FluidControl Unit

FCU 2000 series
19" panel mounted models

Description

The FluidControl Unit FCU 2000 for 19" Panel Mounting is designed for measuring particle contamination in hydraulic and lubrication systems.

The measurement values are recorded by means of infrared technology and output in accordance with ISO 4406, SAE 4059 and NAS 1638.

Applications

- Hydraulic and lubrication systems

Advantages

- Cleanliness classes in accordance with ISO 4406, SAE 4059 and NAS 1638
- Data output in the display or connection to a PC
- RS232 or RS485 interface

Technical details

Continuous display of measured values with display screen (LCD)	
Self diagnostics	Continuous with error indication on display (LCD)
Measurement range (calibrated)	ISO 12/10/9 to 23/21/18 Unit is calibrated within this range. Measures up to class ISO 25/23/21.
Data memory (battery back-up)	3000 measurements
Operating pressure: Pressure inlet Return port connection	 INLET: 1 to 350 bar, with clean filter element OUTLET: max. 3 bar
Ports	INLET: Minimess test coupling type 1604 OUTLET: male coupling DN 7
Sensor flow rate	50 to 150 ml/min
Return flow rate	50 to 800 ml/min (depending on the pressure)
Permitted viscosity range	1 to 1000 mm²/s
Fluid temperature range	0 to +70°C
Power consumption	25 watts max.
Integral printer	Dot-matrix printer
Serial interface	Standard: RS 232 Option: RS 485
3 relay outputs	1x "ready" relay 2x "limit" relays
Ambient temperature range:	0 to +55°C
Storage temperature range	-20 to +85°C
Relative humidity	Max. 90%, non-condensing
Protection class	II (double insulated)
IP class	IP40
Weight	≈ 16 kg

Model code

FCU 2 1 3 0 – 1 – M / -BUS

Type
FCU = FluidControl Unit

Resolution
2 = 4 particle size channels

ISO Code format
0 = ISO 4406 : 1987; NAS 1638 / >5 µm >15 µm>25 µm>50 µm
1 = ISO 4406 : 1987; NAS 1638 / >2 µm >5 µm >15 µm >25 µm
2 = ISO 4406 : 1999 ; SAE AS 4059 (D) / >4 $\mu m_{(c)}$ >6 $\mu m_{(c)}$ >14 $\mu m_{(c)}$>21 $\mu m_{(c)}$

Housing
3 = for 19" panel mounting

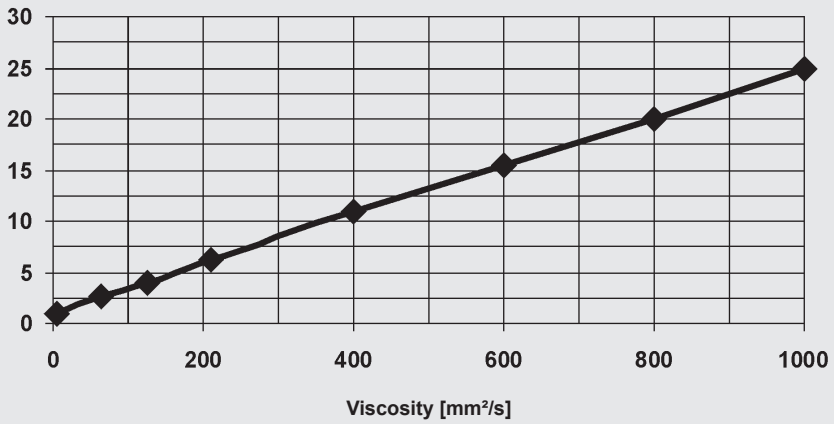
Fluids
0 = for standard mineral oils
1 = for phosphate esters (HFD-R)

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
No details: standard
BUS = RS 485 interface instead of RS 232

Pressure required at FCU high-pressure port*



* For a flow rate of 100 ml/min, flow control valve fully open, new filter element

Items supplied

– FCU
– Power supply cable
– Operating Instructions
– Calibration certificate
– PC software package FluMoS Light

Accessories

– Reservoir Extraction Unit REU
– Inlet and outlet hoses 2 m and 5 m long
– PC software package FluMoS Professional

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.

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