

[1] UNITED KINGDOM CONFORMITY ASSESSMENT

UK TYPE EXAMINATION CERTIFICATE

[2] Product or Protective System Intended for use in Potentially Explosive Atmospheres UKSI 2016:1107 (as amended) – Schedule 3A, Part 1

[3] UK Type Examination Certificate Number: **DNV 22 UKEX 45437** **Issue 0**

[4] Product: **Headsets and Offshore Ear Plug**

[5] Manufacturer: **A-Kabel AS**

[6] Address: **Nedre Hagavei 15C
2150 Arnes
Norway**

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

[8] DNV Business Assurance UK Ltd, Approved Body number 8501 in accordance with Regulation 42 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended), 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 Schedule 1 of the Regulations.

The examination and test results are recorded in confidential reports listed in item 16.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with: **EN IEC 60079-0:2018 and EN 60079-11:2012**

Except in respect of those requirements listed at section 18 of the schedule to this certificate.

[10] If the sign “X” is placed after the certificate number, it indicates that the product is subject to the “Specific Conditions of Use” listed under item 17 of this certificate.

[11] This UK TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Regulations apply to the manufacturing process and supply of this product. These are not covered by this certificate.

[12] The marking of this product shall include the following:

 **II 2 G Ex ib IIC T4 Gb, Ta : -40°C to +60°C**

Date of issue:
2022-07-16



Asle Kaastad
For DNV Business Assurance UK Ltd
The Certificate has been digitally signed.
See www.dnv.com/digitalsignatures for info



[13]

Schedule

 [14] **UK Type Examination Certificate No:**

DNV 22 UKEX 45437X

Issue 0

 [15] **Description of Product**

The covered equipment, headsets and ear plug are intended to be used for radio communication. Connection may be direct to radio units or may go via PTT (Push-To-Talk) units. The offshore ear plug may be used as stand-alone unit to be connected to PTT units, or as accessory to the headset models AK5850S/-HS/-BHS/-BS. However, certificates of radios or PTT units must allow intrinsic safe connections with the covered equipment. In other words matching of safety parameters is important for intrinsic safe connection in the end use.

The below simplified comparison conditions may be used.

$U_o \leq U_i$, $I_o \leq I_i$, $C_o \geq C_i + C_c$, $L_o \geq L_i + L_c$ (C_c & L_c is cable's capacitance & inductance)

(Note. L_i and L_i/R_i values are listed for reference, but end-configuration of intrinsic safe connections may need further consideration)

Model	Description
AK5850	Headset. Standard version.
AK6631	Headset with slim cup
AK5850S	Headset with helmet attachment. Built-in connector for optional ear plug
AK5850HS	Headset with headband. Built-in connector for optional ear plug
AK5850BHS	Headset with headband and connector for ear plug. With extension rings on cups.
AK5850BH	Headset with headband without connector for ear plug. With extension rings on cups.
AK5850BS	Headset with helmet attachment and connector for ear plug. With extension rings on cups.
AK5850B	Headset with helmet attachment and without connector for ear plug. With extension rings on cups.
AK5850T	Headset with 32Ω speaker and ODU connector as an option.
EM2140DC-S	Offshore ear plug version B: Plug is 3.5mm molded jack. (Connect to headsets AK5850S, AK5850HS, AK5850BS and AK5850BHS.)

(The ear plug is also formerly covered by certificate Nemko 12 ATEX 1277).

Type designation

Headsets: AK5850, AK6631 AK5850S, AK5850HS, AK5850BHS, AK5850BH, AK5850BS, AK5850B, AK5850T

Ear plug: EM2140DC-S version B

Intrinsic Safety Data

Headsets:

U_i : 9Vdc, I_i : 291mA, P_i : 1.2W, C_i : Negligible. L_i : 0.9mH or L_i/R_i : 6μH/Ω

For AK5850T:

U_i : 9Vdc, I_i : 291mA, P_i : 1.2W, C_i : Negligible. L_i : 380μH or L_i/R_i : 15.5μH/Ω

Ear Plug:

U_i : 9Vdc, I_i : 300mA, P_i : 0.6W, C_i : Negligible. L_i : 3.497mH or L_i/R_i : 4.22μH/Ω

Degrees of protection (IP Code)

(IP20 checked)

Ambient temperature:

-40°C to +60°C

Routine tests

None

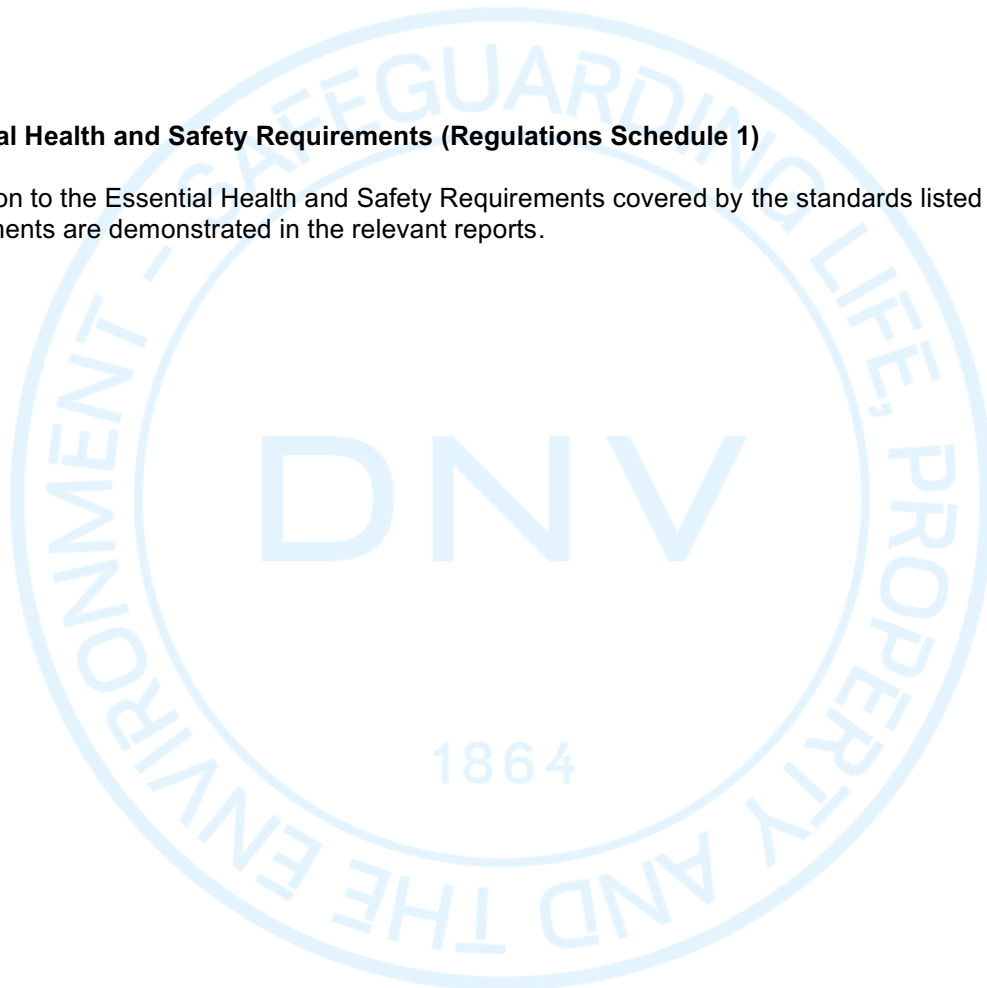
[16] **Report No.:** PRJN-309086-2021-PA-NOR/01

[17] **Specific Conditions of Use**

None

[18] **Essential Health and Safety Requirements (Regulations Schedule 1)**

In addition to the Essential Health and Safety Requirements covered by the standards listed at item 9, all other requirements are demonstrated in the relevant reports.



[19] Drawings and documents

Number	Title	Rev.	Date
EM2140DC-S	Offshore earplug drawing	2	2021-08-01
AK5850sch	AK5850, AK5850S/HS, AK6631 schematic	A	2015-10-21
AK5850Tsch	AK5850T schematic	A	2019-03-26
AK5850S/HS Lineup	AK5850S/-HS Lineup	C	2015-10-21
AK5850T Lineup	AK5850T Lineup	A	2019-03-29
S007D	Wiring diagram B007D	D	2015-10-21
B007D	PCB B007D	D	2012-05-04
DRWG AK5850/S/HS/T, AK6631	Assembly drawing headsets	B	2019-03-26
AK5850BS, AK5850B, AK5850BHS, AK5850BH	Assembly drawing ATEX	A	2021-10-14
Marking UKEX	Marking UKEX	1	2022-06-13

[20] Certificate History

Issue	Description	Issue date	Report no.
0	Original issue	2022-07-16	PRJN-309086-2021-PA-NOR/01

END OF CERTIFICATE