

Closed-circuit breathing apparatus Dräger PSS® BG 4 plus

Specially designed for demanding tasks: The Dräger PSS BG4 plus closed-circuit breathing apparatus combines uncompromising safety with outstanding respiratory protection and wearer comfort. Innovative in design, it provides the wearer with up to four hours of breathing air in toxic environments.



D-16504-2009

- BREATHING AIR FOR UP TO 4 HOURS
- HIGHEST BREATHING COMFORT WITH AN INTEGRATED COOLING SYSTEM
- ERGONOMICALLY SHAPED CARRYING PLATE
- REDUCED EXPOSURE FROM A WELL BALANCED SYSTEM
- IMPROVED HARNESS AND INTELLIGENT BREATHING HOSE ROUTING FOR EXCELLENT FREEDOM OF MOVEMENT
- NEW DRÄGER FPS 7000 RP FULL FACE MASK WITH INTEGRATED DRINKING VALVE



D-16515-2009

Whenever emergency teams are saving lives or extinguishing fires, above or below the ground, the Dräger PSS BG 4 plus comes into its own. Whether used during rescue or fire fighting missions in mines, tunnels or underground train ducts, or in assignments with long access routes, the closed-circuit breathing apparatus is the first choice. More than 25,000 professional users rely on the Dräger PSS BG 4 worldwide.

OPTIMIZED IN CONJUNCTION WITH OUR CUSTOMERS

Our products must meet the precise needs of the user and, for this reason, we involve our customers in the development process. Modifications to the proven Dräger PSS BG 4 are the result of practical experience and constant monitoring to ensure the highest quality standards. We listened to our customers and implemented their

requirements in the new Dräger PSS BG 4 plus. Numerous improvements and new accessories have increased safety and durability and further improved the ease of servicing. The modifications are available individually or as a practical retrofit set upon request.

EXCELLENT SUITABILITY FOR EXTENDED USE

The slight positive pressure breathing circuit protects the wearer by preventing hazardous substances from entering the sealed breathing system. Depending on the application, 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.



ST 101-2003



ST-5B5-2003

Dräger PSS® BG 4 plus
Highest safety in extreme situations

PRODUCT ENHANCEMENTS

Both the minimum valve, which enriches the breathing air with additional oxygen upon demand, and its attachment clip have been treated with a special coating to protect against corrosion. A redesigned clip simplifies the fitting of the valve. The area around the pressure reducer has been reinforced 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 minimise physical stress to the wearer, the breathing air cooler can be filled with ice.

PRACTICE-ORIENTED INNOVATIONS

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 retrofitted 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 a super absorbent fleece. The fleece is designed for single use and is easily disposed.

COOLER BREATHING AIR WITHOUT ICE

An alternative cooler which requires no ice and makes separate cooling logistics obsolete is also available. Reactivated after only 5 hours, the cooler offers unlimited use and is easily retrofitted. An improved spring clip ensures its safe attachment.

SIMPLE CO₂ DISPOSAL

Complete with integral dust filter, the flow-sensitive CO₂ absorber is available as either a single-use absorber or refillable cartridge. Fitted with a newly designed spring clip, the CO₂ absorber offers increased spring durability. The position and size of the breathing hose connectors have also been optimized for easier handling during assembly. For hygienic storage the single-use absorbers are available in a sealed bag.

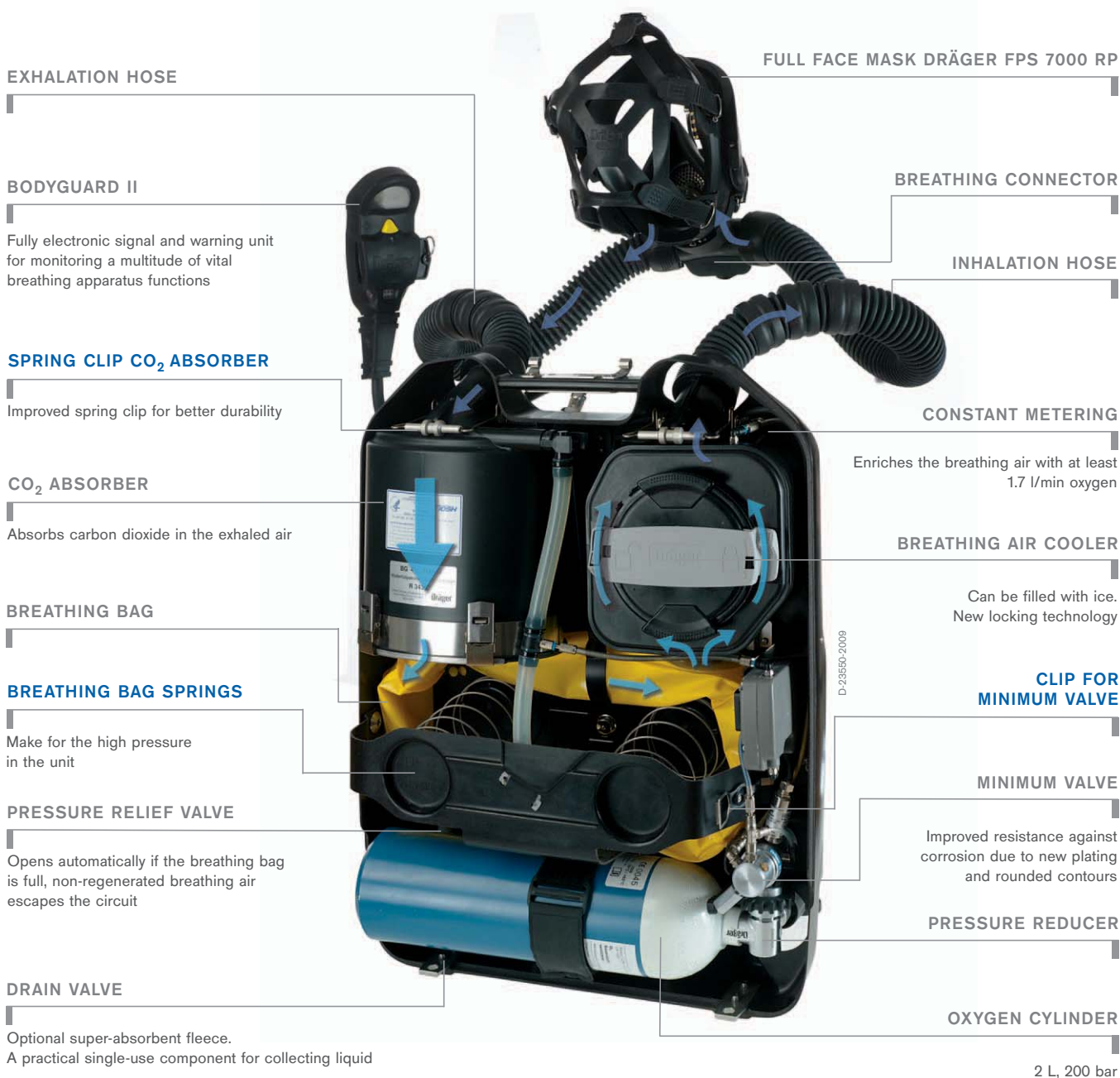
PROVEN WEARER COMFORT

The ergonomically shaped carrying plate, the low weight and the proven harness with adjustable shoulder straps and easy to use "pull-forward" design provide more freedom of movement with less effort. The practical breathing hose routing across the shoulders ensures optimum balance on the wearer's back.

PERFECT RESPIRATORY PROTECTION MONITORING

The data captured by the Dräger Bodyguard II electronic monitoring unit can be transmitted to Dräger PSS Merlin telemetry boards. This electronic monitoring and communications system displays 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 to an emergency.

DRÄGER PSS® BG 4 PLUS – THOUGHT THROUGH TO THE MINUTEST DETAIL



TECHNICAL DATA


Dräger PSS® BG 4 plus

Duration of use	4 h according to EN 145 and NIOSH
Weight, ready for use (kg/pound)	15,5 kg / 34.17 pound (incl. mask, full oxygen cylinder (aluminum), CO ₂ absorber and approx. 1,2 kg / 2.65 pound cooling ice)
Dimensions (H x W x D) (mm/inch)	595 x 450 x 185 mm / 23.43 x 17.72 x 7.28 inches
Constant oxygen metering (l/min O ₂)	1.5 to 1.9
Minimum valve (l/min O ₂)	> 80
Breathing bag volume (l)	5,5
Bypass valve (l/min)	> 50
Operating temperatures	-40°C / -40°F to +90°C / +194°F (if stored at room temperature)
Approvals	EN 145, Ex protection according to EN 50020, Eex IIC T4, Eex ial and NIOSH

ACCESSORIES

FULL-FACE MASKS | ABSORBERS | OXYGEN CYLINDERS

Required for operation














<p>D-3247-2009</p>  <p>Dräger FPS 7000 RP Excellent fit, extremely large field of view, optional drinking connection R 56 326</p>	<p>ST-465-2000</p>  <p>Dräger Panorama Nova EPDM PC RP Safe, comfortable full-face mask in various designs, mask body from EPDM R 53 306</p>	<p>D-23519-2009</p>  <p>Dräger CO₂ absorber single-use cartridge, grey R 34 360</p>	<p>D-23520-2009</p>  <p>Dräger CO₂ absorber refillable cartridge, transparent R 34 367</p>	<p>D-23518-2009</p>  <p>Dräger CO₂ absorber refillable cartridge, grey R 34 277</p>	<p>D-23564-2009</p>  <p>Dräger oxygen cylinder in various designs 2 L, 200 bar, steel G 3/4 B 10 220 2 L, 200 bar, steel M24 x 2 B 10 217</p>	<p>D-23565-2009</p>  <p>Dräger oxygen cylinder in various designs 2 L, 200 bar, aluminum B 10 211 2 L, 200 bar, CFK B 30 229</p>
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Accessories for optimized protection

<p>D-23560-2009</p>  <p>T-piece with water trap Prevents the collection of water in the flow area of the device connection R 34 735</p>	<p>D-23547-2009</p>  <p>Heat protection for breathing hoses and housing, reduces the temperature of the inhaled air when fire fighting R 34 644</p>	<p>D-23561-2009</p>  <p>Ice cooler To the insertion of an ice plug R 34 710</p>	<p>D-23562-2009</p>  <p>Regeneration cooler No ice required, unlimited use, reactivation after 5 hours R 34 720</p>	<p>D-23525-2009</p>  <p>Drägersorb® 400 Absorption Agent, in pellet form, for the refillable cartridge 8 kg canister 67 37 965 18 kg canister 67 37 985</p>	<p>D-23528-2009</p>  <p>Dust sieve Sieving the soda lime before pouring into the refillable cartridge R 32 618</p>	<p>D-23527-2009</p>  <p>Dust filter (200 off) R 35 754</p>
						<p>D-23521-2009</p>  <p>Filling station R 33 752</p>

EXPANSION SETS

Easy retrofit for increased safety and comfort

<p>D-23532-2009</p>  <p>Freezer canister cooler Dräger PSS® BG 4 To produce ice plugs R 33 999</p>	<p>ST-7503-2005</p>  <p>Test instrument Dräger Test-it 6100 For Dräger PSS BG 4 & BG 174 AG 02 690</p>	<p>D-23531-2009</p>  <p>Test kit With all adapters required for testing R 33 777</p>	<p>D-23543-2009</p>  <p>Dräger PSS® BG 4 Harness Optimized, highly flexible strap routing for a comfortable fit</p>	<p>D-23536-2009</p>  <p>Dräger PSS® BG 4 Vibration protection Ensures safe transportation R 34 234</p>	<p>D-23538-2009</p>  <p>Mount For the hinge of the cover plate R 34 642</p>	<p>D-23539-2009</p>  <p>Improved Hose Routing R 34 630</p>
<p>D-23540-2009</p>  <p>Retrofit kit Step 1 for EN R 34 641 Step 1 for NIOSH R 34 681</p>	<p>D-23542-2009</p>  <p>Isolation for Dräger PSS® BG 4 For operations with temperatures under -15°C R 34 498</p>	<p>D-23537-2009</p>  <p>Antifog Spray Prevent fogging of visor R 56 542</p>	<p>D-23533-2009</p>  <p>Merlin Radio Kit Europe 33 54 430 Merlin Radio Kit US 33 56 185</p>	<p>D-23530-2009</p>  <p>Single Use Absorber To catch fluid out of drain valve R 34 633</p>	<p>D-23548-2009</p>  <p>Expansion set Dräger Bodyguard II high pressure R 34 259</p>	



D-16511-2009

Dräger PSS® BG 4 plus
Optional: Heat protection
against radiation heat



D-3247-2009

Dräger FPS 7000 RP
Optimized field of view,
absolutely tight fit

ALL FUNCTIONS UPON A GLANCE

The Dräger PSS BG 4 plus is equipped with the Dräger Bodygard II fully electronic signal and warning unit. Controlled via large pushbuttons, it combines a multitude of functions. During use it quickly provides the wearer with important information, thereby reducing the risk potential. Using battery warning thresholds the Dräger Bodygard II reliably indicates current operational status.

Monitoring functions:

- Cylinder pressure (analog and digital)
- Remaining duration of use (time remaining until residual pressure warning)
- Temperature indication upon the press of a button
- Automatic recording of all mission data

Optical and acoustic warning signals:

- Residual pressure warning
- Two additional selectable electronic alarm thresholds
- Automatic alarm for lack of movement
- Manual emergency call alarm

HIGH PERFORMANCE SODA LIME

Drägersorb 400 has been specially designed for the absorption of CO₂ in closed-circuit breathing apparatus which significantly contributes to long-term performance capabilities, especially under

the likely conditions of use for the Dräger PSS BG 4 plus. Drägersorb 400 is characterized by a very high abrasion resistance and can, therefore, be used in the apparatus for 6 months, or up to 500 km when stored in the vehicle.

EASY MAINTENANCE

Both the retrofittable vibration protection and the robustly designed locking hinge increase the safety of the Dräger PSS BG 4 plus during transportation. For maximum operational readiness, the Dräger PSS BG 4 plus has been designed to allow the fast assembly and/or removal of device components without special tools.

NEW IN THE TEAM:

THE FULL-FACE MASK DRÄGER FPS 7000 RP

The full-face mask Dräger FPS 7000 ideally complements the Dräger Panorama Nova product family. With an improved head harness and available in various sizes, it adjusts perfectly to every face shape. With its dual sealing line, the almost natural field of view and easy-to-operate wiper, guarantees a safe tight fit and good all-round visibility. An optional adapter enables the connection of the comfortable CamelBak® drinking system. Liquid only flows through the straw when the integrated biting valve is pressed together by the teeth.

*CamelBak® is a trademark of Camelbak Products, LLC.

ORDER INFORMATION

Dräger PSS® BG 4 plus

Dräger PSS® BG plus 4 EP	High pressure, european approval with CE mark and G3/4"-Connecting thread	R 34 601
Dräger PSS® BG plus FEP	High pressure, european approval with CE mark and M24 x 2 Connecting thread	R 34 602
Dräger PSS® BG plus IP	High pressure, international W 21.8 x 1/14"	R 34 612
Dräger PSS® BG plus AP	High pressure, NIOSH	R 34 607
Further variants can be found in the price list or are available on request.		

Required for operation

Dräger FPS 7000 RP-EPDM-M2-PCas-CR	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 anti-scratch coated polycarbonate visor and wiper. Available as an option is the CamelBak drinking system	R 56 326
Dräger Panorama Nova EPDM RP PC	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 Further variants and sizes on request	R 53 306

Accessories for communication

Receiver with ear cup and microphone	Optionally, the Dräger FPS 7000 RP can be equipped with a telephone device or a Dräger MS-COM. Both telephone device and Dräger FPS 7000 MS-COM are approved in accordance to 94/9/EG for operations in explosive areas	R 28 495
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Expansion sets

Dräger PSS® BG 4 sticker for cover	Large, front left	R 34 682
	Large, front right	R 34 683
	Small, front left	R 34 684
	Small, front right	R 34 685

Upgrade Kit low warning

Upgrade kit	To convert Dräger BG 4 and Dräger PSS BG 4 high pressure devices on new control wire Mod. 1 (EN)	R 34 630 R 34 641
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Radio Kit for Dräger PSS® BG 4 plus

Dräger Bodyguard IR-Link software		33 51 342
Dräger Merlin/Bodyguard datalog cable		33 54 304

HEADQUARTERS:

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