



Industrial Automation

Cable and CONNECTivity



Industrial IoT and automation are driving the Digital Transformation.

Digital transformation permeates all areas of a company. In production, companies are increasingly relying on IIoT (Industrial Internet of Things), robots and automation. This leads to a strong upheaval, because ultimately every monitoring, control and regulation system will be digitalized. This requires a high level of networking that cannot rely on radio technologies alone. High-performance cables therefore play an eminently important role.

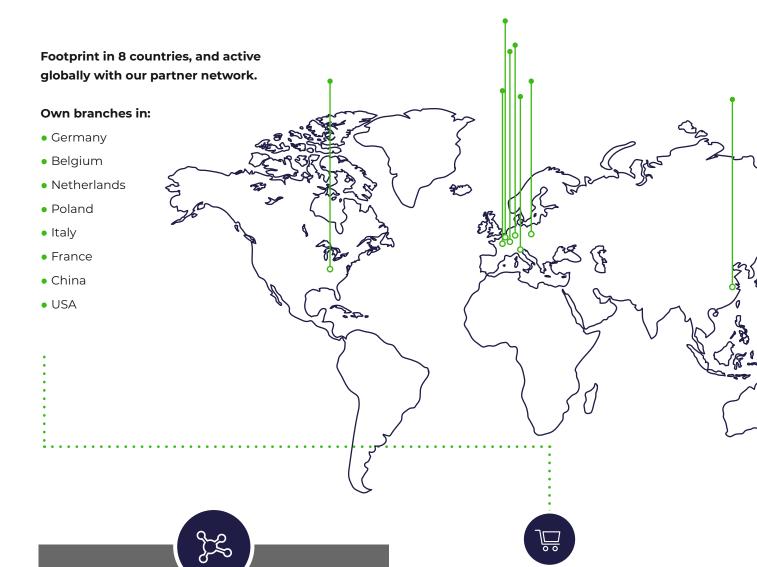
We have the know-how and broad portfolio to always offer the right solution.



TKD Product Overview

TKD is the distributor of Infinite Electronics, specialized in all types of cables.

TKD has decades of experience in design and application technology, combined with a strong awareness of quality and environment. This gives our customers the security of receiving innovative and high-quality products, even for the most demanding requirements.



Globally active

Welcome to the product portfolio of TKD Kabel GmbH. We are one of the world's leading suppliers of cables, ready-to-connect cable systems and cable accessories.

Since 2023 we are part of Infinite Electronics, and since then a progressive and international player in the specialty cable and connectivity solutions market.

Infinite Electronics was formed from the merger of several successful companies in the cable and connectivity industry. The group of companies produces, distributes and assembles special cables as well as cable harnesses and accessories.

Distribution

knowledge company with added value in cables and accessories for wholesale and OEM customers with branches in the Netherlands, Belgium, Germany, Italy, Poland, France, China and the USA.



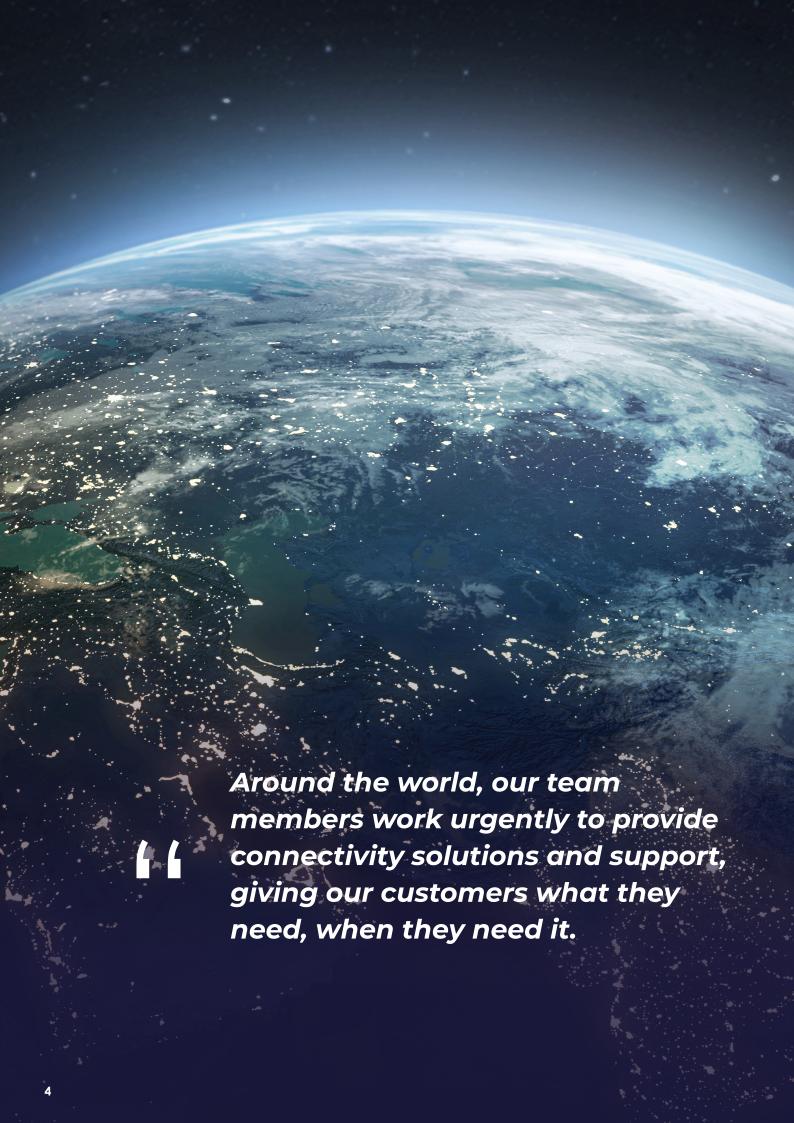
Assembly

customer-specific assembly of connectivity solutions for OEM customers with own locations in the Netherlands, Poland and Germany.



Production

the production of a wide range of special cables.



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KAWEFLEX®

Our KAWEFLEX® series is specifically designed for moving use in drag chain applications, such as in mechanical engineering or robotics. All cables are designed for several million bending cycles and can be used for normal, increased, high or highest requirements.

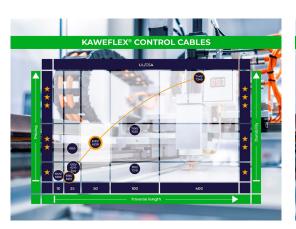
The compact design and advanced stranding technology ensure slim cables with low weight. From data and control cables to power supply, everything is available that mechanical engineering and robotics need: Shielded or unshielded, hybrid or halogen-free products - with a wide variety of cross-sections and core counts.

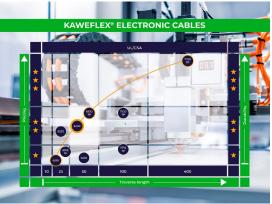
Always choose the optimum cable for your application from up to three different quality levels, both for indoor and outdoor applications, long travel distances or the smallest bending radii. Our KAWEFLEX® cables have been developed to withstand mechanical stress, tensile strength and a wide range of environmental influences, making them extremely versatile. Their range of applications extends from crane and port installations, where the cables are affected by wind and weather, to highly dynamic applications in machinery and plant engineering.

Go directly to KAWEFLEX® product overview - Scan or click QR code



KAWEFLEX® selection guide







KAWEFLEX® Highlights

KAWEFLEX® 6310 SK-PVC UL/CSA

electronic drag chain cable for data and signal transmission for normal requirements in drag chains and moving drive systems.







KAWEFLEX® 5288 SK-C-PUR UL/CSA SERVO 0,6/1kV

shielded, low capacity power cable, also with 2, 3 resp. 4 control cores for temperature sensors or brake for EMC-compatible connecting between drives and frequency converter for high requirements in drag chain applications, moving drive systems, in the field of robotic technology, in manufacturing plants as well as in dry and humid rooms.











KAWEFLEX® 6130 SK-PUR UL/CSA

as highly flexible, low capacity power and control cable for high electrical and mechanical requirements in drag chains and motion drive systems in machine and plant engineering.









KAWEFLEX® Allround 7240 SK-C-TPE UL/CSA

power and control cable for EMC compatible connecting at highest requirements in drag $chain \ applications, for \ machining \ centers, \ machine \ and \ plant \ engineering \ in \ the \ field \ of \ crane$ and conveyor facilities, in compost-, sewage and car wash facility, laundries, in the chemcial industries as well as in the food- and beverage industrie. Applicable in dry and humid rooms also outdoor.













Our product groups for Industrial Automation

Whether for control and data cables for robots, low-frequency electronic cables or fiber optic cables for large amounts of sensory data: Anyone who automates needs a partner who can react flexibly to the requirements of the digital transformation and also offer a large portfolio of solutions and cables. Our customers appreciate us for our solution proposals, short delivery times and the possibility to develop special solutions in a short time.

Industrial automation has experienced significant change in recent decades and has become a key factor in various industries. Automation technologies now make it possible to optimize production processes, increase efficiency and improve the quality of products.

Whether in control and data cables for robots, low-frequency electronic cables or fiber optic cables for large amounts of sensory data: Anyone who automates needs a partner who can respond flexibly to the requirements of digital transformation and also offer a large portfolio of solutions and cables. Our customers appreciate us for our solution proposals, short delivery times and the ability to develop even special solutions in a short time.



Flexible control cables

PVC-control cables

ÖPVC-JB/OB

300/500V, 450/750V, 0,6/1kV, unshielded, CPR Eca

ÖPVC-JB/OB-YCY

300/500V, 0,6/1kV, shielded, transparent, CPR Eca

ÖPVC-JZ/OZ 300/500V, unshielded, CPR Eca

ÖPVC-OZ-YÖ 1.000 V450/750V (IEC), 1.000V (UL), unshielded UL/CSAÖPVC-JZ/OZ ARCTIC +UV BK300/500V, unshielded, cold resistant -60°CÖPVC-JZ/OZ-YCY300/500V, shielded, transparent, CPR Eca

ÖPVC-JZ/OZ-CY (LIYCY-JZ/OZ) 300/500V, shielded, CPR Eca

ÖPVC-OZ-CYÖ 1.000 V 450/750V (IEC), 1.000V (UL), shielded UL/CSA

ÖPVC-JB/OB-YSY 0,6/1kV, steel wire braided, CPR Eca

ÖPVC-JZ/OZ0,6/1kV BK 0,6/1kV, unshielded, UV resistant, CPR EcaÖPVC-JZ/OZ-YCY0,6/1kV BK 0,6/1kV, shielded, UV resistant, CPR Eca

Approved PVC-control cables

 H05VV5-F
 300/500V, unshielded, HAR, CPR Eca

 H05VVC4V5-K
 300/500V, shielded, HAR, CPR Eca

MULTINORM H05VV5-F, 300/500V (IEC), 600V (UL), unshielded, HAR, UL/CSA, CPR Eca MULTINORM-CY H05VVC4V5-K,... 300/500V (IEC), 600V (UL), unshielded, HAR, UL/CSA, CPR Eca

2-NORM-CY (H)05VVC4V5-K

2-NORM +UV 1.000V GY | BK 300/500V (IEC), 1.000V (UL), unshielded , UL/CSA, CPR Eca 2-NORM-CY +UV 1.000V GY | BK 300/500V (IEC), 1.000V (UL), shielded , UL/CSA, CPR Eca

unshielded, grey, CPR Eca

 $2\text{-NORM TRAY-CY TC-ER MTW GY} \qquad \qquad 0,6/1 \text{kV [IEC), 600V (UL:TC-ER \& MTW), 1.000V (UL:WTTC \& AWM), }$

shielded, grey, CPR Eca

2-NORM TRAY+UV DB TC-ER MTW BK 0,6/1kV [IEC], 600V (UL:TC-ER & MTW), 1.000V (UL: WTTC & AWM),

unshielded, black, UV-resistant, direct burial, CPR Eca

2-NORM TRAY-CY+UV DB TC-ER MTW BK 0,6/1kV [IEC), 600V (UL:TC-ER & MTW), 1.000V (UL: WTTC & AWM),

shielded, black, UV-resistant, direct burial, UL/CSA, CPR Eca

Halogen-free control cables

FLAME-JZ/OZ-H FRNC - Dca

FLAME-JZ/OZ-H FRNC - Cca

FLAME-JZ/OZ-H FRNC - Dca

FLAME-JZ/OZ-CH FRNC - Dca

300/500V, unshielded, CPR Cca
300/500V, shielded, CPR Dca

FLAME-JZ/OZ-CH FRNC - Cca or B2ca 300/500V, shielded, CPR Cca or B2ca

PUR-control cables, cables for hand-held machinery

PUR GREY & PUR YELLOW 300/500V, unshielded, (N)YMHilyÖ

KAWEFLEX® CONTROL YPUR 300/500V. unshielded

KAWEFLEX® CONTROL C-PUR GY...

KAWEFLEX® CONTROL ROBUST TPE

KAWEFLEX® CONTROL ROBUST C-TPE

300/500V, shielded, (N)YMHC11YÖ

300/500V, unshielded, black. cold flexible

300/500V, shielded, black, cold flexible

Electronic (LF), instrumentation & telecommunication cables Cables for intrinsically safe circuits

Electronic cables

ELITRONIC® LIYY DIN47100, 250V, unshielded, CPR Eca ELITRONIC®-CY LIYCY DIN47100, 250V, shielded, CPR Eca

PAARTRONIC®-CY LIYCY (TP) DIN47100, 250V, twisted pairs, shielded, CPR Eca

Halogen-free electronic cables

ELITRONIC®-CH LIHCH DIN47100, 250V, shielded, CPR Eca

PAARTRONIC®-CH LIHCH (TP) DIN47100, 250V, twisted pairs, shielded, CPR Eca

Electronic and control cables for intrinsically safe circuits

ELITRONIC®-OZ-CY LIYCY-OZ EB 300/500V, shielded, blue

PAARTRONIC®-CY LIYCY (TP) EB DIN47100, 250V, shielded, twisted pairs, blue

Approved electronic and data cables

ELITRONIC®-CY LIYCY DIN47100 or IEC, 300V, shielded, UL/CSA

PAARTRONIC®-CY LIYCY (TP)

DIN47100 or IEC, 300V, shielded, twisted pairs, UL/CSA

DATATRONIC®-CY

DIN47100, 250V, 300V, shielded, twisted pairs, UL/CSA, AWG

Low-capacity data cables

DATEX-CY LI2YCY (TP) / DIN47100, 250V, shielded, twisted pairs

DATEX-CYV + UV LI2YCYV (TP) DIN47100, 250V, shielded, pairs in metal foil

DATEX-PIMF-CY LI2YCY-PIMF DIN47100, 250V, shielded, pairs in metal foil



BUS, LAN, coaxial & video cables

BUS | FIELDBUS technology - for industrial, process & building automation

PROFIBUS DP / FMS / FIP 150 Ω

PROFIBUS DP / FMS / FIP fixed installation & limited flexible applications, UL/CSA,

available acc. to CPR Eca and Dca

PROFIBUS DP / FMS / FIP - HF for high flexible applications (drag chain, robotic & festoon) UL/CSA

PROFIBUS PA 100 Ω

PROFIBUS PA for fixed installation & limited flexible applications, UL/CSA

MULTIBUS & INTERBUS 100 - 120 Ω

MULTIBUS & INTERBUS for fixed installation & limited flexible applications, UL/CSA

MULTIBUS & INTERBUS - HF for high flexible applications (drag chain) UL/CSA

CAN BUS - ControlerAreaNetwork 120 Ω

CAN BUS for fixed installation & limited flexible applications, UL/CSA

CAN BUS - HF for high flexible applications (drag chain) UL/CSA

DeviceNet 120 Ω

DeviceNet for fixed installation & limited flexible applications, UL/CSA

DeviceNet - HF for high flexible applications (drag chain) UL/CSA

Foundation Fieldbus 100 Ω

Foundation Fieldbus for fixed installation & limited flexible applications, UL/CSA

ASi-BUS Aktor Sensor Interface

ASi-BUS for fixed installation & limited flexible applications, UL/CSA

ASi-BUS - HF for high flexible applications (drag chain) UL/CSA

SafetyBUS 100 - 120 Ω

SafetyBUS for fixed installation & limited flexible applications, UL/CSA

LAN | ETHERNET-Technology - for structured industry & building cabling

structured industry cabling

PROFINET Cat.5e for fixed installation, limited flexible & flexible use, UL/CSA,

different CPR versions available

PROFINET Cat.5e - HF for high flexible applications (drag chain, robotic & festoon)

UL/CSA, CPR Eca versoion available

INDUSTRIAL ETHERNET Cat.5e - Cat.7A for fixed installation, limited flexible & flexible use, UL/CSA,

CPR Eca Version erhältlich

INDUSTRIAL ETHERNET Cat.5e - Cat.7A - HF for high flexible applications (drag chain, robotic, reeling & festoon)

JL/CSA

INDUSTRIAL ETHERNET Cat.5e - Cat.7A - Special for fixed installation, special applications, fire resistant

INDUSTRIAL EtherCAT for fixed installation, limited flexible & high flexible use, UL/CSA

FO BUS-Technology - optical data transmission for industrial and building automation

POF - SIMPLEX, DUPLEX & BUS for fixed installation, limited flexible & flexible use, UL/CSA

Control and data cables – high flexible – for use in drag chains & robotic applications

KAWEFLEX® Control cables for use in drag chains

for light to medium requirements

KAWEFLEX® 6100 ECO SK-PVC300/500V, unshielded, UL/CSAKAWEFLEX® 6200 ECO SK-C-PVC300/500V, shielded, UL/CSA

for normal requirements

 KAWEFLEX® 6110 SK-PVC
 300/500V, unshielded, UL/CSA

 KAWEFLEX® 6110 TRAY SK-PVC
 300/500V, unshielded, UL/CSA

 KAWEFLEX® 6210 SK-C-PVC
 300/500V, shielded, UL/CSA

 KAWEFLEX® 6210 TRAY SK-C-PVC
 300/500V, shielded, UL/CSA

for increased requirements

KAWEFLEX® 6120 SK-PUR 300/500V, unshielded, UL/CSA

for high requirements

KAWEFLEX® 6130 SK-PUR 0,6/1kV, unshielded, halogen-free, UL/CSA KAWEFLEX® 6230 SK-C-PUR 0,6/1kV, shielded, halogen-free UL/CSA

KAWEFLEX® Electronic cables for use in drag chains

for normal requirements

KAWEFLEX® 6310 SK-PVCDIN47100, 300V, unshielded, UL/CSAKAWEFLEX® 6410 SK-C-PVCDIN47100, 300V, shielded, UL/CSA

KAWEFLEX® 6510 SK-TP-C-PVC DIN47100, 300V, twisted pairs, shielded, UL/CSA

for high requirements

KAWEFLEX® 6330 SK-PUR DIN47100, 300V, unshielded, halogen-free, UL/CSA KAWEFLEX® 6430 SK-C-PUR DIN47100, 300V, shielded, halogen-free, UL/CSA

KAWEFLEX® 6530 SK-TP-C-PUR DIN47100, 300V, twisted pairs, shielded, halogen-free, UL/CSA

KAWEFLEX® Allround Control cables for use in drag chains

for increased requirements

KAWEFLEX® Allround 7110 SK-PVC BK 300/500V, unshielded, UL/CSA KAWEFLEX® Allround 7210 SK-C-PVC BK 300/500V, shielded, UL/CSA

for high requirements

KAWEFLEX® Allround 7130 SK-PUR BK

0,6/lkV, unshielded, halogen-free, UL/CSA

KAWEFLEX® Allround 7230 SK-C-PUR BK

0,6/lkV, shielded, halogen-free, UL/CSA

for highest requirements

KAWEFLEX® Allround 7140 SK-TPE BK

KAWEFLEX® Allround 7240 SK-C-TPE BK

0,6/1kV, unshielded, UL/CSA

0,6/1kV, shielded, UL/CSA

KAWEFLEX® Allround Electronic cables for use in drag chains

KAWEFLEX® Allround 7710 SK-TP-C-PVC BK 300V, shielded, UL/CSA

KAWEFLEX® Allround 7720 SK-TP-C-PUR BK 300V, shielded, halogen-free, UL/CSA

KAWEFLEX® Allround 7730 SK-TP-C-TPE BK 300V, shielded, UL/CSA

KAWEFLEX® KINEMATICS® 3D Control & Electronic robotic cables for torsional stress

for bending and torsion applications

KAWEFLEX® KINEMATICS® 3D Control & Power

KAWEFLEX® KINEMATICS® 3D Data

O,6/1kV, unshielded, halogen-free, UL/CSA

DIN47100, 300V, unshielded, halogen-free, UL/CSA



Servo-drives, measurement & system cables - flexible & high flexible - for use in drag chains and robot applications

Cables for servo-drives 0,6/1kV

KAWEFLEX® SERVO 2YSL(St)CY... & 2YSL(St)CYK

O,6/1kV, EMC optimized, double shielded, K: UV-resistant
KAWEFLEX® SERVO 2XSL(St)CY... & 2XSL(St)CYK

O,6/1kV, EMC optimized, double shielded, K: cold flexible,

UV-resistant

KAWEFLEX® SERVO 9YSL(St)CY...VFD 0,6/1kV, EMC optimized, double shielded, BK: UV-resistant,

direkt burial, UL/CSA, CPR Eca

KAWEFLEX® SERVO 2XSL(St)CYK...VFD TRAY 0,6/1kV, EMC optimized, double shielded, K: cold flexible,

UV-resistant, direkt burial, UL/CSA, CPR Eca

KAWEFLEX® SERVO 2XSL(St)CHK...FRNC 0,6/1kV, EMC optimized, double shielded, halogen-free,

K: cold flexible, UV-resistant, CPR Cca

KAWEFLEX® 5 Series – Cables for servo-drives 0,6/1kV

for drag chain applications

KAWEFLEX® 5178 SC SK-PVC0,6/1kV, single core, unshielded, UL/CSAKAWEFLEX® 5278 SC SK-C-PVC0,6/1kV, single core, shielded, UL/CSAKAWEFLEX® 5268 SK-C-PVC SERVO 0,6/1kV0,6/1kV, unshielded, UL/CSA, n..MC500

KAWEFLEX® 5278 SK-C-PVC SERVO 0,6/1kV, shielded, UL/CSA , acc. MC500PLUS

KAWEFLEX® 5288 SK-C-PUR SERV 0,6/1kV, shielded, UV-resistant, UL/CSA, ,acc. MC800PLUS KAWEFLEX® 52DSL SK-C-PUR 0,6/1kV, shielded, DSL Hybrid, UV-resistant, UL/CSA

for flexible applications

KAWEFLEX® 52DSL C-PVC 0,6/1kV, shielded, DSL Hybrid, UL/CSA

KAWEFLEX® 5 Series - Measurement & System cables (feedback, encoder, resolver, speedo sensor, signal)

for flexible applications

KAWEFLEX® 5468 C-PVC 300V, shielded, UL/CSA, acc. MC500

for drag chain applications

KAWEFLEX® 5488 SK-C-PUR 300V, shielded, halogen-free, UV-res., UL/CSA acc. MC800PLUS

KAWEFLEX® ServoDriveQ UL/CSA - cables for DRIVE-CLiQ applications

for fixed installation & flexible applications

KAWEFLEX® ServoDriveQ C-PVC 300V, shielded, UL/CSA, acc. MC5200 KAWEFLEX® ServoDriveQ FLEX-C-PVC 300V, shielded, UL/CSA, acc. MC500

for drag chain applications

KAWEFLEX® ServoDriveQ Plus SK-C-PUR 300/V, shielded, halogen-free, UV-res., UL/CSA, acc. MC800PLUS





Servo-drives, measurement & system cables - flexible & high flexible - for use in drag chains and robot applications

KAWEFLEX® Allround Motor cables 0,6/1kV for use in drag chains

for increased requirements

KAWEFLEX® Allround 7310 SK-PVC 0,6/1kV, unshielded, UL/CSA KAWEFLEX® Allround 7410 SK-C-PVC 0,6/1kV, shielded, UL/CSA

for highest requirements

KAWEFLEX® Allround 7510 SK-TPE (NATURAL)

KAWEFLEX® Allround 7520 SK-TPE (GNYE)

KAWEFLEX® Allround 7610 SK-C-TPE (NATURAL)

O,6/1kV, single core, unshielded, halogen-free, UV-res., UL/CSA

KAWEFLEX® Allround 7610 SK-C-TPE (NATURAL)

O,6/1kV, single core, shielded, halogen-free, UV-res., UL/CSA

KAWEFLEX® Allround 7320 SK-TPE 0,6/1kV, unshielded, halogen-free, UV-res., UL/CSA KAWEFLEX® Allround 7420 SK-C-TPE 0,6/1kV, shielded, halogen-free, UV-res., UL/CSA

KAWEFLEX KINEMATICS® 3D Servo, MeSys & Hybrid robotic cables for torsional stress

for bending and torsion applications

KAWEFLEX KINEMATICS® 3D Servo 0,6/1kV, shielded, halogen-free, UV-res., UL/CSA KAWEFLEX KINEMATICS® 3D Measure & System cable 300V, shielded, , halogen-free, UV-res., UL/CSA

KAWEFLEX KINEMATICS® 3D Hybrid 0,6/1kV, shielded elements, halogen-free, UV-res., UL/CSA

09

Cables and wires for fixed installation

PVC-insulated wiring cables

LIYvz, H05V-K, H07V-K 300/500V, 450/750V, Hook-up wires, HAR, CPR Eca

PVC-insulated wiring cables with UL/CSA approval

Multinorm H05V2-K, H07V2-K 300/500V, 450/750V, Hook-up wires, HAR, UL/CSA, CPR Eca

Wire 300V, 600V, Hook-up wires, UL/CSA

Halogen-free wiring cables

LIHvz, H05Z-K, H07Z-K 300/500V, 450/750V, Hook-up wires, CPR Eca

Service

Benefit from outstanding logistics services.

Our state-of-the-art and fully automated logistics centre in Nettetal and our logistics centres in the Netherlands, Poland, Italy and China ensure high availability of goods and fast delivery.

Our logistics - your advantage



Fully automated Central warehouse



Drum types (disposable, treated, untreated in all sizes)



Rings (All lengths, welded in foil or blanco)



Customer markings



"Speed" Deliveries



Site delivery



track & trace



Cladding with Lamiflex or wood

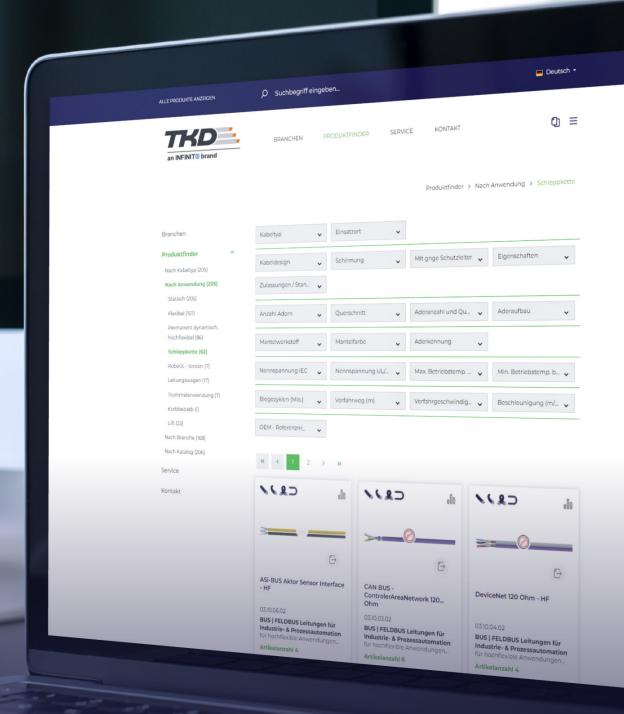


Special packaging



Ecologically compostable filling material





For the right choice of your cable our product finder will help you:



TKD CONNECTivity

Cable assembly, spiral cable, ready for connection cable and energy drag chain system

Cabling systems are the decisive basis for reliable operational processes – whether in mechanical engineering, automation technology, telecommunications or the chemical industry; whether in tank installations, in the audio, video and broadcasting sector or in security technology. Pre-assembled and ready-to-connect cable solutions from TKD help you to complete projects much more quickly and cost-effectively

With our innovative solution concepts divided into 4 areas **STANDARD**, **INDIVIDUAL**, **SERVICES** and **ADVANCED** you are also optimally positioned for all challenges.

STANDARD

TKD CONNECT servo assemblies
TKD CONNECT spiral cable
TKD CONNECT network technology
TKD CONNECT power connection
cables

INDIVIDUAL

Customized solutions

SERVICES

Logistics
KanBan, Printing, Kitting
Product development
Product design
Special packaging

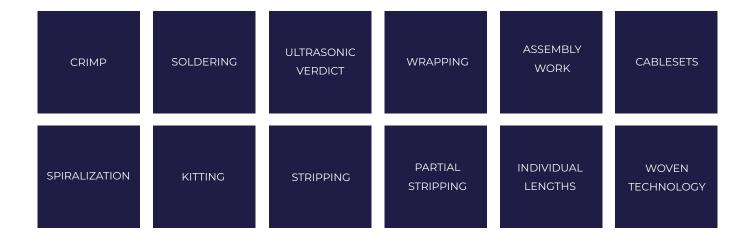
ADVANCED

Cable sets
Cable harnesses
Assemblies
Woven ribbon cable
Energy drag chain systems



TKD CONNECTivity

Service portfolio Individual & Advanced







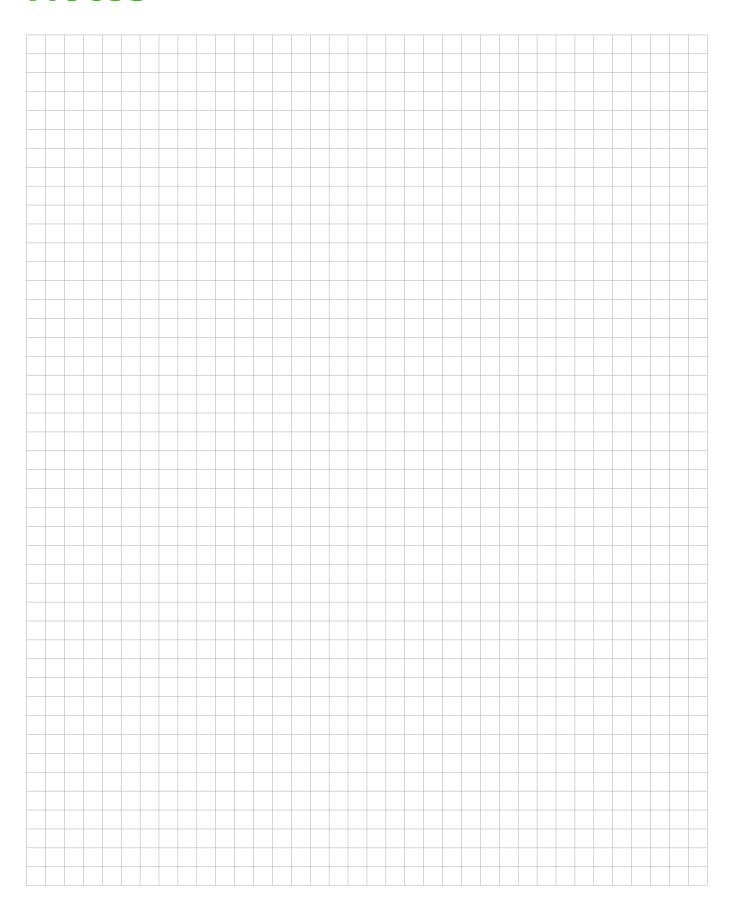








Notes



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We reserve the right to perform modifications to our products, particularly technical improvements and continued development. All illustrations, numerical data, etc. are therefore without warranty.

TKD worldwide

Industries

Our companies are active in a broad selection of industries. Contact us to discuss our custom solutions for your specific industry.

- Machine building
- Industrial automation
- Energy
- Marine & offshore
- Automotive
- Public infrastructure
- Agriculture

- Lifts and escalators
- Transportation infrastructure
- Cranes & material handling
- Train, tram and metro industry
- Telecommunication and datacentres
- Food & beverage





About Infinite Electronics

Infinite Electronics has a global portfolio of leading in-stock connectivity solution brands. Infinite's brands help propel the world's innovators forward by working urgently to provide products, solutions and real-time support for their customers. Infinite's brands serve customers across a wide range of industries with a broad inventory selection, same-day shipping and 24/7 customer service. Learn more at infiniteelectronics.com.

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