(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 11 ATEX 1 363 X

(4) Equipment: Smart Positioner, Type YT2500/2550, YT2500+LS(dry contact)/YT2550+LS(dry contact)

(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 Products 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 10TH0214.

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

EN 60079-0:2009 EN 60079-11:2007

(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.

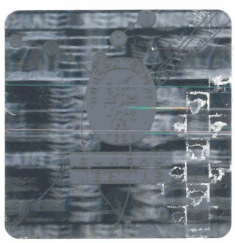
(12) The marking of the equipment shall include the following:

II 2G Ex ia IIC T5/T6 Gb

Certification department of explosion protection

Türkheim, October 20, 2011

A. Hänchen



(13) # Annexe

(14) ## EC Type Examination Certificate EPS 11 ATEX 1 363 x

(15) Description of equipment:

The YT2500/2550 and YT2500+LS(dry contact)/YT2550+LS(dry contact) is an electropneumatic positioner to control linear and rotary valves. The pressure is regulated by a piezo valve and the position of the pneumatic valve is measured by a potentiometer.
The YT2500/2550 and YT2500+LS(dry contact)/YT2550+LS(dry contact) has as an option a super-imposed HART signal. Additionally the PTM module serves as feedback for the position of the valve. Two optional limit switches (contacts) can be built in.
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 (versions YT2500/2550 and YT2500+LS(dry contact)/YT2550+LS(dry contact)) type of protection Intrinsic Safety Ex ia IIC/IIB maximum values:

Ui = 28 V
Ii = 47 mA
Pi = 329 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" (versions YT2500/2550 and YT2500+LS(dry contact)/ YT2550+LS(dry contact)); type of protection Intrinsic safety Ex ia IIC/IIB maximum values:

Ui = 28 V
Ii = 47 mA
Pi = 329 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.

Option circuits "Limit switches 1 and 2" (only version YT2500+LS(dry contact)/ YT2550+LS(dry contact)); type of protection Intrinsic Safety Ex ia IIC/IIB maximum values:

Ui = 28 V
Ii = 93 mA
Pi = 650 mW
Linear characteristic
Ci = 0 nF
Li = 0 µH

The limit switch circuits are galvanically isolated against earth. All circuits are galvanically isolated against each other.

(16) Test report: 10TH0214

(17) Special conditions for safe use:

The ambient temperature range deviates from standard temperature range and amounts:

Temperature class T5: -40 °C to +60 °C
Temperature class T6: -40 °C to +40 °C.

(18) Essential health and safety requirements:

Met by standards.

Certification department of explosion protection

Türkheim, October 20, 2011

A.Hänchen