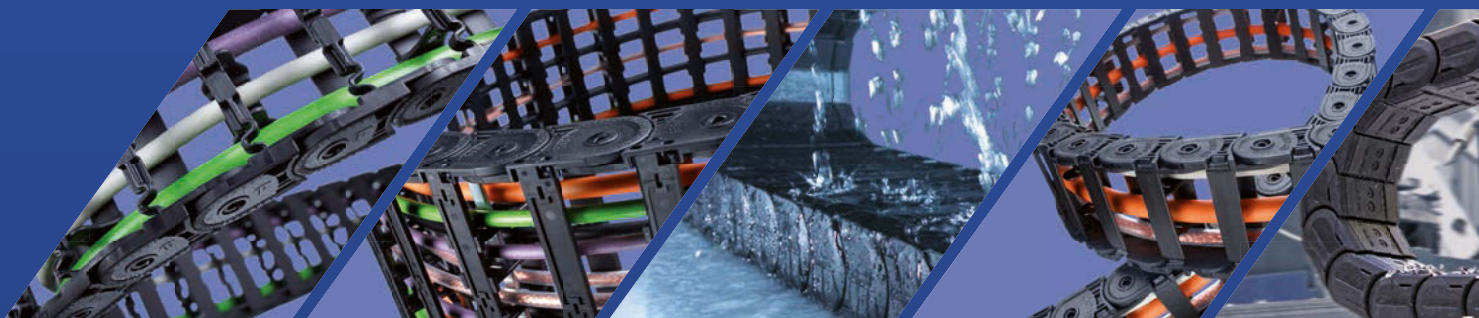


KABELSCHLEPP

**THE NEXT GENERATION
FOR YOUR APPLICATIONS**



QuickTrax

EasyTrax

UNIFLEX *Advanced*

TKA series



THE NEXT GENERATION FOR YOUR APPLICATIONS

Motion is what drives us. For more than 60 years, we have been developing products that not only react to the ever growing demands of the industry but actually make many further developments in production processes possible through targeted innovations. Our technological improvements optimize complex processes in classic segments such as machine tools, crane systems or medical and laboratory technology as well as for industrial robots, deep-sea oil rigs and space travel. Products such as the UNIFLEX cable carrier have proven successful a thousand times over, taking on a leading position with regard to quality and service life.

In response to increased demands, we have continuously expanded our product range and are now able to develop new application options with improved features. We are pleased to present the next generation of our cable carriers. With the UNIFLEX *Advanced* and the options offered by the TKA, Easy-Trax and QuickTrax series, we have once again optimized our standards, enabling us to present a range that is ideal for your applications in terms of performance, quality and the multiple associated options. We are always in motion.

60 YEARS OF INNOVATIONS AND THOUSANDS OF SUCCESSFUL APPLICATIONS





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QuickTrax

EasyTrax

UNIFLEX Advanced

TKA series



SAVINGS

Easy handling and fast installation of our products will save you time and money.



EXCELLENCE

Winner of the IF Product Design Award 2013: the TKA55.



FAST DELIVERY

All products are available directly ex warehouse. It doesn't get any faster than that.



ECO LINK

For the active reduction of CO₂ emissions: the Tsubaki environment label.



COMPATIBLE CONNECTION

Various connection options feasible.



OPENING VARIANTS

For maximum flexibility: six opening variants for any requirement.



TIGHT

TKA: no spray water, no dust. No dirt. No chips. Simply tight.



VARIABLE DIVIDER SYSTEM

Movable and fixable dividers – so everything stays in place.



A NEW GENERATION

THE NEXT GENERATION QuickTrax



Inside height
20 mm



Inside widths
15 – 65 mm



Pitch
32 mm



Additional load
up to 2 kg/m



**Travel length
unsupported**
up to 2 m



**Travel length
gliding**
up to 80 m



Travel speed
up to 10 m/s



Travel acceleration
up to 50 m/s²



FEATURES

- Extremely fast and easy cable laying thanks to bracket with film hinge
- Extremely low noise due to integrated noise damping
- Extensive unsupported length
- High torsional rigidity
- Each chain link consists of two different materials:
 - Hard cable carrier body made of glass fiber-reinforced material
 - Bracket with flexible film hinge made of elastic special plastic
- Sturdy chain design
- High fill level possible

Type	h _i [mm]	B _i [mm]	t [mm]
QT0320	20	15 – 65	32



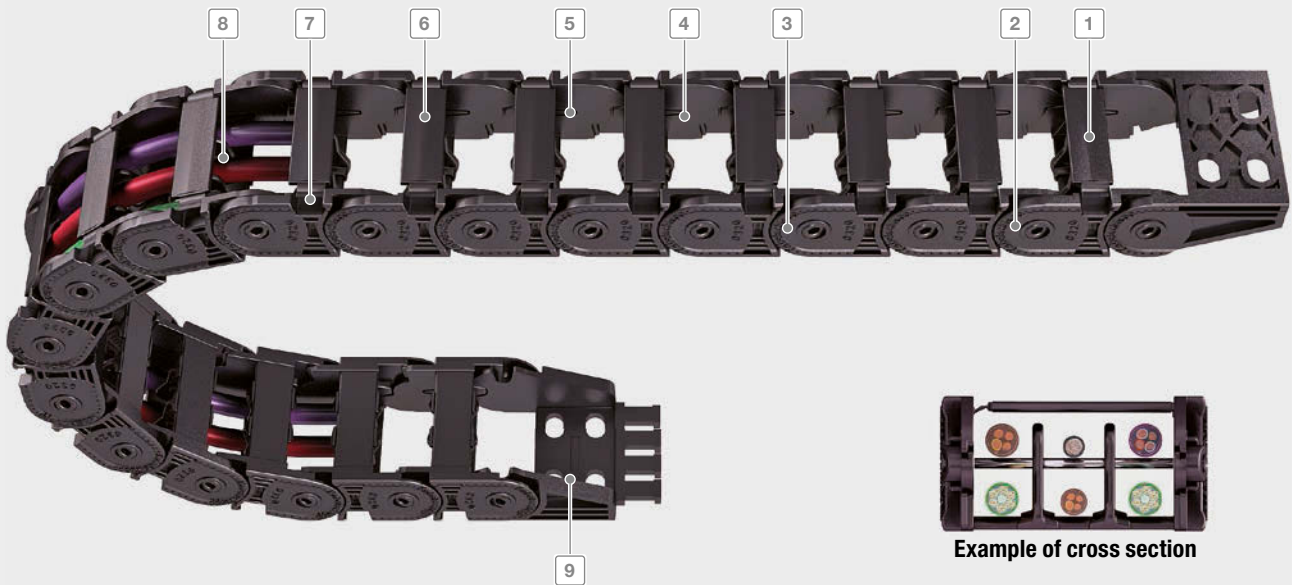
Ex-protection

For Ex-protection applications, we offer customized solutions made from solid plastic, hybrid or steel cable carriers, which meet the requirements of the standard (with < 10⁵ Ω).



ESD

Our proven ESD cable carriers based on nano-technology with carbon tubes easily meet the requirements of the ESD standard (with < 10⁹ Ω) in terms of conductivity and resistance.



- 1 Sturdy two-component design:
hard glass fiber-reinforced cable carrier body,
flexible film hinge
- 2 Chain links made of plastic
- 3 Extensive unsupported length
- 4 Inside space is gentle on the cables –
no interfering edges
- 5 Extremely low noise due to integrated noise
damping
- 6 Quick and easy to open
- 7 For inward/outward opening
- 8 Dividers and height separations for cable
separation
- 9 Single-part end connectors with and without
integrated strain relief

INTRODUCTION TO THE NEXT GENERATION – IT COULDN'T BE SIMPLER

Type	h _i [mm]	B _i [mm]							t [mm]	KR [mm]						Design						
																030	035	040	045	050	055	060
QT0320 <small>The next Generation</small>	20	15	20	25	38	50	65		32	28	38	48	75	100	125 ¹	■	■	■	■			
UNIFLEX 0345	20	15	20	25	38	50	65	90	34.5		38	50	75	100	125	150	■	■	■	■	■	■

¹ On request

■ New widths from 2015

Designs

030 = Outward hinged-opening and detachable brackets
 035 = Outward hinged-opening and lockable brackets
 040 = Inward hinged-opening and detachable brackets
 045 = Inward hinged-opening and lockable brackets

050 = Covered on one side with internally detachable bracket
 055 = Covered on one side with internally lockable bracket
 060 = Covered on both sides with internally detachable cover

THE TWO-COMPONENT TECHNOLOGY OF THE QT0320

The two-component technology of the QT0320 combines two seemingly incompatible features: stability and flexibility. Cable carriers need to be extremely sturdy, with extensive unsupported length. At the same time, cables need to be inserted easily for fast cable laying. The QT0320 meets these

requirements thanks to its innovative design and material combination of a hard cable carrier body made from glass fiber-reinforced material and brackets with a film hinge made from rigid special plastic.



A NEW GENERATION

THE NEXT GENERATION EasyTrax



Inside height
18 mm



Inside widths
15 – 65 mm



Pitch
32 mm



Additional load
up to 2 kg/m



**Travel length
unsupported**
up to 2 m



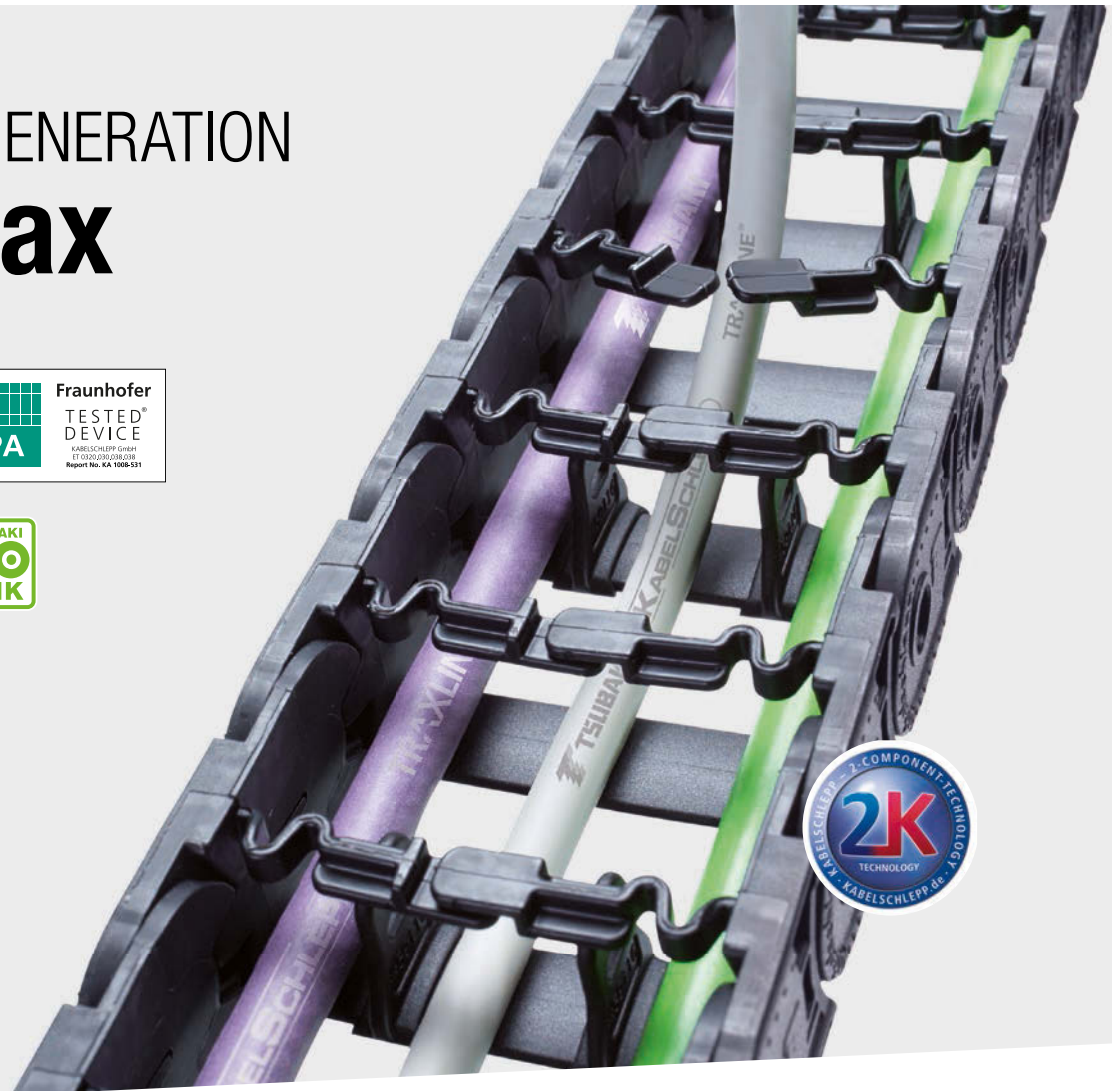
**Travel length
gliding**
up to 80 m



Travel speed
up to 10 m/s



Travel acceleration
up to 50 m/s²



FEATURES

- Extremely fast cable laying thanks to easy cable insertion
- Very high fill level due to the bracket pivoting to the side – bracket does not pivot into the cable space
- Each chain link consists of two different materials:
 - Hard cable carrier body made of glass fiber-reinforced material
 - Bracket with flexible film hinge made of elastic special plastic
- Sturdy chain design
- High torsional rigidity
- Extensive unsupported length
- Extremely low noise due to integrated noise damping

Type	h _i [mm]	B _i [mm]	t [mm]
ET0320	18	15 – 65	32



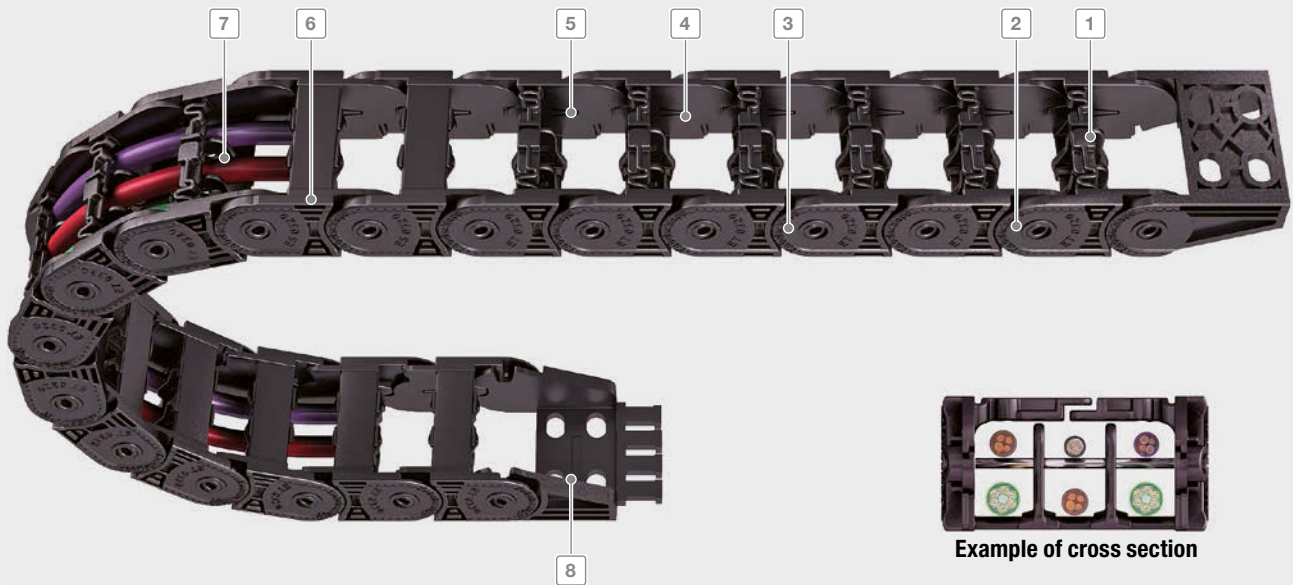
Ex-protection

For Ex-protection applications, we offer customized solutions made from solid plastic, hybrid or steel cable carriers, which meet the requirements of the standard (with < 10⁵ Ω).



ESD

Our proven ESD cable carriers based on nano-technology with carbon tubes easily meet the requirements of the ESD standard (with < 10⁹ Ω) in terms of conductivity and resistance.



- 1 Sturdy two-component design: hard glass fiber-reinforced cable carrier body, flexible film hinge
- 2 Chain links made of plastic
- 3 Extensive unsupported length
- 4 Inside space is gentle on the cables – no interfering edges
- 5 Extremely low noise due to integrated noise damping
- 6 For inward/outward opening
- 7 Dividers and height separations for cable separation
- 8 Single-part end connectors with and without integrated strain relief

INTRODUCTION TO THE NEXT GENERATION – IT COULDN'T BE SIMPLER

Type	h _i [mm]	B _i [mm]							t [mm]	KR [mm]							Design		
		15	20	25	30	38	50	65		28	38	48	60	75	100	125	030	035	040
ET0320 <small>The next Generation</small>	18	15	20	25	30	38	50	65	32	28	38	48	60	75	100	125	■	■	■
UNIFLEX 0250	17.5		20		30	40	50	65	80	25	28	38	45	60	75	100	■	■	

¹ On request

■ New widths from 2015

Designs

030 = Outward hinged-opening and detachable brackets

035 = Outward hinged-opening and lockable brackets

040 = Inward hinged-opening and detachable brackets

THE TWO-COMPONENT TECHNOLOGY OF THE ET0320

The two-component technology of the ET0320 combines two seemingly incompatible features: stability and flexibility. Cable carriers need to be extremely sturdy, with extensive unsupported length. At the same time, cables need to be inserted easily for fast cable laying. The ET0320 meets these

requirements thanks to its innovative design and material combination of a hard cable carrier body made from glass fiber-reinforced material and brackets with a film hinge made from rigid special plastic.



THE NEXT GENERATION UNIFLEX *Advanced*



Inside heights
20 – 44 mm



Inside widths
15 – 250 mm



Pitch
32 – 66.5 mm



Additional load
up to 10 kg/m



Travel length unsupported
up to 3.6 m



Travel length gliding
up to 150 m



Travel speed
up to 10 m/s



Travel acceleration
up to 50 m/s²



FEATURES

- Universal connection options
- Extensive unsupported lengths
- High torsional rigidity
- Good ratio of inner to outer width
- Low noise emissions
- Numerous custom material types for custom applications available
- Easy assembly
- Fast cable laying
- Assembly tools available
- Stays with ball joint, opening on both sides
- Strain relief integrated into the end connector
- Fixable dividers
- Many possibilities for internal subdivision
- Optionally with C-rail integrated in the connector
- Wear surfaces for gliding applications involving long travel lengths

Type	h _i [mm]	B _i [mm]	t [mm]
UA1320	20	15 – 65	32
UA1455	26	25 – 103	45.5
UA1555	38	50 – 200	55.5
UA1665	44	50 – 250	66.5



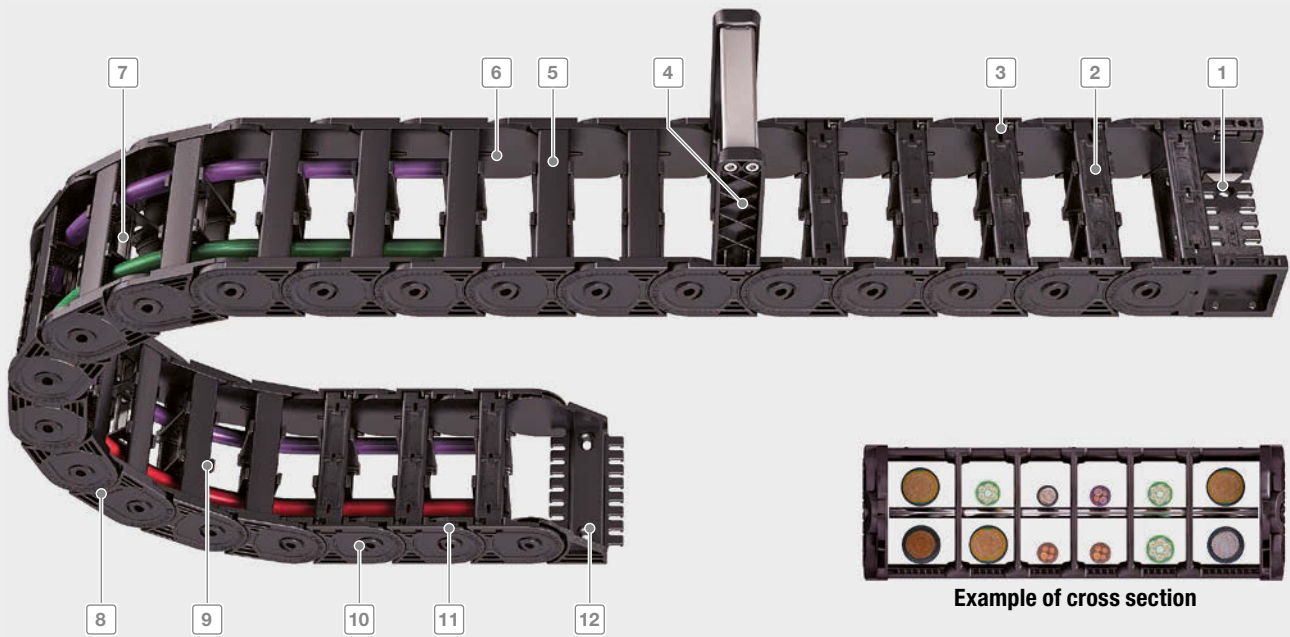
Ex-protection

For Ex-protection applications, we offer customized solutions made from solid plastic, hybrid or steel cable carriers, which meet the requirements of the standard (with < 10⁵ Ω).



ESD

Our proven ESD cable carriers based on nano-technology with carbon tubes easily meet the requirements of the ESD standard (with < 10⁹ Ω) in terms of conductivity and resistance.



- 1 Universal Mounting Bracket (UMB) with integratable strain relief comb
- 2 Designs with inward or outward opening brackets
- 3 Extremely fast and easy to open due to ball joint mechanism
- 4 Construction frame stay
- 5 Single-part links (design 020)
- 6 Favorable ratio of inner to outer width
- 7 Many separation options for the cables
- 8 Robust, double stroke system for long unsupported lengths
- 9 Easy divider fixing
- 10 Extremely low noise due to internal noise damping
- 11 Lateral wear surfaces
- 12 Single-part end connectors with integratable strain relief comb

INTRODUCTION TO THE NEXT GENERATION – IT COULDN'T BE SIMPLER

Type	h _i [mm]	B _i [mm]								t [mm]	KR [mm]								Design								
																		020	030	035	040	045	050	055	060		
UA1250 <small>The next Generation</small>	17.5		20	30	40	50				25	28	38	45	60	75	100			■	■	⁷	■	⁷				
UNIFLEX 0250	17.5		20	30	40	50	65	80		25	28	38	45	60	75	100				■	■						
UA1320 <small>The next Generation</small>	20	15	20	25	38	50	65			32	28	38	48	75	100	125 ⁵			■								
UNIFLEX 0345	20	15	20	25	38	50	65	90		34.5		38	50	75	100	125	150			■	■		■	¹	¹	¹	
UA1455 <small>The next Generation</small>	26	25	38	58	78	103	130 ⁶			45.5	52	65	95	125	150	180	200	225 ⁵	■	■	⁷	■	⁷				
UNIFLEX 0455	26	25	38	58	78	103	130			45.5	52	65	95	125	150	180	200	225		■	■	■	■		■	■	
UA1555 <small>The next Generation</small>	38	50	75	90 ⁷	100	125	150			55.5	63	80	100	125	160	200	230 ⁶		■	■	⁷	■	⁷				
UNIFLEX 0555	38	50	75		100	125	150			55.5	63	80	100	125	160	200	230			■	■		■		■	■	
UA1665 <small>The next Generation</small>	44	50	75	100	125	150	175	200	225	250	66.5	75	100	120	140	200	250	300		■	■	⁷	■	⁷			
UNIFLEX 0665	44	50	75	100	125	150	175	200	225	250	66.5	75	100	120	140	200	250	300			■	■		■		■ ³	

■ New widths from 2015

¹ Except B_i 90

² Only as version 030

³ Up to B_i 175

⁴ B_i 50 on request

⁵ On request

⁶ As UNIFLEX 0455 still available in B_i 130

⁷ The pull-out forces of the UNIFLEX Advanced design 030/040 correspond to the UNIFLEX designs 035/045

Designs

020 = Closed frame

030 = Outward hinged-opening and detachable brackets

035 = Outward hinged-opening and lockable brackets

040 = Inward hinged-opening and detachable brackets

045 = Inward hinged-opening and lockable brackets









050 = Covered on one side with internally detachable bracket

055 = Covered on one side with internally lockable bracket

060 = Covered on both sides with internally detachable cover

THE NEXT GENERATION

TKA series

- 
Inside heights
20.5 – 45 mm
- 
Inside widths
15 – 250 mm
- 
Pitch
30.5 – 55.5 mm
- 
Additional load
up to 10 kg/m
- 
Travel length unsupported
up to 6 m
- 
Travel length gliding
up to 150 m
- 
Travel speed
up to 9 m/s
- 
Travel acceleration
up to 45 m/s²



FEATURES

- Excellent cable protection in the connector area
- Chipping and dirt-resistant due to smooth surfaces
- Extensive unsupported length
- High torsional rigidity
- Good ratio of inner to outer width
- Low noise emissions
- Optional: on request, special material with protection against hot chips up to 850 °C
- Numerous custom material types for custom applications available
- Easy assembly
- Fast cable laying
- TKA55: IP54 tested and certified
- Easy-to-open cover with simultaneously high retention force on the chain link during operation
- Measurement scale for easy alignment of the dividers
- Strain relief can be completely integrated into the mounting bracket (from TKA38)

Type	h _i [mm]	B _i [mm]	t [mm]
TKA30	20.5	15 – 65	30.5
TKA38	26	25 – 130	38.5
TKA45	36	50 – 150	45.5
TKA55	45	50 – 250	55.5



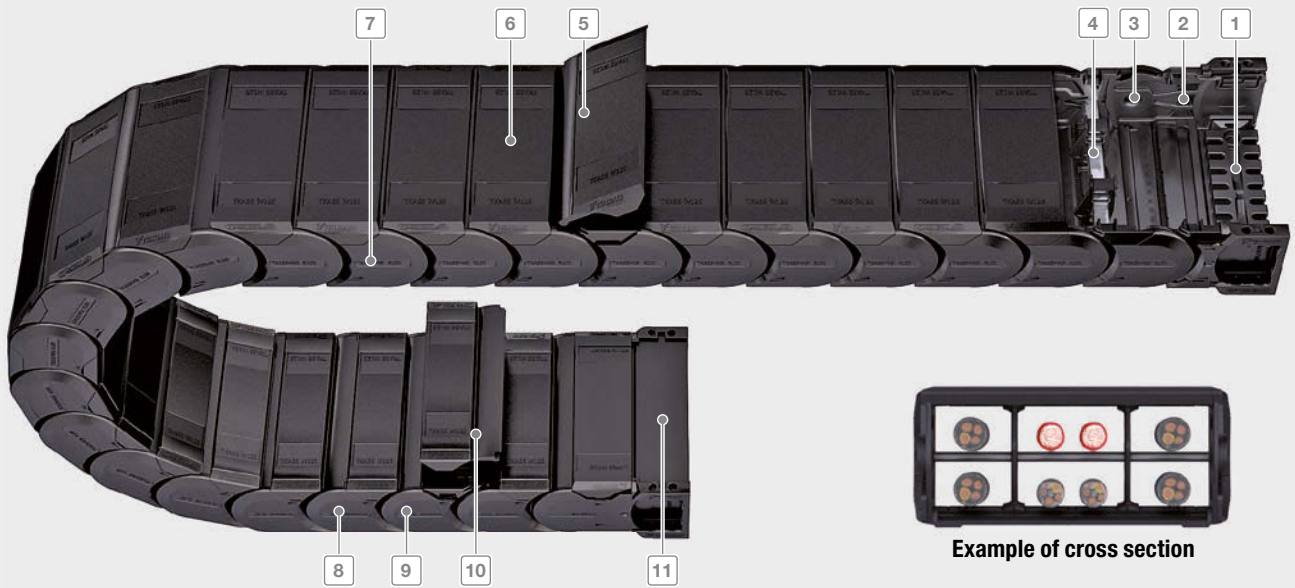
Ex-protection

For Ex-protection applications, we offer customized solutions made from solid plastic, hybrid or steel cable carriers, which meet the requirements of the standard (with < 10⁵ Ω).



ESD

Our proven ESD cable carriers based on nano-technology with carbon tubes easily meet the requirements of the ESD standard (with < 10⁹ Ω) in terms of conductivity and resistance.



- 1 End connectors with optional strain relief
- 2 Interior gentle on the cables with no projecting edges
- 3 Integrated noise damper
- 4 Dividers and height separation for separating the cables
- 5 Quick and easy opening from any vantage point
- 6 Secure cover attachment even under severe stresses (e.g. due to hydraulic lines)
- 7 Chain links made of glass fiber-reinforced plastic
- 8 Pin/bore connection and stroke system covered completely
- 9 Designs with inward or outward opening brackets
- 10 Cover completely detachable on one side
- 11 Cover sheet for universal mounting brackets

INTRODUCTION TO THE NEXT GENERATION – IT COULDN'T BE SIMPLER

Type	h _i [mm]	B _i [mm]								t [mm]	KR [mm]								Design							
		15	20	25	38	50	65	90			38	50	75	100	125	150			030	035	040	045	050	055	060	080
TKA30 <small>The Next Generation</small>	20.5	15	20	25	38	50	65			30.5		55	75	95	125	145	180									
UNIFLEX 0345	20	15	20	25	38	50	65	90		34.5	38	50	75	100	125	150			■	■	■	■	■ ¹	■ ¹	■ ¹	
TKA38 <small>The Next Generation</small>	26	25	38	58	78	103	130			38.5		70	95	120	145	170	195	230								
UNIFLEX 0455	26	25	38	58	78	103	130			45.5	52	65	95	125	150	180	200	225	■	■	■	■	■	■	■	
TKA45 <small>The Next Generation</small>	36	50	75	100	125	150				45.5		82	95	125	145	200	230									
UNIFLEX 0555	38	50	75	100	125	150				55.5	63	80	100	125	160	200	230		■	■	■	■	■	■	■	
TKA55 <small>The Next Generation</small>	45	50	75	100	125	150	175	200	225	250	55.5		100	120	140	170	195	225	250	300						
UNIFLEX 0665	44	50	75	100	125	150	175	200	225	250	66.5	75	100	120	140		200	250	300	■	■	■	■	■	■ ²	

¹ Except width 90

² Up to Bi 175

Designs

030 = Outward hinged-opening and detachable brackets

035 = Outward hinged-opening and lockable brackets

040 = Inward hinged-opening and detachable brackets

045 = Inward hinged-opening and lockable brackets

050 = Covered on one side with internally detachable bracket

055 = Covered on one side with internally lockable bracket

060 = Covered on both sides with internally detachable cover

080 = Covered on both sides with externally detachable cover



CHOOSE ...

... the best possible cable carrier for your requirements. Use the table below to easily decide which cable carrier from the new generation is right for you.

INTRODUCTION TO THE NEXT GENERATION – IT COULDN'T BE SIMPLER

Type	h_i [mm]	B_i [mm]																t [mm]
UNIFLEX 0250	17.5		20	30	40	50	65	80										25
UA1250 <small>The next Generation</small>	17.5		20	30	40	50												25
ET0320 <small>The next Generation</small>	18	15	20	25	38	50	65											32
UNIFLEX 0345	20	15	20	25	38	50	65		90									34.5
TKA30 <small>The next Generation</small>	20.5	15	20	25	38	50	65											30.5
UA1320 <small>The next Generation</small>	20	15	20	25	38	50	65											32
QT0320 <small>The next Generation</small>	20	15	20	25	38	50	65											32
UNIFLEX 0455	26			25	38		58	78		103	130							45.5
TKA38 <small>The next Generation</small>	26			25	38		58	78		103	130							38.5
UA1455 <small>The next Generation</small>	26			25	38		58	78		103	130 ⁴							45.5
UNIFLEX 0555	38					50		75		100	125	150						55.5
TKA45 <small>The next Generation</small>	36					50		75		100	125	150						45.5
UA1555 <small>The next Generation</small>	38					50		75	90 ⁵	100	125	150						55.5
UNIFLEX 0665	44					50		75		100	125	150	175	200	225	250		66.5
TKA55 <small>The next Generation</small>	45					50		75		100	125	150	175	200	225	250		55.5
UA1665 <small>The next Generation</small>	44					50		75		100	125	150	175	200	225	250		66.5

■ New widths from 2015

¹ The pull-out forces of the UNIFLEX Advanced design 030/040 correspond to the UNIFLEX designs 035/045

² On request

³ Except B_i 90

⁴ As UNIFLEX 0455 still available in B_i 130

⁵ Only as version 030

⁶ B_i 50 on request

⁷ Up to B_i 175

	KR [mm]												Design								
													020	030	035	040	045	050	055	060	080
	28	38	45	60	75	100									■	■					
	28	38	45	60	75	100								■	■	¹	■	¹			
	28	38	48		75	100	125 ²								■		■				
		38	50		75	100	125	150							■	■	■	³	³	³	
				55	75	95	125	145	180											■	■
	28	38	48		75	100	125 ²							■							
	28	38	48		75	100	125 ²								■	¹	■	¹			
				52	65	95	125	150	180	200	225				■	■	■	■	■	■	
					70	95	120	145	170	195	230									■	■
				52	65	95	125	150	180	200	225 ²			■	■	¹	■	¹			
				63	80	100	125	160		200	230				■	■	■	■	■	■	
					82	95	125	145		200	230									■	■
				63	80	100	125	160		200	230 ⁶			■	■	¹	■	¹			
					75	100	120	140		200		250	300		■	■	■	■	■	■	⁷
						100	120	140	170	195	225	250	300							■	■
					75	100	120	140		200		250	300	■	■	¹	■	¹			

Designs

020 = Closed frame

030 = Outward hinged-opening and detachable brackets

035 = Outward hinged-opening and lockable brackets

040 = Inward hinged-opening and detachable brackets

045 = Inward hinged-opening and lockable brackets

050 = Covered on one side with internally detachable bracket

055 = Covered on one side with internally lockable bracket

060 = Covered on both sides with internally detachable cover

080 = Covered on both sides with externally detachable cover

TRAXLINE CABLES FOR CABLE CARRIERS

TSUBAKI KABELSCHLEPP cables were developed specifically for use in cable carriers. The reliable, durable yet inexpensive cables can even be used outdoors under adverse environmental conditions, e.g. in port crane systems which impose stringent demands on motor and control cables due to long travel lengths and high travel speeds.



PVC CONTROL CABLES

Cost-effective control cables for standard applications

Temperature:	- 5 to + 80 °C
Minimum bending radius:	$KR_{min} \geq 7.5 \times \varnothing$
v_{max} unsupported	3.5 – 10 m/s
a_{max} :	10 – 20 m/s ²
Cross section:	0.5 ² to 2.5 ²
Number of cores:	2 – 36



PUR CONTROL CABLES

High-quality control cables for the most sophisticated applications

Temperature:	- 35 to + 90 °C
Minimum bending radius:	$KR_{min} \geq 7.5 \times \varnothing$
v_{max} unsupported	20 m/s
a_{max} :	50 m/s ²
Cross section:	0.5 ² to 2.5 ²
Number of cores:	2 – 36



PVC MOTOR CABLES

Robust motor cables for sophisticated applications

Temperature:	- 5 to + 80 °C
Minimum bending radius:	$KR_{min} \geq 7.5 \times \varnothing$
v_{max} unsupported	5 m/s
a_{max} :	20 m/s ²
Cross section:	1.5 ² to 70 ²
Number of cores:	2 – 25



PUR MOTOR CABLES

High-quality, robust motor cables for the most sophisticated applications

Temperature:	- 35 to + 90 °C
Minimum bending radius:	$KR_{min} \geq 7.5 \times \varnothing$
v_{max} unsupported	20 m/s
a_{max} :	50 m/s ²
Cross section:	0.25 ² to 700 ²
Number of cores:	1 – 49



PUR DATA CABLES

Super-flexible, continuous bending and robust cables with an inner jacket

Temperature:	- 35 to + 90 °C
Minimum bending radius:	$KR_{min} \geq 7.5 \times \varnothing$
v_{max} unsupported	20 m/s
a_{max} :	50 m/s ²
Cross section:	0.25 ² to 1.5
Number of cores:	2 – 32



PUR BUS/COAXIAL/LWL CABLES

Super-flexible, continuous bending and robust cables

Temperature:	- 30 to + 70 °C
Minimum bending radius:	type-dependent
v_{max} unsupported	3.5 – 4 m/s
a_{max} :	10 m/s ²
Cross section:	0.25 ² to 1.5
Number of cores:	1 – 12



PUR SYSTEM CABLES

High-quality combination cables for sophisticated system applications

Temperature:	- 35 to + 90 °C
Minimum bending radius:	$KR_{min} \geq 7.5 \times \varnothing$
v_{max} unsupported	6 m/s
a_{max} :	8 m/s ²
Cross section:	0.14 ² to 50 ²
Number of cores:	4 – 16

TRAXLINE INFO CENTER

With the aid of the TRAXLINE info center, you can find the right cable for your cable carrier system with just a few clicks of the mouse. Simply enter the parameters for your application at **traxline.de** and find the ideal cable for your requirements.



TOTALTRAX COMPLETE SYSTEMS

REDUCE COSTS WITH TOTALTRAX COMPLETE SYSTEMS

Take advantage of our expertise. Our experienced system specialists work closely together with you and support you from the planning and project planning phases all the way up to the installation process. You have just one contact partner for the complete system. All of the components are optimally aligned to one another – cable carriers, electric cables, hydraulic and pneumatic hoses and plug connections. TOTALTRAX means: Complete delivery from a single source – with a guarantee certificate on request. TOTALTRAX will reduce your storage costs for cable carriers, cables and plug connectors. We deliver the complete cable carrier system just-in-time, either directly to your production facilities or to the installation site.

EVERYTHING FROM A SINGLE SOURCE:

- | | | |
|--------------------|----------------------------|---------------------------------------|
| ■ Consultancy | ■ Motor and control cables | ■ Plug connectors |
| ■ Planning | ■ Full guarantee | ■ Assembly plates |
| ■ Project planning | ■ Hydraulic hoses | ■ Complete assembly of all components |
| ■ Cable carriers | ■ Pneumatic hoses | |

TOTALTRAX – FROM THE PROJECT PLANNING TO THE COMPLETED SYSTEM

- One contact partner
 - + One order
 - + One delivery
 - + Guaranteed quality
-
- = TOTALTRAX complete system



KABELSCHLEPP

CABLE CARRIER SYSTEMS

Cable carriers made of steel and plastic
QUANTUM cable and hose carrier system
PROTUM cable and hose carrier system
ROBOTRAX cable and hose carrier system

TRAXLINE CABLES FOR MOTION

Continuous bending Hi-flex cables for cable carriers
TOTALTRAX complete turn-key carrier system
Pre-assembled cables

GUIDEWAY PROTECTION SYSTEMS

Telescopic covers
Link apron covers
Way wipers
Conical spring covers
Bellows
Protective devices

CONVEYOR SYSTEMS

Hinged belt conveyors
Scraper conveyors
Belt conveyors



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