Now in the E4.1 range due to the design principle! E4.1 | Series 800



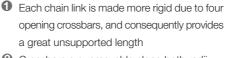








ESD classification: Electrically conductive ESD/ATEX version upon request



- 2 Crossbars are removable along both radii
- 3 Stop dog with "brake" for noise reduction
- Optimized glide pads with lateral wear allowance
- 5 Wide, rounded plastic crossbars cable friendly
- 6 The biggest igus® polymer E-Chain®
- 7 Dirt-repellent exterior
- 3 E-Chains® also available with reverse bending radius "RBR"
- Output
 Undercut for more stability



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



You can find an assembly video on the web www.igus.de/en/800_assembly





When to use the Series 800:

- If a particularly big and stable E-Chain®
- At very high speeds and/or accelerations
- For long travels
- For high additional loads



When not to use it:

If a lighter, less stable E-Chain® with identical inner height is required

Series 840, page 7.106



Order example complete E-Chain®

Please indicate chain-lengths or number of links Example: 5 m or 20 links

5 m **800.30.350.0**



E-Chain®

4

with 2 separators 8011 assembled every 2nd link **Ⅲ**



Interior separation





Mounting bracket





Inner height: 200 mm

03-96 49-222 22 0

System E4/00

Phone +49- (0) 22 03-96 49-800 Fax

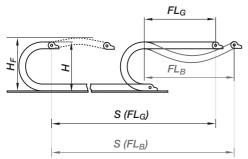




page 7.123

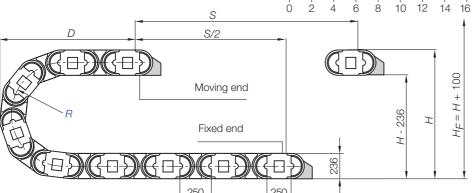
Unsupported length FL_G = with straight upper run FL_{B} = with permitted sag

Further information ▶ Design, page 1.12



E 90.0-				L											Н		
Fill weight [kg/m] 80.0- 60.0- 50.0- 40.0- 40.0-		Ш				_						_			Н		
≚ 70.0-				Ľ	/	1									Н		
통 60.0-					_	/									Н		
9 50.0-						1							L.	FL.	B		
= 40.0-																	
≡ 30.0-				FL	.c-			\setminus							Н		
20.0-					G	_		_	\						Н		
10.0-									_						Н		
6.0-										-							
2.0-											_						
1.5-												\			Н	Ш	
1.0-												_\			Н	Ш	
0.5-													\mathbf{A}		Н		
0-	H	Н		_			Н							Щ	Н	Ц	
0 05101520 25303540455056065707580																	
Unsupported length FL - / FL - [m]																	

Unsupported length FL_G / FL_B [m] Length of travel S [m]



Pitch = 250 mm/link

Links/m = 4 (1000 mm)

Chain	length	= S/ ₂ +	K
-------	--------	----------------------------	---

R	325	350	400	450	500	600	750	1000
Н	886	936	1036	1136	1236	1436	1736	2236
D	725	750	800	850	900	1000	1150	1400
K	1525	1600	1760	1915	2075	2385	2860	3645
H_2	*	*	*	*	*	*	*	*
D_2^{+2}	5 *	*	*	*	*	*	*	*
K_2	*	*	*	*	*	*	*	*

*upon request

 D_2 = Over length - long travels, gliding

D = Overlength E-Chain®

 $K_2 = *Further add-on$

 $K = \pi \bullet R + \text{"safety"}$

S = Length of travel

R = Bending radius

H = Nominal clearence height

 H_F = Required clearence height H_{RI} = Trough inner height

radius in final position

 $H_2 = *Mounting height$

*if the mounting bracket location is set lower

Other installation methods

Vertical, hanging ≤ 120 m Vertical, standing ≤ 6 m Side mounted, unsupp. ≤ 6 m Rotary requires further calculation Unsupported length of upper run = upon request





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.

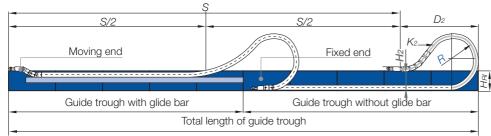
The required clearance height:

 $H_F = H + 100 \text{ mm}$

(with 5,0 kg/m fill weight)

Long travel lengths from 10 m to max. 450 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. 450 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.

Speed / acceleration FL _G	max. 20 [m/s] / max. 200 [m/s²]
Speed / acceleration FL_B	max. 3 [m/s] / max. 6 [m/s²]
Gliding speed / acceleration (maximum)	max. 10 [m/s] / max. 50 [m/s²]
Material - permitted temperature °C	igumid G / -40° up to +120° C
Flammability class, igumid G	VDE 0304 IIC UL94 HB

Technical Data







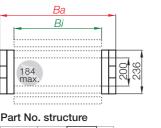
Details of material properties

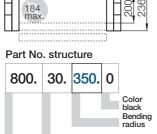
7.102



E4.1 | Series 800 | Product Range

Series 800 - E-Chain® with crossbars every link





Width Series



 E-Chains® of this size are basically used with crossbars every link

- Robust version
- Can be opened from two sides
- Removable crossbars



0.	Bi	Ba	Weight
	[mm]	[mm]	[kg/m]
)0	200	260	≈ 15,09
i0	250	310	≈ 15,50
)0	300	360	≈ 15,89
20	325	385	≈ 16,05
i0	350	410	≈ 16,22
)0	400	460	≈ 16,74
i0	450	510	≈ 16,88
)0	500	560	≈ 17,23
i0	550	610	≈ 17,63
)0	600	660	≈ 18,19
i	450 500 550	510 560 610	≈ 16,88 ≈ 17,23 ≈ 17,63

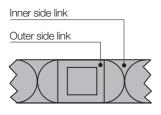
Available bending radii

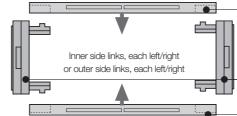
R [mm] 325 350 400 450 500 600 750 1000

Supplement Part No. with required radius. Example: 800.30. 350.0

0 = standard color, other colors ▶ page 1.39 · Pitch = 250 mm/link - Links/m = 4

Part No. E-Chain® links, single parts



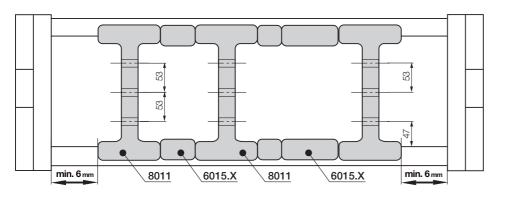


Single crossbar, E-Chain®, Part No. 850.Bi

Outer side link, single part Part No. 800.01 (suitable for all radii) Inner side link, single part Part No. 800.02

Single crossbar, E-Chain®, Part No. 850.Bi

E4.1 | Series 800 | Accessories | Interior Separation





Vertical separators are used if a vertical subdivision is required. In the standard configuration, a separator is mounted at every second E-Chain® link. **Note:** Observe a lateral spacing of at least 6 mm!

Vertical separators and spacers

Standard separator 8001 for E-Chains® offers safe stability due to its wide base design, also when used with thick cables or hoses.

● Separators (e.g. "side mounted") for E-Chains® can be fixed in their position with **spacers 6005.XX**. The available inner height will be reduced by 2 mm, per spacer and side. To avoid this, the parts can be assembled on outside of the crossbar (not for long travels) **XX** = width of the spacer (available 10, 15, 20 mm)



Vertical separator				
for E-Chains®				
unassembled	8001			
assembled	8011			



Spacer*

*For side-mounted applications

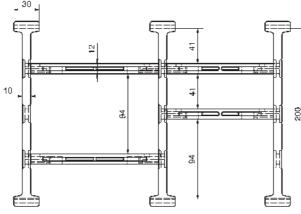


Vertical separator 8001



Modular E4 shelving system safeguides large cables - Series 800





- Easy assembly
- Robust, also for large cable diameters
- Modular
- Widths from 50 to 600 mm

Part No.	Part No.	Snap in tab	Part No.	Part No.	Width
unassembled	assembled		separator	crossbar	[mm]
8001H1	8011H1	single-sided	8001	450.XX	50-600
8001H2	8011H2	double-sided	8001	450.XX	50-600













Phone +49- (0) 22 03-96 49-800

igus[®] GmbH

(0) 22 03-96 49-222

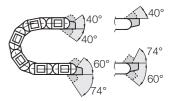
Further installation angles installation sketch

E4.1 | Series 800 | Accessories | Mounting Brackets, Steel

Option steel - pivoting

- For pivoting connections
- One part (two-piece) for all chain widths
- Electrically conductive

Moving end 8000.1

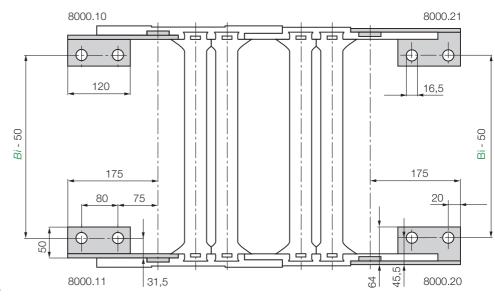


Fixed end 8000.2

Moving end

8000.1

Fixed end 8000.2



Note mounting brackets:

Depending on the E-Chain® length, the carrier will end with outer or inner side links. For the best appearance, make sure the chain ends with outer side link whenever possible. An odd number of links will always end with outer side links.

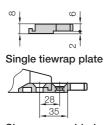
Part No. Mounting bracket 8000. 1.12 Full attachment set (both sides) for E-Chain®, ending with outer side link 8000.3.12 Full attachment set (both sides) for E-Chain®, beginning with outer side link (moving end), ending with inner side link (fixed end) 8000.1 Mounting bracket set moving end (one side) for outer side link

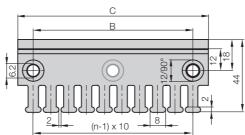
E4.1 | Series 800 | Accessories | Strain Relief

Mounting bracket set fixed end (one side) for inner side link

Tiewrap plate as individual part As individual component screwed on KMA. Can be plugged in the mounting brackets. **Details** chapter 10

8000.2





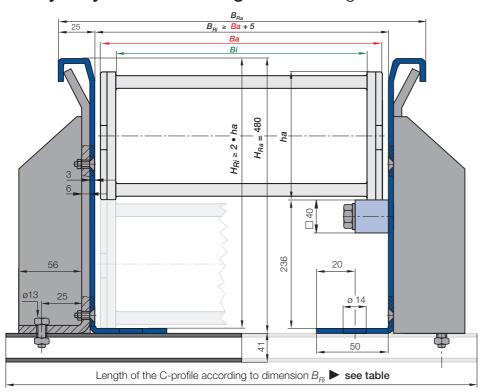
Tiewrap	No. of	Dim. C	Dim. B	Center
plate	teeth n	[mm]	[mm]	bore
3050.ZB	5	50	30	-
3075.ZB	7	75	55	-
3100.ZB	10	100	80	_
3115.ZB	11	115	95	-
3125.ZB	12	125	105	-
3150.ZB	15	150	130	_
3175.ZB	17	175	155	-
3200.ZB	20	200	180	+
3225.ZB	22	225	205	+
3250.ZB	25	250	230	+

Shown assembled

3D-CAD files, pdf-downloads and many online features ▶ www.igus.de/en/800

Heavy-Duty Steel Guide Troughs | With strengthened installation angle





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

- Guide trough without glide bars Part No. 90.30
- Guide trough with glide bars Part No. 90.31
- Installation sets as end connectors Part No. 90.50.XX

.XX indicates the length of the C-profile on which the guide trough is mounted. The values and part numbers are specified in the table on the left. Standard length of the trough components and glide bars is 2 m. The required overall length of the guide trough directly correlates to the length of travel. Special dimensions are available for confined spaces.

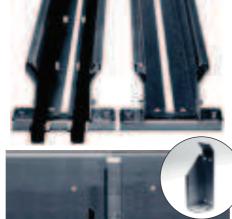


Illustration top: Guide trough with and without glide bar. Illustration bottom: assembly kit with specially strengthened installation angle bracket for 90.30 and 90.31

Ba = Outer width E-Chains® / E-Tube

=Inner width E-Chains® / E-Tube

=Outer height E-Chains® / E-Tube

 H_{Ri} = Inner trough height

=Outer trough height

B_{Ri} = Inner trough width ▶ depends on dim. Ba

B_{Ra} = Outer trough width

n_{Mon}=Number of installation sets (left/right)

 n_{Ri} = Number of trough sets (left/right)

 $H_{Ri} \ge 2 \bullet ha$ $B_{Ri} \ge Ba + 5$

= Guide trough set

= Glide bar

= Installation set

= C-profile

Installation set with C-profile

800.<u>20</u>.325.0 ► Order example

		Part No.
	B_{Ri}	Installation set
.20	265	90.50.450
.25	315	90.50.500
.30	365	90.50.550
.32	390	90.50.575
.35	415	90.50.600
.40	465	90.50.650
.45	515	90.50.700
.50	565	90.50.750
.55	615	90.50.800
.60	665	90.50.850

Phone +49- (0) 22 03-96 49-800

22 03-96 49-222

0

Fax









chapter



Order example: Length of travel 30 m -Center mounted for Series 800.20.325.0 with $B_{Ri} = 265$ Guide trough set (set of 2 trough side parts, incl. glide strips) without glide bar

Order text: 16 m Guide trough without glide bar (8 x 2 m sections) Part No. 90.30 Guide trough set (set of 2 trough side parts, incl. glide strips) with glide bar

Part No. 90.31 Order text: 16 m Guide trough with glide bar (8 x 2 m sections)

Installation set "Basic" complete (Guide trough-sets + 1)

Part No. 90.50.450 Order text: 17 Installation sets (with C-profile)

Principle sketch: Number of installation sets to be installed = Number of trough sections + 1

