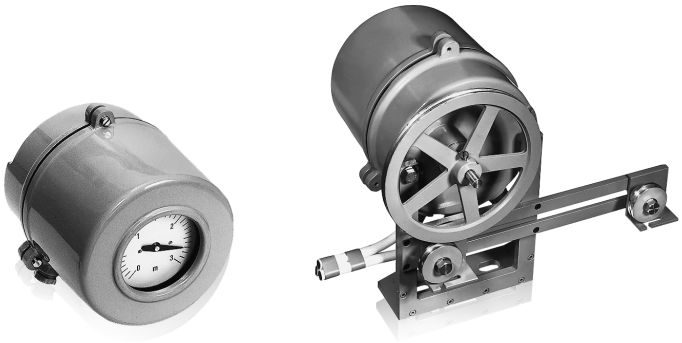
Data Sheet 10/14-1.11-EN

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 meaurements 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.

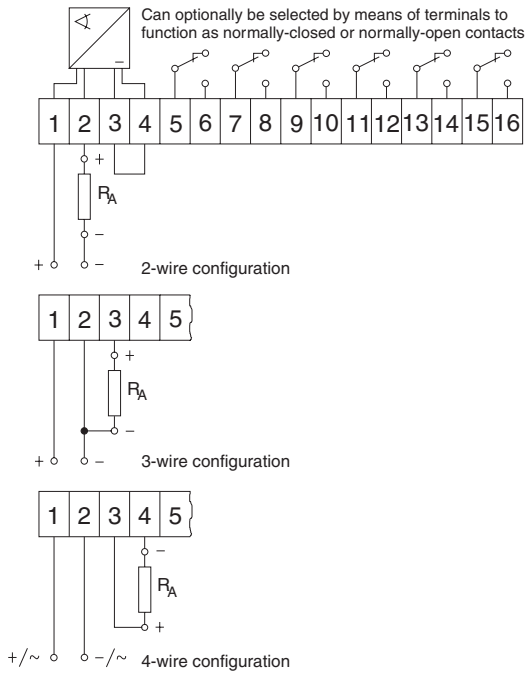
The TGSE consists of a sturdy light alloy cast housing, degree of protection IP 54, and contains a gear assembly for matching to the measuring range as well as a transmitter for angular position to convert the angular position into a DC signal. If desired, up to 6 adjustable limit switches can additionally 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 ∅, 30 mm lang

Direction of rotation[1)]
increasing output signal with clockwise rotation of shaft

Scale
85 mm ∅

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 5[2)]
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 rotation[1)]
increasing output signal with clockwise rotation of shaft

Float
242 mm ∅, Material 1.4571

Cable
1.6 mm ∅, Material 1.4571

Counterweight
made of plastic, with 4 cable clamps

Measuring ranges
min. 0...0.5 mm
max. 0...30 m

Scale 85 mm ∅

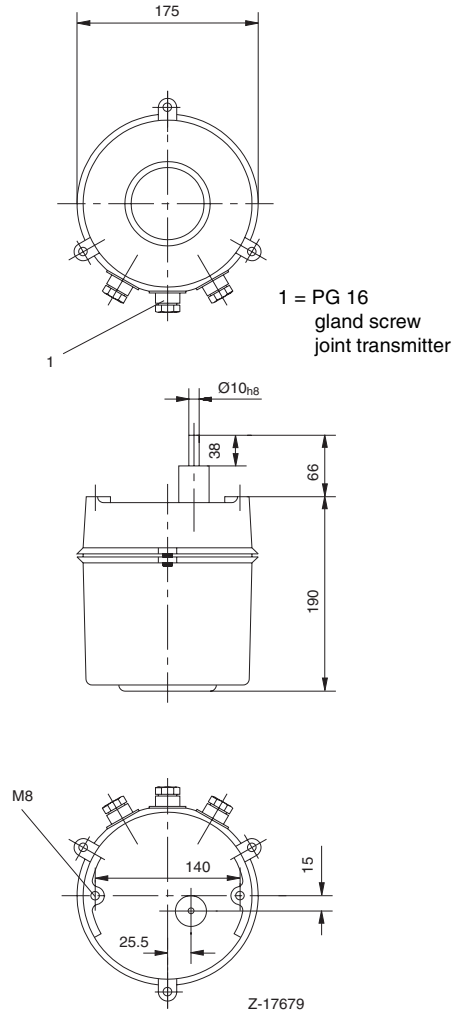
Housing
cast light alloy, degree of protection IP 54
according to DIN 40050

Weight:
approx. 7.5 kg

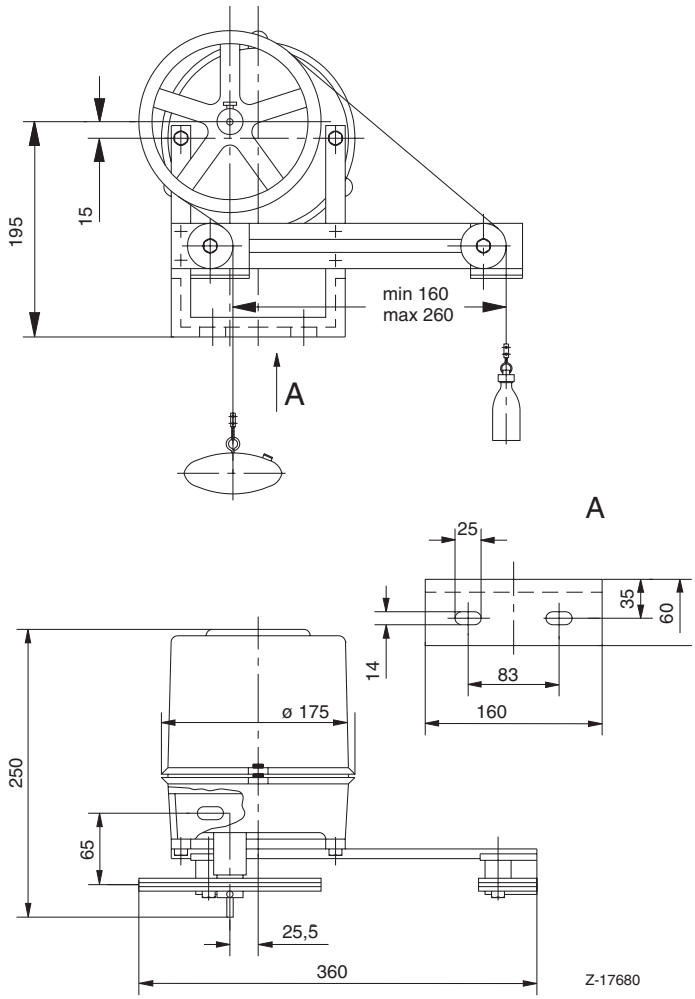
[1)] Looking at the shaft
[2)] For further technical data, see data sheet 10/14-1.23 EN

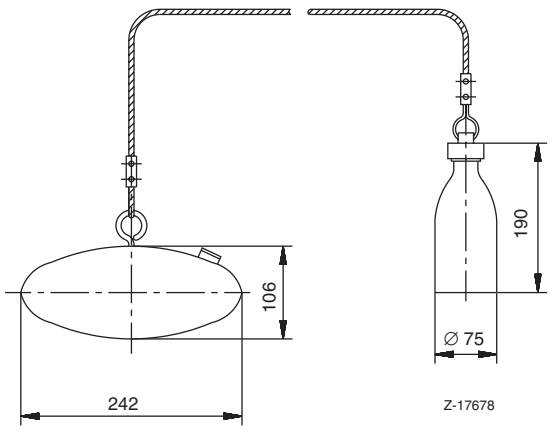
Dimensional drawing (all dimensions in mm)

Transmitter TGSE



Transmitter TGNE





Float, cable and counterweight for the transmitter TGNE

TGSE, TGNE
Transmitter for valve position and liquid level measurement

Ordering information

	Catalog No.								Code		
Transmitter TGNE for liquide level measurements	**V14410A-**				**0**	**0**	**0**	**0**			
with mounting frame, rope pulley, float and counterweight											
Transmitter TGSE for valve position measurement	**V14411A-**										
Measuring attachement											
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 additionaly 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				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 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		

[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

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