

Sense RF level transmitter



Soft electrode



Hard electrode



auxiliary



transmission unit E/F

The sense 2060 is an advanced, state-of-the-art, two-wire, Capacitance-based level transmitter suitable for a wide range of process applications. This level measurement solution is suitable for both high temperature and causticity liquids/solids. The level gauge system consists of an explosion proof housing, field-replaceable electronics module, and level measurement probe/sensor. Common industrial scurviness applications include the measurement of liquid hydrogen, liquid oxygen, solid powder, acid, oil/water interface and others. The latest in microprocessor technology allows the level transmitter to consistently and reliably measure the level of your process fluid.

Simple Calibration

In contrast to competitor's systems in the industrial applications market, the Model SENSE2060 level gauge provides simple microprocessor-controlled calibration. Simply turn the tedious potentiometer adjustments are required for calibration to set the zero and span for any installed sensor.

Remote monitoring

The Sense2060 level gauge comes with a 4-20 mA output which corresponds to 0-100% level. A range of simple and reliable Liquid / Solid Level Transmitters which includes Immersion type Transmitter (for liquid) as well as RF Capacitance type Level Transmitter (for liquids / solids) are available. Options of SS, PP and PTFE wetted parts having max. range up to 15 Mtr.s, Max. temp. of 200°C and Max. pressure of 60 Kg/cm² to suit various industrial applications. Options of Current or Voltage Transmission outputs are available. Indicating controllers are available with panel / wall mounted enclosures and option of 1 to 4 set points.

Enclosure options of Weather proof IP 65 / IP56 as well as Ex - proof enclosures suitable to hazardous areas Gr. IIA, IIB and IIC.

Application

Accurate and continuous level indication / transmission / control of liquid and solid levels in various industries like Chemical, Fertilizer, Petroleum and Petro - Chemicals, Veg - Oil refineries, Power generation, Pharmaceuticals, Automobiles, Cement and Metal industries.

Application of Principle

The level measurement of a medium in a tank, is accomplished by taking advantage of the capacitance theory. The tank wall, the probe and the medium are all capacitors. A high frequency sine wave is then applied between the probe and the tank wall. The level change of the medium will consequently change the current of the applied sine wave. From the formula $Z=1/(2\pi fC)$, we know that if the capacitance increases, the impedance gets smaller and the current gets bigger. If the capacitance decreases, the impedance gets bigger and the current gets smaller. When the small current change is amplified and sent to a MG series meter, the output signal is 0/4-20mA or 0-10VDC.

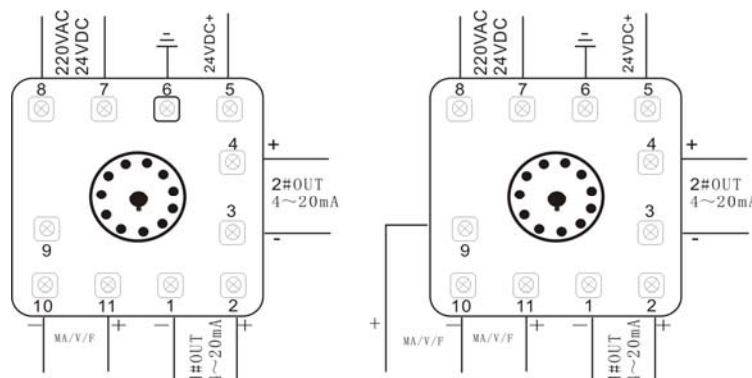
Can be applied at high-temperature, acid & alkali and various style of tank or equipment, will not be affected by Steam, Sound wave, Pressure, Temperature.

Operating voltage: 24VDC; max. output current: 20mA, resolution: 0.2% .Probe material includes steel, stainless steel, PVDF coated, PP coated, or PFA coated.Max. tensile strength of cable probe can up to 50M in length.

Sensitive range: 150pf, 500pf, 1500pf

Max. operating temperature: 200°C, Enclosure protection IP-65 or explosion-proof.

Wires:



transmission unit introduced

simulation output quantity and range of zero can be arbitrarily set.

When the broken resistance, breaking even, interrupted occur ,it will show suggested with a flicker

Instrument power off state, parameters can be set up to maintain permanent

Technical parameters

Accuracy: the four-digit significant: $0.5\% F_s \pm a$ digital or $0.2\% F_s \pm a$ digital

transmission output: 0.5% F_s ;

Input signals: Sensor provided

Output: 4 to 20 mA, 0 ~ 20mA, 0-10mA, 0 - 5V, 1 - 5V, 0 to 10V;

Power supply: 85 ~ 265 VAC (50Hz \pm 2Hz), or 24 VDC \pm 2V;

The main safety indicators

High electronic vantage - shell (land side):> 100 Mohms, 1500 V ,1 minutes, with no breakdown fly arc.

Common to - shell (land side):> 10 Mohms, 500 V, 1 minutes, with no breakdown fly arc.

Working conditions

Temperature: -20 ~ 50 ° C, relative humidity: <85% RH, no-corrosive gases.

Transmission unit model table

E-	□ □ □ □ □ □ □ □		Introduction
F-			
Series	1		Show in digital
Loop	10 T0		Single signal Special
Input type	T0		Input :Sensor provided
Output type	B1 B2 B3 B4 B5 B6 B7		Output:0~10mA Output:4~20mADC Output :1~5VDC 2 outputs:4~20mADC 2 outputs:4~20mADC and 1~5VDC 2 output: 4~20mADC and 4~20mADC 2 output :1~5VDC
Power supply	D A		24VDC 80~220VAC

Selection method

Models	Process connections	pressure	Temperature	Electrode type	Electrode length	Measured length	Measured material
Sense 2060E Standards guide-way Size:	F25/50: Dn25/ Dn 50 flange	N: Atmospheric pressure	A: -30~80 °C	T1: Hard electrode	Length number In cm	Length number In cm	W: water
		D: <6 Mpa	B: 80~150 °C	T2: auxiliary			O: oil
	R1: M27*2		T4: Soft electrode	S: With steam			
Sense 2060F Standards guide-way Size:	R2: G1'	T: special	T: special	T: special			P: Solid powder
	R3: G3/2'						T: special
Sense 2060E	R1	N	A	T1			160

For example Selection: transmission unit is E model

Sense2060E-R1-N-A-T1-160-150-W

Explanation:sense2060 RF level transmitter,

Process connections:M27*2,**Pressure:**atmospheric pressure

Temperature range:-30~80 °C , hard electrode, electrode length:1.6m, measured length:1.5m, measured water level.