

# EXPLOSION PROTECTION

## CERTIFICATE OF CONFORMITY

Cert NO.GYJ17.1233X

This is to certify that the product

Pilot Valve

manufactured by Festo AG & Co. KG

(Address:Ruiter Strasse 82, 73734 Esslingen, Germany)

which model is VACC-P3-~~q~~-K4-1-EX4-A

Ex marking Ex ia II C T5/T6 Gb Ex iaD 21 T125/T85

product standard /

drawing number 116

has been inspected and certified by NEPSI, and that it conforms  
to GB 3836.1-2010,GB 3836.4-2010,GB 12476.1-2013,GB 12476.4-2010

This Approval shall remain in force until 2022.07.06

**Remarks**

- 1.Conditions for safe use are specified in the attachment(s) to this certificate.
- 2.Symbol "X" placed after the certification number denotes specific conditions of use, which are specified in the attachment(s) to this certificate.
- 3.Model designation is specified in the attachment(s) to this certificate.
- 4.Intrinsic safety parameters specified in the attachment(s) to this certificate.

Director



National Supervision and Inspection Centre for  
Explosion Protection and Safety of Instrumentation

Issued Date 2017.07.07

This Certificate is valid for products compatible with the documents and samples approved by NEPSI.

# 国家级仪器仪表防爆安全监督检验站

National Supervision and Inspection Centre for  
Explosion Protection and Safety of Instrumentation

(GYJ17.1233X)

(Attachment I)

## Attachment I to GYJ17.1233X (translation)

### 1. Description

Pilot valve typed VACC-P3-K4-1-EX4-A, manufactured by Festo AG & Co. KG, has been certified by National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation (NEPSI). The product accords with following standards:

GB3836.1-2010 Explosive atmospheres-Part 1: Equipment-General requirements

GB3836.4-2010 Explosive atmospheres-Part 4: Equipment protection by intrinsic safety "i"

GB12476.1-2013 Electrical apparatus for use in the presence of combustible dust- Part 1: General requirements

GB12476.4-2010 Electrical apparatus for use in the presence of combustible dust- Part 4: Protection by intrinsic safety "iD"

The Ex marking is Ex ia II C T5/T6 Gb, Ex iaD 21 T125/T85, its certificate number is GYJ17.1233X.

Type approved in this certificate is shown as the following:

VACC-P3-K4-1-EX4-A

 indicates power consumption, including 0.4 (max. 40 mW) or 0.09 (max. 9 mW).

### 2. Special Conditions for Safe Use

The suffix "X" placed after the certificate number indicates that this product is subject to special conditions for safe use, that is:

2.1 Avoid of the electrostatic charge built on the surface of non-metallic material of the product.

2.2 As a medium, only non-flammable gases may be used.

### 3. Conditions for Safe Use

3.1 The relationship between ambient temperature range, temperature class and max. surface temperature is shown as the following:

| Ambient temperature range | Temperature class | Max. surface temperature |
|---------------------------|-------------------|--------------------------|
| -40℃ ~ +70℃               | T5                | 125℃                     |
| -40℃ ~ +30℃               | T6                | 85℃                      |

3.2 This product should be used in explosive gas atmospheres/combustible dust atmospheres together with approved associated apparatus, follow the instruction manual of this product and associated apparatus when connecting the wiring. Connect the wiring terminals correctly.

3.3 The intrinsically safe parameters are shown as follows:

| $U_i$ (V) | $I_i$ (mA) | $P_i$ (mW) | $C_i$ (nF) | $L_i$ (mH) |
|-----------|------------|------------|------------|------------|
| 40        | 200        | 650        | 0          | 0          |

3.4 Connecting cable between this product and associated apparatus should be insulated screen cable; connect the cable screen functionally to earth ground.

3.5 Clean the surface of this product termly when using in combustibile dust atmosphere.

3.6 The user shall not change the configuration in order to maintain/ensure the explosion protection performance of the equipment. Any change may impair safety.

3.7 For installation, use and maintenance of this product, the end user shall observe the instruction manual and the following standards:

GB50257-2014 "Code for construction and acceptance of electric device for explosion atmospheres and fire hazard electrical equipment installation engineering".

GB3836.13-2013 "Explosive atmospheres- Part 13:Equipment repair, overhaul and reclamation".

GB3836.15-2000 "Electrical apparatus for explosive gas atmospheres- Part 15:Electrical installations in hazardous area (other than mines)".

GB3836.16-2006 "Electrical apparatus for explosive gas atmospheres- Part 16:Inspection and maintenance of electrical installation (other than mines)".

GB3836.18-2010 "Explosive atmospheres-Part 18: Intrinsically safe system".

GB15577-2007 "Safety regulations for dust explosion prevention and protection". (Only if installed in dust hazardous areas).

GB12476.2-2010 "Electrical apparatus for use in the presence of combustibile dust- Part 2: Selection and installation". (Only if installed in dust hazardous areas)

#### 4. Manufacturer's Responsibility

4.1 Conditions for safe use, as specified above, should be included in the documentation the user is provided with.

4.2 Manufacturing should be done according to the documentation approved by NEPSI.

4.3 Nameplate should include these contents listed below:

1) NEPSI logo



2) Ex marking

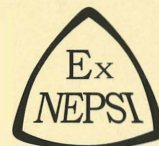
3) certificate number

4) ambient temperature range

5) intrinsically safe parameters

National Supervision and Inspection Center  
for Explosion Protection and Safety of Instrumentation

2017.07.07



# 防爆合格证

证号: GYJ17.1233X

由 Festo AG & Co. KG

制造的产品:

(地址: Ruiter Strasse 82, 73734 Esslingen, Germany)

名称 先导阀

型号规格 VACC-P3-K4-1-EX4-A

防爆标志 Ex ia II C T5/T6 Gb Ex iaD 21 T125/T85

产品标准 /

图样编号 116

经图样及技术文件的审查和样品检验, 确认上述产品  
符合 GB 3836.1-2010、GB 3836.4-2010、GB 12476.1-2013、  
GB 12476.4-2010 标准,

特颁发此证。

本证书有效期: 2017年7月7日至2022年7月6日

- 备注
1. 安全使用注意事项见本证书附件。
  2. 证书编号后缀“X”表明产品具有安全使用特殊条件, 内容见本证书附件。
  3. 型号规格说明见本证书附件。
  4. 本安电气参数见本证书附件。

站长

国家级仪器仪表防爆安全监督检验站

颁发日期二〇一七年七月七日

本证书仅对与认可文件和样品一致的产品有效。

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# 国家级仪器仪表防爆安全监督检验站

National Supervision and Inspection Centre for  
Explosion Protection and Safety of Instrumentation

(GYJ17.1233X)

(Attachment I)

## GYJ17.1233X防爆合格证附件 I

由Festo AG & Co. KG生产的VACC-P3--K4-1-EX4-A型先导阀，经国家级仪器仪表防爆安全监督检验站（NEPSI）检验，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”保护的的设备

GB12476.1-2013 可燃性粉尘环境用电气设备 第1部分：通用要求

GB12476.4-2010 可燃性粉尘环境用电气设备 第4部分：本质安全型“iD”

产品防爆标志Ex ia II C T5/T6 Gb、Ex iaD 21 T125/T85，防爆合格证号为GYJ17.1233X。

本证书认可的产品型号规格如下：

VACC-P3--K4-1-EX4-A

其中，表示功耗，可为0.4（max. 40 mW）或0.09（max. 9 mW）

### 一、产品安全使用特殊条件

产品防爆合格证号后缀“X”表示产品有安全使用特殊要求，具体内容如下：

- 1、产品外壳表面严禁干擦、摩擦，以防产生静电火花危险。
- 2、过程介质应为非可燃性气体。

### 二、产品使用注意事项

1、产品使用环境温度、温度组别和最高表面温度的关系如下：

| 使用环境温度    | 温度组别 | 最高表面温度 |
|-----------|------|--------|
| -40℃～+70℃ | T5   | 125℃   |
| -40℃～+30℃ | T6   | 85℃    |

2、产品必须与已通过防爆认证的关联设备配套共同组成本安防爆系统方可使用于爆炸性气体环境/可燃性粉尘环境。其系统接线必须同时遵守本产品 and 所配关联设备的使用说明书要求，接线端子不得接错。

3、产品本安电气参数如下：

| 最高输入电压<br>Ui (V) | 最大输入电流<br>Ii (mA) | 最大输入功率<br>Pi (mW) | 最大内部等效参数 |        |
|------------------|-------------------|-------------------|----------|--------|
|                  |                   |                   | Ci(nF)   | Li(mH) |
| 40               | 200               | 650               | 0        | 0      |

4、产品与关联设备的连接电缆应为带绝缘护套的屏蔽电缆，其屏蔽层应接地。

5、产品在粉尘环境使用维护时，应定期采取清洁措施，以防止表面积聚粉尘。

6、用户不得自行随意更换该产品的电气零部件，应会同产品制造商共同解决运行中出现的故障，以免影响防爆性能和损坏现象的发生。

7、产品的安装、使用和维护应同时遵守产品使用说明书、GB3836.13-2013“爆炸性环境 第13部分：设备的修理、检修、修复和改造”、GB3836.15-2000“爆炸性气体环境用电气设备 第15部分：危险场所电气安装（煤矿除外）”、GB3836.16-2006“爆炸性气体环境用电气设备 第16部分：电气装置的检查和维修（煤矿除外）”、GB3836.18-2010“爆炸性环境 第18部分：本质安全系统”、GB50257-2014“电气设备安装工程爆炸和火灾危险环境电气装置施工及验收规范”、GB15577-2007“粉尘防爆安全规程”及GB12476.2-2010“可燃性粉尘环境用电气设备 第2部分：选型和安装”的有关规定。

### 三、制造厂责任

1、产品制造厂必须将上述使用注意事项纳入产品使用说明书或相关技术文件中；

2、制造厂必须严格按照NEPSI认可的文件资料生产；

3、产品铭牌中应至少包括下列内容：

a) NEPSI认可标志(见防爆合格证书)

b) 产品防爆标志

c) 防爆合格证号

d) 使用环境温度

e) 本安电气参数

国家级仪器仪表防爆安全监督检验站

二〇一七年七月七日