Dräger Pac<sup>®</sup> 7000



Small and robust, ergonomic and intuitive, economic and powerful – the Dräger Pac 7000 is tailor-made for personal monitoring at the workplace. 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 detector is an impressive instrument, offering a high level of reliability and rapid warning against harmful concentrations of CO, CO<sub>2</sub>, Cl<sub>2</sub>, HCN, H<sub>2</sub>S, NH<sub>3</sub>, NO<sub>2</sub>, O<sub>2</sub>, PH<sub>3</sub>, SO<sub>2</sub>.

### Small and robust

With its compact, handy, pocket-sized design, Dräger Pac 7000 is tailor-made for personal monitoring in daily work activities. Dräger Pac 7000 was specially designed as a small and robust instrument to meet work requirements. The impact-resistant housing features a protective rubber coating and is resistant to corrosive chemicals. Dräger Pac 7000 meets the requirements of IP 65. What is more, protection against electromagnetic effects was specially optimized, while a stable and tightly locking crocodile clip made of stainless steel allows the instrument to be fastened securely to the wearer's clothing. To allow for individual preferences, the crocodile clip can be turned and the two alarm lights are positioned diagonally opposite at the corners of the instrument. Easy battery and sensor replacement are key factors to ensure a long instrument life.

#### Concentration display

The concentration display uses no written text (to avoid language problems), showing all information in the form of large numerals or symbols. In case of an alarm, or at the push of a button, the display can be backlit for better readability. The currently measured concentration is displayed continuously, as are notice and warning functions. In addition, the respective peak concentration, average concentration (TWA value) and short-term exposure limit (STEL) relating to the measurement period can be accessed.

#### New sensor technology "en miniature"

Dräger Pac 7000 boasts the latest in sensor technology. The small size of the sensor supports the application-oriented design of the instrument. Any 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 new sensors. The sensor is positioned inside the housing such as to allow gas to reach it from above and from in front. This positioning minimizes the danger of the gas inlet opening being accidentally covered.

#### Alarm / warning functions

In conjunction with a vibration alarm, a visual and audible alarm is triggered if the two adjustable alarm thresholds are exceeded (or if oxygen levels fall below the set value). For optimum perception a two-tone alarm is used. Furthermore, Dräger Pac 7000 features an adjustable TWA alarm



Dräger Pac 7000: High performance and

unlimited use.

and STEL alarm. A warning is likewise given at the end of the battery capacity or in the event of a device error.

### Bump test mode

The safety of personnel must always have the first priority. Their safety depends on measurement and warning equipment functioning perfectly, which is why national regulations demand regular testing of equipment function using a known gas concentration. Dräger Pac 7000 is equipped with a bump test mode. When a bump test (function test or challenge test) needs to be performed, a notice icon appears on the screen. The bump test interval can be set by the user.

The result of the bump test is saved in the

The instrument is equipped with an IR interface and can be linked to a PC via the connecting cradle or E-Cal system. Dräger Pac Vision or Dräger CC Vision software installed on the PC enables configuration of all functions, as well as calibration and download of the stored data.

### Adjustable operating time

In addition, the instrument allows an individual operating time to be set (in days), e.g. a calibration interval, inspection interval or individual operating time end.

## Data logger

Dräger Pac 7000 features a data logger in which all concentrations and events are stored together with their respective dates

DrägerSensors New XXS sensors react particularly quickly

### Large display

Clearly structured, scratch-proof display showing all information at a glance

#### Robust housing

Impact-resistance and ergonomic design



instrument's memory. Dräger Bump Test Station is available for easy performance of the bump test.

### Calibration and configuration

Dräger Pac 7000 features a menu from which the bump test mode, fresh air calibration and span calibration can be selected. Access to fresh air and span calibration can be password-protected. and times. The intervals at which peak concentrations are saved 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 and the installed Dräger Pac Vision or Dräger CC Vision software and edited using, for example, Microsoft<sup>®</sup> EXCEL<sup>®</sup> software or Dräger GasVision software.

# Dräger Pac 7000 at a glance

- Gas inflow from top and front
- Unlimited instrument life
- Easy sensor replacement
- No-text display (no language problems)
- Continuous concentration display
- Visual alarm
- Audible alarm
- Vibration alarm
- Two adjustable alarm thresholds
- Adjustable TWA alarm
- Adjustable STEL alarm
- Display of peak concentration
- Battery pre- and main alarm

- Adjustable operating time with preand main alarm
- Adjustable bump test interval
- Adjustable bump test mode
- Password-protected menu for fresh air and sensitivity calibration
- IR interface
- Individual instrument configuration
- Replaceable battery
- Data logger

For further information, please visit: www.draeger-safety.com/pac



Dräger Pac 7000: Reliable in daily use.

# ORDER INFORMATION

Description	Measuring	Alarms	Alarms	Order-code
		Threshold A 1	Threshold A 2	
Dräger Pac 7000 CO <sup>1)</sup>	0 to 1999 ppm	30 ppm	60 ppm	83 18 673
Dräger Pac 7000 CO <sup>2)</sup>	0 to 1999 ppm	35 ppm	50 ppm	83 18 970
Dräger Pac 7000 CO	0 to 1999 ppm	by customer request		83 18 676
Dräger Pac 7000 H <sub>2</sub> S <sup>1)</sup>	0 to 100 ppm	10 ppm	20 ppm	83 18 674
Dräger Pac 7000 H <sub>2</sub> S <sup>2)</sup>	0 to 100 ppm	10 ppm	20 ppm	83 18 971
Dräger Pac 7000 H <sub>2</sub> S	0 to 100 ppm	by customer request		83 18 677
Dräger Pac 7000 021)	0 to 25 Vol%	19 Vol%	23 Vol%	83 18 675
Dräger Pac 7000 0220	0 to 25 Vol%	19.5 Vol%	23.5 Vol%	83 18 972
Dräger Pac 7000 0 <sub>2</sub>	0 to 25 Vol%	by customer request		83 18 678
Dräger Pac 7000 CO <sub>2</sub>	0 to 5 Vol%	0.5 Vol%	3 Vol%	83 18 975
Dräger Pac 7000 Cl <sub>2</sub>	0 to 20 ppm	0.5 ppm	1 ppm	83 18 978
Dräger Pac 7000 HCN	0 to 50 ppm	10 ppm	20 ppm	83 18 973
Dräger Pac 7000 NH <sub>3</sub>	0 to 300 ppm	50 ppm	100 ppm	83 18 979
Dräger Pac 7000 NO <sub>2</sub>	0 to 50 ppm	5 ppm	10 ppm	83 18 977
Dräger Pac 7000 PH <sub>3</sub>	0 to 20 ppm	0.1 ppm	0.2 ppm	83 18 974
Dräger Pac 7000 SO <sub>2</sub>	0 to 100 ppm	1 ppm	2 ppm	83 18 976



Dräger Pac 7000: High level of wearing comfort.

<sup>1)</sup> Default configuration Europe <sup>2)</sup> Default configuration NAFTA

## ACCESSORIES

Connecting Cradle, complete with USB cable and Dräger Pac Vision software	83 18 587
Lithium battery	45 43 808
Dust and water filter	45 43 836
Leather carrying case	45 43 822
Dräger Bump Test Station, complete with test gas cylinder 58 L	83 18 586
(gas type by customer request)	
E-Cal instrument module for connection of	83 18 589
4 Dräger Pac 1000 to 7000 to a Dräger E-Cal Master Station or to Module Adapter	

# **TECHNICAL DATA**

Dimensions (H x W x D)	64 x 84 x 20 (battery compartment: 25) mm (2.5 x 3.3 x 0.8 in., battery compartment: 1 in.)		
Weight	120 g (3.8 oz.)		
Ambient conditions	Temperature <sup>1)</sup>	-30 to 50 °C (-20 to 120 °F)	
	Pressure	700 to 1300 hPa	
	Humidity	10 to 90 % r. h.	
ngress protection	IP 65		
Display	Language-free LCD display, continuous indication of concentration, indication of concentration		
	during alarm, peak concentration, TWA- and STEL-concentration, operating time, notice and		
	warning functions		
Typical battery life	3 years (O <sub>2</sub> sensor 1.5 years)		
Acoustic alarm	Two-tone-alarm, typical > 90 dB (A) at a distance of 30 cm		
Data logger	Storage of concentration und events with date and time		
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	

Г

<sup>1)</sup> Dräger Pac 7000 CO<sub>2</sub> -20 to 40 °C (-4 to 104 °F) Dräger Pac 7000 HCN -20 to 50 °C (-4 to 122 °F)

Dräger Pac 7000 PH<sub>3</sub> -20 to 50 °C (-4 to 122 °F)

Г

L