Dräger PSS® BG 4 plus
Closed Circuit Breathing Apparatus

Designed especially for tough missions: The Dräger PSS® BG 4 plus closed circuit breathing apparatus combines uncompromising safety with the highest level of breathing and carrying comfort. The positive pressure unit supplies the wearer with up to four hours of breathing air, even in toxic atmospheres.
Dräger PSS® BG 4 plus

- **Exhalation Hose**
- **Bodyguard II**
  - Fully electronic signal and warning unit for monitoring a multitude of viral breathing apparatus functions
- **Spring Clip CO₂ Absorber**
  - Improved spring clip for better durability
- **CO₂ Absorber**
  - Absorbs carbon dioxide of the exhaled air
- **Breathing Bag**
- **Breathing Bag Springs**
  - Responsible for the high pressure in the unit
- **Drain collecting**
  - Optional super-absorbent fleece as a practical single-use component for collecting liquid
- **Pressure Relief Valve**
  - Opens automatically if the breathing bag is full, non-regenerated breathing air exits the circuit
- **Constant Metering**
  - Enriches the breathing air with at least 1.7 l/min oxygen
- **Breathing Air Cooler**
  - Can be filled either with ice or cooling cartridge
- **Switch-Box (Low Pressure Sensor)**
- **Minimum Valve**
  - Improved resistance against corrosion due to special coating
- **Clip for Minimum Valve**
- **Pressure Reducer**
- **Oxygen Cylinder**
  - 2 L, 200 bar
- **Full Face Mask Dräger FPS 7000 RP**
- **Breathing Connector**
- **Inhalation Hose**
- **Breathing Air Cooler**
  - Can be filled either with ice or cooling cartridge

D-31452-2011
Exhalation Hose
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Improved resistance against corrosion due to special coating
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Pressure Reducer
Oxygen Cylinder
2 L, 200 bar
Benefits

**Optimised together with our customers**

We believe that our products can only fit the needs of our customers when we listen to their desires and specifications. This is why we include them in the development and design process. The modifications on the proven Dräger PSS BG 4 represents the results of practical experience, constant performance evaluations and the highest quality standards. The result is the Dräger PSS BG 4 plus. Numerous optimizations, as well as new attachments have increased its safety, longevity and ease of maintenance. The modifications can, when desired, be individually ordered or as a practical upgrade kit.

**Perfectly made for long-duration deployment**

The positive pressure breathing circuit protects the wearer by preventing hazardous substances from entering the sealed breathing system. Depending on the applications, the duration of use is up to four hours. A CO₂ absorber removes carbon dioxide from the exhaled air. At the same time, the breathing air is enriched with oxygen from the oxygen cylinder. Before the regenerated breathing air is inhaled again, it flows through the breathing air cooler.

**More breathing and working comfort**

The minimum valve, which enriches the breathing air with additional oxygen upon demand, has been treated with a special coating to protect against corrosion. A redesigned clip simplifies the fastening of the valve. The area around the pressure reducer has been strengthened and additional reinforcement protects the carrying plate, providing greater stability when handling the unit complete with oxygen cylinder. To reduce the temperature of the inhaled air and minimize physical stress for the wearer, the breathing air cooler can also be filled either with ice or a re-generating cooling cartridge.

**New features that make sense**

Newly-developed heat protection for the breathing hose and housing are also optionally available to further reduce the temperature of the inhaled air. A T-piece with water trap can be attached to the facemask to prevent water from collecting in the flow area of the device. Any liquid discharged into the breathing circuit from the drain valve is optionally collected in an extra-absorbent fleece. The fleece is designed for single use and is easily disposed.

**Breathing air cooler without ice**

The cooling cartridge as an alternative to ice and can be used for a variety of applications with only three hours of recharging time necessary. The cooling cartridge can be easily exchanged and used unlimited.
Benefits

Reliable CO₂ absorption

The simple CO₂ absorber comes complete with an integral dust filter for more operational convenience. The CO₂ absorber is available as either a single use absorber or refillable cartridge. The development and production of Drägersorb® 400 soda lime along with the PSS BG 4 plus ensures the safety of the user and the long duration breathing supply.

Proven wearing comfort

The ergonomically shaped carrying plate with its lightweight harness, adjustable shoulder straps and easy to use “pull forward” waist belt provide more freedom of movement. The practical breathing hose routing across the shoulders ensures for ideal balance on the wearer’s back.

Ideal respiratory monitoring

The data captured by the Dräger Bodyguard II electronic monitoring unit can be transmitted to Dräger PSS Merlin Telemetry Boards or Merlin Modem. This telemetric monitoring and communications system displays the Bodyguard data for each of the wearers who are logged on. As a result, entry control personnel are able to view the current status of each of the device wearers and can respond immediately in case of an emergency.

System Components

Dräger RZ 7000

Easy to use: With the Dräger RZ 7000 you can carry out the function and leak tests of the Dräger PSS® BG 4 plus easier and faster than ever before.
System Components

**Test kit**

With all adapters required for testing the Dräger PSS® BG 4 plus

R 33 777

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**Dräger FPS® 7000 RP**

Dräger plug connection for closed-circuit breathing apparatus

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**Dräger FPS®-COM 5000 (RP)**

The Dräger FPS®-COM 5000 communication unit has been specifically developed for the full-face mask Dräger FPS® 7000 and ensures clear communication through a voice amplifier unit or radio device – even under extreme conditions.

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**Panorama Nova® RP**

Safe, comfortable full face mask in various designs, mask body made from EPDM.
Accessories

Heat protection

For breathing hoses and housing, reduces the temperature of the inhaled air when fire fighting

Hoses: R 34 745
Housing: R 34 646

Filling station

R 33 752

Cooling cartridge

No ice necessary, unlimited use, reactivated after 3 hours. Placed in standard cooler

R 34 746

Dust filter

(200 off)
R 35 754
Accessories

**Freezer canister cooler Dräger PSS® BG 4**
To produce ice plugs
R 33 999

**Isolation for Dräger PSS® BG 4**
For operations with temperatures under -15°C
R 34 498

**Antifog Spray**
Prevent fogging of visor FPS® 7000 RP
R 56 542

**Merlin Radio Kit**
Europe (869.5 MHz)
33 54 430

Merlin Radio Kit US (450 – 470 MHz)
33 56 185
Accessories

**Drink container CamelBak® Pakteen**

R 57 990

**Training adapter**

The new BG 4 training adapter offers a cost-effective training for the user by saving soda lime, oxygen and cleaning of the BG 4.

R 34 800

**Drägersorb® 400**

Drägersorb® 400 is used to absorb acid gases, such as carbon dioxide (CO$_2$), in closed or semi-closed circuit breathing apparatus.

**Dräger CO$_2$ absorber**

Single-use cartridge

R 34 360
Accessories

**Dräger CO₂ absorber**
Refillable cartridge, transparent
R 34 367

**Dräger oxygen cylinder**
With different thread connections
2 L, 200 bar

CFK: B 10 222
Steel: B 10 221
US: B 30 229
Canada: B 30 230
## Technical Data

**Dräger PSS® BG 4 plus**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration of use</td>
<td>4 h according to EN 145 and NIOSH</td>
</tr>
<tr>
<td>Weight, ready for use (kg/pound)</td>
<td>15 kg / 33.07 pounds (incl. mask, full oxygen cylinder, CO₂ absorber and approx. 1.2 kg / 2.65 pound ice)</td>
</tr>
<tr>
<td>Dimensions (H x W x D) (mm/inch)</td>
<td>595 x 450 x 185 mm / 23.43 x 17.72 x 7.28 inches</td>
</tr>
<tr>
<td>Constant oxygen metering (l/min O₂)</td>
<td>1.5 to 1.9</td>
</tr>
<tr>
<td>Minimum valve (l/min O₂)</td>
<td>&gt; 80</td>
</tr>
<tr>
<td>Breathing bag volume (l)</td>
<td>5.5</td>
</tr>
<tr>
<td>Bypass valve (l/min O₂)</td>
<td>&gt; 50</td>
</tr>
<tr>
<td>Operating temperatures</td>
<td>-40 °C / -40 °F to +90 °C / +194 °F (if stored at room temperature)</td>
</tr>
<tr>
<td>Approvals</td>
<td>EN 145, Ex protection according to EN 50020, Exx IIC T4, Exx Ial and NIOSH</td>
</tr>
</tbody>
</table>

## Ordering Information

**Dräger PSS® BG 4 plus**

<table>
<thead>
<tr>
<th>Model Description</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dräger PSS® BG 4 plus EP</td>
<td>High pressure, European approval with CE mark and G3/4&quot;-Connecting thread</td>
</tr>
<tr>
<td>Dräger PSS® BG 4 plus FEP</td>
<td>High pressure, European approval with CE mark and M24 x 2 Connecting thread</td>
</tr>
</tbody>
</table>

Further variants can be found in the price list or are available on request.

### Required for operation

<table>
<thead>
<tr>
<th>Equipment Description</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dräger FPS® 7000</td>
<td>Full face mask with central connecting for closed circuit breathing apparatus Dräger PSS® BG 4 plus. Mask body, inner mask and head harness made of EPDM. With antiscratch coated polycarbonate visor and wiper. Available as an option is the CamelBak® drinking system.</td>
</tr>
<tr>
<td>Dräger Panorama Nova® EPDM RP PC</td>
<td>Full face mask with plug-in connection, polycarbonate visor and wiper for closed circuit breathing apparatus. Approved for mining and fire departments, tested for EN 136 with CE mark.</td>
</tr>
</tbody>
</table>

You can find other equipment varieties in the price list or per request.

### Communication

<table>
<thead>
<tr>
<th>Equipment Description</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Mask integrated communication unit Dräger FPS®-COM 5000</td>
<td>Optionally, the FPS®-COM 5000 can be fitted to FPS® 7000 RP to provide voice amplifiers and the possibility to connect to various tactical radios. Both features enable crystal clear communication and make the overall incident safer and more efficient.</td>
</tr>
</tbody>
</table>

Dräger FPS® 7000 RP with Dräger FPS®-COM 5000       | R 62 703                           |

Dräger Bodyguard IR-Link software with cable and RS232 connection | 33 51 342 |

Interface for Bodyguard II Upgrade kit

Dräger Bodyguard IR-Link software with cable and RS232 connection | For configuring and analysing of the Bodyguard II. Can be connected using normal USB-RS232 adapter |

### Interface for Bodyguard II

Dräger Bodyguard IR-Link software with cable and RS232 connection | 33 51 342 |
Notes

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