

ATEX S50-P-Z1



ATEX

PARTICLE COUNTING

**EXD ZONE 1 PARTICLE COUNTER
FOR FUEL & OILS CALIBRATED
TO ISO11171:2022**



VERSION 1



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INFORMATION

ATEX ZONE 1 PARTICLE COUNTER WITH WATER SENSOR

DESCRIPTION

The world's first commercially available ATEX Zone 1 classification particle counter calibrated to ISO11171:2022. & fitted with a highly accurate icoto NP330F water sensor, housed in a MAM Exd enclosure.

FEATURES & BENEFITS

- Cost effective, high performance laser based online particle counting system with eight size 8 channels
- Flexible integration into PLC or Cloud solution
- LED display showing the contamination class code according to ISO 4406:2021 in the size classes $> 4 \mu\text{m(c)}$, $> 6 \mu\text{m(c)}$ and $> 14 \mu\text{m(c)}$
- The volumetric cell design of PAMAS sensors measures 100% of the sample flow and guarantees highest accuracy and reproducibility
- The particle number and size distribution of all 8 size channels is reported in real time to PC or PLC (programmable logic controller). The optional analysing software saves the measuring results and shows them in tables and graphs. This makes trends and events easily visible
- Due to its measuring accuracy and its trend monitoring feature, S50-P-Z1 Fuel reduces the risk of failures and ensure the reliability of the controlled operating system
- Every S50-P-Z1 is calibrated and certified individually to ISO 11171:2022
- Highly accurate icoto NP330F water sensor, scaled in ppm
- Classification of: II 2 GD Ex db IIC T6 Gb Ex tb IIIC T85°C Db IP66

STATUS LED

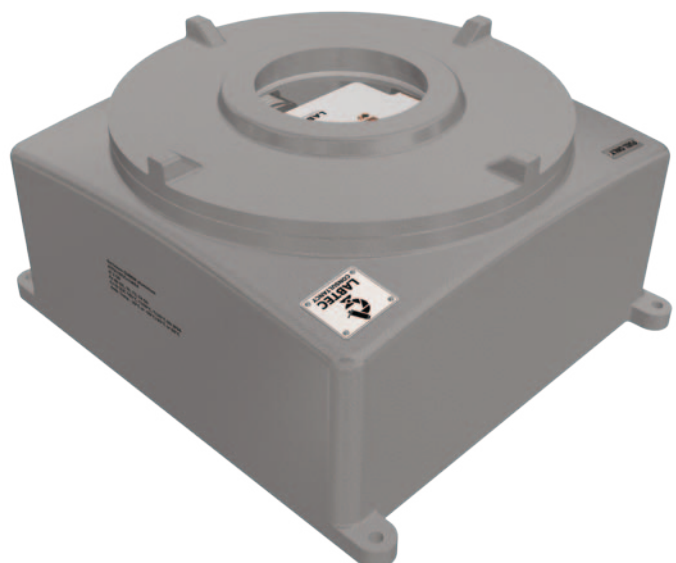
- LED-seven-segment-display red 15mm size 6-digits for ISO-class display
- LED for measurement OK
- 3 LED green/yellow/red configurable

*Flow rate of particle counter 10ml/min or 25ml/min

Scope of Supply:

- 1 x ATEX S50-PEX*
- 1 x One off USB POV Software

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TECHNICAL DATA

ATEX CLASSIFICATION

II 2 GD Ex db IIC T6 Gb Ex tb IIIC T85°C Db IP66°C

PARTICLE SIZING

>4,6,14,21,25,38,50,70µm(C)

COMMUNICATION OPTIONS

4-20Ma, RS485 via 19POV Softcore

ANALYSIS RANGE

ISO 4406:2021 Code 0 to 22

OUTPUTS

4-20mm 4-20Ma. Outputs via control POV software

ACCURACY

± 1/2 ISO code for 4,6,14 µm(C) ±1 code for 21,25,38,50,70 µm(C)

ENVIRONMENTAL PROTECTION

IP66

WEIGHT / DIMENSIONS

51 kg, Height 263 mm, Depth 502 mm, Width 432 mm

CALIBRATION

Individually calibrated with ISO Medium Test Dust (MTD) to ISO 11171:2022

SUPPLY VOLTAGE

18-36VDC

OPERATING FLOW RATE

Internal pump, set rate 10ml/min - 5 BAR max pressure

VISCOSITY RANGE

Up to 100cSt

CURRENT SUPPLY

24V - 350-500mA

TEMPERATURE

Fluid Minimum: +5c +60c

POWER CONSUMPTION

12-15 Watt

OUTER CASING FINISH

Cast Aluminium, powder coat finish stainless ANSI316L Available

PRESSURE

Internal pump max pressure 5 Bar. 400 bar regulator available on request

WETTED PARTS

316 stainless steel, ceramic pump body, FKM, Polycarbonate lense.

SOFTWARE

POV software provided per unit

TEST TIME

Adjustable 5 - 300 seconds.
Start delay and programmable test intervals

FLOW RATE MEASUREMENT

Internal pump, set rate 10ml/min

INTERNAL LEAK DETECTION

Solid state optical sensor with external alarms

ELECTRICAL CONNECTION

Instrumex Exd, Coms and leak detection through Instrumex 9pin

FLUID CONNECTION

6mm DUAL Ferrule Fitok Stainless steel 316-10ml/min

WATER SENSOR OPTION

Custom Sensor to Sample Fluid. High accuracy NP300F iocTo
Water Sensor Scaled to Fluid Display in Input.



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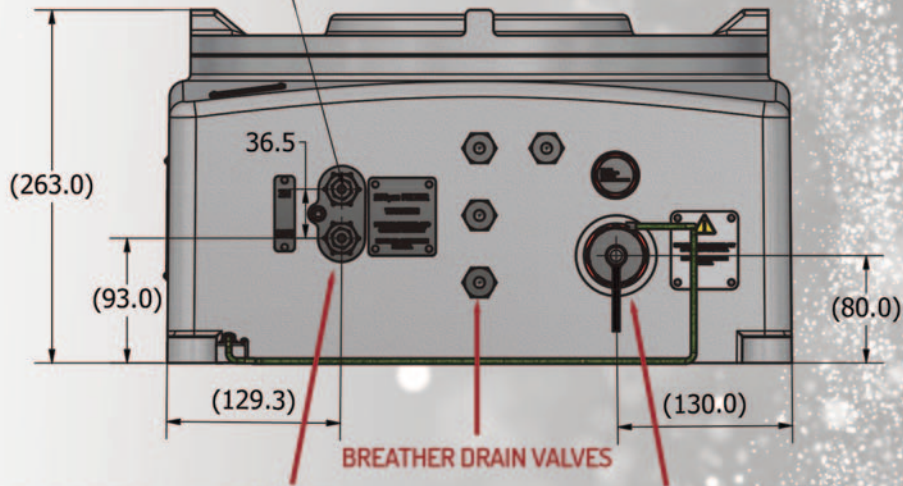


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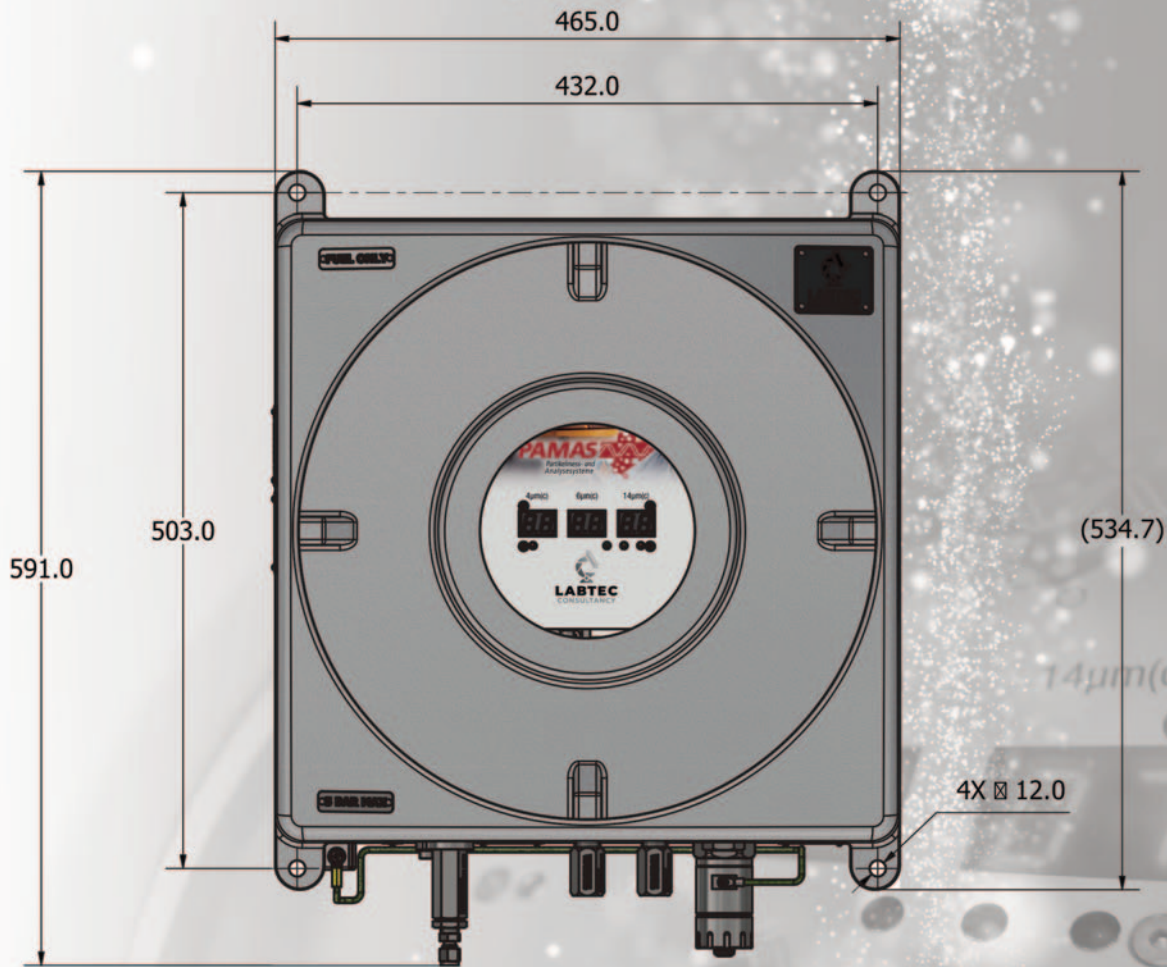
DIMENSIONS

6MM CONNECTIONS



FLAME ARRESTORS - INLET/OUTLET

INSTRUMEX 9PIN CONNECTION



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