



- 12-degree electrode orientation provides improved performance
- pH electrode solution ground allows inline diagnostics
- Designed to enhance flow and minimize hold-up volume
- Suitable for most Ø 12 x 120 mm pH-electrodes

## 12 Degree

The optek PF12 pH electrode adapter is designed to mount pH electrodes at the optimal angle of 12 degrees. This allows the sensor to use electrolyte-filled glass electrodes and improves the functionality and life span of the pH electrodes. The PF12 electrode adapter is compatible with a broad variety of pH electrodes.

## Solution Ground

The PF12 is equipped with a solution ground (earth) connection mounted to the sensor body. This allows the use of pH electrodes that incorporate differential pH input techniques. Additionally, the solution earth connection provides a highly stable measurement while enabling sensor diagnostics including low glass impedance, out-of sample, and broken electrode/cable warnings.

## Sanitary Design

Mounted in an optek inline sensor body, the design of the PF12 ensures smooth and unrestricted flow of all process fluids. The PF12 meets sterility requirements and is compatible with CIP/SIP while minimizing hold-up volume and hydrostatic shear.



PF12  
pH Electrode Holder



ACF60

PF12

Technical Data	PF12
<b>Material</b>	Stainless steel 1.4435 (SS 316L), dF < 1 %, BN2
<b>Material (wetted)</b>	<ul style="list-style-type: none"> <li>• Stainless Steel 1.4435 (SS 316L), dF &lt; 1 %, BN2 or</li> <li>• Hastelloy 2.4602 Hastelloy C22</li> </ul>
<b>Surface</b>	N5: Ra < 0.4 µm (16 µinch) - electropolished
<b>Solution ground</b>	female SA483 for solution ground plug
<b>Line size</b>	1/8 in. to 6 in. (DN 6 to DN 150), ... others on request
<b>Electrode types</b>	suitable for wide variety of electrodes with dimensions Ø 12 x 120 mm, PG 13.5 thread
<b>Process temperature</b>	-10 °C - 135 °C (14 °F - 275 °F)
<b>Process pressure</b>	0 - 6 bar (0 - 87 psi)

### pH and conductivity measurement combined for low hold-up volume\*

Line Size	Volume	
	cond. only	pH + cond.
0.25 in.	< 41 ml	< 38 ml
0.50 in.	< 44 ml	< 41 ml
0.75 in.	< 52 ml	< 49 ml
1.00 in.	< 64 ml	< 61 ml

\* Example values for hold-up volume of an optek F40 sensor body with process connection according to DIN32676-series C, electrode adapter PF12,0-86 and pH electrode with Ø 12 x 120 mm.

Pressure and temperature ratings specified herein may be subject to limitations - see instruction manual. The appropriate choice of material for all wetted parts is the sole responsibility of the user. Data given are subject to changes without prior notice.