



# pHix<sup>®</sup> Compact

pH and redox transmitter

## **BROCHURE**

EN 4.10 pHix Compact BROCHURE 1309

**mjk**   
a xylem brand

# PHIX<sup>®</sup> FOR WASTE WATER TREATMENT, WATER WORKS AND INDUSTRY



## One sensor - Two functions

The pHix<sup>®</sup> Compact is a new and innovative pH and Redox transmitter designed for easy installation and maintenance with electrode, transmitter, and mounting in one unit.

The unique design of pHix<sup>®</sup> Compact eliminates high impedance electrode connections and special hardware for mounting.

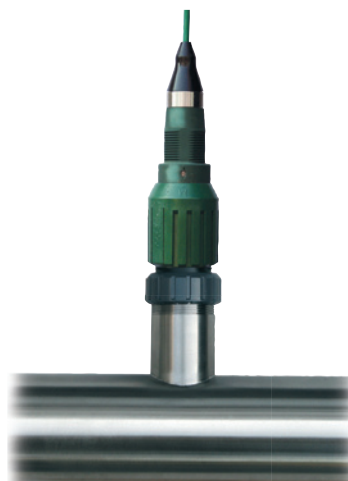
The electrical connection of the pHix<sup>®</sup> Compact is very simple - a loop-powered display and a 12 - 30 V DC supply.

The pHix<sup>®</sup> Compact can be submerged into the liquid for measuring in open channels and tanks. For measuring in pipes the pHix<sup>®</sup> Compact can be mounted in a 2" pipe T.

pHix<sup>®</sup> Compact is IP68 class enclosure and withstands a static pressure of 1 bar/10 mWG.

pHix<sup>®</sup> Compact is available with 4-20 mA output for pH / Redox or with 2 galvanically separated 4-20 mA outputs for both pH and temperature for direct connection to a PLC or indicator.

All parameters can be set with HART<sup>®</sup> communication via the 4 - 20 mA signal.





#### **pH electrode specifications**

Combined double junction with flat glass membrane.

pH-glass: Low impedance.

Reference junction: Sintered PTFE.

Reference system: Gel, double junction.

Impedance: 50 M $\Omega$  / 25 °C.

Estimated lifetime: 1 - 2 years, depending on process conditions.



#### **Redox electrode specifications**

Combined double junction with platinum electrode.

Reference junction: Sintered PTFE.

Reference system: KCl gel, double junction.

Impedance: 2 K $\Omega$  / 25 °C.

Estimated lifetime: 1 - 2 years, depending on process conditions.

#### **New electrode**

Low impedance and large membrane

Less sensitivity to fouling and longer cleaning intervals.

Better performance in liquids with low ion concentration like desalinated water or surface water.

The low impedance, the large membrane and electrolyte volume have significant importance for longer sensor life.





pHix® Compact can be calibrated in three different ways:

A tilt switch, which is activated by turning the transmitter upside down.

A switch ring, which can set to the three standard buffer values.

HART® commands via the 4-20 mA loop.

## Specifications

Supply	12 - 30 V DC, 2-wire loop supply.
Temperature range	- 20 ... + 80 °C
Material	PPS (Ryton®)
Input impedance, pH	> 2 x 10 <sup>12</sup> Ω
Reference	> 2 x 10 <sup>8</sup> Ω
Measuring range	0 - 14 pH (-1000 ... +1000 mV)
Output	1 or 2 galvanically separated 4 - 20 mA
Communication	HART® Protocol



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