

# HA405-DPA-SC-S8

## Pressurized gel-electrolyte electrodes for pH/ORP measurements in chemical processes

### Technical Data

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HA405-DPA-SC-S8

#### Short description

Low-maintenance combination electrodes of the DPA Series from METTLER TOLEDO for the continuous measurement of pH/ORP come complete with a factory-filled, pressurized gel-electrolyte reference system. These long-life electrodes have been designed primarily for use in the chemical industry and in the field of water and wastewater treatment, i.e. for the broadest possible spectrum of chemical process applications. A whole range of integral technical features ensures trouble-free, continuous and highly accurate pH measurement with a very short response time:

- Prepressurization of the gel electrolyte provides permanent internal pressure within the electrode, thereby preventing the ingress of process medium into the reference system and, at the same time, ensuring continuous cleaning of the diaphragm through the constant slow outflow of smallest amounts of electrolyte.
- The patented silver-ion barrier integrated in the reference system avoids contamination and clogging of the diaphragm with black silver sulfide during measurement in process media containing sulfur compounds.
- Designed for use in stirred tanks (STR), vessels, open tanks and pipes in the chemical industry under harsh process conditions at up to 2.5 bar overpressure.
- Equipped with VarioPin (VP) connector (IP68) and, similar to the InPro 3250, offer additional benefits such as temperature compensation, Ex certification, and certification following the Pressure Equipment Directive (PED).

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**METTLER TOLEDO**



**Specifications**

Measuring range	pH 0...14
Temperature	0...100 °C
Pressure resistance	from vacuum up to a process pressure of max. 2.5 bar (36 psi)
Reference system	Argenthal (Ag/AgCl)
Reference electrolyte	pressurized gel-electrolyte
Diaphragm	1 ceramic diaphragm
Glass shaft	Ø 12 mm
Plug head	S8, Pg 13.5 thread

**Ordering information**

**Electrodes**

pH-electrodes	Electrode length [a]	Order no.
HA405-DPA-SC-S8/120	120 mm (4.70")	10 405 4476
HA405-DPA-SC-S8/225	225 mm (8.86")	10 405 4477
HA405-DPA-SC-S8/425	425 mm (16.73")	10 405 4478
Redox-electrodes		
Pt4805-DPA-SC-S8/120	120 mm (4.70")	10 505 3339
Pt4805-DPA-SC-S8/225	225 mm (8.86")	10 505 3338
Pt4805-DPA-SC-S8/425	425 mm (16.73")	10 505 3340

**Cables (open ends)**

Type	Length	Order no.
AS9 / 3 m	3 m (9.8 ft)	10 001 0302
AS9 / 5 m	5 m (16.4 ft)	10 001 0502
AS9 / 10 m	10 m (32.8 ft)	10 001 1002

**Buffer solutions**

	Order no. 1 x 250 ml	Order no. 6 x 250 ml	Order no. 1 x 1000 ml
Buffer pH=4.01 (red)	51 340 057	51 340 058	51 340 228
Buffer pH=7.00 (green)	51 340 059	51 340 060	51 340 229
Buffer pH=9.21 (blue)	51 300 193	51 300 194	51 340 230
Redox buffer +220 mV	51 340 065	51 340 081	51 319 021
Redox buffer +468 mV	51 340 666	-	-

**Recommended housings**

Length	
120 mm (4.70")	InFit 761/762, InFlow 751, InDip 550/524
225 mm (8.86")	InTrac 777-SL/70/100, InTrac 777-SPR/100, InDip 502
425 mm (16.73")	InTrac 777-SPR/200, InTrac 777-SL/200

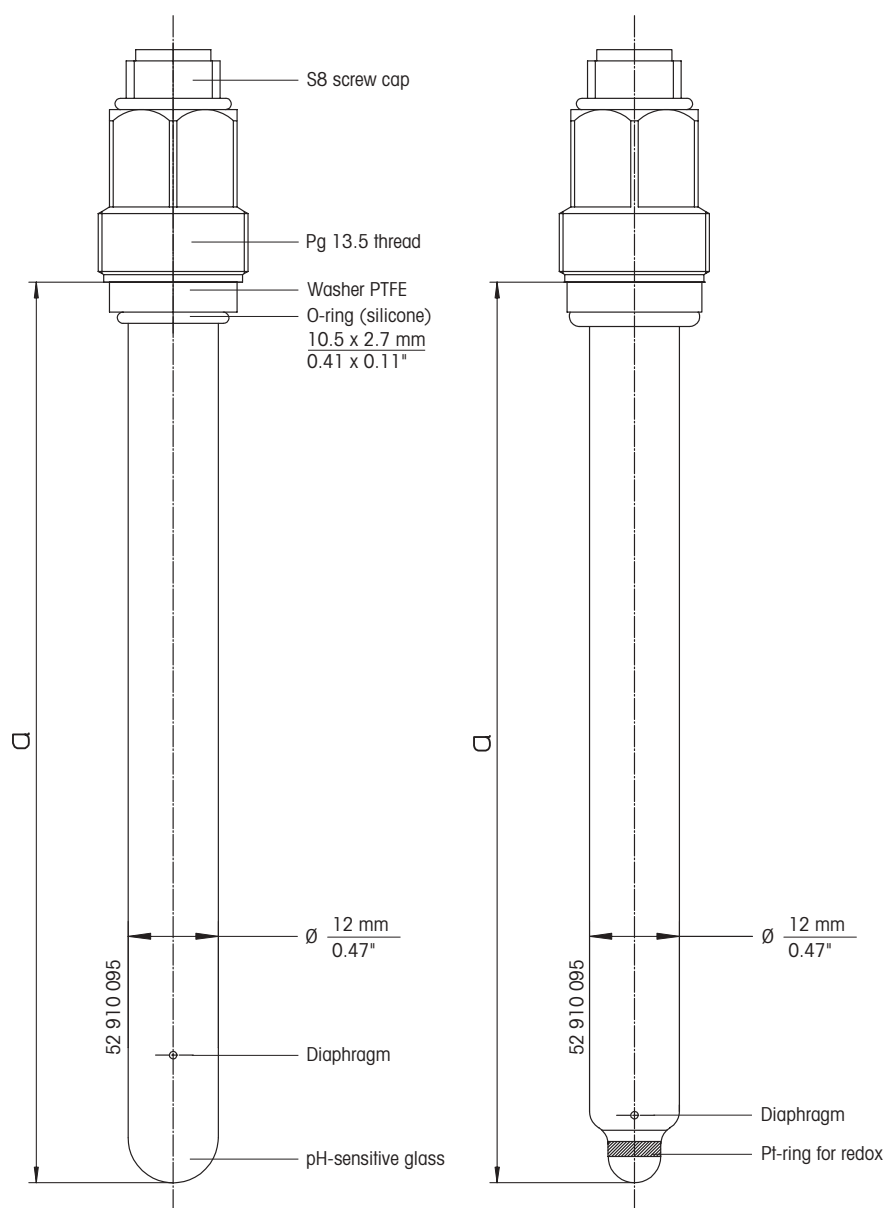
Transmitters

A wide range of transmitters can be offered to complete the METTLER TOLEDO/INGOLD measurement system, including a 4 wire version for universal AC/DC power supply, or alternatively in 2-wire versions, with or without HART® or Profibus® communication, of standard or explosion-proof (EEx) design.

Drawings

HA405-DPA-SC-S8

P14805-DPA-SC-S8



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