

6841 Programmable transmitter for strain gauge sensors

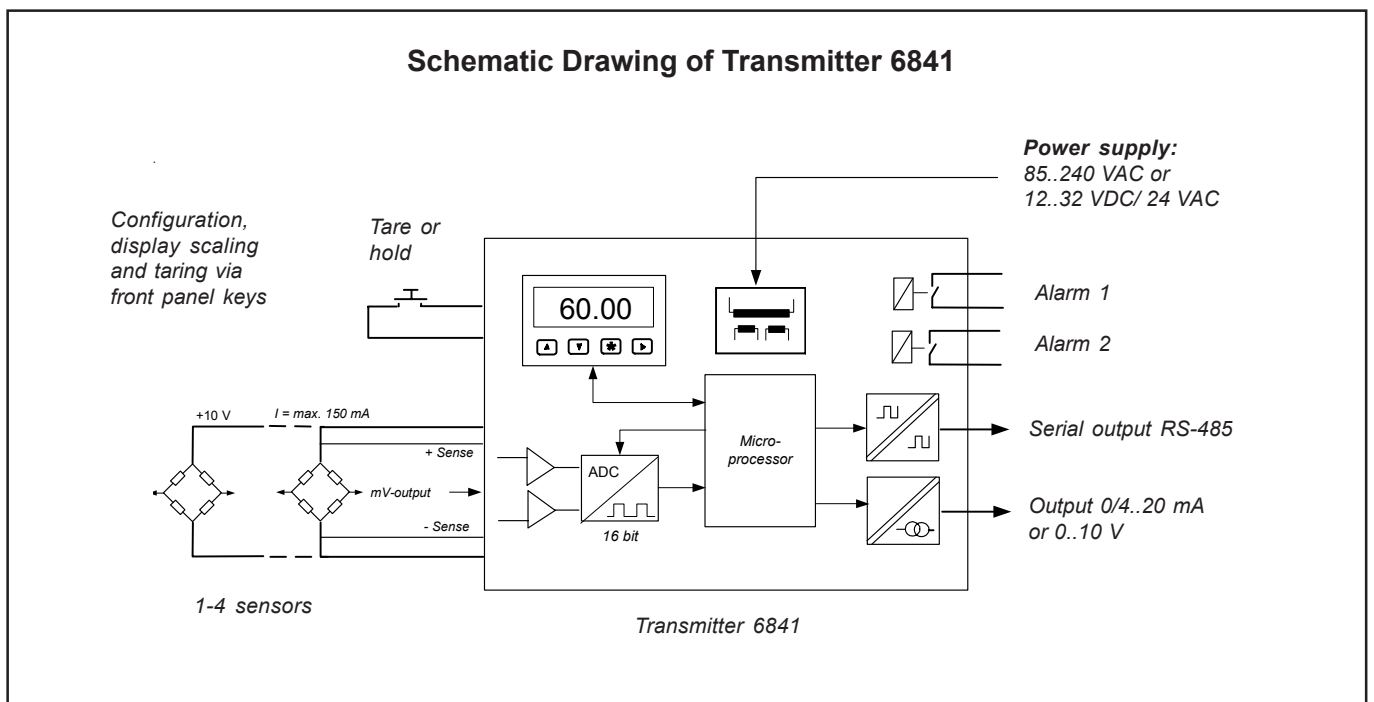
- Strain gauge sensors with 4- or 6-wire connection
- Excitation voltage 10 V to sensors, max 150 mA
- Red LED display on the front panel
- Settings via front panel keys
- Output 0/4..20 mA, 0..10 V
- Serial communication RS-485
- 2 alarm relays
- Taring via front panel keys or external switch
- Measuring accuracy < 0,05 %
- Power supply 12..32 VDC or 85..240 VAC
- Linearisation 6 points



The versatile transmitter 6841 is designed for strain gauge sensors. Strain gauge sensors can be connected with 4 or 6 wires. The 6-wire connection is recommended for applications requiring very high accuracy. The transmitter provides 10 V excitation voltage for the sensors, max. four 350 ohm sensors. The transmitter 6841 includes output 0/4-20 mA/ 0-10 V, 2 alarms or serial output RS-485 as standard. Display scaling and taring is easy via front panel keys. Scaling can be carried out in two different ways, either by applying the mV/V values of the bridge or using the teaching function. The teaching is done by first loading the sensors with the min. weight and then with the max. weight, after which the transmitter will automatically calculate the scaling. Additional teaching points can be utilized to improve linearity.

In applications where the sensor loading is not in balance a separate serial connection unit of the sensors, 20 SA-4, can be used to prevent the nonlinearity caused by the imbalance.

There are two power supply alternatives: one for line voltage 85..240 VAC and the other for 12..32 VDC or 24 VAC, both galvanically isolated from input and outputs. Analog conversion is done by a 16-bit A/D-converter (resolution 1/64000) and the number of measurements is 3 per second. The display can be damped by a digital filter if necessary. The number of decimals on the display is selectable.



Technical specification:

Sensor strain gauge, max. 4 x 350Ω parallel
 Sensor connection 4- or 6 -wire connection
 Bridge connection full bridge or half bridge
 Bridge supply 10 VDC, max 150 mA
 Measuring range -40..+100 mV
 Sensitivity settings mV/V, freely selectable
 Accuracy <0,05 % FS
 Repeatability <0,02 % of span
 Temperature drift 0,003% /°C

General:

Display 4 digits, red LED, digit height 7 mm
 Display scaling via front panel on the whole range
 Display taring via front panel keys
 Configuration via front panel keys or MekuWin via serial connection
 Mounting 35 mm DIN-rail
 Operating temp. 0..60 °C
 Terminals removable, max 2,5 mm²
 Power supply 85..240 VAC or 12..32 VDC / 24VAC
 Weight 240 g

Output:

Outputs 0-20 mA, 4-20 mA and 0-10 VDC
 Output range scaleable on the whole display range, scaling via front panel
 Accuracy 0,05 % of the scaled display range
 Galvanic isolation 2000 VDC, 1 min.
 Load resistance max 1000 Ω

Alarms:

Relays 2 alarm relays, max. 230 VAC/ 2 A for resistive load

Serial output:

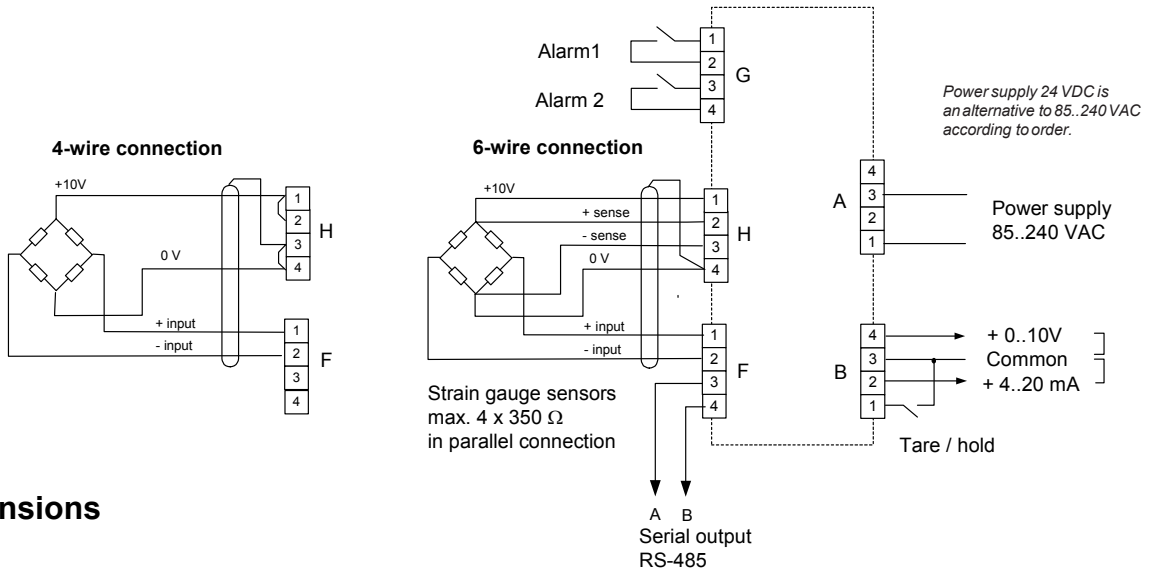
Serial output RS-485
 Protocol Nokeval SCL-protocol/ascii or CRLF auto transmit
 Baud rates 300, 600, 1200, 2400, 4800, 9600 or 19200
 Compatibility WinX, MekuWin software

How to order

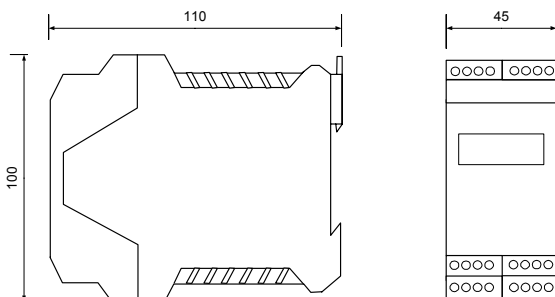
Model **6841-230 VAC**

Power supply: _____
 85..240 VAC
 Optional
 12..32 VDC/ 24 VAC

Connections



Dimensions



Mounting:
 35 mm DIN-rail