

Explosion protection

Marking	ATEX: II 2G IIC T4 Gb
NEC 505	Class I, Div. 2, Group B,C, or D, T3 or T4
NEC 500	Class I, Zone 1, with Chiller: AEx d e ib mb px IIB+H2 T3 or T4 without Chiller: AEx d e ib px IIB+H2 T4
CEC section 18	with Chiller: Ex d e ib mb px IIB+H2 T3 or T4 without Chiller: Ex d e ib px IIB+H2 T4
Certification	pending

Technical data

Technology	distillation
Method	correlates with: ASTM D86, DIN EN ISO 3405, IP 123
Measuring range	+20 °C to +400 °C (+68 °F to +752 °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. 700 W (analyzer only) incl. chiller for liquids: approx. 1600 W
Protection class	IP 54
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

Important notice: rapiDist-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.

Utilities

Instrument air		
Consumption	Purge	8 Nm ³ /h while purging Ex p (12 mins) approx. 1 Nm ³ /h (normal operation) approx. 1.5 Nm ³ /h at 6 bar, optional nitrogen generator is used approx. 0.1 Nm ³ /h for purging Ex d (for gasoline application) 5 bis 50 Nm ³ /h optional "Vortex"
	Pressure at inlet	5 to 7 bar (72 to 101.5 psi)
	Quality	humidity class 2 or better acc. to ISO8573.1
Coolant	Plant water or integrated FKS 1.4 KWS	
Consumption	use of plant water: 20 to 40 l/h	
Pressure at inlet	plant water: 1 to 3 bar	
Temperature	plant water: -5 °C to +40 °C; ± 0.5 K	
Quality	filtered 50 µm, pH 6 to 8	
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, Electrical data of signal outputs and inputs	
Control unit		
Central control unit	Industrial PC	
Operating system	Windows 7	
Control software	PACS	
HMI	TFT display (multi-touch)	
Display	TFT display with touch function, 1024 x 768 pixel	
Keyboard	virtual keyboard, controlled via TFT display with touch function	
Tube fittings	Swagelok® 6 mm/12 mm/18 mm other fittings on request	
Vent/Drain	open to atmosphere	
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: 500 mm, left: 500 mm	
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)	
Sample line connections	metric (6 mm/12 mm/18 mm) Typ 6 mm or imperial (¼", ½", ¾") Typ. ¼"	