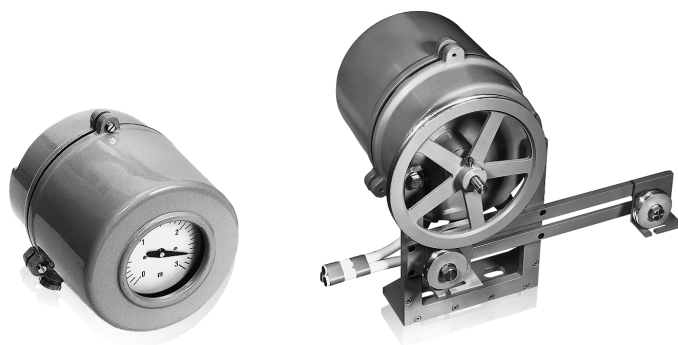


Transmitter TGSE, TGNE for valve position and liquid level measurement



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.

System design and function

Transmitter for valve position measurement TGSE

The transmitter for valve position measurement is suitable for mounting on, for instance, flap 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.

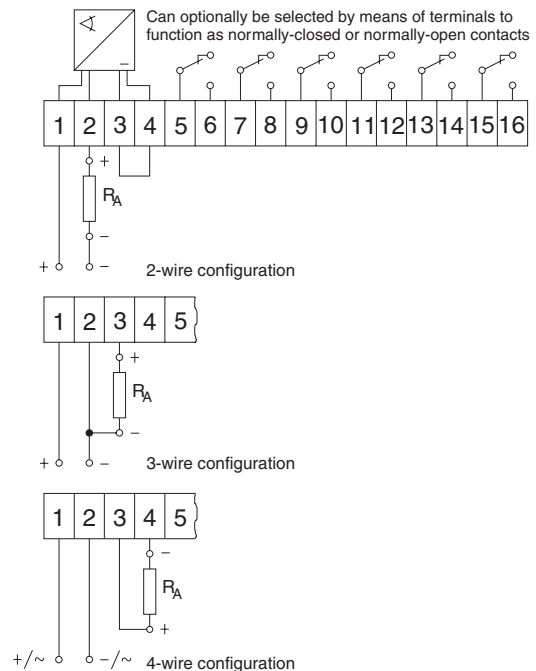
The TGSE consists of a sturdy light alloy cast housing, degree of protection IP 54, and contains a gear assembly for matching to the measuring range as well as a transmitter for angular position to convert the angular position into a DC signal. If desired, up to 6 adjustable limit switches can additionally 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 controlling pumps.

Connection diagrams for transmitters TGSE and TGNE



Technical data

TGSE for valve position measurement

Mounting position
arbitrary

Shaft
10 mm \varnothing , 30 mm lang

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 40050

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 40050

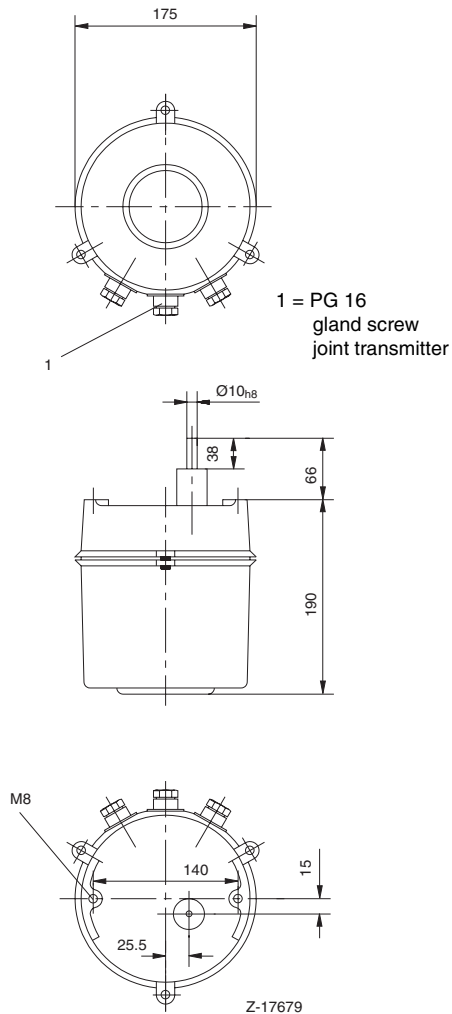
Weight:
approx. 7.5 kg

¹⁾ Looking at the shaft

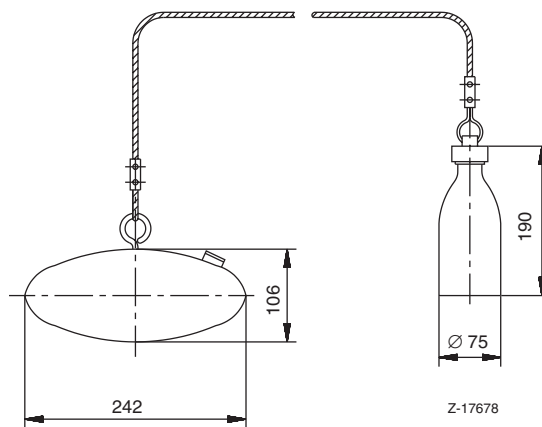
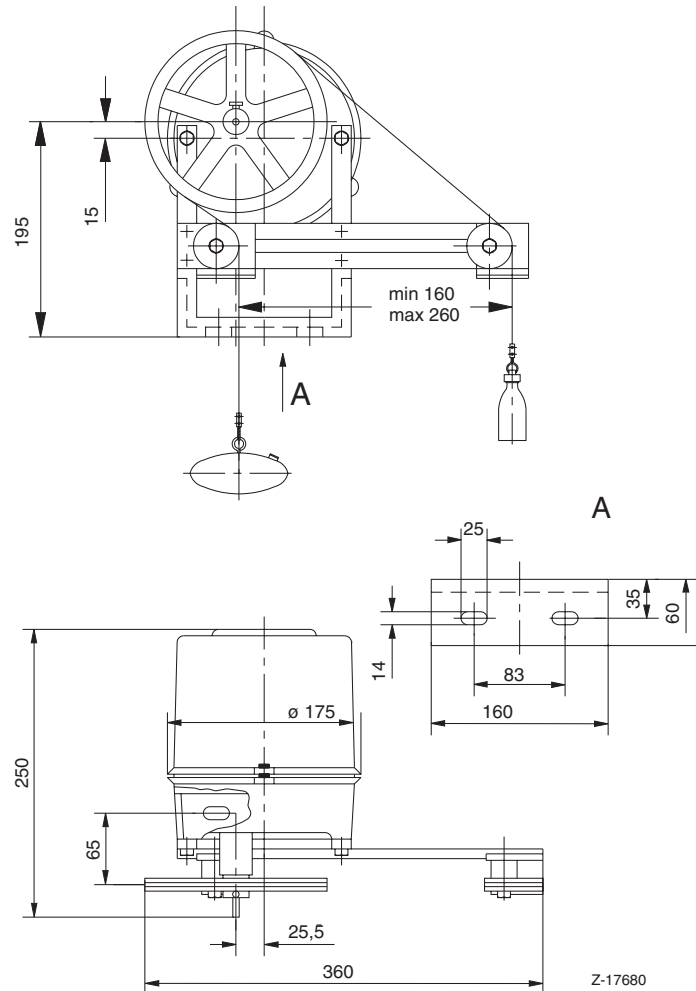
²⁾ For further technical data, see data sheet 10/14-1.23 EN

Dimensional drawing (all dimensions in mm)

Transmitter TGSE



Transmitter TGNE



Float, cable and counterweight for the transmitter TGNE

Ordering information										
		Catalog No.							Code	
Transmitter TGNE for liquid level measurements		V14410A-					0	0	0	0
with mounting frame, rope pulley, float and counterweight										
Transmitter TGSE for valve position measurement		V14411A-								
Measuring attachment										
without		9								
TGE 5 - 270°, output 0...20 mA ¹⁾		2								
Power supply 13.2...36 V DC or 13.2...26.4 V AC		3								
TGE 5 - 270°, output 4...20 mA ²⁾		0								
Power supply 13.2...36 V DC										
TGE 5 with different output signal										
see additional optional ordering information										
Limit switches										
without		0	0							
Number of contacts										
1		1								
2		2								
3		3								
4		4								
5		5								
6		6								
Contacts										
NCC		1								
NOC		2								
Additional ordering information										
		Catalog No.							Code	
Measuring range and scale graduation (clear text)									302	
Continuation (clear text)									303	
Continuation (clear text)									304	
Cable for transmitter TGNE		14491-7852812V								
Length (measuring range + 2 m) (... m complete the Code No)									303	
Increasing output signal with counterclockwise rotation of shaft									310	
TGE 5 with built-in electrical isolation									330	
for power supply 13.2...36 V DC or 13.2...26.4 V AC ³⁾										
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⁾									Z1D	
German (no indication for 1 manual)										

¹⁾ For three-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