



Price index



Low-noise



Cleanroom test upon request



ESD classification:
Electrically conductive ESD/ATEX version upon request



Opening E-Chains®: Remove crossbars and clips - Insert screwdriver into the slot, push down, release by lever action. Repeat action for the other side



When to use the Series 210:

- If a low-noise version is required
- At very high speeds and/or accelerations
- For long travels



When not to use it:

- If a particularly low-cost solution is required
- ▶ Series 1400/1500/1450/1480, chapter 5

- 1 Crossbars are removable along both radii
- 2 Stop dog with "brake" for noise reduction
- 3 Wide, rounded plastic crossbars - cable friendly
- 4 Optimized glide pads
- 5 Interior separation with standard locking separator
- 6 Integrated strain relief possible
- 7 Mounting brackets pivoting on one side with all-round attachment option
- 8 Dirt-repellent exterior
- 9 E-Chains® also available with reverse bending radius "RBR"
- 10 Undercut for more stability



Order example complete E-Chain®

Please indicate chain-lengths or number of links Example: 2 m or 66 links

2 m 210.120.100.0



E-Chain®

with 2 separators T2112 assembled every 2nd link



Interior separation

1 set 21000.120.1.12



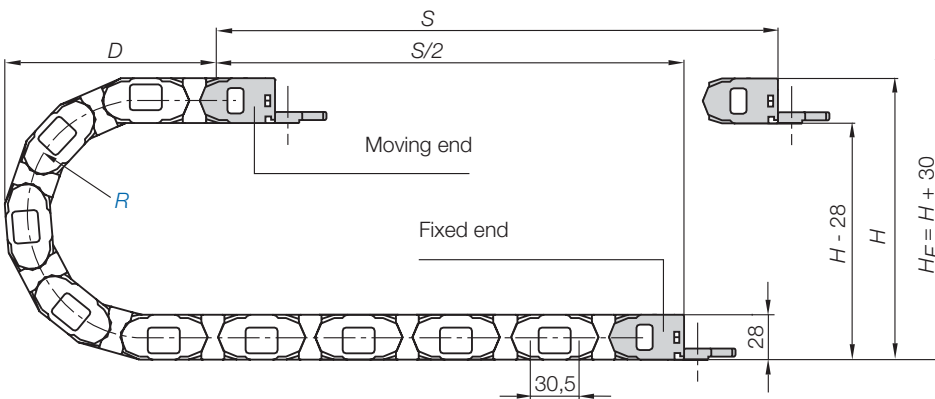
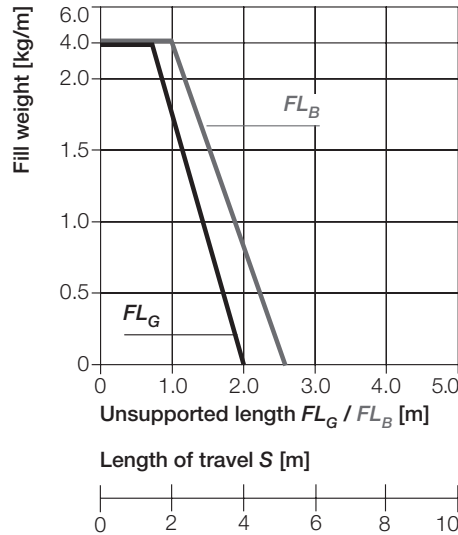
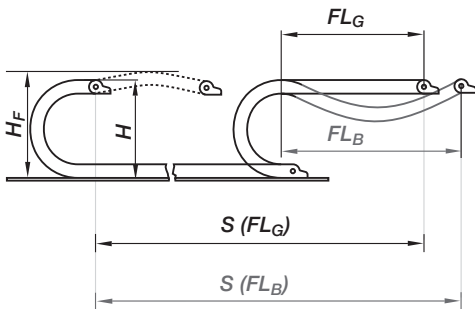
Mounting bracket

Unsupported length

FL_G = with straight upper run

FL_B = with permitted sag

Further information ► **Design, chapter 1**



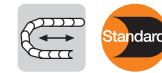
Pitch = 30,5 mm/link Links/m = 33 (1007mm) Chain length = $S/2 + K$

R	038	048	063	075	100	150	200
H	104	124	154	178	228	328	428
D	085	095	110	120	145	195	245
K	185	215	260	300	380	535	690
D_2^{+25}	-	-	-	-	490	530	665
K_2	-	-	-	-	782	920	1104

- S = Length of travel
- R = Bending radius
- H = Nominal clearance height
- H_F = Required clearance height
- H_{RI} = Trough inner height
- D = Overlength E-Chain® radius in final position
- $K = \pi \cdot R + \text{"safety"}$
- D_2 = Over length for long travels gliding
- K_2 = Further add-on if the mounting bracket location is set lower

Other installation methods

- Vertical, hanging ≤ 40 m
- Vertical, standing ≤ 3 m
- Side mounted, un supp. ≤ 1 m
- Rotary requires further calculation



Short travels - unsupported

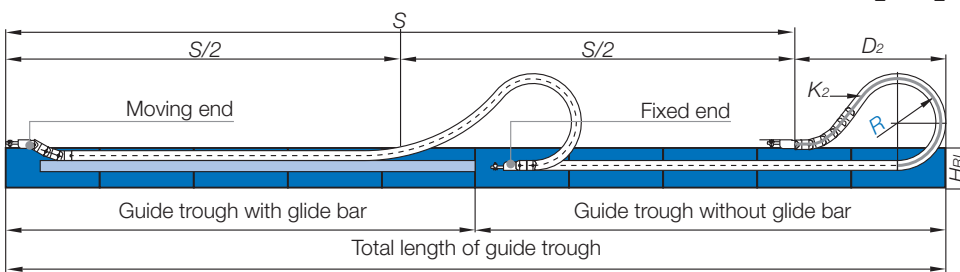
Unsupported E-Chains® feature positive camber over short travels. This must be accounted for when specifying the clearance height H_F . Please consult igus® if space is particularly restricted.

The required clearance height:

$H_F = H + 30$ mm

(with 1,5 kg/m fill weight)

Long travel lengths from 10 m to max. 120 m Chain length = $S/2 + K_2$



In case of travels between 4 and 10 m we recommend a longer unsupported length.



Gliding, long travel applications (max. 120 m)

In this case the E-Chain® upper run will be introduced in a guide trough on the lower run. We recommend to realize the engineering of such a plant by our technicians.

Technical Data

Speed / acceleration FL_G	max. 20 [m/s] / max. 200 [m/s ²]
Speed / acceleration FL_B	max. 3 [m/s] / max. 6 [m/s ²]
Gliding speed / acceleration (maximum)	max. 10 [m/s] / max. 50 [m/s ²]
Material - permitted temperature °C	igumid G / -40° up to +130° C
Flammability class, igumid G	VDE 0304 IIC UL94 HB



Details of material properties

► **chapter 1**

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System E4/00
Inner height: 21 mm

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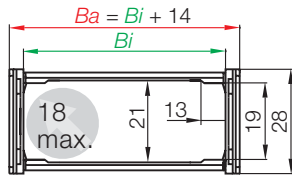
► **chapter 10**



on request



► **page 7.7**

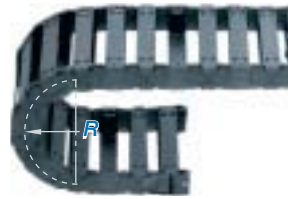


Part No. structure

210.	120.	100.	0
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Series 210 - E-Chain® with crossbars every link



- Robust solution with crossbars every link
- Can be opened from two sides
- Removable crossbars



Part No.	B_i [mm]	B_a [mm]	Weight [kg/m]
210.030. <input type="text"/> .0	30	44	≈ 0,60
210.040. <input type="text"/> .0	40	54	≈ 0,64
210.050. <input type="text"/> .0	50	64	≈ 0,67
210.060. <input type="text"/> .0	60	74	≈ 0,71
210.070. <input type="text"/> .0	70	84	≈ 0,74
210.080. <input type="text"/> .0	80	94	≈ 0,78
210.090. <input type="text"/> .0*	90	104	≈ 0,82
210.100. <input type="text"/> .0	100	114	≈ 0,85
210.110. <input type="text"/> .0*	110	124	≈ 0,89
210.120. <input type="text"/> .0	120	134	≈ 0,92

Available bending radii

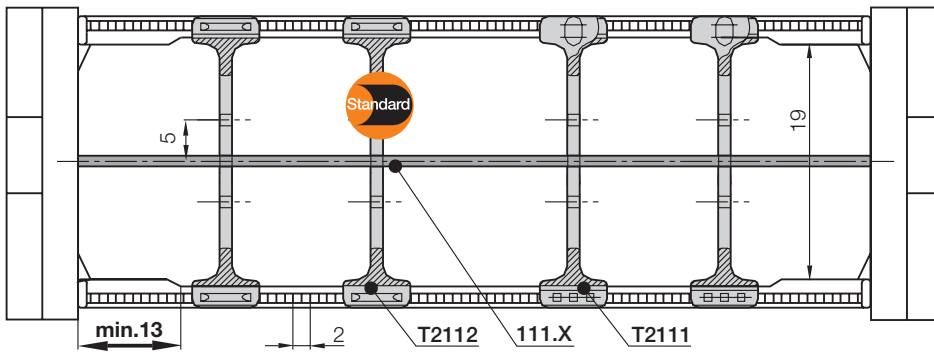
R [mm] 038 048 063 075 100 150 200

Supplement Part No. with required radius. Example: 210.120. 100 .0

0 = standard color, other colors ► chapter 1 · Pitch = 30,5 mm/link - Links/m = 33

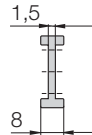
*upon request

Series 210 - Interior Separation



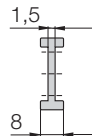
Option 1: Vertical separators and spacers

● Separators can be placed at any point along a chain's cross section. In the standard configuration, a separator is mounted at every second chain link. **Note:** Observe a lateral spacing of at least 13 mm!



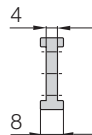
Vertical separator for E-Chains®	
unassembled	T2102
assembled	T2112

● **Standard separator T2102 for E-Chains®** is used when vertical and horizontal separation is required. Due to its slot, it allows basic vertical/horizontal shelving arrangements.



Notch separator for E-Chains®	
unassembled	T2101
assembled	T2111

● **Notch separator T2101 for E-Chains®** can be locked in 2 mm increments due to gaps on the crossbars. The separator cannot slide sideways during operation.



Strain relief separator for E-Chains®	
unassembled	T2103.Z
assembled	T2113.Z

● **Strain relief separator T2103.Z** can be integrated into the mounting bracket and can be placed there at any point. It combines strain relief and interior separation.

Additionally:

● **Full-width shelf 110.X** - this option makes sense in applications with many thin cables with similar diameters. It is based upon **Vertical separator T2102** and **T2101**, with inserted full-width shelves.

Width X [mm]	Part No. unassembled	Part No. assembled
30	110.30	111.30
40	110.40	111.40
50	110.50	111.50
60	110.60	111.60
70	110.70	111.70

Width X [mm]	Part No. unassembled	Part No. assembled
80	110.80	111.80
90	110.90	111.90
100	110.100	111.100
110	110.110	111.110
120	110.120	111.120



Option 1

- Vertical separators
- Full-width shelves



Vertical separator T2102



Notch separator T2101

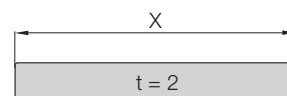


Strain relief separator T2103.Z



Full-width shelf 110.X

Full-width shelf



System E4/00
Inner height: 21 mm

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▶ chapter 10



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