



# 1 EU – Type Examination Certificate

2 Equipment or Protective System Intended for use in Potentially Explosive Atmospheres  
Directive 2014/34/EU

3 EU – Type Examination Certificate Number: **KIWA 20ATEX0031 X Issue: 1**

4 Product: **Pressure Transmitters types Cerabar PMP51B, PMC51B, PMP71B, PMC71B and Differential Pressure Transmitters types Deltabar PMD55B, PMD75B and PMD78B**

5 Manufacturer: **Endress+Hauser SE+Co. KG**

6 Address: **Hauptstrasse 1, 79689 Maulburg  
Germany**

7 This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Kiwa Nederland B.V., Notified Body number 0063 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.  
The examination and test results are recorded in confidential ATEX Assessment Report No. 171200339.

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

<b>EN IEC 60079-0 : 2018</b>	<b>EN 60079-1 : 2014</b>	<b>EN 60079-11 : 2012</b>
<b>EN 60079-26 : 2015</b>	<b>EN 60079-31 : 2014</b>	

10 If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

11 This EU – Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

12 The marking of the product shall include the following:



II 2G	Ex db IIC T6...T1 Gb
II 1/2G or 2G	Ex db ia IIC T6...T1 Ga/Gb or Gb
II 1/2D	Ex ta/tb IIIC T <sub>200</sub> xxx °C Da/Db
II 2D	Ex tb IIIC T <sub>L</sub> xxx °C Db

**Kiwa Nederland B.V.**  
Unit Kiwa ExVision  
Wilmsdorf 50  
P.O. Box 137  
7300 AC Apeldoorn  
The Netherlands

Tel. +31 88 998 34 93  
Fax +31 88 998 36 85  
ExVision@kiwa.nl  
www.kiwaexvision.com

**Kiwa Nederland B.V.**

Ron Scheepers  
Management Director

**Issue date:**

8 July 2020

**First issue:**

---

This certificate shall, as far as applicable, be revised before the date of cessation of presumption of conformity of (one of) the included standards above as communicated in the Official Journal of the European Union.

© Integral publication of this certificate in its entirety and without any change is allowed.

## 13 SCHEDULE

### 14 EU – Type Examination Certificate KIWA 20ATEX0031 X Issue No. 1

#### 15.1 Description of Product

Pressure Transmitters types Cerabar PMP51B, PMC51B, PMP71B, PMC71B and Differential Pressure Transmitters types Deltabar PMD55B, PMD75B and PMD78B for use in explosive atmospheres caused by the presence of combustible gases, fluids, vapours or dusts, are used to convert an over-, under- or differential pressure into a 4-20 mA output signal.

The enclosure is either a single electronics compartment version made of aluminium or a dual compartment version made of aluminium or stainless steel, providing a separate electronics and a terminal compartment. The stainless steel pressure sensor is directly fitted to the enclosure. Optionally the electronics compartment can be equipped with a display module with or without Bluetooth in combination with a windowed cover.

The marking of the pressure transmitters is as follows:

Cerabar PMP51B and PMP71B: Ex db IIC T6...T1 Gb  
Ex ta/tb IIIC T<sub>200</sub> 125 °C Da/Db  
Ex tb IIIC T<sub>L</sub> 125 °C Db

Cerabar PMC51B and PMC71B: Ex db ia IIC T6...T1 Ga/Gb or Gb  
Ex ta/tb IIIC T<sub>200</sub> 125 °C or 150 °C Da/Db  
Ex tb IIIC T<sub>L</sub> 125 °C or 150 °C Db

Deltabar PMD55B, PMD75B and PMD78B: Ex db IIC T6...T1 Gb  
Ex ta/tb IIIC T<sub>200</sub> 100 °C Da/Db  
Ex tb IIIC T<sub>L</sub> 100 °C Db

For thermal data see Annex 1.

The degree of protection of the equipment is IP64 in accordance with EN IEC 60079-0.

The degree of protection of the equipment is IP66/IP68 (1,83 m during 24 h) in accordance with EN 60529.

#### 15.2 Electrical Data

Supply: max. 35 Vdc, 1 W, U<sub>m</sub> = 250 V  
Output: 2-wire 4-20 mA or 2-wire 4-20 mA HART

#### 15.3 Instructions

The instructions provided with the product shall be followed in detail to assure safe operation.

#### 16 ATEX Assessment Report Number

171200339.

#### 17 Specific Conditions of Use

- For thermal data see Annex 1.
- The flameproof joints are not intended to be repaired.

13 **SCHEDULE**

14 **EU – Type Examination Certificate KIWA 20ATEX0031 X Issue No. 1**

- The pressure transmitters shall be installed and maintained such that hazards caused by electrostatic discharge are avoided.
- For EPL Da the surface temperature  $T_{200\text{ xxx }^\circ\text{C}}$  is under 200 mm dust, for EPL Db the surface temperature  $T_{\text{xxx }^\circ\text{C}}$  is when the surface of the equipment is covered with as much fallen dust as it will retain ( $T_L$ ) and without dust.

18 **Essential Health and Safety Requirements**

All relevant Essential Health and Safety Requirements are covered by the standards listed at section 9.

19 **Drawings and Documents**

As listed in ATEX Assessment Report No. 171200339.

**Annex 1 to  
Certificate of Conformity IECEx KIWA 20.0011X, issue 0  
EU – Type Examination Certificate KIWA 19ATEX0031 X Iss. 1  
and Test Report NL/KIWA/ExTR20.0012/00**



Thermal data for EPL Ga/Gb and Gb

Model	Type	Process connection type	Temperature class	Process temperature range Tp <sup>1)</sup>	Ambient temperature range <sup>1)</sup>
Cerabar	PMP51B PMP71B	compact	T6	-50 °C ≤ Tp ≤ 80 °C	-50 °C ≤ Ta ≤ +60 °C
			T4...T1	-50 °C ≤ Tp ≤ 100 °C	-50 °C ≤ Ta ≤ +60 °C
				-50 °C ≤ Tp ≤ 125 °C	-50 °C ≤ Ta ≤ +50 °C
		temperature decoupling	T6	-50 °C ≤ Tp ≤ 80 °C	-50 °C ≤ Ta ≤ +65 °C
			T4	-50 °C ≤ Tp ≤ 125 °C	-50 °C ≤ Ta ≤ +70 °C
			T3	-50 °C ≤ Tp ≤ 190 °C	-50 °C ≤ Ta ≤ +60 °C
	T2		-50 °C ≤ Tp ≤ 290 °C	-50 °C ≤ Ta ≤ +55 °C	
	capillary remote	T1	-50 °C ≤ Tp ≤ 400 °C	-50 °C ≤ Ta ≤ +50 °C	
		T6	-50 °C ≤ Tp ≤ 80 °C	-50 °C ≤ Ta ≤ +70 °C	
		T4	-50 °C ≤ Tp ≤ 125 °C		
		T3	-50 °C ≤ Tp ≤ 190 °C		
		T2	-50 °C ≤ Tp ≤ 290 °C		
T1	-50 °C ≤ Tp ≤ 400 °C				

<sup>1)</sup> for versions without window cover lower ambient temperature decreases to -60 °C (ordercode option 580 = "JT")

Model	Type	Process connection type	Temperature class	Process temperature range Tp <sup>1)</sup>	Ambient temperature range <sup>1)</sup>
Deltabar	PMD55B PMD75B	compact	T6	-50 °C ≤ Tp ≤ 80 °C	-50 °C ≤ Ta ≤ +60 °C
			T4...T1	-50 °C ≤ Tp ≤ 85 °C	-50 °C ≤ Ta ≤ +65 °C
				-50 °C ≤ Tp ≤ 100 °C	-50 °C ≤ Ta ≤ +60 °C
	PMD78B	temperature decoupling	T6	-50 °C ≤ Tp ≤ 80 °C	-50 °C ≤ Ta ≤ +60 °C
			T3	-50 °C ≤ Tp ≤ 190 °C	-50 °C ≤ Ta ≤ +70 °C
		capillary remote	T4	-50 °C ≤ Tp ≤ 125 °C	
			T2	-50 °C ≤ Tp ≤ 290 °C	
			T1	-50 °C ≤ Tp ≤ 400 °C	

<sup>1)</sup> for versions without window cover lower ambient temperature decreases to -60 °C (ordercode option 580 = "JT")

Model	Type	Process connection type	Temperature class	Process temperature range Tp	Ambient temperature range
Cerabar	PMC51B PMC71B	compact sensor	T6	-40 °C ≤ Tp ≤ 80 °C	-40 °C ≤ Ta ≤ +55 °C
			T4	-40 °C ≤ Tp ≤ 100 °C	-40 °C ≤ Ta ≤ +50 °C
			T4...T1	-40 °C ≤ Tp ≤ 125 °C	-40 °C ≤ Ta ≤ +40 °C
		High temperature version	T6	-40 °C ≤ Tp ≤ 80 °C	-40 °C ≤ Ta ≤ +55 °C
			T4	-40 °C ≤ Tp ≤ 125 °C	-40 °C ≤ Ta ≤ +50 °C
			T3...T1	-40 °C ≤ Tp ≤ 150 °C	-40 °C ≤ Ta ≤ +40 °C

**Annex 1 to  
Certificate of Conformity IECEx KIWA 20.0011X, issue 0  
EU – Type Examination Certificate KIWA 19ATEX0031 X Iss. 1  
and Test Report NL/KIWA/ExTR20.0012/00**



Thermal data for EPL Da/Db, Db and Dc

Model	Type	Process connection type	maximum surface temperature	Process temperature range Tp <sup>2)</sup>	Ambient temperature range <sup>1) 2)</sup>
			EPL Da and EPL Db part		
Cerabar	PMP51B PMP71B	compact	125 °C	-40 °C ≤ Tp ≤ 125 °C	-40 °C ≤ Ta ≤ +65 °C
		T decoupled, capillary remote		-40 °C ≤ Tp ≤ 400 °C	-40 °C ≤ Ta ≤ +70 °C

<sup>1)</sup> for housing HS27 an ambient temperature decrease of 5K shall be considered

<sup>2)</sup> the lower ambient and process temperature decreases to -50 °C (ordercode option 580 = "JL")

Model	Type	Process connection type	maximum surface temperature	Process temperature range Tp	Ambient temperature range <sup>1)</sup>
			EPL Da and EPL Db part		
Cerabar	PMC51B PMC71B	compact	125 °C	-40 °C ≤ Tp ≤ 125 °C	-40 °C ≤ Ta ≤ +65 °C
		high temperature	150 °C	-40 °C ≤ Tp ≤ 150 °C	-40 °C ≤ Ta ≤ +65 °C

<sup>1)</sup> for housing HS27 an ambient temperature decrease of 5K shall be considered

Model	Type	Process connection type	maximum surface temperature	Process temperature range Tp <sup>2)</sup>	Ambient temperature range <sup>1) 2)</sup>
			EPL Da and EPL Db part		
Deltabar	PMD55B PMD75B	compact	100 °C	-40 °C ≤ Tp ≤ 100 °C	-40 °C ≤ Ta ≤ +65 °C
	PMD78B	T decoupled, capillary remote	100 °C	-40 °C ≤ Tp ≤ 400 °C	-40 °C ≤ Ta ≤ +70 °C

<sup>1)</sup> for housing HS27 an ambient temperature decrease of 5K shall be considered

<sup>2)</sup> the lower ambient and process temperature decreases to -50 °C (ordercode option 580 = "JL")