AiM Infotech

Exhaust gas power valve position sensor for kart

Release 1.05
1

Introduction

AiM devices can measure the exhaust gas power valve travel using a sensor. It can measure up to 20mm travel and allows to monitor at which RPM value the valve opens/closes showing all intermediate values too. Close valve position is auto-calibrated by the sensor.

2

Kits and spare parts

Exhaust gas power valve sensor cable ends with a 4 pins plastic Binder connector. To connect the sensor to MyChron Expansion, which has on the contrary metallic connectors, you need to purchase the sensor with the proper extension cable.

Kit for connection with MyChron Expansion: part number is: **X08PWVV00R**.
It includes:
- 1 sensor with 20 cm cable
- 1 cover
- one 150 cm extension cable for MyChron Expansion

Each item can also be bought separately as spare part. Their part numbers are:

- power valve: X08PWVALVER
- cover: LSC56801RM
- 150 cm extension cable for MyChron Expansion: V02PCB15BTXG
2.1 Installation notes

The exhaust gas power valve position sensor is to be installed on the valve; the images below help you to perform the operation.

- open the valve cover (1) and remove the kart stock black cover (in the image it has already been removed)
- screw AiM sensor cover (2) ensuring the membrane (3) is well adherent
- replace the cover
- remove the pre-load iron ring and screw AiM iron ring with the integrated sensor (4)
3
Dimensions, pinout and technical characteristics

The drawing here below shows sensor and cover dimensions in millimetres [inches].

The sensor is sold with a 20 cm cable ending with a 4 pins Binder 719 male connector. The image here below shows the connector from solder termination side and its pinout.

<table>
<thead>
<tr>
<th>Binder connector pin</th>
<th>Function</th>
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<tbody>
<tr>
<td>1</td>
<td>Analog signal 0-5 V</td>
</tr>
<tr>
<td>2</td>
<td>GND</td>
</tr>
<tr>
<td>3</td>
<td>Not connected</td>
</tr>
<tr>
<td>4</td>
<td>Vreference (4.5V)</td>
</tr>
</tbody>
</table>