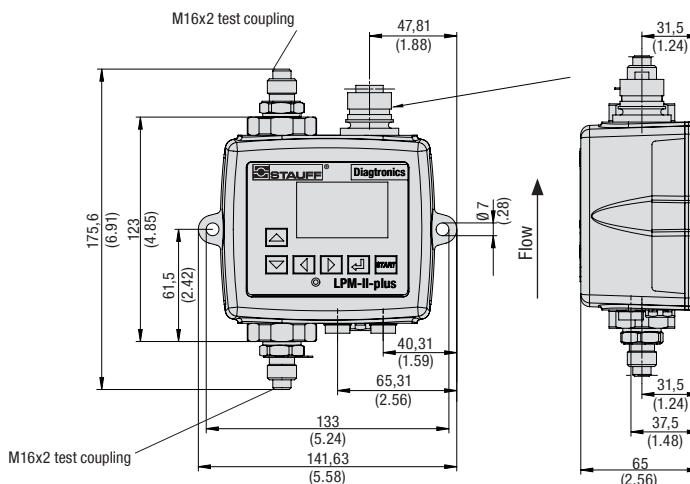


Particle Monitor - LPM-II-plus



Product Description

The LPM-II-plus Particle Monitor determines the contamination level of the measured fluid on eight size channels and offers precise and complete determination of particle sizes in accordance with international standards.

The LPM-II-plus is an automatic, optical particle counter with high-performance LEDs that work on the light obscuration principle. STAUFF recommends recalibrating the measuring equipment at regular intervals.

- Multicolour indicators via LCD (K versions) and LED with output alarm signals as standard
- Secondary connector to allow the simultaneous control/download of results during operation
- 4-20mA analogue output as standard (time multiplex)

Options

- Moisture sensor / temperature sensor: RH in % (relative humidity) and temperatures in °C
- Phosphate Ester- (e.g. Skydrol®) and Water Glycol-compatible devices are available on request
- USB Port for Data transfer (optional)

Technical Data

Channels

- >4, 6, 14, 21, 25, 38, 50, 70 µm(c) according to ISO 4406:1999

Measuring Range / Purity Classes

- ISO 4406:1999 Code 0 to 25, NAS 1638 Class 00 to 12, AS4059 Rev. E. Tables 1 and 2 Sizes A-F: Classes 000 to 12, ISO 11218 Classes 00 to 12 (lower codes or classes are test time-dependent)

Precision

- ±1/2 Code for 4, 6, 14 µm(c)
- ±1 Code for larger particles

Calibration

- Each device is individually calibrated using ISO Medium Test Dust (MTD) in accordance with ISO 11171 (1999);

Flow

- 20 ... 400 ml/min / 0.005 ... 0.11 US GPM

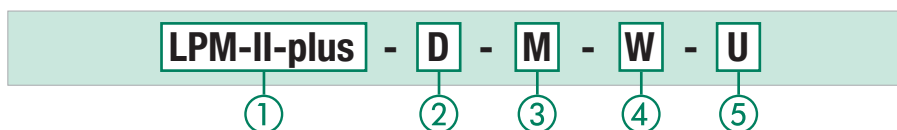
Viscosity Range

- ≤ 1000 mm²/s

Medium Temperature

- -25 °C ... +80 °C / -13 °F ... +176 °F *pressure-dependent

Order Codes



① Series and Type

Particle Monitor (Incl. LPM-II-CAB-P-FL-3 connecting cable) **LPM-II-plus**

② Version

With display and keypad **D**
Without display and keypad **O**

③ Fluid Compatibility

Fluids based on Mineral Oil and Petroleum (standard) **M**
Phosphate Ester (e.g. Skydrol®) **E**
Specific Water Glycols **G**

Note: If you have any queries on fluid compatibility, please contact STAUFF.

Ambient Temperature

- LMP II-O: -25 °C ... +80 °C / -13 °F ... +176 °F
- LMP II-D: -25 °C ... +55 °C / -13 °F ... +131 °F

Weight

- 1,6kg / 3.53 lbs

Fluid Compatibility

- M: suitable for Synthetic and Mineral Oil based fluids, Diesel and Petroleum
- G: Austenitic Stainless Steel, FKM (Viton®): suitable for offshore and aqueous fluids
- E: Austenitic Stainless Steel, Perfluorinated Rubber (FFKM): suitable for Phosphate Ester and aggressive media

Max. Permissible Operating Pressure

- 420 bar / 6091 PSI static *temperature-dependent (Note: In systems with extreme pressure peaks, please contact STAUFF)

Test Duration

- Settable between 10 ... 3600 sec., set ex-works to 120 sec.
- As standard with start delay and freely programmable test intervals

Moisture Sensor / Temperature Sensor

- % RH (relative humidity) ±3 %
- ±3 °C / ±32 °F

Volumetric Flow Measurement

- As display only

Hose Connections

- Test coupling STAUFF Test 20 or comparable (M16 x 2)

④ Moisture Sensor / Temperature Sensor

Without moisture sensor / temperature sensor **O**
With moisture sensor / temperature sensor **W**

⑤ Interface

USB interface to transfer measured data to a data carrier **U**

Note: In the case applications with extreme pressure peaks, please contact STAUFF.

Note: Versions "E" and "G" can only be supplied without moisture sensor / temperature sensor

Note: You need an interface module with either a USB or an Ethernet interface for exporting and programming.

Data Storage

- Max. 4000 measuring results

Interfaces

- RS485, RS232, Modbus, CAN Bus
- 4-20 mA time multiplex interface
- USB interface to transfer measured data to a data carrier (optional)

International Protection Rating

- IP 65/67: Dust-proof and protected from spray
- Impact resistance rating IK04

Power Supply / Power

- 9 ... 36 V DC, < 2.2 W (connecting cable with flying leads is included)

Current Consumption

- 12 V: 70 mA (LPM-II-plus-O), 150 mA (LPM-II-plus-D)
- 24 V: 40 mA (LPM-II-plus-O), 80 mA (LPM-II-plus-D)
- 36 V: 30 mA (LPM-II-plus-O), 60 mA (LPM-II-plus-D)

Housing Surface Treatment

- Polyurethane based paint, according to BSX34 colour BS381-638 (dark sea grey)
- Tested according to: BS2X34A and BS2X34B, MMO114 and SP-J-513-083 Part II. Cl. A
- The unit meets: MIL-PRF-85285

Wetted parts

- M: C46400 Cu Alloy, 316 Stainless Steel, FKM (Viton®), FR4, Sapphire
- G: 316 Stainless Steel, FKM (Viton®), Sapphire
- E: 316 Stainless Steel, Perfluorinated Rubber (FFKM), Sapphire, EPDM

