



Measurement technology

Facts are essential for good decisions

Sensing, monitoring and data logging technology

Better through Responsibility





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Quality is a question of values



Measurement technology

- › Sensor technology
- › Monitoring equipment
- › Data loggers



Quality

It is the result of controlled processes. Only if you know all relevant properties of your compressed air are you in a position to control its quality and manage your energy consumption.

We have what you need

Measurement technology from **BEKO TECHNOLOGIES** offers you all the tools that you need to monitor and analyse key parameters such as residual oil vapour concentration, volume flow, pressure, relative humidity and dew point.

We measure up to your expectations

We make sure that you can see and analyse what is not instantly visible, namely the quality of your compressed air and the efficiency of your production. With our devices, you are in a position to control all processes, secure the quality of your products and make sound business decisions.

Key quality factors

- › Pressure
- › Dew point
- › Relative humidity
- › Temperature
- › Residual oil vapour
- › Volume flow rate

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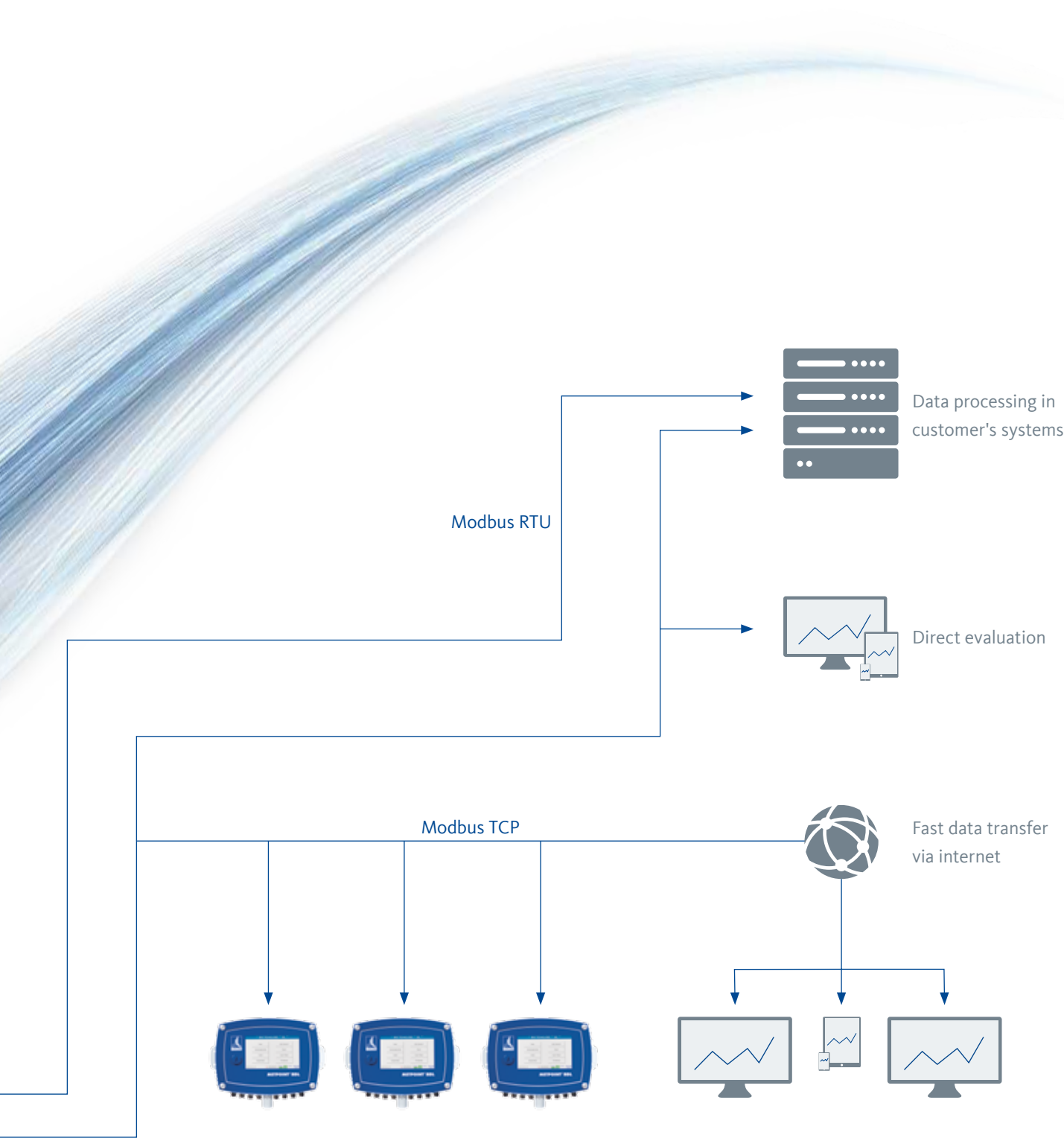
Making the invisible **visible**: visualisation and logging of all relevant quality factors

Make quality visible – by recording all relevant data. The METPOINT® BDL data logger converts your process data into user-friendly statistics and charts.

You can monitor the performance of your system in real time and take action when needed – from wherever you are, as our solutions are networkable and support data exchange through the internet.

METPOINT® BDL





All data at your fingertips: METPOINT® BDL

Our data loggers have been designed specifically for use in compressed air and gas systems. They can be run as stand-alone solutions or integrated into existing systems. Thanks to

their modular design, our devices can be upgraded and retrofitted at any time to meet changing requirements. We offer you solutions that fit your needs and systems perfectly!



METPOINT® BDL compact

All in one: METPOINT® BDL and BDL compact

The METPOINT® BDL and BDL compact data loggers serve as centralised signal processing units. All relevant compressed air properties can be called up at the display, while the integrated

data logger generates user-friendly statistics and charts. One compact instrument therefore caters for all your data recording and monitoring needs.

Access your data from anywhere in the world

- › Standard Ethernet interface for integration into existing networks and internet connection
- › Access to all process data from anywhere in the world
- › Process data forwarding to master systems (e.g. PLC, BMS, etc.) and control desks through TCP/RTU Modbus output
- › Optional: integrated web server with intuitive graphic user interface; no additional software required!

Extremely reliable

- › Logger function as standard
- › Supports process and cost analysis
- › Extra protection thanks to limit alarm signals

User-friendly and adaptable

- › 7" colour display (METPOINT® BDL compact: 3.5") with touch screen functions and intuitive menus in multiple languages
- › All process data available in table format or charts for further analysis
- › Modular design: up to 12 inputs (METPOINT® BDL compact: up to 4) sensors of any type can be connected to each METPOINT® unit
- › Process data tracking
- › Data archiving for efficient quality management
- › Customised reports for various target groups
- › Optional: mathematical operators for cost calculations



Perfect for technicians on the move: METPOINT® BDL portable

The METPOINT® BDL portable is the perfect solution for on-the-spot data logging and analysis of the compressed air quality.

Portable data logging

- › 3.5" colour touch screen display with intuitive menus in multiple languages
- › Universal sensor input for wide range of sensor signals
- › Integrated data logger storing all relevant measurements
- › Visualisation in the form of charts, etc.
- › USB interface for data transfer to USB memory stick
- › Integrated lithium ion battery for reliable continuous operation



METPOINT® BDL portable



Scan to watch the video clip
explaining dew point measurement

Avoiding extra costs: sensor technology for precision measurement of all relevant parameters

Residual moisture content, pressure, volume flow and leakage: these are the four main factors that determine the costs of your compressed air production. With **BEKO TECHNOLOGIES** sensors, you can measure these parameters at all critical points in your compressed air system so that you can make decisions based on solid facts. Apart from reducing energy costs, this information enables you to locate leaks and to identify potentially faulty components. You can also assign costs to specific components in your production plant in order to optimise or re-dimension them.

METPOINT® DPM





Scan this code to receive the latest information about sensor technology

Precision measurement with METPOINT® DPM, PRM, FLM, LKD

Our sensor technology monitors all critical compressed air parameters so that you can optimise the safety and cost efficiency of your production: with the METPOINT® DPM dew point

transmitter, the METPOINT® PRM pressure transducer, the METPOINT® FLM flow meter and the METPOINT® LKD leak detector.



METPOINT® DPM



METPOINT® PRM

Dew point measurement

- › Determine the dew point of your compressed air by measuring the relative humidity and temperature
- › Provides information regarding faulty components
- › Suitable for both mobile and stationary monitoring
- › Continuous collection and output of process data
- › Guarantees safety along the process chain
- › Easy and safe to install
- › Sturdy stainless steel housing for safe installation even in extremely demanding process environments

Pressure monitoring

- › Accurate and reliable monitoring of differential and/or system pressures
- › Stainless steel thin film technology for excellent accuracy (error rate < 0.5%)
- › Rugged construction
- › Designed for integration into various different systems



METPOINT® FLM

Real-time data on site

The METPOINT® UD01 and UD02 plug-on displays enable you to determine the quality of your compressed air directly at the plant and in real time. If needed, you can take action without delay. Simply mount the device on your transducer. All measurements can be forwarded to a data logger (e.g. METPOINT® BDL) or a master control system.



METPOINT® LKD

Volume flow measurement

- › Identifies potential savings, provides basis for intelligent energy management and determines consumption of specific components
- › Display of volume flow, consumption and flow rate
- › Calorimetric measurement optimised for compressed air technology
- › Automatically detects overloads and malfunctions
- › Measures compressed air loss during system standstill, i.e. loss due to leakage
- › Provides all the information you need to dimension and modify your system and its components for improved efficiency
- › Optional: display or LED indicator

Leak detection

When compressed air escapes through leaks in the system, the gas molecules cause friction on the pipeline wall. This friction in turn generates a noise in the ultrasonic frequency range. The METPOINT® LKD detects this noise and converts it into audible and visual signals.

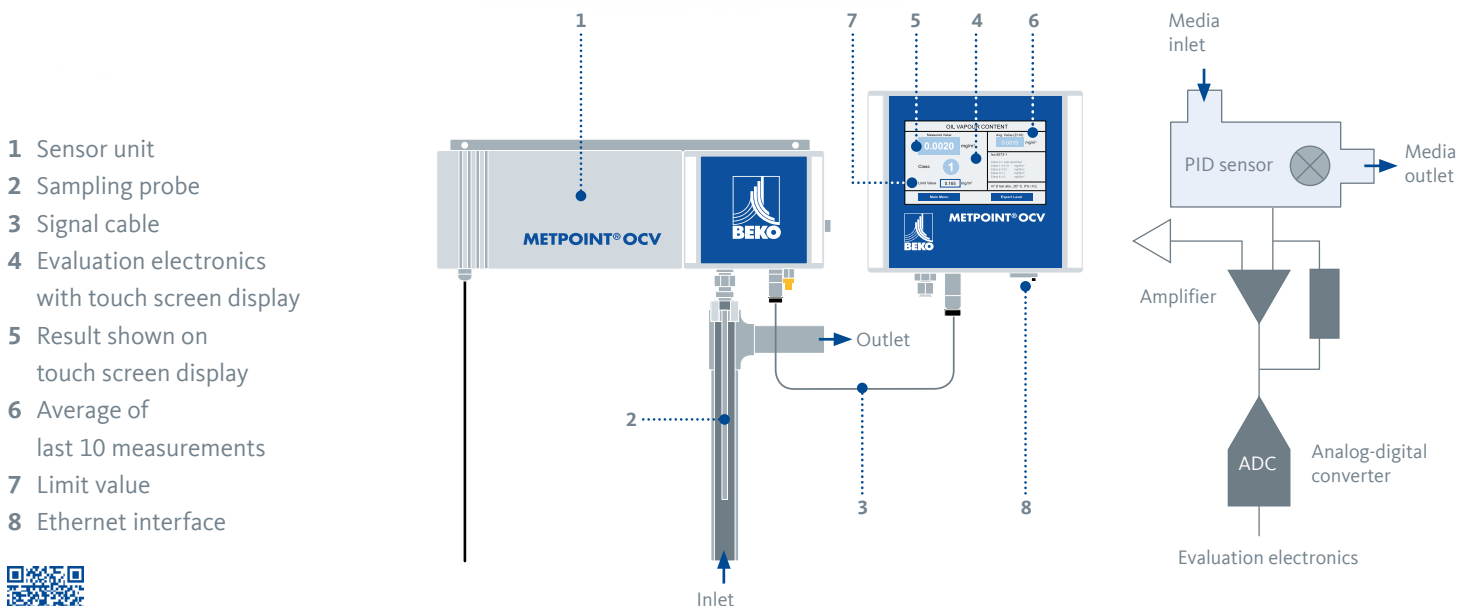
- › Highly sensitive ultrasound technology detects even tiny leaks
- › Mobile unit equipped with modern battery technology
- › Compact and easy to operate
- › User-friendly digital colour display
- › High-grade aluminium housing



Scan this code to receive the latest information about monitoring equipment

Continuous analysis for extra safety: monitoring for precision quality control

Compressed air contaminated with oil can cause damage to production equipment, the environment and also the health of workers. As oil contamination can occur at any point in the compressed air system, it is a constant risk, especially in chemical or pharmaceutical plants, or where foodstuff and beverages are processed. Oil contamination is also a major issue for companies in the surface technology sector. The METPOINT® OCV is the first TÜV-certified monitoring system for compressed air. It continuously measures the residual oil concentration, detecting concentrations down to a thousandth of a g/m³, enabling you to analyse and control the quality of your compressed air on an ongoing basis. For even more demanding applications, for instance in the field of medicine, we have developed our most advanced device: the METPOINT® MMA.



- 1 Sensor unit
- 2 Sampling probe
- 3 Signal cable
- 4 Evaluation electronics with touch screen display
- 5 Result shown on touch screen display
- 6 Average of last 10 measurements
- 7 Limit value
- 8 Ethernet interface



Scan to watch video clip



Oil-free process means oil-free product: with the METPOINT® OCV

The METPOINT® OCV constantly monitors the oil vapour concentration in the compressed air and alerts you, if there is a problem.

You are always informed of the quality and purity of your compressed air, so that you can meet the relevant quality standards and gain the trust of your customers.



METPOINT® OCV

Precise, certified and ahead of the competition

Thanks to its unrivalled functionality and user-friendliness, the METPOINT® OCV allows you to analyse and control your compressed air quality at all stages of the process.

Validated

- › TÜV-certified and validated by the German Federal Institute for Drugs and Medical Devices BfArM
- › Excellent accuracy thanks to the production of a “pure” reference gas flow by means of a purification unit (catalytic converter technology)
- › Automated monitoring of sensor electronics during normal operation and fault alarm function
- › Alarm signal output

Reliable

- › Constant monitoring of oil vapour concentration
- › Tried and tested measuring method
- › Logger function for all measurements as standard

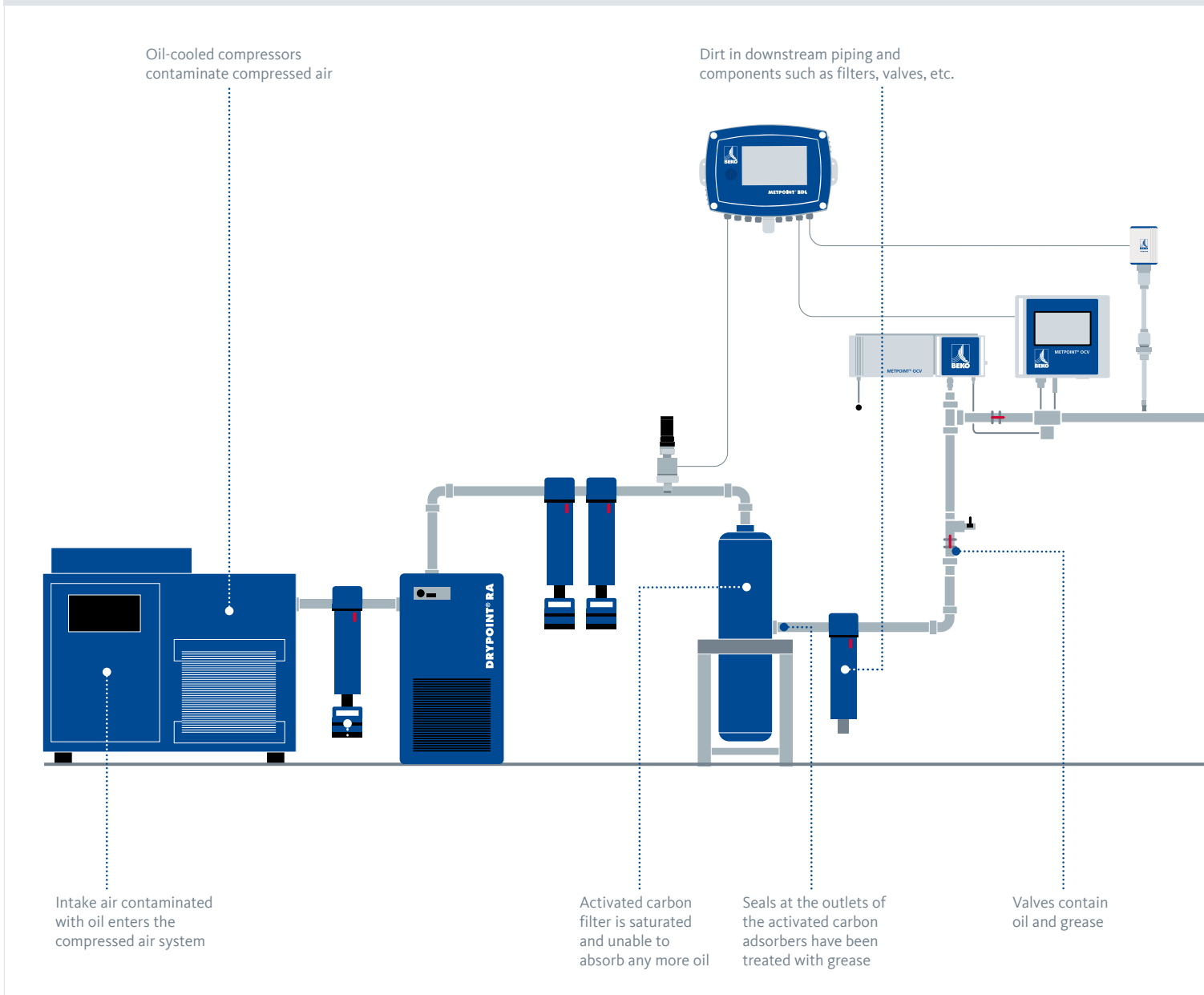
All measurements, and the compressed air quality, are documented. In addition, the data enables you to identify the source of the contamination.

User-friendly

- › Touch screen with intuitive user interface
- › Intuitive visualisation of values
- › Designed for integration into local network, so that measurements can be viewed at any workstation, saving time and money



Factors that determine the residual oil content in compressed air: parameters measured by METPOINT® OCV





Scan this code to receive the latest information about the METPOINT® MMA

Achieve breathing air quality: with the METPOINT® MMA

Air used in medical respirators and similar equipment needs to be extra pure, as even minor contamination might cause harm to the patient. Medical breathing air is therefore subject to stringent standards and regulations. Personnel responsible for the quality

of medical breathing air therefore need fail-safe, reliable monitoring equipment. That is why we have developed the METPOINT® MMA.

Your assistant in medical applications

To meet the exceptionally high quality standards for medical applications, the METPOINT® MMA offers unrivalled performance and reliability: The entire medical compressed air circuit is continuously monitored. All relevant measurements are displayed in real time and logged. The METPOINT® MMA documents your compliance as regards the limit values defined in the European Pharmacopoeia, and any relevant deviation in the composition of the compressed air triggers an instant alarm.

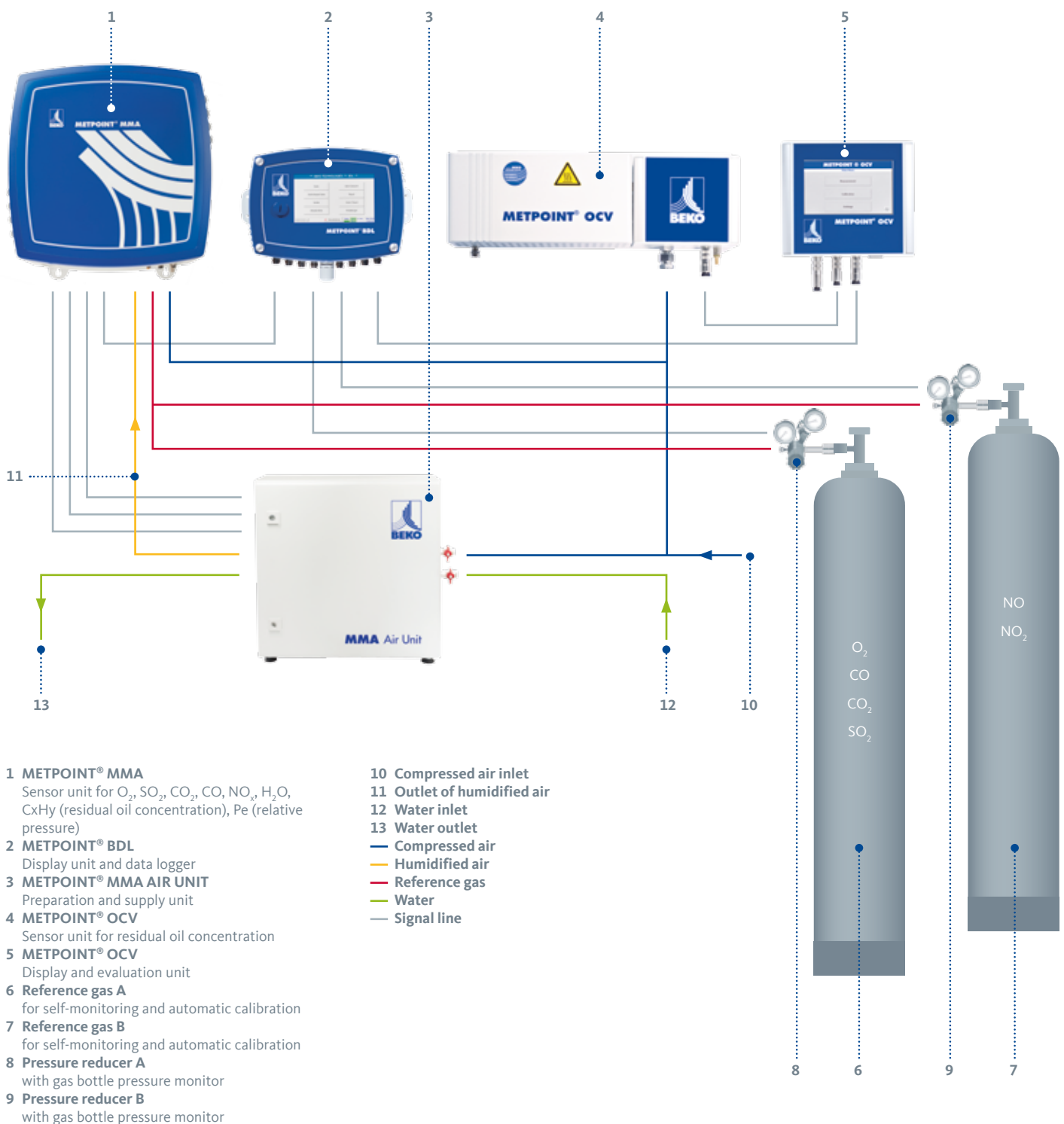
Better through Responsibility

- › Compact measuring system designed for use in hospitals
- › Continuous monitoring of medical breathing air quality
- › Accurate measurement and real-time display of all relevant parameters
- › Instant alarms in the event of a problem
- › Constant logging of all measurements
- › Modular design
- › Easy to install and integrate into compressed air circuit
- › Intuitive touch screen panel
- › Automatic calibration every 24 hours



METPOINT® MMA compact

System for the monitoring of medical breathing air based on European Pharmacopoeia standards





Scan this code to receive the latest information from **BEKO TECHNOLOGIES**

Complete solution from a single supplier **for your success!**

When it comes to compressed air, no two applications are exactly the same. And each application comes with its very specific requirements regarding the quality of the compressed air. This quality is primarily determined by the treatment of the air downstream of the compressor. That is where our solutions come into play! For more than three decades, we have been providing companies with high-performance equipment in the field of compressed air and compressed gas technology. Our tried and tested products, systems and solutions help our customers achieve the compressed air quality they need for their production processes – safely and efficiently. From filtration and drying to condensate processing technology and instruments for quality monitoring and validation. From small compressed air plants to sophisticated process technology. We are the only supplier in the market offering all components found along the processing chain. For our products, we use only components that meet our stringent quality standards. Through dedication and expert knowledge, we are able to combine these components for optimum efficiency and reliability.

 Drying



Compressors

As soon as the compressed air leaves the compressor, it must be prepared for the application it is to be used in.



Excellent service

For us, customer service means that we assist you from the first moment of contact, during the planning and commission phase and beyond. At our calibration lab in Neuss, we calibrate your

measuring system according to your specific requirements. If needed, we re-calibrate your device to prevent inaccurate measurements.

Scan this code to find out more about our services



 Filtration


Application

With our solutions, you can achieve the compressed air quality you need for your applications.

 Condensate technology


BEKO TECHNOLOGIES

 Process technology

 Measurement technology

Operators of compressed air systems rely on our measuring solutions. Our devices are designed for network integration and combine the data from various sensors for detailed analysis and visualisation. This information can be accessed from any workstation in the network and provides a solid basis for important decisions regarding compressed air quality and system efficiency. If a predefined limit is exceeded, an alarm signal is generated so that the problem can be rectified without delay. Our measurement technology guarantees the high quality of your compressed air.

Why is the whole greater than the sum of its parts?

Our solutions combine the expertise of a leading system provider with the dedication of every single member of our staff. We listen to our customers and remain focused on practical applications. We want to protect the environment and value our partners in

business. This commitment is reflected in every single product that leaves our factories.

BEKO TECHNOLOGIES. Better through Responsibility

Do **you** want to know more about measurement technology?

We have the answers! We would be delighted to hear from you to explore solutions for your specific compressed air system.

About **BEKO** TECHNOLOGIES:

- › Established in 1982 by Berthold Koch
- › Independent, family-owned company
- › Head office based in Neuss, Germany
- › Operates production plants in Germany, the USA, India and China
- › Global sales network
- › Committed to the highest quality standards
- › Certified according to EN ISO 9001:2008



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