DRÄGER

COMPRESSED AIR DIVING APPARATUS

DRÄGER

P 2220 e - 3rd Edition - July 1961

CONTENTS

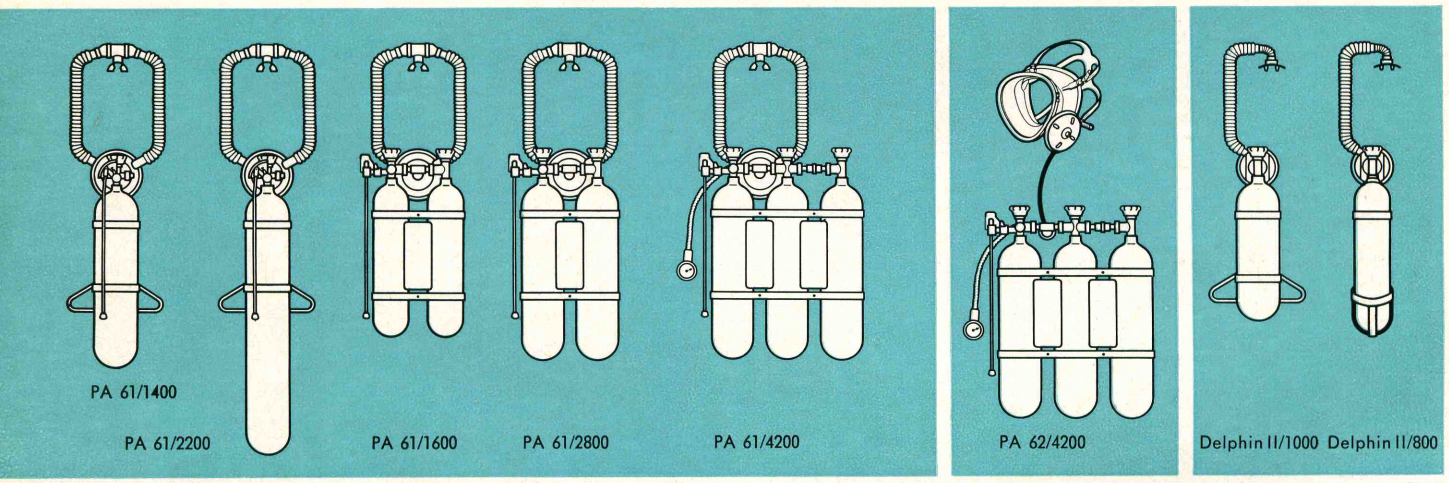


Fig. 1 Over-all Picture of Compressed Air Diving Apparatus

Dräger Compressed Air Diving Apparatus

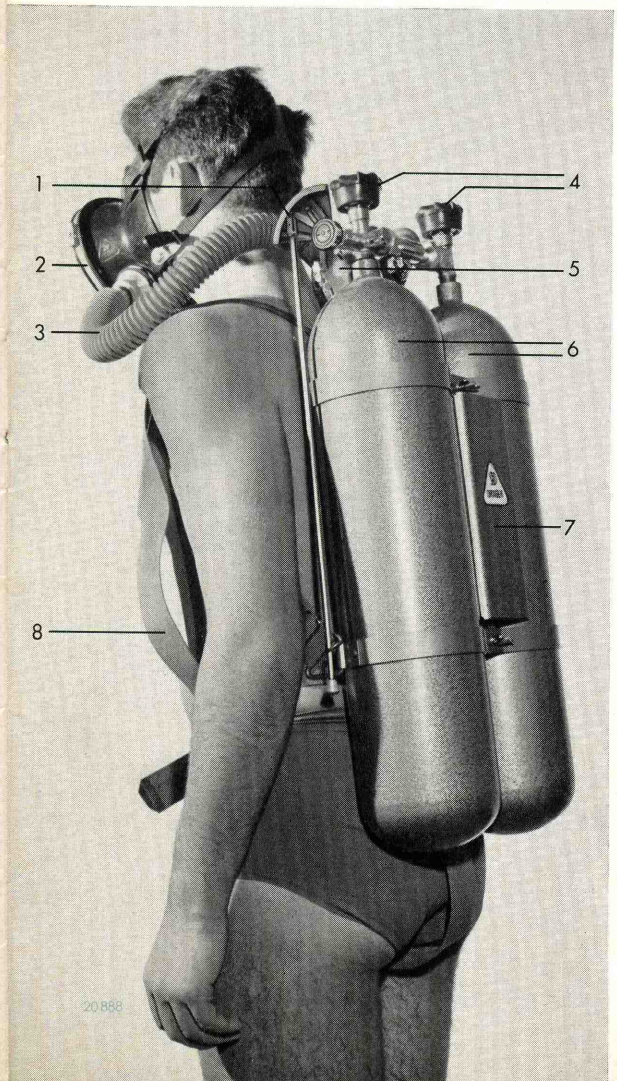
for life-saving
for non-arduous work under water
for marine research
for skin-diving and under water fishing

Wearers of Compressed Air Diving Apparatus can enjoy unhampered swimming under water, because the weight of the equipment is scarcely perceptible, due to the buoyancy of the water. The equipment is easy to use and the simple procedure can be learned in a very short time.

Our various models are designed to suit different applications and requirements.

Compressed Air Diving Sets contain highly-compressed air in supply cylinders which are carried on the back; this make them independent of any air supply by the air-line method. They operate automatically, with a lung demand valve, i. e. they furnish the wearer automatically with just enough air to fill his lungs, preventing wastage. The expired air escapes into the water through an expiratory valve incorporated in the lung demand valve.

20849



A Series PA 61 Compressed Air Diving Apparatus

These sets are intended for the more demanding diver and are for use at greater depths. They are ideal for marine research, sports, life-saving and non-arduous under water work. This series is partly designed on the unit-construction principle; after some additional parts have been purchased, the "basic set" Model PA 61/1400 can be easily converted into any of the other models using 7-litre cylinders.

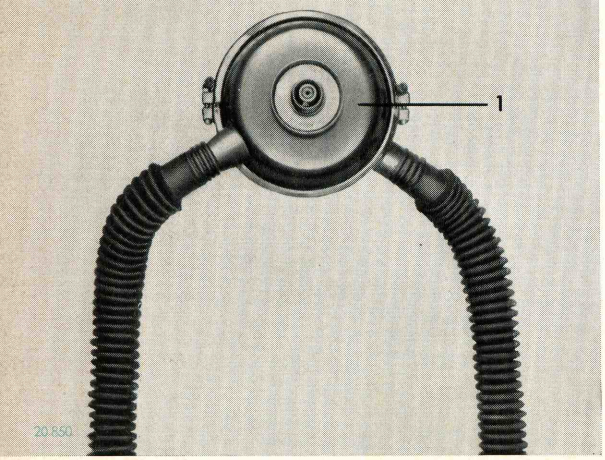
I. Design of the Apparatus

1. "PA 61" lung demand valve with separate corrugated tubes for the inspired and expired air, fitted with a threaded connector for fitment to mouth-piece or all vision mask;
2. Compressed air cylinder or set of cylinders with new safety air reserve switch and shock-protector over the reserve switch lever;
3. Improved harness and quick-action fasteners.
4. Compressed Air Diving Sets should be used with either a mouthpiece or an all vision mask, either of which must be ordered separately.

Fig. 2 Components of Compressed Air Diving Apparatus PA 61/2800

1 Reserve switch
2 All-vision mask
3 Breathing tube
4 Cylinder valves
5 Lung demand valve PA 61
6 Compressed air cylinders
7 Float
8 Harness

Fig. 3 Lung Demand Valve PA 61



20850

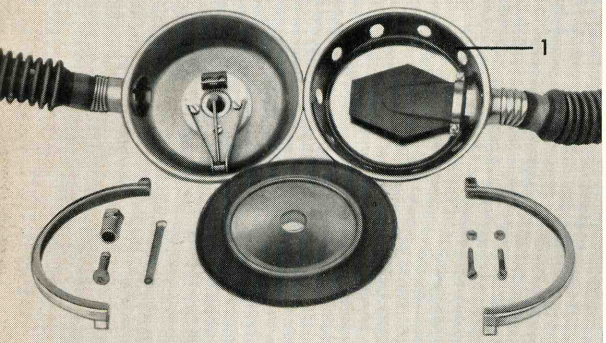
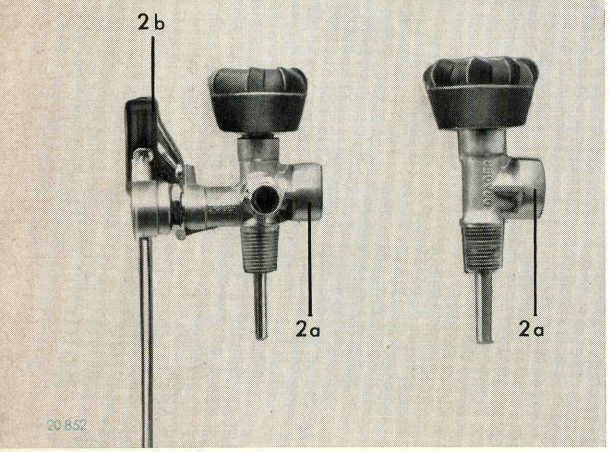


Fig. 4 Components of Lung Demand Valve PA 61

20851

Fig. 5 Cylinder Valves
left: with reserve switch
right: without reserve switch



20852

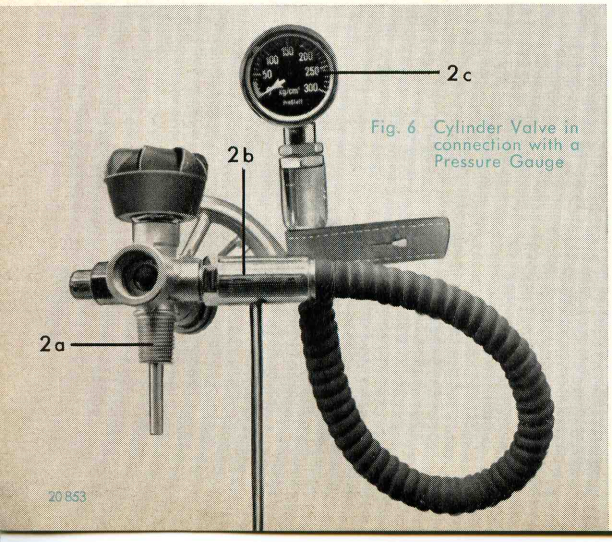


Fig. 6 Cylinder Valve in connection with a Pressure Gauge

20853

1. The PA 61 Lung Demand Valve

reduces the high pressure of the air in the cylinders to a suitable respiratory pressure in one stage. By virtue of this, it has fewer components and is therefore simple and reliable. According to the depth, the lung demand valve always provides for the pressure in the respiratory passages to be balanced against the pressure of the water. Even when breathing is very laboured, the PA 61 lung demand valve always supplies sufficient respirable air without any great resistance. The pressure-reducing unit – the most important component – is so constructed and arranged that it can easily be replaced, with nothing more than an ordinary socket wrench.

The lung demand valve contains no components which are sensitive to seawater; all levers and bearings are made from high-grade stainless steel. The expiratory valve incorporated in the lung demand valve is a lip valve offering a minimum of resistance. The corrugated tubes are made from neoprene and are therefore largely resistant to ageing and are unaffected by oil.

The PA 61 lung demand valve is fitted with the well-known Dräger Manual Connector.

2. Compressed Air Cylinders with Pressure Gauge and Reserve Switch

a) Compressed Air Cylinders

Our Compressed Air Cylinders for a charging pressure of 200 kg/sq.cm (test pressure 300 kg/sq.cm) are made from alloy steel. A special surface treatment under the paint guarantees **effective** protection against corrosion even if the cylinders are damaged. The cylinder valves are shock-proof not only by virtue of their internal design but also by reason of the fact that rubber handwheels are provided.

b) Reserve Switch

The Reserve Switch is a safety device which, in the case of a diving set, warns the wearer of the approaching end of his air supply. The new **Safety Air Reserve Switch** obviates operating errors because now, regardless of the position of the reserve switch valve, all the cylinders in a set are charged simultaneously. Furthermore, wtih the new Reserve Switch, it is necessary always to set the switch valve in the correct position after charging because an incorrect setting will always be revealed by an escape of compressed air.

c) Pressure Gauge

The reserve switch valve is fitted with connectors which, in the case of a multiple cylinder set, make it possible to connect a pressure gauge line and gauge, so that the amount of compressed air available at any given time is indicated in terms of residual pressure.

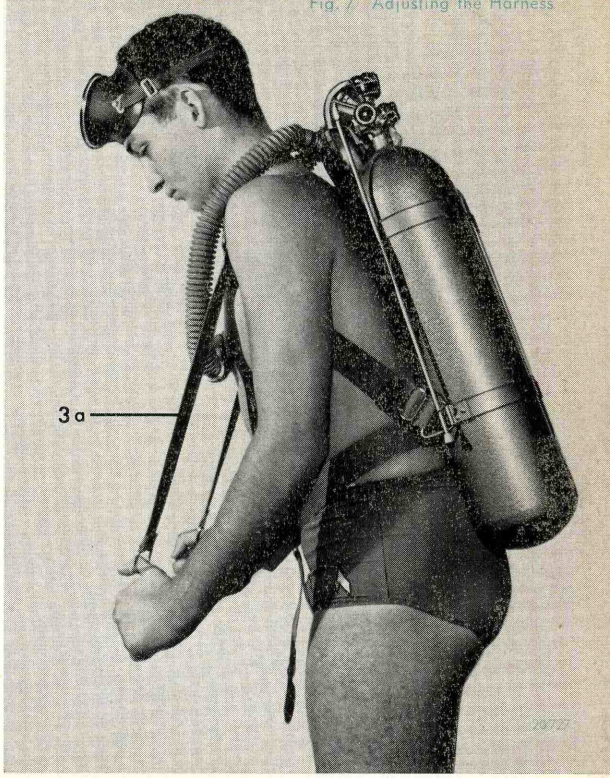
3. Harness and Frame

a) Harness

The **quick-release Harness** available on all sets consists of broad webbing straps which fit snugly to the body. The material used for the straps is strong and will not rot.

Only once the Diving Set is in position should the quick-release Harness to be adjusted to the correct length; to do this, merely pull the straps. The Harness can also be easily readjusted under water, ensuring the best possible fit under all circumstances. All our models of Diving Sets feature the same shoulder-straps and the same body-belt; the crutch strap can be fitted as desired. The body-belt is fitted with a safety-type quick-release buckle which is very easy to open. Thanks to this new Harness, the Diving Set is quickly and easily put on or taken off.

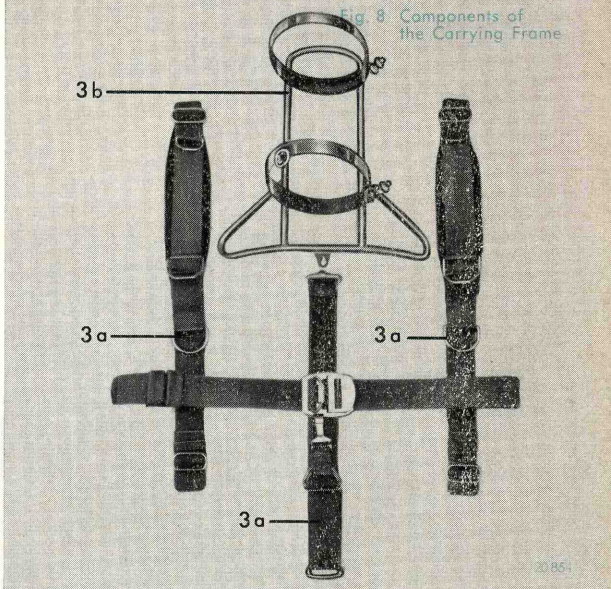
Fig. 7 Adjusting the Harness



b) Carrying Frame

For a single-cylinder Diving Set, a new tubular frame has been developed which ensures an excellent fit. For multiple-cylinder Sets, the individual cylinders are fastened by clips into one composite unit. In conjunction with the carrying frame, a secure fit is assured. To help equalise the weight, a float is provided between the cylinders.

Fig. 8 Components of the Carrying Frame



4. Respiratory Connection for Model PA 61

The Diving Sets in the PA 61 Series may be used, as desired, with an ordinary, valveless mouthpiece, with a type of mouthpiece which incorporates valves, or with all vision masks, because the air tubes are fitted with threaded connectors.

a) The simple, valveless Mouthpiece

consists of a piece of tube with threaded connectors to take the air tubes and a rubber mouthpiece.

b) The valve-type Mouthpiece

contains non-return valves for the inspiratory and expiratory functions. It prevents the penetration of water into the inspiratory side of the lung demand valve and facilitates expulsion of unwanted water without impeding respiration.

c) The All Vision Mask Model 60 T

covers the whole face and should therefore be used particularly in dirty or very cold water. A large, shutter-proof Plexiglass window provides maximum visibility. The sealing frame and quick-release harness ensure a tight fit on almost any shape and size of head. The threaded connectors for the air tubes are located at the sides. The All Vision Mask is fitted with an inner auxiliary mask and non-return valve preventing any concentration of CO_2 forming inside the Mask.

Fig. 9 All-Vision Mask with inner auxiliary mask; valveless mouthpiece, valvetype mouthpiece

II. Summary of the Models in the PA 61 Series

1. SINGLE-CYLINDER SETS

a) Model "Skagerrak" PA 61/1400
Compressed Air Diving Set

b) Model "Biscaya" PA 21/2200
Compressed Air Diving Set

2. MULTIPLE-CYLINDER SETS

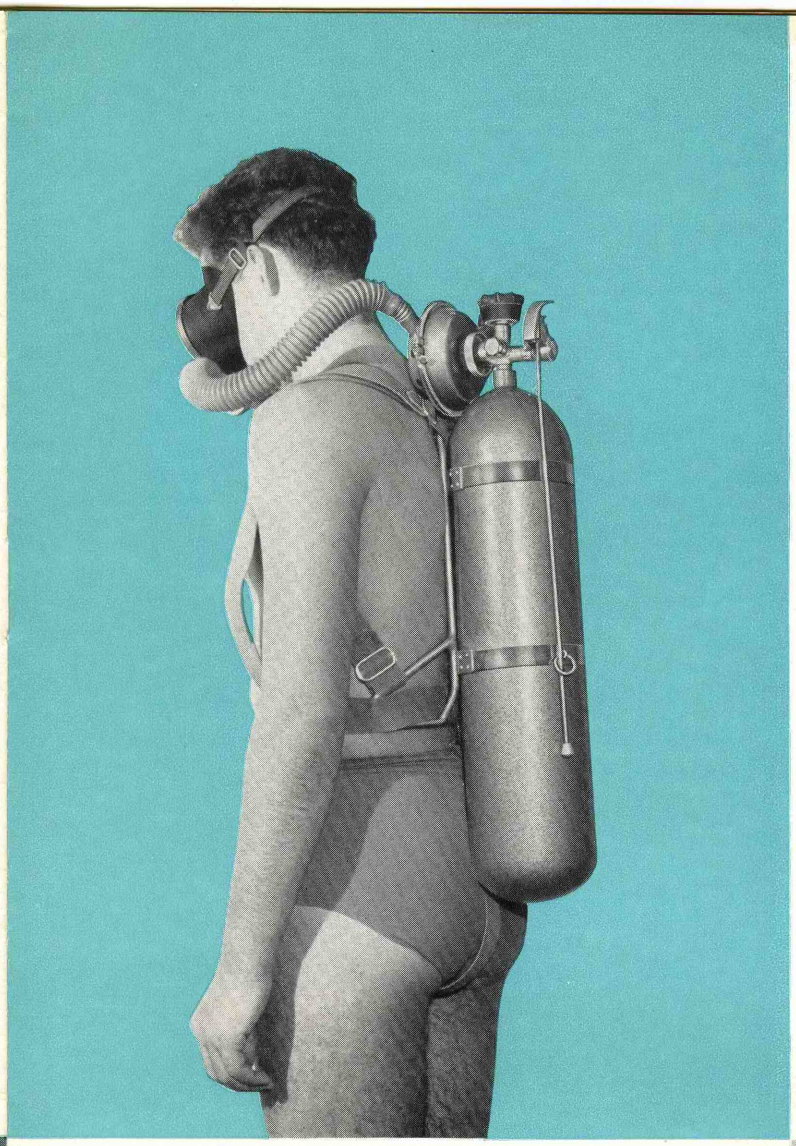
a) Model "Baltic" PA 61/1600
Compressed Air Diving Set

b) Model "Atlantic" PA 61/2800
Compressed Air Diving Set

c) Model "Pacific" PA 61/4200
Compressed Air Diving Set

20725

Fig. 10 Under water filming by diver using Compressed Air Diving Apparatus Model PA 61/2800



20 858

1. Single-Cylinder Sets

a) Model "Skagerrak" PA 61/1400
Compressed Air Diving Set
(Air supply 1400 litres)

This Set features one 7-litre cylinder (140 mm/5½" diam.) for a working pressure of 200 kg/sq. cm, with a safety-type reserve switch; a tubular carrying frame provides for a comfortable and secure fit of the Set under water. This is the basic Set in the PA 61 Series and, if the necessary additional items are purchased, can be extended to Model PA 61/2800 or PA 61/4200.

Fig. 11 Compressed Air Diving Apparatus PA 61/1400 "Skagerrak"

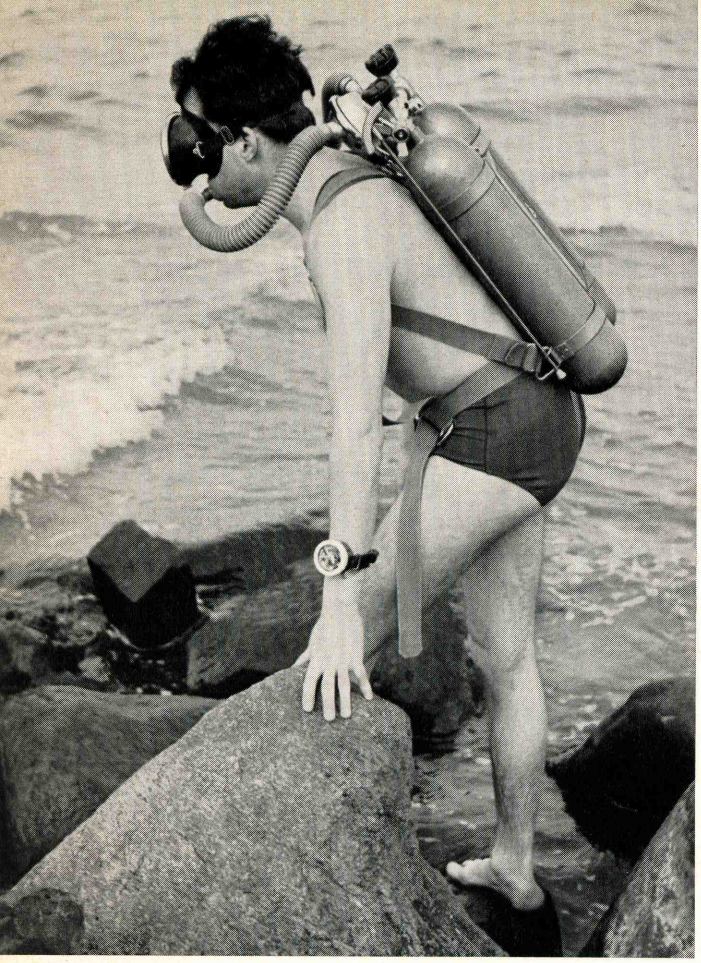
20 587

b) Model "Biscaya" PA 61/2200
Compressed Air Diving Set
(Air supply 2200 litres)

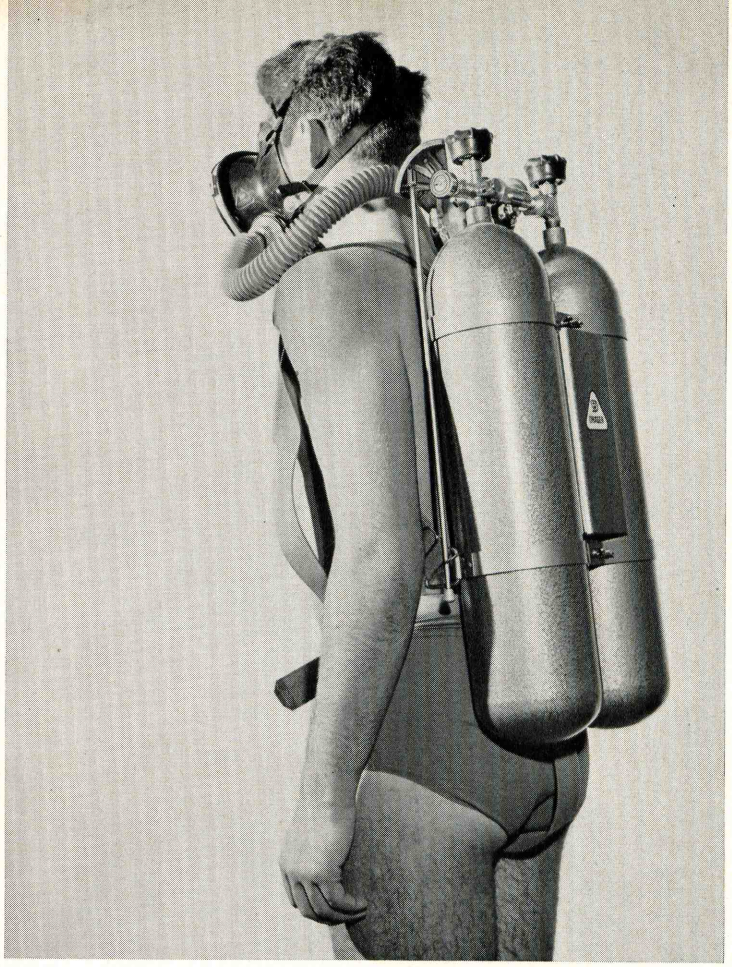
Single-cylinder Set, description as for the previous Model, but with one 11-litre cylinder (140 mm/5½" diam.) for 200 kg/sq.cm working pressure.

This Model should, therefore, only be ordered if there is no intention of subsequent conversion to a multiple-cylinder Diving Set.

Fig. 12 Compressed Air Diving Apparatus PA 61/2200 "Biscaya"



20859



20860 b

Fig. 13 Compressed Air Diving Apparatus PA 61/1600 "Baltic"

Fig. 14 Compressed Air Diving Apparatus PA 61/2800 "Atlantic"

2. Multiple-Cylinder Sets

a) Model "Baltic" PA 61/1600 Compressed Air Diving Set
(Air supply 1600 litres)

This is a particularly handy Set equipped with two 4-litre cylinders (115 mm/4 1/2" diam.) for a working pressure of 200 kg/sq.cm. One of the cylinders is fitted with a reserve switch. The total air supply of 1600 litres is the maximum quantity of air, permitting diving at considerable depths without allowing for decompression pauses.

b) Model "Atlantic" PA 61/2800 Compressed Air Diving Set
(Air supply 2800 litres)

This Set is designed for greater depths and longer periods of use. It is fitted with two 7-litre cylinders (140 mm/5 1/2" diam.) for a working pressure of 200 kg/sq.cm; one of the cylinders is fitted with a reserve switch. This Set can be converted into the "Pacific" Three-Cylinder Set by purchasing additional components.

c) Model "Pacific" PA 61/4200 Compressed Air Diving Set
(Air supply 4200 litres)

This Set is designed for maximum periods of use and greater depths. It is fitted with three 7-litre cylinders (140 mm/5 1/2" diam.) for a working pressure of 200 kg/sq.cm, one of which is fitted with a reserve switch. This Model features as standard a Pressure Gauge with a connecting tube passing over the shoulders.

20861

20862

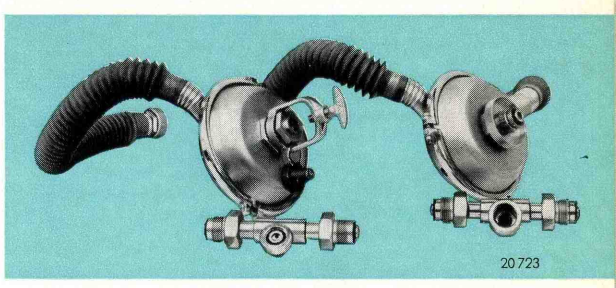
Fig. 15 Compressed Air Diving Apparatus PA 61/4200

Fig. 16 Compressed Air Diving Apparatus PA 62/2800

III. Series PA 61/B Compressed Air Diving Apparatus

The Multiple-Cylinder Diving Sets and the demand valve PA 61 can optionally be supplied with the clamp-type connector so often used abroad. The sets of cylinders are then fitted with a nipple for the clamp-type connector instead of with the German standard connector screwed 5/8" gas thread. Since the cylinders themselves feature the standard connector, they can be individually charged in Germany.

The description of these Diving Sets (Models PA 61 B/1600, PA 61 B/2800 and PA 61 B/4200), can be seen in the Ordering List.



20723

Fig. 17 Lung Demand Valve PA 61 with clamp-type connector and manual connector screwed 5/8"

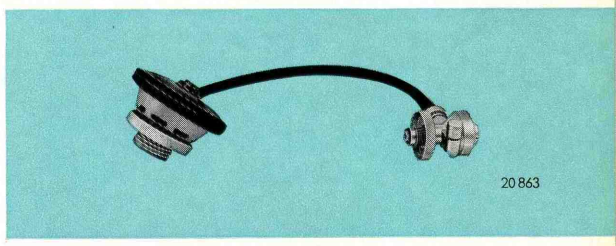
B Series PA 62 Compressed Air Diving Apparatus

On all the Diving Sets listed, it is possible to connect a pressure-reducer into the connection provided for the lung demand valve. From the pressure-reducer, a thin medium-pressure tube would pass to the All Vision Mask. This Model, with a pressure-reducer and lung demand valve, is termed "PA 62". It can be used **only with** a Model 60 R **All Vision Mask** (without interior auxiliary mask).

These Sets are used particularly where corrugated tubes are not considered expedient.

One advantage in the Sets of this Series is the fact that the respiratory resistance is almost constant, whatever the diving position.

Pressure-reducer and lung demand valve together are, however, more complicated in construction than the "PA 61" lung demand valve.



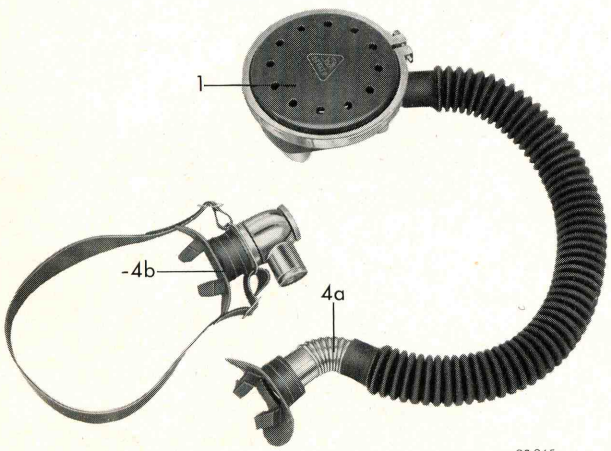
20863

Fig. 18 Lung Demand Valve PA 62 with pressure reducer

Fig. 19 Diving with Compressed Air Diving Apparatus Model "Delphin"

20865

Fig. 20 Lung Demand Valve "Delphin" (1) with integral mouthpiece (4a) and interchangeable mouthpiece (4b)



20855

C DELPHIN Series Compressed Air Diving Apparatus

These Sets are simpler than those in the PA 61 Series. Similarly, they can also be fitted in the minimum of time and are particularly easy to operate. They are ideal for sports purposes and for ligh rescue work but should not be used below 20 m (65′).

I. Design of the Apparatus

They comprise:

1. the "Delphin" lung demand valve with one corrugated tube and integral mouthpiece for inspiratory and expiratory functions;
2. the cylinder of compressed air; and
3. the quick-release carrying harness.

1. DELPHIN Lung Demand Valve

The "Delphin" lung demand valve operates on the single-stage principle and supplies respiratory air with a minimum amount of resistance. The expired air is passed back to the lung demand valve and expelled by an expiratory valve incorporated therein. It provides a pressure-balance in the respiratory passages, according to the depth. Any water penetrating the air tube can easily be blown out through the expiratory valve in the lung demand valve, thanks to the **single-tube system.** The very slight re-inspiration of used air through the single air tube is not worth considering.

Like the PA 61 lung demand valve, the "Delphin" lung demand valve is fitted with the Dräger Manual Connector. It contains no components likely to be affected by sea-water.

2. Cylinder and Resistance Warning

a) The Cylinder

of the Delphin Sets is made from the same material as those of the PA 61 Series.

b) Resistance Warning

The increased restriction in the air supply as the pressure in the cylinder drops draws the attention of the wearer automatically to the fact that the end of his air supply is imminent, so that surfacing is necessary. The warning is given early enough for the diver to surface, the period of notice varying according to the depth.

3. Harness

The relatively small Delphin Set (with four-litre cylinder) has a webbing harness; the five-litre model has a tubular carrying frame with cylinder clips, as used also for the Single-Cylinder Sets in the PA 61 Series. The tubular

frame provides an excellent fit. Both models feature the quick-release fasteners as used on all PA 61 Sets.

4. Respiratory Connection for the DELPHIN Model

a) Integral Mouthpiece

The Delphin lung demand valve is normally supplied with an **integral mouthpiece.** The mouthpiece consists of a piece of tubing with a rubber mouthpiece.

b) Interchangeable Mouthpiece

Optionally, however, it can also be supplied with an **interchangeable mouthpiece.** In this case, the mouthpiece consists of a connecting elbow-piece with a retaining screw and an interchangeable mouthpiece insert with integral rubber mouthpiece.

II. Summary of DELPHIN Models

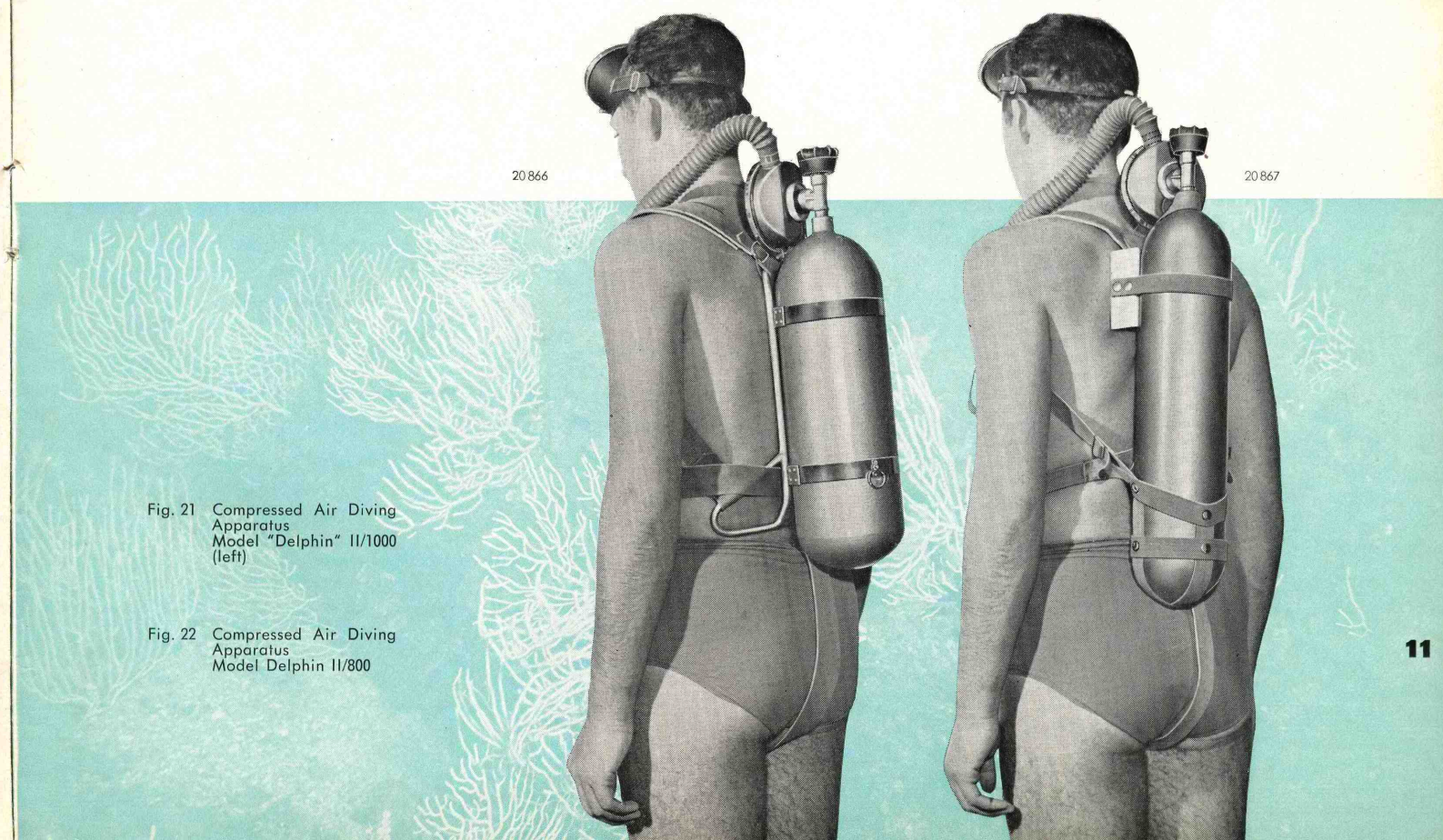
a) Model Delphin II/800 Compressed Air Diving Set

Features one 4-litre cylinder (115 mm/4½" diam.) for 200 kg/sq. cm working pressure with webbing harness, back-plate and quick-release fastener.

This cylinder can also be used for conversion to a Cylinder Set for Model PA 61/1600 Diving Set, for which the Delphin lung demand valve can also be used. In this way, the Set corresponds to the previous Model Delphin III.

b) Model Delphin II/1000 Compressed Air Diving Set

Features one 5-litre cylinder (140 mm/5½" diam.) for 200 kg/sq. cm working pressure, with tubular frame and quick-release fastener.



20 866

20 867

Fig. 21 Compressed Air Diving Apparatus Model "Delphin" II/1000 (left)

Fig. 22 Compressed Air Diving Apparatus Model Delphin II/800

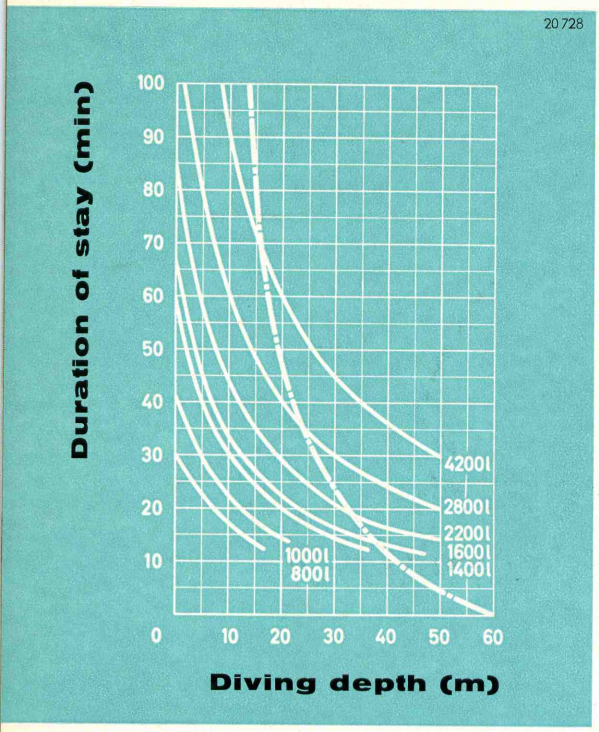


Fig. 23 Diving times in relation to air supply and diving depths swimming slightly with swim fins, with limit for safe ascending

20800

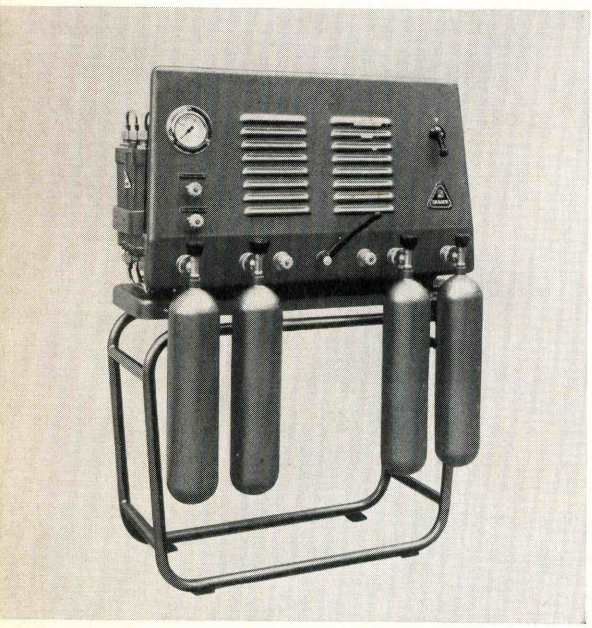


Fig. 24 Compressor Model DK 6000 with 4 compressed air cylinders

Technical Data

Effective delivery	85 litres (3 cu.ft.)/min
Maximum working pressure	225 atm.
Compressor speed	780 revs./min.
Four-cylinder, four-stage polyphase current motor, 2.2 kW, 2860 revs./min.	220 V / 380 V
Weight, complete	128 kg (282.2 lbs.)
Length	880 mm (2′ 10″)
Width	470 mm (1′ 6½″)
Height	1250 mm (4′ 1¼″)

D Duration of Use of the Compressed Air Diving Sets

The duration of use depends largely not upon the design of Diving Set but upon the air supply, the amount of effort exerted by the diver and, above all, upon the depth of dive.

If, for example, the wearer requires 25 litres of air per minute when swimming on the surface, his need rises to about 50 litres per minute for the same effort at 33 feet and to about 75 litres per minute at 66 feet.

The following tables of endurance times is based on an air requirement of 27 litres per minute, which corresponds to the average needs when swimming under water (moderate speed) at varying depths, the maximum being about 15 feet.

Diving Set	Cylinder Content Litres	Air Supply Litres	Duration of Use Minutes (approx.)
Delphin II	4	800	30
Delphin II	5	1000	35
Skagerrak	7	1400	50
Baltic	2 x 4	1600	60
Biscaya	11	2200	80
Atlantic	2 x 7	2800	100
Pacific	3 x 7	4200	150

E Accessories

Dräger Compressor, Model DK 6000

– an economic way of charging Compressed Air Cylinders –
The Dräger Model DK 6000 Compressor is a complete unit which is immediately ready for use, requiring no installation.

All the important components,

Compressor Set
Motor
Separator Unit
Control Panel with charging assembly

are mounted on one tubular frame; it is therefore unnecessary to construct any foundation.
For details see our prospectus 1711e.

Special Features:

- Four stage compression – low thermal loading
- Low compressor speed – low mechanical stresses
- Highly-efficient oil separation – purest respirable air
- Switch-over charging assembly – easy operation

Accessories for Diving

1. Light-weight Diving Suits

Light-weight diving suits are a protection against cold, dirt and injury. Even in summer, the temperature at a few metres' depth can often be so low that divers can withstand it for only a few minutes unless they have some protection against the cold.
For details of our Light-weight Dräger Diving Suits, kindly refer to Pamphlet 2230e.

2. Weight Belt

Weight Belts are needed in particular when divers are wearing suits. The Dräger Weight Belt is fitted with an easily adjustable safety-type quick-action buckle and weights of approx. 2½ lbs. (approx. 2¼ lbs. in the water) each, which are clipped on to the Weight Belt and are designed to be individually removable even when the Weight Belt is being worn.

3. Diving Mask

The Diving Mask with lip seal all round features one large window of shatter-proof safety glass. It is intended for use when the diver is breathing through a mouthpiece.

4. Test Pressure Gauge

The Test Pressure Gauge with manual connector is for testing the cylinder pressure and the function of the reserve switch.

5. Swim Fins

Original "Barakuda" Model, black

6. Depth Gauges

a) Depth Gauges as Standard Models,

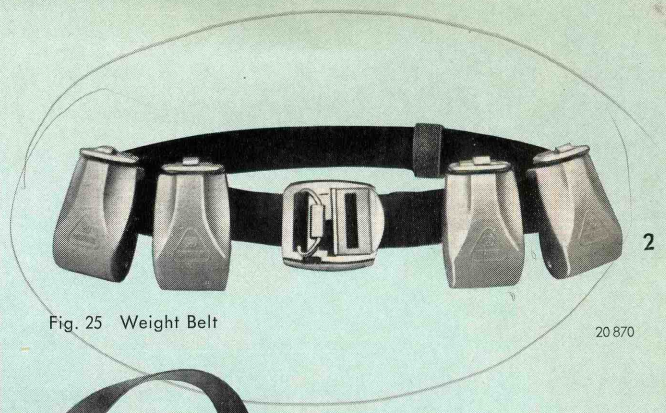
in sea-water resistant plastic case; dial, figures and pointer luminous, for depths of 50 or 80 metres (165 or 260 feet)

b) Depth Gauges with adjustable pointer,

for marking the maximum depth reached, with zeroing magnet, in sea-water resistant plastic case. Dial, figures and pointers luminous;
for 50 or 80 metres (165 or 260 feet) depths

c) Depth Gauge with Liquid Compass

for directional orientation under water, in sea-water resistant plastic case; dial, figures and pointers luminous; for 50 or 80 metres (165 or 260 feet) depths.



2

Fig. 25 Weight Belt 20870

3

20871

Fig. 26 Diving Mask with shatter-proof window

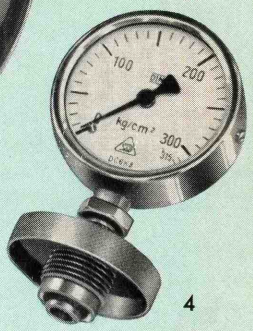
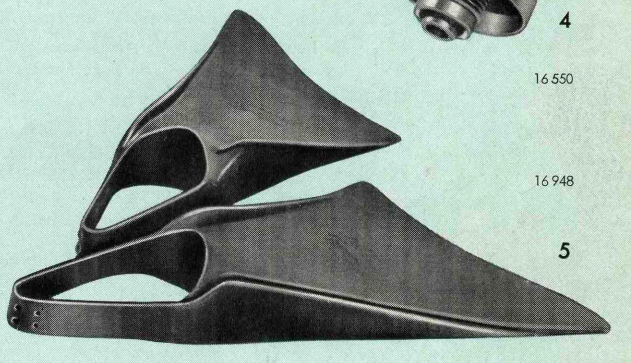


Fig. 27 Test Pressure Gauge

4

16550



16948

5

Fig. 28 Swim Fins Model "Barakuda"

Fig. 29 Depth Gauges 20874

6

a b c

F ORDERING LIST

No.	Designation	Weight kg	Weight lbs.	Cat.No.	Price
1	**Model "Skagerrak" PA 61/1400 Compressed Air Diving Set** consisting of: Demand Valve PA 61, 7-litre Compressed Air Cylinder with Safety Reserve Switch and Shock-protector, Tubular Carrying Frame with Quick-release Harness, Tool-bag with contents, without Mouthpiece	12.900	28.4	R 19413	
2	**Model "Skagerrak" PA 62/1400 Compressed Air Diving Set** As Item 1, but with Pressure-reducer PA 62, Pressure Tube and Demand Valve PA 62, without Full Face Mask	12.480	27.5	R 19449	
3	**Model "Biscaya" PA 61/2200 Compressed Air Diving Set** as Item 1, but with 11-litre Compressed Air Cylinder	15.000	33.1	R 19414	
4	**Model "Biscaya" PA 62/2200 Compressed Air Diving Set** as Item 3, but with Pressure-reducer PA 62, Pressure Tube and Demand Valve PA 62, without Full Face Mask	14.580	32.2	R 19451	
5	**Model "Baltic" PA 61/1600 Compressed Air Diving Set** consisting of: Demand Valve PA 61, two 4-litre Compressed Air Cylinders, Safety Reserve Switch with Shock-protector, Cylinder Clips with fittings for webbing and Quick-release Harness, Tool-bag with contents. Without Pressure Gauge and Mouthpiece.	16.560	36.5	R 19415	
6	**Model "Baltic B" PA 61 B/1600 Compressed Air Diving Set** as Item 5, but with Demand Valve PA 61/B with Clamp-Type Connector	16.580	36.6	R 19428	
7	**Model "Baltic" PA 62/1600 Compressed Air Diving Set** as Item 5, but with Pressure-Reducer PA 62, Pressure Tube and Demand Valve PA 62, without Full Face Mask	16.140	35.5	R 19450	
8	**Model "Atlantic" PA 61/2800 Compressed Air Diving Set** consisting of: Demand Valve PA 61, two 7-litre Compressed Air Cylinders, Safety Reserve Switch with Shock-protector, Cylinder Clips with fittings for webbing and Quick-release Harness, Tool-bag with contents. Without Pressure Gauge and Mouthpiece	23.360	51.5	R 19416	
9	**Model "Atlantic B" PA 61 B/2800 Compressed Air Diving Set** as Item 8, but with Demand Valve PA 61/B with Clamp Type Connector	23.380	51.6	R 19431	
10	**Model "Atlantic" PA 62/2800 Compressed Air Diving Set** as Item 8, but with Pressure-reducer PA 62, Pressure Tube and Demand Valve PA 62 without Full Face Mask	22.940	50.5	R 19452	
	All Twin-Cylinder Sets Items 5–10 can, if especially requested, be supplied with Pressure Gauge and Connecting Tube. In this case the following items have to be ordered: Connecting Tube and Pressure Gauge	0.600	1.325	R 19279	
	Washer	0.002	0.004	R 18416	
	Button slider	0.010	0.022	R 19276	
11	**Model "Pacific" PA 61/4200 Compressed Air Diving Set** consisting of: Demand Valve PA 61, three 7-litre Compressed Air Cylinders, Safety Reserve Switch with Shock-protector, Cylinder Clips with fittings for webbing and Quick-release Harness. Pressure Gauge with Connecting Tubing, Tool-bag with contents, without Mouthpiece	33.060	73.0	R 19417	
12	**Model "Pacific B" PA 61 B/4200 Compressed Air Diving Set** as Item 11, but with Demand Valve PA 61/B with Clamp Type Connector	33.080	73.1	R 19434	
13	**Model "Pacific" PA 62/4200 Compressed Air Diving Set** as Item 11, but with Pressure-reducer PA 62, Pressure Tube and Demand Valve PA 62 without Full Face Mask	32.640	71.9	R 19453	
14	Demand Valve PA 61, with Manual Connector screwed 5/8" gas thread, Corrugated Hoses and Connectors threaded for Mouthpiece or Full Face Mask	1.365	3.0	R 18366	
15	Demand Valve PA 61/B, as above (Item 14), but with Clamp Type Connector	1.385	3.1	R 18408	
16	Pressure-reducer PA 62 with Manual Connector screwed 5/8" gas thread	0.415	0.92	R 18556	
17	Demand Valve PA 62 with Pressure Tube and Round-thread Connector for the Full Face Mask Model 60 R	0.525	1.2	R 18764	

No.	Designation	Weight kg	Weight lbs.	Cat.No.	Price
18	**Model "Delphin II" Compressed Air Diving Set** consisting of: "Delphin" Demand Valve with integral Mouthpiece, 4-litre Compressed Air Cylinder, with fitting for webbing, and with Quick-release Harness	7.800	17.2	R 18855	
19	as Item 18, but with interchangeable Mouthpiece	7.900	17.4	R 18856	
20	**Model "Delphin II" Compressed Air Diving Set** consisting of: "Delphin" Demand Valve with integral Mouthpiece, 5-litre Compressed Air Cylinder, Tubular Carrying Frame with Quick-release Harness	9.500	20.9	R 19406	
21	as Item 20, but with interchangeable Mouthpiece	9.600	21.2	R 19407	
22	"Delphin" Demand Valve only, with one Corrugated Air Hose and integral Mouthpiece	0.880	1.94	R 16360	
23	"Delphin" Demand Valve only, with one Corrugated Air Hose and interchangeable Mouthpiece	0.975	2.1	R 17036	
	Accessories for "PA 61" Models				
24	Mouthpiece with 2 Threaded Connectors	0.110	0.243	R 17067	
25	Valve Mouthpiece with 2 Threaded Connectors	0.265	0.584	R 18160	
26	Diving Mask (Single Window) for use with Mouthpieces	0.230	0.507	T 3270	
27	Full-Face Mask, Model 61 T with Inner Auxiliary Mask and 2 Lateral Connectors	0.730	1.610	R 19610	
28	Wooden Case for Demand Valve "PA 61" approx.	1.000	2.200	R 17040	
	Accessorries for "PA 62" Models				
29	Full Face Mask Model 60 R with Round-Thread Connector	0.800	1.760	R 18235	
	Accessories for the "Delphin" Models				
30	Interchangeable Mouthpiece only, for the "Delphin" Demand Valve	0.065	0.143	R 16678	
31	Diving Mask (Single Window)	0.230	0.507	T 3270	
32	Wooden Case for "Delphin" Demand Valve	0.820	1.808	R 16629	
	Accessories for all Models				
	Reservecylinder for working pressure of 200 kg/sq.cm (test pressure of 300 kg/sq.cm) with cylinder valve with standard connection screwed R 5/8" internal thread				
33	4-litre Compressed Air Cylinder (115 mm/4 1/2" diam.)	5.730	12.649	B 2591	
34	4-litre Compressed Air Cylinder (115 mm/4 1/2" diam.) with safety reserve switch	6.200	13.687	R 19409	
35	5-litre Compressed Air Cylinder (140 mm/5 1/2" diam.)	8.300	18.322	B 2521	
36	7-litre Compressed Air Cylinder (140 mm/5 1/2" diam.)	9.300	20.530	B 2610	
37	7-litre Compressed Air Cylinder (140 mm/5 1/2" diam.) with safety reserve switch	9.650	21.302	R 19410	
38	7-litre Compressed Air Cylinder (140 mm/5 1/2" diam.) with free passage cylinder valve	9.400	20.751	B 2611	
39	11-litre Compressed Air Cylinder (140 mm/5 1/2" diam.) with safety reserve switch	17.400	38.411	R 19412	
40	Test Pressure Gauge for Compressed Air, with Connection screwed 3/8" gas thread, Dial calibrated in atm. (k 16 638) with bag	0.300	0.661	R 19830	
41	Test Pressure Gauge for Compressed Air, with Clamp-Type Connector, Dial calibrated in p.s.i. and atm.	0.300	0.661	R 19606	
42	Adaptor for connecting a Demand Valve with Threaded Connector (German Standards) to Compressed Air Cylinders with Clamp-Type Connector	0.210	0.463	R 19560	
43	Intermediate Piece for Filling Compressed Air Cylinders with threaded Connection (German Standards) from Charging Units with Clamp-Type Connector	0.490	1.080	R 17113	
44	Weight Belt with Safety Quick-release Buckle and 4 detachable weights	4.160	9.171	R 16815	
45	Weight only, for Weight Belt If specially requested, Wooden Cases can be supplied for the Complete Sets	1.000	2.20	R 18262	

No.	Designation	Weight kg	Weight lbs.	Cat.No.	Price
46	**Swim Fins** Original Barakuda, Model, black	1.050	2.31	—	
47	**Depth Gauge** **Standard Model** in sea-water resistant Plastic Case; Dial, Figures and Pointer luminous				
	a) for 50 m (165 ') depth	0.087	0.19	DM 5 K 518 R	
	b) for 80 m (260 ') depth	0.087	0.19	DM 5 K 519 R	
	Also available:				
48	**Depth Gauge** **Standard Model, with Adjustable Pointer,** and for marking the maximum depth reached, with Zeroing Magnet, in sea-water resistant Plastic Case. Dial, Figures and Pointers luminous,				
	a) for 50 m (165 ') depth	0.090	0.20	DM 5 K 523 R	
	b) for 80 m (260 ') depth	0.090	0.20	DM 5 K 524 R	
49	**Depth Gauge with Liquid Compass** for directional orientation under water, in sea-water resistant Plastic Case; Dial, Figures and Pointers luminous				
	a) for 50 m (165 ') depth	0.094	0.21	DM 5 K 528 R	
	b) for 80 m (260 ') depth	0.094	0.21	DM 5 K 529 R	
50a	**Dräger Compressor Model DK 6000** maximum working pressure 225 atm. effective delivery: 5.1 cu.m/hr. (180 cu.ft/hr. or 3 cu.ft/min.) 4-stage, air-cooled, with Electric-motor Drive, mounted on cast-iron Base Plate, Control Panel with Motor Switch, Working Pressure Gauge with Turbine movement, 3 Water-drain Valves, Charging Unit with 4 Take-off Nipples with Manual Connector, 2 Relief Valves and Reversing Valve, Filter Unit for cleansing the air, comprising: Micronic Intake Filter, Intermediate Separator, Water and Oil-Separator, Ceramic Filter and 2 High-Pressure Oil Odour Filters	128	282	U 2555	
	b) as above, but with Petrol Engine	124	273	U 2570	
	Please write in for our prospectus 1711e.				
51	For Dräger Diving Suits, please write in for our special quotation or for our prospectus 2230 e.				

DRÄGERWERK | HEINR. & BERNH. DRÄGER | LÜBECK

GERMANY

Telegr. Addr.: draegerwerk luebeck

Telex No.: 026807

Telefon: 2 58 31

Printed in Germany

Graphische Werkstätten GmbH Lübeck 635 / 5000 5. 61 / **958**