

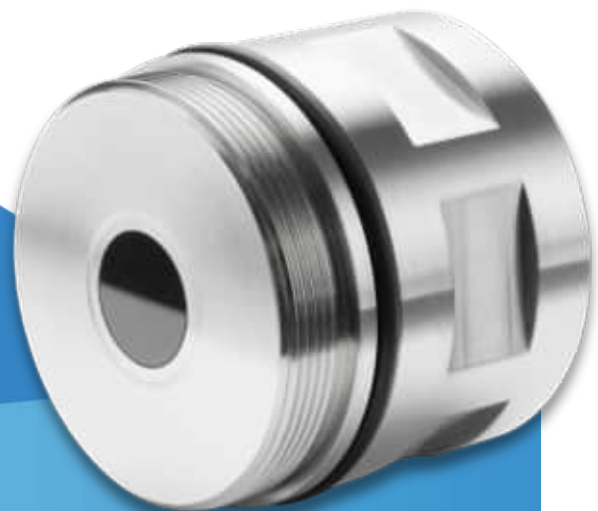
- L** LABORATORY
- P** **PROCESS**
- S** SOFTWARE
- A** AUTOMATION



ICS²

Customizable Inline Concentration Sensor

Highly customizable concentration sensor with the size of a golf ball



SPECIFICATIONS	iCS ² cust.	iCS ² CL	iCS ² EG	iCS ² PG
Measuring scales	Sucrose (Brix) 100+ standard scales, freely definable custom scales, internal storage one scale	Cooling lubricants	Ethylene glycol	Propylene glycol
Measuring range	1.3230 - 1.4036 RI 0 - 40.00 Brix (up to 50 Brix on request)	1.3230 - 1.4036 RI 0 - 20.0 %wt	1.3230 - 1.4036 RI 0 - 66.0 %wt (up to 85 %wt on request)	1.3230 - 1.4036 RI 0 - 66.0 %wt (up to 85 %wt on request)
Accuracy*	± 0.0002 RI / ± 0.15 Brix	± 0.0002 RI / ± 0.3 %wt	± 0.0002 RI / ± 0.3 %wt	± 0.0002 RI / ± 0.3 %wt
Reproducibility / Precision*	± 0.0001 RI / ± 0.075 Brix	± 0.0001 RI / ± 0.2 %wt	± 0.0001 RI / ± 0.15 %wt	± 0.0001 RI / ± 0.15 %wt
Resolution	0.00007 RI / 0.05 Brix	0.00007 RI / 0.1 %wt	0.00007 RI / 0.1 %wt	0.00007 RI / 0.1 %wt
Process temperature**	- 10 to + 80 °C	- 10 to + 80 °C	- 35 to + 80 °C	- 35 to + 80 °C
Ambient temperature	- 35 to + 80 °C			
Temperature sensor accuracy	± 0.3 °C			
Process pressure	0 - 6 bar, up to 10 bar for cleaning process			
Interfaces standard	RS485 Modbus RTU, 4-pin M8 plug, M8 cable 90° 300 mm			
Interface optional	2x 4 - 20 mA (≤ 500 Ω), USB			
Mechanical interface standard	DN40, M38x1 (thread length 7 mm), radially sealing O-ring 36x2 NBR			
Mechanical interfaces optional	VariVent type N 1.4404 Stainless steel on request: Triclamp-, DIN-, ISO-flange, APV 1.4404 Stainless steel			
Dimensions; Weight	44 mm (60 mm incl. 90° Cable) x Ø 40 mm; 155 g			
IP class	IP68			
Light source, wavelength	LED, 589 nm			
Power supply; Current consumption	12-28 V DC; max. 30 mA (at 24 V)			
Wetted parts	N-BK7, 1.4404 Stainless steel, PU			
Housing material	1.4404 Stainless steel			
PC Software	UniConfig (with RS485-USB adapter cable)			

*Standard conditions (t= 20 °C, p= 1013 mbar)
** Non-freezing

Further applications

- Cleaning agents, e.g.: Dirl-LUM603, Promoclean™, SupraWT, deconex®, windshield wiper fluid
- Freezing point depression agents, e.g.: Glysantine, G12, G12+, G13
- Brake fluid, DOT3, DOT4, DOT5
- Hydraulic oil monitoring
- AdBlue and many more

