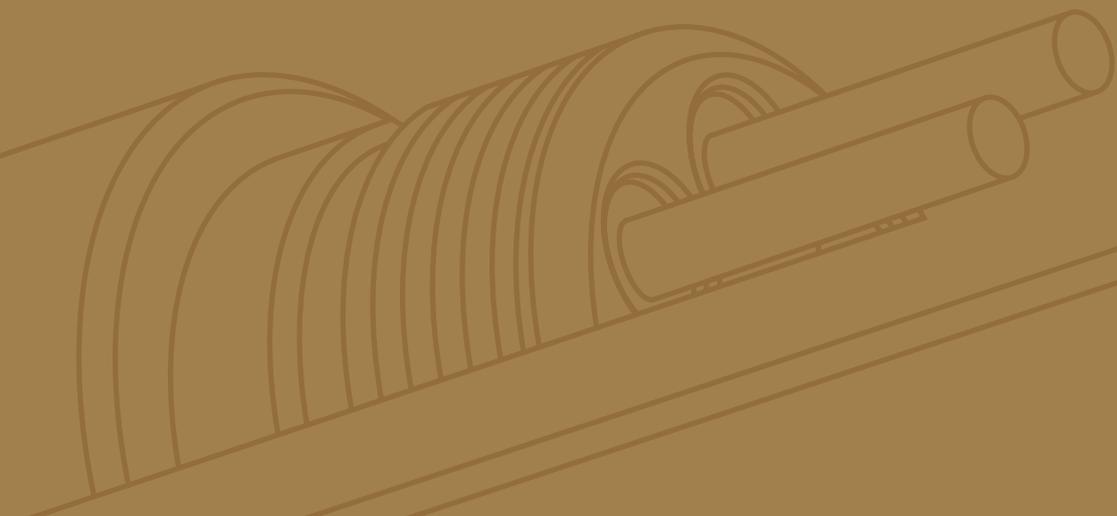


IL Metronic

Sensortechnik GmbH



DUV27 UV MONITOR

UV ABSOLUT

150.5 W/m²

75.1 %

23.4 °C

PASSION AND TRADITION



*Production of traditional glass products
around 1930*

For every technical challenge the right product - that is our claim. Our dedicated team of engineers and skilled workers is available from the idea - through product development - up to the product integration at the user - with words and deeds aside. As our customers and partners of our award-winning company, you can always rely on consistently high quality and innovation of our products.

Since the invention of the electron tube, which is, on closer inspection, a special form of a glass feedthrough, the glass-metal compounds have become indispensable in the electronics industry and are still an integral part in the analysis and measurement technique.

Evolved from the traditional glass industry in Thuringia and matured in the change of time from the industrialization to high technology, our products now constitute an indispensable link between developers and users.



Our general manager Dr. Horst Hansch talking with business partners

Together with our customers we develop solutions, adjusted to your specific requirements in order to implement these into marketable products within shortest possible development cycles. Our engineers can rely on a foundation of decades of experience in research, development and manufacture of electronic components.

UN DER STAND

At the beginning of each product there is a vision or an idea. Our major challenge is to meet our customers, to understand their technical needs and to assist them in implementing their visions.

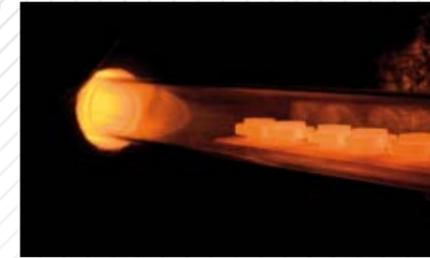
DE VELOP



The common work on research- and development themes with academic institutes show the innovation ability of our team of high qualified specialists around the managers Dr. Horst Hansch and Rolf Kirchhoff

PRO DUCE

On modern and highly specialized equipment first samples are produced in an operationally independent development production. After testing at the customer, numbers of >200.000 pieces per year can be produced under series production conditions. The high level of vertical integration in the company ensures controlled and efficient processes.



Glowing sealing goods at nearly 1000°C during the cooling process

„Es ist nicht genug herzustellen. Man muß auch verkaufen!“

Dr. Horst Hansch · 1992

„Es ist nicht genug zu wissen, man muss auch anwenden. Es ist nicht genug zu wollen, man muss auch tun.“

Goethe · 1829

SPECIAL GLASS FEED THROUGHS

Electrical feedthroughs, called "special glass feedthroughs" because of its customized characteristic, come into action, if electrical current and signals must pass through different media and/or atmospheres.

They also serve for protection of sensitive components (housing). With the outstanding physical properties of special glass feedthroughs, the applications and operations in e.g. medicine-, measurement-, energy- and safety technology, but also in aerospace, are deducible to unforeseen potentials.

TECHNICAL SPECIFICATIONS

The following parameters can be achieved according to current state of the art:

Outer diameter 5 ... 150 mm

high temperature resistance > 450 ° C

high compressive strength > 4500 bar

high chemical resistance

absolute gas tightness 1×10^{-9} mbar l / s

high dielectric strength > 2 kV

high electrical $R_{iso} > 1 \text{ T}\Omega$



SENSOR TECHNOLOGY



UV-MEASUREMENT TECHNOLOGY

IL Metronic Sensortechnik GmbH develops, produces and calibrates, among other products, sensors, probes, measurement windows and measurement units for UV measurement technology in different wave length ranges (see fig. 2). For many applications with UV lamps it is necessary to monitor and display the UV irradiance permanently. For the air- and especially for the drinking water disinfection, probes, measurement windows and measurement units are produced according to the legal standards (ÖNORM M 5873, DVGW W294-3). Additionally, sensors with ATEX as well as IECEx certification are available. In the range of process- and industrial wastewater disinfection also monitoring functions of powerful medium pressure applications $> 5 \text{ kW/m}^2$ (electrical UV lamp power) are realizable.

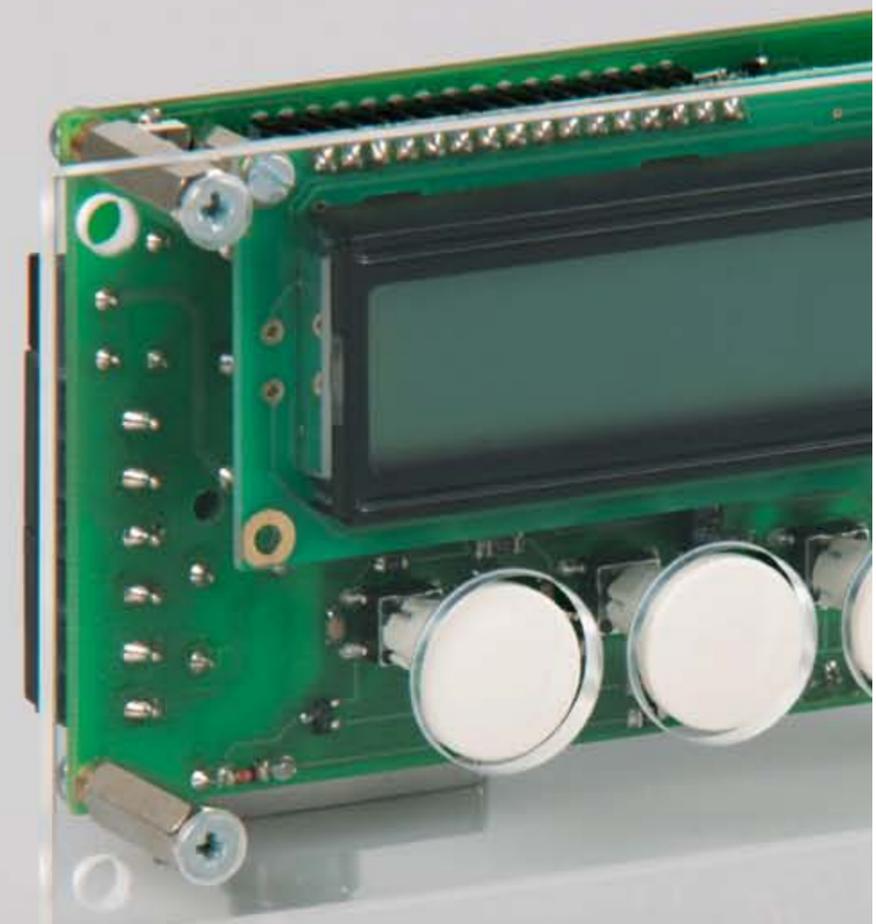
HUMIDITY MEASUREMENT TECHNOLOGY

For the monitoring or rather protection of technical system against uncontrolled moistening, IL Metronic Sensortechnik GmbH offers sensor modules, probes, transmitters and measurement units. As sensor elements, polymer-based relative humidity sensors (dew point hygrometer DRF 5.5.) as well as the directly measuring CCC - principle are used.



CUSTOMIZED SENSOR TECHNOLOGY

For applications where no standard sensors are available in the market, ILM offers the possibility to developed cost effective, customized sensor solutions of different active principles, also for small quantities.



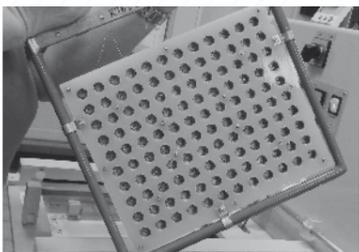
FURTHER TECHNOLOGIES OF IL METRONIC

HIGH PERFORMANCE HARD SOLDERING



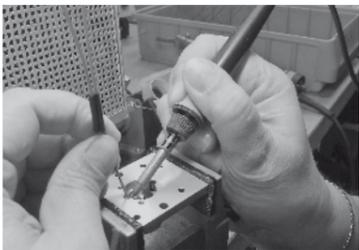
Our equipment and experience allows us to produce high-quality semi-finished products such as process water pump parts, mixing element inserts and fine mechanics. During the next employed procedure, where no flux additives are necessary, components can be assembled up to a height of 40 mm. In a specially developed protective atmosphere furnace, the components to be connected are joined together highly-precise and permanently by means of noble metal solders.

SURFACE REFINEMENT



The finishing of the contact surfaces enhances both the electrical and the mechanical properties of special glass feedthroughs - permanently. The on-site electroplating, possible by partial nickel and gold coating, provides bondable and solderable layers with a minimum level of 0.1 microns thickness. Furthermore solid bowl gilding and the realization of pluggable contact surfaces are possible.

ELECTRONIC WIRING AND ENCAPSULATING



To simplify the supply chain of our customers while increasing the value added, the customized electronic wiring and encapsulating is done in our company. The soldering of cables and connectors, crimping, dip tinning, labeling up to the covering with 2-component casting compounds are very successful operations which can decrease the customer's amount of work.

CONTACT

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