



EU Type Examination Certificate CML22ATEX3602 Issue 0

- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Equipment **IPH**
- 3 Manufacturer **Quintex GmbH**
- 4 Address **i_Park Tauberfranken 13, 97922
Lauda-Königshofen,
Germany**
- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 CML B.V., Chamber of Commerce No 67386717, Koopvaardijweg 32, 4906CV Oosterhout, The Netherlands, Notified Body Number 2776, 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 equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

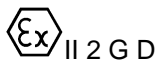
The examination and test results are recorded in the confidential reports listed in Section 12.

- 7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.
- 8 This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN IEC 60079-0:2018

EN 60079-30-1:2017

- 10 The equipment shall be marked with the following:



II 2 G D

Ex 60079-30-1 IIC T* °C Gb

Ex 60079-30-1 IIIC T*°C Db

IP67

Minimum Installation Temperature: -40°C

* Temperature Class is determined by the process/workpiece temperature.
See product description for Temperature Class





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11 Description

The IPH Heating Cables are constant power trace heating cables that are used to protect against freezing or maintain temperatures. The cables are rated at up to 70 W/m on a supply voltage up to 277V. They comprise of two insulated parallel bus wires, around which is wrapped a layer of mica and then glass insulation tape. A resistance wire is spiralled over the core, which is notched at intervals so that the resistance wire connects to the bus wires underneath. A further layer of mica and glass tape insulation is wrapped over the top of the resistance wire. The insulation is covered with a fluoropolymer jacket, metallic braid and can have a further, optional, chemical resistant fluoropolymer outer jacket.

The heating cables are cut to length to form a unit that is terminated at each end with a seal kit. The heaters are designed to be connected to a supply by means of suitable certified cable entries and junction boxes in accordance with the manufacturer's installation instructions.

The Temperature Class is dependent on the workpiece temperature (temperature of the process pipework), the maximum workpiece temperatures per Temperature Class are detailed in the following tables.

IPH-N (without outer fluoropolymer jacket)

Workpiece Temperatures						
Output	T6 (T85°C)	T5 (T100°C)	T4 (T135°C)	T3 (T200°C)	T2 (T300°C)	T1 (T450°C)
Maximum sheath temperature	80°C	95°C	130°C	195°C	200°C	200°C
10 W/m	43	60	100	181	275	275
20 W/m	2	19	61	148	250	250
30 W/m	-	-	25	114	234	234
40 W/m	-	-	5	80	209	209
50 W/m	-	-	-	49	186	186
60 W/m	-	-	-	26	159	159
70 W/m	-	-	-	-	125	125



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IPH-NF (with outer fluoropolymer jacket)

Workpiece Temperatures						
Output	T6 (T85°C)	T5 (T100°C)	T4 (T135°C)	T3 (T200°C)	T2 (T300°C)	T1 (T450°C)
Maximum sheath temperature	80°C	95°C	130°C	195°C	200°C	200°C
10 W/m	39	59	106	186	275	275
20 W/m	-	3	67	160	256	256
30 W/m	-	-	20	133	243	243
40 W/m	-	-	-	101	231	231
50 W/m	-	-	-	64	201	201
60 W/m	-	-	-	27	180	180
70 W/m	-	-	-	-	147	147

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	22 Mar 2023	R15839A/00	Issue of Prime Certificate

Note: Drawings that describe the equipment or component are listed in the Annex.

13 Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

- i. Where the product incorporates certified parts or safety critical components, the manufacturer of the product defined on this certificate shall continually monitor these parts/components for any modifications introduced by the manufacturer(s) of these constituent parts. If the manufacturer of any constituent part introduces any changes which affect the compliance of the certified product that is the subject of this certificate, the manufacturer is required to have this certificate updated.
- ii. An electric strength test of 2 U + 1000 V rms shall be applied between the conductors and the outer, metallic braid/jacket as appropriate for 60 seconds as required by clause 5.1.2 of EN 60079-30-1.
- iii. An electric strength test of the polymeric sheath (over jacket) used for corrosion resistance shall be carried out in accordance with the requirements of EN 60079-30-1 clause 5.2.1.
- iv. The manufacturer shall verify the output rating for each cable manufactured in accordance with EN 60079-30-1 clause 5.2.2.



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14 Specific Conditions of Use (Special Conditions)

None

Certificate Annex

Certificate Number CML 22ATEX3602
Equipment IPH
Manufacturer Quintex GmbH



The following documents describe the equipment or component defined in this certificate:

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
4045	1 of 1	27.02.2023	22 Mar 2023	IPH Metal Label
4046	1 of 1	27.02.2023	22 Mar 2023	Markin Label IPH-PHT
4047	1 of 1	27.02.2023	22 Mar 2023	Drum Label IPH-PHT
IPH-STOCK	1 of 1	C	22 Mar 2023	Quintex IPH / PHT iss 1