



## Liquid KCl Filled pH-Combined Electrode



measuring  
•  
monitoring  
•  
analysing

### EXPERT-LINE



- Measuring range  
pH 1 to 12
- Temperature range  
-15 to +80 °C
- KCl liquid electrolyte fill  
allowing service as well  
with low conductivities  
 $\geq 1 \mu\text{S/cm}$
- Ceramic diaphragm
- Option:  
integrated  
temperature sensor



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**Model:**  
APS-X2Q



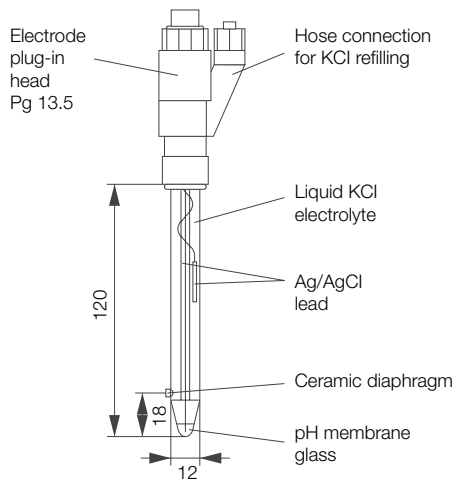
**Description**

The electrode filled with liquid KCl is used in media with very low conductivities ( $\geq 1 \mu\text{S}/\text{cm}$ ), for example in high-purity water analysis or boiler feed water analysis. It is used as well in applications where the high concentration of organic solvents or alcohols which do not allow the use of a maintenance-free KCl gel filled electrode.

The electrode can be used up to a maximum pressure of 8 bar with back-pressure loading. A built-in temperature sensor Pt 100 is available as an option.

The length of the electrode is 120 mm. The connection head is a conduit thread 13.5 screwing.

Connection cable model APK-X is required when using the electrode.



**Technical Data**

- Material: process-compatible glass
- Diaphragm: ceramic
- pH-value: 1...12
- Temperature range: -15...+80 °C
- Length of shaft: 120 mm
- Diameter: 12 mm
- Threaded plug head: conduit thread 13.5
- Minimum conductivity:  $\geq 1 \mu\text{S}/\text{cm}$  at 1 diaphragm
- KCl consumption ( $\Delta p=0,1 \text{ bar}, t=25^\circ\text{C}$ ): max. 3 mL/day

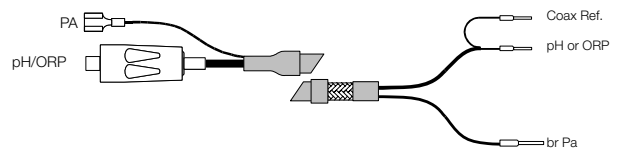
**Connection cable and connector socket for pH electrodes model APS-X2Q**

- Measuring cable with outer screen and coaxial conductor
- Cable sheath: PVC
- Cable diameter: 7 mm, 5 mm (APK-X5S)
- Thermostability: -25...+85 °C  
-10...+80 °C (APK-X5S)
- Length: 5 metre, 10 metre

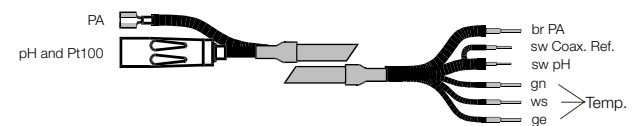
**Standard coaxial cable APK-X5S, -X1S**



**Standard coaxial cable with PA\* APK-X5P, -X1P**



**Coaxial cable for electrodes with Pt 100 APK-X5T, -X1T**



**Order Details Cable Connection**

Model	Cable length	Cable type
APK-X	1 = 10 m	S = standard coaxial cable for ORP P = standard coaxial cable with Pa*
	5 = 5 m	T = coaxial cable for electrodes with Pt 100 sensor

\*when using a fitting with an equipotential bonding pin (PA), in order to discharge any disturbance potentials and to ensure higher EMV.

**Order Details Combined Electrode (Example: APS-X 2 Q 2 K 1 A)**

Model	Diaphragm	Material	Measuring range	Temperature sensor	Electrical connection	Shaft length
APS-X	2 = ceramic diaphragm, liquid KCl filled	Q = glass	2 = pH 1 - 12; T = -15...80 °C	K = without temperature sensor T = with integrated Pt 100 sensor	1 = threaded plug head Pg 13.5	A = 120 mm