Dräger Pac® 7000

Small and robust, ergonomic and intuitive, economic and powerful – the Dräger Pac 7000 is tailor-made for personal monitoring at the workplace. Featuring the latest sensor technology, this innovative single gas detector is equipped with a wide range of functions and is suitable for many different applications in day-to-day industrial settings.

The Dräger Pac 7000 detector is an impressive instrument, offering a high level of reliability and rapid warning against harmful concentrations of hydrogen sulfide, oxygen, carbon monoxide, carbon dioxide, sulfur dioxide, chlorine, hydrogen cyanide, ammonia, nitrogen dioxide, nitrogen monoxide, phosphine, or organic vapors.

SMALL AND ROBUST

Dräger Pac 7000's impact-resistant housing features a protective rubber coating and is impervious to corrosive chemicals. Dräger Pac 7000 meets the requirements of IP 65 to ensure operation even when projected with water. The protection against electromagnetic effects has been optimized. A crocodile clip made of stainless steel is used to fasten the instrument securely to the wearer's clothing and can be rotated to allow for individual preferences. The two alarm lights are located on the corners of the instrument for 360° visibility.

NO LIFETIME LIMITATION

The Dräger Pac 7000 features an unlimited lifetime and has been designed to ensure long-term operation. The battery and the sensor can be easily replaced on-site and without any additional equipment. Also, the dust and water filter on the front of the instrument can be replaced when clogged with dirt or mud. Unique to Dräger, an optional 5-year guaranty (filters and batteries need to be replaced at regular intervals) is available for the hydrogen sulfide, oxygen and carbon monoxide monitors.

NEW SENSOR TECHNOLOGY 'EN MINIATURE'

Utilizing long-life, state-of-the-art Dräger XXS Sensor technology, the innovative Dräger Pac 7000 boasts both speed and reliability in regards to the measurement results. The small size of the sensor supports the application-oriented design of the instrument. Gas hazards that may occur are displayed immediately thanks to the very short diffusion paths inside the instrument and the extremely quick electrochemical reaction times achieved by the Dräger XXS Sensors.

SAFETY FIRST

Personnel safety is always the first priority. The sensor is positioned inside the housing such as to allow gas to reach it from above and from the front. This position also minimizes the danger of a gas inlet being accidentally covered by clothing.

ALARM / WARNING FUNCTION

Visual, vibrating and audible alarms are

Dräger Pac 7000
Increased functionality and no lifetime limitation.

triggered when the two configurable alarm thresholds are exceeded or in the case of oxygen, when the levels fall below the set value. For optimum perception, a two-tone alarm is used. Furthermore, Dräger Pac 7000 features an adjustable TWA (time-weighted average) alarm and STEL (short-term exposure level) alarm. A warning is also given to indicate low battery levels or in the event of a device error.

DATA LOGGER

Dräger Pac 7000 features a data logger in which all concentrations and events are stored together with their respective dates and times. The intervals are variable and can be adjusted by the user. If a one-minute interval is set, the data logger has a capacity of about five days. The stored data can be downloaded via a PC that has Dräger Pac Vision or Dräger CC-Vision software installed and edited using, for example, Microsoft® EXCEL® software. Alternatively, complete data evaluation is possible when the Dräger GasVision software is used.

BUMP TEST MODE

Work safety in industrial settings relies on gas measurement equipment that functions properly. This is the reason why national regulations require regular function or bump tests to test the instrument's functionality using a known gas concentration. Dräger Pac 7000 is designed to make bump testing easier by automating the bump test process when used in conjunction with the Dräger Bump Test Station.

The bump test mode is integrated within the instrument and can be individually configured to match specific safety regulations. For example, the instrument can inform the user when a function test is required and, if after a set period time, the function test has still not been performed; the instrument will automatically shut off. Additionally, when used with the Dräger Bump Test Station, Dräger Pac 7000 can be automatically calibrated after a failed bump test. This ensures the proper functioning of safety equipment.

CALIBRATION AND CONFIGURATION

Dräger Pac 7000 features an integrated menu from which the bump test mode, fresh air calibration and span calibration can be selected. Access to fresh air and span calibration can also be password protected.

The instrument is equipped with an infrared interface and can be linked to a PC via the connecting cradle or the Dräger E-Cal system. Dräger Pac Vision or Dräger CC Vision software can be installed on any PC to configure functions, as well as to calibrate and download the stored data.

DRÄGER PAC 7000 AT A GLANCE

- High performance Dräger XXS Sensors
- Optional 5-year guaranty for hydrogen sulfide, oxygen and carbon monoxide monitors
- Automatic function test with Dräger Bump Test Station
- Optional calibration function after a failed function test
- Adjustable bump test interval
- Unlimited lifetime with simple battery, sensor and filter replacement
- Integrated data logger
- Gas inflow from above and the front
- Adjustable TWA and STEL alarms
- Record of the peak concentration

ORDER INFORMATION

Description	Measuring Range	Default Alarm Threshold A1/A2	Resolution	Response Time	Order Code
Dräger Pac 7000 H_2S [1]	0 – 100 ppm	10/20 ppm	1 ppm	15 sec.	83 18 674
Dräger Pac 7000 H_2S [2]	0 – 100 ppm	10/20 ppm	1 ppm	15 sec.	83 18 971
Dräger Pac 7000 H_2S	0 – 100 ppm	by request	1 ppm	15 sec.	83 18 677
Dräger Pac 7000 H_2S Low Concentrations	0 – 100 ppm	by request	0.1 ppm	15 sec.	83 21 004
Dräger Pac 7000 O_2 [1]	0 – 25 Vol.-%	19/23 Vol.-%	0.1 Vol.-%	10 sec.	83 18 675
Dräger Pac 7000 O_2 [2]	0 – 25 Vol.-%	19.5/23.5 Vol.-%	0.1 Vol.-%	10 sec.	83 18 972
Dräger Pac 7000 O_2	0 – 25 Vol.-%	by request	0.1 Vol.-%	10 sec.	83 18 678
Dräger Pac 7000 CO [1]	0 – 1999 ppm	30/60 ppm	1 ppm	15 sec.	83 18 673
Dräger Pac 7000 CO [2]	0 – 1999 ppm	35/50 ppm	1 ppm	15 sec.	83 18 970
Dräger Pac 7000 CO	0 – 1999 ppm	by request	1 ppm	15 sec.	83 18 676
Dräger Pac 7000 CO_2	0 – 5 Vol.-%	by request	0.1 Vol.-%	30 sec.	83 18 975
Dräger Pac 7000 SO_2	0 – 100 ppm	by request	1 ppm	15 sec.	83 18 976
Dräger Pac 7000 Cl_2	0 – 20 ppm	by request	0.05 ppm	30 sec.	83 18 978
Dräger Pac 7000 HCN	0 – 50 ppm	by request	0.1 ppm	15 sec.	83 18 973
Dräger Pac 7000 NH_3	0 – 300 ppm	by request	1 ppm	20 sec.	83 18 979
Dräger Pac 7000 NO_2	0 – 50 ppm	by request	0.1 ppm	15 sec.	83 18 977
Dräger Pac 7000 NO	0 – 200 ppm	by request	1 ppm	15 sec.	83 21 263
Dräger Pac 7000 PH_3	0 – 20 ppm	by request	0.01 ppm	10 sec.	83 18 974
Dräger Pac 7000 OV	0 – 200 ppm	by request	0.5 ppm	100 sec.	83 21 006
Dräger Pac 7000 OV-A	0 – 200 ppm	by request	1 ppm	100 sec.	83 21 007
5 Year Guaranty (not including battery)					
Dräger Pac 7000 5Y H_2S	0 – 100 ppm	by request	1 ppm	15 sec.	83 21 032
Dräger Pac 7000 5Y O_2	0 – 25 Vol.-%	by request	0.1 Vol.-%	10 sec.	83 21 033
Dräger Pac 7000 5Y CO	0 – 1999 ppm	by request	1 ppm	15 sec.	83 21 031
Leather carrying case					45 43 822
Communication Accessories					
Dräger Gas Vision					83 14 034
Dräger CC-Vision					64 08 515
Communication Module, complete with USB cable and Dräger Pac Vision software					83 18 587
Calibration Accessories					
Calibration adapter					83 18 588
Dräger Pac Module for Dräger E-Cal calibration system					83 18 589
Dräger Bump Test Station for Dräger Pac 7000, not including gas cylinder					83 17 410
Dräger Bump Test Station for Dräger Pac 7000 Complete with one test gas cylinder 58L (gas and concentration variable)					83 18 586
Dräger Bump Test Station for Dräger Pac 7000 The station for an automatic bump test upon placing the Dräger Pac 7000 in the cradle, not including gas cylinder					83 19 559
Dräger Bump Test Station for Dräger Pac 7000 The station for an automatic bump test upon placing the Dräger Pac 7000 in the cradle, complete with one test gas cylinder 58L (gas and concentration variable)					83 21 008
Printer Set for Dräger Bump Test Station Consisting of: Dräger Mobile Printer, single charger, rechargeable NiMH batteries, USB connection cable, positioning aid, Dräger CC-Vision standard					83 21 010
Replacement Parts					
Lithium battery					45 43 808
Water and dust filter					45 43 836

1) Default configuration Europe
2) Default configuration North America

ST-5608-2004

Dräger Pac 7000
Small and robust personal monitor.

ST-5527-2005

Dräger Pac 7000
Quick and reliable function tests.

TECHNICAL DATA

Dimensions (W x H x D)	84 x 64 x 25 mm; 3.3 x 2.5 x 1.0 in.
Weight	120 g; 3.8 oz.
Ambient conditions	Temperature[1] -30 – 50 °C; -20 – 120 °F Pressure 700 – 1300 hPa Humidity 10 – 90 % r. h.
Ingress protection	IP 65
Display	Language-free LCD display, continuous indication of concentration, peak concentration, TWA- and STEL-concentration, operating time, notice and alarm functions
Typical battery life	5500 hours (O_2 version: 2700 hours)
Acoustic alarm	Two-tone-alarm, typical > 90 dB at a distance of 30 cm
Data logger	Storage of concentration und events with date and time (120 hours @ 1 data set per minute)
Approvals	CE-Sign (89/336/EEC, 94/9/EC) ATEX II 1 G EEx ia IIC, T4 I M 1 EEx ia I, T 4 UL Class I, II, Div 1, Group A, B, C, D, E, F, G, Temp. Code T4 cUL Class I, II, Div 1, Group A, B, C, D, E, F, G, Temp. Code T4 IECEx EEx ia IIC, T4 Marine Equipment Directive 96/98/EC Measurement Performance Certificate (acc. to ATEX) EN 45544 (CO, H_2S), EN 50104 (0_2), EN 50271

1) Dräger Pac 7000 CO_2 -20 – 40 °C (-4 – 104 °F), Dräger Pac 7000 HCN -20 – 50 °C (-4 – 122 °F), Dräger Pac 7000 PH_3 -20 – 50 °C (-4 – 122 °F)

90 46 061 | 04.09-2 | Marketing Communications | UUU | PR | ED | Printed in Germany | Chlorine-free – environmentally compatible | Subject to modifications | © 2009 Dräger Safety AG & Co. KGaA