Cold Filter Plugging Point Process Analyzer **CFPP-4**

Explosion protection

Marking	ATEX: Ⓔx II 2G IIC T4 Gb NEC 500: Class I, Div. 2, Groups B, C, D, T4 NEC 505: Class I, Zone 1, AEx IIB+H2 T4 CEC Sec. 18: Class I, Zone 1, Ex IIB+H2 T4

Technical data

Technology	plugging sieve
Method	compliant with: ASTM D6371, DIN EN 116, DIN EN 16329, IP 309
Measuring range	-35 °C to 15 °C (-58 °F to 59 °F)
Repeatability	≤ DIN EN/ASTM
Reproducibility	≤ DIN EN/ASTM
Measuring cycle	discontinuous, 25 to 90 min depends on CFPP temperature
Product streams	1 x sample, 1 x validation (additional hardware required)

Electrical data

Nominal voltage	AC 230 V ± 10 %, 1 phase; 50 Hz; chiller: AC 400 V ± 10 %, 3 phases; 50 Hz other ratings on request
Maximum power consumption	approx. 700 W chiller: approx. 1200 W
Protection class	IP 54 (NEMA 13)
Ambient conditions	
Ambient temperature	operation 5 to 35 °C (41 to 95 °F) storage 0 to 60 °C (32 to 140 °F)
Ambient humidity	operation 5 to 80 % relative humidity, non-corrosive storage 5 to 85 % relative humidity, non-corrosive
Sample	
Quality	filtered 10 µm, moisture content max. 550 ppm (≤ 37 cSt at inlet temperature)
Consumption	20 to 40 l/h
Pressure at inlet	1 to 4 bar (14.5 to 58 psi)
Temperature at inlet	≥ 15 °C (59 °F)

Utilities		
Instrument air		
Consumption	Purge	8 Nm^3/h while purging (~12 min)
	Operation	approx. 2.3 Nm^3/h
	Pressure at inlet	3 to 7 bar (43.5 to 101.5 psi)
	Quality	dew point ≤ -40 °C (-40 °F) humidity class 2 or better acc. to ISO8573.1
Coolant	FKS-KWS with “Temper-55” integrated	
Signal outputs and inputs		
Analog outputs	Cold Filter Plugging Point (others on request)	
Digital outputs	Alarm, Ready/Valid	
Digital inputs	sample selection, summer/winter, request for an validation cycle	
Electrical data of signal outputs and inputs		
Analog outputs	max. 8 (4 to 20 mA; 1000 Ω) active isolated on request	
Analog intputs	4 to 20 mA; 160 Ω	
Digital outputs	DC 24 V; max. 0.5 A	
Digital inputs	high: DC 15 to 28 V; low: DC 0 to 4 V	
Auxiliary power supply output	DC 24 V; max. 0.8 A	
Control unit		
Central control unit	Industrial PC	
Operating system	Windows Embedded Standard 7®	
Control software	PACS	
User interfaces		
Display	TFT display with touch function, 1024 x 768 pixel	
Keyboard	virtual keyboard, controlled via TFT display with touch function	
Connections		
Tube fittings	Swagelok® 6 mm/12 mm/18 mm other fittings on request	
Vent/Drain	open to atmosphere	
Weight and dimensions		
Weight	approx. 400 kg	
Space requirements	right: 500 mm, left: 500 mm	
Optional interfaces		
Analog outputs	on request	
MODBUS interface	MODBUS/RTU via RS485 or RS422 or FOC is, MODBUS/TCP via FOC is	
Remote access	via Ethernet (VDSL or FOC is)	

Important notice: CFPP-4 is subject to continuous product improvement, specifications are preliminary and may be subject to change without notice. If your technical data do not comply with existing data, please contact us for technical clarification.

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