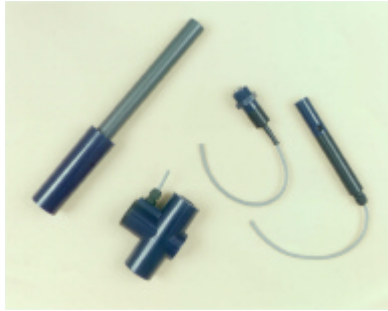


pHOENIX Instrumentation Ltd

SERIES 400 CONDUCTIVITY CELLS



- **Wide range of cell – suited to most applications**
- **Sturdy construction; stable and reliable in hostile environments**
- **Integral temperature compensation as applicable**
- **Simple and easy to use and install**
- **Virtually maintenance free**

Precision made, pHOENIX conductivity cells form the measuring element in electrolytic conductivity monitoring systems. They feature the latest in carbon electrode design encapsulated in a specially developed epoxy resin body. Ideal for almost all applications they have a proven record for reliability, stability and durability, even when operating in hostile industrial environments. Used in conjunction with pHOENIX conductivity instruments they need only the minimum of maintenance, requiring neither calibration nor platinising of electrodes.

Cell Constants

The dimensions and spacing of the electrodes form the basis of measurement. Variations to this configuration will influence the cell measuring characteristics, known as the constant (K). The conductivity measuring range required may be covered by operating with cells of different constant values.

When fitting measuring cells, instrument calibration is achieved by multiplying the conductivity reading by the K factor indicated on the cell.

Thus an instrument calibrated 0-100 μ S with a cell K=1.0 when operated with a measuring cell K=0.1 will cover the range 0-10 μ S.

Cell Types

Flowline – FL/400



Insertion – IN/401/2



Flow – FL403



Dip – D404

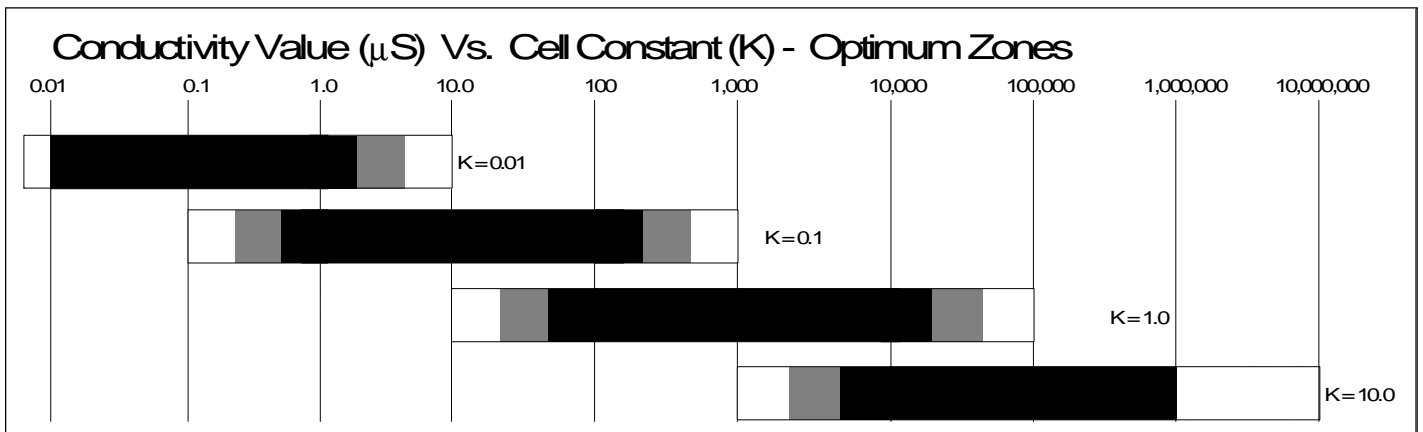


Dip – D405



Temperature Compensation

All pHOENIX conductivity sensors are available with automatic temperature compensation over the range 0-100°C and subject to cell construction can be internal or external component.



Specifications

Model	FL401	IN401	IN402	IN403	D-404	D-405
Design	For pipeline connections 19mm (¾") or 13mm (½") NPT female to order	Insertion length 51mm (2")	Insertion length 120mm (4 ¾")	Insertion length 14mm (9/16")	Extension tube 800mm (31 ½")	Hand held laboratory/field use
Construction	Epoxy resin moulding. Inert carbon electrodes	Stainless steel body and outer electrode. Insulator moulded in epoxy resin. Inner electrode inert carbon	Stainless steel body. Inert carbon electrodes, epoxy resin mouldings	Epoxy resin moulding. Inert carbon electrodes.	Epoxy resin moulding. Inert carbon electrodes	Epoxy resin moulding. Inert carbon electrodes
Cell Constants	K 0.1, 1.0	K 0.01, 0.1	K 1.0	K 1.0	K 0.1, 1.0, 10.0	K 1.0
Max. Operating Pressure	690 N/m ² (100 psig)	690 N/m ² (100 psig)	690 N/m ² (100 psig)	690 N/m ² (100 psig)	-	-
Max. Operating Temperature	100°C (212°F)	100°C (212°F)	100°C (212°F)	100°C (212°F)	80°C (176°C)	80°C (176°C)
Temperature Compensation	Integral thermistor	Separate compensator	Integral or separate compensator	Integral or separate compensator	Separate compensator	Integral compensator
Mounting	2 x 19mm (¾") BSP female threaded connectors	19mm (¾") BSP male. Designed for flange or pipeline 'T' junction fitting.	25mm (1") BSP male (25mm 1" API male to order). Designed for flange or pipeline 'T' junction fitting.	19mm (¾") BSP male (19mm ¾" NPT male to order). Designed for flange or pipeline 'T' junction fitting	Plastic coated adjustable clip or ES10	-
Connecting Cable	A good insulated PVC cable up to 5m	A good insulated PVC cable up to 5m	A good insulated PVC cable up to 5m	Integral 2m length fitted	5m cable fitted	3m cable fitted
Max. Cable Length (Consult pHOENIX)	50m	50m	50m	50m	50m	50m