



JFID

Total Hydrocarbon Analyzer



JFID-MK



JFID-FE



JFID-ES



JFID-PT

APPLICATION

- Continuous monitoring of Total Hydrocarbon THC or Methane CH₄ as option
- Emission monitoring
- Process monitoring
- LEL monitoring

BENEFITS

- Fast response time
- Low maintenance
- Relays for alarms, events and diagnostics
- Independent of pressure fluctuation
- Accurate and reliable
- Adjustable ranges

FEATURES

- Proven, heated FID (Flame Ionization Detector)
- Display in ppm or mg/m³
- Automatic start-up
- Automatic calibration and span check
- Automatic flame ignition
- Electronic flow control
- Built-in combustion air
- Built-in zero air
- Complete diagnostics of all utilities



TECHNICAL DATA

Model	JFID-ES	JFID-PT	JFID-FE	JFID-MK
Description	19" rack mounting	portable	wall and panel mounting	measuring head

Operation

Vacuum system	eductor or membrane pump (option)	membrane pump	eductor	
Measurement range	free selectable, user definable for both channels			
THC	0 – 1 mg org. C/m ³ up to 100,000 mg org. C/m ³		1 mg org. C/m ³ up to 100,000 mg org. C/m ³	
Detection limit	± 5 % of measurement range		< 0.1 mg org. C/m ³	
Linearity	< 1 % over entire measuring range		< 4 % over entire measuring range	
Selectable units	ppm, mg/m ³		ppm, mg/m ³ , Vol%, %LEL	
Signal output	0/4 to 20 mA not galvanically isolated			
Ambient temperature	-5° to 40 °C	+5° to 40 °C	-5° to 40 °C	
Response time (T90)	< 1 s		< 0,5 s if measured value > 20 mg org. C/m ³ < 5 s if measured value < 20 mg org. C/m ³	
Sample gas flow	25 NI/h or 90 NI/h	25 NI/h	25 NI/h	
Sample gas pressure	800 to 1,600 mbara	800 to 1,200 mbara	800 to 1,600 mbara	
Air humidity	< 90 % rel. humidity, 20 °C < 50 % rel. humidity, 40 °C			
Geographical altitude	0 to 1,500 m above sea level			

Construction

Dimensions over all (W x H x D) [mm]	483 x 135 x 401 with membrane pump: 445 x 135 x 401	380 x 155 x 380 with bottle holder: 483 x 290 x 510	470 x 505 x 410 model IP65: 500 x 505 x 410	470 x 520 x 465 model IP65: 500 x 520 x 465
Weight	10 kg with membrane pump: 11 kg	11 kg with bottle holder: 15 kg	28 kg model IP65: 33.5 kg	44 kg model IP65: 49 kg
Detector temperature	adjustable up to 200 °C	adjustable up to 170 °C	adjustable up to 200 °C	
Catalyst temperature	400 °C for combustion air and zero air			
Oxidizer for NMHC	230° to 250 °C		-	

Utilities

Instrument air	3 to 3.9 barg / < 2 Nm ³ /h, quality to ISO 8573-1 1.2.1	air not needed	3 to 3.9 barg / < 2 Nm ³ /h, quality to ISO 8573-1 1.2.1	
Fuel gas	hydrogen 0.7 to 1 barg / < 80 ml/min, quality 5.0			
Combustion air	with internal catalyst or optional synthetic air 1 to 1.5 barg < 30 NI/h	with internal catalyst	with internal catalyst or optional synthetic air 1 to 1.5 barg < 30 NI/h	
Calibration gas	2 to 2.5 barg / < 130 NI/h during calibration concentration 60 % to 80 % of the measurement range			
Zero gas	with internal catalyst or opt. nitrogen 2 to 2.5 barg / < 130 NI/h quality 5.0	with internal catalyst	with internal catalyst or optional nitrogen 2 to 2.5 barg / < 130 NI/h quality 5.0	
Protection class	IP20		IP54 / IP65	
Approvals / Signs	CE			

Electrics

Power supply	115 V ± 10 % or 230 V ± 10 %; 48 Hz to 62 Hz			
Power consumption	< 500 W		< 500 W / < 1,000 W if applicable	

Note: For more detailed specification please contact factory

ORDER CODES

Part No.	Description
207.000000	JFID-ES, 19" rack
207.000800	JFID-ES NMHC, one channel
207.020000	JFID-FE, field housing
207.021000	JFID-FE, field housing IP65
207.030000	JFID-PT/LT portable
207.030001	JFID-PT/LT portable 84TE
207.030002	JFID-PT portable with gas bottle holder
207.030003	JFID-PT, portable with gas bottle holder
207.030800	JFID-PT63 portable NMHC
207.030802	JFID-PT63 portable NMHC with bottle holder
207.040000	JFID-MK, measuring head
207.041000	JFID-MK, measuring head IP65

Options

207.900000	Data storage for measurement values and status report 250 A4 pages
407.020048	Conversion kit for external zero air and synthetic air for combustion air
407.020049	Retrofit kit active carbon
407.040182	Gas cylinder pressure regulator for hydrogen
407.040183	Gas cylinder pressure regulator for calibration gas
407.040184	Gas cylinder pressure regulator for nitrogen
407.040190	Air pressure regulator with fine filter assembly
407.950033	Status- and alarm board with 4 x 0/4 to 20 mA output, galvanically isolated
407.990084	External membrane sample gas pump for JFID-ES
407.990085	Internal membrane sample gas pump for JFID-ES
DAS 2	Instrument air purifier