

Page	No.	Type	Resolution (mm)	max. Indication- Length	Output
2	50.01	<a href="#">XM/XT-800E</a>	5 +/-2	3000	current/voltage
6	50.02	<a href="#">XM/XT-825E</a>	2.5 +/-1	1500	current/voltage
10	50.03	<a href="#">XM/XT-800E-PVDF</a>	5 +/-2	3000	current/voltage
14	50.04	<a href="#">XT-800R</a>	5 +/-2	3000	current
22	50.08	<a href="#">XT-800R-Ex</a>	5 +/-2	3000	current

**Application Area:** Industry, Chemical Industry

**Resolution:** 5 +/- 2 mm

**Max. Mounting Length:** 3000 mm

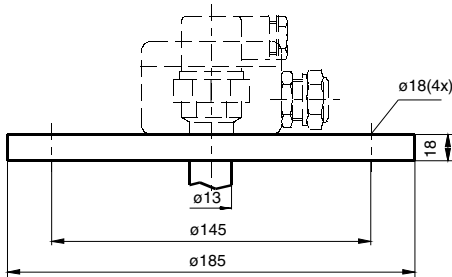
Gems transmitters of the series XM-800E (XT-800E) provide reliable measurement and control for liquid levels. Additionally they can be used as position sensors for vertical displacements. The transmitters are built according to user-specific requirements. They have proved successful in a wide range of 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-800E) or a current (XT-800E) 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-800E (XT-800E)***

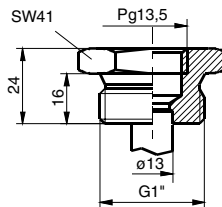


**Mounting**



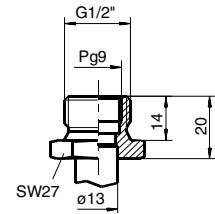
**Flange DN65/PN16 DIN 2527 \***

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



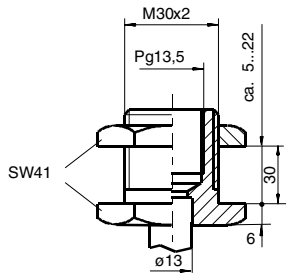
**Tank screw fixing 1"**

- TC 1 316/316L
- TM 1 brass



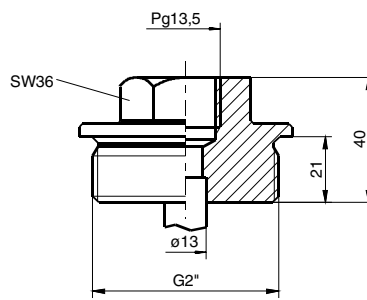
**Inside screw fixing 1/2"**

- EC 1/2 316/316L
- EM 1/2 brass



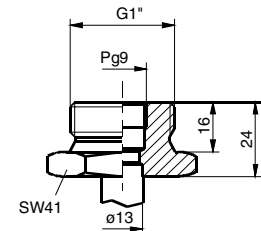
**Bulkhead fitting**

- AC 316/316L
- AM brass



**Tank screw fixing 2"\***

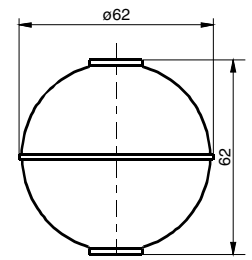
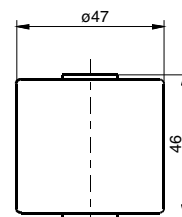
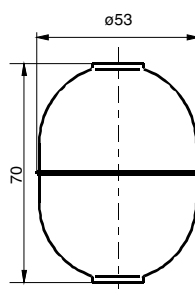
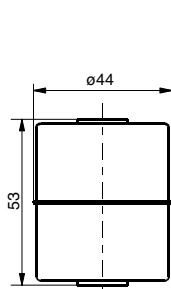
- TC 2 316/316L
- TM 2 brass



**Inside screw fixing 1"**

- EC 1 316/316L
- EM 1 brass

**Floats**



Type • C44 \*  
 Material 316/316L  
 Max. pressure 12 bar  
 Operating temp. -20 °C...150 °C

• C53 \*  
 316/316L  
 20bar  
 -20 °C...150 °C

• N47 \*  
 Buna N  
 10bar  
 -20 °C...80 °C H<sub>2</sub>O  
 -20 °C...100 °C ÖI  
 0.65 g/cm<sup>3</sup>

• Ti62  
 Titanium  
 15 bar  
 -20 °C...150 °C

Minimum density of the liquid 0.85 g/cm<sup>3</sup>  
 Immersion depth at density = 1 g/cm<sup>3</sup> 40 +/- 2mm

0.75 g/cm<sup>3</sup>  
 42 +/- 2mm

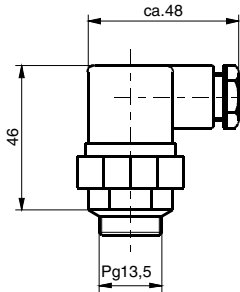
19 +/- 2mm

0.60 g/cm<sup>3</sup>  
 32 +/- 2 mm

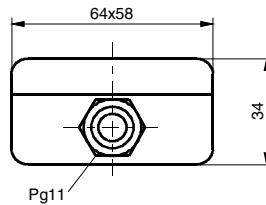
\* Versions with protection tube (damping tube) on request

**Electrical connection XM-800E (3-wire)**

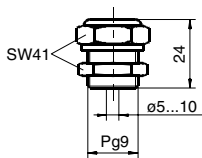
- S Plug connector



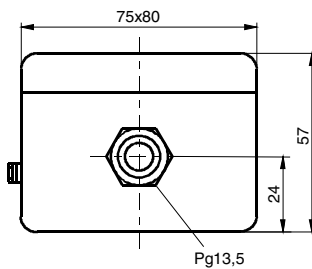
- K6 Junction box



- P Cable gland

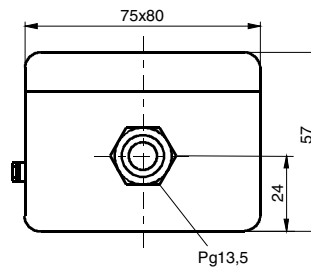


- K11 Junction box

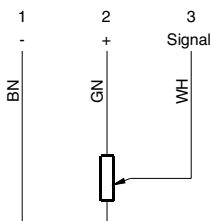


**Electrical connection XT-800E (2-wire)**

- K11 Junction box



**Wiring diagram XM-800E 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.

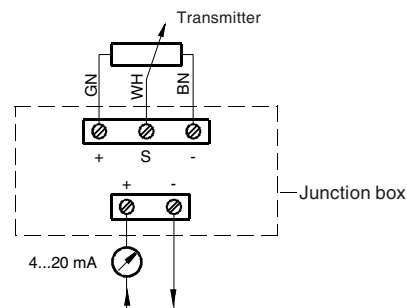
**Function**

Operation of the transmitter in connection with GEMS signal processing units (for details of signal processing units see data sheet 60.01 ff): In this mode of operation voltage supply is provided by the processing units. Operation of the transmitter in connection with other signal processing units: 1...24 V DC, stabilized.

**Technical data**

Operating temperature	depending on float
Supply voltage	1...24 V DC
Internal resistance	700 Ω ...2800 Ω
Enclosure	IP 65

**Wiring diagram XT-800E with current signal**

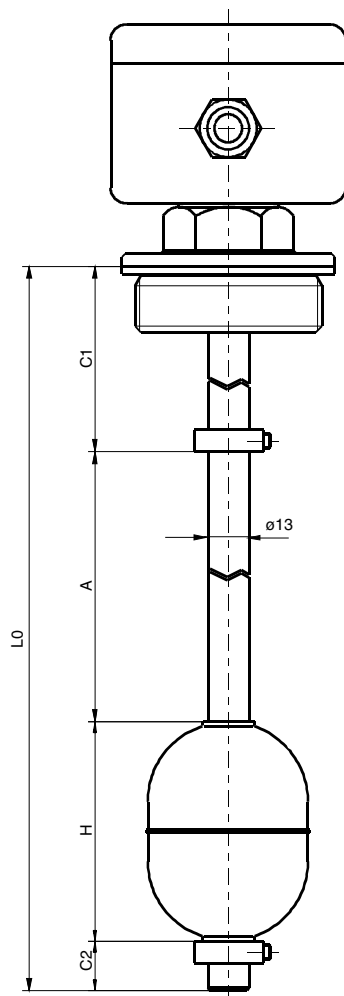


**Function**

The mode of operation of the transmitter XT-800E is basically the same as the mode of operation of the XM-800E. The XT-800E provides an output signal of 4...20 mA (2-wire technique) not a voltage. The same technical data is valid for mounting elements, floats and dimensions as for the transmitter XM-800E. The electrical wiring is made via the junction box which houses the signal converter.

**Technical data**

Operating temperature	0 °C...60 °C
Supply voltage	10...40 V DC
Output signal	4...20 mA
Max. load	100 Ω (10 V) 1.2 kΩ (40 V)
Max. current	20 mA
Enclosure	IP 65



**Order data**

**Type code:**

X...-800E-...-...-...-...

Electrical connection

- S Plug connector
- P Cable gland
- K6 Junction box
- K11 Junction box
- PVC PVC cable, requires cable gland
- Si Si cable, halogen free, requires cable gland
- W4 4..20 mA, 4-wire, galvanically separated

Float

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

Mounting element

- BCCC Flange 316/316L
- BM Flange brass
- Other flanges on request
- TC 1 Tank screw fixing 316/316L
- TM 1 Tank screw fixing brass
- TC 2 Tank screw fixing 316/316L
- TM 2 Tank screw fixing brass
- EC 1/2 Inside screw fixing 316/316L
- EM 1/2 Inside screw fixing brass
- EC 1 Inside screw fixing 316/316L
- EM 1 Inside screw fixing brass
- AC Bulkhead fitting 316/316L
- AM Bulkhead fitting brass

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. = 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 XM-800E-O-TC1-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 1 Tank screw 316/316L 1"
- C53 Float H=70 mm

**Application Area:** Industry, Chemical Industry

**Resolution:** 2.5 +/- 1 mm

**Max. Mounting Length:** 1500 mm

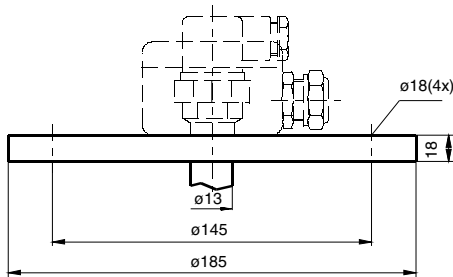
Gems transmitters of the series XM-825E (XT-825E) provide reliable measurement and control for liquid levels. These are developed from the XM-800E (XT-800E) series with double resolution and a well-trying mechanism. Additionally they can be used as position sensors for vertical displacements. The transmitters 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)*

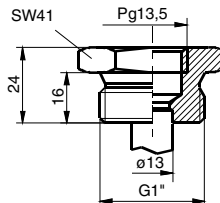


**Mounting**



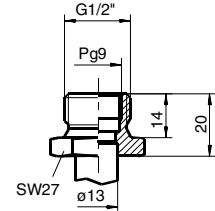
**Flange DN65/PN16 DIN 2527 \***

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



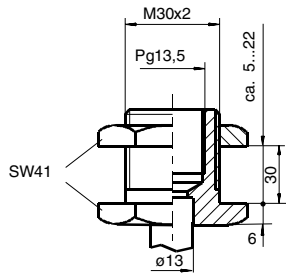
**Tank screw fixing 1"**

- TC 1 316/316L
- TM 1 brass



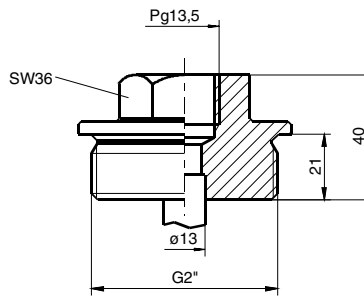
**Inside screw fixing 1/2"**

- EC 1/2 316/316L
- EM 1/2 brass



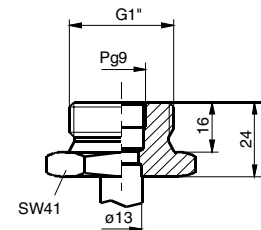
**Bulkhead fitting**

- AC 316/316L
- AM brass



**Tank screw fixing 2" \***

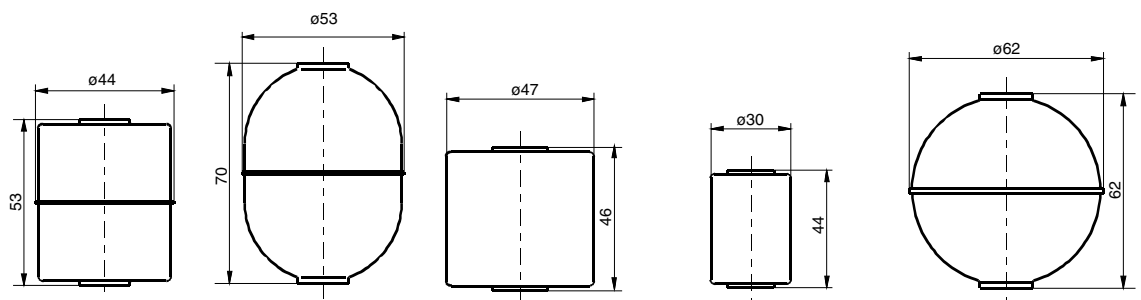
- TC 2 316/316L
- TM 2 brass



**Inside screw fixing 1"**

- EC 1 316/316L
- EM 1 brass

**Floats**

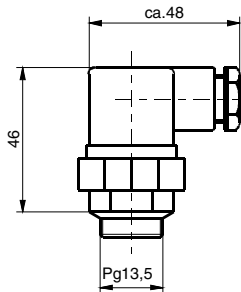


Type	• C44 *	• C53 *	• N47 *	• N30 *	• Ti62
Material	316/316L	316/316L	Buna N	Buna N	Titanium
Max. pressure	12 bar	20bar	10bar	10bar	15 bar
Operating temp.	-20 °C...150 °C	-20 °C...150 °C	-20 °C...80 °C H <sub>2</sub> O -20 °C...100 °C Öl	-20 °C...80 °C H <sub>2</sub> O -20 °C...100 °C Öl	-20 °C...150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

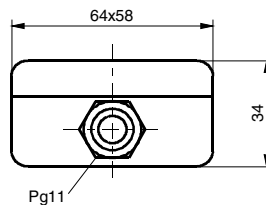
\* Versions with protection tube (damping tube) on request

**Electrical connection XM-825E (3-wire)**

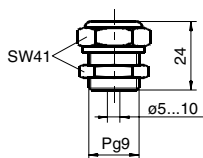
- S Plug connector



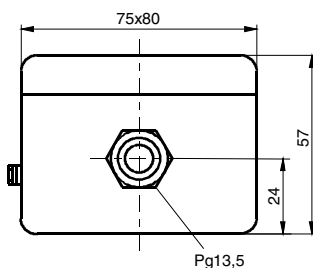
- K6 Junction box



- P Cable gland

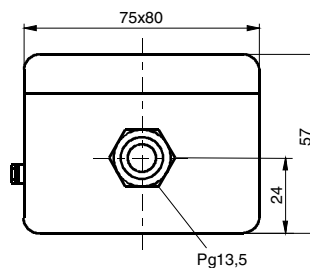


- K11 Junction box

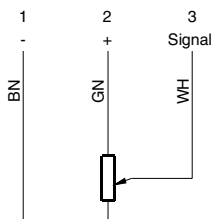


**Electrical connection XT-825E (2-wire)**

- 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.

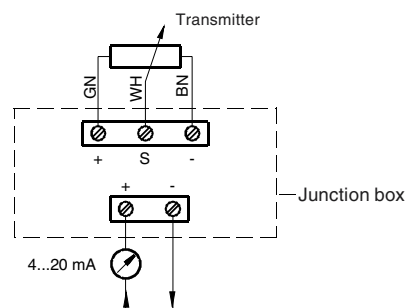
**Function**

Operation of the transmitter in connection with GEMS signal processing units (for details of signal processing units see data sheet 60.01 ff): 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**

Operating 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**



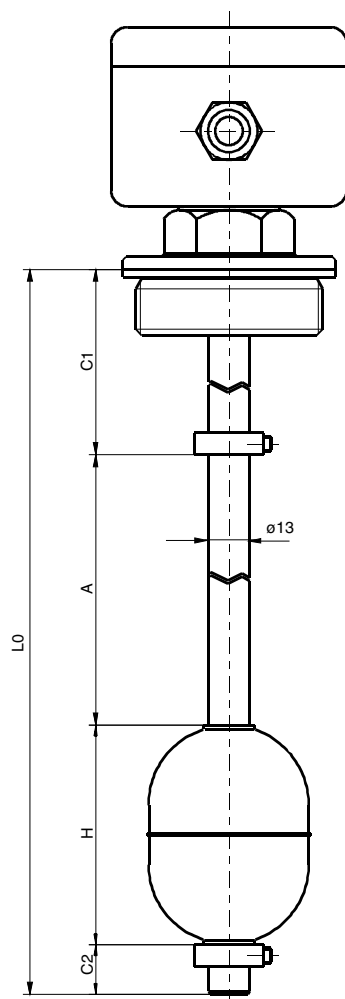
**Function**

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) 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**

Operating temperature	0 °C...60 °C
Supply signal	10...40 V DC
Output signal	4...20 mA
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
- P Cable gland
- K6 Junction box
- K11 Junction box
- PVC PVC cable, requires cable gland
- Si Si cable, halogen free, requires cable gland
- W4 4..20 mA, 4-wire, galvanically separated

Float

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

Mounting element

- BCCC Flange 316/316L
- BM Flange brass
- other flanges on request
- TC 1 Tank screw fixing 316/316L
- TM 1 Tank screw fixing brass
- TC 2 Tank screw fixing 316/316L
- TM 2 Tank screw fixing brass
- EC 1/2 Inside screw fixing 316/316L
- EM 1/2 Inside screw fixing brass
- EC 1 Inside screw fixing 316/316L
- EM 1 Inside screw fixing brass
- AC Bulkhead fitting 316/316L
- AM Bulkhead fitting brass

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-TC1-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 1 Tank screw 316/316L 1"
- C53 Float H=70 mm

**Application Area:** Industry, Chemical Industry

**Resolution:** 5 +/- 2 mm

**Max. Mounting Length:** 3000 mm

Gems transmitters of the series XM-800E-PVDF (XT-800E-PVDF) provide reliable measurement and control for liquid levels. 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.

The PVDF series was specially developed for the foodstuffs industry, medical technology and other particularly exacting chemical applications. The transmitters are able to withstand acids, acidic compounds, bromines and pure media. They are not recommended for use with caustic soda or media having pH values >12.

**Materials**

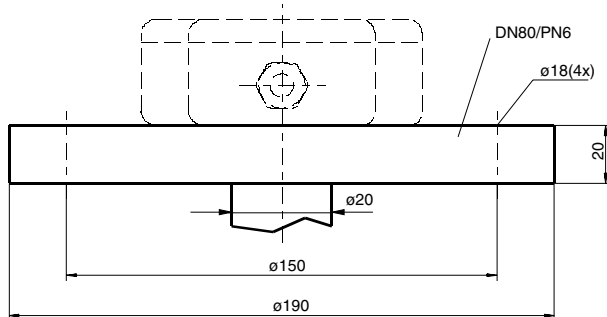
- Stem, Float, Flange: PVDF
- Set collars: PTFE
- Junction boxes: ABS

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-800E-PVDF) or a current (XT-800E-PVDF) 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-800E-PVDF (XT-800E-PVDF)**

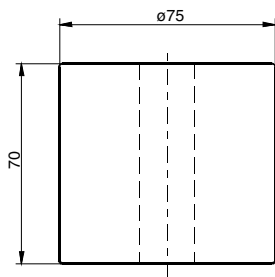


**Mounting**



**Flange DN80/PN6 DIN 2527**  
• BF PVDF

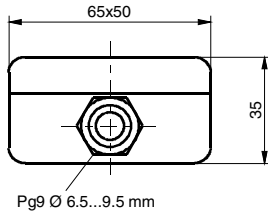
**Float**



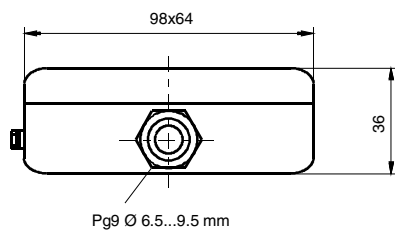
Type	• P75
Material	PVDF
Max. pressure	3bar
Operating temperature	-30 °C...100 °C
Minimum density of the liquid	0.77 g/cm <sup>3</sup>
Immersion depth at density = 1 g/cm <sup>3</sup>	47 +/- 3 mm

**Electrical connection XM-800E-PVDF (3-wire)**

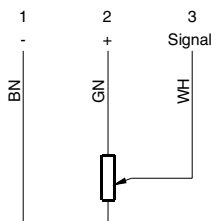
- K6 Junction box (ABS)



- K11 Junction box (ABS)



**Electrical diagram XM-800E-PVDF with voltage signal**



**Hint**

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**

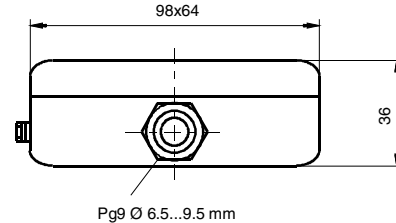
Operation of the transmitter in connection with GEMS signal processing units (for details of signal processing units see data sheet 60.01 ff): In this mode of operation voltage supply is provided by the processing units. Operation of the transmitter in connection with other signal processing units: 10...24 V DC, stabilized.

**Technical data**

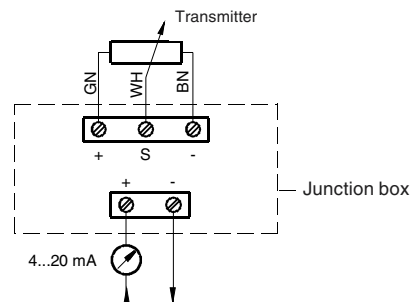
Operating temperature	Depending on float
Input signal	10...24 V DC
Internal resistance	700 Ω ...2800 Ω
Enclosure	IP 65

**Electrical connection XT-800E-PVDF (2-wire)**

- K11 Junction box (ABS)



**Electrical diagram XT-800E-PVDF with current signal**

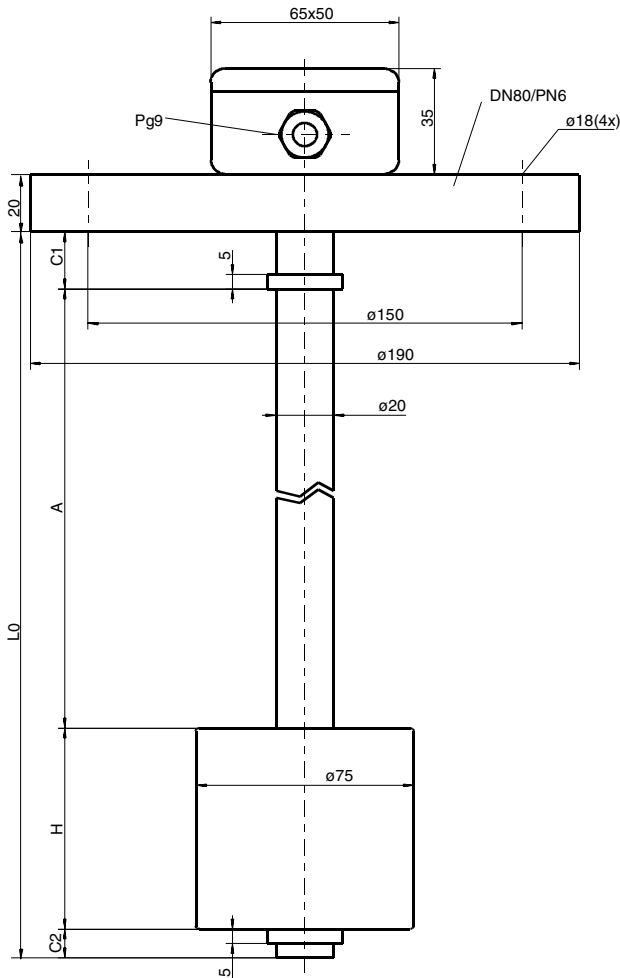


**Function**

The mode of operation of the transmitter XT-800E-PVDF is basically the same as the mode of operation of the XM-800E. The XT-800E-PVDF provides an output signal of 4...20 mA (2-wire technique) not a voltage. The same technical data is valid for mounting elements, floats and dimensions as for the transmitter XM-800E. The electrical connections are made via the cable box which houses the signal conversion electronics.

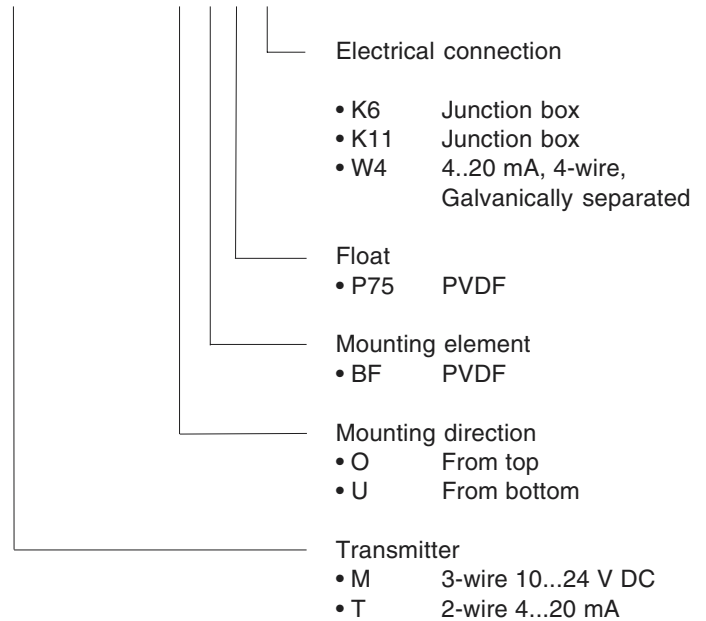
**Technical data**

Operating temperature	0 °C...60 °C
Input signal	10...40 V DC
Output signal	4...20 mA
Max. load	100 Ω (10 V) 1.2 kΩ (40 V)
Max. current	20 mA
Enclosure	IP 65



**Order Data**

**Type Key:**  
X...-800E-PVDF-.....



**Dimensions**

- LO Mounting length (LO max. = 3000 mm)
- A Indication length (float displacement)
- C1 Upper deadline
- C2 Lower deadline min. 15 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-800E-PVDF-O-BF-P75-K6 (example)***

- LO Mounting length 800 mm
- A Indication length 620 mm
- C1 Upper deadline 100 mm
- C2 Lower deadline 10 mm
- O Top mounting
- BF Flange DN80/PN6
- P75 Float H=70 mm

**Application Area:** Industry, Chemical Industry

**Resolution:** 5 +/- 2 mm

**Max. Mounting Length:** 3000 mm

Gems 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.

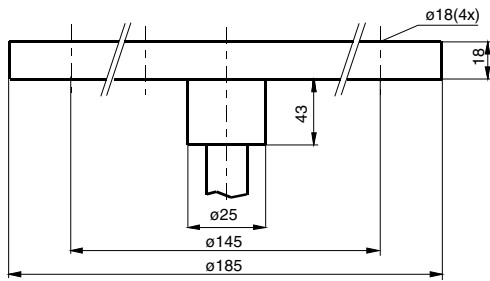
The transmitters are built according to user-specific requirements. They have proved successful in a wide range of different industrial applications as well as in many special applications.

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**

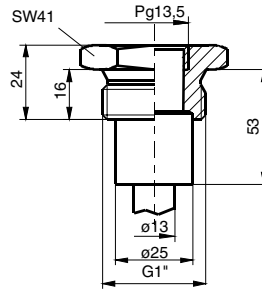


**Mounting**



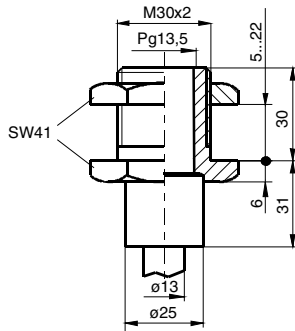
**Flange DN65/PN16 DIN 2527 \***

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



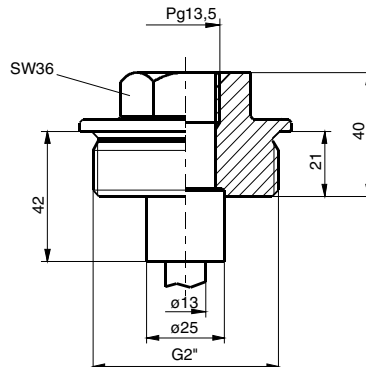
**Tank screw fixing 1"**

- TC 1 316/316L



**Bulkhead fitting**

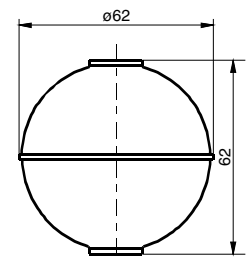
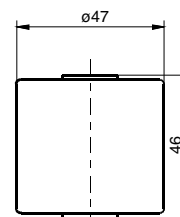
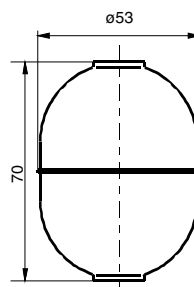
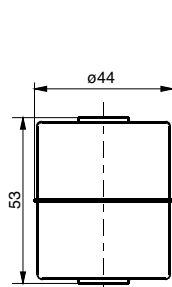
- AC 316/316L



**Tank screw fixing 2" \***

- TC 2 316/316L

**Floats**

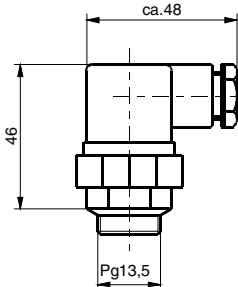


Type	• C44 *	• C53 *	• N47 *	• Ti62
Material	316/316L	316/316L	Buna N	Titanium
Max. pressure	12 bar	20bar	10bar	15 bar
Operating temp.	-20 °C...150 °C	-20 °C...150 °C	-20 °C...80 °C H <sub>2</sub> O -20 °C...100 °C Öl	-20 °C...150 °C
Minimum density of the liquid	0.85 g/cm <sup>3</sup>	0.75 g/cm <sup>3</sup>	0.65 g/cm <sup>3</sup>	0.60 g/cm <sup>3</sup>
Immersion depth at density = 1 g/cm <sup>3</sup>	40 +/- 2mm	42 +/- 2mm	19 +/- 2mm	32 +/- 2 mm

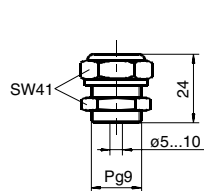
\* Versions with protection tube (damping tube) on request

**Electrical connection XT-800R (2-wire)**

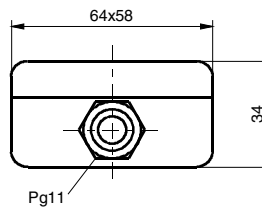
- S Plug connector



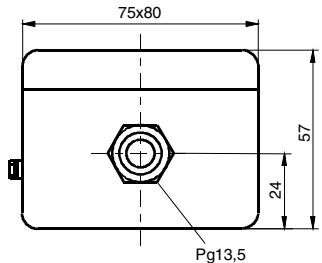
- P Cable gland



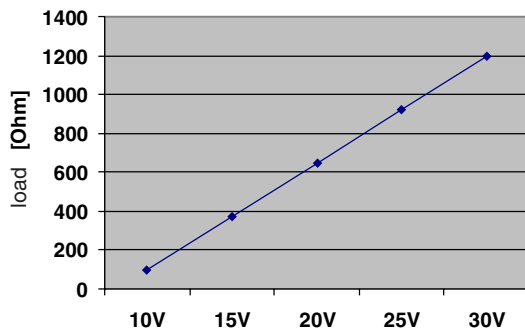
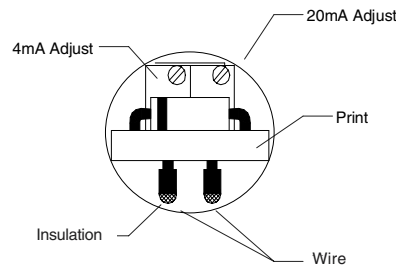
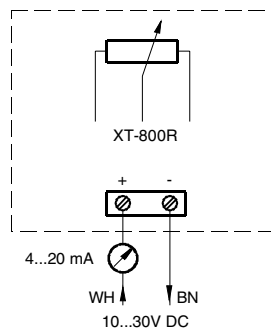
- K6 Junction box



- K11 Junction box



**Wiring diagram XT-800R with voltage signal**



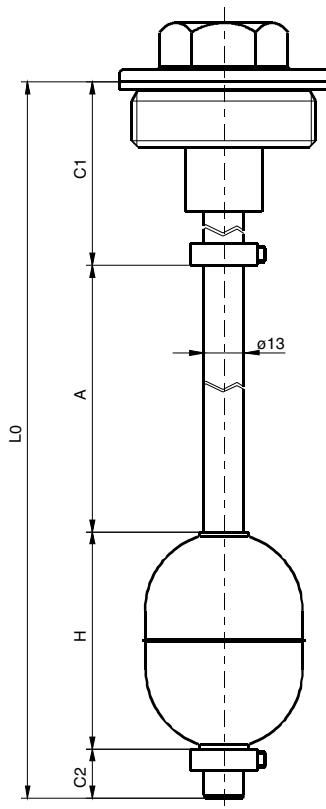
**Function**

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**

Operating temperature	0 °C...70 °C
Supply signal	10...30 V DC
Output signal	4...20 mA
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
- P Cable gland
- K6 Junction box
- K11 Junction box
- PVC PVC cable, requires cable gland
- Si Si cable, halogen free, requires cable gland
- W4 4..20 mA, 4-wire, galvanically separated

Float

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

Mounting element

- BCCC Flange 316/316L
- Other flanges on request
- TC 1 Tank screw fixing 316/316L
- TC 2 Tank screw fixing 316/316L
- AC Bulkhead fitting 316/316L

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-TC1-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 1 Tank screw 316/316L 1"
- C53 Float H=70 mm
- P Cable gland
- PVC3 3 m PVC-cable

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

Gems series XT-800R-Ex transmitters provide a reliable option for level supervision in tanks or containers containing explosive liquids. The transmitters are manufactured in accordance with customers' specifications and have proved to be successful for many years in a wide range of applications connected to the industrial and chemical sector, and in many special applications.

The float is fitted with magnets, and works by moving with the level of reed contacts located in the switching tube. The transmitter operates in accordance with the principle of voltage division. It provides a voltage proportional to the float position as an output signal, which is then converted by an integral converter to a standardised 4...20 mA signal.

PTFE spacers are placed in front of the set collars to prevent impact sparking.

The appropriate output devices can be connected to provide analogue or digital displays, optical and acoustic alarms and computer inputs.

**Safety instructions:**

- The transmitter may be used in Zone 0, 1 and 2 and with gas groups IIA, IIB and IIC that are at risk of explosion because of inflammable materials in the temperature classes T1 to T4.
- The highest permitted ambient temperature is 70 °C.
- The transmitter may only be connected to a certified, intrinsically safe electrical circuit having the maximum values (e.g. Zener barriers).
- The equipment must be included in the routine pressure test of the tank.
- The transmitter must be electrically connected to the system's equipotential system.

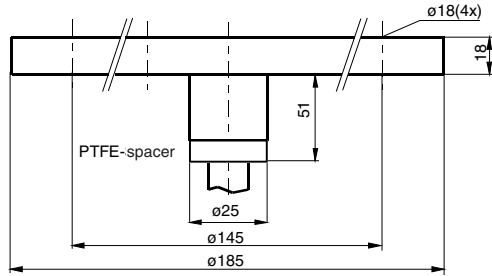
XT-800R-Ex



*EEx ia IIC T4*  
*See 99 ATEX 2447X*  
*II1G*

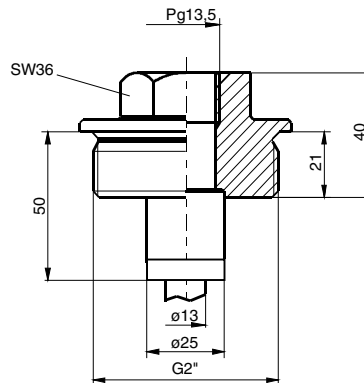


**Mounting**



**Flange DN65/PN16 DIN 2527 \***

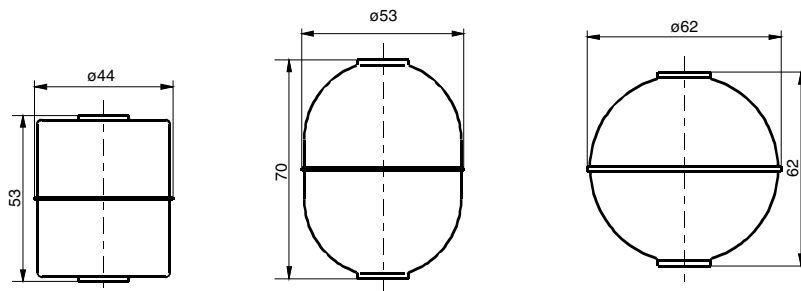
- BCCC 316/316L
- Other flanges on request
- Min. DN65 od. 2 1/2" ANSI



**Tank screw fixing 2" \***

- TC 2 316/316L

**Floats**

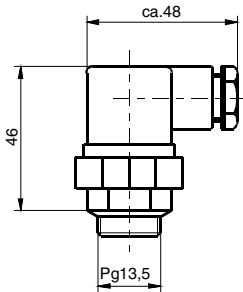


Type	• C44 *	• C53 *	• Ti62
Material	316/316L	316/316L	Titanium
Max. pressure	12 bar	20 bar	15 bar
Operating temp.	-20 °C...150 °C	-20 °C...150 °C	-20 °C...150 °C
Minimum density of the liquid	0.85 g/cm <sup>3</sup>	0.75 g/cm <sup>3</sup>	0.60 g/cm <sup>3</sup>
Immersion depth at density = 1 g/cm <sup>3</sup>	40 +/- 2mm	42 +/- 2mm	32 +/- 2 mm

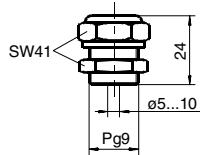
\* Versions with protection tube (damping tube) on request

**Electrical connection XT-800R-Ex (2-wire)**

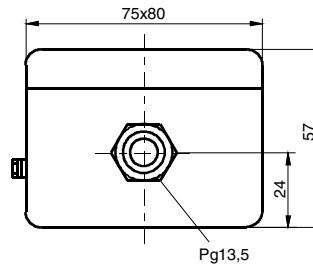
- S Plug connection



- P Cable gland

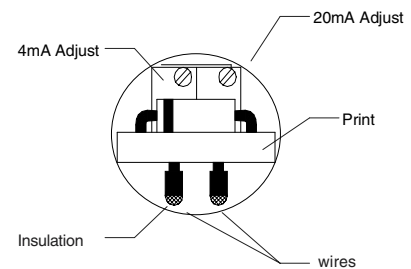
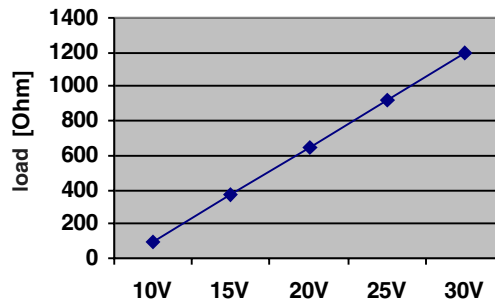
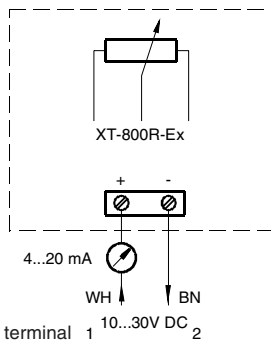


- K11 Junction box



- Cable (82667)  
PVC, blue 2x 0.75<sup>2</sup>, shielded  
WH = + / BN = -

**Wiring diagram XT-800R-Ex with voltage output**



**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 re-opened.

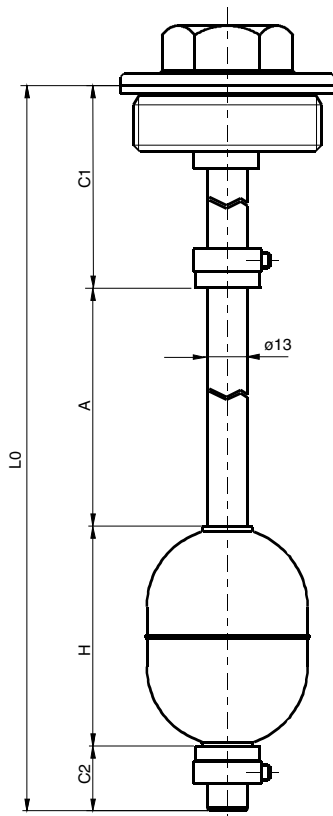
**Technical data**

Max. ambient temperature	70 °C	<b>EEx ia IIC T4</b> or	<b>EEx ib IIC T4</b>
Supply voltage	10...30 V DC	U: 30 V	U: 30 V
Output signal	4...20 mA	I: 150 mA	I: 150 mA
Max. load	100 Ω (10 V) 1.2 kΩ (30 V)	P: 1.13 W	P: 1.13 W
Max. current	20 mA	C: 120 nF	The effective internal inductance and capacitance are negligibly small.
Enclosure	IP 65	L: 0 mH	

**Order data**

**Type key:**

**XT-800R-Ex-...-...-...**



Electrical connection

- S Plug connection
- P Cable gland
- K11-Ex Junction box
- PVC PVC cable, requires cable gland

Float

- C44 316/316L
- C53 316/316L
- Ti62 Titanium

Mounting elements

- BCCC Flange 316/316L
- Other flanges on request
- TC 2 Tank screw 316/316L

**Dimensions**

- LO Mounting length (LO max. = 3000 mm)
- A Indication length (float displacement)
- C1 Upper deadline
- C2 Lower deadline min. 15 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-Ex-TC2-C53-P-PVC3 (example)**

- LO Mounting length 740 mm
- A Indication length 590mm
- C1 Upper deadline 65mm
- C2 Lower deadline 15 mm
- TC 2 Tank screw 316/316L 2"
- C53 Float H=70 mm
- P cable gland
- PVC3 3 m PVC-cable