

KUS[®]

Your best choice for marine!
Since 1984

Marine Products Catalogue

www.kusauto.com



KUS[®]

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INTRODUCTION



The history of Zhengyang Electronic Mechanical Ltd. traces back to 1984. The company was established in Taiwan, and moved to Guangdong province Dongguan city in 2003.

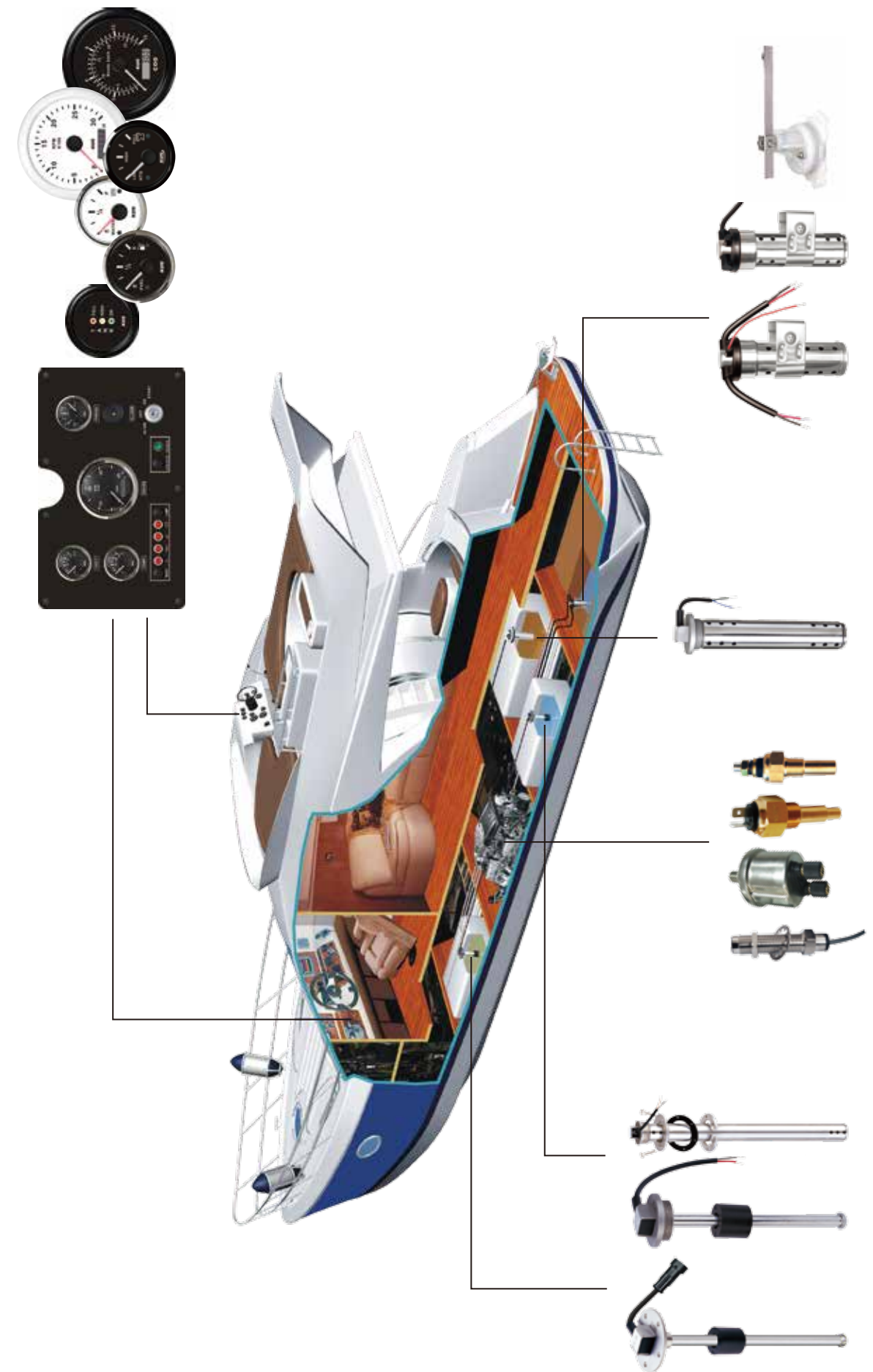
- **Product Range:**
Tank level sensors, temperature and pressure sensors, urea sensors, etc.
Gauges for fuel/water level, engine monitoring.
- **Facilities:**
At the end of 2008 ZEM's new 60,000m² plant was put into operation. The new plant has an integrated laboratory and is capable of stamping, injection, CNC, die-casting, die making, tube manufacturing, forming, bending, and welding.
- **Certificates:** ISO/TS16949, ISO9001, ISO14001, TÜV PED+AD2000 and CE 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 100 professional engineers who are always ready to offer the best solution for your vehicles and yachts.

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Marine Parts Illustration



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1 - 3 Manufacturing Laboratory Validation

4 - 8 Sea N Series

Fuel Level Gauge
Water Level Gauge
Tachometer
Oil Pressure Gauge
Voltmeter
Speedometer
Oil Temp. Gauge
Holding Tank Gauge
NKC40 Covertor

9 - 20 Sea V Series

Fuel Level Gauge
Water Level Gauge
Voltmeter
Water Temp. Gauge
Oil Temp. Gauge
Trim Gauge
Oil Pressure Gauge
Holding Tank Gauge
Rudder Angle Gauge
Clock
Ammeter
Digital Ammeter
3 LED Alarm Indicator
8 LED Water Level Gauge
8 LED Fuel Level Gauge
8 LED Holding Tank Gauge
Navigation Indicator
4 LED Alarm Gauge
Digital Water Temp. Gauge
Digital Oil Pressure Gauge
Digital Voltmeter
Hourmeter
Digital Fuel Level Gauge
Digital GPS Speedometer (52 mm)
Digital GPS Speedometer (85 mm)
Available Gauge Bezel (Plastic)
Tachometer
Speedometer
Tachometer with 4 LED alarm
GPS Speedometer
Rudder Angle Gauge

21 - 32 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
Digital Fuel Level Gauge
4 LED Alarm Gauge
Tachometer
GPS Speedometer (Knots+KMH)
Rudder Angle Gauge
Speedometer (MPH+KMH)

33 Gauge Panel Series

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35 - 43 Sensor Series

NS5 Series
S5 Series
S3 Series
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SHS Series
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OVG Series

44 Accessories

Resistance Resistor
Flange for Mounting

45 - 52 Other Sensors

Rudder Angle Sensor
Temperature Sensor
Pressure Sensor (Mechanical)
Tacho Sensor

53 Urea Sensors for SCR System

54 - 55 Product Application



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 90 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

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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 300 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



Introduction:

NMEA2000 is a communication protocol on data exchange among electric control units in navigation application, presented by America National Marine Electronics Association(NMEA) based on communication protocol J1939. Standard data exchange way better achieves data sharing, allowing user a easier, more reliable application.

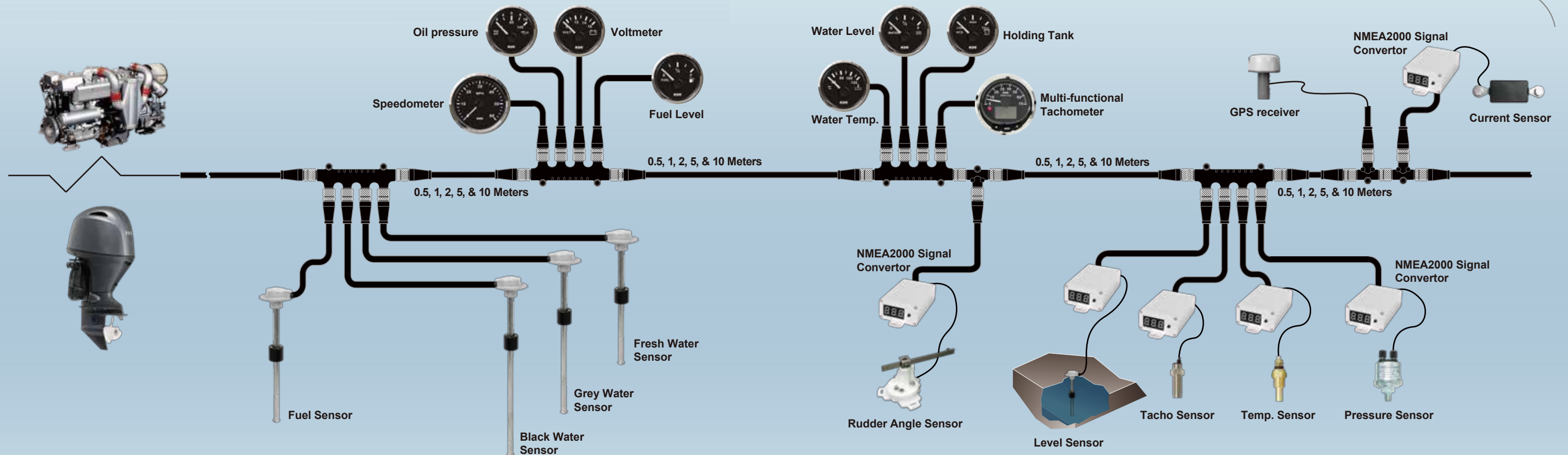
Structure:





NMEA2000 gauges are composed of Sea V series faceplate and Sea Q series main body except the tacho meter. NMEA 2000 tacho meter is able to display temperature, voltage, pressure, speed, engine working hour according to the request of the customer with the LCD display and the key operation function. The data switching can be easily realized by operating the UP and Down button.





Advantages:





1. NMEA2000 is based on CAN-BUS develop standard, which can achieve data exchange and sharing among different equipments.
2. Low cost, easy to installation, simple and easy to use.
3. Support PNP(plug and play), so the marine electric equipments installation, maintenance and exchange are very easy.





NMEA 2000 Network Integration System











FUEL LEVEL								
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KN00001	NMFR-BS	NMEA2000 Network Messages		SS 316	Empty-Full	12V	Φ52mm	
KN00200	NMFR-WS							





WATER LEVEL								
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KN01000	NMWR-BS	NMEA2000 Network Messages		SS 316	Empty-Full	12V	Φ52mm	
KN01100	NMWR-WS							





TACHOMETER								
	Art. No.	Model	Speed Ratio	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KN07000		NMHB-BS-7KL	NMEA2000 Network Messages		SS 316	0~7000rpm	12V	Φ85mm
KN07100		NMHB-WS-7KL						

OIL PRESSURE							
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KN05000	NMPR-BS-0-10	NMEA2000 Network Messages		SS 316	0 ~ 10bar	12V	Φ52mm
KN05100	NMPR-WS-0-10						

VOLTMETER								
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KN03000	NMVR-BS-8-16	NMEA2000 Network Messages		SS 316	8~16V	12V	Φ52mm	
KN03100	NMVR-WS-8-16							

SPEEDOMETER								
	Art. No.	Model	Speed Ratio	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KN08000	NMOB-BS-60	NMEA2000 Network Messages		SS 316	0~60MPH	12V	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	NMEA2000 Network Messages		SS 316	40~120°C	12V	Φ52mm
KN04100	NMTR-WS-40-120						

HOLDING TANK							
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KN02000	NMGR-BS	NMEA2000 Network Messages		SS 316	Empty-Full	12V	Φ52mm
KN02100	NMGR-WS						



NKC40 Covertor

Art No. : JYM1120

The NKC40 is a universal adapter that allows one to connect the existing analog fuel/water level senders or engine performance sensors to the NMEA 2000 network.

Each adapter box can be programed to accept and convert an analog signal source into a signal recognized by the NMEA 2000 network.

Working temperature: -30°C~+80°C

Visual temp: -30°C~+80°C

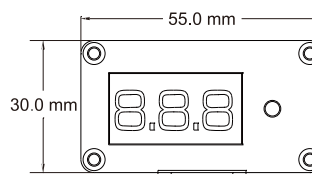
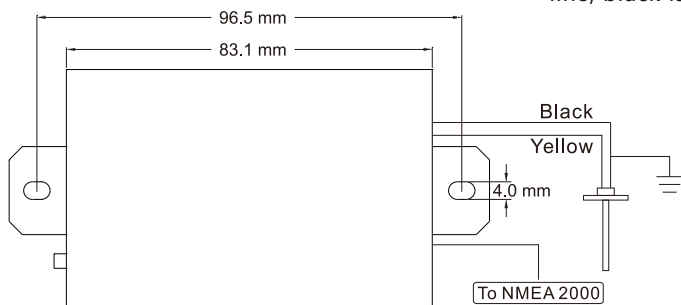
Storage temp: -40°C~+85°C

Working voltage: 9v~16v

Cable connecting guide

a). One standard NMEA2000 cable (with 5 wires) connects with NMEA2000 net.

b). One cable with 2 wires, yellow is signal line and connect with sensor signal line; black is ground line connect with sensor ground line.


























Sea V series







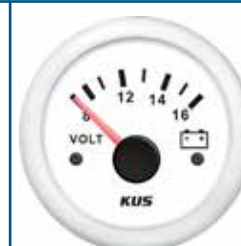










Features:





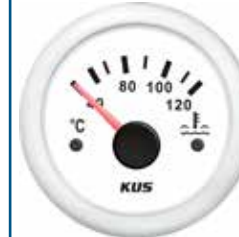





- IP67 protection rating for the entire gauge; can work up to 1m underwater;
- Double layer reinforced anti-fogging glass;
- 316 Stainless steel bezel with curved glass;
- Easy installation with multi-plug socket connection design;
- Selection of red or yellow backlight;
- Default working voltage: 12V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





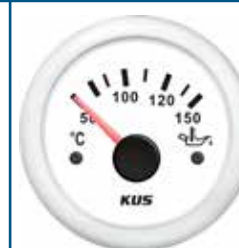





FUEL LEVEL							
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KY10005	CPFR-BS-0-190	0~190Ω		SS 316	Empty-Full	12V/24V	Φ52mm
KY10004	CPFR-BS-240-33	240~33Ω					
KY10100	CPFR-WS-0-190	0~190Ω					
KY10101	CPFR-WS-240-33	240~33Ω					
KY10002	CPFR-BN-0-190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











WATER LEVEL							
	Art. No.	Model	Signal	Picture Indicating	Bezel	Indicating Range	Working Voltage
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					






















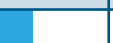








VOLTMETER							
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KY13000	CPVR-BS-8-16	8~16V		SS 316	8~16V	12V	Φ52mm
KY13100	CPVR-WS-8-16			SS 316 in black			
KY13013	CPVR-BN-8-16			plastic in black			
KY13200	CPVR-BB-8-16			plastic in white			
KY13304	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			SS 316 in black			
KY14000	CPYR-BN-50-150			plastic in black			
KY14202	CPYR-BB-50-150			plastic in white			
KY14305	CPYR-WW-50-150						

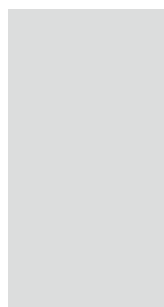
TRIM									
									
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension		
KY09205	CPIR-BS-0-190	0~190Ω		SS 316	DOWN-UP	12V/24V	Φ52mm		
KY09103	CPIR-WS-0-190								
KY09204	CPIR-BN-0-190			SS 316 in black					
KY09206	CPIR-BB-0-190			plastic in black					
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							
KY15001	CPPR-BN-0-5							SS 316 in black
KY15201	CPPR-BB-0-5							plastic in black
KY15300	CPPR-WW-0-5							plastic in white
KY15006	CPPR-BS-0-10			SS 316	0~10Bar			
KY15103	CPPR-WS-0-10							
KY15008	CPPR-BN-0-10							SS 316 in black
KY15202	CPPR-BB-0-10							plastic in black
KY15303	CPPR-WW-0-10							plastic in white

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	LOW-FULL	12V/24V	Φ52mm	
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			



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				

AMMETER							
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage
KY06007	CMAR-BS±50	Matched with KUS 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 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 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			





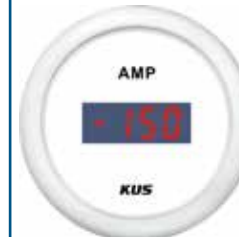













CURRENT SHUNT UNIT














* 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.











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



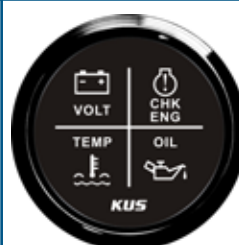

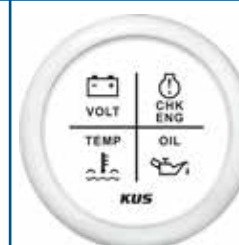





3 LED ALARM INDICATOR										
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension		
	KY99300	SSS-PAN-3LED-BS	Switch Signal		SS 316	FULL-HIGH-ON	12V/24V	Φ52mm		
	KY99402	SSS-PAN-3LED-WS								
	KY99302	SSS-PAN-3LED-BN			SS 316 in black					
	KY99200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





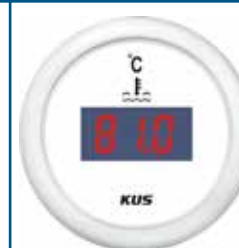





8 LED WATER LEVEL GAUGE							
							
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KY11021	CDWR-BS-240-33	240~33 Ω		SS 316	Empty-Full	12V/24V	Φ52mm
KY11113	CDWR-WS-240-33						
KY11114	CDWR-BN-240-33			SS 316 in black			
KY11207	CDWR-BB-240-33	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











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							

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							





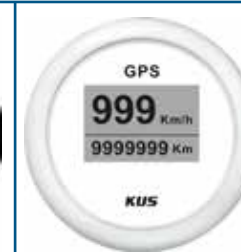





DIGITAL OIL PRESSURE							
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KY15042	CEPR-BS-0-5	10~184Ω		SS 316	0~5Bar	12V/24V	Φ52mm
KY15115	CEPR-WS-0-5						
KY15043	CEPR-BN-0-5			SS 316 in black			
KY15021	CEPR-BB-0-5			plastic in black			
KY15308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

DIGITAL VOLT METER							
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			



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 FUEL LEVEL										
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension		
	KY10012	CEFR-BS-4-20	4~20mA		SS 316	0~100%	12V/24V	Φ52mm		
	KY10113	CEFR-WS-4-20								
	KY10025	CEFR-BN-4-20			SS 316 in black					
KY10213	CEFR-BB-4-20			plastic in black						
KY10308	CEFR-WW-4-20			plastic in white						











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.

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	0~999Knots	12V/24V	Φ85mm
JMV00148	CCSB-WS			SS 316 in black			
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.

GAUGE BEZEL(Plastic)























Art. No.	Size	Color
160001	52 mm	White Plastic
160041	85 mm	
160000	52 mm	Black Plastic
160040	85 mm	


Art. No.	Size	Color
160003	52 mm	Golden Plastic
JYP1556	85 mm	
160002	52 mm	Sliver Plastic
160042	85 mm	

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

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	1.0~10.0		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	1.0~10.0		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	1.0~10.0		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				
























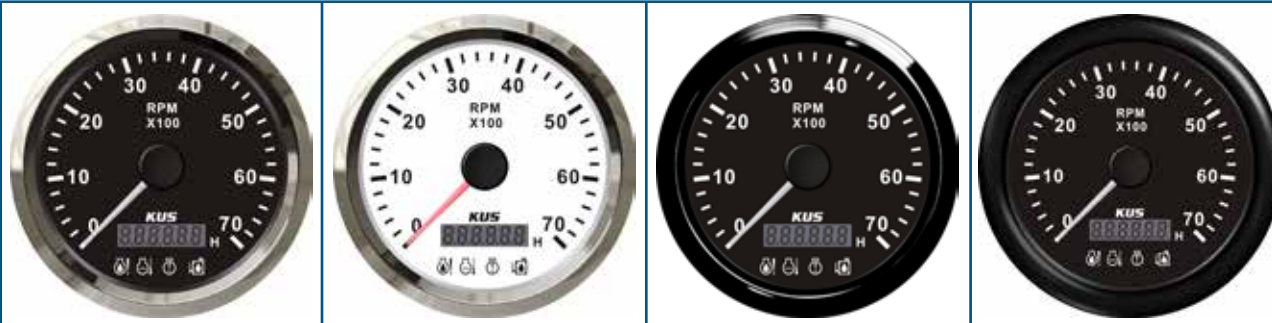






* Note : The speed ratio is adjustable. Alternative ratio range is 1.0~10.0























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








SPEEDOMETER							
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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			
<div><p>* Pitot tube need ordered separately. Art. No. : JYM1060</p></div>							

TACHOMETER with 4 LED ALARM							
							
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KY07046	CMHB-BS-7KL	Pulse		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			
							

GPS SPEEDOMETER							
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KY08017	CMSB-BS-15L	GPS		SS 316	0~15Knots	12V/24V	
KY08108	CMSB-WS-15L			SS 316			
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	GPS		SS 316	0~30Knots		
KY08105	CMSB-WS-30L			SS 316			
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	GPS		SS 316	0~60Knots		
KY08103	CMSB-WS-60L			SS 316			
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.

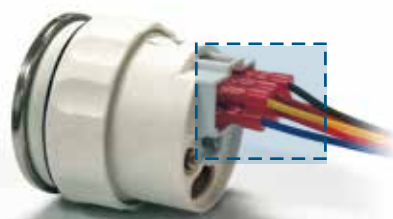
RUDDER ANGLE							
Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
KY09009	CMRB-BS-0-190	0~190Ω		SS 316	R-L	12V/24V	Φ85mm
KY09105	CMRB-WS-0-190			SS 316			
KY09017	CMRB-BN-0-190			SS 316 in black			
KY09215	CMRB-BB-0-190			plastic in black			
KY09311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

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

Sea Q series



I









II







Features:







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







Art. No.	JYS0302	JYS0258
Model	I	II
Length of wire	400 mm	400 mm










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
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℃	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	Installation Dimension
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	Installation Dimension
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							SS 316 in black
KF09024	FPIR-BN-0-190								










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

DIGITAL FUEL LEVEL								
	Art. No.	Model	Signal	Picture Indicating	Bezel	Display Range	Working Voltage	Installation Dimension
	KF20002	FEFR-BS-4-20	4~20mA		SS 316	0~100%	12V/24V	Φ52mm
	KF20100	FEFR-WS-4-20						
KF20003	FEFR-BN-4-20			SS 316 in black				












* To match with digital fuel level gauge, the level sensor need to be customized separately.

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			









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

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						
KF08031	FMSB-BS-30L	GPS		SS 316	0~30Knots		
KF08114	FMSB-WS-30L						
KF08032	FMSB-BN-30L						
KF08033	FMSB-BS-60L	GPS		SS 316	0~60Knots		
KF08115	FMSB-WS-60L						
KF08034	FMSB-BN-60L						

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

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			SS 316			
	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			SS 316			
KF18013	FPOB-BN-35			SS 316 in black			
KF18014	FPOB-BS-55			SS 316	0~55MPH		
KF18109	FPOB-WS-55			SS 316			
KF18015	FPOB-BN-55			SS 316 in black			
KF18016	FPOB-BS-65			SS 316	0~65MPH		
KF18110	FPOB-WS-65			SS 316			
KF18017	FPOB-BN-65			SS 316 in black			



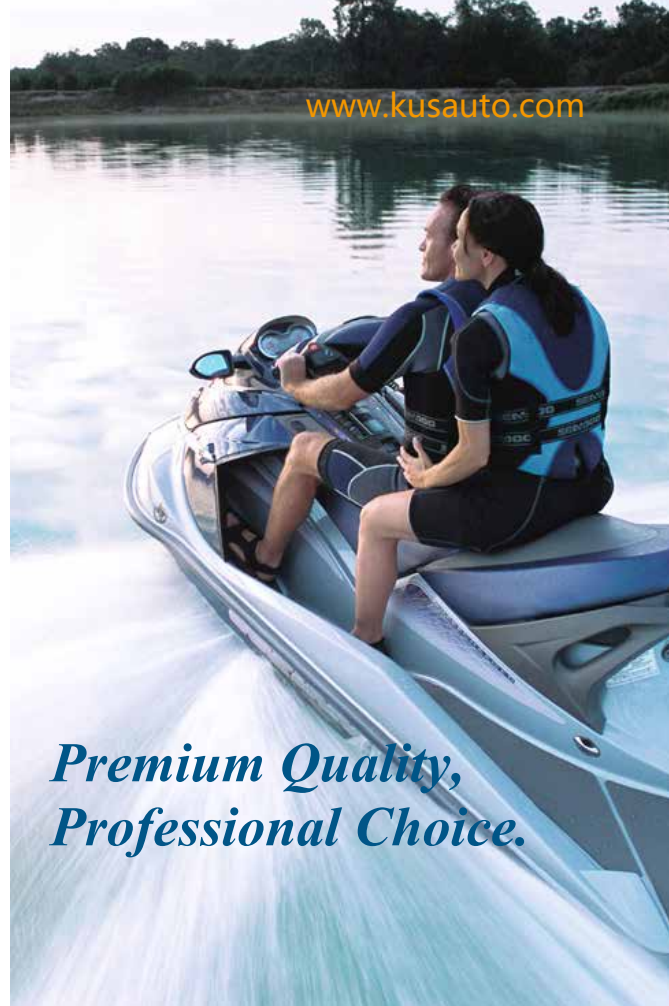
Art. No. : JYM1060

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.

Marine Gauge Panel Series

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.



*Premium Quality,
Professional Choice.*



P/N	Gauge Panel
Art. No.	JMV00144
Working Voltage	12V
Installation Dimension	378*230 mm



P/N	KUS-4
Art. No.	KY89923
Working Voltage	12V/24V
Installation Dimension	250*190 mm



P/N	KUS-3
Art. No.	KY89929
Working Voltage	12V
Installation Dimension	190*75.5 mm



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



P/N	KUS-1
Art. No.	KY89922
Working Voltage	12V/24V
Installation Dimension	180*140 mm



P/N	P2
Art. No.	KY79902
Working Voltage	12V
Installation Dimension	100.5*79 mm

Custom Design Services

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Premium Quality, Professional Choice.



More than 30 years manufacture experience;
Professional Designer;
High-grade silkscreen workshop;
3-D computer design software;
Antistatic workshop;

That allows us to offer personalized designs to best meet the needs of our clients including boats, yachts, off-road machinery, agriculture machinery, generator sets, snowmobiles and etc.

KUS is offering range from custom conjugations to optimized combinations.

Different Dial,
Different Bezel;
Different Backlight;
Different Logo;
Different Package;
Different Structure;
And etc...



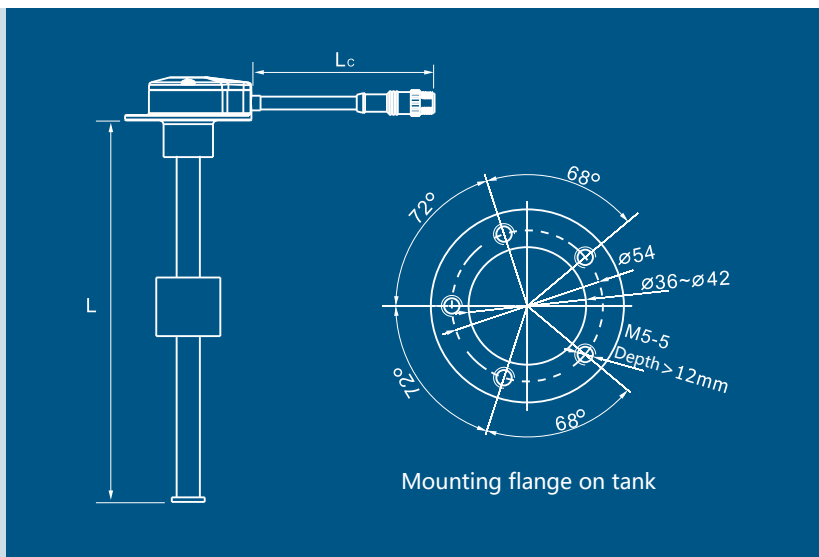
To make the unique design of gauge for your demand, please be free to contact us to know more conditions for OEM & ODM by mail: marine@kusauto.com.

www.kusauto.com

Sensor series



NS5 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

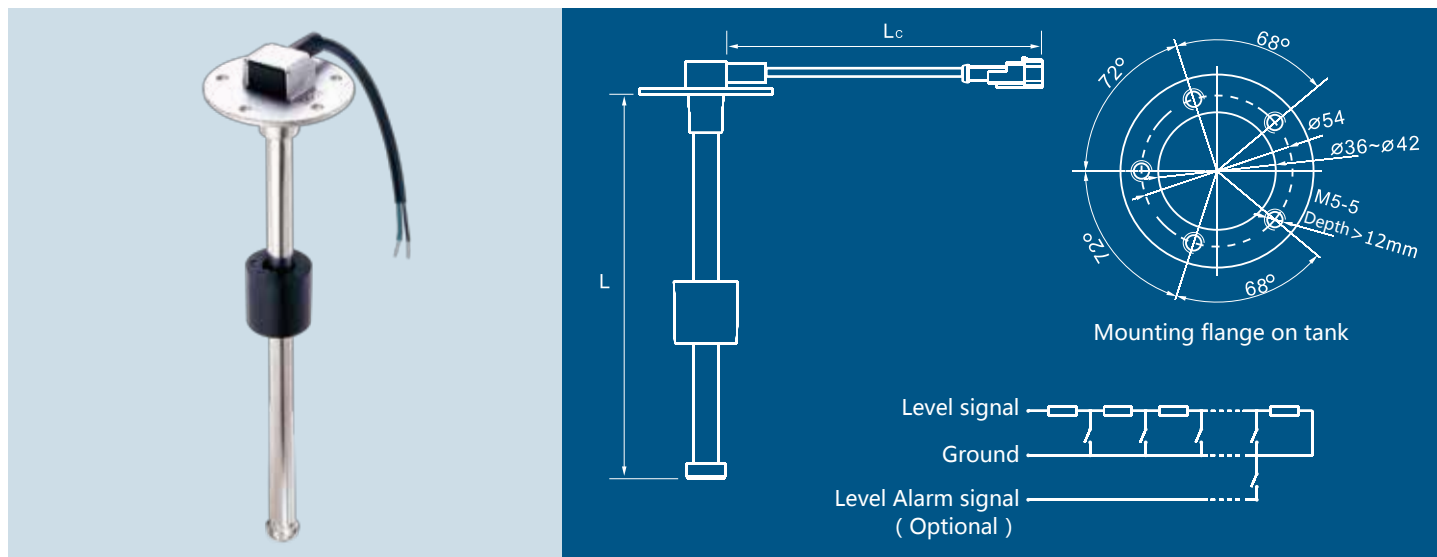
- Utilizing magnetic field to control the reed on-off switch, the product features a long service life and protection against vibration.
- Rated power: 720mW
- Wire: PVC material (PA corrugated pipe cover is optional)
- Connector: Male " Micro -C" Pinout
- Output signal: NMEA2000 Network Messages
- Resolution range: 10~40mm
- Operating temperature: -30°C~+80°C

Art. No.	Product Name	Specification
JKS0107	NS5-150mm	Length of Wire : 460mm Gasket : NBR Alarm : No Material: SS316 Working Voltage: 9~16v Logo: KUS
JKS0108	NS5-200mm	
JKS0109	NS5-225mm	
JKS0110	NS5-250mm	
JKS0111	NS5-275mm	
JKS0112	NS5-300mm	
JKS0113	NS5-350mm	
JKS0114	NS5-400mm	

Art. No.	Product Name	Specification
JKS0115	NS5-450mm	Length of Wire : 460mm Gasket : NBR Alarm : No Material: SS316 Working Voltage: 9~16v Logo: KUS
JKS0116	NS5-500mm	
JKS0124	NS5-550mm	
JKS0117	NS5-600mm	
JKS0125	NS5-650mm	
JKS0118	NS5-700mm	
JKS0126	NS5-750mm	
JKS0119	NS5-800mm	

* Please contact us for more details.

S5 Series

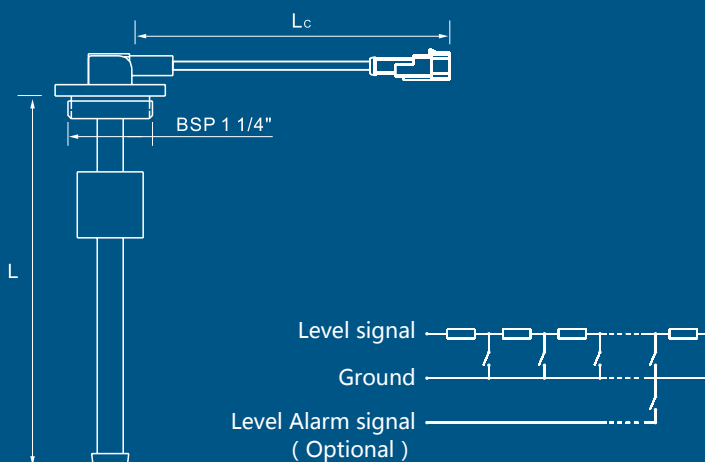


- ◆ Material: The main body is made of SS316 or SS304 stainless steel
- ◆ Length range: 100 ~ 2000 mm. It also can be customized according to your requirements.
- ◆ Mounting: SAE standard 5 holes, other mounting methods available.
- ◆ Accessories: -5 x M5 screws
-2 mm thick NBR gasket.
If installing 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
- Rated current for alarm switch: 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
- Rated current for alarm switch: 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.

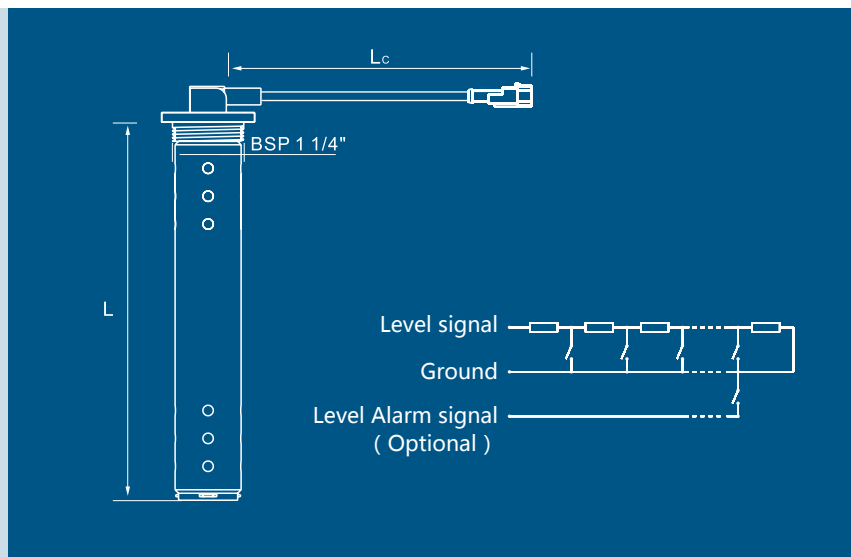
S5/S3 Series

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 : 460mm 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 : 460mm 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 35 “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
- Rated current for alarm switch: 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

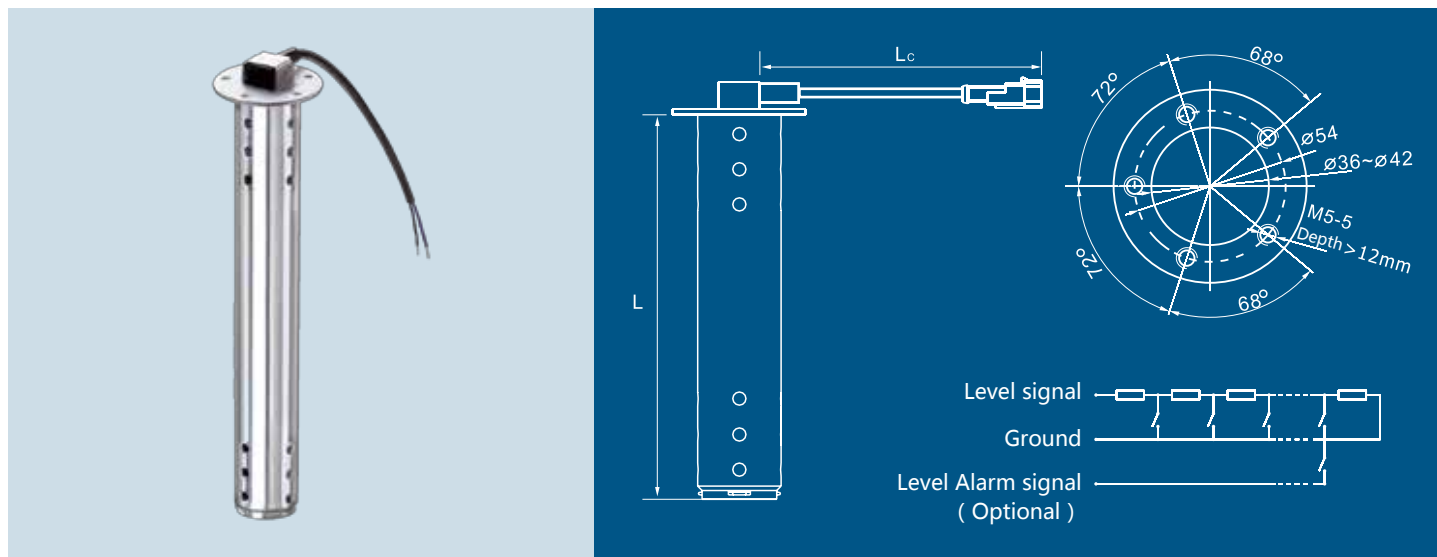
Art. No.	Length(mm)	Specification
JS63186	S3HT-U150	Output : 240~33Ω Mounting : BSP 1 1/4" Thread Gasket : NBR Length of wire : 460mm Material : SS316 Logo : KUS Length of Sensor: Customized
JS63187	S3HT-U175	
JS63062	S3HT-U200	
JS63188	S3HT-U225	
JS63189	S3HT-U250	
JS63203	S3HT-U275	
JS63063	S3HT-U300	
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 : 460mm 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 39.

* Please contact us for more details.

S5H Series



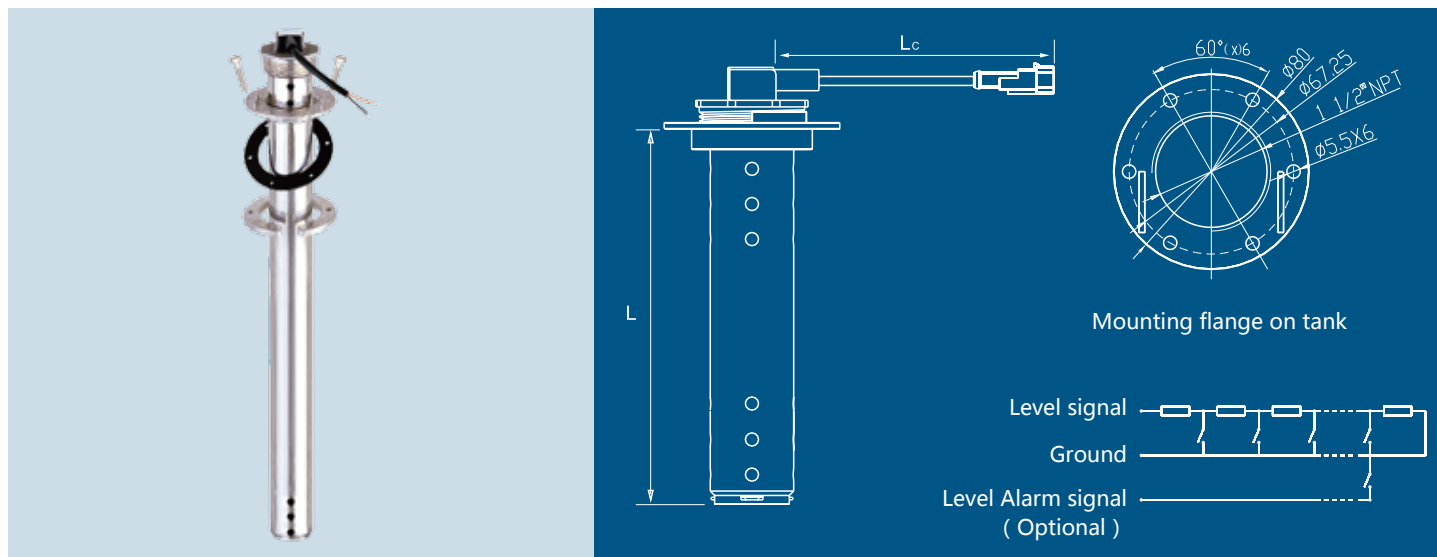
- ◆ Uses: Mainly used in black water or grey water tanks. Can also be used in fresh water tanks.
- ◆ Material: The main body is made of SS316 stainless steel.
- ◆ Length range: 4" , 6" , 8" , 12" , 16" , 20" , 30" It can also be customized according to your requirements.
- ◆ Mounting: SAE standard 5 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
- Rated current for alarm switch: 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



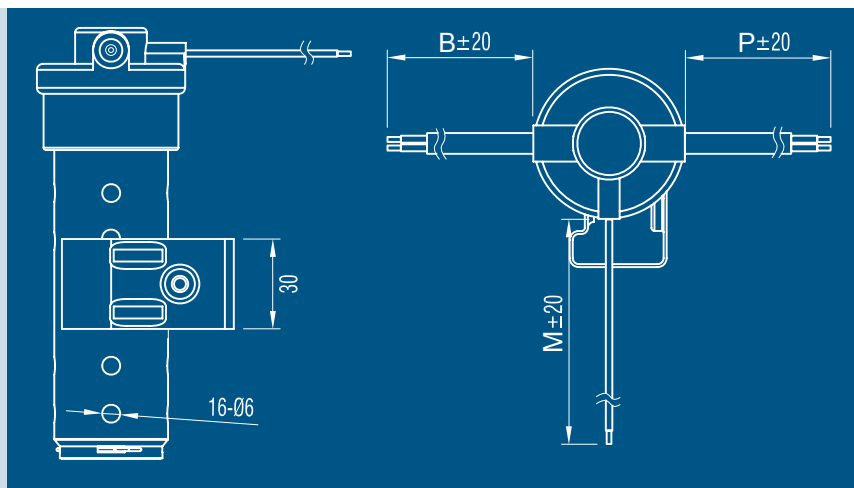
- ◆ Uses: Mainly used in black water or grey water tanks. Can also be used in fresh water tanks.
- ◆ Material: The main body is made of SS316 stainless steel.
- ◆ Length range: 4" , 6" , 8" , 12" , 16" , 20" , 30" It can also be customized according to your requirements.
- ◆ Mounting: NPT 1 1/2" thread twist-in, with standard 6 hole thread flange plate, standard 6 hole under ring and 6 piece of M5×30 threads.
- ◆ 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
- Rated current for alarm switch: 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
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
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

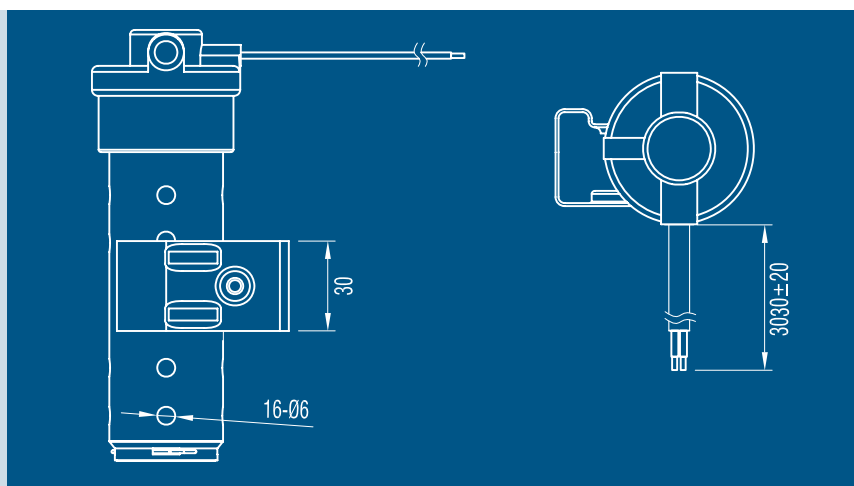


- ◆ Standard length is 4", length can also be customized. Rating working voltage can be 12V or 24V. single core wire can be used, and pump switch can be operated manually.

- 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



Art. No.: JZM8980

If E-F end short circuit :

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

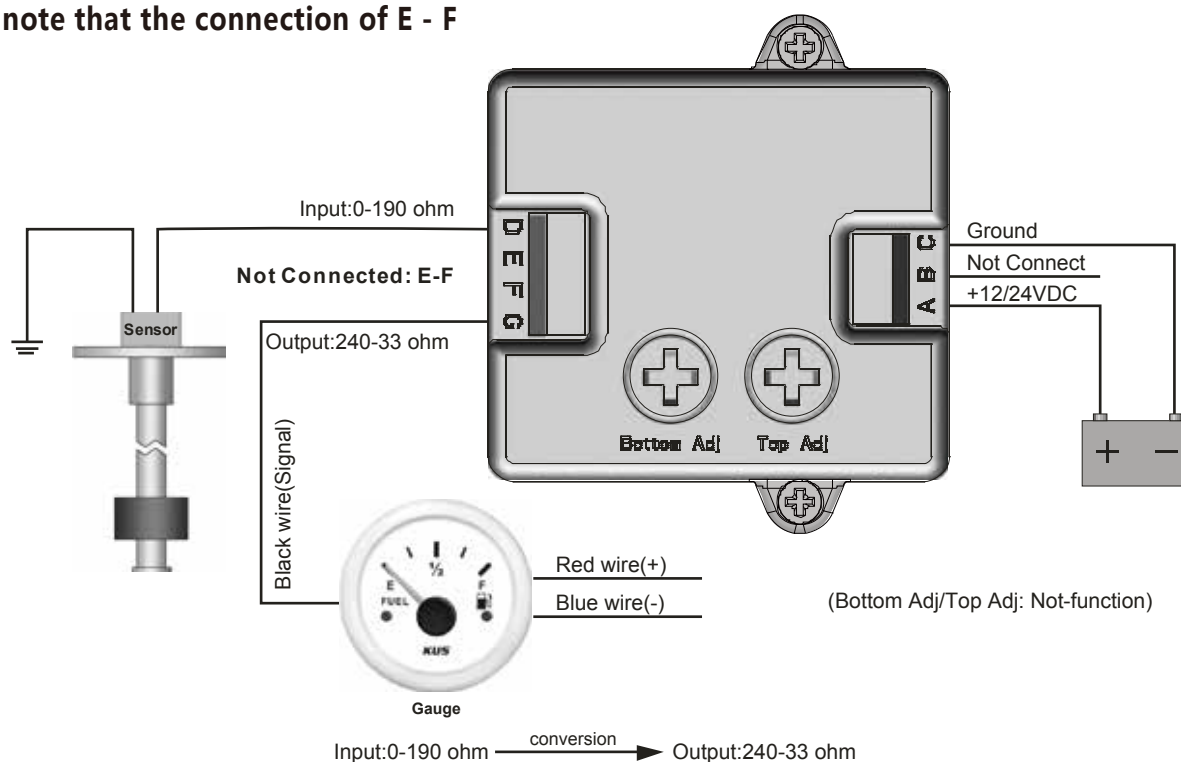
If E-F end off :

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



Flange for mounting

Model	Flange	Flange	HFL	FL-2	FLB
Art. No.	JSM0893	JSA0054	JSM1714	163010	163120
Descriptoin	SAE 5 holes	Alumilum flange for 1 1/4" BSP tank senders	Topside/underside kit to suit S3HT 1 1/4" BSP waste senders	Topside flange to adapt S3 1 1/4" BSP to SAE 5 holes	Stainless steel weld bush for 1 1/4" BSP tank senders

* 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

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.

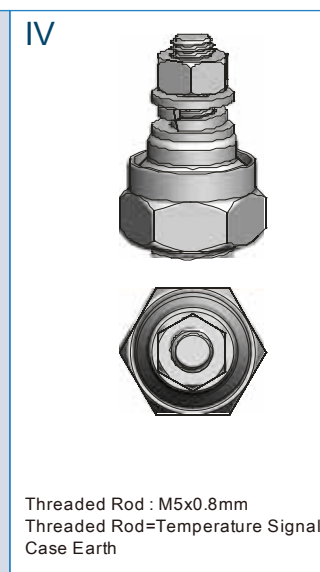
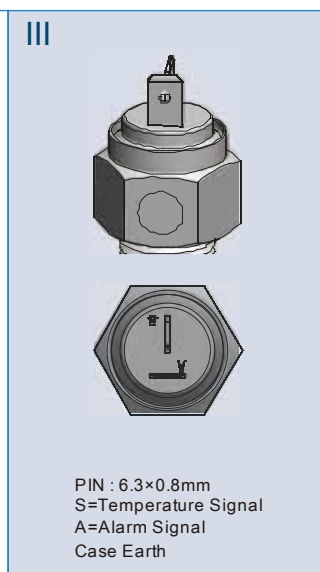
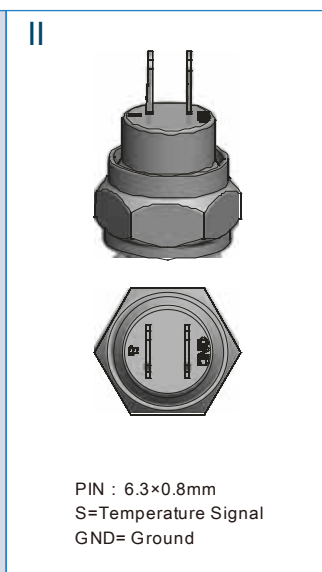
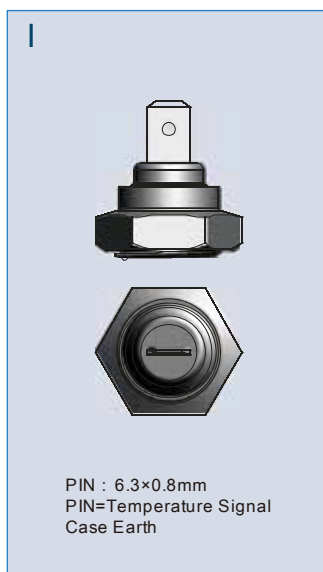
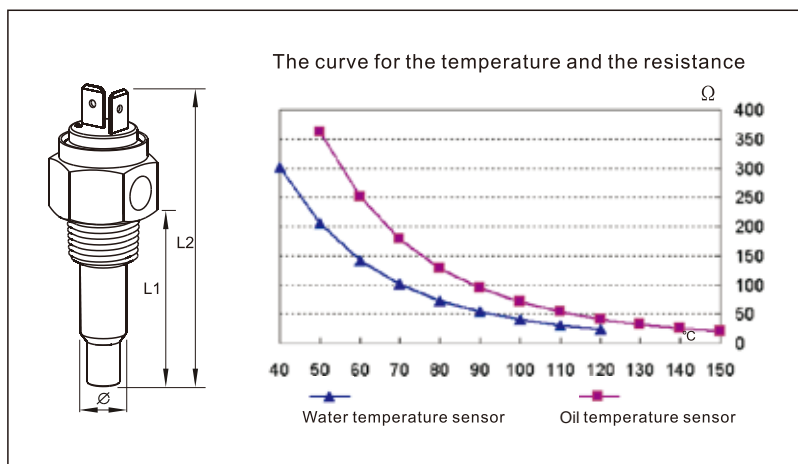
* Please contact us for more details.

Temp. 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.

Temp. 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.

Temp. 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	
KE00112	SWA-3	120	95	M16×1.5	10.7	41	71.5	
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.

Temp. 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	

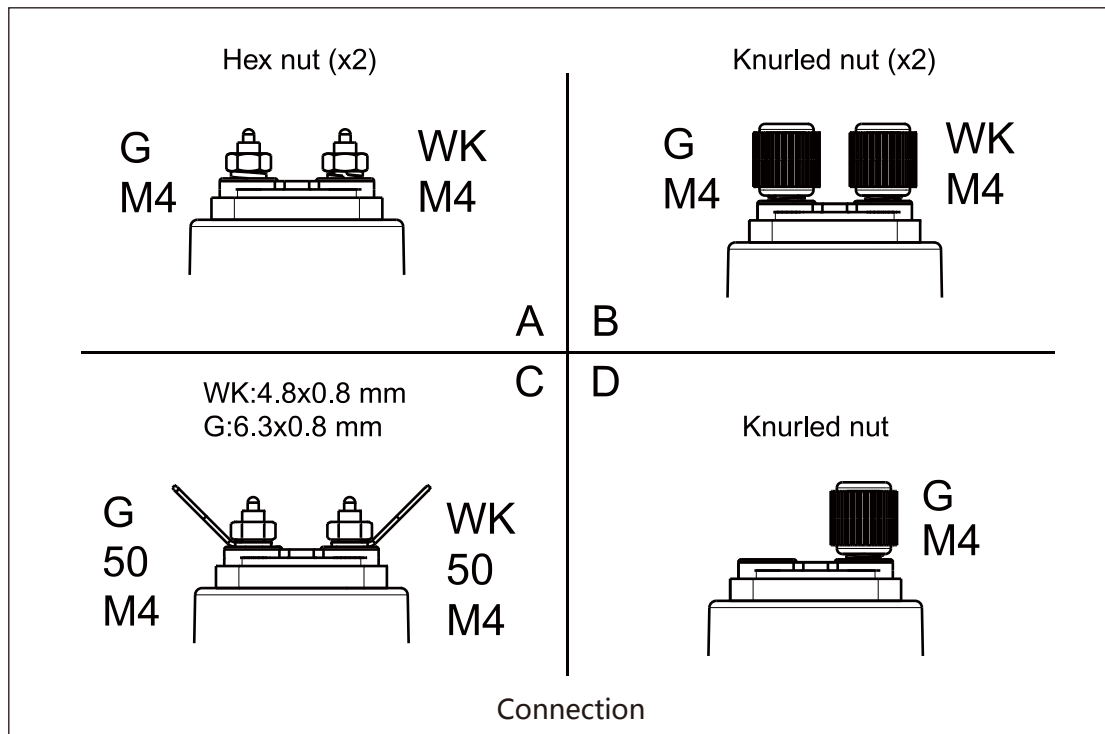
* Please contact us for more details.

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		
KE21104	NPT1/8	0-5	10-184	0.8±0.2	B	White zinc plated
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	NPT 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		
KE21124	NPT1/8	0-10	10-184	0.5±0.2	C	White zinc plated
KE21142	NPT1/8	0-10	10-192	0.8±0.2		
KE21120	NPT1/8	0-10	10-184	0.8±0.2		
KE21005	NPT1/8	0-5	10-184	No	D	
KE21152	BSP-1/8	0-10	10-184	No		



* Please contact us for more details.

Tacho Sensor



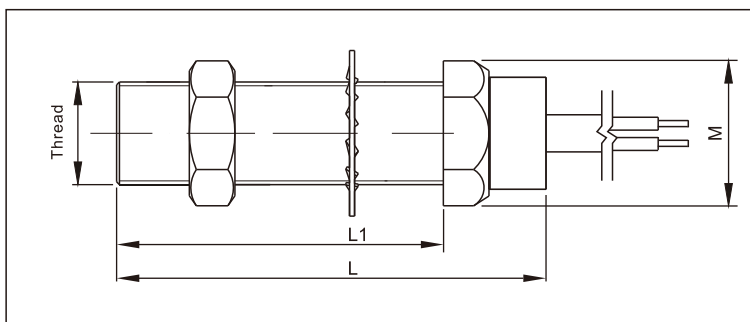
- Used for measuring gear rotation speed. Its main advantages include stable signal output, wide range of operational temperature, small size, and simple assembly process.
- It covers a wide range of measurements, including zero rotation speed.
- The shell appearance, material and thread fitting can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



The International Maritime Organization (IMO) has regulated NO_x emissions from marine vessels in order to reduce air pollution caused by NO_x. The IMO's Tier III standards require that marine vessels setting sail in 2016 or later reduce NO_x 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 NO_x in the exhaust gas of a marine engine.

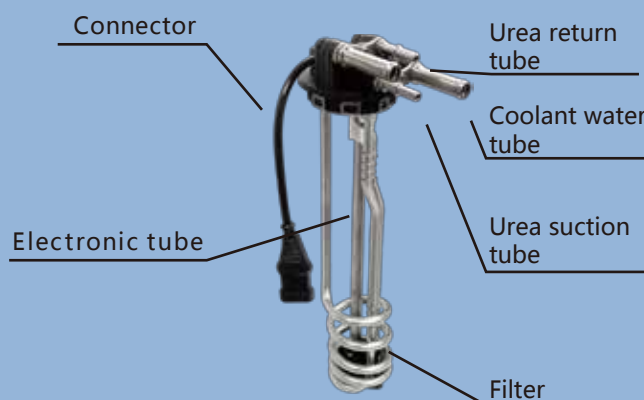
SCR system operation needs to consume urea solution as a reducing agent, in order to ensure the normal operation of marine SCR system, usually set up a separate urea solution tank for storing urea solution, and also need one urea sensor to be combined with this urea tank for level detecting, temperature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



■ Urea sensors with single tube



