Time Electronics
7059 Pressure and Vacuum Calibrator Module

Description
The 7059 is a practical pressure and vacuum calibration and control module. It offers a controlled transition between vacuum and pressure output and can also be used to accurately measure input pressure or vacuum. There are four available versions according to required output range, from vacuum to 0.2, 2, 5, or 10 bar.

The 7059 combines high accuracy with simple operation, and is ideal for vacuum and pressure calibration applications under 10 bar. It is an easy to use module suitable for high volume work in process plants, offshore platforms, refineries, and many other on-site testing facilities. It is commonly used for calibration and maintenance of pressure gauges, sensors, transmitters, transducers, indicators, switches, and more.

Features include a 4.5 digit LCD display, 5 pressure units, zeroing switch, regulated output as well as pressure measurement input. Best accuracy is 0.04 % of full scale. Separate pressure and vacuum ports are provided on the rear of the console with quick release connections. For vacuum supply the 7149 electrical vacuum pump is available.

The module is fitted as standard with an RS-232 interface with internal communication to a control centre (standard with 8060 or 7051 if ordered). This enables readback with EasyCal calibration software. With EasyCal the user can define and perform pressure calibration procedures as well as create and print traceable calibration certificates.

Specifications
Specifications are for 1 year at 23 ºC ± 5 ºC. Accuracy includes linearity and long term effects. All accuracies are ± 1 digit. For operation outside specified temperature range, apply 70 ppm per ºC.

<table>
<thead>
<tr>
<th>Range (bar)</th>
<th>-0.2 to 0.2</th>
<th>-0.95 to 2</th>
<th>-0.95 to 5</th>
<th>-0.95 to 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy (% FS)</td>
<td>0.1</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
</tr>
<tr>
<td>Resolution (bar)</td>
<td>0.01 mb</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Units
- 0.2 bar: mbar, PSI, kPa, cmH2O, cmWg.
- 2, 5, and 10 bar: bar, PSI, kPa, cmH2O, cmWg.

Maximum line pressure
- 10 bar for 0.2, 2, 5 bar versions / 12 bar for 10 bar version.

Sensor
- Piezo-resistive - stainless steel diaphragm.

Over pressure warning
- 1.2 x range full scale - audio and visual (on LCD) warning.

Fittings
- Quick Release.

Rear connections
- Quick Release.

Interface
- RS-232 for readback (using EasyCal on 7051 if ordered).

Module width
- 129 mm (primary or secondary console fitting).

Ordering information
7059 .......... Regulated Vacuum & Pressure Calibrator Module

<table>
<thead>
<tr>
<th>Range (bar)</th>
<th>Order Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.2</td>
<td>7059/7100</td>
</tr>
<tr>
<td>2</td>
<td>7059/7101</td>
</tr>
<tr>
<td>5</td>
<td>7059/7102</td>
</tr>
<tr>
<td>10</td>
<td>7059/7103</td>
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</tbody>
</table>

ECFLA ......................... EasyCal Calibration Software
C178 ...................... Traceable calibration certificate (Factory)
C190 ....................... Accredited calibration certificate (ISO 17025)

Due to continuous development Time Electronics reserves the right to change specifications without prior notice.

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