

Gel Filled ORP Combined Electrode



EXPERT-LINE



- Dirt-repelling, can be sterilised PTFE ring diaphragm
- Platinum ring or gold pin
- Temperature range -15 to +130°C
- Rated pressure up to 6 bar
- Solid electrolyte (KCl gel fill)
- Built-in salt bridge, (protection against electrode poisons S²-, CN⁻)
- Long discharge plate, giving considerably longer service life





Description

The standard electrode for determining ORP is suited for almost all applications in the area of process water analysis and water treatment. It is used with the pH and ORP transmitter APM-X. The dirt-repelling ring diaphragm made of PTFE allows the electrode to be used as well under difficult conditions, for example in very dirty or oily media.

To extend the service life the combined electrode

120

Electrode

Pg 13.5

plug-in head

EPDM O-ring

(KCI-Gel)

Aa/AaCl

lead

PTFE

diaphragm

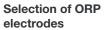
Platinum ring

or gold pin

Solid electrolyte

is filled with KCl gel and contains a long discharge plate. It is thus very easy to operate and requires little or no maintenance. The built-in salt bridge offers improved protection against electrode poisons such as S2-or CN-.

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



The selection of the correct ORP electrode depends on the type of measured medi-

um. The following basic rules should be followed:

- Gold electrode for oxidizing media, for example cyanide oxidation, nitrite oxidation, ozone measurement and hydrogen-peroxide measurement
- Platinum electrode for reducing media, for example chromate reduction, chlorine dosing in swimming pools.

Connection cable model ARK-X is necessary to connect the electrode.

Technical Data

Material: process-compatible glass

Diaphragm: PTFE

Temperature range: -15...+130°C

Pressure range: ≤ 6 bar
Length: 120 mm
Diameter: 12 mm

Threaded plug head: conduit thread 13.5

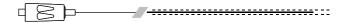
Connection cable for ORP-electrodes

- Measuring cable with outer screen and coaxial conductor
- Cable sheath: PVC
- Thermostability: -25...+85°C (APK-X5P)

-10...+80°C (APK-X5S)

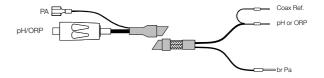
Length: 5 metre, 10 metreColour: grey or black

Standard Coaxial cable APK-X5S



APK-X5P:

Cable with better EM compatibility for electrodes used with a fitting with an equipotential bonding pin (for discharging disturbance potentials).



Order Details Combined Electrode (Example: ARS-X 1 G 1 G 2)

Model	Diaphragm	Electrodes material	Electrical connection	Version	Shaft length
ARS-X	1 = PTFE	G=glass	1 = threaded plug head conduit thread Pg 13.5	G = Gold pin P = Platinum ring	2 = 120 mm

Order Details Connection cable

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

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