

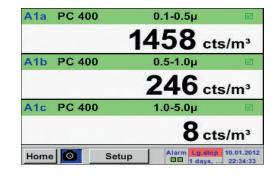
Particle counter PC 400 and DS 400



Digital data transfer via Modbus-RTU: Number of particles (3 measuring channels) Flow in % (100%=28.3 l/min) LaserPower in % Sampling

The DS 400 shows all 3 measuring channels according to ISO 8573-1

Particle size 0.1...0.5 µm: Number or particles per m³ Particle size 0.5...1.0 µm: Number or particles per m³ Particle size 1.0...5.0 µm: Number or particles per m³



Advantages at a glance:

- Highly precise, optical laser particle counter for use in compressed air and technical gases
- Highly precise optics for detecting the smallest particles up to 0.1 µm and therefore suitable for monitoring the compressed air class 1 according to ISO 8573-1
- The flow rate of 28.3 l/min (1 cfm) is 10 times higher than that of the particle counters generally available on the market (usually 2.83 l/min). Advantage: Counts the smallest particles with high counting accuracy at the same time
- Due to the digital data transfer (Modbus-RTU) to the chart recorders DS 400 or DS 500, 3 measuring channels can be transferred at the same time (without any faults due to check sum)
- The class 1 filter which is included in the scope of delivery can be used for on-site calibration at any time. Contaminations on the optics can therefore be quickly detected or eliminated

Advantages of the 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 PC 400

Measured medium:

Parameter:

Compressed air (free from aggressive, corrosive, acid, toxic, flammable and oxidising components) as well as gas types like N2, O2, CO2.

Further gas types on request

Field of application: In case of compressed air after filtration

In case of gases / pure gases also without filtration

Number of particles per m³ (relative to expanded air:

20 °C, 1000 hPa)

Size channels for the PC 400 0.1 µm:

Particle size 0.1...0.5 µm: Number or particles per m³ Particle size 0.5...1.0 µm: Number or particles per m³ Particle size 1.0...5.0 µm: Number or particles per m³

Size channels for the PC 400 0.3 µm:

6 mm PTFE-hose incl. quick coupling

Particle size 0.3...0.5 µm: Number or particles per m³ Particle size 0.5...1.0 µm: Number or particles per m³ Particle size 1.0...5.0 µm: Number or particles per m³

Operating pressure:

Humidity of measured

Max. input pressure on the pressure reducer: 40 bar <= 90% rel. humidity, pressure dew point max. 10 °C,

non-condensable humidity

Ambient temparature: 5...40 °C Temperature of the mea-

sured medium:

0...40 °C

Compressed air connection:

28.3 l/min (1 cfm)

Flow rate: Interface:

RS 485 (Modbus-RTU)

Light source:

Laser diode

8 kg

Power supply:

24 VDC, 300 mA

Dimensions:

150 x 200 x 300 mm

Weight:

Stainless steel Housing:

Stationary solution with particle counter PC 400 and DS 400



ORDER NO.
0699 0040
0553 0108
0500 4000 D
Z500 4002
Z500 4004
0554 8040
0699 0041

Mobile solution with particle counter PC 400 in a service case and DS 500 mobile



DESCRIPTION	ORDER NO.
PC 400 particle counter up to 0.1 μ m for compressed air and gases incl. pressure reducer and calibration certificate in a service case	0699 0042
Connection cable to portable devices, ODU/ M12, 5 m	0553 1503
Chart recorder DS 500 mobile, 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
As an alternative to PC 400 up to 0.1 μm:	0699 0043
PC 400 particle counter up to 0.3 μm for compressed air and gases incl. pressure reducer and calibration certificate in a service case	

Re-calibration and accessories particle counter PC 400



DESCRIPTION	ORDER NO.
Re-calibration particle counter PC 400 incl. certificate	0699 3304
CS Service Software incl. PC connection set for PC 400	0554 2009