

## Technical Features

### Accuracy

Standard Accuracy version: 0.5% of the range  
High Accuracy (HA) version: 0.3% of the range (\*)  
Super Accuracy (SA) version: 0.1% of the range (\*)

(\*) With limited range  
Process temperature range  
-5...+105 °C (23...221 °F).

"LP" version for temperatures up to 140 °C (284 °F)  
Automatic temperature compensation using Pt100 probe.

**Pressure range** max. 10 bar (145 psi) a 20 °C (68 °F).  
max. 8 bar (116 psi) a 100 °C (212 °F).  
**Measurement scales** "BRIX" o "USER"; USER scale configurable when orderi

### Electrical Power Supply

AC 24V ±10%, 50...60Hz, 0.6A DC 24V ±10%, 0.6A

### Interfaces

Analog: 0...20mA o 4...20mA su 470Ω.

Digital: RS422/485 for PC or 1 PROFIBUS by means of module (optional) for Profibus-DP network.

Inputs: 1 input for "Line Stopped" (HOLD)

Outputs: 1 relay output (alarm condition signaling) or Cleaning System command

### Unit Construction Features

Enbloc housing with AISI 316 stainless steel cover, PEEK™ heat insulating flange, AISI 316 stainless steel prism holder

### Measurement section:

Synthetic sapphire or optical glass measurement prism, LED light source, CCD sensitive element.

Ambient temperature limits: -10...+45 °C (14...113 °F)

### Parts in contact with the product:

Pt100 and prism holder in AISI 316 stainless steel (Hastelloy and Incoalloy available on request). O-rings and gaskets in Kalrez 6230 + Viton or EPDM (silicone, Kalrez 6375 or 6380 available on request).

Synthetic sapphire or optical glass measurement prism.

**Degree of Protection:** IP67 in accordance with EN60529

**Accessories:** AISI 316 stainless steel deflectors for in-line or by-pass installation (others available on request) with welded or flanged Tri-Clamp® fittings, DIN Standard and 1" - 4" pipes.

**Dimensions and weight:** Standard version:

Ø176 (b) x 192.5 (h) x 132.5 (p), 3.3 kg;

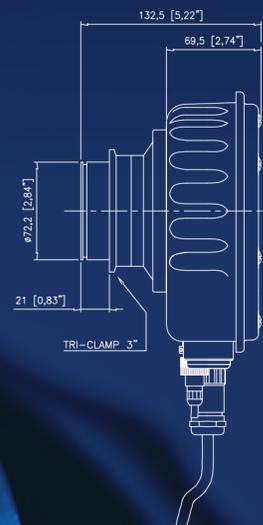
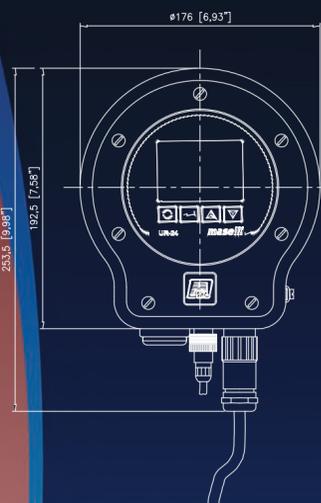
LP Version: Ø176 (b) x 192.5 (h) x 214.5 (p), 5.0 kg

**Conformity to Directives:**

EMC: 2014/30/UE - CE: 1935/04/CE

"3A" USDA approval (on request),

EX version available.



## UR24 SPECIFICATIONS

www.maselli.com

ZZ2001571A

DIN 3" connector

Varivent fitting

Special connectors

Flanged connector

Connector 2", to be welded

A wide range of constantly evolving connectors makes it possible to install Maselli refractometers in the most varied conditions, from welded connectors to DIN standard fittings with different types of flanges, on resistant Varivent fittings, all this for piping ranging from ¾" to 4".

Adoption of a moveable plug facilitates cleaning operations and optimum adjustment of flow speed to maximize self-cleaning capabilities.

Connector 1", to be welded

Cleaning unit

When measuring difficult liquids special cleaners are available which are specially designed for each application. Thanks to our application specialists we can give you advise on the best possible solution using:

- Mechanical cleaners
- Steam injection cleaners
- Manual cleaners
- Superheated water injection cleaner

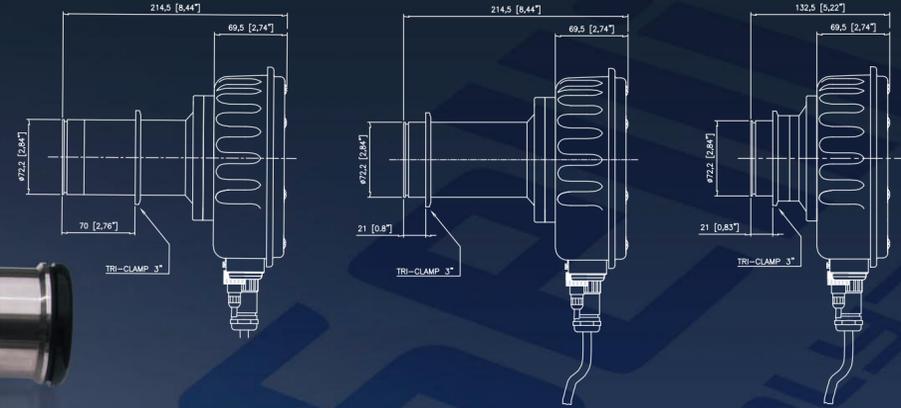
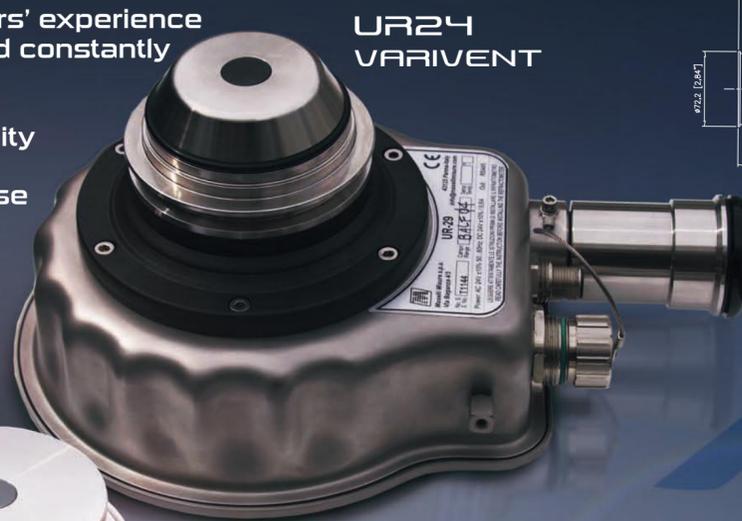
ACCESSORIES

## UR24 digital refractometers

**M maselli**  
PROCESS ANALYZERS

## Why the UR24 series?

- The result of 60 years' experience in refractometers and constantly evolving.
- Measurement reliability
- Easy to install and use
- Super compact instruments
- Different versions for adaptability to all system situations



The UR24 series is characterized by the extreme versatility of the system and is used in a huge range of applications and different industrial sectors. The refractometers in the UR24 series provide measurements in real time of the concentration parameters with installation directly on the line or on the tank.

The UR24 series not only measures homogeneous liquids such as juices, oils, soda and sauces, but also non-homogeneous fluids like fruit pulp, tomato and synthetic resins. The UR24 series consists of instruments with different optical geometry for better adaptation to different application needs. HA (High Accuracy) units are also available for when extra high levels of accuracy are required.

### Chemical & Allied

Polyurethanes  
Acrylic derivatives  
Ethylene glycol  
Ribbon polyester  
Silk  
Potassium hydroxide  
Sodium hydroxide  
Chlorine  
Lubricants  
Cotton  
Sulphuric acid &  
Oleum  
Ethanol  
Phenolic resins  
Urea & Nitrate  
Melaminic resins  
Glycerol  
Nitric acid  
Latex yarn  
Wool

### Food Processing

Honey  
Animal gelatine  
Baking yeast  
Beet sugar  
Candied fruit  
Candies  
Cane sugar  
Ketchup  
Cereals  
Tomato  
Chocolate  
Snaks  
Dairy  
Eggs  
Fresh vegetables  
Meat extract  
Fruit with syrup  
Jams & preserves  
Vegetable extracts  
Soluble coffee

### Beverage

Alcoholic drinks  
Beer  
Cider  
Coconut water  
Soft drink  
Fruit juice

## Sectors and Applications UR24

The UR24 series plays a leading role in various sectors of application and can measure liquids of various nature. The patrimony of application is enriched every day thanks to the diffusion of our instruments on an international level making it possible for us to share experiences and success all over the world.



Our refractometers started out in the food industry where they are considered the instrument of choice. Now, thanks to constant research into new applications, we are able to offer these instruments in a wide variety of fields, such as the chemical industry. The use of special materials, suitable for use in aggressive atmospheres, together with the possibility to customize the instrument both on a hardware and software level, continues to make Maselli refractometers important devices for assisting line and laboratory technicians.