

Universal digital display Type M3329

- ✓ 2 alarm contacts (optional)
- ✓ Input signals for current & voltage or temperature
- ✓ Optional input signals for pH, conductivity or frequency
- ✓ Signal output (current or voltage)
- ✓ Universal supply 20...253VAC/DC
- ✓ Modbus (optional)
- ✓ USB – logger (optional)
- ✓ Optical alarm contact
- ✓ Flush mounting 96mm x 48mm



Technical description

The digital display M3329 is used to indicate or monitor any sensor signal. It converts the input signal to an internal standard signal of for example 0 to 100.0%. In this range two alarm contacts can be set independently. The 4-digit measuring value, as well as the status of the alarm contacts, is shown on an easy to read LCD-Display.

All settings as alarm values, hysteresis, range and operating mode of the floating contacts can be set with a link cable, connected to a personal computer or a laptop.

Both limit values can also be changed directly on the device using push buttons.

A typical application would be to measure and monitor pressure in a process vessel. The pressure transmitter converts the pressure of 1 to 10 bar to a current signal of 4 to 20mA. The M3329 monitors under and overpressure in the vessel. It converts the 4... 20mA signal current to 1.00bar...10.00bar. The alarm contacts can be set between 1bar and 10bar. With these floating alarm contacts, overpressure valves, compressors, etc. are driven directly.

Optionally, a galvanic isolated output signal of 0...20mA or 4...20mA is available.

The digital display M3329 uses a universal supply from 20 to 253VAC/DC.

Technical data

Input signal:	M3329-A: 0/4...20mA; 0...1/10V, other values in these ranges are free programmable M3329-T: Platinum-/Nickelsensors, 2- or 3-wire connection 100Ω, 200 Ω, 500Ω or 1000Ω at 0°C (DIN 43 760) Other input signals on request
Input load / impedance:	Current signal = 51Ω ; voltage signal = 1MΩ
2-Wire transmitter supply:	24VDC, max. 25mA
Display:	LCD-Display, 4-digit, 15mm height, color adjustable
Display range:	-9999...9999, optional -99999...99999
Accuracy:	±0.1% at 23°C ambient temperature
Reproducibility:	±0.1%
Temperature coefficient:	Zero drift: 30ppM/°C typical Gain drift: 25ppM/°C typical
Long-term stability:	±0.1%
Working temperature range:	-5°C to +45°C
Maximum humidity:	95%, non-condensing
Range adjustment:	Programmable by PC / laptop with programming unit
Zero-/Gain adjustment:	Programmable by PC / laptop or directly on the device with small keys
Option alarm contacts:	Two floating change-over contacts may be adjusted over the full range. Each can be defined as normally open or normally closed contact in the menu via the keys. Status: on easy to read LCD-Display Hysteresis: Adjustable, factory settings is ±5 digit Contacts rating: 1A with resistiv load / 230VAC Max. contact load: 100'000 operations at max. load Max. contact lifecycle: 10'000'000 operations mechanically, without load
Display unit:	on easy to read LCD-Display, 8 units programmable
Option signal output:	0/4...20mA, galvanically isolated
Max. load:	500Ω
Output impedance:	>1MΩ typical
Power supply:	20 to 253VAC or DC
Power supply load:	4.5W to 7.0W at 230VAC
CE-conformity:	Fulfilled
Terminals:	Plug-in screw terminals
Mounting:	2 mounting clamps
Weight:	200g
Warranty:	2 years
Options:	<ul style="list-style-type: none">- USB programming unit, with cable and software- Other, user-specific in- and output signals- USB-logger- Modbus (without I-Output)- 5-digit LCD-display

Terminals

1	Supply voltage: AC~/DC(+)	5	Signal output: -	9	Signal input (-) / sensor (-)
2	Supply voltage: AC~/DC(-)	6	Signal output: PE	10	Signal input voltage (+) / sensor (+)
3	Supply voltage: PE	7	n.c.	11	Signal input current (+) / sensor sense (-)
4	Signal output: +	8	2-Wire transmitter supply +24V		

With option alarm contacts:

12	Alarm contact 1: normally open	14	Alarm contact 1: normally closed	16	Alarm contact 2: change over
13	Alarm contact 1: change over	15	Alarm contact 2: normally open	17	Alarm contact 2: normally closed

For Modbus versions:

19	Modbus RS485 – A	20	Modbus RS485 – B	21	Modbus RS485 – GND
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Ordering examples

Example 1:

- M3329-ARS (A = input signals for current/voltage; R = alarm contacts; S = signal output)
- Input: 4...20mA
- Display: 50.0%...100.0%
- Alarm contacts preset to contact 1 = 55.0% and contact 2 = 85.0%; hysteresis ± 2 digit
- Signal output: 50.0%...100.0% = 0...20mA

Example 2:

- M3329-A (A = input signals for current/voltage)
- Input: 0...10VDC
- Display: 25.00rpm...75.00rpm

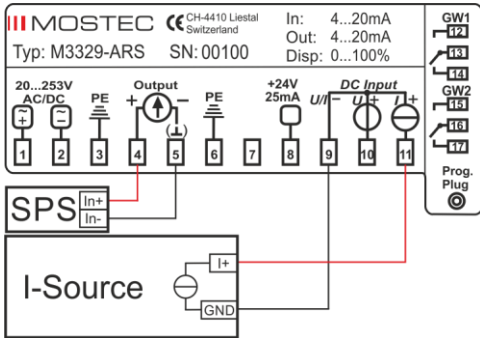
Example 3:

- M3329-TS (T = input for temperature; S = signal output)
- Pt-100 sensor, standard range of -50.0°C...300.0°C
- Signal output: 25.0°C...125.0°C = 4...20mA

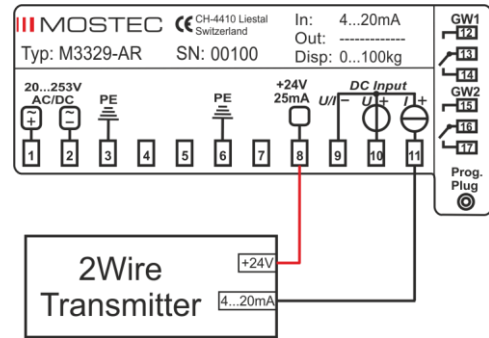
The M3329-A respectively the M3329-T is combinable with the R (alarm contacts) and the S (signal output) options in any needed way.

Wiring

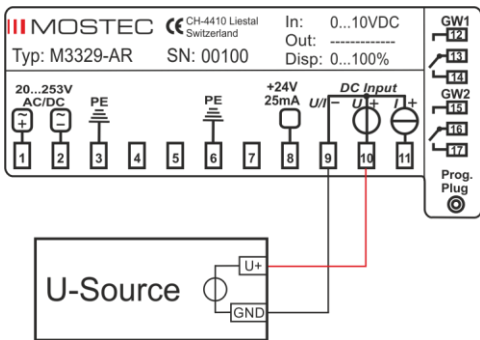
Current input:



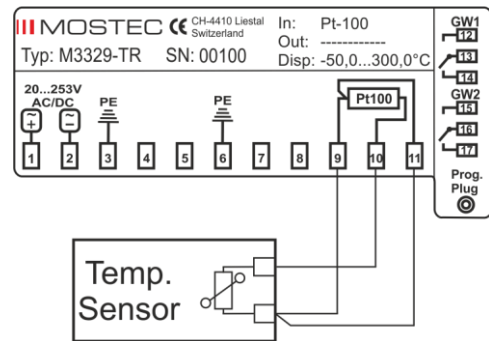
2-Wire input:



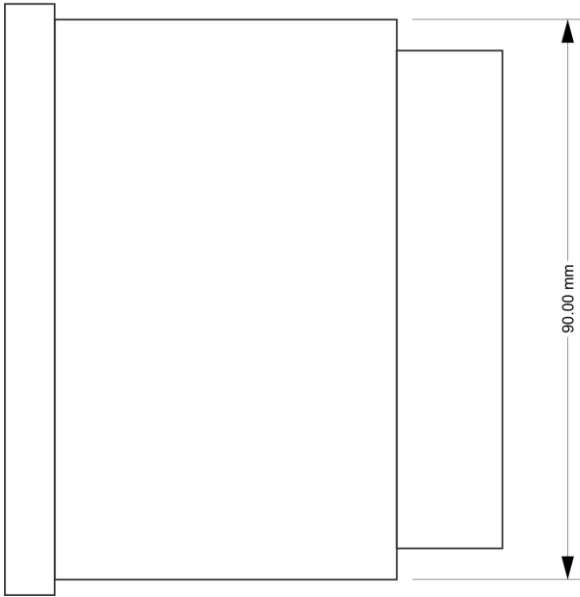
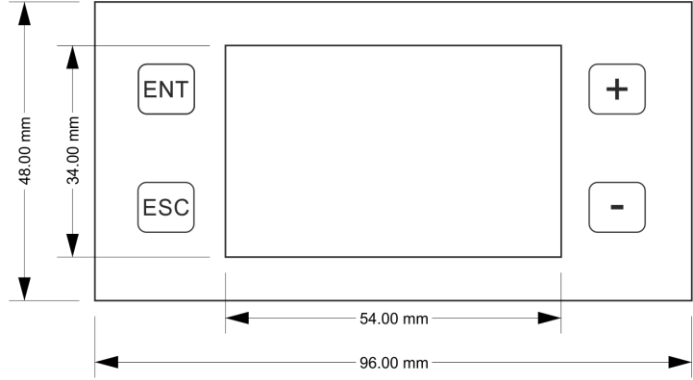
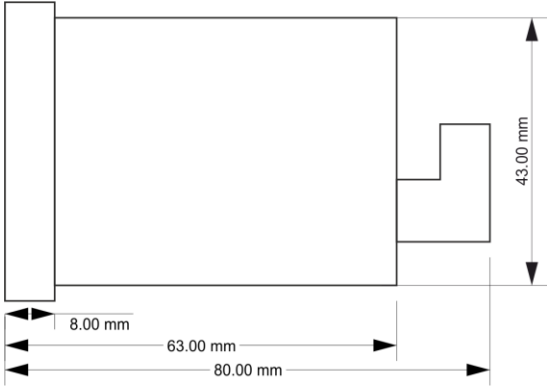
Voltage input:



Temperature input:



Dimensions / Cut out dimensions



Front panel tickness range
min. 0.8mm, max 8mm

Front panel cutout
minimum
91mm x 44mm