

Digital Output

1/1: GS8523-EX.I

Digital output isolated barrier, with 12V/45mA output to hazardous area, is controlled by switches and logic signal in the safe area. This product is suitable for driving IS devices such as solenoid valves, LED and some other low-power loads located in the hazardous area. This product needs independent power supply and galvanic isolation among power supply, input and output.

Specification

Supply Voltage: 20~35V DC

Current Consumption: $\leq 80\text{mA}$ (Supply voltage: 24V; output: 45mA)

Safe-area Input:

If input switch or transistor is close, power the devices located in hazardous area.

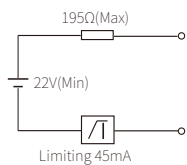
If input switch or transistor is open, stop powering the devices located in hazardous area.

Hazardous-area Output:

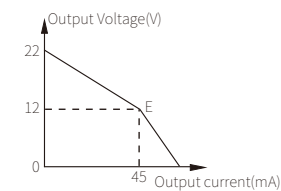
Open-circuit Voltage: 22V~24V

Output voltage at 45mA: $\geq 12\text{V}$

Equivalent Output Circuit:



Output Characteristic:



Response Time: $\leq 20\text{ms}$

Power Supply Protection: Power supply reverse protection

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

Ambient Temperature: $-20^{\circ}\text{C}\sim+60^{\circ}\text{C}$

Dielectric Strength:

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

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

Structure: GS8500 range structure customized by Phoenix Contact.

Weight: Approx. 100g

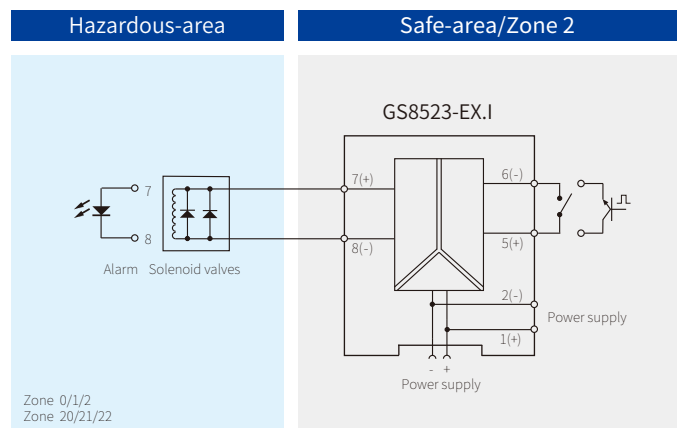
Suitable Location: Mounting in safe area or zone2(for ec protection), and connected to the IS apparatus in hazardous area up to zone 0 IIC and zone 20 IIIC.

Suitable Field Apparatus: solenoid valves, LED.



Dimensions: 118.9mm × 106.0mm × 12.5mm

Connection



Note: Bus-powered function is optional, if necessary please specified when ordering, and purchase bus power supply accessories in additional.

Explosion-proof Certificate

Certifying Authority: NEPSI(China)

Ex Marking: [Ex ia Ga] II C

[Ex iaD]

Ex nA IIC T4 Gc

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

Intrinsic Safety Parameters(7、8 terminals):

$U_o=25\text{V}$, $I_o=140\text{mA}$, $P_o=875\text{mW}$

II C: $C_o=0.11\mu\text{F}$, $L_o=1.5\text{mH}$

* II B: $C_o=0.84\mu\text{F}$, $L_o=4.5\text{mH}$

II A: $C_o=2.97\mu\text{F}$, $L_o=12.0\text{mH}$

I: $C_o=4.87\mu\text{F}$, $L_o=23\text{mH}$

* II B Intrinsic Safety Parameters are also suitable for dust explosion protection[Ex iaD]