

Ground-Loop Interrupt Flat-Surface Self-Cleaning pH and ORP Electrodes

Solves Ground Loop Problems!



Submersion and In-line Models

Quick disconnect design saves time and money

Installs in seconds! No tools necessary!

Flat surface design resists coating

Sends pH signal over 1000 feet

Mounting hardware available with or without ATC elements

New compact size

The DA series of pH and ORP electrodes are designed to solve operational problems in the presence of stray electrical voltage in solution and electrical ground loops. Installations with plastic tanks and piping are especially susceptible to ground loop problems because of the non-conductive nature of the plastic (cannot serve as earth ground). Dirty motors from pumps or mixers and even conductivity electrodes mounted near pH and ORP electrodes can leak voltage into the solution in which pH and ORP are being measured. This voltage damages the reference part of electrodes, giving erroneous readings in the application and calibration errors, leading to short service life. The DA series electrodes combat ground loop problems by utilizing a solution ground rod that is fed into an internal battery-powered (two year battery life) differential amplifier. An additional benefit of the amplifier is that it allows long cable runs of over 1000 feet.

Specifications

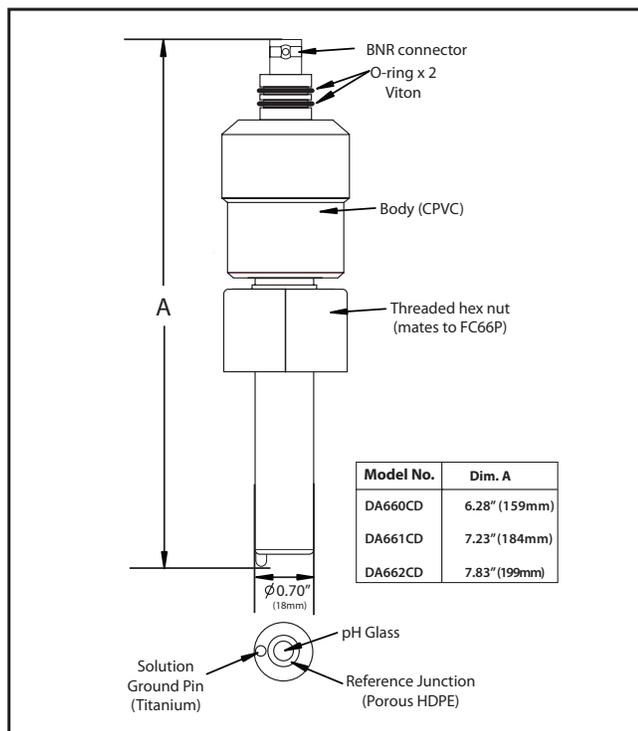
Range	0-14pH (0-12pH without Na+ error) +/- 2000mV for ORP
Wetted Materials	CPVC, porous HDPE, pH Glass, Platinum or gold
Min. Temperature	0 deg C / 32 deg F
Max Temperature/Pressure	70C(158F)/ 100 psig
Reference Type	Double Junction, Ag/AgCl

Parts covered by this product data sheet include:
DA650CD, DA650CD-ORP, DA650CD-HT, DA660CD,
DA660CD-ORP, DA661CD, DA661CD-ORP, DA662CD,
DA662CD-ORP, DA650CD-ORP-HT

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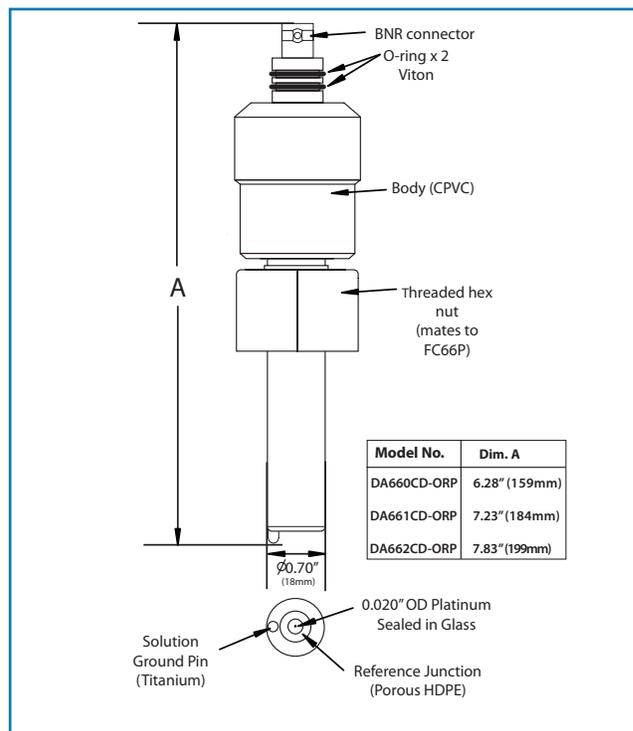
IN-LINE pH MODELS

(DA660CD, DA661CD, DA662CD)



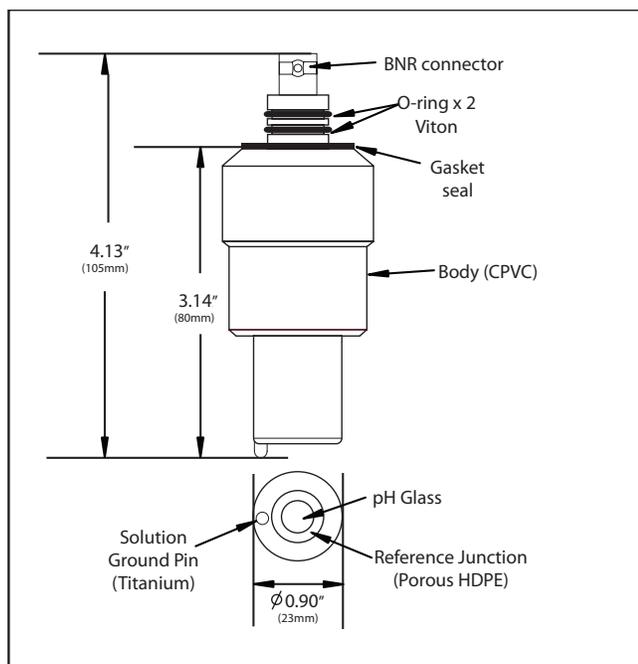
IN-LINE ORP MODELS

(DA660CD-ORP, DA661CD-ORP, DA662CD-ORP)



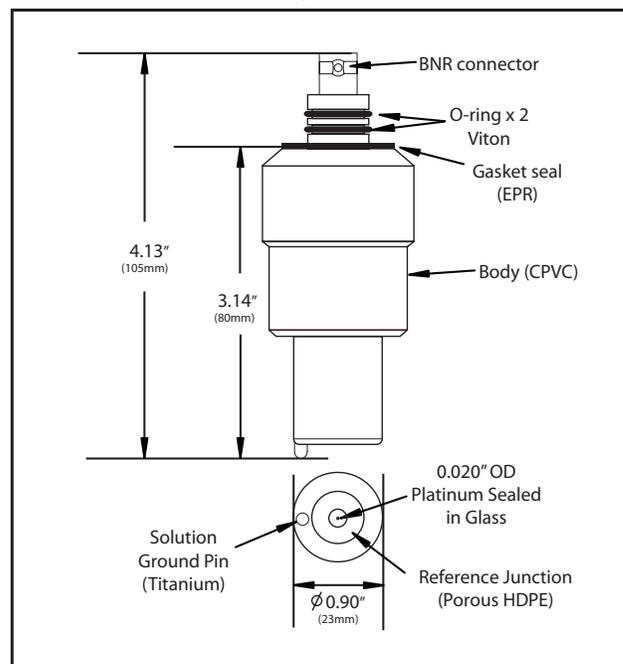
SUBMERSION pH MODELS

DA650CD, DA650CD- HT



SUBMERSION ORP MODELS

DA650CD-ORP, DA650CD-ORP- HT



ORDERING INFORMATION

SUBMERSION SYSTEMS

Systems without temperature compensation

ORDER 2 ITEMS	DESCRIPTION	CPVC PARTS
1. Select one electrode (pH or ORP)	pH combination electrode pH combination electrode (high temp) ORP combination electrode ORP combination electrode (high temp)	DA650CD DA650CD-HT DA650CD-ORP DA650CD-ORP-HT
2. Select one cable assembly	For conduit use	S653- "cable length" - "Connector"

SUBMERSION SYSTEMS

Systems with temperature compensation

ORDER 2 ITEMS	DESCRIPTION	CPVC PARTS
1. Select one electrode (pH or ORP)	pH combination electrode pH combination electrode (high temp)	DA650CD DA650CD-HT
2. Select one cable assembly	For conduit use	S653TC - "TC TYPE" - "cable length" - "Connectors"

IN-LINE SYSTEMS

Systems without temperature compensation

ORDER 3 ITEMS	DESCRIPTION	CPVC PARTS
1. Select one flow cell and gland or gland only	Flow cell and gland Gland only (1" and 2" include reducing bushing)	FC66C(3/4"), FC67C(1"), FC68C(2") FC66P(3/4"), FC67P(1"), FC68P(2")
2. Select one electrode	Combination pH electrode ORP combination electrode	DA660CD (3/4"), DX661CD(1"), DA662CD(2") DA660CD-ORP(3/4"), DA661CD-ORP(1") DA662CD-ORP(2")
3. Select one cable assembly	For conduit use	S653-"cable length"-connector"

IN-LINE SYSTEMS

Systems with temperature compensation

ORDER 3 ITEMS	DESCRIPTION	CPVC PARTS
1. Select one flow cell, gland and cable	Flow cell, gland and cable	FC66TC - "cable length" - "connector" (3/4") FC67TC - "cable length" - "connector" (1") FC68TC - "cable length" - "connector" (2")
2. Select one electrode	Combination pH electrode	DA660CD (3/4"), DA661CD(1"), DA662CD(2")