

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

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

No 3.1 certificate available

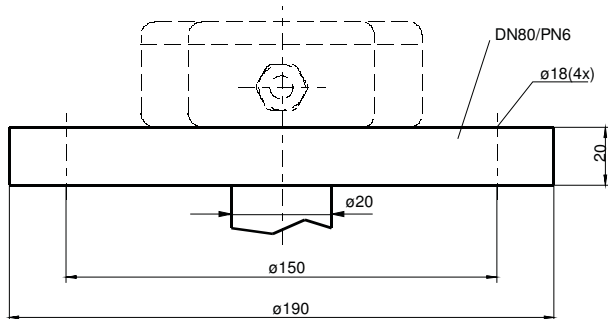
Depending on liquid level or displacement a magnet equipped float actuates some reed switches located in the stem. The transmitter works according to the principle of a voltage divider. Output signals can be a voltage (XM-800E-PVDF) or a current (XT-800E-PVDF) proportional to the float displacement. 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)



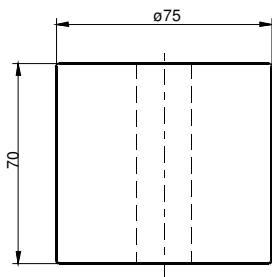
TLI

Mounting



Flange DN80/PN6 EN1092-1
• BF PVDF

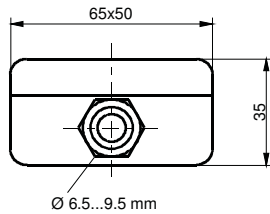
Float



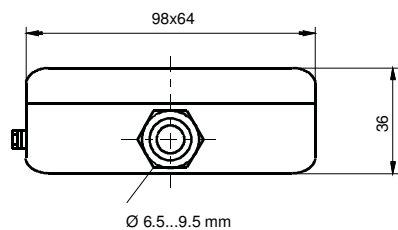
Type	• P75
Material	PVDF
Max. pressure	3bar
Media temperature	-30 °C...100 °C
Minimum density of the liquid	0.77 g/cm ³
Immersion depth at density = 1 g/cm ³	47 +/- 3 mm

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

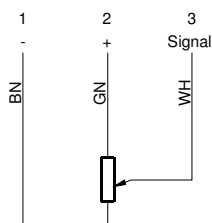
- K6 Junction box (ABS)



- 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

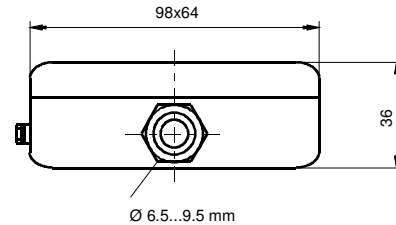
Operation of the transmitter in connection with signal processing units; In this mode of operation voltage supply is provided by the processing units. Operation of the transmitter in connection with other signal processing units: 10...24 V DC, stabilized.

Technical data

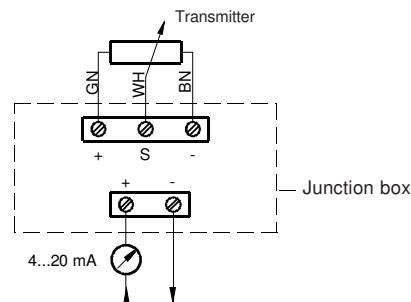
Media temperature	Depending on float
Input signal	10...24 V DC
Internal resistance	700 Ω ...2800 Ω
Enclosure	IP 65

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

- K11 Junction box (ABS)



Electrical diagram XT-800E-PVDF with current signal

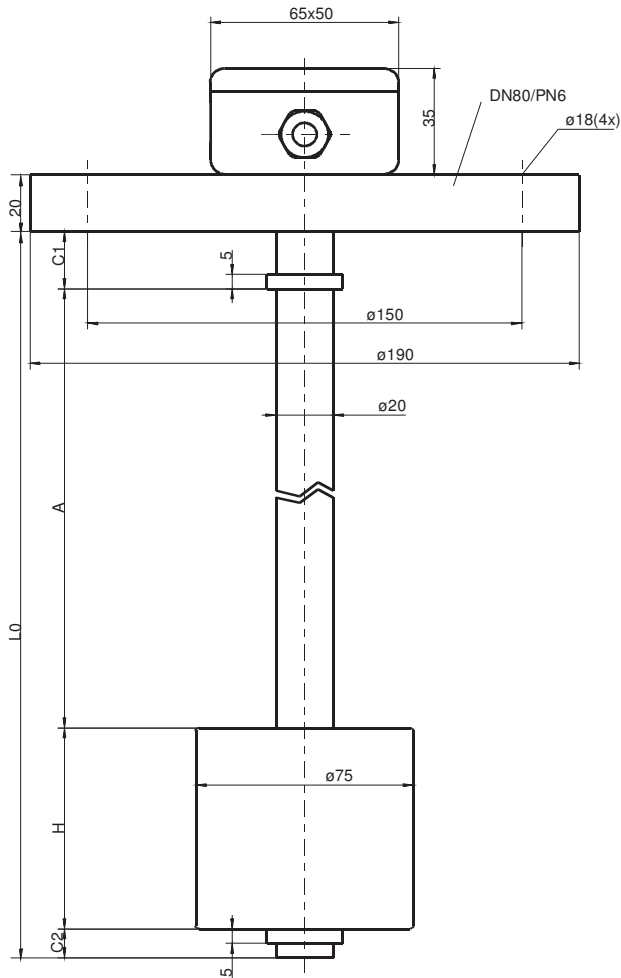


Function

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; current sink) 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.

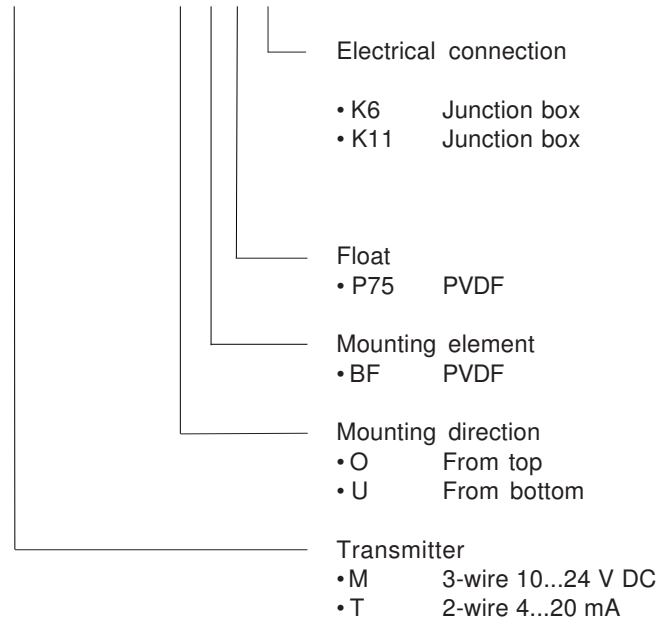
Technical data

Ambient temperature	0 °C...60 °C
Input 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 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 (5mm)

* 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