

Dräger

**DEUTSCHER TEXT:
BITTE UMDREHEN**

OPERATING MANUAL
Precom - Respiratory pressure gauge
with alarm system

BA 5723.1e

36501

From Dräger: Precom – Respiratory pressure gauge with alarm system

OPERATING INSTRUCTIONS

Important Notice

For correct and effective use of the appliance, and to avoid hazards, we would point out the following:

- 1 Any use of the appliance requires precise knowledge and observation of these operating instructions.
- 2 The appliance is intended only for the purposes specified in the Operating Manual or for purposes confirmed in writing by Drägerwerk AG.
- 3 The appliance should be inspected by experts at regular time intervals. An official report of the inspections should be drawn up.
- 4 Only original Dräger spare parts should be used for maintenance and repairs. Repairs and maintenance, and the replacement of spare parts should only be carried out by experts.
- 5 We recommend having inspections and repair work carried out by the Technical

Customer Service of your Dräger Branch or Agent.

Regular inspection is best ensured by entering into an Inspection Service Contract with the Technical Customer Service of your Dräger Branch or Agent.

- 6 Responsibility for the reliable function of the appliance passes to the owner or operator in all cases where the appliance has been inexpertly maintained or repaired by persons not employed by the Dräger Organisation or where it has been used in a manner which does not conform to the normal conditions of use.
- 7 For reasons of safety, pressure reducers should be overhauled at least every 6 years.

We would also point out that the national recommendations, regulations and laws governing the use of technical equipment should be observed.

DRÄGERWERK AG LÜBECK

Intended Use and Approvals

This appliance is to be used in conjunction with an anesthetic ventilator to indicate and monitor the patient's respiratory pressure. In the event of there being disturbance during ventilation, an automatic audible alarm will sound if a set respiratory pressure is not reached in 15 seconds. The respiratory pressure gauge with its alarm system is not

for use with explosive anesthetics (e. g. ether and cyclopropane), and it is not to be used in areas where there is a risk of explosion (see the red indication on the alarm device, as per VDE* 0750 Section 1/6. 77, paragraph 33.5.2.). The appliance bears a spark protection marking.

* VDE = Verband Deutscher Elektrotechniker (German Association of Electro Engineers)

Technical Data

The appliance consists of two assemblies:
a) the respiratory pressure gauge;
b) the alarm system.

The respiratory pressure gauge has a pressure indication range from -30 to +80 mbars, and an alarm setting range which can be adjusted between -10 to -20 and +20 to +60 mbar. When setting the warning limits in an indicating range between -10 and +10, no alarm will be signaled. The alarm system is equipped with an audible warning device which will give a sig-

nal when the preset respiratory pressure is not reached for 15 seconds.

Batteries

Model Baby, 1,5 V, IEC R 14, such as the Pertrix 235 Baby, Daimon 259, Super Dry 281 from Varta.

Use only leak-proof batteries.

Weight

Respiratory pressure gauge with alarm system (without batteries) weighs 1.5 kg.

Dimensions see Fig. 1

Contents

	Page
Important Notice	2
Intended Use and Approvals	3
Technical Data	3
What's what?	5
Initial Preparation	5
Operational Use	6
Shut down Actions	6
Care and Maintenance	6
Order List	7
Troubleshooting	8

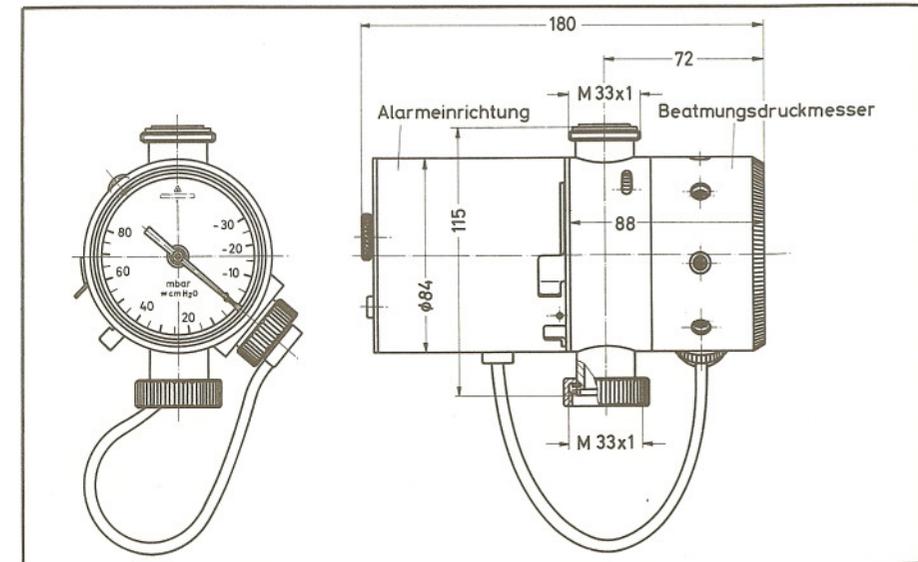


Fig. 1 Dimensions

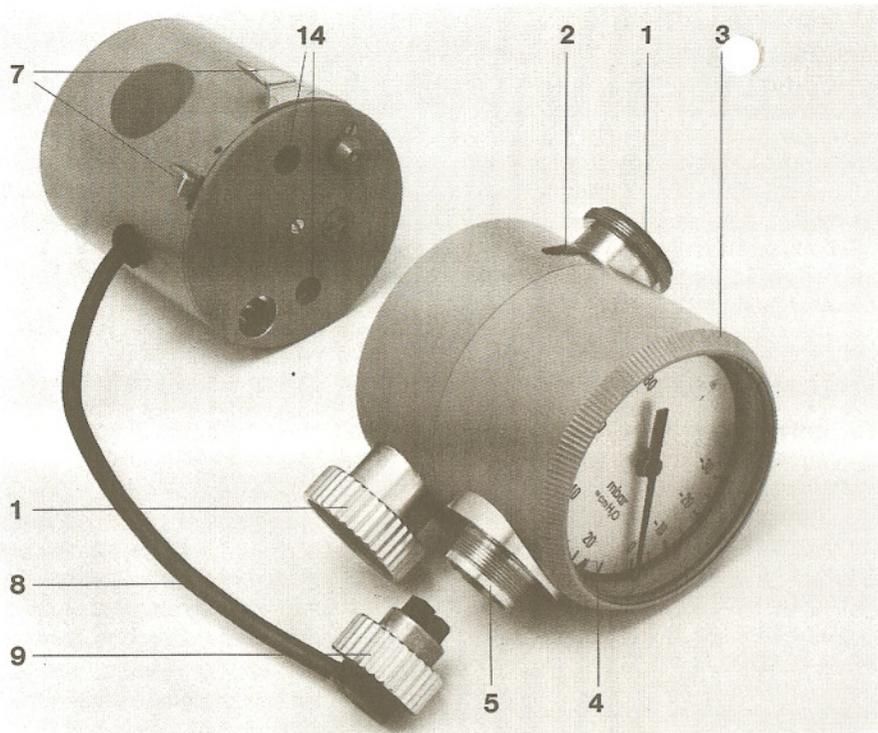
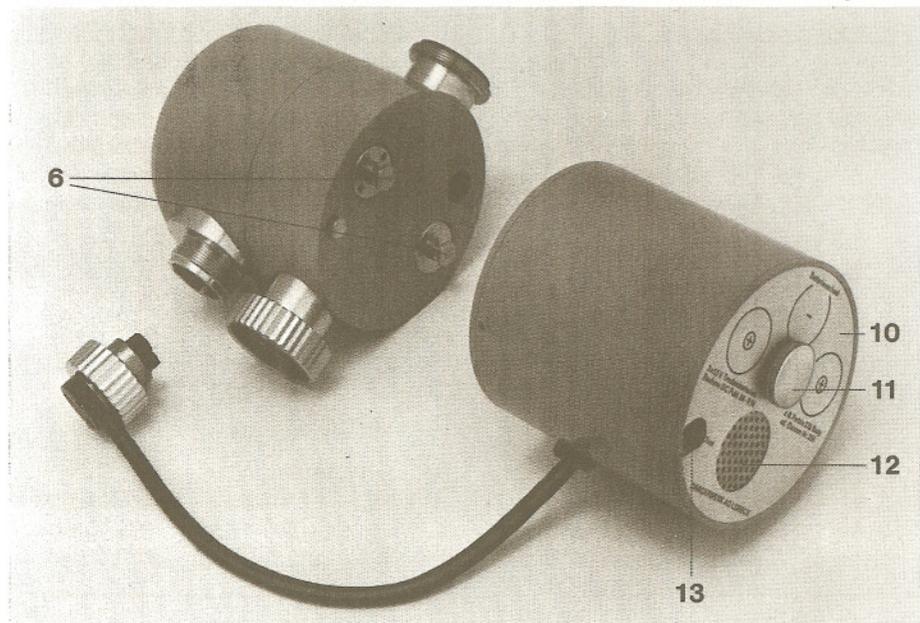


Fig. 2 ▲ 35 362

35 363 Fig. 3 ▼



What's what?

Respiratory Pressure Gauge

- 1 Screw connection for coupling to the anesthetic breathing system
- 2 Knurled wheel to adjust scale zero point
- 3 Adjusting ring to set the red mark 4 (monitoring light)
- 4 Red mark to indicate the respiratory pressure to be monitored (positioning of monitoring light)
- 5 Screw connection to take and hold tight the plug 9 of the monitoring light
- 6 Coupling bolts to connect the respiration pressure gauge and alarm system

Alarm System

- 7 Catch levers to lock the connection between the respiratory pressure gauge and the alarm system
- 8 Connecting cable between the alarm system and the plug of the monitoring light
- 9 Plug of the monitoring light
- 10 Battery compartment cover
- 11 Knob to attach battery compartment cover
- 12 Alarm signal emitter
- 13 Battery check button
- 14 Holes to take the coupling bolts 6

Initial Preparation

- 1 To connect the alarm system to the respiratory pressure gauge (Fig. 4), first move each of the catch levers 7 apart until they come to a stop. Insert the coupling bolts 6 of the respiratory pressure gauge in the holes 14 of the alarm system sub-assembly until the two housings come together. To lock together, press together both catch levers 7.

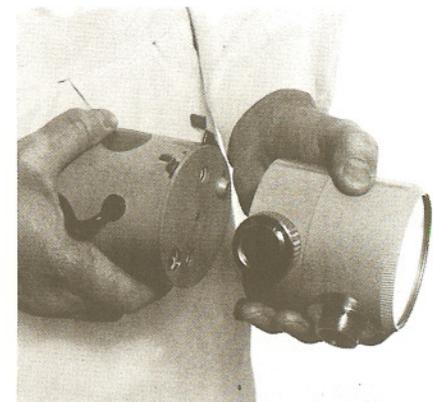


Fig. 4 Connection of sub-assemblies

Both subassemblies will be connected when the fastening is felt to be locked.

- 2 Insert the plug of the monitoring light 9 into the screw connection 5 and then tighten the screw cap (Fig. 5).

Note! Do not put the fingers into orifice 5. Both the needle indicator and the mechanism could be damaged.

- 3 Insert the dry batteries in the alarm system assembly. Loosen knob 11 and take off the battery compartment

Fig. 5 Plugging in the plug of the monitoring light





Fig. 6 Inserting batteries

35366

cover 10. Insert the batteries while making sure the battery poles are in the proper direction (Fig. 6). Replace the cover 10 and tighten down with the knob 11.

- 4 Press the battery check button 13. When the batteries are properly inserted and the battery voltage is sufficient, the alarm signal will sound. This demonstrates that the apparatus will be operational for at least 8 hours.
- 5 Connect up the respiratory pressure gauge with its alarm system to the anesthetic machine. Check that the

needle indicator of the pressure gauge is aligned with the zero point of the mbar dial scale when there is no pressure. If necessary, turn the knurled wheel 2 until the needle indicator comes into line with the zero point.

- 6 Check the operation of the alarm system. The alarm will operate when the adjusting ring 3 is turned until the red mark is moved out of its zero position. The warning signal will then sound about 13 to 25 seconds later. This shows that the respiratory pressure gauge with its alarm system is operational.
- 7 Turn off the apparatus! Turn adjusting ring 3 until the red mark 4 is aligned with the zero point on the dial scale. Failure to do so will leave the alarm system connected which will drain the batteries.

Operational Use

Using adjusting ring 3, set the red mark 4 to the required pressure level to be monitored during ventilation. The device will then be turned on. When the warning limits are set in a range between -10 and +10 mbar, no warning will take place.

Shut down Actions

Turn adjusting ring 3 until the red mark 4 is once again aligned with the zero point on the mbar dial scale. This turns off the alarm system.

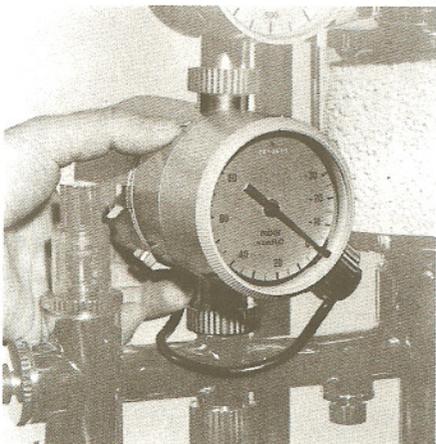
Care and Maintenance

Cleaning

Dirt visible on the outside of the device can be removed by wiping with a damp cloth. Be careful that cleaning fluid does not get inside the apparatus.

Fig. 7 Setting zero point

35367



Sterilization – Applies only to the respiratory pressure gauge

To sterilize the device, the alarm sub-assembly must be separated from the pressure gauge. Disconnect the plug of the monitoring light 9 from the respiratory pressure gauge. Actuate the catch levers 7 to separate the two sub-assemblies (Fig. 8).

Only the mechanical respiratory pressure gauge can be sterilized (at about 120°C). The alarm system assembly must in no case be subjected to high sterilization temperatures.

When the plug 9 of the monitoring-light is removed from the connection 5 of the pressure gauge, do not put anything into the opening 5. The needle indicator and measurement mechanism can be damaged.

After sterilization of the respiratory pressure gauge, allow to cool to room temperature before use. Do not move the adjusting ring 3 when hot.

Disinfection – Applies only to the alarm system assembly.

The alarm assembly is to be wiped with a disinfectant. Be careful that disinfectant solution does not get into the apparatus. When using a disinfectant spray, the disin-

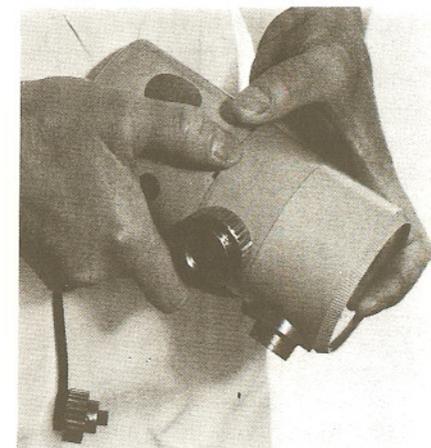


Fig. 8 Separating sub-assemblies

35368

fectant should not be sprayed directly onto the alarm apparatus.

Disinfection in the Dräger-Aseptor® (Sterilizer) with formaldehyde is permissible. Please refer to the "Manual for disinfection in the Dräger-Aseptor®" (Operating manual 6751.10).

After each maintenance procedure, the operation of the alarm system is to be checked when coupled to the respiratory pressure gauge. This is described in the section "Initial Preparation".

Order List

Description	When ordering please state only	
	Designation	Code-No
Respiratory pressure gauge with alarm system The appliance consists of 2 assemblies:	Respiratory pressure gauge PRECOM	E 9711
a) pressure gauge b) alarm system	Pressure gauge Alarm system	E 9726 83 01 450
Spare and Wearing Parts Gasket for connection 1 (Fig. 2) (Set of 10) Dial glass	Gasket set	M 22154
	Dial glass	E 9285

Troubleshooting

Fault	Cause	Remedy
Alarm signal does not sound	Insufficient battery voltage Batteries improperly inserted Alarm system faulty	Change batteries Insert batteries with poles in proper direction Call nearest Dräger representative
The indicator needle of the pressure gauge is blocked by the monitoring light or is carried along when the monitoring light is inserted	The indicator needle of the pressure gauge bent by hard impact	Call nearest Dräger representative
Adjusting ring to set the monitoring light catches or turns only with difficulty	Slide pin defect	Call nearest Dräger representative



DRÄGERWERK AG LÜBECK

FEDERAL REPUBLIC OF GERMANY

✉ P. O. Box 1339, 🏠 Moislinger Allee 53/55,
D-2400 Lübeck 1 – ☎ (04 51) 882-1, 📠 02 6807

Operating manual **5723.1 e**
2nd Edition · February 1979

Graphische Werkstätten 3592/78 - 80 27 532
Printed in the Federal Republic of Germany