Technical Data Sheet

SEWERIN
Protecting Water, Gas and Life.

Multitec® 410

Device data

Dimensions (W × D × H)	prox. 148 × 57 × 205 mm approx. 148 × 57 × 253 mm with supporting bracket
Weight	approx. 1000 g, depending on equipment

Certificates

Certificate	TÜV 07 ATEX 553353 X II2G Ex d e ib IIB T4 Gb basic device without leather bag for: CH4, C3H8, C4H10, C9H20, H2S, CO II2G Ex d e ib IIC T4 Gb basic device with leather bag for: CH4, C3H8, C4H10, C9H20, H2S, CO, H2 BVS 09 ATEX G 001 X, PFG 08 G 002 X (applies to CH4, C3H8, C9H20, O2, CO)

Device elements

Display	monochromatic graphic display, 320 x 240 pixels
Buzzer	frequency 2.4 kHz, volume 80 dB (A) / 1 m
Signal light	red
Pump	vacuum > 250 mbar volume flow approx. 50 l/h pump error (F100) dependent on volume flow: • ≤ 20 l/h F100 certain • > 20 l/h – ≤ 35 l/h F100 possible
Interface	USB
Memory	8 MB
Operation	ON/OFF key, 3 function keys, jog dial

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Operating conditions

Operating temperature	-20 °C – 40 °C
Storage temperature	-25 °C – 60 °C (temperatures above 40 °C reduce the service life of the sensors)
Humidity	5 – 90 % r.h., non-condensing
Atmospheric pressure	800 – 1100 hPa
Protection rating	IP54
Normal position of use	any

Power supply

Power supply	NiMH rechargeable or disposable alkaline batteries, size AA
Operating time, typical	at least 8 h
Charging time	approx. 3 h (complete charge), depending on capacity
Charging voltage	12 V DC, max. 1 A

Data transmission

Communication	USB

Gas types

Standard	methane CH4
Optional	propane C3H8 butane C4H10 nonane C9H20

Catalytic combustion sensor CxHy LEL range

Measuring range	0 – 4.4 % vol. (CH4), 0 – 100 % LEL	
Resolution	0.05 % vol.	
Response times	t50 < 5 s t50 < 6 s t50 < 20 s	t90 < 14 s (CH4) t90 < 11 s (C3H8; C4H10) t90 < 60 s (C9H20)
Measuring error	±1 % UEG CH4 ±4 % UEG CH4 ±1 % UEG C3H8 ±2 % UEG C3H8 ±5% UEG C9H20	(short-term stability as per EN 60079-29-1) (long-term stability as per EN 60079-29-1) (short-term stability as per EN 60079-29-1) (long-term stability as per EN 60079-29-1)
Interference	ALL flammable gases	
Lifetime, expected	5 years	

Electrochemical sensor, oxygen O2

Measuring range	0 – 25 % vol.
Resolution	0.1 % vol.
Response times	t90 < 15 s
Warm-up time	approx. 1 min
Temperature range	-20 °C – +40 °C
Measuring error	±3 % or ±0.3 % vol. (±3 digits)
Interference	none
Lifetime, expected	36 months

Electrochemical sensor, carbon monoxide CO

Measuring range	0 – 500 ppm lower limit: 4 ppm
Resolution	1 ppm
Response times	t90 < 30 s
Warm-up time	approx. 1 min
Decay time	t10 < 24 s
Measuring error	±10 % or ±3 ppm (±3 digits) ±5 ppm (long-term stability as per EN 45544)
Zero point deviation	7 ppm
Interference	At 20 °C • 3000 ppm H2: Approx. 1000 ppm CO • 100 ppm NO: Approx. 25 ppm CO
Operating temperature	-20 °C – +40 °C
Lifetime, expected	36 months