

Application Area:	Industry, Chemical Industry
Resolution:	5 +/- 2 mm
Min. Mounting Length:	400 mm
Max. Mounting Length:	3000 mm

Transmitters of the series XM-800R (XT-800R) provide reliable measurement and control for liquid levels. Additionally they can be used as position sensors for vertical displacements. These are developed from the standard series XM-800E. The signal-matching electronic system is integrated into the switching tube. This results in a functional 2-wire transmitter with a 4...20mA output signal, offering all the variations of the standard series for applications where space is limited.

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.

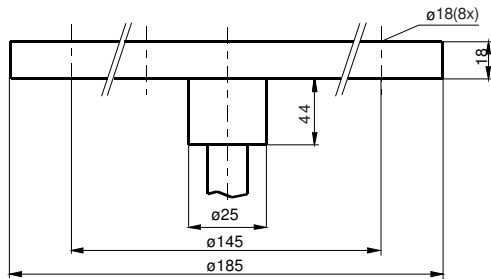
Depending on liquid level or displacement a magnet equipped float actuates some reed switches located in the stem. The resulting signal will be converted into a current signal proportional to the float position. Such signals can be processed to drive analog or digital displays, give optical or acoustical alarms, or be fed into computers.

XT-800R



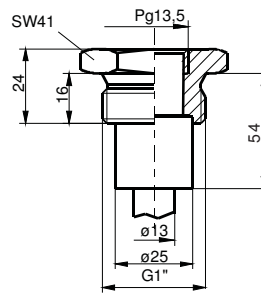
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Mounting



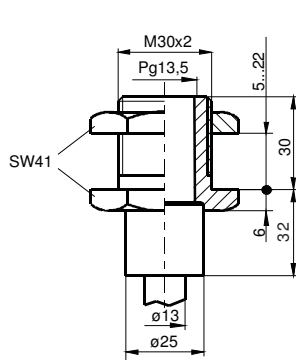
Flange DN65/PN16 EN1092-1 *

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



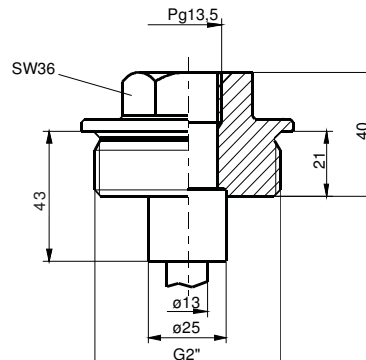
Tank screw fixing 1"

- TC 1 316/316L/316Ti



Bulkhead fitting

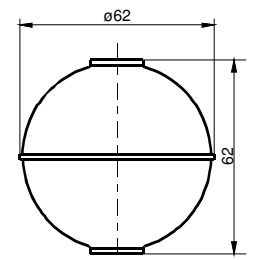
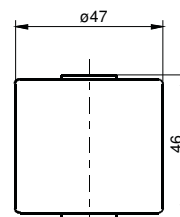
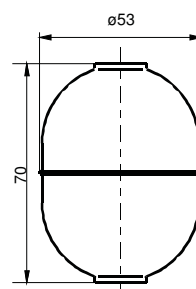
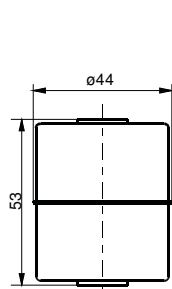
- AC 316/316L/316Ti



Tank screw fixing 2" *

- TC 2 316/316L/316Ti

Floats



Type • C44 *
 Material 316/316L/316Ti
 Max. pressure 12 bar
 Media temperature -20 °C...150 °C
 Minimum density of the liquid 0.85 g/cm³
 Immersion depth at density = 1 g/cm³ 40 +/- 2mm

• C53 *
 316/316L/316Ti
 20bar
 -20 °C...150 °C
 0.75 g/cm³
 42 +/- 2mm

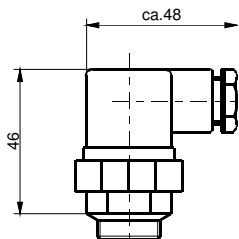
• N47 *
 Buna N
 10bar
 -20 °C...80 °C H₂O
 -20 °C...100 °C Öl
 0.65 g/cm³
 19 +/- 2mm

• Ti62
 Titanium
 15 bar
 -20 °C...150 °C
 0.60 g/cm³
 32 +/- 2 mm

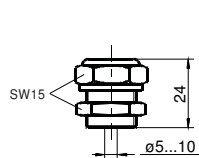
* Versions with protection tube (damping tube) on request

Electrical connection XT-800R (2-wire)

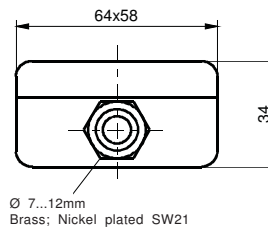
• S Plug connector



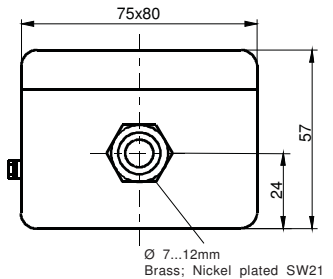
• P Cable gland



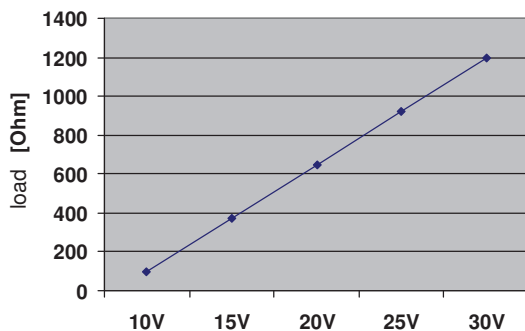
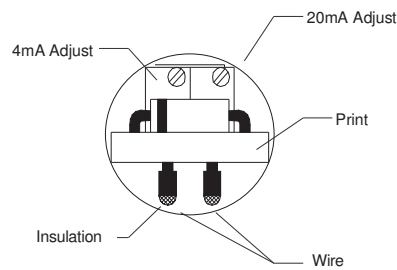
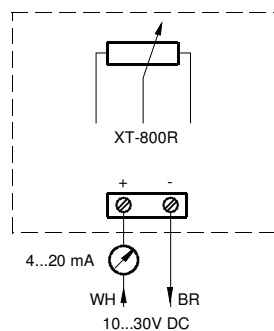
• K6 Junction box



• K11 Junction box



Wiring diagram XT-800R with voltage signal



Function

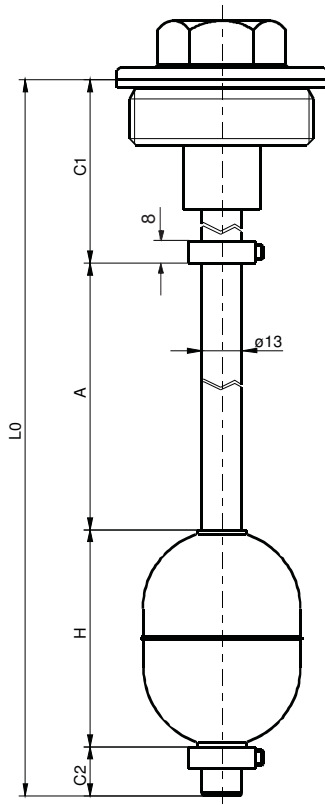
The fundamental operating principle of the XT-800R transmitter is the same as that for the XM-800E series. However, when it is connected to a voltage of 10... 30VDC, the XT-800R transmitter functions as a current sink, superimposing a 4 ... 20mA current analogous to the float position onto the signal. Two potentiometers are located in the top section of the tube and are visible when the tube is opened (see sketch above). These are used to adjust the upper and lower limiting values (4 and 20mA) within a range of 5%, based on the total length. This makes it possible to make readjustments if the set collar has to be moved slightly. The transmitter will have been adjusted before delivery and will not need to be reopened.

Technical Data

Ambient temperature	0 °C...70 °C
Supply signal	10...30 V DC
Output signal	4...20 mA; current sink
Max. Load	100 Ω (10 V) 1.2 kΩ (30 V)
Max. current	20 mA
Enclosure	IP 65

Order Data

Type Key:
XT-800R-.....



- 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
 - 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
 - AC Bulkhead fitting 316/316L/316Ti
- Mounting direction:
 - O from top

Dimensions

- LO Mounting length (LO max. = 3000 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 XT-800R-O-TC2-C53-P-PVC3 (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
- P Cable gland
- PVC3 3 m PVC-cable