METPOINT® OCV compact

The **METPOINT[®] OCV compact** has been developed for the measuring of hydrocarbon vapours and gases in compressed air system applications.

The detection to levels as low as one thousandth mg/m^3 of residual oil vapour content is executed continuously in ongoing operation. Shortened measuring intervals enable the rapid and reliable display of even the smallest deviations.

This on-line monitoring process provides the certainty about the quality of your compressed air as an important element of your process safety at all times and at all quality-critical system points. The measurement data can be utilised for documenting the compressed air quality and for identifying contamination sources.



Reliable measuring via innovative technology

The sensor of the **METPOINT**[®] **OCV compact** functions on the principle of a photo-ionisation detector by utilising a so-called PID sensor. The values to be evaluated for accurate measuring will be compensated for temperature and pressure. The requirements of ISO 8573 are therefore fulfilled. The reference gas will be generated internally via an integrated catalytic converter and ensures the reproducible results.

Advantages

Save

- Reproducible accuracy of the measurement values by utilising reference gas generation (catalytic converter principle)
- Automatic monitoring for the reference gas and sensor electronics
- Issuing and transferring of alarm signal messages

Reliable

- Measuring range from ≤ 0,01 to 2,500 mg/m³
- Pressure range from 3 to 16 bar
- Online monitoring for the oil vapour concentration
- Data transfer to display as standard feature and control centre with customary communication methods
- Standardised multiple point calibration

User-friendly

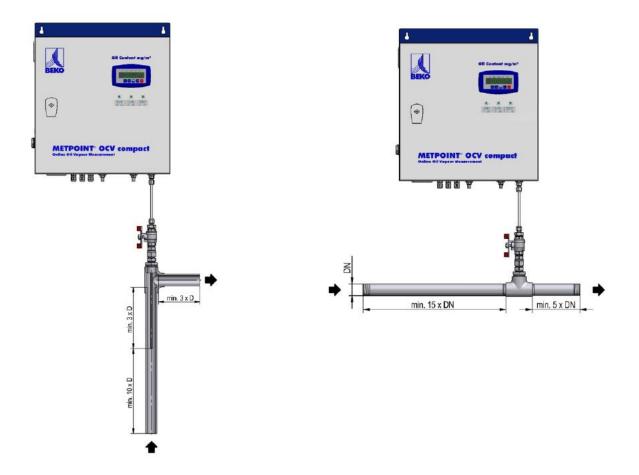
- Intuitive user interface and setting possibilities
- Visualisation of all measurement values
- Accessible from anywhere through the Internet
- Robust industrial housing
- Flexible installation

Scope of delivery

- OCV compact Measuring-System, ready for connection with power cable, 2,5m
- Factory calibration protocol (separately supplied)
- Operating instructions
- Transport packaging (required for the return transport for calibration and maintenance)

Installation

For the measurement, an inlet section (rising main) of at least 5 x DN to the probe tip and an outlet section of 3x DN is required. In addition, the pipe section must have a constant shape and a constant cross-section. The measuring section must be free from oil and grease. The corresponding measuring sections are optionally available. The use of a special oil- and grease-free ball valve is recommended.



Technical data METPOINT® OCV compact

Medium	Compressed air, free of aggressive, corrosive, caustic, toxic, flammable or combustion supporting materials and substances. The use of a compressed air preparation adapted to the measurement task is necessary.
Measured parameter	Residual oil content in mg of oil/normal m ³ , relative to 1.0 bar, +20°C, 0% relative humidity, according to ISO 8573-1
Detectable substances	Polyalphaolefines, aromatics, hydrocarbons, aliphatic hydrocarbons and functional hydrocarbons
Applications	Downstream of activated carbon filter and, activated carbon adsorber, downstream of BEKOKAT [®] (catalytic converter), downstream of oil-free compressing compressor, each with pre-switched filtration and drying
Ambient temperature	+5°C +45°C, relative humidity \leq 75% non-condensing
Storage temperature	+5°C +45°C
Ambient pressure	8001200 mbar absolute
Climatic resistance	Maximum +10 °Ctd
Compressed air temperature,min./max.	+5°C +50°C
Operating pressure	3 … 16 bar(ü), optional pressure reducer pre-switched for up to 300 bar (ü)
Compressed air connection	G 1/8" female thread according to ISO 228-1
Measuring gas humidity	≤ 40 % relative humidity, PDP maximum +10°C Non-condensing humidity
Measurement values	mg / standard m ³ , pressure and temperature compensated
Measuring range	≤ 0,01 … 2,50 mg/m³
Calibrated measuring range	\leq 0.01 1.25 mg/m ³ residual oil content, according to ISO 8573-1
Detection limit (residual oil)	0,001 mg/m³
Measuring range and accuracy	$≤ 0,01 0,5 \text{ mg/m}^3$ ± 30% v.M. ± 0,003 ≥ 0,5 1,0 mg/m ³ ± 20% v.M. ± 0,10 ≥ 1,0 2,5 mg/m ³ ± 10% v.M. ± 0,10
Measuring gas through flow rate	Approx. 1.20 Standard litre / minute relative to 1.0 bar absolute and +20°C, in depressurised status
Power supply	100-240 VAC / 1Ph. / PE / 50-60 Hz / ± 10%
Maximum operating current	0.50 A at 230 VAC / 0.90 A at 115 VAC
Power consumption	115 VA at 230 VAC / 104 VA at 115 VAC
Protection class	IP54 / DIN EN 60529
Outputs	 4 20 mA active analogue output, 2-wire system, RS-485, MODBUS RTU for the transmission of measured values 1 alarm contact, normally open contact
Dimensions	404 x 422 x 158 mm (W x H x D)
Weight	Approx. 16,3 kg

Subject to technical changes, last update 2017-09