

Vibration Transducer

1/1: GS8558-EX

Vibration transducer input isolated barriers, transfer the 1: 1 voltage signals, which vibration transducer outputs in hazardous area, to safe area. It can transmit AC and DC signals. This product needs an independent power supply and galvanic isolation among power supply, input and output.

Specification

Supply Voltage: 20~35V DC

Current Consumption: $\leq 40\text{mA}$

Safe-area Output:

Signal: $-10\text{V}\sim+10\text{V}$

Load Resistance: $R_L \geq 20\text{k}\Omega$

Hazardous-area Input:

Signal: $-10\text{V}\sim+10\text{V}$

Internal impedance: $10\text{k}\Omega$

DC Transmissiton accuracy: $< \pm 0.2\%\text{F.S.}$

AC Transmissiton accuracy:

0Hz~600Hz $\pm 0.2\%\text{F.S.}$

600Hz~10kHz $-1.5\%\sim+0.2\%\text{F.S.}$

Phase response : Less than 1us is equals to

-0.72° 200Hz

-2° 600Hz

-3.6° 1kHz

-36° 10kHz

Bandwidth(-3dB): $\geq 40\text{kHz}$

Temperature Drift: $0.005\%/^\circ\text{C}(-20^\circ\text{C}\sim+60^\circ\text{C})$

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 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 $\geq 100\text{M}\Omega$

Structure: GS8500 range structure customized by Phoenix Contact

Weight: Approx.100g

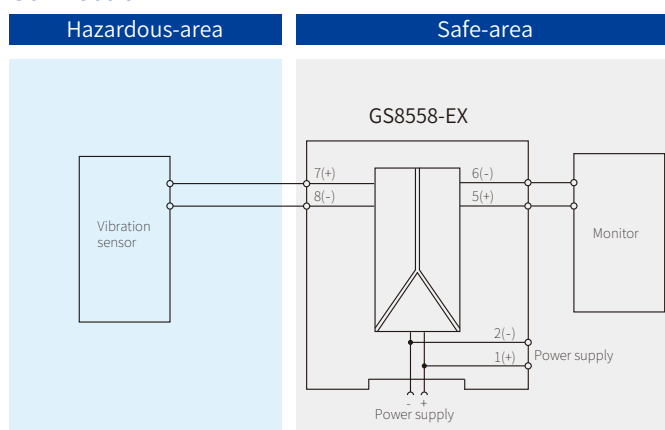
Suitable Location: Mounting in safe area, and connected to the IS apparatus in hazardous area up to zone0 IIC and zone20 IIIC.

Suitable Field Apparatus: Vibration transducer



Dimensions: 118.9mm×106.0mm×12.5mm

Connection



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

Explosion-proof Certificate

Certifying Authority: NEPSI(China)

Ex Marking: [Ex ia Ga] II C

[Ex iaD]

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

Intrinsic Safety Parameters(7、8 terminals):

$U_o=1.2\text{V}$, $I_o=0.2\text{mA}$, $P_o=0.06\text{mW}$

II C: $C_o=100\mu\text{F}$, $L_o=100\text{mH}$

*II B: $C_o=300\mu\text{F}$, $L_o=300\text{mH}$

II A: $C_o=800\mu\text{F}$, $L_o=800\text{mH}$

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