

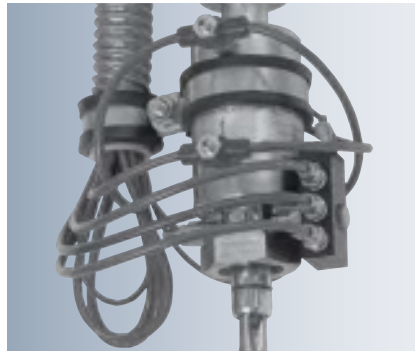
Pneumatic Retractable Fittings

SensoGate® WA 130

Pneumatic retractable fitting for use with Unical 9000 and Uniclean 900 automated control systems

Easy installation

SensoGate® WA 130 offers genuine plug & play. The central multi-plug is linked via a single connection to all rinsing, cleaning, and calibration media as well as the control air and limit position mechanisms. Media entrainment is minimized and the limit-position mechanism is protected.



Conventional retractable fittings:
Tangled hoses (left) and deposits on unprotected limit-position mechanism (right)

Systematic, Fully Automatic Liquid Analysis

The combination of the SensoGate® WA 130 retractable fitting with the Uniclean® 900 (cleaning) or Unical® 9000 (cleaning and calibration) control units and the Protos® 3400 measuring system enables fully automated measuring stations with high precision and reliability.

Maximum stability and precision due to patented metering-pump technology with separate routing of the media. Short duration measurements and regular cleaning enable longer sensor life. The production process is not interrupted by automatic cleaning or calibration.

The system offers the high levels of safety by monitoring the compressed air and water supply, the probe position, and the buffer and cleaning solution levels.



Facts

- Compact, buildup resistant design
- Low maintenance
- Simple replacement of seals due to divided calibration/cleaning chamber
- Increased service life and reduced seal wear
- ATEX approval II 1GD c II for the complete fitting
- Low cost, simple installation, operation, and maintenance
- SensoLock for high operational safety
- Integrated check valves and limit switches
- Fast and easy replacement of calibration chamber and insertion tube
- All maintenance can be performed on site
- Cyclone cleaning effect
- Standard sensor length (225 mm) even for large immersion depths
- Multiple process connections available
- Flange version with scraping ring
- Modular design allows specific replacement of the process-wetted materials: PEEK, PVDF, PP, 316 SS, Hastelloy
- Plastic versions with high pressure and temperature resistance due to carbon-fiber-reinforced plastics
- Special version for sensors with pressurized liquid electrolyte

Pneumatic Retractable Fittings

SensoGate® WA 130 for process applications

Specifications

Ambient temperature	41 ... 158°F (5 ... 70°C)
Permissible process temp	316 SS, Hastelloy: 41 ... 284°F (5 ... 140 °C) PEEK HD, PVDF HD: 41 ... 248°F (5 ... 120°C) (temporarily 284°F (140°C), 30 min) PEEK, PVDF: 41 ... 212°F (5 ... 100°C)
Permitted process pressure during movement	87 psi (6 bar) overpressure at 284°F (140°C) (316 SS/Hastelloy) 87 psi (6 bar) overpressure at 248°F (120°C) (PEEK HD/PVDF HD) 43 psi (3 bar) overpressure at 284°F (140°C) for 30 min (PEEK HD) 87 psi (6 bar) overpressure at 104°F (40°C), 14.5 psi (1 bar) at 212°F (100°C) (PEEK/VDF)
Permissible static pressure	232 psi (16 bars) (104°F (40°C)) in service position
Air supply	58 ... 101 psi (4 ... 7 bar), filtered 10 ... 25 µm, oil- and condensate-free
Effective immersion depth	65 mm or 120 mm, measured from lower edge of flange to sensor tip (flange version)
Total immersion depth incl. immersion tube	88 mm or 143 mm (flange version)
Process adaptations*)	lapped flanges DN 32/DN 50/DN 65/DN 80/DN 100 lapped flanges ANSI 316, 1 1/2" / 2" / 2 1/2" / 3" dairy-pipe screw joint DN 50/DN 65/DN 80/DN 100 Ingold socket 25 mm (G 1 1/4")
Sensors	225 mm, Pg 13.5 coupling, 250 mm for pressurized liquid electrolyte sensors
Rinse-medium inlet	1) for Unical® 9000/Uniclean® 900: Connection with hose grommet and coupling 2) for manual control: ZU 0631/ZU 0646 3) for free hose connection: 6/4 mm
Rinse-medium outlet	connection: hose grommet with coupling
Rinse function	seal rinsing during stroke movement
Process-wetted materials	stainless steel 316 SS, Hastelloy PVDF, PVDF HD (carbon-fiber-reinforced) PEEK, PEEK HD (carbon-fiber-reinforced)
Enclosure	stainless steel, 316 SS
Ingress protection	IP 66
Connection to Uniclean® 900/Unical® 9000	compact multiplug connection
Free hose connection	1 x 4/6 mm hose coupling for rinse water/cleaning agent 2 x 4/6 mm hose coupling for compressed air 2 x 4/6 mm hose coupling for pneumatic limit switches
Sensor protection in the process	integrated in immersion tube
Limit switches	noncontacting electrical limit-position control in conjunction with Uniclean® 900/Unical® 9000/ ZU 0631 or pneumatic limit switches for free hose connection
Certificates	3.1 Material Certificate (optional) ATEX II 1 GD c II

*) Special connections on request

Product Line

Order No.

Process sensor lock-gate, pneumatic		WA 130 /	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Explosion protection	for hazardous area Zone 1 without	X N																		
Sensor	solid electrolyte liquid electrolyte (pressurization possible)	0 1																		
Gasket material	elastomeric ring set A, FKM (Viton) elastomeric ring set B, EPDM elastomeric ring set C, FFKM (Kalrez) elastomeric ring set E, EPDM FDA elastomeric ring set K, FFKM, compl. (Kalrez)	A B C E K																		
Process-wetted materials*)	316 SS/316 SS/316 SS Hastelloy/Hastelloy/Hastelloy	A B																		
	PEEK/PEEK/PEEK PVDF/PVDF/PVDF	C D																		
	PEEK HD/PEEK HD/PEEK HD PVDF HD/PVDF HD/PVDF HD	E F																		
	Hastelloy/PEEK/Hastelloy Hastelloy/316 SS/PEEK	M N																		
	316 SS/316 SS/PEEK	Z																		
	PP-H	P																		
Process adaptation	flange, steel 316 SS, DN 32 flange, steel 316 SS, DN 50 flange, steel 316 SS, DN 65 flange, steel 316 SS, DN 80 ¹⁾ flange, steel 316 SS, DN 100 ¹⁾	B 0 B 1 B 2 B 3 B 4																		
	dairy pipe, DN 50 dairy pipe, DN 65 dairy pipe, DN 80 dairy pipe, DN 100	C 1 C 2 C 3 C 4																		
	flange, ANSI 316, 1 1/2" flange, ANSI 316, 2" flange, ANSI 316, 2 1/2" flange, ANSI 316, 3" ¹⁾	D 0 D 1 D 2 D 3																		
	Ingold socket, 25 mm (G 1 1/4")	H 0																		
	G 2 1/4" for ARF 210/30xxxx NPT 1" (Male)	K 1 A N 1																		
Immersion depth	short long	A B																		
Connection	media connection, PP media connection, PEEK media connection, PEEK, with integr. connection of add. medium	A B C																		
Special variant	without equipped with special grease (provided by customer) with scraper ring, reinforced version, PTFE/PEEK (ZU 0760)																			0 0 0 0 0 1 0 0 3

*) Material combinations: Process-wetted part of calibration chamber/rinse-wetted part of calibration chamber/immersion tube

¹⁾ With the lower calibration chamber made of plastic, you require one of the following flange protectors: ZU 0755, ZU 0756, ZU 0757, ZU 0758

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Accessories		Order No.
Service set	basic equipment	ZU 0680
	maintenance, repair, retrofit	ZU 0740
	calibration chamber	ZU 0754
Mounting aid	for 20 x 2.5 O-rings	ZU 0747
	for scraper ring	ZU 0746
Bellows	version for liquid-electrolyte sensors	ZU 0739
Protective cap	version for sensors with polymeric electrolyte	ZU 0759
Scraper ring	reinforced version, PTFE/PEEK	ZU 0760
Adapter for free hose connection	PP/EPDM (incl. electric feedback)	ZU 0733
	PP/EPDM (without electric feedback)	ZU 0734
	PEEK/EPDM (incl. electric feedback)	ZU 0742
Material Certificate 3.1		ZU 0708
Air supply	for pressurized sensors, 0.5 ... 4 bars	ZU 0670/1
	for pressurized sensors, 1 ... 7 bars	ZU 0670/2
Hose	20 m (extension for ZU 0670)	ZU 0713
Flange protectors	PEEK/FFKM DN 80	ZU 0755
	PEEK/FFKM DN 100	ZU 0756
	PVDF/FFKM DN 80	ZU 0757
	PVDF/FFKM DN 100	ZU 0758
Safety weld-in socket, straight, 40 mm	for tank wall	ZU 0717
	for pipe, DN 50	ZU 0717/DN50
	for pipe, DN 65	ZU 0717/DN65
	for pipe, DN 80	ZU 0717/DN80
	for pipe, DN 100	ZU 0717/DN100
Safety weld-in socket, beveled 15°, 40 mm	for tank wall	ZU 0718
	for pipe, DN 50	ZU 0718/DN50
	for pipe, DN 65	ZU 0718/DN65
	for pipe, DN 80	ZU 0718/DN80
	for pipe, DN 100	ZU 0718/DN100

Gaskets	Set	Contact (process/rinse medium)	Order No.
Flange or dairy pipe	A/1	FKM	ZU 0689/1
	A/2	FKM/FKM	ZU 0689/2
	B/1	EPDM	ZU 0690/1
	B/2	EPDM/EPDM	ZU 0690/2
	C/1	FFKM	ZU 0691/1
	C/2	FFKM/FFKM	ZU 0691/2
	E/1	EPDM FDA	ZU 0692/1
	E/2	EPDM FDA/EPDM	ZU 0692/2
	K	FFKM/FFKM	ZU 0719
	Ingold socket	A/1	FKM
A/2		FKM/FKM	ZU 0693/2
B/1		EPDM	ZU 0694/1
B/2		EPDM/EPDM	ZU 0694/2
C/1		FFKM	ZU 0695/1
C/2		FFKM/FFKM	ZU 0695/2
E/1		EPDM FDA	ZU 0696/1
E/2		EPDM FDA/EPDM	ZU 0696/2
K		FFKM/FFKM	ZU 0720

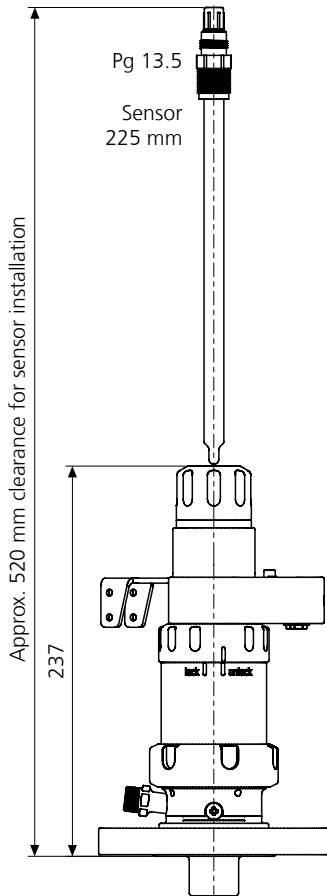
Spare Parts		Order No.
Immersion tube, short	316 SS	ZU 0722
	Hastelloy C22	ZU 0853
	PEEK	ZU 0724
	PVDF	ZU 0726
	PP	ZU 0825
Immersion tube, long	316 SS	ZU 0723
	Hastelloy C22	ZU 0854
	PEEK	ZU 0725
	PVDF	ZU 0727
	PP	ZU 0826

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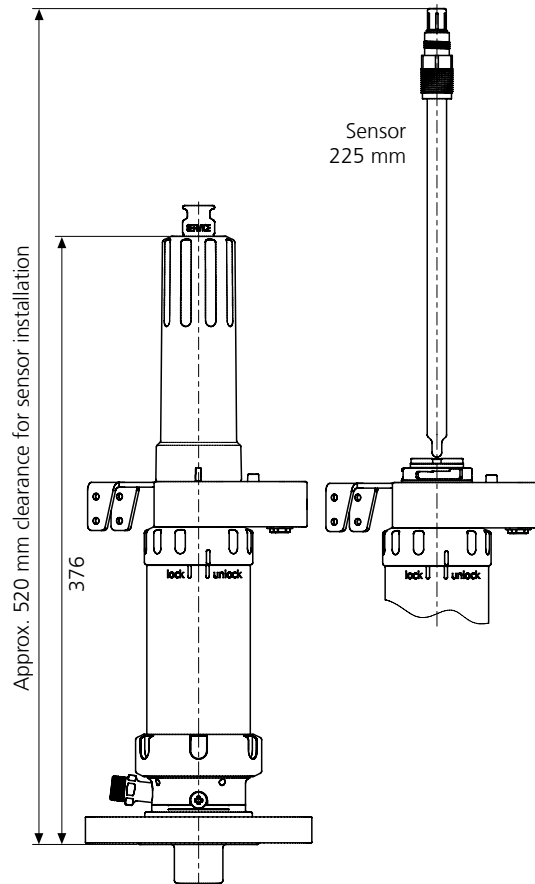
SensoGate® WA 130 for process applications

Dimensional Drawings

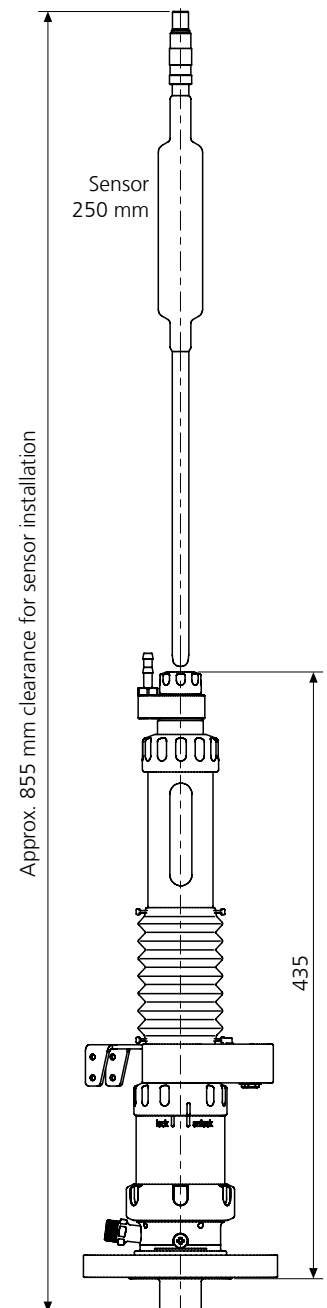
Installation dimensions for SensoGate® WA 130 with short immersion depth for sensors with gel electrolyte



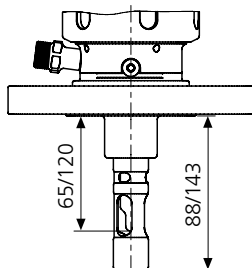
Installation dimensions for SensoGate® WA 130 with long immersion depth for sensors with gel electrolyte



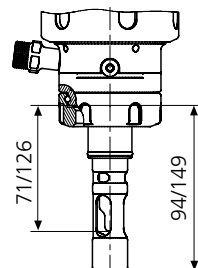
Installation dimensions for SensoGate® WA 130 for sensors with liquid electrolyte



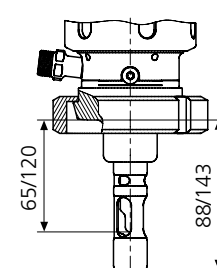
SensoGate® WA 130
Process adaptation for
flange DN 32 ... 100
ANSI 316, 1 1/2" ... 3",
short and long
immersion depth



SensoGate® WA 130
Process adaptation for
25-mm Ingold socket,
short and long
immersion depth



SensoGate® WA 130
Process adaptation for
dairy pipe,
DIN 11851 DN 50 ... 100,
short and long immersion
depth



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