

HYDAC INTERNATIONAL



FluidControl Unit FCU 8000 series Portable laser particle counter

Description

The FluidControl Unit FCU 8000 is designed to measure particle contamination in hydraulic and lubrication systems. It can be used in the field as a portable laser particle measurement device or in connection with the BottleSampling Unit as a laboratory device for the investigation of oil samples.

Applications

- Field use
- In labs or at service bases

Advantages

- Evaluation and storage of the measurement data
- Cleanliness classes in accordance with ISO 4406, SAE 4059 and NAS 1638
- Integrated, graphics-capable printer
- RS232 or RS485 interface for data output
- Easy to operate

Technical details

Continuous display of measured values with display screen (LCD)	
Self diagnostics	Continuous with error indication on display (LCD)
Measurement range (calibrated, depending on version)	NAS 0 to 12 / ISO 0/0/0 to 23/21/18 / SAE 0 to 12 Unit is calibrated within this range. Will display up to class NAS 15 / ISO 25/23/21 / SAE 15
Data memory (battery back-up)	3000 measurements
Operating pressure: Pressure inlet Return port connection	INLET: 1 - 350 bar, with clean filter element OUTLET: max. 3 bar
Ports (rear side)	INLET: Minimesse test coupling type 1620 OUTLET: male coupling DN 7
Sensor flow rate	20 to 80 ml/min
Return flow rate	20 to 800 ml/min (depending on the pressure)
Permitted viscosity range	1 to 1000 mm ² /s
Fluid temperature range	0 to +70°C
Mains voltage	24 V DC, ± 25%
Power consumption	25 watts max.
Operating time with rechargeable batteries	≈ 6 hours
Integral printer	Dot-matrix printer
Serial interface	Standard: RS232 Option: RS485
Ambient temperature range:	0 to +55°C
Storage temperature range	-20 to +85°C
Relative humidity	Max. 90%, non-condensing
Protection class	III (safety extra-low voltage)
IP class	IP40
Weight	≈ 14 kg

Model code

FCU 8 1 1 0 - 1 - M /-BUS

Type

FCU = FluidControl Unit

Resolution

8 = 6 particle size channels

ISO code format

1 = ISO code >2/>5/>15 µm,
NAS 2-5/5-15/15-25/25-50/50-100/>100 µm

2 = ISO code >4/>6/>14 µm_(c),
SAE >4/>6/>14/>21/>38/>70 µm_(c)

Housing

1 = for portable use

Fluids

0 = for standard mineral oils

1 = for phosphate esters (HFD-R)

Optionen

1 = Standard, without options

Supply voltage

K = 120VAC / 60 Hz / 1 phase, USA/CDN

M = 230VAC / 50 Hz / 1 phase, Europe

N = 240VAC / 50 Hz / 1 phase, UK

O = 240VAC / 50 Hz / 1 phase, Australia

P = 100VAC / 50 Hz / 1 phase, Japan

Supplementary details

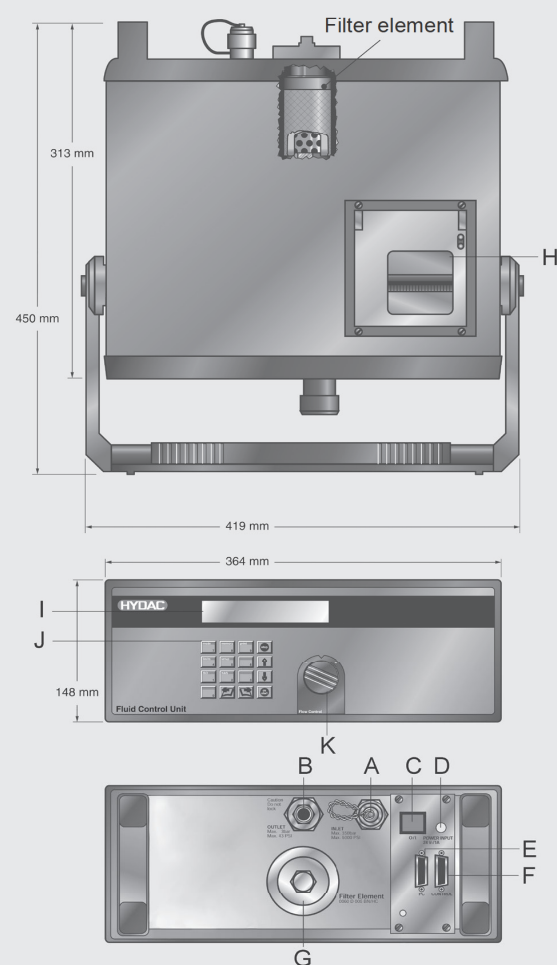
- BUS = RS485 interface instead of RS232

Items supplied

- FCU
- Power supply adapter
- High pressure inlet hose DN 2 (2m long)
- Low pressure outlet hose DN 7 (2m long)
- Operating Instructions
- Calibration certificate
- PC software package FluMoS Light
- Connection cable FCU/PC

Accessories

- Reservoir Extraction Unit REU
- Inlet and outlet hoses 5 m long
- Bottle Sampling Unit BSU
- Aluminium transport case
- PC software package FluMoS Professional



- A = High pressure port
B = Outlet
C = On/off switch
D = Power input 24 volts
E = Serial port for PC connector
F = Control port
G = Cover for filter
J = Dot-matrix printer
K = LCD
L = Keypad
M = Flow control valve

Note

The information in this brochure relates to the operating conditions and applications described.

For applications and operating conditions not described, please contact the relevant technical department.

Subject to technical modifications.