Advantages of the T3 system:
- Very low weight e-chain®
- For high speeds and accelerations
- Virtually no polygon effect
- Small bend radii and installation space
- Fast, easy filling and assembly
- Low noise 33dB(A)\(^{1}\) - extremely low noise and low vibration due small pitch
- Cleanroom ISO Class 2\(^{2}\) - virtually no wear or abrasion

1) Extremely low noise - tested at the igus® lab  
2) Cleanroom - Series T3.29.050.038.0

When to use another igus® e-chain® series:
- When an e-chain® for more fill weight is required  
  ➤ E6.1, page 750
- When larger interior heights are required  
  ➤ E6.1, page 750
- When Cleanroom ISO Class 1 is required  
  ➤ E6.1, page 750
- When an enclosed e-chain® for smooth running is required  
  ➤ R6, page 788

Light, highly flexible and low-vibration
Smooth running "T-band", quiet, cost-effective - T3 system

The T3 system combines low noise operation, simple assembly and economy. The side bands, which snap together, replace a conventional pin/bore connection and prevent relative movements between the joints giving extremely low wear. This means virtually no wear or abrasion (cleanroom). The geometrical shape of the T-band, means that hardly any polygon effect is generated in operation. The T-band therefore rolls in a very smooth arc, giving extremely low vibration and noise. In order to reduce the manufacturing and installation costs, the T-band is made in a segment of 8 links (similar to the igus® E3 system). Due to its low mass, the igus® T-band, is suitable for applications with low fill weights and short strokes, combined with high speeds and accelerations.

Typical industries and applications
- Printer and plotter
- Cleanroom applications
- Production and processing of semiconductors
- Optics
- Pick and place machines
- Measuring technology

IPA Qualification Certificate2) - Report IG 1303-640-1:
ISO Class 2, according to DIN EN ISO 14644-1 for system T3, series T3.29.050.038.0 at v = 0.5m/s, 1 m/s, 2m/s

igus® tests at 1 m measuring distance:
= 33 dB(A)1) for T3.29.050.038.0 at v = 1 m/s and 26.5 dB(A) basic sound level

Available from stock. Ready to ship in 24 - 48hrs.*
*The delivery times indicated correspond to the average time until the ordered goods are dispatched.
### Technical data

**Speed** $F_{L_a}$ / acceleration $F_{L_b}$
- $\leq 20 \text{ [m/s]} / \leq 200 \text{ [m/s$^2$]}$

**Material - permitted temperature** °C
- Upon request

**Flammability class**
- VDE 0304 IIC UL94-HB

---

### Options with order keys

**Options with order keys** | **Examples based on series T3.29**

<table>
<thead>
<tr>
<th><strong>Part No.</strong></th>
<th><strong>NC version - (No Camber) without pretension</strong></th>
<th><strong>Reverse Bend Radius (RBR) for circular movements</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>T3.29.050.R.0</td>
<td>T3.29.050.R.0.NC</td>
<td>T3.29.050.R1/R2.0</td>
</tr>
</tbody>
</table>

**Order example** | **Order key and colour examples** | **Examples based on series T3.29**

**Order example for complete e-chain® (1.0m), colour black, with mounting brackets and interior separation:**

- e-chain® (1.0m) Please indicate e-chain® length or number of links: 1.0m or 67 links
- + Mounting brackets 1 set (with tiewrap plates)
- Interior separation with 2 separators assembled every 2nd link

**Order text:**

1 m T3.29.050.038.0 + T3.050.12 + 2 x 29.1.1

---

**Reverse Bend Radius (RBR) module for Reverse Bend Radii**

- Consists of 4 elements: T3 RBR e-chain®, guiding system, chainflex® cables, iglidur® PRT slewing ring bearing
- Compact guide trough
- Inner or outer radius rotation
- For high speeds
- Quiet
- Several mounting options.

Please consult igus® for delivery time.

More information → www.igus.eu/circularmovement
**T3 | Series T3.29 | Product range**
e-chain® t-band for highly dynamic applications

**e-chains® | Series T3.29 | Crossbars removable along the inner and outer radius**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Bi [mm]</th>
<th>Ba [mm]</th>
<th>R Available bend radii</th>
<th>T3.29</th>
</tr>
</thead>
<tbody>
<tr>
<td>T3.29.030.R.0</td>
<td>30</td>
<td>55</td>
<td>0.038</td>
<td>0.40</td>
</tr>
<tr>
<td>T3.29.040.R.0</td>
<td>40</td>
<td>65</td>
<td>0.038</td>
<td>0.42</td>
</tr>
<tr>
<td>T3.29.050.R.0</td>
<td>50</td>
<td>75</td>
<td>0.038</td>
<td>0.44</td>
</tr>
<tr>
<td>T3.29.060.R.0</td>
<td>60</td>
<td>85</td>
<td>0.038</td>
<td>0.46</td>
</tr>
<tr>
<td>T3.29.070.R.0</td>
<td>70</td>
<td>95</td>
<td>0.038</td>
<td>0.48</td>
</tr>
<tr>
<td>T3.29.080.R.0</td>
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<td>105</td>
<td>0.038</td>
<td>0.50</td>
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<tr>
<td>T3.29.090.R.0</td>
<td>90</td>
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<td>0.038</td>
<td>0.51</td>
</tr>
<tr>
<td>T3.29.100.R.0</td>
<td>100</td>
<td>125</td>
<td>0.038</td>
<td>0.53</td>
</tr>
<tr>
<td>T3.29.110.R.0</td>
<td>110</td>
<td>135</td>
<td>0.038</td>
<td>0.55</td>
</tr>
<tr>
<td>T3.29.120.R.0</td>
<td>120</td>
<td>145</td>
<td>0.038</td>
<td>0.57</td>
</tr>
<tr>
<td>T3.29.140.R.0</td>
<td>140</td>
<td>165</td>
<td>0.038</td>
<td>0.59</td>
</tr>
</tbody>
</table>

Complete Part No. with required radius (R). Example: T3.29.100.038.0

**Installation dimensions**

**Moving end**

- T3.29 ... 2
- Part No. full set with tiewrap plates
- Part No. full set without tiewrap plates
- A [mm] | Bi [mm] | Number of teeth
- 030. ▶ T3.29.030.12PZ T3.29.030.12 | 15 | 30 | 3
- 040. ▶ T3.29.040.12PZ T3.29.040.12 | 20 | 40 | 4
- 050. ▶ T3.29.050.12PZ T3.29.050.12 | 30 | 50 | 5
- 060. ▶ T3.29.060.12PZ T3.29.060.12 | 40 | 60 | 6
- 070. ▶ T3.29.070.12PZ T3.29.070.12 | 15 + 20° | 70 | 7
- 080. ▶ T3.29.080.12PZ T3.29.080.12 | 60 | 80 | 8
- 090. ▶ T3.29.090.12PZ T3.29.090.12 | 20 + 30° | 90 | 9
- 100. ▶ T3.29.100.12PZ T3.29.100.12 | 80 | 100 | 10
- 110. ▶ T3.29.110.12PZ T3.29.110.12 | 30 + 40° | 110 | 11
- 120. ▶ T3.29.120.12PZ T3.29.120.12 | 40 + 40° | 120 | 12
- 140. ▶ T3.29.140.12PZ T3.29.140.12 | 60 + 40° | 140 | 14

*Strain relief consisting of 2 tiewrap plates

**Fixed end**

- T3.29 ... 1
- Moving end
- Width index
- Series

**Possible orientations for mounting brackets.**

**Strain relief e.g. clamps, tiewrap plates, nuggets and plug-in clips are available from stock. The complete chainfix range with ordering options ▶ From page 1300**

More information ▶ www.igus.eu/T3.29

T3.29 3D CAD, configurators, service life calculation and more ▶ www.igus.eu/T3
Separator with integrated strain relief teeth
- Can be integrated into the mounting bracket or placed at any point in the e-chain®
- Combines strain relief and interior separation, for restricted space conditions
- Strain relief separator is easy to assemble without any screws

Part No. E6.29.02.Z. More information ➤ From page 1326

Note:
Please be aware of the minimum lateral gap to the side links! 29.1/29.2 = 1mm  | 29.5 = 13mm
As standard separators are fitted every 4nd e-chain® link!

Standard - for any application
Separator with a wide base for maximum holding force in the e-chain®.

For even faster installation
Wide on one side for high holding force, narrow on opposite side for easy cable fitting.

Locks securely in preset increments
Notch separator for exact positioning in e-chains®. Recommended for side-mounted applications.

Horizontal separation
Full-width shelf locks securely into separators at both ends, giving a fixed width. Can be used as full-width or partial shelf.

Perfect match. Cleanroom-suitable igus® chainflex® cables are safely guided in a T3 e-chain®. 1,125 chainflex® cables are certified according to IPA ISO Class 1 or Class 2 and are available from stock.

More information ➤ www.igus.eu/T3.29

T3 | Application example

Separator, narrow top
unassembled 29.2
assembled 29.2.1

Notch separator for notched crossbar
unassembled 29.5
assembled 29.5.1

Shelf, lockable
unassembled 2300.X
assembled 2310.X

Shelves
Width = X [mm]

<table>
<thead>
<tr>
<th>X [mm]</th>
<th>unassembled</th>
<th>assembled</th>
</tr>
</thead>
<tbody>
<tr>
<td>015</td>
<td>2300.015</td>
<td>2310.015</td>
</tr>
<tr>
<td>025</td>
<td>2300.025</td>
<td>2310.025</td>
</tr>
<tr>
<td>030</td>
<td>2300.030</td>
<td>2310.030</td>
</tr>
<tr>
<td>038</td>
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<td>050</td>
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<td>2310.050</td>
</tr>
<tr>
<td>057</td>
<td>2300.057</td>
<td>2310.057</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>X [mm]</th>
<th>unassembled</th>
<th>assembled</th>
</tr>
</thead>
<tbody>
<tr>
<td>060</td>
<td>2300.060</td>
<td>2310.060</td>
</tr>
<tr>
<td>062</td>
<td>2300.062</td>
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<td>2300.075</td>
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<td>077</td>
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<td>080</td>
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<td>2310.080</td>
</tr>
<tr>
<td>087</td>
<td>2300.087</td>
<td>2310.087</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>X [mm]</th>
<th>unassembled</th>
<th>assembled</th>
</tr>
</thead>
<tbody>
<tr>
<td>090</td>
<td>2300.090</td>
<td>2310.090</td>
</tr>
<tr>
<td>097</td>
<td>2300.097</td>
<td>2310.097</td>
</tr>
<tr>
<td>100</td>
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<td>2310.100</td>
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<tr>
<td>103</td>
<td>2300.103</td>
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<td>110</td>
<td>2300.110</td>
<td>2310.110</td>
</tr>
<tr>
<td>120</td>
<td>2300.120</td>
<td>2310.120</td>
</tr>
<tr>
<td>125</td>
<td>2300.125</td>
<td>2310.125</td>
</tr>
</tbody>
</table>
Advantages of the E3 system:
- For high speeds and accelerations
- For extremely fast opening and closing
- Low noise 38dB(A)\(^1\) - low noise and low vibration due small pitch
- Cleanroom ISO Class 1\(^2\) - virtually no wear or abrasion

When to use another e-chain® series:
- When a larger e-chain® with cleanroom Class 1 is required
  ▶ E6.1, page 750
- When a more cost-effective, openable solution is required
  ▶ easy chain®, page 198
- When longer unsupported lengths are required
  ▶ E6.1, page 750
E3 | Introduction | Advantages

High dynamics and cleanroom compatible - System E3

E3 combines small pitch, smooth running, low noise, stability, easy assembly and low cost. The spring connector element replaces the pin and bore and avoids relative movement between the joints. This means virtually no wear or abrasion (cleanroom). To reduce production and assembly costs, the spring connector is on a segment of ten e-chain® links.

Typical industries and applications
- Semi-conductor manufacturing and handling
- Pick and place robots
- Optics
- Material handling technology
- Measuring technology
- Printers and plotters
- Cleanroom environments
- General mechanical engineering

Cleanroom ISO Class 1*: virtually no wear or abrasion

Universal: polymer mounting brackets or mounting angles

Low noise from 38dB(A): small pitch for low noise, smooth running

Fast assembly: zip-open along the outer radius

Dynamic: for high speeds and accelerations

Modular design: crossbars, interior separation and links all in one band

Modular: easy to lengthen and shorten at any point

IPA Qualification Certificate® - Report IG 0704-400: ISO Class 1, according to DIN EN ISO 14644-1 for system E3, series E3.15.040.075.0 at v = 0.5m/s, 1m/s, 2m/s

Long-term tests in our acoustics laboratory at a speed of 1.8m/s and an acceleration of 3m/s² showed reductions of 19-20dB(A) compared to conventional e-chains®

 IPA
Fraunhofer TESTED DEVICE
IPA Qualification Certificate® - Report IG 0704-400: ISO Class 1, according to DIN EN ISO 14644-1 for system E3, series E3.15.040.075.0 at v = 0.5m/s, 1m/s, 2m/s

More information ► www.igus.eu/E3

E3 | Selection table

<table>
<thead>
<tr>
<th>Series</th>
<th>Inner height Ha [mm]</th>
<th>Inner width Ba [mm]</th>
<th>Outer width [mm]</th>
<th>Outer height Ha [mm]</th>
<th>Bend radius R [mm]</th>
<th>Unsupported length ≤ [m]</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>E3.10</td>
<td>10</td>
<td>20 - 60</td>
<td>32 - 72</td>
<td>15</td>
<td>15 - 48</td>
<td>≈ 0.70</td>
<td>738</td>
</tr>
<tr>
<td>E3.15</td>
<td>15</td>
<td>20 - 60</td>
<td>32 - 72</td>
<td>20</td>
<td>32 - 75</td>
<td>≈ 0.90</td>
<td>742</td>
</tr>
<tr>
<td>E3.22</td>
<td>22</td>
<td>20 - 60</td>
<td>32 - 72</td>
<td>27</td>
<td>44 - 75</td>
<td>≈ 1.20</td>
<td>746</td>
</tr>
</tbody>
</table>

Available from stock. Ready to ship in 24 - 48hrs.*

*The delivery times indicated correspond to the average time until the ordered goods are dispatched.

System E3 - 3-piece e-chains® crossbars on a strip - zip-open along the outer radius

More information ► www.igus.eu/E3

3D CAD, configurators, service life calculation and more ► www.igus.eu/E3
1,125 chainflex® cables are certified according to IPA ISO Class 1 or Class 2 and are available from stock.
### E3 | Series E3.10 | Product range

Fast opening, for high accelerations

---

**e-chains® | Series E3.10 | Crossbars on a strip - zip-open along the outer radius**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Bi [mm]</th>
<th>Ba [mm]</th>
<th>Available bend radii</th>
<th>E3.10</th>
</tr>
</thead>
<tbody>
<tr>
<td>E3.10.020.R0</td>
<td>20</td>
<td>32</td>
<td>[015, 028, 038*, 048*]</td>
<td>= 0.12</td>
</tr>
<tr>
<td>E3.10.040.R0</td>
<td>40</td>
<td>52</td>
<td>[015, 028*, 038, 048]</td>
<td>= 0.15</td>
</tr>
<tr>
<td>E3.10.060.R0</td>
<td>60</td>
<td>72</td>
<td>[015, 028*, 038, 048*]</td>
<td>= 0.20</td>
</tr>
</tbody>
</table>

*Radius available upon request. Please consult igus® for delivery time.

Complete Part No. with required radius (R). Example: E3.10.060.015.0

---

**Installation dimensions**

- **Inner height [mm]**: 10
- **Pitch [mm/link]**: 16.7
- **Links/m**: 60
- **corresponds to [mm]**: 1,002
- **e-chain® length**: \( L_x + \frac{16.7}{10} + R \)

---

**e-chains® | Series E3.10 | Accessories**

**Mounting brackets, polymer | Pivoting**

- **Fixed end**
  - Part No.: E3.100 ... 2

- **Moving end**
  - Part No.: E3.100 ... 1

---

**Width index**

- **Part No. full set**
  - without tiewrap plates: [mm] [mm]
    - 020: 28 36
    - 040: 48 56
    - 060: 68 76

- **Part No. strain relief at both ends**
  - E3.020.12
  - E3.020.12
  - E3.020.12

---

**Order example**

- **Part No. E3.100.XXX.12**
  - Full set without strain relief. Tiewrap plates must be ordered separately.

- **Part No. E3.00.020**
  - Tiewrap plate as an individual part

---

**More information**

- [www.igus.eu/E3.10](http://www.igus.eu/E3.10)
- [3D CAD, configurators, service life calculation and more](http://www.igus.eu/E3)
**E3 | Series E3.10 | Accessories**

**Mounting angle, polymer | Locking**

**Width index** | **Part No. full set strain relief at both ends** | **Part No. mounting angle* (single part)** | **Part No. strain relief at both ends** | **Ba [mm]**
--- | --- | --- | --- | ---
020. | E3.10.020.12 | E3.10.00 | E3.020.12 | 32
040. | E3.10.040.12 | E3.10.00 | E3.040.12 | 52
060. | E3.10.060.12 | E3.10.00 | E3.060.12 | 72

*Note: If the mounting brackets are used, two links each end must be added to the calculated e-chain® length, because the first two links are fixed by the mounting brackets.*

**Part No. E3.10.XXX.12**
Full set with strain relief at both ends
2 tiewrap plates + 4 mounting angles

**Part No. E3.10.00**
Mounting angle as an individual part

**Part No. E3.00.020**
Tiewrap plate as an individual part

**Order example**

**E3.10.11**
Slotted separator
Separators can be arranged at any position in the chain cross section to divide the interior of the e-chain®.

**E3 e-chains® in optional white colour; ideal for cleanroom and medical applications, available upon request**
**E3 | Series E3.15 | Product range**

Fast opening, for high accelerations

---

**Image with plastic mounting bracket**

---

**e-chains® | Series E3.15 | Crossbars on a strip - zip-open along the outer radius**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Bi [mm]</th>
<th>Ba [mm]</th>
<th>$R$ Available bend radii</th>
<th>E3.15 [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>E3.15.020.R,0</td>
<td>20</td>
<td>32</td>
<td>032</td>
<td>048*</td>
</tr>
<tr>
<td>E3.15.040.R,0</td>
<td>40</td>
<td>52</td>
<td>032</td>
<td>038</td>
</tr>
<tr>
<td>E3.15.060.R,0</td>
<td>60</td>
<td>72</td>
<td>032</td>
<td>038</td>
</tr>
</tbody>
</table>

*Radius available upon request. Please consult igus® for delivery time.

Complete Part No. with required radius ($R$). Example: E3.15.060.032.0

---

**Installation dimensions**

<table>
<thead>
<tr>
<th>FLG [mm]</th>
<th>FLB [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>26</td>
</tr>
</tbody>
</table>

Inner height [mm] 15
Pitch [mm/link] 16.7
Links/m 60
corresponds to [mm] 1,002
e-chain® length $L_e = 15 + K$

---

**E3 | Series E3.15 | Accessories**

Mounting brackets, polymer | Pivoting

---

**Part No. E3.150.XXX.12**

Full set without strain relief. Tie-wrap plates must be ordered separately.

---

**Part No. E3.00.020**

Tie-wrap plate as an individual part

---

Possible orientations for assembled polymer mounting brackets.

---

3D CAD, configurators, service life calculation and more ► www.igus.eu/E3

---

742 More information ► www.igus.eu/E3.15

---

743
**E3 | Series E3.15 | Accessories**

**Mounting angle, polymer | Locking**

**Interior separation**

No lateral gap to side links necessary. As standard separators are fitted every 2nd e-chain® link!

---

### Possible attachments

Options for assembled polymer mounting angles.

---

### Order example

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Full set with strain relief at both ends + 4 mounting angles*</th>
<th>Strain relief at both ends</th>
<th>Ba [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>E3.15.020.12</td>
<td>E3.15.00</td>
<td>E3.020.12</td>
<td>32</td>
</tr>
<tr>
<td>E3.15.040.12</td>
<td>E3.15.00</td>
<td>E3.040.12</td>
<td>52</td>
</tr>
<tr>
<td>E3.15.060.12</td>
<td>E3.15.00</td>
<td>E3.060.12</td>
<td>72</td>
</tr>
</tbody>
</table>

* Note: If the mounting brackets are used, two links each end must be added to the calculated e-chain® length, because the first two links are fixed by the mounting brackets.

---

### Slotted separator

Separators can be arranged at any position in the chain cross section to divide the interior of the e-chain®.

### Slotted separator on a strip

Five vertical separators altogether on one strip over ten e-chain® links are mounted on the openable crossbars. In this way separate chambers are formed, protecting the cables. Dimensions same as E3.15.01.

---

**More information** ▶ www.igus.eu/E3.15

**3D CAD, configurators, service life calculation and more** ▶ www.igus.eu/E3
e-chains® | Series E3.22 | Crossbars on a strip - zip-open along the outer radius

### Installation dimensions

- **Inner height** [mm]: 22
- **Pitch** [mm/link]: 16.7
- **Links/m**: 60

*corresponds to* [mm]: 1,002

- **e-chain® length**: $L_e + 1/2 + K$

### Part No.

<table>
<thead>
<tr>
<th>Bi</th>
<th>Ba</th>
<th>R Available bend radii</th>
<th>E3.22</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>32</td>
<td>044 050 075</td>
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<tr>
<td>40</td>
<td>52</td>
<td>044 050 075</td>
<td>0.32</td>
</tr>
<tr>
<td>60</td>
<td>72</td>
<td>044 075</td>
<td>0.41</td>
</tr>
</tbody>
</table>

*Radius available upon request. Please consult igus® for delivery time.

Complete Part No. with required radius (*R*). Example: E3.22.060.044.0

---

The required clearance height: $H_F = H + 50$mm (with 0.3kg/m fill weight)
**E3 | Series E3.22 | Accessories**

**Mounting angle, polymer | Locking**

### Width index

- **Part No. full set strain relief at both ends**
- **Part No. mounting angle* (single part)**
- **Part No. strain relief at both ends**

<table>
<thead>
<tr>
<th>Width index</th>
<th>Part No. full set strain relief at both ends</th>
<th>Part No. mounting angle* (single part)</th>
<th>Part No. strain relief at both ends</th>
<th>Ba [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>040.</td>
<td>E3.22.040.12</td>
<td>E3.040.12</td>
<td>E3.22.040.12</td>
<td>52</td>
</tr>
<tr>
<td>060.</td>
<td>E3.22.060.12</td>
<td>E3.060.12</td>
<td>E3.22.060.12</td>
<td>72</td>
</tr>
</tbody>
</table>

*Note: If the mounting brackets are used, two links each end must be added to the calculated e-chain® length, because the first two links are fixed by the mounting brackets.

---

**Possible attachments options for assembled polymer mounting angles.**

**Part No. E3.22.XXX.12**
- Full set with strain relief at both ends
  - 2 tiewrap plates + 4 mounting angles

**Part No. E3.22.00**
- Mounting angle as an individual part

**Part No. E3.00.020**
- Tiewrap plate as an individual part

**Order example**

- **E3.22.060.12**
  - Full set Width index Series

---

**E3 | Series E3.22 | Accessories**

**Interior separation**

No lateral gap to side links necessary.
As standard separators are fitted every 2nd e-chain® link!

---

**Slotted separator**
Separators can be arranged at any position in the chain cross section to divide the interior of the e-chain®.

---

**igus® series E3.15 side mounted as a low-abrasion guide for cables in a scanner system**

---

**More information** ▶ www.igus.eu/E3.22

**3D CAD, configurators, service life calculation and more** ▶ www.igus.eu/E3
Advantages of the E6.1 system:
● Extremely quiet, low-vibration e-chain®
● For very high speeds and accelerations
● Ideal ratio of internal and external dimensions with thinner outer links and optimised crossbar geometry
● High push-pull forces
● Small bend radii
● Low-noise 32dB(A)\(^1\) - extremely low noise and vibration
● Cleanroom ISO Class \(^2\) - virtually no wear or abrasion

When to use another e-chain® series:
● For side-mounted applications
  ➤ E2/000, page 360
● When a Reverse Bend Radius \(RBR\) is required
  ➤ E2/000, page 360
● For longer unsupported lengths
  ➤ E2/000, page 360
● For longer travels
  ➤ E2/000, page 360
● When an enclosed e-chain® for smooth running is required
  ➤ R6, page 788
E6.1 | Introduction | Advantages

**Dynamic, quiet, light and cleanroom suitable - E6.1**

The E6.1 series is a development of the E6 series. It incorporates all the advantages of the E6 such as strength, cleanroom-compatibility and low weight in addition to even quieter operation at higher maximum speeds. In addition, its accessibility to the interior and the assembly and handling have been improved.

- **Low noise from 32dB(A)**: small pitch for low noise, smooth running
- **Dynamic**: for high speeds and accelerations
- **Long service life**: low vibration, high strength
- **Cleanroom ISO Class 1**: virtually no wear or abrasion
- **Modular design**: easy to lengthen and shorten

**Typical industries and applications**
- Semiconductor industry
- Studio equipment and camera tracking systems
- Printer/plotter industry
- In applications with extremely high accelerations
- When noise minimisation and a low level of abrasion are important

**Series E61.29 special feature:** crossbar openable along inner and outer radius, from both sides

32dB(A)**1**: - level determined at the igus® test-lab, v = 1.0m/s unsupported, series E61.29.070.055.0

---

E6.1 | Selection table

<table>
<thead>
<tr>
<th>Series</th>
<th>Inner height N [mm]</th>
<th>Inner width B1 [mm]</th>
<th>Outer width Ba [mm]</th>
<th>Outer height ha [mm]</th>
<th>Bend radius R [mm]</th>
<th>Unsupported length ≤ [m]</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>E61.29</td>
<td>29</td>
<td>30 - 140</td>
<td>44 - 14</td>
<td>35</td>
<td>055 - 150</td>
<td>≈ 1.75</td>
<td>758</td>
</tr>
<tr>
<td>E61.35</td>
<td>35</td>
<td>30 - 140</td>
<td>46 - 156</td>
<td>42</td>
<td>055 - 150</td>
<td>≈ 1.90</td>
<td>764</td>
</tr>
<tr>
<td>E61.40</td>
<td>40</td>
<td>40 - 300</td>
<td>56 - 316</td>
<td>54</td>
<td>063 - 200</td>
<td>≈ 2.50</td>
<td>768</td>
</tr>
<tr>
<td>E61.52</td>
<td>52</td>
<td>40 - 300</td>
<td>64 - 324</td>
<td>65</td>
<td>075 - 150</td>
<td>≈ 3.00</td>
<td>774</td>
</tr>
<tr>
<td>E61.62</td>
<td>62</td>
<td>50 - 400</td>
<td>82 - 432</td>
<td>84</td>
<td>115</td>
<td>≈ 4.00</td>
<td>778</td>
</tr>
<tr>
<td>E61.80</td>
<td>80</td>
<td>50 - 600</td>
<td>78 - 628</td>
<td>108</td>
<td>150</td>
<td>≈ 5.25</td>
<td>782</td>
</tr>
</tbody>
</table>

**Cost-effective - Series EF61.29**
- Series EF61.29 - 29mm inner height
- Available at an even lower price without the pivoting function of the crossbars
- Crossbars removable from both sides
- Otherwise, technically the same as the E61.29 series.

More information ► www.igus.eu/EF61.29

---

*) Extremely low-noise - tested at the igus® lab Series E61.29.070.055.0
2) Cleanroom - Series E61.29.50.075.0 and Series E61.29.50.075.0.CR

---

Explore the benefits ► www.igus.eu/best/E6.1

---

Available from stock. Ready to ship in 24 - 48hrs.*

*The delivery times indicated correspond to the average time until the ordered goods are dispatched.
E6.1 for cleanrooms

Cleanroom qualification of E6.1 e-chains®
By using a special material, the already low abrasion of the e-chain® can be reduced even further. In many applications where cumbersome special solutions are required, a simple standard e-chain® can be used instead. IPA tests confirm that standard igus® e-chains® meet cleanroom requirements. “Tested and certified as very good!” e-chain® for cleanroom applications demand very high wear resistance of moving parts in order to meet the normal requirements for such a sensitive environment.

IPA Qualification Certificate® – Report IG 1303-640-1: ISO Class 1, according to DIN EN ISO 14644-1 for system E6.1, series E61.29.50.0, E61.29.50.0.CR at v = 0.5 m/s, 1 m/s, 2 m/s

System E6.1 tests in the igus® lab

The E6.1 generation can take up higher accelerations, due to a weight reduction, making it a highly dynamic yet still extremely quiet e-chain®

IPA tests confirm that standard igus® e-chains® meet cleanroom requirements. “Tested and certified as very good!” e-chain® for cleanroom applications demand very high wear resistance of moving parts in order to meet the normal requirements for such a sensitive environment.

The results of the E61.29 series noise-measurement tests in the igus® test laboratory showed noise levels below the already very low values for the E6.29 series. 32dB(A) - level determined at the igus® test-lab, v = 1.0 m/s unsupported, series E61.29.070.055.0

Noise level

Weight reduction

E6.1 for cleanrooms
Technical data

- Speed gliding\(^1\)/ acceleration gliding\(^1\) upon request
- Speed FL\(_A\)/ acceleration FL\(_A\) \(\leq 20 [m/s] / \leq 200 [m/s^2]\)
- Speed FL\(_B\)/ acceleration FL\(_B\) \(\leq 3 [m/s] / \leq 6 [m/s^2]\)
- Material - permitted temperature °C, igumid G upon request
- Flammability class, igumid G VDE 0304 IIC UL94-HB

\(^1\) Gliding applications for long travels are available upon request, please consult igus®.

Installation types, maximum travels

<table>
<thead>
<tr>
<th>Series</th>
<th>Unsupported</th>
<th>Gliding(^1)</th>
<th>Vertical hanging</th>
<th>Vertical standing</th>
<th>Side mounted unsupported</th>
</tr>
</thead>
<tbody>
<tr>
<td>EF61.29/E61.29</td>
<td>(\leq 3.50m) upon request</td>
<td>(\leq 25m) upon request</td>
<td>(\leq 20m) upon request</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E61.35</td>
<td>(\leq 3.80m) upon request</td>
<td>(\leq 30m) upon request</td>
<td>(\leq 20m) upon request</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E61.40</td>
<td>(\leq 5.00m) upon request</td>
<td>(\leq 30m) upon request</td>
<td>(\leq 20m) upon request</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E61.52</td>
<td>(\leq 6.00m) upon request</td>
<td>(\leq 50m) upon request</td>
<td>(\leq 20m) upon request</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E61.62</td>
<td>(\leq 8.00m) upon request</td>
<td>(\leq 60m) upon request</td>
<td>(\leq 30m) upon request</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E61.80</td>
<td>(\leq 10.0m) upon request</td>
<td>(\leq 60m) upon request</td>
<td>(\leq 40m) upon request</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^1\) Gliding applications for long travels are available upon request, please consult igus®.

Options with order keys | Examples based on series E61.52

**Options with order keys**

- **Standard**
  - Simply turn outer side link, no additional rework

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Order key</th>
<th>Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>E61.52.100.R.0</td>
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<td></td>
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<tr>
<td>E61.52.100.R.0.NC</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Ready to ship** in 24 - 48hrs.

Order example | Order key and colour examples

Order example for complete e-chain\(^\circ\) (1.0m), colour black, with mounting brackets and interior separation:

- e-chain\(^\circ\) (1.0m) Please indicate e-chain\(^\circ\) length or number of links: 1.0m or 34 links E61.52.100.075.0
- + Mounting brackets KMA pivoting - 1 set E61.520.100.12
- Interior separation with 2 separators assembled every 2\(^{nd}\) link E61.520.100.12 + 2 x E65.2.1.1

**Order text:** 1 m E61.52.100.075.0 + E61.520.100.12 + 2 x E65.2.1.1

**Order key**

- Crossbars removable
- Colour index (standard black) E61.52.100.075.0

**Order index for colour options**

- Colour | Order index | Colour | Order index
- Black | Standard | Orange | Special colour
- Silver-grey | Special colour | Yellow | Special colour
- White | Special colour | Light grey | Special colour
- Grey-white | Special colour

Black e-chains\(^\circ\) available from stock.

Above special colours upon request.
e-chains® | EF61.29 | Crossbars removable along the inner and outer radius

Series E61.29 special feature: openable crossbars
Crossbar openable along inner and outer radius, from both sides
Assembly video available online at www.igus.eu/E61_assembly

Available bend radii

<table>
<thead>
<tr>
<th>Part No. crossbars removable from both sides</th>
<th>Bi [mm]</th>
<th>Ba [mm]</th>
<th>EF61.29</th>
<th>EF61.29</th>
</tr>
</thead>
<tbody>
<tr>
<td>EF61.29, 030.0</td>
<td>30</td>
<td>44</td>
<td>0.568</td>
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<td>EF61.29, 040.0</td>
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<td>0.580</td>
<td>0.589</td>
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<tr>
<td>EF61.29, 050.0</td>
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<td>64</td>
<td>0.600</td>
<td>0.608</td>
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<tr>
<td>EF61.29, 060.0</td>
<td>60</td>
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<td>0.632</td>
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<tr>
<td>EF61.29, 070.0</td>
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<td>0.660</td>
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<tr>
<td>EF61.29, 080.0</td>
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<td>0.680</td>
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More information ▶ www.igus.eu/EF61.29
KMA pivoting | Recommended for unsupported applications

<table>
<thead>
<tr>
<th>Width index</th>
<th>Part No. full set</th>
<th>A [mm]</th>
<th>B [mm]</th>
<th>Bi [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>030.</td>
<td>E61.290.030.12</td>
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<td>49.5</td>
<td>30</td>
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<td>E61.290.040.12</td>
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<td>59.5</td>
<td>40</td>
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<td>050.</td>
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<td>69.5</td>
<td>50</td>
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<tr>
<td>060.</td>
<td>E61.290.060.12</td>
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<td>79.5</td>
<td>60</td>
</tr>
<tr>
<td>070.</td>
<td>E61.290.070.12</td>
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<td>89.5</td>
<td>70</td>
</tr>
<tr>
<td>080.</td>
<td>E61.290.080.12</td>
<td>90</td>
<td>99.5</td>
<td>80</td>
</tr>
</tbody>
</table>

KMA pivoting - optional pivoting angle for use in applications where the KMA mounting brackets are unfitted. A = Bi + 10

Order example E61.290.050.12.A

The bracket orientations are set automatically when using an igus® KMA mounting bracket. To receive KMA pre-fitted please add index A.

KMA pivoting

- Fixed end
- Moving end
- Front view

Strain relief e.g. clamps, tie-wrap plates, nuggets and plug-in clips are available from stock. The complete chainfix range with ordering options ► From page 1300

More information ► www.igus.eu/E6.1
Lean separators

New design allows extremely fast fitting of shelves in several layers, which significantly reduces assembly time. Enables extremely fast replacement of individual cables in a very full e-chain®.

Lean separator design - several layers of cables fitted quickly, save up to 50%* assembly time

(*Lean separator vs. standard separator - measured on a 4m long e-chain® fitted with 12 cables in the igus® readychain® factory)

Note: Please be aware of the minimum lateral gap to the side links! e-chain®: 1mm

As standard separators are fitted every 2nd e-chain® link!
Installation note - system E6.1
Open by removing the crossbar with a screwdriver.
Repeat the procedure on the other side.
Assembly video available online at www.igus.eu/E61_assembly

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-chains®
- Open design - dirt and debris fall through

More information ▶ From page 1270

Available bend radii
$R$ [mm] | 055 | 075 | 100 | 125 | 150

Complete Part No. with required radius ($R$). Example: E61.35.100.100.0

E61.35 | Series E61.35 | Product range
Dynamic, quiet, light and cleanroom suitable

E61.35 | Series E61.35 | Installation dimensions
Unsupported applications | Short travels

Part No. | Bi [mm] | Ba [mm] | E61.35 [kg/m]
---|---|---|---
e-chains® | Bi [mm] | Ba [mm] | E61.35 [kg/m]
E61.35.030.0,0 | 30 | 46 | 0.653
E61.35.040.0,0 | 40 | 56 | 0.675
E61.35.050.0,0 | 50 | 66 | 0.696
E61.35.060.0,0 | 60 | 76 | 0.718
E61.35.070.0,0 | 70 | 86 | 0.759
E61.35.080.0,0 | 80 | 96 | 0.761

The required clearance height: $H_F = H + 40\text{mm}$ (with 2.0kg/m fill weight)

If a gliding application is required for a long travel, please consult igus®.

More information ▶ www.igus.eu/E61.35

E61.35 | Series E61.35 | 3D CAD, configurators, service life calculation and more ▶ www.igus.eu/E6.1
www.igus.eu/E61.35
KMA mounting brackets | Attachment from any side | Pivoting

KMA pivoting | Recommended for unsupported applications

<table>
<thead>
<tr>
<th>Width</th>
<th>Part No. full set</th>
<th>A</th>
<th>B</th>
<th>Bi</th>
</tr>
</thead>
<tbody>
<tr>
<td>000.</td>
<td>E61.35.030.12</td>
<td>42</td>
<td>54</td>
<td>30</td>
</tr>
<tr>
<td>040.</td>
<td>E61.35.080.12</td>
<td>92</td>
<td>104</td>
<td>80</td>
</tr>
</tbody>
</table>

Order example E61.350.100.12 | A

Fixed end

Moving end

Front view of KMA

KMA pivoting

The bracket orientations are set automatically when using an igus® KMA mounting bracket. To receive KMA pre-fitted please add index A.

More information - www.igus.eu/E61.35

Strain relief e.g. clamps, tiewrap plates, nuggets and plug-in clips are available from stock. The complete chainfix range with ordering options ▶ From page 1300

E61.35 | Series E61.35 | Accessories

Interior separation | Increase cable service life

KMA pivoting

Pivoting angle corresponds to the radius!

Compact chainfix range with ordering options

Complete chainfix range with ordering options

As standard separators are fitted every 2nd e-chain® link!

Strain relief separator is easy to assemble without any screws

Separator, lockable

Separator with a wide base for maximum holding force in the e-chain®

For even faster installation

Wide on one side for high holding force, narrow on opposite side for easy cable fitting.

Locks securely in preset increments

Notch separator for exact positioning in e-chains®. Recommended for side-mounted applications.

Horizontal separation

Full-width shelf locks securely into separators at both ends, giving a fixed width. Can be used as full-width or partial shelf.

Separator with integrated strain relief teeth

Can be integrated into the mounting bracket or placed at any point in the e-chain®

Combines strain relief and interior separation, for restricted space conditions

Strain relief separator is easy to assemble without any screws

Part No. E6.35.02.Z. More information ▶ From page 1326

www.igus.eu/E6.1

View options

www.igus.eu/E6.35
Installation note - system E6.1
Open by removing the crossbar with a screwdriver.
Repeat the procedure on the other side.
Assembly video available online at www.igus.eu/E61_assembly

More information ► www.igus.eu/E61.40
3D CAD, configurators, service life calculation and more ► www.igus.eu/E6.1
KMA pivoting | Recommended for unsupported applications

<table>
<thead>
<tr>
<th>Width index</th>
<th>Part No. full set</th>
<th>A [mm]</th>
<th>B [mm]</th>
<th>Bi [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>040, 050, 060, 070, 080, 090, 100, 120, 140</td>
<td>E61.400.040.12.C</td>
<td>54 66 88 101 113 126 140 166</td>
<td>50 52 62 75 87 100 125 150</td>
<td>125</td>
</tr>
</tbody>
</table>

For the C-profile option please add index A2. KMA mounting brackets are only available for an uneven number of links.

Fixed end E6.40.13
Moving end E6.40.12
Front view of KMA

KMA pivoting corresponds to the radius!

No lateral gap to side links necessary. As standard separators are fitted every 2nd e-chain® link!

- Standard separator, wide base
  - un assembled E6.40.1
  - assembled E6.40.1.1

- Separator, narrow top
  - un assembled E6.40.2
  - assembled E6.40.2.1

- Shelf, lockable
  - un assembled E6.40.3.1
  - assembled E6.40.3.2

**Separator with integrated strain relief teeth**
- Can be integrated into the mounting bracket or placed at any point in the e-chain®
- Combines strain relief and interior separation, for restricted space conditions
- Strain relief separator is easy to assemble without any screws

Part No. E6.40.02.Z. More information ► From page 1326

Increase cable service life

More information ► www.igus.eu/E61.40
E6.1 | Series E61.40 | Accessories

Interior separation | To allow faster filling

No lateral gap to side links necessary.
As standard separators are fitted every 2nd e-chain® link!

Lean separators
New design allows extremely fast fitting of shelves in several layers, which significantly reduces assembly time. Enables extremely fast replacement of individual cables in a very full e-chain®.

Lean separator design - several layers of cables fitted quickly, save up to 50%* assembly time
("Lean separator vs. standard separator - measured on a 4m long e-chain® fitted with 12 cables in the igus® readychain® factory.

Very small bend radii are possible with chainflex® CF98 control cable in this E6.1 readychain® system. It offers smooth operation and is suitable for cleanrooms.
E6.1 | Series E61.52 | Product range
Dynamic, quiet, light and cleanroom suitable

---

### e-chains® | Series E61.52 | Crossbars removable along the inner and outer radius

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Bi [mm]</th>
<th>Ba [mm]</th>
<th>E61.52 [kg/m]</th>
</tr>
</thead>
<tbody>
<tr>
<td>E61.52.040 R.0</td>
<td>40</td>
<td>64</td>
<td>1.679</td>
</tr>
<tr>
<td>E61.52.050 R.0</td>
<td>50</td>
<td>74</td>
<td>1.724</td>
</tr>
<tr>
<td>E61.52.052 R.0</td>
<td>52</td>
<td>76</td>
<td>1.735</td>
</tr>
<tr>
<td>E61.52.062 R.0</td>
<td>62.5</td>
<td>86.5</td>
<td>1.760</td>
</tr>
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<td>E61.52.070 R.0</td>
<td>70</td>
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</tr>
<tr>
<td>E61.52.075 R.0</td>
<td>75</td>
<td>99</td>
<td>1.858</td>
</tr>
<tr>
<td>E61.52.087 R.0</td>
<td>87.5</td>
<td>111.5</td>
<td>1.922</td>
</tr>
<tr>
<td>E61.52.100 R.0</td>
<td>100</td>
<td>124</td>
<td>1.948</td>
</tr>
</tbody>
</table>

### Part No. | Bi [mm] | Ba [mm] | E61.52 [kg/m] |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>E61.52.125 R.0</td>
<td>125</td>
<td>149</td>
<td>2.080</td>
</tr>
<tr>
<td>E61.52.150 R.0</td>
<td>150</td>
<td>174</td>
<td>2.172</td>
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<td>175</td>
<td>199</td>
<td>2.283</td>
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<td>E61.52.200 R.0</td>
<td>200</td>
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<td>2.507</td>
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<td>250</td>
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<td>2.619</td>
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<td>E61.52.275 R.0</td>
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<td>2.731</td>
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<tr>
<td>E61.52.300 R.0</td>
<td>300</td>
<td>324</td>
<td>2.843</td>
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</tbody>
</table>

*Radius available upon request. Please consult igus® for delivery time.

**Available bend radii**

<table>
<thead>
<tr>
<th>R [mm]</th>
<th>075</th>
<th>100</th>
<th>125</th>
<th>150</th>
<th>175*</th>
<th>200*</th>
</tr>
</thead>
<tbody>
<tr>
<td>H</td>
<td>265</td>
<td>315</td>
<td>365</td>
<td>415</td>
<td>465</td>
<td>515</td>
</tr>
<tr>
<td>D</td>
<td>153</td>
<td>178</td>
<td>203</td>
<td>228</td>
<td>253</td>
<td>278</td>
</tr>
<tr>
<td>K</td>
<td>300</td>
<td>375</td>
<td>455</td>
<td>535</td>
<td>610</td>
<td>690</td>
</tr>
</tbody>
</table>

The required clearance height: $H_F = H + 40\text{mm}$ (with 2.0kg/m fill weight)

*Radius available upon request. Please consult igus® for delivery time.

---

**Installation note - system E61.1**

Open by removing the crossbar with a screwdriver.

Repeat the procedure on the other side.

Assembly video available online at [www.igus.eu/E61_assembly](http://www.igus.eu/E61_assembly)

---

**If a gliding application is required for a long travel, please consult igus®.**

---

**Steel support tray for support of the lower run**

- Simple one-piece support trays for the lower run
- To your requirements and specification
- 4 options available

More information ► From page 1264
KMA pivoting | Recommended for unsupported applications

|-------------|------------------|--------|--------|----|-------------|------------------|--------|--------|----|

KMA = polymer metal mounting bracket. For the C-profile option please add index A. KMA mounting brackets are only available for an uneven number of links.

E61.520.100.12.C A2 Order example
E61.520.100.12.C A2 to indicate option with brackets pre-fitted C-profile option. Full set with C-profile in the inner radius at the moving end and in the outer radius at the fixed end.

Strain relief e.g. clamps, tie-wrap plates, nuggets and plug-in clips are available from stock. The complete chainfix range with ordering options ➤ From page 1300
e-chains® | Series E61.62 | Crossbars removable along the inner and outer radius

Part No. | \( B_i \) | \( B_a \) | E61.62
--- | --- | --- | ---
e-chains \(^a\) | \[mm\] | \[mm\] | \[kg/m\]
E61.62. 05, R.0 | 50 | 82 | 2.514
E61.62. 06, R.0 | 68 | 100 | 2.577
E61.62. 07, R.0 | 75 | 107 | 2.601
E61.62. 087, R.0 | 87 | 119 | 2.642
E61.62. 097, R.0 | 97 | 129 | 2.673
E61.62. 10, R.0 | 100 | 132 | 2.667
E61.62. 11, R.0 | 108 | 140 | 2.715
E61.62. 112, R.0 | 112 | 144 | 2.709
E61.62. 12, R.0 | 125 | 157 | 2.774
E61.62. 137, R.0 | 137 | 169 | 2.816
E61.62. 15, R.0 | 150 | 182 | 2.861
E61.62. 162, R.0 | 162 | 194 | 2.902
E61.62. 17, R.0 | 168 | 200 | 2.923
E61.62. 18, R.0 | 175 | 207 | 2.947
E61.62. 187, R.0 | 187 | 219 | 2.969
E61.62. 20, R.0 | 200 | 232 | 3.034

Part No. | \( B_i \) | \( B_a \) | E61.62
--- | --- | --- | ---
e-chains \(^a\) | \[mm\] | \[mm\] | \[kg/m\]
E61.62. 212, R.0 | 212 | 244 | 3.076
E61.62. 22, R.0 | 225 | 257 | 3.121
E61.62. 237, R.0 | 237 | 269 | 3.162
E61.62. 25, R.0 | 250 | 282 | 3.207
E61.62. 262, R.0 | 262 | 294 | 3.249
E61.62. 28, R.0 | 275 | 307 | 3.294
E61.62. 29, R.0 | 287 | 319 | 3.336
E61.62. 30, R.0 | 300 | 332 | 3.381
E61.62. 312, R.0 | 312 | 344 | 3.432
E61.62. 325, R.0 | 325 | 357 | 3.482
E61.62. 337, R.0 | 337 | 369 | 3.539
E61.62. 350, R.0 | 350 | 382 | 3.554
E61.62. 362, R.0 | 362 | 394 | 3.596
E61.62. 375, R.0 | 375 | 407 | 3.641
E61.62. 387, R.0 | 387 | 419 | 3.682
E61.62. 400, R.0 | 400 | 432 | 3.782

*Radius available upon request. Please consult igus® for delivery time.

Available bend radii

<table>
<thead>
<tr>
<th>( R ) [mm]</th>
<th>115</th>
<th>150</th>
<th>200</th>
<th>250</th>
<th>300</th>
<th>350</th>
</tr>
</thead>
<tbody>
<tr>
<td>( H ) [mm]</td>
<td>384</td>
<td>454</td>
<td>554</td>
<td>654</td>
<td>754</td>
<td>854</td>
</tr>
<tr>
<td>( D ) [mm]</td>
<td>232</td>
<td>267</td>
<td>317</td>
<td>367</td>
<td>417</td>
<td>467</td>
</tr>
<tr>
<td>( K ) [mm]</td>
<td>465</td>
<td>575</td>
<td>730</td>
<td>890</td>
<td>1,045</td>
<td>1,200</td>
</tr>
</tbody>
</table>

The required clearance height: \( H_F = H + 80 \text{mm} \) (with 2.0 kg/m fill weight)

*Radius available upon request. Please consult igus® for delivery time.

If a gliding application is required for a long travel, please consult igus®.

Steel support tray for support of the lower run

- Simple one-piece support trays for the lower run
- To your requirements and specification
- 4 options available

More information ► From page 1264

Installation note - system E6.1
Open by removing the crossbar with a screwdriver. Repeat the procedure on the other side.

Assembly video available online at ► www.igus.de/E61_assembly
KMA pivoting | Recommended for unsupported applications

<table>
<thead>
<tr>
<th>Width Index</th>
<th>Part No. full set</th>
<th>A [mm]</th>
<th>B [mm]</th>
<th>Bi [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>06.</td>
<td>E61.620.05.12.C</td>
<td>90</td>
<td>72</td>
<td>50</td>
</tr>
<tr>
<td>06.</td>
<td>E61.620.06.12.C</td>
<td>108</td>
<td>90</td>
<td>68</td>
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<tr>
<td>07.</td>
<td>E61.620.07.12.C</td>
<td>115</td>
<td>97</td>
<td>75</td>
</tr>
<tr>
<td>10.</td>
<td>E61.620.10.12.C</td>
<td>140</td>
<td>122</td>
<td>100</td>
</tr>
<tr>
<td>112.</td>
<td>E61.620.112.12.C</td>
<td>152</td>
<td>134</td>
<td>112</td>
</tr>
<tr>
<td>137.</td>
<td>E61.620.137.12.C</td>
<td>177</td>
<td>159</td>
<td>137</td>
</tr>
<tr>
<td>15.</td>
<td>E61.620.15.12.C</td>
<td>190</td>
<td>172</td>
<td>150</td>
</tr>
<tr>
<td>17.</td>
<td>E61.620.17.12.C</td>
<td>208</td>
<td>190</td>
<td>168</td>
</tr>
</tbody>
</table>

**KMA pivoting**

<table>
<thead>
<tr>
<th>Width Index</th>
<th>Part No. full set</th>
<th>A [mm]</th>
<th>B [mm]</th>
<th>Bi [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>212.</td>
<td>E61.620.212.12.C</td>
<td>212</td>
<td>234</td>
<td>212</td>
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<tr>
<td>262.</td>
<td>E61.620.262.12.C</td>
<td>302</td>
<td>284</td>
<td>262</td>
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<tr>
<td>312.</td>
<td>E61.620.312.12.C</td>
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<td>334</td>
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<tr>
<td>325.</td>
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<td>325</td>
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<td>337.</td>
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<td>337</td>
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<tr>
<td>400.</td>
<td>E61.620.400.12.C</td>
<td>440</td>
<td>422</td>
<td>400</td>
</tr>
</tbody>
</table>

KMA = polymer metal mounting bracket

For the C-profile option please add index A. KMA mounting brackets are only available for an uneven number of links.

---

**Interior separation | Increase cable service life**

No lateral gap to side links necessary. As standard separators are fitted every 2nd e-chain® link!

**Standard - for any application**

Separator with a wide base for maximum holding force in the e-chain®.

**For even faster installation**

Separator for igus® QuickLock crossbar 385.X.Q. Wide on one side for high holding force, narrow on opposite side for easy cable fitting.

**Locks securely in preset increments**

Notch separator for exact positioning in e-chains®. Recommended for side-mounted applications.

**Horizontal separation**

Full-width shelf locks securely into separators at both ends, giving a fixed width. Can be used as full-width or partial shelf.

**Shelves**

<table>
<thead>
<tr>
<th>Width X [mm]</th>
<th>X [mm]</th>
<th>unassembled</th>
<th>assembled</th>
<th>unassembled</th>
<th>assembled</th>
</tr>
</thead>
<tbody>
<tr>
<td>050</td>
<td>3200</td>
<td>3210.050</td>
<td>3210.050</td>
<td>3200.125</td>
<td>3210.125</td>
</tr>
<tr>
<td>075</td>
<td>3200.075</td>
<td>3210.075</td>
<td>3210.150</td>
<td>3200.150</td>
<td>3210.150</td>
</tr>
<tr>
<td>100</td>
<td>3200.100</td>
<td>3210.100</td>
<td>3210.175</td>
<td>3200.175</td>
<td>3210.175</td>
</tr>
<tr>
<td>115</td>
<td>3200.115</td>
<td>3210.115</td>
<td>3210.200</td>
<td>3200.200</td>
<td>3210.200</td>
</tr>
</tbody>
</table>

**Separator for igus® QuickLock crossbar**

Recommended for side-mounted applications.

**Component: KMA mounting brackets**

For the C-profile option please add index A. Please add index B as the standard version with C-profile, in the inner radius at the moving end and in the outer radius at the fixed end.

**Strain relief**

E.g. clamps, tie-wrap plates, nuggets and plug-in clips are available from stock. The complete chainfix range with ordering options from page 1300.

---

More information on the www.igus.eu/E61.62
e-chains® | Series E61.80 | Crossbars removable along the inner and outer radius

Part No. | Bi [mm] | Ba [mm] | E61.80 [kg/m] |
--- | --- | --- | --- |
E61.80. 05. R.0 | 50 | 100 | ±2.008 |
E61.80. 06. R.0 | 65 | 115 | ±2.797 |
E61.80. 07. R.0 | 75 | 125 | ±3.028 |
E61.80. 08. R.0 | 87 | 137 | ±3.099 |
E61.80. 10. R.0 | 100 | 150 | ±3.150 |
E61.80. 11. R.0 | 112 | 162 | ±3.259 |
E61.80. 12. R.0 | 125 | 175 | ±3.272 |
E61.80. 13. R.0 | 137 | 187 | ±3.301 |
E61.80. 15. R.0 | 150 | 200 | ±3.394 |
E61.80. 16. R.0 | 162 | 212 | ±3.453 |
E61.80. 17. R.0 | 175 | 225 | ±3.516 |
E61.80. 18. R.0 | 187 | 237 | ±3.575 |
E61.80. 20. R.0 | 200 | 250 | ±3.638 |
E61.80. 21. R.0 | 212 | 262 | ±3.667 |
E61.80. 22. R.0 | 225 | 275 | ±3.760 |
E61.80. 23. R.0 | 237 | 287 | ±3.819 |
E61.80. 25. R.0 | 250 | 300 | ±3.862 |
E61.80. 26. R.0 | 262 | 312 | ±3.941 |
E61.80. 27. R.0 | 275 | 325 | ±4.004 |
E61.80. 28. R.0 | 287 | 337 | ±4.063 |
E61.80. 30. R.0 | 300 | 350 | ±4.127 |

Part No. | Bi [mm] | Ba [mm] | E61.80 [kg/m] |
--- | --- | --- | --- |
E61.80. 31. R.0 | 312 | 362 | ±4.186 |
E61.80. 32. R.0 | 325 | 375 | ±4.249 |
E61.80. 33. R.0 | 337 | 387 | ±4.307 |
E61.80. 35. R.0 | 350 | 400 | ±4.371 |
E61.80. 36. R.0 | 362 | 412 | ±4.428 |
E61.80. 37. R.0 | 375 | 425 | ±4.486 |
E61.80. 38. R.0 | 387 | 437 | ±4.551 |
E61.80. 40. R.0 | 400 | 450 | ±4.615 |
E61.80. 41. R.0 | 412 | 462 | ±4.703 |
E61.80. 42. R.0 | 425 | 475 | ±4.732 |
E61.80. 43. R.0 | 437 | 487 | ±4.780 |
E61.80. 44. R.0 | 450 | 500 | ±4.847 |
E61.80. 46. R.0 | 462 | 512 | ±4.902 |
E61.80. 47. R.0 | 475 | 525 | ±4.962 |
E61.80. 48. R.0 | 487 | 537 | ±5.027 |
E61.80. 50. R.0 | 500 | 550 | ±5.087 |
E61.80. 51. R.0 | 512 | 562 | ±5.147 |
E61.80. 52. R.0 | 525 | 575 | ±5.207 |
E61.80. 53. R.0 | 537 | 587 | ±5.267 |
E61.80. 55. R.0 | 550 | 600 | ±5.327 |
E61.80. 60. R.0 | 600 | 650 | ±5.387 |

*Radius available upon request. Please consult igus® for delivery time.

More information | E61.80

Installation note - system E6.1
Open by removing the crossbar with a screwdriver. Repeat the procedure on the other side.
Assembly video available online at www.igus.eu/E61_assembly

Unsupported applications | Short travels

HF = H
The required clearance height:

K ≥ H + 80

*Radius available upon request. Please consult igus® for delivery time.

If a gliding application is required for a long travel, please consult igus®.
KMA pivoting | Recommended for unsupported applications

<table>
<thead>
<tr>
<th>Width index</th>
<th>Part No. full set KMA pivoting</th>
<th>A [mm]</th>
<th>B [mm]</th>
<th>Bi [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>05.</td>
<td>E61.800...06.12.C</td>
<td>72</td>
<td>90</td>
<td>50</td>
</tr>
<tr>
<td>06.</td>
<td>E61.800...06.12.C</td>
<td>87</td>
<td>105</td>
<td>65</td>
</tr>
<tr>
<td>07.</td>
<td>E61.800...07.12.C</td>
<td>97</td>
<td>115</td>
<td>75</td>
</tr>
<tr>
<td>08.</td>
<td>E61.800...08.12.C</td>
<td>109</td>
<td>127</td>
<td>87</td>
</tr>
<tr>
<td>09.</td>
<td>E61.800...09.12.C</td>
<td>122</td>
<td>140</td>
<td>100</td>
</tr>
<tr>
<td>10.</td>
<td>E61.800...10.12.C</td>
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</tr>
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<tr>
<td>15.</td>
<td>E61.800...15.12.C</td>
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<tr>
<td>17.</td>
<td>E61.800...17.12.C</td>
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<td>200</td>
</tr>
<tr>
<td>18.</td>
<td>E61.800...18.12.C</td>
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<td>212</td>
</tr>
<tr>
<td>20.</td>
<td>E61.800...20.12.C</td>
<td>259</td>
<td>277</td>
<td>237</td>
</tr>
<tr>
<td>22.</td>
<td>E61.800...22.12.C</td>
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<td>302</td>
<td>262</td>
</tr>
<tr>
<td>23.</td>
<td>E61.800...23.12.C</td>
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<td>275</td>
</tr>
<tr>
<td>27.</td>
<td>E61.800...27.12.C</td>
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<td>365</td>
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</tr>
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<td>E61.800...29.12.C</td>
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<td>30.</td>
<td>E61.800...30.12.C</td>
<td>386</td>
<td>404</td>
<td>403</td>
</tr>
</tbody>
</table>

KMA = polymer metal mounting bracket. For the C-profile option please add index A. KMA mounting brackets are only available for an uneven number of links.

---

Profile interior separation with optional elements [www.igus.eu/E61.80]
E6.1 | Series E61.80 | Accessories

Interior separation | To allow faster filling

Note: Please be aware of the minimum lateral gap to the side links of e-chain®: 16mm
As standard separators are fitted every 2nd e-chain® link!

Lean separators
New design allows extremely fast fitting of shelves in several layers, which significantly reduces assembly time. Enables extremely fast replacement of individual cables in a very full e-chain®.

Lean separator design - several layers of cables fitted quickly, save up to 50%* assembly time
("Lean separator vs. standard separator - measured on a 4m long e-chain® fitted with 12 cables in the igus® readychain® factory)