

DO (loop powered) Isolated Barrier

NPEXB-C511L

Single input, single output

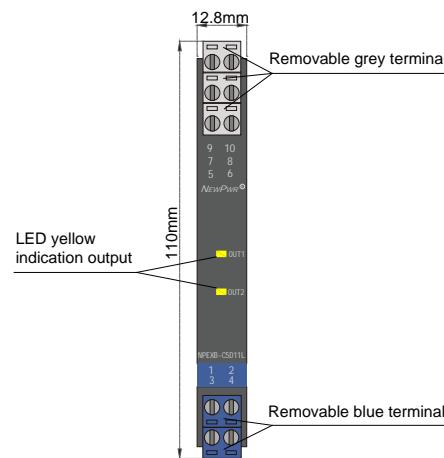
NPEXB-C5D11L

Double inputs, double outputs

Input: wet contact

Output: 35mA

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: ≤ 1.2W (24V, single output)
≤ 2.4W (24V, double outputs)

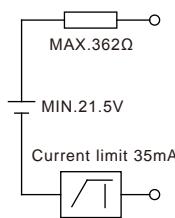
Input signal: wet contact

Output voltage: > 8.75V DC

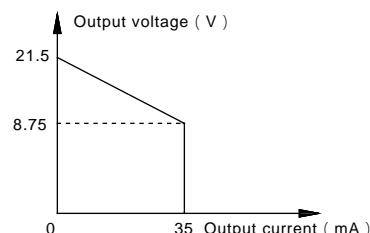
Open-circuit voltage: 21.5V DC

Output current: ≤ 35mA

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)

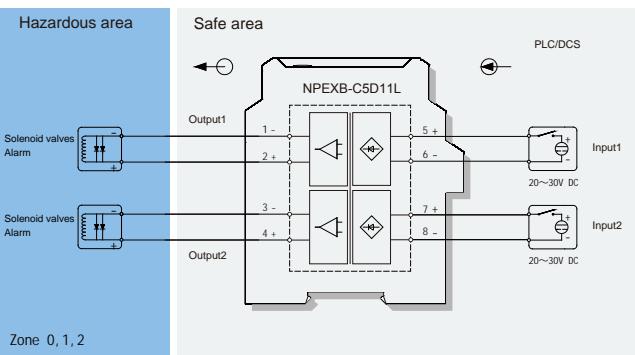
Insulation resistance: ≥ 100MΩ (Input /Output)

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 C

Um: 250V

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

Uo=25.2V, Io=72mA, Po=454mW

II C: Co=0.107μF, Lo=6mH

II B: Co=0.82μF, Lo=18mH

II A: Co=2.9μF, Lo=48mH