

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.

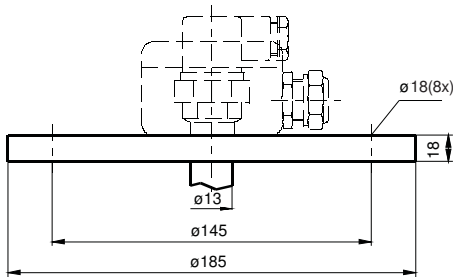
Depending on liquid level or displacement a magnet equipped float actuates some reed switches located in the stem. The transmitter works according to the principle of a voltage divider. Output signals can be a voltage (XM-825E) or a current (XT-825E) proportional to the float displacement. Such signals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

XM-825E (XT-825E)



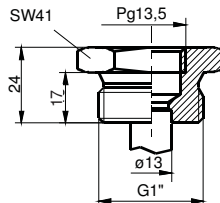
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Mounting



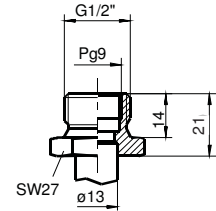
Flange DN65/PN16 EN1092-1 *

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



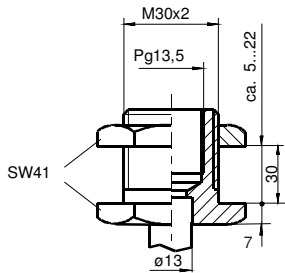
Tank screw fixing 1"

- TC 1 316/316L/316Ti



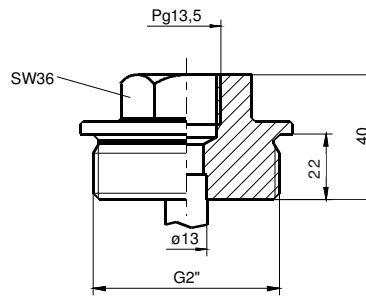
Inside screw fixing 1/2"

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



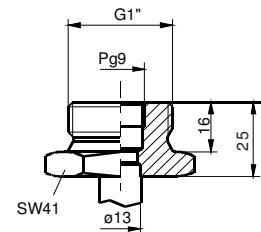
Bulkhead fitting

- AC 316/316L/316Ti



Tank screw fixing 2" *

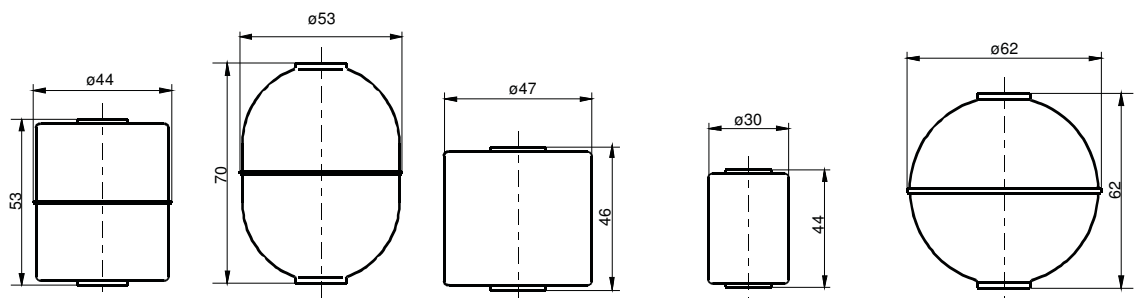
- TC 2 316/316L/316Ti



Inside screw fixing 1"

- EC 1 316/316L/316Ti

Floats

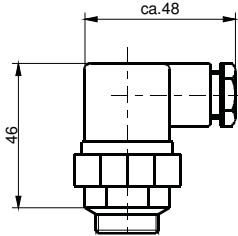


Type	• C44 *	• C53 *	• N47 *	• N30 *	• Ti62
Material	316/316L/316Ti	316/316L/316Ti	Buna N	Buna N	Titanium
Max. pressure	12 bar	20bar	10bar	10bar	15 bar
Media temperature	-20 °C...150 °C	-20 °C...150 °C	-20 °C...80 °C H ₂ O -20 °C...100 °C ÖI	-20 °C...80 °C H ₂ O -20 °C...100 °C ÖI	-20 °C...150 °C
Minimum 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

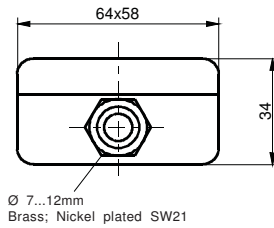
* Versions with protection tube (damping tube) on request

Electrical connection XM-825E (3-wire)

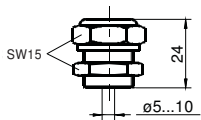
- S Plug connector



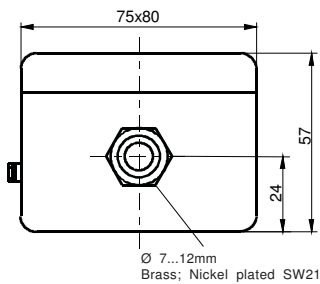
- K6 Junction box



- P Cable gland

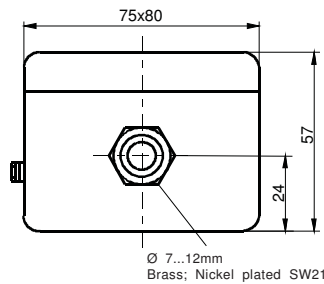


- K11 Junction box

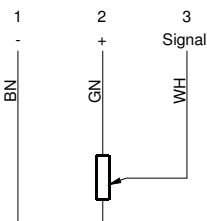


Electrical connection XT-825E (2-wire)

- 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.

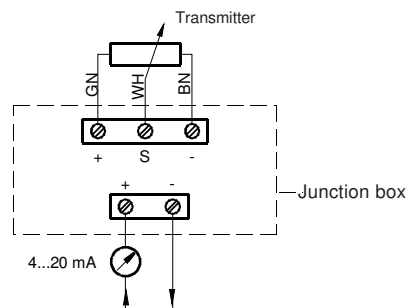
Function

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

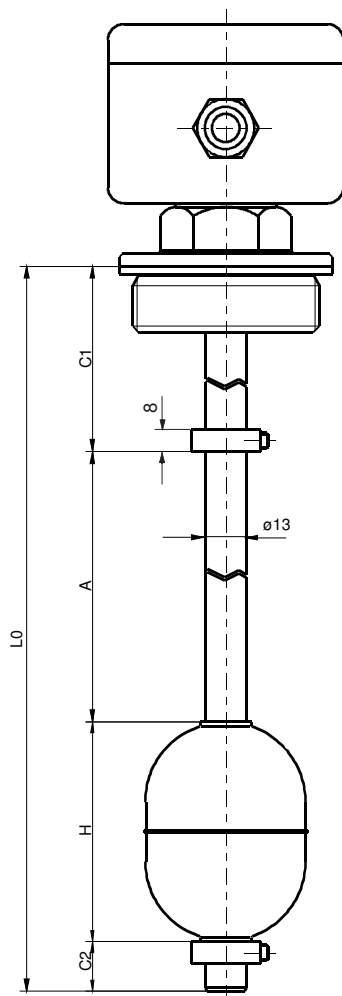


Function

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 kΩ (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