

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 E²PROM 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 47 x 47 x 68 mm (1.85 x 1.85 x 2.68"), 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

$$U_B = (U_{MU_min}...U_{MU_max}) + 6 \text{ V DC}^{1)}$$

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), IP67, plastic, straight cable box



Memory

E²PROM

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, $U_{Switch} = U_B - 2 \text{ V}$, 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, 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/cm²
- 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:

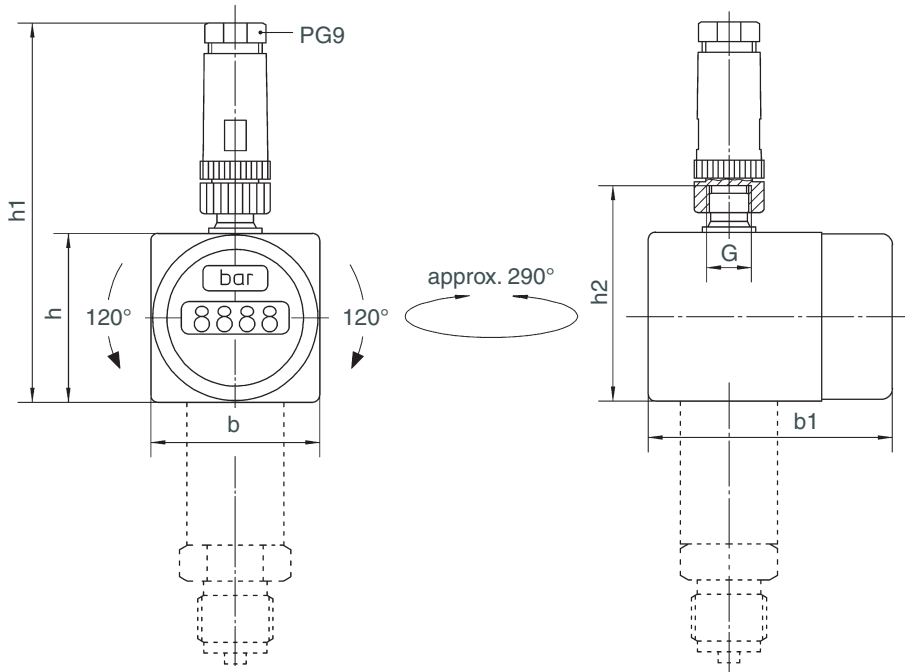
- with attached DAS (optionally: DASA)
- as well as the specification of any special options.

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

The special version DASA is also available separately.

¹⁾ for PTM: 16...46 V DC
for DTM: 15...36 V DC

Dimensional Data and Weight, Pin Assignment



Dimensional Data (mm/inch) and Weight (kg/lb)

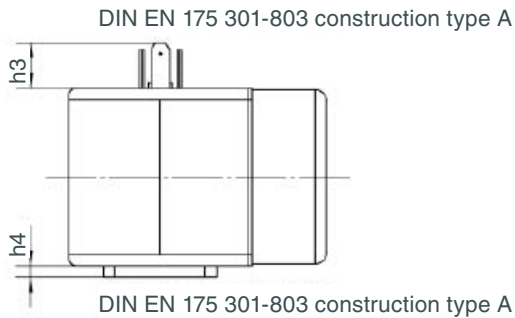
b	b1	G	h	h1	h2	approx. weight
47 1.85	68 2.68	M12x1	47 1.85	105 4.13	60.5 2.38	0.14 0.31

Pin Assignment

2-wire system Pin assignment (standard version)		PIN
Supply +	1	
Supply -	3	
Switch point 1	4	
Switch point 2	5	
Ground	via pressure connection	
3-wire system 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

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