

Mobile solution with DS 500 mobile, OIL-Check 400, PC 400, FA 510

DESCRIPTION	ORDER NO.
DS 500 mobile - intelligent chart recorder with 4 sensor inputs	0500 5012
CS Basic - data evaluation in graphic and table form - readout of the measured data via USB or Ethernet. License for 2 working places	0554 8040
Residual oil measurement: OIL-Check 400 – residual oil measurement of the vaporous residual oil content from 0.001...2.5 mg/m ³ , 3...16 bar. Highly precise PID sensor, integrated mini catalyst for zero point calibration, without integrated display, with analogue output 0...10 volts for connection to external chart recorders	0699 0070
Mobile transport trolley including roles (outer dimensions: 0,68 x 1,06 x 0,41 m) (W x H x D) with firmly mounted components of OIL-Check 400, PC 400, FA 510	0554 6017
Mobile sampling system consisting of 2 m PTFE hose, quick coupling (oil- and grease-free)	Z699 0074
Connection cable for pressure, temperature, third party sensors to portable devices, ODU/ open ends, 5 m	0553 0501
PC 400 particle counter up to 0.1 µm for compressed air and gases, incl. pressure reducer/sampling hose, calibration certificate, Modbus-RTU interface	0699 0040
Connection cable to portable devices, ODU/ M12, 5 m	0553 1503
FA 510 dew point sensor, -80...+20 °Ctd incl. measuring chamber mobile and 5 m connection cable to mobile devices	0699 1510



OIL-Check 400

The monitoring system for permanent highly precise measurement of the vaporous residual oil content in compressed air

Advantages at a glance:

- Permanent, highly precise residual oil measurement (oil vapour) with PID sensor (photo-ionic-detector)
- Ideal for mobile measurement: The PID sensor is ready for measurement within about 30 minutes
- Measuring results with long-term stability due to automatic zero point calibration. The integrated mini catalyst reliably generates a defined reference gas for zero point calibration
- In contrast to measuring systems which generate the "zero air" or reference gas by means of active carbon filters and which are therefore dependent on the ageing and saturation of the active carbon filters, the mini catalyst generates the "zero air" without ageing or wear. There is no change of active carbon filters necessary
- Easy sampling via PTFE hose or stainless steel pipe



Integrated chart recorder DS 400:

- Data logger for long-term monitoring
- Display shows trend curves (online and history curves available)
- Zoom function directly on the touch screen
- Integrated Ethernet interface (Modbus/TCP) and RS 485 interface (Modbus-RTU) for data transfer to superordinate controls
- 2 alarm relays (changeover contact 230 VAC, 3A) – threshold values freely adjustable
- Easy operation via 3.5" touchscreen

TECHNICAL DATA OIL-CHECK 400	
Measured medium:	Compressed air, free from aggressive, corrosive, acid, toxic, flammable and oxidising components.
Measuring unit:	Residual oil content in mg oil/norm m ³ relative to 1.0 bar [abs], +20 °C, 0% relative humidity, in accordance with ISO 8573-1
Identifiable substances:	Hydrocarbons, functional hydrocarbons, aromatic hydrocarbons
Field of application:	After activated carbon filter, after activated carbon adsorber, after oil-free compressor, always with connected upstream filtration and dryer
Ambient temperature:	+5 °C... +45 °C, rel. humidity ≤ 75% without condensation
Pressure dew point:	max. +10 °Ctd.
Compressed air temp.:	+5 °C... +50 °C
Operational overpressure:	3...16 bar [ü] optional pressure reducer connected upstream for up to 300 bar [ü]
Setting operational pressure:	By means of integrated pressure reducer with display
Humidity of measured gas:	≤ 40% rel. humidity, pressure dew point max. +10 °C, non-condensable humidity
Compressed air connection:	G 1/8" female thread according to ISO 228-1
Measured values:	mg/norm m ³ , pressure and temperature compensated residual oil vapour content
Measuring range:	0.001 ... 2.5 mg/m ³
Detection limit (residual oil):	0.001 mg/m ³
Flow of measuring gas:	approx. 1.20 norm litres/minute, relative to 1.0 bar [abs] and + 20 °C, in a relaxed state
Reference gas generation:	By means of integrated mini catalyst
Power supply:	100...240 VAC / 1 Ph. / PE / 50...60 Hz / ± 10%
Outputs:	Ethernet interface (Modbus/TCP), RS 485 interface (Modbus-RTU), 2 alarm relays (change 230 VAC 3A), 4...20 mA (on request)
Operating hours counter:	integrated
Dimensions (mm):	410 x 440 x 163 (W x H x D)
Weight:	approx. 16.3 kg

OIL-Check 400 - Stationary solution

DESCRIPTION	ORDER NO.
OIL-Check 400 – residual oil measurement of the vaporous residual oil content from 0.001...2.5 mg/m ³ , 3...16 bar. Highly precise PID sensor, integrated mini catalyst for zero point calibration, without integrated display, with analogue output 0...10 volts for connection to external chart recorders	0699 0070
Option: DS 400 chart recorder integrated into OIL-Check 400	Z699 0071
Sampling system OIL-Check 400:	Z699 0075
Sampling system consisting of ½" ball valve (oil- and grease-free), 1 m stainless steel tube 6x1 mm (oil- and grease-free), clamp screwing (oil- and grease-free)	
Portable sampling system consisting of 2 m PTFE hose, quick coupling (oil- and grease-free)	Z699 0074
For systems > 16 bar: Pressure reducer (oil- and grease-free), input pressure max. 300 bar, output pressure up to 10 bar	Z699 0076
Options for the DS 400:	
Integrated data logger for 100 million measured values	Z500 4002
Integrated Ethernet and RS 485 interface	Z500 4004
Integrated webserver	Z500 4005
2 additional sensor inputs for analogue sensors (pressure sensors, temperature sensors etc.)	Z500 4001
CS Basic - data evaluation in graphic and table form - readout of the measured data via USB or Ethernet. License for 2 working places	0554 8040



