

# Speed Indicator DR9648



- Pulse inputs for switch contacts, PNP-, Namur-sensors and rotary encoder
- Programmable input prescaler
- Time base min<sup>-1</sup>
- Integrated transmitter-supply
- Max. 4 alarm outputs, electronic or relay SPDT

## Characteristics

The Speed Indicator DR9648 has been designed for field applications in process control and automation. Parameters for operation mode can be programmed. The DR9648 can be used wherever processes based per minute, just as speed should be measured and displayed.

## 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

Working temp. : -20..+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

Frequency max. : input E1 = 1 Hz..30 Hz, (switch contact)  
input E2 = 1 Hz..15 kHz,  
(PNP- or Namur sensor)

Time base : min<sup>-1</sup>

Accuracy :  $\leq 0.003\% \pm 1$  Digit

Min. pulse width : electronic 50  $\mu$ s, contact 5 ms

Hold : 24 V DC or switch contact

Transmitter supply : 8 V (Namur), 24 V DC (PNP),  
Ri approx. 150 $\Omega$ , max. 50 mA

### Display

Indicating range : 0..99999 digit

Additional display : LED 2-digit red, 7 mm  
(parameter- and switch indicator)

### Output

Relay : SPDT < 250 V AC < 250 VA < 2 A,  
< 300 V DC < 50 W < 2 A

Transistor : max. 35 V AC/DC, 100mA,  
short circuit proof

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

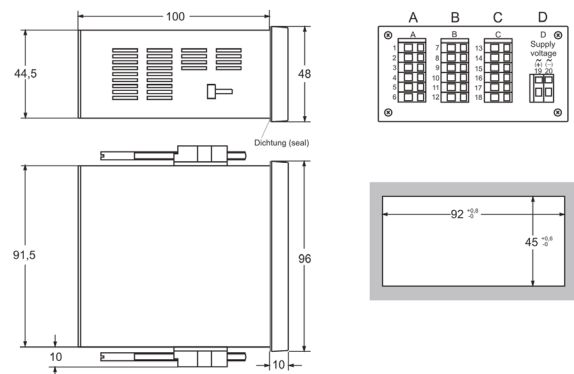
Dimensions : front 96x48 mm, mounting depth 100mm

Weight : max. 390 g

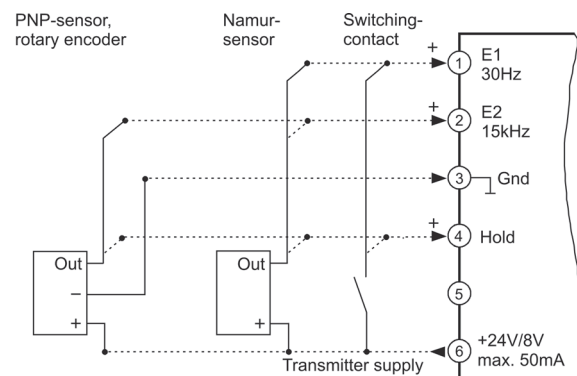
Connection : clamp terminals, 0.08..1.5 mm<sup>2</sup>,  
AWG28..AWG14

Protection class : front IP65, terminals IP20, acc. to BGV A3

## Dimensions



## Connection diagram



## Ordering code

DR9648 -  -  -  -  -  -  -

1. Terminal strip A	
1	2 pulse inputs hold input, 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
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 above the display (3x90 mm HxW)	