

Inside heights



Inside widths



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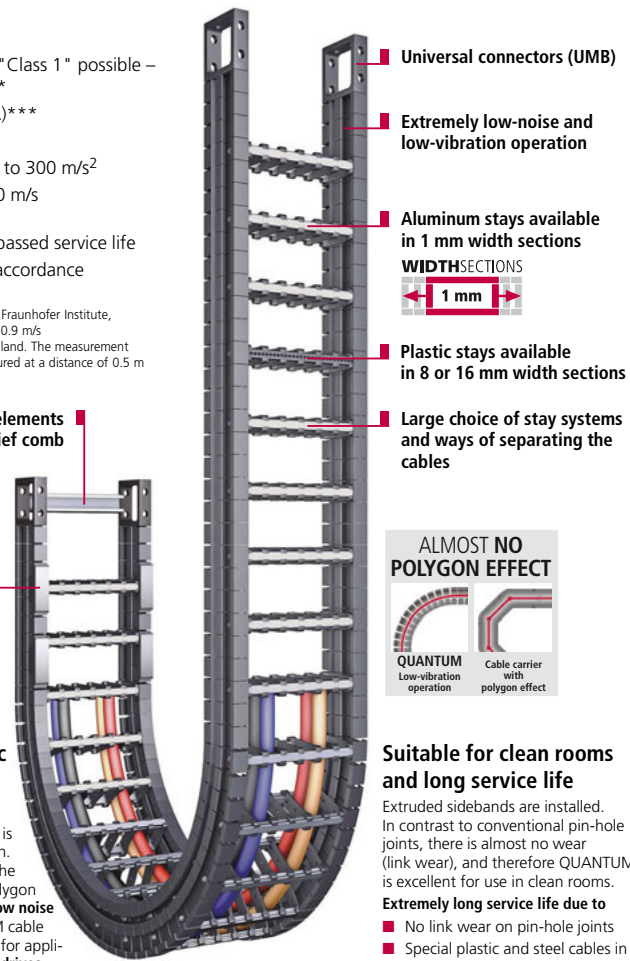
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 THE KABELSCHLEPP
 CABLE CARRIER CONFIGURATOR

QUANTUM

Light, extremely quiet and low-vibration for high speeds and accelerations*

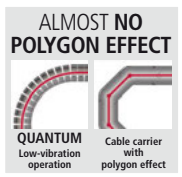
- **Suitable for clean rooms:**
Clean room certification "Class 1" possible – no hinges, no link wear**
- Extremely quiet, 31 db (A)***
- Extremely lightweight
- For high accelerations up to 300 m/s²
- For travel speeds up to 40 m/s
- Very long service life:
25 million cycles = unsurpassed service life
- TÜV design approved in accordance with 2PFG 1036/10.97

** Tested: Q040.77.RE-70-1000 by the Fraunhofer Institute, travel speed V1 = 0.2 m/s and V2 = 0.9 m/s
 *** Tested: Q060.100.100 by TÜV Rheinland. The measurement area sound pressure level was measured at a distance of 0.5 m for uniform and jerky movement.



C-Rail for strain relief elements or strain relief comb

Replaceable glide shoes



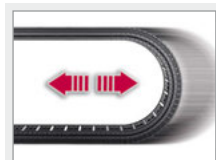
Ideal for highly dynamic applications – extruded side bands

The operation of the QUANTUM is extremely quiet and low-vibration. Due to the link-free design and the very small pitch, the so-called polygon effect is minimized. Due to the **low noise** during operation, the QUANTUM cable carrier system is optimally suited for applications with **low-vibration linear drives**.

Suitable for clean rooms and long service life

Extruded sidebands are installed. In contrast to conventional pin-hole joints, there is almost no wear (link wear), and therefore QUANTUM is excellent for use in clean rooms.

- Extremely long service life due to**
- No link wear on pin-hole joints
 - Special plastic and steel cables in the supporting base



Ideal for highly dynamic applications



3D movements: The driver connection can move sideways and can be turned through up to ± 30 degrees



Side bands made of extruded special plastic and steel cables in the supporting base for extremely long service life



Types Q 040, Q 060, Q 080 and Q 100

with plastic or aluminum stays

- Available in 1 mm width sections (aluminum stays)

WIDTH SECTIONS



- Available in 8 or 16 mm width sections (plastic stays)



Inside heights



Inside widths

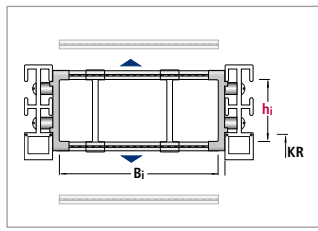


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Type	h _i	B _i	Maximum travel length in m	Dynamics of unsupported arrangement		Page
				Travel speed v _{max} in m/s	Travel acceleration a _{max} in m/s ²	
Q 040	28	28-284	100	40	300	219
Q 060	42*	38-500	150	30	160	219
Q 080	58	50-600	180	25	100	219
Q 100	72	70-600	200	20	70	219

* with stay variant RE

Dimensions in mm



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Stay variants

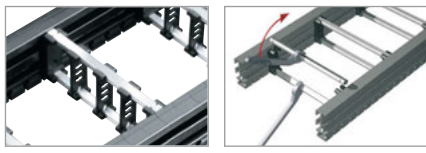
Frame stay RS made of aluminum

Standard design – Q 060, Q 080, Q 100

For lightweight to medium loads.

Opening options:

Outside/Inside: can be opened quickly and easily simply by rotating the stays through 90°.



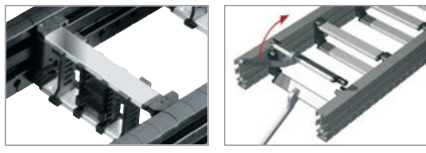
Frame stay RV made of aluminum

Reinforced design – Q 080, Q 100

For medium to heavy loads and for large chain widths.

Opening options:

Outside/Inside: can be opened quickly and easily simply by rotating the stays through 90°.

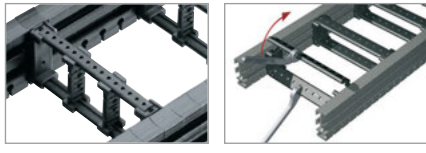


Frame stay RE made of plastic

Q 040, Q 060, Q 080, Q 100

Opening options:

Outside/Inside: simply by turning (through 90°).



Types Q 040, Q 060, Q 080 and Q 100

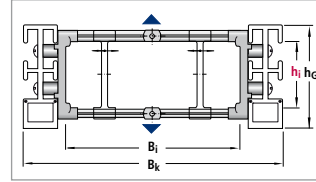
Dimensions and intrinsic weight

"Hybrid designs" with aluminum stay systems

Type	Stay variant	h _i	h _G	B _i min	q _k min	B _i max	q _k max	B _k
Q 060	RS	38	60	38	1.25	500	2.40	B _i + 52
Q 080	RS	58	80	50	1.90	600	2.25	B _i + 72
Q 080	RV	58	80	50	2.10	600	2.90	B _i + 72
Q 100	RS	72	98	70	2.60	600	3.40	B _i + 82
Q 100	RV	72	98	70	2.80	600	4.60	B _i + 82

Dimensions in mm/Weights in kg/m

WIDTH SECTIONS



Inside heights



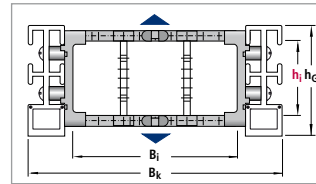
Inside widths



"Plastic designs"

Type	Stay variant	h _i	h _G	B _i min	q _k min	B _i max	q _k max	B _k	Width section
Q 040	RE	28	40	28	0.63	284	0.98	B _i + 40	8
Q 060	RE	42	60	68	1.16	276	1.54	B _i + 52	8
Q 080	RE	58	80	58	1.93	570	2.70	B _i + 72	16
Q 100	RE	72	98	74	2.74	570	3.67	B _i + 82	16

Dimensions in mm/Weights in kg/m



Bend radius and pitch

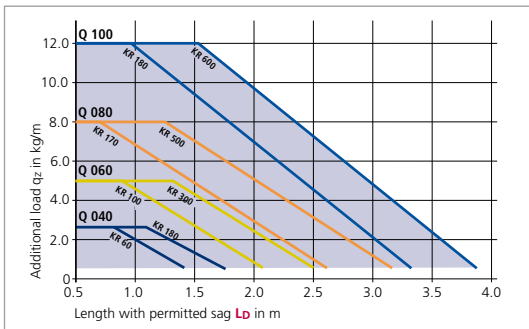
Type	Bend radii KR mm					
Q 040	60	75	90	110	150	180
Q 060	100	120	150	190	250	300
Q 080	170	200	250	320	420	500
Q 100	180	250	300	370	460	600

Pitch:

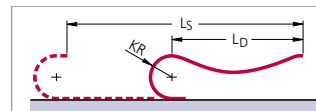
- Q 040: t = 15 mm
- Q 060: t = 20 mm
- Q 080: t = 25 mm
- Q 100: t = 30 mm

Load diagram

for length with permissible (desired) sag L_D depending on the additional load



Length with permissible sag L_D and travel length L_S



In the case of long travel lengths, the cable carriers are placed in a guide channel with the upper trough gliding on the lower trough (see page 375).

We are at your service to advise on these applications.

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Example of ordering

Cable Carrier

Q 060	200	RS	150	1540
Type	Inside width B _i in mm	Stay variant	Bend radius KR in mm	Chain length L _k in mm (without connection)

Divider system

TS 0	2
Divider system	Number of dividers n _T

Connection

FU/MU
Connection Fixed point/Driver

Ordering divider systems:

Please state the designation of the divider system (TS 0, TS 1 ...) and the number of dividers. Possibly attach a sketch with the dimensions.

Types Q 040, Q 060, Q 080 and Q 100

Divider system TS 0

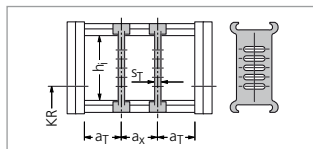
Inside heights



Inside widths



Type	Stay variant	h_i mm	S_T mm	a_T min mm	a_x min mm
Q 040	RE	28	2.8	8	8
Q 060	RS	38	3	13.5	13
Q 060	RE	42	4.2	14	13
Q 080	RS	58	4	11	14
Q 080	RV	58	4	11	14
Q 080	RE	58	6	12	14.5
Q 100	RS	72	5	11	14
Q 100	RV	72	6	13	16
Q 100	RE	72	8	12	14.5



Standard mounting distances of the divider systems:

Q 040, Q 060: on every 6th pitch division
Q 080, Q 100: on every 8th pitch division

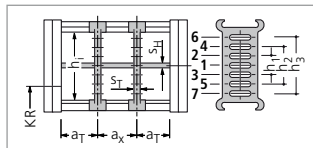
In the standard version, the dividers are movable.

In the case of plastic stays (stay variant RE), the dividers can also be mounted fixed (note the mounting distances).

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Divider system TS 1 with continuous height subdivision made of aluminum

Type	Stay variant	h_i mm	S_T mm	a_T min mm	a_x min mm	S_H mm	h_1 mm	h_2 mm	h_3 mm
Q 040	RE	28	2.8	8	8	2.4	15	–	–
Q 060	RS	38	3	13.5	13	4	15	–	–
Q 060	RE	42	4.2	14	13	2	10	–	–
Q 080	RS	58	4	11	14	4	30	–	–
Q 080	RV	58	4	11	14	4	15	30	–
Q 080	RE	58	6	12	14.5	4	22	–	–
Q 100	RV	72	6	13	16	4	15	30	45
Q 100	RE	72	8	12	14.5	4	32	–	–



Standard mounting distances of the divider systems:

Q 040, Q 060: on every 6th pitch division
Q 080, Q 100: on every 8th pitch division

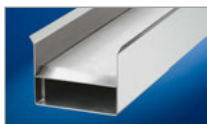
In the standard version, the dividers are movable.

In the case of plastic stays (stay variant RE), the dividers can also be mounted fixed (note the mounting distances).

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Guide channels
➤ from page 375



Strain relief devices
➤ from page 381



Cables for cable carrier systems
➤ from page 438



Types Q 040, Q 060, Q 080 and Q 100

Divider systems TS 2 and TS 3

Q 040 with divider system TS 2 with grid subdivision made of aluminum available in 8 mm section widths.

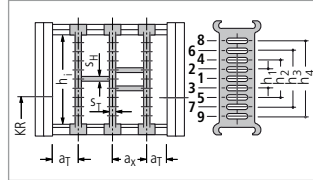
Q 060, Q 080 and Q 100 with divider system TS 3 with section subdivision, partitions made of plastic
For these types, divider system TS 2 with grid subdivision made of aluminum (1 mm grid) is also available.

Type	Stay variant	h _i mm	S _T mm	a _T min mm	a _x min mm	S _H mm	h ₁ mm	h ₂ mm	h ₃ mm	h ₄ mm
Q 040 ^{A)}	RE	28	2,8	14	8	2,4	15	–	–	–
Q 060 ^{B)}	RS	38	8	11	16*	4	14	–	–	–
Q 060 ^{B)}	RE	42	8	11	16*	4	14	28	–	–
Q 080 ^{B)}	RV	58	8	8	16*	4	14	28	42	–
Q 080 ^{B)}	RE	58	8	8	16*	4	14	28	42	–
Q 100 ^{B)}	RV	72	8	8	16*	4	14	28	42	56

* When using plastic partitions

A) Only fixed mounting of the divider is possible, and at 8 mm intervals (also see mounting version B in Chapter ME/MK).

B) The dividers are fixed by the partitions, the complete divider system is movable.



Standard mounting distances of the divider systems:

Q 040, Q 060: on every 6th pitch division

Q 080, Q 100: on every 8th pitch division

Inside heights

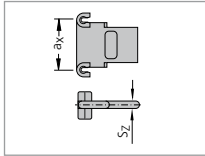


Inside widths



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Dimensions of the plastic partitions for TS 3



S _z	a _x (center-to-center distance, dividers)									
	4	16	18	23	28	32	33	38	43	48
	64	68	78	80	88	96	112	128	144	160
	176	192	208	–	–	–	–	–	–	–

Dimensions in mm

When using partitions with a_x > 112 mm there should be an additional central support with a twin divider.

Twin dividers are designed for subsequent fitting in the partition system.

Aluminum partitions in 1 mm width sections are also available.

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Gliding elements – the economical solution for gliding applications

Replaceable glide shoes made of plastic*

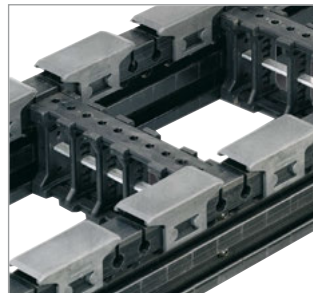
To extend the life of cable carriers in gliding operations KABELSCHLEPP supplies detachable, exchangeable glide shoes. Replaceable glide shoes are a very economical solution. When wear occurs only the glide shoes are replaced, and not the complete cable carrier.

* not for Q 040

Dimensions with glide shoe

Type	Height h _G '	Width B _{EF} '
Q 060	h _G ' = h _G + 6 = 66	B _i + 56.0
Q 080	h _G ' = h _G + 8 = 88	B _i + 79.5
Q 100	h _G ' = h _G + 10 = 108	B _i + 89.5

Dimensions in mm



! By means of a positive snap connection, the glide shoes sit firmly on the profile.

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Info or KABELSCHLEPP
 Cable carrier configuration

Types Q 040, Q 060, Q 080 and Q 100

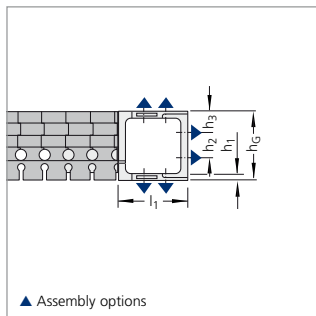
UMB (Universal Mounting Brackets)
made of plastic (Q 040/060) or aluminum (Q 080/100)

Inside
heights

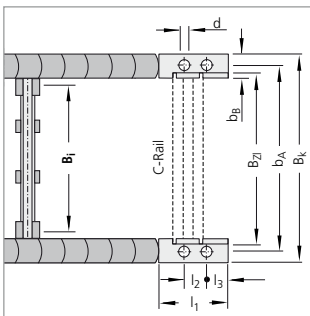
28
72

Inside
widths

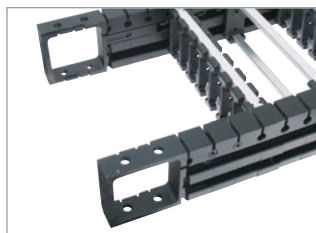
28
600



▲ Assembly options



The dimensions of the fixed point and driver connections are identical.
The connecting elements make the the last 3 pitch divisions at both ends of each sideband immobile.
When ordering please specify the connection type FU/MU (see ordering key on page 419).



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Connection dimensions:

Type	B _{ZL}	b _a	B _k	d	l ₂	l ₃	l ₁	h ₁	h ₂	h ₃	h _G	b _B
Q 040	B _i + 16	B _i + 26	B _i + 40	6.6	14	13.0	40	5	14	13.0	40	14
Q 060	B _i + 18	B _i + 32	B _i + 52	6.6	25	17.5	60	5	25	17.5	60	20
Q 080	B _i + 30	B _i + 47	B _i + 72	9	35	22.5	80	8	35	22.5	80	25
Q 100	B _i + 30	B _i + 52	B _i + 82	11	35	32.5	100	10	35	31.5	98	30

Dimensions in mm

Strain relief devices

Strain relief comb made of aluminum on one side (QUANTUM 040, 060)

The cables can be fixed securely and simply using the **optional strain relief combs**.

The strain relief combs are installed between the UMBS, and do not need to be bolted on separately or mounted on a C-Rail.

Please state on the order whether strain relief combs are needed.



■ Strain relief comb made of Aluminum

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project planning service.

Types Q 040, Q 060, Q 080 and Q 100

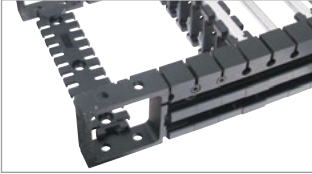
Strain relief devices

Strain relief combs made of plastic on both sides (QUANTUM 060)

The cables can be fixed securely and simply using the **optional strain relief combs**.

The strain relief combs are installed between the UMBs, and do not need to be bolted on separately or mounted on a C-Rail.

Please state on the order whether strain relief combs are needed.



■ Universal mounting bracket with strain relief comb



■ Both-sided strain relief comb

Type	B _i mm	n _z
Q 060	44	5
Q 060	49	5
Q 060	69	7
Q 060	74	7
Q 060	89	8
Q 060	94	9
Q 060	99	9
Q 060	119	11

Type	B _i mm	n _z
Q 060	124	11
Q 060	144	13
Q 060	149	13
Q 060	169	15
Q 060	174	15
Q 060	199*	17
Q 060	224*	19

n_z = Number of teeth on one side of the comb
* on request

Inside heights



Inside widths



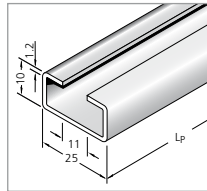
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C-rails for LineFix bracket clamps, SZL strain reliefs and clamps

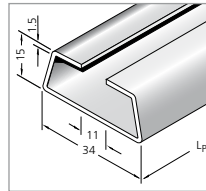
The optional C-rails are fixed by means of the universal mounting brackets and do not have to be screwed separately. **Please state in your order whether C-rails are needed.**



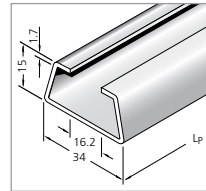
■ Universal mounting bracket with C-rail



■ **QUANTUM 060:**
Integratable C-rail
25 x 10 mm,
slit width 11 mm,
material steel,
Item-No. 3931



■ **QUANTUM 080, 100:**
Integratable C-rail
34 x 15 mm,
slit width 11 mm,
material steel,
Item-No. 3935



■ **QUANTUM 080, 100:**
Integratable C-rail
34 x 15 mm,
slit width 16 – 17 mm,
material aluminum,
Item-No. 3926,
material steel,
Item-No. 3932

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Our LineFix strain reliefs are optimally suited for the C-rails. (LineFix bracket clamps and other strain relief devices – see Accessories chapter, from page 381 onwards).



■ C-rail with LineFix strain relief

