



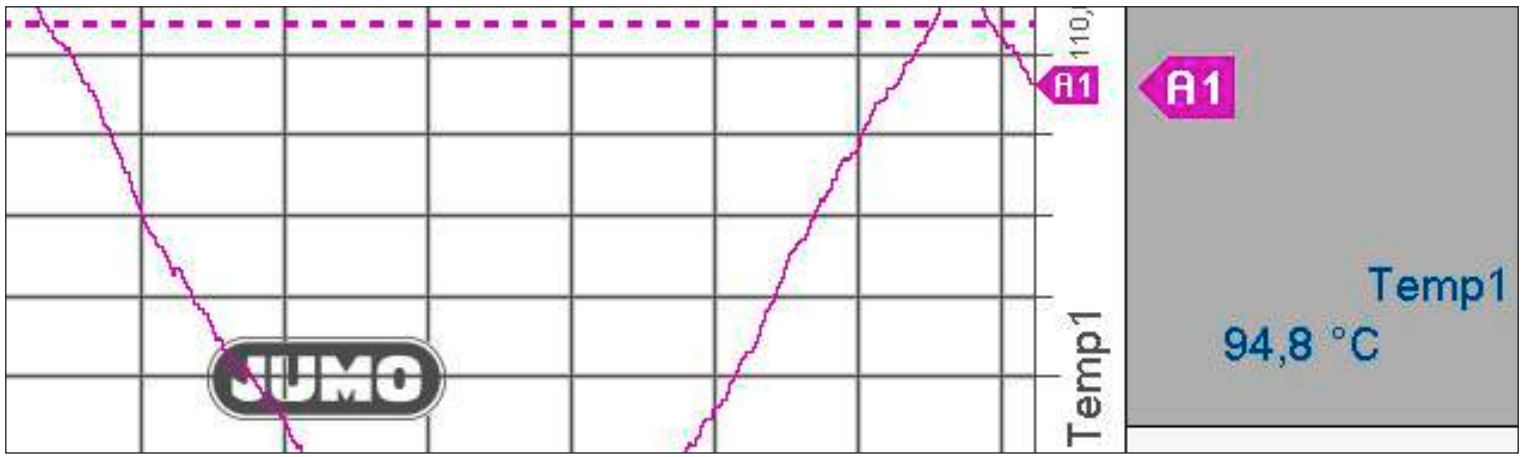
More than **sensors + automation**



JUMO LOGOSCREEN 700

Highly-scalable paperless recorder





JUMO LOGOSCREEN 700

The JUMO LOGOSCREEN 700 paperless recorder is characterized by a simple, intuitive operation. This is ensured by the operating and visualization concept that is based on symbols. A high level of scalability level allows the device to be easily adapted to various customer requirements: from a device version without a measurement input through to device versions with up to 18 measurement inputs, 3 analog outputs, 18 digital inputs, 24 individually switchable digital inputs/outputs, and 7 relay outputs.



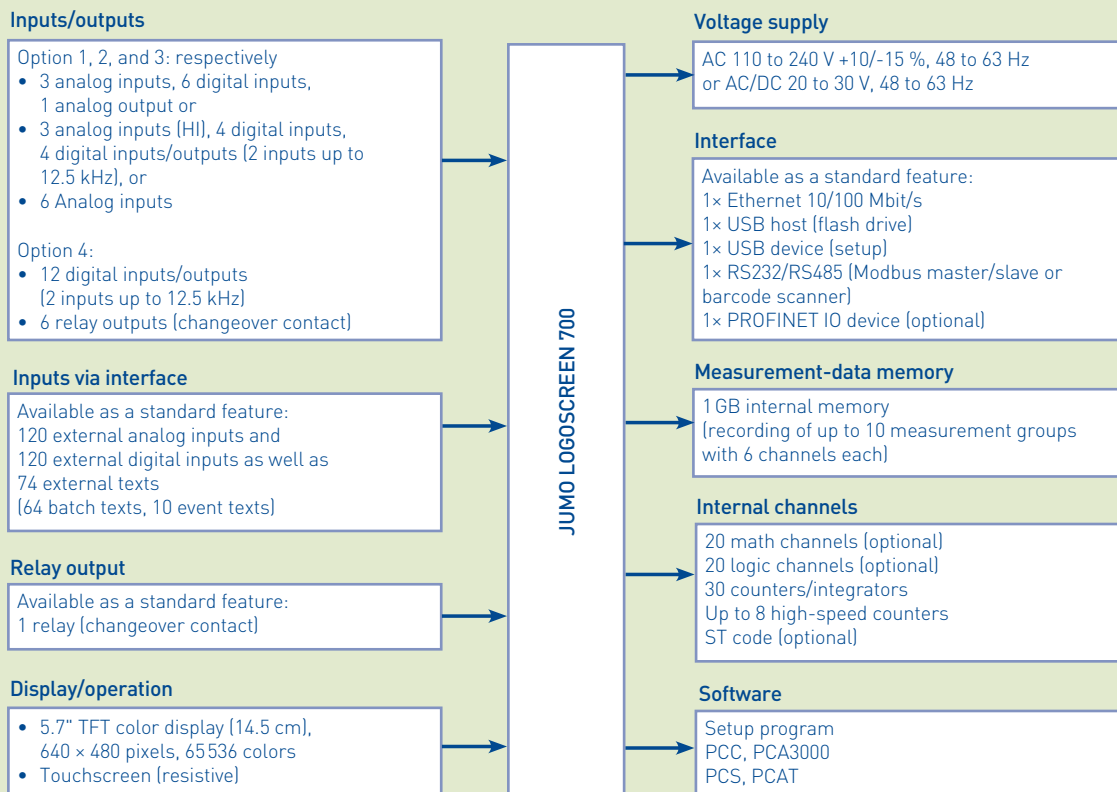
Your benefits in a nutshell

- Flexible application for different tasks – due to the high level of scalability the device can be designed around the plant
- Highest degree of security during data acquisition through manipulation detection based on the latest hash algorithms with digital certificate
- Up to 5 adaptable batch reports with automatic batch printout for documentation of quality-related data
- More safety through batch-related alarm assignment
- Individual adaptation to existing applications through ST code
- Visualization of the plant or depiction of process states with up to 10 customer-specific process screens
- Up to 8 counter inputs facilitate flow measurement based on fast digital pulse generators
- Clearer evaluation by using up to 2 auxiliary lines per measuring channel
- Flexible system connection through a multitude of different interfaces
- Less space required for installation due to low mounting depth of only 121 mm
- Fast startup through the use of PUSH IN terminals

Features

- Display: 5.7" TFT color graphics screen (640 × 480 pixel)
- Operation: touchscreen
- Front panel: die-cast zinc with decor foil (144 × 144 mm format)
- Protection type: on the front IP65
- Up to 18 universal measurement inputs for RTD temperature probes, thermocouples, and standard signals
- Up to 24 individually switchable digital inputs/outputs
- Up to 18 digital inputs
- Up to 3 analog outputs; each can be used as voltage output 0 to 10 V or current output 0(4) to 20 mA
- Relay output: 1 changeover contact (standard), 6 changeover contacts (optional)
- Up to 8 counter inputs (up to 12.5 kHz)
- Variable memory cycle as of 125 ms
- Internal memory 1 GB
- External storage media (e.g. USB flash drive)

Block diagram





Find what you want in 3 steps – intuitive touch operation

Symbol menu system

The JUMO LOGOSCREEN 700 can be used almost intuitively with the menu system based on symbols. Per default the following operating languages are available: English, German, French, Spanish, Italian, Czech, Russian, and Chinese. Individual language versions can also be created with the setup program.

Language-neutral support via almost self-explanatory symbols offers the user a completely new operating experience.

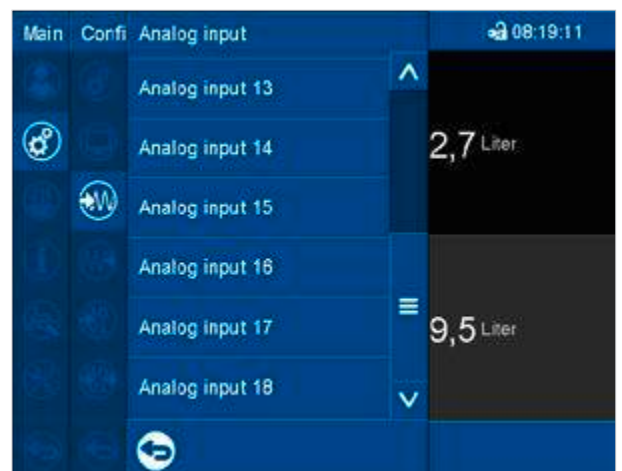


Increased usability through the use of language-neutral symbols

Operating concept

The operating is designed so that in the majority of cases the user can reach the intended destination with 3 touch operations. The display of the touch navigation system means that users have an overview of where they are at all times and can operate the paperless recorder without having to spent a lot of time reading the manual.

Integrated user administration prevents unauthorized access. Up to 5 (50 in the version according to FDA 21 CFR Part 11) different user accounts with individual access rights can be created. The use of user profiles simplifies the administration of individual users.



View everything at once with the touch navigation system display

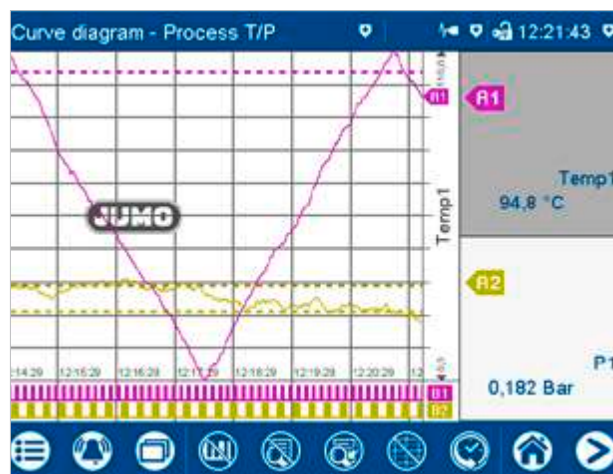
Individual design – visualization of measurement data thanks to professional device software

Data visualization

The JUMO LOGOSCREEN 700 with up to 10 measurement groups offers various options for visualizing measurement data:

- Vertical and horizontal line chart
- Bar graph display
- Text image (numerical)
- Digital diagram
- Report display
- Batch report
- Process screen

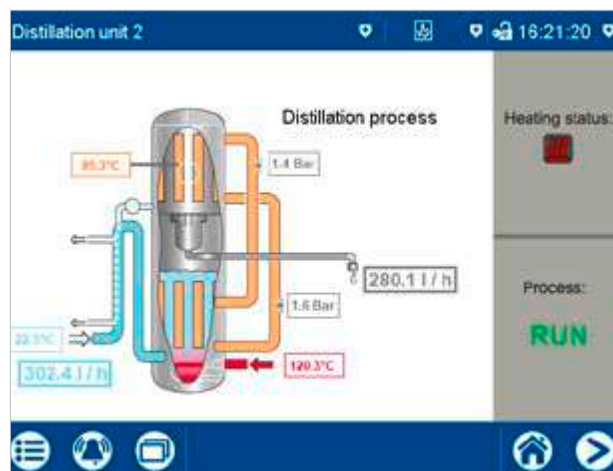
In addition, the color of the individual channels as well as the diagram background color with analog curves and digital tracks can be selected.



Horizontal line chart with white background and auxiliary lines for better legibility

Create personalized process screens

As a highlight, process screens can be used for visualization in the JUMO LOGOSCREEN 700. The user can create up to 10 individual process screens in the setup program without any advanced programming skills. These can comprise up to 100 objects (images, measured value fields, value/text entry, etc.). Thanks to high resolution and color depth even the smallest details are displayed perfectly. A process screen generated in this manner visualizes plant and process statuses which gives the user a particularly clear and complete impression of the plant.



Everything at a glance with up to 10 individual process screens (e.g. a process screen for the distillation process)



Securely networked – interfaces and software for continuous data flow

High degree of connectivity

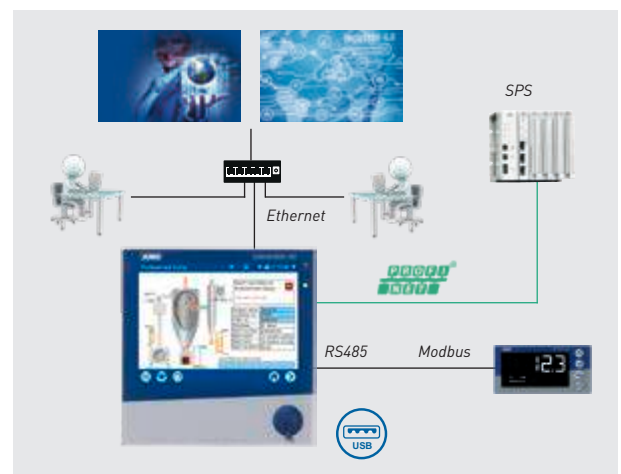
The JUMO LOGOSCREEN 700 is equipped with the following interfaces as standard features: 1 Ethernet, 2 USB, and 1 RS232/RS485. These support the following functions:

- DHCP, HTTP, DNS device names
- Communication with the PC setup program
- Web server
- Automatic data readout (PCC software)
- Email notification for up to 5 alarm events
- Time synchronization via SNTP
- Communication via Modbus/TCP (master/slave)
- Communication via Modbus/RTU (master/slave)

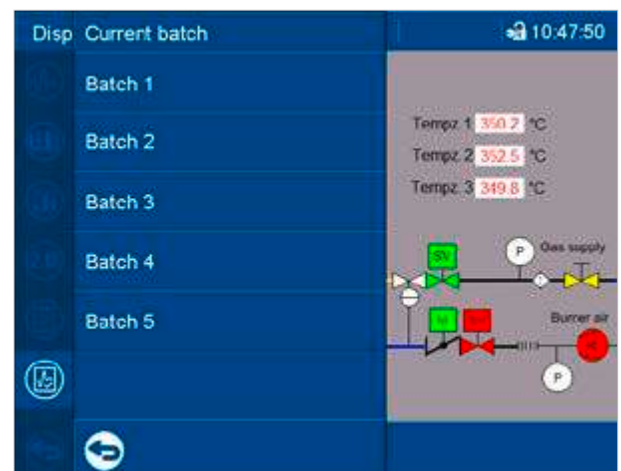
As an option, the paperless recorder also has a powerful PROFINET interface that can record up to 60 channels in an analog and digital manner as well as display 120 external analog and digital inputs.

Networked batch reporting

The JUMO LOGOSCREEN 700 allows batch reports to be created for up to 5 plants simultaneously. The touch-screen is used to enter batch texts as well as to start and stop a batch. Alternatively, data can also be transferred using a barcode scanner or an interface (e.g. PROFINET). For batch evaluation, measurement data as well as the beginning, end, and duration of the batch along with a batch counter and batch texts can be displayed. Using the "automatic printout" option in the evaluation software PCA3000 and the PCC communication software, it is possible to automatically print batch data/reports or to make them available as a PDF file in a connected network. The output forms for this task can be customized.



Networked batch recording in the fluid bed dryer



Recording of up to 5 batches simultaneously

Maximum flexibility – slot-based measuring card concept

Highly scalable system

The high degree of scalability makes the paperless recorder JUMO LOGOSCREEN 700 unique in its class. Due to a flexible measuring card concept the device can be equipped with 0 to 18 channels. Even if the requirements change during operation the measuring cards can be easily retrofitted.

Highly insulated and perfectly protected

The measurement inputs of the 3-channel and 6-channel standard measurement cards are isolated. This means that the channels are galvanically isolated from each other.

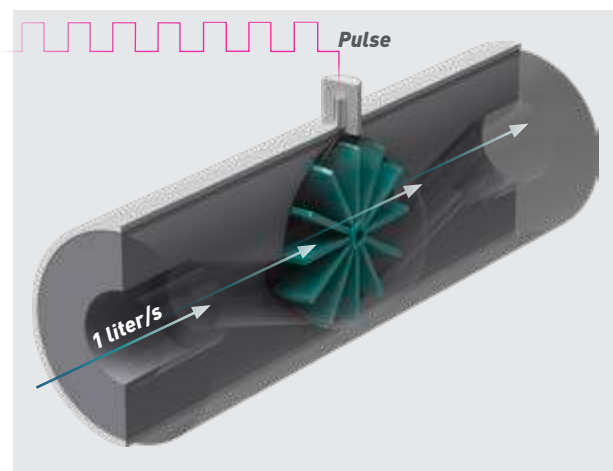
In addition, a highly insulated 3-channel measuring card is now available. The highly insulated measuring inputs are inspected at an alternating test voltage of 3 500 V.

Flexible flow measurement

The JUMO LOGOSCREEN 700 has up to 8 high-speed counters. These counter inputs allow the implementation of a flexible flow measurement concept based on fast digital pulse generators. For example, the pulses given by a paddlewheel flowmeter can be further processed as a flow measurand. As a result, the pumped water quantity per day, per week, per month, and even per year can be balanced in a report.



Example of possible measuring card placement



*Pulse output of a flowmeter
(e.g. 6 pulses = 0.1 l (f = 60 Hz))*

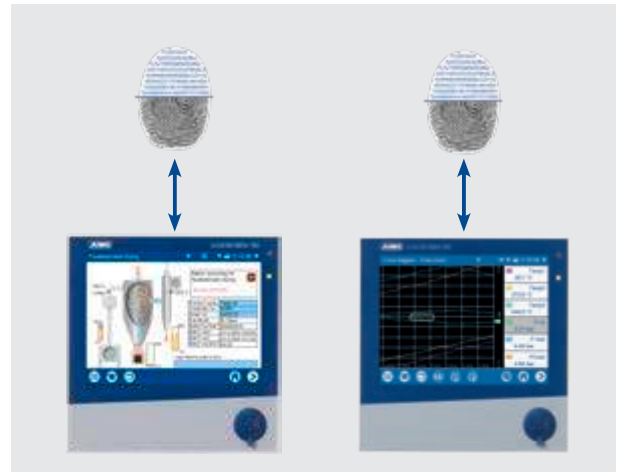


Safe data handling – manipulation detection with digital certificate

Manipulation detection

Increased transparency of data also entails the risk of manipulation. Especially if legal proof of important process data is required, data evaluation as it applies to manipulation is important.

The optional extra code 887 "Manipulation detection with digital certificate" gives the JUMO LOGOSCREEN 700 the highest degree of data security for critical, verifiable process data recordings.



Digital device certificate as digital thumbprint

Digital device certificate

A digital device certificate ensures that the registration data has not been manipulated or changed in the device during transmission or evaluation. This highest possible security of the manipulation detection was implemented for the JUMO LOGOSCREEN 700 and the associated evaluation software PCA3000 by a special TÜV-tested hash algorithm. This, consequently, ensures that further data evaluation occurs based on data that has not been manipulated. For critical audits this ensures safe and reliable proof of the recorded process data with traceability of the so-called raw data back to the manufacturing and production process.



Device certificate display in the JUMO LOGOSCREEN 700

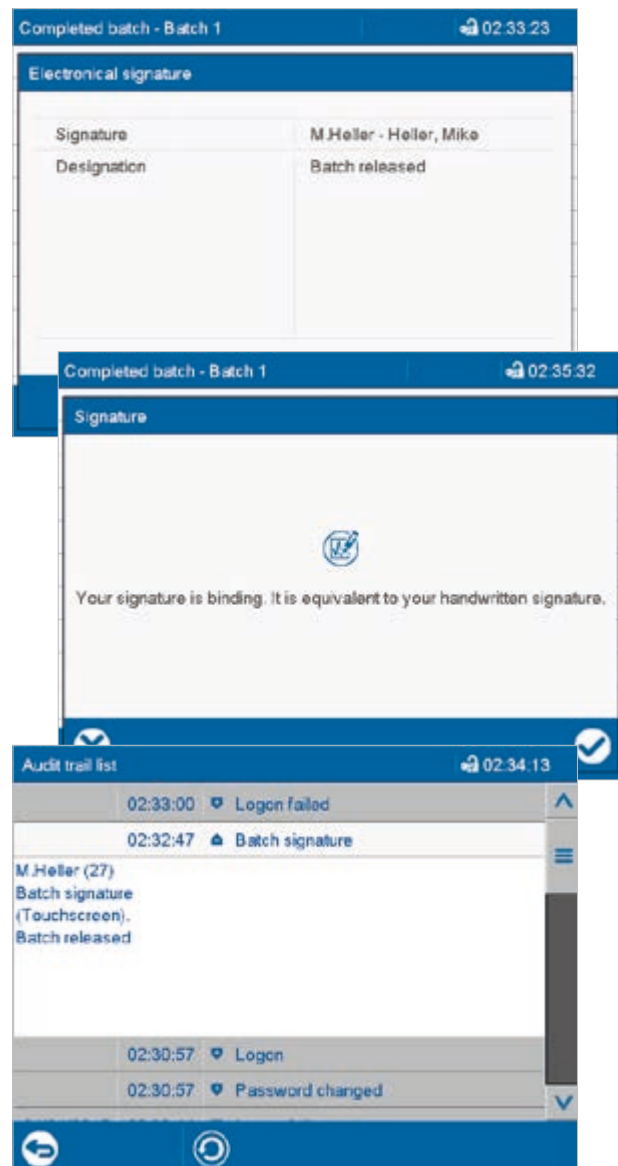
Secure process data acquisition – according to FDA 21 CFR Part 11, AMS2750, and CQI-9

Standard-compliant data recording

For the proper and clearly traceable recording of electronic process data, the Food and Drug Administration (FDA) passed Title 21 CFR Part 11 (Code of Federal Regulations) in 1997. This law defines the requirements for paperless logging of production processes as well as the electronic signature that corresponds to a handwritten signature. The JUMO LOGOSCREEN 700 with the optional extra code 888 "FDA 21 CFR Part 11 with digital certificate" fulfills all FDA requirements for paperless digital process data recording. In addition, data recording during heat treatment processes can comply with the AMS2750 and CQI-9 standards.

Security for up to 50 users

User management with the PC security manager software (PCS) enables administration of up to 50 users per device. The electronic signature under a batch protocol, the indication of a time range, the assignment of authenticated comment texts, and the logoff underlines the flexibility in the logging of verifiable processes. Using the audit trail function, the process-related operation history can be recorded along with the process data. The security software package with setup, PC security manager software (PCS), PC communication server software (PCC), PC evaluation software (PCA3000), and PC audit trail manager software offer maximum convenience for startup, user management, data handling, and the evaluation. A sealable terminal cover is available for the JUMO LOGOSCREEN 700 to protect against manipulation of the sensor connections.



Batch recording with electronic signature



Services & Support

It is the quality of our products that is responsible for such a high level of customer satisfaction. But our reliable after-sales service and comprehensive support are also valued. Let us introduce you to the key services we provide for our innovative JUMO products. You can count on them – anytime, anywhere.

JUMO Services & Support – so that it all comes together!

Manufacturing Service



Are you looking for a competitive and efficient system or component supplier? Regardless of whether you seek electronic modules or perfectly fitting sensors – either for small batches or mass production – we are happy to be your partner. From development to production we can provide all the stages from a single source. In close cooperation with your business our experienced experts search for the optimum solution for your application and incorporate all engineering tasks. Then JUMO manufactures the product for you.

As a result you profit from state-of-the-art manufacturing technologies and our uncompromising quality management systems.

Customer-specific sensor technology

- Development of temperature probes, pressure transmitters, conductivity sensors, or pH and redox electrodes according to your requirements
- A large number of testing facilities
- Incorporation of the qualifications into application
- Material management
- Mechanical testing
- Thermal test



Electronic modules

- Development
- Design
- Test concept
- Material management
- Production
- Logistics and distribution
- After-sales service



Metal technology

- Toolmaking
- Punching and forming technology
- Flexible sheet metal machining
- Production of floats
- Welding, jointing, and assembly technology
- Surface treatment technology
- Quality management for materials





Information & Training



Would you like to increase the process quality in your company or optimize a plant? Then use the offers available on the JUMO website and benefit from the know-how of a globally respected manufacturer. For example, under the menu item "Services and Support" you will find a broad range of seminars. Videos are available under the keyword "E-Learning" about topics specific to measurement and control technology. Under "Literature" you can learn valuable tips for beginners and professionals. And, of course, you can also download the current version of any JUMO software or technical documentation for both newer and older products.

Product Service



We have an efficient distribution network on all continents available to all of our customers so that we can offer professional support for everything concerning our product portfolio. Our team of professional JUMO employees is near you ready to help with consultations, product selection, engineering, or optimum use of our products. Even after our devices are commissioned you can count on us. Our telephone support line is available to give you answers quickly. If a malfunction needs to be repaired on site our Express Repair Service and our 24-hour replacement part service are available to you. That provides peace of mind.

Maintenance & Calibration



Our maintenance service helps you to maintain optimum availability of your devices and plants. This prevents malfunctions and downtime. Together with the responsible parties at your company we develop a future-oriented maintenance concept and are happy to create all required reports, documentation, and protocols. Because we know how important precise measurement and control results are for your processes we naturally also professionally calibrate your JUMO devices – on site at your company or in our accredited DAkkS calibration laboratory for temperature. We record the results for you in a calibration certificate according to EN 10 204.



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