

Loop powered panelmeter SP 9648

4 ... 20mA LED Display

Features

- Display LED 14.2mm red
- Free adjustable indicating range -1999 ... +1999 digit
- Decimal point switch selectable
- Conversion rate 3/s or 0.5/s
- 20-turn trimpots for adjustment
- Plug-in screw terminals
- Panel case (standard) and field case



Panel case 96x48mm



Field case

General information

Loop powered panelmeter SP9648 can be used for indicating and measurement applications in process technology and automation. The small case is suitable for installation in control units and panel boards. The input allows indication of any physical dimension, which are stated in a signal of 4...20mA.

Short information

Display characteristic : units are available for increasing or decreasing display

Conversion rate : switch selectable from 3 to 0.5 per second

Technical data

Input

Current input : 4 ... 20mA
 Overload range : -100 ... 150mA
 Voltage drop : 2.5 ... 3.4V (depends on chosen display brightness)

Accuracy

: < 0.1% +/- 1 digit
 Temperature coefficient : < 50ppm/K
 CE-conformity : EN55022; IEC1000-4-2/4
 Working temperature : -10 ... +60°C

Display

: 3½-digit 14.2mm red
 Range : -1999 ... 1999
 Initial value : adjustable -100 ... +25% of the range
 Span : adjustable 0 ... 3999
 Decimal point selection : switch selectable
 Brightness : adjustable 50 ... 100%
 Conversion rate : switch selectable from 3/s to 0.5/s

Case

: slide-in unit acc. to DIN 43700 of Noryl GFN 2 SE 1
 field case Polycarbonat RAL 7035

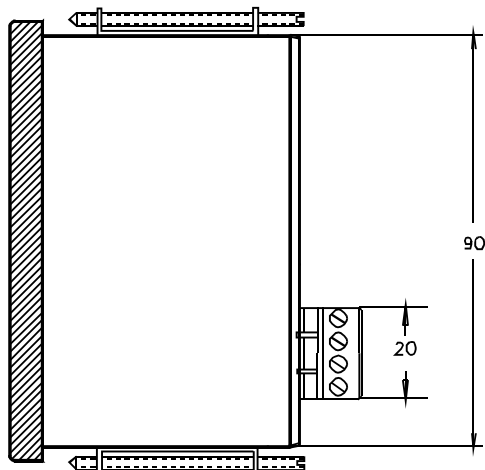
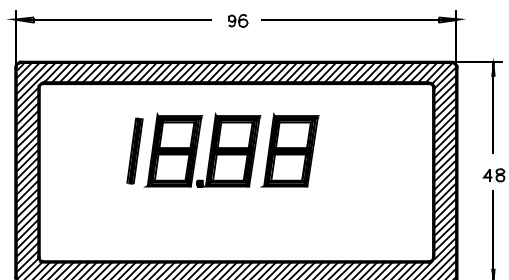
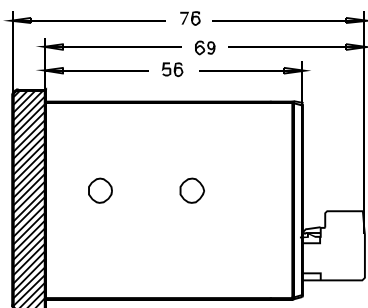
Weight, standard case : 170g

Weight, field case : 360g

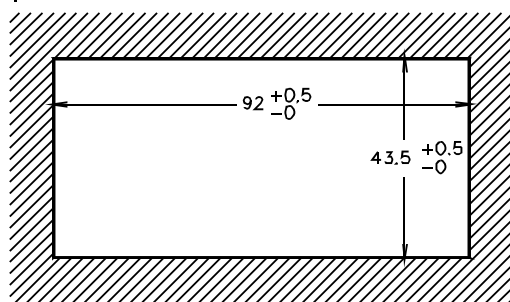
Connection : plug-in screw terminals , max. 1.5mm², wire

Protection : front IP54 (IP65 optional),
 terminals IP20 finger safe acc. German VBG4

Dimensions standard case DIN96x48mm

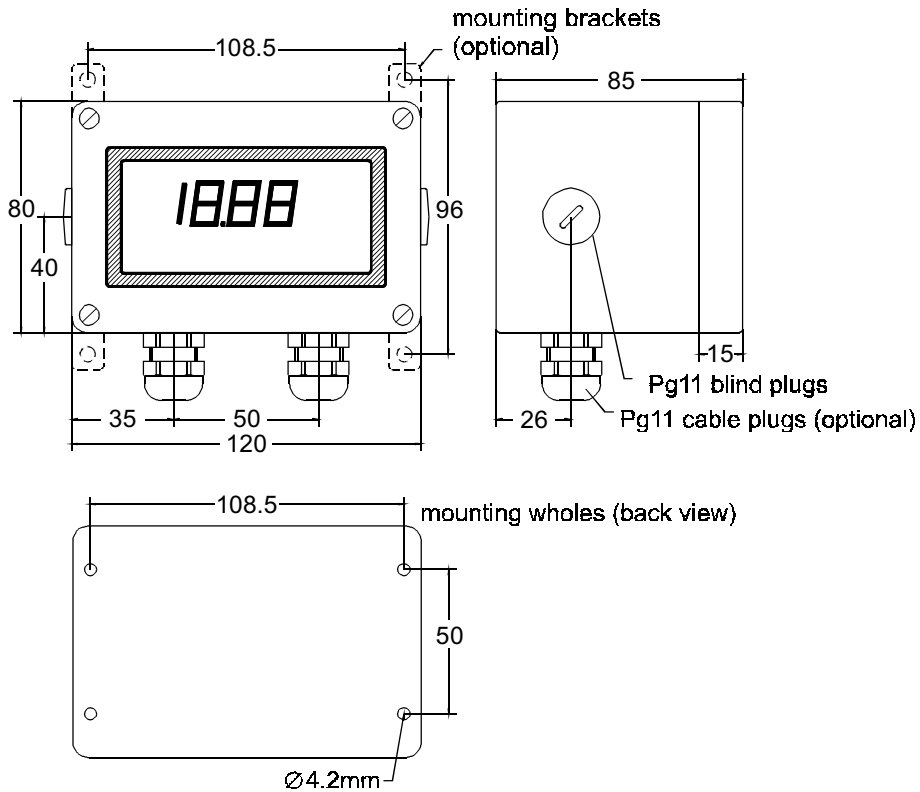


panel cut-out



wall thickness max. 5mm
 min. 6mm mounting distance

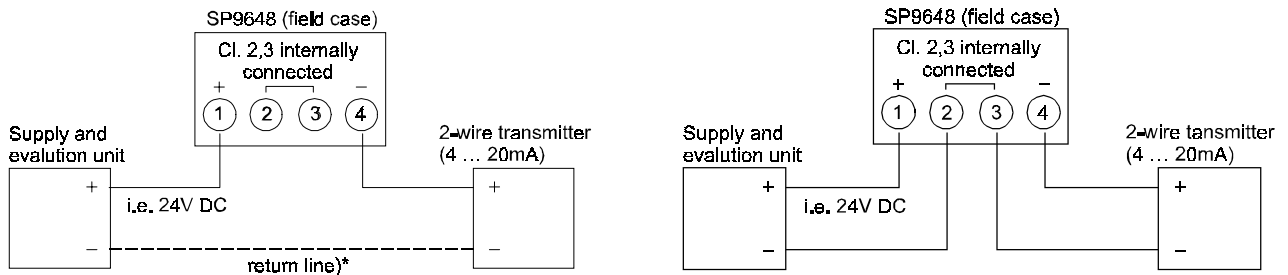
Dimensions field case



Connection diagram

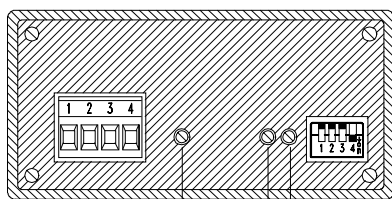
SP9648 standard -and field case: single wire connection

double wire connection

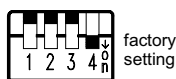


)*the SP9648 can be installed in the return line as well

Back view



DIP-switch
 S1 on: 1.888
 S2 on: 1888
 S3 on: 188.8
 S4 on: conv. rate 3/s
 off: conv. rate 0.5/s



Adjustment

Display initial value =0

1. Input current 4mA, adjust display 000 with P1
2. Input current 20mA, adjust span with P2

Display initial value $\neq 0$

1. Input current 4mA, adjust display 000 with P1.
2. Input current 12mA, adjust display to $\frac{1}{2}$ of the span with P2.

Example:

indication range -100 ... +200 \Rightarrow span = 300 digit

$\frac{1}{2}$ span = 150 digit

3. Input current 4mA, adjust display to initial value with P1.

Order code

SP9648 - <input type="text"/> ^{1.} - <input type="text"/> ^{2.} - <input type="text"/> ^{3.} - <input type="text"/> ^{4.}

1.

Case
1 : DIN96x48 panel case (standard)
2 : Field case, 80x80x60mm 4 blind plugs PG11 included

3.

Protection (front)
1 : IP 54 (standard)
2 : IP 65

2.

Display characteristic
S : Increasing (standard)
F : Decreasing

4.

Unit dimension on the face plate
e.g. °C, °F, hPa, kg, mV, mA so on...



SP9648 is also available as a intrinsic safety type (Eex ia II CT6).