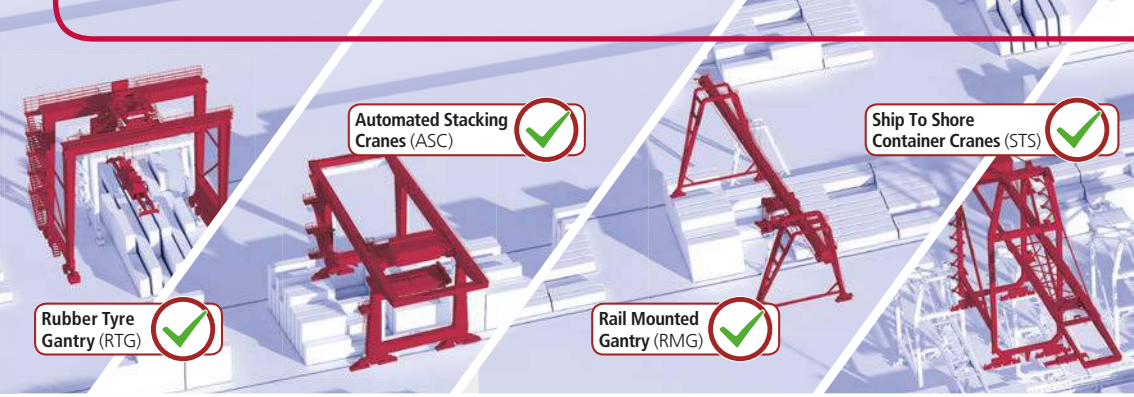
Innovation in Motion
TSUBAKI

KABELSCHLEPP

TRAXLINE TPE

TOP FLEXDESIGN TPE CABLES
UP TO 10 MILLION MOTION CYCLES
UP TO 1000 M TRAVEL LENGTH
DOWN TO 5 × Ø



TRAXLINE Cables – developed for cable carriers in cranes

The TSUBAKI KABELSCHLEPP family of continuous-flex cables has been specially developed for optimal use in dynamic cable and hose carriers.

TSUBAKI KABELSCHLEPP cables are distinguished by high reliability and performance at low costs, as well as by a long service life even in outdoor long term use. Crane applications with long travel paths and high travel speeds place high demands on electrical cables. The Series 1000 is optimized for outdoor use, e.g. on container cranes, due to the use of high quality, UV & ozone resistant materials and the special design.

Permanently flexible from – 40 °C to + 90 °C

The highly flexible and cold-resisting single-core and multi-core cables of the **TRAXLINE 1000 Series** were designed specifically for permanently low temperatures down to – 40 °C. They are manufactured with sophisticated extrusion technology and have excellent unwinding smoothness.

Any occurring system vibrations caused by changes in acceleration of the cable carrier are significantly reduced, which prolongs the service life.

High-Flex Cables – **1000 Series**

TPE Fine jacket
low friction haptic,
high cycle endurance

TPE Inner jacket
valley-sealed, pressure extruded, top FLEXdesign

TPE Outer jacket
pressure extruded,
top FLEXdesign, easy bending

Core insulation
KS special compound

Developed for

- heavy load and long travel
- crane and conveyor equipment
- systems, mechanical and crane engineering
- clean room duties
- limited space solutions
- permafrost using
- outdoor applications

Premium properties

- top FLEXdesign
- oil-resistant
- UV-resistant
- RoHS II-conform
- CFC-free
- silicone-free
- spark tested
- halogen-free

TRAXLINE POWER 1000 TPE 1 kV

Unshielded continuous bending top FLEXdesign TPE power cables

Temperature range fix:	– 55 to + 90 °C
Temperature range in motion:	– 40 to + 90 °C
Minimum bend radius moved:	$KR_{min} \geq 5 \times Ø$
v_{max} | a_{max}:	20 m/s | 50 m/s²
Wire cross section:	4² to 95²
Core number:	4 – 7
Cable diameter:	11.5 – 45.1 mm

Page 4

TRAXLINE POWER ONE 1000 TPE 1 kV

Unshielded continuous bending top FLEXdesign TPE power cables

Temperature range fix:	– 55 to + 90 °C
Temperature range in motion:	– 40 to + 90 °C
Minimum bend radius moved:	$KR_{min} \geq 5 \times Ø$
v_{max} | a_{max}:	20 m/s | 50 m/s²
Wire cross section:	2.5² to 300²
Core number:	single core
Cable diameter:	6.2 – 34.4 mm

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TRAXLINE Power 1000 C TPE 1 kV

Shielded continuous bending top FLEXdesign TPE power cables

Temperature range fix:	– 55 to + 90 °C
Temperature range in motion:	– 40 to + 90 °C
Minimum bend radius moved:	$KR_{min} \geq 5 \times Ø$
v_{max} | a_{max}:	20 m/s | 50 m/s²
Wire cross section:	4^2 to 150^2
Core number:	4 – 5
Cable diameter:	13.7 – 62.5 mm

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TRAXLINE POWER ONE 1000 C TPE 1 kV

Shielded continuous bending top FLEXdesign TPE power cables

Temperature range fix:	– 55 to + 90 °C
Temperature range in motion:	– 40 to + 90 °C
Minimum bend radius moved:	$KR_{min} \geq 5 \times Ø$
v_{max} | a_{max}:	20 m/s | 50 m/s²
Wire cross section:	4^2 to 300^2
Core number:	single core
Cable diameter:	7.4 – 35.4 mm

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TRAXLINE CONTROL 1000 TPE

Unshielded continuous bending top FLEXdesign TPE control cables

Temperature range fix:	– 55 to + 90 °C
Temperature range in motion:	– 40 to + 90 °C
Minimum bend radius moved:	$KR_{min} \geq 5 \times Ø$
v_{max} | a_{max}:	20 m/s | 50 m/s²
Wire cross section:	0.5^2 to 1^2
Core number:	12 – 49
Cable diameter:	10.7 – 21.3 mm

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TRAXLINE CONTROL 1000 C TPE

Shielded continuous bending top FLEXdesign TPE control cables

Temperature range fix:	– 55 to + 90 °C
Temperature range in motion:	– 40 to + 90 °C
Minimum bend radius moved:	$KR_{min} \geq 5 \times Ø$
v_{max} | a_{max}:	20 m/s | 50 m/s²
Wire cross section:	0.5^2 to 1^2
Core number:	12 – 49
Cable diameter:	12.5 – 30.0 mm

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TRAXLINE DATA 1000 TPi C TPE

Shielded continuous bending top FLEXdesign TPE data cables

Temperature range fix:	– 55 to + 90 °C
Temperature range in motion:	– 40 to + 90 °C
Minimum bend radius moved:	$KR_{min} \geq 5 \times Ø$
v_{max} | a_{max}:	20 m/s | 50 m/s²
Wire cross section:	0.25^2 to 0.75^2
Core number:	2 – 32
Cable diameter:	5.4 – 17.8 mm

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TRAXLINE FOC 1000 TPE

Continuous bending top FLEXdesign multi-mode TPE glass fiber optic cable

Temperature range fix:	– 55 to + 90 °C
Temperature range in motion:	– 40 to + 90 °C
Minimum bend radius moved:	$KR_{min} \geq 5 \times Ø$
v_{max} | a_{max}:	20 m/s | 50 m/s²
Wire cross section:	50 to 62.5 µm
Core number:	6 – 12
Cable diameter:	12.4 mm

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TRAXLINE BUS 1000 C TPE

Shielded continuous bending top FLEXdesign TPE bus cables

Temperature range fix:	– 40 to + 90 °C
Temperature range in motion:	– 30 to + 90 °C
Minimum bend radius moved:	$KR_{min} \geq 5 \times Ø$
v_{max} | a_{max}:	20 m/s | 50 m/s²
Wire cross section:	0.15^2 to 0.5^2
Core number:	2 – 8
Cable diameter:	6.9 – 8.4 mm

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TRAXLINE KOAX 1000 CD TPE

Double-shielded continuous bending top FLEXdesign TPE koax cables

Temperature range fix:	– 40 to + 90 °C
Temperature range in motion:	– 30 to + 90 °C
Minimum bend radius moved:	$KR_{min} \geq 7.5 \times Ø$
v_{max} | a_{max}:	20 m/s | 50 m/s²
Wire cross section:	1HF50 – 1HF75
Core number:	3 – 5
Cable diameter:	11.8 – 14.0 mm

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TRAXLINE POWER 1000 TPE 1 kV

Unshielded continuous bending top FLEXdesign TPE power cables

Up to **10 million** motion cycles!

Up to **1000 m** travel length!

Down to **5 × Ø**

TSUBAKI KABELSCHLEPP TRAXLINE *cables for cable carriers*

CE

Developed for

- heavy load and long travel
- crane and conveyor equipment
- systems, mechanical and crane engineering
- clean room duties
- limited space solutions
- permafrost using
- outdoor applications

Premium properties

- top FLEXdesign
- oil-resistant
- UV-resistant
- RoHS II-conform
- halogen-free
- microbe resistant
- metermarked
- CFC-free
- silicone-free
- 10 kV spark tested
- ozone-resistant
- hydrolysis durable

TPE Fine jacket
low friction haptic, high cycle endurance

Core insulation
KS special compound

TPE Outer jacket
pressure extruded, top FLEXdesign, easy bending

Jacket colour black
ozone-resistant
UV-resistant

Design

Conductor:	conductors class 6 of bare copper wires in an optimized top FLEXdesign
Center element:	type-optimized
Core insulation:	KS-Special compound
Core identification:	black with white numbers, protective conductor green/yellow
Core stranding:	conductor cores bundled in short pitches
Outer jacket:	KS-TPE
Jacket colour:	black

Technical Data

Temperature range moved:	– 40 to + 90 °C
Temperature range fixed:	– 55 to + 90 °C
Minimum bend radius moved:	$KR_{min} \geq 5 \times Ø$
v_{max} supported up to:	20 m/s
v_{max} gliding up to:	5 m/s
a_{max} up to:	50 m/s²
Insulation resistance:	≥ 30 MΩ x km
Rated voltage:	according to VDE 0.6/1 kV
Approvals:	based on VDE, cURus on request

varying parameters possible – please contact us

Picture obtainable.

Subject to change.

Type selection

TRAXLINE POWER 1000 TPE 1 kV – unshielded

core number x nominal-cross-section in mm²	part number	max. Ø mm	cable weight kg/m	copper weight kg/m
4 G 4²	**49542**	11.5	0.226	0.154
5 G 4²	**49544**	12.9	0.274	0.240
7 G 4²	**49543**	15.3	0.395	0.268
4 G 6²	**49552**	13.5	0.330	0.240
5 G 6²	**49553**	15.1	0.410	0.288
7 G 6²	**49555**	18.2	0.577	0.403
4 G 10²	**49562**	16.9	0.537	0.384
5 G 10²	**49563**	18.9	0.669	0.500
4 G 16²	**49565**	21.0	0.842	0.640
5 G 16²	**49566**	23.7	1.054	0.800
4 G 25²	**49568**	25.8	1.292	1.000
5 G 25²	**49569**	28.8	1.599	1.200
4 G 35²	**49571**	29.8	1.760	1.344
5 G 35²	**49560**	33.4	2.187	1.750
4 G 50²	**49572**	34.4	2.471	1.920
4 G 70²	**49573**	40.6	3.493	2.700
4 G 95²	**49574**	45.1	4.481	3.800

CABLE + CONNECTOR
can be supplied ready for connection

TRAXLINE at steel mill application

MC chain & TRAXLINE cableset

Additional cable types upon request.

TRAXLINE POWER ONE 1000 TPE 1 kV

Unshielded continuous bending top FLEXdesign TPE power cables

Picture obtainable.

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low friction haptic,
high cycle endurance

Core insulation
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TPE Outer jacket
pressure extruded,
top FLEXdesign, easy
bending

Jacket colour black
ozone-resistant
UV-resistant

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Up to **1000 m** travel length!

Down to **5 × Ø**

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Premium properties

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- UV-resistant
- RoHS II-conform
- halogen-free
- microbe resistant
- metermarked
- CFC-free
- silicone-free
- 10 kV spark tested
- ozone-resistant
- hydrolysis durable

Design

Conductor:	conductors class 6 of bare copper wires in an optimized top FLEXdesign
Core insulation:	KS-Special compound
Core identification:	black with white numbers, protective conductor green/yellow
Core stranding:	conductor cores bundled in short pitches
Outer jacket:	KS-TPE
Jacket colour:	black

Technical Data

Temperature range moved:	– 40 to + 90 °C
Temperature range fixed:	– 55 to + 90 °C
Minimum bend radius moved:	$KR_{min} \geq 5 \times Ø$
v_{max} supported up to:	20 m/s
v_{max} gliding up to:	5 m/s
a_{max} up to:	50 m/s²
Insulation resistance:	≥ 30 MΩ x km
Rated voltage:	according to VDE 0.6/1 kV
Approvals:	based on VDE, cURus on request

varying parameters possible – please contact us

Type selection

TRAXLINE POWER ONE 1000 TPE 1 kV – unshielded

core number x nominal-cross-section in mm²	part number	max. Ø mm	cable weight kg/m	copper weight kg/m
1 x 2.5²	**49581**	6.2	0.053	0.025
1 x 4²	**49582**	6.8	0.072	0.040
1 x 6²	**49583**	7.4	0.094	0.060
1 x 10²	**49584**	8.6	0.141	0.100
1 x 16²	**49585**	9.7	0.201	0.154
1 x 25²	**49586**	11.3	0.293	0.240
1 x 35²	**49587**	13.3	0.406	0.350
1 x 50²	**49588**	15.7	0.577	0.500
1 x 70²	**49589**	17.5	0.802	0.700
1 x 95²	**49590**	19.5	1.008	0.950
1 x 120²	**49591**	21.4	1.268	1.200
1 x 150²	**49592**	24.2	1.595	1.500
1 x 185²	**49593**	26.6	1.949	1.850
1 x 240²	**49594**	30.2	2.537	2.304
1 x 300²	**49595**	34.4	3.160	2.880

CABLE + CONNECTOR
can be supplied ready for connection

Ship To Shore TRAXLINE solution

Reach stacker TRAXLINE solution

Additional cable types upon request.

TRAXLINE POWER 1000 C TPE 1 kV

Shielded continuous bending top FLEXdesign TPE power cables

Picture obtainable.

TPE Fine jacket
low friction haptic, high cycle endurance

Core insulation
KS special compound

TPE Inner jacket
valley-sealed, pressure extruded, top FLEXdesign

Overall shield
continuous bending top FLEXdesign, tin-plated copper braiding for smallest bend radii

TPE Outer jacket
pressure extruded, top FLEXdesign, easy bending

Jacket colour black
ozone-resistant
UV-resistant

Up to **10 million** motion cycles!

Up to **1000 m** travel length!

Down to **5 × Ø**

TSUBAKI KABELSCHLEPP TRAXLINE cables for cable carriers

CE

Developed for

- heavy load and long travel
- crane and conveyor equipment
- systems, mechanical and crane engineering
- clean room duties
- limited space solutions
- permafrost using
- outdoor applications

Premium properties

- top FLEXdesign
- oil-resistant
- UV-resistant
- RoHS II-conform
- halogen-free
- microbe resistant
- metermarked
- CFC-free
- silicone-free
- 10 kV spark tested
- ozone-resistant
- hydrolysis durable

Design

Conductor:	conductors class 6 of bare copper wires in an optimized top FLEXdesign
Center element:	type-optimized
Core insulation:	KS-Special compound
Core identification:	black with white numbers, protective conductor green/yellow
Core stranding:	conductor cores bundled in short pitches
Inner jacket:	KS-TPE
Shielding:	coverage nom. 85 %
Outer jacket:	KS-TPE
Jacket colour:	black

Technical Data

Temperature range moved:	– 40 to + 90 °C
Temperature range fixed:	– 55 to + 90 °C
Minimum bend radius moved:	$KR_{min} \geq 5 \times Ø$
v_{max} supported up to:	20 m/s
v_{max} gliding up to:	5 m/s
a_{max} up to:	50 m/s²
Insulation resistance:	≥ 30 MΩ x km
Rated voltage:	according to VDE 0.6/1 kV
Approvals:	based on VDE, cURus on request

varying parameters possible – please contact us

Subject to change.

Type selection

TRAXLINE POWER 1000 C TPE 1 kV – shielded

core number x nominal-cross-section in mm²	part number	max. Ø mm	cable weight kg/m	copper weight kg/m
(4 G 4²)	**49801**	13.7	0.313	0.211
(4 G 6²)	**49802**	16.1	0.432	0.298
(4 G 10²)	**49803**	19.6	0.666	0.526
(4 G 16²)	**49804**	24.6	1.100	0.781
(5 G 16²)	**49812**	27.7	1.368	0.904
(4 G 25²)	**49805**	29.2	1.516	1.145
(4 G 35²)	**49806**	34.0	2.060	1.667
(4 G 50²)	**49807**	38.9	2.833	2.306
(4 G 70²)	**49808**	45.6	3.974	3.045
(4 G 95²)	**49809**	50.5	5.056	4.060
(4 G 120²)	**49810**	55.9	6.424	5.128
(4 G 150²)	**49811**	62.5	7.783	6.525

CABLE + CONNECTOR
can be supplied ready for connection

TRAXLINE in long travel crane applications

Additional cable types upon request.

TRAXLINE POWER ONE 1000 C TPE 1 kV

Shielded continuous bending top FLEXdesign TPE power cables

TPE Fine jacket
low friction haptic, high cycle endurance

Core insulation
KS special compound

TPE Inner jacket
valley-sealed, pressure extruded, top FLEXdesign

Overall shield
continuous bending top FLEXdesign, tin-plated copper braiding for smallest bend radii

TPE Outer jacket
pressure extruded, top FLEXdesign, easy bending

Jacket colour black
ozone-resistant
UV-resistant

Up to **10 million** motion cycles!

Up to **1000 m** travel length!

Down to **5 × Ø**

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CE

Developed for

- heavy load and long travel
- crane and conveyor equipment
- systems, mechanical and crane engineering
- clean room duties
- limited space solutions
- permafrost using
- outdoor applications

Premium properties

- top FLEXdesign
- oil-resistant
- UV-resistant
- RoHS II-conform
- halogen-free
- microbe resistant
- metermarked
- CFC-free
- silicone-free
- 10 kV spark tested
- ozone-resistant
- hydrolysis durable

Design

Conductor:	conductors class 6 of bare copper wires in an optimized top FLEXdesign
Core insulation:	KS-Special compound
Core identification:	black with white numbers, protective conductor green/yellow
Core stranding:	conductor cores bundled in short pitches
Inner jacket:	KS-TPE
Shielding:	coverage nom. 85 %
Outer jacket:	KS-TPE
Jacket colour:	black

Technical Data

Temperature range moved:	– 40 to + 90 °C
Temperature range fixed:	– 55 to + 90 °C
Minimum bend radius moved:	$KR_{min} \geq 5 \times Ø$
v_{max} supported up to:	20 m/s
v_{max} gliding up to:	5 m/s
a_{max} up to:	50 m/s²
Insulation resistance:	≥ 30 MΩ x km
Rated voltage:	according to VDE 0.6/1 kV
Approvals:	based on VDE, cURus on request

varying parameters possible – please contact us

Picture obtainable.

Subject to change.

Type selection

TRAXLINE POWER ONE 1000 C TPE 1 kV – shielded

core number x nominal-cross-section in mm²	part number	max. Ø mm	cable weight kg/m	copper weight kg/m
(1 x 4²)	**49876**	7.4	0.093	0.059
(1 x 6²)	**49877**	8.0	0.119	0.071
(1 x 10²)	**49878**	9.2	0.169	0.122
(1 x 16²)	**49879**	10.4	0.236	0.190
(1 x 25²)	**49880**	11.9	0.333	0.289
(1 x 35²)	**49881**	13.9	0.451	0.393
(1 x 50²)	**49882**	16.5	0.651	0.560
(1 x 70²)	**49883**	18.3	0.883	0.873
(1 x 95²)	**49884**	20.3	1.099	1.029
(1 x 120²)	**49885**	22.2	1.373	1.272
(1 x 150²)	**49886**	25.0	1.716	1.578
(1 x 185²)	**49887**	27.4	2.081	1.911
(1 x 240²)	**49888**	31.1	2.685	2.451
(1 x 300²)	**49889**	35.4	3.393	2.997

CABLE + CONNECTOR
can be supplied ready for connection

STS with TRAXLINE cables

Automated stacking solution

Subject to change.

Additional cable types upon request.

TRAXLINE CONTROL 1000 TPE

Unshielded continuous bending top FLEXdesign TPE control cables

Picture obtainable.

Up to **10 million** motion cycles!

Up to **1000 m** travel length!

Down to **5 × Ø**

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- halogen-free
- microbe resistant
- metermarked
- CFC-free
- silicone-free
- 6 kV spark tested
- ozone-resistant
- hydrolysis durable

Design

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v_{max} supported up to:	20 m/s
v_{max} gliding up to:	5 m/s
a_{max} up to:	50 m/s²
Insulation resistance:	≥ 30 MΩ x km
Rated voltage:	according to VDE 300/500 V
Approvals:	based on VDE, cURus on request

varying parameters possible – please contact us

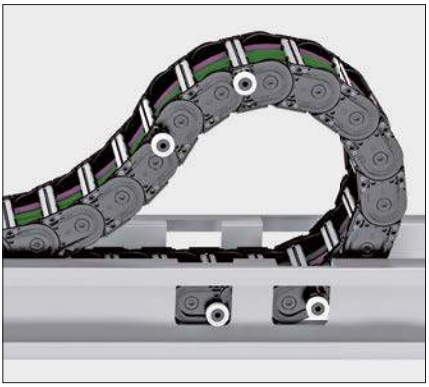
Subject to change.

Type selection

TRAXLINE CONTROL 1000 TPE – unshielded

core number x nominal-cross-section in mm²	part number	max. Ø mm	cable weight kg/m	copper weight kg/m
12 G 0.5²	**49400**	10.7	0.137	0.060
18 G 0.5²	**49404**	13.0	0.200	0.088
36 G 0.5²	**49412**	17.5	0.375	0.198
49 G 0.5²	**49415**	21.3	0.546	0.370
12 G 0.75²	**49429**	12.1	0.164	0.096
18 G 0.75²	**49431**	14.3	0.241	0.146
25 G 0.75²	**49434**	16.6	0.328	0.209
36 G 0.75²	**49436**	20.2	0.481	0.270
12 G 1²	**49449**	12.7	0.197	0.125
18 G 1²	**49451**	15.4	0.286	0.210
25 G 1²	**49454**	17.7	0.428	0.302

CABLE + CONNECTOR
can be supplied ready for connection



TRAXLINE cable bending

TRAXLINE cable seperation

Subject to change.

Additional cable types upon request.

TRAXLINE CONTROL 1000 C TPE

Shielded continuous bending top FLEXdesign TPE control cables

Picture obtainable.

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Shielding:	coverage nom. 85 %
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Jacket colour:	black

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Minimum bend radius moved:	$KR_{min} \geq 5 \times Ø$
v_{max} supported up to:	20 m/s
v_{max} gliding up to:	5 m/s
a_{max} up to:	50 m/s²
Insulation resistance:	≥ 30 MΩ x km
Rated voltage:	according to VDE 300/500 V
Approvals:	based on VDE, cURus on request

varying parameters possible – please contact us

Subject to change.

Type selection

TRAXLINE CONTROL 1000 C TPE – shielded

core number x nominal-cross-section in mm²	part number	max. Ø mm	cable weight kg/m	copper weight kg/m
(12 G 0.5²)	**49709**	12.5	0.209	0.109
(18 G 0.5²)	**49712**	14.5	0.274	0.167
(25 G 0.5²)	**49715**	16.6	0.364	0.212
(12 G 0.75²)	**49729**	13.5	0.242	0.147
(18 G 0.75²)	**49732**	15.9	0.328	0.222
(25 G 0.75²)	**49735**	19.0	0.482	0.293
(12 G 1²)	**49749**	14.3	0.281	0.174
(18 G 1²)	**49752**	17.8	0.496	0.240
(25 G 1²)	**49755**	20.8	0.585	0.332
(36 G 1²)	**49757**	25.4	0.851	0.485
(49 G 1²)	**49759**	30.0	1.136	0.660

CABLE + CONNECTOR
can be supplied ready for connection

All weather covered – MC chain & cables

Additional cable types upon request.

TRAXLINE DATA 1000 TPi C TPE

Shielded continuous bending top FLEXdesign TPE data cables

TPE Fine jacket
low friction haptic, high cycle endurance

Core insulation
KS special compound

TPE Inner jacket
valley-sealed, pressure extruded, top FLEXdesign

Overall shield
continuous bending top FLEXdesign, tin-plated copper braiding for smallest bend radii

TPE Outer jacket
pressure extruded, top FLEXdesign, easy bending

Jacket colour black
ozone-resistant UV-resistant

Up to **10 million** motion cycles!

Up to **400 m** travel length!

Down to **5 × Ø**

TSUBAKI KABELSCHLEPP TRAXLINE *cables for cable carriers*

CE

Developed for

- heavy load and long travel
- crane and conveyor equipment
- systems, mechanical and crane engineering
- clean room duties
- limited space solutions
- permafrost using
- outdoor applications

Premium properties

- top FLEXdesign
- oil-resistant
- UV-resistant
- RoHS II-conform
- halogen-free
- microbe resistant
- metermarked
- CFC-free
- silicone-free
- 3 kV spark tested
- ozone-resistant
- hydrolysis durable

Design

Conductor:	conductors class 6 of bare copper wires in an optimized top FLEXdesign
Center element:	type-optimized
Core insulation:	KS-Special compound
Core identification:	colored, according to DIN 47100
Core stranding:	cores bundled in pairs in short pitches with minimal torsion
Inner jacket:	KS-TPE
Shielding:	coverage nom. 85 %
Outer jacket:	KS-TPE
Jacket colour:	black

Technical Data

Temperature range moved:	– 40 to + 90 °C
Temperature range fixed:	– 55 to + 90 °C
Minimum bend radius moved:	$KR_{min} \geq 5 \times Ø$
v_{max} supported up to:	20 m/s
v_{max} gliding up to:	5 m/s
a_{max} up to:	50 m/s²
Insulation resistance:	≥ 30 MΩ x km
Rated voltage:	according to VDE 300/500 V
Approvals:	based on VDE, cURus on request

varying parameters possible – please contact us

Picture obtainable.

Subject to change.

Type selection

TRAXLINE DATA 1000 TPi C TPE – shielded

core number x nominal-cross-section in mm²	part number	max. Ø mm	cable weight kg/m	copper weight kg/m
(1 x 2 x 0.25²)	**49622**	5.4	0.050	0.016
(2 x 2 x 0.25²)	**49623**	7.0	0.061	0.023
(3 x 2 x 0.25²)	**49624**	8.3	0.091	0.037
(4 x 2 x 0.25²)	**49625**	8.8	0.102	0.045
(5 x 2 x 0.25²)	**49626**	9.4	0.118	0.057
(6 x 2 x 0.25²)	**49627**	10.0	0.129	0.061
(8 x 2 x 0.25²)	**49628**	11.7	0.168	0.086
(10 x 2 x 0.25²)	**49629**	12.1	0.179	0.095
(12 x 2 x 0.25²)	**49630**	12.2	0.184	0.100
(16 x 2 x 0.25²)	**49632**	13.6	0.229	0.124
(1 x 2 x 0.5²)	**49634**	7.4	0.071	0.024
(2 x 2 x 0.5²)	**49635**	9.2	0.106	0.050
(3 x 2 x 0.5²)	**49636**	9.8	0.128	0.058
(4 x 2 x 0.5²)	**49637**	10.4	0.144	0.078
(5 x 2 x 0.5²)	**49638**	11.4	0.171	0.091
(6 x 2 x 0.5²)	**49639**	12.2	0.191	0.106
(8 x 2 x 0.5²)	**49640**	13.7	0.225	0.142
(10 x 2 x 0.5²)	**49641**	15.3	0.287	0.178
(12 x 2 x 0.5²)	**49642**	15.3	0.291	0.204
(14 x 2 x 0.5²)	**49643**	16.2	0.353	0.218
(1 x 2 x 0.75²)	**49646**	7.9	0.085	0.029
(2 x 2 x 0.75²)	**49647**	10.1	0.136	0.068
(4 x 2 x 0.75²)	**49649**	11.5	0.180	0.105
(5 x 2 x 0.75²)	**49650**	12.4	0.216	0.124
(6 x 2 x 0.75²)	**49651**	13.4	0.245	0.155
(8 x 2 x 0.75²)	**49652**	15.9	0.348	0.215
(12 x 2 x 0.75²)	**49654**	17.8	0.433	0.293

CABLE + CONNECTOR
can be supplied ready for connection

TRAXLINE long travel testing at TSUBAKI KABELSCHLEPP headquarter

Additional cable types upon request.

TRAXLINE FOC 1000 TPE

Continuous bending top FLEXdesign multi-mode TPE glass fiber optic cable

TPE Fine jacket
low friction haptic,
high cycle endurance

Fiber-optic cable glass
flexible, continuous bending top FLEX-design, aramid fiber protection

TPE Core insulation
concentrically stranded

TPE Outer jacket
pressure extruded
top FLEXdesign
UV-resistant
extremely abrasion-resistant

Jacket colour black
ozone-resistant
UV-resistant

Up to **10 million** motion cycles!

Up to **1000 m** travel length!

Down to **5 × Ø**

TSUBAKI KABELSCHLEPP TRAXLINE *cables for cable carriers*

CE

Developed for

- heavy load and long travel
- crane and conveyor equipment
- systems, mechanical and crane engineering
- clean room duties
- limited space solutions
- permafrost using
- outdoor applications
- light signal transmission
- sensor equipment

Premium properties

- top FLEXdesign
- oil-resistant
- UV-resistant
- RoHS II-conform
- ozone-resistant
- hydrolysis durable
- flame-retardant
- metal-free
- metermarked
- CFC-free
- silicone-free
- halogen-free
- microbe resistant
- Multimode 1300 nm
- absolutely EMC safety

Design

Conductor:	glass fiber
Conductor insulation:	KS-TPE
Conductor identification:	coloured, colour coded
Conductor stranding:	concentrically around center element
Outer jacket:	KS-TPE
Jacket colour:	black

Technical Data

Temperature range moved:	– 40 to + 90 °C
Temperature range fixed:	– 55 to + 90 °C
Minimum bend radius while moved:	$KR_{min} \geq 5 \times Ø$
v_{max} supported:	3.5 m/s
v_{max} gliding:	3.5 m/s
a_{max}:	20 m/s²
Approvals:	IEC 60794 IEC 61300

varying parameters possible – please contact us

Picture obtainable.

Subject to change.

Type selection

TRAXLINE FOC 1000 TPE

number of conductors x nominal-cross-section in µm	part number	max. Ø mm	cable weight kg/m
6G50/125	**49696**	12.4	0.120
6G62.5/125	**49697**	12.4	0.120
12G50/125	**49698**	12.4	0.120
12G62.5/125	**49699**	12.4	0.120

CABLE + CONNECTOR
can be supplied ready for connection

TRAXLINE all year outdoor testing

Cable carrier system MC1300 with TRAXLINE cables

Additional cable types upon request.

TRAXLINE BUS 1000 C TPE

Shielded continuous bending top FLEXdesign TPE bus cables

TPE Fine jacket
low friction haptic, high cycle endurance

Core insulation
KS special compound

TPE Inner jacket
valley-sealed, pressure extruded, top FLEXdesign

Overall shield
continuous bending top FLEXdesign, tin-plated copper braiding for smallest bend radii

TPE Outer jacket
pressure extruded, top FLEXdesign, easy bending

Jacket colour black
ozone-resistant
UV-resistant

Up to **10 million** motion cycles!

Up to **400 m** travel length!

Down to **5 × Ø**

TSUBAKI KABELSCHLEPP TRAXLINE *cables for cable carriers*

CE

Developed for

- heavy load and long travel
- crane and conveyor equipment
- systems, mechanical and crane engineering
- clean room duties
- limited space solutions
- permafrost using
- outdoor applications

Premium properties

- top FLEXdesign
- oil-resistant
- UV-resistant
- RoHS II-conform
- halogen-free
- microbe resistant
- metermarked
- CFC-free
- silicone-free
- 1.5 kV spark tested
- ozone-resistant
- hydrolysis durable

Design

Conductor:	conductors class 6 of bare copper wires in an optimized top FLEXdesign
Center element:	type-optimized
Core insulation:	KS-Special compound
Core identification:	according to BUS specification
Core stranding:	conductor cores bundled in short pitches
Inner jacket:	KS-TPE
Shielding:	coverage nom. 85 %
Outer jacket:	KS-TPE
Jacket colour:	black

Technical Data

Temperature range moved:	– 30 to + 90 °C
Temperature range fixed:	– 40 to + 90 °C
Minimum bend radius moved:	$KR_{min} \geq 5 \times Ø$
v_{max} supported up to:	20 m/s
v_{max} gliding up to:	5 m/s
a_{max} up to:	50 m/s²
Insulation resistance:	≥ 30 MΩ x km
Rated voltage:	according to VDE 30 V
Approvals:	based on VDE, cURus on request

varying parameters possible – please contact us

Picture obtainable.

Subject to change.

Type selection

TRAXLINE CAN-BUS 1000 C TPE – shielded

core number x nominal-cross-section in mm²	part number	max. Ø mm	cable weight kg/m	copper weight kg/m
(1 x 2 x 0.5²)	**49670**	8.0	0.085	0.033
(2 x 2 x 0.5²)	**49672**	8.4	0.095	0.044

TRAXLINE CAT.5E 1000 CD TPE – double-shielded

core number x nominal-cross-section in mm²	part number	max. Ø mm	cable weight kg/m	copper weight kg/m
((4 x 2 x 0.15²))	**49693**	7.1	0.055	0.030

TRAXLINE CAT.6 1000 CD TPE – double-shielded

core number x nominal-cross-section in AWG	part number	max. Ø mm	cable weight kg/m	copper weight kg/m
((4 x 2 x AWG 26))	**49684**	7.8	0.065	0.034

TRAXLINE INTERBUS 1000 C TPE – shielded

core number x nominal-cross-section in mm²	part number	max. Ø mm	cable weight kg/m	copper weight kg/m
(3 x 2 x 0.25²)	**49676**	8.3	0.085	0.047

TRAXLINE PROFIBUS 1000 C TPE – shielded

core number x nominal-diameter in mm	part number	max. Ø mm	cable weight kg/m	copper weight kg/m
(1 x 2 x 0.64)	**49690**	8.2	0.065	0.025

TRAXLINE PROFINET 1000 C TPE – shielded

core number x nominal-diameter in mm	part number	max. Ø mm	cable weight kg/m	copper weight kg/m
(4 x 1 x 0.5²)	**49692**	6.9	0.065	0.050

Subject to change.

Additional cable types upon request.

TRAXLINE KOAX 1000 CD TPE

Double-shielded continuous bending top FLEXdesign TPE koax cables

Picture obtainable.

TPE Fine jacket
low friction haptic,
high cycle endurance

Coax cable
flexible, continuous bending
top FLEXdesign

TPE Core insulation
concentrically
stranded

Element shield
continuous bending top
FLEXdesign copper braiding
– see type/design

Overall shield
continuous bending top
FLEXdesign, tin-plated copper
braiding for smallest bend
radii, Coverage up to 90 %

TPE Outer jacket
pressure extruded
top FLEXdesign
extremely abrasion-resistant

Jacket colour black
ozone-resistant
UV-resistant

Up to 10 million motion cycles!

Up to 400 m travel length!

Down to 7.5 × Ø

TSUBAKI KABELSCHLEPP TRAXLINE
cables for cable carriers

CE

Developed for

- heavy load and long travel
- crane and conveyor equipment
- systems, mechanical and crane engineering
- clean room duties
- limited space solutions
- permafrost using
- outdoor applications
- image transmission
- sensor equipment

Premium properties

- top FLEXdesign
- oil-resistant
- UV-resistant
- RoHS II-conform
- halogen-free
- microbe resistant
- metermarked
- CFC-free
- silicone-free
- 1.5 kV spark tested
- ozone-resistant
- hydrolysis durable

Design

Conductor:	conductors class 6
Center element:	type-optimized
Core insulation:	KS-Special compound
Core identification:	black with white numbers
Core stranding:	conductor cores bundled in short pitches
Inner jacket:	KS-TPE
Shielding:	coverage up to 90 %
Outer jacket:	KS-TPE
Jacket colour:	black

Technical Data

Temperature range moved:	– 30 to + 90 °C
Temperature range fixed:	– 40 to + 90 °C
Minimum bend radius moved:	$KR_{min} \geq 7.5 \times Ø$
v_{max} supported up to:	20 m/s
v_{max} gliding up to:	5 m/s
a_{max} up to:	50 m/s²
Insulation resistance:	≥ 30 MΩ x km
Rated voltage:	according to VDE 30 V
Approvals:	based on VDE, cURus on request

varying parameters possible – please contact us

Subject to change.

Type selection

TRAXLINE KOAX 1000 CD TPE 50 Ohm – double-shielded

core number x nominal-cross-section in mm²	part number	max. Ø mm	cable weight kg/m	copper weight kg/m
(3 x (1HF50)) 50 Ohm	**49683**	11.8	0.140	0.063
(5 x (1HF50)) 50 Ohm	**49685**	14.0	0.230	0.099

CABLE + CONNECTOR
can be supplied ready for connection

TRAXLINE KOAX 1000 CD TPE 75 Ohm – double-shielded

core number x nominal-cross-section in mm²	part number	max. Ø mm	cable weight kg/m	copper weight kg/m
(3 x (1HF75)) 75 Ohm	**49694**	11.8	0.142	0.065
(5 x (1HF75)) 75 Ohm	**49695**	14.0	0.234	0.102

CABLE + CONNECTOR
can be supplied ready for connection

TSUBAKI chain & cable solution at RTG's

Additional cable types upon request.

Innovation in Motion

TSUBAKI

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 systems
Pre-assembled cables

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Bellows
Protective devices

CONVEYOR SYSTEMS
Hinged belt conveyors
Scraper conveyors
Belt conveyors

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