Dräger



Safety to go.

DRÄGER GAS DETECTION INSTRUMENTS



Your safety is our business

Many hazards in the workplace cannot be detected by human senses: toxic gases, oxygen deficiency, combustible gases and vapors. These hazards pose a serious threat to human life and plant safety in many industries. When it comes to the reliable detection of known and unknown gases, you can rely on portable and stationary gas detection technology from Dräger.

Gas detection technology from Dräger, renowned for its high reliability, robust design and straightforward operation, has been proven in thousands of applications worldwide. Our extensive product range offers you the perfect solution for every application.

With services ranging from consulting via Dräger VOICE®, our web-based virtual hazardous substances database, to training and professional instrument management, we can fully support you in your work.

Profit from our experience.

The development of our Dräger-Tubes® more than seventy years ago laid the cornerstone for accurate gas detection. Today, thanks to continuous research and development, we now offer more than 250 Dräger-Tubes able to detect over 500 substances. Combined with the Dräger chip measuring system, an electronic form of the tube, Dräger provides you with one of the most accurate and reliable means available for spot concentration measurement.

We take your protection personally.

Personal gas detection instruments are essential for providing workers with a reliable form of protection. Our sophisticated single-gas detectors are recommended for ensuring workplace safety when you need to be alerted to the presence of harmful gas concentrations.

Dräger multi-gas detectors offer a wide range of options, making them flexible companions in a variety of situations such as personal protection, area monitoring, and leak detection. Special accessories make it easier to work in places that are difficult to access, such as tanks or shafts, while ensuring that safe clearance is possible.

We continuously invest in sensor technology to ensure greater safety at work. Our sensor systems, including catalytic, infrared, electrochemical and photoionization detectors (PID), set standards in terms of sensitivity and longevity. Providing the world's largest number of electrochemical sensors to measure the widest variety of gases

means that a perfect solution is available for each measurement task. Testing and calibration stations, portable printers, and complete workshop solutions ensure that your Dräger gas detection instruments are well maintained and ready for use at a moment's notice.



The origins of portable gas detection technology are found in the mining industry. Before the availability of sensors, canaries acted as a warning system for alerting miners to hazardous substances in the mine.



Dräger multi-gas detection instruments – the measured response to different hazards

Personal protection, area monitoring, confined space entry permits, as well as safety measurements of shafts, channels or tanks are no problem with the new generation of X-am devices. These portable gas detection instruments deliver reliable measurements, while durable sensors designed in-house ensure maximum safety coupled with extremely low operating costs.



Dräger X-am® 2500: Rugged 1 to 4 gas detector for personal protection The Dräger X-am[®] 2500 was developed specifically for personal safety use. The 1 to 4 gas detection device for personalized measurement of combustible gases and vapors such as O₂, CO, NO₂, SO₂ and H₂S. Reliable and mature measurement

technology, durable sensor technology and easy handling ensure a high degree of safety and extremely low operating costs.



Dräger X-am® 5000: Flexible 1 to 5 gas detector for personal monitoring in a compact size This compact personal gas monitor can detect O₂, CO, H₂S and Ex hazards, as well as CO₂, Cl₂, HCN, NH₃, NO, NO₂, PH₃, SO₂ and organic vapors, and can be equipped to meet individual requirements. The catalytic Ex sensor detects 0-100% LEL and 0-100 vol.% methane. Maximum sensitivity

provides an advanced means of detecting unknown gas hazards far more reliably.



Dräger X-am® 5600: 1 to 6 gas detector with IR Ex/CO₂ dual sensor Infrared technology is now integrated into personal detectors such as the Dräger X-am 5600. Equipped with a dual sensor (Dual IR Ex/CO₂), the device provides warnings related to concentrations of hydrocarbons and carbon dioxide. If used in combination with different electrochemical sensors for monitoring

toxic gas concentrations or oxygen deficiency, the instrument can measure up to 6 different gases simultaneously. And the durable sensors provide minimal cost of ownership for many years.









Dräger X-am® 3500 Multi-Gas **Detection Device**

The Dräger X-am® 3500 was especially designed for clearance measurements and personnel monitoring applications. The 1 to 4 gas detector reliably detects flammable gases and vapors as well as O2, CO, H2S, NO2 and SO2. The innovative signaling design and extensive range of

accessories ensure optimum safety and easy handling. Thanks to its compact and robust construction, the device can withstand even the harshest conditions.



Dräger X-am® 8000 Multi-Gas **Detection Device**

Clearance measurement was never this easy and convenient: The 1 to 7 gas detector detects toxic and flammable gases as well as vapors and oxygen all at once - either in pump or diffusion mode. Innovative signalling design and handy assistant functions ensure complete safety

throughout the process. The Dräger X-am® 8000 is equipped with a very powerful pump. It can be connected with hoses of up to 45 meters in length. A pump adapter makes it easy to switch between diffusion and pump mode at any time.



Dräger X-am® Mark II Pump: External pump for multi-gas detectors

The Dräger X-am® Mark II Pump is an external pump for the Dräger X-am® 2500, 5000, and 5600 portable gas detectorsdesigned for clearance measurement, for example in tanks and shafts. The pump

automatically switches on when it is connected to a running X-am® device. The change from pump mode to diffusion mode is fast and easy.



Dräger X-zone® 5500 with Advanced 3D Communications: State-of-the-art area monitoring

With this innovative area gas monitor, you can transmit data collected by a Dräger X-zone® 5500 unit to a workstation anywhere in the world. Designed to function in the harshest of environments, this IP67-rated device is ideal for oil & gas, chemical and emergency hazmat applications. You can quickly and easily connect up to 25 X-zone units to form an innovative fence line - providing 360° visual and audible evacuation alarm. Both wireless and wired operation are possible.

Data is secured with proprietary protocols. Dräger X-zone® 3D software lets you view all data transmitted to the receiving radio on a standard PC. Gas levels, X-zone battery levels, and gas alarm information can be monitored in real-time at a remote location. Plus, the software automatically stores all of the measured values for review, export to other software systems, and analysis.





Dräger single-gas instruments – we have the solution for your task

Our wide range of single-gas detection instruments enable you to carry out your own safety checks for measuring tasks. A selection of over 30 different Dräger sensors is available to detect a variety of gases and vapors in different concentrations.

Our range of single-gas detectors have been designed with a wide variety of functions for intuitive operation, making them reliable companions in your daily work. The unit can be used to continuously monitor specific gas concentration and a large display is easy to see.

Ready when you are

Fresh-air calibration and automatic calibration options in the event of a bump test failure provide a fast and easy way to make sure the monitor is ready to operate. You can also be sure that you are getting the very best in terms of cost effectiveness: the

instrument can be used without maintenance during its lifetime, for as long as 2 years. An extensive range of accessories including the Dräger X-dock® automatic test and calibration station and the Dräger Bump Test Station provide the efficient way to check the functions of the device.



Dräger X-am® 5100: Special device design with direct gas entry

The Dräger X-am 5100 is designed to measure hydrazine, hydrogen peroxide, hydrogen chloride and hydrogen fluoride gases and vapors. These gas hazards are difficult to detect because they adsorb into different surfaces. The open gas inlet projecting from the device prevents adsorbing surfaces from getting in between

the gas and the gas sensor. The proven XS sensors ensure a rapid response for these special gases. In combination with the Dräger X-zone 5500, the X-am 5100 can be used for pump applications.

The Dräger Pac® Family: as flexible as your needs

Whether for short-term shutdown projects or unlimited operating times, there's a Pac device that's right for all industrial environments. The entire Dräger Pac family offers the same basic features and functions.

Tough on the job

With their compact, pocket-sized design, all Pac family versions are made for personal monitoring. It takes a rugged instrument to accompany you during missions without "ifs and buts". The impact-resistant housing is coated with

rubber for protection and resistance to corrosive chemicals. The instruments meet the requirements of IP 68 and protection against electromagnetic effects such as RFI has been optimized. Convenient dual sensor options allow detection of 2 gases in a small time single gas format.



The Dräger Pac family: Decide which one is best suited to you – after all, you will be working together as a team every day



Dräger Pac® 6000: The disposable personal single-gas detection device

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.



Dräger Pac® 6500: Single-gas detection device

The robust Dräger Pac® 6500 is your reliable companion under tough conditions. The personal single-gas detection device measures CO, H₂S, SO₂ or O₂ quickly and precisely.

Quick sensor response times and a powerful battery also ensure safety.



Dräger Pac® 8000: Reusable single-gas detector

With the robust Dräger Pac® 8000, you'll be well equipped for tough conditions: this non-disposable, 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.



Dräger Pac® 8500: Strong performance for maximum safety

The Dräger Pac® 8500 single-gas detection device is a reliable and precise instrument even under the toughest of conditions. The detector can be equipped with a hydrogen-

compensated CO sensor or a Dräger dual sensor. The dual sensors provide the option of measuring two gases at once: either H₂S with CO or O₂ with CO.



PID technology the top measuring standard for low concentrations

Several volatile organic compounds can affect jeopardize health in the lower concentration range. For this reason, we recommend that in addition to detecting in the explosion limit range, you also measure in the ppm range using the PID technology. Dräger offers an innovative gas detection instrument with a PID sensor, which, besides being reliable and robust, performs a wide variety of applications.



Dräger X-am® 8000: Multi-Gas **Detection Device**

Clearance measurement was never this easy and convenient:

The 1 to 7 gas detector detects toxic and flammable gases as well as vapors and oxygen all at once - either in pump or diffusion mode. Innovative signalling

design and handy assistant functions ensure complete safety throughout the process.



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 vapors are often also present. The gas measurement device allows for short test times and laboratory-quality results.





DrägerSensors® – for extremely sensitive work

Whether electrochemical, catalytical or infrared – sensors from Dräger have always represented leading-edge technology worldwide. All our sensors are produced under clean room conditions and individually tested prior to shipping. DrägerSensors have been proven worldwide under hostile ambient conditions such as in mines, offshore drilling rigs, refineries, and chemical plants.



What's in the air? More than 80 different DrägerSensors from our continually growing sensor family are available for the detection of over 100 gases and vapors. DrägerSensors use three different measurement principles. Electrochemical sensors warn against toxic gases and oxygen deficiency or enrichment. Catalytic and infrared-optical sensors monitor explosive mixtures. Infrared technology measures carbon dioxide. The fact that all our sensors are developed and produced in-house enables Dräger to provide an optimal interaction between instrument and sensor - the essential prerequisite for ensuring user-friendliness and measuring performance.

XXS in size, XXL in performance

Portable gas detection instruments for daily use need to be small, lightweight and unobtrusive – yet also offer maximum performance. Reason enough for us to drastically reduce the volume and weight of the sensors and develop a miniaturized XXS generation of DrägerSensors. This innovative generation of sensors is setting new standards in the field of gas detection technology worldwide. High sensitivity and improved gas selectivity – combined with excellent long-term stability and rapid response times – ensure that the operator is alerted quickly and reliably to the presence of hazardous gases, providing more safety at work.

Plug and play

The well established XS Series of smart sensors are characterized by their intelligence. Sensor-specific data such as temperature compensation, calibration values, gas type, and measuring range are stored in the sensor.





Function tests because the next mission is just around the corner

This simple philosophy best describes the necessity of function tests. Regular inspections, correct maintenance, and accurate adjustments are the only way to ensure the proper functioning and reliability of the instruments.



Dräger Bump Test Station for the Pac® family: Function or calibration tests can be performed easily Sometimes trust is not enough. Tests are also essential, particularly when it comes to the safety of your colleagues. Your protection is dependent on the reliable performance of your measurement and warning instruments. Generally, you are required to regularly test that the instrument is functioning properly with a known gas concentration in order to ensure reliable and correct warning against gas hazards. Yet time-consuming tests can disrupt your work.

The Dräger Bump Test Station enables you to perform function tests using a test gas cylinder in a matter of seconds, in a way that is reliable and uncomplicated. Since the Dräger Bump Test Station does not need power for operation, it is ideal for using in the field. A function test ensures that the sensor responds correctly and the alarms function as intended.

Dräger Pac 6000 to 8500 series detectors Dräger X-am 2500, 5000, 5600 and 8000 all can be tested by means of an integrated instrument-specific adaptor.



Dräger Bump Test Station X-am® 125: Works automatically and requires no external power supply





Dräger X-dock® – Professional instrument management

The Dräger X-dock® series gives you full control of your Dräger mobile gas detection devices. Automatic bump tests and calibrations with low test gas consumption and a shorter test duration save time and money. Extensive documentation and evaluations keep you in control.



Dräger X-dock®: Quick and flexible calibration system



The Dräger X-dock automatic test and calibration station is the modular solution for the daily bump test as well as a workshop and fleet management solution. The X-dock can be operated independently as an individual station – a PC is not required. This gives you the benefit of a range of options at every location: the X-dock can perform quick or extended bump tests; perform calibrations; read out the data logger; and check the gas detector's alarm elements or the sensors' response times. These individual test steps can be configured – and the three most important objectives are always ensured:

1. Ease of use:

The simplest test: insert and close the lid – the rest takes place automatically.

2. Short test time:

An advanced pneumatics system provides extremely short test times.

3. Low gas consumption:

The short test time as well as the gas flow, which has been reduced to 300ml/min, reduces the

gas consumption significantly, which also helps to reduce costs. In addition, the X-dock immediately switches off valves once a test gas is no longer required for a certain test step and the device has completed the test.

This system combines ease of use with low operating costs – but with full documentation. Everything that the X-dock performs is stored in the internal database. If the station is used as an individual station, the results can be exported as a PDF or printed on any conventional or PCL printer. However, X-dock stations can also be connected to a network. The data is synchronized and stored on a server.

The X-dock Manager PC software makes data evaluation easy: Which calibrations are coming up or are even overdue? Has a device not been checked? Has an alarm been triggered in operation and when are the X-dock stations engaged? These are all questions that the X-dock Manager conveniently answers.





Dräger-Tubes® – our measuring accuracy is a long-standing tradition

As the market leader for more than seventy years, Dräger has perfected the "laboratory behind glass". Dräger-Tubes provide a quick and inexpensive method of detecting gases, vapors and aerosols in the air, water and soil. Dräger is also constantly at the forefront of developing new tubes.



Dräger-Tubes® Easy to use – high reliability



Dräger TO 7000: Ensures easy opening of your Dräger-Tubes



Dräger X-act® 5000: All-in-one automatic tube pump for measurements with Dräger short-term tubes and sampling tubes and systems Dräger-Tubes are characterized by their ease of use and high degree of measuring accuracy – at a comparably low cost. The Dräger-Tube system is the result of more than 75 years of experience and is still at the cutting edge of technology. Continuous development and adaptation to new legal requirements, such as limit values, as well as research into new detection techniques make Dräger-Tubes an indispensable measuring tool.

Whether you want to detect a spot contaminant concentration or the average value over a longer period, our short-term or diffusion tubes deliver reliable results to meet your needs. The diffusion tubes are worn for personal exposure monitoring and do not require the use of a pump. The ORSA diffusion sampler, which is used when the contaminant to be measured contains similar component, does not

require a pump either. The ambient air is simply drawn into the attached tube. Detailed information is provided by the laboratory analysis. The implementation of special requirements ensures that there is a suitable response to each situation. For example, simultaneous test sets are used to detect unknown gas hazards which can occur at the same time. Special measuring strategies systematically isolate potential contaminants in incidents involving dangerous materials.

Dräger measuring point and analysis service: certified safety

With this complete service, we provide consulting, on-site service analytics, and expert reports and studies for the samples taken – always oriented to your requirements. There is no measuring task which cannot be solved.





Dräger CMS – measurement of spot concentrations made easy

The Dräger Chip Measurement System (CMS) is one of the most accurate and reliable detection systems currently available for measuring spot concentrations. Dräger CMS enables current measurements in three easy steps: insert chip, start measurement, and read measurement result.





To obtain reliable measurement readings, you need a system that is fast and easy to operate in everyday use. For measurement results that are highly accurate and quick, Dräger CMS combines the advantages of Dräger-Tubes with those of an optoelectronic evaluation system.

The measurement system consists of an analyzer, a combined sampling and evaluation unit, and substance-specific chips, each of which allows 10 measurements. More than 55 chips are available for the measurement of many different gases and vapors.

After turning the unit on, simply move the slide switch into the sequential positions to perform the measurement and then follow

the instructions on the display. The results are digitally displayed. It couldn't be easier.

The measurement results can be stored in the DataRecorder and retrieved again at any time. The data capacity is 50 measurement results, together with relevant data, i.e., measured substance, concentration, number, and date, time and site of measurement.

Remote system: Making all tunnels and shafts accessible

With the Dräger CMS, you can also take measurements in inaccessible locations. Simply use an extension hose and an additional pump connected to the analyzer.



Dräger VOICE® – making sure that no question goes unanswered

Dräger VOICE is a hazardous substances database that offers 24/7 information on hazardous substances, personal protective clothing, and applicable measurement and warning instruments.

Our extensive Dräger VOICE database provides you with up-to-date information on more than 1,700 hazardous substances and 11,500 synonyms.

Dräger VOICE is characterized by clear links between hazardous substances, measurement options, and protective equipment. Information on the proper use and handling of the recommended products provides additional safety information.

A wide range of constantly updated information is available for every selected substance:

- Current international limit values
- Chemical/physical information (formulas, vapor pressure, melting and boiling points etc.)
- Fire protection information (LEL, UEL, flashpoint, ignition point, etc.)
- Identifiers (CAS No., UN No., EC No.)

Dräger VOICE is available at www.draeger.com/voice.



Dräger VOICE®:

Hazardous substances database for 24/7 answers

SINGLE-GAS DETECTION INSTRUMENTS



Dräger Pac® 6000:

The disposable personal single-gas detection device, Dräger Pac® 6000, measures CO, H₂S, SO₂ or O₂ reliably and precisely, even in the toughest conditions.



Dräger Pac® 6500:

Your reliable companion under tough conditions. The personal single-gas detection device measures CO, H₂S, SO₂ or O₂ quickly and precisely.



Dräger Pac® 8000:

This non-disposable, personal single-gas detection device is a reliable and precise instrument, which detects hazardous concentrations of 29 different gases.



Dräger Pac® 8500:

Reliable and precise instrument even under the toughest of conditions. The detector can be equipped with a hydrogen-compensated CO sensor or a Dräger dual sensor.



Dräger X-am® 5100

Incorporates proven
DrägerSensor® technology
to accurately detect HF,
HCl, H₂O₂ or hydrazine.

MULTI-GAS DETECTION INSTRUMENTS AND ACCESSORIES



Dräger X-am® 2500

A 1 to 4 gas detection device for personalized measurement of combustible gases and vapors and O₂, CO, NO₂, SO₂ and H₂S.



Dräger X-am® 5000

Handy 1 to 5 gas detector with replaceable sensors for personal monitoring of explosive hazards, O₂, CO, H₂S, CO₂, Cl₂, HCN, NH₃, NO, NO₂, PH₃, SO₂ and organic vapors.



Dräger X-am® 5600

Equipped with two gas inlets, a 1 to 6 gas detection instrument for use in explosive environments. The unit offers protection against combustible and toxic gases/vapors in the ambient air.



Dräger X-am® 8000

Clearance measurement was never this easy and convenient: The 1 to 7 gas detector detects toxic and flammable gases as well as vapors and oxygen all at once – either in pump or diffusion mode.



Dräger X-am® Mark II

An external pump for the Dräger X-am® 2500, 3500 5000, and 5600 portable gas detectors—designed for clearance measurement, for example in tanks and shafts.



Dräger X-zone® 5500

This innovative monitoring system is designed to meet individual requirements of many applications. In the field, it monitors gas hazards and offers the communication and alarm forwarding within a group of up to 25 devices.

DRÄGER SENSORS



DrägerSensors® XXS Top measuring performance in miniature design. Used in the Dräger Pac® family and Dräger X-am® 1/2/5/5600

units.



DrägerSensor® XS Intelligent sensors with warranty periods of up to five years, which are used with the Dräger Pac® III, Dräger X-am® 3000 and



DrägerSensors® CatEx For measuring combustible gases and vapors in the atmosphere.



DrägerSensors® IR Dräger infrared sensors stand out due to the fact that they are extremely accurate and long lasting. They do not have any cross sensitivities to other gases and are independ-

ent of the ambient air.



DrägerSensor® Smart PID For simultaneous measurement of toxic and explosive atmospheres using catalytic and infrared sensors.

ACCESSORIES FOR FUNCTION TESTING AND CALIBRATION



Dräger X-dock®

This automatic testing and calibration station offers a reliable means of testing and calibrating for portable gas detection instruments from Dräger, for optimum equipment management.



Dräger Bump Test Station For carrying out a function test with test gas for Dräger units; used with a Dräger calibration gas cylinder.



Calibration Gases Supplied in small, lightweight non-refillable cylinders, the gases allow calibration or a function test to be performed in the workshop or on-site.



Dräger CC-Vision Basic PC software for the professional configuration and calibration of the Dräger Pac® family, as well as the Dräger X-am®

DETECTOR ACCESSORIES



Dräger GasVision 7 Data analysis software for data loggers in the Dräger Pac® and Dräger X-am® series of measuring devices.



Dräger Hoses and Probes

Practical accessories to make detecting leaks easier and simplify clearance measurements.

DRÄGER TUBE MEASUREMENT SYSTEMS:



Dräger Short-Term **Tubes**

For short-term measurements, more than 250 Dräger-Tubes® are available to measure spot concentrations of specific gases.



Dräger Diffusion Tubes With no pump

required, the diffusion process transports the contaminant molecules to be measured into the



Dräger Sampling Tubes and Systems

Collects hazardous substances in the air using a suitable medium such as activated charcoal or silica gel. The sample is then analyzed in a laboratory.



Dräger accuro®

The accuro is a manual one-hand gas detection pump for short-term measurements using Dräger-Tubes®.



Dräger X-act® 5000

Automatic pump for the measurment or sample taking of gases, vapors and aerosols with Dräger-Tubes®; licensed for explosive areas.

ACCESSORIES FOR MEASUREMENT WITH DRÄGER-TUBES®



Dräger TO 7000

Using this tube opener, Dräger-Tubes® can be opened with a simple hand movement.



Hot Pack Holder for Dräger-Tubes®

Allows Dräger-Tubes® to be used at temperatures below the limits stated in the Instructions for Use.



Dräger Flow Check

Air flow indicator for detecting leaks in plant facilities and localizing air flows.

DRÄGER-TUBES® TEST



Dräger Fumigation Test Set

This set of tubes allows containers to be checked for the presence of fumigation agents such as formaldehyde, methyl bromide, hydrogen phosphorous and sulphuryl fluoride.



Dräger DLE-Set

The Dräger Air Extraction Method is designed for the rapid analysis of water, waste water, oil sludge, soil and multiphase samples using Dräger-Tubes®.



Dräger Simultaneous Test Set

The parallel measurement of five gases saves time and money. Dräger has several different simultaneous test sets.



Dräger Aerotest

Analyzes pressurized gases, such as breathing air, industrial compressed air, and medical gases for purity, as well as for carbon dioxide.



Dräger Oil Impactor

Using the specially developed Dräger oil impactor and the Dräger Aerotest measuring system, it is possible to test and check compressed air for oil aerosols. Synthetic oils can also be determined, independent of their type and viscosity.

DRÄGER CHIP MEASUREMENT SYSTEM



Dräger CMS Analyzer System

The chip measurement system is used for measuring spot concentrations, e.g., for checking limit values in the workplace.



CMS Chip

A wide variety of chips are available for the Dräger CMS Analyzer System as chemical sensors for measuring all kinds of gases and vapors.

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

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