

## SensoGate WA 133 M

**Manual Retractable Fitting with Maximum Resistance For Process Applications.**



### Variable and Affordable

Based on the proven SensoGate modular design principle, the WA 133 M retractable fitting is perfectly suited to applications that do not require completely automated control with central media routing but still want to make use of superior SensoGate technology.

### Custom Solutions

The design of the cost-efficient SensoGate WA 133 models is scalable to meet requirements; when placing an order, customers simply state the types of connections and functions the retractable fitting must have. Every design permits the sensor to be manually serviced or replaced. This can easily be done under process pressures as high as 6 bar.

The fitting adapts perfectly to the application and can even be adapted later to changed conditions.

### Easy Retrofits

If a further process connection, for example, is required at a future date, it can be easily retrofitted by simply replacing the relevant module.

A switch to electrodes with a store of liquid electrolyte is possible – one big advantage of the SensoGate modular design. The patented lock-gate function, i.e., the reliable shut-off to the process even during movement, is always active. This is a one-of-a-kind functionality for retractable fittings.

### Facts and Features

- Compact, smooth, and dirt-resistant design
- Minimum maintenance costs and maximum flexibility thanks to completely modular design
- Easy gasket replacement with split calibration/rinsing chambers
- Increased life and reduced gasket wear
- ATEX approval II 1 GD c II for the complete fitting
- Cost reduction by simple installation, operation and maintenance
- Very high availability
- Protective rinsing of gaskets for long life
- SensoLock for high safety of operation
- Integrated check valves and limit switches
- Quick and easy replacement of calibration chamber and immersion tube
- All maintenance work possible on site
- Cyclone rinsing for optimum cleaning effect
- Superior sensor immersion depth
- Standard sensor length (225 mm) even for large immersion depths
- Multiple process connections available
- Flange version with scraper ring
- Modular design allows direct replacement of wetted materials PEEK, PVDF, PP, 1.4571, Hastelloy.
- Plastic versions with high pressure and temperature resistance due to carbon-fiber-reinforced material
- Special version for sensors with pressurizable liquid electrolyte

# SensoGate WA 133 M

## Specifications

Permissible process pressure and temperature during movement	6 bar (at 0 ... 40 °C) 6 bar (0 ... 40 °C), falling linearly to 3 bar (100 °C) 3 bar (max. 1 hour) at 135 °C
Permissible pressure for probe control	4 ... 7 bar
Permissible rinsing pressure and temperature	6 bar (at 5 ... 90 °C)
Ambient temperature	-10 ... +70 °C
Protection	IP 66
Housing material	Stainless steel A2/PP or PEEK
Sensors	with solid electrolyte                      Ø 12 mm, length 225 mm with temperature detector, thread PG 13.5 with liquid electrolyte                      Ø 12 mm, length 250 mm with temperature detector
Process connections	Flanges, EN 1092-1                              DN 32 ... 100 Flanges, ANSI B 16.5                            1 ½" to 3" Flange bushings, suitable for sight glasses acc. to DIN 3237 Part 2                      from DN 40 Loose flange 1.4571 for flat glass flange                              DN 40/DN 50
Connections	Inlet    G ½" female thread with hose coupling for hose; outer Ø 6 mm, inner Ø 4 mm Outlet    G ½" female thread with hose coupling for hose; outer Ø 8 mm, inner Ø 6 mm For pressurized sensors                        Hose connection NW 6 mm, pressure in calibration chamber 0.5 ... 1 bar above process pressure (max. 7 bar)
Immersion depths/dimensions	See dimension drawings
Wetted materials	PEEK (natural)

## Specifications for Use in Hazardous Locations

EU Type Examination Certificate	KEMA 04ATEX4035X
ATEX marking	II 1 GD c II
Ambient temperature	-10 ... +70 °C
Process pressure	Max. 6 bar
Process temperature	0 ... 120 °C (plastic)
Special conditions	None

## Product Line

Process Retractable Fitting		WA 133 M -														
Explosion protection	ATEX Zone 0 Without	X N														
Sensor	Sensor, Ø 12 mm with PG 13.5 pH sensor, Ø 12 mm, with pressurization	0 1														
Gasket material	FKM EPDM EPDM – FDA FKM – FDA FFKM-FDA FFKM	A B E F H K														
Wetted materials*	PTFE	R														
Process connection	Flange, loose, 1.4571, PN10/16, DN 32	B 0														
	Flange, loose, 1.4571, PN10/16, DN 40	B A														
	Flange, loose, 1.4571, PN10/16, DN 50	B 1														
	Flange, loose, 1.4571, PN10/16, DN 65	B 2														
	Flange, loose, 1.4571, PN10/16, DN 80	B 3														
	Flange, loose, 1.4571, PN10/16, DN 100	B 4														
	Flange, loose, ANSI 316, 150 lbs, 2"	D 1														
	Flange, loose, ANSI 316, 150 lbs, 2 ½"	D 2														
	Flange, loose, ANSI 316, 150 lbs, 3"	D 3														
	Flange, loose, ANSI 316, 150 lbs, 3 ½"	D 4														
	Fitting, DIN 3237-2, PN 16, DN 40	T A														
	Fitting, DIN 3237-2, PN 16, DN 50	T 1														
Flange, loose, 1.4571, DN 40 for flat glass flange	U A															
Flange, loose, 1.4571, DN 50 for flat glass flange	U 1															
Immersion depth	Short	A														
	Long	B														
Electrical limit signal	Without	A														
	With	B														
Connection, rinse medium	Inlet with PVF hose coupling NW 4/6, outlet with PVF hose coupling NW 6/8, outlet hose made of PTFE, 3 m	3														
Housing material	Stainless steel / PP (< 6 bar operating pressure)	1														
	Stainless steel / PEEK (< 10 bar operating pressure)	2														
Special variant	Without												0	0	0	
	Equipped with special grease (provided by customer)														1	
	Customer-specific special datasheet														F	

Further configurations of these options may be available on request.

\* Material combinations: process-wetted part of calibration chamber / rinse-wetted part of calibration chamber / immersion tube

# SensoGate WA 133 M

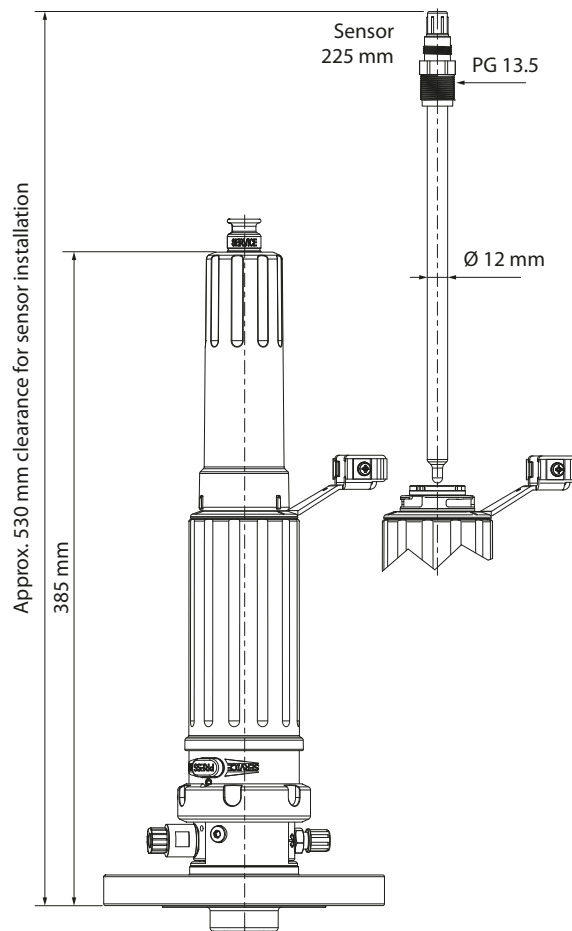
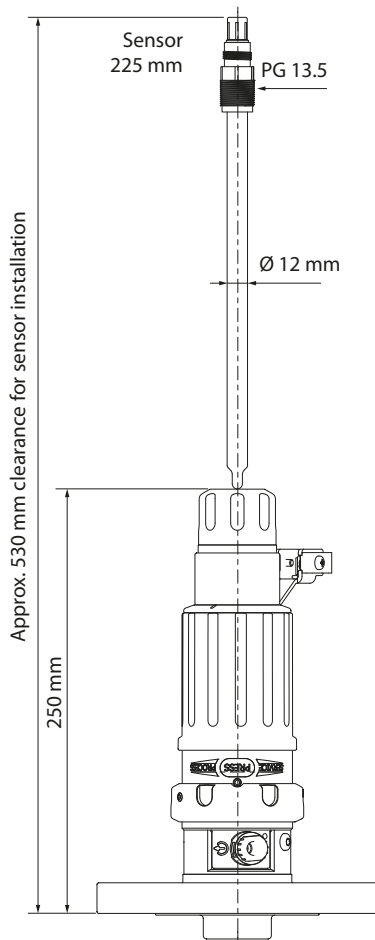
## Product Line

<b>Accessories</b>		Order No.	
Service set	Basic	ZU 0680	
Sensor spanning wrench, 19 mm		ZU 0647	
Bellows (version for liquid-electrolyte sensors)		ZU 0739	
Protective cap (version for sensors with polymer electrolyte)		ZU 0759	
Air supply for pressurized sensors, 0.5 ... 4 bar		ZU 0670/1	
Air supply for pressurized sensors, 1 ... 7 bar		ZU 0670/2	
Hose, 20 m (extension for ZU 0670)		ZU 0713	
Electrical limit switch with plug-in adapter		ZU 0859	
<b>Check Valve</b>		RV01- <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Housing material, valve body	Stainless steel 1.4404 PEEK	<input type="checkbox"/> H <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> E	
Gasket material	FKM EPDM FFKM FKM FDA EPDM FDA FFKM FDA	<input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> F <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> E <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> H	
Inlet connection, female thread	G $\frac{1}{4}$ G $\frac{1}{8}$	<input type="checkbox"/> 4 <input type="checkbox"/> 8	
Outlet connection, male thread	G $\frac{1}{4}$ G $\frac{1}{8}$	<input type="checkbox"/> 4 <input type="checkbox"/> 8	
<b>Gaskets</b>	Set	Contact (process/rinse medium)	Order No.
	A/1	FKM	ZU 1022/1
	A/2	FKM / FKM	ZU 1022/2
	B/1	EPDM	ZU 1023/1
	B/2	EPDM / EPDM	ZU 1023/2
	E/1	EPDM FDA	ZU 1024/1
	E/2	EPDM FDA / EPDM	ZU 1024/2
	H/1	FFKM FDA	ZU 1026/1
	H/2	FFKM FDA / FFKM FDA	ZU 1026/2
	K/1	FFKM	ZU 1027/1
	K/2	FFKM / FFKM	ZU 1027/2
<b>Spare Parts</b>			Order No.
Immersion tube, short	PTFE		ZU 1032
Immersion tube, long	PTFE		ZU 1033

**Dimension Drawings**

Installation dimensions WA 133 M  
Short immersion depth for sensors with solid electrolyte

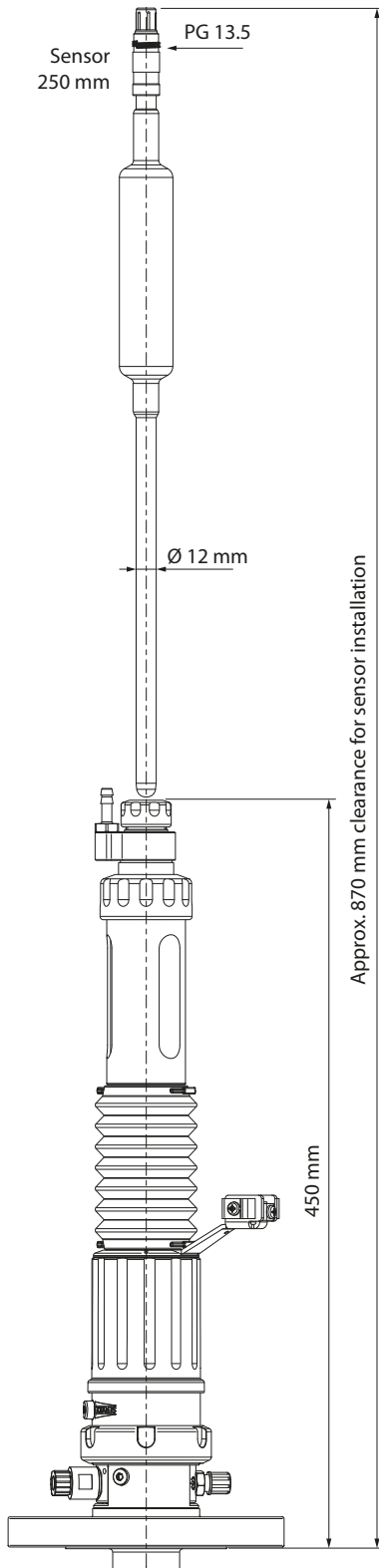
Installation dimensions WA 133 M  
Long immersion depth for sensors with solid electrolyte



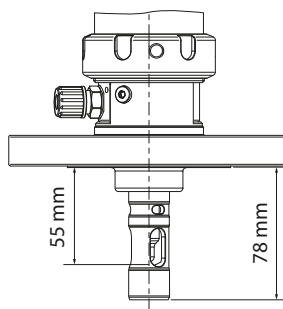
# SensoGate WA 133 M

## Dimension Drawings

Installation dimensions WA 133 M  
Sensors with liquid electrolyte



SensoGate WA 133 M  
Loose flange process connection  
DN 32 ... 100  
ANSI 316, 1 1/2" ... 3"  
Short immersion depth



SensoGate WA 133 M  
Loose flange process connection  
DN 32 ... 100  
ANSI 316, 1 1/2" ... 3"  
Long immersion depth

