-WS±50						
KY06008	CMAR-BN±50			SS 316 in black			
KY06201	CMAR-BB±50			plastic in black			
KY06301	CMAR-WW±50			plastic in white			
KY06005	CMAR-BS±80	Matched with KUS 100A current shunt unit		SS 316	±80 A		
KY06102	CMAR-WS±80						
KY06009	CMAR-BN±80			SS 316 in black			
KY06200	CMAR-BB±80			plastic in black			
KY06300	CMAR-WW±80			plastic in white			
KY06010	CMAR-BS±150	Matched with KUS 150A current shunt unit		SS 316	±150 A		
KY06101	CMAR-WS±150						
KY06011	CMAR-BN±150			SS 316 in black			
KY06203	CMAR-BB±150			plastic in black			
KY06302	CMAR-WW±150			plastic in white			

CURRENT SHUNT UNIT



* The ammeter works exceptionally well with KUS current shunt unit.

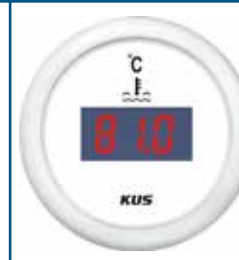
* The working voltage of KUS current shunt unit is 8~32VDC, which is compatible with most of the ammeters.

* With Hall current testing method, KUS current shunt unit features long service life and accurate output. It also has the function of charge-discharge detection.

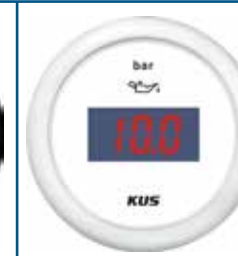
CLOCK								
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
	KY09000	CMCR-BS-12	N/A		SS 316	12-hour format	12V/24V	Φ52mm
	KY09100	CMCR-WS-12						
	KY09003	CMCR-BN-12			SS 316 in black			
	KY09202	CMCR-BB-12			plastic in black			
KY09304	CMCR-WW-12			plastic in white				

* Red backlight only

DIGITAL VOLTMETER										
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension		
	KY23000	CEVR-BS-9-32	9~32V		SS 316	9~32V	12V/24V	Φ52mm		
	KY23100	CEVR-WS-9-32								
	KY23001	CEVR-BN-9-32			SS 316 in black					
	KY23200	CEVR-BB-9-32			plastic in black					
KY23303	CEVR-WW-9-32			plastic in white						

DIGITAL WATER TEMP.										
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension		
	KY24000	CETR-BS-25-120	Matched with KUS temperature sensor		SS 316	25~120°C	12V/24V	Φ52mm		
	KY24100	CETR-WS-25-120								
	KY24002	CETR-BN-25-120			SS 316 in black					
	KY24200	CETR-BB-25-120			plastic in black					
KY24300	CETR-WW-25-120			plastic in white						

DIGITAL AMMETER											
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension				
KY26004	CEAR-BS±50	Matched with KUS 50A current shunt unit		SS 316	±50A	12V/24V	Φ52mm				
KY26101	CEAR-WS±50										
KY26000	CEAR-BN±50							SS 316 in black			
KY26200	CEAR-BB±50							plastic in black			
KY26300	CEAR-WW±50							plastic in white			
KY26001	CEAR-BS±80	Matched with KUS 100A current shunt unit		SS 316	±80A						
KY26102	CEAR-WS±80										
KY26003	CEAR-BN±80							SS 316 in black			
KY26201	CEAR-BB±80							plastic in black			
KY26301	CEAR-WW±80							plastic in white			
KY26002	CEAR-BS±150	Matched with KUS 150A current shunt unit		SS 316	±150A						
KY26103	CEAR-WS±150										
KY26005	CEAR-BN±150							SS 316 in black			
KY26202	CEAR-BB±150							plastic in black			
KY26302	CEAR-WW±150							plastic in white			

DIGITAL OIL PRESSURE								
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension	
KY15042	CEPR-BS-0-5	10~184Ω		SS 316	0~5Bar	12V/24V	Φ52mm	
KY15115	CEPR-WS-0-5							SS 316 in black
KY15043	CEPR-BN-0-5			plastic in black				
KY15021	CEPR-BB-0-5							
KY15308	CEPR-WW-0-5							
KY15012	CEPR-BS-0-10	10~184Ω		SS 316	0~10Bar			
KY15015	CEPR-WS-0-10							SS 316 in black
KY15035	CEPR-BN-0-10			plastic in black				
KY15022	CEPR-BB-0-10							
KY15307	CEPR-WW-0-10							

DIGITAL FUEL LEVEL										
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension		
KY20001	CEFR-BS-0-190	0~190Ω		SS 316	0~100%	12V/24V	Φ52mm			
KY20101	CEFR-WS-0-190									
JMV00352	CEFR-BN-0-190			SS 316 in black						
KY22001	CEFR-BB-0-190			plastic in black						
JMV00353	CEFR-WW-0-190			plastic in white						
KY20006	CEFR-BS-240-33	240~33Ω		SS 316						
KY10116	CEFR-WS-240-33							SS 316 in black		
JMV00354	CEFR-BN-240-33			SS 316 in black						
KY10214	CEFR-BB-240-33			plastic in black						
JMV00355	CEFR-WW-240-33			plastic in white						



HOURMETER										
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension		
KY39000	CCUR-BS	N/A		SS 316	0~99999	12V/24V	Φ52mm			
KY39202	CCUR-WS									
KY39001	CCUR-BN			SS 316 in black						
KY39201	CCUR-BB			plastic in black						
KY39200	CCUR-WW			plastic in white						

DIGITAL 3 IN 1 MULTIFUNCTION								
								
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension	
JMV00860	CP3-WGV-BS	as below		SS 316	as below	9-32V	Φ52mm	
JMV00861	CP3-WGV-WS							
JMV00862	CP3-WGV-BN			SS 316 in black				
JMV00863	CP3-WGV-BB			plastic in black				
JMV00864	CP3-WGV-WW			plastic in white				
Signal		0~190Ω for water level 0~190Ω for black water level 9~32V voltage meter Available for customized.			Display Range	water level: 0%~100% black water level: 0%~100% Voltmeter : 9.0~32.0V		



DIGITAL GPS SPEEDOMETER							
							
							
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KY08041	CCSR-BS	GPS		SS 316	0-999Km/h	12V/24V	Φ52mm
KY08120	CCSR-WS						
KY08056	CCSR-BN			SS 316 in black			
KY08217	CCSR-BB			plastic in black			
KY08309	CCSR-WW			plastic in white			
			* This Speedo has the function of mileage accumulation (Maximum 99999 Km), and data can be saved even the gauge is power down. * 5 meters long GPS antenna is included in the package, so it's no need to order it separately. * Red background light only.				

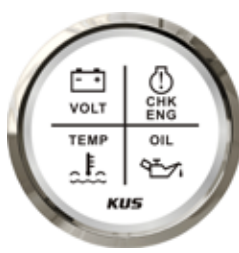
8 LED WATER LEVEL GAUGE							
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KY11021	CDWR-BS-240-33	240~33 Ω		SS 316	Empty-Full	12V/24V	Φ52mm
KY11113	CDWR-WS-240-33			SS 316			
KY11114	CDWR-BN-240-33			SS 316 in black			
KY11207	CDWR-BB-240-33			plastic in black			
KY11305	CDWR-WW-240-33			plastic in white			

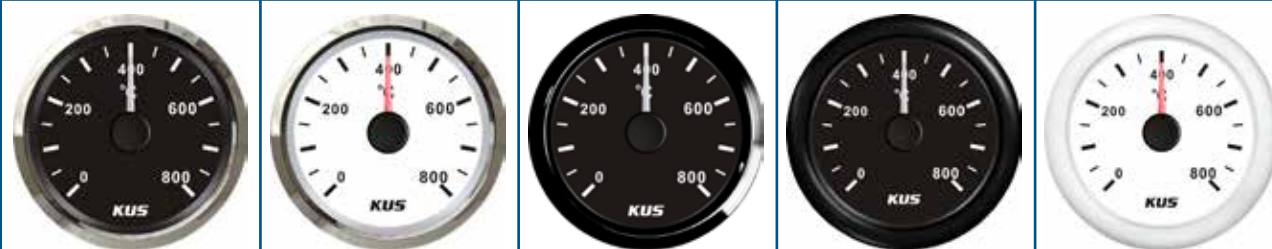
8 LED FUEL LEVEL GAUGE							
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KY10034	CDFR-BS-240-33	240~33 Ω		SS 316	Empty-Full	12V/24V	Φ52mm
KY10118	CDFR-WS-240-33			SS 316			
KY10036	CDFR-BN-240-33			SS 316 in black			
KY10216	CDFR-BB-240-33			plastic in black			
KY10309	CDFR-WW-240-33			plastic in white			

8 LED HOLDING TANK GAUGE							
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KY12015	CDGR-BS-240-33	240~33 Ω		SS 316	Low-Full	12V/24V	Φ52mm
KY12108	CDGR-WS-240-33			SS 316			
KY12018	CDGR-BN-240-33			SS 316 in black			
KY12204	CDGR-BB-240-33			plastic in black			
KY12304	CDGR-WW-240-33			plastic in white			

NAVIGATION INDICATOR										
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension		
	KY99304	CONR-BS-5LED	Matched with KUS controller		SS 316	N/A	12V/24V	Φ52mm		
	KY99501	CONR-WS-5LED								
	KY99303	CONR-BN-5LED			SS 316 in black					
	KY99202	CONR-BB-5LED			plastic in black					
KY99403	CONR-WW-5LED			plastic in white						

3 LED ALARM INDICATOR										
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension		
	KY99300	SSS-PAN-3LED-BS	Switch Signal		SS 316	FULL-HIGH-ON	12V/24V	Φ52mm		
	KY99402	SSS-PAN-3LED-WS								
	KY99302	SSS-PAN-3LED-BN			SS 316 in black					
	KY99200	SSS-PAN-3LED-BB			plastic in black					
KY99400	SSS-PAN-3LED-WW			plastic in white						

4 LED ALARM GAUGE							
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KY79002	CDQR-BS	Switch Signal		SS 316	N/A	12V/24V	Φ52mm
KY79103	CDQR-WS						
KY79004	CDQR-BN			SS 316 in black			
KY79202	CDQR-BB			plastic in black			
KY79303	CDQR-WW			plastic in white			

EXHAUST TEMP. METER								
								
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension	
JMV00172	CMTR-BS-0-800	0~33.277 MV		SS 316	0-800	12V/24V	Φ52mm	
JMV00173	CMTR-WS-0-800							
JMV00342	CMTR-BN-0-800							SS 316 in black
KY09214	CMTR-BB-0-800							plastic in black
KY09308	CMTR-WW-0-800							plastic in white
JMV00385	CMTR-BS-0-200			SS 316	0-200			
JMV00386	CMTR-WS-0-200							
JMV00387	CMTR-BN-0-200							SS 316 in black
JMV00388	CMTR-BB-0-200							plastic in black
JMV00389	CMTR-WW-0-200							plastic in white

Exhaust Temperature Sensor			
	Used for sensing high temperatures such as exhaust gas. Standard K Type signal and ungrounded for use in both marine and automotive applications.		Art. No.: 150210
	Art. No.: JYE0207 Range: 0 - 800°C Main material: SS316 With 5M sheathed wire Thread: PT 3/8" Form ungrounded		Range: 0 - 200°C Main material: SS316 With 3.5M sheathed wire Thread: PT 3/8" Form ungrounded

TACHOMETER with 4 LED ALARM							
							
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KY07046	CMHB-BS-7KL	1.0-10.0		SS 316	0~7000RPM	12V/24V	Φ85mm
KY07123	CMHB-WS-7KL						
KY07047	CMHB-BN-7KL			SS 316 in black			
KY07213	CMHB-BB-7KL			plastic in black			
KY07312	CMHB-WW-7KL			plastic in white			
* The light alarms including CHK ENG, Low Pressure, Low Fuel, Temperature.							
							

TACHOMETER



Art. No.	Model	Speed Ratio	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension	
KY07025	CMHB-BS-3KL	1.0~10.0		SS 316	0~3000rpm	12V/24V	Φ85mm	
KY07116	CMHB-WS-3KL							
KY07026	CMHB-BN-3KL							SS 316 in black
KY07208	CMHB-BB-3KL			plastic in black				
KY07310	CMHB-WW-3KL			plastic in white				
KY07008	CMHB-BS-4KL			SS 316	0~4000rpm			
KY07105	CMHB-WS-4KL							
KY07027	CMHB-BN-4KL							SS 316 in black
KY07204	CMHB-BB-4KL			plastic in black				
KY07306	CMHB-WW-4KL			plastic in white				
KY07009	CMHB-BS-6KL			SS 316	0~6000rpm			
KY07106	CMHB-WS-6KL							
KY07028	CMHB-BN-6KL							SS 316 in black
KY07205	CMHB-BB-6KL			plastic in black				
KY07307	CMHB-WW-6KL			plastic in white				
KY07010	CMHB-BS-8KL			SS 316	0~8000rpm			
KY07107	CMHB-WS-8KL							
KY07029	CMHB-BN-8KL							SS 316 in black
KY07206	CMHB-BB-8KL		plastic in black					
KY07308	CMHB-WW-8KL		plastic in white					
KY07005	CMHB-BS-3KL	0.5~250		SS 316	0~3000rpm			
KY07111	CMHB-WS-3KL							
KY07014	CMHB-BN-3KL					SS 316 in black		
KY07209	CMHB-BB-3KL			plastic in black				
KY07309	CMHB-WW-3KL			plastic in white				
KY07043	CMHB-BS-4KL			SS 316	0~4000rpm			
KY07102	CMHB-WS-4KL							
KY07015	CMHB-BN-4KL					SS 316 in black		
KY07202	CMHB-BB-4KL			plastic in black				
KY07303	CMHB-WW-4KL			plastic in white				
KY07000	CMHB-BS-6KL			SS 316	0~6000rpm			
KY07101	CMHB-WS-6KL							
KY07016	CMHB-BN-6KL					SS 316 in black		
KY07200	CMHB-BB-6KL			plastic in black				
KY07302	CMHB-WW-6KL			plastic in white				
KY07003	CMHB-BS-8KL			SS 316	0~8000rpm			
KY07103	CMHB-WS-8KL							
KY07017	CMHB-BN-8KL					SS 316 in black		
KY07203	CMHB-BB-8KL		plastic in black					
KY07304	CMHB-WW-8KL		plastic in white					



* Note : The speed ratio is adjustable. Alternative ratio range is 1.0~10.0

* Note : The speed ratio is adjustable. Alternative ratio range is 0.5~250.0.



* Note : The speed ratio is adjustable. Alternative ratio range is 1.0~10.0

* Note : The speed ratio is adjustable. Alternative ratio range is 0.5~250.0.

DIGITAL TACHOMETER									
Art. No.	Model	Speed Ratio	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension		
JMV00558	CCHB-BS	1.0~10.0		SS 316	0~8000rpm	12V/24V	Φ85mm		
JMV00559	CCHB-WS								
JMV00557	CCHB-BN			SS 316 in black					
JMV00556	CCHB-BB			plastic in black					
JMV00555	CCHB-WW			plastic in white					
* Note : The speed ratio is adjustable. Alternative ratio range is 1.0~10.0.									
JMV00544	CCHB-BS	0.5-250.0		SS 316	0~8000rpm				
JMV00545	CCHB-WS								
JMV00543	CCHB-BN			SS 316 in black					
JMV00542	CCHB-BB			plastic in black					
JMV00541	CCHB-WW			plastic in white					
* Note : The speed ratio is adjustable. Alternative ratio range is 0.5~250.0.									



SPEEDOMETER							
							
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KY18003	CPOB-BS-35	Pitot tube provides pressure signals		SS 316	0~35MPH	12V/24V	Φ85mm
KY18102	CPOB-WS-35						
KY18010	CPOB-BN-35			SS 316 in black			
KY18204	CPOB-BB-35			plastic in black			
KY18304	CPOB-WW-35			plastic in white			
KY18002	CPOB-BS-55			SS 316	0~55MPH		
KY18101	CPOB-WS-55						
KY18011	CPOB-BN-55			SS 316 in black			
KY18203	CPOB-BB-55			plastic in black			
KY18303	CPOB-WW-55			plastic in white			
KY18004	CPOB-BS-65			SS 316	0~65MPH		
KY18103	CPOB-WS-65						
KY18009	CPOB-BN-65			SS 316 in black			
KY18206	CPOB-BB-65			plastic in black			
KY18306	CPOB-WW-65			plastic in white			
							
* Pitot tube need ordered separately. Art. No. : JYM1060  Art. No. : JKE00284							

SPEEDOMETER



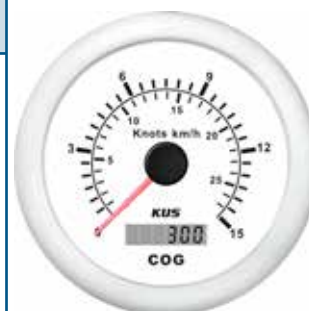



Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension	
KY08000	CMOB-BS-120L	Normal impulse		SS 316	0~120km/h	12V/24V	Φ85mm	
KY08100	CMOB-WS-120L							
KY08001	CMOB-BN-120L			SS 316 in black				
KY08200	CMOB-BB-120L			plastic in black				
KY08302	CMOB-WW-120L			plastic in white	0~200km/h			
KY08015	CMOB-BS-200L			SS 316				
KY08107	CMOB-WS-200L							
KY08016	CMOB-BN-200L			SS 316 in black				
KY08209	CMOB-BB-200L			plastic in black				
KY08306	CMOB-WW-200L			plastic in white				





Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KY08017	CMSB-BS-15L	GPS		SS 316	0~15Knots	12V/24V	Φ85mm
KY08108	CMSB-WS-15L						
KY08018	CMSB-BN-15L			SS 316 in black			
KY08215	CMSB-BB-15L			plastic in black			
KY08307	CMSB-WW-15L			plastic in white			
KY08009	CMSB-BS-30L			SS 316	0~30Knots		
KY08105	CMSB-WS-30L						
KY08019	CMSB-BN-30L			SS 316 in black			
KY08210	CMSB-BB-30L			plastic in black			
KY08303	CMSB-WW-30L			plastic in white			
KY08011	CMSB-BS-60L			SS 316	0~60Knots		
KY08103	CMSB-WS-60L						
KY08020	CMSB-BN-60L			SS 316 in black			
KY08211	CMSB-BB-60L			plastic in black			
KY08304	CMSB-WW-60L			plastic in white			



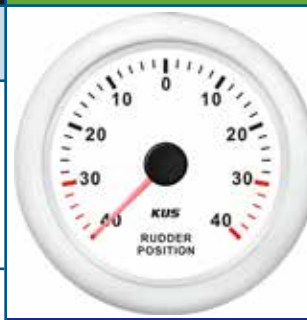
* 5 meters long GPS antenna is included in the package, so it's no need to order it separately.

Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension		
JMV00369	CMSB-BS-15L	GPS		SS 316	0~15Knots	12V/24V	Φ85mm	* With built-in GPS antenna.	
JMV00370	CMSB-WS-15L								
JMV00371	CMSB-BN-15L								SS 316 in black
JMV00372	CMSB-BB-15L								plastic in black
JMV00373	CMSB-WW-15L			plastic in white					
JMV00374	CMSB-BS-30L			SS 316	0~30Knots				
JMV00375	CMSB-WS-30L								
JMV00376	CMSB-BN-30L								SS 316 in black
JMV00377	CMSB-BB-30L								plastic in black
JMV00378	CMSB-WW-30L			plastic in white					
JMV00379	CMSB-BS-60L			SS 316	0~60Knots				
JMV00380	CMSB-WS-60L								
JMV00381	CMSB-BN-60L								SS 316 in black
JMV00382	CMSB-BB-60L								plastic in black
JMV00383	CMSB-WW-60L			plastic in white					

* With built-in GPS antenna.

DIGITAL GPS SPEEDOMETER																	
Art. No.	Model	Remarks	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension										
KY08021	CCSB-BS	I		SS 316	0~999Knots	12V/24V	Φ85mm										
KY08109	CCSB-WS			SS 316													
KY08022	CCSB-BN			SS 316 in black													
KY08213	CCSB-BB			plastic in black													
KY08308	CCSB-WW			plastic in white													
KY08038	CCSB-BS	II		SS 316													
JMV00148	CCSB-WS			SS 316													
KY08047	CCSB-BN			SS 316 in black													
JMV00149	CCSB-BB			plastic in black													
JMV00150	CCSB-WW			plastic in white													
I : The gauge has the function of accumulating the mileage of a single time, all data will reset when power on or unit switches.																	
II : This Speedo has the function of mileage accumulation (Maximum 99999 Km), and data can be saved even the gauge is power down.																	
 * Note: Customers can choose between units displaying in km/h, knots, or mph. The unit mileage and position are integrated into the display. The accumulated data will be cleared to zero after power off, it also can be customized for keeping the history data. * 5 meters long GPS antenna is included in the package, so it's no need to order it separately.																	
Art. No.	Model	Remarks	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension										
JMV00359	CCSB-BS	III		SS 316	0~999Knots	12V/24V	Φ85mm										
JMV00360	CCSB-WS			SS 316													
JMV00361	CCSB-BN			SS 316 in black													
JMV00362	CCSB-BB			plastic in black													
JMV00363	CCSB-WW			plastic in white													
JMV00364	CCSB-BS	IV		SS 316													
JMV00365	CCSB-WS			SS 316													
JMV00366	CCSB-BN			SS 316 in black													
JMV00367	CCSB-BB			plastic in black													
JMV00368	CCSB-WW			plastic in white													
* With built-in GPS antenna.																	
III: The gauge has the function of accumulating the mileage of a single time, all data will reset when power on or unit switches.																	
IV: This Speedo had the function of mileage accumulation(Maximum 99999Km), and data can be saved even the gauge is power down.																	

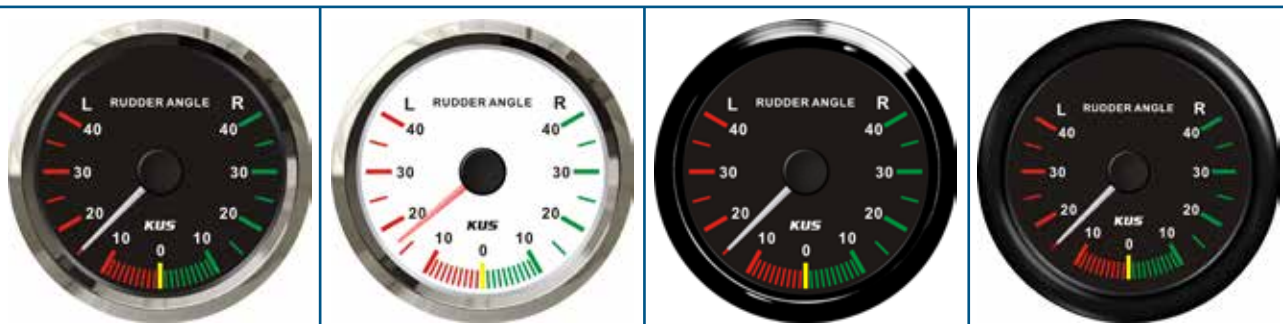
RUDDER ANGLE								
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension	
KY09009	CMRB-BS-0-190	0~190Ω		SS 316	R-L	12V/24V	Φ85mm	
KY09105	CMRB-WS-0-190			SS 316				
KY09017	CMRB-BN-0-190			SS 316 in black				
KY09215	CMRB-BB-0-190			plastic in black				
KY09311	CMRB-WW-0-190			plastic in white				
* The rudder angle with Signal 0-190Ω can be matched with KE41000,.								

RUDDER ANGLE								
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension	
KY09012	CMRB-BS-0-5K	0~5K		SS 316		12V/24V	Φ85mm	
JMV00390	CMRB-WS-0-5K			SS 316				
KY09014	CMRB-BN-0-5K			SS 316 in black				
JMV00391	CMRB-BB-0-5K			plastic in black				
KY09313	CMRB-WW-0-5K			plastic in white				
* The rudder angle with Signal 0-5K can be matched with KE41002.								

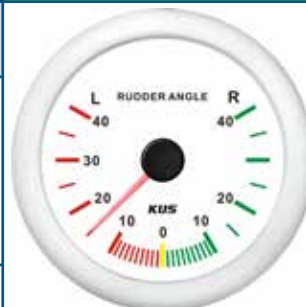


NEW

RUDDER
ANGLE



Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
JMV00847	CMRB-BS-0-190	0~190Ω, Matched with KE41000 rudder angle sensor.		SS 316	R-L	12V/24V	Φ85mm
JMV00848	CMRB-WS-0-190			SS 316			
JMV00849	CMRB-BN-0-190			SS 316 in black			
JMV00850	CMRB-BB-0-190			plastic in black			
JMV00851	CMRB-WW-0-190			plastic in white			



3 IN 1
MULTIFUNCTION



Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
JMV00233	CMQE-BS-3	0-180ohm for fuel level meter; 8-16V voltage meter 0-6000RPM tachometer		SS 316	Fuel level meter: empty-full Voltmeter: 8-16v, Tachometer: 0-6000rpm	12V/24V	Φ110mm
JMV00234	CMQE-WS-3						

4 IN 1 MULTIFUNCTION							
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
JMV00235	CMQE-BS-4	Input Signal : 240-33ohm for 0-10 bar oil pressure meter; 240-33ohm for fuel level meter; 8-16V voltage meter; Input Signal 328-22ohm for water temperature meter		SS 316	Oil press. meter: 0-80psi; Water temp. meter: 100-250F; Fuel level meter: empty-full; Voltmeter: 8-16v.	12V/24V	Φ110mm
JMV00236	CMQE-WS-4						

60MPH SPEEDOMETER							
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
JMV00237	CMSE-BS-60	GPS		SS 316	0-60MPH	12V/24V	Φ110mm
JMV00238	CMSE-WS-60						

0-6000 RPM TACHOMETER							
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
JMV00239	CMHE-BS-6KL	1.0-10.0		SS 316	0-6000 RPM	12V/24V	Φ110mm
JMV00240	CMHE-WS-6KL						

DIGITAL 4 IN 1 MULTIFUNCTION											
		Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension		
		KY79000	P4-VTPR-BS	as below		SS 316	as below	12V/24V	Φ85mm		
		KY79102	P4-VTPR-WS								
		JMV00356	P4-VTPR-BN			SS 316 in black					
JMV00357	P4-VTPR-BB		plastic in black								
JMV00358	P4-VTPR-WW		plastic in white								
Signal		Input Signal 301-23ohm for water temp. meter; Input Signal : 10-185ohm for oil pressure meter; 0-6000RPM tachometer. Speed Ratio : 0.5-250.0				Display Range	Voltmeter: 9-32V Water temp. meter: 40-120°C Oil pressure meter: 0-1mpa Tachometer: 0-6000rpm				

Gauge Accessories

Gauge Holder

Art. No.	Size	Material
JYA0061	52 mm	Alu.
JYA0062	85 mm	



GAUGE BEZEL(Plastic)

* The above bezels are only for plastic bezel gauge replacement, not applicable for the stainless steel bezel gauge.



Art. No.	Size	Color
160001	52 mm	White Plastic
160041	85 mm	
160000	52 mm	Black Plastic
160040	85 mm	
160003	52 mm	Golden Plastic
JYP1556	85 mm	
160002	52 mm	Sliver Plastic
160042	85 mm	

NEW

TACHOMETER



Art. No.	Model	HONDA Engine Number	Engine Stroke /Cylinder	Picture Indicating	Bezel	Display Range	Engine Maximum Speed	Working Voltage	Installation Dimension
JMV00852	ZMHB-WS-7KL	BF90/BF100/ BF115/BF150	2/2 4/4		SS 316	0~7000 rpm	5000-6000 rpm	12V/24V	Φ85mm
JMV00856	ZMHB-BN-7KL				SS 316 in black				
JMV00853	ZMHB-WS-7KL	BF20/BF15 BF9.9/BF8	4/2		SS 316				
JMV00857	ZMHB-BN-7KL				SS 316 in black				
JMV00854	ZMHB-WS-7KL	BF5/BF2	4/1		SS 316				
JMV00858	ZMHB-BN-7KL				SS 316 in black				



NEW

TRIM



Art. No.	Model	Resistance Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
JMV00855	ZMIR-WS-3.3-0.6	0.6-3.3v		SS 316	DOWN-UP	12V/24V	Φ52mm
JMV00859	ZMIR-BN-3.3-0.6			SS 316 in black			



Features:

- Front side has IP67 protection rating; back side has IP65 protection rating;
- Double layer reinforced anti-fogging glass;
- 316 Stainless steel bezel with convex glass;
- Quick and easy to install by terminal;
- Selection of red or yellow backlight, without connector cable;
- Connect directly without extra resistors for 12/24V working voltage.

FUEL LEVEL								
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KF10020	FPFR-BS-0-190	0~190Ω			SS 316	Empty-Full	12V/24V	Φ52mm
KF10022	FPFR-BS-240-33	240~33Ω						
KF10114	FPFR-WS-0-190	0~190Ω						
KF10115	FPFR-WS-240-33	240~33Ω						
KF10026	FPFR-BN-0-190	0~190Ω			SS 316 in black			
KF10027	FPFR-BN-240-33	240~33Ω						

WATER LEVEL							
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KF11015	FPWR-BS-0-190	0~190Ω		SS 316	Empty-Full	12V/24V	Φ52mm
KF11017	FPWR-BS-240-33	240~33Ω					
KF11110	FPWR-WS-0-190	0~190Ω					
KF11111	FPWR-WS-240-33	240~33Ω					
KF11016	FPWR-BN-0-190	0~190Ω		SS 316 in black			
KF11018	FPWR-BN-240-33	240~33Ω					

HOLDING TANK								
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension	
KF12010	FPGR-BS-0-190	0~190Ω		SS 316	LOW-FUL	12V/24V	Φ52mm	
KF12012	FPGR-BS-240-33	240~33Ω						
KF12106	FPGR-WS-0-190	0~190Ω						
KF12107	FPGR-WS-240-33	240~33Ω						
KF12011	FPGR-BN-0-190	0~190Ω		SS 316 in black				
KF12013	FPGR-BN-240-33	240~33Ω						

WATER TEMP.							
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KF14024	FPTR-BS-40-120	Matched with KUS temperature sensor		SS 316	40~120°C	12V/24V	Φ52mm
KF14107	FPTR-WS-40-120						
KF14025	FPTR-BN-40-120			SS 316 in black			

OIL TEMP.								
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
	KF14026	FPYR-BS-50-150	Matched with KUS temperature sensor		SS 316	50~150°C	12V/24V	Φ52mm
	KF14108	FPYR-WS-50-150						
	KF14027	FPYR-BN-50-150			SS 316 in black			

VOLTMETER							
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage
KF13017	FPVR-BS-8-16	8~16V		SS 316	8~16V	12V	Φ52mm
KF13107	FPVR-WS-8-16						
KF13018	FPVR-BN-8-16			SS 316 in black			
KF13016	FPVR-BS-18-32	18~32V		SS 316	18~32V	24V	
KF13108	FPVR-WS-18-32						
KF13019	FPVR-BN-18-32			SS 316 in black			

OIL PRESSURE							
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage
KF15036	FPPR-BS-0-5	10~184Ω		SS 316	0~5Bar	12V/24V	Φ52mm
KF15112	FPPR-WS-0-5						
KF15037	FPPR-BN-0-5			SS 316 in black			
KF15038	FPPR-BS-0-10			SS 316	0~10Bar		
KF15113	FPPR-WS-0-10						
KF15039	FPPR-BN-0-10			SS 316 in black			

RUDDER ANGLE							
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KF09019	FMRR-BS-87-900	87~900Ω, Matched with JSM4480 rudder angle sensor.		SS 316	R-L	12V/24V	Φ52mm
KF09110	FMRR-WS-87-900						
KF09020	FMRR-BN-87-900			SS 316 in black			
KF09021	FMRR-BS-0-190	0~190Ω, Matched with KE41000 rudder angle sensor.		SS 316			
KF09111	FMRR-WS-0-190						
KF09022	FMRR-BN-0-190			SS 316 in black			

* Installation: Customers can easily adjust the deviations caused by assembling or sensor signal difference.

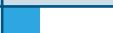
TRIM								
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
	KF09023	FPIR-BS-0-190	0~190Ω		SS 316	DOWN-UP	12V/24V	Φ52mm
	KF09113	FPIR-WS-0-190						
KF09024	FPIR-BN-0-190			SS 316 in black				

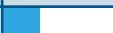
TRIM							
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage
KF09030	FPIR-BS-0-190	0~190Ω		SS 316	DOWN-UP	12V/24V	Φ52mm
KF09116	FPIR-WS-0-190						
KF09031	FPIR-BN-0-190			SS 316 in black			

DIGITAL VOLTMETER								
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
	KF23005	FEVR-BS-9-32	9~32V		SS 316	9~32V	12V/24V	Φ52mm
	KF23105	FEVR-WS-9-32						
KF23006	FEVR-BN-9-32			SS 316 in black				

DIGITAL WATER TEMP.									
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension	
	KF24006	FETR-BS-25-120	Matched with KUS temperature sensor		SS 316	25~120°C	12V/24V	Φ52mm	
	KF24101	FETR-WS-25-120							
KF24007	FETR-BN-25-120			SS 316 in black					

DIGITAL AMMETER									
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension		
KF26008	FEAR-BS±50	Matched with KUS current pick-up unit		SS 316	±50A	12V/24V	Φ52mm		
KF26105	FEAR-WS±50								
KF26009	FEAR-BN±50			SS 316 in black					
KF26010	FEAR-BS±80	Matched with KUS current pick-up unit		SS 316	±80A				
KF26106	FEAR-WS±80								
KF26011	FEAR-BN±80			SS 316 in black					
KF26006	FEAR-BS±150	Matched with KUS current pick-up unit		SS 316	±150A				
KF26104	FEAR-WS±150								
KF26007	FEAR-BN±150			SS 316 in black					

HOURMETER								
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
	KF39002	FCUR-BS	N/A		SS 316	0~99999	12V/24V	Φ52mm
	KF39101	FCUR-WS						
KF39003	FCUR-BN			SS 316 in black				

DIGITAL OIL PRESSURE							
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KF15044	FEPR-BS-0-5	10~184Ω		SS 316	0~5Bar	12V/24V	Φ52mm
KF15116	FEPR-WS-0-5						
KF15045	FEPR-BN-0-5			0~10Bar			
KF15040	FEPR-BS-0-10	10~184Ω			SS 316		
KF15114	FEPR-WS-0-10						
KF15041	FEPR-BN-0-10						

4 LED ALARM GAUGE							
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KF79003	FDQR-BS	Switch Signal		SS 316	N/A	12V/24V	Φ52mm
KF79104	FDQR-WS						
KF79005	FDQR-BN			SS 316 in black			

DIGITAL FUEL LEVEL							
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KF20005	FEFR-BS-0-190	0-190Ω		SS 316	0~100%	12V/24V	Φ52mm
JMQ00025	FEFR-WS-0-190			SS 316 in black			
JMQ00026	FEFR-BN-0-190			SS 316 in black			
JMQ00027	FEFR-BS-240-33	240-33Ω		SS 316			
JMQ00028	FEFR-WS-240-33			SS 316			
JMQ00029	FEFR-BN-240-33			SS 316 in black			



GPS SPEEDOMETER													
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension					
	KF08029	FMSB-BS-15L	GPS		SS 316	0~15Knots	12V	Φ85mm					
	KF08113	FMSB-WS-15L											
	KF08030	FMSB-BN-15L			SS 316 in black	0~30Knots							
	KF08031	FMSB-BS-30L			SS 316								
	KF08114	FMSB-WS-30L											
	KF08032	FMSB-BN-30L			SS 316 in black	0~60Knots							
	KF08033	FMSB-BS-60L			SS 316								
	KF08115	FMSB-WS-60L											
	KF08034	FMSB-BN-60L			SS 316 in black								
 * 5 meters long GPS antenna is included in the package, so it's no need to order it separately.													
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension						
JMQ00030	FMSB-BS-15L	GPS		SS 316	0~15Knots	12V	Φ85mm						
JMQ00031	FMSB-WS-15L												
JMQ00032	FMSB-BN-15L			SS 316 in black	0~30Knots								
JMQ00033	FMSB-BS-30L			SS 316									
JMQ00034	FMSB-WS-30L												
JMQ00035	FMSB-BN-30L			SS 316 in black	0~60Knots								
JMQ00036	FMSB-BS-60L			SS 316									
JMQ00037	FMSB-WS-60L												
JMQ00038	FMSB-BN-60L			SS 316 in black									
* With built-in GPS antenna.													



TACHOMETER							
Art. No.	Model	Speed Ratio	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KF07018	FMHB-BS-3KL	0.5~250.0		SS 316	0~3000rpm	12V/24V	Φ85mm
KF07112	FMHB-WS-3KL						
KF07019	FMHB-BN-3KL						
KF07020	FMHB-BS-4KL	0.5~250.0		SS 316	0~4000rpm		
KF07113	FMHB-WS-4KL						
KF07021	FMHB-BN-4KL						
KF07012	FMHB-BS-6KL	0.5~250.0		SS 316	0~6000rpm		
KF07114	FMHB-WS-6KL						
KF07022	FMHB-BN-6KL						
KF07023	FMHB-BS-8KL	0.5~250.0		SS 316	0~8000rpm		
KF07115	FMHB-WS-8KL						
KF07024	FMHB-BN-8KL						
* Note : The speed ratio is adjustable. Alternative ratio range is 0.5~250.0							
Art. No.	Model	Speed Ratio	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
JMQ00018	FMHB-BS-3KL	1.0~10.0		SS 316	0~3000rpm	12V/24V	Φ85mm
JMQ00019	FMHB-WS-3KL						
JMQ00020	FMHB-BN-3KL						
KF07033	FMHB-BS-4KL	1.0~10.0		SS 316	0~4000rpm		
JMQ00021	FMHB-WS-4KL						
JMQ00022	FMHB-BN-4KL						
KF07035	FMHB-BS-6KL	1.0~10.0		SS 316	0~6000rpm		
KF07118	FMHB-WS-6KL						
JMQ00023	FMHB-BN-6KL						
KF07037	FMHB-BS-8KL	1.0~10.0		SS 316	0~8000rpm		
KF07119	FMHB-WS-8KL						
JMQ00024	FMHB-BN-8KL						
* Note : The speed ratio is adjustable. Alternative ratio range is 1.0~10.0							



RUDDER ANGLE								
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
	JMQ00001	FMRB-BS-0-190	0~190Ω		SS 316	R-L	12V/24V	Φ85mm
	JMQ00002	FMRB-WS-0-190						
JMQ00003	FMRB-BN-0-190			SS 316 in black				

* The rudder angle can be matched with the KE41000 rudder angle sensor.

SPEEDOMETER (MPH+KMH)							
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KF18012	FPOB-BS-35	Pitot tube provides pressure signals		SS 316	0~35MPH	12V/24V	Φ85mm
KF18108	FPOB-WS-35						
KF18013	FPOB-BN-35			SS 316 in black			
KF18014	FPOB-BS-55			SS 316	0~55MPH		
KF18109	FPOB-WS-55						
KF18015	FPOB-BN-55			SS 316 in black			
KF18016	FPOB-BS-65			SS 316	0~65MPH		
KF18110	FPOB-WS-65						
KF18017	FPOB-BN-65			SS 316 in black			



Art. No. : JYM1060(White)/JKE00284(Black)

The pitot tube is to match with both SEAV series and SEAQ series speedometer. It's not included in the package, and need to order separately.

Gauge Panel series

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Premium Quality, Professional Choice.

The marine gauge panels were designed to meet customer needs. Its elegant and simple design allows easy assembly and convenient routine maintenance. Acousto-optic alarming, over current protection, and over voltage protection and other features are integrated in the gauge panel. The gauge panels' color, size, functions and working voltage of 12V or 24V can be customized.



P/N	Gauge Panel	
Art. No.	KY89915	KY89903
Working Voltage	12V	24V
Matching sensor	Magnetolectric Tacho Sensor : M16*1.5 Water temp. sensor: 90°C alarm, M16*1.5 Pressure sensor : 0-10bar, 0.8bar alarm NPT 1/8	
Installation Dimension	335*200*125mm	



P/N	Gauge Panel	
Art. No.	KY89912	
Working Voltage	24V	
Matching sensor	Magnetolectric Tacho Sensor : M16*1.5 Water temp. sensor: 90°C alarm, M16*1.5 Pressure sensor : 0-10bar, 0.8bar alarm NPT 1/8	
Installation Dimension	386*198*130mm	



P/N	Gauge Panel	
Art. No.	JMV00339	
Working Voltage	12V/24V	
Matching sensor	matched with CAN-BUS protocol	
Installation Dimension	270*170*70mm	



P/N	Gauge Panel	
Art. No.	KY89911	KY89910
Working Voltage	12V	24V
Matching sensor	Magnetolectric Tacho Sensor : M16*1.5 Water temp. sensor: 90°C alarm, M16*1.5 Pressure sensor : 0-10bar, 0.8bar alarm NPT 1/8	
Installation Dimension	243*196*130mm	



P/N	Gauge Panel	
Art. No.	KY89904	KY89905
Working Voltage	12V	24V
Matching sensor	Magnetolectric Tacho Sensor : M16*1.5 Water temp. sensor: 90°C alarm, M16*1.5 Pressure sensor : 0-10bar, 0.8bar alarm NPT 1/8	
Installation Dimension	335*200*125mm	



P/N	Gauge Panel	
Art. No.	KY89923	
Working Voltage	12V/24V	
Installation Dimension	250*190mm	



P/N	Gauge Panel	
Art. No.	KUS-3	
Working Voltage	12V	
Installation Dimension	190*75.5 mm	



P/N	Gauge Panel	
Art. No.	KY89924	
Working Voltage	12V/24V	
Installation Dimension	190*88 mm	



P/N	Indicator	
Art. No.	P2	
Working Voltage	12V	
Installation Dimension	100.5*79 mm	



Pole Holder

Art. No.	Spec.	Material
180040	length: 155mm	SS 316



Pole Holder

Art. No.	Spec.	Material
180041	length: 155mm	SS 316



Plastic Holder

Art. No.	Spec.	Material
180061	Packing Size:250*180mm Color: White	PP



Towel Clip

Art. No.	Spec.	Material
180034	Large size: 30mm Color: Blue	PP
180030	Large size: 30mm Color: Black	PP
180031	Large size: 30mm Color: White	PP



Pole Holder Clip

Art. No.	Spec.	Material
180080	Size: 28-32mm	POM+SS316





Premium Quality, Professional Choice.

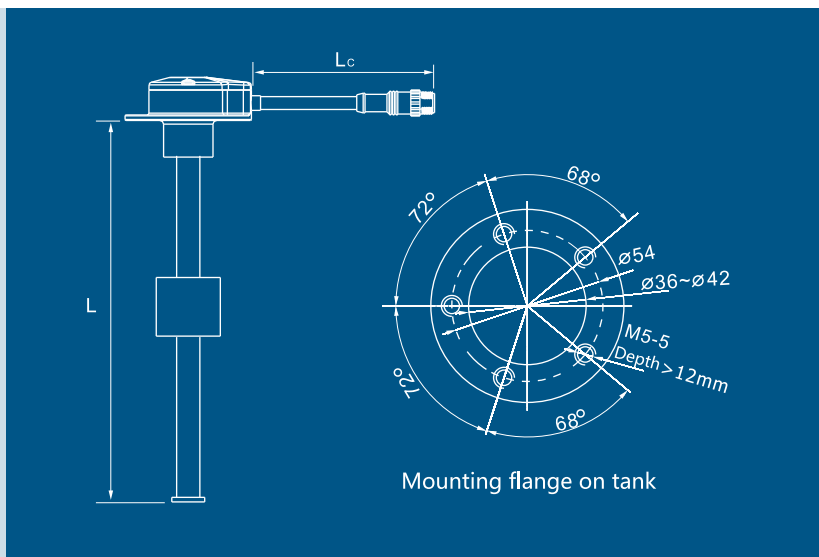


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Sensor series



NS5 series



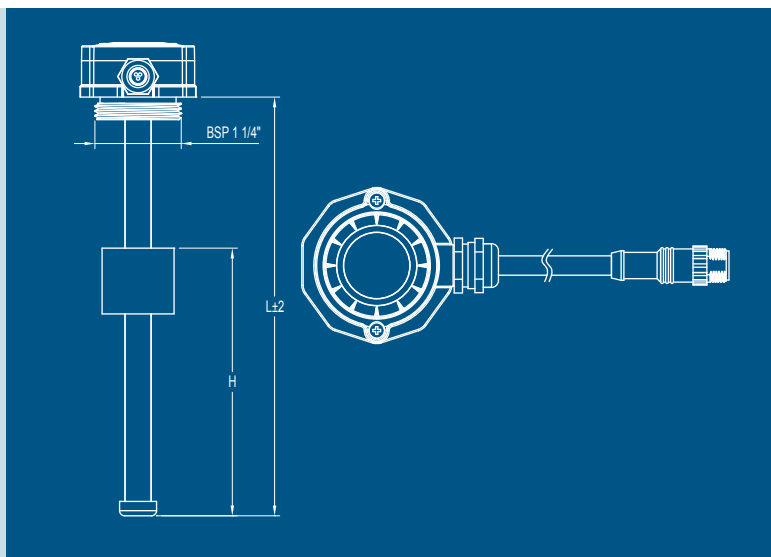
- ◆ **Material:** The main body is made of SS316 stainless steel
- ◆ **Length range:** 100 ~ 2000 mm. It also can be customized according to your requirements.
- ◆ **Mounting:** SAE standard 5 holes, other mounting methods available.
- ◆ **Accessories:**
 - 5 x M5 screws
 - 2 mm thick NBR gasket.
 If installing on a gas tank, we recommend the optional 2mm thick FPM gasket.
- ◆ **Protection rank:** IP67

- Utilizing magnetic field to control the reed on-off switch, the product features a long service life and protection against vibration.
- Rated power: 720mW
- Wire: PVC material (PA corrugated pipe cover is optional)
- Connector: Male "Micro-C" Pinout
- Output signal: NMEA 2000/J1939 network messages
- Resolution range: 10~40 mm
- Operating temperature: -30°C~+80°C

Art. No.	Product Name	Specification
JKS03922	NS5-150mm	Output Signal: NMEA2000 Network Messages Length of wire: 980mm Gasket: NBR Alarm: No Material: SS316 Working Voltage: 9-16V Logo: KUS
JKS03923	NS5-200mm	
JKS03924	NS5-225mm	
JKS03925	NS5-250mm	
JKS03926	NS5-275mm	
JKS03927	NS5-300mm	
JKS03928	NS5-350mm	
JKS03929	NS5-400mm	
JKS03930	NS5-450mm	
JKS03931	NS5-500mm	
JKS03932	NS5-550mm	
JKS03933	NS5-600mm	
JKS03934	NS5-650mm	
JKS03935	NS5-700mm	
JKS03936	NS5-750mm	
JKS03937	NS5-800mm	

Art. No.	Product Name	Specification
JKS02823	NS5-150mm	Output Signal: J1939 Network Messages Length of wire: 980mm Gasket: NBR Alarm: No Material: SS316 Working Voltage: 9-32V Logo: KUS
JKS02824	NS5-200mm	
JKS02825	NS5-225mm	
JKS02826	NS5-250mm	
JKS02827	NS5-275mm	
JKS02828	NS5-300mm	
JKS02829	NS5-350mm	
JKS02830	NS5-400mm	
JKS02831	NS5-450mm	
JKS02832	NS5-500mm	
JKS02833	NS5-550mm	
JKS02834	NS5-600mm	
JKS02835	NS5-650mm	
JKS02836	NS5-700mm	
JKS02837	NS5-750mm	
JKS02838	NS5-800mm	

NS3 series

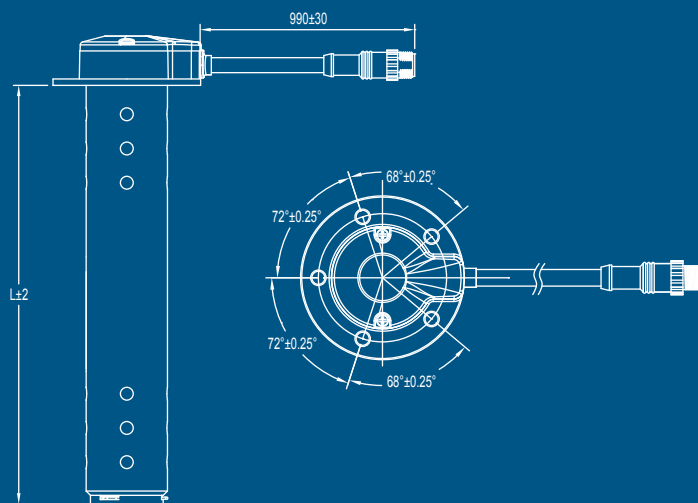


- ◆ **Material:**
The main body is made of SS316 stainless steel.
- ◆ **Length range:**
100~2000mm. It also can be customized according to your requirements.
- ◆ **Assembly:**
BSP 1 1/4" thread twist-in, or NPT thread twist-in. Various types of flanges are available for fitting fuel tank if necessary.
- ◆ **Mounting:**
-38mm x2.6mm O-ring
-43mm x3.5mm O-ring
- ◆ **Protection rank:** IP67
- Utilizing magnetic field to control the reed on-off switch, the product features a long service life and protection against vibration.
- Rated power: 720mW
- Wire: PVC material (PA corrugated pipe cover is optional)
- Connector: Male "Micro-C" Pinout
- Output signal: NMEA 2000/J1939 network messages
- Resolution range: 10~40 mm
- Operating temperature: -30°C~+80°C

Art. No.	Product Name	Specification
JKS02789	NS3-150mm	Output Signal: NMEA2000 Network Messages Length of wire: 980mm Gasket: NBR Alarm: No Material: SS316 Working Voltage: 9-16V Logo: KUS
JKS02790	NS3-200mm	
JKS02791	NS3-225mm	
JKS02792	NS3-250mm	
JKS02793	NS3-275mm	
JKS02794	NS3-300mm	
JKS02795	NS3-350mm	
JKS02796	NS3-400mm	
JKS02797	NS3-450mm	
JKS02798	NS3-500mm	
JKS02799	NS3-550mm	
JKS02800	NS3-600mm	
JKS02801	NS3-650mm	
JKS02802	NS3-700mm	
JKS02803	NS3-750mm	
JKS02804	NS3-800mm	

Art. No.	Product Name	Specification
JKS02839	NS3-150mm	Output Signal: J1939 Network Messages Length of wire: 980mm Gasket: NBR Alarm: No Material: SS316 Working Voltage: 9-32V Logo: KUS
JKS02840	NS3-200mm	
JKS02841	NS3-225mm	
JKS02842	NS3-250mm	
JKS02843	NS3-275mm	
JKS02844	NS3-300mm	
JKS02845	NS3-350mm	
JKS02846	NS3-400mm	
JKS02847	NS3-450mm	
JKS02848	NS3-500mm	
JKS02849	NS3-550mm	
JKS02850	NS3-600mm	
JKS02851	NS3-650mm	
JKS02852	NS3-700mm	
JKS02853	NS3-750mm	
JKS02854	NS3-800mm	

NS5H series



- ◆ Uses: Mainly used in black water or grey water tanks. Can also be used in fresh water tanks.
- ◆ Material:
The main body is made of SS316 stainless steel.
- ◆ Length range:
100~1500mm. It also can be customized according to your requirements.
- ◆ Using NPT thread to fix and seal the sensor and flange, with addition of Teflon tape belts to seal if necessary.
- ◆ Mounting:
SAE standard 5 holes, other mounting methods available.
- ◆ Protection rank: IP67

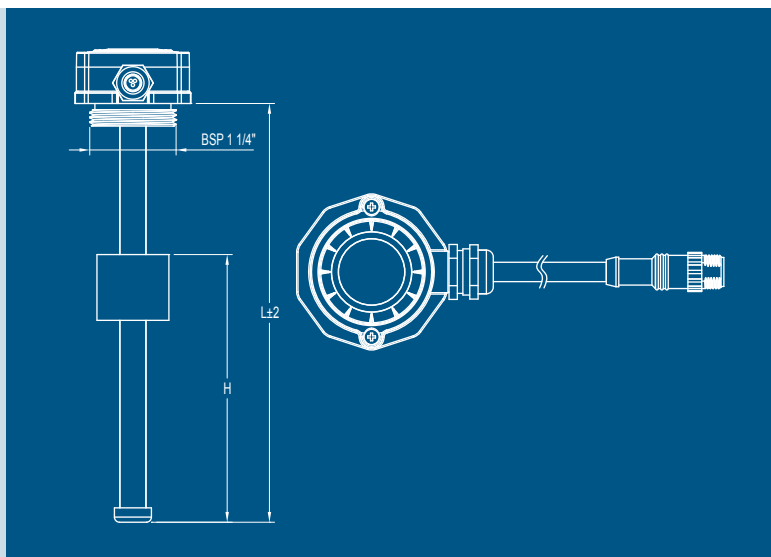
- Utilizing magnetic field to control the reed on-off switch, the product features a long service life and protection against vibration.
- Rated power: 720mW
- Wire: PVC material (PA corrugated pipe cover is optional)
- Connector: Male "Micro-C" Pinout
- Output signal: NMEA 2000/J1939 network messages
- Resolution range: 10~40 mm
- Operating temperature: -30°C~+80°C

Art. No.	Product Name	Specification
JKS03753	NS5H-150mm	Output Signal: NMEA2000 Network Messages Length of wire: 980mm Gasket: NBR Alarm: No Material: SS316 Working Voltage: 9-16V Logo: KUS
JKS03754	NS5H-200mm	
JKS03755	NS5H-225mm	
JKS03756	NS5H-250mm	
JKS03757	NS5H-275mm	
JKS03758	NS5H-300mm	
JKS03759	NS5H-350mm	
JKS03760	NS5H-400mm	
JKS03761	NS5H-450mm	
JKS03762	NS5H-500mm	
JKS03763	NS5H-550mm	
JKS03764	NS5H-600mm	
JKS03765	NS5H-650mm	
JKS03766	NS5H-700mm	
JKS03767	NS5H-750mm	
JKS03768	NS5H-800mm	

Art. No.	Product Name	Specification
JKS03769	NS5H-150mm	Output Signal: J1939 Network Messages Length of wire: 980mm Gasket: NBR Alarm: No Material: SS316 Working Voltage: 9-32V Logo: KUS
JKS03770	NS5H-200mm	
JKS03771	NS5H-225mm	
JKS03772	NS5H-250mm	
JKS03773	NS5H-275mm	
JKS03774	NS5H-300mm	
JKS03775	NS5H-350mm	
JKS03776	NS5H-400mm	
JKS03777	NS5H-450mm	
JKS03778	NS5H-500mm	
JKS03779	NS5H-550mm	
JKS03780	NS5H-600mm	
JKS03781	NS5H-650mm	
JKS03782	NS5H-700mm	
JKS03783	NS5H-750mm	
JKS03784	NS5H-800mm	

NS3H series

NEW

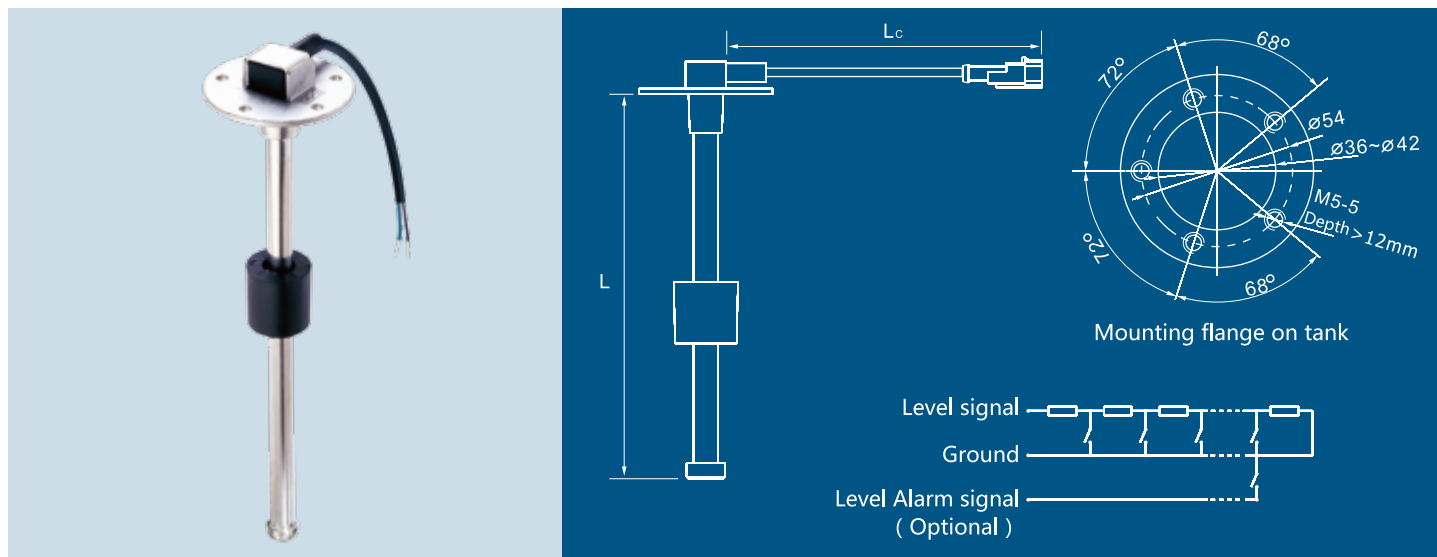


- ◆ **Material:**
The main body is made of SS316 stainless steel.
- ◆ **Length range:**
100~1500mm. It also can be customized according to your requirements.
- ◆ **Assembly:**
BSP 1 1/4" thread twist-in, or NPT thread twist-in. Various types of flanges are available for fitting fuel tank if necessary.
- ◆ **Mounting:**
-38mm x2.6mm O-ring
-43mm x3.5mm O-ring
- ◆ The outer tube can be detached for easy cleaning.
- ◆ Protection rank: IP67
- Utilizing magnetic field to control the reed on-off switch, the product features a long service life and protection against vibration.
- Rated power: 720mW
- Wire: PVC material (PA corrugated pipe cover is optional)
- Connector: Male "Micro-C" Pinout
- Output signal: NMEA 2000/J1939 network messages
- Resolution range: 10~40 mm
- Operating temperature: -30°C~+80°C

Art. No.	Product Name	Specification
JKS03721	NS3H-150mm	Output Signal: NMEA2000 Network Messages Length of wire: 980mm Gasket: NBR Alarm: No Material: SS316 Working Voltage: 9-16V Logo: KUS
JKS03722	NS3H-200mm	
JKS03723	NS3H-225mm	
JKS03724	NS3H-250mm	
JKS03725	NS3H-275mm	
JKS03726	NS3H-300mm	
JKS03727	NS3H-350mm	
JKS03728	NS3H-400mm	
JKS03729	NS3H-450mm	
JKS03730	NS3H-500mm	
JKS03731	NS3H-550mm	
JKS03732	NS3H-600mm	
JKS03733	NS3H-650mm	
JKS03734	NS3H-700mm	
JKS03735	NS3H-750mm	
JKS03736	NS3H-800mm	

Art. No.	Product Name	Specification
JKS03737	NS3H-150mm	Output Signal: J1939 Network Messages Length of wire: 980mm Gasket: NBR Alarm: No Material: SS316 Working Voltage: 9-32V Logo: KUS
JKS03738	NS3H-200mm	
JKS03739	NS3H-225mm	
JKS03740	NS3H-250mm	
JKS03741	NS3H-275mm	
JKS03742	NS3H-300mm	
JKS03743	NS3H-350mm	
JKS03744	NS3H-400mm	
JKS03745	NS3H-450mm	
JKS03746	NS3H-500mm	
JKS03747	NS3H-550mm	
JKS03748	NS3H-600mm	
JKS03749	NS3H-650mm	
JKS03750	NS3H-700mm	
JKS03751	NS3H-750mm	
JKS03752	NS3H-800mm	

S5 series

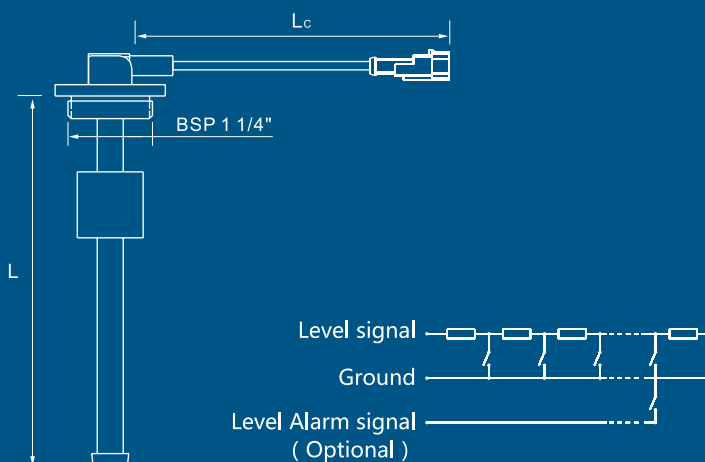


- ◆ **Material:** The main body is made of SS316 or SS304 stainless steel
- ◆ **Length range:** 100 ~ 2000 mm. It also can be customized according to your requirements.
- ◆ **Mounting:** SAE standard 5 holes, other mounting methods available.
- ◆ **Accessories:**
 - 5 x M5 screws
 - 2 mm thick NBR gasket.
 If installing on a gas tank, we recommend the optional 2mm thick FPM gasket.
- ◆ **Protection rank:** IP67
- Utilizing magnetic field to control the reed on-off switch, the product features a long service life and protection against vibration.
- **Rated power:** 125mW
- **Max current:** 500mA
- **Wire:** PVC material (PA corrugated pipe cover is optional)
- **Connector:** Delphi, Tyco, or others are available according to customer's requirements.
- **Output signal:**
 - Resistance control signal, 0~190Ω, 240~33Ω, or customized as required; You can also choose current control signal, 0~20mA, 4~20mA or Voltage control signal, 0.5~4.5VDC, 0~5VDC.
- **Resolution range:** 10~40mm
- **Operating temperature:** -40°C ~ +85°C



* Please contact us for more details.

S3 series



- ◆ **Material:** The main body is made of SS316 or SS304 stainless steel
- ◆ **Length range:** 100~2000mm. It also can be customized according to your requirements.
- ◆ **Assembly:** BSP 1 1/4" thread twist-in, or NPT thread twist-in. Various types of flanges are available for fitting fuel tank if necessary.
- ◆ **Mounting:**
 - 38mm×2.6mm O-ring
 - 43mm×3.5mm O-ring
- ◆ **Protection rank:** IP67
- Utilizing magnetic field to control the reed on-off switch, the product features a long service life and protection against vibration.
- **Rated power:** 125mW
- **Max current:** 500mA
- **Wire:** PVC material (PA corrugated pipe cover is optional)
- **Connector:** Delphi, Tyco, or others are available according to customer's requirements.
- **Output signal:** Resistance control signal, 0~190Ω, 240~33Ω, or customized as required; You can also choose current control signal, 0~20mA, 4~20mA or Voltage control signal, 0.5~4.5VDC, 0~5VDC.
- **Resolution range:** 10~40mm
- **Operating temperature:** -40°C ~+85°C

KUS is the world's leading supplier of multipurpose level sensors. Every year more than a million KUS sensors are installed in boats, trucks and off-road equipments all over the world. Measurements are done by series of reed switches positioned inside the level tube. The float is the only moving part of the sensor, thereby minimizes potential mechanical failures. These features contribute to the the sensor's precise level measurements.



* Please contact us for more details.

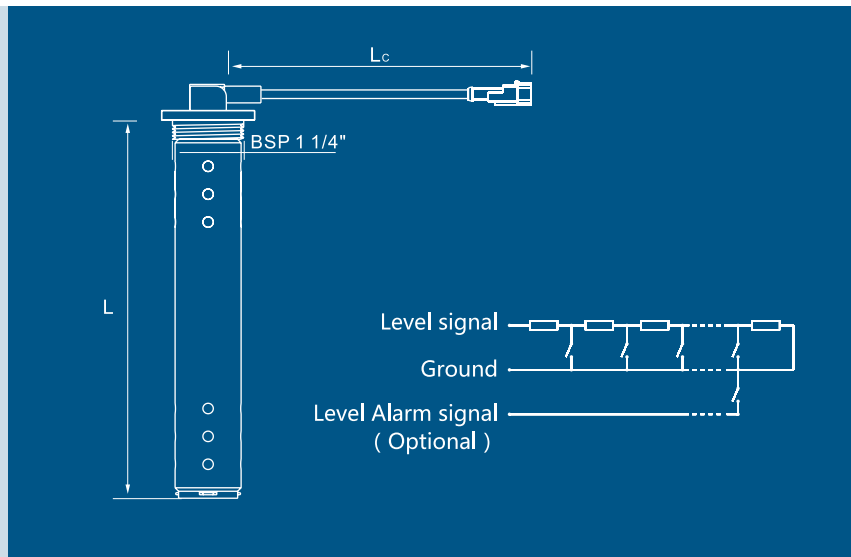
S3/S5 series

Art. No.	Product Name	Specification
JS60055	S5-E150mm	Output Signal : 0~190Ω Mounting : SAE standard 5 holes Length of Wire : 460mm Gasket : NBR Alarm : No Material: SS316 Logo: KUS
JS60057	S5-E200mm	
JS60059	S5-E250mm	
JS60061	S5-E300mm	
JS60063	S5-E400mm	
JS60065	S5-E500mm	
JS60067	S5-E600mm	
JS60069	S5-E700mm	
JS60071	S5-E800mm	
JS60073	S5-E900mm	
JS60075	S5-E1000mm	
JS60076	S5-E1100mm	
JS60077	S5-E1200mm	
JS60078	S5-E1300mm	
JS60079	S5-E1400mm	
JS60080	S5-E1500mm	
JS60081	S5-E1600mm	
JS60334	S5-U150mm	Output Signal : 240~33Ω Mounting : SAE standard 5 holes Length of Wire : 280mm Gasket : NBR Alarm : No Material : SS316 Logo : KUS
JS60336	S5-U200mm	
JS60338	S5-U250mm	
JS60340	S5-U300mm	
JS60342	S5-U400mm	
JS60344	S5-U500mm	
JS60346	S5-U600mm	
JS60348	S5-U700mm	
JS60350	S5-U800mm	
JS60352	S5-U900mm	
JS60354	S5-U1000mm	
JS60355	S5-U1100mm	
JS60356	S5-U1200mm	
JS60357	S5-U1300mm	
JS60358	S5-U1400mm	
JS60359	S5-U1500mm	
JS60360	S5-U1600mm	

Art. No.	Product Name	Specification
JS61043	S3-E150mm	Output Signal : 0~190Ω Mounting : BSP 1 1/4" Thread Length of Wire : 460mm Gasket : NBR Alarm : No Material : SS316 Logo : KUS
JS61045	S3-E200mm	
JS61047	S3-E250mm	
JS61049	S3-E300mm	
JS61051	S3-E400mm	
JS61053	S3-E500mm	
JS61055	S3-E600mm	
JS61057	S3-E700mm	
JS61059	S3-E800mm	
JS61061	S3-E900mm	
JS61063	S3-E1000mm	
JS61064	S3-E1100mm	
JS61065	S3-E1200mm	
JS61066	S3-E1300mm	
JS61067	S3-E1400mm	
JS61068	S3-E1500mm	
JS61069	S3-E1600mm	
JS61368	S3-U150mm	Output Signal : 240~33Ω Mounting : BSP 1 1/4" Thread Length of Wire : 280mm Gasket : NBR Alarm : No Material : SS316 Logo : KUS
JS61332	S3-U200mm	
JS61334	S3-U250mm	
JS61336	S3-U300mm	
JS61338	S3-U400mm	
JS61340	S3-U500mm	
JS61342	S3-U600mm	
JS61344	S3-U700mm	
JS61346	S3-U800mm	
JS61348	S3-U900mm	
JS61350	S3-U1000mm	
JS61351	S3-U1100mm	
JS61352	S3-U1200mm	
JS61353	S3-U1300mm	
JS61354	S3-U1400mm	
JS61355	S3-U1500mm	
JS61356	S3-U1600mm	
* Optional Flange : Please refer to page 56 "Flange for mounting"		

Remark: The length can be customized according to the tank height.

S3HT series



- ◆ **Material:** The main body is made of stainless SS316
- ◆ **Length range:** 4" , 6" , 8" , 12" , 16" It can also be customized according to your requirements.
- ◆ **Assembly:** Various types of flanges is available for fitting fuel tank if necessary.
- ◆ **Mounting:**
 - 38mm×2.6mm O-ring,
 - 43mm×3.5mm O-ring.
- ◆ The outer tube can be detached for easy cleaning.
- ◆ **Protection rank:** IP67
- Utilizing magnetic field to control the reed on-off switch, the product features a long service life and protection against vibration.
- **Rated power:** 125mW
- **Max current:** 500mA
- **Wire:** PVC material (PA corrugated pipe cover is optional)
- **Connector:** Delphi, Tyco, or others are available according to customer's requirements.
- **Output signal:** Resistance control signal, 0~190Ω , 240~33Ω, or customized as required; You can also choose current control signal, 0~20mA, 4~20mA or Voltage control signal, 0.5~4.5VDC, 0~5VDC.
- **Resolution range:** 10~40mm
- **Operating temperature:** -40°C ~+85°C

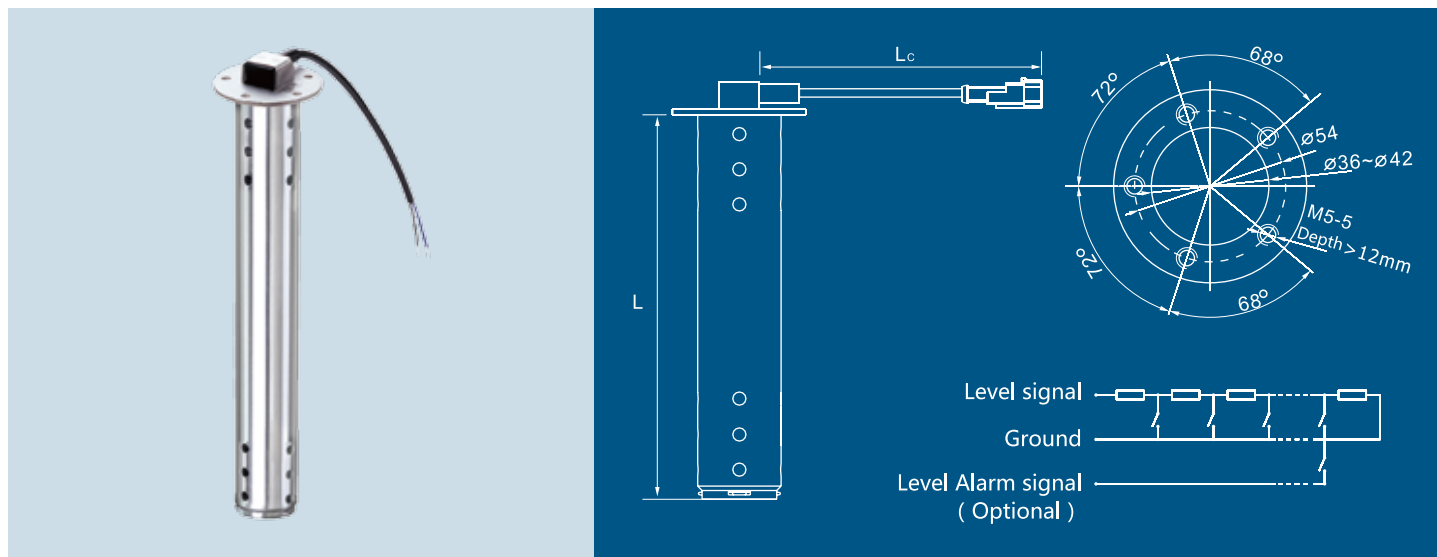
Art. No.	Length(mm)	Specification
JS63186	S3HT-U150	Output : 240~33Ω Mounting : BSP 1 1/4" Thread Gasket : NBR Length of wire : 280 mm Material: SS316 Logo : KUS Length of Sensor: Customized
JS63187	S3HT-U175	
JS63062	S3HT-U200	
JS63188	S3HT-U225	
JS63189	S3HT-U250	
JS63203	S3HT-U275	
JS63063	S3HT-U300	
JS63014	S3HT-U350	
JS63064	S3HT-U400	
JS63190	S3HT-U450	
JS63191	S3HT-U500	

Art. No.	Length(mm)	Specification
JS63171	S3HT-E150	Output : 0~190Ω Mounting : BSP 1 1/4" Thread Gasket : NBR Length of wire : 280 mm Material : SS316 Logo : KUS Length of Sensor: Customized
JS63172	S3HT-E175	
JS63173	S3HT-E200	
JS63174	S3HT-E225	
JS63148	S3HT-E250	
JS63205	S3HT-E275	
JS63149	S3HT-E300	
JS63089	S3HT-E350	
JS63146	S3HT-E400	
JS63175	S3HT-E450	
JS63152	S3HT-E500	

Note: The above items are without flange, but we can offer optional flange, refer to JSM1714 on page 56.

* Please contact us for more details.

S5H series



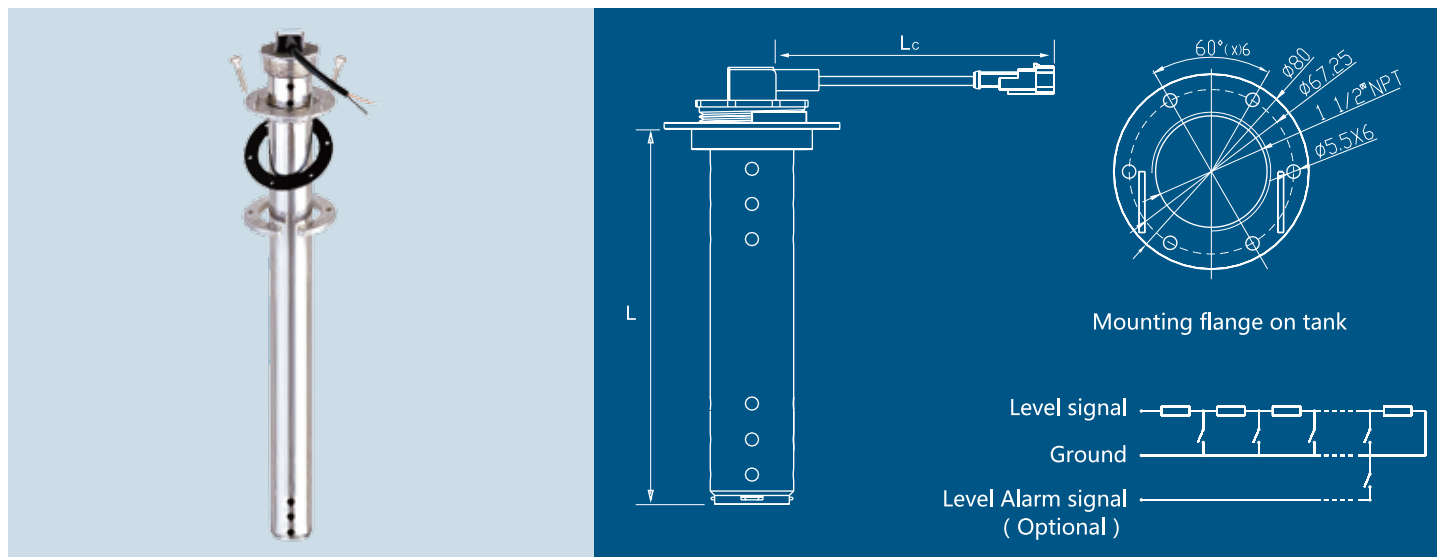
- ◆ Uses: Mainly used in black water or grey water tanks. Can also be used in fresh water tanks.
- ◆ Material: The main body is made of SS316 stainless steel.
- ◆ Length range: 4" , 6" , 8" , 12" , 16" , 20" , 30" It can also be customized according to your requirements.
- ◆ Mounting: SAE standard 5 holes, other mounting methods available.
- ◆ Using NPT thread to fix and seal the sensor and flange, with addition of Teflon tape belts to seal if necessary.
- ◆ Protection rank: IP67
- Utilizing magnetic field to control the reed on-off switch, the product features a long service life and protection against vibration.
- Rated power: 125mW
- Max current: 500mA
- Wire: PVC material (PA corrugated pipe cover is optional)
- Connector: Delphi, Tyco, or others are available according to customer's requirements.
- Output signal: Resistance control signal, 0~190Ω , 240~33Ω, or customized as required; You can also choose current control signal, 0~20mA, 4~20mA or Voltage control signal, 0.5~4.5VDC, 0~5VDC.
- Resolution range: 10~40mm
- Operational temperature: -40°C ~+85°C

Art. No.	Length(mm)	Specification
JKS00103	S5H-U150	Output : 240~33Ω Mounting : SAE standard 5 holes Gasket : NBR Length of wire : 460mm Material : SS316 Logo : KUS Length of Sensor: Customized
JKS00104	S5H-U175	
JKS00105	S5H-U200	
JKS00106	S5H-U225	
JKS00107	S5H-U250	
JKS00108	S5H-U275	
JKS00109	S5H-U300	
JKS00110	S5H-U350	
JKS00111	S5H-U400	
JKS00112	S5H-U450	
JKS00113	S5H-U500	

Art. No.	Length(mm)	Specification
JKS00092	S5H-E150	Output : 0~190Ω Mounting : SAE standard 5 holes Gasket : NBR Length of wire : 460mm Material : SS316 Logo : KUS Length of Sensor: Customized
JKS00093	S5H-E175	
JKS00094	S5H-E200	
JKS00095	S5H-E225	
JKS00096	S5H-E250	
JKS00097	S5H-E275	
JKS00098	S5H-E300	
JKS00099	S5H-E350	
JKS00100	S5H-E400	
JKS00101	S5H-E450	
JKS00102	S5H-E500	

* Please contact us for more details.

SHS series



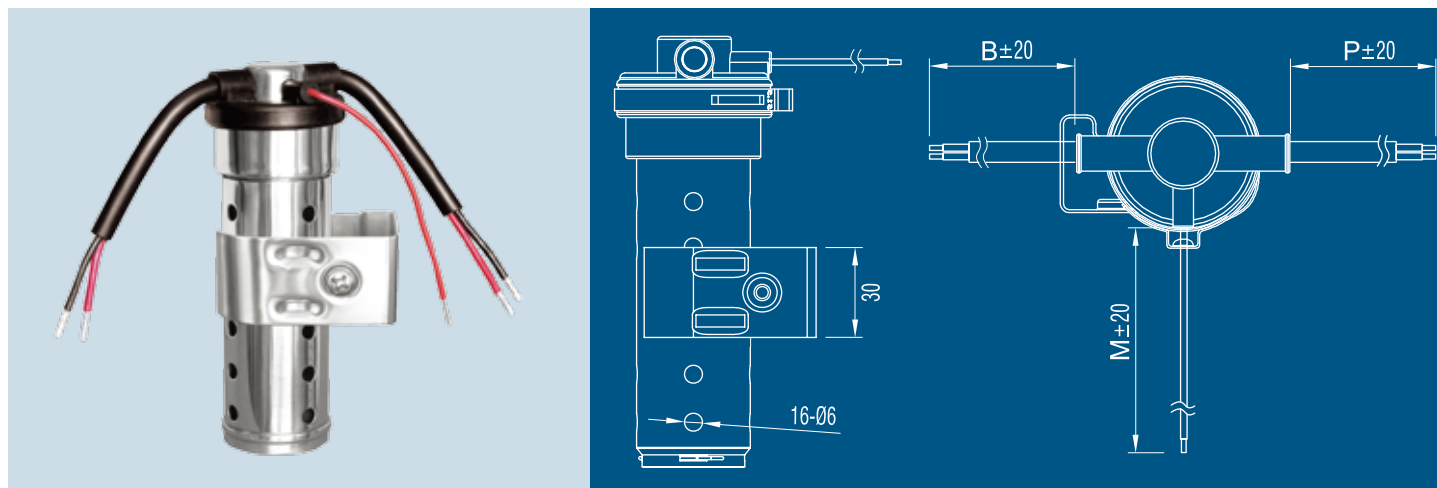
- ◆ Uses: Mainly used in black water or grey water tanks. Can also be used in fresh water tanks.
- ◆ Material: The main body is made of SS316 stainless steel.
- ◆ Length range: 4" , 6" , 8" , 12" , 16" , 20" , 30" It can also be customized according to your requirements.
- ◆ Mounting: NPT 1 1/2" thread twist-in, with standard 6 hole thread flange plate, standard 6 hole under ring and 6 piece of M5×30 screws.
- ◆ Using NPT thread to fix and seal the sensor and flange, with addition of Teflon tape belts to seal if necessary.
- ◆ Protection rank: IP67
- Utilizing magnetic field to control the reed on-off switch, the product features a long service life and protection against vibration.
- Rated power: 125mW
- Max current: 500mA
- Wire: PVC material (PA corrugated pipe cover is optional)
- Connector: Delphi, Tyco, or others are available according to customer's requirements.
- Output signal: Resistance control signal, 0~190Ω , 240~33Ω, or customized as required; You can also choose current control signal, 0~20mA, 4~20mA or Voltage control signal, 0.5~4.5VDC, 0~5VDC.
- Resolution range: 10~40mm
- Operational temperature: -40°C ~+85°C

Art. No.	Length(mm)	Specification
JKS00126	SHS-U150	Output : 240~33Ω Mounting : NPT 1 1/2" Gasket : NBR Length of wire : 460mm Material : SS316 Logo : KUS Length of Sensor: Customized With flange
JKS00127	SHS-U175	
JKS00128	SHS-U200	
JKS00129	SHS-U225	
JKS00130	SHS-U250	
JKS00131	SHS-U275	
JKS00132	SHS-U300	
JKS00133	SHS-U350	
JKS00134	SHS-U400	
JKS00135	SHS-U450	
JKS00136	SHS-U500	

Art. No.	Length(mm)	Specification
JKS00115	SHS-E150	Output : 0~190Ω Mounting : NPT 1 1/2" Gasket : NBR Length of wire : 460mm Material : SS316 Logo : KUS Length of Sensor: Customized With flange
JKS00116	SHS-E175	
JKS00117	SHS-E200	
JKS00118	SHS-E225	
JKS00119	SHS-E250	
JKS00120	SHS-E275	
JKS00121	SHS-E300	
JKS00122	SHS-E350	
JKS00123	SHS-E400	
JKS00124	SHS-E450	
JKS00125	SHS-E500	

* Please contact us for more details.

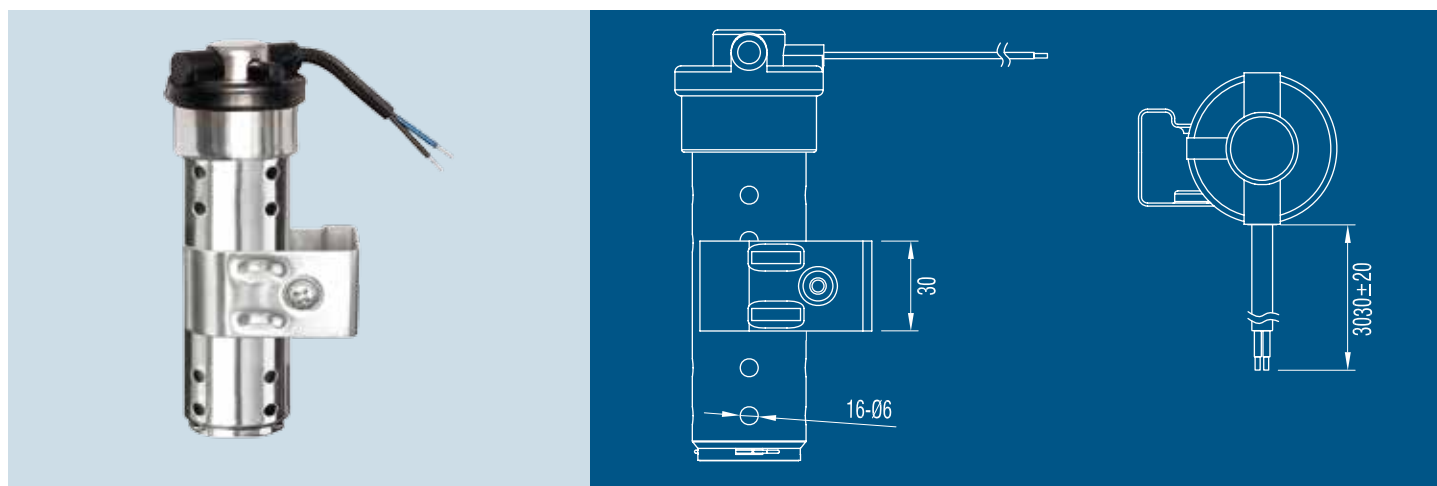
PBK series



- ◆ Standard length is 4", length can also be customized. Rating working voltage can be 12V or 24V. single core wire can be used, and pump switch can be operated manually.
- This device is for detecting water level at the bottom of your boat, can also be used as a pump switch by manual operation. It can be installed at the bottom wherever is convenient. Adjustable bracket is to fix the sensor in place and slight adjustment of height. The housing, which can be conveniently disassembled and cleaned, can prevent foreign particles from interfering with the float's movement.

Art. No.	Lengh	Voltage	Mounting	Gasket	Connector	Length Of Wire(Lc)			Material
JS65120	100 mm	24V	BSP 1 1/4" Thread	NBR	NO	B:3000 mm	P:800 mm	M:3000 mm	SS 316
JS50639	100 mm	12V	BSP 1 1/4" Thread	NBR	YES	B:600 mm	P:330 mm	M:620 mm	SS 316
Customized	Customized	Customized	Customized	NBR/FPM	YES/NO	Customized			Customized

OVG series



- ◆ Standard length is 4", length can also be customized. Rating working voltage can be 12V or 24V. single core wire can be used, and pump switch can be operated manually.
- The function of OVG is same as the PBK, it can also be used as a pump switch but by automatically.

Art. No.	Lengh	Voltage	Mounting	Gasket	Connector	Length Of Wire(Lc)			Material
JS65121	100 mm	24V/12V	BSP 1 1/4" Thread	NBR	NO	3030 mm			SS 316
Customized	Customized	Customized	Customized	NBR/FPM	YES/NO	Customized			Customized



Resistance Resistor

Art. No.: JKE00473

If E-F end short circuit :

Input : 240-33 ohm-----Output : 0-190 ohm

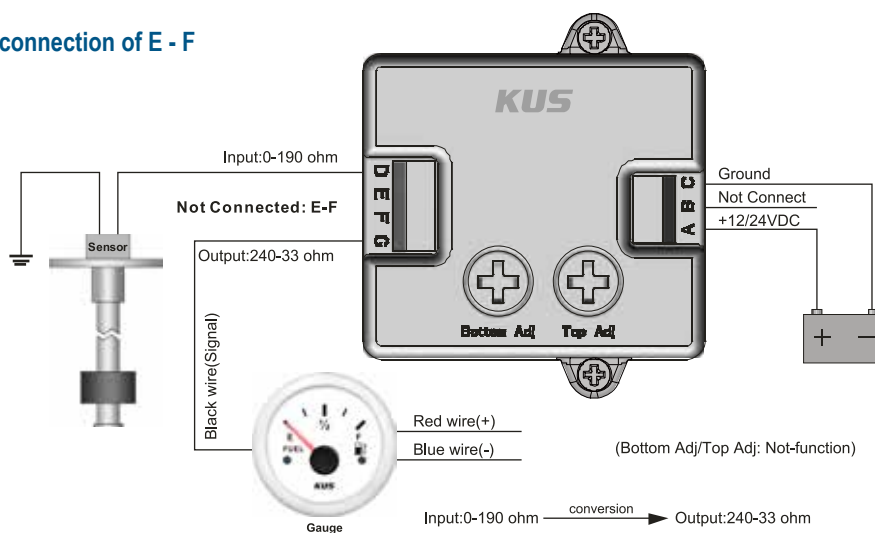
If E-F end off :

Input : 0-190 ohm-----Output : 240-33 ohm

Special requirements can be customized :

This product mainly solves problem that customized sensor can't match with gauge resistor signal, it can perfectly connect the two equipments whose signals didn't match, so the user loss can be reduced.

Please note that the connection of E - F



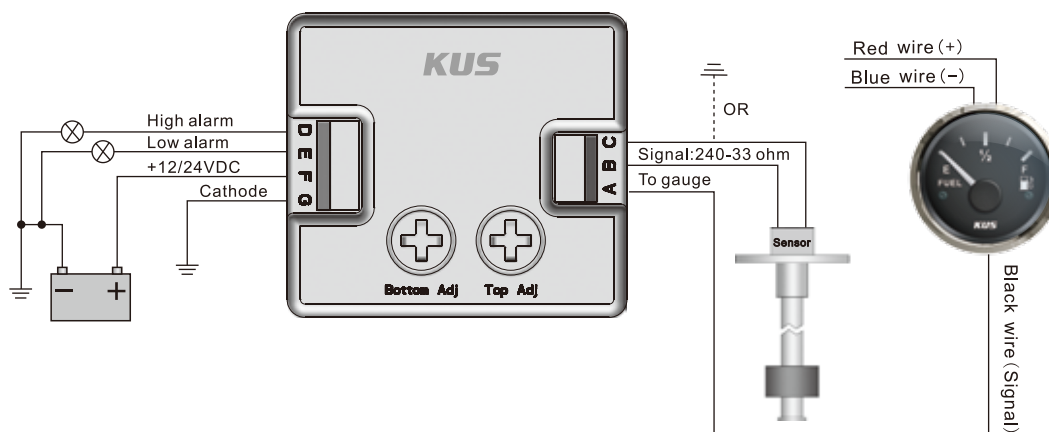
SAB High/Low Level Alarm

Art. No.: JKE00023

Product feature:

This product allows the user to add a high and low level alarm signal to the control and monitoring system. The high/low level alarm position could be adjusted by turning the two adjusting knobs.

Connection diagram:





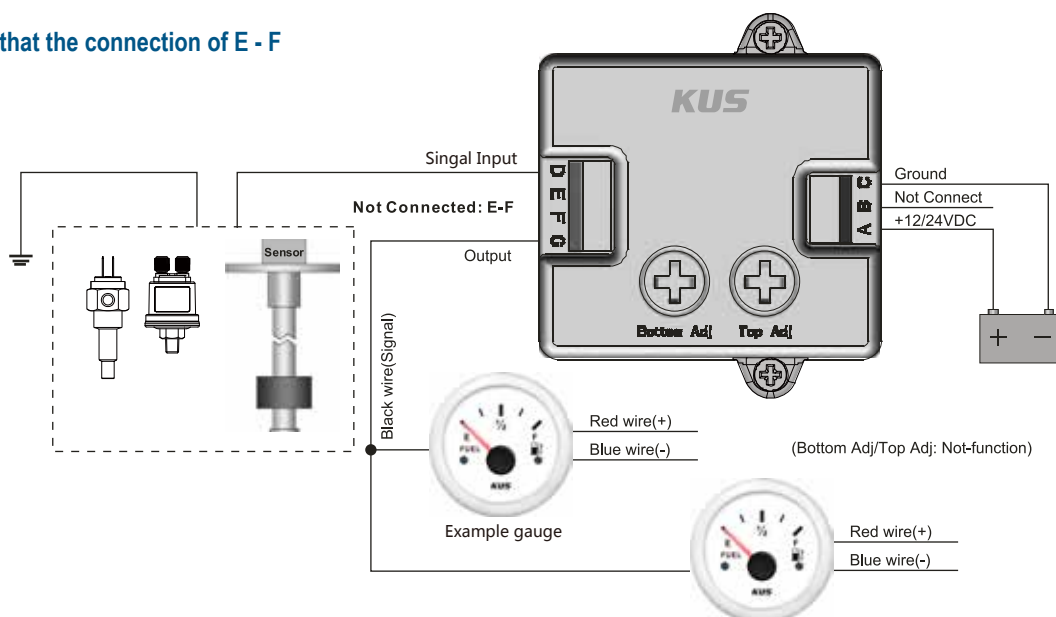
Art. No.: JMC00003

Connection diagram: As shown below

Product Feature:

This product allows the connection of one sensor to two gauges. The maximum resistance range of the sensor is required to be 0-930ohm. The product can be applied to pressure, oil temperature, liquid level sensors, and etc.

Please note that the connection of E - F



Art. No.: JYC00003

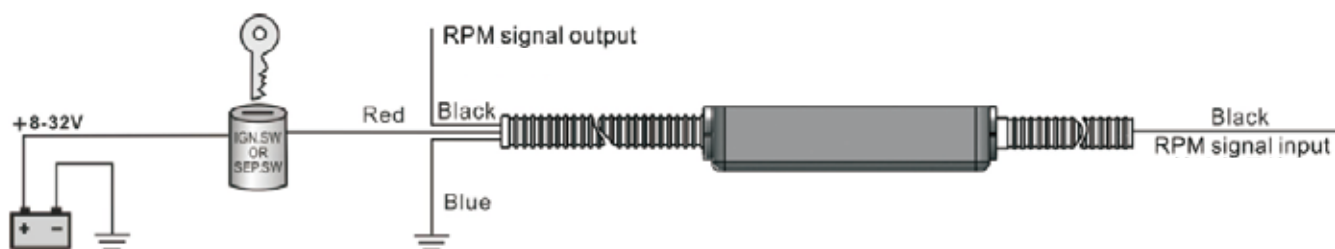
Size: 63*36*14mm

Operating Voltage: 8-32V

Connection diagram: As shown below

Product Feature:

This product mainly solves the problem of abnormal instrument display caused by the unstable frequency signal of the client in the complex working environment. It filters the frequency signal of the engine or speed sensor to make the signal more stable.





Pictures	Model	Art. No.	Descriptoin
	Flange	JSM0893	SAE 5 holes
		JSA0054	Aluminium flange for 1-1/4" BSP tank senders
	HFL	JSM1714	Tooside/underside kit to suit S3HT 1-1/4" BSP waste senders
	FL-2	JSP00172	Tooside flange to adapt S3 1-1/4" BSP to SAE 5 holes
	Flange	JSM0319	Stainless steel weld flange for 1-1/4" BSP tank senders S3HT/ S3
		JSM0884	Iron SAE 5 holes Weld Flange for S3HT/ S3
		JS21880	SAE 5 holes of C-ring Flange for S5 sensors.
	Buzzer	162011	Buzzers with 6.3mm faston

* KUS also offers various flanges for connection between the tank and sensor, such as standard SAE flanges and BSP thread flanges. One can choose between flange/accessories made of stainless steel, aluminum or engineered plastic.

Rudder Angle Sensor



Rudder sensor is usually installed on the sternward rudder horn to collect signals by wire resistor. These sensors are made of materials of the highest quality.

Art. No.	Output	Connecting wires	Connecting Gauges
KE41000	Single output : 0-190Ω	2 wires	1 Gauge
JZM6470	Double output : 0-190Ω	3 wires	2 Gauges

Optional products: connecting rod

Art. No. : JS202905

Art. No. : JSM4480

Rudder sensor is attached to the cylinder of the steering rudder. Signal output is via integrated reed switches. Sensor is durable and can be easily assembled.



Art. No. : KE41002

The rudder sensor is made of highest quality with 10 meter wires.

Turn the rudder controller (Steering wheel) to the middle position, and quickly press down the key, it will record the corresponding position of the rudder sensor when the rudder is in the middle position.

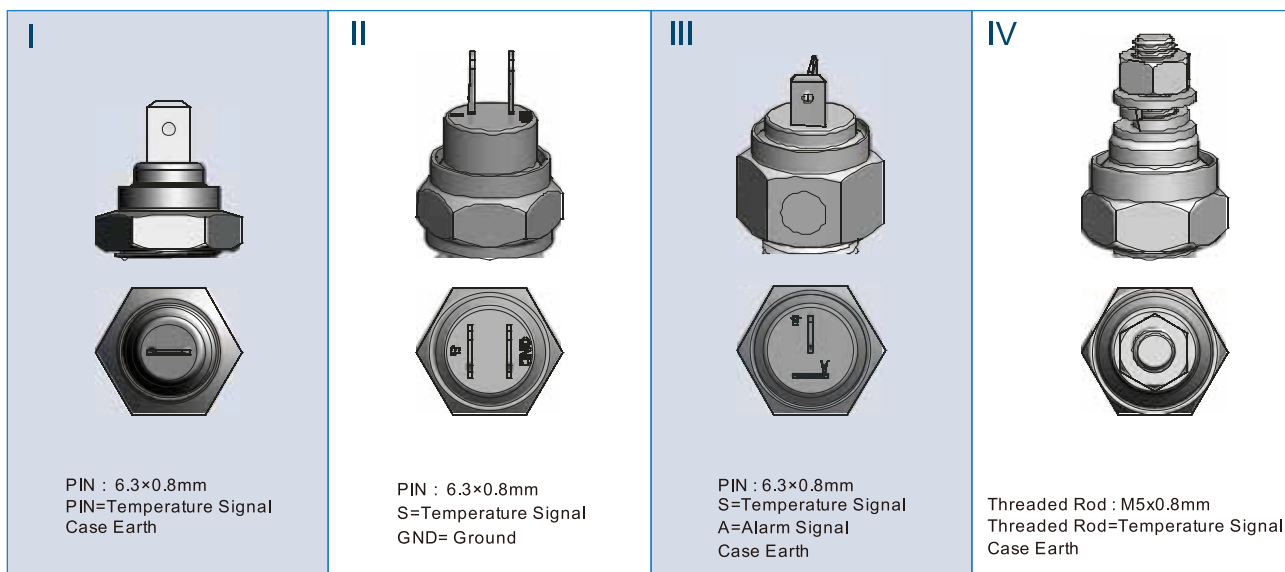
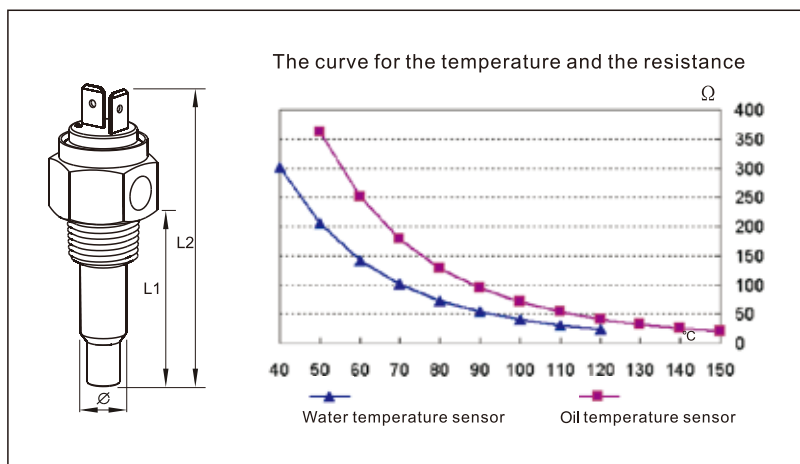
* Please contact us for more details.

Temperature Sensor



- The main body is made of brass.
- Please refer to appendix 1 for product types (temperature sensor series)
- Sensors have double metal plate connectors.
Eg: Type II and Type III
(Type III with alarm feature)
- Protection rank: IP67

- Rated voltage: 6V~24V
- Temperature response time: Minimum 3 minutes after power supply electrified.
- Rated power for alarm switch: 1.2W~3W
- The temperature alarm tolerance: $\pm 3^{\circ}\text{C}$
- Type of alarm touch:
The switch turns off when the temperature rises.



* Please contact us for more details.

Temperature Sensor

WATER TEMPERATURE SENSORS

Art. No.	Product Name	Temperature Max(°C)	Alarm Temp.(°C)	Thread Spec.	Ømm	L1(mm)	L2(mm)	Type
KE00000	SWN-1	120	—	M14×1.0	7.5	28.5	51	I
KE00001	SWN-1	120	—	M14×1.25	7.5	28.5	51	
KE00002	SWN-1	120	—	M14×1.5	7.5	28.5	51	
KE00003	SWN-1	120	—	M16×1.5	7.5	28.5	51	
KE00004	SWN-1	120	—	M18×1.5	7.5	28.5	51	
KE00005	SWN-1	120	—	1/4"-18NPT	7.5	28.5	51	
KE00006	SWN-1	120	—	1/8"-27NPT	7.5	28.5	51	
KE00007	SWN-1	120	—	3/8"-18NPT	7.5	28.5	51	
KE00009	SWN-1	120	—	5/8"-18UNF	7.5	28.5	51	
KE00025	SWN-1	120	—	1/2"-14BSP	7.5	28.5	51	
KE00035	SWN-1	120	—	M10×1.0	7.5	28.5	51	
KE00038	SWN-1	120	—	M16×1.5	7.5	22	44.5	
KE00017	SWN-2	120	—	M16×1.5	13	28.5	58.7	II
KE00021	SWN-2	120	—	3/8"-18NPT	13	28.5	58.7	
KE00018	SWN-2	120	—	M18×1.5	13	28.5	58.7	
KE00022	SWN-2	120	—	5/8"-18UNF	13	28.5	58.7	
KE00016	SWN-2	120	—	M14×1.5	13	28.5	58.7	
KE00020	SWN-2	120	—	1/2"-14NPT	13	28.5	58.7	
KE00036	SWN-2	120	—	1/4"-18NPTF	13	28.5	58.7	
KE00023	SWN-2	120	—	M20×1.5	13	28.5	58.7	
KE00100	SWA-3	120	95	M14×1.0	10.7	41	71.5	III
KE00101	SWA-3	120	95	M14×1.25	10.7	41	71.5	
KE00102	SWA-3	120	95	M14×1.5	10.7	41	71.5	
KE00119	SWA-3	120	107	M16×1.5	10.7	41	71.5	
KE00122	SWA-3	120	98	M18×1.5	10.7	41	71.5	
KE00105	SWA-3	120	98	3/8"-18NPT	10.7	41	71.5	
KE00133	SWA-3	120	103	5/8"-18UNF	10.7	41	71.5	
KE00148	SWA-3	120	108	R3/8"-19	10.7	30	68.5	
KE00170	SWA-3	120	110	1/2"-14NPT	10.7	30	68.5	
KE00112	SWA-3	120	95	M16×1.5	10.7	41	71.5	
KE00106	SWA-3	120	95	M18×1.5	10.7	41	71.5	

* Please contact us for more details.

Temperature Sensor

WATER TEMPERATURE SENSORS

Art. No.	Product Name	Temperature Max(°C)	Alarm Temp.(°C)	Thread Spec.	Ømm	L1(mm)	L2(mm)	Type
KE00108	SWA-3	120	95	1/2"-14NPT	10.7	41	71.5	III
KE00103	SWA-3	120	95	3/8"-18NPT	10.7	41	71.5	
KE00109	SWA-3	120	95	5/8"-18UNF	10.7	41	71.5	
KE00113	SWA-3	120	98	M14×1.0	10.7	41	71.5	
KE00114	SWA-3	120	98	M14×1.25	10.7	41	71.5	
KE00120	SWA-3	120	98	M14×1.5	10.7	41	71.5	
KE00121	SWA-3	120	98	M16×1.5	10.7	41	71.5	
KE00124	SWA-3	120	98	1/2"-14NPT	10.7	41	71.5	
KE00125	SWA-3	120	98	5/8"18UNF	10.7	41	71.5	
KE00149	SWA-3	120	102	5/8"18UNF	10.7	30	68.5	
KE00115	SWA-3	120	98	1/2"-14NPT	10.7	41	71.5	
KE00116	SWA-3	120	95	M12×1.25	10.7	41	71.5	
KE00140	SWA-3	120	110	M16×1.5	10.7	30	68.5	
KE00141	SWA-3	120	105	3/8"-18NPT	10.7	41	71.5	
KE00143	SWA-3	120	100	M14×1.5	10.7	41	71.5	
KE00152	SWA-3	120	99	1/2"-14NPT	10.7	41	71.5	
KE00153	SWA-3	120	99	3/8"-18NPT	10.7	41	71.5	
KE00156	SWA-3	120	100	1/2"-14NPT	10.7	41	71.5	
KE00160	SWA-3	120	98	3/8"-18NPT	10.7	30	68.5	
KE00161	SWA-3	120	98	M16×1.5	10.7	30	68.5	
KE00163	SWA-3	120	110	1/2"-14NPT	10.7	41	71.5	
KE00164	SWA-3	120	110	3/8"-18NPT	10.7	41	71.5	
KE00165	SWA-3	120	98	1/2"-14NPT	10.7	30	68.5	
KE00166	SWA-3	120	98	1/4"-18NPT	10.7	41	71.5	
KE00169	SWA-3	120	98	3/8"-18R	10.7	41	71.5	
KE00010	SWN-1	120	—	1/2"-14NPT	8	30	54	IV
KE00011	SWN-1	120	—	1/8"-27NPT	8	27	51.5	
KE00012	SWN-1	120	—	1/4"-18NPT	8	27	51.5	
KE00027	SWN-1	120	—	1/2"-14BSP	8	30	54	
KE00013	SWN-1	120	—	3/8"-18NPT	8	22	46.5	
KE00030	SWN-1	120	—	M10×1.0	8	27	51.5	
KE00039	SWN-1	120	—	M16×1.5	8	22	46.5	

* Please contact us for more details.

Temperature Sensor

OIL TEMPERATURE SENSOR

Art. No.	Product Name	Temperature Max(°C)	Alarm Temp.(°C)	Thread Spec.	L1(mm)	L2(mm)	Type
KE01001	SON-1	150	—	M14×1.0	28.5	51	I
KE01000	SON-1	150	—	M14×1.25	28.5	51	
KE01002	SON-1	150	—	M14×1.5	28.5	51	
KE01003	SON-1	150	—	M16×1.5	28.5	51	
KE01004	SON-1	150	—	M18×1.5	28.5	51	
KE01005	SON-1	150	—	1/4"-18NPT	28.5	51	
KE01006	SON-1	150	—	1/8"-27NPT	28.5	51	
KE01007	SON-1	150	—	3/8"-18NPT	28.5	51	
KE01008	SON-1	150	—	1/2"-14NPT	28.5	51	
KE01009	SON-1	150	—	5/8"-18UNF	28.5	51	
KE01013	SON-2	150	—	M16×1.5	28.5	58.7	II
KE01017	SON-2	150	—	3/8"-18NPT	28.5	58.7	
KE01014	SON-2	150	—	M18×1.5	28.5	58.7	
KE01018	SON-2	150	—	5/8"-18UNF	28.5	58.7	
KE01012	SON-2	150	—	M14×1.5	28.5	58.7	
KE01016	SON-2	150	—	1/2"-14NPT	28.5	58.7	
KE01019	SON-2	150	—	R3/8"-19	28.5	58.7	
KE01020	SON-2	150	—	M22×1.5	28.5	58.7	
KE01102	SOA-3	150	120	M14×1.0	41	71.5	III
KE01103	SOA-3	150	120	M14×1.25	41	71.5	
KE01104	SOA-3	150	120	M14×1.5	41	71.5	
KE01105	SOA-3	150	120	M16×1.5	41	71.5	
KE01106	SOA-3	150	120	M18×1.5	41	71.5	
KE01107	SOA-3	150	120	M16×1.5	41	71.5	
KE01108	SOA-3	150	120	1/2"-14NPT	41	71.5	
KE01101	SOA-3	150	120	3/8"-18NPT	41	71.5	
KE01100	SOA-3	150	120	5/8"-18UNF	41	71.5	
KE01109	SOA-3	150	120	M20×1.5	41	71.5	
KE01110	SOA-3	150	115	1/2"-14NPT	41	71.5	
KE01023	SOA-3	150	105	M12×1.25	41	71.5	
KE01111	SOA-3	150	80	M14×1.5	41	71.5	
KE01112	SOA-3	150	120	1/4"-18NPT	41	71.5	
KE01113	SOA-3	150	120	M22×1.5	30	68.5	
KE01114	SOA-3	150	135	M16×1.5	41	71.5	
KE01115	SOA-3	150	100	M14×1.0	41	71.5	

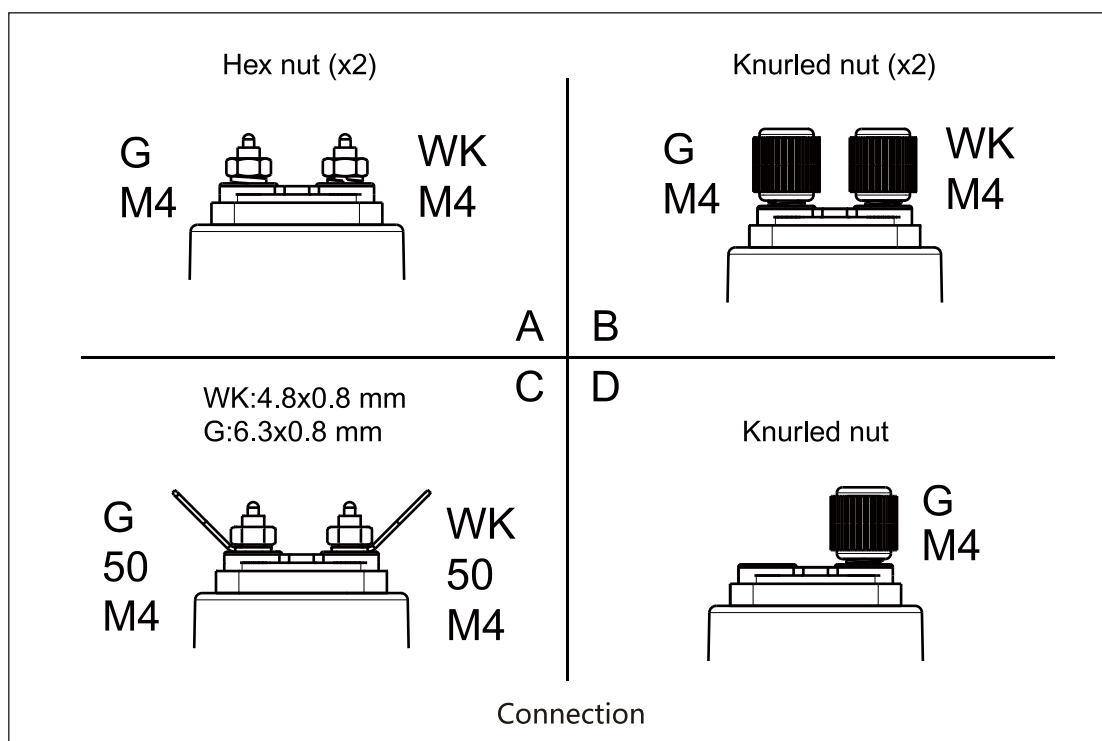
* Please contact us for more details.

Pressure Sensor(Mechanical)



- It combines the advantages of excellent anti-vibration performance, long service life, simple assembly process, stable quality, wide range of operating temperature, etc.
- It is largely applied to many fields, such as the engine pipe of vehicles and ships, water processing projects, inspection and control of industrial processes, hydraulic and pneumatic control projects, etc.
- Protection rank: IP66

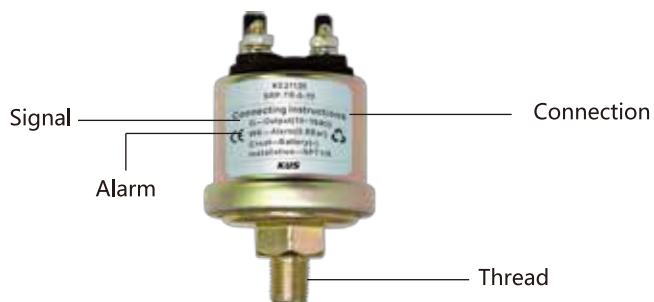
- Operating voltage: 6~24V
- Conducting power: < 5W
- Operating temperature: -25 ~120°C(120°C MAX 1H)
- Measuring range: 0~5Bar or 0~10Bar
- Alarm: 0.8Bar or 1.4Bar
- Output signal: Standard resistance value: 10~184Ω
- Thread fitting: NPT1/4、NPT1/8、M10、M10X1 or customized as requires.



* Please contact us for more details.

Pressure Sensor(Mechanical)

Art. No.	Thread	Measuring Range(Bar)	Output(Ω)	Alarm(Bar)	Connection	Appearance			
KE21102	NPT1/8	0-5	10-184	0.8±0.2	A	Color zinc plated			
KE21100	NPT1/8	0-10	10-184	0.8±0.2					
KE21101	NPT1/4	0-10	10-184	0.8±0.2					
KE21047	NPT1/4	0-10	10-184	1.4±0.3					
KE21015	UNF 3/8	0-10	10-184	No					
KE21109	M10*1	0-10	10-184	1.4±0.2					
					B		Color zinc plated		
KE21104	NPT1/8	0-5	10-184	0.8±0.2					
KE21010	NPT1/8	0-5	10-184	NO					
KE21112	NPT1/4	0-5	10-184	0.8±0.2					
KE21121	M10*1	0-5	10-184	1.4±0.2					
KE21134	R1/8	0-5	10-184	0.8±0.2					
KE21103	NPT1/8	0-10	10-184	0.8±0.2					
KE21107	M10*1	0-10	10-184	1.4±0.2					
KE21111	NPT1/4	0-10	10-184	0.8±0.2					
KE21006	PT 1/8	0-10	10-184	No					
KE21123	M14*1.5	0-10	10-184	0.8±0.2					
KE21126	R1/8	0-10	10-184	0.4±0.2					
KE21017	NPT1/8	0-10	240-33	NO					
					C			Color zinc plated	
KE21124	NPT1/8	0-10	10-184	0.5±0.2					
KE21142	NPT1/8	0-10	10-192	0.8±0.2					
KE21120	NPT1/8	0-10	10-184	0.8±0.2					D
KE21005	NPT1/8	0-5	10-184	No					
KE21152	BSP-1/8	0-10	10-184	No					



* Please contact us for more details.

Tacho Sensor



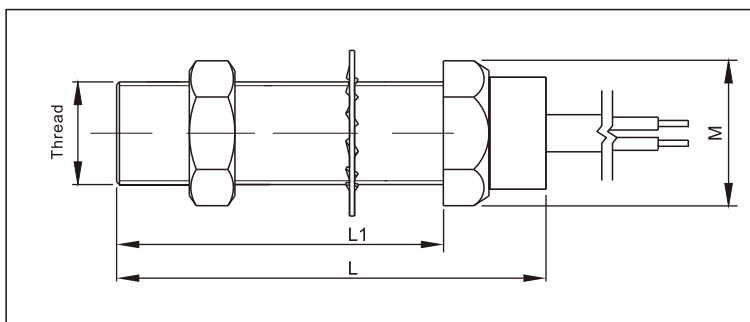
- Used for measuring gear rotation speed. Its main advantages include stable signal output, wide range of operational temperature, small size, and simple assembly process.
- It covers a wide range of measurements, including zero rotation speed.
- The shell appearance, material and thread fitting can be customized as requires.
- Protection rank: IP65

Holzer Tacho Sensor

- Operating voltage: 8~32V with polarity protection
- Operating current: < 50mA
- Operating temperature: -40~85°C
- Output signal: Square wave
- Signal duty factor: 47±5%
- Inductance distance: ≤2mm
- Connection method:
three or four wires connection

Magnetoelectric Tacho Sensor

- Operating temperature: -40~85°C
- Output signal: sine wave
- Inductance distance: ≤1mm
- Tooth module: 2~6
- Connection method:
two wires connection



Art. No.	L(mm)	L1(mm)	Thread	M	Output Signal	Frequency Range(Hz)	Connection	Appearance
KE10010	100	80	M16×1.5	SW19	Sine wave	100-15000	Two wires	Nickel plated
KE10011	65	45	M16×1.5	SW19				
KE10012	100	80	UNF5/8	SW19				
KE10000	80	60	M18×1.5	SW22	Square wave	0-20000	Three wires	
KE10001	80	70	M18×1.5	No hexagon				
KE10004	80	70	M16×1.5	No hexagon				
KE10005	60	40	M18×1.5	SW22				
KE10006	80	70	UNF5/8	No hexagon				
KE10007	80	60	UNF5/8	SW19				

* Please contact us for more details.

The next generation of SCR technology for NOx reduction



The International Maritime Organization (IMO) has regulated NOx emissions from marine vessels in order to reduce air pollution caused by NOx. The IMO's Tier III standards require that marine vessels setting sail in 2016 or later reduce NOx emissions by 80 % relative to 2010 levels.

In order to comply with the strict standard, SCR (selective catalytic reduction, SCR) is to reduce marine diesel exhaust nitrogen oxide content of mainstream technology.

SCR meets IMO Tier III standards and beyond by consistently removing 95% or more of NOx in the exhaust gas of a marine engine.

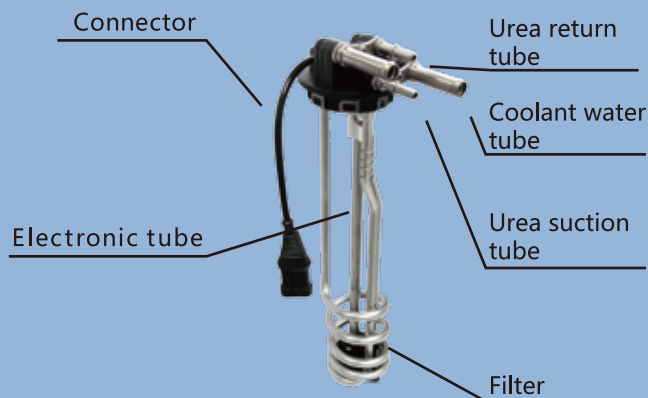
SCR system operation needs to consume urea solution as a reducing agent, in order to ensure the normal operation of marine SCR system, usually set up a separate urea solution tank for storing urea solution, and also need one urea sensor to be combined with this urea tank for level detecting, temperature measurement, suction and return of urea solution, impurities filtration and others functions.

KUS is the world's leading manufacturer of urea tank and urea sensors. Our urea sensors and urea tank are widely used in SCR equipped vehicles all over the world.

We can supply OEM and ODM service for SCR system of marine diesel engines.

Benefits of our sensors

- Signal output with high precision
- Resistant to environmental variations
- Integrated key features
- Extended operation lifetime
- Selectable length subject to users' application
- Options of different electronics connectors
- Custom design formation optimized for different tank design



■ Urea sensors with Multi-functions



CC8

CS8

CS9B

■ Urea sensors with single tube



TU

TUA

NEW

CARAVAN ACCESSORIES MAP



Control Panel
(High Version)



Control Box
(AC/DC Optional)



Control Panel
(Mid Version)



Control Box
(DC Available)



Control Panel(Standard Version)
(Pointer/Digital Gauge optional)



Fuel Level Sensor

NEW

Control Panel (High Version)



■ Product Feature

- High Integration
- Excellent Electromagnetic Compatibility
- Input Overvoltage Protection
- Power Overcurrent Protection
- 12-Way Power Output With Short Circuit Diagnosis
- 8-Way Sensor Input
- 6-Way Switch Input
- LCD With High Resolution

■ Product Specification

- Display Screen Size : 207 * 134.4 * 50.1mm
- Control Box Size : 37*117*45mm
- Working Voltage : 9-16V
- Working Temperature : -40~85°C
- Storage Temperature : -40~90°C
- Relative Humidity : 5%~90%
- Air Pressure : 86kPa~106kPa

Control Panel (Mid Version)



■ Product Feature

- High Integration
- Excellent Electromagnetic Compatibility
- Input Overvoltage Protection
- Power Overcurrent Protection
- 8-Way Power Output With Short Circuit Diagnosis
- 4-Way Sensor Input
- 4-Way Switch Input
- LCD With High Resolution

■ Product Specification

- Display Screen Size : 205*91*50mm
- Control Box Size : 237*117*45mm
- Working Voltage: 9-16V
- Working Temperature : -40~85°C
- Storage Temperature : -40~90°C
- Relative Humidity : 5%~90%
- Air Pressure : 86kPa~106kPa

Control Panel (Standard Version)



■ Product Feature

- 5min Protection For Reverse Connection
- 60min Protection For Overvoltage
- 8-Way Control Switch Power Output, Reach 20A/Each Circuit
- Integrated With 8 Current Protectors
- Integrated With Waste Gauge, Grey Water Gauge, Voltmeter(Customized Requirement Be Allowed)
- Simple Installation
- High Cost Performance

■ Product Specification

- Display Screen Size : 290*180mm
- Working Voltage : 9-16V DC
- Working Current : ≤200mA
- Resistant To High Voltage : 500V, 1S
- Operation Method : Rocker switch
- Working Temperature : -30°C ~ +65°C
- Storage Temperature : -30°C ~ +80°C

