

Explosion protection

Marking	ATEX: II 2G Ex h IIC T4 Gb X IECEX: on request NEC 500: Class I, Division 2, Group B,C and D NEC 505: Class I, Zone 1, AEx d e ib px IIB resp. IIB+H2 T3 resp. T4 CEC Sec. 18: Ex d e ib px IIC T3 resp. T4 TR CU: on request
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Technical data

Technology	distillation
Method	correlates with: ASTM D86, DIN EN ISO 3405, IP 123
Measuring range	+20 °C to +420 °C (+68 °F to +788 °F)
Repeatability	≤ DIN EN/ASTM D86
Reproducibility	≤ DIN EN/ASTM D86
Measuring cycle	discontinuous, cycle time approx. 10 min for diesel cycle time approx. 15 min for gasoline
Product streams	2 x sample, 1 x validation
– Electrical data	
Nominal voltage	230 VAC ± 10 %, 1 phase; 50 Hz/60 Hz or 110 VAC +/- 10 %, 1 phase; 50 Hz/60 Hz with FKS 1,4-KWS 400 VAC +/- 10 %; 3 phase; 50 Hz/60 Hz other ratings on request
Maximum power consumption	approx. 500W
– Protection class	IP 54 (comparable with NEMA 13)
– Ambient conditions	
Ambient temperature	operation +5 °C to +40 °C (+41 °F to +104 °F) storage -20 °C to +60 °C (-4 °F to +140 °F)
Ambient humidity	operation: 5 to 80 % , relative humidity at +25 °C, non- corrosive storage: 5 to 80 % , relative humidity at +25 °C, non- corrosive
Sample	
Quality	filtered 50 µm, no suspended water, bubble-free
Consumption	20 to 40 l/h
Pressure at inlet	1 to 3 bar (14.5 to 43 psi)
Temperature at inlet	max. +50 °C (+122 °F)
Temperature change	max. 1K/min.
Viscosity	max. 37 cSt at inlet temperature
Utilities	
– Instrument air Consumption	During operation: approx. 1 Nm ³ /h while purging: 8 Nm ³ /h (~12 min)
Pressure at inlet	5 to 7 bar (72 to 101.5 psi)
Quality	humidity class 2 or better acc. to ISO 8573.1

– Nitrogen Consumption	During operation: max. 0.5 Nm ³ /h
Pressure at inlet	4 to 7 bar (58 to 101.5 psi)
Quality	Purity >= 98%, class 2 or better acc. to ISO 8573-1
– Coolant	20 to 40 l/h
Temperature	-10 to 55 °C (14 to 131 °F)
Pressure at inlet	1 to 3 bar (14.5 to 43.5 psi)
Quality	filtered 50 µm, pH 6 to 8
Electrical data of signal outputs and inputs	
Analog outputs	max. 8 outputs 4 to 20 mA, (max. resistance 1000 Ω), active isolated on request
Analog inputs	4 to 20 mA, 160 Ω
Digital outputs	DC 24 V; max. 0.5 A; sum alarm Ready/Come-Read, Power identification Validation identification, Analysis Cycle Active
Digital inputs (max. 3 configurable inputs)	high: DC 15 to 28 V; low: DC 0 to 4 V Reset, Inhibit, Stream request, Validation request, Decoking request, Automatic stream switching
Control unit	
Central control unit	Industrial PC
Operating system	Windows 10 Enterprise LTSB
Control software	PACS
HMI	TFT display (multi-touch)
User interfaces	
Display	TFT display with touch function, 1366 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	
Dimensions (W x H x D)	approx. 1150 x 1900 x 710 mm
Weight	approx. 300 kg approx. 450 kg (incl. FKS 1.4-KWS)
Space requirements	right: 150 mm/left: 100 mm
Optional interfaces	
MODBUS interface	MODBUS RTU/TCP (RS485, RS422, VDSL/FO (IS) MODBUS/TCP via FOC is
Remote access	remote software with modem, ISDN, Ethernet via VDSL modem FO (FS)