

Dräger



DEUTSCHER TEXT:
BITTE UMDREHEN

INSTRUCTIONS FOR USE

Oxydig
O₂ Meter and Monitor

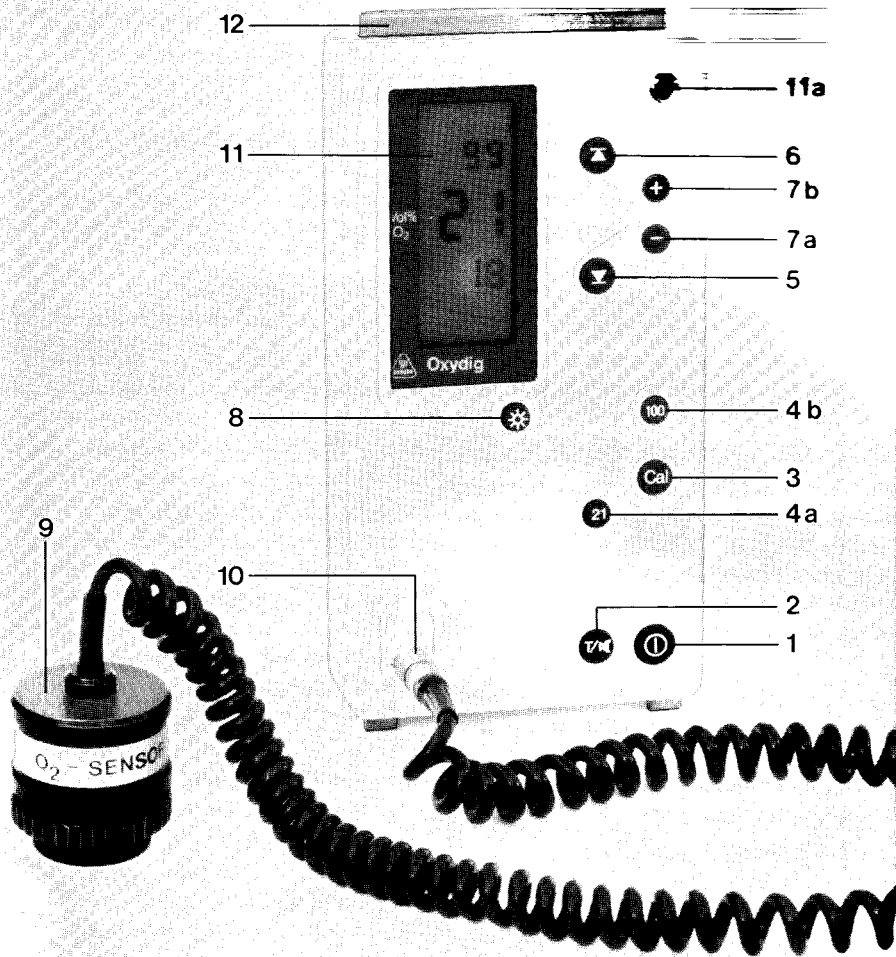


Fig. 1 Oxydig with Dräger O₂ sensor

1-8 see Page 5

9 O₂ sensor with helical cable

10 Sensor connector

11 Display panel

11a Red warning lamp

12 Operating instructions in brief
(pull out upwards)

Notes on Operation

Buttons

The buttons are logically grouped both in terms of shape and visually.

The buttons and their markings are designed to contrast with the surface of the device; the switching point is readily perceptible when the buttons are pressed.

In a manner corresponding to the design of the device, the following table is to be read from bottom to top.

8		Light button ¹⁾
7b		Adjustment button for increasing preselected limit value in each case
7a		Adjustment button for reducing preselected limit value in each case
6		Preselection button for upper limit-value adjustment
5		Preselection button for lower limit-value adjustment
4b		Selector button for calibration with O ₂
3		Calibration button
4a		Selector button for calibration with air
2		Button for test / 2 minutes alarm suppression
1		ON/OFF button

¹⁾ When the batteries are running low (»BAT« display flashes), the display cannot be illuminated; in such cases reliable measurement and monitoring have priority.

Display (Fig. 2)

The display consists of a liquid crystal display – with lighting feature – for measurement and alarm information. Furthermore, prompts and information are superimposed according to the device status.

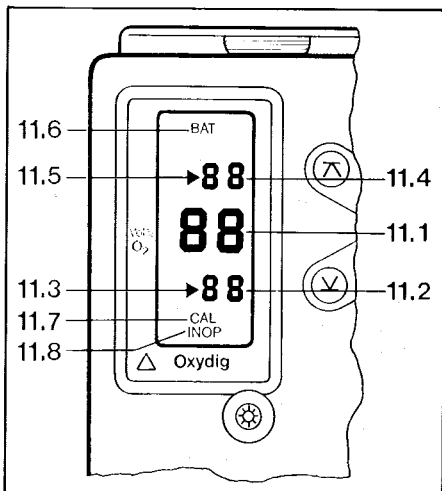


Fig. 2 Oxydig display (during test function)

- 11.1 Numerical display of measured O₂ concentration up to 100%.
- 11.2 Two-digit numerical display of lower limit value.
- 11.3 Flashing arrow symbol: Lower limit value undershot (at the same time lower limit value display flashes, accompanied by audible alarm, red warning lamp flashes).
- 11.4 Two-digit numerical display of upper limit value.
- 11.5 Flashing arrow symbol: Upper alarm value overshoot (upper limit-value display flashes at the same time, accompanied by audible alarm, red warning lamp flashes).
- 11.6 Flashing text »BAT«: The batteries are almost flat and must be replaced within the next 24 hours.
Permanent display of »BAT« text: Batteries must be replaced immediately!
- 11.7 Flashing »CAL« text is intended to prompt calibration following switch-on of device.
- 11.8 Text »INOP« = inoperative; possible causes: Dräger O₂ sensor no longer serviceable or break in sensor cable. No measured-value display!

Initial Preparation

Fitting/replacing batteries (Fig. 3)

Use alkaline-manganese batteries, round cells 1.5 V, LR 6 (4 x). Press latch on side of device, pull out battery compartment downwards. Fit batteries; ensure correct polarity (symbols in battery compartment).

Slide in battery compartment – with

batteries facing device – as far as stop.

The flashing »BAT« text indicates that the batteries need replacing and that this must be done within the next 24 hours.

If the »BAT« text lights continuously, the batteries must be replaced **immediately!**

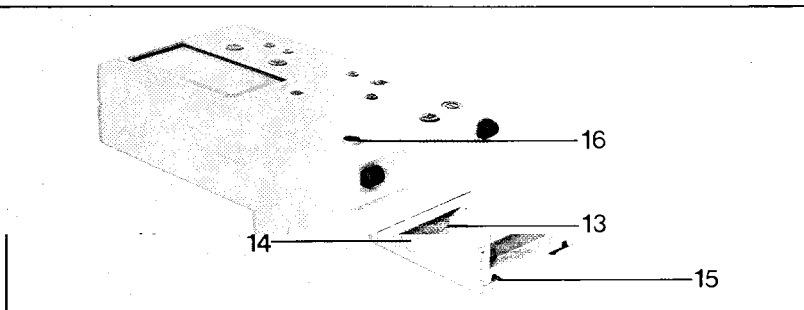


Fig. 3 Oxydig (battery compartment)

- 13 Battery compartment
- 14 Latch for battery compartment
- 15 Recess for O₂-meter holder
- 16 Sensor jack

Inserting or replacing sensor capsule (Fig. 4)

Remove sensor capsule from package. In doing so, do not touch the wire sieve (including diaphragm), since perspired hands, grease or dirt are liable to reduce that water-repellent (hydrophobic) properties of the diaphragm so that the measurement function may be impaired.

Remove screw cap from sensor housing, insert sensor capsule as per Fig. 4 and screw in again tightly by hand.

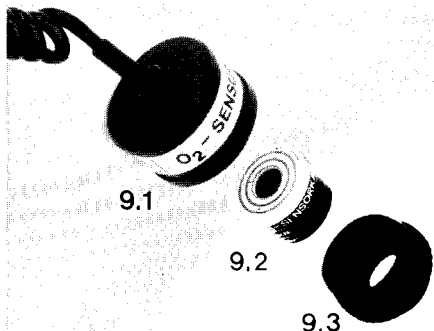


Fig. 4 Dräger O₂ sensor assembly

- 9.1 Sensor housing
- 9.2 Sensor capsule
- 9.3 Screw cap

The sensor capsule must be replaced if, with air calibration, the display can no longer be calibrated to 21 vol. % O₂ (as described under »Calibration«). Replacement is also necessary if excessive deviations are established during linearity testing (as described under »Servicing«).

Following fitting of a sensor capsule, the Oxydig must be calibrated after a warm-up time of 15 minutes.

Installation

Specific connection elements for the various applications are available for the Dräger O₂ sensor as well as attachment elements for the Oxydig meter (see Order List).

When using equipment not manufactured by Dräger, a non-tilt surface is to be selected for the Oxydig.

Insert sensor connector in jack of indicating instrument; connector must audibly engage.

Calibration

Calibration is to be performed

- periodically every 24 hours, in both sustained and intermittent operation;
- as a general rule following an INOP alarm; the text »CAL« flashes up;
- following battery replacement;
- following sensor replacement.
- Switch on device:
Press ① button.
Whenever the device is switched on, it performs a self-test for approximately 4s: all displays appear, the red warning lamp lights.

- Press ☹ button:
With the button pressed, the numbers and text as per Fig. 2 must appear on the display accompanied by an audible alarm; the red warning lamp lights.

If (following release of the button) the text »CAL« then flashes up, or if the above-mentioned periodic calibration is due (in this case the text »CAL« does not necessarily flash up), calibration is to be performed.

Calibration in air



To be used for O₂ concentrations less than 60 vol. % O₂, e. g. in anaesthesia.

- Expose Dräger O₂ sensor beforehand to ambient air for at least 2 minutes.
- Press ☹ button:
all numerical displays disappear.
- Press selector button ② for calibration with air:
the limit values appear again; the measured-value display flashes. Calibration is completed after approx. 30s (max. 120s under unfavourable conditions): the measured value 21 vol. % O₂ appears on the display.

Calibration with oxygen

To be used in the intensive-care sector for measuring oxygen concentrations greater than 60 vol. % O₂, e. g. long-term ventilation.


- Attach test adapter 6801349 to Dräger O₂ sensor. Allow oxygen to flow through the test adapter at a rate of approximately 1 L/min during the entire calibration process. It is advisable to initiate the oxygen flow 1 minute prior to calibration, in order to flush the measurement system.

- Press calibration button  : all numerical displays disappear.
- Press selector button  for calibration with oxygen: the limit values re-appear, the flashing measured value for the O₂ concentration increases to 100 vol.%. The calibration process is over when the 100 vol.% O₂ measured value stops flashing.

Given correct calibration and **no changes in calibration gas** (air or oxygen), the displayed measured value (21 vol.% O₂ or 100 vol.% O₂) must not change over a period of some 2 minutes following release of calibration buttons.

Should the value change nevertheless: repeat calibration.

Caution

The following appear after 30s (max. 120s) in the event of incorrect calibration (if, for example, the O₂ sensor was exposed to ambient air, but the selector button  was pressed):

CAL
INOP

If this is the case, calibration is to be repeated.





Note



The calibration and limit settings remain stored even after the device has been switched off.

Cancelling of the memory can only be caused by flat batteries or removal of the battery compartment.

Functional Check

Checking limit-value settings




- Press pre-selection button for lower limit value  or upper limit value  : arrow symbol appears for approximately 5s in front of lower/upper limit value. Setting of the limit value must be commenced within this period, otherwise the pre-selection button is to be pressed again.
- Briefly press button  : the limit value is decremented (minimum value: 18 vol.% O₂).
- Briefly press button  : the limit value is incremented (maximum value: 99 vol.% O₂).

Pressing the buttons  or  continuously effects rapid setting.

The limit-value settings cannot overlap.



Checking limit-value alarms

Lower-limit alarm

- Expose O₂ sensor to ambient air. Set upper limit value to 30 vol.% O₂ and lower limit value to 18 vol.% O₂.
- Press button for lower limit value  ; set value of 30 vol.% O₂ with button  : the alarm must sound. Red warning lamp flashes. An arrow symbol must appear in front of the lower limit-value display. Arrow symbol and numbers must flash intermittently.
- Press button  : alarm must be reset. Red warning lamp, arrow symbol and numerical display must continue to flash.
- After 2 minutes: alarm must sound again.

- Reduce lower limit value to 18 vol. % O₂ again:
audible alarm must be reset. Arrow symbol must disappear. Display of lower limit value and red warning lamp must no longer flash.

Upper-limit alarm

- Press button for upper limit value  ;
set value of 18 vol. % O₂ with button  :
alarm must sound, red warning lamp must flash. Arrow symbol must appear in front of upper limit-value display. Arrow symbol and numbers must flash intermittently.
- Set upper limit value to 30 vol. % O₂:
audible alarm must be reset; arrow symbol must disappear. Display of upper limit value and red warning lamp must no longer flash.


Checking INOP alarm

- Pull sensor connector:
Measured-value display disappears. »INOP« appears. Alarm sounds. Warning lamp flashes. Lower limit value and arrow symbol flash.
- Insert sensor connector again:
alarm is reset. Warning lamp goes out. »CAL« flashes as calibration prompt following INOP display.
- Perform calibration in air (see P. 7).
Following completion of calibration the flashing »CAL« text must disappear.

Note

If, during an alarm situation, one of the two pre-selection buttons for the upper or lower limit value is pressed, the alarm is reset until the limit-value alteration has been completed.

Testing display illumination

- Press light button  :
display must light up when button is pressed. If does not light the batteries are flat.
If the device switches off automatically, this indicates that the batteries are flat and must be replaced.

Operational Use

Ambient conditions

The envisaged operating range of the Oxydig equipment system is specified by the following:

+15 to +40°C	Temperature range
900 mbar to 1100 mbar	Atmospheric pressure
up to 100%	Relative humidity

Exceeding the limits of these operating conditions results in corresponding reductions in measurement accuracy and service life of the Dräger O₂ sensor.

The following basic rule also applies: The lower the O₂ concentration, the longer the sensor service life.

Use in inhalation anaesthesia apparatus

The Dräger O₂ sensor is to be calibrated as described under »Calibration« prior to use in the inspiration section of inhalation anaesthesia apparatus. In view of the fact that the O₂ concentrations used in anaesthesia are generally below 50 vol. % O₂, calibration in air is to be employed in the interests of maximum measurement accuracy.

Following calibration, the Dräger O₂ sensor is to be attached at the **inspiration** valve of the circle system:

Detach cap nut from inspiration valve, remove original cap. Screw Dräger O₂ sensor into specific cap (contained in O₂ meter holders 10 and 11, see Order List).

When using condenser (see Section entitled »Influence of moisture«) the cap nut is to be placed between the specific cap and the condenser.

Screw on Dräger O₂ sensor and cap with cap nut at inspiration valve.

The location of the Dräger O₂ sensor in the cap of the inspiration valve makes for a defined, prescribed installation position (sensor opening downwards).

The positioning of the Dräger O₂ sensor in the inspiration valve downstream of the CO₂ absorber further prevents the galvanic cell from being unnecessarily used up by the influence of rebreathed carbon dioxide.

Plug-in adapter

The O₂ sensor can be rapidly removed from or pushed onto the inspiration valve by means of the plug-in adapter (cf. Order List), e. g. for calibration purposes.

The upper part of the plug-in adapter is firmly screwed into the O₂ sensor (or the condenser) by hand. The lower part is firmly screwed into the screw cap by hand whereupon the O₂ sensor is slipped on.

Effect of CO₂ on service life

The service life of the electrochemical cell is reduced by CO₂.

If the Dräger O₂ sensor of the Oxydig is exposed in an anaesthesia system to a gas blend containing CO₂, the stated service life is shortened as a function of the time involved and the CO₂ concentration during the period of exposure.

For example:

The service life of the Dräger O₂ sensor is expressed in

$$5000 \text{ vol. \% CO}_2 \times \text{hours}$$

i. e. given uninterrupted use of the Dräger O₂ sensor in a gas blend of, for example, 1 vol. % CO₂, the Dräger O₂ sensor will have completed its useful life after 5000 h or 208 days.

On the other hand, the service life of the Dräger O₂ sensor in gas blends **containing no CO₂** (50 vol. % O₂, 50 vol. % N₂, 25°C) is 1 year.

Long-term effect of N₂O

When performing measurements in gas blends containing N₂O, minute quantities of N₂O diffuse into the galvanic cell. As a long-term effect, N₂O accumulates in the galvanic cell and results in an increase in pressure, which may impair the sensitivity and response time of the Dräger O₂ sensor.

Note

Should the daily usage time of the Oxydig in gas blends containing N₂O exceed 4 hours, the Dräger O₂ sensor should be stored in air overnight, i.e. the knurled nut of the cap at the inspiration valve is to be loosened and the Dräger O₂ sensor – together with sensor cap – is to be stored in air.

Effects of moisture

The diaphragm of the Dräger O₂ sensor is water-repellent (hydrophobic) and can even be used at a relative humidity of up to 100 %.

In the event of extreme moisture, use must be made of the air-cooled condenser (M 27667).

Time response

The change in O₂ concentration through time and thus the time response of the Oxydig in anaesthesia circle systems is influenced by the compressible volume of the rebreathing system.

This volume forms a buffer and thus has the effect of slowing down rapid changes in concentration.

Accordingly, the time response is influenced by the following parameters:

- Ventilation ratio
- I:E ratio
- Fresh-gas flow

The effect with modified circle systems is typically < 1 minute.

With low-flow systems there is a more pronounced effect in accordance with the reduced fresh-gas flow.

In the interests of **due** warning in the event of oxygen failure, the lower limit value is to be set as close as possible to the desired value for the inspiratory O₂ concentration.

The overall reaction time is correspondingly reduced in the case of non-rebreathing systems with a fresh-gas flow greater than or equal to the required minute volume on account of the pronounced flushing effect.

Use in long-term ventilation

The Dräger O₂ sensor is to be calibrated as described under »Calibration« prior to use in the inspiration section of a ventilator.

In order to achieve maximum measurement accuracy, calibration is to be effected

- with air in the case of O₂ concentrations less than 60 vol. %
- with oxygen in the case of O₂ concentrations greater than 60 vol. %.

Following calibration, the Dräger O₂ sensor is to be screwed into the specific socket and the socket is to be fitted in the inspiratory tubing system between device and humidifier. See ventilator operating manual.

Shut-Down Actions

To switch off, press ON/OFF button.

Disassembly

For use in circle system:

Remove Dräger O₂ sensor with transparent cap from inspiration valve (loosen cap nut), seal circle system with original cap and tighten cap nut. Unscrew cap, if applicable with condenser, from Dräger O₂ sensor.

For use in ventilators:

Remove socket from inspiratory tubing system, seal tubing system again. Unscrew socket from Dräger O₂ sensor. Pull sensor connector.

Care

Cleaning

Dräger O₂ sensor

The surface of the Dräger O₂ sensor (except the wire sieve of the sensor capsule) is wiped using a cloth soaked in detergent¹⁾, which also applies to the helical cable and the surface of the connector.

Make sure that no detergent gets into the connector or onto the wire sieve:

Detergents would reduce the water-repellent properties of the diaphragm, thus impairing the measurement function.

Any dirt on the sensor capsule may only be wiped off with great care by using a

cloth soaked in aqua-dest. Then wipe dry thoroughly by using a dry cloth.

Oxydig

Wipe over Oxydig and operating instructions in brief using a cloth soaked in detergent¹⁾. Detergent must be prevented from entering the sensor jack!

Connection elements

The connection elements are to be cleaned in water containing a detergent¹⁾, rinsed in clean water and thoroughly dried.

¹⁾ Recommended detergents: for example, Incidin Perfekt (Henkel Co.) or Cerofon (Alcon Co.).

Disinfection in Dräger Aseptor

Prepare Oxydig, Dräger O₂ sensor and connection elements for disinfection in Aseptor in accordance with description given in Section entitled »Cleaning«. Note that parts must be dry.

Place parts in Aseptor, Oxydig remains switched off.

Prior to re-use with a patient, the device is to be subjected to a functional check as described in the Sections entitled »Calibration« and »Functional check«.

Gas sterilization

Prepare parts for ethylene oxide sterilization as described in Section entitled »Cleaning«. The device remains switched off.

The Oxydig, Dräger O₂ sensor and connection elements may be sterilized in ethylene oxide at max. 50°C, however the prescribed airing times must be maintained.

Prior to re-use with a patient, the device is to be subjected to a functional check as described in the Sections entitled »Calibration« and »Functional check«.

Sterilization in autoclave

The indicating instrument and Dräger O₂ sensor must **not be** sterilized in superheated steam!

The connection elements can be sterilized in an autoclave at 134°C.

Servicing

Batteries

Flashing »BAT« text in display window: The batteries must be replaced within 24 hours.

Permanent »BAT« text: **Immediate** replacement necessary.

If the measured value is not within this range, the sensor capsule must be replaced.

Linearity check

A linearity check (two-position measurement) is to be performed on the Dräger O₂ sensor once a month:

First calibrate with pure (100 vol. %) oxygen (see »Calibration with oxygen«). Then expose O₂ sensor to ambient air for at least 2 minutes. In this process, the measured value must be in the range 18–24 vol. % O₂.

Storage

If the device is taken out of service for a lengthy period, the batteries are to be removed from the battery compartment. Always leave sensor capsule in sensor housing!

Replacement sensor capsules should not be stored for more than 1 month, since the Dräger O₂ sensor also deteriorates in the packaging.

Trouble Shooting

Fault/ Information displayed	Possible cause	Recommended remedy
Device cannot be switched on	Batteries flat	Replace batteries immediately
Device switches off when LCD lighting is actuated	Batteries flat	Replace batteries
»BAT« text flashes	Batteries close to being flat	Replace batteries within next 24 hours
No measured-value display, permanent »BAT« display	Batteries flat	Replace batteries immediately
No measured-value display, INOP display, alarm sounds	Sensor connector not inserted	Connect O ₂ sensor to device
Following calibration: Text »CAL« »INOP«	Calibrated with incorrect gas	Re-calibrate with appropriate gas
	Sensor capsule no longer serviceable	Replace sensor capsule, re-calibrate
	Break in sensor cable	Replace sensor housing with cable
	No contact between sensor capsule and contact springs of sensor housing, or: sensor defective	Clean contact springs, wipe wiring of sensor capsule using a cloth soaked in alcohol or: replace sensor and re-calibrate unit
Measured-value display disappears Text »INOP«	Incorrectly calibrated; temperature or atmospheric pressure have changed considerably	Re-calibrate

Should it not be possible to eliminate the above faults employing the recommended measures, call in the Dräger Technical Customer Service.

Should the liquid-crystal display break, a chemical liquid is liable to leak out. Make sure that it does not get into contact with the body. Spots on the skin must be cleaned by means of soap.

Technical Data

Oxydig equipment system

Measuring range	5 to 100 vol. % O ₂
Overall measurement error for 5 to 100 vol. % O ₂	≤ ± 3 vol. % at constant pressure and constant temperature (calibrated with 100 % oxygen)
Response time (T ₉₀ time)	≤ 20 seconds

Dräger O₂ sensor

Measurement principle	Galvanic cell
Sensitivity drift	≤ 1 vol. % O ₂ in 8 hours
Zero drift	≤ 0.1 vol. % O ₂ per month
Temperature error	≤ ± 3 % of measured value in range between +15°C and +40°C
Cross-sensitivity	< 1 % of full scale value at 70 vol. % N ₂ O and 5 vol. % CO ₂ and 4 vol. % halothane or 5 vol. % enflurane or 5 vol. % isoflurane
Ambient conditions	
– during operation	+15°C to +40°C, 900 mbar – 1100 mbar, up to 100 % rel. humidity
– in storage	–20°C to +60°C, 600 mbar – 1100 mbar, up to 100 % rel. humidity
Service life	approx. 1 year at 25°C, 50 % rel. humidity, on average 50 vol. % O ₂ in an O ₂ /N ₂ gas blend or: ≤ 5000 vol. % · h CO ₂ (in a gas blend containing CO ₂)
Usage position (in tubing system)	Sensor opening faces downwards (± 90°)
Dimensions	dia. 40 mm, 45 mm high
Weight	125 g
Sensor cable	Helical cable, max. length: 1.5 m electrically shielded

Indicating instrument

Display	2 1/2-digit LCD display
Power supply	4 alkaline-manganese batteries, round cells 1.5 V, LR 6
Battery service life in normal operation	approx. 500 hours
Alarm range	Lower limit value 18–99 vol. % O ₂ Upper limit value 18–99 vol. % O ₂ Lower and upper limit values cannot overlap
Alarms	Visual and audible if alarm limits are overshoot Visual only in the event of overshoot of setting ≥ 96 vol. % O ₂ at upper limit value Audible and visual in the event of sensor malfunction and break in if battery discharged, in the event of incorrect calibration
Ambient conditions	
– during operation	+15°C to +40°C, 900 mbar – 1100 mbar, ≤ 95 % rel. humidity
– in storage	-15°C to +70°C, 600 mbar – 1100 mbar, ≤ 95 % rel. humidity
Dimensions	93 mm x 170 mm x 65 mm (W x H x D)
Weight	500 g

Order List

Denomination and description	Identity No.
Oxydig, complete	83 04 411
Special accessories Test adapter for tubing connection dia. 6 mm Accessory set, O₂ sensor housing	 68 01 349 68 50 659
Attachment and connection elements required 1. For Dräger anaesthesia apparatus a) If use is being made of a sphygmomanometer, anaesthesia timer or a combination thereof (attachment to back of these devices): O₂ meter holder 11 O₂ meter holder 10 b) for screwing directly to threaded mount (in place of devices listed under a): O₂ meter holder 10 2. For Dräger ventilators a) Babylog 1 and Babylog 2: O₂ meter holder O₂ measurement set Babylog 1/Humidifier 19 Condenser with O-ring O₂ connection: Babylog 1/Aquapor O₂ measurement set Babylog 1 and Babylog 2 (Tubing system, dia. 7) b) Pulmolog, SIMV-Pulmolog, UV 1, CPAP 800, ASB 800/801, modular system in combination with Aquapor: O₂ meter holder O₂ connection: Babylog 1/Aquapor c) UV 2 O₂ meter holder O₂ connection: Babylog 1/Aquapor	 M 27 669 M 27 670 2M 17 770 84 03 370 M 27 668 84 05 754 84 03 988 2M 17 770 84 05 754 84 07 219 84 05 754

Order List (ctd.)

Denomination and description	Identity No.
d) Assistor 744, Spiromat 760:	
O₂ meter holder	2M 16 460
O₂ measurement set	84 02 485
e) Servo-Ventilator:	
O₂ adapter	84 05 807
f) Spiromat 661/662 and Assistor 664:	
Connection element, dia. 26	84 01 077
3. For ventilators manufactured by other companies:	
O₂ adapter	84 05 807
4. For Dräger Incubators:	
a) Sealing ring for periodic measurement	2M 15 090
b) O₂ meter holder	2M 17 770
for continuous measurement (Dräger O ₂ sensor is placed in incubator without sensor mount)	
c) For Intensive-Care Transport Incubator 5400:	
O₂ meter holder	2M 18 640
5. For incubators manufactured by other companies:	
Sealing ring	2M 15 090
for periodic measurement	
Spare and wearing parts	
Oxydig (basic unit)	83 04 300
Battery (4 x required)	13 35 804
Sensor housing – Oxydig (with cable)	68 50 250
Rubber plug for sensor housing	68 01 566
O-ring set for sensor housing (qty. 5) (item 5 in Fig. 5)	84 02 472
Flat-gasket set for sensor housing (qty. 5)	68 50 028
O-ring set for sensor housing (qty. 5) (item 8 in Fig. 5)	84 02 468
O₂ sensor capsule	68 50 645

Parts List (cf. Fig. 5)

Item in Fig. 5	Denomination	Identity No.
1-10	Oxydig, compl.	83 04 411
1	Oxydig	83 04 300
2	Battery compartment	83 04 336
3	Battery (4 ea required)	13 35 804
4-9	O₂ sensor housing	68 50 250
4	Rubber plug	68 01 566
5-8	Front section of housing	68 03 596
5	O-ring	2M10296
6	Adapter (not available as individual component)	
7	Flat seal	68 50 006
8	O-ring	2M10633
9	Rear part of housing	68 50 251
10	O₂ sensor capsule	68 50 645
11	Test adapter	68 01 349
11 a	Hose 5 x 1.75 Gi (neoprene) electr. conductive, M 4701, 12 cm	11 80 681
12	O₂ connection Babylog 1/Aquapor	84 05 754
13	O₂ adapter	84 05 807
14	Set for O₂ measurement	84 03 370
15+16	Set for O₂ measurement	84 03 988
15	O₂ connection	84 03 987
16	Hose, 7 x 2.5 - Gi (silicone) transp., 5 cm	11 98 343
17	Connecting part, dia. 26	84 01 077
18	Cuff	2M15091
19	Ring	2M15089
20+20 a	Set for O₂ measurement	84 02 485
20	O₂ connection	84 02 458
20 a	Hose, 12 x 3 - Gi (silicone) transp., 5 cm	11 98 912
21	Holder	M 21 479
22	Cap	M 21 482
23	Condenser	M 27 667
25+26	Holder (sub assembly)	M 27 774
25	Holder	M 27 775
26	Screw AM 4 x 6 (DIN 964 Ms/084)	13 34 816
15+28-30	O₂ meter holder	2M18640
28	Oxycom holder	2M18775
29	Holder	2M18635
30	Cap	2M18634
31	Plug-in adapter upper part	M 27 961
32	Plug-in adapter lower part	M 27 963
34+34 a	O₂ meter holder	2M17770
34 a	Bracket	M 25 739
35	Holder (for UV 2)	84 07 219
36	Accessory set O₂ sensor housing	68 50 659

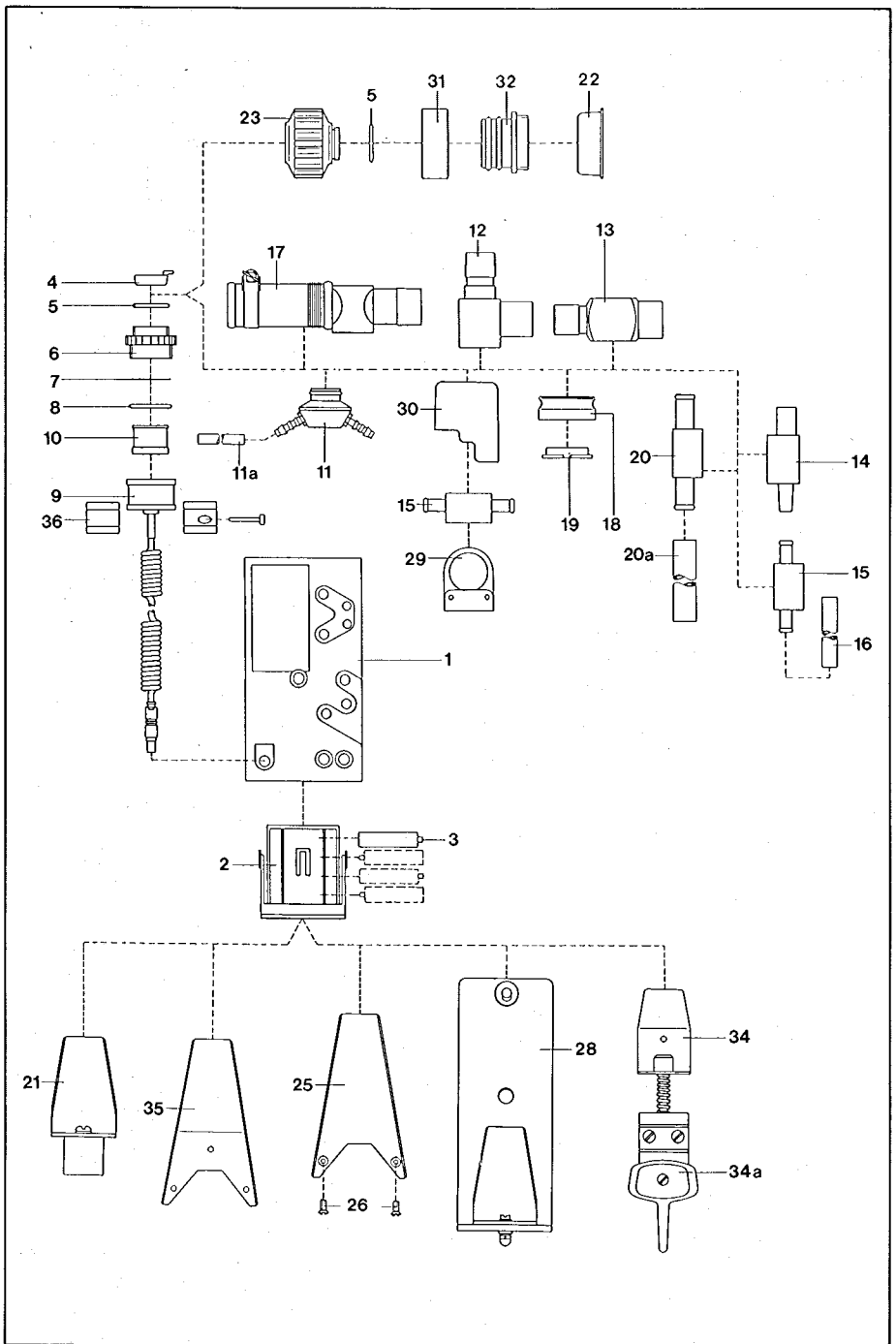


Fig. 5. Component parts