

### Price Index



10 Widths  
4 Bending Radii



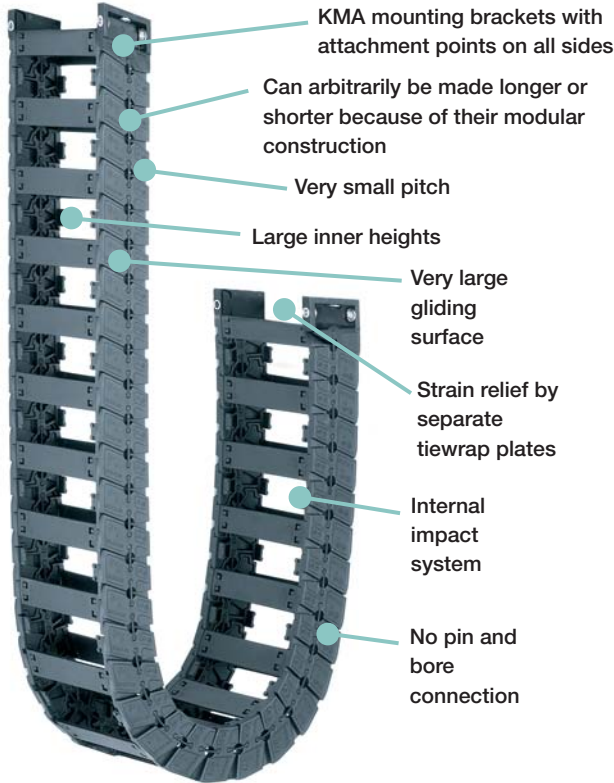
Low-noise design



Interior separation possible



KMA mounting brackets



KMA mounting brackets with attachment points on all sides

Can arbitrarily be made longer or shorter because of their modular construction

Very small pitch

Large inner heights

Very large gliding surface

Strain relief by separate tiewrap plates

Internal impact system

No pin and bore connection

### Product Range:

Inner Widths (Bi) inches (mm):	1.18 (30) - 4.72 (120)
Bending Radii (R) inches (mm):	2.17 (055), 2.95 (075), 3.94 (100), 5.91 (150)
Pitch:	.87 (22 mm/link) = 14.0 links/ft (46 links/m)
	39.8 (1012 mm)



### When to use the Series E6-29:

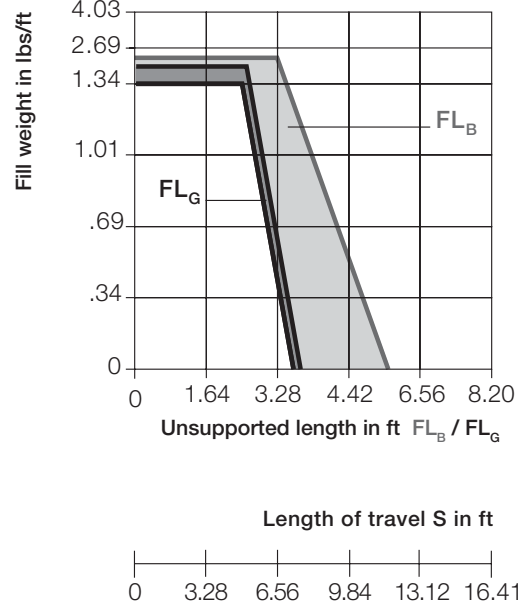
- If extremely quiet operation is required
- If very high speeds and/or accelerations are required
- If large stresses and thrust forces are part of the application
- For small bending radii
- When low vibration is important
- For very low wear, suitable for cleanrooms



### When not to use the Series E6-29:

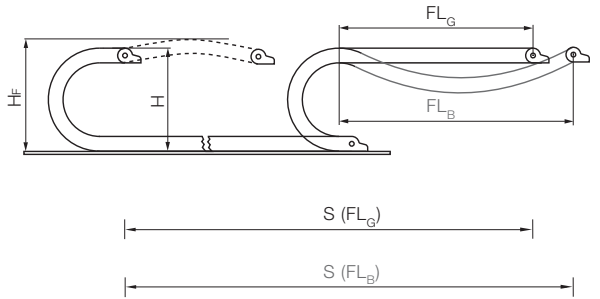
- For side-mounted applications  
▶ Series 200 System E2, Chapter 4
- For RBR (reversed bend radius)  
▶ Series 200 System E2, Chapter 4
- For extremely high additional loads  
▶ Series 200 System E2, Chapter 4
- For very dirty environments  
▶ Series 200 System E2, Chapter 4

- Accessories for  
▶ Guide Troughs, Chapter 9
- Further information  
▶ Design, Chapter 1



### Unsupported length

- FL<sub>B</sub> = unsupported with permitted sag
- FL<sub>G</sub> = unsupported with straight upper run



Unsupported Energy Chains® ▶ **Design, Chapter 1**, feature positive camber over short travels. This must be accounted for when specifying the clearance height. Please refer to **Installation dimensions** for further details.

If the unsupported length is exceeded, the Energy Chain®/Tube must glide on itself. This requires a guide trough ▶ **Design, Chapter 1** or incorporation of igus® exclusive AUTO-GLIDE System guide elements, which are available for this chain series ▶ **AUTO-GLIDE System, Chapter 9**.

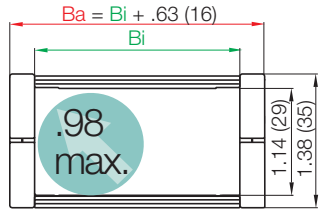
### Other Installation Methods:

<b>Vertical, hanging</b>	= max 98.4 ft (30 m)
<b>Vertical, standing</b>	= max 6.56 ft (2 m)
<b>Rotary</b>	= requires further calculation

- Long travel Max: 197 ft (60 m)

## Series E6-29 Energy Chain®

(Crossbars every other link)



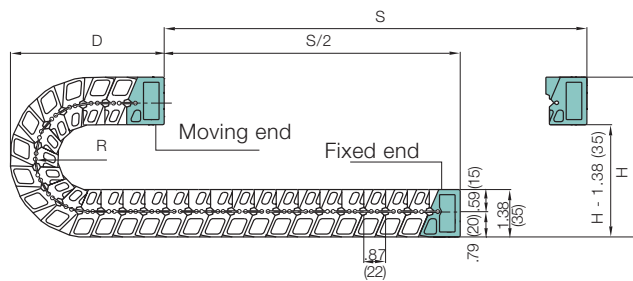
Part No.	Bi	Ba
E6-29-030	1.18 (30)	1.81 (46)
E6-29-040	1.57 (40)	2.20 (56)
E6-29-050	1.97 (50)	2.60 (66)
E6-29-060*	2.36 (60)	2.99 (76)
E6-29-070	2.76 (70)	3.39 (86)
E6-29-080*	3.15 (80)	3.78 (96)
E6-29-090*	3.54 (90)	4.17 (106)
E6-29-100	3.94 (100)	4.57 (116)
E6-29-110*	4.33 (110)	4.96 (126)
E6-29-120	4.72 (120)	5.35 (136)

Bending Radii for ALL Widths  
 2.17 (055)  
 2.95 (075)  
 3.94 (100)  
 5.91 (150)

\*Delivery time upon request

Supplement part no. with required radius for example, E6-29-050-150-0

## Installation Dimensions



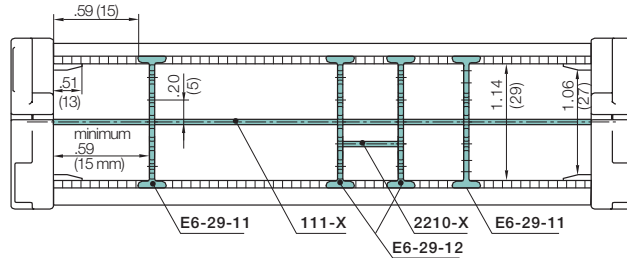
R	2.17 (055)	2.95 (075)	3.94 (100)	5.91 (150)
H*	5.91 (150)	7.48 (190)	9.45 (240)	13.39 (340)
D	3.82 (97)	4.61 (117)	5.59 (142)	7.56 (192)
K	8.66 (220)	11.02 (280)	14.17 (360)	20.47 (520)

\*The required clearance height is HF = H + 1.57 (40 mm) with 1.68 (2.5 kg/m) fill weight. Please consult igus® if space is particularly restricted.

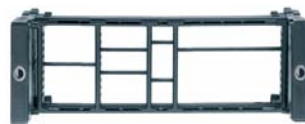
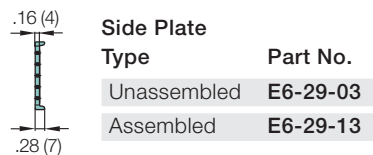
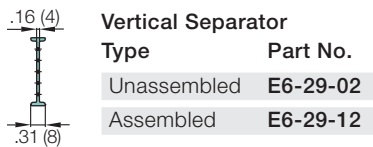
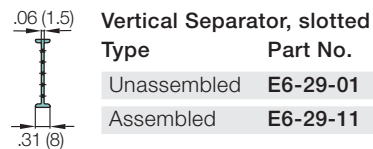
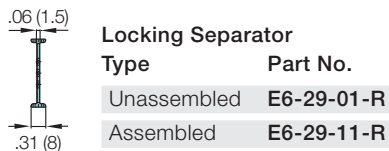
- Pitch: = .87 (22 mm) per link
- Links per ft (m): = 13.79 (46)
- Total Travel: = S
- Chain length: =  $\frac{S}{2} + K$

## Interior Separation

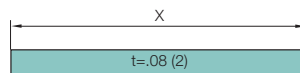
Energy Chains® can be subdivided both vertically and horizontally using the various interior separation elements. Please note: For the series E6-29, not all shelves are compatible with all separators. Please consult igus.



### Vertical Separators

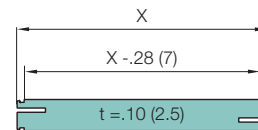


### Full-Width Shelving



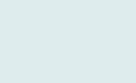
Width X in. (mm)	Part No.	
	Unassembled	Assembled
1.57 (30)	110/220-30	110/221-30
1.97 (50)	110/220-50	110/221-50
2.36 (60)	110/220-60	110/221-60
2.76 (70)	110/220-70	110/221-70
3.15 (80)	110/220-80	110/221-80
3.54 (90)	110/220-90	110/221-90
3.94 (100)	110/220-100	110/221-100
4.33 (110)	110/220-110	110/221-110
4.72 (120)	110/220-120	110/221-120

### Shelves



Width X in. (mm)	Part No.	
	Unassembled	Assembled
.71 (18)	2200-18	2210-18
.91 (23)	2200-23	2210-23
1.10 (28)	2200-28	2210-28
1.30 (33)	2200-33	2210-33
1.50 (38)	2200-38	2210-38
1.65 (42)	2200-42	2210-42
1.69 (43)	2200-43	2210-43
1.89 (48)	2200-48	2210-48
2.28 (58)	2200-58	2210-58
2.56 (65)	2200-65	2210-65
2.68 (68)	2200-68	2210-68
2.87 (73)	2200-73	2210-73
3.46 (88)	2200-88	2210-88
3.90 (99)	2200-99	2210-99

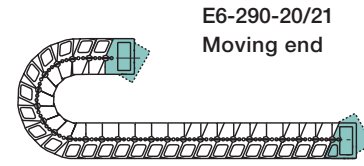
PDF: [www.igus.com/echainpdf.asp](http://www.igus.com/echainpdf.asp)  
 Specs/CAD/RFQ: [www.igus.com/echain.asp](http://www.igus.com/echain.asp)  
 RoHS info: [www.igus.com/RoHS.asp](http://www.igus.com/RoHS.asp)



### Mounting Brackets

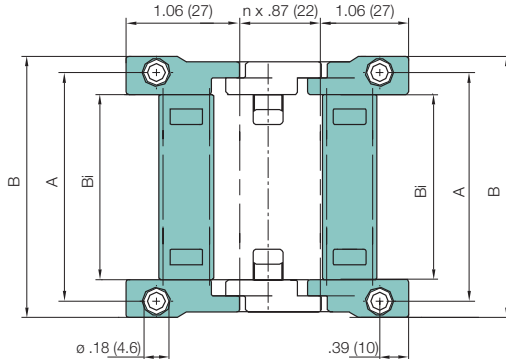
#### Option: pivoting

- Bolts to machine
- Pivots in one direction
- Easy to assemble
- Hole pattern identical to Series 240/250



E6-290-20/21  
Moving end

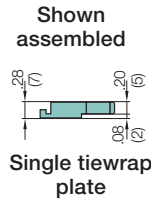
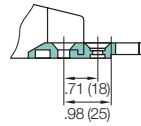
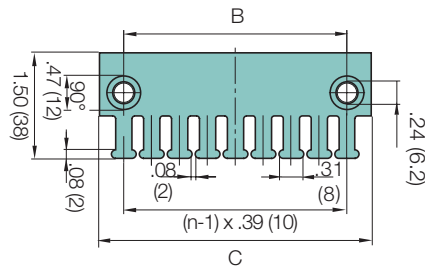
E6-290-10/11  
Fixed end



Chain Type	Part No. Full Set	Dimension A in. (mm)	Dimension B in. (mm)
E6-29-030	E6-290-030-12	1.57 (40)	1.94 (49)
E6-29-040	E6-290-040-12	1.97 (50)	2.33 (59)
E6-29-050	E6-290-050-12	2.36 (60)	2.73 (69)
E6-29-060	E6-290-060-12	2.76 (70)	3.12 (79)
E6-29-070	E6-290-070-12	3.15 (80)	3.52 (89)
E6-29-080	E6-290-080-12	3.54 (90)	3.91 (99)
E6-29-090*	E6-290-090-12	3.94 (100)	4.30 (109)
E6-29-100	E6-290-100-12	4.33 (110)	4.70 (119)
E6-29-110*	E6-290-110-12	4.72 (120)	5.09 (129)
E6-29-120	E6-290-120-12	5.12 (130)	5.48 (139)

\* Delivery time upon request

### Tiewrap plate as an individual part

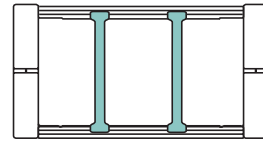
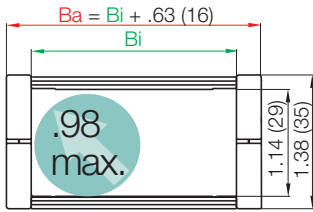


Single tiewrap plate

Tiewrap Plates	n Number of Teeth	C Overall Width	B Distance Between Bore Holes
2020-ZB	3	1.18 (30)	.59 (15)
2030-ZB	4	1.57 (40)	.79 (20)
2040-ZB	5	1.97 (50)	1.18 (30)
2050-ZB	6	2.36 (60)	1.57 (40)
2070-ZB	8	3.15 (80)	2.36 (60)
2090-ZB	= 2030-ZB + 2040-ZB		
2100-ZB	10	3.94 (100)	3.15 (80)
2125-ZB	= 2050-ZB + 2050-ZB		

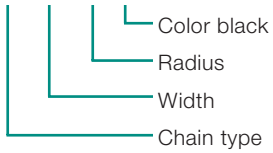
# Order Example and Technical Data: Series E6-29 System E6

## Order example



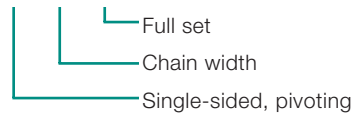
### 1. Chain selection:

E6-29-100-075-0



### 2. Mounting brackets:

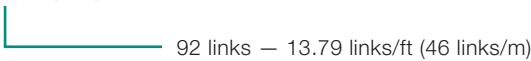
E6-290-100-12



### 3. Interior separation:

2 separators assembled every other link (Part No. E6-29-01).  
Alternative interior separation configuration according to design layout possible.

For 6.56 ft (2 m) chain, color black, with pivoting mounting brackets  
6.56 ft (2 m) E6-29-100-175-0 and E6-290-100-12



## Technical data

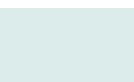
Chain Type	Weight	
	(lbs/ft)	(kg/m)
-030	0.49	(0.727)
-040	0.51	(0.752)
-050	0.52	(0.777)
-060	0.54	(0.801)
-070	0.56	(0.826)
-080	0.57	(0.851)
-090	0.59	(0.876)
-100	0.61	(0.901)
-110	0.62	(0.926)
-120	0.64	(0.951)

Material	igumid G
Permitted temperature	-40°/+266°F (-40°/+130°C)
Gliding speed max.	16.4 ft/s (5 m/s)
Unsupported V max.	32.8 ft/s (10 m/s)
Flammability class	VDE 0304 IIC UL94 1H

● Details of material properties

▶ Design, Chapter 1

PDF: [www.igus.com/echainpdf.asp](http://www.igus.com/echainpdf.asp)  
 Specs/CAD/RFQ: [www.igus.com/echain.asp](http://www.igus.com/echain.asp)  
 RoHS info: [www.igus.com/RoHS.asp](http://www.igus.com/RoHS.asp)



## Guide Troughs

Guide troughs are used with applications where the upper run of the Energy Chain® glides on the lower run. If using igus® steel guide troughs, the following components are required:

- Full travel length of guide trough  
**Part Number 92-30**
- 1/2 travel length of glide bars  
**Part Number 92-01**
- Installation sets as end connectors  
**Part Number 92-50-XX**

-XX indicates the length of the profile rail on which the guide trough is mounted. The values and part numbers are specified in the table on the left. The standard length of the trough components and glide bars is 6.56 ft (2 m.) The required overall length of the guide trough directly correlates to the length of travel.

**Example:**

Length of travel 164 ft (50 m)  
Center mounted

**Required guide troughs:**  
164 ft (50 m) guide trough  
82 ft (25 m) glide bar

= 25 sections of 6.56 ft  
(2 m) guide trough

**Part No. 92-30**

= 13 sections of 6.56 ft (2 m) glide bar

**Part No. 92-01**

**Required number of installation sets:**

= Number of guide trough components + 1  
= 25 + 1 = 26

Part number of the installation sets

Example: 92-50-400 for 15.75" (400 mm) long profile rail.



Crossbar Width  
E6-29-100-100-0

Dimension D	Installation Part No.
-030 2.01 (51) *	
-040 2.40 (61)	92-50-175
-050 2.80 (71)	92-50-200
-060 3.19 (81)	92-50-200
-070 3.58 (91)	92-50-200
-080 3.98 (101)	92-50-225
-090 4.37 (111)	92-50-225
-100 4.76 (121)	92-50-250
-110 5.16 (131)	92-50-250
-120 5.55 (141)	92-50-250

