

DO Isolated Barrier

NPEXB-C513

Single input, single output

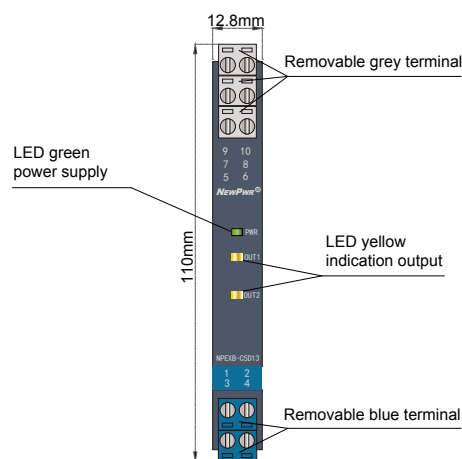
NPEXB-C5D13

Double inputs, double outputs

Input: dry contact

Output: 60mA

Digital output isolated barrier. By switch signal controlling, transfers the dry 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 needs an independent power supply. The input, output, and power supply are galvanically isolated from each other.

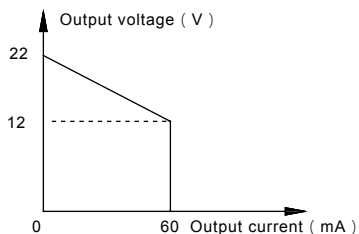
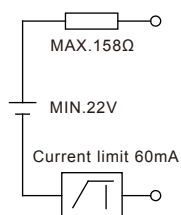


Parameters

Power supply:	18V DC ~ 60V DC (Reverse power protection)
Power dissipation:	≤ 1.8W (24V, single output) ≤ 3.6W (24V, double outputs)
Input signal:	dry contact
Output voltage:	> 12V DC
Open-circuit voltage:	22V DC
Output current:	≤ 60mA

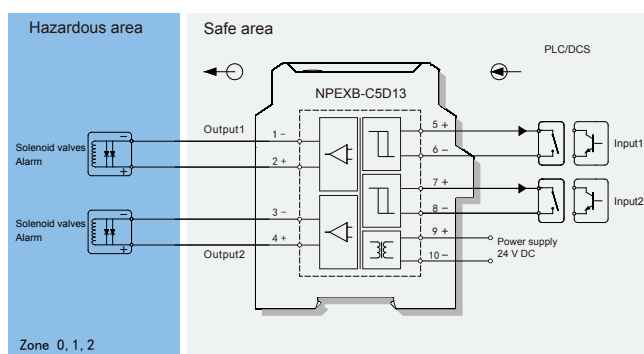
Output equivalent circuit

Output characteristics diagram



Response time:	< 20ms
Electromagnetic compatibility:	IEC 61326-3-1
Dielectric strength:	≥ 3000V AC (intrinsically safe side / non-intrinsically safe side) ≥ 1500V AC (Power supply/non-intrinsically safe side)
Insulation resistance:	≥ 100MΩ (Input /Output/Power supply)
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] IIB

Um: 250V

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

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

Co=0.82μF, Lo=4mH