

UWT-Lot

Continuous level measuring system



Information SLB 200E list of contents

	page
introduction	G1

function	G1

technical data	G2 - G3

view internal structure	G4

electrical connection	G5 - G7

adjustment and commissioning	G8 - G10

signal description	G11

safety items	G12

mounting	G12

pricelist	P0 - P3

Subject to technical change and price change.

All dimensions in mm.

All units of this pricelist are
CE-certificated.

Of course there are other unit variations than specified possible.
Please speak with our consulting technicians.

UWT-Lot

Continuous level measuring system

Information SLB 200E

introduction - function



introduction

- The **UWT-LEADS SLB 200 E** is an electro-mechanic level measuring instrument for the continuous measuring of level heights or level volumes in hoppers, silos or tanks.

The use of UWT LEADS SLB 200 E is recommendable in fields of application with high mechanical stress.

- powders
- small grain bulk goods
- coarse grain bulk goods
- liquids

- The **UWT - LEADS SLB 200 E** is

- reliable
- very robust design
- suited for a wide range of application
- insensitive to dust and noise
- suitable for manual and automatic operation

and has

- easy data logging for evaluation
- 0/4 - 20mA output and microprocessing control
- accurate measuring
- easy installation
- easy service construction

- **UWT - LEADS** level measurement systems have stood the test in several applications over a long period of years such as

- chemical industry
- building materials industry
- plastics industry

function

The **UWT - LEADS SLB 200 E** is mounted on the top of the container. A sensor weight is moving down into the container. The sensor weight is mounted at the end of a measuring tape, which is wrapped on a motor driven tape roller.

Upon impact on the filling material, the sensor weight returns and is drawn back to its upper stop position.

The unit is divided into two independent chambers (tape chamber and electronic chamber), which are sealed to each other.

Only the tape chamber is in contact to the inside of the container during the measuring. Inside the tape chamber are no electrical parts. All internal signals are detected via inductive sensors.

During the upwards movement of the sensor weight, material caking on the tape is removed via a cleaning device.

Pulses are generated during downward movement and the number of pulses is a measure for the level.

The pulses generated can be processed directly in
a PLC (programmable logic controller)
or a counter (EMZ100-4; ELZ-300; see chapter
'transmit /display /evaluation')

Version with 0/4-20mA:

The pulses are internal converted into an analogue current signal. The current signal can be adjusted specifically. So it is possible to get a volume-specific signal, fitting to the geometry of the container.

Additionally to the current signal, output of pulses is standard. The pulses can be adjusted to the geometry of the container, too, to get a volume-specific output.

The current signal is renewed, if the sensor weight reaches the upper stop position after a measurement.

The measurement is started with an external starting signal (remote-control) with

- an external make contact
- or an external 24V DC signal
- or an automatic-start timer (e.g. ET 400, see chapter
'transmit /display /evaluation')

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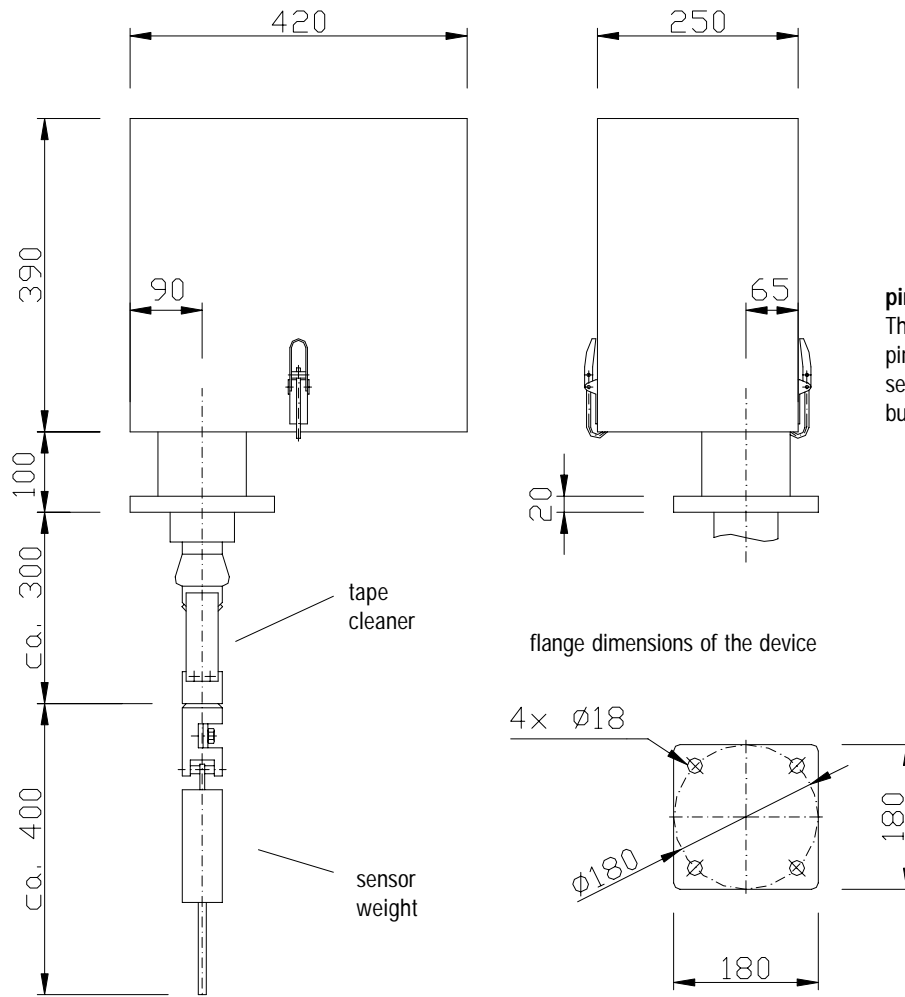
Continuous level measuring system



Information SLB 200E
technical data

technical data

dimension



pin for sensor weight

The sensor weight is equipped with a pin (Ø10mm), which prevents the sensor weight from slipping on the bulk material.

control of motor current

Optional with the **UWT-LEADS SLB 200 E** the module **STR 15-1A** is available. It is used for monitoring the motor function via the motor current to prevent a malfunction. In case of heavy-running tape during the measurement (e.g. due to strong dirt on the tape), the motor current will increase due to the increasing motor torque. The module is detecting this current and signals it via an floating relay contact.

The module is mounted into an extern housing.

UWT-Lot

Continuous level measuring system

Information SLB 200E

technical data



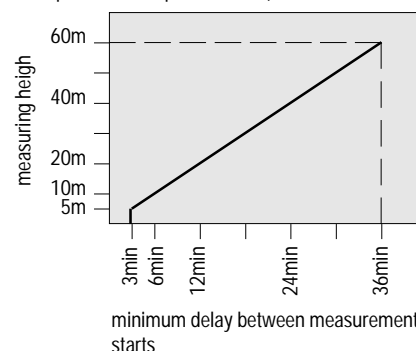
mechanical data

housing	stainless steel
protection cover	aluminium
enclosure	IP 54 to EN 60529
process connection	flange DN100 PN16 DIN 2633
overall weight	approx. 30kg
measuring tape	stainless steel, 12 x 0.2 mm
measuring range	standard 30m, optional upto 70m
measuring speed	0.3 m/s (upward- and downward movement)
sensor weight	approx. 3.5kg
material sensor -weight	aluminium and stainless steel
deviation of vertical mounting	max. 3°

electrical data

mains voltage	3x 230V 50-60Hz or 3x 400V +N 50-60Hz or 3x 500V +230V control voltage 50-60Hz all voltages +10% / -15%
installed load	motor: 0.25kW (cosφ=0.8) 3x 0,7A (type 400V and 500V) 3x 1,2A (type 230V) control electronic with heating (optional) additional 120W
connection terminal	2x max. 2.5mm ²
screwed cable gland	2x PG16
signal output (version with digital counting pulse output)	"counting pulse" and "reset pulse" floating relais contact max. 250V AC, 2A, 500VA
signal output (version with 0/4-20mA current output)	floating current output 0/4 - 20mA, ±0.2mA max. load 500Ω
measuring intervall	

error of measurement	0.1m/pulse
measuring pulse	max. 1 Impuls
minimum security level	count: 0.2s ON; 0.2s OFF; reset: 0.6s
connection diagram	adjustable by coding switch
protection class	
heating (optional)	datasheet, inside housing
signal output "upper stop position" (optional)	thermostat controlled 230V, 100W; for temperatures down to -35°C or in case of condensation of water inside the housing
signal output "malfunction" (optional)	floating relais contact max. 250V AC, 2A, 500VA
minimum delay between measurement starts	floating relais contact max. 250V AC, 2A, 500VA (display excess motor temperature, tape break and power failure)



operating conditions

container pressure	max. 0.2bar
temperature in container	max. 80°C upto 150°C on request
ambient temperature	-20°C upto +50°C -35°C upto +50°C (with heating)

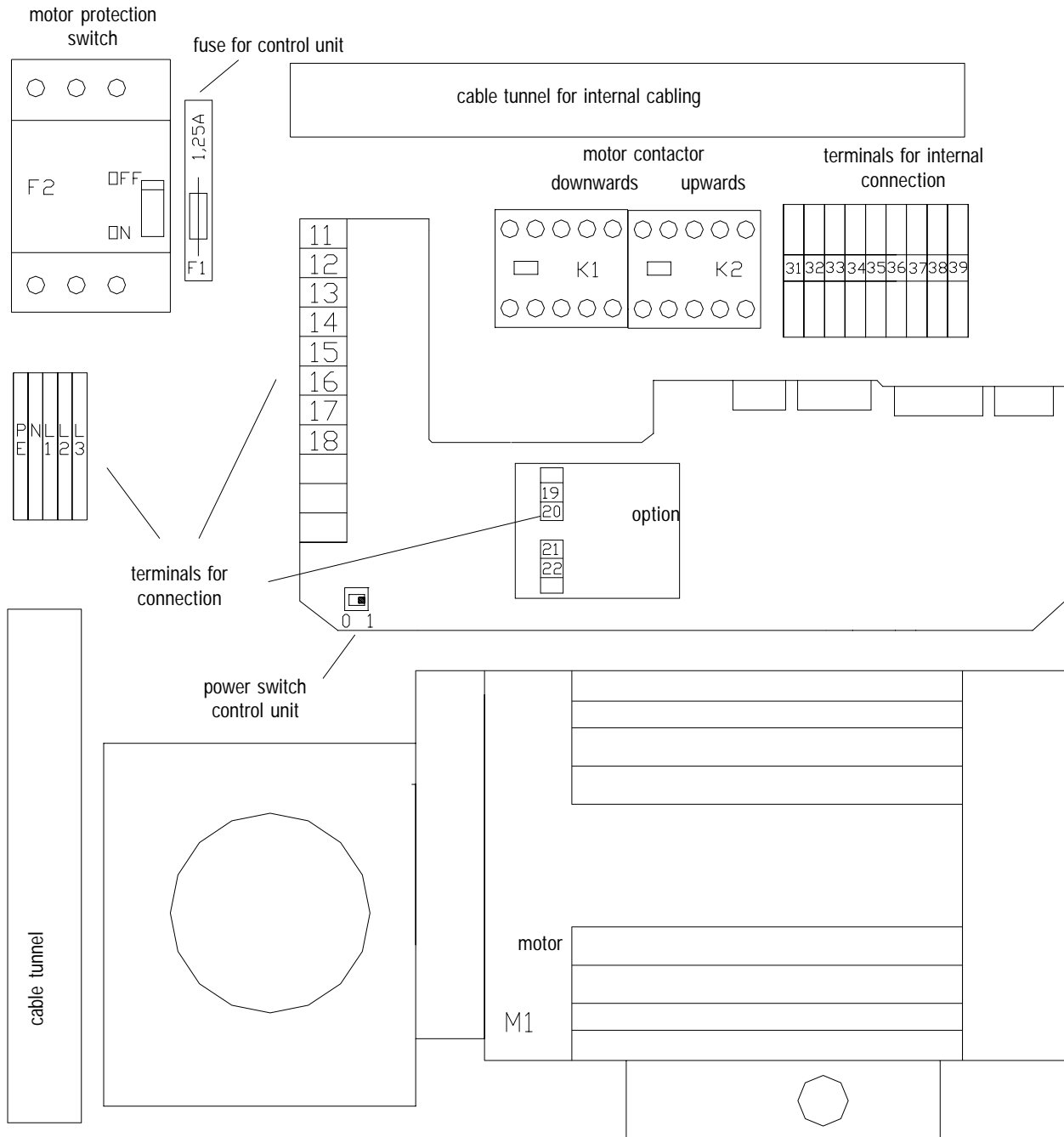
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Continuous level measuring system



Information SLB
Structure

View internal structure



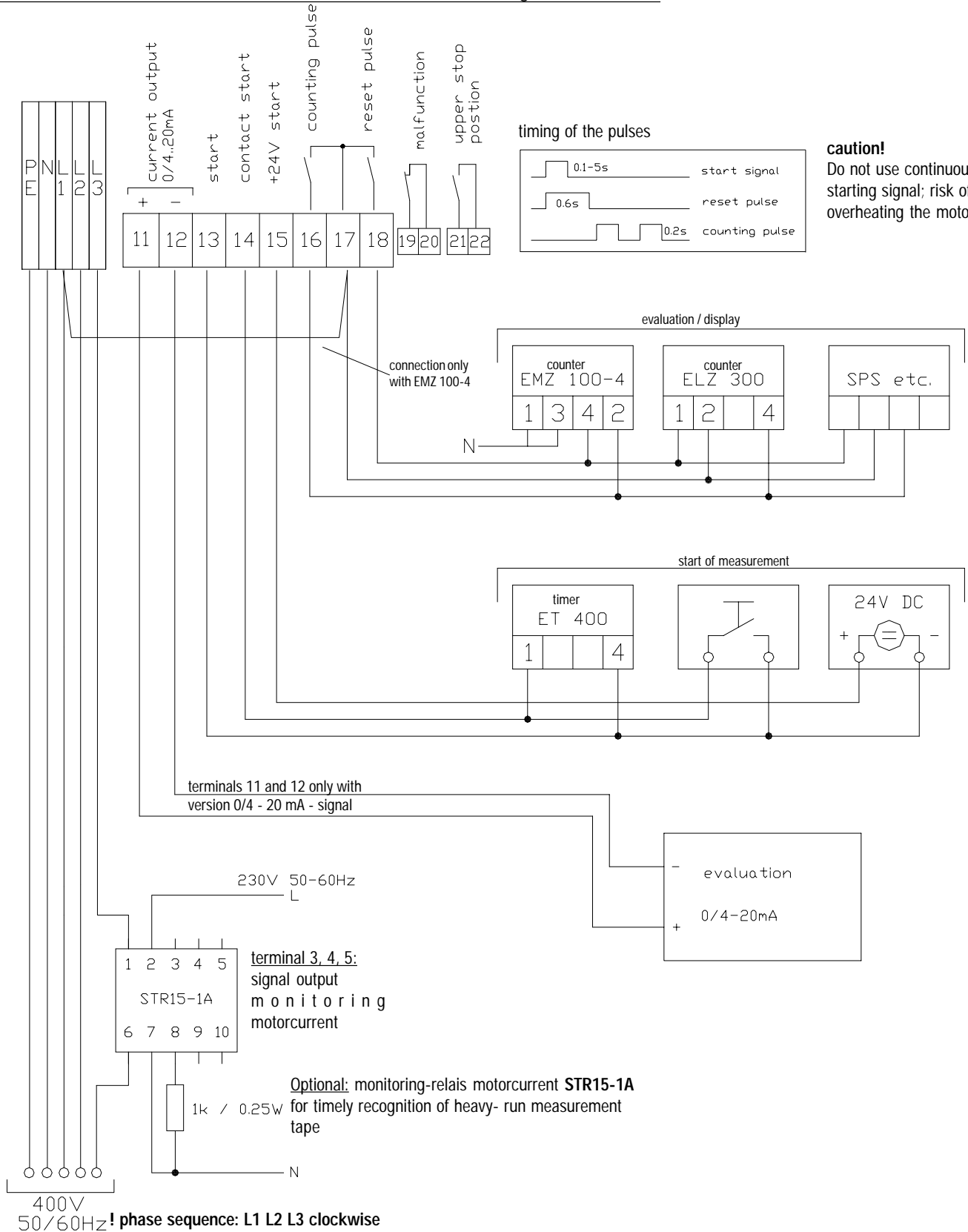
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Continuous level measuring system



Information SLB 200 E
electrical connection

electrical connection version with mains voltage 3x 400V + N



caution!
Do not use continuous starting signal; risk of overheating the motor.

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Continuous level measuring system



Information SLB 200 E
electrical connection

electrical connection version with main voltage 3x 500V + 230V control voltage

