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CSA Group Testing UK Ltd, a CSA Group company, provides the following services:

- **SAFETY TESTING**
- **ENVIRONMENTAL TESTING**
- **TRAINING**
- **HAZARDOUS AREA CLASSIFICATION**
- **PRODUCT CERTIFICATION SERVICES**
- **FUNCTIONAL SAFETY**

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Laboratory Technician

Technical Approval: **S Cork**
Laboratory Manager

Date: **11th January 2018**

Ingress Protection test on a 70 Series solenoid housing on behalf of Rotork Midland Limited

Report No: N70169304A
Commercially in Confidence

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Registered Office: Hawarden Industrial Park, Hawarden, CH5 3US United Kingdom
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TEST REPORT

ISSUED BY CSA GROUP TESTING UK LIMITED

Carried out by CSA Group Testing UK Ltd on behalf of:

Rotork Midland Limited
Patrick Gregory Road
Wolverhampton
WV11 3DZ

Project No: 70169304

Commercially in confidence

1 INTRODUCTION

This report refers to the performance of the test sample when tested against the agreed programme. It does not imply that any other samples or products necessarily comply with the requirements of the test programme. In addition, whilst this report maybe freely reproduced as a complete document it may not be abstracted.

Manufacturer:	Rotork Midlands Limited
Type Identification:	70 Series solenoid housing
Serial number:	Given identifier 70169304 #1 by CSA Group
Standard:	IEC 60529:2013
Deviations from Standard:	None
Aim:	IPX6
CSA Test Procedure:	LOP 220
CSA Internal Test Report:	18/0007
Sample Delivery Date:	4th January 2018
Test Conducted On:	5th January 2018

2 DESCRIPTION OF TEST SAMPLE

Figure 1 – Views of sample

2.1 Materials of construction

The primary materials of construction were metals.

2.2 Dimensions

The approximate dimensions of the main enclosure were 100 x 80 mm (H x diameter).

2.3 Seals

An O-ring was provided between the enclosure lid and main body.

For the purposes of the test the cable gland entry was sealed, at the request of the customer.

2.4 Fasteners

The screwed enclosure lid was secured hand tight prior to test.

3 TEST FOR SECOND CHARACTERISTIC NUMERAL: 6

3.1 Test for protection against water

Reference IEC 60529:2013 clause 14.2.6.

The test sample was supported in a number of orientations during the test in order that it could be sprayed from all practical directions. Water from a jet hose test nozzle with internal ∅ 12.5 mm was directed at the test sample at a rate of 100 L/min from a distance between 2.5 to 3 metres. The test duration was 3 minutes.

3.1.1 Result

On internal inspection of the test sample, no water was found.

4 CONCLUSION

The test sample described in sections 1 and 2, when tested in the manner described in section 3, satisfied the requirements of IEC 60529:2013, IP Code X6.