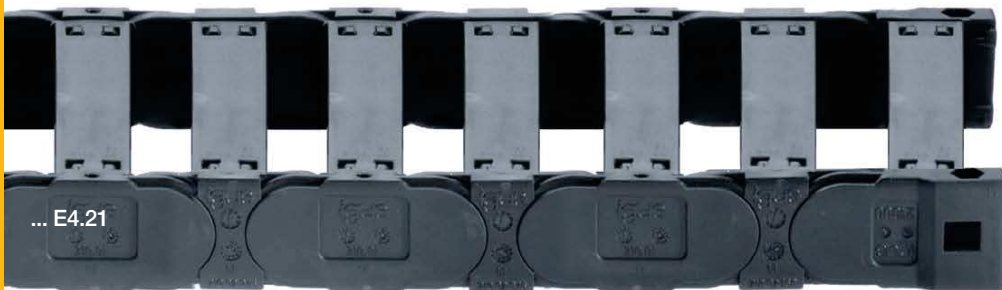


Strong due to undercut design, small inner height



e-chains® | Series E4.21 | Crossbars every link (crossbars removable along the inner and outer radius)

Part No.	Bi [mm]	Ba [mm]	E4.21 [kg/m]	Part No.	Bi [mm]	Ba [mm]	E4.21 [kg/m]
E4.21.030.R.0 <sup>▲</sup>	30	44	≈ 0.60	E4.21.090.R.0	90	104	≈ 0.82
E4.21.040.R.0 <sup>▲</sup>	40	54	≈ 0.64	E4.21.100.R.0	100	114	≈ 0.85
E4.21.050.R.0 <sup>▲</sup>	50	64	≈ 0.67	E4.21.110.R.0	110	124	≈ 0.89
E4.21.060.R.0 <sup>▲</sup>	60	74	≈ 0.71	E4.21.120.R.0	120	134	≈ 0.92
E4.21.070.R.0 <sup>▲</sup>	70	84	≈ 0.74	E4.21.140.R.0	140	154	≈ 0.99
E4.21.080.R.0 <sup>▲</sup>	80	94	≈ 0.78				

▲ ESD version (Electro Static Discharge) available from stock. More information ▶ From page 142

⊙ All widths of the E4.21 with crossbars every link are available from stock as RBR version (Reverse Bend Radius) 048/390. More information ▶ From page 130

Available bend radii

R [mm] | 038 | 048<sup>⊙</sup> | 063 | 075 | 100 | 150 | 200 |

Complete Part No. with required radius (R). Example: E4.21.120.100.0 = crossbars every link

**ESD - many sizes from stock**

- Standardised product made from Iguimid ESD
  - ESD material tested for over 10 million cycles for the toughest requirements
  - Short delivery times including mounting brackets and interior separation; 24hrs, from stock
- More information and the complete product range  
▶ From page 142 or at ▶ [www.igus.co.uk/esd](http://www.igus.co.uk/esd)



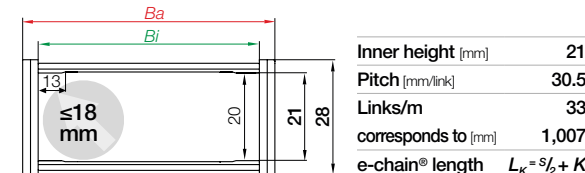
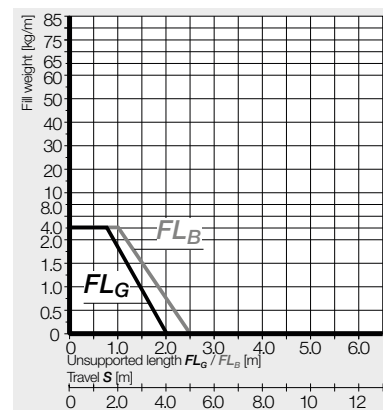
**Rotating energy supply systems with Reverse Bend Radius (RBR) - some radii available from stock**

- Maximum rotation angle in minimal installation space
- Minimal friction forces and maximum service life
- Short delivery times, from stock

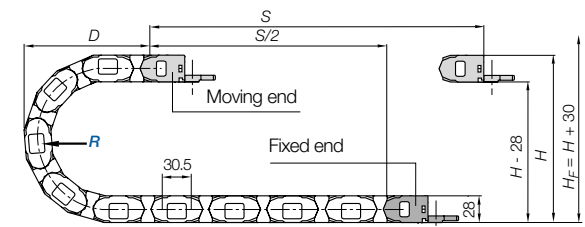
More information and the complete product range ▶ From page 130



Unsupported applications | Short travels



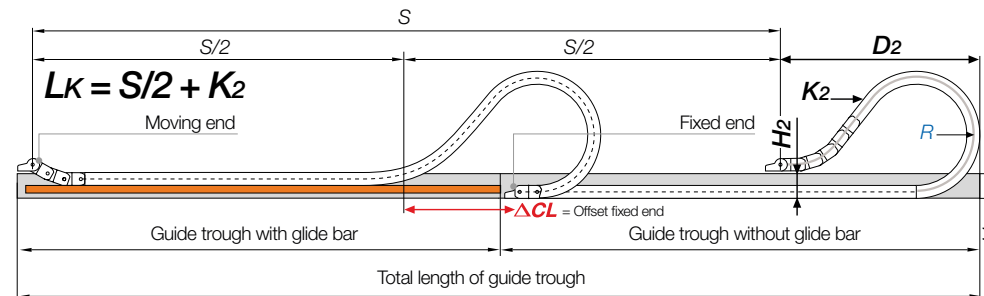
Inner height [mm]	21
Pitch [mm/link]	30.5
Links/m	33
corresponds to [mm]	1,007
e-chain® length $L_K = S/2 + K$	



R	038	048	063	075	100	150	200
H	104	124	154	178	228	328	428
D	98	108	123	135	160	210	260
K	185	215	260	300	380	535	690

The required clearance height:  $H_F = H + 30\text{mm}$  (with 1.5kg/m fill weight)

**Gliding applications | For travel lengths from 10m to max. 120m**

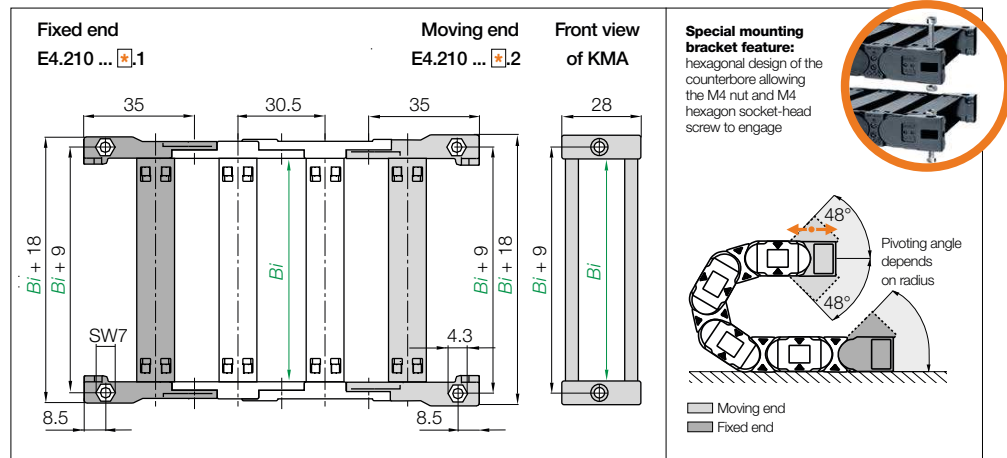


**Note:** We recommend the project planning of such a system to be carried out by igus®.

In case of travels between 4 and 10m we recommend an e-chain® with a longer unsupported length.

R	038	048	063	075	100	150	200
H <sub>2</sub>	76	96	126	152	135	135	135
D <sub>2</sub>	85	95	110	120	430	580	730
K <sub>2</sub>	185	215	260	300	640.5	945.5	1250.5
ΔACL	-	-	-	-	270	370	470

KMA mounting brackets | Pivoting

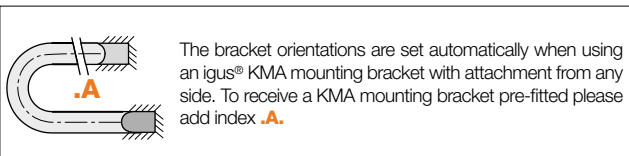


KMA pivoting | Recommended for unsupported and gliding applications

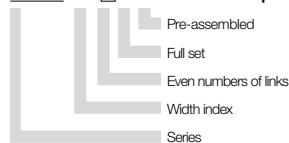
Width index	Part No. full set KMA pivoting	Bi [mm]	Width index	Part No. full set KMA pivoting	Bi [mm]
030.	E4.210.030.[1]	30	090.	E4.210.090.[1]	90
040.	E4.210.040.[1]	40	100.	E4.210.100.[1]	100
050.	E4.210.050.[1]	50	110.	E4.210.110.[1]	110
060.	E4.210.060.[1]	60	120.	E4.210.120.[1]	120
070.	E4.210.070.[1]	70	140.	E4.210.140.[1]	140
080.	E4.210.080.[1]	80			

(KMA = polymer metal mounting bracket)

**Note:** [1] The e-chains® may end with either an inner or an outer side link. An outer side link should always be the first e-chain® link at the moving end. Please specify the index [1] (for odd) or [2] (for even) depending on an even or odd number of links required.

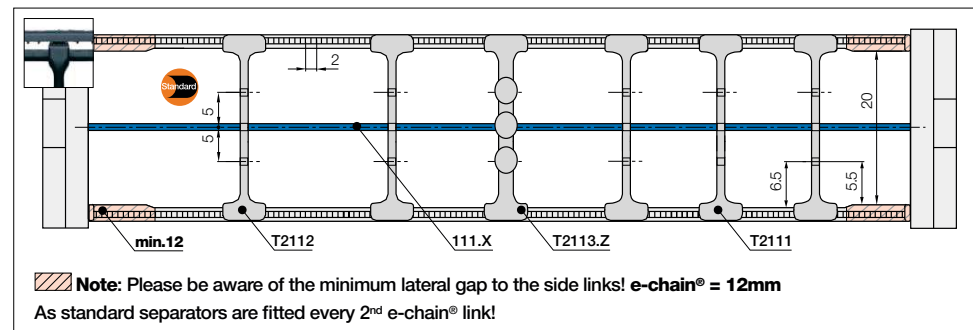


E4.210.120.[2].12.A Order example



**Strain relief** e.g. clamps, tiewrap plates, nuggets and clips are available from stock. The complete chainfix range with ordering options ▶ From page 1392

Interior separation



Separator Type	Unassembled	Assembled
<b>Slotted separator*</b>	T2102	T2112
<b>Slotted notch separator*</b>	T2101	T2111
<b>Full-width shelf for e-chains®</b>	110.X	111.X

**Slotted separator\***  
For a vertical subdivision. The slot allows basic vertical/horizontal shelving arrangements.

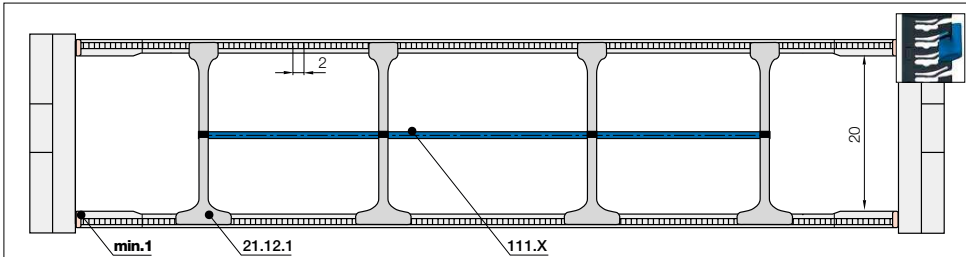
**Slotted notch separator\***  
Can be locked/fixated securely due to special recesses on the crossbars of the e-chain®. The separator cannot slide sideways during operation.

**Full-width shelf**  
This option is for applications with many small cables with similar diameters. For full-width separation.

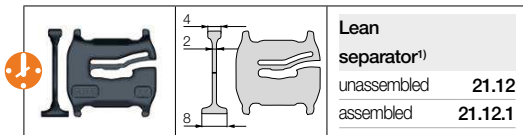
\*Note: not suitable for Bi 030

Full-width shelves Width = X [mm]	X [mm] unassembled		X [mm] assembled		X [mm] unassembled		X [mm] assembled	
	un	as	un	as	un	as	un	as
030	110.30	111.30	070	110.70	111.70	110	110.110	111.110
040	110.40	111.40	080	110.80	111.80	120	110.120	111.120
050	110.50	111.50	090	110.90	111.90			
060	110.60	111.60	100	110.100	111.100			

## Interior separation | To allow faster filling



**Note:** Please be aware of the minimum lateral gap to the side links! e-chain® = 1mm  
As standard separators are fitted every 2<sup>nd</sup> e-chain® link!

**Lean separators<sup>1)</sup>**

For quick fitting of shelves in several layers.

**1) Note:** Please combine maximum 4 lean separators with one shelf. Not suitable for side-mounted e-chains!

With the lean separator you can quickly insert several layers of cables into the e-chain® and reduce the installation time by up to 50%<sup>2)</sup>.

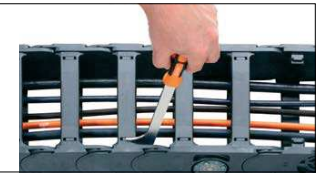
<sup>2)</sup> Lean interior separation vs. Standard separator - measured on a 4m long e-chain® fitted with 12 cables in the igus® readychain® factory

**Aluminium support tray**

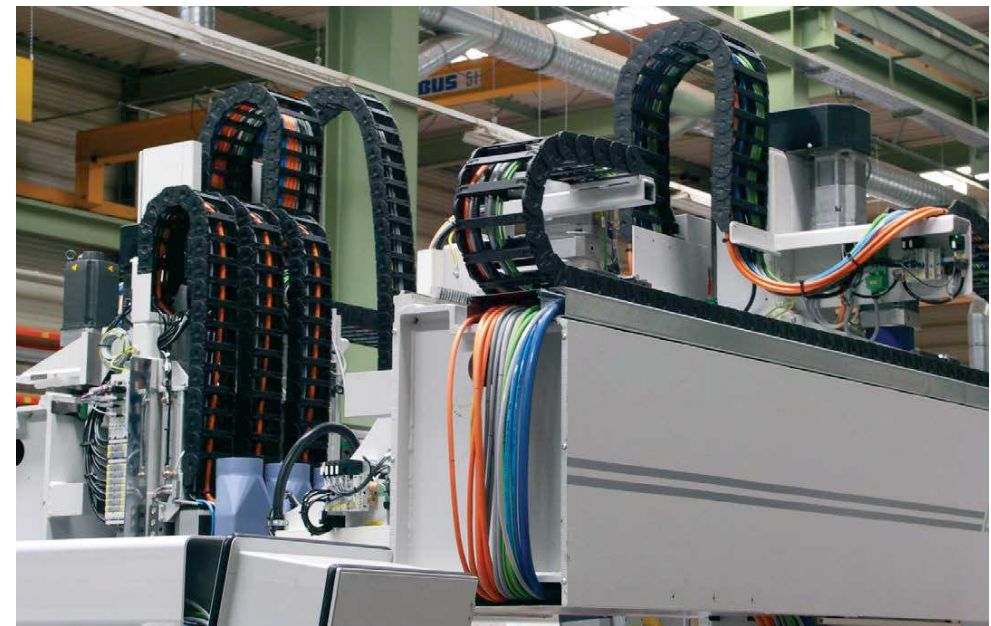
- Corrosion-resistant and seawater-resistant aluminium rails with adjustable width
  - Noise-reducing glide strip integrated as standard
  - Easy installation and connection of the e-tube
  - Open design - dirt and debris fall through
- More information ► From page 1362**

**Reduce assembly time - E4 e-chain® opener**

- e-chain® opener tools for easy opening and closing of e-chains®
  - Simple opening and closing of e-chain® crossbars
  - Also for use in hard to reach locations
  - Significant assembly time reduction
- More information ► www.igus.co.uk/E4savetime**

**Separator with integrated strain relief teeth**

- Can be integrated into the mounting bracket or placed at any point
  - Combines strain relief and interior separation, for restricted space conditions
  - Strain relief separator is easy to assemble without any screws
- Part No. T2103.Z - more information ► From page 1424**



Many e-chains® are used in this customised CNC-machine for the woodworking industry