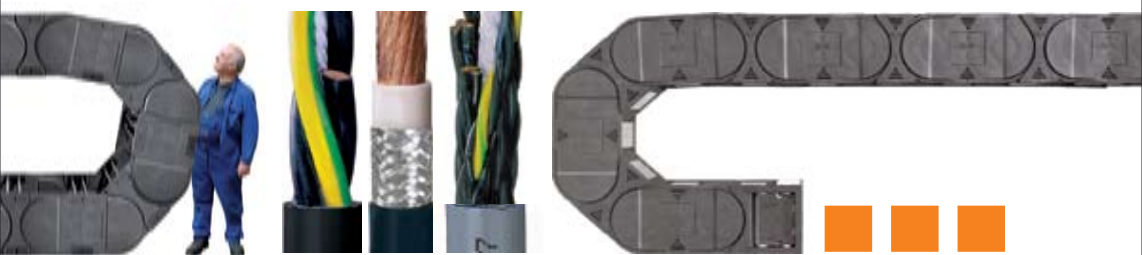


igus®.com.cn

24种新品+型号扩充 24news+line-extens 24种新品+型号扩充



新品.08

...2008.E-Chain®.E-Chains®.Chainflex®.ReadyChain®.invis®...

- 4 巨型** 世界上最大的工程塑料拖链 – Biggest Polymer E-Chain® of the world
- 8 p4.模块化** P4大型模块化工具箱系统 – P4 Large modular tool box system
- 12 triflex®rs** 通用型模块化系统及其附件 – Universal module and accessories
- 15 持久** 更大的滑行表面 - 使用寿命更持久 – Larger gliding surfaces – longer cycle life
- 16 XXL材料** 更长的架空行程 – even longer unsupported travels
- 18 内部分隔** 用于E4.1的内部分隔模块 – Interior separation modules for E4.1
- 20 t3.esd.atex** 带状拖链满足“低成本”和“ESD”的需求 – band chain "Low Cost" and "ESD"
- 22 方便** 新型迷你拖链B07系列 – New mini-series B07
- 23 可打开** 新型迷你拖链B09系列 – New mini-series B09
- 24 整套** 带一体式梳状板的接头 – Mounting brackets with integrated tie-wrap plates
- 25 方便** CF 卡扣扎带 - 用于走线布线和C型槽 – CF Nugget – for top hat rail and C-profile

news.08

- 26 快速** 模块化系统用于项目，常备库存 – Modular system for projects ex-stock
- 28 无尘室** 数百种拖链和电缆等级1-4 – Hundreds of E-Chains® and cables class 1-4
- 30 原料** Chainflex® CF77.UL.D/CF78.UL – 无卤素 – halogen free
- 32 无卤素** CF 37.D - 高柔性电缆用于户外应用 – Chainflex® -Cables f. outdoor applications
- 34 户外电缆** CF 330.D - 高柔性电缆用于户外应用 – Chainflex® -Cables for outdoor applications
- 36 扭转** 用于机器人和扭转应用的定制电缆 – Custom cables for robotic- and torsion-applications
- 38 mtw.nfpa** CF 130.US - 第一根易格斯MTW电缆 – CF 130.US - first igus® MTW-cables
- 40 模块化** 坚固的感应模块 – Robust induction modules
- 42 方便&快速** QuickPin 2.0 - 在线配置 – Online Pin-Out Configurator
- 44 轻松查找** 在线目录 - 更多改进 – Online-Catalog – many improvements

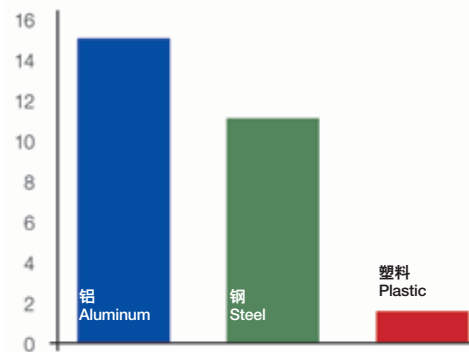
上海市外高桥保税区加太路28号 master@igus.de

电话: 021-5130 3100 传真: 021-5130 3200



plastics for longer life® – 耐磨塑料的优点

plastics for longer life® – Advantages triboplastics



制造1升铝需要15升的石油。1升钢需要11升的石油。1升耐磨塑料平均只需1.8-2.3升的石油。 To produce 1 litre of aluminium the energy from 15 litres of oil is necessary. 1 litre of steel requires 11 litres of oil. The production of 1 litre of plastic only needs on average of 1.8 - 2.3 l oil.*

耐磨塑料由摩擦性能经过优化的材料所组成，是所有易格斯产品体系的基本原材料。

在拖链系统中，将高柔性电缆，内部分隔片，横杆以及导向槽等组件进行完美装配是非常重要的。该材料是为了在单件或系统使用中达到最佳的使用寿命而研发的。就目前而言，易格斯是世界上唯一一家专注于工程塑料的拖链制造商。应用领域遍及：海上石油平台，钢铁厂，采矿业，起重机和机床领域 www.igus.eu/heavyplastics。

还可用于无尘室（通过ESD-ATEX认证）或高温应用，详情请登陆 www.igus.eu/cleanroom。

在这本目录中，易格斯将会为您介绍使用耐磨塑料研制出的最新产品。我们诚挚欢迎您的反馈和对我们提出新的要求！

* 资料来源：易格斯

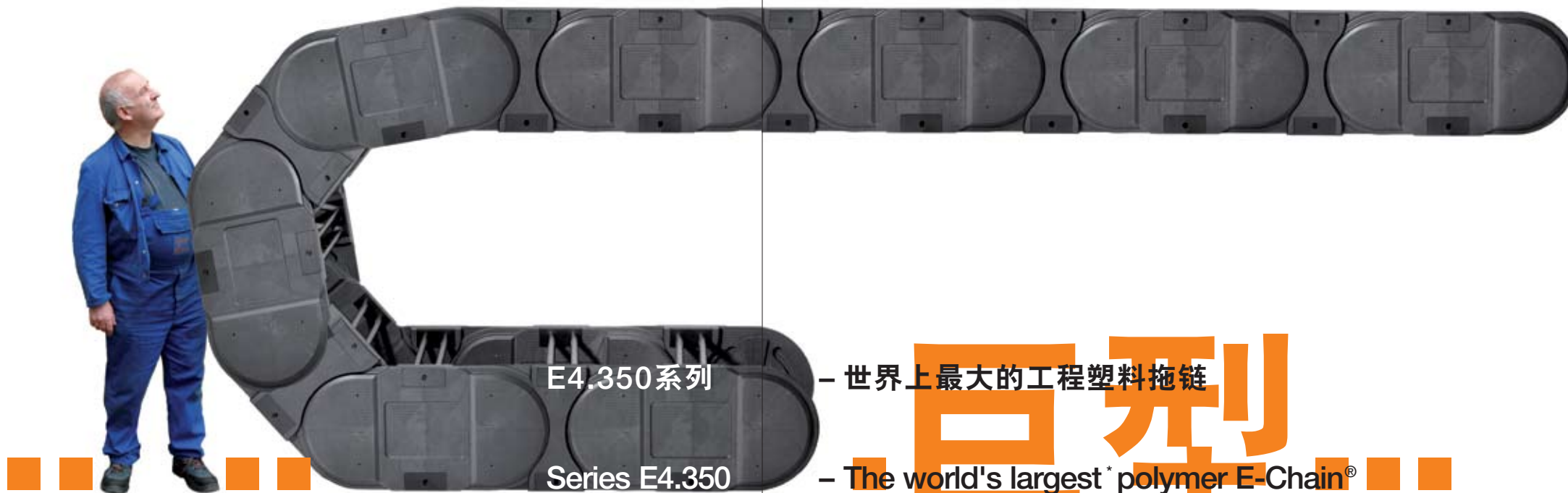
Triboplastics are tribologically optimized material compounds and the basis of all igus®-products and -systems.

In Energy Chain Systems® the perfect match of all components, such as Chainflex®-cables, interior separation, cross bars and guide troughs is important. The materials are developed for best service life in single or system use. Worldwide, igus® is currently the only manufacturer of E-Chains® who consistently focuses on plastics only. Applications are: offshore, steel plants, mining, cranes and tooling machines www.igus.eu/heavyplastics Even the areas clean room ESD-ATEX or high temperatures will be served www.igus.eu/cleanroom.

In this catalog, igus® presents you its latest products from triboplastics. We would like to receive your reactions and wishes!

* Quelle/Source: igus®

新品 2008...E-Chains®.Chainflex®.ReadyChain®.invis®... 3



E4.350系列

Series E4.350

— 世界上最大的工程塑料拖链

— The world's largest* polymer E-Chain®

发挥工程塑料拖链的最大极限：世界上最大的全工程塑料拖链，专为装载粗重坚硬的电缆和介质管而设计。它是海上石油平台，钢铁厂，重载机械的理想选择。

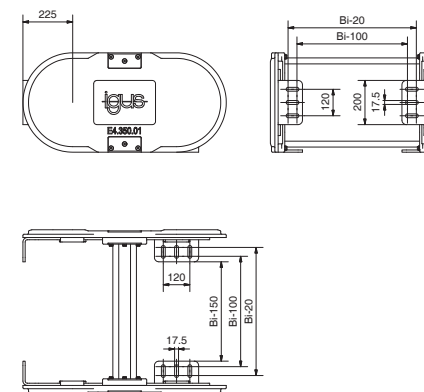
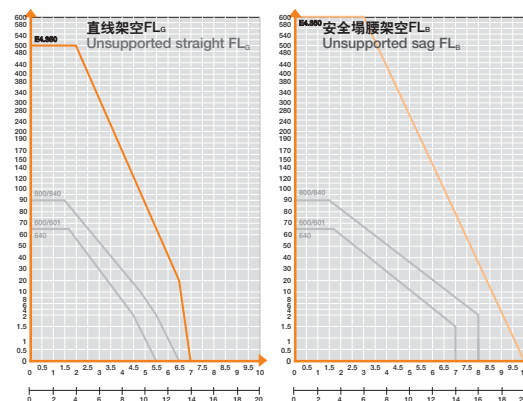
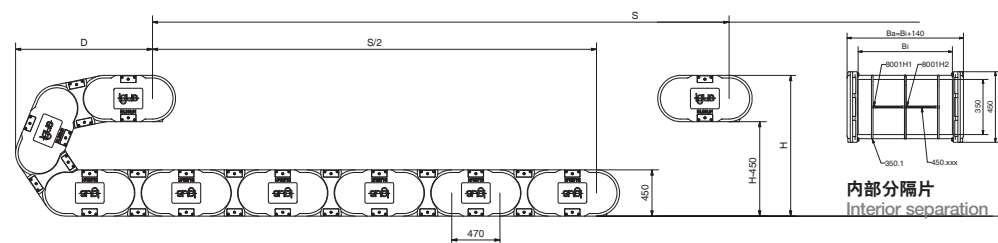
- 内高350毫米，内宽200-1000毫米
- 负载 > 100千克/米
- 免维护，连接处无需润滑油脂润滑
- 模块化设计节省装配时间
- 高耐磨性，耐腐蚀，且可抵抗海水的侵蚀
- 易于缩短和延长
- 由工程塑料制成可降低噪音
- 不导电
- 可提供内部分隔片

应用行业：海上石油平台/海上应用，钢铁厂/炼钢厂，建筑设备，煤炭输送，重载应用等

Carrying plastic E-Chains® to the extremes: The world's largest* all-plastic E-Chain® yet is predestined to carry thick, heavy and stiff cables and hoses. It is ideal for rough use on oil platforms, in steel plants, or in heavy duty machinery.

- 350 mm inner height / 200-1000 mm inner width
- Fill weights > 100 kg/m
- Maintenance-free – no grease or oil needed to lubricate the joints
- Modular design saves assembly time
- Highly resistant to wear, corrosion and sea water
- Easy lengthening and shortening
- Plastic material reduces noise
- Electrically insulating
- Interior separation available

Industries: Oil platforms/Offshore, steel plants/smelters, construction equipment, coal conveyors, heavy duty applications in general

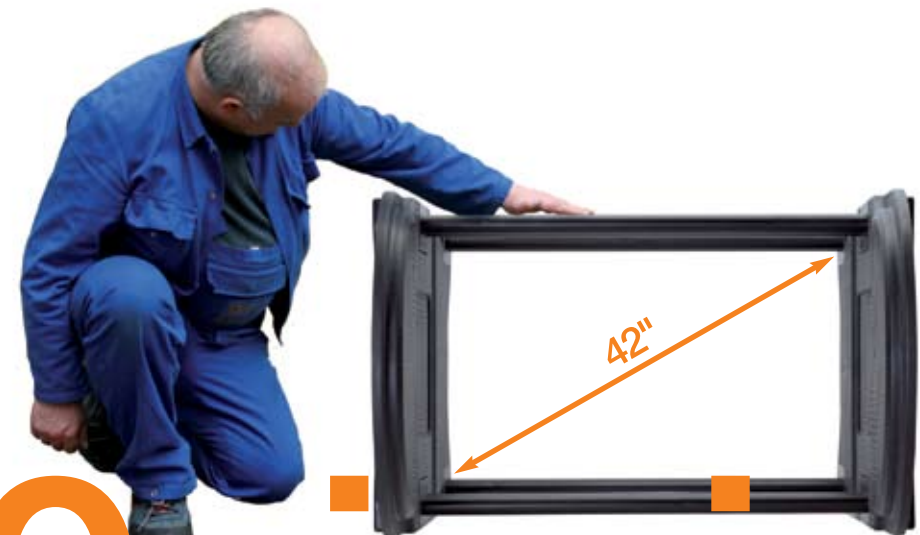
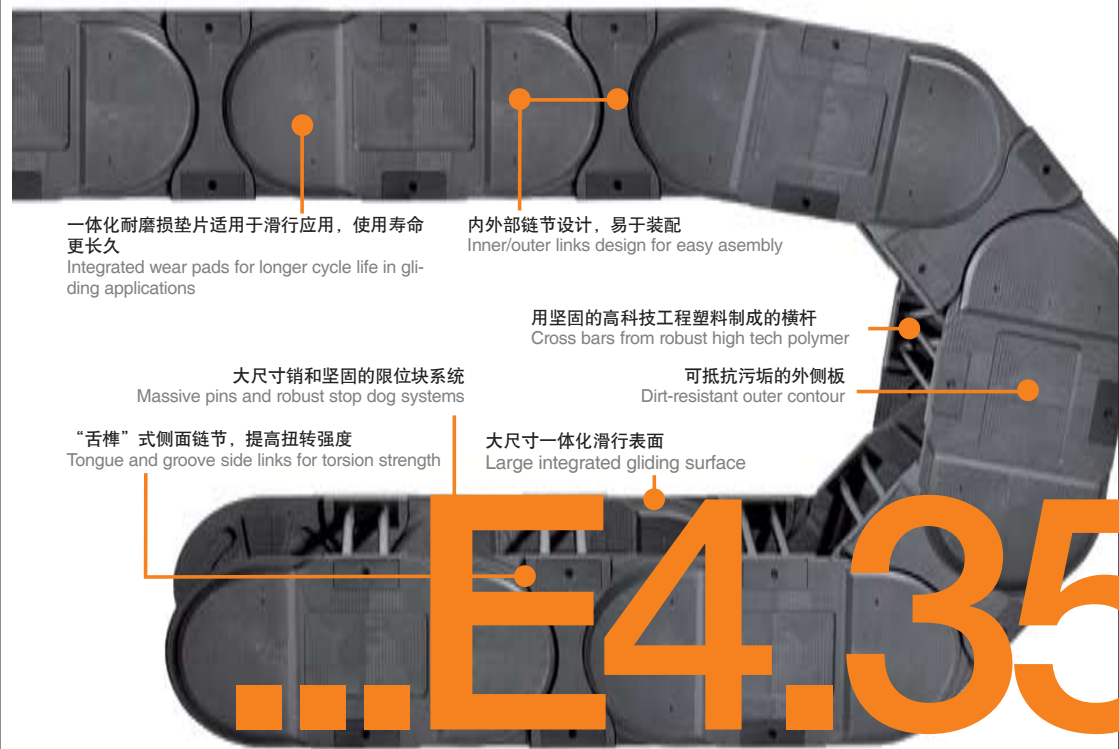


系列 Series	hi [mm]	ha [mm]	Bi [mm]	Ba [mm]	R [mm]	T [mm]	链节数/米 Links/m [mm]
新品 E4.350. [Bi]. [R]. 0	350	450	200 - 1000	340 - 1140	从500起	470	2 (940 mm)

可提供附件，例如：接头，分隔片和装配工具。

Accessories available, i.e. mounting brackets, separators and assembly tools

*截至：04/2008，从2009年开始供货 *Issue 04/2008, available from 2009



坚固，重载荷，模块化

Strong, heavy loads, modular



用于海上石油平台，经过时间考验：易格斯工程塑料拖链。
优势：耐腐蚀，可抵抗海水侵蚀，完全免维护
Time proven for years on offshore platforms: igus® Plastic E-Chains®.
Benefits: Corrosion- and sea water resistant, virtually maintenance-free



工程塑料拖链可经受油的影响，海水的侵蚀和温度的变化
Plastic E-Chains® withstand the effects of oil, sea water and temperature change



使用了早期最大的全塑料拖链(800/840系列，内高可达204毫米)的海上应用
Offshore application for the previously largest all-plastic E-Chain®, series 800/840 (up to 204 mm inner height)



全新E4.350系列结合了易格斯丰富的海上平台经验
A lot of offshore experience was incorporated into the new E4.350 series



2007年iF设计奖



新品：大尺寸模块化工具箱系统 – 安静，耐磨损，长行程

New: Large modular tool box system available – quiet, wear-resistant, long travels



新品：80毫米内高

- 新品：P4.80 – 80毫米内高
- 新品：滚轮采用了优化的耐磨损材料
- 更高负载，更长行程
- 所有链节的节距相同
- 大尺寸滚动和滑动表面
- 可提供5050系列内部分隔系统

New: 80 mm inner height

- New: P4.80 – 80 mm inner height
- New: Tribo-optimized roller material
- Higher fill weights and longer travels
- Same pitch for all links
- Large rolling and gliding surfaces
- Interior separation systems series 5050 available



新品：附加宽度

- P4系统现已可提供5种宽度
- 250毫米内宽和全新300, 350, 400毫米的内宽
- 自滑行型号可提供所有宽度
- 可有效保护电缆的圆塑料横杆
- 借助双锁紧机构，更具安全性

New: Additional widths

- System P4 now comes in 5 widths
- 250 mm inner width and new 300, 350 and 400 mm inner width
- AUTO-GLIDE version available for all widths
- Crossbars in cable friendly, rounded plastic
- Safe due double lock mechanism



新品：更多弯曲半径

- P4系统现已可提供三种全新弯曲半径：250, 300, 350毫米
- 大尺寸半径用于坚硬的电缆和软管
- 小弯曲半径适用于安装空间有限的应用

New: More bending radii

- System P4 now comes in 3 new bending radii: 250, 300 and 350 mm
- Large radii for stiff cables and hoses
- Small radii for limited space



新品：拓展链节 – 重载荷应用

- 全新滚轮拓展链节适用于P4.56系列
- 可实现比原来高50%的负载
- 架空长度已增加
- 最大化的强度
- 可将横截面合理区分成间隔(输送电力/输送液体)

New: Extension link – heavy fill weights

- New roller extension link for series P4.56
- 50% higher fill weight possible
- Increased unsupported span
- Maximum rigidity
- Divides cross section into reasonable compartments (electric/hydraulic)



新品：长寿命的滚轮

- 全新优化的耐磨损工程塑料滚轮适用于所有P4系统
- 优化的耐磨损性能
- 长使用寿命
- 经过改良的滚轮
- 噪音更低，震动更小
- 节距相同的滚轮链节和拖链链节

New: Long-life rollers

- New tribo-optimized plastic rollers for all P4 systems
- Wear optimized
- Long cycle life
- Improved rolling
- Lower noise and vibration
- Same pitch for roller links / chain links



新品：标准导向槽系统

- 全新导向槽系统
- 特殊几何结构，与自滑行横杆组合使用，实现拖链上层在下层上的偏移滑行应用
- 坚固的安装套件，使用寿命长
- 不锈钢导向槽耐腐蚀和海水侵蚀

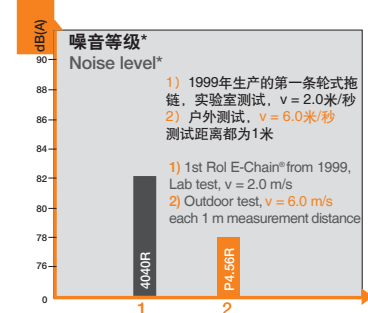
New: Standard guide trough system

- New guide trough system
- Special geometry in combination with AUTO-GLIDE cross bars allows for offset upper and lower run
- Strong installation kits for long cycle life
- Stainless trough segments resist cor-



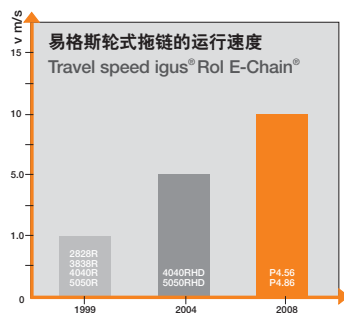
新技术数据

New technical data



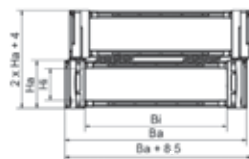
模块化P4系统用于极长行程和高速度：

- 800米甚至可以更长
- 速度 > 10米/秒
- 负载可重达10千克/米
- 大尺寸滚动和滑动表面，使用寿命更长
- 通过自滑行横杆和导向槽，使运行更安全
- 节距相同的“普通”和滚动链节



模块化P4系统用于极长行程和高速度：

- 800 m travels and more are possible
- >10 m/s speed
- Heavy fill weight up to 10 kg/m
- Large rolling and gliding surfaces for long cycle life
- Safely on track through AUTO-GLIDE cross bars and guide trough
- Same pitch for "normal" and roller links



* 减少了3dB(A)的噪音，但对于人类的耳朵来说，就像是降低了一半噪音等级一样。。

* A reduction of 3 dB(A) sounds like a 50 % reduction in the noise level to the human ear.

P4系统 – 整套系统

System P4 – package completed



P4.56: 易格斯户外测试装置 - 行程长度为120米

P4.56: igus® outdoor test setup – travel length 120 m



现有的应用能在延伸后再次被使用

Existing applications could be extended once again

产品代码 Part No.	内高 Inner height hi [mm]	外高 Outer height ha [mm]	内宽 Inner width Bi [mm]	外宽 Outer width Ba [mm]	弯曲半径 Bending radii R [mm]	节距 Pitch [T]	最大行程长度 Max. travel [m]	最大速度 Max. speed [m/s]	最大负载 Max. Load [kg/m]
P4.56R.Bi.□.R.□.0	56	84	200 - 400**	270 - 470	250 - 350**	91	800	10	20
新品 P4.80R.Bi.□.R.□.0	80	108	200 - 400**	276 - 476	250 - 500**	100	800	10	30
拓展链节 Extension links									
新品 P4.56R.Bi./Bi.□.□.□.0	56	84	200 - 400**	270 - 470	250 - 350**	91	800	10	30

** 可根据客户要求提供更多尺寸

** More sizes upon request.

10 新品 2008...E-Chains®.Chainflex®.ReadyChain®.invis®...

新品 2008...E-Chains®.Chainflex®.ReadyChain®.invis®... 11



Triflex® R – 目前可提供的通用型模块，新尺寸和附件

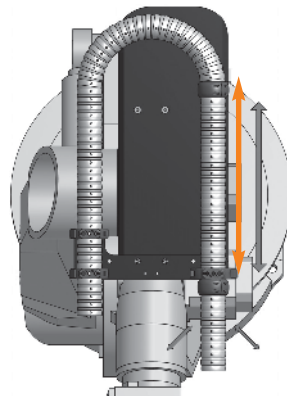
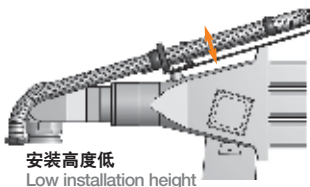
Triflex® R – Now with universal module, new sizes and accessories

新品: Triflex® RS – 通用型模块用于安全地实现复杂的机器人运动。Triflex® RS固定在机器人现有的固定点上。由于其安装高度低，Triflex® R能在机器人手臂中平行紧贴地运行。它甚至能被应用于拥挤的空间中。一体式回弹机构使Triflex® R拖管能安全导向，避免任何电缆应力的产生。

- 通用型产品
- 右侧/左侧型号
- 带或不带盖板
- 附加空间用于控制箱和阀门组
- 可安装于所有机器人
- 一体化弹性机构
- 易于安装
- 横截面小
- 可调节导向弯度，使其更靠近机器人手臂
- 横向贯穿的路径取决于系统的尺寸可达400至700毫米

New: Triflex® RS – universal module for safe realisation of complex robotic movements. Triflex® RS attaches to the existing fixation point on the robot. Thanks to its low installation height, Triflex® R runs parallel and tightly against the robotic arm. Even applications with heavy space restrictions can be realized. The integrated pull-back mechanism guides the Triflex® R tube safely, avoiding any stress for the cables

- Universal useable
- Right/left version
- With or without cover
- Additional space for controlbox and valve cluster
- Fits on every robot
- Integrated spring mechanism
- Easy to install
- Small cross section
- Adjusted camber for guidance close to the robots arm
- Traverse path depending on systems size from 400 to 700 mm



横向贯穿的路径可达700毫米
Traverse path up to 700 mm



新品: Triflex® R - 整套带盖板

- 可创造性地节省空间，比如：控制箱或者阀门组
- 适用于倒置应用
- 允许用于极端运动

New: Triflex® R-Set with cover

- Creates additional building space, i.e. for control box or valve clusters
- For upside down applications
- Allows for extreme movements



新品: Triflex® R - 整套带适配器

- 允许Triflex® R在机器人上设置固定点
- 可提供适用于所有机器人的型号
- 标准模块，现货供应

New: Triflex® R-Set adapter

- Allows for Triflex® R Set fixation onto the robot
- Available for all robot types
- Standard module ex-stock



新品: Triflex® R - 整套带滑行管套

- 适用于TRC(全封闭型)和TRE("方便型"设计)
- 适用于Triflex® R的顺畅运动
- 优化的几何结构
- 可延长您Triflex® R的使用寿命

New: Triflex® R-Set – gliding duct

- For TRC (enclosed) and TRE ("Easy" design)
- For smooth Triflex® R motion
- Optimized geometry
- Increases cycle life of your Triflex® R application

新尺寸TRL.30和所有新附件

New size TRL.30 and all kinds of new accessories

新品: Triflex® R TRL.30.050.0

- 最小的Triflex® R 轻型产品, 直径可达30毫米
- 优化的由两个内腔组成的几何结构

新品: Triflex® R 轻型接头TL.30.01.Z0/1/2

- 轻型接头带整体的去应力元件
- 高性价比
- 适用于Triflex® R尺寸和模块TRC.30(封闭型), TRE.30("方便型"设计), 以及新品TRL.30("轻型")

新品: Triflex® R TR.70/85/100.20.xx

- 重载型连接, 适用于去应力电缆夹
- 适用于所有直径为30, 32 和34毫米的辅助轴

新品: Triflex® R TR.60/70/85/100.21.xx

- 重载型连接, 可装配带或不带去应力元件的接头
- 适用于直径为30, 32 和34毫米的辅助轴

新品: Triflex® R 带保护套

- 右侧保护套适用于所有应用, 可选择密封, 带涂层或者是经过铸造的型号
- 可使您的设备使用寿命更长久

New: Triflex® R TRL.30.050.0

- The smallest Triflex® R light Ø 30 mm
- Optimized 2-chamber geometry

New: Triflex® R Light mounting bracket TL.30.01.Z0/1/2

- Light mounting bracket with molded-on strain relief
- Cost effective
- For Triflex® R sizes and models TRC.30 (enclosed), TRE.30 ("easy" design) and for the new TRL.30 ("light")

New: Triflex® R TR.70/85/100.20.xx

- Heavy duty connection for strain relief clamps
- Fits all Ø 30, 32 and 34 mm auxiliary axes

New: Triflex® R TR.60/70/85/100.21.xx

- Heavy duty connection for mounting brackets with or without strain relief
- Fits Ø 30, 32 and 34 mm auxiliary axes

New: Triflex® R protective sheet versions

- Right protection for every application, sea-ling, painting or casting
- For higher cycle life of your equipment



更大的滑行表面 – 使用寿命更长久

Larger gliding surfaces – even longer cycle life

新品: 可提供适用于更多系列的更多宽度选择。使拖链在极端应用和极长行程应用中的使用寿命更长久。高耐磨损性能的易格斯滑行元件, 滑行表面最大可增加70%。

- **新品:** 七种新增尺寸
 - **新品:** 用于新增的拖链系列
 - **新品:** 符合几何学的优化滑行表面
 - 适用于长行程和最高负载应用
 - 滑行应用, 无需附加组件(横杆和滑行表面为一片式结构)
 - 通过扩大滑行表面(扩大了70%)使其具有极好的耐磨损性能且运行极为安静, 耐磨损垫片的厚度是原来的150%
 - 使用寿命是原来的四倍
 - 通过优化表面结构, 使运行平滑顺畅, 并且还装配了滑行元件
 - 适用于新拖链型号或改进现有系统
- 应用行业:** 起重机建筑, 设备制造, 龙门机器人, 采矿业, 发电厂, 钢铁厂

New: More width available for more series. For further increase of E-Chain® cycle life in extreme applications and very long travels.

- Highly wear-resistant igus® plastic gliding elements with up to 70% larger gliding surface.
 - **New:** 7 additional sizes
 - **New:** For additional E-Chain® series
 - **New:** Optimized gliding surface geometry
 - For long travels and highest fill weights
 - Gliding applications without additional components (Crossbar and glide surface are made of one piece)
 - Extremely wear-resistant and quiet through enlarged gliding surfaces (up to 70 %) and 150 % thicker wear pads
 - 4 times longer cycle life
 - Smooth motion through optimized surface geometry and cushioned gliding elements
 - For use on new E-Chains® or to retrofit existing systems
- Industries:** Crane building, equipment manufacturing, gantry robots, mining, power plants, steel plants

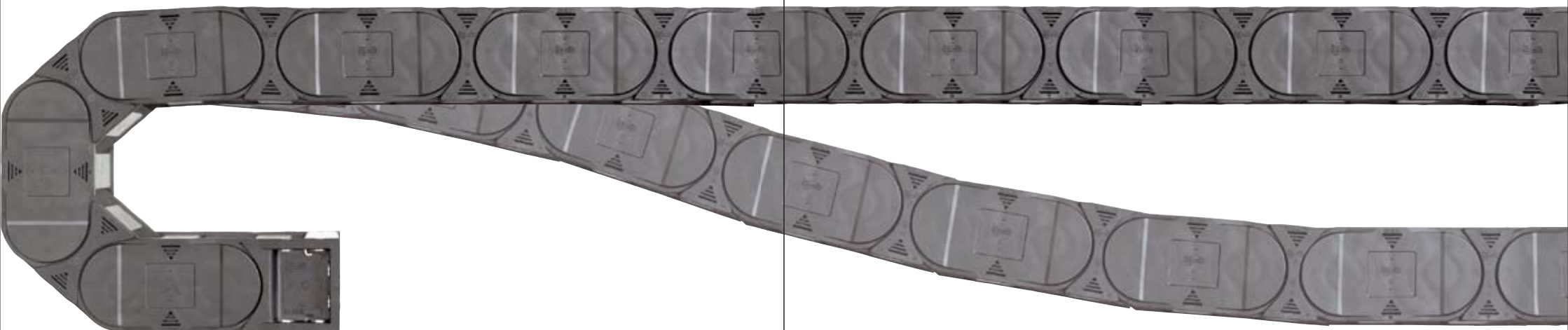
适用系列 For series	宽度 Widths xx [mm]	滑行表面宽度 Gliding surface width [mm]	产品代码 Part No. GN Version**	产品代码 Part No. GS Version**
14040, 15050	.20* .25 .27* .28* .30 .32 .35 .37*	32	450.xx.GN.S	450.xx.GS.S
4040, E4.56, 400	.20* .25 .27* .28* .30 .32 .35 .37*	38	450.xx.GN.M	450.xx.GS.M
5050	.20* .25 .27* .28* .30 .32 .35 .37*	43	450.xx.GN	450.xx.GS

新品
New

* 准备中
* in preparation

**GN = 拖链新品
**GN = New E-Chain®

GS = 您现有拖链的更新产品
GS = Retrofit for your existing E-Chain®



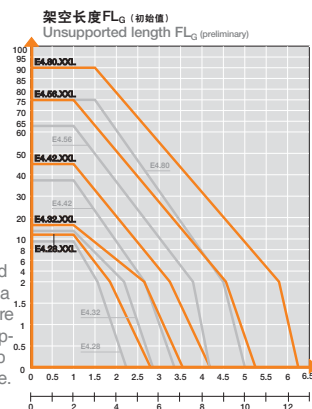
...XXL material... New XXL – Material for E4.1 – even longer unsupported travels

系统扩展型号E4.1

新品: XXL-材料: 使架空跨度增加了25%, 使架空行程增加至13米。使用滑行拖链的解决方案通常都比架空应用更精细更昂贵, 因为它必须使用一条更长的细拖链以及一个导向槽系统。使用全新XXL-材料制成的E4.1系列架空跨度增加了25%, 从而使架空行程增加至13米。坚固的限位块机构和联锁侧面链节使“XXL架空”具有非常强大的架空性能。

Program extension E4.1

New: XXL-material: Allows for up to 25 % more unsupported span and for up to 13 m of unsupported travel. Solutions with gliding E-Chain® are often more elaborate and expensive than unsupported applications, because a slightly longer E-Chain® and a guide trough system becomes necessary. Usually, gliding E-Chain® also require more space. The new XXL-material for E-Chain® series E4.1 allows for 25 % longer unsupported span and makes unsupported travels of up to 13 m possible. The strong stop dog mechanism and interlocking side links underscore the “XXL unsupported” aptitude.



系列 Series	内高 Inner height hi [mm]	外高 Outer height ha [mm]	内宽 Inner width Bi [mm]	外宽 Outer width Ba [mm]	最大架空跨度 Max. unsupported span [mm]	弯曲半径 Bending radii R [mm]	节距 Pitch T [mm]	链节数/米 Links/m
新品 E4.28.XXL	28	42	40 - 300	60 - 320	2.75	55 - 250	46.0	22
新品 E4.32.XXL	32	54	50 - 400	73 - 423	3.50	63 - 300	56.0	18
新品 E4.42.XXL	42	64	50 - 400	76 - 426	4.20	75 - 350	67.0	15
新品 E4.56.XXL	56	84	50 - 600	84 - 634	5.25	135 - 500	91.0	11
新品 E4.80.XXL	80	108	50 - 600	100 - 650	6.25	150 - 1000	111.0	9

- 更长架空行程
- 更高负载
- 无需导向槽和支撑
- 更高速度
- 磨损率更低, 使用寿命更长
- 能更灵活地适用于您的应用
- 对安装空间要求更小

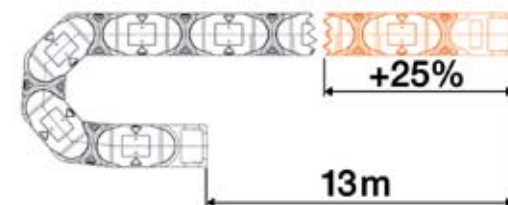
应用行业: 机床, 物料搬运, 运输系统, 建筑设备, 机器人等。

- Longer unsupported travels
- Higher fill weights
- Eliminates guide troughs and supports
- Higher speed
- Lower wear and longer cycle life
- More flexibility for your application
- Less space required

Industries: machine tools, material handling, conveyor systems, construction equipment, robotics, etc.



负载能力测试 - E4.56 XXL vs. 大型E4.80 (右侧):
11.25千克的居中负载, 位于4.5米的架空跨度上
Load capacity test - E4.56 XXL vs. larger E4.80 (right):
Centered load of 11.25 kg at 4.5 m unsupported span





内部分隔模块适用于 系统E4.1 – 4套组件

Interior separation modules for system E4.1 – 4 groups

系统拓展 E4.1

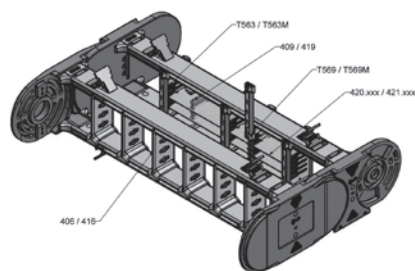
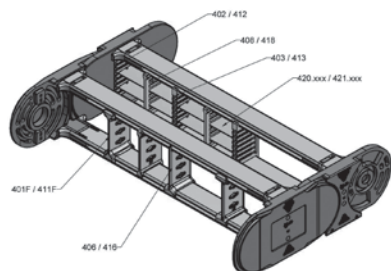
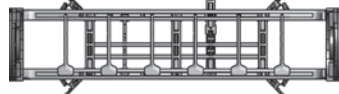
新品：模块化内部支架系统 - 理想的易格斯分隔系统适用于所有应用。模块可以相互替换，也可以组合使用。全新附件使系统更完整。我们热切期待您的来电咨询！

1 传统型号 Classics

- 适合大多数应用
- 可提供带孔横隔片和支架
- 可进行水平和垂直分隔
- 已经证实，这是一款可适用于安全分隔的模块系统
- Suits most applications
- Range of slotted separators and shelves
- Vertical and horizontal separation
- Proven modular system for safe interior separation

2 Q(快速)系列 Q(quick) series

- 易于装配和填充电缆
- 通过使用“快速锁紧”可节省大量装配时间
- 可与易格斯“快速锁紧”横杆385.Q/450.Q组合使用
- 可提供垂直和水平分隔
- Easy assembly and cable routing
- Time savings through faster opening with "Quick lock"
- In combination with igus® "Quick Lock" cross bars 385.Q/450.Q
- Vertical and horizontal shelving

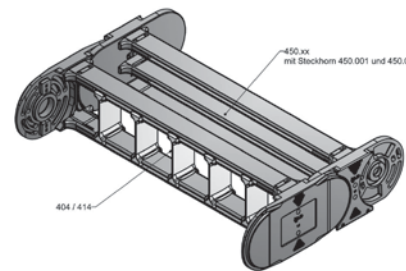


Program extension E4.1

New: Modular interior shelving system — the ideal igus® separation for every application. Modules are interchangeable and can be combined. New accessories complete the system. We look forward to discussing your application!

3 HDX 系列 HDX series

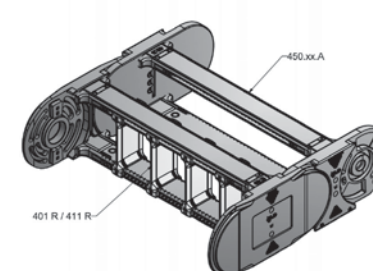
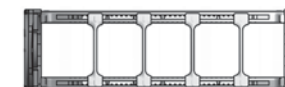
- 适用于最大载荷和负载
- 在链条中的安全装置使系统非常坚固
- 潮湿环境的理想解决方案，比如堆肥厂等
- 适用于坚硬的介质管，液压管等
- For maximum loads and fill weights
- Very strong for a safe fit inside the links
- Ideal for humid environment, like composting plants, etc.
- For stiff media hoses, hydraulic hoses, etc.

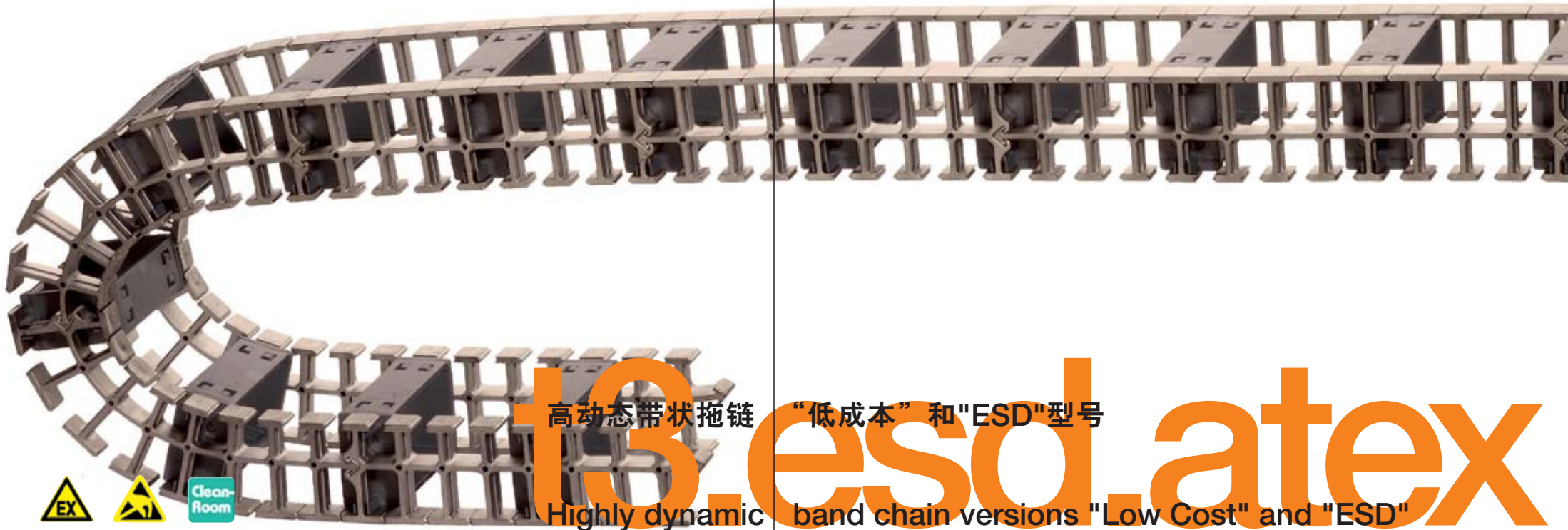


4 R系列(带凹口/notched)

- 通过添加分隔片和横杆来装配光栅
- 是侧向应用的理想解决方案
- 无需附加填充片

- Defined raster through projections on separators and raster cross bars
- Ideal for applications "on the side"
- No additional spacers required





高动态带状拖链

“低成本”和“ESD”型号

Highly dynamic

band chain versions "Low Cost" and "ESD"

T3系统，易格斯轻型三片式拖链带，适用于高动态运动 - “低成本”和“ESD”型号现已开始供货。

System T3, igus® light weight 3-part chain band, for highly dynamic motion – "low cost" and "ESD" versions now available

通用型系统T3的优势：

- 由于其完全无磨损，因此可适用于无尘室
- 运行时超级安静，分贝为33 dB(A) (结果由易格斯测得)
- 重量极轻
- 适用于非常高的速度
- 一片式侧向带状链节段使装配更快速
- 当做滚动运动时几乎不会产生多棱现象

General System T3 benefits:

- Fit for clean rooms, thanks to virtually no wear
- Superquiet at 33 dB(A) (igus® test result)
- Very light weight
- For very high speed
- Side band segments in one piece for faster assembly
- Nearly no polygon effect when rolling

新品：ESD型号

由于不采用孔销链节的连接方式，可做到完全无磨损。与新ESD材料组合使用，这种设计还可以确保其具有持久的传导性。

New: ESD version

Virtually no wear thanks to the elimination of a pin/bore link connection. In combination with the new ESD-material, this design also ensures permanent conductivity.

新型：“低成本”型号

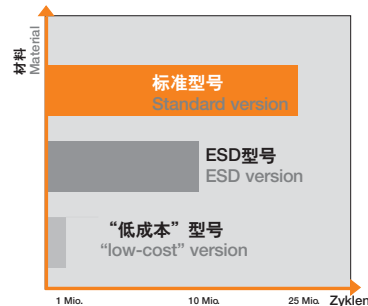
由于使用了新材料，具有高性价比。适用于往复次数不高但速度极快的应用。这个型号是所有通用型T3具有的优势。

New: "Low cost" version

Cost effective thanks to new material. Suits applications without high cycle counts or high speed. All general T3 benefits apply for this version.

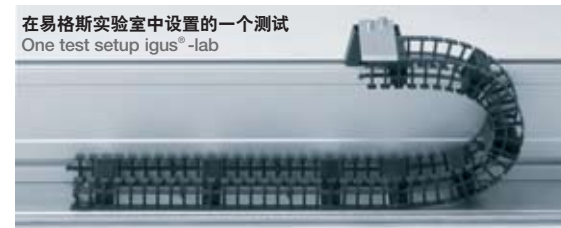


由igulene材料制成的系统T3低成本型号
System T3 LowCost version made of igulene

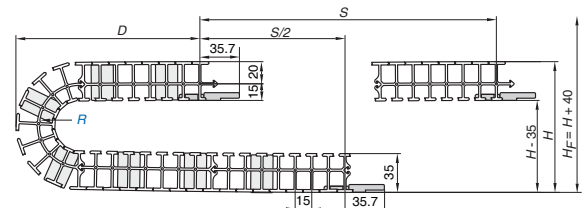


易格斯T3型号的产品使用寿命一览表(产品的使用寿命由易格斯实验室所测得)

Cycle life guidelines for igus® T3 versions (cycle life tests at igus® lab)



在易格斯实验室中设置的一个测试
One test setup igus®-lab



系列 Series	hi [mm]	ha [mm]	Bi [mm]	Ba [mm]	R [mm]	节距 Pitch T[mm]	链节数/米 Links/m [mm]
新品 T3.29.□.□.ESD	29	35	30 - 120	55 - 145	38	15	67
新品 T3.29.□.□.LBT	29	35	30 - 120	55 - 145	38	15	67
新品 T3.29.□.□.ESD	29	35	30 - 120	55 - 145	38	15	67

其它尺寸可根据客户要求提供 Other sizes upon request



新迷你型-B07系列

New mini-series B07

这个系列是根据客户的要求而设计的。在久经考验的拉链式07系列拖链的基础上研发而成，是一款简单，高性价比的可开启机构，带可打开和可移去的横杆。

- 横杆是可打开和可以移去的
- 尺寸小且高性价比的拖链，内高10毫米，由两个部件组成
- 特殊设计适用于空间有限的应用，外径带可打开的横杆，可快速装填电缆
- 可提供的宽度为16/20/30/40毫米，弯曲半径为18/28/38毫米

Upon customer request this series was designed. Based on the proven Zipper 07 series with a simple, cost efficient opening mechanism, with openable and removable lids.

- Lids are openable and removable
- Small and cost efficient E-Chain® with 10 mm inner height consisting of two parts.
- Specially for space limited applications with in the outer radius openable lids for quick cable filling
- Available in widths 16/20/30/40 mm and bending radii 18/28/38 mm



可快速打开
Quick opening

内高相同，使开启更快速 - 拉链式07/09
Same inner height, even quicker opening



新迷你型-B09系列

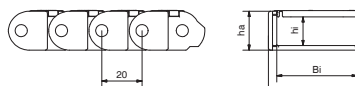
New mini-series B09

这个系列也是根据客户的要求而设计的。在久经考验的拉链式09系列拖链的基础上研发而成，是一款简单，高性价比的可开启机构，带可打开和可移去的横杆。

- 横杆是可打开和可以移去的
- 尺寸小且高性价比的拖链，内高14毫米，由两个部件组成
- 特殊设计适用于空间有限的应用，外径带可打开的横杆，可快速装填电缆
- 可提供的宽度为16/20/30/40毫米，弯曲半径为18/28/38毫米

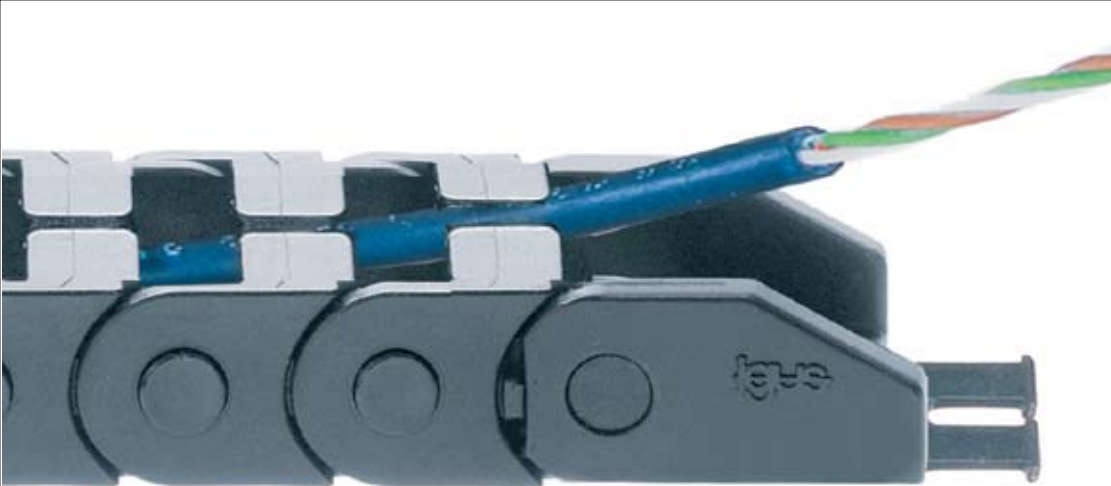
Also this series was designed upon customer request. Based on the proven Zipper series 09 with a simple, cost efficient opening mechanism, with openable and removable lids.

- Lids are openable and removable
- Small and cost efficient E-Chain® with 14 mm inner height consisting of two parts.
- Specially for space limited applications with in the outer radius openable lids for quick cable filling
- Available in widths 16/20/30/40 mm and bending radii 28/38/48 mm



系列拖链
- Zipper zip fastening chain series 07/09

系列 Series	hi	ha	Bi	Ba	R	节距 Pitch	链节数/米 Links/m
	[mm]	[mm]	[mm]	[mm]	[mm]		
新品 B09.16.□.0	14.3	19.3	16	24.2	28 - 48	20	50
新品 B09.20.□.0	14.3	19.3	20	28.2	28 - 48	20	50
新品 B09.30.□.0	14.3	19.3	30	38.2	28 - 48	20	50
新品 B09.40.□.0	14.3	19.3	40	48.2	28 - 48	20	50



接头现已带一体化梳状板

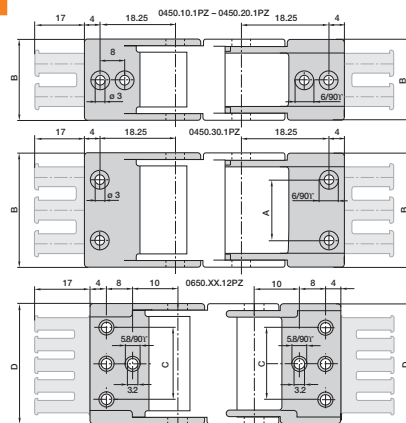
Mounting brackets now with integrated tiewrap plates

一片式接头用于快速装填。方便型拖链E/Z045和E/Z065系列，带整体注塑的去应力梳状板。

- 使用了可去应力的梳状板，安全又简单
- 一片式接头 - 紧固装置
- 适用于内外径的接头连接
- 也可提供不带一体化梳状板的型号
- 耐腐蚀

One-piece mounting bracket for quick fillable EasyChain® series E/Z045 and E/Z065 with molded tiewrap plates for strain reliefs.

- Safe and easy possibility for strain relieving with tiewraps
- One-piece mounting bracket - tight fit
- Suitable mounting surface on inner and outer radius
- Also available without integrated tiewrap plates
- Corrosion-free



系列 Series E/Z045	齿数 Number of teeth	尺寸 A Dimension A	尺寸 B Dimension B	系列 Series E/Z065	齿数 Number of teeth	尺寸 C Dimension C	尺寸 D Dimension D
新品 E045.10.	1	-	16.0	E065.10.	1	-	16.5
新品 E/Z045.16.	2	-	22.0	E065.16.	2	-	22.5
新品 E/Z045.2/7.	2	-	22.0	E065.2/9.	2	-	27.0
新品 E045.2/9.	2	-	26.0	E065.3/9.	3	22	37.0
新品 E045.3/9.	3	22	36.0	E065.4/9.	4	32	47.0



CF卡扣扎带 - 适用于连线布线和C型槽

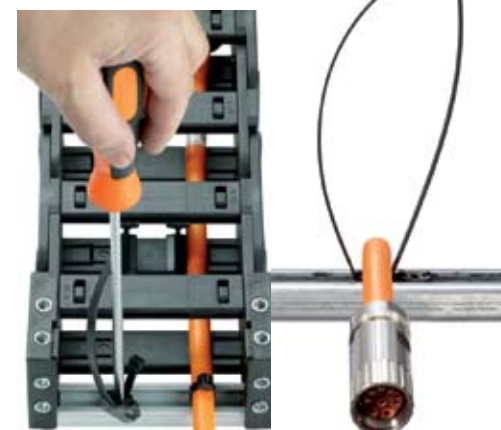
CF Nugget - for top hat rail and C-profile

小型CF卡扣扎带的全新尺寸 - 在机械制造业走线方面的有帮助的创意。

- 应用 1: 极为简单且通用的电缆固定配件，现还可提供直径为30毫米的型号
- 应用 2: 在标准钢壳导轨上通过结扎进行紧固

New size of the small CF-Nuggets - the smart helper for electricians in the machine building industry.

- Variant 1: completely simple and universal cable fixation, now also for diameter 30 mm
- Variant 2: Fastening through clipping onto standard top hat rail



产品代码
Part No.

固定对象
Fixation

电缆直径可达
For cable diameter up to
[mm]

新品 CFN.30.52

CFN.20

CFN.20.N35

C型槽 92.52.../92.52...E

C型槽 92.42.../92.42...E

Normschiene 35 (钢壳导轨 Top hat rail)

30

20

20



模块系统适用于项目，现货供应

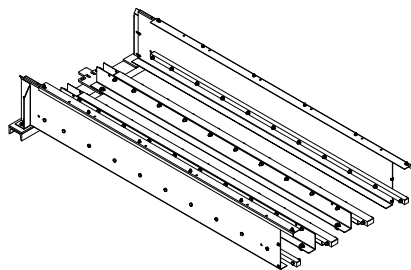
Modular system for projects ex-stock

易格斯模块系统适用于项目 - 特殊组件，在无数项目中久经考验，现已成为一个模块标准系统开始供应。优势包括：

- 更快速的报价
- 更快速的项目计划
- 详细的服务手册和附带文件
- 时间和成本的节约
- 运行安全
- 可根据客户要求提供系统质保单，适用于个性化应用

The igus® modular system for projects – special components, tested and time-proven in numerous projects, have now become available as a modular standard system. Your benefits include:

- Faster quotations
- Faster project planning
- Detailed service manuals and documentation
- Time and cost savings
- Safe function
- System warranty available upon request, for individual applications



易格斯项目计划示例，此处为：导向槽模块
igus® project planning example, here: guide trough modules



易格斯主管在世界各地策划项目
igus® supervisors plan projects worldwide

还可提供模块系统中的模块以满足项目的需求，例如：

- 带电子驱动力监测系统的PPDS牵引臂
- 固定点模块适用于导向槽内拖链的简单连接，无需钻孔
- 极为适合滑行的滑行元件使长行程拖链的使用寿命更长久
- HD“重载型”导向槽系统选用了不同材料，采用了不同装配套件的设计，用以匹配个性化的应用和应力级别

应用行业：起重机，海上石油平台以及更多应用

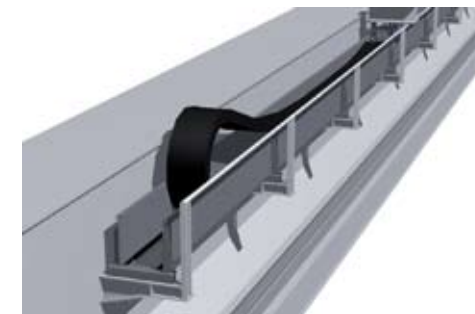
Available modules of such a modular system for projects entail, for example:

- PPDS tow arm with electronic push/pull force monitoring
- Fixation point modules for easy attachment of the E-Chain® inside the guide trough, with no drilling required
- Extreme gliders gliding elements for even longer cycle life of E-Chains on long travels
- HD "heavy duty" trough systems from various materials and with different assembly kit designs, matching the respective application and stress levels

Industries: cranes, offshore and many more



由易格斯设计的起重机系统
Crane system designed by igus®



3D设计模型
3D design model



数百种拖链和电缆，可提供1-4个等级，现货供应

Hundreds of E - Chains® and cables with class 1 to 4 ex - stock

IPA报告指出E3和E6.CR拖链系统通过了ISO class 1等级认证
易格斯所有拖链都可提供洁净空间的相关信息

E-ChainSystems® E3 and E6.CR IPA certified for ISO class 1
Specific information available for clean room compatibility of all igus® E-Chains®



测试装置 - 磨损微量测量装置
Test setup - wear particle measurement

Chainflex® - 电缆CF9, CF27, CF34和气管CF Clean Air, 经过IPA认证适用于ISO等级1
所有电缆都采用了相同的外护套材料, 共有612种不同型号的电缆 - 现货供应。

Chainflex® -cables CF9, CF27, CF34 and pneumatic hose CF Clean Air IPA certified for ISO class 1
By including all cables with the same outer jacket material there are results for 612 different cables - available ex stock.

对于无尘室的产品来说唯一的要求就是暴露在环境中的微粒越少越好。这一点对于移动的动态系统是尤为重要的, 比如拖链和电缆。耐磨损性能越高, 微粒也就越少, 同时也能保证产品的使用寿命。

这是所有易格斯产品发展的共同目标。一项全新的IPA报告, 由德国媒体及通信研究机构Fraunhofer Institute提供, 报告中大部分易格斯产品都通过了ISO class 1等级的认证。

The single demand for all cleanroom products is that as few particles as possible should be released into the environment. This is especially important for moving dynamic systems, for example E-Chains® and cables. A high resistance to wear results in less particles, as well as ensuring a life time. This is the common objective for the development of all igus®-products. A new report of IPA, Fraunhofer Institut, proves the best possible classification ISO class 1 for a large number of igus®-products.

拖链系列 E-Chain® series	结果 Result	
E3.15.040.075.0	ISO 等级 1	ISO Class 1
E6.29.060.150.CR*	ISO 等级 1	ISO Class 1
E6.29.060.150.0	ISO 等级 3	ISO Class 3
E14.3.038.0	ISO 等级 2	ISO Class 2
2500.05.055.0	ISO 等级 3	ISO Class 3
280.100	ISO 等级 4	ISO Class 4

* Sondermaterial* Special material

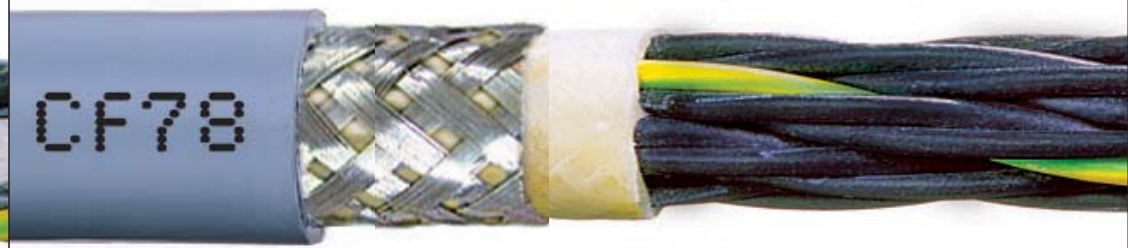
电缆系列 Chainflex® series
控制电缆 Control cables
数据/总线/测量系统电缆 Data/Bus/Measuring system cables
伺服电缆 Servo cables
动力电缆 Power cables
机器人电缆 Robot cable
气管 Pneumatic hose

符合ISO Class 1, 材料/电缆都通过IPA测试, 符合ISO标准14644-1 According to ISO Class 1, material/cable tested by IPA according to ISO standard 14644-1

CF9, CF10, CF9.UL, CF10.UL, CF98, CF99
CF111, CF11, CF12, CF BUS, CF11.LC, CF11.LC.D, CF14, CF113.D, CF111.D, CF11.D, CF Koax
CF27.D
CF34.UL, CF35.UL, CF37.D, CF38, CF300.UL, CFPE, CF310.UL, CF330.D, CF340, CF Braid
CF ROBOT
CF Clean Air

符合ISO Class 2, 材料/电缆都通过IPA测试, 符合ISO标准14644-1 According to ISO Class 2, material/cable tested by IPA according to ISO standard 14644-1

CF5, CF6
CF240, CF211
CF21.UL
CF30, CF31
-
-



Chainflex® CF77.UL.D – 通用型 – 无卤素 – 耐油 –

阻燃 – 分束成缆设计 – CF78.UL

Chainflex® CF77.UL.D – Allrounder – halogen free –

oilresistant – flame retardant – bundle design – CF78.UL

新一代用于机床制造业的控制电缆

- 一根电缆符合5个标准和认证
- PUR外护套，甲冑式挤压成型
- 耐油
- 不含PVC和卤素
- 阻燃
- 分束成缆设计，适用于高频率往返应用
- 拖链内的弯曲半径：7.5xd

应用行业：机床制造业，一般机械制造

The new generation of control cables for machine tool manufacture

- Complies with one cable 5 norms and certificates
- PUR outer jacket, gusset filled extruded
- Oil-resistant
- PVC-free/halogen-free
- Flame-retardant
- Bundle design for high number of cycles
- Bending radius inside E-Chain®: 7,5 x d

Industries: Machine tool manufacture, general machine building



适用于机床制造商的完美方案：

易格斯CF77和CF78
Perfect for machine tool manufacture:
igus® CF77 and CF78.



产品代码 Part No.	芯数+截面积[mm²] Number of cores + cross section [mm²]	产品代码 Part No.	芯数+截面积[mm²] Number of cores + cross section [mm²]	产品代码 Part No.	芯数+截面积[mm²] Number of cores + cross section [mm²]
CF77.UL.05.04.D	4 G 0.5	CF77.UL.07.04.D	4 G 0.75	CF77.UL.07.36.D	36 G 0.75
CF77.UL.05.05.D	5 G 0.5	CF77.UL.07.05.D	5 G 0.75	CF77.UL.10.02.D	2 x 1.0
CF77.UL.05.12.D	12 G 0.5	CF77.UL.07.07.D	7 G 0.75	CF77.UL.10.03.D	3 G 1.0
CF77.UL.05.18.D	18 G 0.5	CF77.UL.07.12.D	12 G 0.75	CF77.UL.10.04.D	4 G 1.0
CF77.UL.05.25.D	25 G 0.5	CF77.UL.07.18.D	18 G 0.75	CF77.UL.10.05.D	5 G 1.0
CF77.UL.05.30.D	30 G 0.5	CF77.UL.07.20.D	20 G 0.75	...	...
CF77.UL.07.03.D	3 G 0.75	CF77.UL.07.25.D	253 G 0.75	CF77.UL.100.04.D	4 G 10.0

30 新品 2008...E-Chains®.Chainflex®.ReadyChain®.invis®...



耐油

Oil resistance

新一代带屏蔽的控制电缆，适用于机床制造业

- PUR外护套，挤压成型
- 耐油
- 不含PVC和卤素
- 阻燃
- 分束成缆设计适用于高频率往返运动
- PUR内护套，甲冑式挤压成型
- 镀锡铜编织屏蔽，光学覆盖率为80%
- 拖链内的弯曲半径为：7.5xd

应用行业：机床制造业，一般机械制造

The new shielded generation of control cables for machine tool manufacture

- PUR outer jacket, extruded under pressure
- Oil-resistant
- PVC-free/halogen-free
- Flame-retardant
- Bundle design for high number of cycles
- PUR inner jacket, gusset filled extruded
- Tinned braided shield with 80% optical cover
- Bending radius inside E-Chain®: 7,5 x d

Industries: Machine tool manufacture, general machine building



产品代码 Part No.	芯数+截面积[mm²] Number of cores + cross section [mm²]	产品代码 Part No.	芯数+截面积[mm²] Number of cores + cross section [mm²]	产品代码 Part No.	芯数+截面积[mm²] Number of cores + cross section [mm²]
CF78.UL.05.04	(4 G 0.5)C	CF78.UL.07.03	(3 G 0.75)C	CF78.UL.10.05	(5 G 1.0)C
CF78.UL.05.05	(5 G 0.5)C	CF78.UL.07.05	(5 G 0.75)C	CF78.UL.10.07	(7 G 1.0)C
CF78.UL.05.07	(7 G 0.5)C	CF78.UL.07.07	(7 G 0.75)C	CF78.UL.10.12	(12 G 1.0)C
CF78.UL.05.09	(9 G 0.5)C	CF78.UL.07.12	(12 G 0.75)C	CF78.UL.10.18	(18 G 1.0)C
CF78.UL.05.12	(12 G 0.5)C	CF78.UL.07.18	(18 G 0.75)C	CF78.UL.10.25	(25 G 1.0)C
CF78.UL.05.18	(18 G 0.5)C	CF78.UL.07.24	(24 G 0.75)C	...	...
CF78.UL.05.24	(24 G 0.5)C	CF78.UL.10.03	(3 G 1.0)C	CF78.UL.40.04	(4 G 4.0)C

新品 2008...E-Chains®.Chainflex®.ReadyChain®.invis®... 31



37.halogenfrei.38

CF 37.D – 适用于户外应用的电缆 – CF38

CF 37.D – Chainflex®-Cables for outdoor applications – CF38

全新无卤素动力电缆适用于起重机和车间工程上对于机械性能有极高要求的应用

- TPE外护套，甲冑式挤压成型
 - 不含PVC和卤素
 - 耐油
 - 耐生物油
 - 耐低温
 - 抗UV辐射
 - 额定电压0.6/1kV
 - 拖链的弯曲半径为：7.5xd
- 应用行业：起重机和车间工程

The new halogen-free power cable for extra high mechanical demands on cranes and for plant engineering

- TPE outer jacket, gusset filled extruded
 - PVC-free/halogen-free
 - Oil-resistant
 - Bio-oil-resistant
 - Low-temperature-flexible
 - UV-resistant
 - Nominal voltage 0.6/1kV
 - Bending radius inside E-Chain®: 7,5 x d
- Industries: Crane- and plant engineering



典型应用：起重机
Typical application: Cranes



产品代码 Part No.	芯数+截面积[mm²] Number of cores + cross section [mm²]	产品代码 Part No.	芯数+截面积[mm²] Number of cores + cross section [mm²]
CF37.15.04.D	4 G 1.5	CF37.160.04.D	4 G 16.0
CF37.25.04.D	4 G 2.5	CF37.160.05.D	5 G 16.0
CF37.40.04.D	4 G 4.0	CF37.250.04.D	4 G 25.0
CF37.60.04.D	4 G 6.0	CF37.60.04.O.PE.D	4 x 6
CF37.60.05.D	5 G 6.0	CF37.100.04.O.PE.D	4 x 10
CF37.100.04.D	4 G 10.0	CF37.160.04.O.PE.D	4 x 16
CF37.100.05.D	5 G 10.0	CF37.500.03.O.PE.D	3 x 50

在高柔性电缆产品目录
(04/08)上可查询到更多
数据
More data in Chainflex®
catalog 04/08

32 新品 2008...E-Chains®.Chainflex®.ReadyChain®.invis®...

全新带屏蔽的动力电缆适用于起重机和车间工程上对于机械性能有极高要求的应用

- TPE外护套，强力挤压成型
 - 带屏蔽
 - 不含PVC和卤素
 - 耐油
 - 耐生物油
 - TPE内护套，甲冑式挤压成型
 - 耐低温
 - 抗UV辐射
 - 额定电压0.6/1kV
 - 镀锡铜编织屏蔽，光学覆盖率为90%
 - 拖链内的弯曲半径为：7.5xd
- 应用行业：起重机和车间工程

The new shielded power cable for extra high mechanical demands on cranes and for plant engineering

- TPE outer jacket, extruded under pressure
 - Shielded
 - PVC-free/halogen-free
 - Oil-resistant
 - Bio-oil-resistant
 - TPE inner jacket, gusset filled extruded
 - Low-temperature-flexible
 - UV-resistant
 - Nominal voltage 0.6/1kV
 - Tinned braided shield with 90% optical cover
 - Bending radius inside E-Chain®: 7,5 x d
- Industries: Crane- and plant engineering



产品代码 Part No.	芯数+截面积[mm²] Number of cores + cross section [mm²]	产品代码 Part No.	芯数+截面积[mm²] Number of cores + cross section [mm²]
CF38.05.04.D	(4 G 0.5)C	CF38.160.04.D	(4 G 16)C
CF38.07.04.D	(4 G 0.75)C	CF38.250.04.D	(4 G 25)C
CF38.15.04.D	(4 G 1.5)C	CF38.60.03.O.PE.D	(3 x 6)C
CF38.25.04.D	(4 G 4)C	CF38.100.03.O.PE.D	(3 x 10)C
CF38.40.04.D	(4 G 6)C	CF38.160.03.O.PE.D	(3 x 16)C
CF38.60.04.D	(4 G 10)C	CF38.250.03.O.PE.D	(3 x 25)C
CF38.100.04.D	(4 G 16)C	CF38.500.03.O.PE.D	(3 x 50)C

在高柔性电缆产品目录
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数据
More data in Chainflex®
catalog 04/08

新品 2008...E-Chains®.Chainflex®.ReadyChain®.invis®... 33



CF330.D – 适用于户外应用的电缆 – CF340

CF330.D – Chainflex®-cables for outdoor applications – CF340

全新无卤素单芯电缆适用于起重机和车间工程上对于机械性能有极高要求的应用

- TPE外护套
- 不含PVC和卤素
- 耐油
- 耐生物油
- 耐低温
- 抗UV辐射
- 额定电压0.6/1kV
- 拖链内的弯曲半径为: 7.5xd

应用行业: 起重机和车间工程

The new halogen-free single conductor for extra high mechanical demands on cranes and for plant engineering

- TPE outer jacket
- PVC-free/halogen-free
- Oil-resistant
- Bio-oil-resistant
- Low-temperature-flexible
- UV-resistant
- Nominal voltage 0.6/1kV
- Bending radius inside E-Chain®: 7,5 x d

Industries: Cranes- and plant engineering



动力电缆适用于岸桥起重机
Power for ship-to-shore cranes

全新带屏蔽且无卤素的单芯电缆适用于起重机和车间工程上对于机械性能有极高要求的应用

- TPE外护套
- 带屏蔽
- 不含PVC和卤素
- 耐油
- 耐生物油
- 耐低温
- 抗UV辐射
- 额定电压0.6/1kV
- 拖链内的弯曲半径为: 7.5xd

应用行业: 起重机和车间工程

The new shielded halogen-free single conductor for extra high mechanical demands on cranes and for plant engineering

- TPE outer jacket
- Shielded
- PVC-free/halogen-free
- Oil-resistant
- Bio-oil-resistant
- Low-temperature-flexible
- UV-resistant
- Nominal voltage 0.6/1kV
- Bending radius inside E-Chain®: 7,5 x d

Industries: Cranes- and plant engineering



产品代码 Part No.	芯数+截面积[mm²] Number of cores + cross section [mm²]	产品代码 Part No.	芯数+截面积[mm²] Number of cores + cross section [mm²]
CF330.60.01.D	1 x 6.0	CF330.700.01.D	1 x 70
CF330.100.01.D	1 x 10.0	CF330.950.01.D	1 x 95
CF330.160.01.D	1 x 16.0	CF330.1200.01.D	1 x 120
CF330.250.01.D	1 x 25.0	CF330.1500.01.D	1 x 150
CF330.350.01.D	1 x 35.0	CF330.1850.01.D	1 x 185
CF330.500.01.D	1 x 50.0		

在高柔性电缆产品目录
(04/08)上可查询到更多
数据
More data in Chainflex®
catalog 04/08



产品代码 Part No.	芯数+截面积[mm²] Number of cores + cross section [mm²]	产品代码 Part No.	芯数+截面积[mm²] Number of cores + cross section [mm²]
CF340.40.01	(1 x 4.0)C	CF340.500.01	(1 x 50.0)C
CF340.60.01	(1 x 6.0)C	CF340.700.01	(1 x 70.0)C
CF340.100.01	(1 x 10.0)C	CF340.950.01	(1 x 95.0)C
CF340.160.01	(1 x 16.0)C	CF340.1200.01	(1 x 120.0)C
CF340.250.01	(1 x 25.0)C	CF340.1500.01	(1 x 150.0)C
CF340.350.01	(1 x 35.0)C	CF340.1850.01	(1 x 185.0)C

在高柔性电缆产品目录
(04/08)上可查询到更多
数据
More data in Chainflex®
catalog 04/08



torsion... getestet.

定制电缆适用于机器人和扭转应用

Custom cables for robotic - and torsion applications

定制电缆适用于机器人和扭转应用

- 控制、动力、伺服、总线和数据电缆
- 带屏蔽和不带屏蔽
- 外护套材料: PVC, PUR, TPE
- 特殊电缆500米起订
- 度身定制的扭转度

应用行业: 三维机器人和运行应用

Custom cable for robotic- and torsion- application

- Control-, motor-, servo-, bus- and data cables
- Shielded and unshielded
- Outer jacket materials: PVC, PUR, TPE
- Special cables from 500 m on
- Custom-made torsion-degree

Industries: Robots and movements in the 3D applications



电缆在扭转应用中的使用寿命, 根据不同的应用, 扭转度和电缆长度的不同, 其性能也是各不相同的。必须经过众多测试才能检测出结果, 仅仅经过单次测试是完全不够的。

The cycle life of cables in torsion applications is a disproportionate function of the degree of torsion and of the cable length in each individual application. Numerous test setups are necessary, since a single test is usually not sufficient.

产品代码
Part No.

芯数+截面积
Number of cores + cross section
[mm²]

CFROBOT.035	(1 x 10.0)C
CFROBOT.036	(1 x 16.0)C
CFROBOT.037	(1 x 25.0)C
CFROBOT.038	(1 x 35.0)C
CFROBOT.039	(1 x 50.0)C
CF900.07.332	(6x(2x025))C
CF900.08.003	(4G4.0)C

36 新品 2008...E-Chains®.Chainflex®.ReadyChain®.invis®...



您的扭转电缆正在您的应用中接受测试 – 尽可能地接近实际应用情况, 因此易格斯测试实验室中配备了8台不同的扭转测试机械。

Your torsion-cables are tested for your application – as close to reality as possible. Therefore the igus® test lab is equipped with 8 different torsion-test-machines.

新品 2008...E-Chains®.Chainflex®.ReadyChain®.invis®... 37



CF 130.US – 第一根易格斯MTW电缆

CF 130.US – first igus® MTW-cables

对于出口美国的机构，要求通过NFPA 79认证的情况越来越多。

详细地研究过这个认证后，它非常明显地表明了使用AWM或者UL注册的电缆已经不被认可，这种情况甚至出现在绝大多数要求使用拖链的应用中。

这个问题的出现可以体现在两个方面：

1. 适用的电缆选择急剧减少。
2. 由于对阻燃性要求很高，目前NFPA 79会减少使用PVC作为护套材料。

Exporting machinery into some states of the United States, NFPA 79 is a more and more required certification.

Studying this certification in detail it is obvious that the use of AWM or UL registered cables is not allowed, even in the most demanding E-Chain® applications.

This is problematic in two ways:

1. The choice of applicable cables is reduced tremendously.
2. Because of the high demands concerning fire resistance, the NFPA 79 reduces the choice of applicable materials to PVC for the moment.



产品代码 Part No.	AWG	芯数 Number of cores	截面积[mm²] cross section [mm²]	产品代码 Part No.	AWG	芯数 Number of cores	截面积[mm²] cross section [mm²]
CF130US-05-03	20	3	0.52	CF130US-07-04	18	4	0.82
CF130US-05-04	20	4	0.52	CF130US-07-05	18	5	0.82
CF130US-05-05	20	5	0.52	CF130US-07-07	18	7	0.82
CF130US-05-07	20	7	0.52	CF130US-07-12	18	12	0.82
CF130US-05-12	20	12	0.52	CF130US-07-18	18	18	0.82
CF130US-05-18	20	18	0.52	...	...	...	...
CF130US-05-25	20	25	0.52	CF130US-60-05	10	5	5.21

38 新品 2008...E-Chains®.Chainflex®.ReadyChain®.invis®...

除了CF130.US和CF140.US，易格斯现还可提供MTW电缆（机床电缆），符合NFPA 79标准。但是由于必须符合一些标准，这些电缆只限于使用在拖链系统中，特别是充满油的环境中。

但是至少易格斯可以在控制电缆的领域提供一种适用于短行程和中等负载应用的解决方案。

With CF130.US and CF140.US, igus® offers a a MTW-cables (Machine Tool Wire cable) which comply with NFPA 79 norms. But because of the severe norms these cables are only for limited use in E-ChainSystems®, specially in oily environment.

But at least igus® offers a solution in the field of control cables for applications with short strokes and medium mechanical requirements.



产品代码 Part No.	AWG	芯数 Number of cores	截面积[mm²] cross section [mm²]	产品代码 Part No.	AWG	芯数 Number of cores	截面积[mm²] cross section [mm²]
CF140US-05-02	20	2	0.52	CF140US-05-25	20	25	0.52
CF140US-05-03	20	3	0.52	CF140US-07-04	18	4	0.82
CF140US-05-04	20	4	0.52	CF140US-07-05	18	5	0.82
CF140US-05-05	20	5	0.52	CF140US-07-07	18	7	0.82
CF140US-05-07	20	7	0.52	CF140US-07-12	18	12	0.82
CF140US-05-12	20	12	0.52	...	...	...	...
CF140US-05-18	20	18	0.52	CF140US-60-05	10	5	5.21

新品 2008...E-Chains®.Chainflex®.ReadyChain®.invis®... 39

invis[®].baulkasten.

坚固的模块化系统适用于感应 供电

Robust modular system for inductive energy supply

invis[®] 动力感应模块:

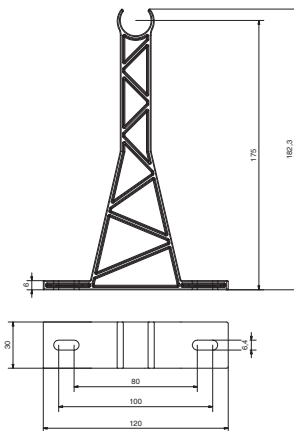
全新环紧固适用于安全的循环电线路

- 环电缆可被快速装填于安装管
- 适合invis[®]动力M型拾取
- 模块 (安装于地板, 墙壁或者倒置)
- 抗UV辐射
- 易于安装
- 适用于极长的行程长度和弯曲行程

invis[®] power induction modules:

New loop fastening for safe loop cable routing

- Loop cable snaps into installation tube
- Fits with invis power M-style pickup
- Modular (installs to floor, wall or upside down)
- UV resistant
- Easy installation
- For unlimited travel length and curved travels



完全invis[®] 动力目录
Full invis[®] power catalog

现已开始供应模块系统。

现在起即可订购您所需要的invis[®] 动力系统。

- 无磨损
- 无需机械维护
- 弯曲行程
- 多元化拾取适用于相同行程
- 功率输出可达40kW

在线目录请浏览: www.igus.de/invis

The modular system is now available. Order your invis power system now.

- No wear
- No mechanical maintenance
- Curved travels
- Multiple pickups for the same travel
- Output up to 40 kW

Catalogs also online: www.igus.eu/invis



环紧固
Loop Fastening
产品代码 / Part No.
LH100.01



环拖管
Loop Tubes
产品代码 / Part No.
LR100.01



进给模块
Feeder Modules
产品代码 / Part No.
E100.01
E200.01
E300.01

最高动力
Peak power
5 kVA
20 kVA
40 kVA

连续动力
Continuous p.
3 kVA
15 kVA
30 kVA



拾取模块
M型—拾取
产品代码 / Part No.
PM200.01
PM500.01
PM800.01

最高动力
Peak power
2 kW
5 kW
8 kW

连续动力
Continuous p.
1 kW
3 kW
5 kW

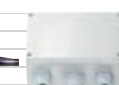
补偿
Compensation
产品代码 / Part No.
K100.01

环线
Loop line
产品代码 / Part No.
IP100.07.01

进给线
Feed line
产品代码 / Part No.
IP200.07.01

终端盒
Terminal box
产品代码 / Part No.
A100.01

DC-DC转换24 V
DC-DC converter 24 V
产品代码 / Part No.
DC100.01





einfach & schnell.

QuickPin 2.0 – 在线配置

QuickPin 2.0 – Pin-Out Configurator

- 快速且简便地在线配置和订购高柔性电缆以及连接器。每步只需使用鼠标进行点击和拖拽即可。
- 可提供圆形接插件，方形接插件，D-Sub连接器和无电缆末端的型号
- 只需点击一下即可将配置好的电缆放入购物篮中，并且咨询，订购或者先储存再订购
- 从订购历史记录中可以查询到已咨询过的电缆，进行进一步咨询
- 在线报价，包括铜加价
- 减轻设计工作：使用ePLAN电子P8软件配置的电缆，不会产生交付费用
- 只需一个供应商即可完成装配—100%经过测试
- 专属于您的销售人员可提供现场服务
- 无需安装
- 可提供德文和英文的语言版本
- 通过制造商产品代码可为个性化应用提供连接器规格或者组件

演示视频：
www.igus.de/quickpin-demo



- Quick and easy configuration and order of Chainflex® cables and connectors. Per mouse click and drag & drop
- Circular plug-in connector, squared plug-in connectors, D-Sub and free cable ending possible

Demo video:
www.igus.eu/quickpin-demo



新品 2008...E-Chains®.Chainflex®.ReadyChain®.invis®... 43

新购物篮适用于灵活的
在线购物
New shopping basket for
intuitive online shopping

新品: "快速订购" 功能
New: "Quick order" function

40个国家, 19种语言版本
40 countries, 19 languages

快速查询
Fast search

所有重要测试方法和产品信息都显示在同一页面上
All important measures and product information on one page

可直接链接到专属于您的联系人
Direct access to your contact person

点击"更多组件"可直接链接到CAD文件和PDF文件
The "more about part" link guides you directly to CAD files, PDF files

在线目录 - 配置 - 商店 - 三维CAD - 应用 - 诸多改进

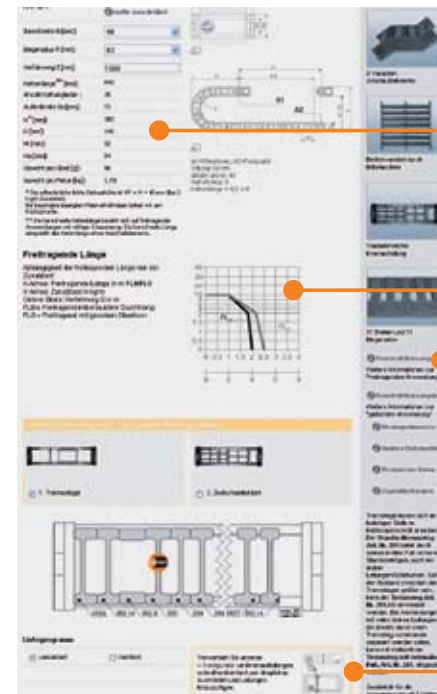
Online-Catalog - Configuration - Shop - 3D-CAD - Applications - many improvements

在 www.igus.com.cn 上, 您会发现许多新的功能和改进:

- 快速浏览全文和产品代码查询
- 新QuickPin - 配置适用于连接件和电缆
- 现在的易格斯接插件可提供连接件商店, 在线目录
- 适用于拖链的新产品查询器, 仅需两个问题, 您就可以查询到适合您应用的拖链
- 改进过的内部支架配置
- 新在线目录使用invis®动力 - 无线动力传输
- 改进过的三维CAD设计功能, 适用于拖链
- 可直接链接到适合的产品和联系人
- 上百种应用案例告诉您 - 工程塑料产品使用寿命更长久

On www.igus.de you'll find many new functions and improvements:

- Quick full text and part number search.
- New QuickPin-Configuration for connectors and cables
- Now with Connectors Shop, the online catalog for igus plug-in connectors
- New product finder for E-Chains®, with only two questions you'll find the right E-Chain®
- Improved inner shelving configurator
- New online catalog for invis Power - contactless power transmission.
- Improved 3D CAD design functions for E-Chains®
- With industry webpages direct access to the right product and contact person
- Hundreds of applications examples showing you - plastics for longer life®



计算适用于架空应用的拖链长度
Calculation of chain length for unsupported applications

显示架空长度和附加负载
Show unsupported length and additional loads

设计和装配帮助
Help on design and assembly

内部支架配置, 可通过拖拽对支架进行快速配置
Interior shelving configurator for quick configuration of shelving by Drag & Drop

包括高柔性电缆
...incl. Chainflex® - Cables

装配接头的自动选择
Automated choice of the fitting mounting brackets

直接链接到更多附件
Direct links to further accessories



已扩充的在线目录和内部支架

Extended online catalog and interior shelving configurator

滑行应用的广泛产品系列
Huge Range of gliding applications



完整配置可简单快速地放入购物篮中
Easy and quick transmission of the complete configuration into the shopping basket



在配置中可直接改变拖链宽度
Change of the chain width directly in the configurator

电缆总览，使操作更便捷
Cable overview for better handling



三维CAD文件
3D CAD file

在Excel表格中配置下载文件
Configuration downloads in Excel format

电缆的快速定位
Quick positioning of cables

快速和精确地配置合适的拖链和电缆
使用内部支架配置，您可简单且快速地装填拖链，只需点击一下鼠标即可生成三维CAD文件

- 新品：内部支架配置现可使用最小弯曲半径的合理检测
- 对于高柔性电缆的直径和拖链的截面积无需手动计算和反复查对
- 现已提供电缆总览使操作更一目了然
- 拖链内宽的改变 – 现在内部支架配置中即可实现改变
- 在Excel表格中可下载带内部支架和电缆的拖链零部件

- Quickly and accurately to the right E-Chain® and Chainflex® cable combination
- With their interior shelving configurator you design the complete filling of an E-Chain® easily and quickly and generate a 3D-CAD-file with one click.
- Neu: Interior shelving configuration now with logical check of min. bending radius.
 - No manual calculation and crosscheck of the Chainflex® cable diameter and E-Chain® cross section necessary.
 - Now with cable overview for better handling
 - Change of the chain width – now possible also in the inner shelving configurator
 - Download E-Chain® partlist with interior shelving and cables in Excel format

灵敏的操作向导
Intuitive operator guidance

在“我的易格斯”中节省购物篮空间用作更多用途
Save shopping basket in "myigus" for further use

已配置产品的快速变动
Quick chagement of already made configuration

可直接链接到CAD文件, PDF文件和计算产品的使用寿命
Directly to CAD, PDF and lifetime calculation

计算铜加价
Calculation of copper charge



新购物篮 – 咨询/订购只需五步

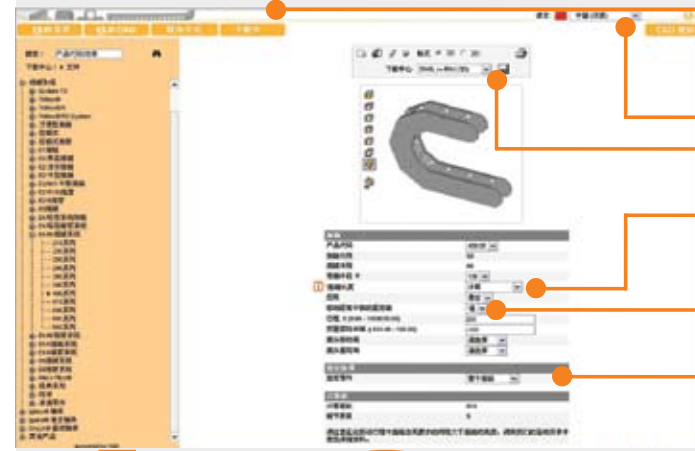
New shopping basket – 5 steps to request/order

新购物篮, 具有非常灵敏的操作向导, 从咨询到订购, 只需五个步骤

- 订购只需顺时针点击几下即可
- 对于已注册的用户来说, 所有咨询和订购信息都可被储存在“我的易格斯”中
- 所有订购产品都可被记录下来, 便于在“我的易格斯”用户再次操作
- 点击按钮“i”, 您可直接链接到更多信息, 如: 三维CAD文件, 产品使用寿命的计算和PDF文件

The new shopping basket with intuitive operator guidance in 5 steps from inquiry to order

- Order around the clock with few clicks
- All inquiries and orders will be saved in "myigus" for registered users
- All orders can be recalled from archive for "myigus" users for further operation
- The "i" button directs you to all further information like 3D-CAD-files, lifetime calculation and PDF-files



带“压缩”和“电子邮件”功能的下载中心
Download center with "zip" and "email" functions

可提供16种语言版本 16 languages

不同的二维和三维文件格式
Various 2D & 3D formats

拖链计算选项
Chain calculation options

新品: 偏心驱动点
New: Off-center feeding point

整套拖链或者个别链节和接头
Complete E-Chain® or individual links and mounting brackets

三维CAD文件 – 更简便的CAD模型获得方法

3D CAD – easier ways to CAD models

三维CAD – 现在您可以更简单地获得拖链CAD文件了

- 无需注册, 下载三维CAD文件更迅速
- 通过查询功能, 在线目录或者产品查询器, 可以更加快速地锁定用户所需要的产品
- 11种不同三维CAD文件格式以及8种以上不同的二维CAD文件格式
- 可提供16种语言版本

3D-CAD – get to your individual E-Chain® CAD model even easier now

- Faster 3D CAD file download without registration
- Fast locating of specific items through search function, online catalog or product finder
- 11 different 3D CAD file formats plus 8 different 2D CAD formats
- Available in 16 languages

新:

- 无需复杂的拖链长度计算, 即可创建拖链的CAD文件。无论您是否可以确定行程长度, 拖链长度 (以毫米为单位) 或者所需的链节数 – 该系统都能为您创建出适合您应用的准确拖链
- 可沿着行程长度自由地定位拖拽手臂。无需在CAD系统中进行更多的复杂调整
- 通过偏心驱动点可非常简单地创建拖链模型

New:

- Create E-Chain CAD files without complicated chain length calculation. Regardless whether you know just the travel length, the chain length in mm or the required number of links – the system always generates the accurate E-Chain®
- Position the tow arm freely along the travel length. No more complicated adjustments within the CAD system
- Easy creation of E-Chain® models with off-center feeding point