



# JFID-ES | JFID-PT

## NMHC Non-Methane Hydrocarbon



### APPLICATION

- Continuous real-time analysis of Non-Methane Hydrocarbons NMHC, Total Hydrocarbons THC or Methane CH<sub>4</sub>
- With dual detector

### 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)
- Simultaneous monitoring and display of NMHC and CH<sub>4</sub>
- Display in ppm or mg/m<sup>3</sup>
- Oxidation catalyst switchable
- Automatic start-up and flame ignition
- Automatic calibration and span check
- Electronic flow control
- Built-in combustion air and zero air
- Complete diagnostics of all utilities



## TECHNICAL DATA

Model	JFID-ES NMHC	JFID-PT NMHC	JFID-ES NMHC Dual
Description	19" rack mounting	portable	19" rack mounting
<b>Operation</b>			
Vacuum system	eductor or membrane pump	membrane pump	eductor
Number of channels	1	1	2 (simultaneous monitoring)
Measurement range	free selectable, user defineable for both channels		
THC	10,000 ppm C3		
CH <sub>4</sub>	0 – 3.000 ppm C1		
Detection limit	±5 % of measurement range		
Linearity	< 1 % of measured value		
Zero noise	max. 2 % from measuring range		
Span noise	max. 2 % from measuring range		
Selectable units	ppm, mg/m <sup>3</sup>		
Signal output (simultaneous)	2 x 0/4 to 20 mA for channel THC or NMHC; 2 x 0/4 to 20 mA for channel CH <sub>4</sub>		
Ambient temperature	with eductor: -5° to 40 °C with membrane pump: 5° to 40 °C	5° to 40 °C	-5° to 40 °C
Response time (T90)	THC < 15 s; CH <sub>4</sub> < 30 s		THC; CH <sub>4</sub> < 5 s
Sample gas flow	with eductor: 25 NI/h or 90 NI/h with membrane pump: 25 NI/h	25 NI/h	25 NI/h or 90 NI/h
Sample gas pressure	with eductor: 800 – 1.600 mbara with membrane pump: 800 – 1.200 mbara	800 – 1.200 mbara	800 – 1.600 mbara
Air humidity	< 90 % rel. humidity, 20 °C; < 50 % rel. humidity, 40 °C		
Geographical altitude	0 – 1.500 m above sea level		
<b>Construction</b>			
Dimensions over all (W x H x D) [mm]	with eductor: 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	483 x 135 x 310
Weight	with eductor: approx. 10 kg with membrane pump: approx. 11 kg	approx. 11 kg with bottle holder: approx. 15 kg	approx. 12 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° – 250 °C		
<b>Utilities</b>			
Instrument air	with eductor: 3 to 3,9 barg / < 2 Nm <sup>3</sup> /h, quality to ISO 8573-1, 1.2.1 with membrane pump: air not needed	air not needed	3 to 3,9 barg / < 2 Nm <sup>3</sup> /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 optional 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	IP40	IP20
Approvals / Signs	CE	CE	CE
<b>Electrics</b>			
Power supply	115 V ± 10 % or 230 V ± 10 %; 48 Hz to 62 Hz		
Power consumption	< 500 W		

**Note:** For more detailed specification please contact factory

## ORDER CODES

Part No.	Description
207.000800	JFID-ES NMHC, one channel
207.000880	JFID-ES NMHC, dual channel
207.030802	JFID-PT63 portable NMHC with bottle holder, one channel
207.030883	JFID-PT84 portable NMHC with bottle holder, dual channel

### Options

407.010076	Gas connection fitting set SS
407.010077	Gas connection fitting set SS and aluminum
407.020048	Conversion kit for external zero air and synthetic air for combustion air
407.020049	Retrofit kit active carbon
207.900000	Data storage for measurement values and status report 250 A4 pages
407.040190	Air pressure regulator with fine filter assembly
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
DAS 2	Instrument air purifier