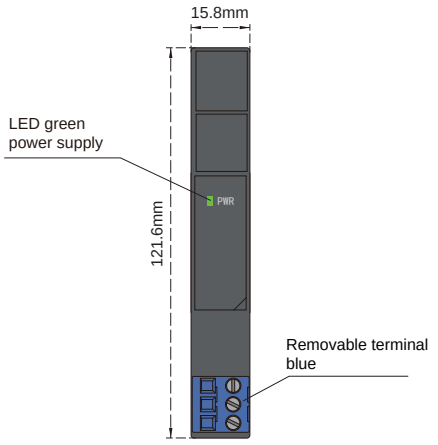
NPEXA-HM41 single input, single output

Input: 1 ~ 5 V
Output: 4 ~ 20 mA

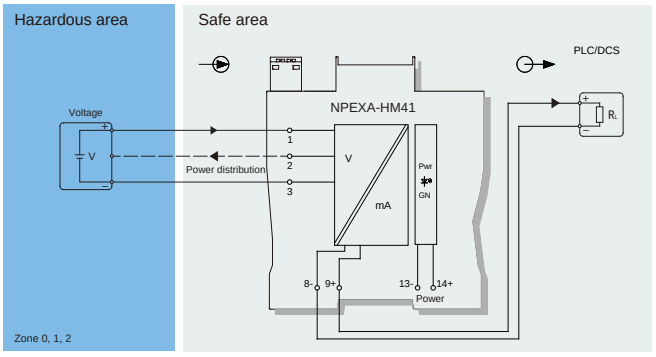
This isolated safety barrier detects loop voltage and converts it from a hazardous area into current signals to a safe area by isolation, and also provides transmitters with power in the hazardous area. The input, output, and power supply are galvanically isolated from each other.



Technical data

Power supply:	18 V DC~32 V DC (Reverse power protection)
Power dissipation:	1.3 W (24V DC, single output)
Input signal:	1 ~ 5V
Input resistance:	≥ 1MΩ
Available voltage:	open-circuit voltage ≤ 26 V voltage: ≥ 15.5 V at 20 mA
Output signal:	4 ~ 20mA
Load resistance:	RL ≤ 450Ω
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)

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, 3):
Uo=5V, Io=1mA, Po=2mW
II C : Co=70μF , Lo=999mH
II B : Co=700μF , Lo=999mH
II A : Co=700μF , Lo=999mH
Certified parameters (Terminals 2, 3):
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

Other ordering information

Type	Input	Output1	Output2	Power supply
NPEXA-HM42	1 ~ 5V	1 ~ 5V	--------	backplane mounting
NPEXA-HM45	0 ~ 5V	0 ~ 10V	--------	backplane mounting