

DPAS pH and ORP Electrodes with gel electrolyte for hygienic processes.

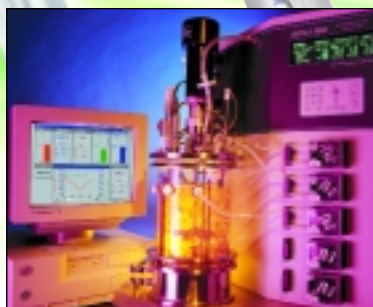


The combination DPAS electrodes are specially designed for in-line measurements in bio-processes including bio-reactors and fermentors. The rugged DPAS electrodes have set the industry standard for fast and precise measurements, even after repeated autoclaving or sterilization cycles at 130°C (266°F).

The DPAS electrodes are filled with gel reference electrolyte under a pressure of 2.5 bar (36 psi) and have additional features that make this electrode easy-to-use, low maintenance, and resistant to contamination. The internal over-pressure ensures a gradual outflow of electrolyte through the diaphragm to prevent the influx of process media into the reference half cell and blockage of the reference junction. In addition, Mettler-Toledo's patented silver-ion trap keeps the diaphragm clear of black silver sulfide precipitation, even when measuring in sulfide-bearing solutions such as amino acids.

Key Features

- Fully autoclavable or in-situ sterilizable for hygienic and CIP / SIP applications
- Gel electrolyte eliminates fill requirements to reduce maintenance
- Patented silver-ion trap prevents sulfide poisoning of the liquid junction, increasing electrode life even in sulfide-bearing media
- Suitable for direct insertion through compression fittings or top or side mounting in a stationary or retractable housing
- New DPAS-VP models feature the IP67 rated, fully autoclavable Vario Pin connector to provide the watertight connection of a fixed cable and the convenience of a detachable cable.
- Engraved serial number on each electrode for easy identification when working under GMP



Fermentors and Bio-reactors

DPAS can withstand repeated sterilizations required in typical biotech applications



Right Angle VarioPin Cable

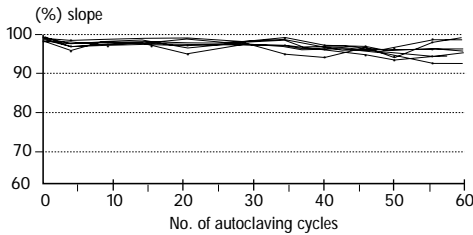
Low cable profile for installation in confined areas, reducing space requirements and eliminating cable fatigue

METTLER TOLEDO

DPAS electrodes: setting the standard in Biotech

Specifications

pH range:	0...12
Pressure range:	from vacuum up to a process pressure of max.36 psi [2.5 bar]
Temperature range:	Steam sterilizable/autoclavable to 266°F [0 to 130°C]
In-situ sterilization:	Up to 100 cycles under standard conditions
Cable connector	K8S or VarioPin
Sensor Thread	Standard Metric Pg 13.5; threaded retainer nut version also available



Autoclaving: The graph illustrates typical slope values during an autoclaving challenge test under standardized conditions.

After 60 autoclavings, the slopes of the tested electrodes were all still above 95%.

Ordering Information

Designation	Order No.	Recommended housings*:	
		Side-mounting	Top-mounting

pH electrodes

DPAS pH electrode with K8S, 120 mm length	104054479IG	InFit 761-25BT/70 InFit 761-25CIP	
DPAS pH electrode with K8S, 200 mm length	104054480IG	InFit 761-25BT/150	InFit 761-19BT /150
DPAS pH electrode with K8S, 225 mm length	104054481IG	InFit 761-25BT/175	InFit 761-19BT /175
DPAS pH electrode with K8S, 325 mm length	104054482IG	InTrac 797 /75	InFit 761-19BT /275
DPAS pH electrode with K8S, 425 mm length	104054483IG		InFit 761-19BT /375
DPAS pH electrode with K8S, 600 mm length	114053126IG	InFit 761-25BT/550	
DPAS pH electrode with VP, 120 mm length	53100022	InFit 761-25BT/70	
DPAS pH electrode with VP, 200 mm length	53100023	InFit 761-25BT/150	InFit 761-19BT /150
DPAS pH electrode with VP, 325 mm length	53100024	InTrac 797/75	InFit 761-19BT /275

ORP (Redox) electrodes

DPAS ORP electrode with K8S, 120 mm length	105053334IG	InFit 761-25BT/70 InFit 761-25CIP	
DPAS ORP electrode with K8S, 200 mm length	105053335IG	InFit 761-25BT/150	InFit 761-19BT /150
DPAS ORP electrode with K8S, 225 mm length	105053336IG	InFit 761-25BT/175	InFit 761-19BT /175
DPAS ORP electrode with K8S, 325 mm length	105053337IG	InTrac 797 /75	InFit 761-19BT /275

pH electrode with VP connector and free-spinning threaded retainer nut, photo at left (fits Broadley-James Corporation housings listed in the table below)

DPAS pH electrode with VP and retainer nut fitting, 130 mm length	53100030	BJ Housings 320, 330, 326,336, 370	BJ Housings 350, 357
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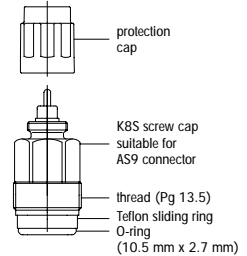
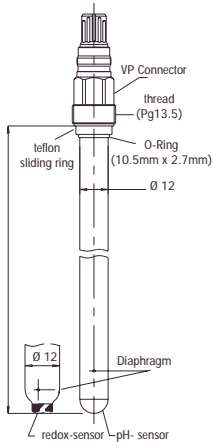
* See housing literature for specifications.

Cable Ordering Information

Cables	Stripped and Tinned Ends	BNC Connector
AK9 Cable for K8S Connector, 1 meter	100000102	100000103IG
AK9 Cable for K8S Connector, 3 meters	100000302	100000303IG
AK9 Cable for K8S Connector, 5 meters	100000502	100000503IG
VP Cable for VP Connector, 1 meter	52300107	53400183
VP Cable for VP Connector, 3 meters	52300108	53400184
VP Cable for VP Connector, 5 meters	52300109	53400185
Low Profile Right Angle VP Cable, 3 meters	53600070	-
Low Profile Right Angle VP Cable, 5 meters	53600072	-

Other terminating connectors and cable lengths available.

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Manufacture, design and service of electrochemical measuring systems following ISO 9001



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