



More than **sensors + automation**



Dial thermometers

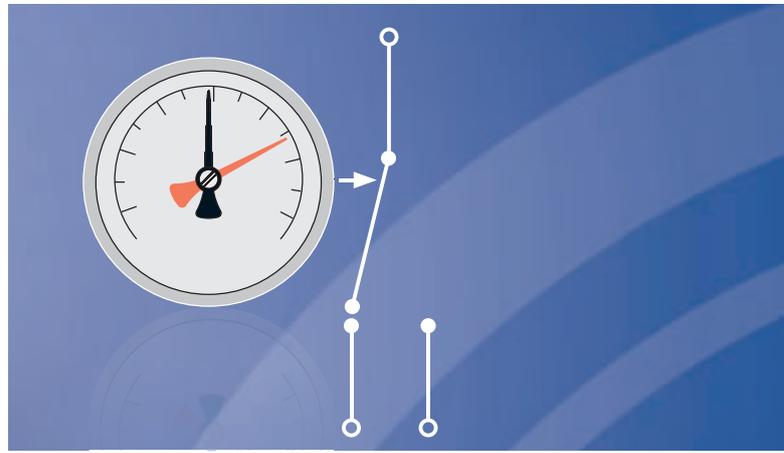
Innovative solutions for the highest requirements



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Dear reader,

Life in our modern industrial society is marked by the rapid progress of technology, accompanied by the demand for greater safety.

Considering the severity of possible accidents, selective use of reliable products is therefore essential in all sectors of industry. JUMO offers dependable measurement and control technology specially designed for specific applications for this purpose to reliably monitor machines and plants. This helps you efficiently develop your core competence in machine and plant engineering.

Continually focused on the latest trends, we develop and produce a range of products covering all the challenging requirements of measurement and control technology.

As state-of-the-art instruments, JUMO dial thermometers stand for safety and reliability.

The high standard of our products is based on extensive quality control measures. Our dial thermometers are continuously put to the test in measuring and monitoring processes, yet even under extreme ambient conditions they always provide temperatures reliably in thermal processes.

Continual contact with users of our products enables us to respond precisely to individual needs.

In this way we are able to develop new products carefully crafted for the expanding demands of this challenging business segment.

Further information about our products can also be found at www.jumo.net.

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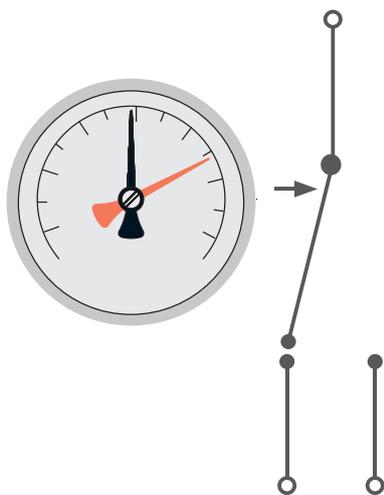
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Dial thermometer production

To ensure the high quality standard of our dial thermometers, they are manufactured with maximum precision in production facilities developed specifically for and with JUMO. An efficient process that preserves resources is indispensable.

High level of process safety with optimized production processes



High-quality materials are used for processing, resulting in devices with a sturdy design to ensure a long operating life for our products. Special welding and soldering processes support this process and enhance the quality of our measuring systems. To meet required delivery times, all dial thermometers are manufactured in modern, ergonomic independent workstations. This is the only way to produce dial thermometers efficiently and cost-effectively even with a batch size of 1. Optimum material flow and short transport routes within the company also provide strong support in this regard.

Sophisticated products, maximum precision and competent consulting – high standards met by JUMO.



Measuring systems



Specialized laser method for creating scales



Our wide and varied assortment of dial thermometers offers you the best solution for your needs, customized to the individual requirements of your industry. Decades of experience and refined technologies guarantee you maximum performance and reliable use of your products for many years.

With our numerous international locations, we have reliable contacts close at hand and personally available for you worldwide. They will be happy to provide support for you in choosing the optimum products for your specific application. Our service is customer-oriented in every way.



Dial thermometers

The wide assortment of products includes the right solution for almost any industrial application. Adaptations for specific industries and applications are always possible. These products can be manufactured to customized specifications by choosing from a display range between $-50\text{ }^{\circ}\text{C}$ and $+650\text{ }^{\circ}\text{C}$ with a large selection of different case sizes, design types and process connection.



Dial thermometers



	Description	JUMO bimetal dial thermometers – Industrial version – Chemicals version	JUMO dial thermometers – Transformer version	JUMO dial thermometers with capillary system	JUMO dial thermometers in bayonet case
General	Type	608002/608003	608005	608201	608225
	Features	– Industrial and chemicals design – Stainless steel case	– Temperature indicator in the stainless steel case – Drag pointer	– Temperature indicator in flush panel or surface mounted case	– Temperature indicator in flush panel or surface mounted case – Ambient temperature compensation as a standard feature
	Areas of applications	– Mechanical engineering – Process technology – Transmission construction – Chemical industry – Plant engineering	– Industrial transformers	– Oven construction – Compressor construction	– Mechanical engineering – Process technology – Transmission construction – Chemical industry – Plant engineering
Technical data	Accuracy class acc. to DIN EN 13190	Class 1	Class 1.5	Class 1.5	Class 1
	Case size	60 mm, 80 mm, 100 mm, 160 mm	80 mm	60 mm, 80 mm, 100 mm	100 mm and 160 mm
	Probe exit	Vertical or horizontal			
	Capillary/ rigid thermowell	Rigid thermowell	1" Screw connection, probe 150 mm long for mounting in transformer sleeve	Capillary length up to 10.000 mm available	

Contact dial thermometers

The function of contact dial thermometers is to display the temperature while simultaneously monitoring and controlling it. Up to two microswitches can be used simultaneously, freely adjustable by the user over the entire scale range. Circuits up to 5 A, 230 V, (optionally up to 10 A, 230 V) can be connected directly. Gold-plated microswitches are available for applications up to 100 mA.



Contact dial thermo meters



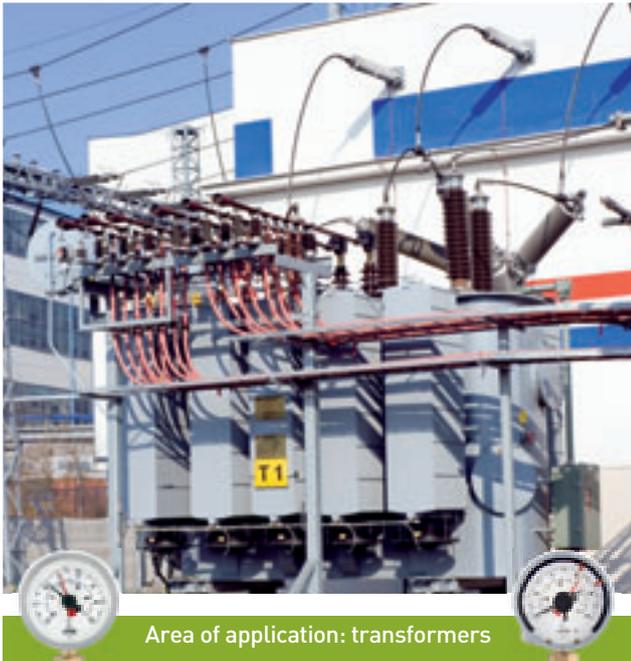
	Description	JUMO microstat M	JUMO contact dial thermometers	JUMO contact dial thermometers in bayonet case
General	Type	608501	608520/608523/608540	608425
	Features	<ul style="list-style-type: none"> – Temperature controllers with microswitch in plastic flush-panel mounting case – Optionally available with sheet metal case 	<ul style="list-style-type: none"> – Temperature controller with up to two microswitches – IP65 available (type 608523) 	<ul style="list-style-type: none"> – Temperature controller in flush panel or surface mounted case – Ambient temperature-compensation
	Areas of applications	<ul style="list-style-type: none"> – Compressor construction – Baking oven construction 	<ul style="list-style-type: none"> – Monitoring of oil temperature in industrial transformers – Process technology 	<ul style="list-style-type: none"> – Process technology – Baking oven construction
Technical data	Accuracy class acc. to DIN EN 13190	–	Class 1.5	Class 1
	Case size	60 mm, 80 mm, 100 mm	60 mm, 80 mm, 100 mm, made of CrNi (608540 made of polyamide, only 80 mm)	100 mm und 160 mm
	Capillary/ rigid thermowell	With capillary	Rigid thermowell or capillary (up to 10 m)	
	Probe exit	–	Vertical or horizontal	

Dial thermometers in transformers and ovens

Dial thermometers are easy and uncomplicated to work with, which explains their widespread use in industrial applications. For example, they are simple to install and the actual temperature can be read directly.

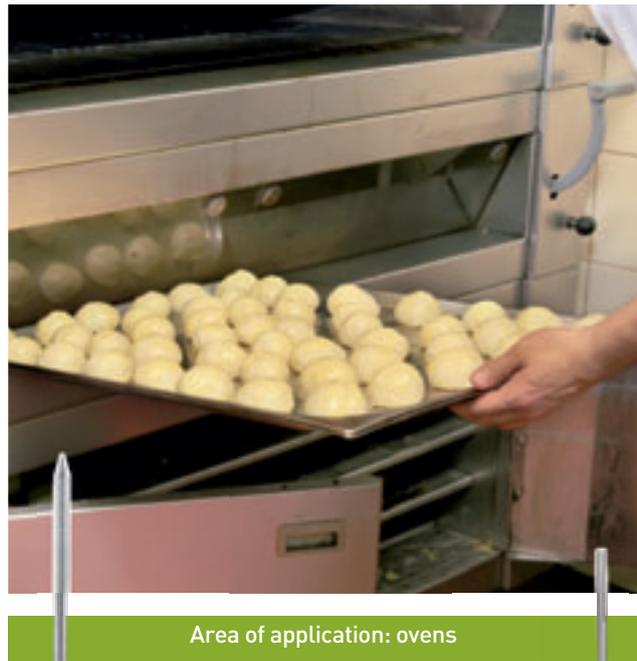


Sample applications



JUMO dial thermometers
transformer version
Type 608005

JUMO contact dial thermometers
Type 608540



JUMO dial thermometers
with capillary system
Type 608201



JUMO microstat M
Type 608501

Temperature monitoring in the oil circuit of a transformer

JUMO dial thermometers are used as a monitoring unit in oil-filled transformers. An increase in the oil temperature can serve as an indication of a breakage in insulation. If a temperature indicator is used, the increase in oil temperature can be read directly on the device. If a contact dial thermometer is used, the communication unit can receive the relevant information via a signal from the switch and prevent serious damage.

Temperature monitoring in an baking oven

The internal temperature of an baking oven can be measured with the JUMO dial thermometer type 608201. The user can read the internal oven temperature from the clearly designed scale at any time. The type 608501 microstat can be used as a temperature controller in baking ovens. This microstat offers users added value features such as simple adjustment of the setpoint value and directly switching 10A at 230V. The current temperature can also be read directly, as on all dial thermometers.



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