



### Flat-surface, Self-cleaning pH and ORP Electrodes

Insertion/wet-tap pH and ORP electrodes, assemblies and cables



Quick Disconnect Design Saves Time and Money

Installs in Seconds, No Tools Needed

Flat Surface Design Resists Coating

CPVC or PVDF Construction

Available with or without ATC Elements

The insertion assembly allows pH measurements to be made in pressurized tanks and main lines without the need for system shutdown for electrode maintenance. The assembly's adjustable insertion depth allows it to be placed in a turbulent flow region so that it can operate in the self-cleaning mode.

In abrasive applications, the electrode is best positioned even with the pipe or tank wall. High suspended solids and viscous liquid pH measurements are simple with the insertion assembly and electrode pair. A specially designed internal allows the electrode to be mounted in any direction, including inverted. A 1" full-port ball-valve is recommended for installation.

#### Specifications

Range : 0-14pH (0-12 pH without Na+ error)  
+/- 2000mV for ORP

Body material : CPVC or PVDF

Junction material : HDPE for CPVC and PVDF for PVDF

Min Temperature : 10C/50F

Max Temperature : 75C/170F = 100 psig  
81C/180F = 85 psig  
100C/212F = 50 psig

Pressure : 0-100 psig (7.5 Bar)-see max temp

Reference Type : Double Junction

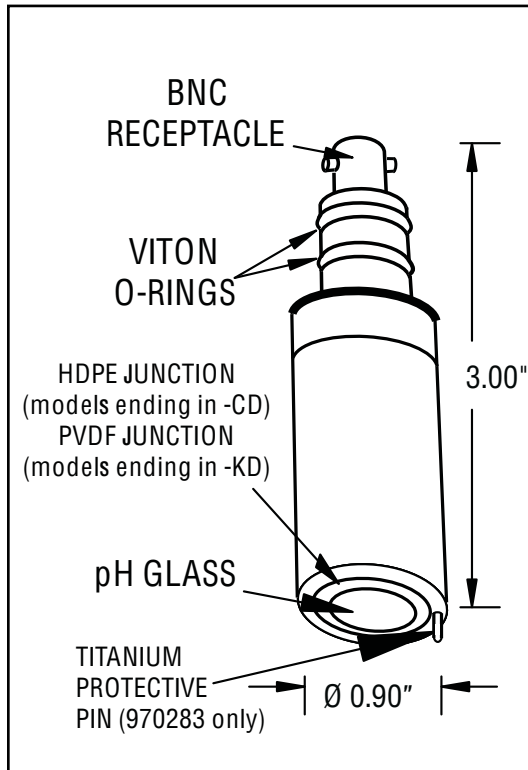
Installation : Insertion, any direction

Parts covered by this product data sheet include:  
S675, S676, S677, S675TC, S676TC, S677TC, S655CD, S655CD-HT, S655CD-ORP,  
S655CD-ORP-HT, S655KD, S655KD-HT, S655KD-ORP, 970283

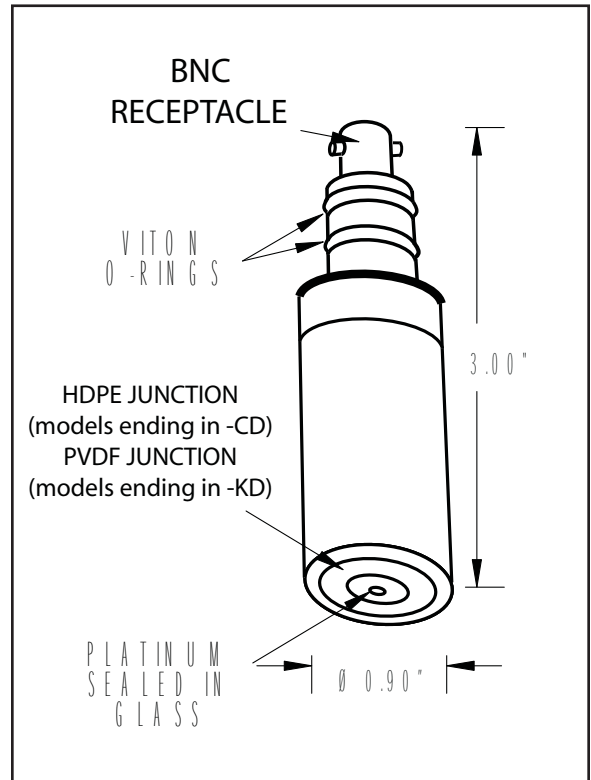


## CPVC and KYNAR ELECTRODES

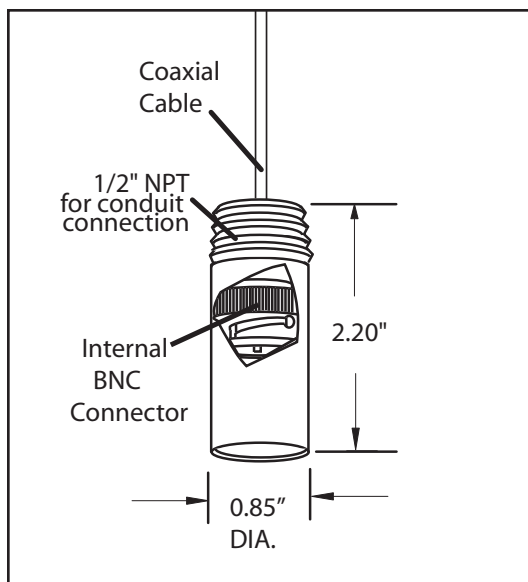
pH - S655CD, S655CD-HT,  
S655KD, S655KD-HT



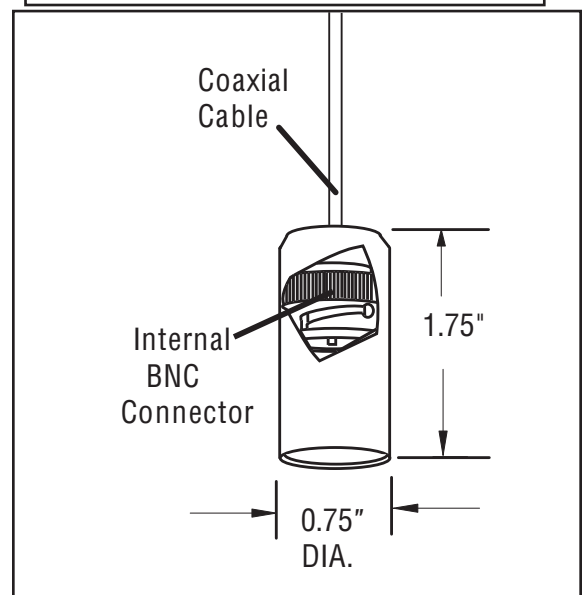
ORP-S655CD-ORP, S655CD-ORP-HT,  
S655KD-ORP, S655KD-ORP-HT

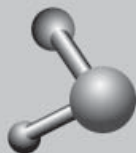


CPVC and KYNAR CABLES  
WITH CONDUIT CONNECTION  
(NO ATC) - S653, S653K

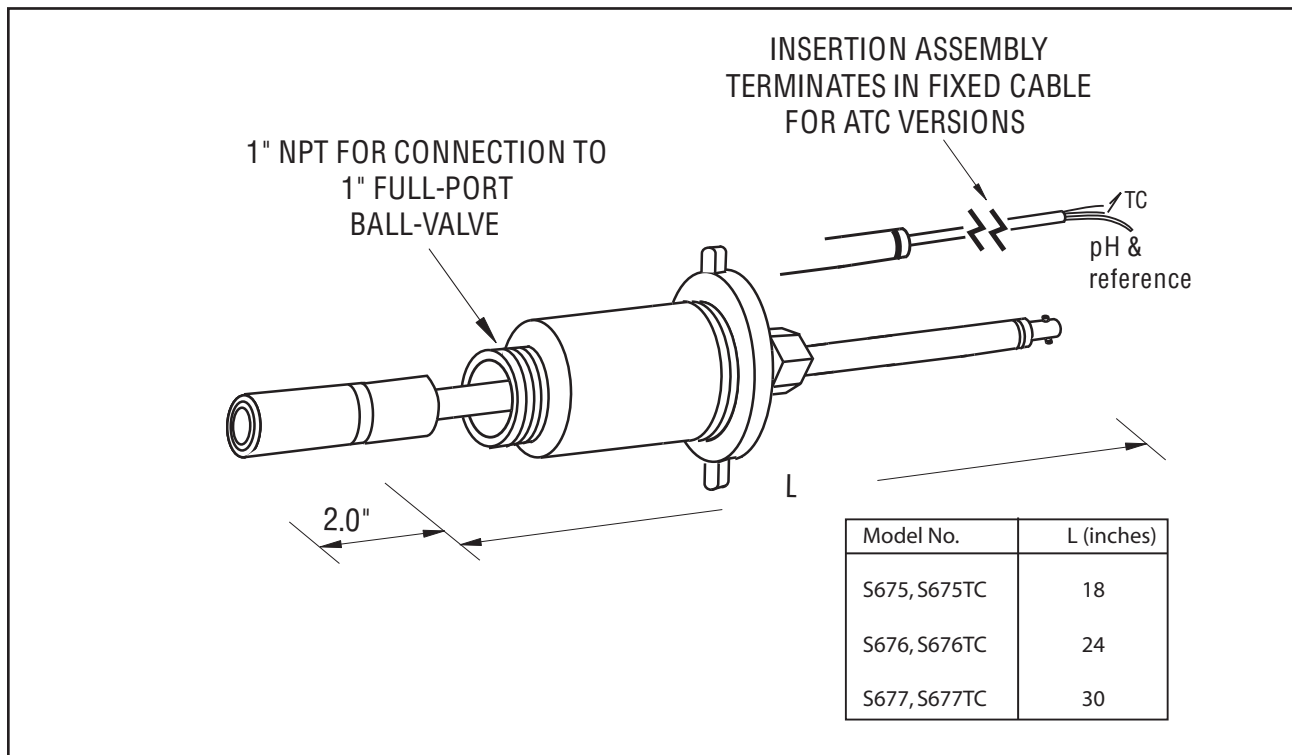


CPVC and KYNAR CABLES EXPOSED  
CABLE CONNECTION  
(NO ATC) - S648, S648K

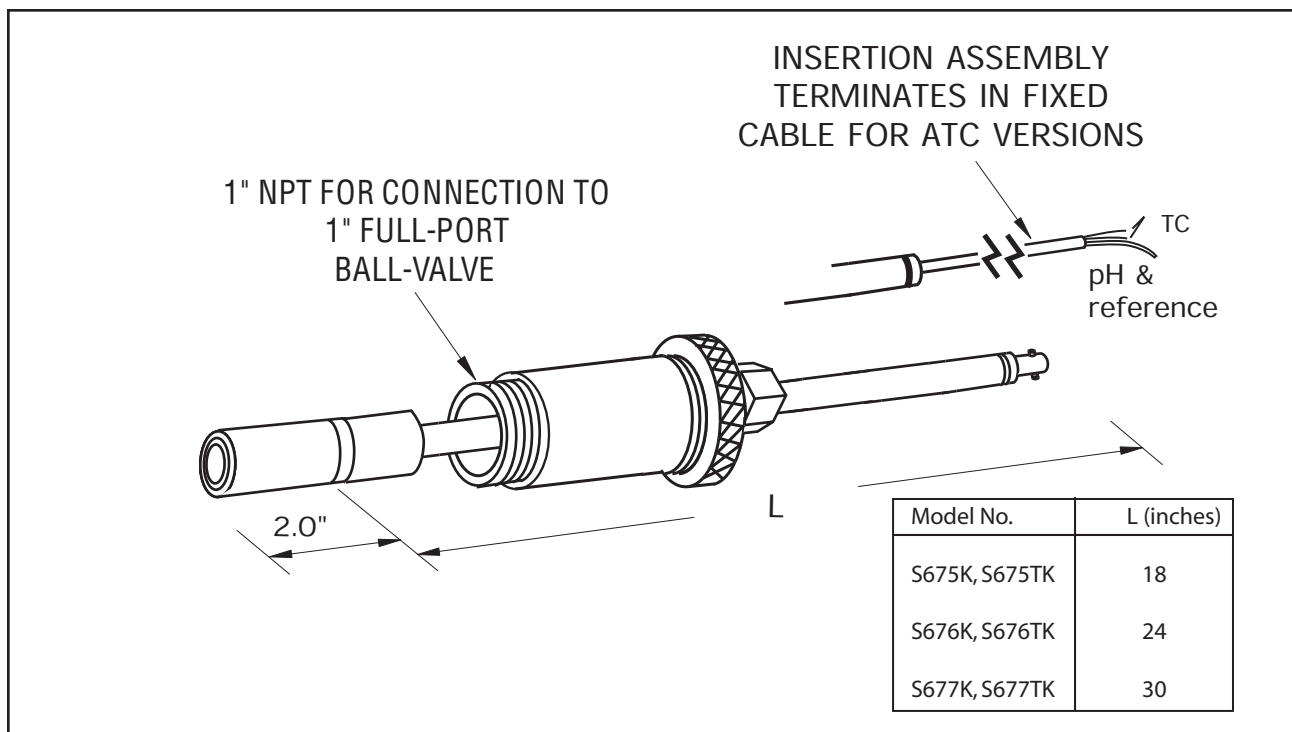




### CPVC pH and ORP Insertion Assemblies ( With and Without ATC) -S675, S675TC



### PVDF pH and ORP Insertion Assemblies ( With and Without ATC)-S675K, S675TK



# PRODUCT SPECIFICATION SHEET

## ORDERING INFORMATION

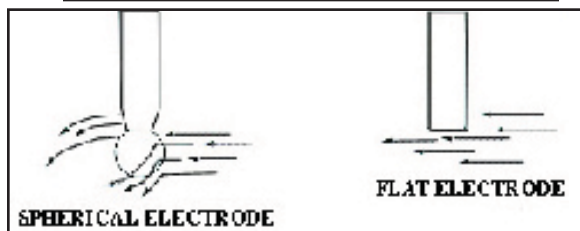
### Systems without temperature compensation

ORDER 3 ITEMS	DESCRIPTION	CPVC PARTS	KYNAR (PVDF) PARTS
1. Select one insertion assembly	Insertion assembly 12" depth Insertion assembly 18" depth Insertion assembly 24" depth	S675 S676 S677	S675K N/A N/A
2. Select one electrode (pH or ORP)	pH combination electrode pH combination electrode(high temp) ORP combination electrode ORP combination electrode(high temp)	S655CD S665CD-HT S655CD-ORP N/A	S655KD S655KD-HT S655KD-ORP
3. Select one cable assembly	For conduit use for exposed cable use	S653-"cable length"-"Connector" S648-"cable length"-"Connector"	S653K-"cable length"-"Connector" S648K-"cable length"-"Connector"

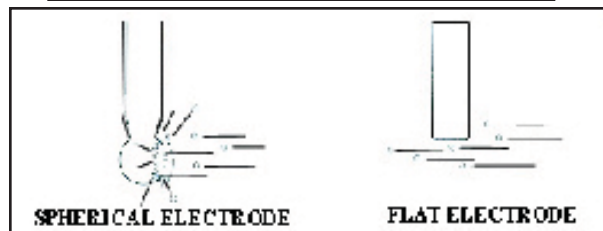
### Systems with temperature compensation

ORDER 2 ITEMS	DESCRIPTION	CPVC PARTS	KYNAR (PVDF) PARTS
1. Select one insertion assembly	Insertion assembly 12" depth  Insertion assembly 18" depth  Insertion assembly 24" depth	S675TC-"TC TYPE"-"CABLE LENGTH"-"PH CONN"/"TC CONN" S676TC-"TC TYPE"-"CABLE LENGTH"-"PH CONN"/"TC CONN" S677TC-"TC TYPE"-"CABLE LENGTH"-"PH CONN"/"TC CONN"	S675TK  N/A  N/A
2. Select one electrode (pH or ORP)	pH combination electrode pH combination electrode(high temp) ORP combination electrode ORP combination electrode(high temp)	S655CD S655CD-HT S655CD-ORP N/A	S655KD S655KD-HT S655KD-ORP N/A

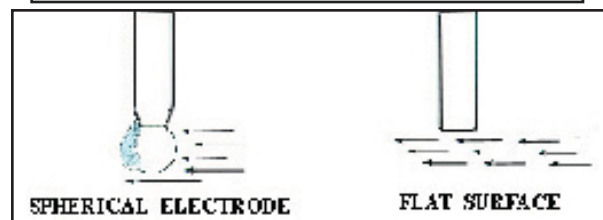
### SELF-CLEANING OPERATION



### ABRASION-FREE OPERATION



### VISCOUS MATERIAL OPERATION



**Sensorex®**

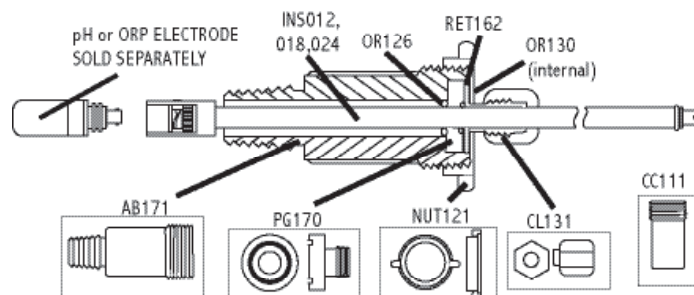
11751 Markon Dr.  
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E-mail: info@sensorex.com  
www.sensorex.com

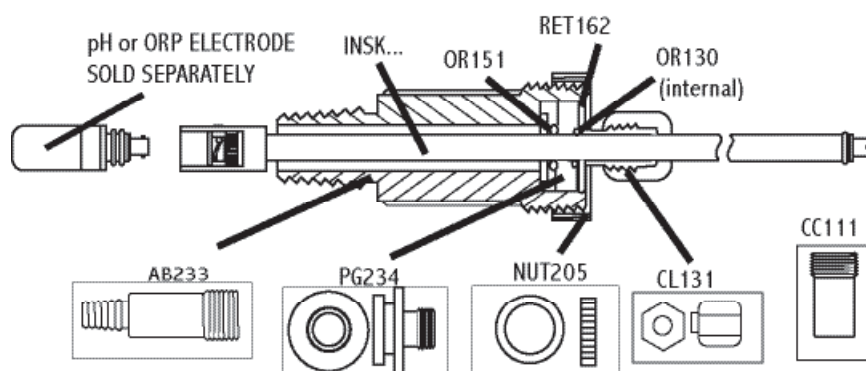


ORDERING INFORMATION - REPLACEMENT PARTS

**S675 INSERTION ASSEMBLY CUT AWAY VIEW  
SHOWING REPLACEMENT PARTS**



**KYNAR INSERTION ASSEMBLY CUT AWAY  
VIEWS SHOWING REPLACEMENT PARTS**



**DESCRIPTION**

Insertion tube 12" depth (18" length)\*  
Insertion tube 18" depth (24" length)\*\*  
Insertion tube 24" depth (30" length)\*\*\*

Insertion tube 12" depth\*, with ATC  
Insertion tube 18" depth\*\*, with ATC  
Insertion tube 24" depth\*\*\*, with ATC

Packing gland sliding seal, o-ring  
Packing gland  
Adapter Body  
Retainer Nut  
O-ring face seal (Large ring on PG170 and PG234)

Compression Nut and Ferrule  
Steel Retainer Ring  
Cable connection (1/2" NPT)

**PVC PARTS**

INS012  
INS018  
INS024

INS012TC  
INS018TC  
INS024TC

OR130  
PG170  
AB171  
NUT121  
OR126

CL131  
RET162  
CC111

**KYNAR (PVDF) PARTS**

INS012K  
INS018K  
INS024K

INS012TK  
INS018TK  
INS024T

OR130  
PG234  
AB233  
NUT205  
OR131

CL131  
RET162  
CC111

Sensing Solutions  
for today  
and beyond