

# **KELINE**

## **Certificate bundle**

from independent testing  
laboratories for Keline®  
structured cabling



### **Keline® components Cat. 6<sub>A</sub> , Cat. 7**

- Installation cable, Category 6<sub>A</sub>, 550 MHz, (B2<sub>ca</sub>, D<sub>ca</sub>, Outdoor)
- Installation cable, Category 7, 1000 MHz, (B2<sub>ca</sub>, D<sub>ca</sub>)
- Keystone jack, patch panel, Category 6<sub>A</sub>
- Keystone jack, HD, Category 6<sub>A</sub>
- Patch cable, Category 6<sub>A</sub>

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GHMT  
FORCE Technology

check if the certificate is not fake, created or edited in software.

**\*\* ISO/IEC 11801:2017 (Ed.1.0)** - International standard defining the requirements for structured cabling  
**TIA-568.2-D:2018** - American national standard defining the requirements for structured cabling

# Compliance Statement

No. 2022-124B

## Data communication cable, Category 6A

### Company

KRUGEL EXIM spol s r.o.  
Rybničná 38/H  
831 06 Bratislava  
Slovakia

### Product description

Screened cable (U/FTP) characterised up to 500 MHz  
Horizontal floor wiring cable, 100  $\Omega$   
4 individually screened twisted pairs  
Flame retardant, halogen free

### Product identification

KELine 10Giga 550MHz, STP 4x2xAWG23 Cat.6A, LSOH  
Part number: KE550HS23/1E

### Generic cabling and cabling components standards - Category 6A cable requirements

- ISO/IEC 11801-1:2017 (Ed. 1.0) / ISO/IEC 11801-2:2017 (Ed. 1.0)
- IEC 61156-5:2020 (Ed. 3.0)
- EN 50173-1:2018 / EN 50173-2:2018
- EN 50288-10-1:2012
- TIA-568.2-D:2018

### Standards for flammability, halogen acidity, and smoke performance

- IEC 60332-1-1:2015 (Ed. 1.1) / IEC 60332-1-2:2015 (Ed. 1.1)
- IEC 60754-2:2019 (Ed. 2.1)
- IEC 61034-1:2019 (Ed. 3.2) / IEC 61034-2:2019 (Ed. 3.2)

### Technical report

12223093-01, DANAK-19/22523

### EC Cabling product ID

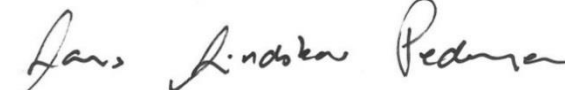
6217

### CS valid until

1 March 2023

This product has been tested by FORCE Technology and complies with the requirements of the above specified standards and "Terms and conditions for the EC VERIFIED programme for Generic and Coaxial Cabling", DQP231006. The product takes part in a maintenance schedule, which implies that FORCE Technology performs a quality audit of the manufacturer's production and QA sites. The maintenance testing of the product is performed on a sample basis. This compliance statement has been revised, original issue date 14 February 2022.

Hørsholm, 1 March 2022

  
Lars Lindskov Pedersen  
Test Manager

  
Dennis Andersen  
Head of Department



# Compliance Statement

No. 2022-125A

## Data communication cable, Category 7

### Company

KRUGEL EXIM spol s r.o.  
Rybničná 38/H  
831 06 Bratislava  
Slovakia

### Product description

Screened cable (S/FTP) characterised up to 1000 MHz\*  
Horizontal floor wiring cable, 100  $\Omega$   
4 individually foil screened twisted pairs with overall braid screen  
Flame retardant, halogen free

### Product identification

KELine 10Giga 1000MHz, S/FTP 4x2xAWG23 Cat.7, LSOH  
Part number: KE1000HS23

### Generic cabling and cabling components standards - Category 7 cable requirements

- ISO/IEC 11801-1:2017 (Ed. 1.0) / ISO/IEC 11801-2:2017 (Ed. 1.0)
- IEC 61156-5:2020 (Ed. 3.0)
- EN 50173-1:2018 / EN 50173-2:2018
- EN 50288-4-1:2013

### Standards for flammability, halogen acidity, and smoke performance

- IEC 60332-1-1:2015 (Ed. 1.1) / IEC 60332-1-2:2015 (Ed. 1.1)
- IEC 60754-2:2019 (Ed. 2.1)
- IEC 61034-1:2019 (Ed. 3.2) / IEC 61034-2:2019 (Ed. 3.2)

### Technical report

12223093-02, DANAK-19/22524

### EC Cabling product ID

6218

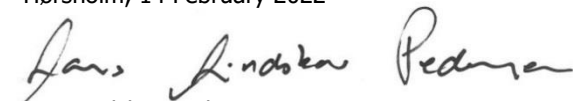
### CS valid until

1 March 2023

\*Transmission parameters comply with IEC 61156-7 and with extended Cat. 7 limits up to 1000 MHz.

This product has been tested by FORCE Technology and complies with the requirements of the above specified standards and "Terms and conditions for the EC VERIFIED programme for Generic and Coaxial Cabling", DQP231006. The product takes part in a maintenance schedule, which implies that FORCE Technology performs a quality audit of the manufacturer's production and QA sites. The maintenance testing of the product is performed on a sample basis. This compliance statement has been revised, original issue date 14 February 2022.

Hørsholm, 14 February 2022



Lars Lindskov Pedersen  
Test Manager



Dennis Andersen  
Head of Department



# Compliance Statement

No. 2021-320

## Connecting Hardware, Category 6A

Including 4 Pair Power over Ethernet (4PPoE)

(Un-mating connectors under electrical load of up to 2 A per conductor)

### Company

KRUGEL EXIM spol. s r.o.

Rybníčná 38/H

831 06 Bratislava

Slovak Republic

### Product description

Screened Category 6A RJ45 Jack and Patch Panel characterised up to 500 MHz, 100  $\Omega$

### Product identification

KELine RJ45 Jack. Part number: KEJ-C6A-S-10G

KELine Patch Panel. Part number: KEP-C6A-S-10G

KELine Patch Panel. Part number: KEP-C6A-S-10G-NP

### Generic cabling and cabling components standards - Category 6A connector requirements

- ISO/IEC 11801-1:2017 (Ed. 1.0) / ISO/IEC 11801-2:2017 (Ed. 1.0)
- IEC 60603-7-51:2010
- EN 50173-1:2018 / EN 50173-2:2018
- TIA-568.2-D:2018
- IEC 60512-99-002:2019

including all connector alien crosstalk parameters (PS ANEXT and PS AFEXT)

### Technical report

12126389, DANAK-19/21910

### EC Cabling product ID

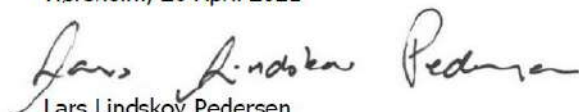
5113

### CS valid until

1 June 2022

This product has been tested by FORCE Technology and complies with the electrical requirements of the above specified standards and "Terms and conditions for the EC VERIFIED programme for Generic and Coaxial Cabling", DQP231006. The testing included measurement of NEXT with a compliant test plug and calculation of all the 14 test cases in both measurement directions. The product takes part in a maintenance of certification schedule, which implies that FORCE Technology performs a quality audit of the manufacturer's production and QA sites. The maintenance testing of the product is performed on a sample basis once a year.

Hørsholm, 28 April 2021

  
Lars Lindskov Pedersen  
Test Manager

  
Dennis Andersen  
Head of Department



# Certificate

**No. c6408a-21**

**Customer:**

Krugel Exim spol. s.r.o.  
Rybníčná 38/H  
831 06 Bratislava 35, Slovakia

**Category 6A**

**Test sample(s):**

Connecting hardware:  
**KELine® RJ-45 Keystone Cat.6A**

Part no.: KEJ-C6A-S-HD

**Applied standard(s):**

ISO/IEC 11801-1 Ed.1.0 (2017-11)  
IEC 60603-7-51 Ed.1.0 (2010-03)

**Result(s):**

The sample meets the limits of the specified standards and regulations with respect to the parameters indicated above.

## Connecting hardware, Copper, Category 6A

## GHMT Type Approval

The test results which were determined in the course of the measurement refer to the submitted specimen. Any future technical modifications of the verified products are subject to the responsibility of the manufacturer.

This Certificate refers to the comprehensive test report **no. R6408a-21** and shall only be applicable in conjunction with the test report. This certificate is valid 24 months after date of testing.

Bexbach, 12. January 2021



Dirk Wilhelm, engineer  
(Chairman of the Managing Board)



Test laboratory accredited by DAkkS in accordance with DIN EN ISO/IEC 17025:2018.  
The accreditation is valid for the test methods listed in certificate D-PL-17559-01-00.

**GHMT AG**

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**RELIABILITY IN TOTAL  
REQUIRES ACCURACY IN DETAIL.**

# Compliance Statement

No. 2022-001

## Data communication cords, Category 6A

### Company

KRUGEL EXIM spol. s r.o.  
Rybníčná 38/H  
831 06 Bratislava  
Slovak Republic

### Product description

Screened Category 6A RJ45 cords (equipment, patch, and work area) characterised up to 500 MHz

### Product identification

KELine 10Giga patch cables STP Cat.6A, LS0H  
Part number: KEL-C6A-P-xxx (xxx: denotes length in dm)

### Generic cabling and cabling components standard - Category 6A balanced cord requirements

- ISO/IEC 11801-1:2017 (Ed. 1.0) / ISO/IEC 11801-2:2017 (Ed. 1.0)
- EN 50173-1:2018 / EN 50173-2:2018
- TIA-568.2-D:2018
- IEC 61935-2:2010 (Ed. 3.0) (transmission requirements)

### Technical report

12134853-01, DANAK-19/22401

### EC Cabling product ID

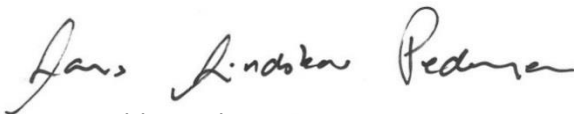
5008

### CS valid until

1 March 2023

This product has been tested by FORCE Technology and complies with the electrical requirements of the above specified standards and "Terms and conditions for the EC VERIFIED programme for Generic and Coaxial Cabling", DQP231006. The product takes part in a maintenance of certification schedule, which implies that FORCE Technology performs a sample test of the product once a year.

Hørsholm, 4 January 2022



Lars Lindskov Pedersen  
Test Manager



Dennis Andersen  
Head of Department

