Attachable Indicator
Type A-AI-1, A-IAI-1

Applications
- Machine tools
- Test benches
- Level measurement
- General industrial applications

Special Features
- Display range -1999 ... 9999
- Attaches to a 4 ... 20 mA output transmitter using a DIN 43 650 L-plug
- User-adjustable on site without calibration equipment
- IP 65 Ingress protection
- Intrinsically safe explosion protection II 2G EEx ib IIC T4 (model A-IAI-1)

Description
The model A-AI-1 or A-IAI-1 attachable indicator provides an ideal solution for a local read-out with simultaneous 4-20 mA signal transmission.

The universal programmability and simple mounting allows the display to retrofit existing installed transmitters equipped with a full size DIN plug. It is loop powered so no additional power supply is required.

The scaling is adjusted by accessing three buttons under the front cover. The user is prompted through the programming steps by a logically arranged menu and prompts displayed on the LCD.

Two user-selectable filtering levels smooth the display during dynamic pressure changes and brief pressure peaks can be suppressed. All programmed parameters are stored in an EEPROM so in the event of a power failure reprogramming is unnecessary.

The IS attachable indicator model A-IAI is designed for use in potentially explosive atmospheres. This IS attachable indicator can be combined with an IS-transmitter and with an IS signal isolator or IS transmitter power supply to enable the use in Zone 1 hazardous areas.

The display is provided with an integrated, continuous self-diagnostic circuit that monitors indicator function. The integral self-diagnostic system provides error messages for sensor failure along with upper or lower deviation from the range help provide a high degree of safety.

The sturdy and compact plastic case provides IP65 ingress protection, making the display ideally suited for a great variety of industrial applications.
Specifications

Display
Type: 0.4" high LCD
Programmable display range: -1999 to +9999

Accuracy
< 0.2% of span

Programmable Range
4-20 mA can be assigned any display value within the display range. Both scaling points are individually adjustable using push buttons inside the case.

Power
Loop powered - no additional power supply required
Voltage drop: 3 VDC
Maximum current rating: 40 mA

Environmental
Operating temperature: +32 to +122°F (0 to 50°C)
Storage temperature: -22 to +176°F (-30 to +80°C)
Temperature effects: 0.1% of span per 18°F (10°C)
Humidity: <90%, non-condensing

CE Conformity
Interference emission per EN 50 081-1
Interference immunity per EN 50 082-2

Construction
Case: ABS plastic
Viewing window: polycarbonate

Dimensions (inches)
1.9 x 1.9 x 1.4 deep

Weight
Approx. 3 oz.

Programming Instructions

1.) Remove four cover screws and remove cover.
2.) Press the “P” Key. Display shows “dP”.
3.) Press the “Up” or “Down” key to select the desired decimal place position.
4.) Press the “P” key twice. Display shows “An 4”.
5.) Press the “Up” or “Down” key to set display to zero or other 4 mA display point.
6.) Press the “P” key twice. Display shows “An20”.
7.) Press the “Up” or “Down” key to set the maximum range of the transmitter.
8.) Press the “P” Key twice. Display shows “LI ”.
9.) Press the “Up” key to activate error code display (display shows “1”) or the down key to disable error codes (display shows “0”).

Error codes: under range: Display shows “F1”
over range: Display shows “F2 ”
10.) Press the “P” key. Display shows “FILT”. A digital filter is available to improve the readability of the display for applications undergoing rapid pressure changes. To set the digital filtering, press the “up” or “down” key to adjust the update rate of the display:

<table>
<thead>
<tr>
<th>Display</th>
<th>Time delay</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot; 0&quot;</td>
<td>0.2 s</td>
</tr>
<tr>
<td>&quot; 1&quot;</td>
<td>0.5 s</td>
</tr>
<tr>
<td>&quot; 2&quot;</td>
<td>1.0 s</td>
</tr>
<tr>
<td>&quot; 3&quot;</td>
<td>1.5 s</td>
</tr>
</tbody>
</table>

11.) Press the “P” key to return to the display mode.

Ready-To-Ship Meters

<table>
<thead>
<tr>
<th>Type</th>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-AI-1</td>
<td>7082534</td>
<td>Loop powered indicator for S-10, S-11 and A-10 using DIN 43 650 electrical connector (4-20 mA 2-wire only)</td>
</tr>
</tbody>
</table>

NOTE: Standard items shown in bold print. (Subject to prior sale)
Specifications and dimensions given in this data sheet represent the state of engineering at the time of printing. Modifications may take place and materials specified may be replaced by others without prior notice.