

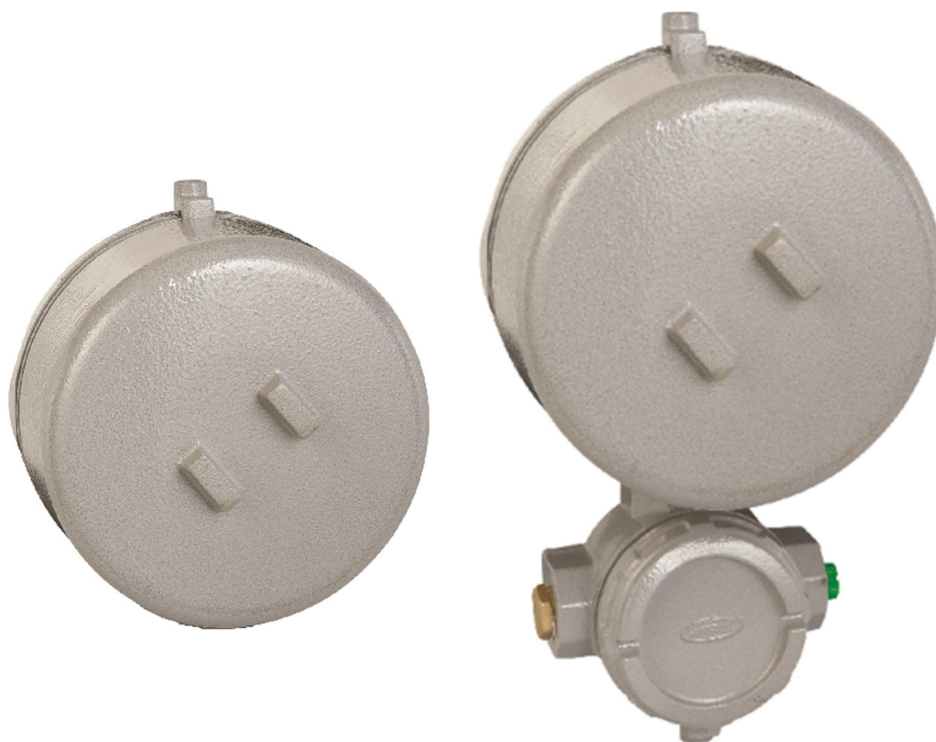
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CATALOGUE

HAT-Series



Doc. no. : HAT_E_Rev.0

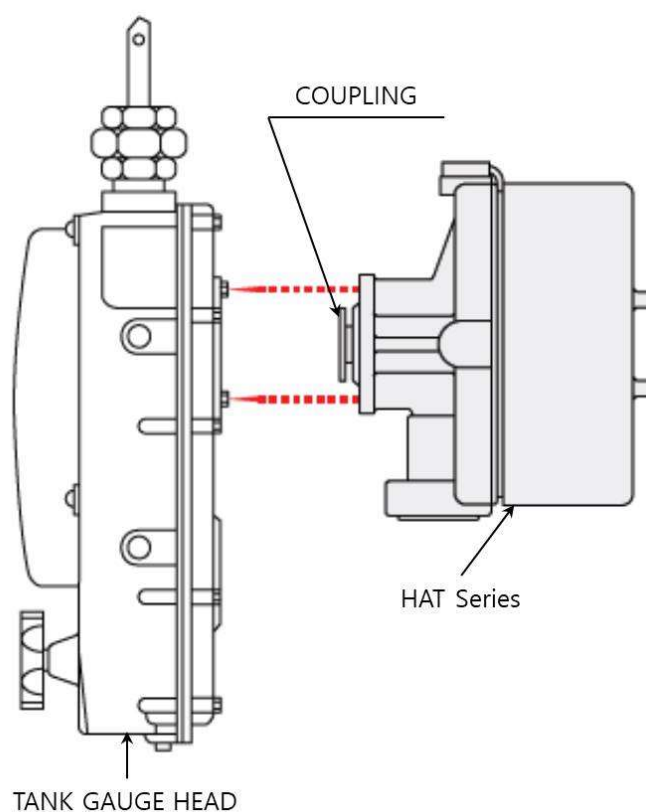
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Product overview The HAT-Series is a transducer that connects to the Tank Level Gauge (HLT-1000 Series) and converts mechanical signals into electrical signals. The level can be adjusted and instructed by converting the level of the measurement to DC 4-20 mA and outputting the output, and the built-in micro switch outputs the contact point at the desired location to alert or adjust the level.

- Features**
- There is an explosion proof structure. (Ex Version)
 - Contact point and DC 4-20 mA output are possible.
 - The structure is sturdy and reliable.

The principle of operation and Product appearance

The HAT Series is used in conjunction with Tank Level Gauge (HLT-1000 Series) Head as shown below. When the tank gauge needle instructs the change in the water level inside the tank, the gear within the gauge rotates and sends the output signal to the HAT-Series attached behind the gauge head. The HAT-Series outputs signals from the gauge to DC 4-20 mA or Micro Switch contacts (alarm signals).



Specifications HAT-1000 Series

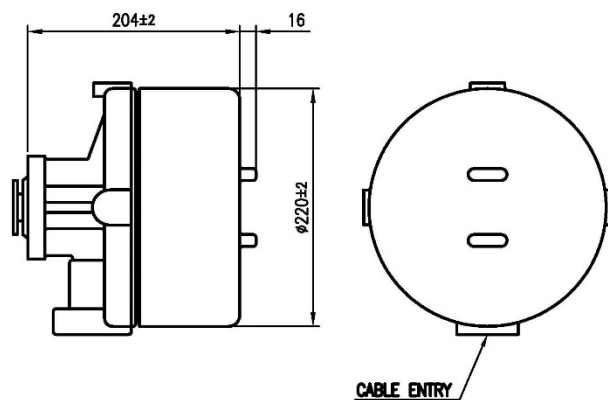
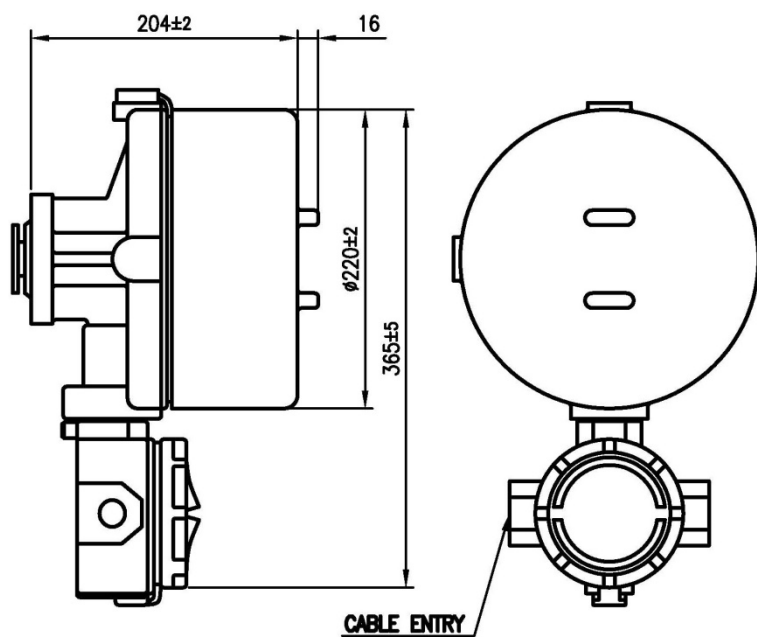
Model	HAT-1000	HAT-1000-Ex
Enclosure	Weather-Proof(IP66)	Ex-Proof(Ex d IIC T4, IP66)
Ambient Temp.	-20°C ~ +60°C	
Power	DC 24V	
Output	DC 4~20mA (2~wire) Opt. 2-SPDT (HAT-1002, HAT-1000-Ex)	
Contact Rating	Std. None AC 250V, 15A, DC 125V, 0.5A	
Housing	AL	
Cable Entry	PF3/4"(F), Adaptor(PF1/2", NPT3/4"...)	
Combination Gauge	HLT-1000 Series	

HAT-5000 Series

Model	HAT-5004	HAT-5004-Ex
Enclosure	Weather-Proof(IP66)	Ex-Proof(Ex d IIC T4, IP66)
Ambient Temp.	-20°C ~ +60°C	
Switch Type	MICRO	
Contact Form	Max. 4-SPDT	
Contact Rating	AC 250V, 15A, DC 125V, 0.5A	
Housing	AL	
Cable Entry	PF3/4"(F), Adaptor(PF1/2", NPT3/4"...)	
Combination Gauge	HLT-1000 Series	

Amplifier Specification (HAT-1000 Series)

Item	Specification
Microprocessor	16Bit Microprocessor
Supply Voltage	+17V ~ +40V@Typ.+24V
Operating Voltage	+3.3V
Current Consumption	2.5 mA or less @Sensor 1KΩ
Status Indicator	Bi-Color LED (Green/Red/Orange)
Zero / Span Set	Tact Switch
Wire Connection	One-Touch Connector
Ambient Temperature	-20°C ~ +60°C
Dimension	80mm x 65mm x 20mm
Weight	54g
Current Loop Interface	2-Wire Loop Current
Output Current Range (Accuracy)	4 mA to less than 20 mA @±0.2%
Output Current Offset	Adjustment
Measurement Sensor Range	30KΩ[15M]@Sensor 10Ω Min. : 200Ω[100mm] / Max. : 50KΩ[25M]@Sensor 20Ω
Output Current Definite	TP

Product dimension**< WEATHER-PROOF >****HAT-1000 (5004)****< Ex - PROOF >****HAT-1000 (5004)-Ex**

at installation ■ The user must enter a washer between Bolt and Nut to prevent loosening.

Precautions ■ It should be installed in consideration of ambient temperature.

■ The user shall determine whether the relevant product is an explosion proof area and install the appropriate product.

■ The power is applied after the installation is completed and the COVER of the product is



Do not damage the shaft or open gaps in the bonding surface during installation.

■ Contact information of headquarters, factories, and research institutes

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