

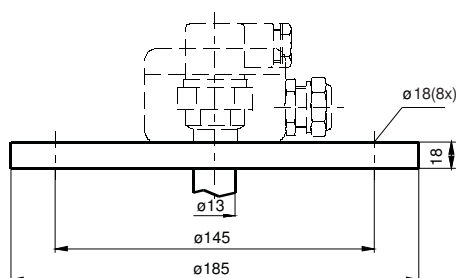
Application Area:	Industry, Chemical Industry
Resolution:	2.5 +/- 1 mm
Min. Mounting Length:	200 mm
Max. Mounting Length:	1500 mm

Transmitters of the series XM-825E (XT-825E) provide reliable measurement and control for liquid levels. These are developed from the XM-800E (XT-800E) series with double resolution and a well-tried mechanism. Additionally they can be used as position sensors for vertical displacements. The transmitters are built according to user-specific requirements. They have proved successful in a wide range of different industrial applications as well as in many special applications.

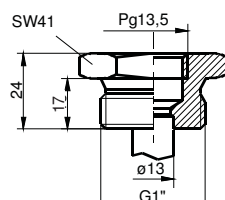
Depending on liquid level or displacement a magnet equipped float actuates some reed switches located in the stem. The transmitter works according to the principle of a voltage divider. Output signals can be a voltage (XM-825E) or a current (XT-825E) proportional to the float displacement. Such signals can be processed to drive analog or digital displays, give optical or acoustical alarms, or be fed into computers.

XM-825E (XT-825E)

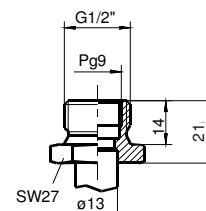

No 3.1 certificate available

Mounting

Flange DN65/PN16 EN1092-1 *

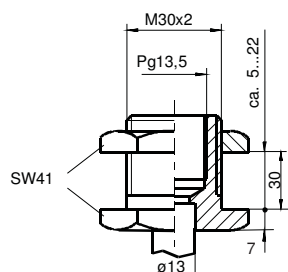
- BCCC 316/316L/316Ti
- other flanges on request
- Min. DN65 od. 2 1/2" ANSI


Tank screw fixing 1"

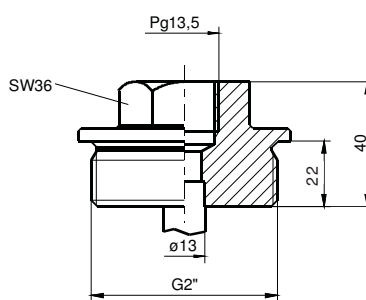
- TC 1 316/316L/316Ti


Inside screw fixing 1/2"

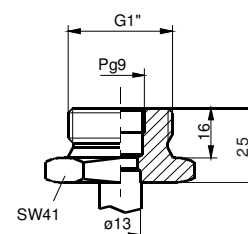
- EC 1/2 316/316L/316Ti


Bulkhead fitting

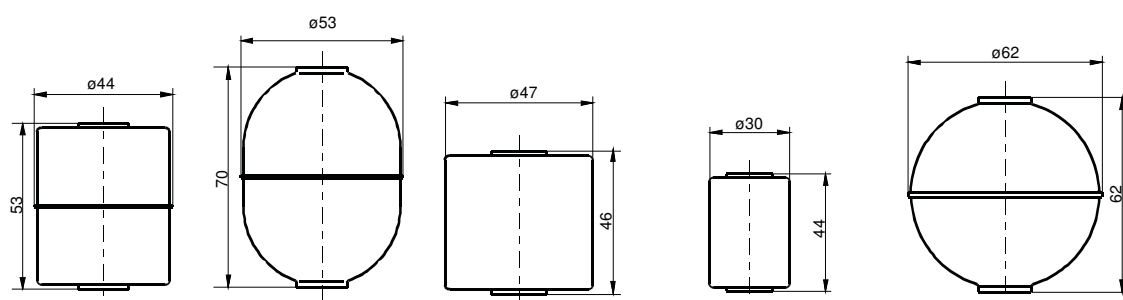
- AC 316/316L/316Ti


Tank screw fixing 2" *

- TC 2 316/316L/316Ti


Inside screw fixing 1"

- EC 1 316/316L/316Ti

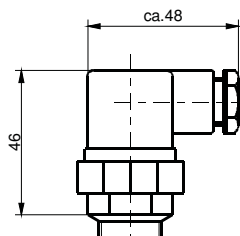
Floats


Type	• C44 *	• C53 *	• N47 *	• N30 *	• Ti62
Material	316/316L/316Ti	316/316L/316Ti	Buna N	Buna N	Titanium
Max. pressure	12 bar	20bar	10bar	10bar	15 bar
Media temperature	-20 °C...150 °C	-20 °C...150 °C	-20 °C...80 °C H ₂ O -20 °C...100 °C Öl	-20 °C...80 °C H ₂ O -20 °C...100 °C Öl	-20 °C...150 °C
Minimum density of the liquid	0.85 g/cm ³	0.75 g/cm ³	0.65 g/cm ³	0.65 g/cm ³	0.60 g/cm ³
Immersion depth at density = 1 g/cm ³	35 +/- 2mm	40 +/- 2mm	19 +/- 2mm	25 +/- 2mm	32 +/- 2 mm

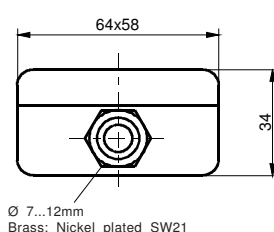
* Versions with protection tube (damping tube) on request

Electrical connection XM-825E (3-wire)

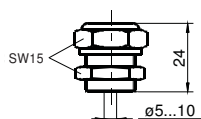
- S Plug connector



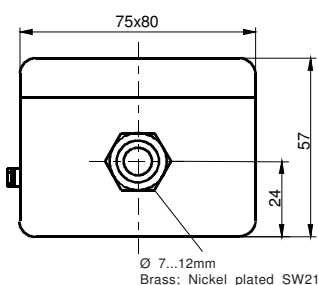
- K6 Junction box



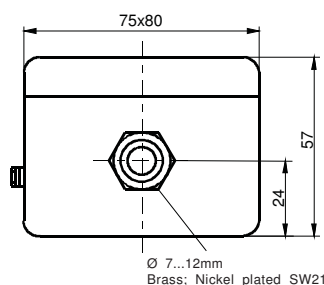
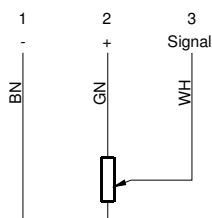
- P Cable gland



- K11 Junction box


Electrical connection XT-825E (2-wire)

- K11 Junction box


Wiring diagram XM-825E with voltage signal

Note

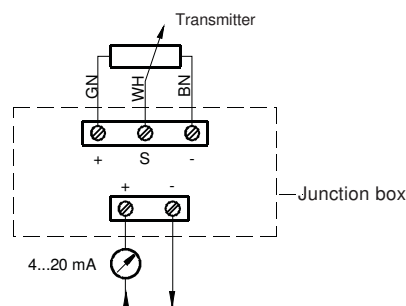
Because of the internal wiring of the transmitter, the output voltage and not the transmitter resistance has to be measured when a test is taken.

Function

Operation of the transmitter in connection with signal processing units; In this mode of operation voltage supply is provided by the processing units. Operation of the transmitter in connection with other signal processing units: 10...24 V DC, stabilized.

Technical data

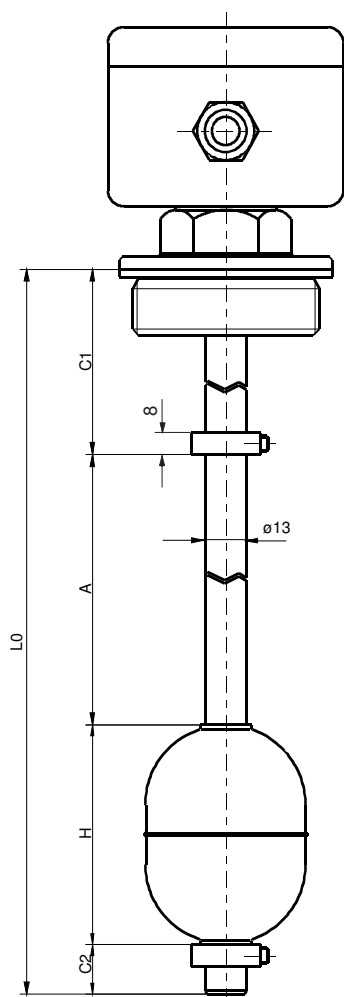
Media temperature	depending on float
Supply signal	10...24 V DC
Internal resistance	700 Ω ...2800 Ω
Enclosure	IP 65

Wiring diagram XT-825E with current signal

Function

The mode of operation of the transmitter XT-825E is basically the same as the mode of operation of the XM-825E. The XT-825E provides an output signal of 4...20 mA (2-wire technique; current sink) not a voltage. The same technical data is valid for mounting elements, floats and dimensions as for the transmitter XM-825E. The electrical wiring is made via the junction box which houses the signal converter.

Technical data

Ambient temperature	0 °C...60 °C
Supply signal	10...40 V DC
Output signal	4...20 mA; current sink
Max. load	100 Ω (10 V) 1.2 k Ω (40 V)
Max. current	20 mA
Enclosure	IP 65


Order data
Type code:
X...-825E-...-...-...
Electrical connection

- S Plug connector
- K6 Junction box
- K11 Junction box
- P-PVC PVC cable, with cable gland (Standardlength 3m)
- P-Si Si cable, halogen free, with cable gland (Standardlength 3m)

Float

- C44 316/316L/316Ti
- C53 316/316L/316Ti
- N47 Buna N
- N30 Buna N
- Ti62 Titanium

Mounting element

- BCCC Flange 316/316L/316Ti
- other flanges on request
- TC 1 Tank screw fixing 316/316L/316Ti
- TC 2 Tank screw fixing 316/316L/316Ti
- EC 1/2 Inside screw fixing 316/316L/316Ti
- EC 1 Inside screw fixing 316/316L/316Ti
- AC Bulkhead fitting 316/316L/316Ti

Mounting direction

- O From top
- U From bottom

Transmitter

- M 3-wire 10...24 V DC
- T 2-wire 4...20 mA

Dimensions

- LO Mounting length (LO max. = 1500 mm)
 A Indication length (float displacement)
 C1 Upper deadline
 C2 Lower deadline min. 10 mm
 H Float height

$$LO = A + C1 + C2 + H$$

For versions with an upper set collar:

C1 = minimum measure* + set collar thickness (8mm)

* minimum measure see below mounting elements

Typical order data XM-825E-O-TC2-C53-K11 (example)

- LO Mounting length 740 mm
 A Indication length 600 mm
 C1 Upper deadline 60 mm
 C2 Lower deadline 10 mm
 O Top mounting
 TC 2 Tank screw 2" 316/316L/316Ti
 C53 Float H=70 mm