

YACHT CATALOGUE FRS product catalogue

A safe journey with Dräger

Dräger. Technology for Life®

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Hoogvliet, 2023

ADVANTAGES

- ✓ Total FRS package
- ✓ Fast delivery
- ✓ 24/7, 365 days support
- ✓ Largest FRS product range
- ✓ Top quality
- ✓ Worldwide Dräger locations

SAFETY ON BOARD

Dräger Marine & Offshore has a long history of providing dedicated support to their customers, by supplying a wide range of quality products and services to a global audience for marine and offshore. This approach facilitates a Firefighting, Rescue and Safety (FRS) equipment and service capability from a single source. The Dräger Marine & Offshore organization is built around a proven total care FRS concept.

Wherever people or assets are subject to danger, those who are responsible for their safety rely on the firefighting, rescue and safety equipment from Dräger. Dräger Marine & Offshore has always recognized its responsibility as a supplier of safety systems and will continue to do everything we can to meet the needs of our customers, and keep Dräger customers safe.

ONE PARTNER FOR ALL FRS SOLUTIONS

Dräger Marine & Offshore offers a complete portfolio of firefighting, rescue and safety equipment, including service and maintenance.

Dräger realizes that products that are used to protect and save lives and minimise damage must function 100 percent.

We provide solutions for the Offshore, Sea Shipping, Barge and Inland shipping.

DEDICATED TO THE MARINE & OFFSHORE WORLD

Years of experience and highly trained and certified technicians make Dräger an authority on firefighting, rescue and safety projects for the marine and offshore. Our organization has a strong global presence and meets all of the requirements of high safety and quality standards.

Dräger Marine & Offshore is located at the center of the Port of Rotterdam and at major North Sea Oil & Gas ports which guarantees fast delivery of the FRS equipment and services. Dräger is available 24 hours a day, seven days a week and 365 days a year.

Meeting our customers needs is the cornerstone of our organization. We clearly understand that longlasting relationships are built upon mutual trust and proven reliability.

Dräger. Technology for Life®

MEETING YOUR NEEDS

Dräger Marine & Offshore specializes on sales and service in the field of firefighting, rescue and safety equipment. As part of the well known Dräger organi-sation we offer our customers first class products and support.

We feel responsible for all firefighting, rescue and safety equipment on board of your vessels and offshore installations. Our service portfolio consists of supply, installation and maintenance of FRS equipment.

DRÄGER MARINE & OFFSHORE OFFERS YOU

- one contact point for all firefighting, rescue and safety service
- a service organization and structure dedicated to the marine and offshore world
- service and support for both Dräger and non-Dräger equipment
- clear pricing structure for all services
- one invoice for all FRS services
- 90 days warranty on all services and repairs
- exchange equipment available during service to secure safety on board
- issuing of certificates on the services as a standard

24/7 AVAILABILITY 365 DAYS A YEAR

Our highly skilled service technicians are always there! We have a continuous working schedule. Whenever you visit our ports, our organization is standing by to support you.

ISSUING OF CERTIFICATES

When we service FRS equipment we ensure that the equipment is tested according to the manufacturer's requirements and appropriate regulations.

RENTAL EQUIPMENT

Via a rental pool Dräger makes all the safety-relevant equipment required (during shutdown) available to you, from communications technology or gas detection devices to personal protection equipment.

ON BOARD SERVICE

Our field service engineers are fully equipped to help you on site. Trained, skilled and ready to service all portable firefighting equipment, fixed fire suppression, smoke detection and gas detection systems. These services will be carried out onboard wherever possible. If equipment requires repair, refilling, hydrostatic pressure testing or if computerized diagnostic equipment is required we will transport the equipment to our workshop. Of course we will provide adequate exchange equipment wherever possible to ensure the safety onboard during the service period.

FRS WORKSHOPS

Our workshop technicians use modern technology to test, refill and repair your FRS equipment. Modern diagnostic equipment ensures rapid and reliable elimination of all malfunctions in safety equipment. Certified calibration and test gases make the service on your gas detection equipment both traceable and auditable.

SPARE PARTS

We stock a wide range of parts for the FRS products most commonly used onboard of global, commercial marine vessels. We service for both Dräger and non-Dräger equipment; from fire extinguishers to self contained breathing apparatus; from portable gas detectors to life jackets.

CLASS SURVEYOR

We are in close contact with all major classification organisations. If our service requires a Class witness we will contact the relevant Class surveyor and invite them to attend and verify the inspection.

QUALIFIED MAINTENANCE

Our Total Care Offshore and Marine Service is a service strategy with a vision. The basis of this vision lies in the quality of our people and organization. To be able to offer high quality service from a single source we invest in qualified technicians, modern workshops together with our back office and logistics teams.

BASIC INSPECTION

The basic inspection forms the heart of our services. The basic inspection contains all activities you should expect from quality maintenance.

The price for the basic inspection will cover the inspection and testing of the equipment according to the applicable test procedures. It will cover the administrative activities like registration, service labels and anti-tamper tags. And finally it will cover for the certification and the issuing of the paperwork. If the equipment is in serviceable condition and no mandatory replacements are required then the basic inspection is all you pay for.

REFILLING

In a number of situations refilling is part of the mandatory maintenance schedule.

To provide quality maintenance you must have the right equipment and service providers to fulfill this vital task. Our workshops are fully equipped to refill the following equipment:

- Breathing air cylinders according to EN12021
- Medical Oxygen cylinders up to 200 or 300 bar filling pressure
- Nitrogen bottles up to 200 bar
- Dry powder extinguishers; ABC or AB powder
- Fixed dry powder installation
- CO2 extinguishers and CO2 bottles from the CO2 installation
- Foam extinguishers; AFFF or AB fillings
- Fixed foam installations
- Fire suppression systems FM200, foam, water etc.

HYDROSTATIC PRESSURE TESTING

Hydraulic pressure testing is a mandatory requirement for fire extinguishers, CO2 installations and breathing air or Oxygen cylinders. Performing a correct hydrostatic test requires the right equipment and the technicians who are skilled in performing its use. Our technicians and equipment live up to these expectations. We are able to hydrostatically test all equipment promptly in combination with our refilling capacity without causing delay in your normal port schedule.

REPAIRS

A key component of providing quality maintenance is the ability to affect repairs. Our technicians are trained to fulfill this challenge. To support our customers our personnel are qualified fire technicians, trained breathing protection and gas detection experts and educated in the service on lifesaving products. In combination with our large spare part stock and the ability to supply replacement products from our warehouse; we ensure that we repair your fire fighting, rescue and safety equipment promptly and on a level you should expect from a quality maintenance provider.

WARRANTY

As evidence of our high quality we offer a unique warranty on service. On all of our service and repairs we provide warranty of 90 days subject to terms and conditions. On new products we will provide a limited warranty of 12 months.

FLEXIBLE SERVICE AGREEMENTS

Total Care means that we feel ourselves responsible for all firefighting, rescue and safety equipment on board of your vessels and offshore installation. Our service portfolio consists of supply, installation and maintenance of FRS equipment.

TOTAL CARE SERVICES

Firefighting

- Inspection of all types fire extinguishers
- Inspection fixed fire suppression systems CO2 / DP / Foam / FM200 / FS49C2
- Repair / Refill / hydro testing
- Spares for extinguishers & systems on stock
- Foam sample analyses

Rescue

- Inspection of all brands and types of life rafts
- Inspection of rescue boats & davits
- Inspection of lifejackets & immersion suits
- Inspection of hospital rescusitation
- Refill / hydro testing of oxygen bottles

Safety

- Inspection of breathing protection & EEBD's
- Calibration of gas detectors & fixed system
- Refill / hydro testing of air cylinders
- Inspection / repair of air compressors
- Inspection of gas tight chemical suits
- Inspection of temperature & pressure equipment
- Inspection of UTI & MMC

Drägers product and service portfolio meets our customers needs by extensive support by representa-tives and service experts who are dedicated to the marine and offshore world.

FACTS AND FIGURES

- 25 cars for service transport
- 2x mobile inspection stations for extinguishers
- 1x mobile inspection station for BA sets
- > 1.000 inspections of fire extinguishers
- > 6.000 calibrations of gas detectors
- > 3.500 inspections of BA and escape sets
- > 250 testing of gastight suits
- > 7.000 cleaning / disinfecting of face masks
- > 2.000 inspections on inflatable life jackets
- > 2.500.00 liters of air refill

QUALITY, SAFETY AND LIABILITY

QUALITY

We guarantee that the offered services are performed to the very highest standards. The quality of our work and our organization is safeguarded by certified Quality Management Systems ISO 9001:2000, ISO14001 and OHSAS18001.

During a contract period Dräger always commits itself to keep the Quality Management System certified and valid. In addition, we welcome an audit by your quality manager at any time.

SAFETY

Safety on board is a key consideration for all professional operators. It is therefore reassuring that our service technicians are all in possession of a basic safety certificate. They understand the possible risks on board and they know what is expected from them to ensure the safety for themselves, your crew and your assets.

Our safety management system ensures that our procedures and our behavior are regularly monitored and adjusted where required. Of course it is possible to audit our safety system. Please ask your safety manager to contact us at any time to make an appointment.

LIABILITY INSURANCE

As part of the world wide operating Dräger group (www.draeger.com) our organization is in possession of a liability insurance which cover our activities. On request we can sent you a copy of the insurance policy.

CUSTOMER SATISFACTION

We are your Fire fighting, Rescue and Safety partner who will provide solutions to meet your needs. We clearly understand that longlasting relationships are built upon mutual trust and proven reliability. Therefore customer satisfaction is a key performance indicator for us.

We constantly monitor our customer satisfaction level and strive to improve our performance, our procedures and general behavior based on your feedback. We have a procedure in place which offers you the opportunity to share your suggestions and/or concerns.

SKILLED TECHNICIANS

Employees are trained and skilled, our services will meet the required standards and regulations of all major class societies such as:

- Lloyds
- DNV
- BV
- GL
- ABS
- RINA
- RMRS

Offshore teams are trained according to NOGEPA (NL) / OPITO (UK) / OLF (NO).

MEMBERSHIPS

Dräger Marine & Offshore is a FPAL certified supplier and registered on Shipserv.

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Dräger calibration and bump testing

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Dräger 9 liter AB composite foam extinguisher (stored pressure)

The revolution in portable fire extinguishers: composite extinguishers are the latest development in the quest for durable corrosion resistant and low maintenance extinguishers. The extinguishers have EN3, CE and MED certification and a lifetime of 20 years. Another unique feature: the extinguishing medium in these units needs to be replaced every 10 years as per manufacturer specification. Foam extinguishers cover type A and B fires.

General description

The red outer HDPE mantle houses a pressure vessel which is manufactured out of HDPE. The valve is supplied in nickle plated brass. Hose clips, squeeze for action handle and carrying handle are supplied in stainless steel. Due to these material and construction choices replacement of the extinguisher caused by corrosion, scratches and dents belong to the past. Resulting into lower lifetime costs. In addition the extinguisher will remain in good condition, offering greater reliability for the user when being deployed in firefighting tasks. These extinguishers are 100% recyclable, reducing waste output at the end of its service life.

AB foam

AB foam is suitable for fire extinguishing of substances in fire class A (containing carbons) and fire class B (flammable liquids). An additional feature is that the foam is not

conductive to electricity. The foam can be used to a maximum voltage of 1000 V and at a distance of at least 1 meter.

Applications

These extinguishers are extremely suitable for harsh (outdoor, saline) conditions as found on offshore installations, marine application, yachts and moist (production) spaces.

Features

- 10 year manufacturer guarantee
- replacement of foam once every 10 years
- durable and corrosion free
- reliable and ultra-strong composite material
- 100% UV resistant
- \pm 15% lighter than conventional extinguishers
- cost reducing
- better overview of cost control
- environmentally friendly
- 100% recyclable product

TECHNICAL SPECIFICATIONS

| Manufacturer / Model | Britannia / P50-9F |
|-----------------------------------|-------------------------------------|
| Extinguisher | Portable foam fire extinguisher |
| Туре | Stored pressure operated |
| Capacity | 9 liter |
| Fire class / Rating | 34A/183B |
| Propellant gas | Nitrogen |
| Discharge time | 49 seconds |
| Throw length | 7 meters |
| Working pressure | 12 bar |
| Suitable for electrical equipment | Up to 1000 Volt |
| Extinguishing agent | Foam |
| Temperature range | +5°C to +60°C |
| Approx gross weight | 11.7 kgs |
| Approx dispatch weight | 12.7 kgs |
| Approx unit dimension | 640 x 210 mm (H x D) |
| Color | Red (RAL3000) |
| Approvals | EN3, MED, CE, Rijkskeurmerk 2212/01 |
| | |



Dräger 9 liter AB composite foam

extinguisher

Stored pressure

Dräger 9 liter AB composite foam extinguisher (stored pressure)

| Description | Unit Sales | Articlenr | | Price |
|---|------------|-----------|---|--------|
| Dräger 9 liter AB composite foam extinguisher (stored pressure) | 1 | 01170221 | € | 139,00 |
| Bracket for Composite powder extinguisher | 1 | SG00335 | € | 40,40 |
| Cover for fire extinguisher | 1 | SG00322 | € | 50,30 |
| GRP storage cabinet: DMO-35 | 1 | SG02030 | € | 429,70 |
| Polyethylene fire extinguisher cabinet JBWE-70, red door | 1 | SG02423 | € | 136,35 |

Dräger 6 liter AB composite foam extinguisher (stored pressure)

The revolution in portable fire extinguishers: composite extinguishers are the latest development in the quest for durable corrosion resistant and low maintenance extinguishers. The extinguishers have EN3, CE and MED certification and a lifetime of 20 years. Another unique feature: the extinguishing medium in these units needs to be replaced every 10 years as per manufacturer specification. Foam extinguishers cover type A and B fires.

General description

The red outer HDPE mantle houses a pressure vessel which is manufactured out of HDPE. The valve is supplied in nickle plated brass. Hose clips, squeeze for action handle and carrying handle are supplied in stainless steel. Due to these material and construction choices replacement of the extinguisher caused by corrosion, scratches and dents belong to the past. Resulting into lower lifetime costs. In addition the extinguisher will remain in good condition, offering greater reliability for the user when being deployed in firefighting tasks. These extinguishers are 100% recyclable, reducing waste output at the end of its service life.

AB foam

AB foam is suitable for fire extinguishing of substances in fire class A (containing carbons) and fire class B (flammable liquids). An additional feature is that the foam is not conductive to electricity. The foam can be used to a maximum voltage of 1000 V and at a distance of at least 1 meter.

Applications

These extinguishers are extremely suitable for harsh (outdoor, saline) conditions as found on offshore installations, yachts marine application and moist (production) spaces.

Features

- 10 year manufacturer guarantee
- replacement of foam once every 10 years
- durable and corrosion free
- reliable and ultra-strong composite material
- 100% UV resistant
- ± 15% lighter than conventional extinguishers
- cost reducing
- better overview of cost control
- environmentally friendly
- 100% recyclable product

TECHNICAL SPECIFICATIONS

| Manufacturer / Model | Britannia / P50FM |
|-----------------------------------|----------------------------------|
| Extinguisher | Portable foam fire extinguisher |
| Туре | Stored pressure operated |
| Capacity | 6 liter |
| Fire class / Rating | 27A/183B |
| Propellant gas | Nitrogen |
| Discharge time | 40 seconds |
| Throw length | 4 meters |
| Working pressure | 12 bar |
| Suitable for electrical equipment | Up to 1000 Volt |
| Extinguishing agent | Foam |
| Temperature range | +5°C to +60°C |
| Approx gross weight | 8.5 kgs |
| Approx dispatch weight | 9 kgs |
| Approx unit dimension | 178 x 570 mm (d x h) |
| Color | Red (RAL3000) |
| Approvals | EN3, MED, CE, Rijkskeurmerk 2212 |



Dräger 6 liter AB composite foam extinguisher

Stored pressure

P. 7

Dräger 6 liter AB composite foam extinguisher (stored pressure)

| Description | Unit Sales | Articlenr | | Price |
|---|------------|-----------|---|--------|
| Dräger 6 liter AB composite foam extinguisher (stored pressure) | 1 | 01170210 | € | 159,05 |
| Bracket for Composite powder extinguisher | 1 | SG00335 | € | 40,40 |
| Cover for fire extinguisher | 1 | SG00322 | € | 50,30 |
| GRP storage cabinet: DMO-35 | 1 | SG02030 | € | 429,70 |
| Polyethylene fire extinguisher cabinet JBWE-70, red door | 1 | SG02423 | € | 136,35 |

Dräger 6 kgs ABC composite powder extinguisher (stored pressure)

The revolution in portable fire extinguishers: composite extinguishers are the latest development in the quest for durable corrosion resistant and low maintenance extinguishers. The extinguishers have EN3, CE and MED certification and a lifetime of 20 years.



Dräger 6 kgs ABC composite powder extinguisher Stored pressure

General description

The red outer HDPE mantle houses a pressure vessel which is manufactured out of HDPE. The valve is supplied in nickle plated brass. Hose clips, squeeze for action handle and carrying handle are supplied in stainless steel. Due to these material and construction choices replacement of the extinguisher caused by corrosion, scratches and dents belong to the past. Resulting into lower lifetime costs. In addition the extinguisher will remain in good condition, offering greater reliability for the user when being deployed in firefighting tasks. These extinguishers are 100% recyclable, reducing waste output at the end of its service life.

ABC Powder

ABC-powder is suitable for fire extinguishing of substances in fire class A (containing carbons), fire class B (flammable liquids) and fire class C (flammable gases). An additional feature is that the powder is not conductive to electricity. The powder can be used to a maximum voltage of 1000V and at a distance of at least 1 meter.

Applications

These extinguishers are extremely suitable for harsh (outdoor, saline) conditions as found on offshore installations, marine application and moist (production) spaces.

Features

- 10 year manufacturer guarantee
- durable and corrosion free
- reliable and ultra-strong composite material
- 100% UV resistant
- ± 15% lighter than conventional extinguishers
- cost reducing
- better overview of cost control
- environmentally friendly
- 100% recyclable product

TECHNICAL SPECIFICATIONS

| Marco Caral and A Mardal | |
|-----------------------------------|-----------------------------------|
| Manufacturer / Model | Britannia / P50PM |
| Extinguisher | Portable powder fire extinguisher |
| Туре | Stored pressure operated |
| Capacity | 6 kgs |
| Fire class / Rating | 34A/183B |
| Propellant gas | Nitrogen |
| Discharge time | 20 seconds |
| Throw length | 5 meters |
| Working pressure | 12 bar |
| Suitable for electrical equipment | Up to 1000 Volt |
| Extinguishing agent | ABC powder |
| Temperature range | -20°C to +60°C |
| Approx gross weight | 8.5 kgs |
| Approx dispatch weight | 9 kgs |
| Approx unit dimension | 178 x 570 mm (d x h) |
| Color | Red (RAL3000) |
| Approvals | EN3, MED, CE, Rijkskeurmerk 2211 |
| | |

Dräger 6 kgs ABC composite powder extinguisher (stored pres-

| Description | Unit Sales | Articlenr | | Price |
|--|------------|-----------|---|--------|
| Dräger 6 kgs ABC composite powder extinguisher (stored pressure) | 1 | SG00163 | € | 159,15 |
| Bracket for Composite powder extinguisher | 1 | SG00335 | € | 40,40 |
| Cover for fire extinguisher | 1 | SG00322 | € | 50,30 |
| GRP storage cabinet: DMO-35 | 1 | SG02030 | € | 429,70 |
| Polyethylene fire extinguisher cabinet JBWE-70, red door | 1 | SG02423 | € | 136,35 |

Dräger High Quality Fire Hose

The lay-flat fire hoses are extremely durable and very flexible to use. This hose is suitable for intensive firefighting. This extruded hoses are resistant to oil, gasoline, salt solutions, acids and chemicals.



Dräger high quality fire hose Good protection against ozone and atmospheric weathering

Applications

For intensive use.

Features

The high quality hose made of PVC nitrile, has an ozone, chemicals and acids resistant layer. The burst pressure is 50 bar. The rubber liner on the inside is "extruded" with the outside. The standard length is 20 meters. Standard available with Storz pillars and in the color red. Other colors and/or columns on request.

Life span

Hoses are available in different qualities. Before purchasing, keep the usage frequency in mind. This will determine the life span of the hose. The Polydur has a long life.

Hose Bridge

If hoses are placed on a road, they can be protected by placing them in a snake bridge. This will protect the hose and vehicles are able to pass.

TECHNICAL SPECIFICATIONS

| Туре | Polydur |
|--------------------|--|
| Material | 100% high tenacity synthetic yarn circular woven |
| Temperature | -35°C to +100°C |
| Working pressure | 17 bar |
| Burtsting pressure | 50 bar |
| Diameter | Ø 52 mm |
| Length | Standard: 20 meters |
| | Other lengths on request |
| Approvals | DIN 14811 Class 3, BS 6391:1983 Type III, MED 96/98/EC SBG*, Russian Maritime Register |

| Description | Unit Sales | Articlenr | | Price |
|--|------------|-----------|---|--------|
| Storz - Pro / LM / N66 / 2,0" 20 meter, Red | 1 | SG00642 | € | 290,70 |
| Storz - Pro / LM / N66 / 2" 15 meter, Red | 1 | 02120079 | € | 152,95 |
| Storz - Pro / MS / N81 / 2" 20 meter, Red | 1 | SG00667 | € | 416,25 |
| Storz - Pro / LM / N81 / 2" 5 meter, Red | 1 | 02120085 | € | 89,35 |
| Storz - Pro / LM / N81 / 2,0" 20 meter, Red | 1 | SG00662 | € | 275,80 |
| Storz - Pro / LM / N81 / 2,5" 20 meter, Red | 1 | SG00663 | € | 350,00 |
| Storz - Pro / LM / N81 / 3,0" 20 meter, Red | 1 | SG00664 | € | 387,55 |
| Storz - Pro / Instantaneous BA /2" 20 meter, Red | 1 | 02120088 | € | 272,50 |
| Storz - Pro / MS / N66 /2" 20 meter | 1 | 02120092 | € | 224,25 |
| Storz - Pro / MS / N66 /2" 20 meter, Blue | 1 | 02120096 | € | 231,60 |
| Storz - Pro / MS / N66 /2" 30 meter, Blue | 1 | 02120097 | € | 310,85 |
| Storz - Pro / USPIN 1.1 / 2" 20 meter | 1 | 02120100 | € | 187,45 |

POK 400 Spray Nozzle

We believe that POK products have the ability to provide firefighters all over the world the proper tools to save lives and to minimize property damage.



POK 400 DIN Spray Nozzle Tough construction

POK nozzles are quality products that have been thoroughly tested. They meet the current standards and requirements of the daily (professional) user. Both standard and specialized nozzles are included in the range. Depending on the application, on-site use, performance, characteristics and manufacturing material, the appropriate nozzle is to be chosen. The final result of POK products comes after extensive testing of the products in consultation with users. This ensures that POK products meet the highest quality and usability.

Features

- tough anodized aluminium constructionswivel inlet
- swiver inter
- compact size for easy stowage
- meets the needs of Forestry and Rural Fire brigades where water conservation is desirable
- multi flow selection
- pattern detents for positive positioning
- change flow without changing pattern and flush without shutting down
- excellent for application of A class foam
- new inlet filter mesh prevents blockages caused by stones
- each nozzle etched with a unique serial number for identification

TECHNICAL SPECIFICATIONS

| Material | Aliminium alloy, stainless steel |
|------------|-----------------------------------|
| Spray | 10 m, full jet, spray 110°, flush |
| Full stray | 34 meters |
| Connection | G2"A |
| Adjustable | 60, 130, 250, 400 I/min at 6 bar |
| Approvals | DIN 14367, DIN 14367-6-400-3-C |

| Description | Unit Sales | Articlenr | Price |
|--|------------|-----------|----------|
| POK: Debikador Spray Nozzle 400 - 2" DIN-14367 | 1 | SG01021 | € 588,50 |

POK Mixy Eductor

Body manufactures in bronze with an inlet filter metering valve 0 to 6% with by-pass. The pick up tube needs to be ordered separately.



Features

The foam mixer works on the Venturi principle. The water pressure in the state, creates a vacuum that causes the suction of the liquid. The device has a check valve ball which prevents any return of water into the tank of foam concentrate. A dispenser valve allows you to adjust the proportion of water / foam from 0% to 6%.

A valve device ensures constant mixing rates, even when the pressure varies.

POK Mixy Eductor

Tough construction

TECHNICAL SPECIFICATIONS

| Setting aspiration | 0 - 6% |
|--------------------|---|
| Pressure drop | 35% |
| Capacity | 200 liters, 400 liters or 800 liters per minute |

| Description | Unit Sales | Articlenr | | Price |
|---|------------|-----------|---|--------|
| POK Mixy Eductor, 200 liter p/m, excluding coupling | 1 | SG01101 | € | 401,95 |
| POK Mixy Eductor, 400 liter p/m, excluding coupling | 1 | SG01102 | € | 440,20 |
| POK Mixy Eductor, 800 liter p/m, excluding coupling | 1 | SG01203 | € | 900,70 |
| Pick up tube, 1.5 meters LM-N31 including suction bar | 1 | SG01211 | € | 75,40 |
| Pick up tube, 1.5 meters LM-N31 excluding suction bar | 1 | SG01212 | € | 18,20 |

Delta Low Expansion Foam HV225 / S

Delta's "V" range of foam branch pipes are designed for the foams of the late '90s. All purpose alcohol resistant, FFFP and AFFF foams.



Delta HV225 Branch pipe

Self inducing models

General information

The new style branch pipe is designed to first expand the foam and then accelerate it to high velocity producing long throws beyond the capability of many older designs.

Delta's branch pipes are designed to match Delta variable inline foam inductors or equivalent types.

Features

- long throw
- self inducing models
- designed for all new technology foams
- all international inlets

- dot/Lloyds certified
- optional on/off ball valve available

Construction

- body: Light Alloy internally and externally powder coat
- finish: Epoxy Polyester International Orange
- nozzle: Light Alloy
- inlet: HV 2" BSP Male

A wide range of International fittings are available as an option.

Self inducing models are supplied with quick release pick-up and stainless steel dip tube.

TECHNICAL SPECIFICATIONS

| Nominal flow (L/min) | 5 bar - 200 | |
|-------------------------|--|--|
| | | |
| | 7 bar - 225 | |
| Foam Expansion | 6-10 | |
| Range (metres) at 7 Bar | 18-22 | |
| Length | 740 mm | |
| Weight | 2.2 kgs | |
| Approvals | Lloyds certified and D.O.T. approved (M.S.A.) for marine use | |

| Description | Unit Sales | Articlenr | | Price |
|------------------------------------|------------|-----------|---|--------|
| Delta Low expansion foam HV225 / S | 1 | SG01041 | € | 596,90 |

Dräger Nomex Fireman's Suit

Dräger would like to present its new line of firefighting clothes designed to the highest standards with one thing in mind: the firefighter. The new suit is the result of a close study of technical key features and usability of suits that are currently available in the market: the suit has been improved on eight key features as compared to the most readily available suits. Providing a safe barrier "between human will and fire's forces".

Radiation heat barrier

A Kermel fleece that provides excellent thermal protection, these very thin layers found inside the layer concept, minimise the amount of water that can replace the critical insulation air space in the garment.

Membrane

A Hi-Tech polyurethane membrane coated on the outer radiation heat barrier. Ensures exceptional breathable characteristics and unmatched durability. Up to a temperature of 380°C, this membrane gives a good protection against heat and chemicals and will not melt.

Liner

A combination of Nomex and Viscose. The Nomex thread of this special weave method with the 2,5% Kevlar makes the liner strong. The fire retardant Viscose thread provides comfort and transports moisture to the outside of the liner. The multi-layer configuration ensures that each layer accomplishes its part of the job.

Air layers and thermal barriers

The protective value of the "ESS® 5 layer system" in combination with the fabric composite is found in the air between the fire fighter and the heat source. Air itself is the greatest single source of insulation qualities in protective clothing. Sandwiching stitching inside the facing cloth is therefore never used. All the layers are not stitched to each other; this improves the thermal insulation value (TPP) by protecting the moisture barrier and creating multiple air spaces between the very thin layers.

Comfort

The used layer system creates a lightweight, durable and highly comfortable garment without compromises to the suits protective features.

Quick Release Breakaway Zippers

Specially designed for military, firefighter and chemical suits. Ideal for situations where it's desirable to tear the zipper open without having to move the zipper all the way back.

Anti Aqua

High-Tech coated polyester fabric in sleeves, trouser legs, storm flap, back piece and pocket flaps. Prevents water and chemicals to easily enter the lining of the suit.

Eyelets

To quickly drain fluids from the suits pockets.

External padding

The suit features external protective pads on the knees and the elbows. Most other suits have their padding installed on the inside of the pants and do not use padding for elbows. Using padding for both elbows and knees increases user comfort. In addition using padding on the outside helps to protect the suit from damages on its most fragile parts.

Rounded pocket flaps

By using rounded pocket flaps the chances of being caught behind protruding parts when in action are reduced. In addition the rounding of the corners reduces wear and tear on the fabric in everyday use.

TECHNICAL SPECIFICATIONS

| Type of material | NOMEX® III, 220 g/m ² |
|------------------|---|
| Inner material | Jacket and trouser: NOMEX, 93% Meta-Aramide, 5% Para-Aramide, 2% Static Control Stitching: NOMEX Liner: NOMEX fleece (heat barrier), NOMEX fleece eith Hi-Tech PU breathable membrane, NOMEX viscose FR lining |



Dräger Nomex Fireman's Suit

A lightweight, durable and highly comfortable suit

Dräger Nomex Fireman's Suit

| Pockets | Jacket: Two side pockets with flaps, one inside pocket and one radio pocket on each chest Trousers: 2 |
|-----------|---|
| | box pockets on thighs. Inverse pocket in both sides |
| Color | Orange with reflective striping |
| Sizes | S - XXL |
| Approvals | EN469:2005, MED |

| Description | Unit Sales | Articlenr | | Price |
|---------------------------------------|------------|-----------|---|--------|
| Dräger Nomex Fireman's Suit, size S | 1 | SG03701 | € | 861,15 |
| Dräger Nomex Fireman's Suit, size M | 1 | SG03702 | € | 861,15 |
| Dräger Nomex Fireman's Suit, size L | 1 | SG03703 | € | 861,15 |
| Dräger Nomex Fireman's Suit, size XL | 1 | SG03704 | € | 861,15 |
| Dräger Nomex Fireman's Suit, size XXL | 1 | SG03705 | € | 904,30 |

Dräger PSS 7000



Dräger PSS 7000 For professional fire fighting

Developed by professionals for professionals the new Dräger PSS 7000 represents a major leap forward in the evolution of breathing apparatus for the professional fire fighter.

Design

The Dräger PSS 7000 is the result of Dräger's ongoing commitment to providing professional fire fighters with state of the art, world class breathing apparatus. A key measure of the performance of breathing apparatus is the degree to which it provides confidence and safety to the user during operational use.

The new harness is a key feature of the Dräger PSS 7000. The advanced compression moulded comfort padding combines high temperature performance, exceptional wear resistance and a high grip anti-slip surface ensures the harness remains in position and the set remains secure on the body.

Ergonomics

Ergonomic design is an important feature as it is essential in ensuring that the fire fighter can carry out the task at hand safely and effectively and with minimum effort. The Dräger PSS 7000 incorporates a range of features which together maximize comfort and minimize stress and fatigue resulting in the highest level of safety and confidence.

Durability and safety

Fire fighters and their protective equipment are routinely faced with hostile environments where they are exposed to extreme temperatures and/or chemicals. To provide the safety and protection required the Dräger PSS 7000 uses the most advanced materials and pneumatics which are proven in the field and come together to ensure long life and enduring reliability.

Care and maintenance

Simple and easy maintenance guarantee quick turnaround times in the workshop and ensure that your breathing apparatus is always ready for use. The Dräger PSS 7000 design incorporates a host of features which facilitate easy cleaning and decontamination and quick assembly and disassembly of all major components.

| Weight of complete set | approx 11.9 kgs, for Dräger PSS 7000 pneumatic gauge |
|---|---|
| | Complete with Dräger FPS 7000 facemask, lung demand valve and Dräger 6.8 litre 300 bar carbon |
| | composite cylinder (20 year design life) |
| Input Pressure | 200 or 300 bar |
| Normal 1st stage output pressure | 8 bar |
| 1st stage output flow | > 1000 l/min |
| High pressure whistle activation pressure | 50 - 60 bar |
| Whistle sound level | >90 dBa |
| Whistle frequency range | 2000 - 4000 Hz |
| Bodyguard sound level | N/A |
| Operating temperature range | -32°C up to + 70°C |
| Approvals | EN137; 2006 Type 2 vfdb 0802 |
| | Atex I M 1 / II 1 GD IIC T6 (Ta -30°C to +60°C): |
| | for the Dräger PSS 7000 and Dräger Panorama Nova masks with triplex visor |
| | Atex I M 1 / II 1 GD IIB T6 (Ta -30°C to +60°C): |
| | for Dräger PSS 7000 with all other Dräger Safety breathing apparatus masks |

TECHNICAL SPECIFICATIONS

Dräger PSS 7000

| Description | Unit Sales | Articlenr | Price |
|--|------------|-----------|------------|
| Dräger PSS 7000 with standard cylinder strap | 1 | 3355068 | € 1.947,00 |
| Dräger breathing apparatus S Plus | 1 | 3338700 | € 427,00 |
| Lung Demand Standard type P | 1 | 3357527 | € 34,75 |

Dräger PSS[®] AirBoss

The Dräger PSS® AirBoss offers best in class ergonomics and is one of the lightest weight breathing apparatus for firefighting. Lessons learned from firefighters around the world as well as latest innovations in technology have led us to design an even safer and cleaner SCBA system to enable you to breathe more easily and for longer.



Dräger PSS® AirBoss Best in class ergonomics

Excellent fit

The PSS[®] AirBoss ergonomics significantly reduce the physical strain associated with carrying SCBAs. Some key features include height-adjustment, a pivoting and sliding waist belt, and easily adjustable harness to fit every shape and size of firefighter. The durable space frame design offers you a low weight and low profile all the while maintaining the SCBA's centre of gravity in an optimum position for greater weight distribution. Due to its low weight and class leading ergonomics, you benefit from reduced stress and fatigue which leads to lower air consumption. Moreover, the PSS® AirBoss offers different routing options for the LDV, gauge, and rescue hoses over each shoulder and waist belt to provide you with your preferred fit. The easy to connect reducer handwheel simplifies cylinder removal and fitting. A cylinder Quick Connect option further shortens the time for cylinder changeouts. Our universal cylinder strap allows single or twin cylinder configurations. For a fast cylinder exchange, we developed a new universal cylinder strap and buckle which also keeps your SCBA in a secure position. This conveniently offers you the option of single and twin cylinders using a single system for extended duration operations.

Enhanced safety

The PSS® AirBoss comes with large reflective surfaces, thus increasing firefighters' visibility as well as making it easier to locate team members in distress. When you equip the PSS® AirBoss with a Personal Alert Safety System (PASS), it further increases this effect. It positions buddy lights at the front and back of the SCBA. Furthermore, the PASS draws attention to firefighters in distress by generating distinctive visual and acoustic alert signals - e.g. after a fall or impact, when motionless, when reaching lowair, experiencing high thermal stress or activating the manual distress signal. Next to the wearer's position, the buddy lights can also indicate the remaining pressure of the air cylinder by emitting different colours, giving team members critical information at a glance. The PASS' automatic switch on feature

activates upon cylinder opening – so its activation cannot be forgotten. To improve your safety, we also designed an integrated anti-entanglement system to help prevent wires and cables from getting snagged between the cylinder and backplate. In addition, the PSS® AirBoss is equipped with grab handles for firefighter extraction and rescue. The PSS® AirBoss can additionally be equipped with a Heads-up display. Always within the field of view – the Heads-Up-Display gives firefighters continuous handsfree information of air consumption, therefore enabling you to have an uninterrupted operation.

Automatic Accountability System

Our state-of-the-art automatic accountability system, Dräger FireGround, supplies the incident commanders (IC) with live information from SCBA wearers –making sure that all SCBA wearers are accounted for at every incident. The Dräger FireGround gives ICs, an additional, non-verbal means of communication with their team. The PSS® AirBoss can be equipped with a built-in radio for data transmission – connecting each wearer to the Dräger FireGround. To find more detailed information about our automatic accountability system, please see our separate Dräger FireGround brochure or the infographic below.

Data logging

The PSS® AirBoss' PASS devices are equipped with a data logger that automatically logs alerts, air pressure, battery status and other vital information. Furthermore, this data as well as the entry control officer's notes and other information are logged in Dräger FireGround. This multi-stage data logging makes it simple for you to record and access post incident reviews in all circumstances.

Bluetooth capability

Driven by forward-thinking technology, we have engineered the PSS® AirBoss Connect with a Bluetooth interface, in order to ensure that the foundations are set for future compatibility to upcoming Dräger innovations.

Dräger PSS® AirBoss

Easy to clean

The PSS® AirBoss uses low-absorbent and liquid repellent harness materials which takes on less contaminants. Its overall streamlined design minimises dirt traps – making the SCBA extremely easy to clean. Furthermore, the complete SCBA is machine washable, and the Dräger cleaning process is backed up by Dräger's warranty. For you it means a significant decrease in equipment downtime.

Simplified processes

All key components are equipped with RFID tags to help the workshop technician maintain asset management and support quick turnarounds. The key components of the PSS® AirBoss are quickly and easily disassembled for service without the need to use tools due to its Plug & Play design. To save you time prior to operations, we included a new electronic high-pressure leak test that ensures operational readiness and reduces air consumption during daily checks.

Flexible battery logistics

Depending on the type of PASS device you choose to add, the PSS® AirBoss is powered by primary power cells or rechargeable batteries. In stand-alone operation, the primary power cells have a one-year lifetime and should be exchanged with every annual SCBA test. If the automatic accountability system FireGround is used, the battery life goes down to approx. 6 months. The rechargeable batteries can be charged while the SCBA is mounted inside the fire engine or separately in a desk-top charger.

Available in three standard configurations

- PSS[®] AirBoss Active with a mechanical gauge gives you the lowest weight and simplicity.
- PSS[®] AirBoss Agile with an integrated PASS device offers you increased safety features.
- PSS[®] AirBoss Connect with advanced sensors and compatibility with Dräger FireGround offers you maximum situational awareness.

TECHNICAL SPECIFICATIONS

| Weight of complete set | Dräger Airboss Active: 11.9 kgs |
|--|--|
| | Dräger Airboss Agile: 12.3 kgs |
| | Dräger Airboss Connect: 12.6 kgs |
| | Weight of complete set with Dräger FPS® 7000 facemask, lung demand valve and 6.8 litre Dräge |
| | NANO cylinder |
| Input pressure (bar) | 0 - 300 bar for all three models |
| Normal 1st stage output pressure | 7.5 for alle three models |
| 1st stage output flow (I/min) | > 1.000 |
| Download the datasheet for more Technica | al Information |

| Description | Unit Sales | Articlenr | Price |
|----------------------------|------------|-----------|------------|
| Dräger Airboss Active, SCS | 1 | 3709501 | € 1.958,00 |

Dräger FPS 7000

The Dräger FPS 7000 full-face mask series sets new standards in terms of safety and wearing comfort. Thanks to its newly designed ergonomics and the availability of multiple sizes, it offers a large, optimized field of vision and a very comfortable, secure fit.



Dräger FPS 7000 Large field of vision

Field of vision and mask body

The new full-face mask Dräger FPS 7000 has a large distortion-free polycarbonate visor, which provides you with an exceptional wide field of vision, even in difficult situations. The visor does not mist due to a well thought-out air circulation and is available with different coatings. The mask body made of either hypoallergenic Silicone or EPDM provides an especially comfortable fit.

Fit

The full-face mask Dräger FPS 7000 has an outstanding head and face fit. The ergonomic head harness and the double sealing line ensure a secure and comfortable fit on all face shapes and contours. The head harness of the Dräger FPS 7000 also ensures that the mask can be donned and doffed easily and quickly.

Mask-helmet combination

For those who use mask-helmet combinations the newly developed adapter offers a new level of safety. For example, when combining the Dräger HPS 6200 / 7000 with the new full-face mask, the newly developed and patented Dräger Q-fix connection prevents the unintentional release of the attachment. Integrated accessories The newly developed communication system Dräger FPS-COM optimally adapts to the design and ergonomics of the mask. Depending on what is required, it can be chosen with different modules and offers the optimal solution for each communication in the field. Whether radio, voice, amplifier or head-up display, everything can be directly integrated into the mask and is easy to use.

Modularity

Naturally, Dräger Safety pays close attention to our customers needs. The full-face mask Dräger FPS 7000 is not only safer and more comfortable; it also has more flexible options than previous models. Whatever may be needed during operation: It is quickly attached and ready for use.

Maintenance

The special accessories and simple maintenance of all mask parts make the Dräger FPS 7000 not only very economical and easy to service, but also flexible and versatile in its use.

TECHNICAL SPECIFICATIONS

| Mask body | Convenient, hypoallergenic and flexible silicone or EPDM (dermatologically tested) |
|-------------------------|---|
| Harness | 5-point connection with a large contact surface area at the back of the head, alternatively a hairnet |
| Mask-helmet combination | 2-point connection for Dräger HPS 6200 either with Dräger Q-fix (with safety button) or with Dräger |
| | S-fix (without safety button) connection |
| Size | Mask body in 3 sizes (S, M and L) compatible with inner mask in 3 different sizes |
| Visor | polycarbonate visor available with different coatings |
| Connector | P, RA, ESA, PE and RP |
| Weight | approx. 600 gr (varies according to version) |
| Approval | EN 136 Class 3 |
| | |

| Description | Unit Sales | Articlenr | | Price |
|-------------------------------------|------------|-----------|---|--------|
| Dräger FPS 7000 M2-PC-CR | 1 | R56200 | € | 285,00 |
| Dräger FPS 7000 M2-PC-Q-fix, size M | 1 | R56850 | € | 394,00 |
| Dräger FPS 7000 S1-PC-CR | 1 | R56249 | € | 301,00 |
| Dräger FPS 7000 L2-PC-CR | 1 | R56300 | € | 301,00 |

Dräger Composite Air Cylinders

Designed using leading technology and advanced materials, Dräger's range of Composite Cylinders can be used in any application where breathing becomes difficult or impossible.

Dräger Composite Air Cylinders Can be used in any application where breathing becomes difficult or impossible

Features

Through continuous product improvement and investment in technology, Dräger provides the highest quality pneumatics, carrying systems and high performance, ultra lightweight, carbon composite cylinders. Because Dräger manufacture all elements of the breathing apparatus system – masks, carrying systems, pneumatics and cylinders – you can be assured of the highest quality and maximum performance.

Dräger cylinders are manufactured and tested using automated, computer controlled processes. Continuous re-investment in plant and equipment ensures that Dräger cylinders are manufactured and tested in accordance with the most technologically advanced processes available. Automatic data collection ensures full traceability of materials used and the effective monitoring of critical process parameters.

Aluminium liner

These ranges of cylinders are manufactured from a seamless aluminium liner, which is

subsequently over wrapped with carbon and glass fibres. The aluminium liner is cold drawn from AA 6061 aluminium plate and then wrapped with carbon fibre in an epoxy matrix, using a computer controlled 4 axis wrapping machine.

Glass fibre

An external layer of glass fibre in an epoxy matrix is then wrapped onto the cylinder. This external layer of glass fibre is applied to enhance the resistance of the cylinder to impact and abrasion in service. Following a high temperature curing of the epoxy matrix, an external gel coat is applied to the surface of the cylinder. This coating provides a smooth, easily cleaned surface for the cylinder. Every batch of 200 cylinders is subjected to exhaustive testing in accordance with the legislative design and manufacturing codes (EN 12245 and 97/23/EC), under the supervision of a Notified Body. All relevant production data is retained electronically for the full working life of the cylinder.

TECHNICAL SPECIFICATIONS

| Water Capacity | 6 liters |
|-------------------|--------------------------|
| Free Air Capacity | 1.636 liters |
| Working Duration | 41 min |
| Nominal Duration | 31 min |
| Service Pressure | 300 bar |
| Weight | 3.7 kg |
| Dimensions | 492/495 x 152.5/154.0 mm |
| Design Life | 20 years |
| Thread | M18 x 1.5 |
| Approval | EN12245:2002 |

| Description | Unit Sales | Articlenr | | Price |
|--|------------|-----------|---|----------|
| Dräger Composite Air Cylinder, 6 liters, 300 bar | 1 | 3353732 | € | 461,81 |
| Dräger Cylinder KSF 6.8 liter, 300 bar | 1 | 3353733 | € | 531,95 |
| Dräger Cylinder KSF 9.0 liter, 300 bar, STD | 1 | 3353734 | € | 756,70 |
| Dräger Cylinder Carbon Composite, 9 liter, 200 Bar | 1 | 3354631 | € | 1.506,00 |

Dräger Testor 2500/3500



Dräger Testor 2500/3500 The compact all-rounder

The Dräger Testor 2500/3500 is a compact all-rounder for the static tests of your breathing protection equipment. Testing is reliable, easy, and convenient. The compact design enables both models to be integrated smoothly into any breathing protection workshop.

Versatile testing options

Both Dräger Testor 2500/3500 models are designed for tests in the low – and medium-pressure range. They are especially suitable for testing:

- full face masks,
- compressed air breathing apparatus,
- lung demand valves, and
- chemical protection suits.

Quick and easy to operate

Use the Dräger Testor 2500/3500 to test your breathing protection equipment conveniently and reliably – manually with the Testor 2500 or PC-controlled with the Testor 3500. Both models feature a clear control panel with two pressure gauges, timers, and control levers. Negative and positive pressure is generated intuitively.

- The Dräger Testor 2500/3500 is independent of inlet pressure thanks to the integrated pressure reducer. Any medium pressure from 4 to 10 bar may be applied.

Realistic mask testing

The test head of the Testor 2500/3500 has a natural shape. It is securely mounted, and the gel face may be replaced independently by the user as required. The design eliminates the need for any inflation and deflation of the test head. The new gel face II is more robust due to the optimised material composition. This enables full breathing protection masks to be tested faster and better in less time.

Improved user friendliness

Lung demand valves may be tested with an adapter, which connects easily to the mouth opening on the test head. Because there is no head inflation, the Dräger Testor 2500/3500 only features two control levers. Switching over the valves is also unnecessary. The small measuring range of -15 to +25 mbar is easier to read. This makes the device easier and more convenient to use.

PC operation

You can also operate the Dräger Testor 3500 with a PC, using the USB connection located on the rear of the device. The Dräger Protector software, which is included, guides you through the test process in steps, displays measured values in graphic form, and evaluates them. Naturally, all test results may be saved and printed for documentation purposes.

Integration is possible in any workshop

With its compact size and robust design, the Dräger Testor 2500/3500 fits into any workshop. A base plate (optional) also enables the device to snap onto the workbench mounting of the Dräger Quaestor 5000/7000 and the Prestor 5000. The gel face II is used for all three testing device types. This ensures maximum compatibility and increases the efficiency of your workshop.

Versatile training services

The Dräger Academy offers you a broad training program for the professional application and correct operation of our testing devices.

TECHNICAL SPECIFICATIONS

| 300 x 515 x 335 mm | |
|----------------------------|--|
| Dräger Testor 2500: 5.5 kg | |
| Dräger Testor 3500: 6.0 kg | |
| | |
| +10 to 40 °C | |
| 850 mbar to 1,400 mbar | |
| max. 70 % | |
| 4 to 10 bar | |
| | Dräger Testor 2500: 5.5 kg Dräger Testor 3500: 6.0 kg +10 to 40 ℃ 850 mbar to 1,400 mbar max. 70 % |

Dräger Testor 2500/3500

| Medium-pressure manometer | |
|-----------------------------|---------------------|
| Measurement range | 0 to 10 bar |
| Scale division | 0.5 bar |
| Measurement precision | 1.6% from end value |
| Low-pressure manometer | |
| Measurement range | -15 / 0 / +25 mbar |
| Scale division | 0.5 mbar |
| Measurement precision | 1.0% from end value |
| Timer | |
| Display | LCD |
| Pre-selected measuring time | 1 s to 99 min |

| Description | Unit Sales | Articlenr | Price |
|--|------------|-----------|------------|
| Dräger Testor 2500 - Consisting of: Basic device and IFU | 1 | R62950 | € 4.602,00 |
| Dräger Testor 3500 - Consisting of: Basic device, USB cable, IFU and Dräger Protector Software | 1 | R62970 | € 6.844,00 |

Dräger HPS SafeGuard Helmet

The Dräger HPS® SafeGuard is the extremely lightweight universal helmet for fire and rescue services. Its innovative design combines optimal protection with the highest levels of wearing comfort. Its sporty look, light weight and tailor-made accessories make the helmet a real all-rounder for any challenge.

Optimal wearing comfort

Weighing just around 1.2 kg in its basic configuration, the Dräger HPS SafeGuard is one of the lightest helmets in its class. Its innovative design also ensures optimal weight distribution of the fire and rescue helmet. These two factors combined offer you the best possible wearing comfort and the perfect fit for all types of movement - even when crawling. The helmet is characterised by its advantageous weight distribution and the excellent climate characteristics: The excellent thermal insulation helps to protect you when fighting fires, while guaranteeing a balanced climate inside the helmet even during longer rescue missions without respiratory protection. Lots of benefits, all confirmed in external scientific studies.

Ready for every challenge

The multifunctional and sporty design of this compact helmet offers you exceptional protection, without limiting your movements or perception: vital senses such as sight, hearing and sensitivity to heat are not impaired, while at the same time all essential parts of the head are protected. A combination of aesthetic and functional elements makes the helmet attractive as well as safe. Examples include the integration of the lighting and communication systems, and the numerous configuration options and customisation markings available for each helmet. These make it easy to visually identify the role and function of each person.

Quick and easy helmet adjustment

One size fits all - the protective helmet covers a wide range of individual head sizes from 50 to 67 cm. You can adjust the helmet to your head size in just a few simple steps: The chin and neck strap are quick and easy to adjust. In addition, the adjustment wheel on the back of the helmet is particularly easy to access.

A helmet for all situations

Thanks to its universal design and multiple certifications, you can make perfect use of the helmet for all key applications required in fire and rescue services. The special endurance testing conducted by Dräger also means that you can rely on the multifunctional helmet to consistently deliver a high degree of safety, reliability and quality. With its fully integrated, highest optical quality visors, your face and eyes are perfectly protected. Moreover, the additional multi-coating feature prevents it from fogging and scratching. A gold coating not only provides the best possible protection against radiant heat but also gives the helmet a stylish look.

For better visibility

The helmet is available in a wide range of colours. For the best possible protection in conditions of poor visibility, you can also fix reflective strips in different designs all around the helmet, making it easily identifiable day or night. The HPS BuddyLight on the back of the helmet provides additional safety - it ensures that you can be immediately recognisable from behind even in conditions of poor visibility. You can use the individual lighting solutions to illuminate your immediate workspace as needed: our integrated, explosion-proof helmet lamps can be fitted at the front or side and can be handled hands-free.

Lots of options - easily fitted

For your convenience, the construction of the helmet has been streamlined to just a small number of main components, thereby simplifying the spare-parts logistics. You can easily and intuitively attach individual parts and accessories. You don't need any tools to replace the parts. All electronic accessory components can be powered using standard commercial batteries. In addition, RFID transponders and barcode technology also support your logistics processes.

Straightforward cleaning and maintenance

Whether manually or mechanically - you can use any common cleaning process on this protective helmet without any problems. In addition, the simple and tool-free removal of just four component parts makes for quick and effective cleaning of some or all parts of the helmet.

Unhindered communication



Dräger HPS® SafeGuard Helmet The extremely lightweight universal helmet for fire and rescue services.

Dräger HPS SafeGuard Helmet

Thanks to the helmet shell's special design, your ears remain uncovered. For you this translates to improved communication with your team, that is being able to hear and speak to them clearly. Even the perception of background noises is flawless.

Optional integrated communication system

In addition, the integrated Dräger HPS-COM helmet communication unit provides reliable support for radio communication. Alongside its excellent voice quality, its stand-out features include a robust, compact design and easy installation. The new dual-mic technology is ideally suited to all operations, with or without breathing protection.

Dräger HPS 7000 Fireman's Helmet

The Dräger HPS 7000 firefighter's helmet is in a class of its own thanks to its innovative, sporty and dynamic design, ergonomic fit and components which make it a multi-functional system solution. It provides you optimum protection during every operation.



Dräger HPS 7000 fireman's helmet Tailor- made for every head

Tailor-made fit for every head

Two helmet shells for head sizes from 50 to 66 cm cover a wide range of individual head and face shapes. With a weight of approx. 1,380 g as basic version, it is one of the lightest helmets in its class. In addition to its comfortable interior fitting made of skinfriendly, anti-allergic and flexible materials, the Dräger HPS 7000 stands out with its high level of operating and wearing comfort.

Comfort is a matter of position

The padded 4-point harness allows for safe and easy adjustment to any head shape. The optimum balance of the helmet can be adjusted individually in the neck and chin area. The padding made of Nomex also ensures a comfortable fit. The integrated comfort hairnet enables the height to be adjusted and assures a good climate inside the helmet. During operation, the head size can be adjusted quickly via an easy-to-operate size adjustment wheel with safety mechanism on the outer shell, even with wet and thick gloves.

Design at its strongest

The ergonomic helmet design evenly distributes the weight to the head and relieves the neck muscles. The large and modern facial protection visor offers unrestricted protection with best visibility. For operations under chemical protective suits, the visor can be fixed permanently. A safe alternative is provided by the integrated and individually adjustable protective goggles with integrated softpad edge protection. Both visors leave enough space for the simultaneous use of corrective glasses or respiratory masks.

Innovative system design

As a provider of integrated system solutions, Dräger sets new standards for the interaction of its products. The universally and individually adjustable mask connection system of the Dräger HPS 7000 creates a strong and safe helmet-mask combination. The full-face mask FPS 7000, the integrated mask communication unit FPS 7000 COM-PLUS and the SCBA of the PSS series allow you to optimally configure the overall system. The light-weight LED helmet lamp is integrated into the helmet shell and illuminates the whole working area. It is located in the centre of the front plate and has an effective glare 2012shield as well as intelligent battery management system. The interior fitting can be equipped with various audio/speech headsets for different radios. This ensures reliable communication even in loud

- environments.

Highest safety - the material mix makes the difference

Despite its low weight, the Dräger HPS 7000 is one of the safest full-shell helmets in its class. Its outer shell of composite material in combination with the PUR inner shell provides reliable protection against thermal and mechanical influences. The plastic reinforced with glass fibre and aramide webbing resists extreme temperatures. It is even able to withstand the enormous radiation heat and flame engulfment of a flash over. The visors of high temperature resistant polyether sulphone reliably protect your eyes and face against high heat, particles and liquid chemicals.

Nothing left to be desired

A comprehensive accessory program completes the Dräger package. Reflective strips improve your visibility under unfavourable conditions and allow for individual marking. matched to your clothing, the various neck protection versions reliably keep your back free. Separate helmet lamps are attached with a lamp adapter on the right or left helmet side. A Nomex coating protects your helmet in any training situation and extends its service life. Helmet bags and cases provide safe storage and transport.

Ready again in no time at all

The Dräger HPS 7000 is easy and efficient to service due to the minimum number of components. The entire interior fitting can be removed and re-installed in just a few steps. You can replace individual components easily and quickly, using standard tools. All helmet components are cleaned and disinfected manually or in industrial washing machine.

Dräger HPS 7000 Fireman's Helmet

TECHNICAL SPECIFICATIONS

| Size | H1: for head size 52 to 60 and optional for 50/51 (when using a separate padding strip), | | |
|---|---|--|--|
| | H2: for head size 56 to 64/66, continuously adjustable via adjustment wheel (available 2014) | | |
| Weight | Approx. 1,380 g (±5%) | | |
| Color | Luminescent, pure white, red, signal blue, zinc yellow, black, bright yellow, other colors on request | | |
| Mask connection (only PRO version) | Option to attach any adapter mask, e.g. Dräger FPS 7000, 4 positions adjustable | | |
| Interior fitting | Flame-resistant and washable 4-point harness made of Nomex, sweat band of eco leather, head | | |
| | support ring with wheel adjustment system (patent pending), integrated comfort hairnet, fixing lever | | |
| | for facial protection visor and communication adapter | | |
| Material, outer shell | composite consisting of glass fibre reinforced plastic (PA-GF) and additionally reinforced with aramide | | |
| | webbing, high temperature resistant | | |
| Facial protection visor | 2.5 mm polyether sulphone, anti-scratch coated (optional), approved acc. to EN 14458:2004 (\pm 40 | | |
| | °C, T, N, K, AT, R, E3) clear or gold-coated version | | |
| Protective goggles (only for PRO version) | 2.5 mm polyether sulphone with softpad edge protection, anti-scratch coated (optional), approved acc. | | |
| | to EN 14458:2004 (±40 °C, T, N, K, AT, R, E3), clear or tinted version, 2 positions adjustable | | |
| Approvals | EN 443:2008 (type B 3b, C, E2, E3, -40 °C), mask-helmet combination acc. to DIN 58610 | | |

| Description | Unit Sales | Articlenr | | Price |
|---|------------|-----------|---|--------|
| Dräger HPS 7000, luminescent | 1 | R79170 | € | 368,00 |
| Dräger HPS 7000, white | 1 | R79171 | € | 268,00 |
| Dräger HPS 7000, PRO luminescent/matt black | 1 | R79250 | € | 436,00 |
| Dräger HPS 7000, PRO white/matt black | 1 | R79251 | € | 404,50 |
| Dräger HPS 7000 - neck protection Nomex / Aluminium | 1 | R79145 | € | 42,75 |
| Dräger HPS 7000 - neck protection Nomex / short | 1 | R79146 | € | 36,00 |
| Dräger HPS 7000 - neck protection Nomex, neck curtain, three-layer | 1 | R79147 | € | 110,00 |
| Dräger HPS 7000 - helmet lamp, LED, integrated | 1 | R79013 | € | 110,00 |
| For Dräger HPS 7000 and HPS 7000 PRO, to attach the integrated LED helmet lamp, order | 1 | R79226 | € | 13,05 |
| separately: | | | | |
| E-kit front plate for Dräger HPS 7000 helmet lamp | | | | |
| Lamp holder Dräger HPS 7000 (for helmet lamps Dräger PX1) | 1 | R79129 | € | 18,00 |
| Helmet lamp Dräger PX 1 LED | 1 | R62350 | € | 84,42 |

Bauer Junior II - E Compressor

The most compact highly mobile one of our diving compressor range. Due to its toughness and reliability the Junior has become a global classic. The Bauer Junior II offers an even more compact design and numerous improvements in details. The patented TRIPLEX® filter system guarantees purest breathing air according to DIN EN 12021 (formerly DIN 3188).



Invest in Bauer Quality

The Bauer Junior II is a product based on more than 50 years of experience and strict Bauer. Quality Management according to DIN EN ISO 9001. This is the uncompromising quality down to the last detail that has made us the global market leader for breathing air compressor units.

Easy Handling

- due to symbolic figures it is child's play to operate the compressor
- comprehensive documentation facilitates maintenance work

Toughness

- durable, long-life compressor block
- new fan and pulley protection made of unbreakable
- UV-resistant special plastic, which improves cooling air flow for increased compressor efficiency
- filling device: stainless steel; filling hose: kevlar

Safe Handling

- moving parts such as v-belt, pulley and fan have optimal protection
- the GS-sign certifies the observation of all relevant safety regulations

Bauer Junior II Compressor Uncompromising quality

TECHNICAL SPECIFICATIONS

| Medium | Air | |
|------------------------------|---|--|
| Intake Pressure | Atmospheric | |
| Intake Temperature | +5°C to +45°C | |
| Ambient Temperature | +5°C to +45°C | |
| Setting of safety valve | 225 or 330 bar | |
| Filling pressure | 200 or / and 300 bar | |
| Capacity | 100 I/min measured at bottle filling 0 to 200 bar | |
| | Tolerance ± 5% at +20°C Ambient Temperature | |
| Speed | 2300 l/min | |
| Number of Compression stages | 3 | |
| Number of Cylinders | 3 | |

| Description | Unit Sales | Articlenr | Price |
|---|------------|-----------|------------|
| Bauer Junior II-EH Compressor 400V 50Hz | 1 | BK0J3EH00 | € 3.981,45 |

Dräger Saver CF15

The Saver range of Emergency Escape Breathing Apparatus has been designed using the latest technologies available whilst still bearing in mind our three leading principles; reliability, quality and ease of use. The Saver CF constant flow emergency escape breathing apparatus allows safe, effective and uncomplicated escape from hazardous environments with the minimum of user training.



Bräger - OT

Dräger Saver CF15, with storagebox Designed with one thing in mind, to save lives

Automatic activation

The unit is automatically activated on opening the carrying bag and can be simply re-set in the event of false alarm.

Long life neck seal

The air hood neck seal is ozone resistant ensuring high levels of protection, even after storage.

High visibility

The unit is contained in an instantly recognisable orange carrying bag, incorporating photo luminescent panels allowing the unit to be seen at very low ambient light and visibility levels.

Easy inspection

The cylinder contents gauge is clearly visible without any dismantling or adjustments to the unit due to a transparent viewing window located on the side of the bag. This allows for quick and simple cylinder contents inspection.

Made to measure

The Saver CF has been especially designed to be as easy to don as is possible, regardless of face shape or size and is suitable for users with glasses or facial hair.

Design

Utilises a simple fail-safe reducer system with excellent flow characteristics giving a consistent air flow rate at all cylinder pressure levels. The combined diffuser and exhalation valve account for excellent air supply combined with a very streamlined hood profile. The easy to don flame retardant hood incorporates a wide visor for enhanced peripheral vision and a long life ozone resistant neck seal.

The Saver CF is extremely compact in design providing greater freedom of movement.

Carrying bag

The high visibility orange carrying bag incorporates photo luminescent panels, is interchangeable for either chest bag or bandoleer positions, washable, flame retardant and allows water to self-drain.

Low contents warning

A warning whistle sounds when the unit is nearing the end of its air supply.

Optional: Storage box

Storage box for EEBD complete with photo luminescent sign.

TECHNICAL SPECIFICATIONS

| Dräger Saver CF15 | | |
|---------------------|--------------------------------|--|
| Dimensions | 490 x 160 x 250 mm | |
| Weight | 5.2 kgs | |
| Max. pressure | 200 bar | |
| Working temperature | -15°C to 60°C | |
| Storage box | | |
| Dimensions | 740 x 280 x 220 mm (l x w x d) | |
| Weight | 1.3 kgs | |

Dräger Saver CF15

| Description | Unit Sales | Articlenr | | Price |
|--------------------------------------|------------|-----------|---|--------|
| Hard case version: Dräger Saver CF15 | 1 | 3359740 | € | 740,00 |
| Storagebox for Dräger Saver CF15 | 1 | 03170017 | € | 82,15 |
| Safety Wash, 1 liter dispenser | 1 | 3380164 | € | 19,60 |
| Safety Wash, refill 1 liter | 1 | 3380165 | € | 10,40 |
| Safety Wash, 5 liter dispenser | 1 | 3380166 | € | 44,50 |
| Safety Wash, refill 5 liter | 1 | 3380167 | € | 35,70 |

Dräger PARAT[®] 5500

The Dräger PARAT® 5500 fire escape hood was developed in cooperation with users – always with the focus on offering the fastest possible escape. Optimized operation and wearing comfort, a robust housing and a tested CO P2 filter guarantee that the wearer of the Dräger PARAT® 5500 is protected from toxic fire-related gases, vapours and particles for at least 15 minutes while escaping.

Ready for escape in only 3 steps

Exceptionally innovative and intuitive: When opening the packaging, the filter plug is automatically released from the filter. The filter is then deployed into operational position and the hood can be immediately donned. Thanks to the self-adjusting internal head harness, no additional tightening is required. All you have to do is: open the packaging, remove the and don hood – and leave the danger zone.

Reliable protection

The high-performance combination filter reliably protects against a wide range of toxic fire-related gases, vapours and particles.The CO P2 filter is approved according to the EN standard 403:2004. In addition, the filter is tested for use against H2S (at 2500 ppm) in accordance with DIN 58647-7. Particularly convenient: The security seal on the packaging shows if the unit has been opened. In addition, the filter is tightly sealed with two filter plugs.

16 years of service life

Replacing the filter after 8 years will extend the service life of the Dräger PARAT Escape Hood to 16 years in total. For this, Dräger offers filter replacement service or an expert training for your employees.

Sturdy and ergonomic at once

Both, ergonomics and wearing comfort were considered when designing the packaging of the Dräger PARAT Escape Hoods. The escape hood can be carried with a belt, shoulder strap, grip clip or belt clip. The PARAT Hard Case can also be mounted on the wall using a wall holder. Additionally, the robust packaging of the Dräger PARAT Escape Hoods protects the device from damage.

Different packaging types

You can select between three packaging types: The Hard Case provides splash water protection (IP54) – the Soft Pack provides dust protection (IP5) – or select the Single Pack with the standard filter plug system. Both, the Hard Case and the Soft Pack have viewing windows to check the filter expiration date and the condition of the device.

TECHNICAL SPECIFICATIONS

| PARAT® 5510: 190 x 135 x 90 mm (l x w x h) |
|---|
| PARAT® 5520: 215 x 155 x 105 mm (l x w x h) |
| PARAT® 5530: 241 x 143 x 107 mm (l x w x h) |
| PARAT® 5510: 590 g |
| PARAT® 5520: 660 g |
| PARAT® 5530: 720 g |
| CO P2 combination filter against toxic fire-related gases, vapours and particles |
| At least 15 minutes |
| according to EN 403:2004, additionally tested for the use against H2S (at 2,500 ppm) in accordance with DIN 58647-7 |
| |



Dräger PARAT 5500 Fire escape hood

Dräger PARAT® 5500

| Description | Unit Sales | Articlenr | | Price |
|---------------------------------|------------|-----------|---|--------|
| Dräger PARAT® 5510, Single Pack | 1 | R59415 | € | 186,00 |
| Dräger PARAT® 5520, Soft Pack | 1 | R59425 | € | 210,00 |
| Dräger PARAT® 5530, Hard Case | 1 | R59435 | € | 210,00 |

Personal Grab Bag

Grab bag with personal escape aid to abandon the installation in case of a fire. The personal grab bag is to be used in the event of a fire.

Personal Grab Bag Personal escape aid

Contents

- grab bag with carrying strap and photo luminescent identification strip
- Dräger Parat 5500 smoke hood
- heat resistant gloves
- cyalume light stick

Dräger PARAT 5500

A fire along with the hazardous smoke and fumes it gives off, can take you by surprise. The Dräger PARAT 5500 Fire Escape Hood is designed to help you escape the fire safely by filtering out the toxic smoke and fumes in the fire, allowing you to breathe easily while getting to safety. The Dräger PARAT 5500 has been successfully proven in use and

public building and with fire departments, helping to rescue others, giving you minimum 15 minutes of escape protection in fire situations.

Light stick

The 6" EASY-LIGHT is a pure European product. Thanks to its elegant design, it is a good alternative to the 6" GLOWSTICK. The "alligator" hook helps to clip this lightsticks on many supports. Combine the 6" EASY-LIGHT with a lanyard and it becomes a glowing pendant. On special events, imprint the 6" EASY-LIGHTS to adapt more personally.

TECHNICAL SPECIFICATIONS

| Dräger PARAT 5500 | |
|------------------------|---|
| Dimensions | Dräger PARAT 5500 Single-, Traveller-, Soft-Pack: |
| | 8 x 19 x 13,5 cm (H x L x W) |
| | Dräger PARAT 5500 box: |
| | 18 x 19 x 8 cm (H x L x W) |
| | Dräger PARAT 5500 Twin-Pack: |
| | 9 x 33 22,5 cm (H x L x W) |
| Weight | approx. 600 gr |
| Filter performance | Combination cartridge (gas & particle filter) provides protection against smoke, gases and particles, |
| | Filter Type CO-P2 |
| Approved duration | minimum of 15 minutes |
| Approval | CE mark, tested to EN 403 |
| Light stick | |
| Dimensions | 150 x 11 mm |
| Weight | 0.0133 kg |
| Color | Green |
| Duration of use | up to 12 hours |
| Approval | EN 71 1-2-3 |
| Heat restistant gloves | |
| Operating temperature | 150°C |
| Approval | EN388 CAT-1 |

| Description | Unit Sales | Articlenr | | Price |
|-----------------------|------------|-----------|---|--------|
| Grab bag | 1 | SG06154 | € | 77,80 |
| Dräger PARAT C | 1 | R59415 | € | 186,00 |
| Heat resistant gloves | 1 | SG06152 | € | 15,35 |
| Cyalome stick | 1 | SG06153 | € | 11,65 |



Hansen Sea Eco Immersion Suit

The Hansen Sea Eco Immersion Suit has been manufactured in waterproof flame retardant 4.5 or 5 mm neoprene, which provides insulation and buoyancy. Emergency suit for yachts. The immersion suit can be delivered vacuum packed, so the suit doesn't need to be serviced for 10 years.

Features

- double glued seams and approved reflector tape
- leg fasteners keep feet in place in the boots
- delivered with handy carrier bag or air-tight package
- delivered as a one-size suit (can be manufactured in X-Large)
- can be delivered vacuum packed, so the suit doesn't need to be serviced for 10 years

Basic Product

Suit with neoprene cuffs, gloves attached with elastic band, attached hood, leg fasteners, neoprene face seal, approved reflector tape and attached hoodie.

Important notice

SUIT HAS TO BE USED WITH AN APPROVED LIFEJACKET



Hansen Sea Eco Immersion Suit Provides insulation and buoyancy

TECHNICAL SPECIFICATIONS

| Materials | Flame retardant 4.5 or 5mm neoprene |
|-----------|---|
| Size | One size and XXL |
| Weight | Standard: 5 kgs XXL: 5.5 kgs |
| Color | International approved orange |
| Approvals | IMO/SOLAS 2,3 and resolution MSC-152 (78) / MED |

| Description | Unit Sales | Articlenr | | Price |
|---|------------|-----------|---|--------|
| Hansen Sea Eco Immersion Suit, size standard | 1 | SG05412 | € | 319,70 |
| Hansen Sea Eco Immersion Suit, size standard, vacuum packed | 1 | SG05416 | € | 325,00 |
| Hansen Sea Eco Immersion Suit, size XL | 1 | SG05413 | € | 427,00 |
| Hansen Sealife Life Jacket, safety light included | 1 | SG05011 | € | 63,75 |

Viking YouSafe[™] Essence Lifejacket

Designed to minimize storage dimensions, while still allowing for easy repacking for crew. Featuring a compact design and proven in-water performance, VIKING YouSafe™ Essence is a great basic lifejacket for commercial cargo and passenger vessels.



General

- Good in-water performance with a torso and head-support buoyancy panel
- Intuitive donning and protection in case of emergency
- Easy repacking and storage when not in use

Features

- Whistle, buddy line, lifting strap

- Single front buckle and crotch strap ensures an easy intuitive donning
- Minimal storage space required
- Body and head-support buoyancy panel

Typical applications

- Cargo vessels
- Passenger vessels
- Offshore applications

Viking YouSafe™ Essence Lifejacket Easy intuitive donning

TECHNICAL SPECIFICATIONS

| Туре | Solid life jacket |
|-----------|------------------------|
| Color | High visibility yellow |
| Size | Universal size |
| Fabric | Coated polyester |
| Approvals | SOLAS/MED |

| Description | Unit Sales | Articlenr | | Price |
|------------------------------------|------------|-----------|---|-------|
| Viking YouSafe™ Essence Lifejacket | 1 | SG05014 | € | 63,75 |

Secumar Alpha 275 Twin SOLAS Tetra 3D Life Jacket

The Secumar Alpha 275 3D life jacket is recommended for wearers of immersion suits, insulated clothing or survival suits: Two triangular air chambers form a long lever which quickly turns the body into a safe position on your back.



Secumar Alpha 275 Twin SOLAS Tetra 3D Life Jacket

To combine with immersion suits, insulated clothing or survival suits

Applications

- water board authorities
- customs
- police
- locks
- dock workers
- inland waterways
- hydraulic engineering
- dredging
- underground engineering

- sewerage works

- stevedoring

- yachting

Features

- buoyancy chamber system: Bright orange buoyancy chamber in 3D-Design in navy blue protective cover, patented folding
- standard equipment: Zip pocket, inspection window, pocket for name tag, crotch strap loops, detachable neck fleece, whistle, mesh storage bag

TECHNICAL SPECIFICATIONS

| Type of buoyancy | Inflatable |
|--------------------|-----------------------|
| Method of Inflator | 3001S 60g + 301SM 56g |
| Buoyancy | 290N |
| CO2 cartridge size | 60 gr |
| Color | Navyblue |
| Closure | Frontal click buckle |
| Approvals | CE/MED/SOLAS |

| Description | Unit Sales | Articlenr | | Price |
|--|------------|-----------|---|--------|
| Secumar Alpha 275 Twin SOLAS Tetra 3D Life Jacket, safety light included | 1 | 20110017 | € | 406,05 |

Secumar Golf 275N Life Jacket

A good value, this fully automatic inflatable lifejacket is for tough jobs. Protective cover made of robust nylon fabric. Very light and with a compact design. Buoyancy chamber and protective cover are separate components and in the case of wear and tear can be replaced independently of one other.



Applications

- water board authorities
- customs
- police
- locks
- dock workers
- inland waterways
- hydraulic engineering
- dredging

- underground engineering
- sewerage works
- stevedoring

Features

- buoyancy chamber system: Bright orange buoyancy chamber in navy blue protective cover
- standard equipment: whistle

Secumar Golf 275N Life Jacket An inflatable life jacket for tough jobs

TECHNICAL SPECIFICATIONS

| Type of buoyancy | Inflatable | |
|--------------------|--------------------------|--|
| Method of inflator | Automatic inflator 3001S | |
| Buoyancy | 275N | |
| CO2-cartridge size | 56 gr | |
| Color | Navyblue, Orange (=SPR) | |
| Closure | Front buckle | |
| Emergency light | Optional | |
| Approvals | CE | |

| Description | Unit Sales | Articlenr | | Price |
|--|------------|-----------|---|--------|
| Secumar Golf 275N Life Jacket, safety light not included | 1 | 20110009 | € | 298,60 |
| Seculux CFX-II Life Jacket light | 1 | SG05602 | € | 42,20 |

Hansen Sea Lion Life Jacket 150N

The Hansen Sea Lion Life Jacket is specially designed for use as a combined working/ $\ensuremath{\mathsf{abandonment}}$ life jacket.



Applications

The life jacket is designed to be worn when the user is wearing heavy duty clothing or with an abandonment suit - where it guarantees to self right the wearer in less than 5 seconds. The Patented interlocking lobe design also creates an effective wave barrier preventing water channeling into the airways. The life jacket design gives neck and head support which is particularly vital for an unconscious wearer.

Features

- patented interlocking lobe design
- 150N Newtons buoyancy
- high visibility fabric
- wide range of options
- contoured head and neck support
- lightweight and comfortable to wear
- automatic firing mechanisms
- retro-reflective tape
- whistle
- grab loop
- locational light

Hansen Sea Lion Life Jacket

Inflates automatically when it comes in contact with water

TECHNICAL SPECIFICATIONS

| Model | 150N |
|-----------|------------------------|
| Material | PVC cover |
| Sizes | XS-XXL |
| Approvals | SOLAS Chapter III 2010 |

| Description | Unit Sales | Articlenr | | Price |
|--|------------|-----------|---|--------|
| Hansen Sea Lion Life Jacket, 150N, safety light included | 1 | SG05211 | € | 248,80 |

AQ8A Life Jacket Light



AQ8A Life Jacket Light Automatically activated The AQ8A life jacket light is an alkaline battery powered emergency light designed to be installed on any type of life jacket. It is automatically activated upon contact with water and features a manual switch.

Fitting

The light must be secured to the life jacket in a position that provides maximum visibility when the wearer is in the water, preferably near the shoulder. The installation position must ensure that the water sensors on main light body will have contact with water when the wearer is in the water. Feed the clip behind life jacket material or button hole and press into the light unit until it clicks securely into place. When fastened the light cannot be removed unless the clip is broken.

Operation

The light will automatically activate when the sensors are immersed in water. To operate the light manually, press the button on the front of the unit. It is possible to turn the light off by pushing the button on the front of the unit, regardless of whether it is still immersed in water.

Maintenance

Inspect unit for signs of damage or corrosion. Test the light by immersing the sensors in water or manually pressing the button on the front of the unit, the light should illuminate. Turn the light off by pushing the button on the front of the unit. When in storage, ensure the water sensors are dry at all times.

Disposal

The unit has a five year life span from the date of manufacture, it should be replaced by the expiry date shown on the label. The unit should be disposed in accordance with local regulation through an approved environment disposal agent.

Safety

The light contains a Alkaline battery which must be handled correctly:

- do not dismantle battery pack
- do not make any external electrical connection
- do not recharge
- do not incinerate
- store between -30°C and +65°C

TECHNICAL SPECIFICATIONS

| Battery | Alkaline batteries |
|-------------------------|--|
| Light source | LED |
| Chromaticity | White |
| Light type | Flashing |
| Flash Frequency | 50 – 70 times/min |
| Luminous Intensity | ≥0.75.cd |
| Operation Life | ≥13h over 0.75cd at -1ºC |
| Storing Temperature | -30 ^e C − +65 ^e C |
| Working temperature | -1°C to 30°C |
| Expiry Date | 5 years |
| Weight | 38g (including buckle) |
| Dimension | Main body: 62.5 x 25.4 x 23.5mm |
| | buckle: 61.2 x 9.5 x 11.7mm |
| Activation | Water-activation automatically on |
| | / manual off / manual on |
| Performance | Fire-resistant, oil-resistant, mould-proof, corrosion-proof, water-proof |
| Environment Performance | Meets RoHS and asbestos-free requirement |
| Standards | MSC.81(70) as amended |
| Certifications | MED, CCS |

AQ8A Life Jacket Light

| Description | Unit Sales | Articlenr | | Price |
|------------------------|------------|-----------|---|-------|
| AQ8A Life Jacket Light | 1 | SG05606 | € | 23,50 |

Lifebuoys, 2.5 and 4 kgs

Inherent buoyant lifebuoy for use on board of vessels or offshore installations. Durable synthetic material, reflective striping and grab line.

Features

- Solas 2.5 kg lifebuoy: the lifebuoy may be fitted with a light & smoke signal
- Solas 4 kg lifebuoy: the lifebuoy may be fitted with a light & smoke signal

Marking for identification

The lifebuoy shall be marked in block capitals of the Roman alphabet with:

- the name and the port of registry of the ship
- two last digits of year affixed
- not less then 50mm high

Important notice

Buoy 2.5 kg: not to be used where light and smoke signal is to be fitted and maximum permitted fall height is 30 metres. The 2.5 kg lifebuoy is the standard for inland shipping.

Lifebuoy 2.5 kg and 4 kg

TECHNICAL SPECIFICATIONS

| Outer diameter | 751 mm +/- 2% |
|-----------------------------|-------------------------------|
| | |
| Inner diameter | 450 mm +/- 2% |
| Reflective tape | yes |
| Materials | Buoy ring: EUROPOL RCC 128P |
| | Grab line: polyethylene 10 mm |
| Maximum installation height | 60 meter |
| Color | International orange |
| Approvals | EC / SOLAS / MED |

| Description | Unit Sales | Articlenr | | Price |
|--|------------|-----------|---|--------|
| Lifebuoy 2.5 kgs | 1 | SG05712 | € | 59,25 |
| Lifebuoy 4 kgs | 1 | SG05711 | € | 74,20 |
| Lifebuoy: 2.5kg IMO/SOLAS | 1 | 20120018 | € | 85,90 |
| Lifebuoy lanyard, 30 meter | 1 | SG05722 | € | 55,35 |
| Lifebuoy cabinet Polyethyleen 30", red, size: 830 x 850 x 270 mm | 1 | 20120009 | € | 795,85 |
| Lifebuoy Y bracket, Stainless steel | 1 | SG05753 | € | 93,95 |
| Lifebuoy bracket, Stainless steel | 1 | SG05751 | € | 394,70 |
| Lifebuoy, lettering | 1 | 20120027 | € | 32,20 |

Lifebuoy Lanyard

Orange lifebuoy lanyard; meets all stringent demands.



Features A safety line to attach to a lifebuoy to pull back the lifebuoy.

Lifebuoy lanyard Safety line

TECHNICAL SPECIFICATIONS

| Material | Lanyard: Polypropylene Ring: Rubber |
|----------|--|
| Color | Orange |
| Weight | App. 1.5 kgs for 50 meters |

| Description | Unit Sales | Articlenr | | Price |
|--|------------|-----------|---|--------|
| Lifebuoy lanyard with ring, with 20 meter line | 1 | SG05721 | € | 57,15 |
| Lifebuoy lanyard with ring, with 30 meter line | 1 | SG05722 | € | 55,35 |
| Lifebuoy lanyard with ring, with 50 meter line | 1 | SG05724 | € | 63,45 |
| Lifebuoy lanyard with ring, with 60 meter line | 1 | SG05725 | € | 97,20 |
| Lifebuoy lanyard with ring, with 85 meter line | 1 | SG05727 | € | 124,45 |

Encapsulated Safety Line

It is an encapsulated safety line of 30 meter to suit 24" or 30" lifebuoys.



Features

It is an encapsulated line made of polypropylene orange rope with a breaking strain of 250 kgs which fits neatly in the inner diameter of the buoy providing a good stowage facility and protection of the line from environmental deterioration.

Lifebuoy safety line

Providing a good stowage facility

TECHNICAL SPECIFICATIONS

| Material | Polypropylene |
|----------|---------------|
| Color | Body: White |
| | Rope: Orange |

| Description | Unit Sales | Articlenr | | Price |
|---|------------|-----------|---|-------|
| Encapsulated Safety Line, 30 meter line | 1 | SG05723 | € | 55,95 |

Lifebuoy Bracket Stainless Steel, standard

Features

- bracket is pre-drilled

Chrome finished steel lifebuoy Y-bracket for installation of a life buoy against the railing or the wall.

Lifebuoy bracket stainless steel, standard For installation against railing or the wall

TECHNICAL SPECIFICATIONS

| Dimensions | Appr. 720 x 380 x 110 mm |
|------------|--------------------------|
| Material | 3 mm stainless steel |
| Color | Stainless steel |

| Description | Unit Sales | Articlenr | | Price |
|-------------------------------|------------|-----------|---|-------|
| Lifebuoy bracket RVS | 1 | SG05753 | € | 93,95 |
| Lifebuoy bracket RVS, J shape | 1 | SG05752 | € | 38,90 |

Daniamant L90 Lifebuoy Light

The Daniamant L90 uses five alkaline batteries, offering a life of one year. Robust and reliable, the Daniamant L90 is automatically activated after release.

Features

- the Daniamant L90 is supplied complete with a 2.5m lanyard
- minimum 2 cd light output
- minimum 2 hour light duration
- fully MED approved
- IMO SOLAS approved



TECHNICAL SPECIFICATIONS

| Weight | 1080 gr |
|------------|--------------------------------|
| Dimensions | 380 mm |
| Lamp | 4 Volt, 0.6 Amp. |
| Batteries | 5 1.5 Volt LR20 |
| Activation | Self-activating by tilt switch |
| Approvals | IMO / SOLAS |

| Description | Unit Sales | Articlenr | | Price |
|--|------------|-----------|---|-------|
| Daniamant L90 Lifebuoy Light, bracket and battery included | 1 | SG05731 | € | 69,15 |
| Bracket for Daniamant L90 Lifebuoy Light | 1 | SG05732 | € | 19,45 |



Daniamant L160 Lifebuoy Light

The L160 lifebuoy light is a water-activated system designed for automatic actuation by the act of releasing the lifebuoy to which the unit is attached, such that the battery is unsealed ready for use when the light is pulled from the housing. The light illuminates when the unsealed battery is immersed.

Features

- the L160 lifebuoy light has a 5-year storage life and uses the famous water-activated, silver chloride-magnesium batteries first developed by McMurdo, for intrinsically safe operation
- the L160 is both corrosion and tamperproof, so the batteries cannot be removed or expended accidentally, nor can they be activated unless removed from the container and floated in fresh or salt water
- the lamp is sealed inside a tough, polycarbonate dome



Daniamant L160 Lifebuoy Light Designed to be smaller and highly resistant

TECHNICAL SPECIFICATIONS

| Yellow |
|---------------------------|
| |
| 2 Candela |
| min. 2 hours |
| Flashing LED |
| -30°C to + 65°C |
| -1°C to + 30°C |
| 76 meters |
| 5 years |
| Lithium manganese dioxide |
| 185 x 106 mm |
| 255 grams |
| IMO / SOLAS |
| |

| Description | Unit Sales | Articlenr | | Price |
|-------------------------------|------------|-----------|---|--------|
| Daniamant L160 Lifebuoy Light | 1 | SG05733 | € | 105,60 |

Daniamant L161 Lifebuoy Light

The Lifebuoy light is designed to deliver, as a minimum standard, the 2cd output specification and 2 hour duration required by IMO SOLAS regulations.



Features

- five year life
- no maintenance or replacement batteries
- are required
- compact size

- 76 meter drop height, exceeding SOLAS requirement
- easy fitting
- LED technology
- exempt from Class 9 transport requirements
- ATEX Ex proof

Daniamant L161 Lifebuoy Light

The only water actived intrinsically safe Lifebuoy light

TECHNICAL SPECIFICATIONS

| Color light | Yellow |
|-----------------------|---------------------------|
| Light output | 2 Candela |
| Light duration | min. 2 hours |
| Light type | Flashing LED |
| Storage temperature | -30°C to + 65°C |
| Operating temperature | -1°C to + 30°C |
| Drop height | 76 meters |
| Storage life | 5 years |
| Battery type | Lithium manganese dioxide |
| Dimensions | 185 x 106 mm |
| Weight | 300 gr |
| Approvals | SOLAS / MED /ATEX / ECEx |

| Description | Unit Sales | Articlenr | | Price |
|---|------------|-----------|---|--------|
| Daniamant L161 Lifebuoy Light, ATEX proof | 1 | SG05735 | € | 369,65 |

Man Over Board MOB1 personal locator device

The worlds smallest personal locating AIS Man Over Board device with integrated DCS. The MOB1 is intended to be installed within the life jacket and will activate automatically on inflation, sending the first alert within 15 seconds. In an emergency MOB1 provides two methods of rapidly communicating your location back to the vessel, plus providing visual indication.



MOB1 Man Over Board Personal locator device

Rapid rescue

The best chance of rapid rescue if you fall overboard comes from your own vessel. Your crew needs to be immediately aware of the incident and keep track of your position whilst recovery is carried out. Even in the most moderate seas it is alarming how quickly a visual sighting of a man overboard can be lost.

Precise location

Once activated your MOB1 will transmit an alert to all AIS receivers and AIS enabled plotters in the vicinity. The integrated GPS ensures precise location is sent to your vessel and any others that may be assisting. An additional feature of the MOB1, is its ability to activate the DSC alarm on your vessels VHF, alerting your crew to the situation.

Compatibility

Most modern AIS plotters and DSC VHF comply with the standards required to receive the MOB transmissions. It is recommended that you check compatibility with the equipment manufacturer, particularly if you are using older equipment.

Strobe light

The integrated strobe light ensures maximum visibility in low light conditions.

TECHNICAL SPECIFICATIONS

| Company righting mothed | AIC (Automotive la definition Constant) |
|---------------------------------|--|
| Communication method | AIS (Automatic Indetification System) |
| | DSC (Digital Selective Calling) |
| Dimensions | Height 134 mm |
| | Diameter 38 mm |
| AIS transmission Transmit Power | 1Watt |
| Frequency | 161.975/162.025MHz |
| DSC Transmission Transmit Power | 0.5Watt |
| Frequency | 156.525MHz |
| Messages | Individual Distress Relay Distress Alert (by single call made on press of the activation button) |
| Temperature range | -20°C - +55°C (operational) |
| Temperature range | -30°C - +55°C (storage) |
| Waterproof | 10 meter depth |
| Weight | 92 grams |
| Battery lifetime | 7 years |
| Approvals | RTCM SC11901, EN303 098-1 |

| Description | Unit Sales | Articlenr | | Price |
|---|------------|-----------|---|--------|
| Man Over Board MOB1 personal locator device | 1 | SG05811 | € | 458,15 |

Electronic Distress Flare EDF1

The EDF1 electronic distress flare offers users a safe and long-lasting solution to visual signaling in an emergency.



Electronic Distress Flare EDF1 Visual signaling in an emergency

Advanced LEDs

The unique lens design combined with the use of advanced LEDs and highly efficient circuit technology ensures a constant level of light output throughout the life of the user replaceable battery.

Light coverage

The light output is a beam of over 30° throughout the full 360° azimuth, providing in excess of 6 times more light coverage than other electronic flares. Light is also distributed throughout the hemisphere above the unit to ensure visibility from the air.

Repeatedly usage

Unlike single use pyrotechnic flares the rescueME EDF1 can be used repeatedly in any of its four modes, ensuring continued visibility is maintained over a longer period. The unit is both safe to store and operate while also eliminating any worries associated with disposal.

Grab bag

The compact size and rugged design means the rescueME EDF1 is the perfect safety product for a grab bag, life raft or hiker's backpack.

TECHNICAL SPECIFICATIONS

| Туре | Lithium Primary |
|---------------------------------|---------------------------------|
| Chemistry | LiMn02 |
| AIS transmission Transmit Power | > 6 hours |
| Temperature range | 20°C to +55°C (operational) |
| Temperature range | 30°C to +70°C (storage) |
| Waterproof | 10 meters at +20°C |
| Weight | 155 grams |
| Size | 187 mm x 42 mm |
| Modes of operation | 4 plus SOS signaling |
| Reach | 7 mile / 11,2 km |
| Battery | Easy change replaceable battery |

| Description | Unit Sales | Articlenr | | Price |
|--------------------------------|------------|-----------|---|--------|
| Electronic Distress Flare EDF1 | 1 | 20121003 | € | 170,85 |

Comet Life Boat Set

Container for the safe and dry storage of various pyrotechnics in marine environment like lifeboats or MOB boats.

Contents for a lifeboat set

- 6x Comet Hand flare
- 4x Comet Parachute signal
- 2x Comet Smoke Signal
- 1x Container



Comet life boat set For safe and dry storage

TECHNICAL SPECIFICATIONS

| Container | |
|----------------|----------------------------------|
| Dimensions | 220 x 410 mm |
| Material specs | PVC container with screw off lid |
| | Rubber seal in lid |

| Description | Unit Sales | Articlenr | | Price |
|---------------------|------------|-----------|---|--------|
| Comet Life Boat Set | 1 | SG05906 | € | 434,25 |

Dräger Alcotest 6000



Dräger Alcotest 6000 Professional alcohol testing device The Dräger Alcotest[®] 6000 allows the professional user to perform a breath alcohol test with speed and precision. The measuring technology of this small and user-friendly portable measuring device has already been proven worldwide and has been sold over 1,000,000 times.

Breath alcohol testing made easy

The device is ready to use within seconds. This means that you can perform an (active) test on a subject at any time. It is also possible to measure alcohol in the ambient air (passive), in which case a mouthpiece isn't required.

All functions required for a measurement are activated with the convenient blue OK button, while two menu buttons are used for navigation

Versatile and tough

The tried and tested electro-chemical Dräger sensor in the Alcotest 6000 is distinguished by its very fast response times and a long service life. It operates with extreme precision and reliability. The analysis is reliable even at temperatures of -5 to +50 °C / 23 to 122 °F. The sensor also delivers reliable results quickly in case of a high alcohol content, for both active and passive measurements.

Convenient to use

Dealing with intoxicated people requires a high degree of attention and concentration. An intuative operation of the device is an important aspect for ease of use and smooth breath testing procedures.

All measurement functions can be operated with just one button to make it easier for you to perform the test. The large back-lit display is easy to understand due to its full-text messages which guide you securely through the alcohol test. An LED and audible signal complement the display and indicate the end of a measurement process. Two menu buttons are used to navigate through the menu, enabling you to perform functions such as reviewing the last test results and optional printing.

Simply hygienic: the Slide'nclick mouthpiece

The sophisticated product design meets the requirements for performing the breath alcohol test quickly, easily and hygienically: The shape of the Slide'n'click mouthpiece allows you to intuitively fit it correctly, even in the dark. The Alcotest 6000 is ready to use again immediately after changing the mouthpiece. Furthermore, attempts at obstruction are consistently rejected by the device: The air outlet cannot be closed, foiling any attempts to manipulate the device when giving a breath sample.

A spacer on the mouthpiece keeps the lips of the person being tested from coming into contact with the device's housing. The spacer can also be used as a mouthpiece ejector if necessary. Mouthpieces with return valve are also available upon request.

The Alcotest Hygiene Plus

Hygiene is an increasingly important part of our everyday lives. Dräger Alcotest breathalcohol detection devices use non-invasive measuring technologies with a high degree of hygiene – for the user as well as the test subject – thanks to the following features:

- During testing, the exhaled air is directed past rather than through the device
- There is a 90° angle between the user and the test subject during testing
- Disposable mouthpiece is individually packaged

Benefits of the Slide 'n' Click mouthpieces

- safe, hygienic distance between user and test subject
- spacer prevents direct contact between lips and device
- mouthpiece is easy to remove
- the non-return valve prevents inhalation of air through mouthpiece

Innovation born out of tradition

With over 65 years of experience, Dräger is the global market leader in the field of breathalcohol testing. Police in many countries use devices from the Alcotest product series in everyday traffic monitoring. The Alcotest 6000 is made in Germany and meets the highest standards of quality. It uses the same, professional EC sensor technology, ensuring precise test performance and secure results.

Dräger Alcotest 6000

TECHNICAL SPECIFICATIONS

| Measuring principle | Electrochemical Dräger sensor for 1/4" technology, alcohol specific |
|------------------------------------|--|
| Measuring range | 0 to 2.5 mg/L; if measurement range limit is exceeded, a message is displayed |
| Sampling | Standard: automatic sampling when minimum volume resp. defined blow time is reached; |
| | Passive sampling without mouthpiece or manual initiation of sampling possible |
| Ready for use | Approx. 2 s after switching on |
| Display of the measurement results | After approx. 3 s (at 0 mg/L, room temperature) |
| Operating temperature | -5 to +50 °C / 23 to 122 °F |
| Relative humidity | 10 to 100 % relative humidity (non-condensing and in operating state) |
| Ambient pressure | 600 to 1,300 hPa / 17.7 to 38.4 inch Hg |
| Display | Graphic backlit LCD display; 32 x 22 mm / 1.3" x 0.9" (128 x 64 pixels) |
| LED | 2-colour, to support display of results and warning messages |
| Audible signal | Different signal tones to support display messages and warnings |
| Datalogger | Storage of last 500 tests with test numbers |
| Power supply | 1 x CR123A-Battery, charge level indicator in display, with one battery approx. 1,500 breath tests can |
| | be done. |
| Mouthpiece adaption | Improved Slide'n'click mouthpiece attachment; can be fitted for right or left orientation |
| Mouthpiece | Hygienically, individually packaged, with tamper-proof, tamperproof air outlet, mouthpiece ejector and |
| | spacer between mouth and instrument housing |
| Operating concept | Measurement functions can be performed using just one button; menu navigation is via two menu |
| | button |
| Calibration | Wet gas or dry gas calibration |
| Housing | Impact resistant ABS/PC |
| Dimensions (W x H x D), weight | Approx. 50/60 x 141 x 31 mm / 2"/2.4" x 5.6" x 1.2"; approx. 150g / 0.33 lbs, incl. battery |
| Instrument configuration | Direct menu-guided configuration of instrument settings (PIN required) No additional PC software |
| | needed |
| Vibration and shock | EN 60068-2-27, EN 60068-2-6; EN600-2-64 |
| CE marking | CE conform |
| Norms | EN 15964, NHTSA, FDA Conformity, depending on configuration |
| Internal clock | Warning or deactivation after end of service interval |
| Protection type | IP54 |
| Bluetooth* (optional) | For the communication with the Dräger Mobile Printer BT |
| | |

| Description | Unit Sales | Articlenr | | Price |
|--|------------|-----------|---|------------|
| Dräger Alcotest® 6000 - configurator | 1 | 3706320 | C |)n request |
| Dräger Alcotest® 6000 – Standard | 1 | 3706961 | € | 595,00 |
| Dräger Alcotest mouthpiece (Slide'n'click) - Package with 100 pieces | 1 | 6810690 | € | 44,50 |
| Mouthpieces 'slide'n click', 250 pieces per unit | 1 | 6810825 | € | 109,00 |
| Mouthpieces 'slide'n click', 1,000 pieces per unit | 1 | 6810830 | € | 426,00 |
| Protection bag, black | 1 | 8324999 | € | 38,75 |
| Protection bag, yellow | 1 | 8327811 | C |)n request |
| Lithium battery (CR123A) | 1 | 4543808 | € | 8,45 |
| Dräger Mobile Printer BT | 1 | 3700421 | € | 465,00 |

First Aid Backpack

Compact handy backpack with first aid content. Equipped with reflective cross and triangle on the front pocket. The content is separated. The first aid backpack can also be used as a shoulder bag and is easy to hang on the wall. The backpack is waterproof and suitable for emergency response and first aid. Content is according to the guidelines of the Orange Cross.



Contents

- 3 First aid dressing 6 x 8 cm sterile
- 4 First aid packet medium sterile
- 4 Gauze compress sterile 5 x 8,5 cm
- 4 Non-woven compress sterile 10 x 10 cm
- 3 Synthetic wadding 3 m x 10 cm
- 5 Aluminium wound dressing 10 x 10 cm
- 2 Elastic bandage 4 m x 6 cm
- 10 Wound closure strips 3 x 7,6 cm
- 2 Self-Adhesive Fixation Bandage 4 m x 8 cm
- 3 Ideal supportive bandage 5 m x 8 cm

- 2 Triangular bandage non woven
- 1 Roll adhesive plaster
- 1 Assortment plaster bandages
- 1 Plaster bandage elastic 100 x 6 cm
- 1 Life saving kiss resuscitation mask
- 1 Lister bandage scissors 14 cm
- 4 Latex gloves non sterile
- 1 Rescue sheet gold/silver 160 x 210 cm
- 1 Splinter tweezer Feilchenfeld 8,5 cm
- 1 Tick-out tick tweezer
- 1 Disinfection liquid lotion 1%
- 1 First aid advice step by step leaflet

First Aid backpack All first aid kit contents

TECHNICAL SPECIFICATIONS

| Dimensions | 340 x 100 x 380 mm |
|------------|--------------------|
| Material | Nylon 1680D |
| Color | Red |
| Packaging | Per piece in a bag |

| Description | Unit Sales | Articlenr | | Price |
|---------------------|------------|-----------|---|--------|
| First Aid Back Pack | 1 | 19110018 | € | 170,05 |

Zoll AED Plus

A cardiac arrest or cardiac fibrillation is always sudden and, at that moment it is necessary to act immediately. Of course, one of the first things one should do is contact professional help. Zoll AED Plus does not only alert you when a transient is needed, also tells you if the heart massage is deep enough and runs at the right motion.



Zoll AED Plus With a good step-by-step resuscitation guidance

This AED is distinguished from other brands

- use of special CPR-D padz

- mounted a pressure point to the electrodes, which controls the pressure and pace of the heart
- a good step-by-step resuscitation guidance with icons and a clear voice

Batteries

The Zoll Plus AED is the only one using normal household batteries, they are easily replaced and inexpensive to use.

By self-testing, the electrodes are also being tested.

Unique for marine use

It is the victim, however, of utmost importance that immediate first aid is granted. This first aid is the basis of CPR and ventilation: an AED increases the survival of the victim. Partly because the emergency services to vessels often need more time than is desirable, Dräger has added the AED to its portfolio.

Dräger has deliberately chosen the AED of Zoll Plus.

TECHNICAL SPECIFICATIONS

| Particle and wateringress | IP-55 | |
|---------------------------|---|--|
| Battery life | 5 years | |
| Padz life | 5 years | |
| Display | LCD display, 70 x 30 mm | |
| Dimensions | 133 x 241 x 292 mm | |
| Weight | 3.1 kg | |
| Operating temperature | 0°C to +50°C | |
| Storage temperature | -30°C to +60°C | |
| Cable length | 1.1 m | |
| Guarantee | 7 years | |
| Approvals | UL2601, AAMI DF-39, IEC 601-2-4, EN 60601-1 | |

| Description | Unit Sales | Articlenr | Price |
|---|------------|-----------|------------|
| Zoll AED Plus, complete with carrying bag | 1 | 19130027 | € 1.835,05 |
| Zoll AED closet, clear | 1 | 19130029 | € 472,10 |

Dräger UCF® FireVista



Dräger UCF[®] FireVista Small, light and robust

Small, light, robust and can be operated with just one button: The compact thermal imaging camera Dräger UCF® FireVista provides excellent picture quality even under the most difficult operating conditions. The camera is ready for immediate use and provides the best possible support on firefighting deployments. Outstanding quality – especially in the price.

Ideally suited for firefighting

When fire, smoke and darkness make firefighting difficult, the Dräger thermal imaging camera provides a vital sense of orientation, supporting the firefighter to advance, to identify the source of the fire and to locate victims. The Dräger UCF® FireVista helps you to optimally assess dangerous situations and thus obtain additional safety.

Excellent image quality

Even in poor visibility conditions, the Dräger UCF FireVista produces exceptional images. It is optimised for structural firefighting and provides a clear view even in thick smoke and darkness. Thanks to its high thermal sensitivity, it reliably detects even the smallest differences in temperature, which allows you to localise fire sources more quickly. This means that the image displayed shows a clear contrast between walls, doors and stairs. The high resolution and frame rate ensure that optimal image quality creates a quick overview in split seconds. This helps to find people more quickly when searching for them. With a clear view, you can search rooms and surrounding areas for sources of fire or locate victims. These features help you complete your mission quickly and safely.

Extremely durable and heat resistant

Even under the harshest operating conditions, you can rely on the camera's durability and heat resistance. Thanks to its almost indestructible outer shell, the Dräger UCF FireVista is extremely heat resistant. It can also easily withstand mechanical stresses that occur during a mission. Its IP67 protection class means water and dust cannot affect it in typical operating conditions.

Light and manageable

Weighing only 870 g, it makes it one of the lightest thermal imaging cameras currently on the market. During a mission, this means two important benefits: increased mobility and minimum physical strain for the user. The compact design ensures comfortable handling.

Ease of use with one-button operation

The camera deliberately dispenses with additional functions and focuses on optimised thermal imaging. With just one on/off switch, the camera requires minimum effort to operate. It is quickly ready for operation and gives you all the information you need in just a few seconds. This saves you valuable time in critical deployment situations. Despite the compact design, it has a large screen, so you can also assess the situation with others.

Reliable during use

Thanks to the powerful LiFe PO4 rechargeable battery, the operating time of approx. five hours gives you enough leeway for even longer deployments. The camera is virtually maintenance-free, and the integrated battery has a lifetime of approx. 4000 charging cycles.

A high-quality thermal imaging camera at a compelling price

Our Dräger UCF FireVista offers outstanding image quality at a compelling price, in trusted Dräger quality. Take this opportunity to equip your emergency teams on a large scale with an easy-to-use and technically advanced camera.

TECHNICAL SPECIFICATIONS

| Dimension of the camera | 134 x 89 x 134 mm (w x h x d) |
|-------------------------|----------------------------------|
| Weight | 870 g incl. rechargeable battery |
| Display Colour scheme | 1 |
| Size display (diagonal) | 3.5 in (9 cm) |
| Protective rubber cover | EPDM rubber |

Dräger UCF[®] FireVista

| Carrying loops | High-temperature-resistant textile |
|--|--|
| Housing material | High-temperature-resistant plastic |
| Resolution | 320 x 240 pixels |
| Thermal sensitivity | 50 mK / 0.05 °C |
| Frame rate | 30 Hz |
| Operating time (at 23°C) with rechargeable battery | approx. 5 hours |
| Temperature measurement | Digital display of temperature -20°C 650°C |
| Operating temperature | 260°C for 5 mins |
| Battery technology | Integrated |
| Battery type | LiFe PO4 |
| Battery charging time | 2 – 4 hours |
| Approvals and tests | IP67 Protection class for resistance to dust and immersion |
| | Drop test: 2 m onto concrete |

| Description | Unit Sales | Articlenr | Price |
|---------------------------|------------|-----------|------------|
| Dräger UCF® UCF FireVista | 1 | 3719350 | € 4.700,00 |

Dräger Pac[®] 6000



Dräger Pac 6000 Robust design, quick sensor response time

The disposable personal single-gas detection device, Dräger Pac[®] 6000, measures CO, H₂S, SO₂ or O₂ reliably and precisely, even in the toughest conditions. The robust design, quick sensor response times, and a powerful battery ensure maximum safety for up to two years with virtually no maintenance required.

Strong performance for maximum safety

You can rely on the Dräger Pac 6000: The personal single gas detection device warns against hazardous concentrations of carbon monoxide, hydrogen sulphide, sulphur dioxide or oxygen with precision and reliability. Powerful sensors with a very low t-90 response time ensure quick reactions. The Pac 6000 is versatile thanks to its wide measurement range. For example, the CO sensor measures concentrations from 1 to 1,999 ppm, and the H2S sensor from 0.4 to 100 ppm.

Easy handling thanks to clear user guidance

The D-Light indicates whether the functionality of the device has been tested and that it is ready to use. The housing is also designed with your safety in mind: each sensor variant of the Dräger Pac 6000 features a clear, well visible colour coding, thereby minimising the chance of mistakes.

Robust design – even for the toughest conditions

The Pac 6000 can easily handle even extreme conditions: depending on the sensor, temperatures from -40°C to 55°C and air pressures between 700 and 1,300 mbar can be tolerated. A membrane filter protects the sensor from foreign matter such as dust and liquids. The shock-proof, chemical-resistant housing meets the requirements specified in the IP68 standard rating.

User-friendly display with all important information

The large display is non-verbal and clearly indicates the respective gas concentration. Other important information, such as remaining operating time and battery capacity, is also displayed. The bright backlighting ensures clear reading of all values in the dark.

360° alarm with various functions

If the Dräger Pac 6000 measures hazardous gas concentrations, it sets off an audible, visual, and noticeable vibrating alarm. Two bright, flashing LEDs on the top and bottom of the device ensure that the alarm is easily visible from all sides. The acoustic alarm reaches a volume of 90 dB. The display can show the peak concentration measured at any given moment. Earlier alarms registered can also be retrieved at a later time even if acknowledged. The Pac 6000 with oxygen sensor has two additional alarm thresholds in addition to the standard alarm threshold setting.

Event logger for analyses and reports

The Dräger Pac 6000 logs concentrations and events along with date and time. The data can be downloaded to a PC via an interface and processed further there.

Economical operational costs

All of the versions of the Pac 6000 are equipped with extremely durable DrägerSensors[®] and a powerful battery. Neither the sensor nor the battery need to be changed for the entire two-year maintenancefree service life of the H2S, SO2 and CO versions. The service life of the Dräger Pac 6000 starts when it is first activated. The device automatically switches off after two years. The Pac 6000 is protected against water, dust and other foreign bodies by a special membrane filter. When the filter becomes heavily soiled you can quickly and easily replace it yourself. The device is then ready to use again in no time.

Fast function test saves time and money

Function tests and calibrations can be carried out especially efficient using the Dräger Xdock[®] calibration station. The automatic bump tests in the X-dock are a cost-efficient and convenient solution thanks to short test duration and extremely low test gas consumption. The Dräger Pac 6000 is simply placed in the bump test station and automatically selects the correct setting.

Dräger Pac® 6000

TECHNICAL SPECIFICATIONS

| Dimensions | 64 x 84 x 20 mm (w x h x d) |
|----------------------|---|
| Weight | Approx. 106 g (113 g with clip) |
| Device service life | 2 years from first activation |
| Battery service life | 2 years (O2 min. 12 months) |
| Ingress protection | IP68 |
| Air pressure | 700 to 1300 hPa |
| Air humidity | 10 to 90% relative humidity, non-condensing |
| Temperature | -30 °C to +55 °C (briefly down to -40 °C for 1 hr, depending on sensor) |
| Approvals | cCSAus, IECEx, ATEX, CE |
| | |

| Description | Unit Sales | Articlenr | | Price |
|-------------------------------------|------------|-----------|---|--------|
| Dräger Pac 6000 CO LC | 1 | 8326321 | € | 199,00 |
| Dräger Pac 6000 H ₂ S LC | 1 | 8326320 | € | 199,00 |
| Dräger Pac 6000 O ₂ | 1 | 8326322 | € | 209,00 |

Dräger Pac[®] 6500



Dräger PAC 6500 Quick sensor respone time and powerful battery

The robust Dräger Pac[®] 6500 is your reliable companion under tough conditions. The personal single-gas detection device measures CO, H<sub2S, SO₂ or O₂ quickly and precisely. Quick sensor response times and a powerful battery also ensure safety.

Strong performance for maximum safety

You can rely on the Dräger Pac 6500: the personal single-gas detection device warns against hazardous concentrations of carbon monoxide, hydrogen sulphide, sulphur dioxide or oxygen with precision and reliability. Powerful sensors with a very low t-90 response time ensure quick reactions. The Pac 6500 is versatile thanks to its wide measurement range. For example, the CO sensor measures concentrations from 1 to 1,999 ppm, and the H2S sensor from 0.4 to 100 ppm.

Easy handling thanks to clear user guidance

The D-Light indicates whether functionality of the device has been tested and whether it is ready to use. The housing is also designed with your safety in mind: each sensor variant of the Dräger Pac 6500 features clearly visible colour coding, thereby minimising the chance of mistakes.

Robust design – even for the toughest conditions

The Pac 6500 can easily handle even extreme conditions. Depending on the sensor, temperatures from -40 °C to 55 °C and air pressures between 700 and 1,300 mbar can be tolerated. A membrane filter protects the sensor from foreign matter such as dust and liquids. The shock-proof, chemicalresistant housing meets the requirements specified in the IP68 standard rating.

User-friendly display with all important information

The large display is word-free and clearly indicates the respective gas concentration. Other important information, such as the battery capacity, is also displayed. The bright backlighting ensures that all values are clearly legible in the dark.

360° alarm with various functions

If the Dräger Pac 6500 measures hazardous gas concentrations, it sets off an audible, visual and perceptible vibrating alarm. Two bright, flashing LEDs on the top and bottom of the device ensure that the alarm is easily visible from all sides. The acoustic signal reaches a volume of 90 dB. The display can show the peak concentration measured at any given moment. Earlier alarms registered can also be retrieved at a later time even if they have been acknowledged. The Pac 6500 with oxygen sensor has two additional alarm thresholds in addition to the standard alarm threshold settings.

Data logger and event logger for analyses and reports

The Dräger Pac 6500 logs concentrations and events along with the date and time. The data can be loaded on a PC via an interface and processed further there.

Economical operating costs

All versions of the Pac 6500 are equipped with extremely durable DrägerSensors[®] and a powerful battery. Neither the sensor nor the battery need to be changed over the two-year maintenance-free service life of the H_2S , SO_2 and CO versions. The Pac 6500 is protected against water, dust and other foreign bodies by a special membrane filter. When the filter becomes heavily soiled in use, you can quickly and easily replace it yourself. The device is then ready to use again right away.

Fast function test saves time and money

Function tests and calibrations can be carried out especially efficient in the Dräger X-dock® calibration station. The automatic bump tests in the X-dock are a cost-efficient and convenient solution thanks to the short test duration and the extremely low consumption of test gas. The Pac 6500 is simply placed in the bump test station and automatically selects the correct setting.

Dräger Pac® 6500

TECHNICAL SPECIFICATIONS

| Dimensions | 64 x 84 x 20 mm (w x h x d) |
|----------------------|---|
| Weight | Approx. 106 g (113 g with clip) |
| Battery service life | 2 years (O ₂ min. 12 months) |
| Ingress protection | IP68 |
| Air pressure | 700 to 1300 hPa |
| Air humidity | 10 to 90% relative humidity, non-condensing |
| Temperature | -30 °C to +55 °C (briefly down to -40 °C for 1 hr, depending on sensor) |
| Approvals | cCSAus, IECEx, ATEX, CE |

| Description | Unit Sales | Articlenr | | Price |
|-------------------------------------|------------|-----------|---|--------|
| Dräger Pac 6500 H ₂ S LC | 1 | 8326330 | € | 309,00 |
| Dräger Pac 6500 CO LC | 1 | 8326331 | € | 309,00 |
| Dräger Pac 6500 O ₂ | 1 | 8326332 | € | 309,00 |

Dräger Pac[®] 8000



Dräger PAC 8000 Detects 29 different gases

With the robust Dräger Pac[®] 8000, you'll be well equipped for tough conditions: this nondisposable, personal single-gas detection device is a reliable and precise instrument, which detects hazardous concentrations of 29 different gases, including special gases like NO₂, O₃ or COCl₂.

Strong performance for maximum safety

You can count on the Dräger Pac 8000 to give you reliable, precise readings at any time even in extreme conditions. Our powerful sensors with a low t-90 response time ensure quick reactions. In addition to the standard alarms, you can define extra alarm thresholds for TLV[®]* and STEL*. * TLV[®] = Threshold Limit Values, STEL = Short Term Exposure Limit

Sensors for special gases

The Pac 8000 can be fitted with sensors for carbon dioxide (CO₂), chlorine gas (Cl₂), hydrogen cyanide (HCN), ammonia (NH₃), nitrogen dioxide (NO₂), phosphine (PH₃) and organic vapours (OV or OV-A). The Dräger Pac 8000 performs especially well when detecting different special gases: it can detect ozone (O₃) from concentrations as low as 0.02 ppm and phosgene (COCL₂) from 0.01 ppm. The Pac 8000 detects nitrogen dioxide (NO₂) from concentrations as low as 0.04 ppm.

Robust design – even for the toughest conditions

The Pac 8000 can easily handle even extreme conditions. The sensors can tolerate air pressures between 700 and 1,300 mbar. A membrane filter protects the sensor from foreign matter such as dust and liquids. The shock-proof, chemical-resistant housing meets the requirements specified in the IP68 standard rating.

Easy handling thanks to clear user guidance

The D-Light indicates whether functionality of the device has been tested and that it is ready to use. The housing is also designed with your safety in mind: each sensor variant of the Dräger Pac 8000 features clear, well visible colour coding, thereby minimising the chance of mistakes.

User-friendly display with all important information

The large display is non-verbal and clearly indicates the respective gas concentration. Other important information, such as the unit of concentration and battery capacity, is also displayed. The bright backlighting ensures that all values can be clearly read off in the dark.

360° alarm with various functions

If the Dräger Pac 8000 measures hazardous gas concentrations, it sets off an audible, visual and noticeable vibrating alarm. Two bright, flashing LEDs on the top and bottom of the device ensure that the alarm is easily visible from all sides. The acoustic signal reaches a volume of 90 dB. The display can show the peak concentration measured at any given moment. Earlier alarms registered can also be retrieved at a later time even if acknowledged.

Data logger and event logger for analyses and reports

The Pac 8000 logs concentrations and events along with date and time. The data can be downloaded to a PC via an interface and processed further there.

Economical operational costs

All of the versions of the Dräger Pac 8000 are equipped with extremely durable Dräger sensors[®] and a powerful battery. The Pac 8000 is protected against water, dust and other foreign bodies by a special membrane filter. When the filter becomes heavily soiled in use, you can quickly and easily replace it yourself. The device is then ready to use again in no time.

Fast function test saves time and money

Function tests and calibrations can be carried out especially efficiently in the Dräger Xdock[®] calibration station. The automatic bump tests in the X-dock are a cost-efficient and convenient solution thanks to short test duration and the extremely low test gas consumption. The Pac 8000 is simply placed in the bump test station and automatically selects the correct setting.

Dräger Pac® 8000

TECHNICAL SPECIFICATIONS

| Dimensions | 64 x 84 x 20 mm (w x h x d) |
|----------------------|---|
| Weight | Approx. 106 g (113 g with clip) |
| Battery service life | 2 years |
| Ingress protection | IP68 |
| Air pressure | 700 to 1300 hPa |
| Air humidity | 10 to 90% relative humidity, non-condensing |
| Temperature | -30 °C to +55 °C (briefly down to -40 °C for 1 hr, depending on sensor) |
| Approvals | cCSAus, IECEx, ATEX, CE |

| Description | Unit Sales | Articlenr | | Price |
|--|------------|-----------|---|--------|
| Dräger Pac 8000 HCN | 1 | 8326353 | € | 658,80 |
| Dräger Pac 8000 NH ₃ | 1 | 8326354 | € | 725,00 |
| Dräger Pac 8000 PH ₃ | 1 | 8326355 | € | 725,00 |
| Sensorfilter 8x00 (sensor grid, silver), set of 4 pieces | 1 | 8326852 | € | 23,10 |
| Sensorfilter 8x00 (housing silver), set of 40 pieces | 1 | 8326859 | € | 173,10 |

Dräger Pac[®] 8500



Dräger PAC 8500 Measuring two gases at once

The Dräger Pac 8500[®] single-gas detection device is a reliable and precise instrument even under the toughest of conditions. The device can be equipped with a hydrogen-compensated CO sensor or a Dräger dual sensor. This gives you the option of measuring two gases at once: either H₂S with CO or O₂ with CO.

Strong performance for maximum safety

You can count on the Dräger Pac 8500 to give you reliable, precise readings at any time even under extreme conditions. Our powerful sensors with a low t-90 response time ensure quick reactions. In addition to the standard alarms, you can define extra alarm thresholds for TLV®* and STEL*. The Pac 8500 also provides a data and event logger for logging concentrations and events along with the date and time. The data can be loaded on a PC via an interface and processed further there. * TLV® = Threshold Limit Values, STEL = Short Term Exposure Limit

Convert to two-gas detection device using a dual sensor

Your single-gas detection device can become a two-gas device when a dual sensor is used. The Dräger Pac 8500 series offers the following sensor combinations: hydrogen sulphide with carbon monoxide or oxygen with carbon monoxide. Dual sensors enable detection of even low concentrations – and all in one and the same handy device. Measuring two gases at the same time reduces downtime as well. You can take vol.% measurements of oxygen and ppm measurements of carbon monoxide simultaneously using just one sensor.

Measurement of carbon monoxide with significantly reduced cross sensitivity

In industries where carbon monoxide needs to be measured with hydrogen as a background gas, the measured value for carbon monoxide may be falsified by cross sensitivity. Thanks to the special hydrogen-compensated CO sensor from Dräger, this cross sensitivity to hydrogen is significantly reduced in the display of carbon monoxide.

Robust design – even for the toughest conditions

The Pac 8500 can easily handle even extreme conditions. The sensors can tolerate air pressures between 700 and 1,300 mbar. A membrane filter protects the sensor from foreign matter such as dust and liquids. The shock-proof, chemical-resistant housing meets the requirements specified in the IP68 standard rating.

Easy handling thanks to clear user guidance

The D-Light indicates whether functionality of the device has been tested and if it is ready to use. The housing is also designed with your safety in mind: each sensor variant of the Dräger Pac 8500 features clearly visible colour coding, thereby minimising the chance of mistakes.

User-friendly display with all important information

The large display is word-free and clearly indicates the respective gas concentration. Other important information, such as the unit of concentration and battery capacity, is also displayed. The bright backlighting ensures that all values are clearly legible in the dark.

360° alarm with various functions

If the Dräger Pac 8500 measures hazardous gas concentrations, it sets off an audible, visual and perceptible vibrating alarm. Two bright, flashing LEDs on the top and bottom of the device ensure that the alarm is easily visible from all sides. The acoustic signal reaches a volume of 90 dB. The display can show the peak concentration measured at any given moment. Earlier alarms registered can also be retrieved at a later time even if they have been acknowledged. The Pac 8500 with oxygen sensor has two additional alarm thresholds in addition to the standard alarm threshold settings.

Economical operating costs

All of the versions of the Dräger Pac 8500 are equipped with extremely durable DrägerSensors[®] and a powerful battery. The Pac 8500 is protected against water, dust and other foreign bodies by a special membrane filter. When the filter becomes heavily soiled in use, you can quickly and easily replace it yourself. The device is then ready to use again right away. Thanks to the powerful battery, the Pac does not require charging on a daily basis and is easy to handle.

Dräger Pac® 8500

Fast function test saves time and money

Function tests and calibrations can be carried out especially efficient in the Dräger X-dock[®] calibration station. The automatic bump tests in the X-dock are a cost-efficient and convenient solution thanks to the short test duration and the extremely low consumption of test gas. The Pac 8500 is simply placed in the bump test station and automatically selects the correct setting.

TECHNICAL SPECIFICATIONS

| Dimensions | 64 x 84 x 20 mm (w x h x d) |
|----------------------|---|
| Weight | Approx. 106 g (113 g with clip) |
| Battery service life | 2 years |
| Ingress protection | IP68 |
| Air pressure | 700 to 1300 hPa |
| Air humidity | 10 to 90% relative humidity, non-condensing |
| Temperature | -30 °C to +55 °C (briefly down to -40 °C for 1 hr, depending on sensor) |
| Approvals | cCSAus, IECEx, ATEX, CE |

| Description | Unit Sales | Articlenr | | Price |
|--|------------|-----------|---|--------|
| Dräger Pac 8500 CO LC / H ₂ S LC | 1 | 8326365 | € | 658,80 |
| Dräger Pac 8500 CO LC / O ₂ | 1 | 8326366 | € | 725,00 |
| Dräger Pac 8500 H ₂ S LC / O ₂ | 1 | 3702251 | € | 800,00 |
| Sensorfilter 8x00 (sensor grid, silver), set of 4 pieces | 1 | 8326852 | € | 23,10 |
| Sensorfilter 8x00 (housing silver), set of 40 pieces | 1 | 8326859 | € | 173,10 |

Dräger X-am[®] 8000



Dräger X-am 8000 Up to 7 toxic measurements

Clearance measurement was never this easy and convenient: the Dräger X-am® 8000 measures up to seven toxic as well as flammable gases, vapours and oxygen all at once — either in pump or diffsion mode. Innovative signalling design and handy assistant functions ensure complete safety throughout the process.

Specially designed for use with a pump, optimised for your requirements

The Dräger X-am[®] 8000 is equipped with a very powerful pump. It can be connected with hoses of up to 45 metres in length. A pump adapter makes it easy to switch between diffusion and pump mode at any time. This means the pump is only operated when you actually need it. That saves energy, reduces wear and tear, and thereby extends the lifespan of the pump. Handy and durable, the Dräger X-am[®] 8000 is intuitive to operate single-handedly using three function keys. The easy-to-read colour display clearly lays out all the information for you. Standard accessories include a sturdy shoulder strap, so you can comfortably carry the X-am 8000. Thanks to its compact and robust construction, the device can withstand even the harshest conditions.

Clearance measurement, release and documentation in no time

The X-am 8000 effectively supports various applications with specially developed assistant functions that guide you through each process step by step. During clearance measurement, for example, the smart assistant calculates the necessary flooding time for the device and probe (FKM hose) based on parameters such as measuring gases, temperature limits, and the indicated hose length. When monitoring for high methane concentrations, an optional automatic measurement range switch makes it easier to take a reading: if the Cat-Ex sensor measures values above 100% LEL, the display switches to the range of 0 to 100 vol%. An additional useful tool is CSE Connect. It combines an Android app, specially designed for the X-am 8000, with a cloud-computing solution. Measuring jobs can be guickly and easily transferred to the app using an online application. An optional Bluetooth® module in the Dräger X-am 8000 enables measured values to be transferred automatically to the CSE Connect app. You can also easily and conveniently use the app to create measurement reports. This saves time and helps you manage your measuring

tasks during clearance measurements more effciently.

Clear signalling design

The signal system of the Dräger X-am 8000 is based on a clear colour code:

- Red light = gas alarm
- Yellow light = device-related alarm, e.g. low battery
- Green light = device is ready for use

Economical Fleet Management

Bumptest and calibration are carried out simply and quickly using the Dräger X-dock[®] calibrating station. Its low test gas consumption keeps operating costs to a minimum. Its reporting function and numerous other useful features make the Xdock Manager PC software a smart addition to any fleet management operation. To identify the devices in the fleet, you can either use tried and tested barcodes or an integrated RFID transponder.

Specialist for high and low hydrocarbon concentrations

To measure hard-to-detect hydrocarbons, you can fit the Dräger X-am 8000 with one of two high-performance PID sensors. The PID HC covers a measurement range of 0 to 2,000 ppm (Isobutene). The PID LC ppb is particularly suited for a measurement range of 0 to 10 ppm (Isobutene) with a low resolution in the range below 1 ppm. For benzenespecific measurements, the X-am 8000 can be used with a pre-tube. The advantage: you only need one measuring device for this application, which significantly reduces the costs of purchasing, maintaining and transporting devices in use. The use of the pre-tubes is supported by a built-in assistant.

Inductive charging protects against wear and tear

The X-am 8000 features inductive charging. This makes it easier to operate and increases the lifespan of the device. Issues like corrosion and contact problems in the charging cradle are a thing of the past. You can charge (outside of explosion-hazard zones) and measure at once, e.g, when in

Dräger X-am® 8000

use inside vehicles or on machinery. The charging cradle can connect with one another, taking up minimal space, and are

compatible with existing Dräger X-am[®] series cradles.

TECHNICAL SPECIFICATIONS

| Dimensions (HxWxD) | 179 x 77 x 42 mm | | | | |
|--------------------|---|--|--|--|--|
| Weight | Approx. 495 g, depending on sensor configuration, without strap, without pump | | | | |
| | Approx. 550 g, depending on sensor configuration, without strap, with pump | | | | |
| Temperature | -20 °C to + 50 °C | | | | |
| Pressure | 700 to 1300 hPa | | | | |
| Humidity | 10 to 90% (short-term up to 95%) r.h. | | | | |
| Ingress protection | IP 67 | | | | |
| Energy supply | Lithium-ion battery, rechargeable, inductive charging | | | | |
| Alarms | visual: 3 LED 'red' (gas alarms), 3 LED 'yellow' (device alarms) | | | | |
| | acoustic: multi-tone, typically 100 dB(A) at 30 cm | | | | |
| | vibration | | | | |
| Charging time | Typically 4 hours after use during a shift of max. 10 hours | | | | |
| Pump operation | Maximum length of tubing 45 m | | | | |
| Approvals | ATEX / IECEx, MED / DNV GL, Class I, Zone O, AEx da ia IIC T4 Ga, CE labelling | | | | |
| Warranty | 3 years for the device, 1 year for the power supply, sensors: see DrägerSensor & Portable Instruments | | | | |
| | Handbook | | | | |

| Description | Unit Sales | Articlenr | | Price |
|-----------------------------------|------------|-----------|---|-------|
| Dräger x-am 8000 basic instrument | 1 | 8325800 | € | 0,00 |

Dräger X-dock



Dräger X-dock Provides you with full control of your portable Dräger gas detection instruments.

The Dräger X-dock series provides you with full control of your portable Dräger gas detection instruments. Automatic bump tests and calibrations with reduced test gas consumption and short testing times save time and money. Comprehensive documentation and evaluations provide you with a clear overview.

As versatile as your requirements

The X-dock is available in a wide variety of versions. The X-dock 5300 includes a master station including a module for a gas detection instrument from the X-am 1/2/5x00 or Pac family. It is immediately ready to use. The X-dock 6300 and 6600 versions can be configured freely. They consist of a master station and can be expanded with up to 10 modules for X-am 1/2/5x00 and/or Pac 1 gas detection instruments.

Easier than ever before

Insert the device, close the lid and remove it when the indicator goes "green" – a test with the X-dock is just that simple. It immediately detects all sensor combinations. Furthermore, the X-dock automatically tests and adjusts when all required test gases are connected. The station works independently and can be configured and used without a PC. The station is operated via an integrated touchscreen. A gas detection instrument is detected as soon as it is inserted, and all data is documented in the database.

More safety thanks to complete documentation

Do you need to document whether or not your devices are ready for operation? Who tested which device when, and what the result was? The X-dock stores all of the relevant data and reads the collected information from the gas detection instruments for subsequent evaluations - providing you with complete control every step of the way. You can use the reporting function (report wizard) to create customised reports. Furthermore, you can print a calibration certificate right at the stations, since the X- dock series supports standard PostScript-compatible USB printers. This functionality allows the user to manage all requirements of EN 60079-29-1 and EN 60079-29-2.

Automatically reduced costs

With a reduced gas flow (300 mL/min instead of 500 mL/min) per module, you save costs on test gases. Short testing times reduce the overall maintenance efforts. The valve concept (patent pending) requires one

pump only, resulting in the need for less wear and tear parts. The valves automatically switch the test gases and – when connected – the compressed air as well.

Significant time savings

Up to 10 modules can be connected to the Xdock at any given time, allowing you to test gas detection instruments simultaneously but also independently of each other. The automatic bump test also saves time, because the test only takes 8 to 15 seconds 2. All Dräger test gas cylinders are already stored in the database – entering the part number will automatically fill in the fields required for the gas configuration. This eliminates the need for manual data entry.

Overview of results

The additional "X-dock Manager" software offers you even more comfort: It produces a detailed evaluation of the data in the calibration system and gas detection instruments, and presents the information in various graphics and statistics – providing you with a complete overview of all results. All connected X-dock systems can be connected in one network. Therefore, the data is not only stored locally in the system, but in a central database as well. With the X-dock manager you are always in control.

Further benefits

- Touchscreen operation at the master station
- Up to three configurable test routines
- Automatic leak tests
- Automatic tests of alarm elements (acoustic, visual and vibration alarms)
- Optional charging function for X-am 1/2/ 5x00
- Replaceable seal cartridge
- 12V operation (e.g. in vehicles) possible
- Can be subsequently expanded with up to 10 modules (X-dock 6300/6600)
- Evaluation of sensor response time

The X-dock manager offers much more

- Gas exposure in specific areas, number of conducted tests, device availability, overview of created and sent reports
- Templates for regular reports

Dräger X-dock

- An issue and return function to allocate gas detection instruments to specific individuals
- Monitoring of stations within the network: All connected systems can be monitored (e.g. information on the gas configuration)
- Overview of devices: direct access to test reports and device configuration
- Notifications, also via email, e.g. if test gases are running out
- VLAN capable

TECHNICAL SPECIFICATIONS

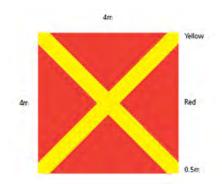
| Operating Temperature | -5°C to 45°C |
|-----------------------|----------------------------------|
| Storage Temperature | -20°C to 50°C |
| Humidity | 100%, not condensing |
| Atmospheric Pressure | 600 to 1050 mbar |
| Dimensions | 109 x 61 x 206 mm |
| Weight | 0.45 kgs |
| Power supply | 4 x 1.5V alkaline (AA) batteries |

| Description | Unit Sales | Articlenr | | Price |
|--|------------|-----------|---|----------|
| Ready to use | | | | |
| Dräger X-dock [®] 5300 X-am [®] 1/2/5, 3 gas connections, limited to one module, including adapter | 1 | 8321880 | € | 2.686,00 |
| Dräger X-dock 5300 PAC [®] 1/2/5, 3 test gas connections, limited to one module, including charger | 1 | 8321881 | € | 2.686,00 |
| Master versions | | | | |
| Dräger X-dock 6300 Master, 3 test gas connections, can be expanded to 10 modules | 1 | 8321900 | € | 2.115,00 |
| Dräger X-dock 6600 Master, 6 test gas connections, can be expanded to 10 modules | 1 | 8321901 | € | 2.561,00 |
| Modular versions | | | | |
| Dräger X-dock module X-am 1/2/5 | 1 | 8321890 | € | 1.088,00 |
| Dräger X-dock module X-am 1/2/5+, allowing charging X-am 1/2/5 devices | 1 | 8321891 | € | 1.227,00 |
| Dräger X-dock module PAC | 1 | 8321892 | € | 1.088,00 |
| X-dock Manager | | | | |
| Dräger X-dock manager professional, standard functions plus instrument handout and return function | 1 | 8321870 | € | 1680,00 |
| and reporting centre | | | | |
| Power supply | | | | |
| Connector 100-240, 24 V / 1.25 A plug-in power supply, up to 3 modules | 1 | 8321849 | € | 107,00 |
| Connector 100-240, 24 V / 6,25 A plug-in power supply, up to 10 modules | 1 | 8321850 | € | 193,00 |
| Car adapter supply 12/24 V DC, up to 5 modules | 1 | 8321855 | € | 52,75 |
| Accessories | | | | |
| Pressure valve 0.5 bar, constant, nickel-plated | 1 | 8324250 | € | 457,00 |
| Pressure valve 0.5 bar, constant , nickel-plated and with flow stop, vlave closes immediately when hose | 1 | 8324251 | € | 596,00 |
| is removed | | | | |
| Pressure valve 0.5 bar constant , stainless steel | 1 | 8324252 | € | 697,00 |
| Hose connector (5 pcs) | 1 | 8324095 | € | 24,80 |
| Wall mount, standard | 1 | 8321922 | € | 27,00 |
| Wall mount, comfort (adjustable tilt angle) | 1 | 8321910 | € | 194,00 |
| Cylinder bracket for table mount version X-dock, excl. cylinder | 1 | 8321918 | € | 81,75 |
| Cylinder holder for DIN rail/wall mount | 1 | 8321928 | € | 104,00 |
| Filter for fresh air pump inlet for X-am 1/2/5x00 | 1 | 8319364 | € | 24,00 |
| 5 x 1.5 mm fluorinated rubber hose (by the metre), ideally suited for connecting the test gas cylinder | 1 | 1203150 | € | 35,00 |
| with X-dock | | | | |
| Spare parts | | | | |
| Seal cartridge for X-am 1/2/5 module | 1 | 8321986 | € | 36,50 |

Dräger X-dock

| Description | Unit Sales | Articlenr | | Price |
|--------------------------------------|------------|-----------|---|-----------|
| Seal cartridge for PAC module | 1 | 8321987 | € | 36,50 |
| Display protection seal | 1 | 8321804 | € | 16,95 |
| Stickers for module numbering (1-10) | 1 | 8321839 | € | 8,85 |
| Floater complete, without hose | 1 | 6802337 | € | 63,50 |
| Bar scanner | 1 | 8318792 | 0 | n request |

Helideck Closed Marker



Helideck Closed Marker Marker 4 x 4 mtr

TECHNICAL SPECIFICATIONS

| Material | PVC 630g/m2 |
|------------|---------------------------------|
| Dimensions | 4x4 m , stripe width: 0.5m |
| Fixation | Every 0,5m a brass fixation eye |

| Description | Unit Sales | Articlenr | | Price |
|-----------------------------------|------------|-----------|---|--------|
| Helideck Closed Marker, 4 x 4 mtr | 1 | SG04902 | € | 966,45 |

Cabinets

SAFETY STATION PRE BOURSENT LOCKER UPE LOCKER RUNNAL SUTS

Helideck Closed Marker

Marker 4 x 4 mtr

Fire fighting and safety equipment cabinets and chests. High quality glass fibre reinforced polyester cabinets specially designed for use in the marine and offshore environment.

Features

The cabinets and chest are made out of quality GRP. The minimum wall thickness of 3-4mm gives a optimum stiffness of the products which ensures a maximum lifetime also under tough conditions. For maximum safety the cabinets can be produced using a Class 2 flame retardant gel coating.

Locks and Hinges

All locks and hinges are made out of stainless steel.

On request the cabinets can be fitted with a aluminium roller shutter door.

Options

- - flame retardant Class 2
- - shelf's / Bulkheads / Hanging rail / BA brackets / securing strips
- - aluminium roller shutters
- - insulation and heating (also in ATEX)
- - lettering

| Size | Although the cabinet are available in a number of standard sizes custom made products can be delivered. |
|------------------|--|
| | Standard cabinets for: |
| | Survival suits, Life jackets, Life buoys, Fireman's outfit, Chemical clothing, Helicopter crash equipment, |
| | Fire hydrants and hoses, Fire extinguishers etc. |
| Color | Standard : Red RAL3002, Green RAL6002 |
| | Custom : Any RAL-colour (on request) |
| Protection class | Standard IP55 for all cabinets fitted with a neoprene 6x20 mm door seal |

| Description | Unit Sales | Articlenr | Price |
|---|------------|------------|------------|
| Contact our sales department for more information | 1 | On request | On request |

Dräger Savina® 300 Classic

The Dräger Savina[®] 300 Classic (in this configuration) combines the independence and power of a turbine-driven ventilation system with a wide range of ventilation modes. The large colour touch screen and intuitive operating system that concentrates on essential features make configuration and operation very simple.



Dräger Savina® 300 Classic High ventilation performance

Ease-of-use

- intuitive for simple operation and quick configuration
- Dräger-wide standardised user interface provides confidence in use and reduces training time
- quick operational readiness with an automatic device check
- intelligent alarm handling for a quick response to patient alarm situations
- smooth and sealed surfaces for easy cleaning and disinfection

High ventilation performance

- wide range of ventilation modes
- stress-free spontaneous breathing with excellent trigger response time thanks to the turbine
- free breathing with AutoFlow in volume constant ventilation at a minimum pressure level

- non-invasive ventilation (NIV) with a very quick response time to patient efforts – available in all modes
- no device change in case of altered ventilation therapy necessary: O2-therapy allows oxygen application with constant flow
- extended graphic capabilities with loops, trends and logbook

Independent from gas and power supply

- built-in-turbine with rapid response time and continuous high flow delivery of up to 250 I/ min
- five hours of independent ventilation due to built-in and external batteries
- transport Supply Unit (TSU) can be quickly attached for ergonomic handling of gas cylinders
- bed coupling for quick connection between ventilator and patient bed
- low Pressure Oxygen (LPO) inlet for ventilation without central gas supply

TECHNICAL SPECIFICATIONS

| MV low | 0.2 40 L/min or off |
|-------------------|--|
| VTi high | 0.06 4 L or off; with Pediatric Plus 0.03 4 L or off |
| Apnea monitoring | 15 – 60 s or off |
| Tdisconnect | 0 60 s |
| Ti max | 0 60 s |
| Leak compensation | optimized patient-ventilator synchrony adjusts the flow trigger and the inspiratory termination criteria for |
| | leaks. |
| | tube application: up to 10 L/min |
| | NIV VC-modes: up to 25 L/min |
| | – NIV PC-modes: not limited |

| Description | Unit Sales | Articlenr | Price |
|--------------------|------------|------------|------------|
| Dräger Savina® 300 | 1 | On request | On request |

Dräger Oxylog VE300

The straightforward and user-friendly Dräger Oxylog[®] VE300 is built to face your challenges in preclinical emergency services. With reliable ventilation technology, robustness and intuitive operation, it provides you with reliable and safe assistance in an emergency.



Dräger Oxylog VE300 Reliable ventilation during an emergency

Simple, ergonomic, robust - and economical

- reliable even under extreme operating conditions (-20 to +50°C)
- three step device start up, takes less than 10 seconds
- device check takes less than a minute
- preset parameters for fast ventilation start (adult, child, infant)
- replaceable and rechargeable battery for up to 9 hours of operation
- low oxygen consumption thanks to DuroFlow technology*
- clear user guidance with moderate training time
- easily accessible documentation with Bluetooth and USB interface: patient data, system test, screen shots
- wall mount permits flexible positioning
- practical extras available as options: belt, stretcher mounting, accessory bag, battery charger
- ergonomic carrying handle directly above the device's centre of gravity

Easy to carry, quick-start ventilation

- clear colour touch screen
- flip-screen button rotates the display 180°
- volume-controlled ventilation: VC-CMV / VC-AC, VC-SIMV
- pressure-controlled ventilation: PC-BIPAP**
- spontaneous breathing support: SPN-CPAP/PS with NIV
- pressure support: PS
- CPR mode can be selected with a single keystroke
- for patients with a tidal volume of 50 mL upward
- capnography: main-stream CO₂ measurement
- logbook supports documentation
- * DuroFlow technology: based on the "Venturi-Principle" without additional base flow
- ** trademark used under license

TECHNICAL SPECIFICATIONS

| Dimensions main device | 399 x 153 x 160 mm (w x h x d) |
|--|--------------------------------------|
| Dimensions main device, with carrier system | 607 x 228 - 251 x 166 mm (w x h x d) |
| Weight main device, without battery | Approx. 3.3 kg |
| Weight main device, with battery | Approx. 3.6 kg |
| Weight main device, with battery and bag, with carrying system | Approx. 5.6 kg |
| Screen technology | TFT colour screen |
| Screen size | 4.3 inch |

| Description | Unit Sales | Articlenr | Price |
|---------------------|------------|------------|------------|
| Dräger Oxylog VE300 | 1 | On request | On request |

Dräger Medical Oxygen Resuscitation Device

The Dräger Medical Oxygen Resuscitation Unit is a quick-& easy to-use unit which will be of equal interest in emergency services, general practitioners and hospital personnel. The device concept drew on experience from all areas.



Dräger Medical Oxygen Resuscitation Device Quick to use Medical Oxygen Resuscitation device

Features

Among the outstanding features are the 100% by volume Medical Oxygen delivery, the simultaneous operation of several professional components, the medical Oxygen Cylinder with an RPV and a handy small Oxygen Case.

Even from a distance, the robust, highly condensed polyethylene case is clearly visible thanks to its bright orange colour.

Equipment

Inside the device no space is wasted as all the contents are ergonomically arranged. The

pack contains everything emergency ventilation requires.

The main component is a 2.0 L Medical Oxygen cylinder c/w a special Residual Pressure Valve (RPV) which provides the best protection against pollution. A compact pressure reducer with a 5 Bar outlet and an adjustable flow regulator (0-30) L/min. is included.

Additional components

- ambu resuscitator manual ventilation bag
- aero Suc Manual suction pump
- 2 pcs. inhalation masks
- 3 pcs Guedel Airway tubes
- cylinder bracket

TECHNICAL SPECIFICATIONS

| Dimensions | 480x360x170mm |
|------------------------------|--------------------------------|
| Weight incl contents | Approx. 7 kgs |
| Pack material | Polyethylene, highly condensed |
| Capacity O2 cylinder | 2 liter |
| Filling pressure O2 cylinder | 200 bar |
| Material O2 cylinder | Steel |
| Valve type | RPV |

| Description | Unit Sales | Articlenr | F | Price |
|---|------------|-----------|---------|-------|
| Dräger Oxygen Case Excl. 2 Ltr. Cylinder, RPV Valve / Pin Index | 1 | 86073701 | € 1.047 | 7,50 |
| Cylinder O2: 2 Ltr. 200 Bar | 1 | SG04842 | € 326 | 3,55 |

Dräger Polaris[®] 50



Dräger Polaris® 50 Flexible to handle and easy to use

The Polaris[®] 50 is ideal for everyday hospital life, which is becoming more and more challenging. Whether it is in the examination room, in intensive care or in the OR-induction room – the Polaris[®] 50 always provides high contrast, colour-stable light. In addition, the treatment light is flexible to handle and easy to use so that you can make the right decisions more quickly.

Main benefits

The Polaris[®] 50 meets the highest requirements for high-quality lighting in medical locations. LEDs of the newest generation generate a light intensity of up to 80,000 lux. With a colour temperature of 4,500 K in the neutral white range, the Polaris[®] 50 gives you a true-color view of the treatment area. The colour rendering index of Ra = 95 and R9 = 90 also guarantees high visibility of details. Colour nuances in the illuminated tissue therefore appear natural and rich in contrast so that you can easily focus on your work.

The Polaris[®] 50 is a powerful solution for everyday use. Thanks to its low maintenance requirements and high reliability, the light system guarantees many years of operation at minimal costs. For example: The LEDs reduce the heat intensity at the light head and thus increase its efficiency. They consume only a fraction of the energy compared to conventional halogen bulbs. The installed high-performance LEDs have a service life of up to 50,000 hours, enabling significant cost reductions.

"Versatile in its function and area of application" – this is the motto of the Polaris[®] 50 minor surgical light. You decide where and how you want to use the light: as a standalone ceiling, wall or mobile version or in combination with Dräger supply units at a central mounting. The numerous combination options enable you to save space and design workplaces from the treatment room via the OR to the intensive care unit exactly for their specific purpose.

Arm System

The Polaris[®] 50 arm system – consisting of axis and spring arm – enables you to position the light anywhere you want. In addition, three joints of the Polaris[®] 50 can be rotated a full 360°. This gives you freedom of movement and saves time. Thanks to its sophisticated mechanical system, the light can be easily operated or adjusted with one hand. Two adaptation options are available for different space requirements: the ceiling tube, which can be individually shortened, and an optional suspended ceiling adapter for installation on suspended ceilings.

Functional Design

The functional design of the Polaris[®] 50 convinces with its compact form and robust components. It enables quick and efficient cleaning. The handle can be removed and sterilised. Individual components and the LED module itself can be professionally serviced by a Dräger service technician if required. The light intensity is continuously adjustable via a dimming wheel which can be easily operated with one hand without accidentally changing the position of the light.

Workplace Design

The best light is useless if it is not where you need it. For this reason, the Dräger Polaris[®] 50 system is extremely flexible and can be mounted almost anywhere – as a stand-alone version on ceilings and walls (e.g. in treatment rooms) and suspended in combination with Dräger supply units (e.g. in the recovery room). Combination with a display (e.g. for emergency rooms) is also possible.

In addition, installing the Polaris[®] 50 on a three-arm mounting system enables you to make the most of confined spaces (e.g. in the intensive care unit). The Polaris[®] 50 is also available as a mobile version that can be used as an additional treatment light in general rooms, the OR section or operating rooms. The trolley of the mobile light is equipped with practical locking brakes and hooks for the power cable.

Dräger Polaris[®] 50

TECHNICAL SPECIFICATIONS

| Illumination intensity (1m distance) | 80,000 lux |
|---|--------------------------------|
| Brightness adjustment | Continuous, 20 – 100 % |
| Light field diameter d10 (1 m distance) | 18 cm |
| Light field diameter d50 (1 m distance) | 10 cm |
| Colour temperature | 4,500 K |
| Colour rendering index Ra | 95 |
| Colour rendering index R9 | 90 |
| Depth of illumination L1+L2 | 240 cm |
| Power supply | 100 – 240 V (AC) |
| Frequency | 50 – 60 Hz |
| Power consumption | 32 W (max. 80 VA) |
| Number of LEDs | 7 LEDs |
| Service life of the LEDs | 50,000 h |
| Max. total illumination intensity | 320 W/m2 |
| Classification | Protection class I |
| Degree of protection | IP20, IP43 |
| Light head diameter | 33 cm |
| Total weight of light and axis system | Polaris® 50 Ceiling: 14 kg |
| | Polaris® 50 Wall: 13.5 kg |
| | Polaris® 50 Mobile: 20 kg |
| | Polaris® 50 Supply Unit: 10 kg |
| Accessories | Sterilisable handle |
| | Suspended ceiling adapter |

| Description | Unit Sales | Articlenr | Price |
|--------------------|------------|------------|------------|
| Dräger Polaris® 50 | 1 | On request | On request |

Dräger Polaris® 100/200



Dräger Polaris® 100/200 Compact design, simple operation

In the operating room, the right illumination is essential for success. The Polaris[®] 100/200 surgical illumination systems provide cool light with natural colours and rich-contrast for thousands of hours of carefree operation without straining on your hospital's budget.

LED technology in the OR

LEDs are highly efficient light sources for surgical applications. Dräger has now combined the advantages of this innovative light source with a new, extremely compact, lightweight yet robust design that includes individual lens reflectors for enhanced output and shadow control. Even the little heat produced by the LEDs is regulated and dissipated by an integrated Thermal Management System. The maximum light head temperature (upper surface) will not exceed 35 °C*. With an average operational lifetime of 50,000 hours, this LED technology is as reliable as affordable. * At a room temperature of 20 °C.

The Polaris 100

The all new, highly compact Polaris 100 features 48 LEDs with an output range of 40,000 to 120,000 lux. A special mode provides ambient light from a single LED to support minimal invasive procedures. The sleek yet very sturdy light head weights just 13 kg and makes positioning exremely easy and comfortable. Without any moving parts in the light head this system requires almost no maintenance. With a colour-rendering index Ra of 95 and a colour-rendering index R9 93, the Polaris system offers you a contrast-rich and natural illumination without compromising red tones. The Polaris 100/200 lighting system can be equipped with warm white, neutral white or cold white (4,400 K, 5,000 K or 5,600 K) LED lights.

The Polaris 200

Without changing the external dimensions or design, the Polaris 200 gives you additional 18 LEDs for a total of 66. This translates to a maximum output of 160,000 lux. The light intesity can be easily dimmed down to 40,000 lux. Color temperature and rendering index are identical to those of the Polaris 100. Each LED is equipped with its own lens reflector system. The homogenous light column of both lights provides the surgeon with a shadow-controlled, contour-rich, natural color view of the surgical field.

Compact design, simple operation

The classic round design includes integrated handles for nonsterile personnel and touch panel controls for easy handling and operation. Sterile personnel can position the Polaris 100/200 easily with the central sterile handle. You can either choose between the sterilisable or sterile handle, depending on your infection prevention concept. Each of the four clearly marked control buttons performs a single function, and an optional, wallmounted control panel is also available. The smooth, seamless casing makes cleaning quick and simple, while its lightweight construction ensures practically effortless positioning.

The Polaris 100/200: Simply good light!

The Polaris 100/200 surgical illumination system is an economical, high-performance solution for your daily surgical routine. This workhorse is designed for years of carefree operation and minimal maintenance. Its exceptional reliability and price/performance ratio will help you reduce investment costs today as well as maintenance and operating costs tomorrow.

The mobile Polaris 100/200

The mobile Polaris light can be used as an additional single light in the OR – for example, for cardiovascular interventions where the patient has to undergo several procedures at the same time. Of course the high-quality mobile light can also be used in the ER or in treatment rooms. The mobile Polaris 100/200 is especially useful when it is not possible to install a fixed, ceiling-mounted light due to unsuitable infrastructure. The trolley features a fully closed cover, which ensures the light is easy to clean. The rear double castors are equipped with locking brakes.

With the Polaris light your hospital is equipped with state of the art, high performance LED technology combined with a functional, high quality design. The Polaris is approved as both a surgical light and a treatment light and is available with a choice of light intensity and colour temperature. With up to 160,000 lux and a smooth cardanic

Dräger Polaris® 100/200

mounting for exact positioning, the mobile version has no functional limitations. Height adjustment supported by pneumatic springs allows for effortless adaptation to transport and operating conditions. In the fully extended position a working height of 2,175 mm is reached under the light head – ideal also for tall surgeons. The transport height of the Polaris 100/200 Mobile, however, is only 1,850 mm.

In the event of a mains power failure, the integrated battery provides uninterrupted power to the light with at least three hours guaranteed supply. As soon as the battery falls below a charging state of 25 % – this equals a remaining operating time of approx. 45 minutes – you will be warned by an integrated, acoustic reminder message. LED status indicators on the trolley also show the status of the power supply and state of charge of the battery.

TECHNICAL SPECIFICATIONS

| Light intensity in 1m distance | Polaris® 100: 40,000 – 120,000 lx |
|--|---|
| | Polaris® 200: 40,000 – 160,000 lx |
| Ee/Ec ratio | 3,5 (mW/m2)/ lx |
| Ambient light intensity | 300 lx |
| Depth of illumination L1 + L2 (20 %) | 1,300 mm |
| Depth of illumination L1 + L2 (60 %) | 750 mm |
| Colour temperature | 4,400, 5,000 or 5,600 Kelvin |
| | Lights are produced with the desired colour temperature |
| Colour rendering index Ra | 95 |
| Colour rendering index R9 | 93 |
| Number of LEDs | Polaris [®] 100: 48 LEDs in 8 modules |
| | Polaris [®] 200: 66 LEDs in 11 modules |
| Service life of LEDs | approx. 50,000 hours |
| Ergonomically shaped sterilisable handle | available |
| Ergonomically shaped sterile handle | available |
| Light head diameter | 620 mm |
| | |

| Description | Unit Sales | Articlenr | Price |
|-------------------------|------------|------------|------------|
| Dräger Polaris® 100/200 | 1 | On request | On request |

Content of the Medical Oxygen Cylinder is in

Refills will take place under the regulation as

described in the MFAG (Medical First Aid

Guide) and the information provided in the

Dangerous Goods Code), the IMSBC Code (International Maritime Solid Bulk Cargoes),

the EmS (Emergency Procedures for Ships

Carrying Dangerous Goods), IBC Code

Bulk) and IGC Code (Ships Carrying

Liquefied Gases in Bulk).

(Ships Carrying Dangerous Chemicals in

IMDG Code (International Maritime

conformity with International regulations.

Dräger Cylinder Medical Oxygen

Content

The Dräger Cylinder Medical Oxygen, available in 2, 5, 10 and 40 Liters. Filled and including Protection Cap for transportation.

Dräger Cylinder Medical Oxygen 200 bar

TECHNICAL SPECIFICATIONS

ORDER INFORMATION

| Description | Unit Sales | Articlenr | | Price |
|---|------------|-----------|---|------------|
| Cylinder O2: 2 Ltr. 200 Bar c/w Bullnose 5/8" RPV | 1 | SG04841 | € | 326,55 |
| Cylinder O2: 2 Ltr. 200 Bar c/w Pin-Index RPV | 1 | SG04842 | € | 326,55 |
| Cylinder O2: 2 Ltr. 200 Bar c/w 3/4" RPV | 1 | SG04843 | € | 343,85 |
| Cylinder O2: 5 Ltr. 200 Bar c/w Bullnose 5/8" RPV | 1 | SG04846 | € | 425,05 |
| Cylinder O2: 5 Ltr. 200 Bar c/w Pin-Index RPV | 1 | SG04847 | € | 425,05 |
| Cylinder O2: 10 Ltr. 200 Bar c/w Bullnose 5/8" RPV | 1 | SG04851 | € | 521,40 |
| Cylinder O2: 10 Ltr. 200 Bar c/w Pin-Index RPV | 1 | SG04852 | € | 521,40 |
| Cylinder O2: 10 Ltr. 200 Bar c/w 3/4" RPV | 1 | SG04853 | € | 540,90 |
| Cylinder O2: 40 Ltr. 200 Bar c/w Bullnose 5/8" RPV | 1 | SG04861 | € | 855,30 |
| Cylinder O2: 40 Ltr. 200 Bar c/w Pin-Index RPV | 1 | SG04862 | € | 855,30 |
| Dräger: Oxygen case - RPV valve / Pin-Index: | | | | |
| Dräger: Medical oxygen resuscitation case RPV valve / Pin-Index (w/o cylinder) | 1 | 86073701 | € | 1.047,50 |
| Cylinder O2: 2 Ltr. 200 Bar c/w Pin-Index RPV | 1 | SG04842 | € | 326,55 |
| Dräger: Oxygen case - RPV valve / Bull-Nose: | | | | |
| Dräger: Medical oxygen koffer RPV valve / Bull-Nose (w/o cylinder) | 1 | 86073702 | € | 1.047,50 |
| Cylinder O2: 2 Ltr. 200 Bar c/w RPV valve / Bull-Nose (filled and c/w protection cap) | 1 | SG04840 | 0 |)n request |

Special Residual Pressure Valve (RPV) included

One of the strict demands to refill an oxygen cylinder with Medical Oxygen according to the above procedures, the GMP and International MFAG regulations is the following;

- Each Medical Oxygen Cylinder needs to be fitted with a Residual Pressure Valve (RPV),
- The Dräger Medical oxygen cylinder is in full compliance with the above regulations and will be supplied with a certificate under the auspices of an approved pharmacist,
- UN1072 CLASS 2.2/5.1.

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