

# Digital Display and Switching Module

(LED) 4-digit, 2 limit switches, min/max storage

supplied by 4...20 mA current loop of the connected pressure transmitter



DAS

## Applications

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

It is suitable for all pressure transmitters with 0...10 V/3-wire or 4...20 mA/2-wire analogue outputs. When mounted to our pressure transmitter series PTM or DTM, you receive a most successful combination of precise pressure transmitter, intelligent pressure switch, and digital display for direct reading of the operating pressure at the measuring point. The DAS can comfortably be programmed via two push buttons on the front side (foil-sealed keypad). The integrated software allows the adjustment of the indication span, the decimal point, the indication rate (attenuation) and the switching values. Those parameters are stored in an E<sup>2</sup>PROM and kept even in case of a power blackout.

Both limit switch values 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.

## Standard Version

### Case

Polyamide 6.6 black 47 x 47 x 68 mm (1.85 x 1.85 x 2.68"), turnable approx. 290°

### Window Front Hood

Polycarbonate

### Display

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

### Indication Range

-1999...+9999

### Accuracy

±0.1 % of the span ±1 digit

### Attenuation (Indication Rate)

Adjustable from 0.3 to 30 s

### Hold Function

Min/max memory

### Measuring Unit

Standard version with bar-marking on front, but every required measuring unit, corresponding to the calibrated signal of the pressure transmitter that will be connected, can be chosen – please state when ordering

### Fitting Position

Any, without restrictions

### Auxiliary Energy

Supplied by 4...20 mA current loop of the connected pressure transmitter, voltage drop ≤6 V

$U_B = (U_{MU\ min} \dots U_{MU\ max}) + 6\ V\ DC$

$U_B$  = operating voltage

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

### Output Signal

4...20 mA, 2-wire

### Electrical Connection

Circular plug connector M 12x1 (5-pin), IP 67, plastic, straight cable box

### Memory

E<sup>2</sup>PROM

### Temperature Ranges

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

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



## Temperature Influence

0.1 % / 10 K

## Programming

2 push buttons on the front, foil-sealed keypad

## Switching Output

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

## Switching Delay

Adjustable from 0 to 100 s

Dimensional data, weights and wiring diagram see back of the page.

## Options

- Angular cable box
- Other electrical connection (for output signal 4...20 mA)
  - **screwed cable gland** with 2 m connection cable (IP 67) or
  - **plug connector** DIN EN 175 301-803 construction type A (IP 65; only 2-wire version, only 1 PNP-output possible!)
- Input/output signal **0...10 V DC** (power supply 15...36 V DC), 3-wire
  - with round plug connector M 12x1 or optionally
  - with screwed cable gland (IP 67) and 2 m connection cable
- Marking with **other unit**, e.g. %, psi, kg/cm<sup>2</sup>
- **Attachable** digital display and switching module model **DASA**
  - suitable for subsequent fitting
  - with male plug connector (top) and cable box (bottom)
  - according to DIN EN 175 301-803 construction type A
  - IP 65
  - 1 PNP-output
  - approx. weight 100 g (0.22 lb)

## Ordering Information

Please order the pressure transmitter type series PTM or DTM as advised in our data sheets 9810 ff. or 9830 ff. and add:

with attached DAS (optionally: DASA)  
and specification of any special options.

The DAS will then be preadjusted according to the mounted PTM or DTM.

The special version DASA is also available separately.



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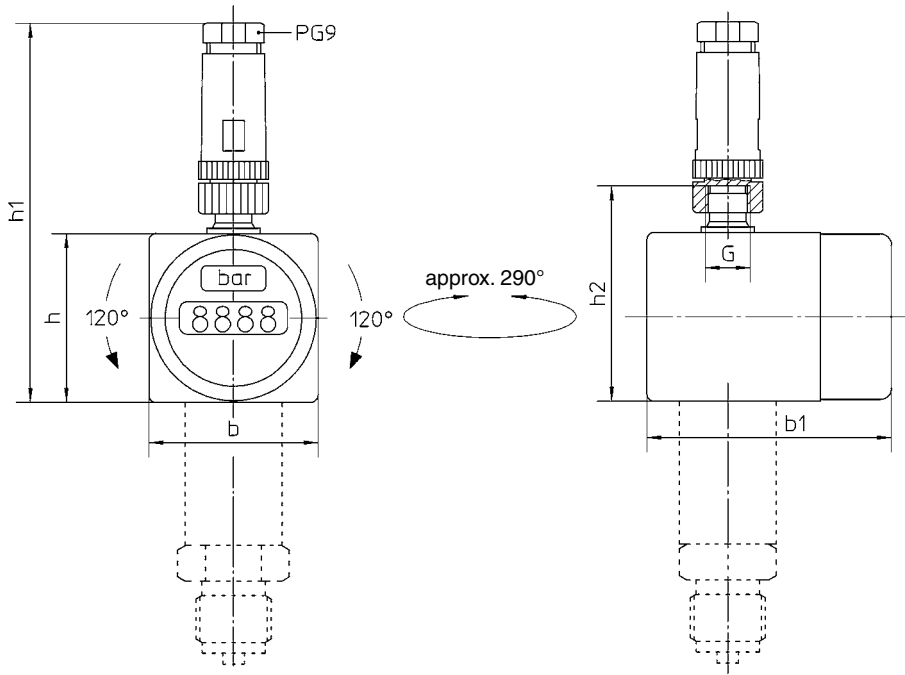
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# Dimensional Data and Weight, Pin Assignment

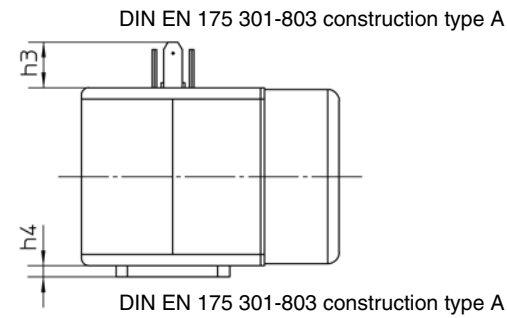


Dimensional Data (mm/inch) and Weight (kg/lb)						
b	b1	G	h	h1	h2	weight (approx.)
47 1.85	68 2.68	M 12x1	47 1.85	105 4.13	60.5 2.38	0.14 0.31

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