

Dräger Pac 6x00 / 8x00 Approvals



Approvals / Marking Pac 6000/8000/8500

Pac 8000 Type MOG 0010 **Dräger**

CE Ex I M1 Ex ia I Ma KIWA 19 ATEX 0031
 II 1G Ex ia IIC T4 Ga IECEx KIWA 19.0017
 0158 -40°C ≤ Ta ≤ +55°C ANZEx 20.2004X
 Cl. I, Zone 0, A/Ex ia IIC T4 Ga CSAE 21 UKEX 0300
 Cl. II, Div. 1, Gr. E, F, G IP 68
 FCC ID: X60-BT005, IC: 5895F-BT005, HVIN: BT005
 UK CA 8505 18-AV4BO-0141 16.70055575

WARNING: Read manual for safety precautions.
 AVERTISSEMENT: Lire le manuel pour les précautions sécurité.
 Dräger Safety, DE-23560 Lübeck, Germany
 Importer (UK): Draeger Safety UK Ltd, Blyth, UK

Pac 8500 Type MOG 0015 **Dräger**

CE Ex I M1 Ex ia I Ma KIWA 19 ATEX 0031
 II 1G Ex ia IIC T4 Ga IECEx KIWA 19.0017
 0158 -40°C ≤ Ta ≤ +55°C ANZEx 20.2004X
 Cl. I, Zone 0, A/Ex ia IIC T4 Ga CSAE 21 UKEX 0300
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 Dräger Safety, DE-23560 Lübeck, Germany
 Importer (UK): Draeger Safety UK Ltd, Blyth, UK

Pac 8500 Type MOG 0015 **Dräger**

CE Ex I M1 Ex ia I Ma KIWA 19 ATEX 0031
 II 1G Ex ia IIC T4 Ga IECEx KIWA 19.0017
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 Importer (UK): Draeger Safety UK Ltd, Blyth, UK

Serial No.

Serial Number key: The third letter of the serial number specifies the manufacturing year: M = 2019, N = 2020, P = 2021, R = 2022, S = 2023, T = 2024, U = 2025, W = 2026, X = 2027, Y = 2028,

Z = 2029, etc. (Letters G, I, O, Q are omitted)

Example: Serial Number ARMB-0001: the third letter is M, which means that the unit was manufactured in 2019.

Approvals / Marking Pac 6500

Pac 6500 Type MOG 0005 **Dräger**

CE Ex I M1 Ex ia I Ma KIWA 19 ATEX 0031
 II 1G Ex ia IIC T4 Ga IECEx KIWA 19.0017
 0158 -40°C ≤ Ta ≤ +55°C ANZEx 20.2004X
 Cl. I, Zone 0, A/Ex ia IIC T4 Ga CSAE 21 UKEX 0300
 Cl. II, Div. 1, Gr. E, F, G IP 68
 FCC ID: X60-BT005, IC: 5895F-BT005, HVIN: BT005
 UK CA 8505 18-AV4BO-0141 16.70055575

WARNING: Read manual for safety precautions.
 AVERTISSEMENT: Lire le manuel pour les précautions sécurité.
 Dräger Safety, DE-23560 Lübeck, Germany
 Importer (UK): Draeger Safety UK Ltd, Blyth, UK

Only for EU:

Radio

Max. radiated power:

Bluetooth®: < 10 dBm EIRP

Operating frequency: 2402-2480 MHz

Only for Canada:

CAN ICES-3 (B)/NMB-3(B)

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Only for USA:

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC responsible party:

Draeger Inc.

7256 S. Sam Houston W. Parkway

Suite 100

Houston, Tx 77085 USA

phone: +1 346-802-6111

e-mail: DIHouston.Approvals@draeger.com

Only for Japan:

Dräger Pac 6x00/8x00 取扱説明書 追記事項

1.1 基本的な安全上の注意」に関する追記事項

- 本製品の分解・改造は、絶対に行わないでください。
- 本製品の修理およびメンテナンスにあたっては、Drägerの純正品およびアクセサリのみを使用してください。

1.2 防爆に関する安全上の注意」に関する追記事項

危険場所の定義 (日本)

Dräger Pac 6x00/8x00 ガス検知警報器は、ゾーン 0、ゾーン 1、ゾーン 2 に区分される危険場所で、かつ、周囲温度は - 40 ~ + 55 °C で、爆発等級が IIA、IIB、IIC で、温度等級が T1、T2、T3、T4 のガスが存在する可能性のある場所で使用できます。

2.1 警告表示について」に関する追記事項

警告 この警告事項に従わない場合、使用者が死亡または重傷を負うおそれがあることを示します。

注意事項 この注意事項に従わない場合、人が傷害を負うおそれや製品が損傷するおそれ、物的損害が発生するおそれがあることを示します。

5.1 電池の交換」に関する追記事項

- 警告: リチウム電池 (LBT 0100) のみを使用してください。
- 電池パックの製造者: Dräger Safety AG & Co. KGaA

8.1 ガス検知警報器」に関する追記事項

定格電圧 3.6V

認証 労検第 TC 22445 号

Ex ia IIC T4 Ga

Ta = - 40 ~ +55 °C

適用基準:

工場電気設備防爆指針 (国際整合技術指針)

JNOSH-TR-46-1 及び 6: 2015

保護等級 IP68 (IECEX Test Report に基づくものです)

※TIIS の検定では評価していません (国内検定上は IP20)

Limited Manufacturer Guarantee

We are going paperless.

Scan the QR code and enter document number 9300255.



www.draeger.com/ifu

9300255

For details, see instructions for use/data sheets for the respective sensor.

The instructions for use, technical manual and data sheets for the utilized sensors can be downloaded from:
www.draeger.com/ifu and the PC software CC-Vision from: www.draeger.com/software

	XXS O ₂	XXS CO-LC	XXS H ₂ S-LC
Pac 6500 (MOG 005)			
Measuring principle	Electrochemical	Electrochemical	Electrochemical
Time of response t _{0...90} ¹⁾	≤ 10 s	≤ 15 s	≤ 21 s
Time of response oxygen t _{0...20} ¹⁾	≤ 5 s		
Time of response toxic gases t _{0...50} ¹⁾		≤ 10 s	≤ 15 s
Time of recovery t _{0...10}	n/a	≤ 16 s	≤ 21 s
Time of recovery t _{0...50}	n/a	≤ 10 s	≤ 15 s
Indication range	0 to 25 vol %	0 to 2000 ppm	0 to 100 ppm
Measuring range (certified)	0 to 25 vol %	3 to 500 ppm EN 45544-2 3 to 2000 ppm EN 45544-3	0.4 to 100 ppm EN 45544-2 EN 45544-3
Capture range ²⁾	± 0.5 vol %	± 1 ppm	± 0.4 ppm
Drift of measured value/month	≤ ±1 %	≤ ±0.5 %	≤ ±0.5 %
Warm-up time	≤ 5 min	≤ 5 min	≤ 5 min
Linearity error	≤ 0.3 vol %	≤ ± 2 % of measured value	≤ ± 2 % of measured value
Standards certified measuring function for deficiency and toxic gases	EN 50104	EN 45544-1 EN 45544-2 EN 45544-3	EN 45544-1 EN 45544-2 EN 45544-3
Cross-sensitivities	Negatively affected by: C ₂ H ₆ , C ₂ H ₄ , C ₂ H ₂ , CO ₂ , H ₂ No O ₂ measurement in He	Additively affected by: C ₂ H ₂ , H ₂ , NO	Additively affected by: SO ₂ , NO ₂ , H ₂ Negatively affected by: Cl ₂

- Response times can be quicker if calibration adapter or docking station is used.
- This range of measured values is known as capture range where minor measured value fluctuations (e.g. signal noise, concentration fluctuations) does not result in a changing display. Measured values outside the capture range are displayed using their actual measured values. By using Dräger CC-Vision the set capture range can be read out and activated/deactivated. The capture range is continuously activated in measuring mode and is disabled in calibration mode.

Environmental conditions (operation and storage) of DrägerSensors XXS:

Temperature: -30 °C to +55 °C (short time -40 °C) Température : -30 °C à +50 °C (brièvement -40 °C)
 Pressure: 800 hPa to 1300 hPa Pression : 800 hPa à 1300 hPa
 Maximum altitude: 2000 m above sea level Altitude maximale : 2000 m au-dessus du niveau de la mer
 Humidity: 10 % RH to 90 % RH, non-condensing Humidité de l'air : 10 % à 90 % d'humidité relative, sans condensation

Environmental conditions (operation and storage) of Pac 6500: -30 °C to +55 °C (operation -10 °C to +40 °C is covered by EN 45544).

The IP degrees of protection do not indicate whether the device detects a gas during or after it was exposed to it.

Check the calibration and functional integrity of the device in the event of dust deposits and contact with water through submersion or a water jet.

Dräger

CE EU-Konformitätserklärung
 EU-Declaration of Conformity
 Dokument Nr. / Document No. SE23949-04

Wir / We Dräger Safety AG & Co. KGaA, Revalstraße 1, 23560 Lübeck, Germany
 erklären in alleiniger Verantwortung, dass das Produkt
 declare under our sole responsibility that the product

Gasmessgerät Typ MOG 00** (Pac 6*00 / 8*00)
 Gas Detection Instrument type MOG 00** (Pac 6*00 / 8*00)

mit der EU-Baumusterprüfbescheinigung / Expertise
 is in conformity with the EU-Type Examination Certificate / Expertise
 KIWA 19ATEX0031

ausgestellt von der notifizierten Stelle mit der Kenn-Nr. 8812AR Arnheim
 with Identification No. 2813
 CSA Group Netherlands B.V.
 Utrechtseweg 310, Building B42
 Netherlands

und mit den folgenden Richtlinien unter Anwendung der aufgeführten Normen übereinstimmt
 and is in compliance with the following directives by application of the listed standards

Bestimmungen der Richtlinie / Provisions of directive	Nummer sowie Ausgabedatum der Norm / Number and date of issue of standard
2014/34/EU ATEX-Richtlinie ATEX Directive	EN IEC 60079-0:2018, EN 60079-11:2012
2014/53/EU RED-Richtlinie RE Directive	EN 62479:2010, EN 301 489-1 V2.2.3, EN 301 489-17 V3.2.4, EN 301 328 V2.2.2, EN 50270:2015 (Emission: Type 1, Susceptibility: Type 2), EN 62388-1:2014+AC:2015+A11:2017
2011/65/EU RoHS-Richtlinie RoHS Directive	EN IEC 63000:2018

Überwachung der Qualität:
 surveillance of quality through
 Production by
 DEKRA Testing and
 Inspection GmbH
 Handwerkerstr. 15
 D-70565 Stuttgart
 0158

Zertifikat-Nr.:
 Certificate No.:
 Lübeck, 2023-02-28

Ort und Datum (jjj-jmm-tt)
 Place and date (yyyy-mm-dd)
 Dr. Marcus Pombh
 Head of Product Compliance
 Safety Products
 Research & Development Safety Division

Dräger

UKCA UK Declaration of Conformity
 Document No. 11215202-00

We Dräger Safety AG & Co. KGaA, Revalstraße 1, 23560 Lübeck, Germany
 declare under our sole responsibility that the product

Gas Detection Instrument type MOG 00** (Pac 6*00 / 8*00)
 Gas Detection Instrument type MOG 00** (Pac 6*00 / 8*00)

is in conformity with the UK-Type Examination Certificate / Expertise
 CSAA 21UKEX0300

issued by the Approved Body with Identification No. 0518
 CSA Group Testing UK Ltd.
 Hawarden Industrial Park
 Deeside, CH8 3US
 United Kingdom

and is in compliance with the following UK regulations by application of the listed standards

Statutory Instrument	Number and date of issue of designated standard
SI 2016/1107 Equipment and Protective Systems Intended for use in Potentially Explosive Atmospheres	EN IEC 60079-0:2018, EN 60079-11:2012
SI 2017/1206 Radio Equipment	EN 62479:2010, EN 301 489-1 V2.2.3, EN 301 489-17 V3.2.4, EN 301 328 V2.2.2, EN 50270:2015 (Emission: Type 1, Susceptibility: Type 2), EN 62388-1:2014+AC:2015+A11:2017
SI 2012/3032 The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment	EN IEC 63000:2018

Surveillance of Quality Assurance
 Production by
 (Schedule 3A Part 2)
 DEKRA Certification UK Ltd
 Stokenchurch House,
 Oxford Road, Stokenchurch,
 HP14 3SK
 United Kingdom
 8505

Lübeck, 2023-03-02

Place and date (yyyy-mm-dd)
 Dr. Marcus Pombh
 Head of Product Compliance
 Safety Products
 Research & Development Safety Division