

# XPB Series Analog Output Isolated Barrier Data Sheet

## 1. General

**XPB Series Analog Output Isolated Barrier** receives the analog signal from safe area, converts into the voltage or current signal specified by the user and outputs to the dangerous area after isolation. The product restricts the energy from intrinsically safe port to hazardous area, insuring the system against explosion. It widely used in chemical industry, petroleum, natural gas, electricity, and other industrial fields. It is connected with all kinds of intrinsic safety instruments and used as the associated equipment of intrinsically safe explosion-proof system.



The product meets *GB3836.1-2010 Explosive atmospheres - Part 1: Equipment-General requirements* and *GB3836.4-2010 Explosive atmospheres - Part 4: Equipment protection by intrinsic safety "i"*. It has passed the test of China National Test Centre for Explosion Protect Electrical Products and obtained the Explosion-proof Certificate.

## 2. Features

- ◆ Input, output and power are completely isolated, with strong anti-interference ability
- ◆ High accuracy, high linearity, long - term running stability
- ◆ Modular design, small size, low power consumption, suitable for intensive installation
- ◆ Plug-in construction, easy installation, disassembly and maintenance

## 3. Safety Description

Approvals: [Exia Ga] II C

Equipment	Terminal 4 to 6 ,Terminal 1 to 3
Um	250V
Uo	28V
Io	93mA
Po	655mW
Co	50nF
Lo	2.4mH

## 4. Specifications

Power supply: DC24V±10%

Power consumption: ≤0.8W / channel

Input: DC voltage, DC current, safe area

Input resistance: voltage input ≥500KΩ

current input ≤200Ω

Output: DC voltage, DC current, hazardous area

Load resistance: voltage output ≥5KΩ

current output ≤650Ω

Accuracy: ±0.1%F.S, ±0.2%F.S

Temp. coefficient: ≤±100PPM/°C

Insulation resistance: ≥100MΩ/500VDC

Dielectric strength: input/output ≥2000VAC (1min)

output/power ≥2000VAC (1min)

input/power ≥1000VAC (1min)

Operating temperature: 0~50°C

Storage temperature: -40~85°C

Operating humidity: 10~90%RH

Atmospheric pressure: 86~106kPa

Installation: DIN 35mm rail

Dimension: 122mm×18mm×96mm

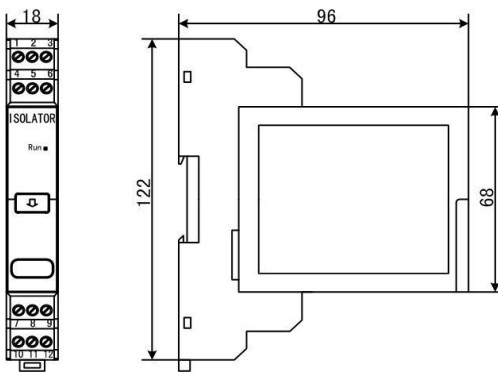
## 5. Ordering Information

XPB series code table :

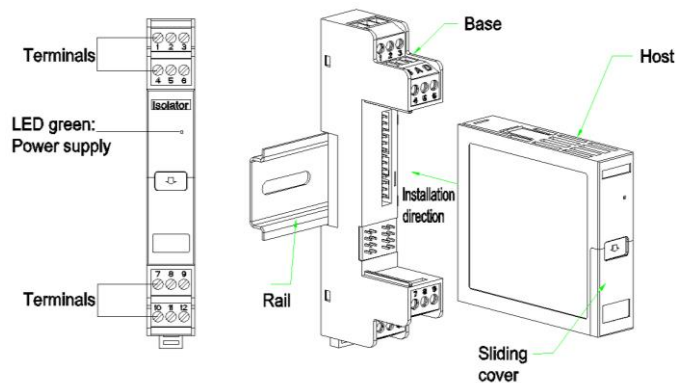
XPB	Type code1		Type code 2		Input 1		Input 2		Output 1		Output 2	
	Code	Type	Code	Type	Code	Rang	Code	Rang	Code	Rang	Code	Rang
Analog Output Isolated Barrier	G	Isolation	AO	Analog output	A420	4-20mA	A420	4-20mA	A420	4-20mA	A420	4-20mA
					A020	0-20mA	A020	0-20mA	A020	0-20mA	A020	0-20mA
					A010	0-10mA	A010	0-10mA	A010	0-10mA	A010	0-10mA
					H420	4-20mA+Hart	H420	4-20mA+Hart	H420	4-20mA+Hart	H420	4-20mA+Hart
					V010	0-10V	V010	0-10V	V010	0-10V	V010	0-10V
					V15	1-5V	V15	1-5V	V15	1-5V	V15	1-5V
					V05	0-5V	V05	0-5V	V05	0-5V	V05	0-5V
					V075	0-75mV	V075	0-75mV	Y	Option	Y	Option
					Y	Option	Y	Option				None
								None				

## 6. Dimension & Installation

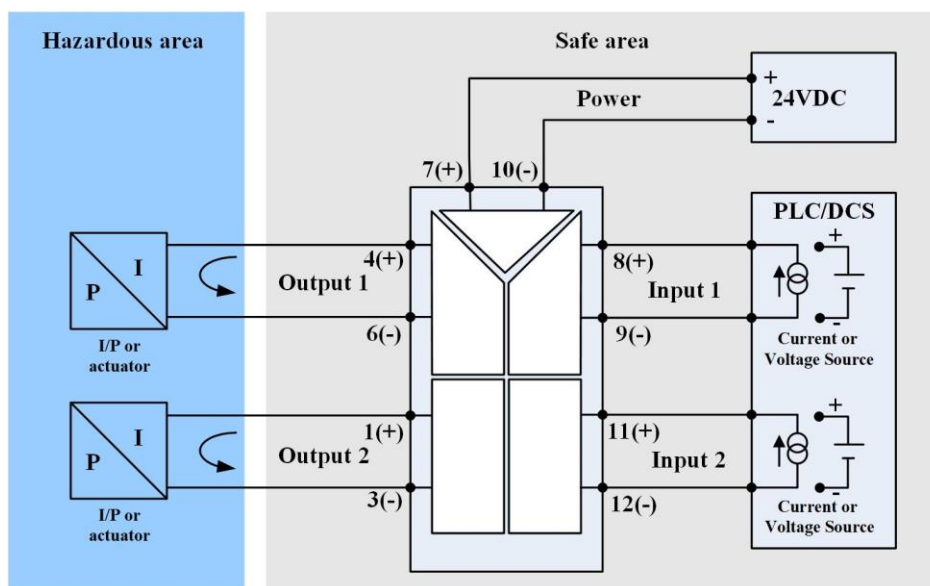
Dimension (122mm×18mm×96mm)



Installation



## 7. Typical Connection



Note: The connection diagrams given in this manual are typical. When installing, please refer to the connection diagram on the product.

## 8. Examples of ordering

Refer to the code table above and provide the model number correctly.

Example 1 input: safe area, one channel 4-20mA, output: hazardous area, two channels 4-20mA,  
power supply: 24VDC  
order model: XPB-G-AO-A420-A420-A420 (abbreviated as: XPB-G-AO-A420-2A420)

Example 2 input: safe area, one channel 1-5V, output: hazardous area, one channel 4-20mA, power supply: 24VDC  
order model: XPB-G-AO-V15-A420

Example 3 input: safe area, one channel 0-10V, output: hazardous area, two channels 0-10V, power supply: 24VDC  
order model: XPB-G-AO-V010-V010-V010 (abbreviated as: XPB-G-AO-V010-2V010)

## 9. Explosion-proof Certificate

编号: CNEx19.0396

**CNEX**  
国家防爆

**防爆合格证**

制造单位 苏州迅鹏仪器仪表有限公司  
(江苏省苏州市工业园区星汉街5号B幢6楼)

产品名称 隔离式安全栅

型号规格 XPB-P DC24V

防爆标志 [Ex ia Ga]IC

产品标准 Q/MXB 29-2017

总装图号 WG-RY-155

经对上述产品图样及技术文件的审查和样品检验,确认符合下列标准:  
GB3836.1-2010《爆炸性环境 第1部分:设备通用要求》  
GB3836.4-2010《爆炸性环境 第4部分:由本质安全型“i”保护的设备的设备》  
GB3836.20-2010《爆炸性环境 第20部分:设备保护级别(EPL)为Ga级的设备》

记事:  
1、本证书可代表 XPB-P 和 XPB-G 两种型号的隔离式安全栅,防爆标志均为 [Ex ia Ga]IC。  
2、本安参数(1/3端,4/6端)均为:Um:250VAC/DC  
Uo:28VDC, Io:93mA, Po:0.65W, Co:0.05μF, Lo:2.4mH  
3、安全注意事项见使用说明书。

中心主任 王军 颁发日期 2019年1月24日  
本证有效期 2019年1月24日至2024年1月23日

**Ex**  
**COST** 国家防爆电气产品质量监督检验中心  
南阳防爆电气研究所

地址:中国河南省南阳市仲英北路20号  
邮编:473009  
电话:0377-63285564  
传真:0377-63281975  
http://www.china-ex.com

4232 9588 4378 9599 查询方式: www.china-ex.com

编号: CNEx19.0395

**CNEX**  
国家防爆

**防爆合格证**

制造单位 苏州迅鹏仪器仪表有限公司  
(江苏省苏州市工业园区星汉街5号B幢6楼)

产品名称 温度变送隔离式安全栅

型号规格 XPB-E DC24V

防爆标志 [Ex ia Ga]IC

产品标准 Q/MXB 33-2017

总装图号 WG-RY-143

经对上述产品图样及技术文件的审查和样品检验,确认符合下列标准:  
GB3836.1-2010《爆炸性环境 第1部分:设备通用要求》  
GB3836.4-2010《爆炸性环境 第4部分:由本质安全型“i”保护的设备的设备》  
GB3836.20-2010《爆炸性环境 第20部分:设备保护级别(EPL)为Ga级的设备》

记事:  
1、本证书可代表 XPB-E 热电阻温度变送隔离式安全栅和 XPB-R 热电阻温度变送隔离式安全栅,防爆标志均为 [Ex ia Ga]IC。  
2、本安参数(1-4-6端)均为:Um:250VAC/DC  
Uo:6.6VDC, Io:68mA, Po:0.112W, Co:15μF, Lo:5mH  
3、安全注意事项见使用说明书。

中心主任 王军 颁发日期 2019年1月24日  
本证有效期 2019年1月24日至2024年1月23日

**Ex**  
**COST** 国家防爆电气产品质量监督检验中心  
南阳防爆电气研究所

地址:中国河南省南阳市仲英北路20号  
邮编:473009  
电话:0377-63285564  
传真:0377-63281975  
http://www.china-ex.com

1156 6996 1780 4229 查询方式: www.china-ex.com



Please Scan