

H Series Isolator

→ Introductions

This isolator converts the current/voltage signals into current/voltage signals, and also provides transmitters with power in the field. Current input isolator allows transmission of HART communication signals.

The input, output, and power supply are galvanically isolated from each other. The main advantages of the isolator are fast response, low dissipation and temperature stability. It can be interfaced with all kinds of device, such as DCS, PLC and other systems.

→ Parameters

Power supply (13, 14):

Rated voltage: 18 V DC ~ 32 V DC (Recommended voltage: 24 V DC)

Input (1, 2, 3; 4, 5, 6):

Current: 0(4) ~ 20 mA; 0 ~ 10 mA

Voltage: 0(1) ~ 5 V; 0 ~ 10 V (Please see the product label for details)

Input resistance:

Current: Approx. 50 Ω

Voltage: $\geq 1 \text{ M}\Omega$

Available voltage:

Open-circuit voltage $\leq 27 \text{ V}$, voltage: $\geq 22 \text{ V}$ at 20 mA

Output (8, 9; 11, 12):

Sink mode: 4 ~ 20 mA

Output current: 0(4) ~ 20 mA; 0 ~ 10 mA

Output voltage: 0(1) ~ 5 V; 0 ~ 10 V

Other signal types is required special customization, please see the product label for details

Load resistance:

Sink mode: $R_L \leq [(U-3)/0.02] \Omega$ U: Loop power supply

0(4) ~ 20 mA: $\leq 450 \Omega$; 0 ~ 10 mA: $\leq 900 \Omega$

0(1) ~ 5 V: $\geq 1 \text{ M}\Omega$; 0 ~ 10 V: $\geq 2 \text{ M}\Omega$

Other load resistance is required special customization, please see the product label for details.

Transmission characteristics:

Accuracy: $\pm 0.1\%$ F.S. (25 $^{\circ}\text{C} \pm 2 \text{ }^{\circ}\text{C}$)

Response time: $\leq 2 \text{ ms}$

Temperature drift: 0.005% F.S./ $^{\circ}\text{C}$

Electromagnetic compatibility: According to IEC 61326-3-1

Dielectric strength (1 mA leakage current, 1 minute test time):

$\geq 1500 \text{ V AC}$ (Input /Output, Input /Power supply)

$\geq 500 \text{ V AC}$ (Power supply / Output)

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