Dräger

Oxylog

Emergency Ventilator

Instructions for Use

Deutscher Text: Bitte umdrehen

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For Your Safety and that of Your Patients

For correct and effective use of the apparatus and to avoid hazards it is essential to read the following recommendations and to act accordingly[1]):

Strictly follow the instructions for use

Any use of the apparatus requires full understanding and strict observation of these instructions. The apparatus is on/y to be used for purposes specified here.

Maintenance[2]

The apparatus must be inspected" and serviced" by experts at regular 2 years intervals (and a record kept).
We recommend obtaining a service contract with DrägerService.
Repairs[2] and general overhaul on the apparatus may on/y be carried out by experts.
General overhaul by DrägerService of pressure reducers should occur every 6 years.
On/y original Dräger spare parts may be used for maintenance.

Liability for proper function or damage

The liability for the proper function of the apparatus is irrevocably transferred to the owner or operator to the extent that the apparatus has been serviced or repaired by personnel not employed or authorized by DrägerService or when the apparatus was used in a manner not conforming to its intended use.
Dragerwerk Aktiengesellschaft cannot be he/d responsible for damage caused by non-compliance with the recommendations given above. The warranty and liability provisions of the terms of sale and delivery of Dragerwerk Aktiengesellschaft are likewise not modified by the recommendations given above.

Dragerwerk Aktiengesellschaft

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1) *Insofar as reference is made to laws, regulations or standards, these are based on the legal system of the federal Republic of Germany*

2) *In accordance with DIN 31051:*

Inspection	*= examination of actual condition*
Service	*= measures to maintain desired condition*
Repair	*= measures to restore desired condition*
Maintenance	*inspection, service and, if applicable, repair*

Contents

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Intended Use

The Oxylog is a ventilator for providing **controlled** ventilation of infants as of 5 kg body weight and adults on a time-cycled, volume-constant basis. The device is designed for mobile use by rescue services, for transportation to hospitals in ambulances or helicopters, for transferring patients by road or air, for ventilation in the emergency admissions department and for transferring patients receiving ventilation from one department to another, e. g. from the operating theatre to the intensive-care ward.

What's What? (Figs. 1-3)

Oxylog (Figs. 1 and 2)

1 Airway pressure gauge (scale range -10 mbar to + 80 mbar)
2 Zero adjustment of airway pressure gauge
3 Rotary knob for setting ventilation ratio
3a Heart symbol – adjustment aid for ventilation during cardiopulmonary resuscitation: ratio 12 min^{-1}
4 Rotary knob for setting minute volume (MV)
5 Pneumatic main switch I-O
6 Switch »Air Mix« – »No Air Mix«
7 Stud for attaching carrying strap (also serves to secure device in holder)

Patient system (Items 8-10)

8 Ventilation tubing
9 Non-rebreathing valve (with external taper ISO, dia. 22) for breathing mask or catheter connector (with internal taper ISO, dia. 15) for tube
15 Operating instructions in brief

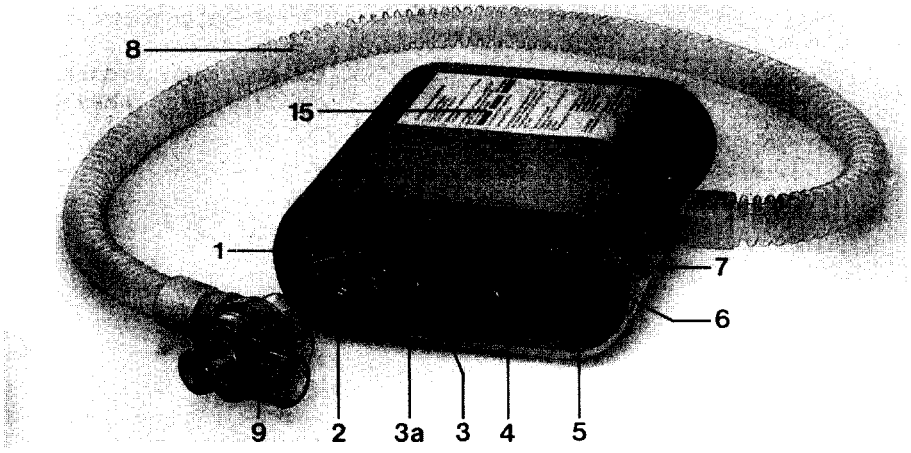

Fig. 1 Oxylog with patient system connected

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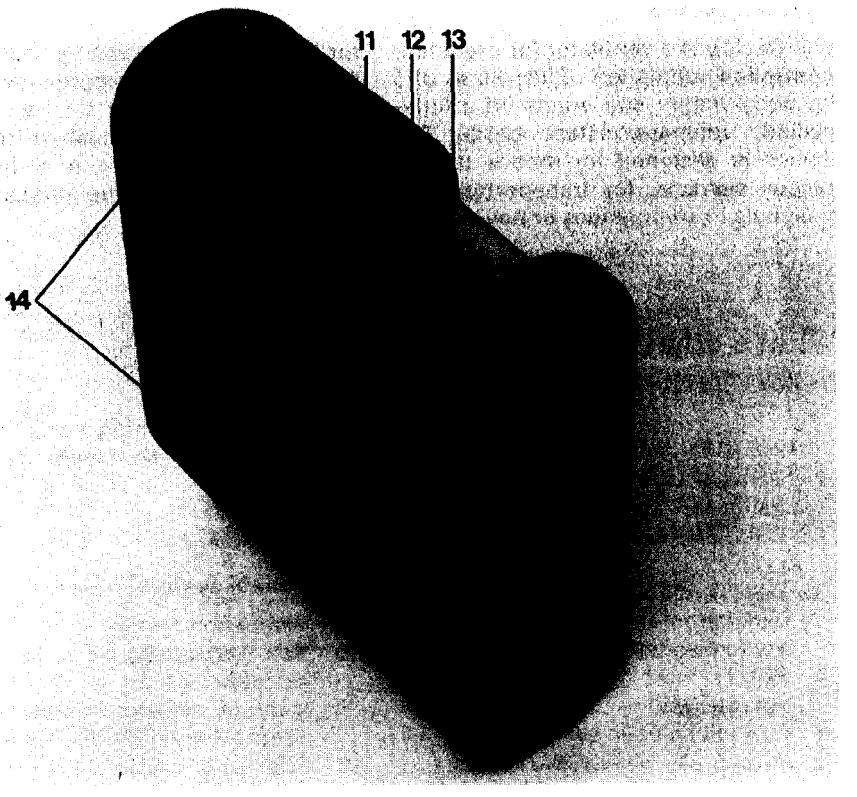

Fig. 2 Oxylog -gas inlets and outlets

11 Socket for ventilation tubing
12 Filter for purifying ambient air drawn in
13 Compressed-gas connection (male thread M 15 x 1)
14 Slot for alternative fastening of carrying strap, e. g. when using holder

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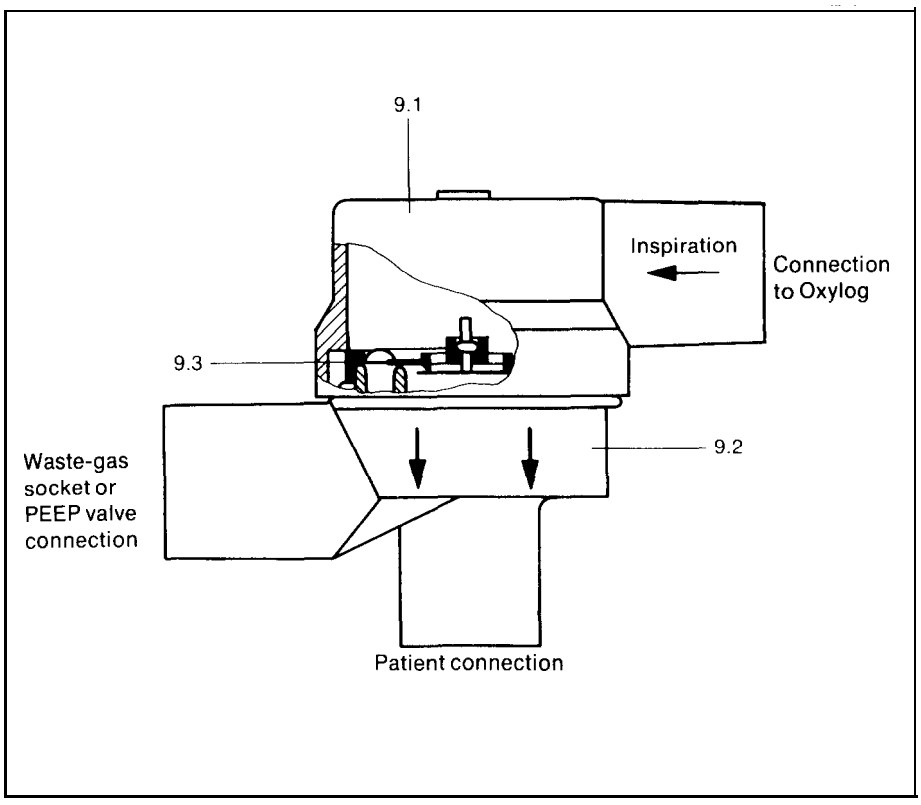

Fig. 3 Non-rebreathing valve

Non-rebreathing valve
(Fig. 3, Items 9.1-9.3)

9.1 Cover with connection for ventilation tubing (external taper ISO, dia. 22)

9.2 Valve housing with patient connection and waste-gas socket.
The patient connection features an external taper ISO, dia. 22 and an internal taper ISO, dia. 15. The waste-gas socket has an internal taper ISO, dia. 22 for connection of a PEEP valve.

9.3 Diaphragm (complete) comprising control diaphragm and checkvalve. The control diaphragm and check valve are marked yellow and red to enable their presence and correct installation position in the valve housing to be checked.

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Mounting and Usage of Holder

The Oxylog is secured in position in the rescue vehicle by way of the holder **8404560** (Fig. 4).

The screws for attaching the basic element are provided.

Mounting of holder

The **basic** element 16 is provided with sufficient holes for the fastening screws. At least 3 screws (with maximum possible spacing between them) are to be used in each case. The installation location is arbitrary.

Insertion of Oxylog into holder

Push device into holder such that stems of two studs 7 on housing slide into slots **16a** of holder. Studs must engage in hole in brackets 17.

Press on brackets 17 to ensure that the device is firmly secured in position in the holder.

The guide stud **19** secures the device on the back. Fig. 5 illustrates the Oxylog in position in the holder.

Removing Oxylog

Pressing open the two brackets 17 releases the studs 7 and enables the device to be removed from the holder.

Holder with rail bracket (Fig. 6)

The holder is used for attachment to the Dräger wall rail system (10 x 25 mm section).
Handling is the same as for the holder **8404560.**

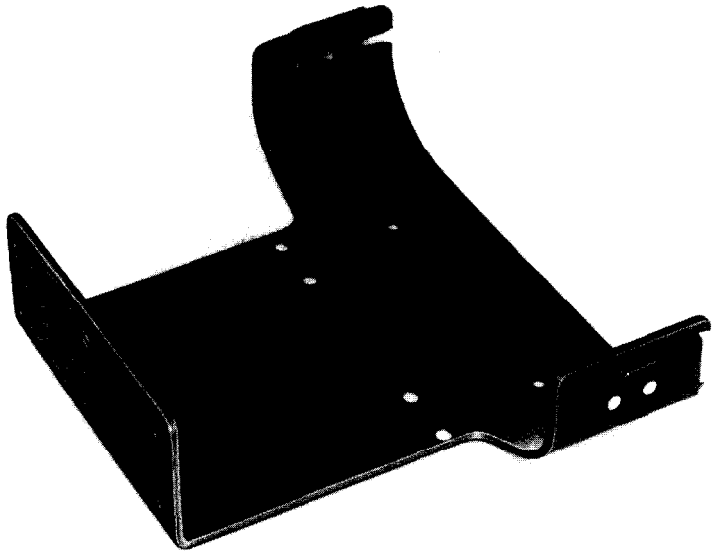

Fig. 4 Holder 8404560 (without bracket)

Fig. 5 Oxylog in holder

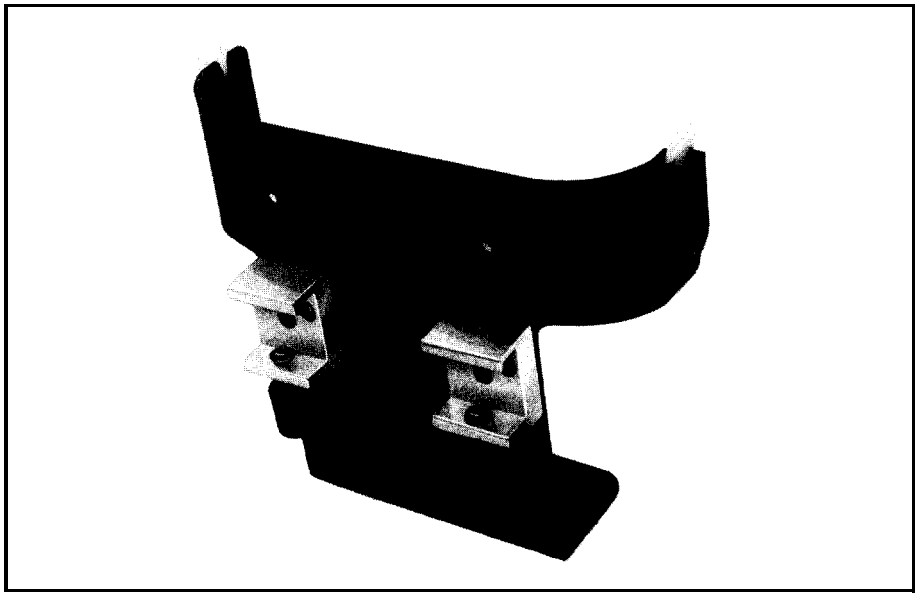

Fig. 6 Holder with rail bracket

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Attachment of carrying strap on back of device

If the carrying strap is constantly in use – e. g. including cases where Oxylog is accommodated in holder and in the event of constant mobile use outside the rescue vehicle – the carrying strap can be secured in position in the slots in the Oxylog housing. See attachment diagram in Fig. 7.

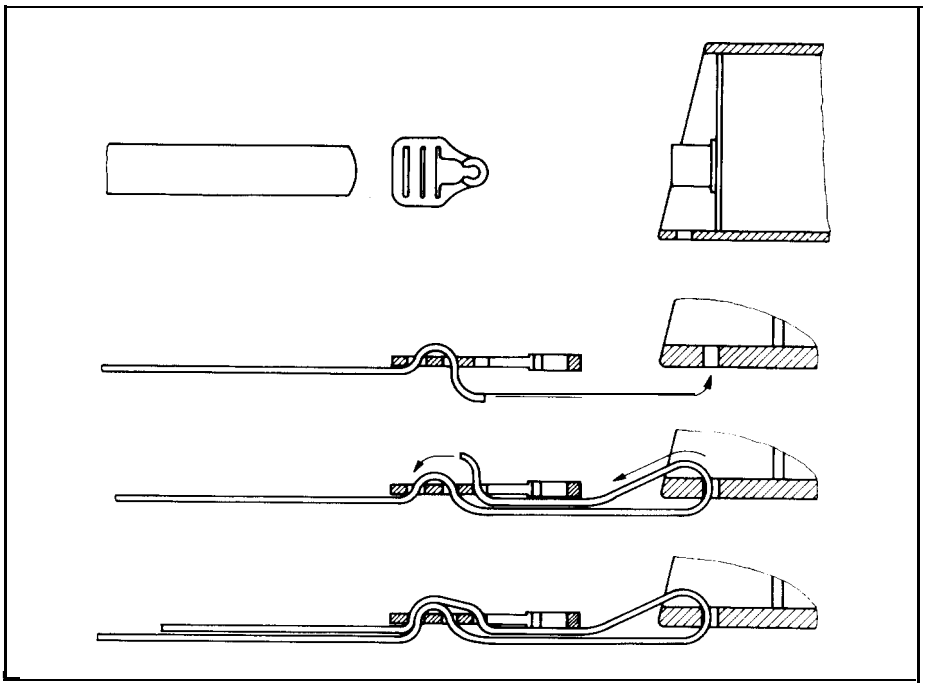

Fig. 7 Attaching carrying strap on back of device

Initial Preparation

An inlet pressure at the device (compressed-gas connection 13 in Fig. 2) of **at least 2 bar at a flow rate of 60 L/min** is required for operation of the Oxylog.

The drive sources used (central gas supply or gas cylinder with pressure reducer) must always comply with the aboveprerequisite.

Any upstream closing or metering elements must be **fully open!**

The functioning of the Oxylog can be checked with the compressed-gas source (see »Functional Check« on page 11).

Operation from a central gas supply

Screw O_2/air connecting hose (3 m or 5 m, see Order List) to device and insert connector into wall outlet valve.

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Operation from a gas cylinder

Screw pressure reducer to cylinder. Check 2-6 bar delivery-pressure setting. Screw connecting hose (1.5 m or 3 m, see Order List) to device and to pressure reducer. Fully open cylinder valves.

Use with Dräger Oxator®

The connection piece 2M 19051 is exclusively designed for use of the Oxylog on the Oxator head (Fig. 8). This connection piece is screwed to the Oxator head and consists of a self-closing, standard O_2 coupling for connection of the Oxylog using the standard, gas-specific connector (O_2/air). A self-closing inlet screw connection for O_2 makes it possible (in addition to the use of cylinders) to supply the Oxylog and the other components connected to the Oxator head (e. g. humidifier/nebulizer or aspiration ejector) from a central gas supply unit (see Oxator Operating Manual).
The Oxylog may not be fed via the flow control valves at the Oxator head!

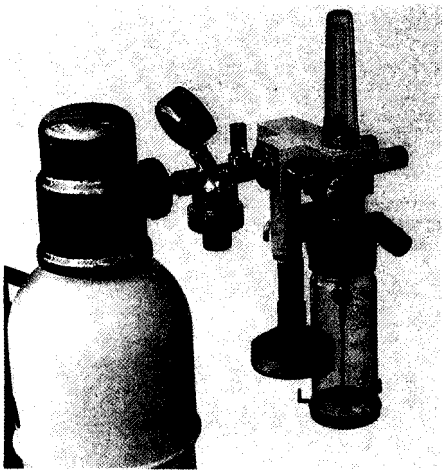

Fig. 8 Oxator head with connection piece for Oxylog

Use of gas blenders

In the case of lengthy ventilation, e. g. during repatriation flights, low, defined O_2 concentrations may be required.

For this purpose **a** compressed-gas blender can be connected upstream of the Oxylog (see Order List).

Caution!
The inlet pressure at the Oxylog must however be at least 2 bar at a flow rate of approx. 60 L/min (see »Functional Check« on page 11).

The switch is to be set to »No Air Mix«.

Equipping (Fig. 9)

- Assemble non-rebreathing valve as per Fig. 10. Ensure that entire diaphragm is correctly positioned and take particular care to ensure that red check valve **is present and not out of shape.** Screw cover to valve housing (turn 45" in clockwise direction).
- Attach ventilation tubing to socket at Oxylog as well as to »Inspiration« socket on non-rebreathing valve.
- If use is made of an (optional) externally adjustable pressure limiting valve (see Order List), attach this valve first to the socket at the Oxylog and then connect the ventilation tubing to the socket of the pressure limiting valve.
- If PEEP is being applied, insert PEEP valve (see Order List) into waste-gas socket of non-rebreathing valve.
- Set airway pressure gauge to zero.
- Preselect O_2 concentration »Air Mix« setting reduces drive-gas consumption by roughly 50% as ambient air is sucked in.

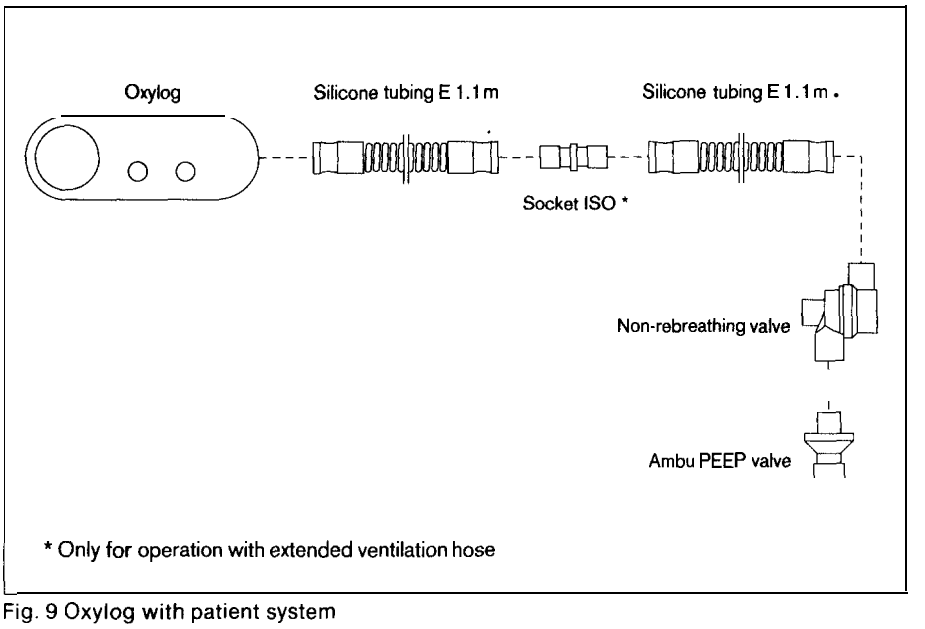

Fig. 9 Oxylog with patient system

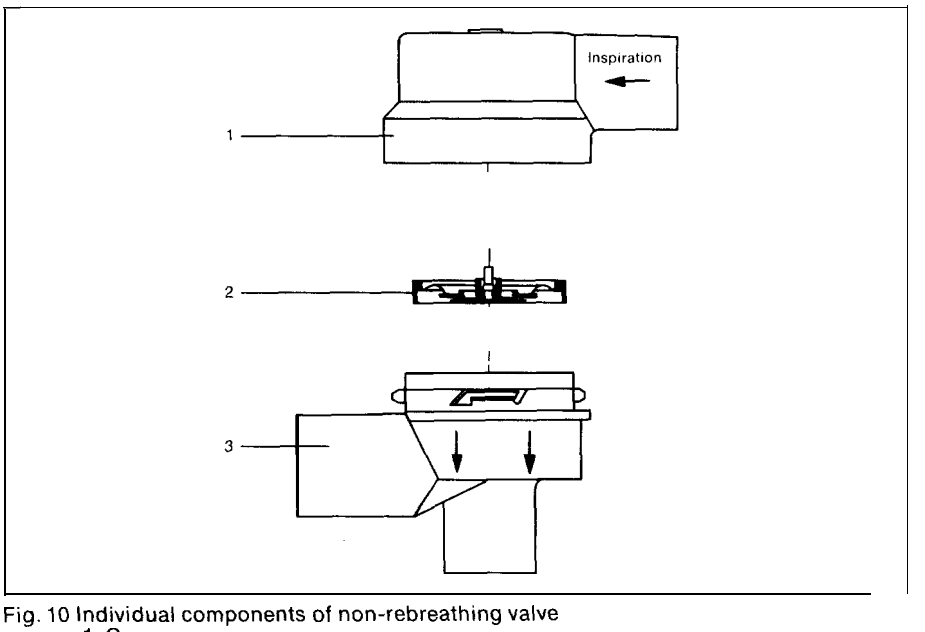

Fig. 10 Individual components of non-rebreathing valve
1 Cover
2 Diaphragm
3 Valve housing

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Determination of Compressed-Gas Supply and Usage Period

Example:

Compressed-gas supply
O_2 cylinder: 3 L
Cylinder pressure (at cylinder pressure gauge):
200 bar
Available compressed-gas supply, 200 x 3 = approx. 600 L

Usage period
Switch setting at Oxylog:
»No Air Mix«
Minute volume MV: 10 L/min

$$\text{Usage period} = \frac{\text{Compressed-gas supply}}{\text{MV} + 1}$$

$$= \frac{600\ \text{L}}{(10 + 1)\ \text{L/min}} = \text{approx. 54 min}$$

Switching to »Air Mix« reduces the gas consumption by 50%, i. e. the usage period is increased to roughly 100 min.

Functional Check

Following device upkeep and assembly, the Oxylog is to subjected to the following functional checks:

Testing ventilation ratio

Device settings	
Pneum. main switch	I (ON)
MV	3 L/min
Ventilation ratio	15 min^{-1}
Switch	»No Air Mix«

Seal non-rebreathing valve at patient connection and using stopwatch take the time t for 10 complete cycles and determine ventilation frequency f

$$f = \frac{60}{t/10}\ \text{min}^{-1}$$

The ventilation ratio of the Cxylog should be between 13 and 17 min^{-1}.

Testing safety valve

With the same device settings and with the patient connection **sealed** at the non-rebreathing valve the max. airway pressure should be between 50 and 80 mbar.

Testing compressed-gas supply and minute volume

Insert catheter adapter, size 5 (M 25569) into patient connection of non-rebreathing valve.

Read off the max. inspiration pressure at the airway pressure gauge for the MV settings: 7, 15, 20.

MV 7 L/min
Airway pressure 4 to 8 mbar
MV 15 L/min
Airway pressure 15 to 24 mbar
MV 20 L/min
Airway pressure 28 to 38 mbar

The Oxylog should switch at regular intervals from inspiration to expiration.

The operating prerequisites (at least 2 bar at 60 L/min at Oxylog) are checked indirectly in the MV = 20 L/min setting.

Remove catheter adapter from patient connection; the device is now ready for operation.

Operational Use

The airway pressure gauge must be observed all the time so that incorrect ventilation can be detected in due time, thus precluding risks for the patient!

Set ventilation ratio and minute volume (MV) to suit patient concerned.

For rapid presetting:

The ventilation ratio and minute volume (MV) scales each have three colour bands for the specific patient groups **infants, children** and **adults.**

If both rotary knobs are set to a band of the same colour, the following ventilation values are obtained:

	Ventilation ratio min^{-1}	MV L/min
Green band for infants (5-20 kg body weight)	28-35	I-3.5
Blue band for children (20-40 kg body weight)	18-28	3.5-7
Brown band for adults (as of 40 kg body weight)	10–18	7-20

The switch is to be set to »No Air Mix« or to »Air Mix« depending on the patient's requirements:

High O_2 concentration required:
»No Air Mix« (and O_2 drive)
In the case of a toxic atmosphere (and respiratory standstill): »No Air Mix«

»No Air Mix« setting:
The drive gas, e. g. O_2, is routed unblended to the patient. The ventilation ratio and MV settings remain unchanged irrespective of the switch setting.

Low O_2 concentrations required:
»Air Mix« (with O_2 drive)
or compressed-air drive
Small gas supply: »Air Mix«

»Air Mix« setting:
The drive gas (O_2 or air) is blended with ambient air. With O_2 drive and an MV setting in excess of 7 Llmin *the percent by volume added is approximately 50%, i. e. the O_2 concentration is roughly 50 vol. %. With an* MV setting less than 7 *L/min the O_2 concentration increases up to 80 vol. %.*

Connect non-rebreathing valve to mask or tube.
Make sure that airways are completely free.

Check airway pressure gauge.

In normal circumstances the inspiratory airway pressure values should be approximately 20 mbar.

Atypical airway pressures

In the event of an **excessively high airway pressure reading,** the MV setting should first be checked as well als the functioning of the non-rebreathing valve.

Ensure that airways are completely free!

High airway pressure (50-70 mbar) in conjunction with a buzzing noise (safety valve in device blowing out) are an indication of incorrectly positioned airways or a kinked tube.

If the **airway pressure reading is too** low, the MV setting must likewise be checked.

The hose connections are also to be tested for tightness and freedom from leaks and the non-rebreathing valve is to be checked for proper functioning.

Ventilation ratio for cardiopulmonary resuscitation

Within the scope of cardiopulmonary resuscitation of adults employing a ratio of 1:5, it must be ensured that a ventilatory impulse is given after every 5th cardiac compression.

Given a cardiac massage frequency of 60 min^{-1} this means that ventilation must be effected with a ratio of $\frac{60}{5} = 12$ min^{-1}.

To facilitate setting, the ventilation ratio 12 min^{-1} on the Oxylog is provided with a heart symbol.

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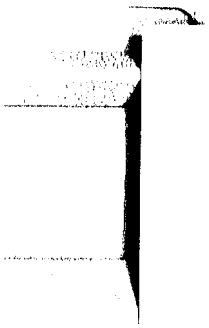


Use in toxic atmosphere

The Oxylog can also be used for **controlled** ventilation of injured persons in a toxic ambient atmosphere. The switch setting »No Air Mix« is to be employed for this purpose.

If the patient breathes spontaneously or if **spontaneous breathing** has been restored after resuscitation the partially spontaneous intake of toxic ambient air is **not** prevented by the Oxylog.

It is for this reason that the special Oxylog with spontaneous breathing device (cf. Order List) must be used. This device facilitates spontaneous breathing with an airway pressure 0 to be carried out in addition to controlled ventilation (pay attention to respective Operating Manual).

Note
In the case of spontaneous breathing the mask must always fit snugly, so as to prevent the intake of toxic ambient air.

Ventilation with PEEP
(Special accessory)

Pay attention to respective Operating Manual.

Set PEEP valve to 0 and push it onto the waste-gas socket of the non-rebreathing valve:
Determine inspiratory airway pressure at airway pressure gauge.

Set PEEP value:
The endinspiratory pressure increases approximately by the set PEEP value.

Should the airway pressure rise higher or not change its value at all, the PEEP valve is defective and must be replaced.

Upon termination of the PEEP mode the PEEP valve must be removed from the valve of the airway pressure gauge.

Use of pressure limiting valve
(special accessory)

Set rotary knob at optional pressure limiting valve (located on inspiration socket at Oxylog) and check inspiration pressure limited in this manner on airway pressure gauge.

Caution!
In the case of pressure-limited ventilation the set MV does not have the full effect. It is advisable to set the pressure limitation roughly 10 mbar in excess of the inspiration pressure, so that the pressure limitation only becomes effective in exceptional circumstances (e. g. coughing).

Use of expiratory volume measurement (special accessory)

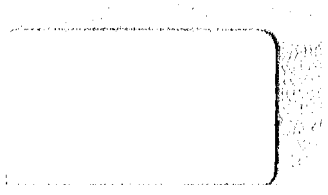
Insert hose nozzle into waste-gas socket of non-rebreathing valve.
Connect Volumeter 3000 to silicone tubing (1.1 m).

The Volumeter 3000 can be used to measure both the tidal volume and the MV (pay attention to the respective Operating Manual).

Caution!
Expiratory volume measurement is not possible when using the PEEP valve.

Shut-Down Actions

Set main switch to »0«. When using compressed-gas cylinder, close cylinder valve.



Option: Oxylog with demand valve to facilitate spontaneous breathing

Pinpointed intended use

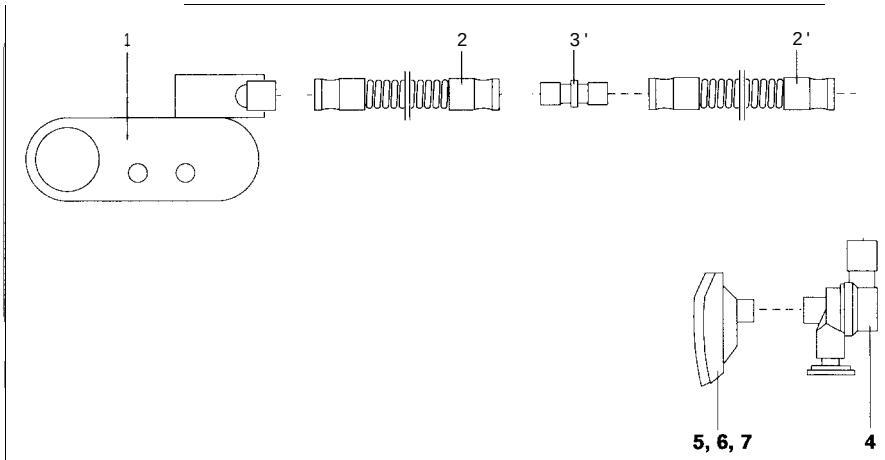
Time-cycled, volume-constant ventilation and spontaneous breathing in a toxic atmosphere.

No spontaneous breathing under positive airway pressure (CPAP)!

Description

- An equipment combination of Oxylog and demand valve switched in parallel for supply of spontaneous breathing
- Without Air-Mix switch
- Non-rebreathing valve with expiratory check valve.

The following configuration is a prerequisite for use in a toxic atmosphere:



1	Oxylog with demand valve		**5**	Face mask, size 1, small	M25572
2	Silicone hose E (adults) 1.1 m	84 04 063	**6**	Face mask, size 2, medium	M 25 573
3*	Socket ISO	M 25 647	**7**	Face mask, size 3, large	M 25 574
4	Non-rebreathing valve with check valve	8408568			

* Only for operation with extended ventilation hose

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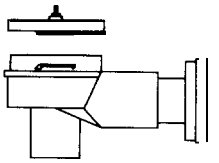
Preparation

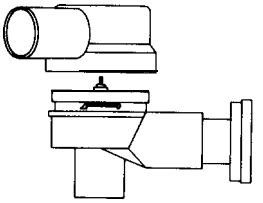
Assembly of non-rebreathing valve:

Make sure that the red check valve is fitted in the diaphragm and makes even contact with the diaphragm.

Fit the diaphragm into the valve housing so that the disc of the check **valve** points towards the housing.
The bulge of the diaphragm makes even contact with the edge of the housing.

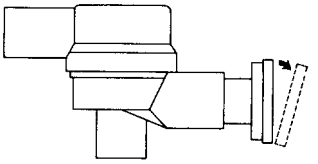


Fit the cover by applying slight pressure and turn clockwise by about 45".
Make sure that the diaphragm sits smoothly in the housing.



Pull the perforated cap at the outlet over the edge and take it off to check whether the rubber ring makes even contact with the outlet.

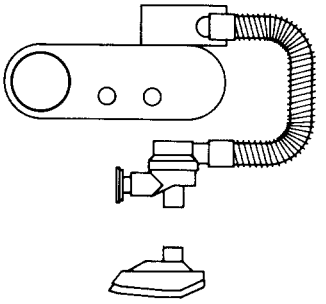
Replace the cap by applying slight pressure
– until it rests in place.



Assembly of the Oxylog:

Connect Oxylog and non-rebreathing valve with the ventilation hose.

Attach Oxylog to gas supply.



Check the demand valve for operational readiness

– Prior to each use

Push a catheter adapter size 5 into the patient port of the non-rebreathing valve. Generate a suction with your mouth:

- Gas should begin to flow.

Stop sucking:

- The gas flow is cut off.

Remove the catheter adapter.

Operation

Push the face mask onto the patient port of the non-rebreathing **valve and make sure that the mask makes a tight seal with the face.**

Upon commencement of spontaneous breathing:

- Set pneumatic main switch to 0.

Spontaneous breathing with positive airway pressure CPAP is not possible!

Care

Stripping down

- Detach ventilation hose from Oxylog.
- Detach non-rebreathing valve from hose.
- Detach mask from non-rebreathing valve.
- Turn cover of non-rebreathing valve anti-clockwise by 45" and remove.
- Remove diaphragm from valve housing.

Cleaning

Clean disassembled patient system using water to which a detergent has been added, and dry well.

Disinfection

The disinfected patient system can be subjected to bath disinfection e.g. using Tego 103 G (Messrs. Th. Goldschmidt AG, Essen) and observe the manufacturer's instructions for use.

Sterilization

The valve housing of the non-rebreathing valve must **not be subjected to thermal disinfection.**

The diaphragm, the cover and the ventilation hose can be autoclaved at 134°C.

Leak-test of the non-rebreathing valve

– Following each assembly.

Establish test setup

1 Conical sealing plug, smallest dia. 15mm

2 Non-rebreathing valve with check valve

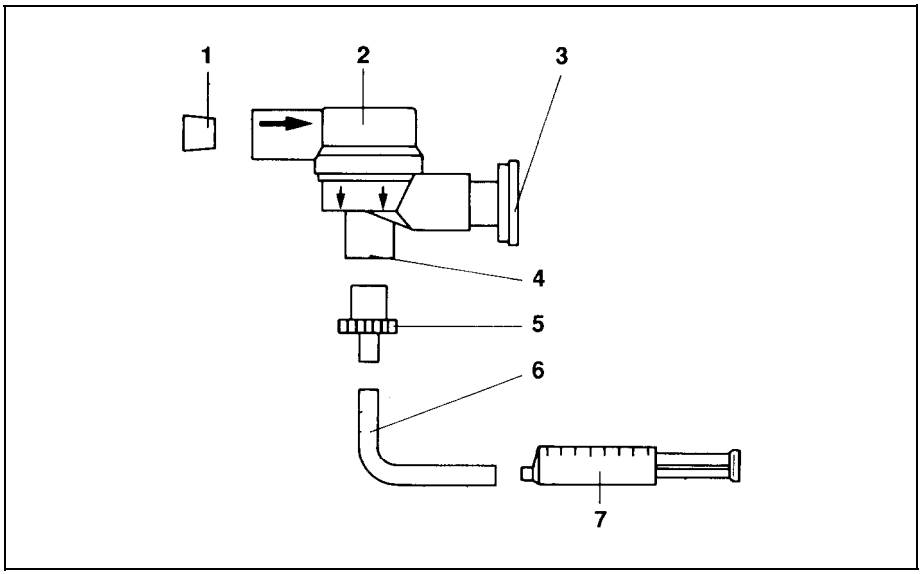
3 Cap of check valve

4 Patient connection

5 Catheter connector, dia. 4.5 mm

6 Silicone hose, internal dia. 4 mm, external dia. 6 mm, 100 mm long

7 Disposable syringe, 10 mL



– Detach cap from check valve.

– Attach syringe together with catheter connector.

– Seal inspiratory port with sealing plug.

– Using the syringe, extract a volume of 3 mL and keep plunger of syringe in this position. By force of the negative pressure, the black diaphragm of the check valve adapts to the shape of the valve body.

Within 15 seconds, the diaphragm must not come back to its original state.

Leak test of Oxylog with demand valve attached

– Every 6 months.

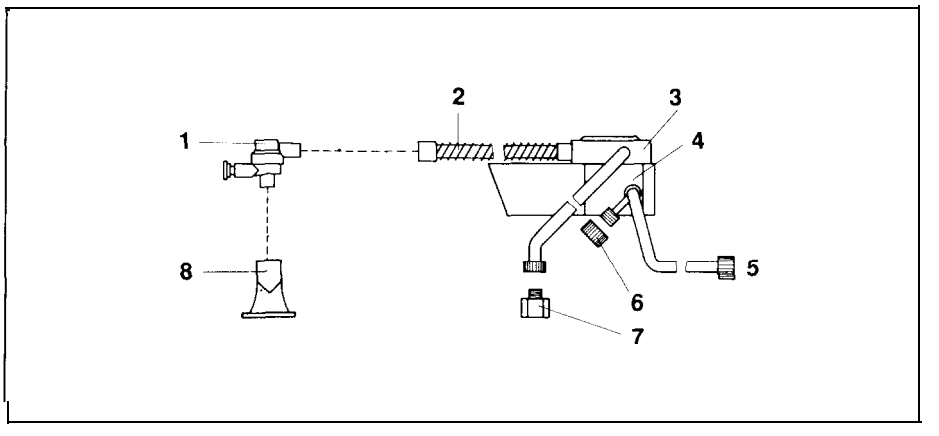
– Remove Oxylog from its mount.

– Unscrew pressure-gas line of the demand valve and seal the connections.

Establish test setup

Components 6, 7, 8 are comprised in test set 84 10 072.

1	Non-rebreathing valve with check valve	84 08 568	
2	Ventilation hose	84 04 063	
3	Demand valve		
4	Oxylog		
5	Pressure-gas line, 5 bar		
6	Cap nut		84 08 298
7	Screw plug		84 08 299
8	Mouthpiece		84 07 303



– Open oxygen-cylinder valve.

– Set switch at Oxylog to »0«.

Fit non-rebreathing valve to silicone hose.

– Generate a negative pressure of about -10 mbar with your mouth.

The unit is sufficiently leakproof if the pressure change from -6 mbar to -2 mbar takes at least 20 seconds.

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Care

Following termination of ventilation the Oxylog is to be prepared for thorough cleaning and disinfection:

Remove mask or tube from patient connection of non-rebreathing valve. Detach ventilation tubing from non-rebreathing valve and from Oxylog.

Disassemble non rebreathing valve into its component parts (Fig. 10). Turn cover 45" in anti-clockwise direction with respect to valve housing (= valve open).

Caution!
The red check valve must not be removed from the yellow control valve!

The PEEP valve is to be disassembled into its 3 main components.

The disassembled parts of the patient system are to be thoroughly cleaned either in running hot water or in a mixture of detergent[1)]/water with subsequent rinsing under running water.

Important: Do not use a hard brush for cleaning purposes!

[1)] Recommended detergents are, for example, Incidin Perfect (Henkel Co) and Caraform (Weigert Co.)

The surface of the device can be cleaned using a soft cloth impregnated with a mixture of detergent/water.

Caution!
Do not use petrol, ether or similar solvents for cleaning the device.

Carefully rinse Volumeter 3000 in direction of flow with hot running water.

Caution!
Do not allow water to flow into drain holes in control section.

Carefully remove residual water from Volumeter.

All parts are to be thoroughly dried following cleaning and rinsing.

The component parts can also be washed in the Dräger Purfactor®, which automatically subjects the material to be washed to disinfection and drying.

Disinfection in liquid disinfectant

The cleaned and dried parts of the patient system can be disinfected in a cold disinfectant solution.

The surface of the device can be disinfected by wiping over it.

Caution!
Use may only be made of disinfectants which do not attack the materials used. Compliance with the prescribed concentrations is to be ensured. In case of doubt consult the disinfectant manufacturer.

Following disinfection and drying of its component parts, the Oxylog is to be assembled as described under »Initial Preparation« on Page 8 and subjected to a functional check as described under »Functional Check« on Page 11.

Disinfection in Dräger Aseptor®

The cleaned and dried components of the patient system as well as the device itself can be disinfected in the Aseptor.

Caution!
The ventilation tubing and breathing masks (silicone rubber) must **not** be disinfected in the Aseptor.

Following disinfection in the Aseptor, the device is to be assembled as described under »Initial Preparation« on Page 8 and subjected to a functional check as described under »Functional Check« on Page 11.

Sterilization in steam

The valve housing of the Oxylog with demand valve to facilitate spontaneous breathing is not suitable for sterilization.

The cleaned and dried parts of the patient system can be sterilized in superheated steam.

The component parts of the PEEP valve and Volumeter 3000 can be sterilized at 121 °C.

The component parts of the non-rebreathing valve and the ventilation tubing can be sterilized at 134°C.

The Oxylog **cannot be sterilized.**
Plastic and rubber mouldings are to be disassembled prior to sterilization.

Following sterilization in an autoclave, the device is to be disassembled as described under »Initial Preparation« on Page 8 and subjected to a functional check as described under »Functional Check« on Page 11.

Inspection

The device is to be inspected at regular 2 years intervals by trained personnel.

Storage

The Oxylog and its accessories are to be kept dust-free and dry.

Permitted storage conditions:
-20°C to +70°C
0–100 % relative humidity
600-l 200 mbar

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Trouble Shooting

Fault	Cause	Remedy
Device does not build up pressure	No gas in cylinder	Immediately connect device to another full gas cylinder
	Gas pressure at device inlet too low	Establish adequate supply pressure: 2-6 bar
	Yellow control diaphragm in non-rebreathing valve deformed or out of shape	Open non-rebreathing valve and assemble correctly
Device comes to a halt on »inspiration«	Inadequate supply pressure	Establish adequate supply pressure: 2-6 bar
	Oxylog defective	Notify Dräger Inspection Service
Patient cannot exhale or only with difficulty	Ventilation tubing kinked	Eliminate any kinks in tubing
	Red check valve in yellow control diaphragm missing or »deformed«	Open non-rebreathing valve and assemble correctly

Technical Data

Principle of operation	Flow chopper
Control	Time-cycled, volume-constant
Ventilation ratio	10-35 min^{-1} ± 20%, infinitely adjustable
I:E ratio	1:1.5 ± 10%
Minute volume	2-20 L/min ± 15%, infinitely adjustable
O_2 concentration of breathing gas with O_2 drive	
Switch on »Air Mix«	55 vol. % O_2 ± 10% (with MV greater than 7 L/min) with MV less than 7 L/min O_2 concentration increases up to 80 vol. % O_2
Switch on »No Air Mix«	100 vol. % O_2
Safety valve	
Opening pressure	50 mbar to 80 mbar
Airway pressure reading	Pressure gauge – 10 to + 80 mbar ± 2.5 % full scale
Drive gas	O_2 or air
Quality	Dry, oil-free and dust-free from a central supply unit or from compressed-gas cylinders'.
Pressure at device inlet	min. 2, max. 6 bar with a flow rate of 60 L/min
Gas consumption	
Control	approx. 0.8 L/min
MV (Air Mix)	approx. 50 % of set MV
MV (No Air Mix)	approx. 100 % of set MV
Typical usage period	with 3 L cylinder/200 bar MV = 10 L/min (see also Page 11)
(»No Air Mix«)	54 min
Pneumatic main switch	I-O
Patient system	Comprising silicone tubing 1.1 m Non-rebreathing valve
Compressible volume	approx. 3.3 mL/mbar
Inspiration resistance	3 mbar/L/s
Expiration resistance	3 mbar/L/s

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Dead space	approx. 12 mL
Dimensions (W x H x D)	**200 x 80 x 200** mm
Weight	approx. 2 kg
Ambient conditions during operation*:	
Temperature	**-5°C** to +50°C
Humidity	0–100 % relative humidity
Ambient pressure	600-1200 mbar
Vibration	Tested in accordance with MIL STD 810 C 514.2-III curve M (helicopter)
In toxic atmosphere	Switch to »No Air Mix- setting with controlled ventilation in the event of respiratory standstill. Caution! In the event of spontaneous breathing possible intake of toxic ambient atmosphere.
Storage conditions:	
Temperature	**-23°C** to +70°C
Humidity	0–100 % relative humidity
Ambient pressure	600-l 200 m bar

Materials used

Oxylog housing	Impact-resistant ABS (Acrylonitrile-Butadiene-Styrene)
Ventilation tubing	Silicone rubber
Non-rebreathing valve	
Housing	PSU (Polysulfone)
Control diaphragm	Silicone rubber

. Non-compliance with these requirements will lead to reduced efficiency or failure Of device functions

Caution!
The following is to be noted when using oxygen:
All parts which carry gas must be kept free of oil and grease!
Smoking and naked flames are prohibited!

Oxylog with demand valve to facilitate spontaneous breathing

Demand valve	
Opening pressure	0 to -4 mbar
Max. output	100 L/min at -7 mbar
Oxylog	
No »Air-Mix« switch	ambient air is not sucked in
Pressure limiting valve	(50^{+30}) mbar
Non-rebreathing valve	with additional expiratory check valve.

Order List

Name and description	**Order No.**
Basic unit	
Oxylog time-cycled, volume constant ventilator for controlled ventilation in emergency medicine. Including accessories, comprising: ventilation tubing and non-rebreathing valve.	84 09 520
Oxylog with spontaneous breathing	84 09 585
Standard equipment	
For *operation from oxygen cylinder:*	
O_2 pressure reducer, G 3/4	**D 17251**
and	
O_2 cylinder AG 2.51200, G 3/4 straight valve, filled	**B 03 580**
or	
O_2 cylinder AG 1 1/200, G 3/4 straight valve, filled	**B 02710**
and	
O_2 compressed-air connecting hose, 1.5 m	**M 17816**
or	
O_2 compressed-air connecting hose, 3 m	**M 17617**
For operation from central supply unit option of:	
O_2 compressed-air connecting hose, 3 m (angled plug connector)	**M** 22 494
or	
O_2 compressed-air connecting hose, 5 m (angled plug connector)	**M** 22 495
For operation from portable O_2 cylinder pack	
Cylinder support for two 2 L cylinders	**M 23 370**
Use of 2 x 2 L cylinders is possible	
O_2 pressure reducer (G 3/4)	**D 20 225**
and	
O_2 cylinder AG 21200, G 3/4 straight valve, filled	**B 02 352**
and	
Spanner SW 32/22 (hexagonal)	**M 12401**

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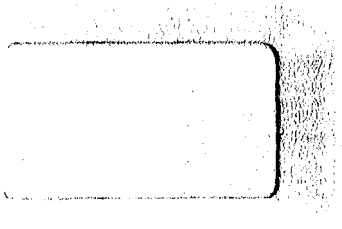

Name and description	**Order No.**
Special accessories for pressure reducer ***D*** *20225:*	
O_2 coupling hose, 0.15 m	**M** *23 874*
Connection hoses between Oxylog and cylinder pack option of:	
a) screw-type both ends, option of	
O_2 compressed-air connecting hose, 1.5 m	**M 17616**
or	
O_2 compressed-air connecting hose, 3 m	**M 17617**
b) When using O_2 coupling hose M 23874, plug-type via quick-release coupling, thread M 15 x 1 at device end, option of:	
O_2 compressed-air connecting hose, 3 m (angled plug connector)	**M** 22 494
or	
O_2 compressed-air connecting hose, 5 m (angled plug connector)	**M** 22 495
Special accessories	
Silicone mask, No. 2	21 20 194
Silicone mask, No. 5	**21 20 186**
Holder to secure Oxylog in mobile units	84 04 560
Holder with rail bracket to attach Oxylog to wall rail	84 05 009
Connecting hose, 3 m (Oxett/Oxylog)	**M** 25 879
Pressure limiting valve adjustable from 10 to 45 mbar, to be latched onto patient connection	84 05 390
Volume measurement Oxylog auxiliary means for measurement of expired volume comprising: Volumeter, support, silicone hose 1.1 m and 2 sockets	84 06 995
PEEP valve (Ambu PEEP) adjustable from 0 to 10 mbar	84 07 475
Polymed 201 (gas blender)	**D 21 800**
and	
O_2 compressed-air connecting hose, 1.5 m	**M 17716**

Continued next page

Name and description	Order No.
For checking compressed-gas supply and minute volume:	
Standard connector, size 5 (stainless steel)	**M 25 589**
For operation with extended ventilation hose:	
Connection hose, silicone, 1.1 m	**84 04 063**
Socket ISO	**M 25 647**
Spare and wearing parts for sterilisation	
Non-rebreathing valve 2	**84 06 600**
Connection hose Silicone, 1.1 m	**84 04 063**
Carrying strap	**a4 04 773**

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Parts List

No. in Fig. 11 Page 28	Designation and description	Order No.
1-7	Oxyfog with ventilation accessories	84 09 520
1	Oxylog	84 08 500
2	Silicone tubing E 1.1 m	84 04 063
3-5	Non-rebreathing valve	84 06 600
3	Cover	84 06 585
4	Diaphragm	84 03 552
5	Valve housing	84 06 595
6, 7	Carrying strap	84 04 773
6	Strap	84 04 078
7	Buckle	8405 179
8	Pressure limiting valve	84 05 390
9	PEEP valve (Ambu) O-10 mbar	84 07 475
10	Silicone mask, No. 2	21 20 194
10	Silicone mask, No. 5	21 20 186
12	Holder	84 04 560
13	Holder with bracket	84 05 009
2, 14-17	Voiumeter connection	84 06 995
14	Socket	M 25 647
15	Socket, complete	84 05 155
16	Volumeter 3000	2M 18250
17	Retainer	84 06 677

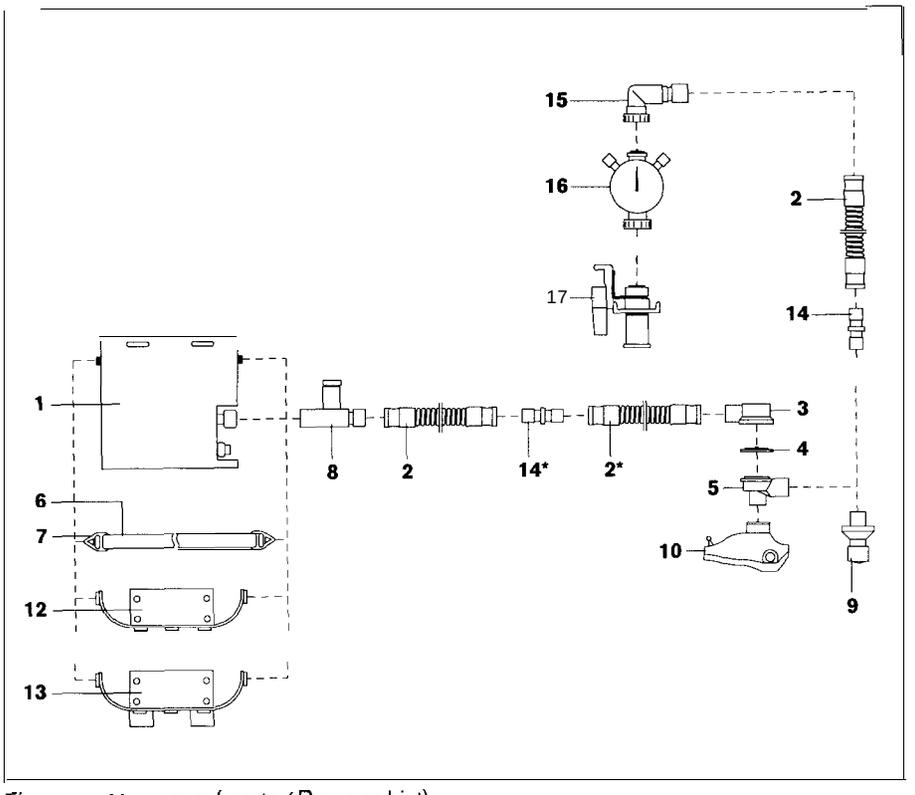

Fig. 11 Component parts (See rans List).
* Optional, only for operation with extended ventilation hose.
The item Nos. are not identical with the item Nos. in the other figures.

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These Instructions for Use apply only to
Oxylog
with Serial No.:

If no Serial No. has been filled in by Dräger these Instructions for Use are provided for general information only and are not intended for use with any specific machine or device.

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