



chainfix

Strain Relief



igus® chainfix strain relief. Flexible and fast assembled.

Strain relief from igus® specifically developed for use in e-chains® and dynamic applications. The combination of chainflex® cable materials in contact with the polymer strain relief components of igus® chainfix are designed for high durability of the cables and maximum holding power. For a wide variety of applications igus® is the best solution in terms of costs and benefits, such as the best chainfix strain relief for long travels or rough use or chainfix Nuggets, for simple and inexpensive strain relief solutions. igus® chainfix strain relief components are under practical for the use by customers around the world.



Available from stock. Delivery in 24h or today!*

*Delivery time means time until shipping of goods



Clamps and stainless steel clamps - for maximum pull forces ► from page 10.8



Clamps and bottom saddle elements, chainfix Multi-Clamps	ø [mm]	page
CFX* Single, double, triple standard clamps	6-42	10.10
CFXL* Single, double, triple clamps with wide base for maximum pull forces	6-42	10.11
Saddle elements - bottom and stacker saddles	6-42	10.12
chainfix Multi-Clamps*	6-12	10.13

C-profiles ► page 10.14



Standard C-profiles and C-profiles for Heavy-Duty applications	page
Standard C-profiles Part No. CF.92.42. (to be integrated into KMA!)	10.14
C-profiles Part No. CF.92.52. with increased pull force (mounting in front of e-chain®)	10.14

Tiewrap plates - for universal tiewrap, bolted or clip-on ► from page 10.16



chainfix tiewrap plates	ø [mm]	page
Option 1A: Tiewrap plates as single part "Series 2000" + cable tiewraps	max.36	10.16
Option 1B: Tiewrap plates as single part "Series 3000" + cable tiewraps	max.36	10.17
Cable tiewraps as single part		10.16

Tiewrap plates, with clip-on connection for the C-profile ► from page 10.18



chainfix tiewrap plates	page
Option 2: Tiewrap plates with clip-on connection for the C-profile	10.18
Option 3: Integrated strain relief for E2 e-tubes - Series R	10.18
Option 4: Tiewrap plates for fixed crossbars	10.19
Option 5: Tiewrap plates for opening crossbars	10.19

Clips - high pull forces, plug-in ► from page 10.20



chainfix Clips	ø [mm]	page
Option 1: for all e-chains® with C-profiles and also suitable for assembly in the KMA mounting brackets	4-24	10.20
Option 2: Clip-on strain relief for opening crossbars	4-24	10.21

Strain relief separators - with integrated teeth ► from page 10.22



chainfix strain relief separator	ø [mm]	page
Separator with integrated strain relief -		
easy strain relief with tiewrap	20-30	10.22

Nuggets - for top hat rail and C-profile ► page 10.24



chainfix Nuggets	ø [mm]	page
Option 1: completely simple and universal cable fixation, for diameter with Ø 20 mm and Ø 30 mm	≤ 30	10.24
Option 2: Fastening through clipping onto standard top hat rail	≤ 20	10.24

Blocks - Special strain relief for hoses ► from page 10.25



Blocks	ø [mm]	page
Conventional igus® blocks - strain relief for hoses	4,3-14	10.25
CFB polymer strain relief connector system, many cables in a very confined space		10.26

chainfix | Select your strain relief system

e-chain® Series	Clamps ¹⁾		Clip C-profile ¹⁾	chainfix Clip crossbars ¹⁾	Nugget ¹⁾	Strain relief separator ²⁾
	CFX	CFXL**				
triflex®						
easy triflex®						
triflex®						
easy chain®						
E/Z200						
E/Z26						
E/Z300						
E2/000						
1400/1500		X				NEW! 21.1.Z
1450/1480		X				
2400/2500		X				2020.Z
2450/2480		X				2020.ZR
2600/2700	X	X	X		X	262.Z
2650/2680	X	X	X		X	
3400/3500	X	X	X		X	301.Z
3450/3480	X	X	X		X	34501.Z
255						
E2						
R117/118		X				
R157/158		X				1585.01.Z
R167/168		X				1685.01.Z
R48		X				481.ZR
R58		X				
R68		X				
E4.1						
E4.21		X				T2103.Z
E4.28/R4.28		X				upon request
E4.32/H4.32/R4.32	X	X	X		X	
E4.42/H4.42/R4.42	X	X	X		X	
E4.56/H4.56/R4.56	X	X	X	X	X	
E4.80/H4.80/R4.80	X	X	X	X	X	
1640/R1608	X	X		X		
800	X	X				
840		X		X		
E4/00						
210		X				T2103.Z
220/R760		X				
280/290/R770	X	X	X		X	
380/390/R780	X	X	X		X	
400/410/R880	X	X	X	X	X	
600/601/R608	X	X		X		
640	X	X		X		
E4/4						
2828/2928/R7728	X	X	X		X	
3838/3938/R7838	X	X	X		X	
4040/4140/R8840	X	X	X	X	X	
5050/5150/R9850	X	X	X	X	X	
E4/light						
14040/14140/18840	X	X	X	X	X	
14240/14340	X	X	X		X	
14550/14650/19050	X	X	X	X	X	
15050/15150/19850	X	X	X	X		
15250/15350	X	X	X			
E6						
E6.29		X				E6.29.02.Z
R6.29		X				
E6.35		X				E6.35.02.Z
E6.40	X	X	X		X	E6.40.02.Z
E6.52	X	X	X		X	
R6.52	X	X	X		X	
E6.62	X	X	X		X	
E6.80L	X	X	X	X	X	
E6.80	X	X	X	X	X	

**CFXL-clamps must be assembled in front of the e-chain® - Not to be integrated in KMA

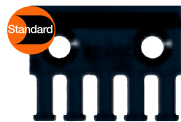
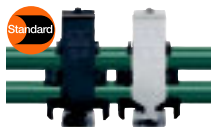
chainfix | Select your strain relief system

chainfix tiwrap plates						
Single part 2000 ²⁾	Single part 3000 ²⁾	Clip-on for C-profile ²⁾	Fixed crossbar ²⁾	Cross- bar ²⁾	For triflex ²⁾	For E2 e-tube ²⁾
					E33X.XX.2 33X.XX	
20XX.ZB	30XX.ZB 30XX.ZB		2050.Z			
20XX.ZB 20XX.ZB 20XX.ZB 20XX.ZB			2050.Z			
	30XX.ZB 30XX.ZB 30XX.ZB 30XX.ZB	30XX.ZC 30XX.ZC 30XX.ZC 30XX.ZC	2050.Z	2050.Z 2050.Z* 30XX.ZS 30XX.ZS*		
20XX.ZB						
20XX.ZB						
20XX.ZB						5850.Z 30XX.Z
20XX.ZB	30XX.ZB 30XX.ZB 30XX.ZB 30XX.ZB 30XX.ZB 30XX.ZB 30XX.ZB	30XX.ZC 30XX.ZC 30XX.ZC 30XX.ZC		2050.Z 3850.ZS 3850.ZS 45XX.ZS 45XX.ZS 45XX.ZS		
20XX.ZB	30XX.ZB 30XX.ZB 30XX.ZB 30XX.ZB 30XX.ZB	30XX.ZC 30XX.ZC 30XX.ZC		2050.Z 3850.ZS 3850.ZS 45XX.ZS		
	30XX.ZB 30XX.ZB 30XX.ZB 30XX.ZB	30XX.ZC 30XX.ZC 30XX.ZC 30XX.ZC		3850.ZS 3850.ZS 45XX.ZS 45XX.ZS		
	30XX.ZB 30XX.ZB 30XX.ZB 30XX.ZB 30XX.ZB 30XX.ZB 30XX.ZB 30XX.ZB	30XX.ZC 30XX.ZC 30XX.ZC 30XX.ZC		45XX.ZS 3850.ZS 45XX.ZS 45XX.ZS 45XX.ZS 3850.ZS		
20XX.ZB 20XX.ZB 20XX.ZB	30XX.ZB 30XX.ZB 30XX.ZB 30XX.ZB	30XX.ZC 30XX.ZC 30XX.ZC 30XX.ZC		3850.ZS		
	30XX.ZB 30XX.ZB 30XX.ZB 30XX.ZB	30XX.ZC 30XX.ZC 30XX.ZC 30XX.ZC		3850.ZS 45XX.ZS 45XX.ZS 45XX.ZS		

■ = Recommended strain relief for selected e-chain®
 *Half e-tube only

¹⁾ you'll find on subsequent page
²⁾ you'll find on the product page of each e-chain® Series

igus® chainfix strain relief system



Parameters	CFX clamps	Tiewrap plates bolted, clip-on
Recommended standard for the following e-chains®:	E4, E6, for all KMA* with C-profile *Polymer Metal Mounting Bracket	easy chain®, E2/000, E2 e-tubes, E4, E6
When to take this igus® strain relief system:	Standard for high accelerations, loads and demanding applications. For many cables, large-diameter cables, and cables on top of each other. For long travels, cranes, offshore, machine tools, high speed, hydraulic lines. If modularity is required.	Standard for many applications with medium acceleration. For unsupported, gliding, hanging and standing applications in general machinery and machine tools. In cables next to each other. Also available as single parts, for example for cabinets, etc.
When not to take it:	No limitation	For large cable diameters
Characteristic features		
Index assembly time	+	+
Customizable traction	++	-
Price Index	●●●	●●●
Modularity	yes	yes
Dynamics	high - very high	high
Traction determine ¹⁾ in N with chainflex®-cables under different conditions		Cable tiewraps
		single double
Dry, PUR	1023	94 165
Dry, PVC	891	455 601
Dry, TPE	1580	97 224
Water ²⁾, PUR	947	65 150
Water ²⁾, PVC	917	447 528
Water ²⁾, TPE	1283	94 123
Oil ³⁾, PUR	500	96 137
Oil ³⁾, PVC	874	393 627
Oil ³⁾, TPE	1044	64 87

1) Tested with igus® chainflex® cables in the sheathing materials PVC (CF7.15.12), PUR (CF5.05.25), TPE (CF9.10.25) and Ø 15 mm

2) Water, 60°C, 24h climate cabinet at 90% RF

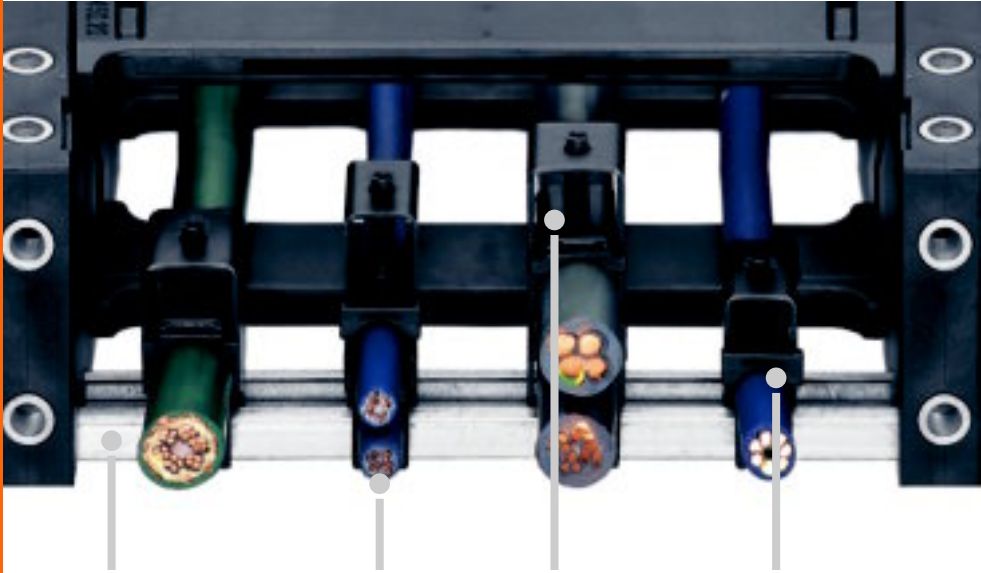
3) Cables coated with oil. Oil type synthetic lubricant with Teflon.

			
Clips for C-profiles or stackable	Nuggets top hat rails	Strain relief separators	CFB Strain relief connector system
E4, E6, for all KMA* with C-profile *Polymer Metal Mounting Bracket	For all KMA* with C-profiles, top hat rails *Polymer Metal Mounting Bracket	E2/000, E2 e-tubes, E6, T3	E4, E6, for all KMA* with C-profile *Polymer Metal Mounting Bracket
Cost-effective, space-saving strain relief for many applications with medium acceleration. For cables over one another or cables with identical diameters.	Low cost, fast strain relief for ease of use with minimal space requirements at medium acceleration. Also available as single parts for rigid linings, such as in cabinets, etc.	Combination of separator and strain relief, ideal for limited space. For applications with medium acceleration. For smaller cable diameter. Ideal for e-tubes. For machine tools and automation.	Space-saving, modular grip with many cables in a confined space. For example, applications with high accelerations and loads, e.g. machine tools.
At high loads	At high loads	At high loads	No limitation
+ -	+ -	+	+ -
+ -	-	-	+
●●●	●●●	●●●	●●●
yes	yes	yes	yes (special fabrication)
medium	high	high	high - very high
		Cable tiewraps single double	
66	356	109 128	573
72	395	339 289	330
103	286	64 82	285
51	255	65 139	245
55	312	136 151	233
86	170	48 98	177
45	95	19 89	203
59	402	146 315	223
63	87	77 33	165

Price Index
●●● low category
●●● medium category
●●● high category

+ + = best suitability
+ = good suitability
+ - = suitable
- = conditionally suitable

All clamps were tightened to 1 Nm.
Cable tiewraps tightened by hand.



To be integrated into
KMA mounting bracket

For up to three cables
over one another

Reduced installation
height, space saving

Excellent durability for
dynamic applications

chainfix clamps - more secure, faster assembled

- Integration with KMA mounting brackets and C-profile host-option
- Easy to read the Part no. and lateral marking of the correct installation direction
- Reduced installation height due to optimal housing height (compared to conventional clamps up to 15 mm)
- Space- and time-saving assembly
- Delivery options for complete systems with cables and preassembled strain relief
- Improved base for easy fit on the C-profile
- Setscrews, tightened with Allen wrench, for easy installation
- Durability for dynamic applications through improved stacker elements: optimized stacker saddles, captive by retaining lugs
- The long contact surface of the stacker elements improves the clamp's stability
- The high rigidity of the stacker elements significantly increases the reliability
- Built-in ribs to the stacker elements - no disconnection of cables from the strain relief
- Optional: CFXL clamps with increased holding power for Heavy-Duty applications (CFXL are always assembled in front of the e-chain® - Not be integrated into KMA mounting brackets with C-profile-host option!)



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Product range and materials

- Steel clamp: clamp and screw black painted steel
- Stainless steel clamp: clamp and screw: blank (material 1.4301)
- Stacker elements: bottom saddle and stacker saddle (material igumid G)
- C-profiles: steel (material galvanized steel) or stainless steel (material 1.4301) available

Installation Height

If the e-chain® glides on itself for long travels, the screw heads of the strain relief at the fixed end of the e-chain® must have a distance of at least 10 mm from the top of the e-chain®. This restriction has the consequence that the strain relief elements described herein may not be used at the fixed end of long e-chains®. For unsupported e-chains® strain relief elements can be safely used.



Please note

- In the ideal case the cables are attached to both ends of the e-chain®. They definitely need to be attached at the moving end of the e-chain®!
- When using chainfix clamps on C-profiles in the mounting bracket for the Series: E4.32/H4.32/R4.32, 280/290/ R770, 2828/2928/R7728, 28/29/R77, a shortened bottom saddle must be used. For shortened bottom saddles supplement Part No. with index "K" = Example: **Part No. CFX12.1K**



CFX - chainfix housing with reduced height



KMA mounting bracket with integrated C-profile and chainfix clamps



Saves both time and space during installation of igus® chainfix clamps



For the following igus® Series

E2/000

- E4.42/H4.42/R4.42
- 2600/2650/2680/2700

E4.1

- E4.32/H4.32/R4.32
- E4.42/H4.42/R4.42
- E4.56/H4.56/R4.56
- E4.80/H4.80/R4.80

E4/light

- 14040/14140/18840
- 14240/14340
- 14550/14650/19050
- 15050/15150/19850
- 15250/15350

E4/00

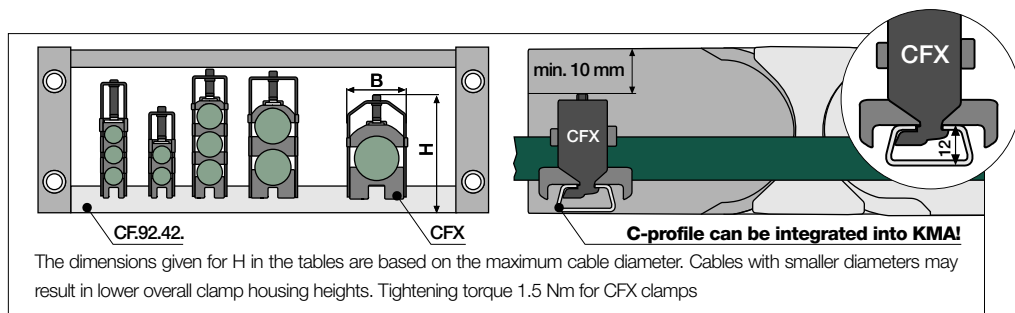
- 280/290/R770
- 380/390/R780
- 400/410/R880

E4/4

- 2828/2928/R7728
- 3838/3938/R7838
- 4040/4140/R8840
- 5050/5150/R9850

E6

- E6.40
- E6.52 / R6.52
- E6.62
- E6.80L
- E6.80



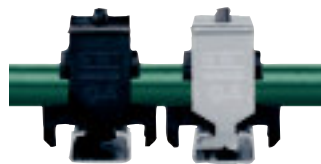
CFX | Standard clamps with standard base

Suitable for C-profiles CF.92.42.XX - Can be integrated into KMA with C-profile host-option!

CFX - Single clamp housing, incl. bottom saddles

Part No.	Part No.	ø	B ⁺²	H	Part No.	Part No.	ø	B ⁺²	H
Steel	Stainless steel*	[mm]	[mm]	[mm]	steel	Stainless steel*	[mm]	[mm]	[mm]
CFX12.1	CFX12.1.E	06 - 12	16	54	CFX26.1	CFX26.1.E	22 - 26	30	67
CFX14.1	CFX14.1.E	12 - 14	18	50	CFX30.1	CFX30.1.E	26 - 30	34	71
CFX16.1	CFX16.1.E	14 - 16	20	52	CFX34.1	CFX34.1.E	30 - 34	38	75
CFX18.1	CFX18.1.E	16 - 18	22	54	CFX38.1	CFX38.1.E	34 - 38	42	79
CFX20.1	CFX20.1.E	18 - 20	24	56	CFX42.1	CFX42.1.E	38 - 42	46	83
CFX22.1	CFX22.1.E	20 - 22	26	58					

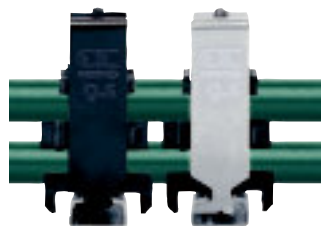
*Material stainless steel: 1.4301



CFX - Double clamp housing, incl. bottom and stacker saddles

Part No.	Part No.	ø	B ⁺²	H	Part No.	Part No.	ø	B ⁺²	H
Steel	Stainless steel*	[mm]	[mm]	[mm]	steel	Stainless steel*	[mm]	[mm]	[mm]
CFX12.2	CFX12.2.E	06 - 12	16	72	CFX22.2	CFX22.2.E	20 - 22	26	90
CFX14.2	CFX14.2.E	12 - 14	18	74	CFX26.2	CFX26.2.E	22 - 26	30	109
CFX16.2	CFX16.2.E	14 - 16	20	78	CFX30.2	CFX30.2.E	26 - 30	34	117
CFX18.2	CFX18.2.E	16 - 18	22	82	CFX34.2	CFX34.2.E	30 - 34	38	125
CFX20.2	CFX20.2.E	18 - 20	24	86					

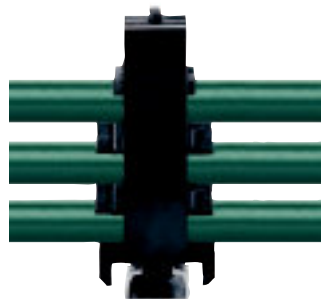
*Material stainless steel: 1.4301



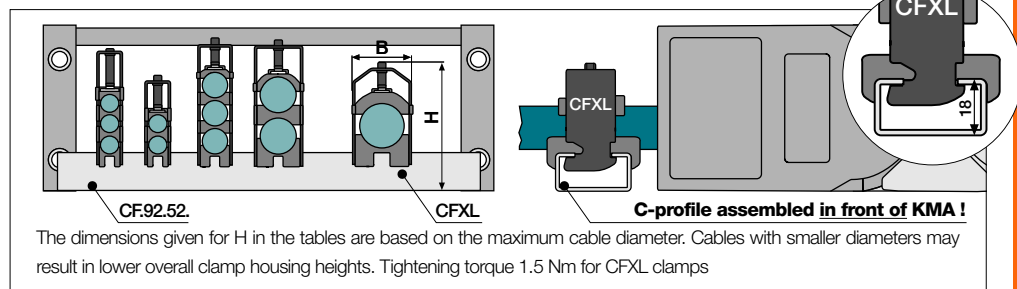
CFX - Triple clamp housing, incl. bottom and stacker saddles

Part No.	Part No.	ø	B ⁺²	H	Part No.	Part No.	ø	B ⁺²	H
Steel	Stainless steel*	[mm]	[mm]	[mm]	steel	Stainless steel*	[mm]	[mm]	[mm]
CFX12.3	-	06 - 12	16	100	CFX18.3	-	16 - 18	22	108
CFX14.3	-	12 - 14	18	96	CFX20.3	-	18 - 20	24	114
CFX16.3	-	14 - 16	20	102	CFX22.3	-	20 - 22	26	120

*Material stainless steel: 1.4301



Suitable C-profiles for CFX clamps Part No. **CF.92.42.** ► page 10.14

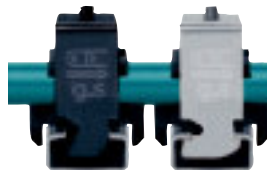
NEW in this catalog


CFXL I clamps with wide base for increased holding power

Suitable for C-profiles CF.92.52.XX - C-profile assembled in front of KMA ! - NO integration!

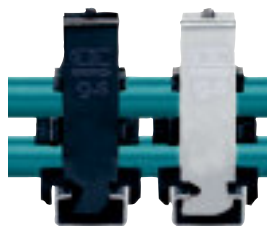
CFXL - Single clamp housing, incl. bottom saddles

Part No.	Part No.	ø	B ^{±2}	H	Part No.	Part No.	ø	B ^{±2}	H
Steel	Stainless steel*	[mm]	[mm]	[mm]	steel	Stainless steel*	[mm]	[mm]	[mm]
CFXL12.1	CFXL12.1.E	06 - 12	16	60	CFXL26.1	CFXL26.1.E	22 - 26	30	73
CFXL14.1	CFXL14.1.E	12 - 14	18	56	CFXL30.1	CFXL30.1.E	26 - 30	34	77
CFXL16.1	CFXL16.1.E	14 - 16	20	58	CFXL34.1	CFXL34.1.E	30 - 34	38	81
CFXL18.1	CFXL18.1.E	16 - 18	22	60	CFXL38.1	CFXL38.1.E	34 - 38	42	85
CFXL20.1	CFXL20.1.E	18 - 20	24	62	CFXL42.1	CFXL42.1.E	38 - 42	46	89
CFXL22.1	CFXL22.1.E	20 - 22	26	64	*Material stainless steel: 1.4301				



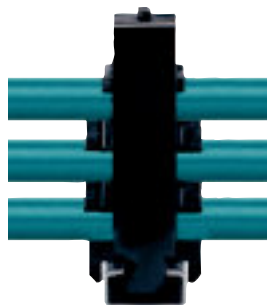
CFXL - Double clamp housing, incl. bottom and stacker saddles

Part No.	Part No.	ø	B ^{±2}	H	Part No.	Part No.	ø	B ^{±2}	H
Steel	Stainless steel*	[mm]	[mm]	[mm]	steel	Stainless steel*	[mm]	[mm]	[mm]
CFXL12.2	CFXL12.2.E	06 - 12	16	78	CFXL22.2	CFXL22.2.E	20 - 22	26	86
CFXL14.2	CFXL14.2.E	12 - 14	18	80	CFXL26.2	CFXL26.2.E	22 - 26	30	115
CFXL16.2	CFXL16.2.E	14 - 16	20	84	CFXL30.2	CFXL30.2.E	26 - 30	34	123
CFXL18.2	CFXL18.2.E	16 - 18	22	86	CFXL34.2	CFXL34.2.E	30 - 34	38	131
CFXL20.2	CFXL20.2.E	18 - 20	24	92	*Material stainless steel: 1.4301				



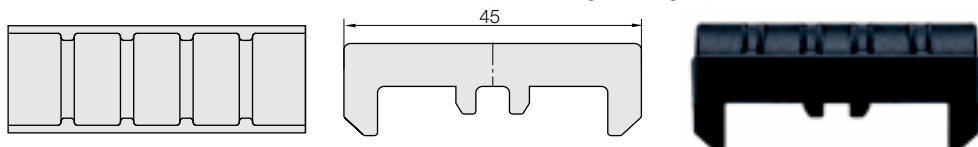
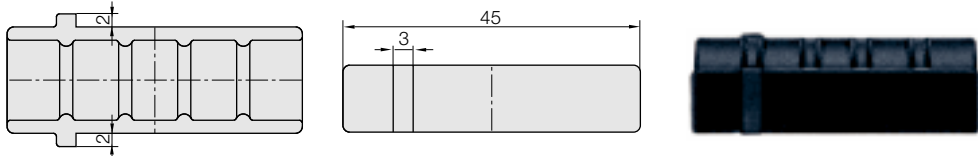
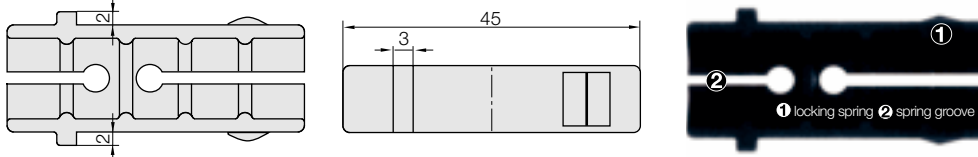
CFXL - Triple clamp housing, incl. bottom and stacker saddles

Part No.	Part No.	ø	B ^{±2}	H	Part No.	Part No.	ø	B ^{±2}	H
Steel	Stainless steel*	[mm]	[mm]	[mm]	steel	Stainless steel*	[mm]	[mm]	[mm]
CFXL12.3	-	06 - 12	16	106	CFXL18.3	-	16 - 18	22	114
CFXL14.3	-	12 - 14	18	102	CFXL20.3	-	18 - 20	24	120
CFXL16.3	-	14 - 16	20	108	CFXL22.3	-	20 - 22	26	126
					*Material stainless steel: 1.4301				


Suitable C-profiles for CFXL clamps Part No. **CF.92.52.** ► page 10.14

Characteristics of igus® chainfix clamps - stacker elements

- Built-in ribs for security of cables in the strain relief
- Optimized stacker saddles, captivated by ① locking spring and with ② spring groove for a simplified and precise installation
- Conventional stacker saddles
- Long contact surface improves the clamp's stability
- More secure due to high stiffness
- Suitable for CFX- and CFXL-clamps

**CGXX** | Bottom saddles to slide into the clamp housing as single part**CDXX** | Conventional stacker saddles for all for all double and triple clamps as single part**NEW** in this catalog**CD.XX.C** | Optimized stacker saddles for all double and triple clamps as single part

Part No. clamp	Part No. bottom saddle	CDXX stacker saddle	CD.XX.C stacker saddle	Cable Ø [mm]	Part No. clamp	Part No. bottom saddle	CDXX stacker saddle	CD.XX.C stacker saddle	Cable Ø [mm]
CFX/CFXL12.1	CG12	CD12	CD.12.C*	06 - 12	CFX/CFXL26.1	CG26	CD26	CD.26.C*	22 - 26
CFX/CFXL14.1	CG14	CD14	CD.14.C*	12 - 14	CFX/CFXL30.1	CG30	CD30	CD.30.C*	26 - 30
CFX/CFXL16.1	CG16	CD16	CD.16.C*	14 - 16	CFX/CFXL34.1	CG34	CD34	CD.34.C*	30 - 34
CFX/CFXL18.1	CG18	CD18	CD.18.C	16 - 18	CFX/CFXL38.1	CG38	—	—	34 - 38
CFX/CFXL20.1	CG20	CD20	CD.20.C*	18 - 20	CFX/CFXL42.1	CG42	—	—	38 - 42
CFX/CFXL22.1	CG22	CD22	CD.22.C*	20 - 22	*upon request, from summer 2011				

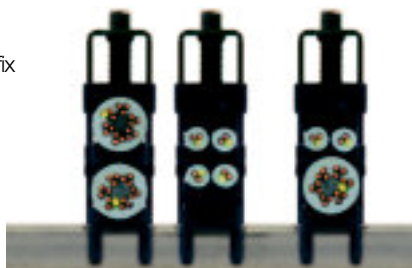


Please note: When using chainfix clamps on C-profile in the mounting bracket for Series E4.32/H4.32/R4.32, 280/290/ R770, 2828/2928/R7728, 28/29/R77 a shortened bottom saddle has to be used.

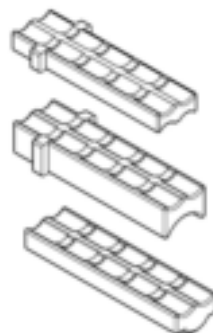
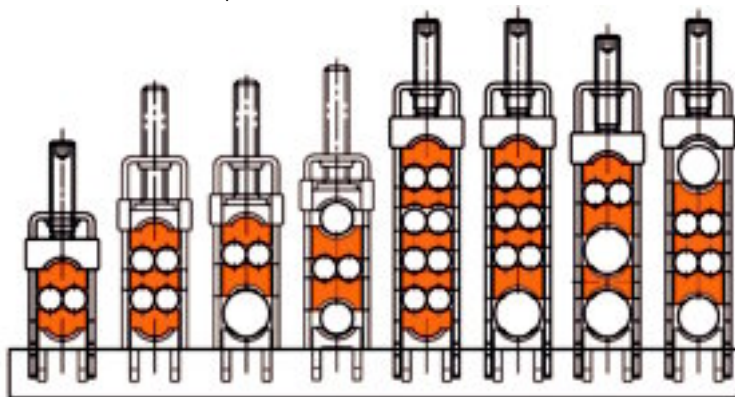
The Part No. for this is "K" = example: **Part No. CFX12.1K**

Characteristics of igus® chainfix Multi-Clamps

- Now more flexible mounting options of the proven chainfix strain relief elements with more components
- Universal strain relief - various assembly options
- Saves both time and space during installation
- Compact and modular
- For small outer diameters
- Cost-effective



CFX12 | Multi-Clamps, universal strain relief



Universal bottom and
stacker saddles

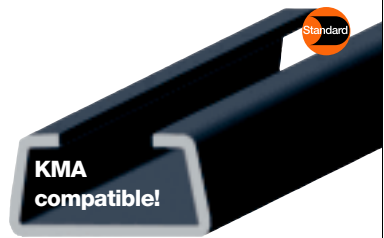
Part No. Series	Part No. stacker saddles - single parts				For cables Ø max. [mm]
					
CFX12.1.Z1	X (2-piece)	–	–	–	6
CFX12.2.Z1	X (2-piece)	X (1-piece)	–	–	6
CFX12.2.Z2	X (1-piece)	–	X (1-piece)	–	6 + 12
CFX12.2.Z3	–	–	X (2-piece)	–	6 + 8
CFX12.3.Z1	X (2-piece)	X (3-piece)	–	–	6
CFX12.3.Z2	X (1-piece)	X (2-piece)	X (1-piece)	–	6 + 12
CFX12.3.Z3	X (1-piece)	–	X (1-piece)	X (1-piece)	6 + 12
CFX12.3.Z4	–	X (1-piece)	X (2-piece)	–	6 + 10

Standard material: galvanized steel. For the stainless steel version (material 1.4301)

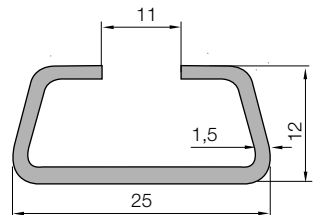
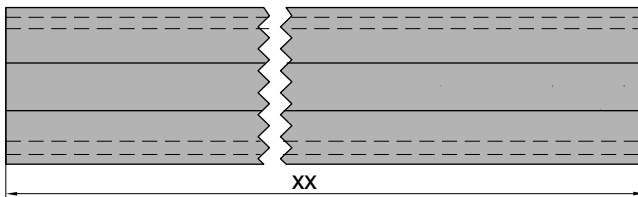
supplement Part No. with Index "**E**" = example: **Part No. CFX.12.3.Z1.E**

Standard C-profiles Part No. CF.92.42.XX

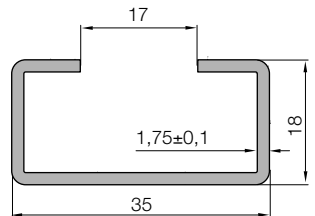
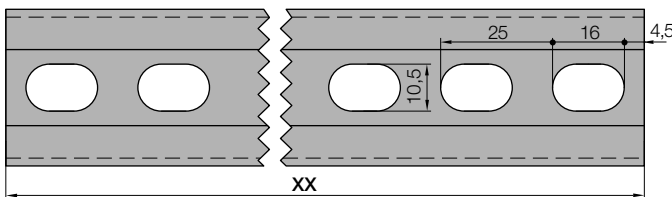
- For all igus® CFX clamps und KMA-mounting brackets with C-profile host-option
- Standard material: galvanized steel
- **Part No. CF.92.42.XX** (XX - length in mm)
- Also available as stainless steel version (Material stainless steel: 1.4301) please add Index **.E**, example: **Part No. CF.92.42.XX.E**
- Length tolerances of ± 1 mm possible!

**Standard C-profile Part No. CF.92.42.** | For conventional applications

Can be integrated into KMA with C-profile host-option!

**Optional | For Heavy-Duty applications****C-profiles Part No. CF.92.52.XX**

- For all igus® CFXL clamps
- With increased holding power - even for harsh applications
- Standard material: galvanized steel
- **Part No. CF.92.52.XX** (XX - length in mm)
- Also available as stainless steel version (Material stainless steel: 1.4301) please add Index **.E**, example: **Part No. CF.92.52.XX.E**
- Length tolerances of ± 5 mm possible!

**C-profile Part No. CF.92.52.** | With increased holding power for harsh conditionsAssembly in front of the e-chain® - NO integration into KMA!**Available from stock. Delivery in 24h or today!***

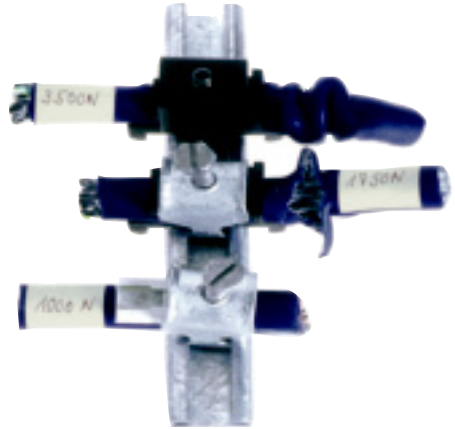
*Delivery time means time until shipping of goods



igus® tensile strength test with CFX clamps

igus® strain relief devices are tested under practical conditions, taking various parameters into account

Whether under the influence of fluids like water or oil, or at different ambient temperatures. The interaction of chainfix systems with different sheath materials of cables and hoses of course plays a big role in the in-house tests. Detailed information about these tests: **chainfix strain relief parameter overview ► page 10.6/10.7**



igus® test: Comparison of three different strain reliefs - Result: Triple tensile strength of igus® chainfix clamps in comparison with conventional products.



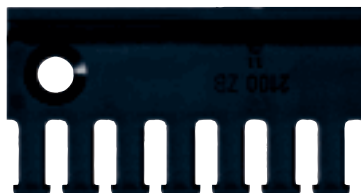
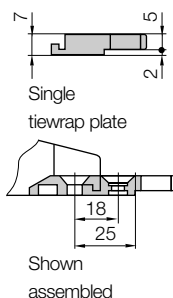
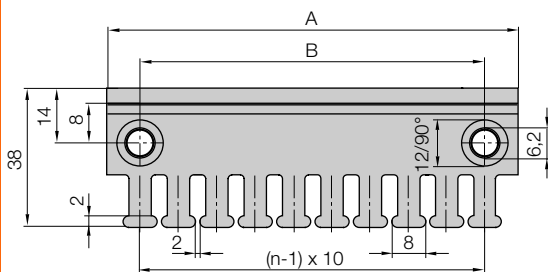
Tensile strength tests with chainflex® cables



Tensile strength tests of igus® clamps with cable tie wraps

Characteristics of igus® chainfix tiewrap plate Series 2000**Option 1A: Tiewrap plate as single part**

- Available as individual component
- Screwed on KMA* with C-profile (*polymer metal mounting bracket)
- Can be stacked onto the mounting bracket
- Single part for the manufacturing of switchgear cabinets or for the assembly of machines
- Accessory for igus® e-chainsystems®

**Series 2000 | Tiewrap plate as single part**

Tiewrap plate	n Number of teeth	Dim. A [mm]	Dim. B [mm]	Dim. C [mm]	Center bore - = no / + = yes
2020.ZB	3	30	15	–	–
2030.ZB	4	40	20	–	–
2040.ZB	5	50	30	–	–
2050.ZB	6	60	40	–	–
2070.ZB	8	80	60	–	–
2090.ZB (= 2030.ZB + 2040.ZB)	9	90	–	–	–
2100.ZB	10	100	80	–	–
2125.ZB (= 2050.ZB + 2050.ZB)	12	120	–	–	–

For the following igus® Series
easy chain®

- E200/Z200

E2/000

- 1400/1500/1450/1480
- 2400/2500/2450/2480
- 255

E2 e-tubes

- R117/R118
- R48

E4.1

- E4.28

E4/00

- 220 (2050.Z)

E6

- E6.29/R6.29
- E6.35
- E6.40

Cable tiewraps as single part

Cable tiewraps (100-piece bag)	Width x length [mm]	Maximum Ø	Pull force resistance [N]
CFB.001	4,8 x 150	36	222 N

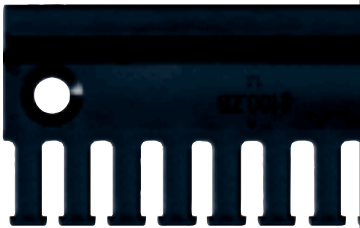
**Available from stock. Delivery in 24h or today!***

*Delivery time means time until shipping of goods

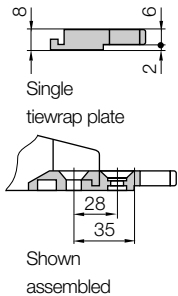
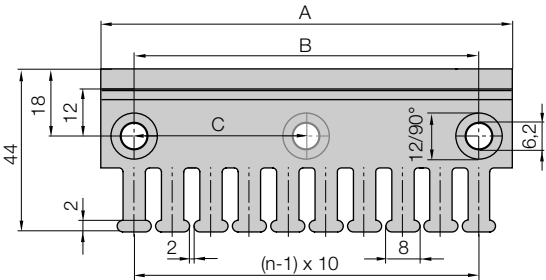
Characteristics of igus® chainfix tiewrap plate Series 3000

Option 1B: Tiewrap plate as single part

- Available as individual component
- Screwed on KMA* with C-profile (*polymer metal mounting bracket)
- Can be stacked onto the mounting bracket
- Single part for the manufacturing of switchgear cabinets or for the assembly of machines
- Accessory for igus® e-chainsystems®



Series 3000 | Tiewrap plate as single part



Tiewrap plate	n Number of teeth	Dim. A [mm]	Dim. B [mm]	Dim. C [mm]	Center bore -- no / + = yes
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	90	+
3225.ZB	22	225	205	102,5	+
3250.ZB	25	250	230	115	+

Cable tiewraps as single part

Cable tiewraps (100-piece bag)	Width x length [mm]	Maximum Ø	Pull force resistance [N]
CFB.001	4,8 x 150	36	222 N



For the following

igus® Series

easy chain®

- E26/Z26
- E300/Z300

E2/000

- 2600/2700/2650/2680
- 3400/3500/3450/3480

E4.1

- E4.32/H4.32/R4.32
- E4.42/H4.42/R4.42
- E4.56/H4.56/R4.56
- E4.80/H4.80/R4.80
- 1640

- 800

- 840

E4/light

- 14040/14140/18840
- 14240/14340
- 14550/14650/19050
- 15050/15150/19850
- 15250/15350

E4/00

- 280/290/R770
- 380/390/R780
- 400/410/R880
- 600/601/R608

- 640

E4/4

- 2828/2928/R7728
- 3838/3938/R7828
- 4040/4140/R8840
- 5050/5150/R9850

E6

- E6.52/R6.52
- E6.62
- E6.80L / E6.80

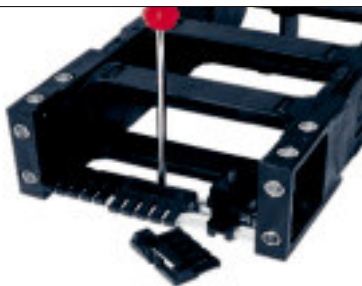


Available from stock. Delivery in 24h or today!*

*Delivery time means time until shipping of goods

Characteristics of igus® chainfix tiewrap plates**Option 2: With clip-on connection for the C-profile**

- Can be plugged into the KMA C-profile
- Easy to assemble without any screws
- Easy to remove with screwdriver nevertheless safe stop
- Single part for the manufacturing of switchgear cabinets or for the assembly of machines
- Accessory for igus® e-chainsystems®

**Option 2** | Tiewrap plate with clip-on connection for C-profile

For all mounting brackets with C-profile connectivity!

Part No.	Width [mm]	Number of teeth
3050.ZC	50	5
3075.ZC	75	7

Characteristics of igus® chainfix tiewrap plates**Option 3: integrated strain relief for E2 e-tubes - Series R**

- Strain relief disappears completely in the e-tube
- Easy to assemble without any screws
- Single part for the manufacturing of switchgear cabinets or for the assembly of machines
- Accessory for igus® e-chainsystems®

**Option 3** | Tiewrap plate for E2 e-tubes of Series R

For the following igus® Series
► see table

Part No.	Width [mm]	Number of teeth	For Series
3050.Z	50	5	R68
3075.Z	75	7	R68
5850.Z	46	4	R58



Available from stock. Delivery in 24h or today!*

*Delivery time means time until shipping of goods

Characteristics of igus® chainfix tiewrap plates**Option 4: for fixed crossbars Option 5: For opening crossbars**

- Can be plugged on fixed and opening crossbars
- In case of many harnessed cables
- Strain relief "over two floors"
- If the KMA is too small for the C-profile
- Easy to assemble without any screws
- Accessory for igus® e-chainsystems®

**Option 4** | Tiewrap plate for fixed crossbars

For the following
igus® Series
► see table

Part No.	Width [mm]	Number of teeth	For Series
2050.Z	60	6	E/Z200, 2400/2500, 2600/2700
3050.Z	50	5	3400/3500
3075.Z	74	7	3400/3500

Option 5 | Tiewrap plate for opening crossbars

For the following
igus® Series
► see table

Part No.	Width [mm]	Number of teeth	For Series
2050.Z	60	6	E4/H4/R4.28, 220, 2650
3035.ZS	35	3	3400/3500
3050.ZS	50	5	3400//3500
3075.ZS	75	7	3400/3500
3850.ZS	48	5	E4/H4/R4.32, E4/H4/R4.42, 280/290/R770, 380/390/R780,2828/2928/R7728, 3838/3938/R7838, 14240/14340, 15250/15350, E6.52, E6.62
4550.ZS	48	5	E4/H4/R4.56, E4/H4/R4.80, 400/410/R880, 4040/4140/R8840, 5050/5150/R9850, 14040/14140/18840,14550/14650/19050, 15050/15150/19850, E6.80L, E6.80, 1640/1608
4575.ZS	74	7	E4/H4/R4.56, E4/H4/R4.80, 400/410/R880, 4040/4140/R8840, 5050/5150/R9850, 14040/14140/18840, 14550/14650/19050, 15050/15150/19850, E6.80L, E6.80,1640/1608



Available from stock. Delivery in 24h or today!*

*Delivery time means time until shipping of goods

Characteristics of igus® chainfix Clips -

Option 1: Modular clip-on strain relief for the C-profile

- Available for all igus® e-chains® with C-profiles
- Also suitable for assembly in the KMA mounting brackets
- Polymer, for cable diameters ranging from 4 mm to 24 mm
- Quick assembly without any tools
- 2 and 3 layers on top of one another possible
- Each layer can be detached and changed later on



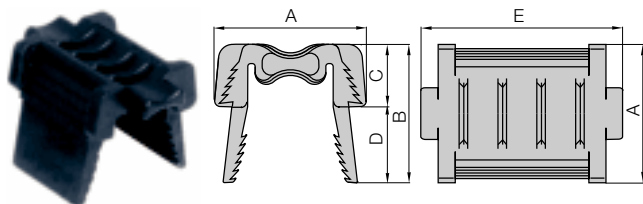
Option 1 | Clip-on strain relief for the C-profile



For all mounting brackets with C-profile connectivity!

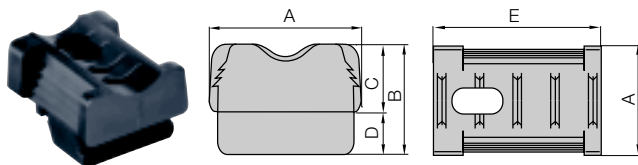
Clamp - Part No. CFC-XX-M

ø Cable [mm]	Part No. clamp	Dim. A [mm]	Dim. B [mm]	Dim. C [mm]	Dim. D [mm]	Dim. E [mm]
04 - 08 mm	CFC-08-M	14,5	13	5,5	7,5	30
08 - 12 mm	CFC-12-M	23,7	24	10	14	36
12 - 16 mm	CFC-16-M	32,4	32,5	13,6	18,9	42
16 - 20 mm	CFC-20-M	43,2	39,1	17,6	11,5	45
20 - 24 mm	CFC-24-M	54	49	22	27	50



Bottom part - Part No. CFC-XX-C

ø Cable [mm]	Part No. bottom part	Dim. A [mm]	Dim. B [mm]	Dim. C [mm]	Dim. D [mm]	Dim. E [mm]
04 - 08 mm	CFC-08-C	14,5	12,5	5,5	7	24
08 - 12 mm	CFC-12-C	23,8	18	11	7	28
12 - 16 mm	CFC-16-C	32,4	23,6	13,6	10	32
16 - 20 mm	CFC-20-C	43,2	24,6	17,6	7	36
20 - 24 mm	CFC-24-C	54	29	22	7	39



Available from stock. **Delivery in 24h or today!***

*Delivery time means time until shipping of goods

Characteristics of igus® chainfix Clips -

Option 2: Clip-on strain relief for opening crossbars

- Available for all e-chains® with opening crossbars **Part No. 450.XX.**
- Polymer, for cable diameters ranging from 8 mm to 12 mm
- Quick assembly without any tools
- 2 and 3 layers on top of one another possible
- Each layer can be detached and changed later on



Option 2 | Clip-on strain relief for opening crossbars

Clamp - Part No. CFC-XX-M

ø Cable [mm]	Part No. clamp	Dim. A [mm]	Dim. B [mm]	Dim. C [mm]	Dim. D [mm]	Dim. E [mm]
08 - 12 mm	CFC-12-M	23,7	24	10	14	36



**For the following
igus® Series**

E4.1

- E4.56/H4.56/R4.56
- E4.80/H4.80/R4.80

- 1640
- 840

E4/light

- 14040/14140
- 14550/14650
- 15050/15150

E4/00

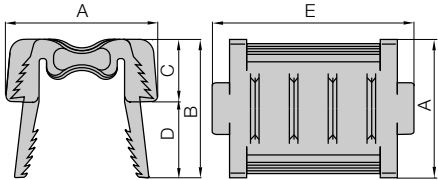
- 400/410
- 640

E4/4

- 4040/4140
- 5050/5150

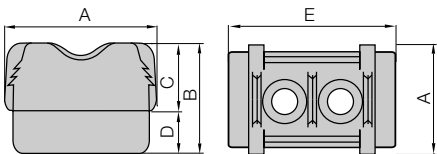
E6

- E6.80L
- E6.80



Bottom part - Part No. CFC-XX-B

ø Cable [mm]	Part No. bottom part	Dim. A [mm]	Dim. B [mm]	Dim. C [mm]	Dim. D [mm]	Dim. E [mm]
08 - 12 mm	CFC-12-B	23,8	21	13	8	38



Available from stock. Delivery in 24h or today!*

*Delivery time means time until shipping of goods

Characteristics of igus® strain relief separators - Separator with integrated strain relief teeth

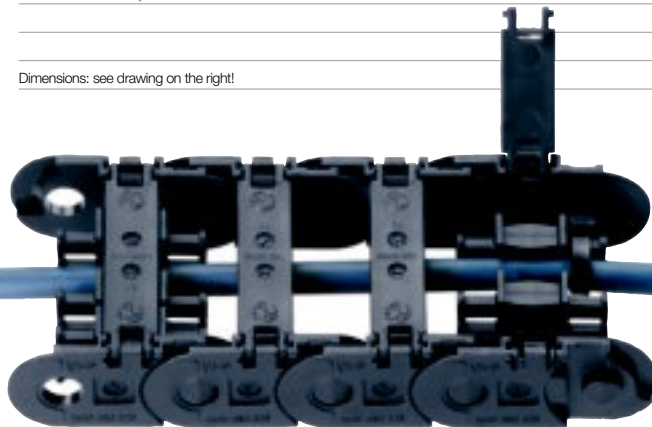
- To be used assembled either at the first or last e-chain® link
- For restricted space conditions
- Accessory for igus® e-chainsystems®
- Easy to assemble without any screws
- The number n is depending on the selection of cable (diameter, type) and available space



Strain relief separator | with integrated teeth

For Series	Part No. strain relief separator	Number of teeth	Dim. A [mm]	Dim. B [mm]	Dim. C [mm]	Dim. D ø [mm]
1400/1500	► 21.1.Z NEW	2	10	4	–	6
2400/2500	► 2020.Z	2	10	4	–	6
2450/2480	► 2020.ZR	2	10	4	–	6
2600/2700	► 262.Z	3	10	4	–	6
3400/3500	► 301.Z	3	18	4	–	14
3450/3800	► 34501.Z	3	14	4	–	10
R157/R158	► 1585.01.Z	3	22	4	–	18
R167/R168	► 1685.01.Z	4	22	4	–	18
R48	► 481.ZR	2	10	3,5	10	6,5
E4.21	► T2103.Z	2	8	4	13	4
E6.29	► E6.29.02.Z	2	8	4	12	4
T3.29	► E6.29.02.Z	2	8	4	12	4
E6.35	► E6.35.02.Z	3	8	4	12	4
E6.40	► E6.40.02.Z	3	13	4	–	8

Dimensions: see drawing on the right!



For the following igus® Series

E2/000

- 1400/1500
- 2400/2500
- 2450/2480
- 2600/2700
- 3400/3500
- 3450/3480

E2 e-tubes

- R157/R158
- R167/R168
- R48

E4.1

- E4.21

T3

- T3.29

E6

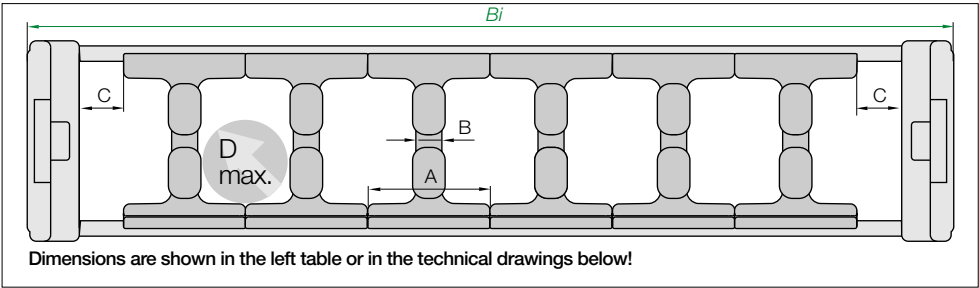
- E6.29
- E6.35
- E6.40

Strain relief separators are assembled either at the first or last e-chain® link. For an intermediate strain relief they can alternatively be assembled in the e-chain®.



Available from stock. **Delivery in 24h or today!***

*Delivery time means time until shipping of goods



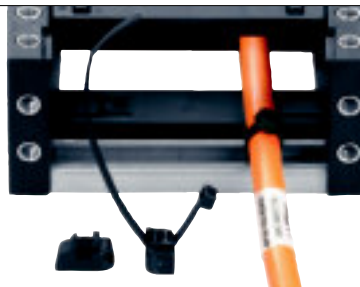
Strain relief separators | Product range overview

	 4 10 21.1.Z	1400/1500 NEW E2/000 e-chains® unassembl. 21.1.Z assembled 21.1.Z.1
	 4 10 21.1.Z	2400/2500 E2/000 e-chains® unassembl. 2020.Z assembled 2120.Z
	 4 10 21.1.Z	2450/2480 E2/000 e-tubes unassembl. 2020.ZR assembled 2120.ZR
	 4 10 21.1.Z	2600/2700 E2/000 e-chains® unassembl. 262.Z assembled 263.Z
	 4 18 21.1.Z	3400/3500 E2/000 e-chains® unassembl. 301.Z assembled 311.Z
	 4 14 21.1.Z	3450/3480 E2/000 e-tubes unassembl. 34501.Z assembled 34511.Z
	 4 8 21.1.Z	E4.21 E4.1 e-chains® unassembl. T2103.Z assembled T2113.Z
	 4 22 10	R157/R158 E2 e-tubes unassembl.1585.01.Z assembled1586.01.Z
	 4 22 10	R167/R168 E2 e-tubes unassembl.1685.01.Z assembled1686.01.Z
	 3.5 10 10	R48 E2 e-tubes unassembl. 481.ZR assembled 482.ZR
	 4 8 10	E6.29 E6 e-chains® unassembl.E6.29.02.Z assembled E6.29.12.Z
	 4 8 10	T3.29 T3 e-chains® unassembl.E6.29.02.Z assembled E6.29.12.Z
	 4 8 10	E6.35 E6 e-chains® unassembl.E6.35.02.Z assembled E6.35.12.Z
	 4 13 10	E6.40 E6 e-chains® unassembl.E6.40.02.Z assembled E6.40.12.Z

Characteristics of igus® chainfix Nuggets

Option 1: C-profile and Option 2: top hat rail

- **Option 1:** Universal cable fixation in C-profile
- **Option 2:** Clip onto a top hat rail
- Simple strain relief - harnessed cable tiewraps
- Minimum space required
- Easy to assemble without any screws and tools
- Adjustable to every e-chain® filling

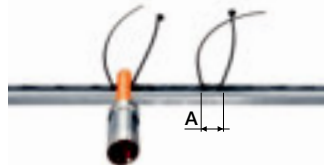


Option 1 | chainfix Nuggets for the C-profile

For C-profiles	Part No. Nugget	ø Cable max. [mm]	Dim. A [mm]
92.42.../92.42...E	CFN.20	20	10,8
92.52.../92.52...E	CFN.30.52	30	16,4



For all mounting brackets with C-profile host-option!

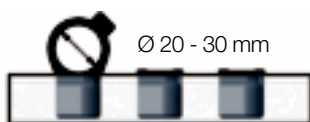
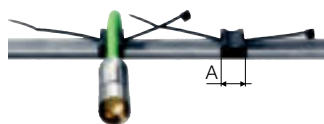


Option 2 | chainfix Nuggets for the top hat rail

For top hat rail	Part No. Nugget	ø Cable max. [mm]	Dim. A [mm]
	CFN.20.N35	20	20,0



For top hat rail 35!



Available from stock. Delivery in 24h or today!*

*Delivery time means time until shipping of goods

Characteristics of special strain relief for hoses - igus® blocks

- Modular, space-saving system
- No hose damage
- Combination of hoses and cables possible
- Hose diameters: 4,3 - 14 mm
- Easy to assemble without any screws or tools
- Adjustable to every e-chain® filling



Block | Strain relief for hoses

Part No. Block modules	Hose ø [mm]	Number of hoses	Width [mm]
CFS 4,3	4,3	4 - 12	27,5
CFS 6	6	3 - 6	27,5
CFS 9	9	2	27,5
CFS 55,9	9	5	55,0
CFS 10	10	2	27,5
CFS 12	12	2	27,5
CFS 14	14	1	27,5
Part No. Base plate	Part No. Cover plate	Width [mm]	
CFS U75	CFS P75	75	
CFS U102,5	CFS P102,5	102,5	
CFS U130	CFS P130	130	
CFS U185	CFS P1185	185	
CFS U212	CFS P212	212,5	
CFS U240	CFS P240	240	
CFS U295	CFS PD295	295	
Part No. Spacer	Height [mm]		
CFS D 16	16		
CFS D 12	12		
CFS D295	16		



Please contact igus®



① Cover plate

② Spacers

③ Base plate

④ Grid-dimensioned modules

B = 27,5 mm, H = 16 mm

The modules accommodate hoses from 4.3 to 14 mm, 3 x 4.3 mm hoses can be fitted on top of each in module CFS 4.3 and 2 hoses can be fitted directly on top of each other in one notch using module CFS 6. The modules have a width of 27.5 mm, are inserted into the base plate and then fastened in position with M4 countersunk-head screws. The exception is module CFS 55.9 which offers the capacity for 5 x 9 mm hoses with twice the width. The base plate and cover plate are available in widths ranging from 75 to 240 mm. The height of the spacers and modules is 16 mm. Several layers can be installed directly above one another.



Delivery time upon request, in case of customer-specific fabrication!

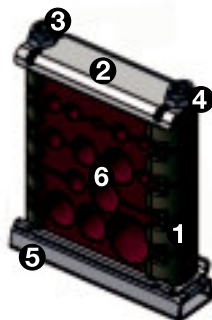
Characteristics of the modular igus® CFB: Polymer strain relief connector system to be mounted onto the C-profile

- Customized strain relief solutions can be offered
- 2 variations available
- Fast assembly by standard screw connection
- Can be mounted in the mounting bracket or in front of the e-chain®
- Customized production from 1 piece
- Low priced and effective

**CFB 907.881. | Polymer strain relief connector system**

Parts list Description	Part No.	Quantity
① Outer fixing block	CFB20.1	N x 2
② Klemmschiene - Clamping bar	907.881.1.XXX	2
③ Threaded bolt with plate	907.825.2.LLL	2
④ Hexagon nut M8	MAT 0040012	2
⑤ C-profile (part of KMA)	92.42.XXX	1
⑥ Strain relief block	customer-specific	1

! Please contact igus®
individual designing



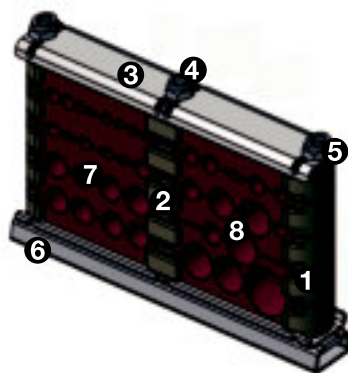
Order key
907.881.XXX.N

N = Number of layers fixing blocks ①
 XXX= Bi - 3 mm (mounting bracket)
 Part No. with version 881

CFB 907.825. | Polymer strain relief connector system

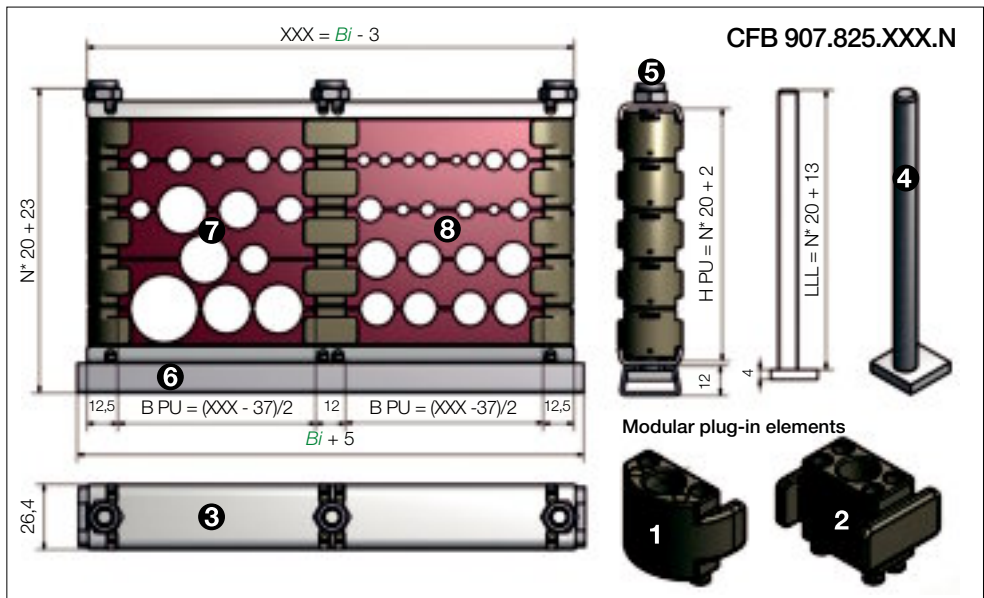
Parts list Description	Part No.	Quantity
① Outer fixing block	CFB20.1	N x 2
② Inner fixing block	CFB20.2	N
③ Klemmschiene - Clamping bar	907.825.1.XXX	2
④ Threaded bolt with plate	907.825.2.LLL	3
⑤ Hexagon nut M8	MAT 0040012	3
⑥ C-profile (part of KMA)	92.42.XXX	1
⑦ Strain relief block	customer-specific	1
⑧ Strain relief block	customer-specific	1

! Please contact igus®
individual designing



Order key
907.825.XXX.N

N = number of layers fixing blocks ① + ②
 XXX= Bi - mm (mounting bracket)
 Part No. with version 825



Delivery time upon request, in case of customer-specific fabrication!