



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEX EPS 24.0085X** Page 1 of 4 [Certificate history:](#)

Status: **Current** Issue No: 0

Date of Issue: 2024-10-07

Applicant: **Rotork Fluid Systems S.r.l.**
Via Padre Jacques Hamel 138 B
Porcari (LU) 55016
Italy

Equipment: **Range of Pneumatic and Hydraulic Actuators (see Annex for details)**

Optional accessory:

Type of Protection: **Non-electrical "h"**

Marking: Ex h IIC T5 Gb
Ex h IIIC T100°C Db
Ambient temperature range*:
-20 °C ≤ T_{amb} ≤ +100 °C
-30 °C ≤ T_{amb} ≤ +100 °C
-40 °C ≤ T_{amb} ≤ +100 °C
*Note: The ambient range applied depends on the non-electrical installed parts.

Approved for issue on behalf of the IECEx
Certification Body:

Ulrich Feike

Position:

Head of Certification

Signature:
(for printed version)

Date:
(for printed version)

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
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Certificate issued by:

Bureau Veritas Consumer Products Services Germany GmbH
Businesspark A96
86842 Türkheim
Germany





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Via Padre Jacques Hamel 138 B
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Manufacturing locations: **Rotork Fluid Systems S.r.l.**
Via Padre Jacques Hamel 138 B
Porcari (LU) 55016
Italy

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

[IEC 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[ISO 80079-36:2016](#) Explosive atmospheres - Part 36: Non-electrical equipment for explosive atmospheres - Basic methods and requirements
Edition:1.0

[ISO 80079-37:2016](#) Explosive atmospheres - Part 37: Non-electrical equipment for explosive atmospheres - Non electrical type of protection constructional safety "c", control of ignition source "b", liquid immersion "k"
Edition:1.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

[DE/EPS/ExTR24.0091/00](#)

Quality Assessment Report:

[DE/EPS/QAR24.0009/00](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Rotork Actuators for Quarter-Turn Valves models GP and GH, are based on the scotch yoke mechanism to transform the linear motion of the pneumatic/hydraulic cylinder piston or spring typically into a 90° rotary motion (quarter-turn). The actuators can be in double-acting or single-acting versions: the pneumatic/hydraulic cylinder and, for single-acting version, the spring can be connected to the two opposite side of the central body that houses the scotch yoke mechanism. On actuators can be installed manual and hydraulic override to allow motion in absence of fluid power.

SPECIFIC CONDITIONS OF USE: YES as shown below:

The end user shall check the temperature of the process fluid used and the conditions of irradiation, since the actuator has no internal heat source and its surface temperature is strictly dependent on the mentioned factors.

The end user shall follow IEC 60079-14 requirements for installing the actuator in combination with other equipment.

The end user shall establish and maintain the grounding connections on the actuator.

The end user shall avoid performing maintenance operations with acidic or basic solutions.

The end user shall repair any damage to the paintwork according to Rotork's painting instructions.

The end user shall use only replacement parts specified by Rotork when replacement parts are required.

The end user shall not polish or rub non-conductive surfaces with a dry cloth and avoid from any charging mechanism stronger than manual rubbing of surfaces, to prevent electrostatic charges in potentially explosive areas.



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Additional information:

The ingress protection level of IP66 has been validated and certified in accordance with the requirements of IEC 60079-0. Additionally, the equipment has been independently tested in compliance with IEC 60529 and has been confirmed to meet the IP67 standard (unrelated to explosion protection type).

Annex:

[BV_annex to IECExEps24.0085X_1.pdf](#)



The Product Key for ordering the Actuators provides the variants and types below.

A		B		- C C C		D		- E E E		F / G G		- H H							
ACTUATOR TYPE																			
G SCOTCH YOKE																			
SUPPLY TYPE																			
P PNEUMATIC																			
H HYDRAULIC																			
CENTER BODY SIZE Nominal movement arm (mm)																			
085, 100, 130, 160, 161, 200, 201, 270, 271, 350																			
YOKE TYPE																			
A, S SYMMETRIC YOKES																			
B, C, D, E, F CANTED YOKES																			
CYLINDER SIZE in mm (see Note 1)																			
GP RANGE PNEUMATIC ACTUATOR SEALS												Temperature Range							
A NBR - NORMAL TEMPERATURE												-30° TO +100°C							
B VITON - HIGH TEMPERATURE												-20° TO +100°C							
C FLUOROSILICONE - LOW TEMPERATURE												-40° TO +100°C							
GH RANGE HYDRAULIC ACTUATOR SEALS												Temperature Range							
F NBR - NORMAL TEMPERATURE												-30° TO +100°C							
G VITON - HIGH TEMPERATURE												-20° TO +100°C							
H FLUOROSILICONE - LOW TEMPERATURE												-40° TO +100°C							
CYLINDER / SPRING CANISTER CONFIGURATION																			
C0D ÷ C9D		SINGLE ACTING - FAIL TO CLOSE - SPRING CAN SIZE 0 ÷ 9 (D series)																	
C0E ÷ C9E		SINGLE ACTING - FAIL TO CLOSE - SPRING CAN SIZE 0 ÷ 9 (E series)																	
C0G ÷ C9G		SINGLE ACTING - FAIL TO CLOSE - SPRING CAN SIZE 0 ÷ 9 (G series)																	
O0D ÷ O9D		SINGLE ACTING - FAIL TO OPEN - SPRING CAN SIZE 0 ÷ 9 (D series)																	
O0E ÷ O9E		SINGLE ACTING - FAIL TO OPEN - SPRING CAN SIZE 0 ÷ 9 (E series)																	
O0G ÷ O9G		SINGLE ACTING - FAIL TO OPEN - SPRING CAN SIZE 0 ÷ 9 (G series)																	
D1		DOUBLE ACTING - SINGLE CYLINDER																	
D2		DOUBLE ACTING - TWO CYLINDERS																	
MANUAL OVERRIDE TYPE																			
M		VISIBLE JACKSCREW																	
MH		JACKSCREW WITH PROTECTION PIPE																	
MHD		JACKSCREW WITH PROTECTION PIPE AND DECLUTCHABLE HANDWHEEL																	
MD		DOUBLE ACTING ACTUATOR - MANUAL HANDWHEEL OVERRIDE																	
HPA		SINGLE ACTIVE PNEUMATIC ACTUATOR - HYDRAULIC MANUAL PUMP																	
HP1		DOUBLE ACTIVE PNEUMATIC/HYDRAULIC ACTUATOR - HYDRAULIC MANUAL PUMP																	
HPB		SINGLE ACTING HYDRAULIC ACTUATOR - HYDRAULIC MANUAL PUMP + STOP VALVE + 3/2 HAND MANUAL VALVE																	
HPC		DOUBLE ACTING HYDRAULIC ACTUATOR - HYDRAULIC MANUAL PUMP + N°2 3/2 HAND OPERATED VALVE																	
Note 1		For cylinder diameter > 935 replace EEE with model																	
EEE		937	938	940	942	945	960	962	965	970	972	975	980	982	987	990	992	995	997
∅ Cylinder		985	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800