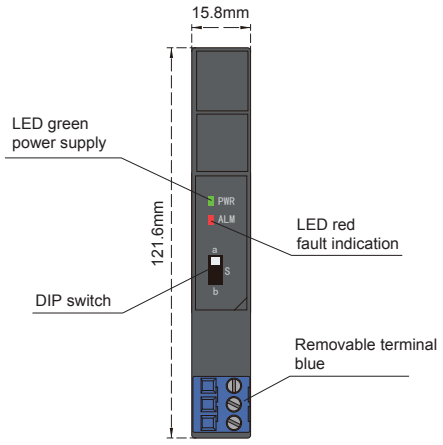
NPEXB-HM31 single input, single output

Input: 4 ~ 20 mA
Output: 4 ~ 20 mA

Accepts 4～20mA signal from safe area to drive executive mechanisms in hazardous area, It allows transmission of HART communication signals. The input, output, and power supply are galvanically isolated from each other. The LFD function of output short-circuit/line-break can be closed by the DIP switch on the front side.



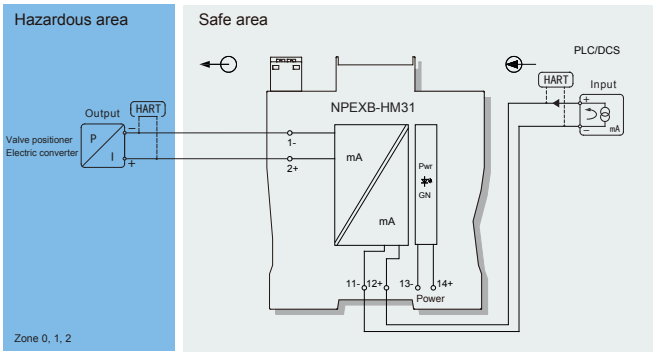
Technical data

Power supply:	18 V DC~32 V DC (Reverse power protection)
Power dissipation:	< 1.5 W (24V DC, single output)
Input signal:	4 ~ 20mA, HART
Input voltage drop:	< 1.2V
Line Failure state:	When the output load resistance was detected less than 80Ω, the output is in the fault of short circuit. When the output load resistance was detected more than 6000Ω, the output is in the fault of line breakage. If the output is in the fault, the input current value is limited to within 1mA and the output current value is limited to 3mA.
Output signal:	4 ~ 20mA, HART
Load resistance:	80Ω ~ 800Ω
Accuracy:	± 0.1%F.S.
Temperature drift:	0.005%F.S./°C
Response time:	≤ 2ms
Electromagnetic compatibility:	IEC 61326-3-1
Dielectric strength:	≥ 2500 V AC (intrinsically safe side / non-intrinsically safe side) ≥ 500 V AC (Power supply side /non-intrinsically safe side)
Insulation resistance:	≥ 100 MΩ (Input /Output/Power supply)
Operation temperature:	-20°C ~ +60°C
Storage temperature:	-40°C ~ +80°C
Dimension:	15.8 mm (W) × 121.6 mm (H) × 104.8 mm (D)

DIP switch settings

Switch State	a	b
S	The LFD function of output short-circuit/line-break off	The LFD function of output short-circuit/line-break on

Wiring diagram



Explosive-proof parameters

National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation (NEPSI)
Explosive-proof grade: [Ex ia Ga] II C
Um: 250 V
Certified parameters (Terminals 1, 2):
Uo=28V, Io=93mA, Po=651mW
II C : Co=0.08μF , Lo=4mH
II B : Co=0.6μF , Lo=12mH
II A : Co=2.1μF , Lo=32mH