#### **DATA SHEET**

## Type MZ30





## Reagent unit

- Module for storing and monitoring the reagents for the fullyautomatic operation of the flow injection analysis modules
- Records the reagent level and indicates a required replacement in due time
- Checks the correct reagent type and storage life<sup>1.)</sup>
- Fully EDIP compatible for easy system integration<sup>1,)</sup>







Product variants described in the data sheet may differ from the product presentation and description.

#### Can be combined with



Type 8905 ► Online Analysis System



Type MS06

Iron measuring module

flow injection analysis

## Type description

The reagent unit supplies the flow injection analysis within a Type 8905 system with the correct reagents. Up to three reagents are stored in a bottle holder for this.

The device checks whether the correct reagent bottles are inserted. This function is ensured by the integrated barcode reader. The barcode provides additional information on the expiry date.

The operator receives a message if a reagent is faulty. The level is detected through the weight of each bottle. In this case, the operator also receives a message if the reagents need to be topped up.

The reagent unit can be installed in a system housing or attached to the mounting plate in an analysis cabinet.

If an MZ30 without electronics is used, there is no barcode detection. The level is calculated based on the pump function.

1.) Only applies to devices with barcode reader and weight sensors (product with electronics).





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#### General technical data

Prod	luct	pro	perties

#### Material

Please make sure the device materials are compatible with the fluid you are using.

Detailed information can be found in chapter "2.1. Chemical Resistance Chart - Bürkert resistApp" on page 4.

#### Non wetted parts

Housing (if applicable) Polycarbonate Bottle holder Powder-coated steel Hoses Silicone, Polyurethane

Spiral coiled tube

#### Wetted parts

FKM Seals Bottles and bottle covers PΕ Hoses PFA or PE Waste hose PFA

**Dimensions** Detailed information can be found in chapter "3. Dimensions" on page 4. Weight

Level meter (0...250 ml) and barcode detection<sup>1.)</sup> (Bürkert specific barcode) Measuring principle Weight sensors factory calibrated, Barcode-scanner<sup>1.)</sup> Sensor

With iron measuring module Type MS06 and Online Analysis System Type 8905 Compatibility

See data sheet Type MS06 ▶ and data sheet Type 8905 ▶ for more information.

#### Performance data

Measuring range resolution1.) <1 ml Measurement deviation1.) 2 ml

**Electrical data** 

Operating voltage 24 V DC through the backplane of the system Type 8905 via büS

Power consumption Max. 1.1 W Media data

Supplies Reagent, calibration standard and cleaning solution in 250 ml bottle Detailed information can be found in chapter "7.4. Ordering chart accessories" on

page 7 and see also data sheet Type MS06 ▶ for more information.

#### Process/Port connection & communication

Tubing (integrated into product) Process connection<sup>1.)</sup> M12 connector Electrical connection<sup>1,)</sup>

Data transfer

Internal communication Through büS (Bürkert bus, CAN-Protocole)

## **Approvals and Certificates**

## **Standards**

Protection class according to IEC/ EN 60529 IP20, as standalone product without housing

· IP65, when installed in the 8905 housing

#### **Directives**

CE directives

The applied standards, which verify conformity with the EU Directives, can be found on the EU Type Examination Certificate and/or the EU Declaration of conformity (if applica-

ble).

#### **Environment and installation**

Ambient temperature	
Operating	+10+40 °C (+50+104 °F), 20 °C (68 °F) recommended
Storage and transport	-10+60 °C (+14+140 °F), only without reagents
Relative air humidity	≤90%, without condensation
Height above sea level	Max. 2000 m
Operating condition	Continuous
Equipment mobility	Fixed
Application range	Indoor and outdoor (Protect the device against electromagnetic interference, ultraviolet rays and, when installed outdoors, against the effects of climatic conditions.)
Installation category	Category I according to UL/EN 61010-1
Pollution degree	Degree 2 according to UL/EN 61010-1

<sup>1.)</sup> Only relevant for devices with bar code readers and weight sensors (product with electronics).

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## 2. Materials

## 2.1. Chemical Resistance Chart - Bürkert resistApp

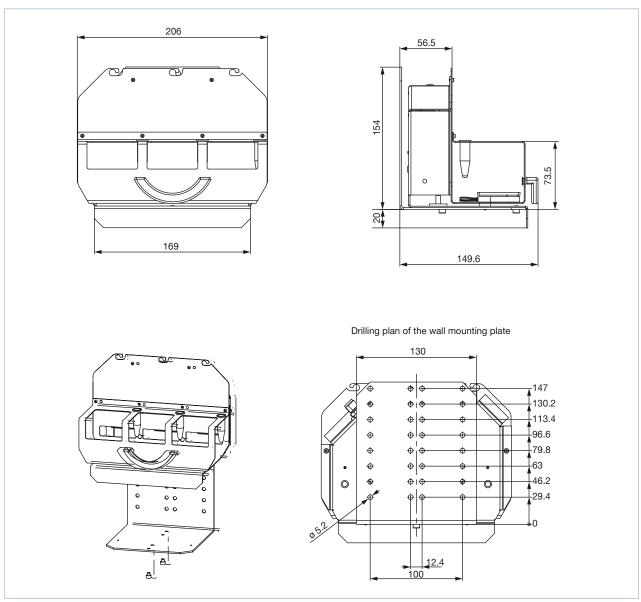


## Bürkert resistApp - Chemical Resistance Chart

You want to ensure the reliability and durability of the materials in your individual application case? Verify your combination of media and materials on our website or in our resistApp.

Start Chemical Resistance Check

## 3. Dimensions





#### 4. Product installation

#### Note:

- The device can either be installed in a control cabinet using a wall mounting plate or purchased fully assembled in an IP65 protected housing
- To operate the reagent unit it has to be associated with an injection analysis module MS06 and both together represent a variant
  of the system Type 8905.

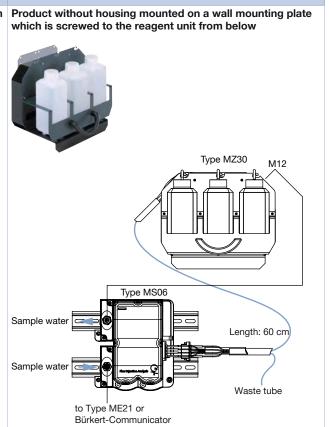
See data sheet Type 8905 ▶ Online Analysis System, data sheet Type MZ06 ▶ Iron measuring module for more information.

#### Installation example

# Product mounted in a housing for the Online analysis system Type 8905

- Reagent unit Type MZ30 + Iron measuring module Type MS06
- Housing iron measuring module Type MS06ype ME21 with HMIU electronics module





## 5. Product operation

### 5.1. Measuring principle

The MZ30 reagent unit is a holder for bottles with supplies (reagent, cleaning agent and calibration standard) to feed the MS06 iron measuring module.

### Reagent unit with electronics

The MZ30 reagent unit provides information on level, type, batch and expiry date of the used agents for the MS06.

The MZ30 is connected to the büS-system, the information is so available to the iron measuring module Type MS06 as well as to all other sensor cubes, such as e.g. Display or fieldbus interface.

The level is determined by weight sensors. The information of the reagent is read out from the barcode which is printed on the bottle labels. The reagent bottles are connected to the iron measuring module Type MS06 using connecting hoses with a pre-assembled connector.

#### Reagent unit without electronics

For the MZ30 without electronics, the filling level is determined via the calculated pump volume. The type, batch and expiry date can then not be determined.

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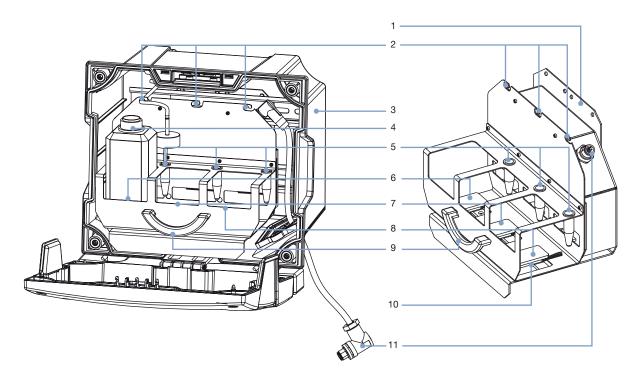


# 6. Product design and assembly

## 6.1. Product assembly

With housing Type 8905

With wall mounting plate



No.	Element
1	Wall mounting plate (according to design)
2	Guides for hoses
3	Housing Type 8905 (according to version)
4	Bottle for the supplies
5	Hose holders for the unscrewed tubes
6	Position 1: Reagent
7	Position 2: Cleaning solution
8	Position 3: Calibration solution
9	Handle for pulling out the bottle holder
10	Weight sensors
11	M12 connector to büS (only for MZ30 with electronics)

## 7. Ordering information

# 7.1. Bürkert eShop – Easy ordering and quick delivery



## Bürkert eShop - Easy ordering and fast delivery

You want to find your desired Bürkert product or spare part quickly and order directly? Our online shop is available for you 24/7. Sign up and enjoy all the benefits.

Order online now

Visit product website ▶ 6 | 8



## 7.2. Bürkert product filter



## Bürkert product filter - Get quickly to the right product

You want to select products comfortably based on your technical requirements? Use the Bürkert product filter and find suitable articles for your application quickly and easily.

Try out our product filter

## 7.3. Ordering chart

#### Note:

The product must be used with an iron measuring module Type MS06.

See data sheet Type MS06 ▶ for more information.

Description	Article no.
MS06 combinations for use in Online analysis system, Type 8905	
Reagent unit MZ30 + iron measuring module MS06, for wall-mounting or into control cabinet	567638 ≒
Reagent unit MZ30, mounted in housing + iron measuring module MS06	567637 ≒
Reagent unit MZ30 + iron measuring module MS06, both mounted in Type 8905 housings	567636 ≒
Reagent unit MZ30 (without electronics) + iron measuring module MS06, for wall-mounting or into control cabinet	569063 ≒
Reagent unit MZ30 (without electronics), mounted in housing + iron measuring module MS06	569062 ≒
Reagent unit MZ30 (without electronics) + iron measuring module MS06, both mounted in Type 8905 housings	569061 ≒

## 7.4. Ordering chart accessories

Description	Article no.
Fe Reagent solution, 250 ml For detailed information, please refer to the safety data sheet; see <b>Reagent solution data sheet</b> ▶	807613 🛱
Fe Cleaning solution, 250 ml For detailed information, please refer to the safety data sheet; see <b>Cleaning solution data sheet</b> ▶	807614 🖫
Fe Calibration standard solution, 250 ml For detailed information, please refer to the safety data sheet; see Calibration standard solution data sheet	807615 🛱

# Bürkert - Close to You

