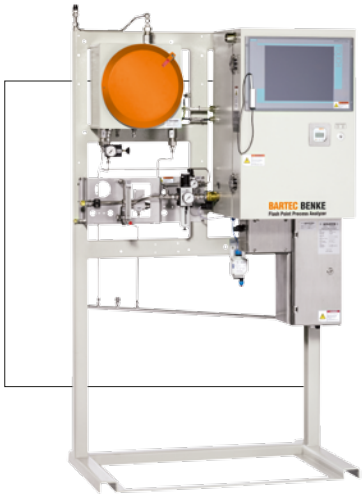
FPA-4 Flash Point Process Analyzer



Marking ATEX	Ⓔx II 2G IIC T4 Gb
CSA	C/US ongoing
Certification	TR CU available
Other approvals and certificates, see www.bartec.de	

Technical data

Technology	continuous measurement using catalytic combustion
Method	correlates with: ASTM D56, ASTM D93, DIN EN ISO 2719, DIN EN ISO 13736, IP 34, IP 170, DIN 51755
Measuring range	25 to 180 °C (77 to 356 °F)
Repeatability	≤ DIN EN/ASTM e.g. kerosene typ. 0.1 °C (approx. 0.2 °F)
Reproducibility	≤ DIN EN/ASTM
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. 500 W
Protection class	IP 54 (NEMA 13)
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 50 µm, free of suspended water, bubble-free, sulfur < 2000 ppm, free of heavy metals, free of phosphate (≤ 37 cSt at inlet temperature)
Consumption	approx. 2 to 3 l/h (at sample inlet)
Pressure at inlet	2 to 5 bar (29 to 72.5 psi)
Temperature at inlet	min. 15 °C below Flash Point, max. +80 °C, temperature change maximum 1 K/min, For cooling with product: max. +40 °C For using an inductive ring-type initiator (“min. contact“) on the flow meter: max. +60 °C

Utilities

Instrument air	
Consumption	Purge: 8 Nm^3/h while purging (~12 min) Operation: approx. 1 Nm^3/h
Pressure at inlet	2 to 7 bar (29 to 101.5 psi)
Quality	humidity class 2 or better acc. to ISO 8573.1

Coolant	depends on flash point temperature
Consumption	sample as coolant: 30 to 60 l/h or plant cooling water: 10 to 40 l/h
Temperature	+5 to +40 °C (+41 to +104 °F)
Pressure at inlet	2 to 5 bar (14.5 to 72.5 psi)
Quality	filtered 50 µm

Signal outputs and inputs	
Analog outputs	flash point temperature (others on request)
Digital outputs	Alarm, Ready/Valid
Digital inputs	Stream Selection, 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 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. 200 kg
Dimensions (W x H x D)	approx. 1140 x 2000 x 710 mm
Space requirements	right: 200 mm/left: 200 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 FPA-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.

Marketing & Communications-10/2017