

EZ1000 Series Sulphate Analysers

Applications

- Wastewater
- Drinking water
- Power and steam generation
- Surface water



Online colorimetric Sulphate measurements in industrial and environmental applications

Excellent analytical performance

The EZ1000 Series online analysers stem from many years of analytical expertise and application knowledge in colorimetry. At the heart of the analysers there is a compact photometer assembly. Consumption of reagents is reduced by low volume analysis, yet high sensitivity is assured by a long optical path length.

Since their introduction EZ Series Analysers have served in hundreds of industrial and municipal applications. The flexible analyser mainframe allows a perfect online duplicate of standard laboratory wet-chemical methods, with outstanding precision and accuracy.

The EZ1036 Sulphate Analysers combine unique technology with a set of analysis, control and communication features in an industrial analyser mainframe designed for the highest performance:

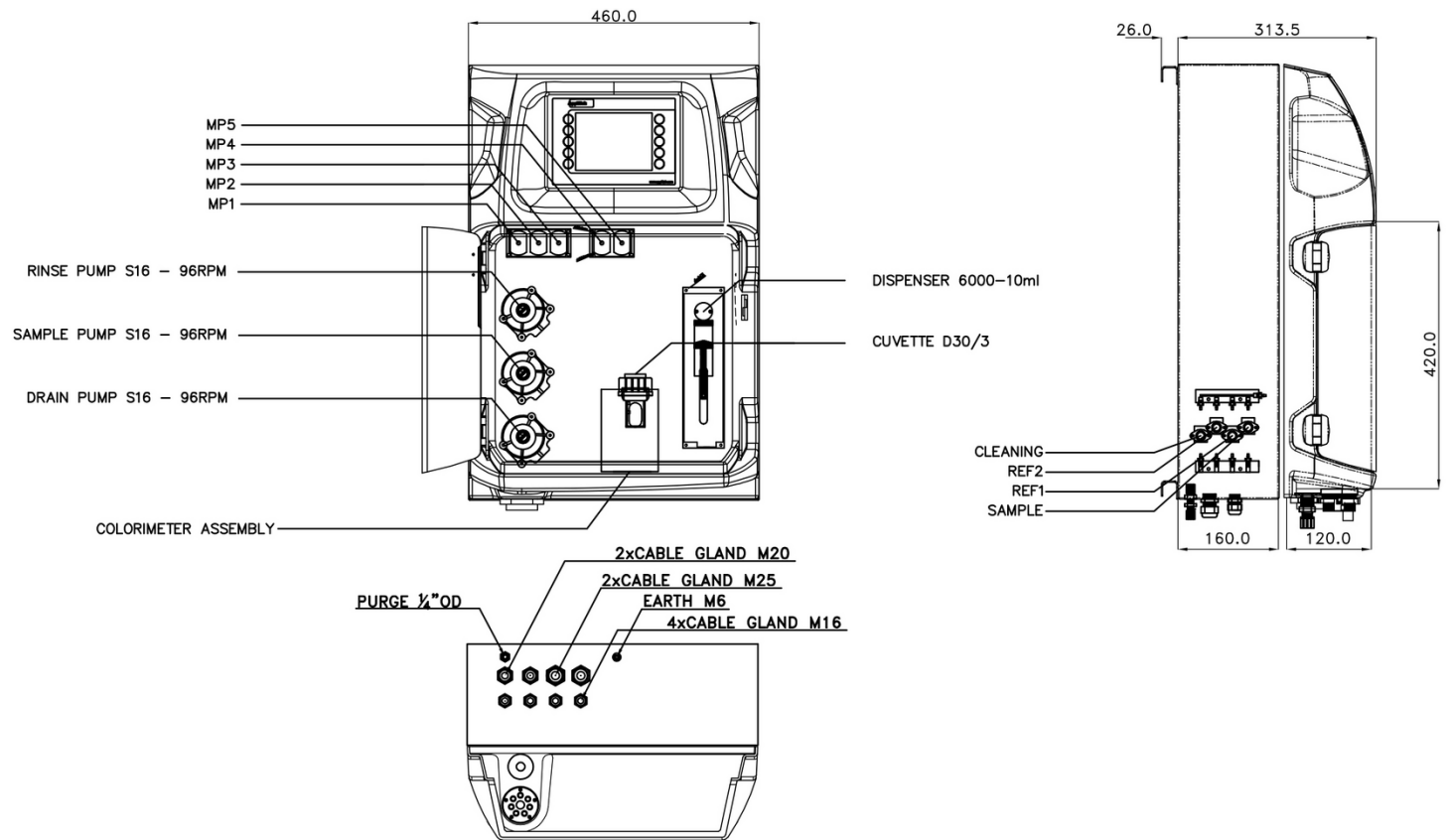
- Standard measuring ranges with optional internal dilution
- Smart automatic features
- Control and communication via industrial panel PC
- Analogue and digital output options
- Multiple stream analysis (up to 8 streams)

Technical Data*

| | |
|-------------------------------|--|
| Parameter | Sulphate |
| Measurement method | Colorimetric measurement of turbidity at 450 nm after barium precipitation, conform with standard methods EPA 375.4 and APHA 4500-SO ₄ |
| Measuring range | 10 - 40 mg/L SO ₄ ²⁻ |
| Precision | Better than 3% full scale range for standard test solutions |
| Detection limit | ≤ 10 mg/L |
| Interferences | Other metals that form complexes with EDTA. Silica > 500 mg/L, organic matter in water. Suspended or colloidal organic matter also may interfere with the endpoint. Large amounts of colour and turbidity interfere. Fats, oil, proteins, surfactants and tar. |
| Cycle time | 10 minutes (dilution + 5 min) |
| Automatic cleaning | Yes |
| Calibration | Automatic, 2-point; frequency freely programmable |
| Validation | Automatic; frequency freely programmable |
| Ambient temperature | 10 - 30 °C ± 4 °C deviation at 5 - 95% relative humidity (non-condensing) |
| Reagent requirements | Keep between 10 - 30 °C |
| Sample pressure | By external overflow vessel |
| Flow rate | 100 - 300 mL/min |
| Sample temperature | 10 - 30 °C |
| Sample quality | Maximum particle size 100 µm, < 0.1 g/L; Turbidity < 50 NTU |
| Power | 110 - 240 VAC, 4 A, 50/60 Hz Max. power consumption: 150 VA |
| Instrument air | Dry and oil free according to ISA-S7.0.01-1996 quality standard for instrument air |
| Demineralised water | For rinsing and/or dilution |
| Drain | Atmospheric pressure, vented, min. Ø 64 mm |
| Earth connection | Dry and clean earth pole with low impedance (< 1 Ohm) using an earth cable of > 2.5 mm ² |
| Analogue outputs | Active 4 - 20 mA max. 500 Ohm load, standard 1, max. 8 (option) |
| Digital outputs | Optional: RS232, Modbus (TCP/IP, RS485) |
| Alarm | 1 x malfunctioning, 4 x user-configurable, max. 24 VDC/0.5 A, potential free contacts |
| Protection class | Analyser cabinet: IP55 / Panel PC: IP65 |
| Material | Hinged part: Thermoform ABS, door: plexiglass Wall section: Galvanised steel, powder coated |
| Dimensions (H x W x D) | 690 mm x 465 mm x 330 mm |
| Weight | 25 kg |
| Certifications | CE compliant / UL certified |

*Subject to change without notice.

Dimensions



Be confident with Hach Service

Start-Up/Commissioning: Our service technicians visit your site and setup instrumentation, provide basic end-user training on operations and maintenance, and validate settings and performance to get you started.

Service Agreement: Hach provides on-site and in-factory repair, preventive maintenance, and calibration programs for your instruments to ensure reliability and instrument up-time. We have services to fit your specific needs.

Order Information

| Standard range, 10-40 mg/L SO ₄ ²⁻ | EZ1036.99 | X | X | X | X | X | 2 |
|--|-----------|---|---|---|---|---|---|
| Measurement range settings / Dilution options | | | | | | | |
| 50% of standard range | | C | | | | | |
| Standard range | | 0 | | | | | |
| Internal micropump dilution (factor 4) | | 1 | | | | | |
| Internal micropump dilution (factor 8) | | 2 | | | | | |
| Internal dispenser dilution (max factor 100) | | 5 | | | | | |
| Customised | | Z | | | | | |
| Power supply | | | | | | | |
| Standard 110 - 240 VAC; 50/60 Hz | | | 0 | | | | |
| Customised | | | Z | | | | |
| Number of sample streams | | | | | | | |
| 1 stream | | | | | 1 | | |
| 2 streams | | | | | 2 | | |
| 3 streams | | | | | 3 | | |
| 4 streams | | | | | 4 | | |
| 5 streams | | | | | 5 | | |
| 6 streams | | | | | 6 | | |
| 7 streams | | | | | 7 | | |
| 8 streams | | | | | 8 | | |
| Outputs | | | | | | | |
| 1x mA | | | | | | 1 | |
| 2x mA | | | | | | 2 | |
| 3x mA | | | | | | 3 | |
| 4x mA | | | | | | 4 | |
| 5x mA | | | | | | 5 | |
| 6x mA | | | | | | 6 | |
| 7x mA | | | | | | 7 | |
| 8x mA | | | | | | 8 | |
| RS232 | | | | | | A | |
| Modbus TCP/IP | | | | | | B | |
| Modbus RS485 | | | | | | C | |
| 1x mA + Modbus RS485 | | | | | | E | |
| 2x mA + Modbus RS485 | | | | | | F | |
| 3x mA + Modbus RS485 | | | | | | G | |
| 4x mA + Modbus RS485 | | | | | | H | |
| 1x mA + Modbus TCP/IP | | | | | | I | |
| 2x mA + Modbus TCP/IP | | | | | | J | |
| 3x mA + Modbus TCP/IP | | | | | | K | |
| 4x mA + Modbus TCP/IP | | | | | | L | |
| Customised / combined | | | | | | Z | |
| Specials | | | | | | | |
| No adaption, standard version | | | | | | | 0 |
| Customer specific adaptations required, to specify | | | | | | | S |