

1/1:GS5067-EX
2/2:GS5038-EX

Analog output isolated barriers transfer the 4~20mA signal from safe area to hazardous area to drive field devices, such as valve positioners and electrical converters. It also allows bi-directional transmission of HART communication signals. The product needs an independent power supply and galvanic isolation among power supply, input and output.

Specification

Supply Voltage:20~35V DC

Current Consumption (Supply voltage: 24V; output: 20mA) :
 $\leq 50\text{mA}$ (GS5067-EX)
 $\leq 75\text{mA}$ (GS5038-EX)

Safe-area Input:

Current:0/4~20mA, HART digital signal
 Voltage drop: $\leq 2\text{V}$

Hazardous-area Output:

Current:0/4~20mA, HART digital signal
 Load Resistance: $R_L \leq 800\Omega$
 HART Communication Load Resistance: $R_L \geq 250\Omega$
 Voltage:0/1~5V, HART digital signal
 Load Resistance: $R_L \geq 330\text{k}\Omega$

Note:Customers need specify current or voltage output when ordering.

Output Accuracy:0.1%F.S. (Typical:0.05%F.S.)

Temperature Drift:0.005%F.S./°C

Response Time (0~90%) : $\leq 2\text{ms}$

Power Supply Protection:Power supply reverse protection

EMC:According to IEC 61326-1 (GB/T 18268), IEC 61326-3-1

Dielectric Strength:

Between non-intrinsically safe part and intrinsically safe part $\geq 2500\text{V AC}$

Between power supply part and output part $\geq 500\text{V AC}$

Insulation Resistance:

Between non-intrinsically safe part and intrinsically safe part $\geq 100\text{M}\Omega$

Between power supply part and output part $\geq 100\text{M}\Omega$

Weight:Approx. 100g (GS5067-EX) , Approx. 150g (GS5038-EX)

Suitable Location:Mounting in safe area, and connected to the IS apparatus in hazardous area up to zone0 IIC and zone20 IIIC.

Suitable Field Apparatus:2-wire valve positioner, electrical converter, etc.

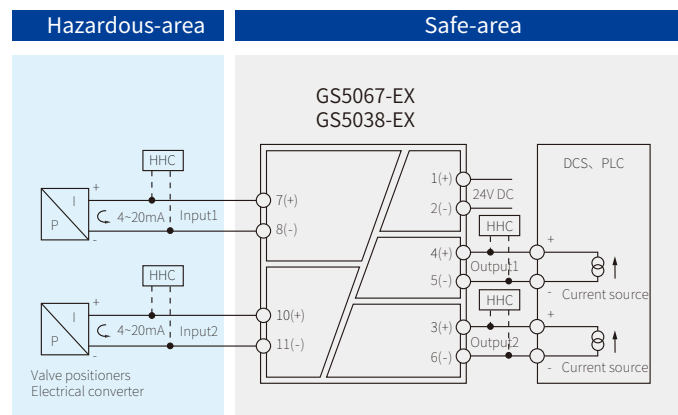


Dimensions:

114.5mm×99mm×12.5mm (GS5067-EX)

114.5mm×99mm×17.5mm (GS5038-EX)

Connection



Note: a) GS5067-EX only contains input1, output1;

b) Can't use HHC (HART Hand Held Communicator) in hazardous area and safe area at the same time;

c) HHC (HART Hand Held Communicator) used in the hazardous area must get the explosion-proof certificate.

Explosion-proof Certificate

Certificate Authority:NEPSI (China)

Ex Marking:[Ex ia Ga] II C

[Ex iaD]

Maximum Voltage: $U_m=250\text{V}$

Intrinsic Safety Parameters:

Terminals (7、8), (10、11)

$U_o=28\text{V}$, $I_o=93\text{mA}$, $P_o=651\text{mW}$

II C: $C_o=0.083\mu\text{F}$, $L_o=4.2\text{mH}$

*II B: $C_o=0.65\mu\text{F}$, $L_o=12.6\text{mH}$

II A: $C_o=2.15\mu\text{F}$, $L_o=33.6\text{mH}$

*II B Intrinsic safety parameters are also suitable for dust explosion protection[Ex iaD]