

UR

22

REFRACTOMETER FOR ON PRODUCTION LINE ANALYSIS OF SUGARED AND DIET DRINKS

The Brix/Diet UR-22 analysis unit with microprocessor is made up of a multifunctional monobloc. The instrument is installed directly on the drinks' production line and can carry out, in real time, concentration measurements which are shown on a local display and carries an alarm system. Results can be transmitted with analogue or digital signal.

The analyzer can be integrated with the Multilab system. The UR-22 refractometer analysis unit incorporates modern technology such as:

- the latest in microprocessors
- long-life light source
- high resolution CCD optical transducer

On the front of the instrument are situated the digital LCD indicator with back lighting and the control keyboard. It is possible to configure all functions and alarms using the keyboard.

The instrument also has an RS422/RS485 connection for remote configuration and on-line assistance using a personal computer and on-line assistance using a PC with modem, Multilab system and PCAnywhere software.

A 1" sanitary Tri-clamp® connection allows the instrument to be connected to the production line in by-pass, in a quick and simple way.



GENERAL CHARACTERISTICS

TECHNICAL CHARACTERISTICS

Sugar Beverages:

Measurement limits:

0...18.5 Brix ("Regular" Scale)

Accuracy:

0.1% of the Scale range maximum accuracy
±0.02 Brix with variation of ±10 °C (±50 °F)

Temperature compensation:

Automatic -5 °C...+35 °C (+23 °F...+95 °F)

Diet Beverages:

Measurement limits:

0...2000 mBrix ("Diet" Scale)

Accuracy:

0.15% of the Scale range maximum accuracy
±0.003 Brix with variation of ±2.5 °C (±36.5 °F)

Automatic temperature compensation:

-5 °C...+35 °C (+23 °F...+95 °F)

Measurement scales:

- Brix Scale (refers to the nD/Brix ICUMSA 1974 Conversion tables)
- "%STANDARD"

Interfaces:

(optically isolated)

Analogue:

N° 1 output channel 0...20mA or 4...20mA (on 470Ω) to be configured for values "Start and Bottom Scale" relative to measurement limits

N° 1 input channel mA/mV

Digital:

RS485 for connection to "CM00" Remote Control Unit to PC with Software Labtech, to PC (Optomux protocol)

Input contacts:

N° 2 inputs configurable

Output contacts:

N° 2 relay outputs for alarm signals with maximum contact 2A/24V DC/AC

Supply:

- AC 24V (18...27V) 50...60Hz 10VA
- DC 24V (20...34V) 10W
- Connection box with Transformer (optional): AC 115/230V ±10% 50...60Hz 25VA

CONSTRUCTION CHARACTERISTICS

Measurement prism:

Optical glass

Light source:

High efficiency LED electronically compensated

Element of refractometric measurement:

High resolution CCD

Element of temperature measurement:

With Pt1000 inserted on line

Controls:

Keypad in scratch-proof polyester

Display:

Backlit graphic LCD display 128x64 point

Language:

Choice of 5 interface languages (English, German, French, Italian, Spanish) for the display of menus and messages

Execution:

- AISI 304-316 stainless steel
- Protection IP65 (EN60529)

Weight:

10 kg (22 lb)

Materials in contact with the process fluid:

- 316 AISI stainless steel
 - Optical glass
 - Buna N white
 - PVDF
 - EPDM
- (others on request)

Attachment:

1" Tri-clamp®

Dehumidification:

The optical section of the unit is dehumidified by means of a Molecular Sieve dessiccant cartridge

FLUID OPERATING LIMITS

Temperature:

-20 °C...+120 °C (-4 °F...+248 °F)

Pressure:

-1...+10 bar (-14.5...+145 psi) at 20 °C (68 °F)



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