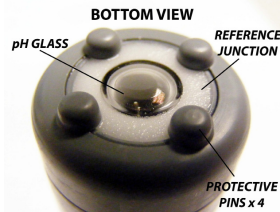
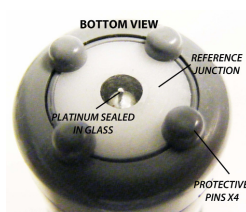


Flat-Surface, Self-Cleaning pH and ORP Electrodes

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



S656CD



S656CD-ORP

Specifications

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

Wetted Materials

Body/Junction: CPVC/HDPE ("-CD" models)
PVDF/ Porous PVDF ("-KD" models)
Measuring Surface: pH glass (pH), Platinum or Gold (ORP)
O-rings: Viton
Gasket: EPR

Temperature/Pressure Range

(all models ending in "-CD") = 0C* - 75C (0-100psig), 80C (0-85psig)
(all models ending in "-KD") = 0C* - 100C (0-100psig)

Note: From 0 to 10C, electrodes will exhibit slower response time.

Reference Type Ag/AgCl, Sealed Double Junction

Installation Any direction

Quick disconnect design saves time and money

Installs in seconds, no tools necessary

Flat-surface design resists coating

CPVC or PVDF construction

Available with or without ATC elements

Protective tip reduces pH glass breakage (S656CD)

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

In abrasive applications, the electrode is best positioned flush with the pipe wall or tank wall. High suspended solids and viscous liquid pH measurements are simple with the insertion assembly and electrode pair. The specially designed internal makes the electrode mountable in virtually any direction, including inverted. A 1" full-port ball-valve (Sensorex BV-1) is recommended for installation.

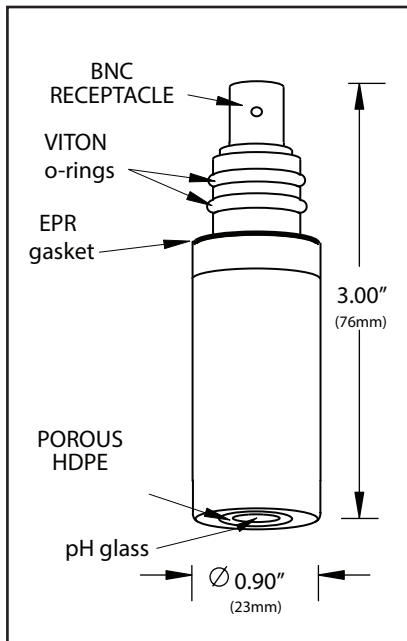
New part number S656CD has four protective pads to reduce pH glass breakage. The S656CD replaces the 970283 which is now obsolete. In addition to the protective pad feature, the S656CD also includes our high performance acrylamide gel that provides longer life in many applications.

Parts covered by this product data sheet include:

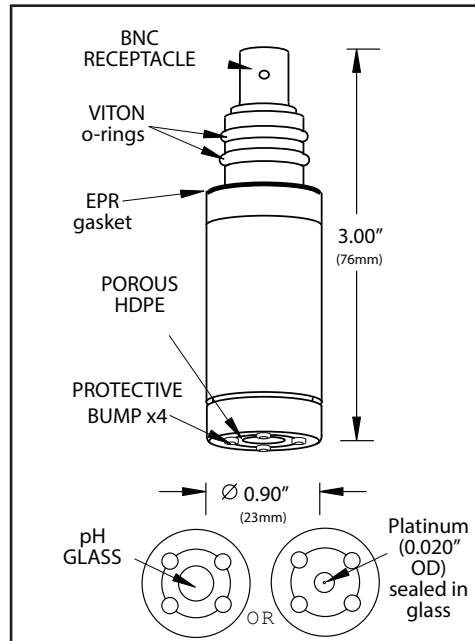
S675, S676, S677, S675TC, S676TC, S677TC, S656CD, S655CD-ORP, S656CD-ORP, S675K, S675TK, S655KD, S656KD, S655KD-HT, S655KD-ORP, S655KD-ORP-HT

CPVC and KYNAR ELECTRODES

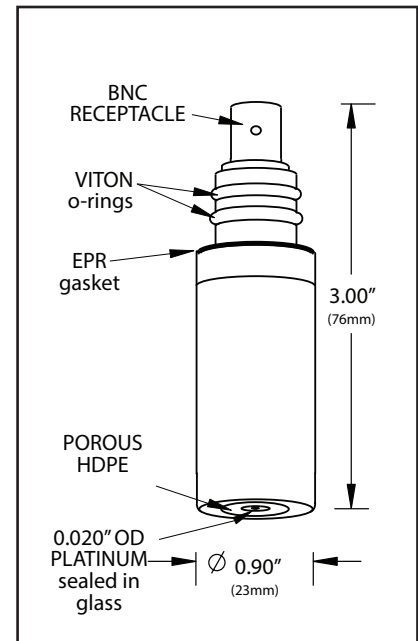
**pH - S655CD, S655CD-HT,
S655KD, S655KD-HT**



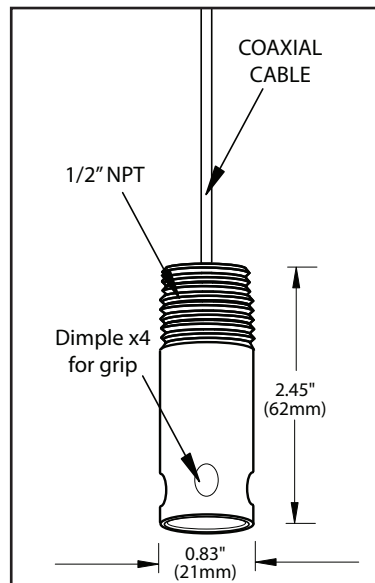
S656CD and S656CD-ORP



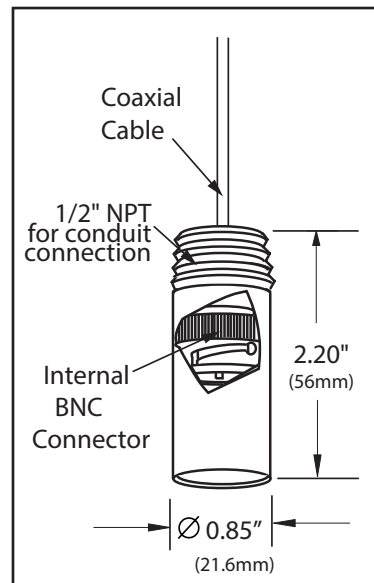
**S655CD-ORP, S655KD-ORP,
S655KD-ORP-HT**



**CPVC CABLES
WITH CONDUIT CONNECTION
(NO ATC) - S653**



**KYNAR CABLES WITH CONDUIT
CONNECTION
(NO ATC) - S653K**



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

1" NPT FOR CONNECTION TO
1" FULL-PORT
BALL-VALVE

2.0"
(50mm)

INSERTION ASSEMBLY
TERMINATES IN FIXED CABLE
FOR ATC VERSIONS

TC
pH &
reference

L

Model No.	Insertion Depth (in.)	L (in)
S675, S675TC	18	24
S676, S676TC	24	30
S677, S677TC	30	36

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

1" NPT FOR CONNECTION TO
1" FULL-PORT
BALL-VALVE

2.0"
(50mm)

INSERTION ASSEMBLY
TERMINATES IN FIXED CABLE
FOR ATC VERSIONS

TC
pH &
reference

L

Model No.	Insertion Depth (in.)	L (in)
S675K, S675TK	18	24

ORDERING INFORMATION

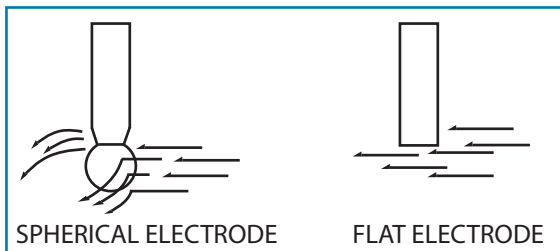
Systems without temperature compensation

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 protective tip pH combination electrode (high temp) ORP combination electrode ORP combination electrode (high temp)	S655CD S656CD S656CD S655CD-ORP S656CD-ORP	S655KD N/A S656KD S655KD-ORP S656KD-ORP
3. Select one cable assembly	For conduit use	S653-"cable length"-"Connector"	S653K-"cable length"-"Connector"

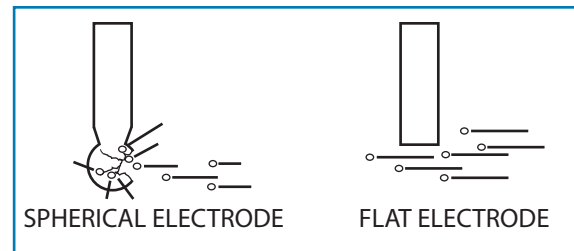
Systems with temperature compensation

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 protective tip pH combination electrode (high temp) ORP combination electrode ORP combination electrode (high temp)	S655CD S656CD S656CD S655CD-ORP S655CD-ORP-HT	S655KD N/A S656KD S655KD-ORP S656KD-ORP

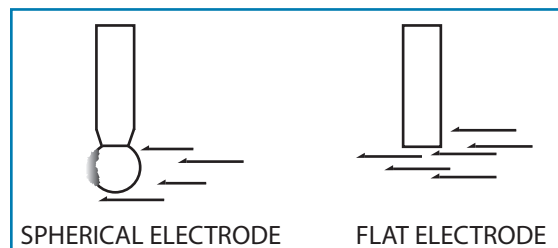
SELF-CLEANING OPERATION

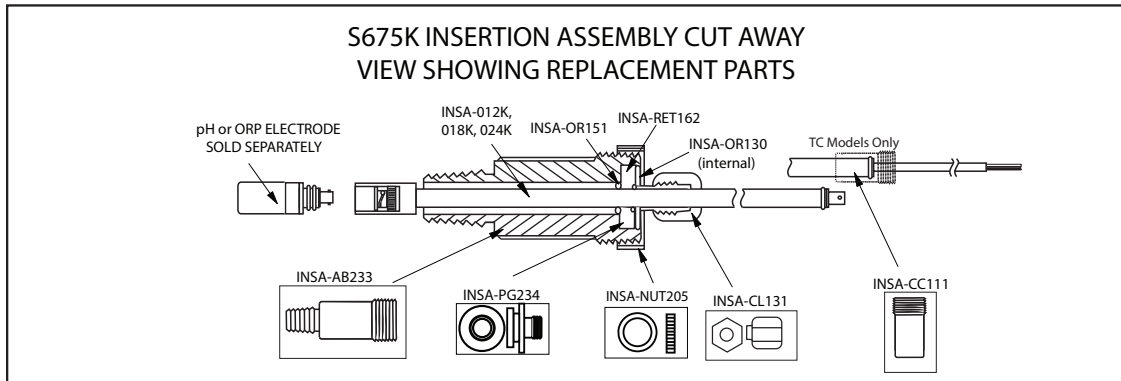
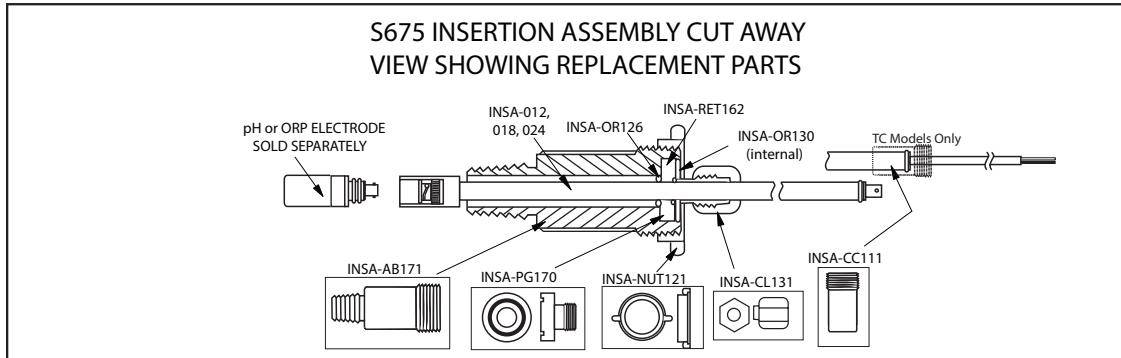


ABRASION-FREE OPERATION



VISCOUS MATERIAL OPERATION



ORDERING INFORMATION - REPLACEMENT PARTS


Description	CPVC Parts	KYNAR (PVDF) Parts
Insertion tube 12" depth (18" length)*	INSA-012	INSA-012K
Insertion tube 18" depth (24" length)**	INSA-018	N/A
Insertion tube 24" depth (30" length)***	INSA-024	IN/A
Insertion tube 12" depth*, with ATC	INSA-012TC	INSA-012TK
Insertion tube 18" depth**, with ATC	INSA-018TC	N/A
Insertion tube 24" depth***, with ATC	INSA-024TC	N/A
Packing gland sliding seal, O-ring	INSA-OR130	INSA-OR130
Packing gland	INSA-PG170	INSA-PG234
Adapter Body	INSA-AB171	INSA-AB233
Retainer Nut	INSA-NUT121	INSA-NUT205
O-ring face seal (Large ring on PG170 and PG234)	INSA-OR126	INSA-OR131
Compression Nut and Ferrule	INSA-CL131	INSA-CL131
Steel Retainer Ring	INSA-RET162	INSA-RET162
Cable connection (1/2" NPT)	INSA-CC111	INSA-CC111