

Explosion protection

Marking	ATEX: II 2G Ex h IIC T3 Gb X IECEX: on request NEC 500: on request NEC 505: on request CEC Sec. 18: on request TR CU: on request
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Technical data

Technology	continuously analyzing kinematic viscosities at 40 °C and 100 °C, capillary-type
Method	compliant with: ASTM D445, ASTM D2270, ASTM D341, DIN EN ISO 3104, IP 71
Measuring range and temperatures	viscosity index 80 to 120 (other temperatures on request)
Measuring cycle	continuous
Product streams	2 x sample, 1 x validation (additional hardware required)
– Electrical data	
Nominal voltage	230 V AC ± 10 %, 1 phase; 50 Hz; other ratings on request
Maximum power consumption	approx. 1000 W
– Protection class	
IP 54 (comparable with NEMA 13)	
– Ambient conditions	
Ambient temperature	operation 5 to 40 °C (41 to 104 °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 or 50 µm (depending on the viscosity measuring range), bubble-free max. viscosity 800 cSt at the lowest temperature (technical clarification required) (sample as coolant ≤ 10 cSt)
Consumption	3.8 to 10 l/h (depends on variant)
Pressure at inlet	3 to 14 bar (43.5 to 203 psi)
Temperature at inlet	50 to 60 °C; changes ≤ 0,1 K/min
Utilities	
– Instrument air Consumption	
Purge	11 Nm ³ /h while purging (~16 min)
Operation	approx. 1 Nm ³ /h
Pressure at inlet	3 to 7 bar (43.5 to 101.5 psi)
Quality	humidity class 2 or better acc. to ISO 8573.1
– Coolant	

Consumption	sample as coolant: 20 to 40 l/h or plant cooling water: 20 to 40 l/h for re-cooling of peltier device
Temperature	5 to 50 °C (41 to 122 °F)
Pressure at inlet	2 to 7 bar (29 to 101.5 psi)
Quality	filtered 50 µm
Signal outputs and inputs	
Analog outputs	viscosity index (others on request)
Digital outputs	Alarm, Ready/Valid
Digital inputs	Validation Request, Reset
Electrical data of signal outputs and inputs	
Analog outputs	max. 8 (4 to 20 mA; 1000 Ω) active isolated on request
Analog inputs	4 to 20 mA; 160 Ω
Digital outputs	24 V DC; max. 0.5 A
Digital inputs	high: 15 to 28 V DC low: 0 to 4 V DC
Auxiliary power supply output	24 V DC; max. 0.8 A
Control unit	
Central control unit	Industrial PC
Operating system	Windows 10 Enterprise LTSC
Control software	PACS
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, backpressure on request
Weight and dimensions	
Weight	approx. 600 kg
Dimensions (W x H x D)	approx. 2540 x 1930 x 710 mm
Space requirements	right: 150 mm/left: 100 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)