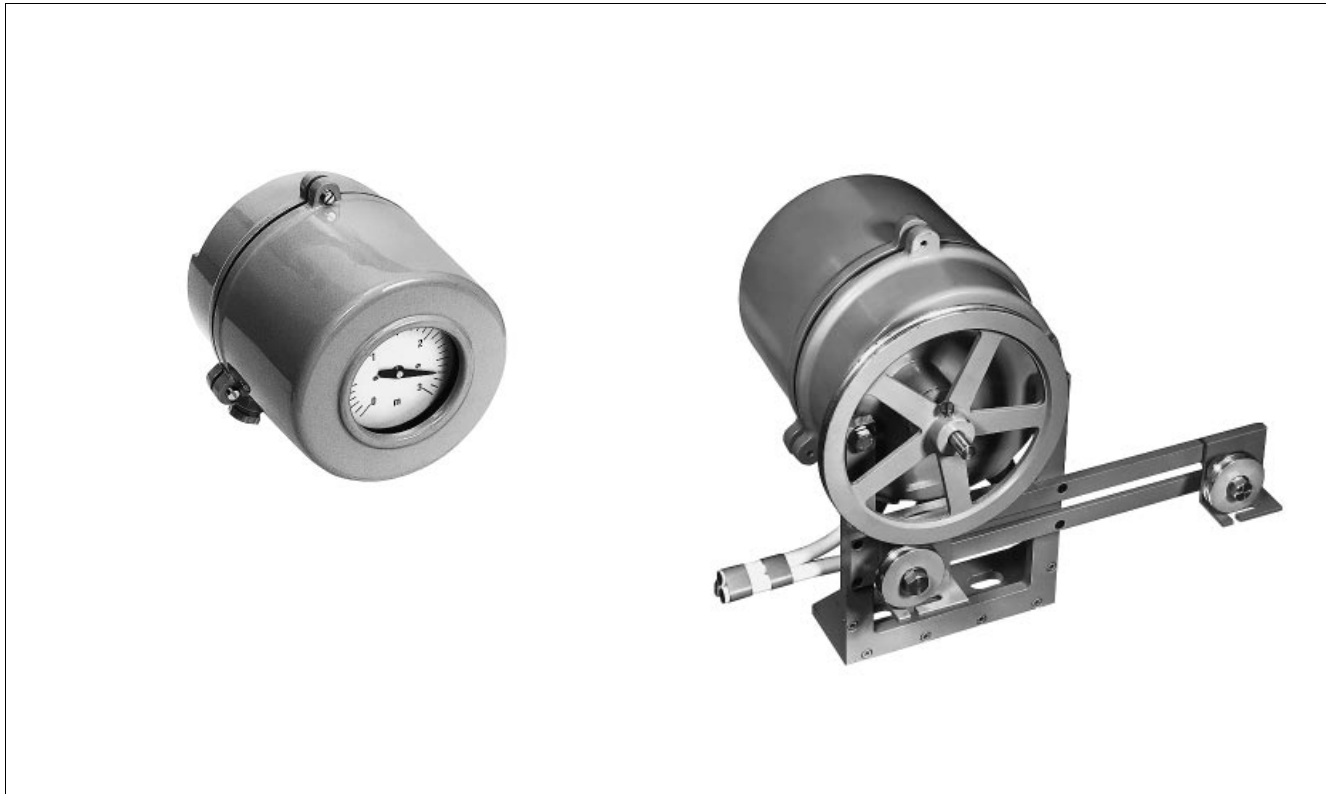


Transmitter TGSE, TGNE

for valve position and liquid level measurement



Application

TGSE

Mounted on flaps, valves, gate valves etc. for measuring the valve position with local display. With built-in transmitter for angular position.

TGNE

For measuring the liquid level in water containers, tanks of all types, etc.; for level measurements on wells, rivers, artificial lakes etc., with local display. With built-in transmitter for angular position.

Description

Transmitter for valve position measurement TGSE

The transmitter for valve position measurement is suitable for mounting on, for instance, flap valves, valves, gate valves, etc. It converts the angular position signal received into a proportional load-independent DC signal. This signal can be used for display, recording, control purposes and remote transmission of the measured value.

The TGSE consists of a sturdy light alloy cast housing, degree of protection IP 54, and contains a gear assembly for matching to the measuring range as well as a transmitter for angular position to convert the angular position into a DC signal. If desired, up to 6 adjustable limit switches can additionally be installed. There are two M8 threaded holes on the front for mounting the TGSE on the measured value sensor.

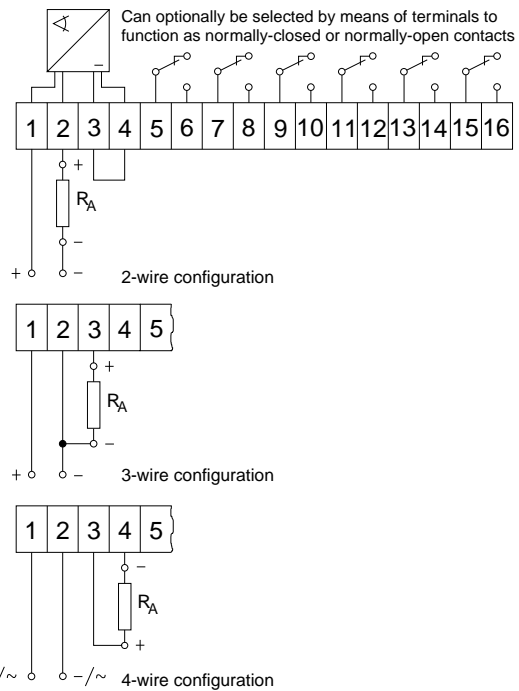
Transmitter for liquid level measurement TGNE

The transmitter for liquid level measurement is suitable for mounting on wells and containers. It converts the liquid level or the drop in level into a proportional, load-independent DC signal. The device consists of a float, a plastic bottle filled with sand which is used as a counterweight and the transmitter housing with mounting frame, deflection pulleys and rope pulley.

The travel of the float is transmitted to the rope pulley of the transmitter by means of a cable. The housing accommodates the gear assembly for matching to the measuring range as well as a transmitter for angular position for converting the angular position into a load-independent DC signal. Additionally, a max. of 6 limit switches can be installed. The switches may be used for signalling purposes for for controlling pumps.

Terminal diagrams

for transmitters TGSE and TGNE



Technical data

TGSE for valve position measurement

- Mounting position
arbitrary
- Shaft
10 mm \varnothing , 30 mm long
- Direction of rotation¹⁾
increasing output signal with clockwise rotation of shaft
- Scale
85 mm \varnothing
- Measuring ranges
min. 0...30°
max. 0...60 revolutions
- Housing
Cast light alloy, degree of protection IP 54 according to DIN 40 050
- Weight
approx. 4.5 kg

Measuring attachment TGE 5²⁾

- built into TGSE and TGNE
- Measuring range
0...224°, adjustable up to 280°, set between 0...270°

Limit switches

- Quantity: max. 6
- Breaking capacity: max. 50 VA, 6 A, 250 V

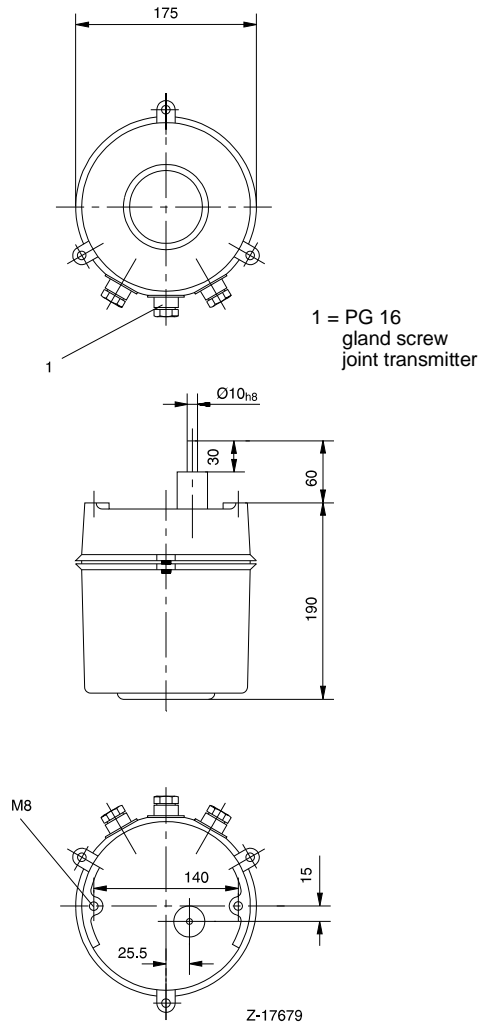
TGNE for liquid level measurement

- Type of mounting
with mounting frame
- Rope pulley
500 mm circumference
- Direction of rotation¹⁾
increasing output signal with clockwise rotation of shaft
- Float
242 mm \varnothing , Material 1.4571
- Cable
1.6 mm \varnothing , Material 1.4571
- Counterweight
made of plastic, with 4 cable clamps
- Measuring ranges
min. 0...0.5 m
max. 0...30 m
- Scale 85 mm \varnothing
- Housing
cast light alloy, degree of protection IP 54 according to DIN 40 050
- Weight
approx. 7.5 kg

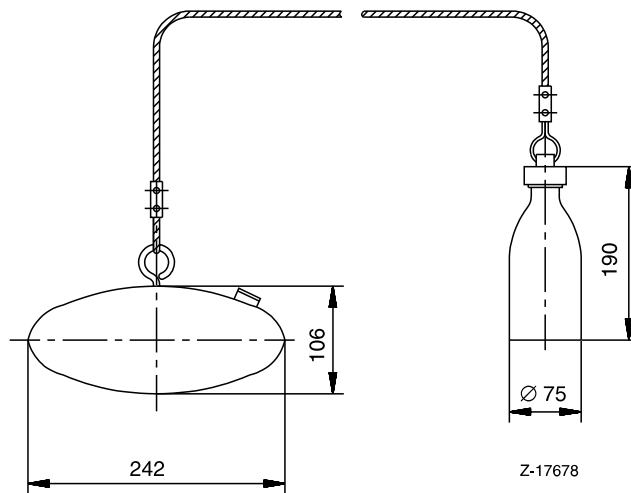
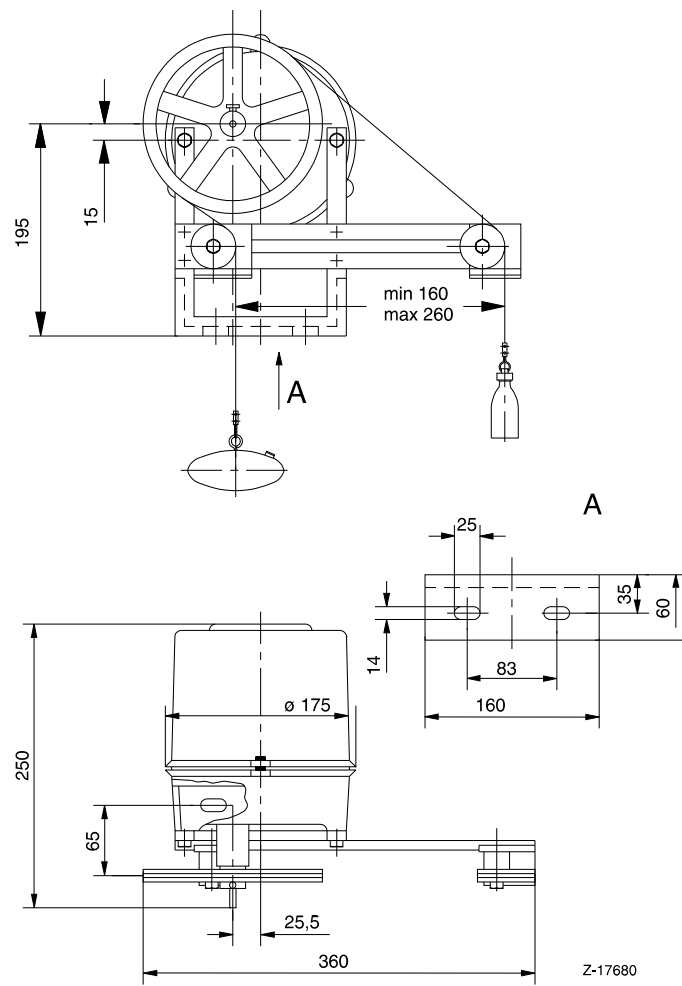
¹⁾ Looking at the shaft
²⁾ For further technical data, see Data Sheet 14-1.23 EN

Dimensional drawing (all dimensions in mm)

Transmitter TGSE



Transmitter TGNE



Float, cable and counterweight for the transmitter TGNE

Ordering information

	Catalog No.	
Transmitter TGNE for liquid level measurements with mounting frame, rope pulley, float and counterweight	14410-	
Transmitter TGSE for valve position measurement	14411-	
Measuring attachment without		9
TGE 5 – 270 °, output 0...20 mA ¹⁾ Power supply 13.2...36 V DC or 13.2...26.4 V AC		 2
TGE 5 – 270°, output 4...20 mA ²⁾ Power supply 13.2...36 V DC		 3
TGE 5 with different output signal see additionally optional ordering information		 0
Limit switches without		0 0
Number of contacts		
1		1
2		2
3		3
4		4
5		5
6		6
Contacts NCC NOC		 1 2
Catalog No. 1441 - 0 0 0 0		

Supplementary Numbers should be appended to the Catalog Nos. if necessary.

Additionally required ordering information	Suppl./Catalog No.
Measuring range and scale graduation	302 <input style="width: 40px;" type="text"/>
Continuation	303 <input style="width: 40px;" type="text"/>
Continuation	304 <input style="width: 40px;" type="text"/>
Cable for transmitter TGNE	14491-5-7852812
Length (measuring range + 2 m)	303 (... m)

Additionally optional ordering information	Suppl. No.
Increasing output signal with counterclockwise rotation of shaft	310
TGE 5 with built-in electrical isolation for power supply 13.2...36 V DC or 13.2...26.4 V AC ³⁾	330
TGE 5 with output signal 0... 5 mA ¹⁾	350
0...10 mA ¹⁾	355
TGE 5 for four-wire connection, output 4...20 mA	370
Operating manual (state total quantity) ⁴⁾ German (no indication for 1 manual)	Z1D (... pcs.)

At this sign complete the Suppl. No. with clear text

1) For three-wire and four-wire connection only, for three-wire circuit direct voltage power supply necessary
 2) For two-wire connection only
 3) For four-wire connection only
 4) 1 manual at no extra cost