

Dräger CPS 7900 Chemical Protective Suit

Tailor-made for use in CBRN hazard situations: The gas-tight Dräger CPS 7900 provides excellent protection against industrial chemicals, biological agents, and other hazardous substances. Its innovative material qualifies the CPS 7900 equally well for civil emergency and disaster recovery missions as well as decontamination work.



D-20332-2010

PROTECTION IN A CLASS OF ITS OWN

The Dräger CPS 7900 was developed to protect its wearer and to provide much needed support for almost any variety of dangerous missions. The suit material D-mex offers unique resistance to various substances as well excellent protection against mechanical effects, liquefied gases, and flash fires. The Dräger CPS 7900 meets and exceeds the requirements of international safety standards and regulations for reusable protection suits. Among these are the EN 943 part 2 (ET), EN1073-2 and the British CBRN standard BS 8467. The suit also meets the requirements of CBRN CWA 1606. This recommends the suitable personal protective equipment (PPE) for emergency services during CBRN events. Its properties and accessory options offer the highest degree of safety and a level of wearing comfort that is in a class of its own.

D-MEX: 5-FOLD SAFETY

The suit's innovative and unique material called D-mex™ consists of five layers. A tear-proof textile makes up the middle layer. An especially sturdy elastomer layer as well as a barrier layer resistant to chemicals is on the inside as well as the outside. This

allows the suit to retain its protective capacity even when the material on the outside becomes damaged. Its electrostatic properties makes it possible to use the suit in all explosive areas. The flame-retardant and self-extinguishing material protects its wearer from serious burns. The flexibility of D-mex™ even makes it possible to handle liquefied gases such as ammonia at a contact temperature of -80°C.

OUTSTANDING WEARING COMFORT

The CPS 7900 reduces the stress during the already difficult work in hazard zones. With its new, ergonomic cut and five available sizes, the suit offers its wearers with a body height of 1.50 m to 2.10 m the highest degree of mobility during a wide variety of activities and tasks. The suit is designed to be used in conjunction with other Dräger protective gear such as the current Dräger PSS 7000 or HPS 6200 as well as older products. (Working with the BG-4 CCBA is not a problem either) Moreover, the clearly lighter weight and better drape of the suit material adjusts to the wearer's movements and offers the full range of flexibility.



D-18318-2010

Dräger CPS 7900, olive



D-30779-2011

Dräger CPS 7900, beige



D-30786-2011

READY AT ANY TIME

Innovative materials and new service concepts made it possible to significantly reduce time and expenses for regular testing and expenses. In addition, the suit can be easily cleaned and disinfected. This means the time and expense spent over the 15 years of service life of the suit is much less. The service technician is able to carry out any repairs or maintenance required. Of course, Dräger Service can also assume these tasks.

SMART DETAILS FROM HEAD TO TOE

The CPS 7900 is characterized by functional details. The newly designed visor combined with the FPS 7000 offers an almost natural field of vision.

Two different glove combinations can be fastened to the suit quickly and without using tools.

- Previous EN combination: Viton gloves optionally with Tricotril or K-mex overgloves.
- New EN combination: More sensitivity due to thin Silvershield gloves highly resistant to chemicals and permanently attached cut and prick resistant gloves.

The changeable boot connection and the comfortable safety boots are barely felt by the wearer. As an alternative, it is also possible to attach to the suit gas-tight socks made from D-mex to ensure everybody steps safely into any situation. With these socks the wearer does not have to use one-size-fits-all.

Boots in different sizes are then worn over these socks. An integrated mobile device pocket and a holder for push-to-talk buttons facilitate communication.

READY FOR THE EXTRAORDINARY

Accessories are available to customize the CPS 7900 to meet your specific needs and requirements, thereby expanding your range of application options.

- The pressure gauge holder on the visor makes it possible for the wearer to keep an eye on his or her cylinder pressure without having to pull the arm out off its sleeve, losing valuable time on the job. Additionally, the pressure can be determined from the outside in case of emergency.
- The anti-fog visor prevents the visor from fogging up without prior treatments and saves time when getting a team ready for a run.
- Not all first responders or search and rescue personnel have the same height. The height adjustment is used to fit the suit to various body heights. This is simply snapped into the hip belt of the breathing apparatus.
- The D-connect is used to fasten measuring instruments, flashlights, various tools, or guide lines to the left or right hip to have both hands free for other tasks. The suit can also be equipped with two D-connects. These two fixed anchoring points can then also be used as grips for crash rescues.



D-18312-2010

Previous EN combination



D-18322-2010

New EN combination



NEVER AGAIN GASPING FOR A BREATH

Breathing air is a scarce commodity when it comes to runs involving toxic materials or hazardous atmospheres. The route to the deployment location and the decontamination location must be bridged. The actual tasks must be completed. This is followed by a careful decontamination so that suits can be removed. The amount of air available in a compressed air breathing apparatus often is insufficient to cover both activities. The air-connect and the regulation valve PT 120 L are designed for just such cases.

The air-connect is used to connect the suit from the outside with an external source of breathing air such as the Dräger RPS 3500 or Dräger PAS AirPack. Inside of the suit, the compressed air breathing apparatus is then connected to the air-connect via an automatic switchover valve or Y-adaptor. Once the external source of air is connected and the pressure is sufficient, the breathing air is then supplied from this source. If the connection is severed or malfunctioning, breathing air is supplied from the compressed air breathing apparatus.

The control valve PT 120L offers the additional option of cooling the suit and reducing the humidity inside of the suit. An airflow of 0, 5, 30, or 120 l/min provides cool compressed air to the leg, arm, and chest area of the suit. Warm, humid air is extracted and vented to the outside with the valves of the suit. The airflow also makes it possible for body perspiration to evaporate, which cools the body naturally.

This makes activities carried out in especially warm temperatures, e.g. surveying hazardous areas in hot climates, significantly less stressful for the cardiovascular system of the wearer. In addition, the system can also be used to have a fully equipped rescue team on stand-by without losing breathing air and with minimized thermal stresses.



Dräger CPS 7900, olive with Dräger PAS AirPack I



Connection of the air line with the SCBA inside of the suit



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Pressure gauge holder to mount manometer or bodyguard within wearer's field of vision.



D-18316-2010

The height adjustment is used to fit the suit to various body heights.



D-18321-2010



D-18314-2010

With the Dräger glove attachment, gloves can be exchanged easily and without tools.



D-4910-2010

The D-Connect can be used for rescue operations and to attach measuring instruments, tools, etc.



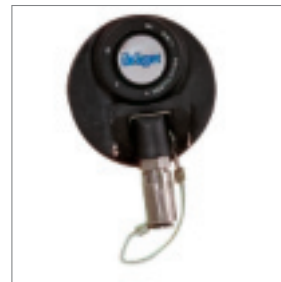
D-18315-2010

Integrated safety boots facilitate putting the suit on.



D-18319-2010

Gas-tight socks offer flexibility when selecting boots.



D-48102-2010

The RV PT 120 L is a connection to an external source of breathing air and features controllable suit cooling.



D-4663-2010

The air-connect is a connection to an external source of breathing air.

APPROVALS

EN 943-1:2002	EU requirements for gas-tight protective suits for industrial applications
EN 943-2:2002 (ET)	EU requirements for gas-tight protective suits for use by firefighters
BS 8467	British requirements for CBRN protective suits
EN 1073-2	Protection against contamination from radioactive particles
EN 14126	Protection against contamination from infectious agents
EX-PROTECTION	Suitable for operations in all explosive areas

CHEMICAL TESTS

Chemical	Breakdown time in min*	Chemical	Breakdown time in min*	Chemical	Breakdown time in min*
Acetone	>540	Ethyl acetate	>540	Sarin (GB)**	>1440
Acetonitrile	>540	Ethylene oxide	>540	Sodium hydroxide 40%	>540
Ammonia	>540	Hydrogen chloride	>540	Soman (GD)**	>1440
1,3-Butadiene	>540	Lewisite (L)**	>180	Sulfuric acid 96%	>240
Carbon disulfide	>540	Methanol	>540	Tetrachlorethylene	>540
Chlorine	>540	Methyl chloride	>540	Tetrahydrofuran	>540
Dichloromethane	>540	Mustard gas (HD)**	>1440	Toluene	>540
Diethylamine	>540	n-Heptane	>540	VX**	>1440

A continuously updated database is available to stay informed about chemical resistances and decontamination processes.

* breakthrough time according to EN 943 Part 2.

** breath through time according to FINABEL 0.7.C

MECHANICAL TESTS

Test acc. to EN 943:	Class***
Abrasion resistance	6
Flex cracking resistance	6
Flex cracking resistance at -30°C	6
Resistance to tear propagation	3
Bursting resistance	6
Piercing resistance	3

*** classes acc. to EN 943 Part 2 – from 1 (lowest) to 6 (highest).

ORDER INFORMATION

		Order No.
CPS 7900 olive-green/beige		R 29 450
Colors	olive/beige	
Standard print	Dräger logo in the chest area	
Sizes	Size S for body heights of 1.50 m to 1.65 m Size M for body heights of 1.60 m to 1.75 m Size L for body heights of 1.70 m to 1.85 m Size XL for body heights of 1.80 m to 2.00 m Size XXL for body heights of 1.95 m to 2.10 m	Basic components
Zipper	Closes at top or bottom Cover flap with Velcro fastener or snaps	Basic components
Integrated boots or socks	Safety boots in size 43 to 50 (German sizing system) Gas-tight socks in 3 sizes from 40 to 50 (German sizing system)	Basic components
Gloves	Previous EN combination in size 9 to 11 New EN combination in size 10 to 11	Basic components
Gloves accessories	Cotton gloves Gas-tight arm sleeve/wristband Cut-resistant overgloves Tricotril or K-mex Gigant	Accessories
Clear view	Anti-fog visor	Accessories
External air supply	Regulation Valve PT 120 L Air-connect	Accessories
Fastening option	D-connect at right and/or left hip	Accessories
Easier pressure monitoring	Pressure gauge holder	Accessories
Individually adjustable	Height adjustment	Accessories
Storage and transport	Electronic warehouse management transponder Storage and transport bag Storage box	Accessories
Customized marking:	In different colors on back, chest, and sleeves	Accessories



HEADQUARTERS

Dräger Safety AG & Co. KGaA
Revalstraße 1
23560 Lübeck, Germany
Tel +49 451 882-0
Fax +49 451 882-2080
nbc@draeger.com

www.draeger.com/defense

SUBSIDIARIES

AUSTRALIA

Draeger Safety Pacific
Pty. Ltd.
Axxess Corporate Park
Unit 99, 45 Gilby Road
Mt. Waverley Vic 3149
Tel +61 3 92 65 50 00
Fax +61 3 92 65 50 95

P. R. CHINA

Beijing Fortune Draeger
Safety Equipment Co., Ltd.
A22 Yu An Rd, B Area,
Tianzhu Airport Industrial Zone,
Shunyi District, Beijing 101300
Tel +86 10 80 49 80 00
Fax +86 10 80 49 80 05

FRANCE

Dräger Safety France SAS
3c route de la Fédération,
BP 80141
67025 Strasbourg Cedex 1
Tel +33 3 88 40 59 29
Fax +33 3 88 40 76 67

NETHERLANDS

Dräger Safety
Nederland B.V.
Edisonstraat 53
2700 AH Zoetermeer
Tel +31 79 344 46 66
Fax +31 79 344 47 90

SINGAPORE

Draeger Safety Asia Pte
Ltd
67 Ayer Rajah
Crescent #06-03
Singapore 139950
Tel +65 68 72 92 88
Fax +65 65 12 19 08

REP. OF SOUTH AFRICA

Dräger South Africa
(Pty) Ltd.
P.O.Box 68601
Bryanston 2021
Tel +27 11 465 99 59
Fax +27 11 465 69 53

SPAIN

Draeger Safety
Hispania S.A.
Calle Xaudaró 5
28034 Madrid
Tel +34 91 728 34 00
Fax +34 91 729 48 99

UNITED KINGDOM

Draeger Safety UK Ltd.
Blyth Riverside
Business Park, Blyth,
Northumberland
NE24 4RG
Tel +44 1670 352 891
Fax +44 1670 356 266