

# Digital Display and Switching Module

**DAS**

(LED) 4-digit, 2 limit switches, min/max storage  
self powering from current loop 4...20 mA

## Application

The digital display and switching module model DAS is an LED display with 2 limit switches.

The DAS is suitable for all pressure transmitters with 0...10 V/3-wire or 4...20 mA/2-wire analogue output. When mounted to our pressure transmitters series PTM and DTM..., you receive an excellent combination of precise pressure transmitter, intelligent pressure switch, and digital display device for direct reading of the operating pressure at the measuring point. The display and switching module is freely programmable via two push buttons on the front side (membrane keypad). The integrated software allows the configuration of e.g. scaling, decimal point, damping and switch points. The parameters are stored in an E<sup>2</sup>PROM and remain stored even in case of a power failure.

The switch points can be programmed separately in a range from 0 to 100 % of the nominal pressure. Additional LEDs indicate the current status of the switching outputs. The integrated diagnostic system continuously controls all functions of the display.

## Standard Versions

### Case

Polyamide 6.6 black 47x47x68 mm (1.85x1.85x2.68"), turnable approximately 290°

### Window Front Cover

Polycarbonate

### Display

4-digit LED, digit height 7.62 mm (0.3"), resolution 12 bit, turnable

### Indication Range

-1999...+9999

### Indication Accuracy

±0.1 % of the span ±1 digit

### Damping (Indication Rate)

Adjustable from 0.3...30 s

### Hold Function

Min./max. memory

### Measuring Unit

Standard version with indication in bar; each other pressure unit corresponding to the calibrated signal of the pressure transmitter is available – please specify when ordering

### Position of Installation

Any

### Supply Voltage

Self powering from the 4...20 mA current loop of the connected pressure transmitter, voltage drop ≤6 V

$$U_B = (U_{MU\_min} \dots U_{MU\_max}) + 6 \text{ V DC}$$

$$U_B = \text{operating voltage}$$

$$U_{MU} = \text{operating voltage of the used transmitter}$$

### Output Signal

4...20 mA, 2-wire

### Electrical Connection

Circular plug connector M 12x1 (5-pin), IP67, plastic, straight cable box



### Memory

E<sup>2</sup>PROM

### Temperature Limitation

Operating temperature: -25 / +85 °C (-13 / +185 °F)

Storage temperature: -40 / +85 °C (-40 / +185 °F)

### Temperature Influence

0.1 % / 10 K

### Programming

2 push buttons on the front side, membrane keypad

### Switching Output

2 independent PNP-outputs,  $U_{\text{Switch}} = U_B - 2 \text{ V}$ , maximum load 125 mA, short-circuit proof

### Switching Delay

Adjustable from 0...100 s

## Options

- Angular cable box
- Other electrical connection (for output signal 4...20 mA)
  - screwed cable gland with 2 m connection cable (IP67) or
  - plug connector DIN EN 175 301-803 construction type A (IP65; only 2-wire version, only 1 PNP output possible!)
- Input/output signal 0...10 V DC, (supply 15...36 V DC), 3-wire
  - with circular plug connector M 12x1 or optionally
  - with screwed cable gland (IP67) and 2 m connection cable
- Indication of other measuring unit, e.g. %, psi, kg/cm<sup>2</sup>
- Attachable digital display and switching module model DASA
  - also suitable for subsequent fitting
  - with plug (top) and cable box (bottom)
  - according to DIN EN 175 301-803 construction type A
  - IP65
  - 1 PNP output
  - approx. weight 100 g (0.22 lb)

## Ordering Information

Please order the pressure transmitter type series PTM or DTM with all required information according to data sheet 9810 ff or 9830 ff and add:

- with attached DAS (optionally: DASA)
- as well as the specification of any special options.

The DAS will then be supplied preprogrammed with the settings matching the mounted PTM or DTM.

The special version DASA is also available separately.

[www.armano-messtechnik.com](http://www.armano-messtechnik.com)

**ARMANO**

ARMANO Messtechnik GmbH

### Location Beierfeld

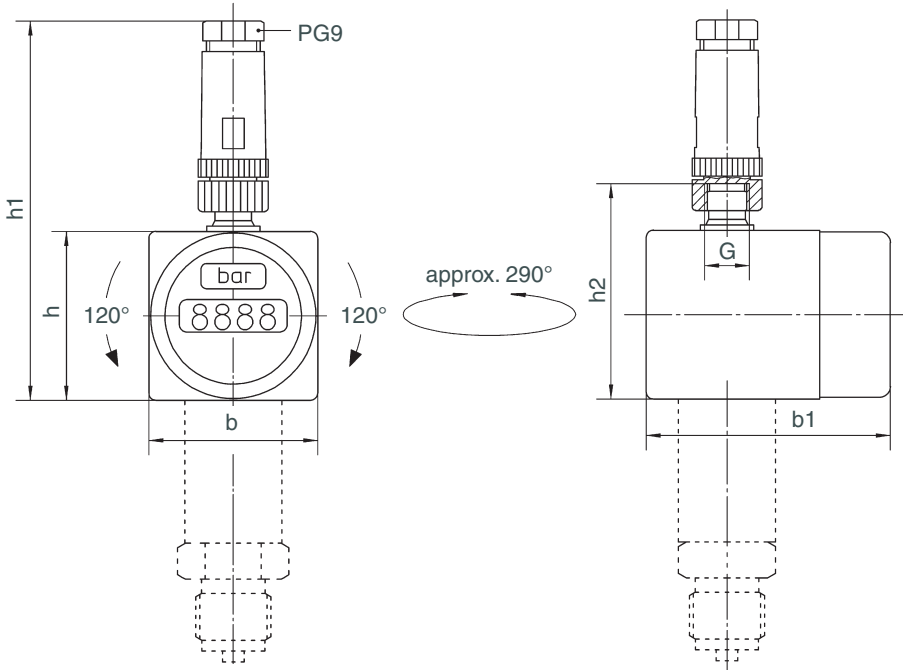
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# Dimensional Data and Weight, Pin Assignment

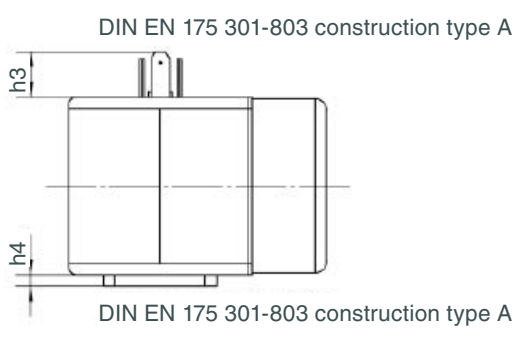


Dimensional Data (mm/inch) and Weight (kg/lb)						
b	b1	G	h	h1	h2	Weight (approx.)
47 1.85	68 2.68	M12x1	47 1.85	105 4.13	60.5 2.38	0.14 0.31

Pin Assignment	
<b>2-wire system</b> Pin assignment (standard version)	PIN
Supply +	1
Supply -	3
Switch point 1	4
Switch point 2	5
Ground	via pressure connection
<b>3-wire system</b> Pin assignment (see special versions 0...10 V DC)	PIN
Supply +	1
Supply -	3
Signal +	2
Switch point 1	4
Switch point 2	5
Ground	via pressure connection

## Special Version Model DASA

### Attachable digital display and switching module



Dimensional Data (mm/inch)	
h3	h4
12 0.47	3 0.12

**Available** mounted to a measuring instrument, which is equipped with a plug connector according to DIN EN 175 301-803 construction type A, e.g. pressure transmitters of the type series PTM..., DTM... and CTM... or separately for subsequent mounting

Pin Assignment	
<b>2-wire system</b> Pin assignment (standard version)	Plug connector DIN EN 175 301-803 construction type A
Supply +	1
Supply -	2
Switching output	3
Ground	earth contact

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