

Dräger X-pid® 9000/9500 Multi-Gas Detection

The selective PID gas measurement device is ideal for users who frequently test for hazardous toxic substances. Benzene, butadiene and other volatile organic compounds (VOCs) are carcinogenic even in the smallest concentrations. Selective measurement is necessary because other gases and vapours are often also present. The gas measurement device allows for short test times and laboratory-quality results.



Benefits

Two modes for an efficient measurement strategy

“Seeker” mode is a broadband measurement for pre-testing and localising measurement points. It allows continuous, direct-reading measurement of the total concentration of all VOCs present. “Seeker” mode is similar to using a single-PID gas measurement device.

“Analysis” mode allows selective measurement for monitoring specific toxic compounds. Pre-defined target compounds can be precisely measured in seconds. “Analysis” mode is similar to gas chromatography analyses conducted in the laboratory.

Up to 90% time savings

The Dräger X-pid 9000/9500 requires no preparation and is ready to use after a brief start-up phase. Selective measurement in “Analysis” mode takes only a few seconds. A benzene measurement starts with the push of a button and is completed in only 30 seconds. After another 60 seconds, the device is ready to measure for benzene again. Compared with other detection systems, the Dräger X-pid 9000/9500 saves considerable time and enables further monitoring to be undertaken. Simultaneous measurement of other compounds, like benzene and butadiene, further reduces testing times.

Cost savings

Because no consumables are used to take measurements, operating costs can be reduced. For users with high measurement needs, the Dräger X-pid 9000/9500 quickly pays for itself. For example, it requires no pre-tubes, also making it easier to use and preventing user errors. On the basis of 200 measurements per year, the Dräger X-pid 9000/9500 is generally more cost-effective than comparable measurement systems.

High selectivity for greater safety

The selective measurement mode “Analysis” relies on technology which separates individual compounds present in mixed gases. This makes it possible to conduct a compound-specific measurement for benzene, even if other VOCs like toluene and xylene are also present in high concentrations. Cross-sensitivities for benzene are reduced to a minimum. This reduces the number of false-positive measurement results and false alarms.

Reliable performance under tough conditions

The influence on measurement results by environmental factors like variable ambient temperature or high humidity are reduced to a minimum. The sensor unit maintains a constant temperature above the ambient air temperature and separates water vapour from the target compounds. This ensures reliable measurements under tough environmental conditions.

Benefits

Low detection limits

Concentrations of toxic compounds in the air at work sites must not exceed threshold limit values. Mandatory time-weighted averages in the low ppb to ppm range need to be performed for carcinogenic vapours like benzene. The Dräger X-pid 9000/9500 is optimised for measuring in this concentration range and detects benzene starting at 50 ppb.

Intuitive handling with mobile app

The sensor unit is controlled and the measurement data processing is conducted by a mobile app installed on an explosion-proof smartphone (delivery includes both). The large touch screen and familiar user interface elements are easy to use. This makes the sophisticated technology accessible to a broad group of users. No prior knowledge or extensive training is required.

Laboratory-quality measurement results

The gas measurement device is based on gas chromatography (GC) and photoionisation detection (PID) technologies. These technologies, used widely in laboratories, have a high acceptability due to their excellent analytical performance. The Dräger X-pid 9000/9500 brings these technologies directly to the hazardous area of any production site.

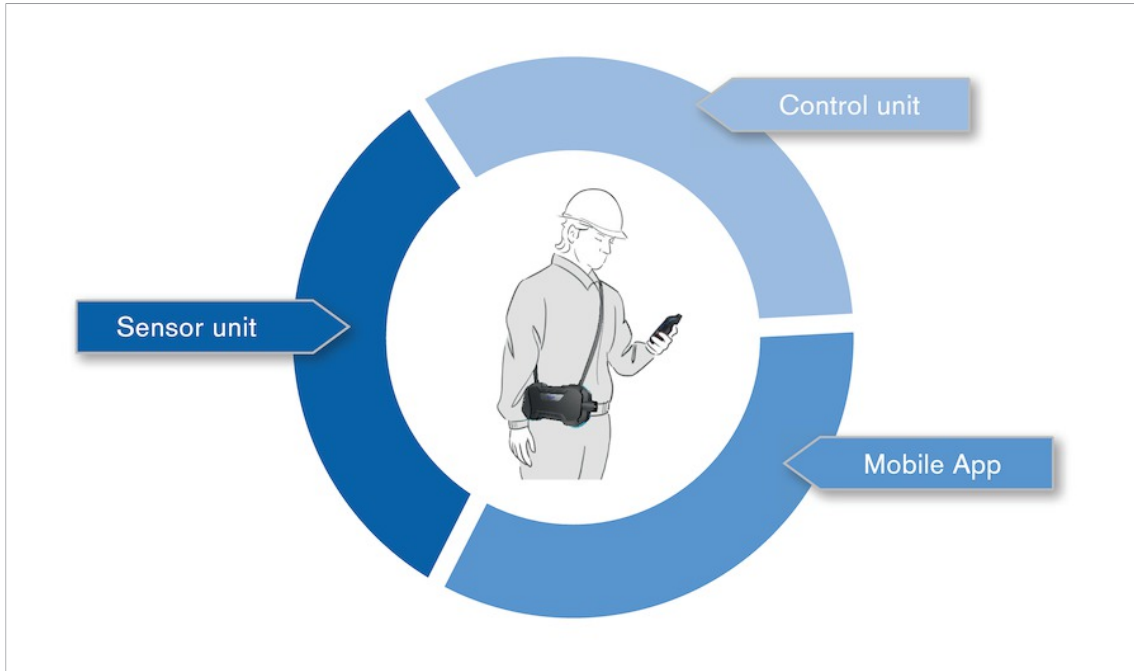
Simple functional test and calibration

The functional test with the test gas isobutylene and toluene is done in just two minutes and the Dräger X-pid 9000/9500 is ready to use. During the test the user is guided through the user interface step-by-step. The calibration is completed within about four minutes.

Two product models for different requirements

There are two models of the product: the 9000 and 9500. The Dräger X-pid 9000 covers the target compounds benzene and butadiene. The Dräger X-pid 9500 offers the possibility of combining more than 23 target compounds into individual analysis programmes and thus expanding its application range. This means, you can independently expand the target substance database for the Dräger X-pid 9500.

Innovative operating design



The Dräger X-pid® 9000/9500 consists of three elements: You control the sensor unit via the control unit and the pre-installed mobile app. The sensor unit can be worn around the neck, keeping one hand free.

Accessories



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Calibration Gas and Accessories

Calibration of equipment will ensure safe operation and functionality of equipment and will also meet with the applicable regulations and codes of practice. Various calibration gas options are easily available.

Accessories



Case with inlay for Dräger X-pid® 9000/9500

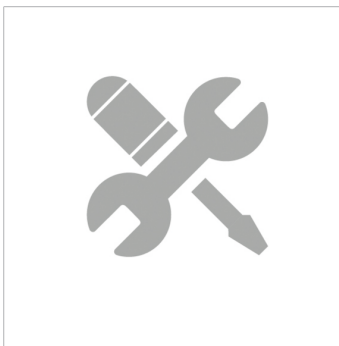
For convenient transport of sensor unit, control unit, calibration gas cylinder, chargers and sampling accessories.



Sampling probes and hoses

Selection of sampling accessories for various applications.

Services



Product Service

Our product service department supports you with a range of service packages – in our shops or on site in your plant. Care, servicing and maintenance are key factors when it comes to safety. Diligent maintenance and care is also absolutely necessary from an economics perspective. Preventive checks, service procedures and original replacement parts make your investment last longer.

Technical Data

The technical specifications refer exclusively to the Dräger X-pid® 9000/9500 sensor unit.

| | | |
|---------------------------------|-------------------|--|
| Dimensions (W x H x D) | | Ca. 132 x 281 x 56 mm |
| Weight | | Ca. 880 g (2 lb) |
| Ambient conditions in operation | Temperature | -10 to +35 °C |
| | Pressure | 700 to 1,300 mbar |
| | Relative humidity | 10% to 95% RH |
| Protection class | | IP54 |
| Start-up phase | | Ca. 10 min can be increased at low ambient temperatures |
| Operating times | | Typically 8 h, reduces with lower ambient temperatures |
| Approvals | ATEX | II 1G Ex ia IIC T4 Ga |
| | IECEX | Ex ia IIC T4 Ga |
| | cCSAus | Class I, Div. 1 Group A, B, C & D T4, Ex ia Class I, Zone 0, A/Ex ia IIC T4 Ga |
| | CE Marking | RED (Directive 2014/53/EU) ATEX (Directive 2014/34/EU) |

List of Dräger X-pid® 9000/9500 target compounds for "Analysis" mode

The Dräger X-pid® 9000 is limited to the target compounds benzene and 1,3-butadiene. For the Dräger X-pid® 9500 the following target compounds are qualified.

| Compounds | CAS number |
|----------------------------|------------|
| Acrolein | 107-02-8 |
| Benzene | 71-43-2 |
| Butadiene, 1,3- | 106-99-0 |
| Butanone, 2- | 78-93-3 |
| Butyl acrylate | 141-32-2 |
| Chlorobenzene | 108-90-7 |
| Dichloroethene, 1,1- | 75-35-4 |
| Dichloroethene, cis-1,2- | 156-59-2 |
| Dichloroethene, trans-1,2- | 156-60-5 |
| Epichlorohydrin | 106-89-8 |
| Ethyl acetate | 141-78-6 |
| Ethyl acrylate | 140-88-5 |
| Ethylbenzene | 100-41-4 |
| Ethylene oxide | 75-21-8 |
| Hexane, n- | 110-54-3 |
| Isobutylene | 115-11-7 |
| Methyl acrylate | 96-33-3 |
| Methyl bromide | 74-83-9 |
| Phosphine | 7803-51-2 |
| Propylene oxide | 75-56-9 |
| Styrene | 100-42-5 |
| Tetrachloroethylene | 127-18-4 |
| Tetrahydrofuran | 109-99-9 |
| Toluene | 108-88-3 |

Technical Data

| | |
|-------------------|----------|
| Trichloroethylene | 79-01-6 |
| Vinyl chloride | 75-01-4 |
| Xylene, m- | 108-38-3 |
| Xylene, o- | 95-47-6 |
| Xylene, p- | 106-42-3 |

Ordering Information

| Description | Order number |
|--|--------------|
| Dräger X-pid® 9000 with sensor unit, control unit with pre-installed mobile app, power supplies, charging cables, test gas adapter and dust and water filter | 68 51 847 |
| Dräger X-pid® 9500 with sensor unit, control unit with pre-installed mobile app, power supplies, charging cables, test gas adapter and dust and water filter | 68 51 848 |
| Dräger X-pid® 9500 AUS/SGP with sensor unit, control unit with pre-installed mobile app, power supplies, charging cables, test gas adapter and dust and water filter | 68 50 014 |
| Dräger X-pid® 9500 CAN with sensor unit, control unit with pre-installed mobile app, power supplies, charging cables, test gas adapter and dust and water filter | 68 50 015 |
| Upgrade Dräger X-pid® mobile app from version 9000 to version 9500 | 68 51 849 |
| Test and calibration gas 58 l | 68 14 046 |
| Isobutylene 10 ppm, Toluene 10 ppm | |
| Test gas 58 l | 68 14 050 |
| Benzene 5 ppm | |
| Control valve basic 0.5 LPM; fits to 58 l Test gas cylinder | 68 10 397 |
| Dräger X-pid® 9000/9500 test gas adapter | 68 51 850 |
| Case for Dräger X-pid® 9000/9500 | 68 51 851 |
| Sampling hose Tygon with inlined PTFE hose Length (3 m); OD: 8 mm; ID: 4.8 mm; WD: 1.6 mm | 83 26 980 |
| Sampling hose Tygon with inlined PTFE hose Length (15 m); OD: 8 mm; ID: 4.8 mm; WD: 1.6 mm | 45 94 679 |
| Sampling hose FKM (solvent resistant) OD: 6.4 mm; ID: 3.2 mm; WD: 1,6 mm | 83 25 837 |
| Dust and water filter with hose adapter | 83 19 364 |
| Dust and water filter w/o hose adapter | 83 19 359 |
| Telescopic probe ES 150 Length up to 150 cm with FKM sampling hose extension | 83 16 533 |
| Bar probe 90 Length: 90 cm with FKM sampling hose extension | 83 16 532 |
| Float probe without hose | 68 02 337 |

Notes

Not all products, features, or services are for sale in all countries.
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