

Manual Retractable Fittings

Pharm

Food



SensoGate® WA 131 MH

Innovative manual retractable fitting with easy-to-operate rotary drive for hygienic applications

For applications in which pneumatic fittings are not essential, Knick has now developed the SensoGate® WA 131 MH, a modern manual sensor lock-gate fully compatible with its automatic "sister fittings". This applies to rinsing chambers and process connections as well as the materials used.

Revolutionary operation

The SensoGate® WA 131 MH has a manual rotary drive, which enables the fitting to be operated up to a counter pressure of 10 bar – and this in less than two turns. Regardless of how unfavorable the angle or the operating height at which the fitting is installed, the low rotary forces can easily be applied using the wrist. This is not possible with the sliding motion of conventional fittings.

Facts

- steam-sterilizability validated for all process-wetted parts incl. rinsing/calibration chamber
- directed flow rinses the process seal from the process side as well as from the inside of the fitting
- perfect sensor cleaning effect by cyclone rinsing
- safe separation to the process during probe movement and prevention of re-contamination
- double gaskets with leakage bores prevent microbial contamination of the drive
- broad applications in hygienic conditions
- cost reduction by simple installation, operation, and maintenance
- very high availability
- protective rinsing of the seals for a long service life
- SensoLock for high safety of operation
- integrated limit switches
- fast and uncomplicated replacement of calibration chamber and immersion tube
- all maintenance can be performed on site
- superior sensor immersion depth
- standard sensor length (225 mm) even for large immersion depths
- multiple process connections available
- process-wetted parts: stainless steel 1.4404, electropolished
- modular design
- special version for sensors with pressurizable liquid electrolyte
- SIP and CIP capable in the process
- SIP and CIP of calibration chamber and media routing

Specifications

| | |
|--|--|
| Permissible process pressure and temperature during movement | 10 bar (at 0 ... 140 °C) |
| Permissible process pressure and temperature, statically in service position | 16 bar (at 0 ... 40 °C) |
| Ambient temperature | -10 ... +70 °C |
| Ingress protection | IP 66 |
| Housing material | stainless steel A2 |
| Permissible pressure for probe control | 4 ... 7 bar |
| Sensors | |
| With gel electrolyte | Ø 12 mm, length 225 mm with temp detector, Pg 13.5 thread |
| With liquid electrolyte | Ø 12 mm, length 250 mm with temp detector |
| Process adaptations | |
| Dairy pipe, DIN 11851 | DN 50 to 100 |
| Ingold socket, 25 mm | 25 mm |
| Clamp 1.4404 | clamp 1" to 3.5" |
| Varivent 1.4404 | for pipes from DN 50, from DN 65 short, from DN 80 long |
| BioControl 1.4404 | size 50/65 |
| Connections | |
| Rinse and calibration media (optional) | internal thread G1/8; hose coupling G1/8; DN 4/6 |
| Outlet (optional) | outlet hose, NW 8 EPDM 3m |
| For pressurized sensors | hose connection NW 6, pressure in sensor chamber 0.5 ... 1 bar above process pressure (max. 7 bar) |
| Immersion depths/ Installation dimensions | see dimension drawings |
| Process-wetted materials | see order code |

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Product Line

Order No.

| Hygienic Sensor Lock-Gate, Manual | | WA 131 MH / | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
|-----------------------------------|--|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------|---|
| Explosion protection | for hazardous area Zone 1 without | X N | | | | | | | | | | | | | | | | |
| Sensor | solid electrolyte liquid electrolyte (pressurization possible) | 0 1 | | | | | | | | | | | | | | | | |
| Gasket material | set F – FKM FDA set E – EPDM FDA set G – FFKM FDA process-wetted set H – FFKM FDA complete | F E G H | | | | | | | | | | | | | | | | |
| Process-wetted materials* | 1.4404/1.4404/1.4404 (electropolished) | G | | | | | | | | | | | | | | | | |
| Process adaptation | dairy pipe, DN 50 dairy pipe, DN 65 dairy pipe, DN 80 | C 1 C 2 C 3 | | | | | | | | | | | | | | | | |
| | Ingold socket, 1.4404, 25 mm (G 1 1/4") Ingold socket, hygienic, 1.4404, 25 mm (G 1 1/4") | H 0 A H 1 A | | | | | | | | | | | | | | | | |
| | Clamp 1,5", 1.4404 Clamp 2", 1.4404 Clamp 2,5", 1.4404 Clamp 3", 1.4404 Clamp 3,5", 1.4404 | J 1 A J 2 J 3 J 4 J 5 | | | | | | | | | | | | | | | | |
| | Varivent, 1.4404 (from DN 50) Varivent, 1.4404 (from DN 50 short, from DN 80 long) | V 1 A V 2 | | | | | | | | | | | | | | | | |
| | BioControl, DN 50 BioControl, DN 65 | L 1 A L 2 A | | | | | | | | | | | | | | | | |
| Immersion depth | short long | A B | | | | | | | | | | | | | | | | |
| Electrical limit signal | without with | A B | | | | | | | | | | | | | | | | |
| Rinse-medium connection | G 1/8" complete with outlet hose (3 m) G 1/8" complete with outlet hose (3 m), inlet G 1/8" G 1/8" complete with outlet hose (3 m), inlet G 1/8" and inlet hose (5 m) complete with coupling nut | 0 1 2 | | | | | | | | | | | | | | | | |
| Housing material | stainless steel / PP (< 6 bar operating pressure) stainless steel / PEEK (< 10 bar operating pressure) | 1 2 | | | | | | | | | | | | | | | | |
| Special variant | without equipped with special grease (provided by customer) | | | | | | | | | | | | | | | | 0 0 0 0 0 1 | |

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

| Accessories | | Order No. |
|---|--|----------------------|
| Service set | basic equipment | ZU 0680 |
| | maintenance, repair, retrofit | ZU 0740 |
| | calibration chamber | ZU 0754 |
| Sensor mounting wrench, 19 mm | | ZU 0647 |
| 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 |
| Material Certificate 3.1 | | ZU 0708 |
| Air supply | for pressurized sensors, 0.5 ... 4 bar | ZU 0670/1 |
| | for pressurized sensors, 1 ... 7 bar | ZU 0670/2 |
| Hose, 20 m (extension for ZU 0670) | | ZU 0713 |
| 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 |
| Retainer clamp for 25 mm socket | | ZU 0818 |

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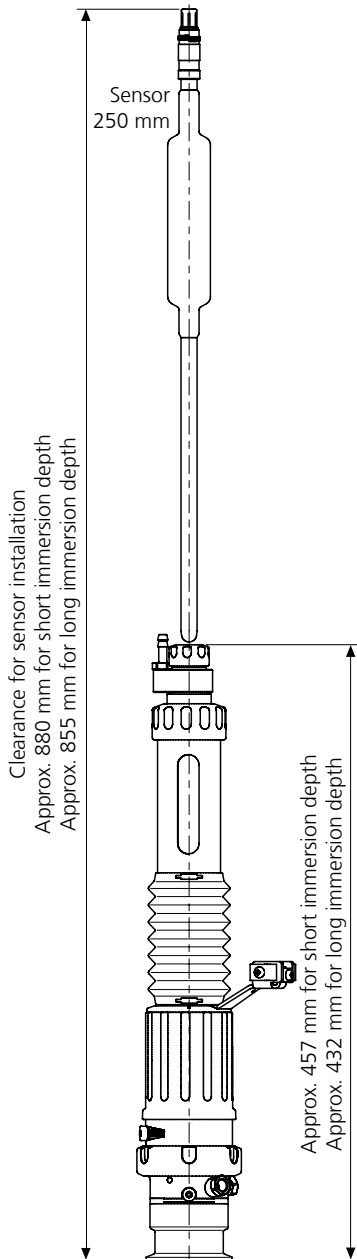
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SensoGate® WA 131 MH for hygienic applications

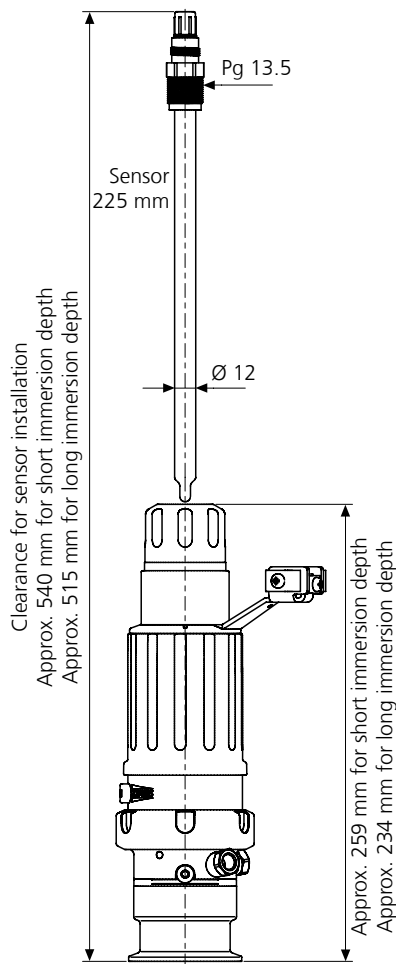
| Gaskets | | Set | Contact (process/rinse medium) | Order No. |
|-----------------------------|--------------------|-------------------|--------------------------------|------------------|
| Dairy pipe, Varivent, clamp | E/1 | EPDM FDA | ZU 0700/1 | |
| | E/2 | EPDM FDA/EPDM FDA | ZU 0841 | |
| | F/1 | FKM FDA | ZU 0697/1 | |
| | F/2 | FKM FDA/FKM FDA | ZU 0842 | |
| | G/1 | FFKM FDA | ZU 0766/1 | |
| | G/2 | FFKM FDA/EPDM FDA | ZU 0843 | |
| | H/2 | FFKM FDA/FFKM FDA | ZU 0844 | |
| | Ingold socket H0 | E/1 | EPDM FDA | ZU 0704/1 |
| | | E/2 | EPDM FDA/EPDM FDA | ZU 0845 |
| F/1 | | FKM FDA | ZU 0703/1 | |
| F/2 | | FKM FDA/FKM FDA | ZU 0846 | |
| G/1 | | FFKM FDA | ZU 0768/1 | |
| G/2 | | FFKM FDA/EPDM FDA | ZU 0847 | |
| H/2 | | FFKM FDA/FFKM FDA | ZU 0848 | |
| Ingold socket H1 | | E/1 | EPDM FDA | ZU 0704/1 |
| | | E/2 | EPDM FDA/EPDM FDA | ZU 0849 |
| | F/1 | FKM FDA | ZU 0703/1 | |
| | F/2 | FKM FDA/FKM FDA | ZU 0850 | |
| | G/1 | FFKM FDA | ZU 0768/1 | |
| | G/2 | FFKM FDA/EPDM FDA | ZU 0851 | |
| | H/2 | FFKM FDA/FFKM FDA | ZU 0848 | |
| | Spare Parts | | | Order No. |
| | Immersion tube | 1.4404 | ZU 0764 | |

Dimension Drawings

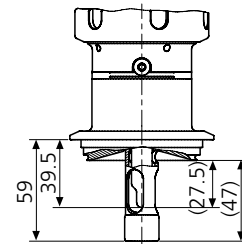
Installation dimensions for SensoGate® WA 131 MH for sensors with liquid electrolyte



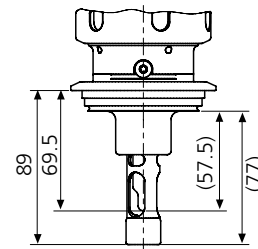
Installation dimensions for SensoGate® WA 131 MH for sensors with gel electrolyte



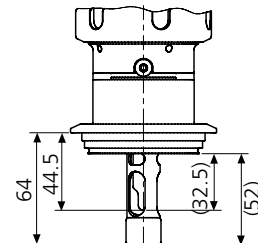
SensoGate® WA 131 MH Process adaptation for Varivent DN 50, short immersion depth



SensoGate® WA 131 MH Process adaptation for Varivent from DN 80, long immersion depth



SensoGate® WA 131 MH Process adaptation for Varivent from DN 65, short immersion depth



All dimensions in mm

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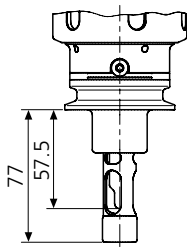
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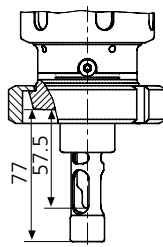
SensoGate® WA 131 MH for hygienic applications

Dimension Drawings – continued

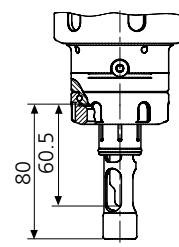
SensoGate® WA 131 MH
Process adaptation for
Triclamp 2; ... 3.5;;
long immersion depth



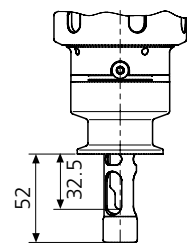
SensoGate® WA 131 MH
Process adaptation for dairy pipe
DN 11851 DN 50 ... DN 100,
long immersion depth



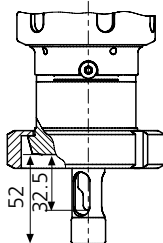
SensoGate® WA 131 MH
Process adaptation for
Ingold socket, 25 mm



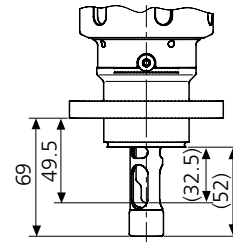
SensoGate® WA 131 MH
Process adaptation for
Triclamp 1; ... 3.5;;
short immersion depth



SensoGate® WA 131 MH
Process adaptation for dairy pipe
DN 11851 DN 50 ... DN 100,
short immersion depth



SensoGate® WA 131 MH
Process adaptation for
BioControl DN 50/DN 65



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