



(1) TYPE EXAMINATION CERTIFICATE

(2) Non-electrical equipment of category 2 intended for use in potentially explosive atmospheres
Directive 94/9/EC

(3) Type Examination Certificate nr **LOM 10ATEX6092 X**

(4) Equipment or protection system Rotary pneumatic actuators
Types KSY-****.**** y KSYM-****.****.****

(5) Manufacturer QUIFER Actuators, S.L.

(6) Address Ctra. Nal. Ila, km 8,500
17600- FIGUERES (Girona)
SPAIN

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

(8) Laboratorio Oficial J.M. Madariaga (LOM) certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of non-electrical equipment of category 2 intended for use in potentially explosive atmospheres, given in Annex II to the Directive.
The examination and test results are recorded in confidential report nr. **LOM 10.309 NP**

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

Standards **EN 13463-1 :2009** **EN 13463-5 :2003**

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

(11) This Type Examination Certificate relates only to the design and construction of this specified equipment or protective system in accordance with the Directive 94/9/EC. Further requirements of the Directive apply to the manufacture and supply of this equipment or protective system. These are not covered by this certificate.

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



II 2GD c IIC T6 IP65/IP66
-20 °C ≤ Ta ≤ +60 °C

OFICIAL



Madrid, 2010-12-14

Carlos Fernández Ramón
DIRECTOR OF THE LABORATORY

Angel Vega Remesal
Head of the ATEX

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LABORATORIO OFICIAL J. M. MADARIAGA

(A1) SCHEDULE

(A2) Type Examination Certificate: **LOM 10ATEX6092 X**

(A3) Description of equipment or protective system

The equipment is a Scotch Yoke pneumatic actuator for operating industrial valves, ball, butterfly, gate, or those appliances or equipment that require 90-degree turns with air or non-corrosive gases up to a maximum pressure of 10 bar.

Operating characteristics

- Working pressure: from 2 to 10 bar in double effect actuators
from 2 to 10 bar in single effect actuators
- Supply fluid: Air or non-corrosive inert gas
- Working temperature: -20°C a $+60^{\circ}\text{C}$.
- Displacement: rotation from $0^{\circ} \pm 2.5^{\circ}$ to $90^{\circ} \pm 2.5^{\circ}$

Type designation

KSX-XXX-YYY □ 90° double acting actuator
KSYM-XXX-YYY-MMM 90° single acting actuator

where XXX denotes the actuator model
YYY denotes the actuator cylinder model
MMM denotes de actuator sprig type

Complete range of equipment including:

Double acting actuators

KSX-100-160, KSX-100-180, KSX-100-235, KSX-400-235, KSX-400-280, KSX-400-335, KSX-400-385, KSX-900-235, KSX-900-280, KSX-900-335, KSX-900-385, KSX-900-435, KSX-1600-335, KSX-1600-385, KSX-1600-435, KSX-1600-485, KSX-1600-535, KSX-3500-335, KSX-3500-385, KSX-3500-435, KSX-3500-485, KSX-3500-535

Single acting actuators

KSYM-100-160-046, KSYM-100-180-046, KSYM-100-235-046, KSYM-100-160-078, KSYM-100-180-078, KSYM-100-235-078, KSYM-400-235-110, KSYM-400-280-110, KSYM-400-335-110, KSYM-400-235-160, KSYM-400-280-160, KSYM-400-335-160, KSYM-400-385-160, KSYM-400-280-220, KSYM-400-335-220, KSYM-400-385-220, KSYM-435-220, KSYM-900-235-140, KSYM-900-280-140, KSYM-900-335-140, KSYM-900-235-200, KSYM-900-280-200, KSYM-900-335-200, KSYM-900-385-200, KSYM-900-435-200, KSYM-900-280-290, KSYM-900-335-290, KSYM-900-385-290, KSYM-900-435-290, KSYM-900-335-390, KSYM-900-385-390, KSYM-900-435-390, KSYM-1600-335-450, KSYM-1600-385-450, KSYM-1600-435-450, KSYM-1600-485-450, KSYM-1600-535-450, KSYM-1600-335-510, KSYM-1600-385-510, KSYM-1600-435-510, KSYM-1600-485-510, KSYM-1600-535-510, KSYM-1600-385-650, KSYM-1600-435-650, KSYM-1600-485-650, KSYM-1600-535-650, KSYM-3500-485-610, KSYM-3500-535-610, KSYM-3500-385-782, KSYM-3500-435-782, KSYM-3500-485-762, KSYM-3500-535-762, KSYM-3500-385-1057, KSYM-3500-435-1057, KSYM-3500-485-1057, KSYM-3500-535-1057.

The degree of protection is IP65 equipment for single acting actuators with local air exhaust muffler sintered metal. Double-acting actuators are IP66.

(A4) Test report nr **LOM 10.309 NP**

(A5) Special conditions for safe use

The single acting actuators will ensure the proper state of exhaust in order to preserve the degree of protection.





LABORATORIO OFICIAL J. M. MADARIAGA

(A1) SCHEDULE

(A2) Type Examination Certificate: LOM 10ATEX6092 X

(A6) Individual tests

None

(A7) Essential Health and Safety Requirements

Explosion safe requirements are covered by application of the standards indicated in page 1/3 of this certificate.

(A8) Descriptive Documents

- Technical dossier nr. :

ATEX-IND

Rev.

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Date

2010-06-15

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