

# Universal Counter UZ9648



- Counting, length measurement, metering, positioning
- 2 digital input channels for summation- and subtraction
- Integrated transmitter supply
- Max. 4 preselect outputs, relay SPDT or transistor

The universal counter UZ9648 has been designed for field application in process control and automation. Parameters for operation mode can be programmed. The counter can be used wherever quantity processes should be measured, displayed and monitored.

## Technical data

### Power supply

Supply voltage : 230 V AC  $\pm 10\%$ ; 115 V AC  $\pm 10\%$ ;  
24 V AC  $\pm 10\%$  or 24 V DC  $\pm 15\%$

Power consumption : max. 3.5 VA, 5 VA with analog output

Operating temp. : -10..+55 °C

CE-conformity : EN 61326-1:2013; EN 60664-1:2007

### Input

PNP sensor : Ri = 6.3 k $\Omega$

level: < 4 V low; > 8.5 V high;  
hysteresis > 2.5 V; max. 35 V DC

Namur sensor

: Ri approx. 1 k $\Omega$  (< 4 mA)  
level: < 1 mA low; > 2.2 mA high;  
hysteresis > 0.5 mA; max. 35 V DC

Pulse frequency

: input A or B = 15kHz,  
A and B together = 6 kHz,  
contact = 30 Hz debounced,  
2-channel rotary encoder = 8 kHz

Counting loss

: 100  $\mu$ s at reset;  
20 ms changing of preselect value

Min. pulse width

: electronic 50  $\mu$ s, contact 5 ms

External reset

: reset impulse  $\geq$  10 ms

Transmitter supply

: 8 V DC (Namur), 24 V DC (PNP),  
Ri approx. 150  $\Omega$ , max. 50 mA  
(25 mA with 4 relay outputs)

### Display

: LED red, 14.2 mm

Indicating range

: -99999..999999 Digit

Additional display

: LED 2-digit red, 7 mm  
(parameter - and output indicator)

### Output

Relay

: SPDT < 250 V AC < 250 VA < 2 A,  
< 300 V DC < 50 W < 2 A  
with short circuit protection

Transistor

: max. 35 V AC/DC, 100 mA,  
with short circuit protection

Analog output

: 0/4..20 mA burden  $\leq$  500  $\Omega$ ; 0/2..10 V,  
burden > 500  $\Omega$ , with isolation

-Accuracy

: 0.1 %; TK 0.01 %/K

### Case

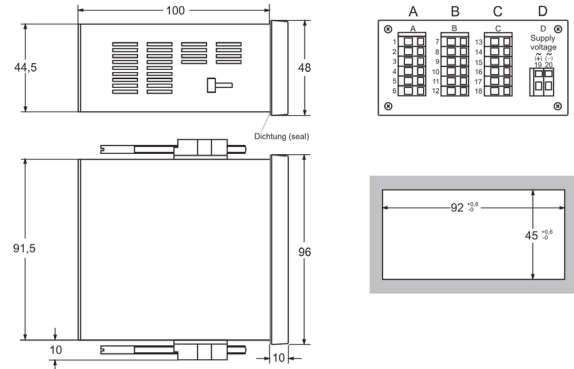
: panel case DIN 96x48 mm,  
material PA6-GF; UL94V-0

Dimensions

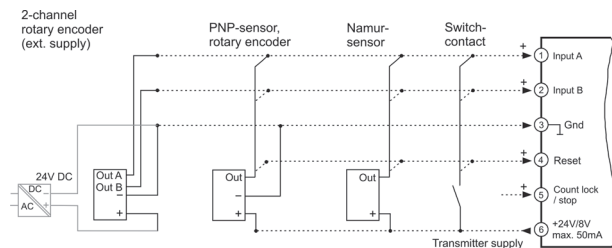
: front 96x48 mm, mounting depth 100mm

Weight : max. 390 g  
Connection : clamp terminals, 0.08..1.5 mm<sup>2</sup>,  
AWG28..AWG14  
Protection class : front IP65, terminals IP20 acc. to BGV A3

## Dimensions



## Connection diagram



## Ordering code

UZ9648 -  1. -  2. -  3. -  4. -  5. -  6. -  7.

1. Terminal strip A	
1	2 configurable count inputs, display conversion, wide range of count functions, integrated transmitter supply 24V max. 50 mA
2. Terminal strip B	
00	not installed
2R	2 relay outputs
2T	2 electronic outputs
3. Terminal strip C	
00	not installed
2R	2 relay outputs
2T	2 electronic outputs
AO	analog output 0/4..20 mA, 0/2..10 V DC
4. Terminal strip D; supply voltage	
0	230 V AC $\pm 10\%$ 50-60Hz
1	115 V AC $\pm 10\%$ 50-60Hz
4	24 V AC $\pm 10\%$ 50-60Hz
5	24 V DC $\pm 15\%$
5. Options	
00	without option
6. Unit (appears in the unit field)	
7. Additional text placed above the display (3x90 mm HxW)	