

Special sensor

Load sensor



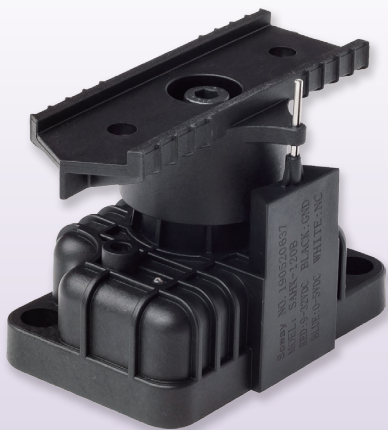
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Fuel consumption meter



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Load sensor



With the rapid development of the national economy, the market has a strong demand for the supervision of garbage trucks, slag trucks and goods transport vehicles. In order to solve the headache problems such as overloading illegal operation, random unloading garbage, transporting for private work and so on. To ensure the public safety and the interests of the owners, over the years, we have adopted various means, but these problems cannot be fundamentally solved from the source.

The most commonly used method is weighing, however, the phenomena of damage and misreport, etc. easily occur in existing weighing methods in use, and the maintenance cost is very high. The patented product-load sensor developed by our company for the market demand, has the advantages of not easy to damaged and precise measurement, which selecting a single sensor or multiple sensor combination, combined with GPS and operating platform, can well solve the current market problems from the source. The sensor is designed according to the principle of angle measurement, because the change of vehicle load will lead to the deformation of leaf spring and produce displacement, and the change of vehicle weight can be monitored by measuring the displacement corresponding to the corresponding

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Data download

www.sowaysensor.com/product/

- It can detect the specific weight of carrying idler, full load, overload or load weight
- Fast installation: provide auxiliary mounting bracket, and easy to commissioning.
- Good seismic performance, up to 5G/40Hz
- Oil pollution resistance with protection level IP67

Application area



Slag truck load detection

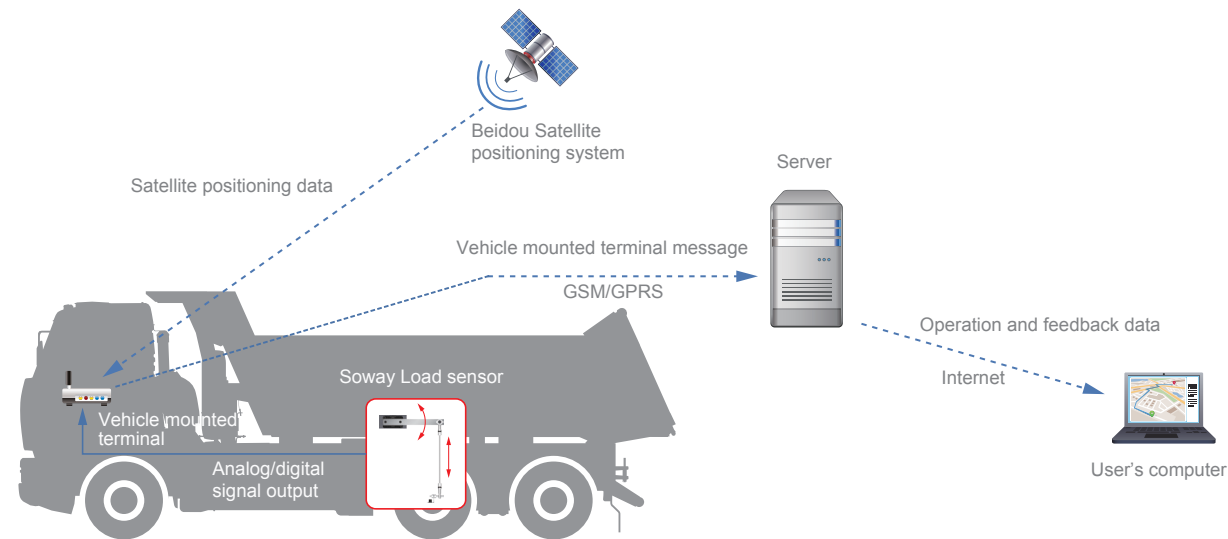


Logistics vehicle load detection



Vehicle body height detection

Product application diagram



Basic performance parameter

Model	SAHX-120B
Power supply	9~32 V DC
Output signal	0.5-4.5V / CAN / RS485
Accuracy	±2% (F.S.)
Range scope	0-120 °
Housing material	PA66、GF35
L of protection	IP67
Working temperature	-40 C ~ +70 C
Storage temperature	-40 C ~ +80 C

Position detection
Angle measurement
Speed measurement
Displacement measurement
Liquid level measurement
Flow measurement
Pressure measurement
Temperature and humidity measurement
Current measurement
Special sensor
Load sensor
Fuel consumption meter

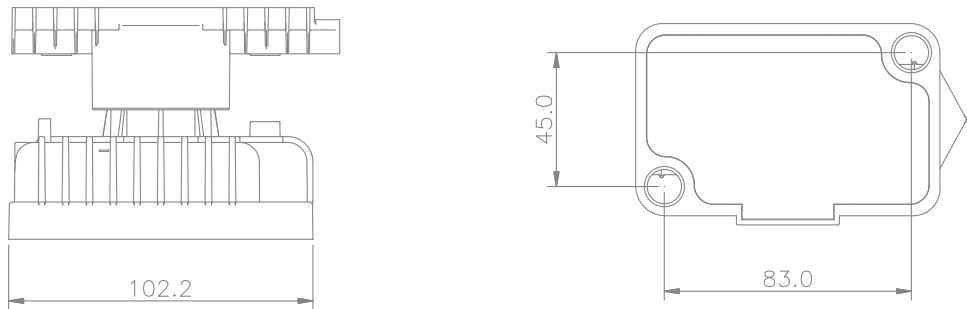


Position detection
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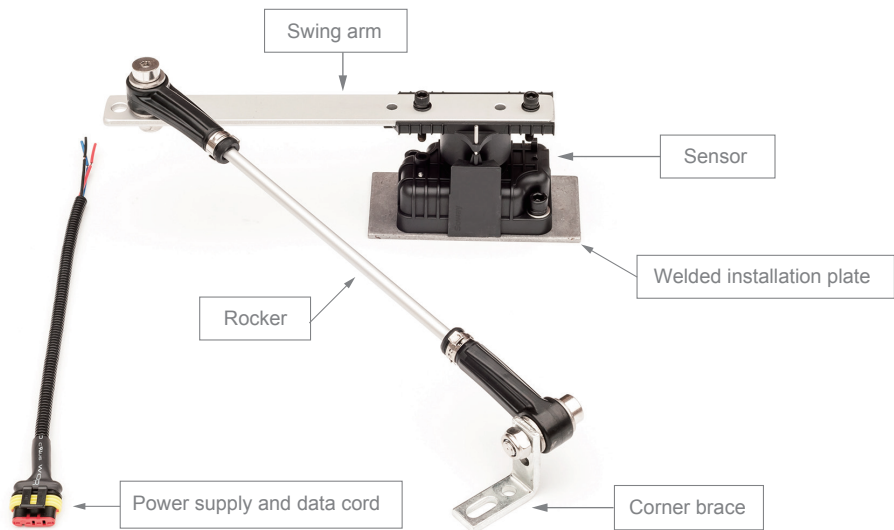


Machine size



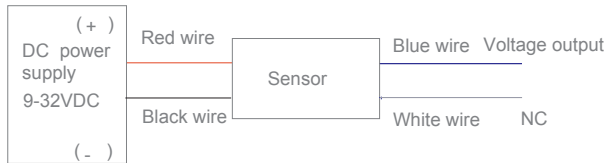
Unit: mm

Product structure

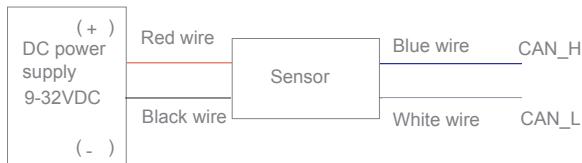


Wiring method

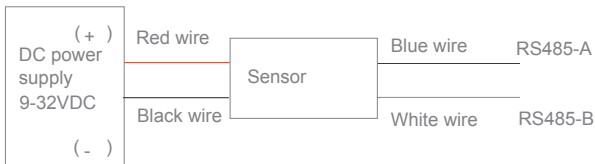
Voltage output wiring diagram:



CAN output wiring diagram:

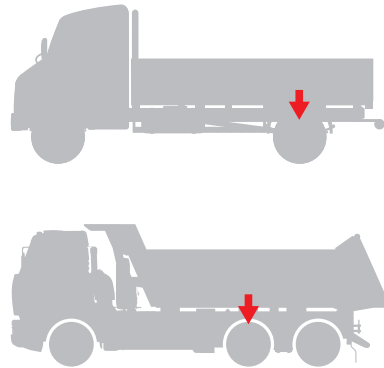


RS485 output type wiring diagram:



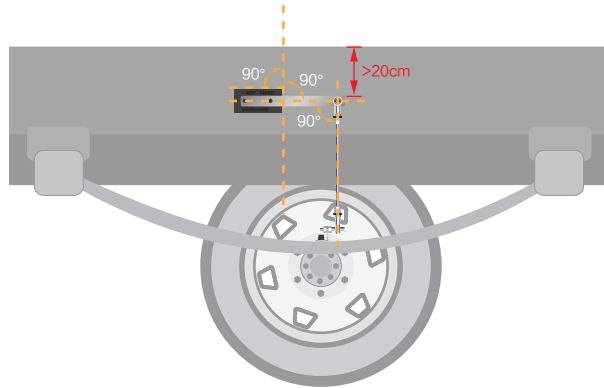
Wiring method

Installation diagram



※ Precautions:

1. The red arrow is the recommended installation point;
2. Please select the fixed position point for both the sensor mounting back plate and the corner brace;
3. Confirm that the installation method is welding or fastening by screws;
4. When the sensor is installed, the swing arm shall be parallel and upward, leaving a active space greater than 20CM.



Position detection
Angle measurement
Speed measurement
Displacement measurement
Liquid level measurement
Flow measurement
Pressure measurement
Temperature and humidity measurement
Current measurement
Special sensor

Load sensor
Fuel consumption meter



Fuel consumption meter



The fuel consumption meter product adopts the high sensitivity positive displacement flow sensor as the core which is installed in the fuel circuit between the fuel tank and the engine without damage. With the fuel consumption totalizer, it can measure the basic data such as the fuel consumption quantity and the working time of the engine in real time, which completely does not affect the original fuel circuit of the vehicle, and realizes the functions such as automatic exhaust, balance pressure, oil temperature balance and so on. It can be applied to vehicle fuel consumption monitoring and other fuel consumption measurement fields to realize remote, real-time, intelligent management of vehicle fuel consumption, so that enterprises can facilitate modern high-tech means to rapidly improve the level of fuel consumption management.

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High precision with measurement precision up to $\pm 1\%$

Stable performance and industrial grade design and processing, ensure long-term and stable use of products

Easy to install with standard oil pipe joint design

Application area



Truck fuel consumption detection



Ship fuel consumption detection



Diesel unit fuel consumption detection

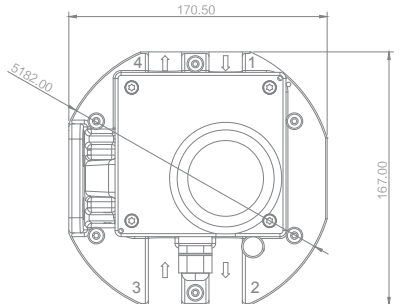
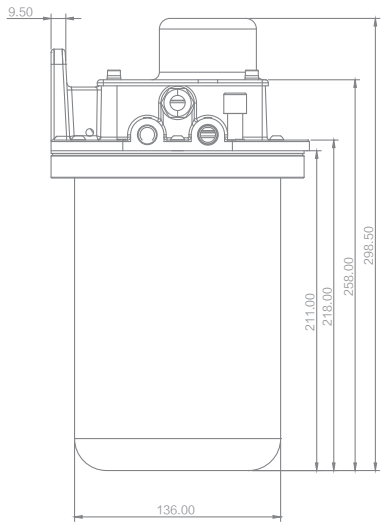
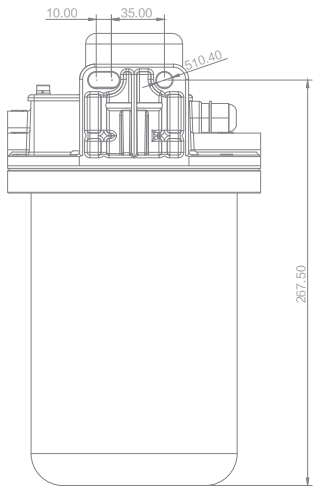


Construction machinery fuel consumption detection

Basic performance parameter

Model	HOXM03
Accuracy of measurement	$\pm 1\%$
Flow range	10-450 L/H
Working temperature	-20 °C ~ 80 °C
Storage temperature	-40 °C ~ 85 °C
Product material	Aluminum
External dimension:	318*175*167 mm
Operating voltage	24 VDC
Digital output (one can be selected)	RS232 interface (1 way) RS485 interface (1 way)
Oil circuit interface	M14*1.5

Machine dimension



- 1: Tank fuel inlet
- 2: Engine fuel inlet
- 3: Engine drainback
- 4: Tank drainback

- Position detection
- Angle measurement
- Speed measurement
- Displacement measurement
- Liquid level measurement
- Flow measurement
- Pressure measurement
- Temperature and humidity measurement
- Current measurement
- Special sensor

- Load sensor
- Fuel consumption meter

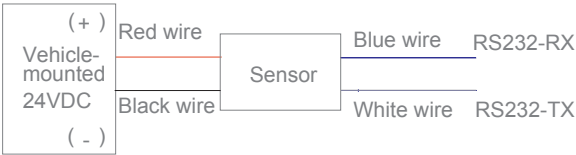


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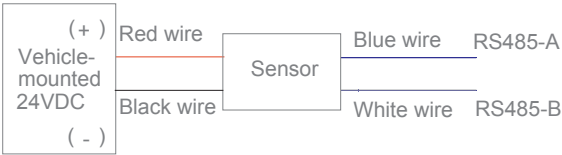


Wiring method

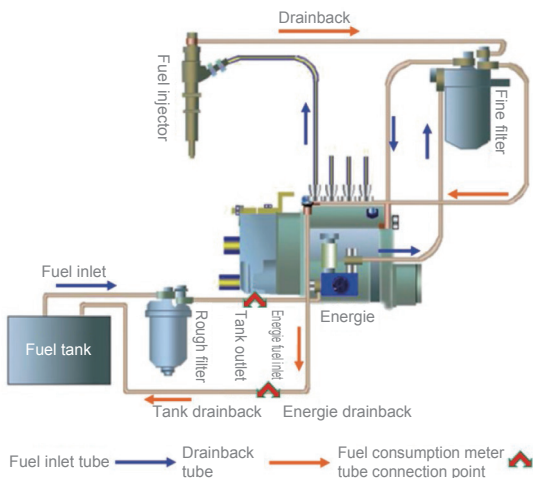
RS232 output type wiring diagram:



RS485 output type wiring diagram:



Precautions



Note: please connect the pipeline according to the identification on the fuel consumption meter.

Please read the notes carefully before installation

1. The fuel consumption meter number must correspond to the number on the totalizer, which cannot be mixed;
2. The power supply of fuel consumption meter is 24V. Please start the engine after installation is completed and power is switched on;
3. When the fuel consumption meter is working properly, no fuel will come out from the return line of the fuel tank. After the installation is completed and the power is switched on, run for a period of about 5 minutes, no oil leakage here indicates the operation is normal;
4. Before installation, do not pull the rubber plug at the fule inlet and outlet to prevent impurities from entering;
5. It shall be installed vertically as much as possible and shall not be inverted;
6. Install the hinged joint with filter screen at the inlet where the inflow liquid enters the fuel consumption meter, and install the other hinged joint without filter screen at the other outlet. It shall ensure that the fuel consumption meter and the hinged joint do not mix with particulate solids or other impurities.
7. In order to ensure the normal use of the fuel consumption meter, please try to keep the oil connection site of fuel consumption meter clean, first of all, the possible residue in the pipeline shall be cleaned; and the fuel consumption meter shall be installed after the filter in the oil circuit.
8. After the installation is completed, since there is more gas in the pipe, the engine shall start to exhaust the air in the fuel circuit before the vehicle runs;