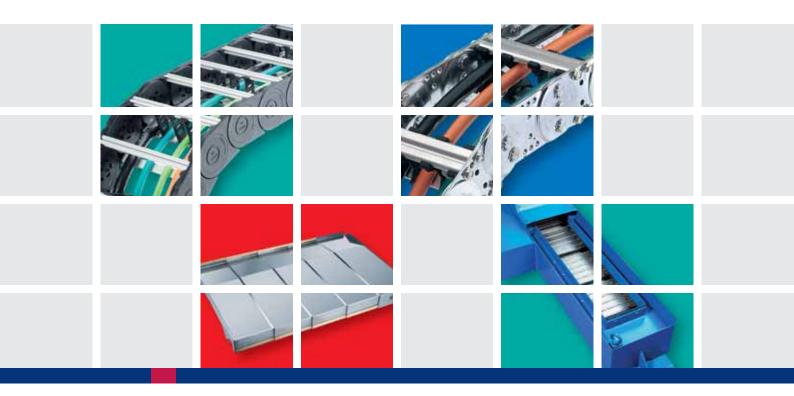


Range of Products and Services

Solutions with safety as standard



Only with energy can you get things moving.

It is hard to believe, but until 1953 no-one in industry had found a good solution to the problem of energy input. In those days cables were simply allowed to hang loose from machines, causing damage and rapid wear. This all changed with the KABELSCHLEPP idea. The rest, as the saying goes, is history.

A world market has grown out of our idea. And we, the inventors and founders, have become one of the companies which to date have continued to set the pace for the market with our innovative solutions.

Specifically for the engineering and machine building industries, we offer individual solutions for guideway protection and conveyor systems. Our conveyor systems, along with our telescopic covers, link apron covers and way wipers have been in use internationally for decades.

On the following pages you will find the complete spectrum of our product programme: cable and hose carrier systems, LIFE-LINE cables, guideway protection and conveyor systems.

Alongside a comprehensive selection of standard solutions which are immediately available exstock from our warehouse, we can also offer individual bespoke solutions developed specifically to meet your needs. Whether with a standard 'off the shelf' or tailor-made solution, with KABELSCHLEPP you can get things moving – world-wide.





BASIC-LINE	4
Solid plastic cable carriers with fixed chain widths; an economical solution for standard applications. Many types available immediately ex-stock. MONO Series, UNIFLEX Series.	
BASIC-LINE PLUS	5
Solid plastic cable carriers with fixed chain and chamber widths; quick insertion of cables simply by pressing them in. No links, no link wear, extremely long service-life. PROTUM, PROTUM-Office, PROFILE	
VARIO-LINE	6
Cable carriers with plastic or aluminium stays. Can be opened on both sides, available in different widths. Lightweight, solid or link-free side bands. K Series, M Series, MASTER H and L Series, XL Series, QUANTUM	
3D-LINE	10
Cable carriers for three-dimensional motion sequences: open design, quick insertion of cables simply by pressing them in. ROBOTRAX	
STEEL-LINE	12
Steel cable carriers for demanding applications with heavy loads, made of galvanised steel or high-grade stainless steel, maximum unsupported lengths possible. Steel cable carriers, CONDUFLEX	
TUBE-SERIES	
Fully enclosed variants of the BASIC-LINE, VARIO-LINE and STEEL-LINE are also available.	
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Fully harnessed cable carrier systems including cables, plugs and sheet metal components	
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BASIC-LINE

- Solid plastic cable carriers with **fixed** chain widths
- Economical solutions for standard applications
- Many types available immediately ex-stock

MONO Series



The single unit chain links of the MONO Series combine to form cable carriers with a simple design:

- Simple and quick assembly
- With the option of either fixed or openable brackets
- End connector with integrated strain relief
- Internal widths from 6 169 mm
- Internal heights from 10 42 mm

UNIFLEX Series



The UNIFLEX Series, with its many variants, provides a fitting answer to many application situations:

- Open, semi-enclosed or fully enclosed design available
- Can be opened inside or outside according to preference
- Robust double stroke system for long unsupported lengths
- Particularly high torsional rigidity
- Various types in different sizes
- End connector with integrated strain relief, available in aluminium or plastic according to preference
- Optimised with regard to noise for quiet operation
- Internal widths from 15 250 mm
- Internal heights from 17.5 44 mm

BASIC-LINEPLUS

- Solid plastic cable carriers with fixed chain widths
- Quick and easy cable insertion simply by pressing them in
- No links, no link wear

PROTUM Series



Small, lightweight cable carrier for unsupported applications. Optimal for short travel lengths and high travel speeds. Very gentle on the cables, since there is practically no polygon effect:

- Flexible carrier band with lightweight side pieces
- Very long service life
- Low vibration and quiet operation
- Maximum available space thanks to ideal design
- Internal widths from 15 45 mm
- Internal heights from 15 25 mm
- Also available as PROTUM Office, the sophisticated cable conduit for your desk

PROFILE Series



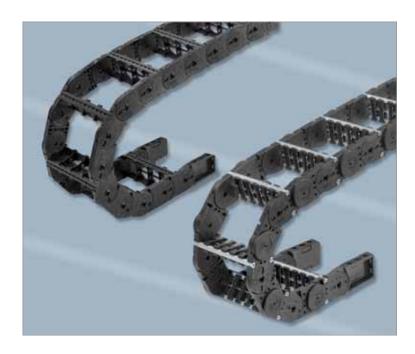
A cable carrier from the PROFILE Series often provides the ideal answer for short travel lengths and high travel speeds. The standard modules made of extruded plastic can be combined if required:

- Very long service life
- Low vibration, quiet operation
- Modular cable carrier system
- Suitable for clean room environments
- Standard modules for cable diameters from 6 – 30 mm

VARIO-LINE

- Variable widths available with aluminium or plastic stays
- Can be opened quickly and easily on both sides
- Lightweight, solid or link-free side bands according to the application

K Series



This simple, economical and robust cable carrier is also suitable for large additional loads. The K Series is available in a solid plastic design or in a hybrid version with aluminium stays:

- Available in 1-mm width sections (aluminium stays), 8- or 16-mm width sections (plastic stays)
- Stable side plate design
- Minimised link wear thanks to the "life extending 2 disc principle"
- Enclosed stroke system not sensitive to dirt or contamination
- Internal widths from 68 700 mm
- Internal heights from 38 58 mm

MASTER H Series



MASTER L Series



The MASTER H Series combines a low intrinsic weight with a high degree of stability. Particularly suited to a heavy additional load and long unsupported length:

- Standard widths, variable widths available in 1-mm sections
- Hybrid cable carrier
- Optimal stability
- Can be opened at lightning speed
- Very quiet owing to internal damping system and optional damping elements which can be fitted
- Available with variable pre-tensions
- Standard bend radii, individual bend radii available on request
- Internal widths 50 400 mm
- Internal heights 33 46 mm

The MASTER L Series is the lightweight, quiet cable carrier for unsupported applications. The hybrid design consisting of plastic chain bands and aluminium stays opens up new possibilities. The enclosed design comes with aluminium covers:

- Available in 1-mm widths
- Low intrinsic weight
- Standard bend radii, application-specific bend radii available on request
- Integral damping system resulting in reduced noise emissions
- Available with variable pre-tensions
- Internal widths 75 800 mm
- Internal heights 60 80 mm

VARIO-LINE

- Variable widths available with aluminium or plastic stays
- Can be opened quickly and easily on both sides
- Lightweight, solid or link-free side bands according to the application

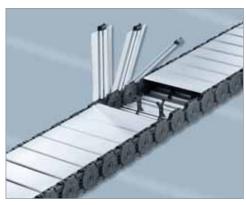
M Series

The multi-variable and robust all-rounder made of solid plastic or as a hybrid cable carrier with aluminium stays to protect the cables. There is a comprehensive stay programme for the M Series, suitable for every application, and a

maximum choice of separation possibilities. The M Series can be supplied with a plastic or aluminium cover system to protect the cables within:

- Variable widths in 1-mm sections (aluminium stays) and 4-, 8- or 16-mm sections (plastic stays)
- Can be opened quickly and easily on the inside and the outside for easy cable laying
- Enclosed stroke system not sensitive to dirt or contamination
- Highly wear-resistant, detachable guide shoes available
- Internal widths from 24 800 mm
- Internal heights from 19 72 mm









XL Series



A hybrid cable carrier with a large internal height for cables with large diameters, the XL Series was developed especially for large dimensions. For unsupported and gliding arrangements:

- Variable widths in 1-mm sections
- Large choice of stay systems and ways of separating the cables
- Low intrinsic weight
- Can be opened quickly and easily on the inside and the outside for easy cable laying
- Covered variant with aluminium cover system
- Internal widths 200 1000 mm
- Internal heights 105 mm and 108 mm

QUANTUM Series



QUANTUM is the link-free, variable-width cable carrier in a modular design: with extruded plastic side bands and stays made of aluminium or plastic.

- Variable widths available in 1-mm sections (aluminium), 8- and 16-mm sections (plastic)
- Extremely quiet, less than 40 db (A)
- No links, no link wear, therefore suitable for clean room environments
- For high accelerations up to 30 G
- For travel speeds up to 40 m/s
- Very durable
- Extremely lightweight
- Internal widths 28 600 mm
- Internal heights 28 72 mm

3D-LINE

- Cable carriers which move in three dimensions
- Ideal for use on robots for bending and pivoting movements
- Easy cable insertion simply by pressing them in

ROBOTRAX

The cable carrier which moves in three dimensions for all twisting and turning movements, eg on a robot. A steel wire through the core of the links gives it high torsional rigidity. The open-plan design of the links means that even harnessed cables can be quickly and easily pushed in to one of the three chambers:

■ Simple control of all cables thanks to openplan design

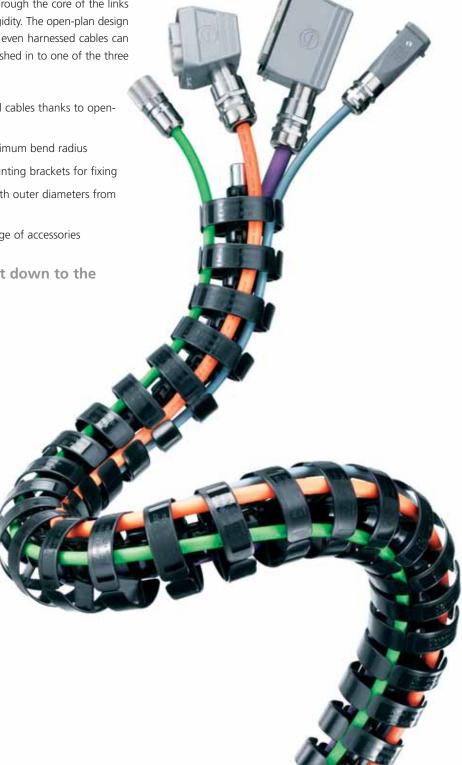
Exactly defined minimum bend radius

Quick opening mounting brackets for fixing

■ 5 sizes available, with outer diameters from 40 – 100 mm

Comprehensive range of accessories

Well thought out down to the finest detail.





STEEL-LINE

Steel Cable Carriers



Cable carriers made of steel and high-grade steel for extreme and harsh operational conditions, for heavy mechanical loads and long unsupported lengths:

- Available in 1-mm sections
- Heat-resistant
- For heavy additional loads
- Large selection of stay systems
- TUBE-Series with aluminium covers
- Internal widths from 70 1500 mm
- Internal heights from 31 370 mm

CONDUFLEX Series

Completely enclosed cable carrier with a sophisticated design:

- High-grade steel brackets and frame made of fibre-glass reinforced polyamide
- Simple replacement of brackets in the case of external damage
- Optimum protection for cables and hoses
- Internal widths from 45 162 mm
- Internal heights from 25 72 mm





LIFE-LINE Safety Cables

- Innovative design, especially for use in cable carriers
- Comprehensive, clearly defined programme, from Low Cost to High Tech
- ICC (Integrated Colour Code) colour identification system in accordance with DESINA

LIFE-LINE Electric Cables



■ LIFE-LINE Control 400 Standard PLUS / LIFE-LINE Control 400 C Standard PLUS Standard cable PLUS for more challenging applications



■ LIFE-LINE Power 400

Premium robust PVC power cables for more challenging applications



■ LIFE-LINE Data 700 C / LIFE-LINE Data 700, system-specific Super-flexible, very bending-resistant and robust PUR data cables



■ LIFE-LINE Power 700 / LIFE-LINE Power 700 C

Premium, robust PUR power cables for the most demanding applications



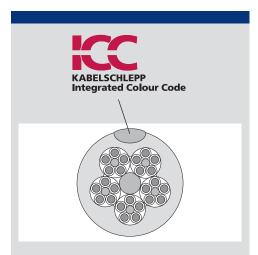
■ LIFE-LINE Control 700 / LIFE-LINE Control 700 C
Premium PUR control cables for the most demanding applications



■ LIFE-LINE S 800 C / LIFE-LINE S 900 C

Premium PUR combined cables for the most demanding applications

All our expertise from over 50 years' experience of working with cable carriers has gone into these cables. LIFE-LINE stands for quality electric cables which are a particularly suitable match for the stresses and strains of the cable carrier.



Part-extruded ICC colour identification in accordance with the DESINA Colourcode.

The different colour coding of power, control and BUS cables etc means that the cable types can easily be distinguished from one another. This reduces your installation times.

TOTALTRAX Turn-key systems

A TOTALTRAX turn-key system enables you to lower your costs thanks to our support from the product design phase right through to installation. Throughout the whole process you have just one contact who is responsible for coordinating the entire operation for you: just one order number, one supplier and one item number.

The result is self-evident: individual components which are highly compatible with each other, delivery and service all from one source. "Just-in-time" delivery and short installation times save you valuable man hours.

- Professional system advice
- Turn-key engineering
- System planning free of charge
- Just one order and item number
- Reduced storage costs
- Complete installation and commissioning on request
- System guarantee
- Harnessed cables with plugs
- Ready to install
- Available with assembly plates and fixing elements tailored to your drawings if required
- Despatch on special transport frame or in customised packaging to meet your requirements



Guideway Protection Systems

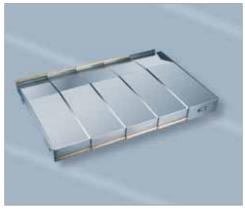
Wherever guideways need to be protected on machinery, we have a fitting solution. Our guideway protection systems put in a convincing performance with their functional safety, long service life and innovative technical solutions:

Telescopic Covers

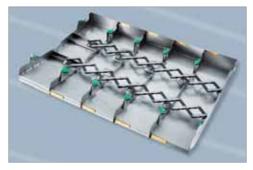
Telescopic covers in a level form, sloping, in a 'roof style', with a one-sided slant and in a flattened roof style are only some of the buzzwords in the vocabulary of our experts seeking to find the right solution for a horizontal, sloping or vertical installation. The variety of variants is quite immense, and no one cover for a machine is identical to another.

These days modern machine tools have to process components with ever increasing cutting speeds and work rates. This is where telescopic covers with a scissor mechanism come in, offering several benefits:

- Acceleration forces and speeds are evenly distributed over all surfaces. The same applies for the inertial forces.
- The stress peaks which normally arise when the telescopic cover shutters knock against one another no longer occur.
- The stroke noise from the shutters ceases to be a problem.



■ Inclined base telescopic cover



Synchronization devices (scissor mechanism) for particularly high travel speeds



For this reason KABELSCHLEPP telescopic covers fitted with a scissor mechanism are increasingly being used. The term SXM, derived from "Synchronized Expansion Mechanism", indicates when this progressive technology is being used.

Application spectrum for telescopic covers

Travel lengths up to 40 m

Guideway widths up to 5000 mm

Spray- and splash-proof as standard

Scissor mechanism for travel speeds up to 200 m/min.

Way wipers

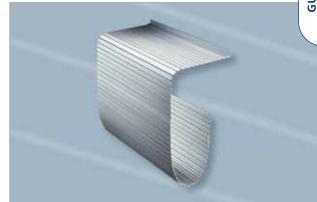
KABELSCHLEPP way wiper systems have proved themselves over decades where it is a matter of the effective protection of guideways. Our product spectrum offers an appropriate solution for every application:



For the protection of guideways in confined spaces we produce link apron covers made of aluminium in four different designs.



■ BA way wiper with individually produced geometry



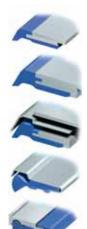
Link apron cover



lacksquare BA Vario way wiper system in kit form



■ Link apron covers in a typical area of application



Way Wipers Application Spectrum

Type BA for restricted spaces and individual designs to suit the guideway, assembled and cast.

Type BAS for direct swarf contamination.

Type MA for use on telescopic covers.

Type BA VARIO ready assembled and as a kit.

Link Apron Covers Application Spectrum

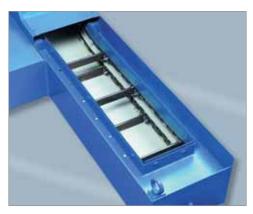
Link apron covers can be used where the lack of space prevents the use of a telescopic cover. Link apron covers lie directly on the guideway and can either hang down loose without any specific guidance at the end of the guideway, be bolted down or coiled up.

Conveyor Systems

Our scraper, hinged belt and belt conveyors are the products of more than 30 years' experience. Consistent and ongoing development of the products and the adaptation of their functions for use on machines of the newest generation guarantee you the highest degree of reliability.

Even though the basic principle of the conveyors in itself has hardly changed, there is still a rich variety of modifications to the specific requirements of our customers. Machines process materials of very different types and qualities. Aluminium shavings are different to fine shavings of high-strength steel. The conveying of items from a machine tool is therefore a complex operation, and requires a lot of experience.

Dependable engineering from KABELSCHLEPP.



■ Scraper conveyor Type KRF 040



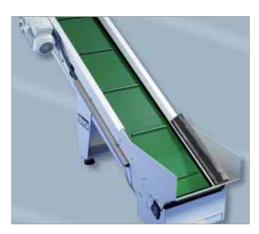
■ Hinged belt conveyor SRF 040.00

Application Spectrum of Conveyor Systems

Scraper conveyors for transporting granular loose material and short broken chips.

Hinged belt conveyors for transporting wet or dry shavings, metal scraps, warm forgings, moulded parts etc.

Belt conveyors for transporting trimmings.



■ Belt conveyor

KABELSCHLEPP Service

We are available for you around the clock, because our service is oriented to your needs: if your production is down simply because a conveyor system, a cable carrier or a telescopic cover is not working, we can provide quick and reliable assistance.

Especially in the case of telescopic covers and conveyor systems a repair can often be worthwhile, for these are mostly of individual manufacture. Our service engineers are well versed in all makes and so can get your production line up and running again in the shortest of time-frames.

- Installation, maintenance and repair directly on site
- Larger repairs and general overhauling at our Service-Center in Hünsborn
- Quick delivery of spare parts
- Training of your personnel for maintenance and repair work
- Preparation of samples and production of prototypes

SERVICE-HOTLINE: 02762-97420 www.kabelschlepp-service.de



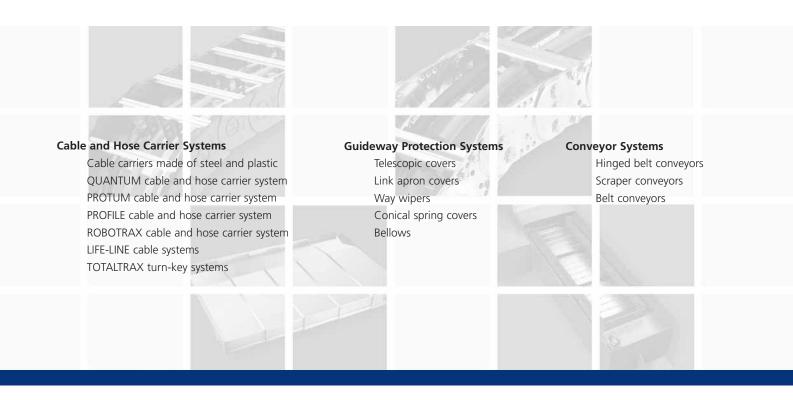
■ KABELSCHLEPP Hünsborn Service-Center



■ Repair booths in Hünsborn



■ Commissioning and training on site



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