



- Overfill cut-out and leakage safety device
- Slimline construction, only 22.5 mm
- Adjustable sensitivity
- Potential-free output as SPDT (2x)
- Power supply 24 V DC optional

Overfill cut-out device according to § 19

Overfill cut-out Device according to § 19 WHG

Conductive Limit Level Electrode and Electrode Relay ER-107/B

Construction

The overfill cut-out device consists of the pickup (conductive double electrode) and the electrode relay type ER-107/B. It provides a binary switching signal at the output. This signal can be sent directly or via a signal amplifier to the report device or to the control section and its control element.

The overfill cut-out device's components which have no test certificate have to correspond with the sections 3 and 4 of the device's approval principles (ZG-ÜS).

Function

The electrode relay ER-107/B supplies a measurement voltage which makes a "working current" flow through the signal wire via the built-in resistor in the pickup. As soon as this working current is interrupted (e.g. cable break) this is detected and displayed by the ER-107/B and the source contact switches to alarm status.

When the filling level of the container reaches the conductive pickup's rods a measurement current is able to flow through the conductive liquid. This current, which is higher in comparison with the working current, is detected by the ER-107/B and the alarm message is set.

The sensitivity can be adjusted within the response range of the probe using a potentiometer.

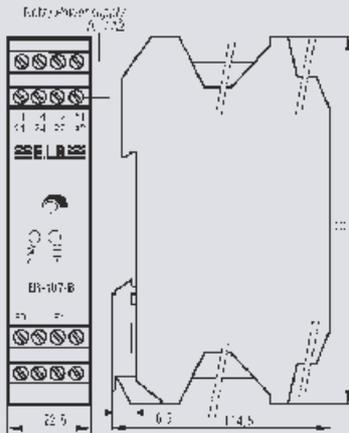
The ER-107/B's functions are based on the closed circuit current principle. The alarm status of the relay corresponds with the dead condition of the device.

Hence, beside monitoring and reporting of wire interruptions and level increase up to the pickup's point of response, the ER-107/B also monitors a working current failure.

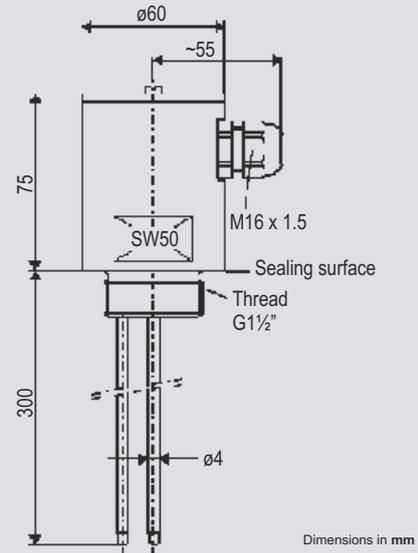
The conductive pickup has a G1½" connection thread as a standard.

Specifications

Dimensions ER-107/B



Dimensions double rod electrode § 19 WHG



ER-107/B

Power Supply

Nominal operating voltage	230 V AC ±10% or 24 V DC other voltages on request
Rated frequency	48...62 Hz
Power consumption	approx. 1 VA

Output

Contacts:	2 potential-free SPDT (simultaneously operated)
Contact load unblocking potential	according to EN60730 part 1 max. 250 V AC; 150 V DC
Current on contact	max. 5 (3) A AC; max. 5 A DC
Contact rating	1250 VA DC 50 to 180 W DC (depending on switching voltage)

Input

Open circuit voltage:	≤10 V AC
Short circuit current:	≤5 mA
Storage temperature:	-30... +80 °C
Operating temperature:	-20... +60 °C
Switching delay:	approx. 0.5 s
Sensitivity range:	1...30 kOhm

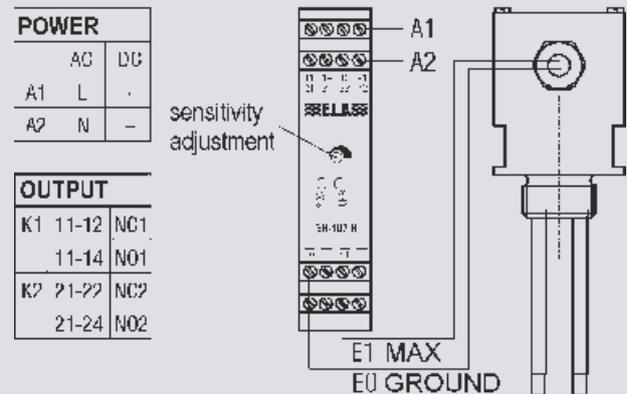
Weight

Weight	approx. 150 g
Protection	terminals IP20, enclosure IP40
With general approval for Z-65.13-405, Z-65.40-191 constructions	

Double rod electrode §19 WHG

Rod length	300 mm
Rod diameter	4 mm
Connection thread	G 1 1/2"
Pressure	10 bar
Operating temperature	-20 °C to +90 °C
Material	<ul style="list-style-type: none"> screw connection and head: PPH (Polypropylene) rod: stainless steel (1.4571) coating: Polyamide
Protection EN602529	IP65

Connection double rod electrode § 19 WHG



You can find more information in the instruction manual or on www.nivus.com