

# Epoxy Body Combination ISE Electrodes



## ELECTRODE SPECIFICATIONS

<b>Dimensions:</b>	6.50" (165 mm) H x 0.476" (12 mm) OD
<b>Wetted Materials:</b>	ISE pellet (F <sup>-</sup> , Cl <sup>-</sup> ) ISE membrane (NH <sub>4</sub> <sup>+</sup> , NO <sub>3</sub> <sup>-</sup> , K <sup>+</sup> ) Body: Epoxy Junction: Silicone/Pellon
<b>Temperature Range:</b>	0-60°C (F <sup>-</sup> , Cl <sup>-</sup> only) 0-40°C (NH <sub>4</sub> <sup>+</sup> , NO <sub>3</sub> <sup>-</sup> , K <sup>+</sup> )
<b>Isopotential Point:</b>	NH <sub>4</sub> <sup>+</sup> = 0 +/-20mV (1ppm) K <sup>+</sup> = 0 +/-20mV F <sup>-</sup> = 240 +/-20mV NO <sub>3</sub> <sup>-</sup> = 200 +/-20mV Cl <sup>-</sup> = 225 +/-20mV (10ppm)
<b>Slope:</b>	56 +/-4mV
<b>pH Range:</b>	Cl <sup>-</sup> : 2-10 pH NH <sub>4</sub> <sup>+</sup> : 4-10 pH NO <sub>3</sub> <sup>-</sup> : 3-11 pH K <sup>+</sup> : 3-11 pH F <sup>-</sup> : 5-7 pH
<b>Concentration Range:</b>	Cl <sup>-</sup> : 5x10 <sup>-5</sup> to 1M NH <sub>4</sub> <sup>+</sup> : 1 x 10 <sup>-6</sup> to 1M NO <sub>3</sub> <sup>-</sup> : 7 x 10 <sup>-6</sup> to 1M K <sup>+</sup> : 1 x 10 <sup>-6</sup> to 1M F <sup>-</sup> : 1 x 10 <sup>-5</sup> to 1M
<b>Response Time:</b>	90% in 1 minute
<b>Interfering ions:</b>	NH <sub>4</sub> <sup>+</sup> = K <sup>+</sup> , Li <sup>+</sup> , Na <sup>+</sup> , Cs <sup>+</sup> K <sup>+</sup> = Cs <sup>+</sup> , NH <sub>4</sub> <sup>+</sup> , H <sup>+</sup> , Li <sup>+</sup> , Na <sup>+</sup> , Ag <sup>+</sup> F <sup>-</sup> = OH <sup>-</sup> , H <sup>+</sup> complexes NO <sub>3</sub> <sup>-</sup> = Cl <sup>-</sup> , NO <sub>2</sub> <sup>-</sup> , Br <sup>-</sup> , CN <sup>-</sup> , ClO <sub>3</sub> <sup>-</sup> , I <sup>-</sup> , ClO <sub>4</sub> <sup>-</sup> Cl <sup>-</sup> = S <sup>-2</sup> , I <sup>-</sup> , Br <sup>-</sup> , CN <sup>-</sup> , OH <sup>-</sup>

### Parts covered by this product data sheet include:

IS200CD-NH4, IS200CD-CL, IS200CD-F, IS200CD-NO3, IS200CD-K,  
IS222CD-NH4, IS222CD-CL, IS222CD-F, IS222CD-NO3, IS222CD-K

### Easy-to-use combination sensors

**ISE types available: Fluoride (F-), Chloride (Cl-), Ammonium (NH4+), Potassium (K+) and Nitrate (NO3-)**

**Fixed cable or quick-disconnect cartridge**

**Rugged epoxy body**

Sensorex offers a combination Ion Selective Electrodes (ISE's) for Fluoride (F-), Chloride (Cl-), Ammonium (NH<sub>4</sub><sup>+</sup>), Potassium (K+) and Nitrate (NO<sub>3</sub><sup>-</sup>) measurement. These convenient combination electrodes use just one electrode to measure ppm of ions.

All Sensorex ISE's are housed in rugged plastic bodies and offer a choice of fixed cable or detachable cable design.

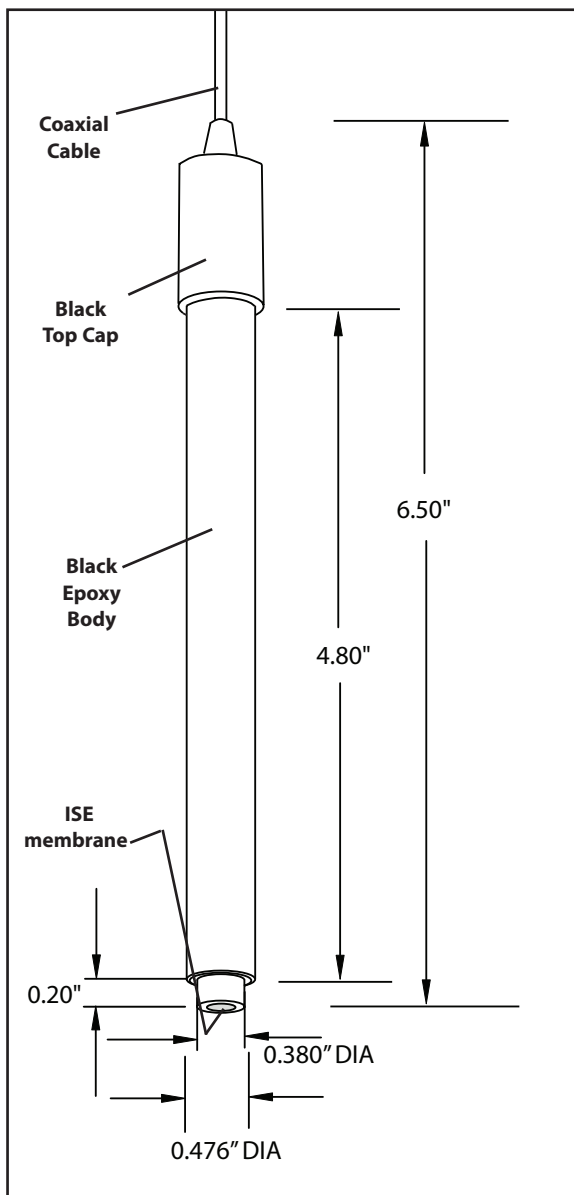
Use these electrodes with your ISE meter, pH meter in mV mode or with any mV input device.

Sensorex ISE's require little to know cleaning and are maintenance free (no reference or ISE refill solution required).

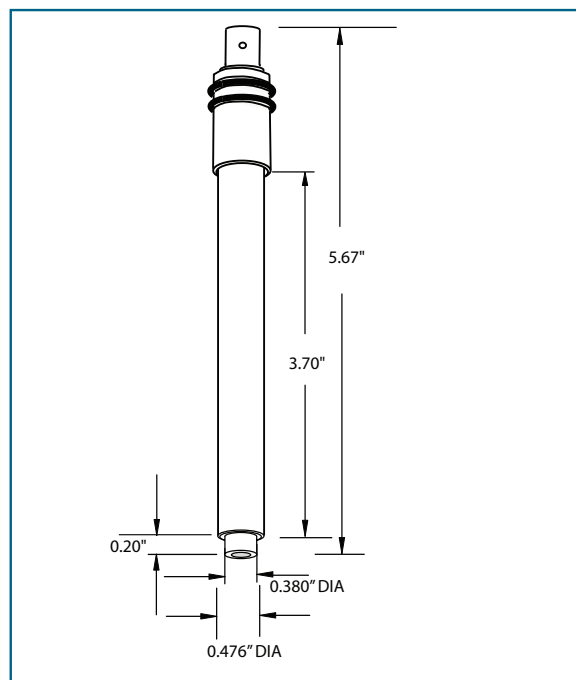
Each electrode is shipped in a bottle with or without a storage solution and are ready for immediate use.

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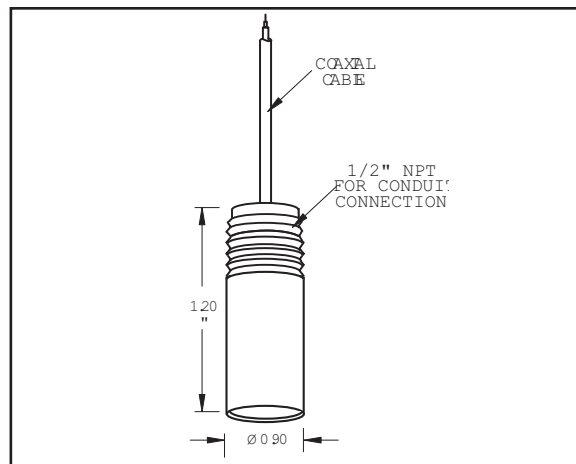
**IS200CD-NH4, IS200CD-CL,  
IS200CD-F, IS200CD-NO3,  
IS200CD-K**



**IS222CD-NH4, IS222CD-CL,  
IS222CD-F, IS222CD-NO3,  
IS222CD-K**



## S653 Cap & Cable Assembly



# Epoxy Body Combination ISE Electrodes

## Ordering Information

Part Number	ISE Type	Description
IS200CD-NH4	Ammonium (NH <sub>4</sub> <sup>+</sup> )	Combination ammonium ISE electrode, 6.5"(165mm) L x 0.48" 12mm OD), 30" (.76m ) fixed cable, black epoxy body
IS200CD-CL	Chloride (Cl <sup>-</sup> )	Combination chloride ISE electrode, 6.5"(165mm) L x 0.48" 12mm OD), 30" (.76m ) fixed cable, black epoxy body
IS200CD-F	Fluoride (F <sup>-</sup> )	Combination fluoride ISE electrode, 6.5"(165mm) L x 0.48" 12mm OD), 30" (.76m ) fixed cable, black epoxy body
IS200CD-NO3	Nitrate (NO <sub>3</sub> <sup>-</sup> )	Combination nitrate ISE electrode, 6.5"(165mm) L x 0.48" 12mm OD), 30" (.76m ) fixed cable, black epoxy body
IS200CD-K	Potassium (K <sup>+</sup> )	Combination potassium ISE electrode, 6.5"(165mm) L x 0.48" 12mm OD), 30" (.76m ) fixed cable, black epoxy body
IS222CD-NH4	Ammonium (NH <sub>4</sub> <sup>+</sup> )	Combination ammonium ISE electrode cartridge 5.7"(145mm) L x 0.48" 12mm OD), 30" (.76m ), black epoxy body. Requires cable assembly S653.
IS222CD-CL	Chloride (Cl <sup>-</sup> )	Combination chloride ISE electrode cartridge 5.7"(145mm) L x 0.48" 12mm OD), 30" (.76m ), black epoxy body. Requires cable assembly S653.
IS222CD-F	Fluoride (F <sup>-</sup> )	Combination fluoride ISE electrode cartridge 5.7"(145mm) L x 0.48" 12mm OD), 30" (.76m ), black epoxy body. Requires cable assembly S653.
IS222CD-NO3	Nitrate (NO <sub>3</sub> <sup>-</sup> )	Combination nitrate ISE electrode cartridge 5.7"(145mm) L x 0.48" 12mm OD), 30" (.76m ), black epoxy body. Requires cable assembly S653.
IS222CD-K	Potassium (K <sup>+</sup> )	Combination potassium ISE electrode cartridge 5.7"(145mm) L x 0.48" 12mm OD), 30" (.76m ), black epoxy body. Requires cable assembly S653.