 2379	Test Report Number 9685 Issue 1		Product Assessment and Reliability Centre Ltd Unit 4 Alverdiscott Road Industrial Estate Bideford, Devon, EX39 4LQ Telephone: +44 (0) 1237 421255 <a href="mailto:info@parctest.co.uk">info@parctest.co.uk</a> <a href="http://www.parctest.co.uk">www.parctest.co.uk</a>
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<b>Date Samples Arrived:</b>	30/10/2018	<b>Customer Name and Address:</b>	Michael Slade Hansford Sensors Ltd Artisan, Hillbottom Road Sands Industrial Estate High Wycombe HP12 4HJ
<b>Date Testing Started:</b>	06/11/2018		
<b>Date Testing Completed:</b>	07/11/2018		
<b>Customer Purchase Order No:</b>	10312		

<b>Description of Test Samples:</b>	<b>Identity/Serial Numbers:</b>
1 off HS-100 series Accelerometer with 2 Pin MS Connector	Sample 1

<b>Test(s) Performed in the following order unless otherwise specified:</b>	<b>In Accordance With:</b>
Water Ingress Test – IPX8	UKAS
	In accordance with BS EN 60529:1992+A2:2013

<b>Report Summary:</b>
<p>The sample content was subjected to the test above, the details of which are contained in this test report.</p> <p>Following the removal of the sample from the immersion tank, it was dabbed free of excess water. The sample was cut open in line with customer instructions emailed to PARC 01/11/2018. During the opening of the sample no visual evidence of water ingress was recorded by the PARC engineer.</p> <p>Customer advised in an email dated 12/11/2018 that water ingress is to be checked for within the Accelerometer with 2 Pin MS Connector only, and that the cable assembly and exterior connector is of no concern.</p> <p>The customer was emailed on the 07/11/2018 with post-test inspection photographs.</p> <p>On completion of testing the sample was returned to the customer for further examination.</p>

<b>Distribution:</b>	<b>Test Engineer:</b>	Tom Josling	
1. PARC Ltd File 2. Michael Slade			
<b>Sample Disposal:</b>	<b>Approved by:</b>	Sam Wort, Senior Test Engineer	
Sample/s returned to customer via courier			

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## 1. Sample Content

Description of Test Samples:	Identity/Serial Numbers:
1 off HS-100 series Accelerometer with 2 Pin MS Connector	Sample 1




## 2. Initial Inspection

The sample content exterior was subjected to an initial visual inspection (non-UKAS). No obvious damage was noted.



Pre-test photo of sample 1

*(intentionally blank)*

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### 3. Test Procedure

#### 3.1 Water Ingress Test – IPX8

##### 3.1.1 Test Definition

Sample 1 was subjected to an IPX8 water ingress test, carried out in accordance with BS EN 60529:1992+A2:2013 using the following conditions:

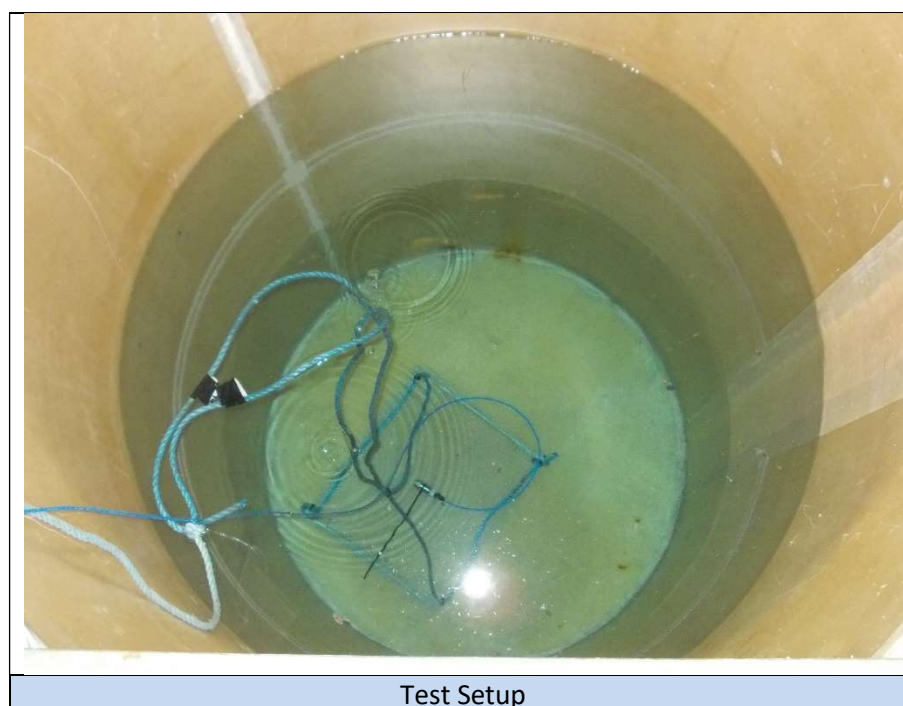
- Immersion depth: 1.75m
- Test duration: 24 hours
- Temperature difference between sample and water less than 5°C

##### 3.1.2 Test Equipment Used




Test Equipment	PARC ID	Calibration Due Date
Immersion Tank	282	N/A
Fluke Thermometer	596	05/09/2019
Thermocouple	1060	08/01/2019
Steel Rule	738	Indication only
Timer	630	22/11/2018

##### 3.1.3 Test Photos

Sample 1 was placed in an immersion tank for 24 hours as shown in the image below:

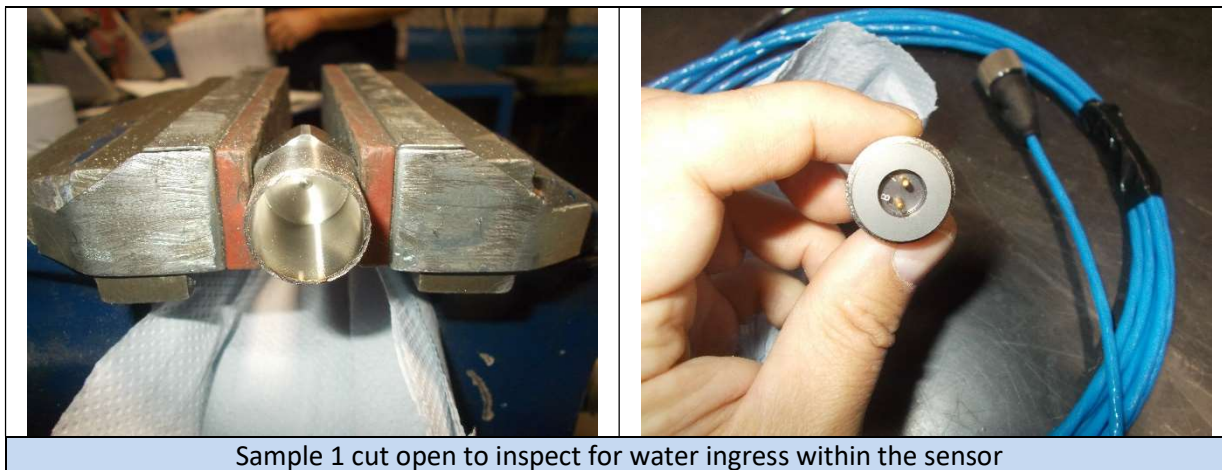


Test Setup

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### 3.1.4 Test Results/Plots

Typical photos of the sample during post-test visual inspection for water ingress are shown below:



Sample 1 cut open to inspect for water ingress within the sensor

## 4. Report Summary

The sample content was subjected to the test detailed within this report.

Following the removal of the sample from the immersion tank, it was dabbed free of excess water. The sample was cut open in line with customer instructions emailed to PARC 01/11/2018. During the opening of the sample no visual evidence of water ingress was recorded by the PARC engineer.

Customer advised in an email dated 12/11/2018 that water ingress is to be checked for within the Accelerometer with 2 Pin MS Connector only, and that the cable assembly and exterior connector is of no concern.

The customer was emailed on the 07/11/2018 with post-test inspection photographs.

On completion of testing the sample was returned to the customer for further examination.

### End of Test Report