

TECHNICAL REPORT

| | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product | AK6724W - Key-switch (push button) AK6916: Accessory cable | | |
| Name and address of the applicant | A-Kabel AS Nedre Hagavei 15C 2150 Årnes Norway | | |
| Rating and principal characteristics | Ui: 8,4V, Ii: 1,5A, Ci: 52nF, Li=Negligible Uo: 8,4V Io: 270mA, Po: 0,57W Co: 6,2μF, Lo: 0,46mH | | |
| Trade mark (If any) | N / A | | |
| Model/type | AK6724W and AK6916 | | |
| DNV certificate no. | DNV 23 ATEX 95140 | | |
| Ex-code for component / electrical apparatus |  II 2 G Ex ib IIC T4 Gb | | |
| Additional information | Tamb -20°C to +40°C | | |
| Report issue No. | 0 | | |
| Tested according to | EN IEC 60079-0:2018 (IEC 60079-0 ed. 7) | Explosive atmospheres, Part 0: Equipment – General requirements | |
| | EN 60079-11:2012 (IEC 60079-11 ed. 6) | Electrical apparatus for potentially explosive atmospheres , Part 11: Equipment protection by intrinsic safety «i» | |
| Name and address of the testing laboratory |  | DNV Product Assurance AS Veritasveien 1 1363 Høvik Norway | Tel: +47 67 57 88 00 e-mail: ex@dnv.com Web: www.dnv.com |
| Prepared by | Gunnar Nielsen | | |
| Reviewed by | | | |
| Approved by | | | |
| This document has been (partly or fully) digitally signed. See www.dnv.com/digitalsignatures for info | | | |

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General remarks:

The test results presented in this Technical Report relate only to the item or product tested.

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[Appendix; Part 0 \(IECEx TEST REPORT, IEC 60079-0\)](#)

[Appendix; Part 1 \(IECEx TEST REPORT, IEC 60079-11\)](#)

Description of equipment under test:

Key switch (push button) AK6724W for connection between a certified radio transceiver and a certified head-set.

The equipment is certified to use with certified headsets where the input parameters match the output parameters of the key switch and certified radios where the output parameters match the input parameters of the key-switch, as specified in this certificate.

AK6916: Accessory cable for connection between key-switch and headset.

Warning markings;

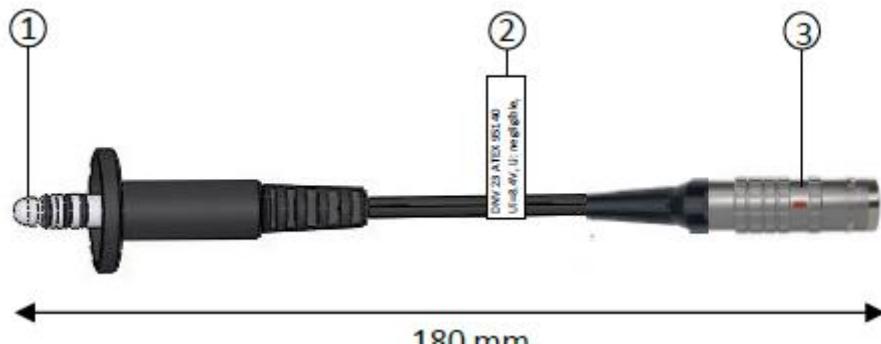
N / A

Descriptive documents;

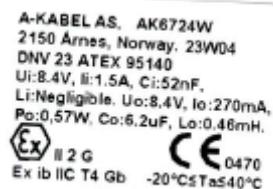
| Drawing No. | Name/Title | Rev. | Date | Page/-s |
|--------------------------------------|-------------------------------------|------|----------|---------|
| DNV 23 ATEX 95140 | Dok. User info. AK6724W | 1 | 20.02.23 | 1 |
| User Guide for Adapter cable AK6916 | User Guide for Adapter cable AK6916 | 1 | 20.02.23 | 1 |
| Certificate no. 09ATEX1082 | Dok. Marking AK6724W | 2 | 20.02.23 | 1 |
| Adapter cable AK6916 | Adapter cable AK6916 | 1 | 20.02.23 | 1 |
| S046B | Pcb connector GP340 MTP850EX | B | 20.04.09 | 1 |
| S063A | Mike amp. & headset interface | A | 20.04.09 | 1 |
| S064A | Safety barriere interface | A | 20.04.09 | 1 |
| B064A | Safety barriere interface | A | 18.02.09 | 3 |
| B063A | Mike amp. & headset interface | A | 18.02.09 | 3 |
| B046B | Pcb connector GP340 MTB850EX | B | 18.02.09 | 3 |
| 46B Bill of materials | Bill of materials | A | 18.02.09 | 1 |
| 63A bill of materials | Bill of materials | A | 18.02.09 | 1 |
| 64A bill of materials | Bill of materials | A | 18.02.09 | 1 |
| AK 6724 W assy 1/2 PTT UNIT A | Assembly drawing | A | 23.03.09 | 1 |
| AK 6724 W assy 2/2 INTERFACE UNIT M1 | Assembly drawing | A | 20.03.09 | 1 |
| AK6724w | AK6724w system connections | A | 18.02.09 | 1 |

Copy of marking plate:

AK6916: Accessory cable



AK6724W - Key-switch (push button):



Tested according to additional information:

N / A

Other requirements:

N / A

Additional information:

N / A

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|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Calibration: | All instruments used in the tests given in this test report are calibrated and traceable to national or international standards. Further information about traceability will be given on request. |
| Measurement uncertainty: | Measurement uncertainties are calculated for all instruments and instrument set-ups given in this report. Calculations are based on the principles given in the standard EA-4/02 (Oct 2013). Further information about measurement uncertainties will be given on request |
| Laboratory accreditation |  Testing laboratory satisfy requirements in NS-EN ISO/IEC 17025 NORWEGIAN ACCREDITATION TEST 274 |

Possible test case verdicts:

- test case does not apply to the test item.....: N / A
- test item does meet the requirement.....: Pass

Report History

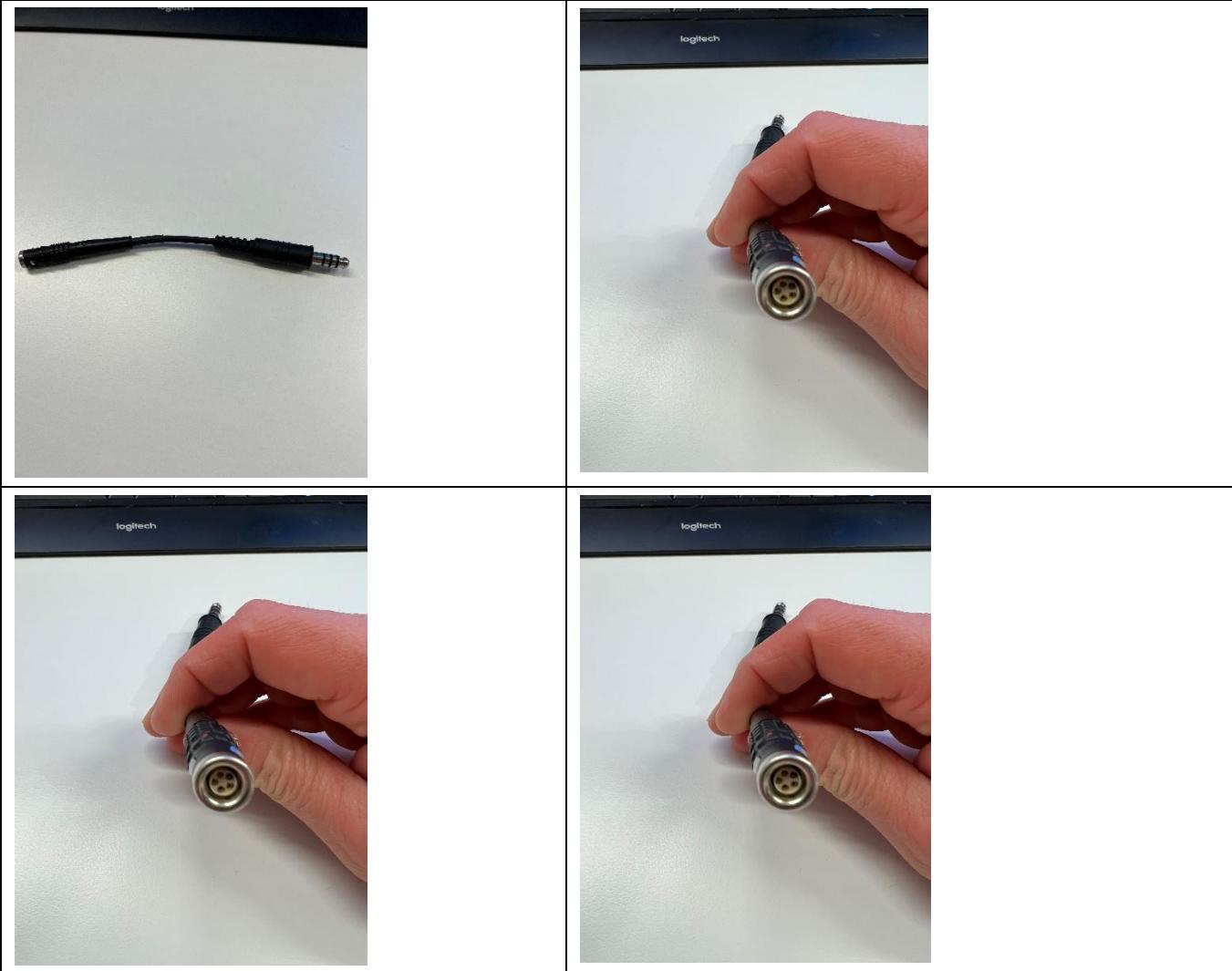
| Issue No. | Date of revision | Description |
|-----------|------------------|-------------|
| | | |

Report History

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|---|------------|--------------------------------------------------------------------------------------------------|
| 0 | 2023-04-21 | Original report (based on Nemko 09ATEX1082 and report no. 123970) and include the cable adapter. |
|---|------------|--------------------------------------------------------------------------------------------------|

Equipment tested:

| DNV Sample ID. | Date received | Description (size, colour, material, prototype modification, version no. etc) | Serial no. (if any) |
|-------------------|------------------|----------------------------------------------------------------------------------|---------------------|
| 1 | 2023-03-23 | Cable adapter | - |

Photos of equipment

Photos of equipment



EN IEC 60079-0:2018

| Clause | Requirement - Test | Result - Remark | Verdict |
|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------|
| Endorsement notice: | | | |
| The text of the International Standard IEC 60079-0:2017 was approved by CENELEC as a European Standard without any modifications | | | |
| Additional information relating to the European ATEX directive 2014/34/EU (informative): | | | |
| Annex ZY.1 | Equipment groups and categories | | |
| Annex ZY.2 | Instructions In clause 30.1 under: "instructions for safety addressing the following areas – installation and erection;" "Information other than the general requirements given in IEC 60079-14" is replaced by "Information other than the general requirements given in EN 60079-14 and EN 50628" | | Pass |
| Annex ZY.3 | Marking | Refer to checklist for MARKING: -ADDITIONAL REQUIREMENTS ACCORDING TO ATEX DIRECTIVE | Pass |
| Annex ZY.4 | Fans Clause 17.2.5 "Room ventilating fans" is to be supplemented by the requirements given in EN 14986 "Design of fans working in potentially explosive atmospheres" | EUT is not a fan. | Pass |

EN 60079-11:2012

| Clause | Requirement - Test | Result - Remark | |
|------------------------------------------------------------------------------------------------------------------------------------|--------------------|-----------------|--|
| Endorsement notice: | | | |
| The text of the International Standard IEC 60079-11:2011 was approved by CENELEC as a European Standard without any modifications. | | | |

| MARKING: -ADDITIONAL REQUIREMENTS ACCORDING TO ATEX DIRECTIVE | | | |
|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | Where reference is made to Directive 2014/34/EU, the marking shall also include (Annex II, 1.0.5) | | Pass |
| | <ul style="list-style-type: none"> name, registered trade name or registered trade mark, and address of the manufacturer, | A-Kabel AS 2150 Årnes Norway | Pass |
| | <ul style="list-style-type: none"> the year in which the equipment was constructed | E.g. 23W04 | Pass |
| | <ul style="list-style-type: none"> the specific marking of explosion protection  followed by the symbol of the equipment-group and the category |  II 2 | Pass |
| | <ul style="list-style-type: none"> CE marking with identification number to the notified body involved in the production control phase |  0470 | Pass |
| | <ul style="list-style-type: none"> If ATEX component, no CE mark, only NB number | EUT is not an Ex component. | N / A |
| | for equipment Group II: | | Pass |
| | <ul style="list-style-type: none"> the letter 'G' where explosive atmospheres caused by gases, vapours or mists are concerned and/or |  | Pass |
| | <ul style="list-style-type: none"> the letter 'D' where explosive atmospheres caused by dusts are concerned | EUT not intended for use in dust atmospheres. | N / A |