(1) EC-Type Examination Certificate

(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres – **Directive 94/9/EC**

(3) EC Type Examination Certificate Number

EPS 12 ATEX 1 448 X

(4) Equipment: Smart Positioner, Type YT-2300

(5) Manufacturer: Young Tech Co., Ltd

(6) Address: #3022, Hagun-ri, Yangchon-myeon, Gimpo-si, Gyeonggi-do, Korea

(7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) Bureau Veritas Consumer Product Services Germany GmbH, Notified Body No. 2004 in accordance with Article 9 of the Council Directive 94/9/EC of March 23rd 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II of the Directive. The examination and test results are recorded in the confidential report 11TH0411.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2009 EN60079-11:2007

EN 61241-11:2006

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC Type Examination Certificate relates only to the design and the construction of the specified equipment in accordance with Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and supply of this equipment.

(12) The marking of the equipment shall include the following:

II 2G Ex ia IIC T5/T6 Gb

II 2D Ex iaD IIIC T85°C/T100°C Db IP6X

Certification department of explosion protection

Türkheim, 2012-06-22

D. Zitzmann

(13) # Annexe

(14) ## EC Type Examination Certificate EPS 12 ATEX 1 448 X

(15) Description of equipment:

The YT-2300 is an electro pneumatic positioner to control linear and rotary valves. The pressure is regulated by a piezoelectric valve and the position of the pneumatic valve is measured by a potentiometer.
The YT-2300 has as an option a superimposed HART signal. Additionally the PTM module as another option serves as feedback for the position of the valve. All circuits are supplied by intrinsically safe power supplies with linear characteristic. The different intrinsically safe circuits are galvanically isolated against each other and against ground.

Electrical data:

Supply circuit: Type of protection Intrinsic Safety Ex ia IIC/IIB maximum values:

Ui = 28 V
Ii = 93 mA
Pi = 651 mW
Linear characteristic
Ci = 0.6 nF differentially between the lines or 2.2 nF against ground
Li = 300 µH

The supply circuit is galvanically isolated against earth.

Option circuit "PTM": Type of protection Intrinsic safety Ex ia IIC/IIB maximum values:

Ui = 28 V
Ii = 93 mA
Pi = 651 mW
Linear characteristic
Ci = 0.6 nF differentially between the lines or 2.2 nF against ground
Li = 300 µH

The PTM circuit is galvanically isolated against earth.

(16) Test report: 11TH0411

(17) Special conditions for safe use:

The ambient temperature range deviates from the standard temperature range and amounts to:
Temperature class T5/T100°C: -40 °C to +60 °C
Temperature class T6/T85°C: -40 °C to +40 °C.

Impact testing on light transmitting parts was carried out with low impact energy. Applications with a risk of high impact energy are to be avoided.

(18) Essential health and safety requirements:

Met by standards.

Certification department of explosion protection

Türkheim, 2012-06-22

D. Zitzmann