



INTRINSICALLY SAFE

process refractometer

The URX1 Process Refractometer is a stand-alone unit designed specifically for hazardous areas up to Zone 0, made of a stainless steel monobloc that works in conjunction with a power supply and transducer barriers for output signals as required by ATEX certification: CE 0722 - II 1G – Ex ia IIB T4 Ga (Tamb.=45°C) CESI 03 ATEX 325 Q.

It continuously measures the concentration of the liquids, displays and outputs the result in %, or alternatively °Brix. It also features a user programmable scale for specific applications. The URX1 will signal to the process when concentration is outside of product specifications or has reached its target end point.

The URX1 is unaffected by particulates, high viscosity liquids. High Temperature and High Pressure options are available.

Mounting fittings are available with various connections including welded ends, Triclamp, 3A, Flanges, DIN11851, Varivent.

BENEFIT

- EX protection version ATEX
- 316 Stainless Steel welded parts (other materials are available)
- Suitable for all applications in explosion-proof areas
- Simple mounting direct in line or on tank

URX1

PROCESS REFRACTOMETER

BRIX, nD AND % CONCENTRATION OF THE LIQUIDS

URX1 installation accessories

The URX1 robust construction with stainless steel case and IP67 protection, allows the installation in any aggressive environment using both standard Varivent fittings and Maselli adapters including welded ends, flanges, DIN 11851. For specific applications, the mounting adapter may be equipped with dedicated system for prism cleaning.



OPERATING SPECIFICATION

Measurement range:	1.3163 ... 1.5318 nD (0...95 Bx)*
Accuracy:	+/- 0.0002 nD (+/-0.15 Bx) for STD version +/- 0.00007 nD (+/-0.05 Bx) for HA version
Measurement scale:	Brix scale or USER scale on request * 0 Bx at max 105°C

TECHNICAL FEATURES

Product temperature:	-5...+105°C (23...221°F) for STD version -5...+140°C (23...284°F) for LP version
Max sterilization temperature:	125°C (257°F) x 30 min or 145°C (293°F) x 30 min for LP version
Line pressure:	max. 10 bar (145 psi) at 20 °C (68 °F) max. 8 bar (116 psi) at 105 °C (221 °F) Special configuration for pressures till 25 bar (362 psi) at 100°C (212 °F)
Power supply:	- DC 24V 1A for version with Barriers but without power supply unit - AC 100...240V 1A for version with Barriers and power supply unit
Interfaces:	Analogue: 0...20mA or 4...20mA (out of 470Ω) Digital: - RS485 and RS232 converted by the Barriers - Profibus through one Module (optional) fed by DC 24V

Please refer to the technical datasheet for further data.



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PROCESS ANALYZERS

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