



## 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 measuring instrument, or in the laboratory in conjunction with the Bottle Sampling Unit for analyzing oil samples.

### Applications

- Field applications
- In laboratories and at service centres

### Advantages

- Analysis and storage of measurement data
- Cleanliness classes according to ISO 4406, SAE 4059 and NAS 1638
- Integrated graphics-capable printer
- RS232 or RS485 interface for data output
- Easy operation

### Technical specifications

Continuous display of measured values via display (LCD)	
Self-diagnostics	Continuous with error indication on display (LCD)
Measurement range (calibrated, version-dependent)	NAS 0 ... 12 / ISO 0/0/0 ... 23/21/18 / SAE 0 ... 12 The instrument 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 line outlet	INLET: 1 ... 350 bar, with clean filter element OUTLET: max. 3 bar
Ports (back of unit)	INLET: Minimes test coupling type 1620 OUTLET: male coupling DN 7
Measurement flow rate	20 ... 80 ml/min
Outlet flow rate	20 ... 800 ml/min (pressure-dependent)
Permitted viscosity range	1 ... 1000 mm <sup>2</sup> /s
Fluid temperature range	0 ... +70 °C
Supply voltage	24 V DC, ± 25%
Power consumption	25 Watt max.
Operating time with rechargeable batteries	≈ 6 hours
Integral printer	Dot matrix printer
Serial interface	Standard: RS232 Optional: RS485
Ambient temperature range	0 ... +55 °C
Storage temperature range	-20 ... +85 °C
Relative humidity	max. 90%, non-condensing
Protection rating	III (safety extra-low voltage)
Protection 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  $\mu\text{m}$ ,  
NAS 2-5/5-15/15-25/25-50/50-100/>100  $\mu\text{m}$

2 = ISO Code >4/>6/>14  $\mu\text{m}_{(c)}$ ,  
SAE >4/>6/>14/>21/>38/>70  $\mu\text{m}_{(c)}$

### Housing

1 = for portable use

### Fluids

0 = for standard mineral oils

1 = for phosphate esters (HFD-R)

### Options

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

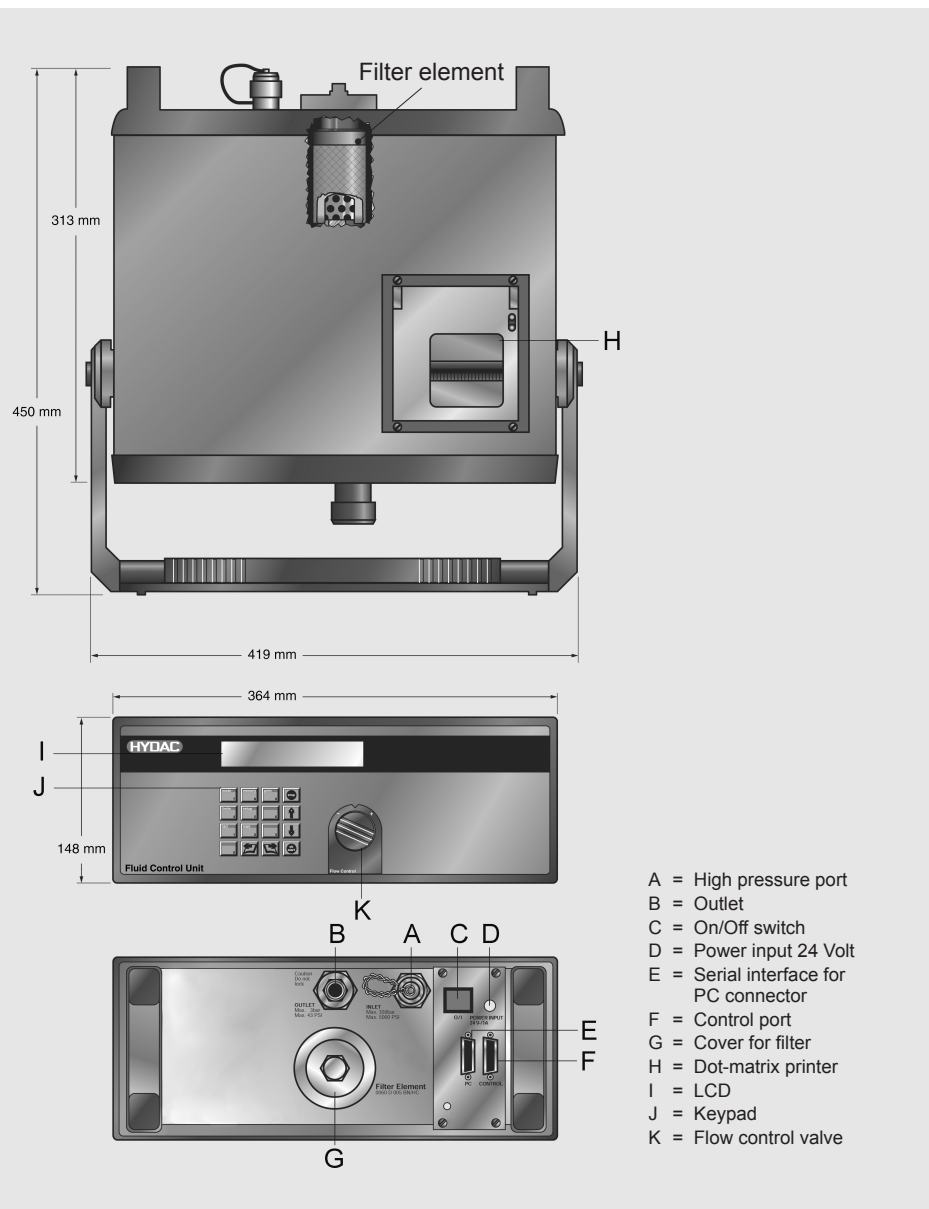
- BUS = RS485 interface instead of RS232

## Items supplied

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

## Accessories

- Reservoir Extraction Unit REU
- Inlet and outlet hoses 5 m long
- Bottle Sampling Unit BSU
- Transport case (aluminium)
- PC software package CoCoS Professional



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

## Note

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

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

Subject to technical modifications.

## HYDAC FILTER SYSTEMS GMBH

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