

Industrial mV/V measuring instrument With multi-function display Model B6494

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Applications

- Precision scales
- Industrial scales
- Machine building and plant construction, manufacturing automation

Special features

- Dual mV/V display
- 2x digital input and 4x digital output
- Integrated multiple signal outputs available
- Serial interface, RS-232 or RS-485
- Ingress protection IP65



Industrial mV/V measuring instrument, model B6494

Description

The B6494 industrial measuring instrument for panel mounting is suitable, through its accuracy and easy readability, for numerous applications. Via the two 6-digit digital multi-function displays, the measured values and the status of the transistor outputs are indicated.

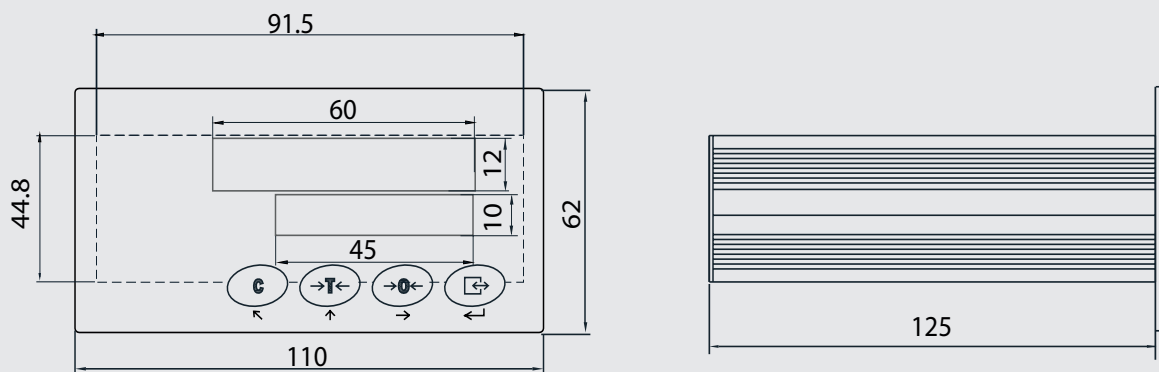
The connection and the parameterisation are usually performed by the customer for this model. Programming the instrument is menu-driven. All strain gauge measuring bridges (maximum 4 x 350 Ω parallel) with an output signal up to a max. ±4.0 mV/V can be connected.

The internal sensor supply is DC 5 V. Requests and parameterisation of different values are possible via the serial interface. The 4 transistor outputs enable the dropping below or exceeding of limit values to be monitored. In addition, a 0/4 ... 20 mA and a DC 0 ... 10 V output signal are available for analogue evaluation. Interfering signals can be eliminated by filter settings.

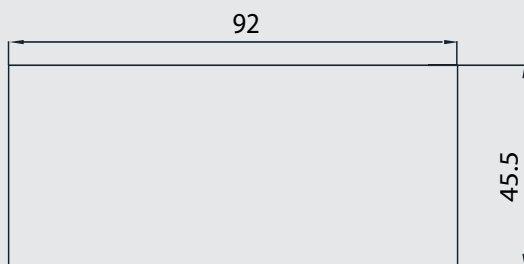
Specifications

Model B6494		
Input signal	4 x 350 Ω sensor 4- or 6-wire	
Sensitivity	0 ... 39 mV	
Display	6-digit and 2-line display, readable in sunlight, 10 or 13 mm high respectively Output max. -99,999 to +999,999 digits Refresh rate 1 to 20 updates/s	
Sensor supply	DC 5 V	
Accuracy	Display value: 0.005 % Analogue output: 0.005 %	
Linearisation	Number of linearisation steps: Selectable from 2 to 16 Scale range: -99,999 to 999,999 Decimal point: 0 to 0.0000	
Rated temperature range	18 ... 28 °C	
Service temperature $B_{T, G}$	-10 ... +40 °C	
Storage temperature range	-40 ... +60 °C	
Analogue output	0 ... 20 mA and DC 0 ... 10 V	
Serial interface	RS-232 Parameterisable baud rate 600 ... 57,600	RS-485 Parameterisable baud rate 600 ... 57,600
Digital output	4 transistor outputs	
Digital input	2 programmable user inputs Maximum voltage: DC 24 V Settling time: 20 ms	
Resolution	16-bit A/D converter	
Sampling rate	120 Hz / 240 Hz / 480 Hz / 960 Hz	
Supply voltage	DC 12 ... 36 V, 6 W	
Response time	≤ 10 ms	
Ingress protection (per IEC/EN 60529)	IP65	
Interference emission	CISPR 11 class A	
Immunity	EN 61326-1 immunity for industrial areas	
Common-mode rejection (CMR)	> 100 dB, DC to 120 Hz	
Relative humidity	Max. 85 % r. h., non-condensing	
Weight	0.44 kg	

Dimensions in mm



Mounting dimensions



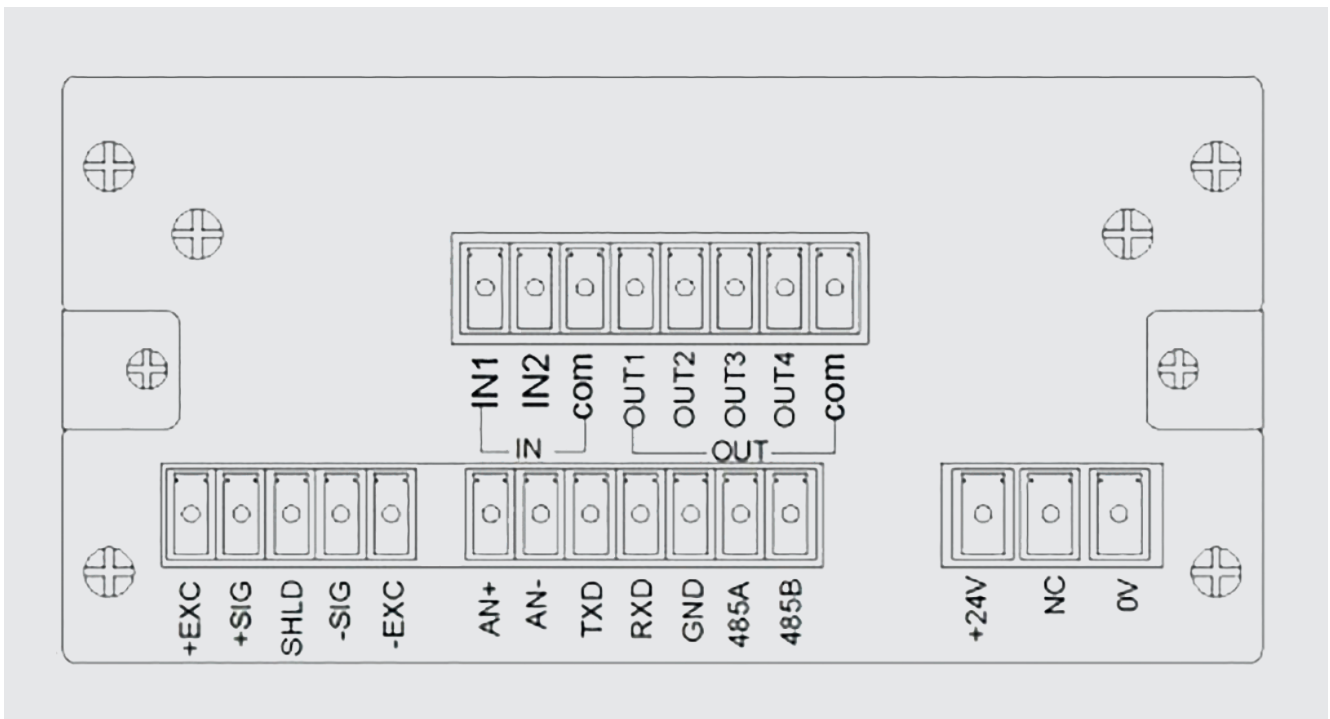
Operation

Setting and operating the display is menu-driven via the 4 front buttons.

LED meaning

Display	Description
RUN	Instrument is in operation
ZERO	Weighing value is zero
MOTION	Dynamic weighing process
GROSS	Total weight (gross weight)
NET	Net weight
ALARM	Alarm signal (Error display)
IN1	Digital input 1
IN2	Digital input 2
OUT1	Digital output 1
OUT2	Digital output 2
OUT3	Digital output 3
OUT4	Digital output 4

Pin assignment



Sensor cabling		
Terminal	Meaning	
1	+EXC	Sensor supply +
2	+SIG	Output signal +
3	GND (SHLD)	Shield
4	-SIG	Output signal -
5	-EXC	Sensor supply -

Communications and analogue output		
Pin	Connections	
1	AN+	Analogue output +
2	AN-	Analogue output -
3	TXD	COM1 RS-232 sender
4	RXD	COM1 RS-232 receiver
5	GND (SHLD)	COM1 RS-232 GND
6	485A	COM2 RS-485 +
7	485B	COM2 RS485 -

Power supply		
Pin	Connections	
1	0V	Supply voltage DC 0 V
2	NC	nicht verbunden
3	+24 V	Supply voltage DC 24 V

I/O interface		
Pin	Connections	
1	IN1	Digital input 1
2	IN2	Digital input 2
3	Com	Input ground
4	OUT1	Switching output 1
5	OUT2	Switching output 2
6	OUT3	Switching output 3
7	OUT4	Switching output 4
8	Com	Output ground

To order, the specification B6494 is sufficient.

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