

DO (loop powered) Isolated Barrier

NPEXB-C513L

Single input, single output

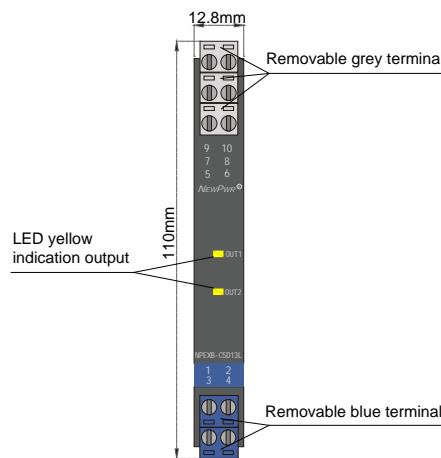
NPEXB-C5D13L

Double inputs, double outputs

Input: wet contact

Output: 60mA

Digital output isolated barrier. By switch signal controlling, transfers the wet contact signals from a safe area into current signals to a hazardous area, and drives field device like intrinsically safe valves, audible alarms, etc. It has loop powered. The input and output is galvanically isolated from each other.



Parameters

Loop Powered: 20V DC ~ 30V DC (Reverse power protection)
Power dissipation: ≤ 1.8W (24V, single output)

≤ 3.6W (24V, double outputs)

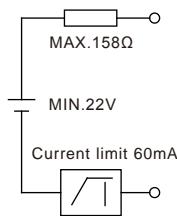
Input signal: wet contact

Output voltage: > 12V DC

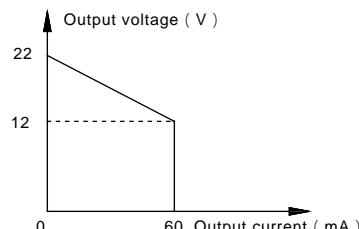
Open-circuit voltage: 22V DC

Output current: ≤ 60mA

Output equivalent circuit



Output characteristics diagram



Response time: < 20ms

Electromagnetic compatibility: IEC 61326-3-1

Dielectric strength: ≥ 3000V AC (intrinsically safe side / non-intrinsically safe side)

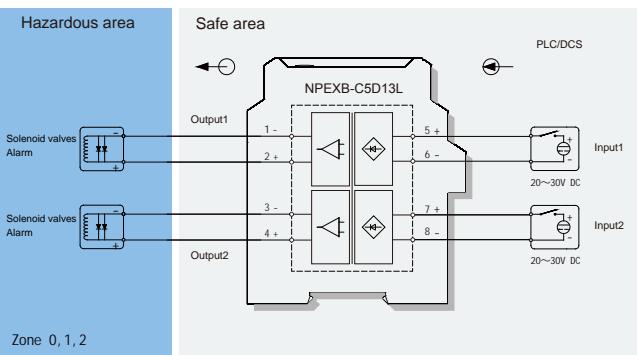
Insulation resistance: ≥ 100MΩ (Input /Output)

Operation temperature: -20°C ~ +60°C

Storage temperature: -40°C ~ +80°C

Dimension: 12.8mm (W) × 110mm (H) × 117mm (D)

Wiring diagram



Explosive-proof parameters

National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation (NEPSI)

Ex marking: [Ex ia Ga] II B

Um: 250V

Certified parameters (Terminals 1, 2; 3, 4):

Uo=25.2V, Io=170mA, Po=1080mW

II B: Co=0.82μF, Lo=4mH

II A: Co=2.9μF, Lo=10.6mH