

# CERTIFICATE OF CONFORMITY



- HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**
- Certificate No:** FM19US0090
- Equipment:** YT-1000L and YT1000R  
**(Type Reference and Name)** Linear and Rotary Electro-Pneumatic Valve Positioners
- Name of Listing Company:** Rotork YTC Limited
- Address of Listing Company:** 81, Hwanggeum-ro, 89 beon-gil  
Gimpso-si  
Gyeonggi-do  
10048 Republic of Korea
- The examination and test results are recorded in confidential report number:  
3029618 dated 7<sup>th</sup> April 2008
- FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:  
FM Class 3600:2018, FM Class 3615:2018, FM Class 3616:2011, FM Class 3810:2018,  
ANSI/ISA 61010-1:2004, ANSI/ISA 60079-18:2005 (2<sup>nd</sup> ED), ANSI/NEMA 250:2003
- If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.
- This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.

**Certificate issued by:**

J.E. Marquedant  
VP, Manager - Electrical Systems

28 April 2020

Date

To verify the availability of the Approved product, please refer to [www.approvalguide.com](http://www.approvalguide.com)

**THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE**

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# SCHEDULE



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10. Equipment Ratings:

Explosionproof with special protection (Encapsulated coil) for Class I, Division 1, Groups C and D; Dust-ignitionproof for Class II, Division 1, Groups E, F and G; Class III, Division 1; Indoors and outdoors (Type 4X) with an ambient temperature rating from -20°C to +60°C.

11. The marking of the equipment shall include:

Class I Division 1, Groups C and D; Class II, Division 1, Groups E, F, G, Class III, Division 1; Ta = -20°C to +60°C; Type 4X

12. **Description of Equipment:**

**General Description** – The YT-1000L and YT1000R linear and rotary electro-pneumatic valve positioners are industrial process control equipment used to convert an electrical input signal (e.g., a 4 to 20 mA current) into a pneumatically actuated positioner in process control applications.

**General Construction** - The YT-1000L and YT1000R electro-pneumatic valve positioner enclosure consists of two main parts. One part is the field wiring compartment and the second part is the torque motor assembly. Two, ½ inch NPT conduit openings (or (2) straight thread type, M20 sized) are provided in the field wiring compartment for customer connections. This compartment is covered by a thread-on solid cover and is connected to the torque motor assembly by way of a cylindrical joint to a potted actuating coil.

**Ratings** - The input supply for the YT-1000L and YT1000R electro-pneumatic valve positioners is 4 to 20 mA and shall be fused externally which is equal to or less than 0.062 Amperes (62 mA). This external customer supplied fuse is required for safety reasons in the event of a fault. The ambient temperature rating for the apparatus is -20°C to +60°C. The pneumatic operating supply pressure range is 20 psi (1.4 Bar) to 100 psi (7 Bar), maximum.

**Listings:**

**YT-1000L-abcdef. Linear Type Positioner.**

- a = Acting Type: S or D.
- b = Explosionproof: F.
- c = Lever Type: 1, 2, 3, or 4.
- d = Orifice Type: 1, 2 or 3.
- e = Conduit - Air Connection Type: 4 or 5.
- f = Operating Temp: S.

**YT-1000R-abcdefgh. Rotary Type Positioner.**

- a = Acting Type: S or D.
- b = Explosionproof: F.
- c = Lever Type: 1, 2, 3, 4 or 5.
- d = Orifice Type: 1, 2 or 3.
- e = Conduit - Air Connection Type: 4 or 5.
- f = Operating Temp: S.
- g = Option1: 0.
- h = Option2: 0.

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13. **Specific Conditions of Use:**

None

14. **Test and Assessment Procedure and Conditions:**

This Certificate has been issued in accordance with FM Approvals US Certification Requirements.

15. **Schedule Drawings**

A copy of the technical documentation has been kept by FM Approvals.

16. **Certificate History**

Details of the supplements to this certificate are described below:

Date	Description
7 <sup>th</sup> April 2008	Original Issue.
14 <sup>th</sup> June 2011	<u>Supplement 1:</u> Report Reference: – 3029618rev110429 Dated 14 <sup>th</sup> June 2011.
7 <sup>th</sup> July 2019	<u>Supplement 2:</u> Report Reference: – RR218810 Dated 7 <sup>th</sup> July 2019. Description of the Change: Updated company name from Young Tech Co Ltd to Rotork YTC Limited along with labels and documentation, as well as updated FM Class Standards 3600, 3615, and 3810 to latest editions. Issued new format certificate.
30 <sup>th</sup> March 2020	<u>Supplement 3:</u> Report Reference: – PR454644 dated 30 <sup>th</sup> March 2020. Description of the Change: Constructional product design changes, add FM Class 3616:2011 standard, add YTC brand listing and correction of certificate type errors.
15 <sup>th</sup> April 2020	<u>Supplement 4:</u> Report Reference: – RR223385 dated 15 <sup>th</sup> April 2020. Description of the Change: Changes made to model code to remove and correct parts of the listing.
28 <sup>th</sup> April 2020	<u>Supplement 5:</u> Report Reference: – RR223521 dated 28 <sup>th</sup> April 2020. Description of the Change: Corrections made to model code going to '4 or 5' for option code 'e', from '1 or 2'.

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