



EU Type Examination Certificate CML 23ATEX2668X Issue 0

- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Equipment **Smart Valve Positioner KGP2XXX**
- 3 Manufacturer **NIHON KOSO Co., Ltd. KOSO ENGINEERING DIVISION**
- 4 Address **1-16-7, NIHOMBASHI, CHUO-KU, TOKYO, 103-0027, JAPAN**
- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 CML B.V., Chamber of Commerce No 67386717, Koopvaardijweg 32, 4906CV Oosterhout, The Netherlands, Notified Body Number 2776, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 12.

- 7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.
- 8 This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN IEC 60079-0:2018

EN 60079-11:2012

- 10 The equipment shall be marked with the following:



II 1 G

Ex ia IIC T4/T5 Ga

T4: -40°C ~ +80°C

T5: -40°C ~ +60°C



This certificate shall only be copied
in its entirety and without change

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H M Amos
Technical Specialist



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11 Description

KGP2XXX series smart valve positioner is a control device mounted on the pneumatic actuator for control valve, which positions a control valve according to a 4 to 20mA signal from a higher-level control system or a control device.

The dimensions of the equipment is about 203mm×128mm×131mm. The enclosure of this product consists of an aluminum die-cast housing, a front cover and one LCD. The main PCB board and torque motor coil, which are the main units, are installed inside the enclosure. The potentiometer itself is composed of a metal housing, and has a sensor board inside and a rotating shaft exposed from the housing. And this unit is attached to the housing of the main body with the shaft on the outside.

There is one earthing terminal on the enclosure, the connection of earthing terminal refer to “Specific Conditions of Use” for more information. The in-output terminal block is attached to the left side of the main PCB by soldering, and the board is covered with a resin PCB cover.

Type designation

KGP2①②③-④⑤⑥⑦-⑧

① identifies proof type:

- 0: Dust water proof
- B: CCC certification
- D: IECEx certification
- E: ATEX certification

② identifies Feedback type:

- 0: Linear motion standard type
- 1: Linear motion long stroke type
- 2: Rotary motion type
- 3: Rotary motion VDI/VDE3845 type

③ identifies Communication type:

- 0: 4~20mA & Without HART & Without Position feedback
- 1: 4~20mA & Without HART & With Position feedback
- 2: 4~20mA & With HART & Without Position feedback
- 3: 4~20mA & With HART & With Position feedback

④ identifies Actuator type:

- S: Single acting actuator
- D: Double acting actuator

⑤ identifies Pressure gauge block type

⑥ identifies Pressure gauge range

⑦ identifies Pressure gauge unit

⑧ identifies Option

Electrical Rating:

The smart valve positioner has one terminal with five terminal ports:

Input signal(port 1,2): $U_i=28V$, $I_i=93mA$, $P_i=651mW$, $C_i=1.4nF$, $L_i=0.1mH$.

PT signal(port 4,5): $U_i=28V$, $I_i=93mA$, $P_i=651mW$, $C_i=1.4nF$, $L_i=0.1mH$.

No connection (port 3).



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12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	24/01/2024	R17249A/00	Prime release

Note: Drawings that describe the equipment or component are listed in the Annex.

13 Conditions of Manufacture

None.

14 Specific Conditions of Use (Special Conditions)

The following relate to the installation and/or safe use of the equipment:

1. Under certain extreme circumstances, the non-metallic window and exhaust plug incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore, the equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on such surfaces. This is particularly important if the equipment is installed in a zone 0 location. In addition, the equipment shall only be cleaned with a damp cloth.
2. The enclosure is manufactured from aluminium. In rare cases, ignition sources due to impact and friction sparks could occur. This shall be considered during installation, particularly if the equipment is installed in a zone 0 location.
3. The enclosure has an ingress protection of rating of IP66. The user shall ensure that any devices, such as plugs, conduit or cable glands that are fitted will provide a degree of protection of IP66, after they are connected.
4. The apparatus is not capable of withstanding the 500V insulation test required by Clause 6.3.13 of EN 60079-11:2012. This must be taken into account when installing the equipment.