



The Ceramat® is an automatic Remote Calibration Probe with ceramic sealing between calibration chamber and process. The usual problems caused by O-ring sealings of conventional retractable probes are omitted. Sealing is achieved by two plane ceramic discs which separate the calibration chamber from the process by their relative movement. The drive unit consists of a compact pneumatic rotating/reciprocating motor with positively-controlled, integrated valves.

Ceramat® WA 150

Remote calibration probe with ceramic sealing to process

The Ceramat® remote calibration probe is particularly suited for application in difficult processes where standard O-ring seals fail:

- Process media with solids or other contaminations
- Sticky or pulpy process media, such as in food industry.

The Ceramat® provides internal rinsing, which makes it suitable for use in sensitive processes with a high safety requirement.

The process-wetted parts even of the basic Ceramat® version are made of ceramic and PEEK and allow application in chemically aggressive media.

The attractive price/performance ratio, the compact design and versatile process adaptation make the Ceramat® suitable for practically any application in chemistry, pharma and food industry.

The facts

- Ceramic seal to the process, insensitive to strong pollutions
- 2 independent barriers with internal rinsing
- Compact design for different process adaptations
- Installation in immersion fittings from DN 120 possible
- Smooth surfaces to prevent pollution
- High-quality materials for process-wetted parts even for the basic version
- In the case of a fault the drive unit can easily be replaced under process conditions (one coupling nut). Also when the electrode is broken, the drive unit can be removed under process conditions to clean the calibration chamber.
- Application of liquid or gel electrolyte electrodes (225 mm length)
- Electrode locking device

Specifications

Adm. process temperature	0 ... 120 °C, for sterilization: 130 ... 140 °C
Adm. process pressure	6 bars overpressure at 120 °C
Electrodes	225 mm
Air supply	(4) 5 ... 7 bars, oil-free, filtered 10...25 µm, Compressed-air demand temporarily approx. 100 L/min
Immersion depth	Approx. 135 mm (from flange to electrode tip)
Process adaptations	DN 50 flange, DN 50 dairy pipe thread TRI-Clamp, APV, Neumo immersion fitting DN 120 V4A or plastic lengths up to 3 m. Further adaptations coming soon.
Outlet	Hose coupling grommet with collar Material: PVDF/Viton 1/4 " " Internal locking by ceramic washers
Inlet	Material: PVDF/Viton 1/4 " " Internal locking by ceramic washers
Rinsing function	Discontinual rinsing of inner cavities
Process-wetted materials	PEEK carbon fiber-reinforced ceramic (aluminum oxide); O-rings made of EPDM or Viton, optionally Kalrez
Housing	1.4404 stainless steel
Tightness	IP 66
Connection to Unical® 79/2 X	Compact multi-plug connection for 2x buffer solution, 1x rinsing water; 1x cleaning liquid or compressed air, 2x compressed-air supply to drive unit, 4 integrated check valves for buffer solution, water and cleaning liquid, electrical limit position indication
Connection to Unical® 9000 (X)	Compact multi-plug connection for 3x buffer, 1x rinsing water; 1x cleaning liquid, 1x purging air, 5 integrated check valves for buffer solution, water and cleaning liquid, 2x compressed-air supply to drive unit, noncontacting electrical limit position indication
Electrode protection	Bulb guards (different mesh sizes) with bayonet lock
Limit switch	Noncontacting electrical limit position indication

Product line

		Order no.
Cerammat® WA 150	Remote Calibration Probe with ceramic seal to process	WA 150

Assembly drawing

