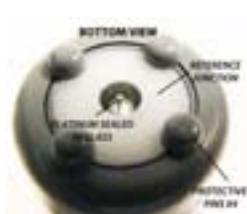


Flat-Surface, Self-Cleaning pH and ORP Electrodes

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)

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

Parts covered by this product data sheet include:

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

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)

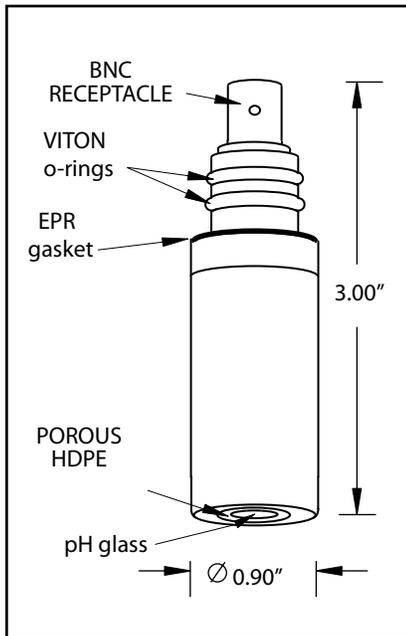
Without the need for system shutdown for electrode maintenance, the insertion assembly allows pH measurements to be made in pressurized tanks and main lines. The assembly's adjustable insertion depth allows it to be placed in a turbulent flow region, enabling it to operate in the self-cleaning mode.

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.

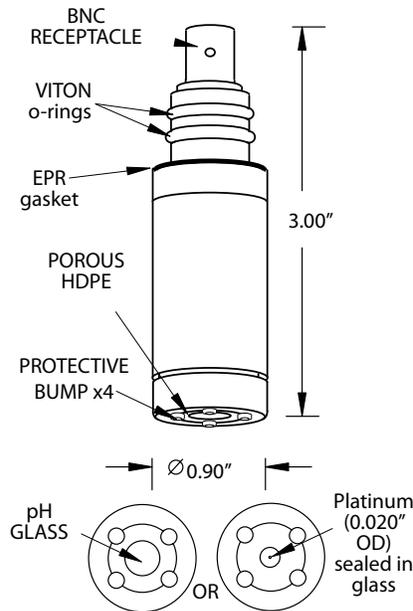
New part number S656CD has four protective pads to reduce pH glass breakage. The S656CD replaces the 970283 which is now obsolete. In addition to the protective pad feature, the S656CD also includes our high performance acrylamide gel that provides longer life in many applications.

CPVC and KYNAR ELECTRODES

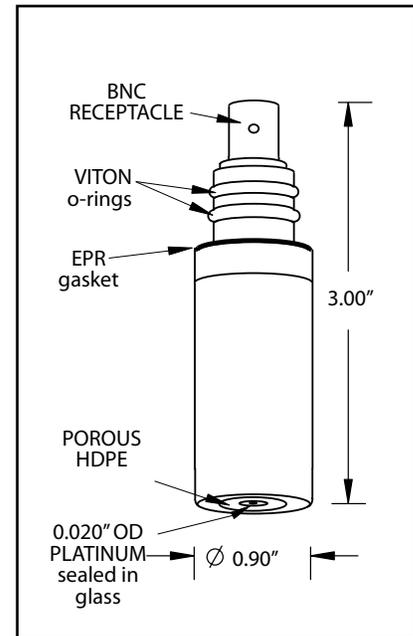
pH - S655CD, S655CD-HT, S655KD, S655KD-HT



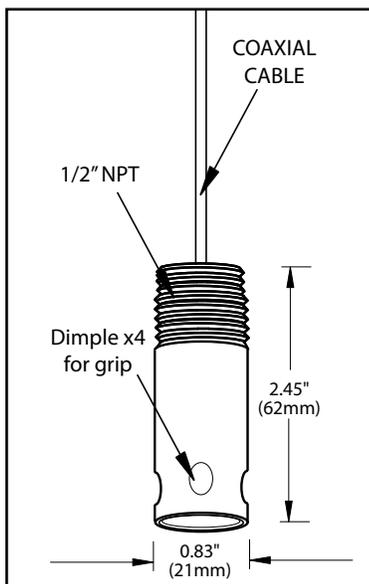
S656CD and S656CD-ORP



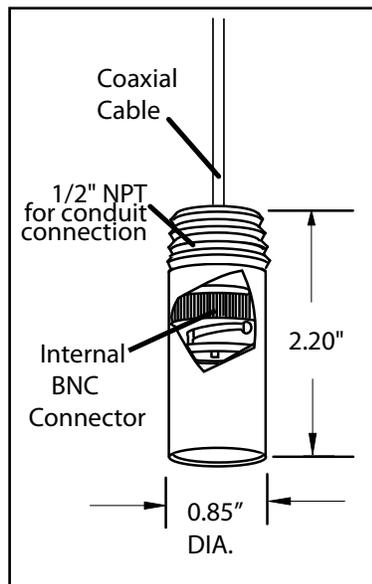
ORP-S655CD-ORP, S655KD-ORP, S655KD-ORP-HT



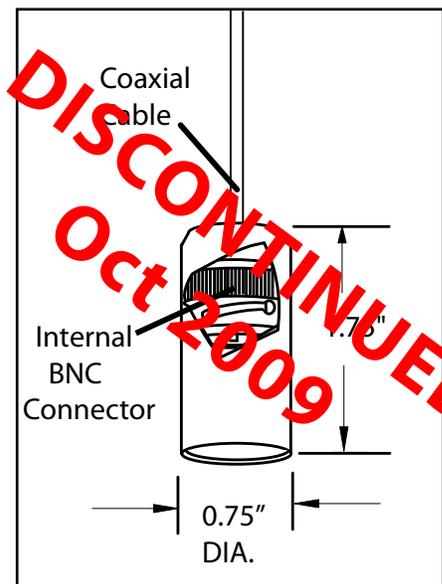
CPVC CABLES WITH CONDUIT CONNECTION (NO ATC) - S653



KYNAR CABLES WITH CONDUIT CONNECTION (NO ATC) - S653K



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



DISCONTINUED
Oct 2009

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

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

2.0"

INSERTION ASSEMBLY
TERMINATES IN FIXED CABLE
FOR ATC VERSIONS

TC
pH &
reference

L

Model No.	L(inches)
S675, S675TC	18
S676, S676TC	24
S677, S677TC	30

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

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

2.0"

INSERTION ASSEMBLY
TERMINATES IN FIXED CABLE
FOR ATC VERSIONS

TC
pH &
reference

L

Model No.	L(inches)
S675K, S675TK	18
S676K, S676TK	24
S677K, S677TK	30

ORDERING INFORMATION

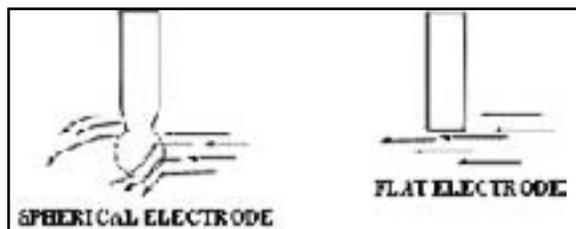
Systems without temperature compensation

ORDER 3 ITEMS	DESCRIPTION	CPVC PARTS	KYNAR (PVDF) PARTS
1. Select one insertion assembly	Insertion assembly 12" depth	S675	S675K
	Insertion assembly 18" depth	S676	N/A
	Insertion assembly 24" depth	S677	N/A
2. Select one electrode (pH or ORP)	pH combination electrode	S655CD	S655KD
	pH combination electrode protective tip	S656CD	N/A
	pH combination electrode (high temp)	S656CD	S655KD-HT
	ORP combination electrode	S655CD-ORP	S655KD-ORP
	ORP combination electrode (high temp)	S655CD-ORP-HT	S655KD-ORP-HT
	3. Select one cable assembly	For conduit use	S653-"cable length"-"Connector"

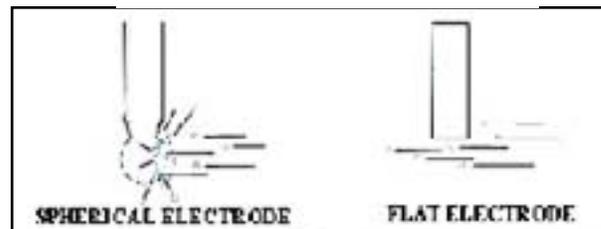
Systems with temperature compensation

ORDER 2 ITEMS	DESCRIPTION	CPVC PARTS	KYNAR (PVDF) PARTS
1. Select one insertion assembly	Insertion assembly 12" depth	S675TC-"TC TYPE"-"CABLE LENGTH"-"PH CONN"/"TC CONN"	S675TK
	Insertion assembly 18" depth	S676TC-"TC TYPE"-"CABLE LENGTH"-"PH CONN"/"TC CONN"	N/A
	Insertion assembly 24" depth	S677TC-"TC TYPE"-"CABLE LENGTH"-"PH CONN"/"TC CONN"	N/A
2. Select one electrode (pH or ORP)	pH combination electrode	S655CD	S655KD
	pH combination electrode protective tip	S656CD	N/A
	pH combination electrode (high temp)	S656CD	S655KD-HT
	ORP combination electrode	S655CD-ORP	S655KD-ORP
	ORP combination electrode (high temp)	S655CD-ORP-HT	S655KD-ORP-HT

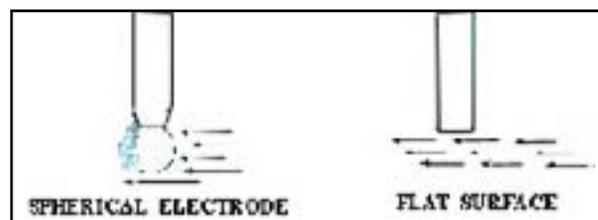
SELF-CLEANING OPERATION



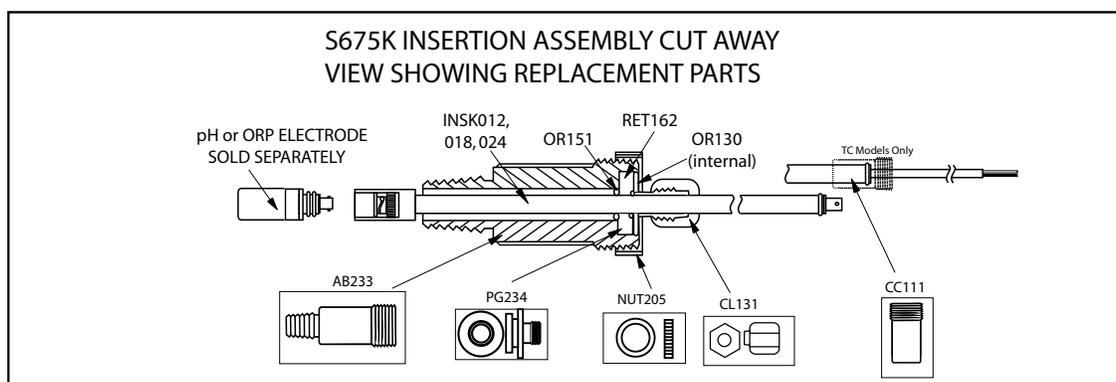
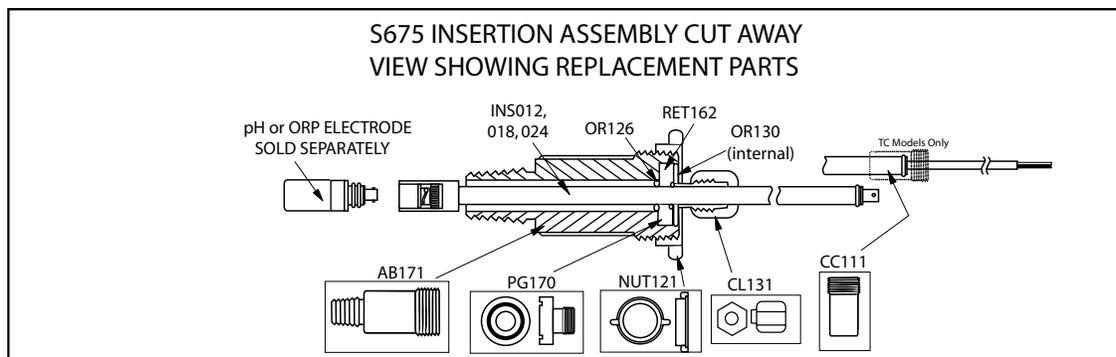
ABRASION-FREE OPERATION



VISCOUS MATERIAL OPERATION



ORDERING INFORMATION - REPLACEMENT PARTS



Description	CPVC Parts	KYNAR (PVDF) Parts
Insertion tube 12" depth (18" length)*	INS012	INS012K
Insertion tube 18" depth (24" length)**	INS018	INS018K
Insertion tube 24" depth (30" length)***	INS024	INS024K
Insertion tube 12" depth*, with ATC	INS012TC	INS012TK
Insertion tube 18" depth**, with ATC	INS018TC	INS018TK
Insertion tube 24" depth***, with ATC	INS024TC	INS024TK
Packing gland sliding seal, O-ring	OR130	OR130
Packing gland	PG170	PG234
Adapter Body	AB171	AB233
Retainer Nut	NUT121	NUT205
O-ring face seal (Large ring on PG170 and PG234)	OR126	OR131
Compression Nut and Ferrule	CL131	CL131
Steel Retainer Ring	RET162	RET162
Cable connection (1/2" NPT)	CC111	CC111