testo 316 - 1

Instruction manual

Monitoring instrument to detect gas leaks.

The testo 316-1 detects even the smallest leaks of combustible gases in pipelines, flanges and screw connections etc. The bendable probe stem has no problem reaching even inaccessible points. Its wide range of applications makes the gas leak monitoring instrument indispensable for every professional.

Do not measure on live parts.
This Instrument is not designed to operate while wet or in an environment of condensing humidity (> 95 %RH).

Observe maximum storage and transport temperature and maximum operation temperature (e.g. protect measuring instrument from direct sunlight)!

Do not use **testo 316-1** in enclosed rooms where gases have gathered to form an explosive mixture.

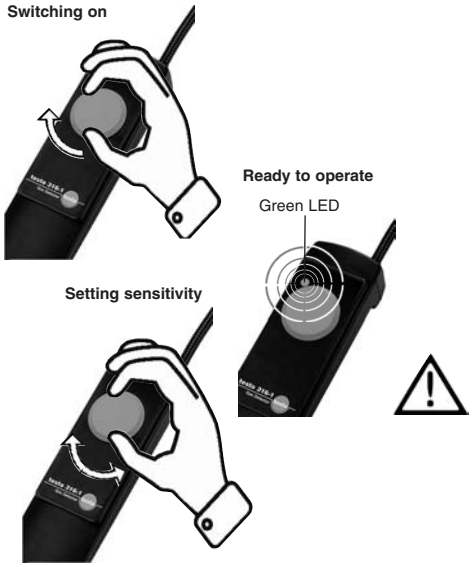
Ensure that the gas concentration does not exceed the lower explosion limit of gas mixtures by 20%. The alarm limits are adjusted downward when the sensitivity is set in a gas environment.

Always carry out a function test prior to gas leak detection.

Set sensitivity of sensor in fresh air.

Warranty no longer applies in the case of inexpert handling or if force is used.

Measuring



Switching on
- Turn control button
- Warm-up phase of sensor begins
- LED is red
- Alarm signal sounds
- Warm-up phase max 30 seconds
- LED is green
- Alarm signal off

Ready to operate
- No alarm signal
- LED is green

Setting sensitivity in fresh air
- Turn control button to the right until the sound signal is heard
- Turn the control button to the left until the sound signal stops.

Function test
- Expose sensor to a combustible gas e.g. from a know leak point in the pipeline or from a butane (gas) lighter, for a period nor exceeding 10 sec.
- If the sensor does not react (no alarm), the instrument should be considered as defective and must not be used. Return the unit immediatly to the nearest Test service point for repair.

Detecting leaks
- Sound signal when gas is escaping
- Signal becomes quicker as concentration increases
- **Alarm > 200 - 10000 ppm**
  - LED changes from green to yellow
  - Warning sound
- **Alarm > 10000 ppm**
  - LED changes from yellow to red
  - Warning sound

Low Batt Signal

If during use the LED switches off and a one sec cyclic audible signal is obtained, replace the battery within 15 min for continued working.

Changing the battery

- Open housing screw (rear of instrument).
- Insert 9 V block battery. **Observe polarisation.**
- Close housing.

Note on disposal: Dispose of empty batteries responsibly. Batteries should be placed in plastic bags to avoid short-circuits.

Technical data

Measuring range:	0 to 10,000 ppm (1 vol%) CH4
1. Alarm threshold:	at max. 200 ppm LED is yellow
2. Alarm threshold:	at max. 10,000 ppm LED is red
Battery lifetime:	> 5 h with alkali manganese IEC 6LR61
Operating temperature:	4 to 45 °C
Storage/transport temperature:	-20 to +50 °C
Dimensions:	90 x 57 x 42 mm
Weight:	Approx. 300 g
Warranty:	2 years

Measuring instrument conforms with:
EN 50 082 Part 1
EN 50 081 Part 1

Ordering data

Ordering data	Part no.
testo 316-1, gas leak monitoring instrument with Instruction manual and battery	0632.0316
Case	0516.0182
TopSafe, indestructible protective case with stand	0516.0189
Plastic case to transport and store measuring instrument and accessories	0516.3120

0973.3161/06.01/T/wh/04.03.2004