

Explosion protection

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| 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

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| 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 | |

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| 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) |