

# Waterpilot FMX167



More information and current pricing:

[www.ch.endress.com/FMX167](http://www.ch.endress.com/FMX167)

## Benefits:

- Robust overload-resistant high purity ceramic sensor (99.9% Al<sub>2</sub>O<sub>3</sub>)
- Simultaneous measurement of level and temperature with optionally integrated Pt100 temperature sensor
- Extensive range of accessories provides complete measuring point solutions
- 4 to 20mA output signal with integrated overvoltage protection
- Small outer diameter of 22mm (0.87") version suitable for drinking water applications and for use in bore holes and wells with small diameters

## Specs at a glance

- **Accuracy** 0.2%
- **Process temperature** -10°C...70°C (14°F...158°F) Diameter 29mm (1.14"): 0°C...50°C (32°F...122°F)
- **Pressure measuring range** 100mbar...20bar (1.5psi...300psi)
- **Process pressure / max. overpressure limit** 40bar (600psi)
- **Main wetted parts** Diameter 22mm and 42mm: Seal, 316L, Ceramic Diameter 29mm: Seal, PPS, Polyolefin, Ceramic  
Extension cable: PE, PUR, FEP

**Field of application:** The Waterpilot FMX167 4 to 20mA transmitter with capacitive, oil-free ceramic measuring cell is typically used in the process and environmental industries for hydrostatic level measurement. It is certified for drinking water with a robust ceramic sensor and integrated temperature measurement. A robust design for applications in wastewaters and sludges or a metal-free version for usage in salt water is also available.

## Features and specifications

Pressure

Measuring principle

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## Pressure

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### Characteristic

Cable probe for hydrostatic level measurement,  
with ceramic cell  
Diameter = 22mm:  
General applications, Drinking water  
Diameter = 42mm:  
Wastewater applications  
Diameter = 29mm:  
Salt water applications

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### Supply voltage

10...30V DC

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### Reference Accuracy

0.2%

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### Long term stability

0.1% of URL/year

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### Process temperature

-10°C...70°C  
(14°F...158°F)  
Diameter 29mm (1.14"): 0°C...50°C  
(32°F...122°F)

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### Ambient temperature

-10°C...70°C  
(14°F...158°F)  
Diameter 29mm (1.14"):  
0°C...50°C  
(32°F...122°F)

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### Measuring cell

40bar (600psi)

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### Communication

4...20 mA

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**Pressure****Certificates / Approvals**

ATEX, FM, CSA

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**Marine approvals**

GL/ ABS

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**Drinking water approvals**

NSF/ KTW/ ACS

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**Successor**

FMX21 with analog output

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**Continuous / Liquids****Measuring principle**

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**Characteristic / Application**Cable probe for hydrostatic level  
measurement,

with ceramic cell

Diameter = 22mm:

General applications, Drinking water

Diameter = 42mm:

Wastewater applications

Diameter = 29mm:

Salt water applications

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**Specialities**

version w/o metal parts in contact to process

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**Supply / Communication**

10...30V DC

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**Accuracy**

0.2%

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**Long term stability**

0.1% of URL/year

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**Continuous / Liquids****Ambient temperature**

-10°C...70°C  
(14°F...158°F)  
Diameter 29mm (1.14"):  
0°C...50°C  
(32°F...122°F)

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**Process temperature**

-10°C...70°C  
(14°F...158°F)  
Diameter 29mm (1.14"): 0°C...50°C  
(32°F...122°F)

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**Process pressure / max. overpressure limit**

40bar (600psi)

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**Pressure measuring range**

100mbar...20bar  
(1.5psi...300psi)

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**Main wetted parts**

Diameter 22mm and 42mm:  
Seal, 316L, Ceramic  
Diameter 29mm:  
Seal, PPS, Polyolefin, Ceramic  
Extension cable: PE, PUR, FEP

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**Process connection**

Suspension clamp  
Cable mounting screws

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**Max. measurement distance**

200m H<sub>2</sub>O  
(656 ft H<sub>2</sub>O)

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**Communication**

4...20 mA

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## Continuous / Liquids

### **Certificates / Approvals**

ATEX, FM, CSA

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### **Marine approval**

GL/ ABS

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### **Drinking water approvals**

KTW/ NSF/ ACS

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### **Options**

Integrated temperature sensor Pt100, 4-wire  
customer specific adjustment  
customer specific cable marking

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### **Successor**

FMX21 with analog output

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### **Application limits**

Measuring cell: ceramics

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