

## DPA/DPAS

### Combine Accuracy and Ease of Use



DPA

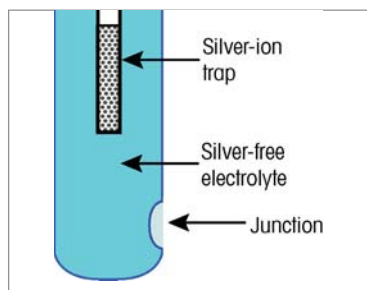
DPAS

The DPA/DPAS are pre-pressurized, gel-filled, low-maintenance pH or redox sensors for in-line measurements of industrial processes. Pre-pressurized reference electrolyte prevents influx of process medium and keeps the reference junction clean. The silver-ion trap prevents reference junction fouling even in solutions containing sulfide. The DPAS delivers fast and precise measurements, even after repeated autoclaving or sterilization cycles at 130 °C (266 °F).

The DPA/DPAS sensors are also available as a platinum redox (ORP) sensor for oxidation-reduction measurements.

#### Specifications

	DPA	DPAS
pH range	0–14 pH	0–12 pH
Temperature	0 to 100 °C (32 to 212 °F)	0 to 130 °C (32 to 266 °F)
Pressure	0 to 2.5 barg (0 to 36 psig)	0 to 2.5 barg (0 to 36 psig)
Plug head	S8 screw cap, Pg 13.5 (for AS9 connector)	K8S screw cap, Pg 13.5 (for AK9 connector)
Reference system	Argenthal with silver-ion trap	Argenthal with silver-ion trap
Type of junction	Ceramic	Ceramic
Reference electrolyte	Pre-pressurized gel	Pre-pressurized gel
Lengths	120 mm, 225 mm, 425 mm	120 mm, 200 mm, 225 mm, 325 mm, 425 mm, 600 mm
Shaft diameter	12 mm	12 mm
Temperature sensor	None	None
Sterilizable	No	Yes
Autoclavable	No	Yes
Glass membrane	High alkali quality glass	pH sensitive quality glass
Certificates	Quality certificate	Quality certificate



Reference electrode  
Argenthal system/silver-ion trap

#### Feature Overview

- Gel electrolyte does not require refilling, reduces maintenance
- Silver-ion trap prevents poisoning by sulfide-bearing substances
- Redox version available
- Option (DPAS only): watertight VarioPin connector (IP68) for easy connection and excellent signal transmission

#### Typical Applications (DPA)

- Industrial processing
- Reaction tanks
- Mixing vessels

#### Typical Applications (DPAS)

- Benchtop fermentors and bio-reactors
- Hygienic processes requiring autoclaving or SIP

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### Ordering Information

DPA Electrodes	Sensor Type	Electrode Connection	Length	Order Number
<b>– pH Electrodes</b>				
HA-405-DPA-SC-S8	HA glass	S8	120 mm	10 405 4476IG
HA-405-DPA-SC-S8	HA glass	S8	225 mm	10 405 4477IG
HA-405-DPA-SC-S8	HA glass	S8	425 mm	10 405 4478IG
<b>– Redox Electrodes</b>				
Pt4805-DPA-SC-S8	Pt	S8	120 mm	10 505 3339IG
Pt4805-DPA-SC-S8	Pt	S8	225 mm	10 505 3338IG
Pt4805-DPA-SC-S8	Pt	S8	425 mm	10 505 3340IG

DPAS Electrodes	Sensor Type	Electrode Connection	Length	Order Number
<b>– pH Electrodes</b>				
405-DPAS-SC-K8S	A41 glass	K8S	120 mm	10 405 4479
405-DPAS-SC-K8S	A41 glass	K8S	200 mm	10 405 4480
405-DPAS-SC-K8S	A41 glass	K8S	225 mm	10 405 4481
405-DPAS-SC-K8S	A41 glass	K8S	250 mm	41 405 4485
405-DPAS-SC-K8S	A41 glass	K8S	325 mm	10 405 4482
405-DPAS-SC-K8S	A41 glass	K8S	425 mm	10 405 4483
405-DPAS-SC-K8S	A41 glass	K8S	600 mm	11 405 3126
<b>– Redox Electrodes</b>				
Pt4805-DPAS-SC-K8S	Pt	K8S	120 mm	10 505 3334
Pt4805-DPAS-SC-K8S	Pt	K8S	200 mm	10 505 3335
Pt4805-DPAS-SC-K8S	Pt	K8S	225 mm	10 505 3336
Pt4805-DPAS-SC-K8S	Pt	K8S	325 mm	10 505 3337

For pH buffers, refer to "pH and Redox Accessories" section.

For cables, cable lengths and for terminating connectors, refer to "Cables" section on pages 152–155.

### Did You Know

The DPA and DPAS sensors have a built-in silver-ion trap which extends sensor life by preventing reference junction fouling by sulfide-bearing substances.

Cable Information for DPAS Electrodes	pg.
VP cable for VP connector	153
High temperature VP cable	153
AK9 cable for K8S connector	153

Suitable Housings	pg.
InFit 761e/762e	126/128
InFlow	132
InDip	134
InTrac 777e	138
InTrac 787/785	144