



The new residual oil sensor CS 120 monitors oil contents of compressed air and gases permanently or for spot checks when used as portable unit in conjunction with CS 550 / DS 350-P. The simple installation and the outstanding performance makes CS 120 the ideal choice when residual oil contents needs to be measured and monitored.

Oil free compressed air is not an easy task to be achieved. Monitoring is a must in many industries and applications to avoid contaminations in products and risks for health of humans. CS 120 makes this monitoring task affordable and reliable.

For best accuracy and long term stability, the sensor applies an automatic calibration. Sensor contaminations and sensor life time are monitored and will be indicated to the user. An over range detection will remove the sampling air from the sensor to protect it against contamination.

Limits of oil vapor

Compressed air class 1 (EN ISO 8573-1): 0.01 mg/m³

Medical applications (EAB 407/1238): 0.1 mg/m³

Breathing apparatus (EN 12021): 0.5 mg/m³

Features

- Measures residual oil contents in compressed air and other gases
- Can be used for permanent or in portable applications
- Measures down to 0.001 mg/m³
- Easy connection through sampling hose and quick connect
- Output signals:
 - 4 ... 20 mA
 - RS-485 / Modbus/RTU
 - Relay switch (NO)
- PID sensor for highest accuracy
- Service and Alarm indication through LED
- Connectable to CS-iTEC displays and data loggers as well as third parties displays and control units

Technical data CS 120 / 121

Residual oil sensor

Measuring range	0.001 ... 10.00 mg/m ³
Sensor type	PID (photoionization detector)
Medium	Clean dry compressed air
Operating pressure	3 ... 10 barg
Sample flow rate	< 2 l/min
Sensor life time	Requires service once a year
Gas temperature	-20 ... 40 °C
Ambient conditions	-20 ... 40 °C
Transport temperature	-30 ... +70 °C
Output signal	4...20 mA or RS-485, Modbus/RTU Alarm relay
Casing	PC, Al alloy
Classification	IP65
EMC	According to IEC 61326-1

CS 120 RESIDUAL OIL SENSOR



Applications

- Medical air
- Pharmaceuticals
- Breathable air
- Marine air
- Food and beverage
- Medical engineering
- High speed trains
- Semiconductor fabs
- Conveyance of hygroscopic food
- High tech processes
- Electronics industry



CS 120 mounted at the wall for permanent oil vapor monitoring



Portable CS 120-P with accessories connectable to CS 550

- **Power**
- **Alarm**
- **Service Sensor**
- **Service Filter**

LED indicate if pre-set alarms are reached, or if filter and sensor needs to be serviced. The service indications start blinking 4 weeks before expiring and are turned on permanently when service is immediately required.

Order no.	Description
0604 1201	CS 120, residual oil sensor, 0.001 ... 10 mg/m ³ , 4 ... 20 mA output, RS-485, Alarm output, 24 VDC
0604 1202	CS 120, residual oil sensor, 0.001 ... 10 mg/m ³ , 4 ... 20 mA output, RS-485, Alarm output, connectable to CS 550
0365 1200-X	PID sensor for CS 120, refurbished for exchange
0365 1200	PID sensor for CS 120 (new)
0554 1201	Activated carbon filter element