

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



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Costumizable Inline Concentration Sensor

Highly costumizable concentration sensor with the size of a golf ball



SPECIFICATIONS

IN-LINE CONCENTRATION SENSOR #15555

Measuring scales	Freely programmable, user exchangeable scales
Measurement principle	Total internal reflection refractometer, 589 nm
Temperature measurement accuracy	+/-0.5 °C
Operating temperature	0 °C to +50 °C
Process pressure	max. 4 bar
Interfaces	RS485 Modbus
Power supply	12-28 VDC
Current consumption	max. 30 mA (at 24 V)
IP class	IP67
Process pressure (max.)	100 kPa (14,5 psi, 1 bar), max. 4 bar
Wetted materials	Sapphire, 1.4404 stainless steel, epoxy sealant
Housing material	1.4404 stainless steel
Weight	220 g
Dimensions	Diameter 40 mm, length 30 mm (54 mm including cable)
Available process connections	<ul style="list-style-type: none"> • M38x1 thread, length 7 mm, radially sealing O-Ring 36x2mm • Tuchenhagen VARIVENT® (separate adapter necessary) • ½" NPT Tee-piece adapter for fittings and tubing e.g. Swagelok (separate adapter necessary)

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

Accessories

- #17705 VARIVENT® adapter
- #80067 Demonstration setup
- #17618 RS485-USB adapter cable
- #18699 Tee-piece connector with port for cleaning nozzle



Sensor performance in some example applications

	Refractive index	Sucrose Brix	Ethylene glycol or propylene glycol	Cooling lubricants
Measuring range	1.32...1.4400	0...60.00 Bx	0...100.0 %wt	0...15.00 %wt
Accuracy	0.0005	0.40 Bx	0.5 %wt	0.44 %wt
Reproducibility	0.0002	0.15 Bx	0.2 %wt	0.22 %wt
Resolution	0.0001	0.05 Bx	0.1 %wt	0.11 %wt

