



# FMS-FCU-1310

FLUID CONTROL UNIT

NFPA/T2/6/1  
BURST & FATIGUE RATING

ISO 3968  
Pressure Drop vs Flow

## PREVENTIVE MAINTENANCE MAXIMUM EFFICIENCY



OUTLET PORT

INLET PORT

USB DOWNLOAD PORT

PUMP ON/OFF SWITCH

DATA  
INTERFACE  
(DATA)

DISPLAY  
AND KEYPAD

POWER SUPPLY CONNECTOR 24 VDC

The FluidControl Unit FCU 1310 series combines the advantages of the portable contamination measurement units with the measurement technology of the TestMate® Contamination Monitor (TCM) and TWS (TestMate® Water Sensor), in a portable, field-ready package for diesel fuel applications.

The FCU 1310 is a portable service unit and is designed for temporary measurement of solid particle contamination and water saturation in diesel storage, diesel transfer and diesel filling applications. Measuring contamination levels of diesel fuel, as well as mineral based hydraulic oils compatible with Viton® seals. The FCU 1310 is not compatible with water glycol fluids.

The integrated pump and the hoses with test point connections, which are included, allow operation on diesel fuel storage tanks and transfer circuits, as well as on hydraulic reservoirs, control circuits, and pressure circuits.

**AUTOMATIC  
MEASUREMENT  
of cleanliness ratings  
as ISO 4406:1999; SAE  
AS 4059, and NAS 1638**

**PARTICULATE  
CONTAMINATION  
detected with an optical  
measurement cell**

**WATER SATURATION  
(0 - 100%)**

FEATURES & BENEFITS

**VISCOSITY RANGE**  
33 to 1622 SUS  
(2 to 350 cst)

**SUPPLY  
VOLTAGE**  
24 VDC

**INTEGRATED PUMP**  
for automatic  
control of oil flow

**MEASUREMENT  
ACCURACY**  
+/- 1/2 ISO code

To ensure safe operation with diesel fuel, the FCU 1310 is equipped with a grounding wire, along with an integral temperature monitoring system to ensure the device switches off when operated above the critical temperature of diesel fuel (113°F, 45°C).

**Schroeder  
INDUSTRIES**  
Advanced Fluid Conditioning Solutions®

### TECHNICAL SPECIFICATIONS

<b>Self-Diagnosis</b>	Continuously with error indication via status LED and display
<b>Measured Value</b>	ISO code / SAE Class / NAS Class / Saturation Level / Temperature
<b>Measuring Range</b>	Display from ISO code 9/8/7 (MIN) to ISO code 25/24/23 (MAX) Calibrated within the range ISO 13/11/10 to 23/21/18 Saturation level 0 to 100 % / Temperature -13°F to 212°F (-25°C to 100°C)
<b>Accuracy</b>	± 1/2 ISO class in the calibrated range / ± 2 % Full scale max for Water Sat. and Temp.
<b>Material of Sealings</b>	FPM seals
<b>Ambient Temperature Range</b>	32°F to 113°F (0°C to 45°C)
<b>Storage Temperature Range</b>	-40°F to 176°F (-40°C to +80°C)
<b>Dimensions (cover closed)</b>	9.06" H x 16.14" L x 13"D
<b>IP Class</b>	IP50 in operation, IP67 when closed
<b>Weight</b>	Approx. 29 lbs (13 kg) without accessories
<b>With Diesel According to ASTM D975 4-D or DIN EN 590</b>	IN: 0 psi (0 bar) OUT: 0 psi (0 bar)
<b>HYDRAULIC DATA</b>	
<b>Hydraulic Fluid</b>	IN: -725 to 650 psi (-0.5 to 45 bar)
<b>Operating Pressure</b>	OUT: 0 to 7.5 psi (0 to 0.5 bar)
<b>with Adapter for Pressure Lines</b>	IN: 217 to 5000 psi (15 to 345 bar) OUT: 0 to 7.5 psi (0 to 0.5 bar)
<b>Pressure Max.</b>	5000 psi (345 bar)
<b>Permissible Viscosity Range</b>	33 to 1622 SUS (1.5 to 350 cSt)
<b>Fluid Temperature Range</b>	32°F to 158°F (0°C to +70°C), or up to 113°F (45°C) for diesel fuel
<b>ELECTRICAL DATA</b>	
<b>Power Supply Voltage</b>	24 VDC ± 20%, residual ripple < 10%
<b>Max. Power/Current Consumption</b>	100 Watt / 4 A
<b>Interface</b>	Plug connection, 5-pole, male, M12x1 and USB