

# DO Isolated Safety Barrier

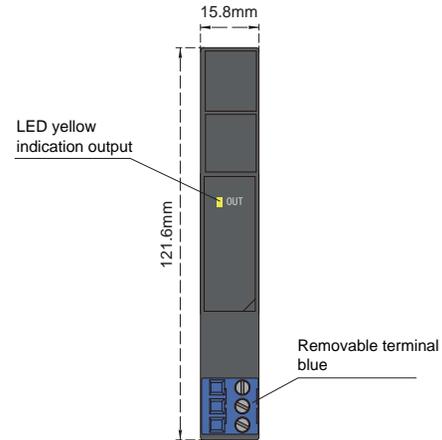
## NPEXB-H512L

single input, single output

Input: wet contact

Output: 45mA

By switch signal controlling, transfers the digital signals (wet contact) from safe area into current signals to hazardous area, and drives field device like intrinsically safe valves, audible alarms, etc. The input, output are galvanically isolated from each other.

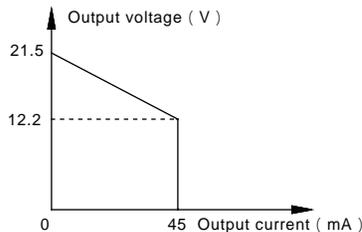
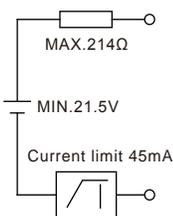


### Technical data

- Loop Powered: 20 V DC~30 V DC (Reverse power protection)
- Power dissipation:  $\leq 1.6W$
- Input signal: wet contact
- Output voltage:  $> 12.2V$  DC
- Open-circuit voltage: 21.5V DC
- Output current:  $\leq 45mA$

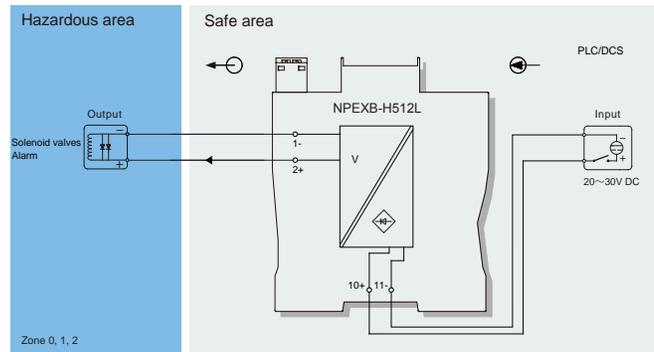
Output equivalent circuit

Output characteristics diagram



- Response time:  $< 20ms$
- Electromagnetic compatibility: IEC 61326-3-1
- Dielectric strength:  $\geq 2500$  V AC (intrinsically safe side / non-intrinsically safe side)
- Insulation resistance:  $\geq 100$  MΩ ( Input /Output)
- Operation temperature:  $-20^{\circ}C \sim +60^{\circ}C$
- Storage temperature:  $-40^{\circ}C \sim +80^{\circ}C$
- Dimension: 15.8 mm (W) x 121.6 mm (H) x 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, 2):

Uo=25.2V, Io=125mA, Po=790mW

II C : Co=0.107μF, Lo=1.5mH

II B : Co=0.82μF, Lo=4.5mH

II A : Co=2.9μF, Lo=12mH