

如何帮助我们的客户“精进技术，降低成本”，使设备的运行时自重轻，静音，免润滑和耐久性更长？”

“How can we help our customers to reduce costs, improve technology and make their application lighter, quieter, more durable and lubrication-free?”

We always find more answers with motion plastics®: igus® new products and product range additions 2019

## 2019年新品及新增的产品范围: 易格斯能够提供更多的运动工程塑料解决方案:

产品设计人员，采购和研发人员无时无刻都在反复关注一个问题：“如何用低成本研发制造出一个好产品。”易格斯可以为您解决这个问题：“精进技术，降低成本”一直是我们的目标。您可以通过在线的易格斯专家系统，提前计算出产品的成本花费，计算使用寿命。您也可以在样本册或官网www.igus.com.cn/news上找到易格斯2019年的新品和新增的产品范围。

Every day, designers, buyers and developers around the world ask questions that revolve around one topic: „How can I make moving parts better whilst reducing costs?“ motion plastics® from igus® are developed for exactly this purpose: improving motion. And so that you know in advance whether the use of motion plastics® pays off, the service life of almost all products can be calculated or simulated. We hope you enjoy discovering our new products and product range additions 2019 in this catalogue or online at www.igus.eu/news

igus® motion plastics® ...  
... improve what moves ...

## igus® ... 2019 新品 ... 拖链...

... 移动供能更便捷

► 智能工程塑料 smart plastics ... 维护和维修更高效 predictive maintenance

智能工程塑料 smart plastics



通讯模块 iCom和升级版通讯模块 iCom.plus  
The iCom.plus concept and the data concentrator iCom



EC.I wear detection



CF.D wear detection



DLW.W wear detection

igus®用于拖链的传感器  
igus® sensors for e-chains®

igus®用于高柔性电缆的传感器  
igus® sensors for chainflex®

igus® sensors for dry-tech®  
igus® sensors for dry-tech®

► 页码 08

► 快速安装和配置...  
Fast assembly and configurations

E4Q/R4Q 系列拖链



低噪音运行，自重轻，轻松开启和闭合  
Quieter, lighter and easy to open

► 页码 10

拖链在配置工具



在线快速配置拖链系统  
Configure energy chain systems in seconds

► 页码 12

► 拖链...机器人...小安装空间...安全...e-chain® ...  
robotics ... less space ... safe...

triflex® TR.RSEL.85



机器人伸缩系统 - 头部无干涉，新尺寸  
Robot retraction systems - no loops, new size

► 页码 13

triflex® TRCF.65



弯曲半径，可用于激光切割  
Radius for laser cables

► 页码 16

► 节省时间...  
time saving...

简易机器人夹具



低成本，快速安全地安装  
Attach safely and cost-effectively in seconds

► 页码 20

快速配置机器人



快速配置10,000多种机器人的管线包系统  
Configure 10,000 robot components in seconds

► 页码 24

► 拖链...无尘室...紧凑空间...  
e-chain® ... clean room ... tighter spaces ...

e-skin® soft



可用于无尘室的拖管，所需安装空间小  
Corrugated tubes for cleanroom applications in confined spaces

► 页码 26

e-skin® flat



紧凑的结构且易清洁，可用于半导体行业  
Compact and clean for the semiconductor industry

► 页码 28

► 页码 30

► 页码 34

► 页码 36

► 在同一个系统中传输能量, 数据, 气体和液体 e-chain... energy, data, air & liquids in one system ► 适用于多种运动和行业

e-spool 21	e-spool flex	twisterband HD	e-loop
			
电缆可回缩, 能传输能量, 数据, 气体和液体介质, 无需滑环 Rotational supply of energy, data, air and liquids without slip ring	无滑环的电缆卷筒: 传输无间断 Cable drum without slip ring: cable feeding without interruption	在极小的安装空间做旋转运动 Rotary motion in the most confined space	loops 安全引导电缆运行 Safe cable guidance for service loops
► 页码 40	► 页码 42	► 页码 44	► 页码 48


的解决方案 Other solutions for different motions and industries

plane-chain	micro flizz®	导槽夹具	可用于高速运行的滑条
			
可用于长行程的自动化 Automatisieren auf langen Wegen	高性价比, 免维护的整套系统 Alternative to the busbar: maintenance-free complete system	引导电缆在导槽外侧路径 Guide permanently installed cables along the trough	耐磨性能经优化, 适用于拖链长行程运行 Extremely wear-resistant on long travels
► 页码 50	► 页码 52	► 页码 54	► 页码 56




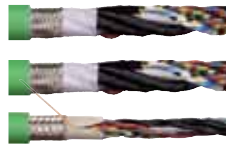
► 高柔性电缆 chainflex® cables ...

YE.42	Profinet	PVC外护套的以太网电缆	多种外护套材质的以太网电缆
			
坚固且抗振动, 可用于工程机械和存储平台 Strong and vibration-resistant for construction machinery and access platforms	Profinet电缆用于各种运动, 提供质保的使用寿命 Profinet cables for all movement types with guaranteed service life	PVC外护套的总线电缆, 适用于拖链 - 通过CMX认证 PVC Bus cables for e-chains® - now available with CMX rating	以太网电缆有多种外护套材质供选择, 现通过CC-Link IE Field认证 Now available in all jacket material qualities with CC-Link IE Field Network approval
► 页码 58	► 页码 64	► 页码 66	► 页码 70

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CFROBOT8.PLUS	CF77.UL.D	CF240.PUR	CF11.028.D DriveClik
			
总线电缆可实现两倍扭转角度(±360°/m) With twice the torsion angle (±360°/m) and guaranteed service life	新增小截面系列规格的CF77.UL.D PUR 控制电缆 Addition of smaller cross sections for CF77.UL.D PUR control cable	新增小截面系列规格的PUR外护套数据电缆CF.240.PUR Addition of smaller cross sections for PUR Data cable CF.240.PUR	TPE外护套测量系统电缆CF11.D型号拓展 Extension of TPE measuring system cable CF11.D by DriveClik standard
► 页码 72	► 页码 74	► 页码 76	► 页码 78

► 高柔性电缆 chainflex® cables ...

经优化的绝缘	CF27.D UL 1000V	CF21.UL   CF27.D	MSC UL 300V
			
新一代绝缘材料的动力和伺服电缆, 适用于大电流的情况 New generation of core insulation for motor and servo cables for high currents	新一代绝缘材料, 通过高温测试认证 New generation insulation material for improved temperature stability	新型单元屏蔽, 加快了30%的装配时间 Servo cables with new pair shielding for 30% faster harnessing	新一代测试系统电缆, 通过UL 300V认证 New generation Measuring system cables with higher UL approval of 300V
► 页码 80	► 页码 82	► 页码 84	► 页码 86

...

CFBUS 以太网电缆	在线快速查找
	
CFBUS.045 和 CFBUS.049 以太网电缆, 现通过 UL 600V 认证 Ethernet cables CFBUS.045 and CFBUS.049 now with 600V UL approval	在线快速查找满足要求的电缆 Find the right cable online
► 页码 88	► 页码 90

## ► 装配电缆 readycable® ...

### 4,600种装配电缆



新增的装配电缆包括Beckhoff, SEW, Siemens OCC等  
New drive cables for Beckhoff, SEW, Siemens OCC

► 页码 94

### 装配电缆在线商店



readycable® 装配电缆商店方便查找, 配置和订购驱动电缆  
New readycable® shop simplifies finding, configuring and ordering of harnessed cables

► 页码 95

### M12 编码器接头



即插即用的装配电缆, 可配拓展的M12 编码接头  
Ready-to-connect harnessed network cables as extension with M12 x-coded connectors

► 页码 96

### 用于7轴机器人的装配电缆



用于7轴机器人, 也可用于ABB机器人的装配电缆  
igus® readycable® for 7 axis robots. Now also harnessed for ABB.

► 页码 97

...

### 工业以太网电缆



即插即用的以太网和Profinet电缆, 带注塑接头  
Ready-to-connect with Ethernet and Profinet cables with molded connectors

► 页码 98

### 使用寿命计算器



装配电缆readycable®查找器2.0  
readycable® product finder 2.0 with direct service life calculation online

► 页码 99

2019 亮点 2019 highlight

新品

升级版通讯模块  
The icom.plus concept



当磨损部件需要被更换时，能及时发现吗？

Can I see when the wear-resistant parts should be replaced?

## 移动供能更智能： moving energy made smart: 智能工程塑料

### 智能产品通知提前维护时间

igus® 智能产品包含各种部件，如不同的智能传感器通讯模块icom和icom.plus等，能在设备运行期间检测磨损度，并尽量提前警告用户制定维护方案。这使用户对产品的监控更容易。由于新的icom.plus模块提供在线和离线方案，所以用户都不需要考虑整合所有设备数据就可以提前安排维护计划。igus® 智能产品让领先一步。

### Predictive maintenance with igus® smart plastics

igus® smart plastics offer components, such as various isense sensors, the evaluation module icom and the icom.plus concept, that measure operating conditions, report required maintenance and also interrupt operation before major damage to a system occurs. The display can be done easily on the machine monitor. However, anyone who wants to implement predictive maintenance in their company

does not have to think about a complete digital reorientation, because the icom.plus now offers a module that can be operated online or offline. igus® smart plastics – one step ahead of wear.



您可以在线找到更多的新品及应用，以及合适的高柔性总线电缆chainflex®: [igus.com.cn/chainflex](http://igus.com.cn/chainflex)  
Matching chainflex® bus cables for every application and more news can be found online: [igus.eu/chainflex](http://igus.eu/chainflex)

# ... 移动供能更便捷 ...

... motion plastics®



新品

10

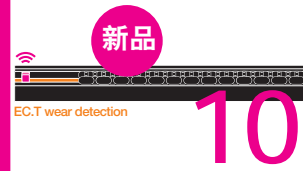
通讯模块icom.plus  
The icom.plus concept



新品

11

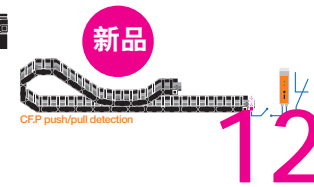
2条拖链断裂监测  
Breakage detection for two e-chains®



新品

10

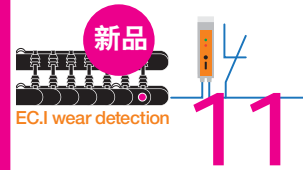
滑条磨损监测(EC.T)  
Sensor for glide bar wear (EC.T)



新品

12

监测柔性电缆的推拉力(CF.P)  
Sensor for measuring tensile forces on cables (CF.P)



新品

11

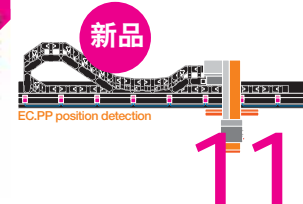
链节磨损量 (EC.I)  
Non-contact wear measurement of the e-chain® (EC.I)



新品

12

监测总线电缆的传输率(CF.D)  
Sensor for measuring the transmission quality of Ethernet bus cables (CF.D)



新品

11

监测拖链移动位置的推拉力(EC.PP)  
Sensor for position-sensitive push/pull force measurement in e-chains® (EC.PP)





## ... 经济 ... 高效 ...

## 智能 ...

### 移动供能更智能: 智能运动工程塑料的开创者

作为工程塑料拖链, 轴承和高柔性电缆的制造商和供应商, 易格斯经历了一些列智能化的变革。目的是提前通知系统的维护和维修, 更加高效且节约成本。新一代的 isense 产品不仅关联生产本身。提前维护, 也将设备运行数字化, 并得益于此。

- 降低维护成本
- 消除意外停机
- 更长使用寿命
- 提高设备的效率
- 节省时间-快速监测到设备异常
- 减少能源的消耗
- 多种工业4.0部件常备库存

典型的应用领域:  
任何需要提前维护的地方

### Moving energy made smart: intelligent smart plastics help create smart factories

As a manufacturer and supplier of plastic components such as energy chains, cables and bearings, igus® is also going through a digital development process and is increasingly orienting its products towards use in smart factories. The aim is to make the maintenance and repair of its plastics more efficient and cost-effective. Thanks to igus® smart plastics products, maintenance and repair are not only being focused at industrial production; they also benefit from digitalisation and its advantages.

- Reduce maintenance costs
- Eliminate unplanned downtime
- Long service life
- Increase equipment efficiency
- Save time through faster detection of wear and faults
- Reduction of energy consumption
- Many Industry 4.0 components available from stock

Typical application areas:  
Wherever predictive maintenance is required

新一代的易格斯智能工程塑料产品 isense 为用户提供了多种系列可供选择。离线状态下, 系统可搜集运行状态下的相关数据。用户不允许数据外泄, 所以易格斯采用历史数据实现数据对比, 帮助客户评判设备状况。半离线状态下, 设备可通过连接到易格斯的服务器终端, 使用易格斯的ERP系统的自动生成订单功能。在线方案, 可提供在线设备的历史数据对比, 得到最优结果。这些用户数据和应用情况也会使得 igus® 系统, 得到更多成长, 更智能。智能系统为使用通讯设备 icom.plus 的用户提供了多样化的系统控制的选择。

With the igus® isense product family, the customer has the choice of the degree of connectivity with the systems. Used offline, it collects sensor data and receives information about operating conditions. The customer for whom data security is most important, keeps the data in-house and uses the service life data pre-programmed by igus®. Semi-offline they connect to the igus® server for a period of their own choosing and can use the igus® ERP to automatically generate spare parts orders. There is a permanent online data comparison option for the best possible performance of the system. Sensor data and igus® knowledge are constantly growing and so the systems become more intelligent. Whatever the customer chooses, everything can be controlled using the icom.plus concept within the existing plant control system.



igus® 智能产品的视频:

[www.igus.com.cn/smartplastics](http://www.igus.com.cn/smartplastics)

New videos on igus® smart plastics at:

[www.igus.eu/smartplastics](http://www.igus.eu/smartplastics)

# igus® sensors ... Isense 产品范围 ...

新品

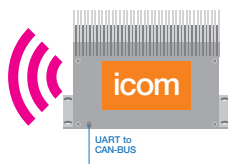
## 通讯模块 icom.plus The icom.plus concept



智能拖链模块中的数据拟通过通讯模块导出到平板或其他系统，来分析及实现提前预警。通讯方案有离线，半离线和在线状态可供选择。

This local device makes maintenance predictions and exceeding limit values, which are output via the control panel or the fieldbus system. The concept enables offline, semi-offline and online use.

## 通讯模块(icom) Data concentrator (icom)



Isense 传感器数据，通过互联网，传到igus® 服务器终端。

Compresses sensor data for cost-effective IoT transmission to the igus® server.

新品

## 滑条更换监测系统 (EC.T) Sensor for glide bar wear (EC.T)



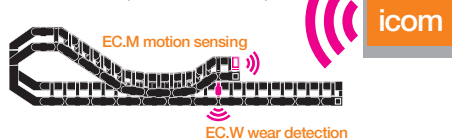
EC.T wear detection

滑条磨损监测的智能系统可用在长行程的应用中，且将系统的运行状态数据传输到通讯设备icom。

The sensor measures the wear of the glide bar on long travel applications and reports the status to the icom module.

## 监测拖链运行状态/监测磨损情况 (EC.M/EC.W)

Sensors for movement and wear on e-chains® (EC.M/EC.W)



EC.M: 监测运动加速度，速度和温度，确保预测系统使用寿命更加精确。

EC.M: With the measured values of acceleration, speed and temperature, a precise service life prediction accounting for the actual operating conditions is possible.

EC.W: 通过监测实际的磨损程度，使得整个系统能够采用根据实际运行情况得出的寿命预测。

EC.W: Enables learning of the entire system by detecting a defined percentage of wear and therefore making it possible to adapt the service life predictions to the actual operating conditions.

# 用于拖链 ...

新品

## 链节间磨损的测量(EC.I) Non-contact wear measurement of the e-chain® (EC.I)



不接触测量，孔销连接的磨损程度，来计划下一步需求的工序。

Contactless measurement of the wear of the pin and bore connection for maintenance planning. Connects to the icom modules.

## 拖链断裂监测 (EC.B) e-chains® breakage detection (EC.B)

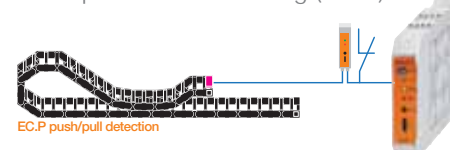


传感器监测拖链链节断裂的最开始阶段并马上停机，这样就不用花费大量的成本去更换整套损坏的拖链系统。

The sensor detects a chain breakage at its initial stage and shuts down the system before an expensive complete breakdown is caused.

新品

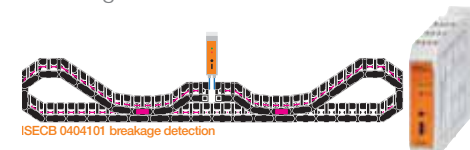
## 推/拉力监测 (EC.P) Push/pull force monitoring (EC.P)



14年以来，全球的起重机都采用智能系统用来监测拖链的推拉力，避免拖链链节的意外损坏和停机。

For 14 years, the measurement of push/pull forces prevented chain breakage and unplanned downtime in cranes equipped with e-chain systems® worldwide.

## 同时监测两条拖链的断裂 Breakage detection for two e-chains®

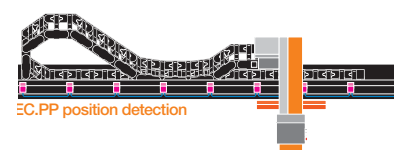


对于对开运行的拖链或拖链的长行程应用来说，两个传感器同时监测拖链断裂状况，并在断裂最开始阶段提前通知系统。

For opposing or very long travel chains, two sensors detect chain breakage in the initial stage and report to a common module.

新品

## 特定位置推/拉力的监测 (EC.PP) Sensor for position-sensitive push/pull force measurement in e-chains® (EC.PP)



对于拖链的长行程应用来说，EC.PP 系统监测特定位置的推/拉力。

For very long glide applications, the EC.PP sends defined position information to measure the push/pull forces in a position-dependent manner with EC.P.

... for cables

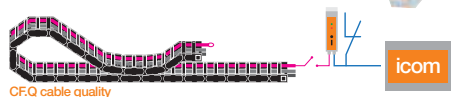
# 用于电缆...

... for dry-tech

# ...用于dry-tech®

## chainflex® 高柔性电缆的使用寿命 (CF.Q)

Sensor for the chainflex® cable service life (CF.Q)



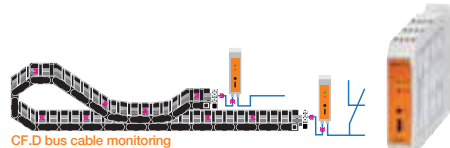
通过测量高柔性电缆的电气性能，及时发现电缆的故障。

Identifies an impending defect in the cable by measuring the electrical properties of the chainflex® cable whilst in operation.

新品

## 监测以太网总线电缆的传输速率 (CF.D)

Sensor for measuring the transmission quality of Ethernet bus cables (CF.D)



通过检查传输中数据包的损耗，来监测预发生的电缆故障。通过LED灯预警，也可控制开关或连接网络预警。无需在电缆中安装额外的芯线。

Detects impending cable failure by measuring packet loss. Alarm via LED, switching contact or network. No extra measuring cores necessary.

新品

## 监测电缆的预紧力 (CF.P)

Sensor for measuring tensile forces on cables (CF.P)



监测拖链系统中的电缆不断增加的预紧力，及时通知客户或关停系统。

Detects increased tensile forces on cables in e-chain systems® and informs the customer or shuts down the system.

## 监测drylin® T 直线系统磨损 (DLT.W)

Wear sensor for drylin® T linear systems (DLT.W)

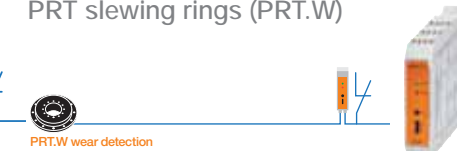


及时通知更换drylin T® 导轨。

Gives timely replacement recommendations for the sliding elements in drylin T® carriages.

## 监测iglidur® PRT回转环磨损 (PRT.W)

Wear measurement for iglidur® PRT slewing rings (PRT.W)



及时通知更换iglidur® 回转环轴承

Gives timely replacement recommendations for the sliding elements in iglidur® slewing ring bearings.

新品

## 监测drylin® W 直线系统的磨损 (DLW.W)

Wear measurement for sliding elements in drylin® W linear systems (DLW.W)



drylin® DLW.W 传感器监测drylin® W直线系统的磨损。

The drylin® DLW.W sensor reports the wear of the sliding elements in drylin® W linear systems.

新品

## 监测轴承的磨损 (isense轴承智能系统)

Wear measurement integrated in plain bearing (isense plain bearing)



新型isense智能系统监测轴承的磨损，且在设备发生故障前通知用户更换。

The new isense plain bearing sensor reports the wear of the plain bearing and enables the replacement before a possible failure of the system.

2019 亮点 2019 highlight

新品

拖链是否可以快速开启和  
闭合且无需任何工具？

Is there a strong energy  
chain that I can quickly open  
and close without tools?

E4Q: 无需任何工具即可快速  
开启和闭合的拖链  
E4Q: complete tool-free  
opening and closing of an  
e-chain®



只需几秒即可配置系统和计算使用  
寿命  
Configure systems and calculate their  
service life online in seconds

## 移动供能更便捷: moving energy made easy: 拖链供能系统 e-chain® and systems®

新型拖链设计，无需任何工具

New design for tool-free filling

新型E4Q系列拖链使移动供能更便捷。新设计的横杆无需任何工具即可开启和闭合，也可轻松填充管线。坚固且抗扭自重轻的E4Q系列拖链，尤其适用于长行程和架空应用。新产品内部设计更有益于保护管线，并且内部分隔占用空间少。有一些环境要求更高的地方，我们也提供R4Q拖管。

Energy supply is now made even easier with the new E4Q e-chain®. The innovative crossbar mechanism makes the chain openable by hand without the need for tools. In combination with the modular design, the E4Q can be filled even faster. With its high torsional rigidity, strength and light weight, it is particularly suitable for long travels and unsupported travels. The new design also makes it more cable-friendly and allows for narrower interior separation. For environments requiring greater cable protection, the chain is also available as R4Q tube.



您可以在线找到更多的新品及应用，  
以及合适的高柔性电缆chainflex®:  
[igus.com.cn/chainflex](http://igus.com.cn/chainflex)  
Matching chainflex® cables for every  
application and more news can be  
found online: [igus.eu/chainflex](http://igus.eu/chainflex)

... motion plastics ...

新品



16

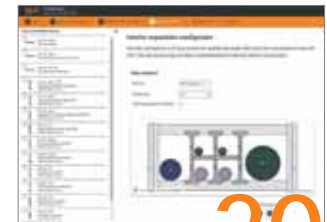
E4Q系列拖链: 无需任何工具即可开  
启和闭合拖链  
E4Q: complete tool-free opening and  
closing of an e-chain®

新品



16

R4Q系列拖管: 无需任何工具即可开  
启和闭合拖管  
System R4Q: complete tool-free  
opening and closing of an e-tube



20

在线拖链系统专家  
Online tool – e-chain® expert



新品

R4Q拖链系统: 也使用于切割木屑的环境。

R4Q: also available as an e-tube for high swarf protection.

... opened in the blink of an eye ...

# ... 可轻松开启和闭

## 新型E4Q/R4Q系列拖链

新型E4Q/R4Q拖链系统可用在长行程和架空应用中。该系列拖链是在E4.1系列拖链基础之上优化而来, 填补了市场上同类产品的不足, 给客户更好的产品体验。易于填充管线, 易装配, 静音运行(可选项)。

### 典型的应用领域:

可用于长架空, 高负载及长行程应用

## System E4Q/R4Q newest e-chain® generation

E4Q/R4Q is designed to provide the best possible solution for unsupported lengths and long travels. In addition to insights from worldwide applications with the E4.1 series and the resulting optimisation, competitive analysis and customer surveys have been conducted to make the energy chain better, more cable-friendly, easier to assemble and operate, and (optionally) quieter.

### Typical application areas:

Applications with large unsupported lengths, high fill weights or long travels

产品代码 Part No.	内高 Inner height	外高 Outer height	内宽 Inner width	外宽 Outer width	弯曲半径 Bend radius	重量 Weight
E4Q.58.15.150.0	58mm	84mm	150mm	184mm	150mm	3.9kg/m
R4Q.58.15.150.0	58mm	84mm	150mm	184mm	150mm	4.5kg/m

技术数据如架空长度和最大行程长度还未最终确定。  
Technical data such as unsupported lengths and maximum travel lengths have not yet been fully determined.



1,354种高柔性电缆chainflex® 常备库存, 且提供36个月质保  
1,354 chainflex® cables available from stock with 36-month guarantee

... E4Q/R4Q ...

# 合拖链 ...



无需工具即可开启和闭拖链。  
Tool-free opening and closing.



4个限位块的设计, 强度高, 适合多种安装方式。  
Four stop-dogs for maximum strength in any installation orientation.



自重更轻, 但没有影响拖链的强度。  
Less material used where it does not add to the strength.



低噪音设计, 静音运行(可选项)。  
Optional noise dampeners for even quieter operation.



内部分隔选项, 可用于任何复杂的情况。  
Interior separation product range, also for complex division.



横杆可牢固固定隔片。  
Notches in the crossbar for secure grip of the separators.



交货期 Available  
夏季起供货 from summer



[www.igus.com.cn/E4Q](http://www.igus.com.cn/E4Q)  
[www.igus.eu/E4Q](http://www.igus.eu/E4Q)

低噪音运行选项 – 新型的经改进的降噪系统。随时可以在水平限位块中放入或者取走橡胶条，这些橡胶条能使拖链运行更静音。

Optional noise dampening – new concealed system for noise reduction. Can be retrofitted any time. Rubber elements attached to the horizontal stop-dogs additionally dampen the impact noise of the already very quiet e-chain®.

... 低噪音运行  
... less noise

水平和垂直方向的限位块 – 垂直方向的限位块使安装更加坚固，且适用于架空应用。水平方向的限位块，可用于有更多灵活性和耐用性要求的环境。

Vertical and horizontal stop-dogs – the vertical stop-dogs provide extra rigidity and allow large unsupported lengths. The horizontally arranged stop-dogs, on the other hand, are particularly important if the e-chain® needs more flexibility and durability in areas with excessive bending, for example, over long travels.

... 高稳固性  
... higher strength

横杆(拖链)/盖板(拖管) – 无需任何工具即可快速开启和闭合拖链和拖管。这种锁定方式的横杆和盖板拥有更强的锁紧力。同样布线也很省时。

Crossbar (e-chain®)/lids (e-tube) – complete tool-free opening and closing of the e-chain® and e-tube. Crossbars and lids lock into the side plates for even higher holding forces. The filling of the e-chain® can be done in significantly less time.

... 快速填充管线  
... faster filling

自重轻 – 经过优化设计的材料，拖链的稳固性不变。这种镂空设计体现在限位块上，同样也体现在外侧链板上，且都采用圆弧设计理念。

Save weight – through careful design optimisation, material was left out where it doesn't add to the strength of the e-chain®. This is used both inside, between the stop-dogs, as well as outside. In the process, nature-inspired rounded shapes were used for the design.

... 自重轻  
... less weight

quieter ... lighter ... stronger

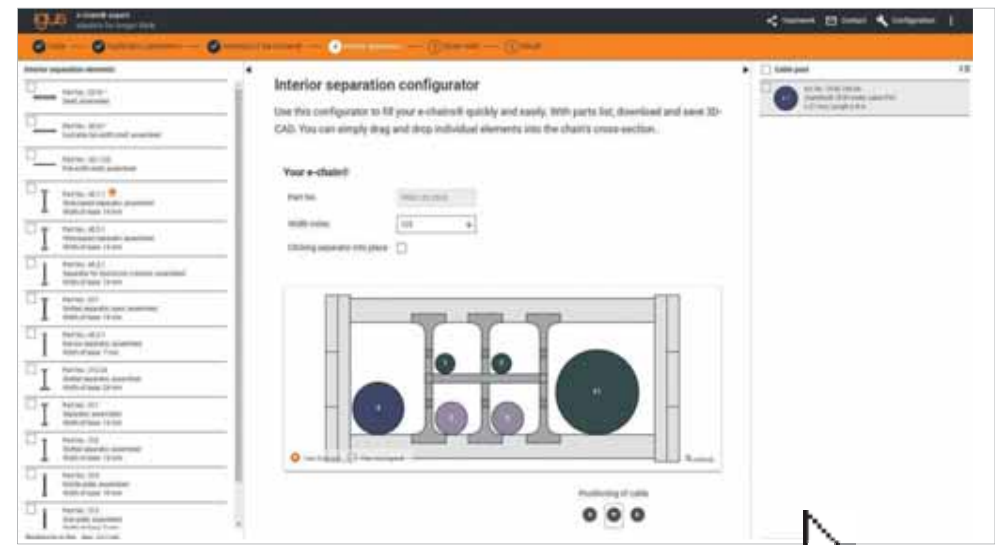
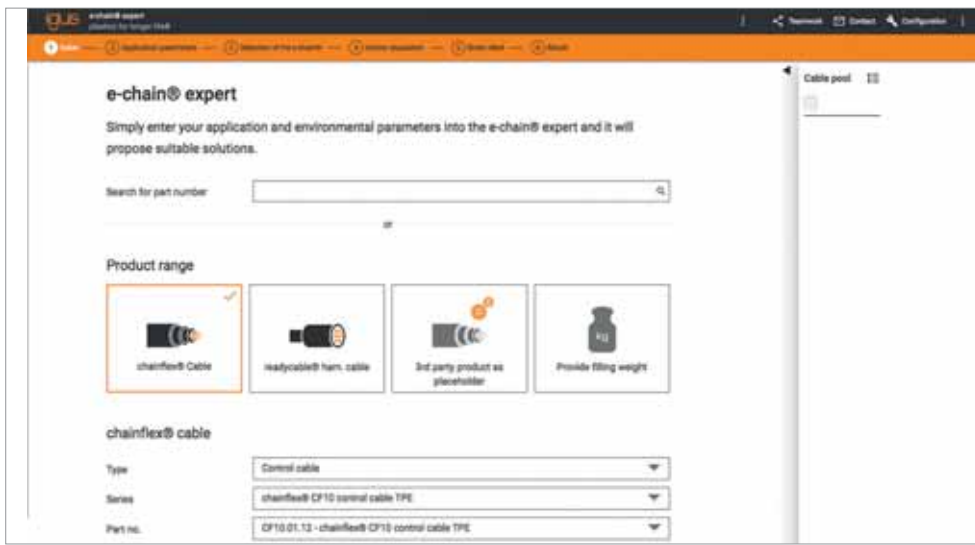
... 低噪音运行... 自重轻... 高稳固性...



交货期 Available  
夏季起发货 from summer



[www.igus.com.cn/E4Q](http://www.igus.com.cn/E4Q)  
[www.igus.eu/E4Q](http://www.igus.eu/E4Q)



... configure systems in seconds ...  
**快速配置**

## 拖链系统的在线配置工具

使用拖链配置工具，您可以配置整套的适用于短行程或长行程以及悬挂应用的拖链系统。只需在系统中输入电缆的相关参数，即可得到合适的内部分隔片。拖链系统的在线配置工具，能预测计算出拖链和电缆的使用寿命，并可显示出完整的零件清单，价格及预计的交货时间。您可以直接在线快速提交您的需求、配置及下单。

只需轻松几步即可配置装配拖链系统  
 内部分隔片可快速便捷的将电缆分隔开  
 可预测拖链和电缆的使用寿命  
 根据您的需求报价和交货  
 免费提供样品试用

## Online tool – e-chain® expert

With the e-chain® expert, you can configure complete e-chain systems® for short or long travels and hanging applications. Simply select cables for interior separation and enter your application's parameters into the e-chain® expert to get a suitable solution for your e-chain® as well as interior separation. The e-chain® expert will also indicate the anticipated service life of e-chain® and cables, provide a complete parts list, show the total price and indicate the predicted delivery time for your configuration. You can submit a request or order your configuration easily and quickly online directly from the expert.

Calculation and configuration of ready-to-install e-chain systems® with just a few clicks  
 Fast and easy configuration of the interior separation system with cable allocation  
 Calculation of the anticipated service life for e-chains® and chainflex® cables  
 Indication of price and delivery time for your individual configuration  
 Order your free sample

## 您可以浏览易格斯的官方博客!

您可以了解更多的易格斯产品，如拖链，电缆，轴承，直线技术，3D打印技术和低成本自动化等。您在易格斯的官方博客中，可以发现最新的产品及应用信息。点击关注，它可能给您的工作带来更多的便捷和帮助哦!

## The motion plastics® experts are blogging now!

Learn all about professional energy supply, cables, bearing and linear technology, 3D printing and Low Cost Automation at first hand. On the igus® blog, our product and industry experts will provide you with the latest information on developments, products and unique applications in the industry. Have a look, and be inspired!





2019 亮点 2019 highlight

新品

为机器人提供快速安装和高性价比的供能系统？

Can I quickly and cost-effectively fix my energy supply to the robot?

协作机器人安全经济的解决方案。  
Attach safely and cost-effectively in seconds – lean robotics clamps for cobots.



在线配置  
Configure online

## 移动供能更便捷： moving energy made easy: 适用于机器人的拖链供能系统 e-chain® and -systems® for robots

### triflex® R 新型夹具

新型简易夹具用于协作机器人，安装时无需任何工具。夹具可便捷地安装在拖链的带状区域。只需简单几步，即可安装或者拆卸夹具。拖链不再是可悬挂式的安装，这样可以更有效的保护电缆。

### New clamps for secure attachment of triflex® R

The new lean robotics clamps fix triflex® R e-chains® to cobots and can be installed quickly without tools. The clamps are attached to a strap that is simply placed around the robot and tightened. With a few simple steps, the clamps are opened and the triflex® R is fitted. The energy chain is no longer hanging and the cables inside are now even better protected against torsion.



您可以在线找到更多的新品及应用，以及抗扭转的高柔性电缆chainflex®：  
[igus.com.cn/chainflex](http://igus.com.cn/chainflex)  
Suitable chainflex® cables for torsion and more news can be found online:  
[igus.eu/chainflex](http://igus.eu/chainflex)

# ... motion plastics ...



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避免机器人的头部干涉 – 高性价比的伸缩系统 triflex® RSEL  
Avoid looping on the robot head – yet more cost-effective – triflex® RSEL



新品

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快速安全安装且高性价比 – 简易机器人夹具，可用于cobots机器人  
Attach safely and cost-effectively in seconds – lean robotics clamps for cobots



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triflex® R TRCF: 有2个特殊尺寸可供选择，扩大了弯曲半径的范围  
triflex® R TRCF: 2 special sizes with increased bend radius



30

QuickRobot – 10,000种不同类型零部件可供选择，可用于机器人供能系统。  
QuickRobot – 10,000 different options for component selection for the energy supply on a robot





# ...机器人...头部无干涉...新尺寸...

高性价比, 直线伸缩系统 – triflex® RSEL  
新尺寸为  $\varnothing 85\text{mm}$

避免机器人头部干涉 – 高性价比的RSEL伸缩系统, 该设计尤其适用于中高负载的机器人, triflex® RSEL伸缩系统避免了机器人管线的缠绕, 管线的设计尽可能贴近机械臂。

低成本的伸缩系统

易于更换

标准尺寸和紧凑的设计

RSEL 伸缩系统可以直接安装在常规机器人的第3轴上

尤其适合高动态应用

伸缩长度可达 380mm

由于RSEL伸缩系统的直线设计, 可自由选择拖链的固定端

典型的领用领域:

机器人, 自动化工业 (流水线作业, 焊接, 搬运)

Cost-effective, linear retraction system – triflex® RSEL – now available in new size  $\varnothing 85\text{mm}$

Avoid looping on the robot head – more cost-effective, even for corrugated tubes – with the RSEL retraction system. Especially designed for robots with medium to high payload, the igus® triflex® RSEL retraction system offers an option to actively avoid looping in the working area of the robot by keeping the e-chain® as close as possible to the robot arm.

Cost-optimised retraction system

Easy to retrofit

Standard dimensions and more compact design

The RSEL retraction system can be mounted directly on the 3rd axis of all common types of robots

Even for highly dynamic applications

Up to 380mm of retraction length

The fixed end of the e-chain® can be freely placed due to the linear design of the RSEL retraction system

Typical application areas:

Robotics, automotive industry (serial production applications, welding packages, handling)

... TR.RSEL.85 ...



产品代码 Part No.	伸缩长度 Retraction length
TR.RSEL.70	$\leq 380\text{mm}$
TR.RSEL.85	$\leq 380\text{mm}$



交货期 Available  
常备库存 from stock



[www.igus.com.cn/triflex-RS](http://www.igus.com.cn/triflex-RS)  
[www.igus.eu/triflex-RS](http://www.igus.eu/triflex-RS)



TRCF.65. 弯曲半径为 200mm。  
TRCF.65. now available with  
increased bend radius 200mm.



# ...弯曲半径, 可用于

# 激光切割 ...

triflex® R TRCF – 封闭式, 带锁定机制  
– 有2种特殊尺寸和弯曲半径可供选择

封闭式的, 拖链链节可打开的triflex® R TRCF, 可快速填充大尺寸电缆, 有2种特殊尺寸和弯曲半径可供选择。TRCF.85.240.0, 弯曲半径为240mm和新型的 TRCF.65.200.0, 弯曲半径为 200mm。较大的弯曲半径 200/240mm, 延长了光纤, 水气管的使用寿命, 避免管线过度弯折。

特殊的附件

封闭式, 可用于脏污和碎屑环境

使用螺丝刀可开启拖链

最小弯曲半径限制, 防过度扭转机制, 更有效的保护了管线

典型的领用领域:

工业机器人, 大尺寸液压管, 送气管, 送丝管, 更换工具的设备, 激光焊接机器人

triflex® R TRCF – enclosed, with snap-lock mechanism – 2 special sizes with increased bend radius now available

The enclosed triflex® R TRCF with openable e-chain® links, for easy insertion of large filling diameters is now available in 2 special sizes with increased bend radius. TRCF.85.240.0 with 240mm and the new TRCF.65.200.0 with 200mm bend radius. The large bend radii 200/240mm increase the service life of laser light cables and prevent kinking of supply hoses.

Special range of accessories available

Enclosed version, for use with dirt and chip exposure

Snap lock mechanism openable with a screwdriver  
Defined minimum bend radius and torsion stop-dog for optimum cable protection

Typical application areas:

Industrial robots, large hydraulic hoses, screw and rivet feeders, tool changer applications, robots for laser welding



产品代码 Part No.	内高 Inner height	外高 Outer height	弯曲半径 Bend radius
TRCF.65.100.0	22.3mm	70.2mm	100mm
TRCF.65.200.0*	22.3mm	70.2mm	200mm
TRCF.85.135.0	30mm	94.5mm	135mm
TRCF.85.240.0*	30mm	94.5mm	240mm
TRCF.100.145.0	34.3mm	108mm	145mm

\*特殊尺寸适用于弯曲半径和附件。

\*Special size with increased bend radius and special range of accessories



交货期 Available

常备库存 from stock



[www.igus.com.cn/TRCF](http://www.igus.com.cn/TRCF)

[www.igus.eu/TRCF](http://www.igus.eu/TRCF)



新品



... attach safely, low cost, lean ...

## ...安全安装...低成本

在协作机器人上安装电缆 - 新型模块化设计的拖链可快速安装，无需任何工具

通用型机械臂的尺寸  
适用于 triflex® R TRC/TRE/TRL 30, 40 和 50 系列  
紧凑，平滑的设计  
薄型，自重轻  
可与波纹管连接  
圆形边角设计，将风险降到最小  
快速安装和更换  
低成本，有多种cobot机器人附件可供选择

Cable attachment on collaborative robots - new modular concepts for fast attachment of energy supply without tools

For various robots arm diameters, universal applications  
Suitable for igus® triflex® R series TRC/TRE/TRL 30, 40 and 50  
Compact, smooth design  
Slim, lightweight design  
Can also be combined with corrugated tube systems  
Virtually no edges, the risk of injuries is minimised  
Assembled and retrofitted in just a few steps  
Low-cost addition in igus® cobot accessories product range



快速安装且高性价比 - 简易机器人夹具，可用于 cobots 机器人。  
Attach safely and cost-effectively in seconds - lean robotics clamps for cobots.



多种安装附件。  
Different concepts  
for attachment.

## 本...精益化...

更多用于协作机器人的易格斯解决方案  
More igus® solutions for cobots



UR夹具 - 适用于“通用型机器人”

Mounting brackets for  
"Universal Robots" -  
UR mounting clamps.



适用于KUKA LBR iiwa机器人的  
夹具

Mounting clamps for  
KUKA LBR iiwa.



HRC设计的简易夹具- 适用于  
机械臂的

Lean robotics clamps for  
robot arms with HRC design -  
HRC mounting clamps.



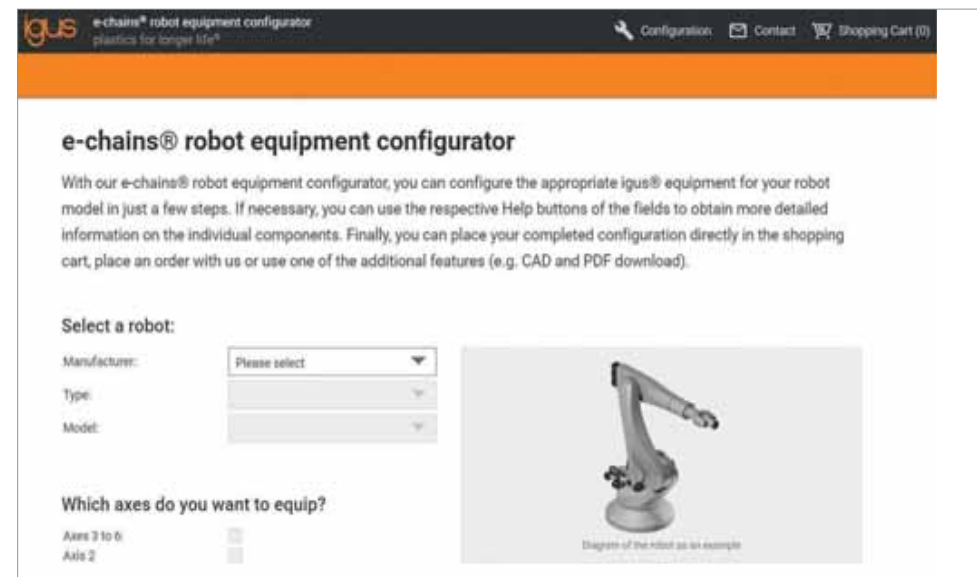
抗扭转运动的电缆，角度单米可达 $\pm 360^\circ$ ，提供36个月质保，常备库存  
Cables for torsional movements on robots up to  $\pm 360^\circ$ , with 36-month guarantee, available from stock.



交货期 Available  
夏季起交货 from summer



[www.igus.com.cn/TR.USRC](http://www.igus.com.cn/TR.USRC)  
[www.igus.eu/TR.USRC](http://www.igus.eu/TR.USRC)



# ...快速配置机器人...

新型快速配置机器人模块 – 更多的在线工具支持，10,000多种不同的部件可供选择

机器人选型工具，可配置一个完整的机器人系统，包含不同机器人的管线包系统。可以配置整个机器人，也可以单独配置部件。

可选择常见的机器人厂家模型

可导出完整部件清单

可选择配置整机或单独部件，放入购物车中无最小起订量

可保存，下载或重新配置

可导出配置清单的PDF文件

New robot models included. QuickRobot – user-friendly online tool offers around 10,000 component options for energy supply systems on robots

Thanks to this selection tool for robot equipment, a complete system including cable guide systems can be specified from the available robot types. One can select either a full system or a system for an individual axis.

Choose your robot from a large number of models from well-known manufacturers

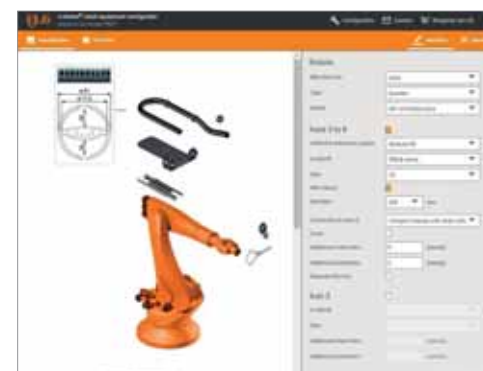
Output a complete parts list, the total price and the estimated delivery time of your configuration

Easy transfer to the shopping cart, complete configuration or individual parts

No minimum order quantity

Save, download or reset your individual configuration

Creation of PDF report for your configuration



模型配置: 适用于KUKA KR 120 R2900系列机器人的RS 伸缩系统，可调节单元模块，夹具和与6轴的连接。

Sample configuration: KUKA KR 120 R2900 extra with RS retraction system, adjustment unit, clamp and connection to axis 6.



模型配置: 带碳纤维棒的FANUC R1000系列机器人，通用的配置安装，夹具和与6轴的连接。

Sample configuration: FANUC R1000 with fibre-rod module, universal assembly set, clamp and connection to axis 6.





2019 亮点 2019 highlight

您找不到适合无尘室应用的拖链？  
No room for an energy chain in a cleanroom application?

DESIGN STUDY

e-skin® – 可在较小的安装空间安装  
e-skin® flat – fits even in the most confined spaces

Clean-Room



可在线快速配置系统和计算使用寿命  
Configure systems and calculate their service life online in seconds

## 移动供能更便捷： moving energy made easy: 适用于无尘室和半导体行业应用 cleanroom and semiconductor industry

新型的适合无尘室应用的拖链

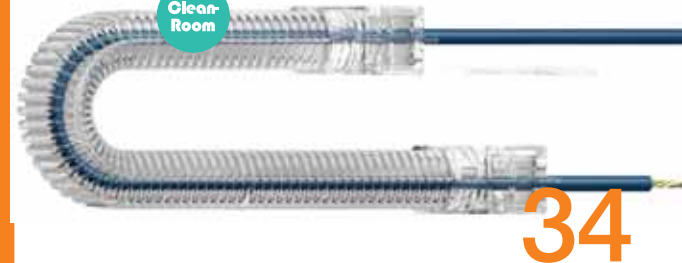
符合无尘室环境的特殊需求，可用于LCD/LED面板半导体生产线上。新型的e-skin® flat 提供了低成本的解决方案，可用于较小的安装空间。它是扁平的，模块化且封闭的。另外，它可以拉链式开启，易于快速填充管线。为无尘室应用提供一个完全封闭的方案。安装灵活，可根据需求截短至需求长度。

Innovation for cleanroom applications

Special demands are placed on the cleanliness of the production environment for the manufacturing of LCD/LED displays and semiconductors. The new e-skin® flat was developed to offer a low-cost solution for small spaces. It has a flat, modular structure and is completely sealed. Despite this, it can be opened easily with a zipper, in order to be able to replace cables quickly at any time. This offers a clear advantage over a completely closed solution. Installation is also really flexible, because it can be easily shortened to the required length.

... motion plastics ...

Clean-Room



改进版e-skin® soft – 由软材料制成，常备库存  
e-skin® soft advanced – now available with softer material

DESIGN STUDY

Clean-Room

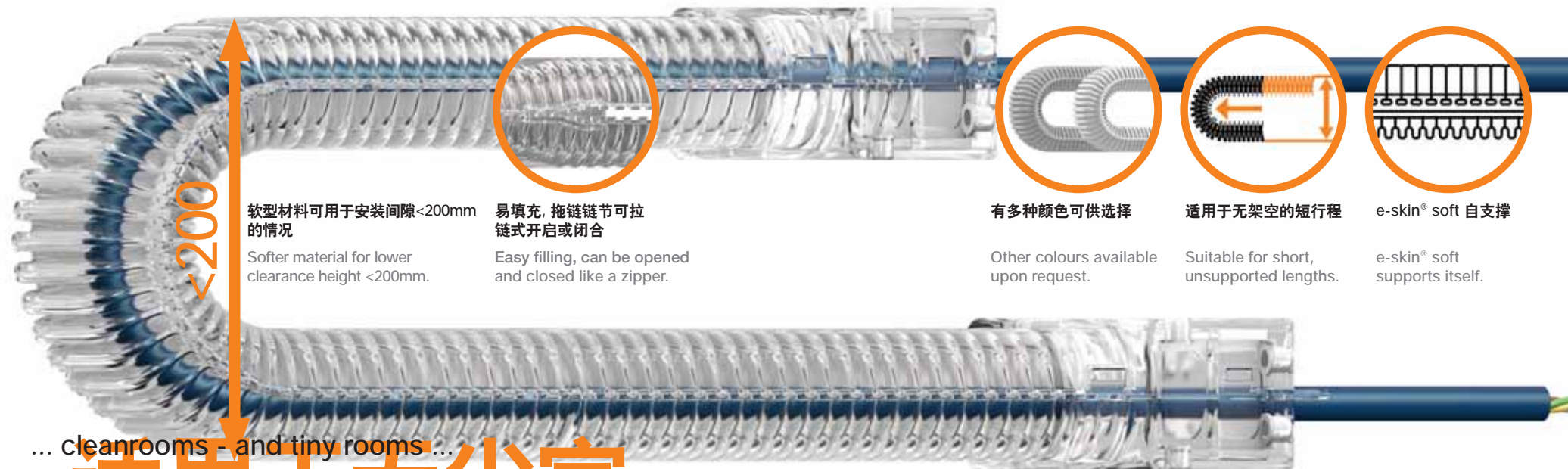


e-skin® flat – 可在较小的安装空间安装  
fits even in the most confined installation spaces

品质承诺  
36  
品质保证

Clean-Room

您可以在线找到更多的新品及应用，以及经IPA检测，Class 1的高柔性总电缆 chainflex®: [igus.eu/chainflex](http://igus.eu/chainflex)  
Matching IPA Class 1 chainflex® cables for every application; this and more news can be found online: [igus.eu/chainflex](http://igus.eu/chainflex)



<200

软型材料可用于安装间隙<200mm的情况

Softer material for lower clearance height <200mm.

易填充, 拖链链节可拉链式开启或闭合

Easy filling, can be opened and closed like a zipper.

有多种颜色可供选择

Other colours available upon request.

适用于无架空的短行程

Suitable for short, unsupported lengths.

e-skin® soft 自支撑

e-skin® soft supports itself.

... cleanrooms and tiny rooms ...

# ...适用于无尘室...

新型供能拖链, 可用于无尘室 – e-skin® soft – 由软性材料制成, 可供货

e-skin® 是由上层外壳和下层外壳组成的工业软管, 上下两个外壳相连时, 可提供完全密闭的空间。e-skin® soft是现有e-skin®的拓展。与标准型e-skin®相比, 它有更软的材料。也可用于较低安装高度。

紧凑的模块化设计

易填充管线

方便反复开启和闭合: "拉链式" 开启

特别适用于无尘室环境

长度可按需截取

KMA 接头, 可配去应力元件

通过PU板可使接头实现全封闭

典型的应用领域:

紧凑的安装空间可用于无尘室环境, 短行程应用, 半导体流水线, LCD/LED 面板生产线

Advanced energy supply in cleanrooms – now available with softer material – e-skin® soft

e-skin® is a hose consisting of an upper and lower shell that form a complete enclosure when connected together. The e-skin® soft is a further development of our existing e-skin® product range. It uses a softer material than the standard e-skin®. This development was prompted by customer demands for lower installation heights.

Compact, modular design

Flexible filling

Reclosable opening mechanism: easy filling with "zipper" function

Especially suitable for cleanrooms

Can be shortened as required

KMA mounting bracket, strain relief optional

Mounting brackets sealed tightly by PU block

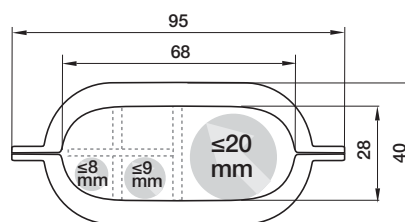
Typical application areas:

Cleanroom applications with compact installation spaces, short travels, semiconductor production, LCD/LED panel production

产品代码 Part No.	内高 Inner height	外高 Outer height	内宽 Inner width	外宽 Outer width	安装高度 Installation height	节距 Pitch
SKS28.068.02.1	28mm	40mm	68mm	95mm	< 200mm	7mm
SK28.068.02.1	28mm	40mm	68mm	95mm	265mm	7mm
SK40.085.02.1	38mm	57mm	85mm	118mm	355mm	7mm

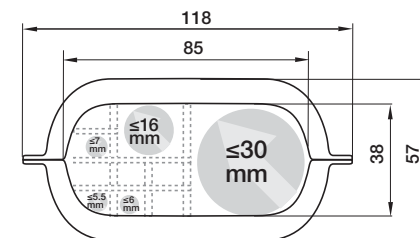
e-skin® 软型相关参数不适用于架空和长行程的情况。

The e-skin® soft is not fully tested yet. Technical data such as unsupported lengths and maximum travel lengths have not yet been fully determined.



安装尺寸 – SKS28 / SK28

Installation dimensions – SKS28 / SK28



安装尺寸 – SK40

Installation dimensions – SK40



常备库存 Available

夏季起供货 from summer



[www.igus.com.cn/e-skin](http://www.igus.com.cn/e-skin)

[www.igus.eu/e-skin](http://www.igus.eu/e-skin)

918无尘室-可配套高柔性电缆chainflex®, 经IPA检测, Class 1, 提供36个月质保, 常备库存。

918 cleanroom-compatible chainflex® cables IPA Class 1, available from stock with 36-month guarantee.

## DESIGN STUDY



小的弯曲半径可用于低的安装高度。  
Smaller bend radius for a lower installation height.

模块化的部件，宽度可调节。  
Modular attachment, adjustable width.

内腔可拉链式的开启或闭合。  
The individual chambers can be opened and closed with a zipper closure.

... flat design for cleanrooms ...

# 扁平的设计，适用于无尘室 ...

e-skin® flat，扁平的设计 - 适用于极小的安装空间 - 可用于半导体行业

e-skin® flat的扁平设计能满足更多客户的需求。新型e-skin® 的SK28和SK40系列是为半导体行业的无尘室和LCD生产线所设计。扁平的e-skin® 的系列是该行业的新型解决方案，可安装空间受限的场合。并且拥有模块化的设计，易于填充管线。

紧凑的结构

可连接的模块化的结构

可打开，易于填充管线

特别适合无尘室

长度可按需截取

典型的应用领域:

小安装空间的无尘室，短行程应用，半导体流水线，LCD/LED 面板生产线

e-skin® flat – fits even in the most confined installation spaces – ideal for the semiconductor industry

The design study e-skin® flat was developed to meet customer requirements. The e-skin® versions SK28 and SK40 have already been developed especially for requirements in cleanrooms for semiconductor and LCD production. The latest igus® solution for these special applications is the design study e-skin® flat. Its especially low profile fits in small installation spaces. It still offers the advantages of modular design and easy filling.

Very compact structure

Modular structure using connectable profiles

Openable, flexible filling

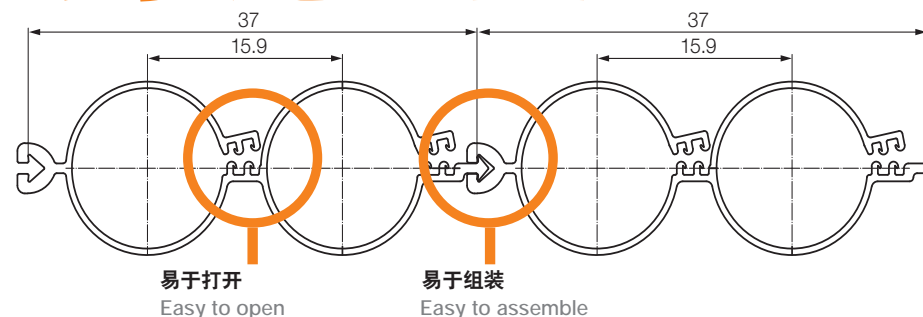
Especially suitable for cleanrooms and fully enclosed

Can be shortened as necessary

Typical application areas:

Cleanroom applications with compact installation spaces, short travels, semiconductor production, LCD/LED panel production

# 用于无尘室 ...



e-skin® flat易连续挤出成型的，有2个挤压成型的电缆内腔。单独的内腔可拉链式开启或闭合，长度可按需截取。

The e-skin® flat consists of double profiles with 2 cable chambers each produced by continuous extrusion. These can be connected to wider systems. The individual chambers can be opened and closed with a zipper closure and shortened as required.

产品代码 Part No.	内高 $\varnothing$ Inner height $\varnothing$	外高 $\varnothing$ Outer height $\varnothing$	内腔数 Number of chambers	内腔外宽 Outer width chambers
SKF12.6.01.1	12mm	13mm	2 / 3 / 4 / 5 / 6	38 / 54 / 75 / 91 / 112mm

此技术数据仅供参考。

This is a design study. Technical data have not yet been fully determined.



交货期 Available

根据需求 upon request



[www.igus.com.cn/e-skin](http://www.igus.com.cn/e-skin)

[www.igus.eu/e-skin](http://www.igus.eu/e-skin)



2019 亮点 2019 highlight

DESIGN STUDY

能否在做旋转运动的同一个系统中传输能量，数据，液体和气体介质？

Can I implement a rotary supply of energy, data, oil and air in one system?

灵巧的e-spool 无滑环卷筒：灵活的外壳设计，内部装有twisterband。

Slip-ring-free cable drum e-spool flex: An intelligent housing design cleverly combined with a twisterband on the inside.



在线快速配置系统和计算使用寿命  
Configure systems and calculate their service life online in seconds

## 移动供能更便捷： moving energy made easy: 旋转运动 ... 无需滑环... Rotating movements without slipping

电缆可完全可靠地回收  
电缆是多种移动供能应用的核心。如果电缆发生故障，设备将不能运行，并需要更换电缆。如果电缆在运行过程中，没有拖链的引导，会缠绕打结，对设备的运行造成危险。新型的灵活的e-spool，能使传输所有类型介质（数据，气体，液态，能量）的管线安全运行。管线能被缓慢拉出或回收，不会缠绕打结，因此它们有较长的使用寿命。e-spool flex的优点是可以其完全完全被拉出，并且卷盘可以固定住，不会使线缆再出来或承受拉力。这是一个安全可靠供能和节省安装空间的解决方案。

### Retract cables gently and reliably

Cables are the core of many moving applications. If they are damaged, a failure of the system with costly cable replacement is likely. Also, if they are loose, they can become a trip hazard. With the new e-spool flex, all types of cables (data, air, water, energy) can be gently extended and retracted. The cables do not get tangled; they are guided safely, do not twist and therefore have a longer service life. The main highlight of the e-spool flex is that at the full extension, the drum stops, there

is no further cable coming out from the drum and no overstretching. The e-spool flex is a clean solution for anyone who wants a reliable energy guidance whilst saving space.



您可以在线找到更多的新品及应用，以及高柔性电缆chainflex®：  
[igus.com.cn/chainflex](http://igus.com.cn/chainflex)  
Matching chainflex® bus cables for every application and more news can be found online: [igus.eu/chainflex](http://igus.eu/chainflex)

# ... motion plastics ...

新品



40

e-spool 21系列：拓展长度可达21m。  
e-spool 21: now up to 21m extension length

DESIGN STUDY



42

e-spool 无滑环的电缆卷筒：灵巧的外壳，内部包含twisterband。  
Slip-ring-free cable drum e-spool flex: An intelligent housing design cleverly combined with a twisterband on the inside.

新品



44

适用于小安装空间的旋转运动，装有新型的紧凑型twisterband HD。  
Slip-ring-free cable drum e-spool flex: An intelligent housing design cleverly combined with a twisterband on the inside.



新品



最大管线直径可达 24mm, 最大拓展长度可达 21m。  
Maximum cable diameter 24mm, maximum extension lengths up to 21m possible.



剧院/Theater

# ...拓展长度可达21m...无滑环...

e-spool 21系列 – 电缆可回缩, 能传输能量, 数据, 气体和液体介质, 无需滑环

e-spool的产品范围得到了拓展, 有不同的尺寸可供选择。e-spool产品已经有6年的实际应用使用经验, 并在一直不断地改进和提高。e-spool 21系列产品填补了标准型弹簧驱动的 e-spool(拓展长度可达14m)和电机驱动的 e-spool 的产品空白。e-spool 21系列产品的最大扩展长度可达21m, 且有弹簧和电机驱动两种类型可供选择。

拓展长度可达21m

坚固的外壳提供了更好的保护

每个面都可以安装

方便移动

集成的滚轮可持续引导拖链

加强的底板更利于拖链的紧固连接

有弹簧和电机两种驱动方式可供选择

新型可调节的弹簧驱动

典型的应用领域:

剧院, 体育馆, 移动舞台, 演出舞台, 室内起重机

e-spool 21 – retractable supply of energy, data, air and liquids, without slip rings

The e-spool product range will be extended by another size. The e-spool experiences of the last 6 years gave birth to the first prototype of a renewed e-spool. This covers the gap in the product range between the spring-driven standard e-spool up to 14m travel and the large motor-driven project e-spools. This offers 21m maximum extension length, with the option to choose between spring or motor-driven retraction.

Up to 21m extension length

Strong protection housing

Flexibly connectable from all sides

Mobile and stackable

Integrated guide roller for continuous extension at one position

Reinforced floor plate for fastening

Spring-driven or motor-driven options available

Optimised spring adjustment mechanism

Typical application areas:

Theatres, stadiums, mobile stage

construction, festival stages, indoor cranes

产品代码 Part No.	twisterband twisterband	管线直径 Max. cable diameter	可拓展的长度 Max. extension length
SPHD1.1200.21000.01.0	TBHD42	24mm	21m

## e-spool 系统概览 e-spool systems at a glance



标准型和HD型的 e-spool



e-spool 21系列的拓展长度可达21m



紧凑型e-spool – 节省安装空间, 带弹簧驱动



可手动操作的e-spool – 可靠且节省安装空间



带电机驱动的e-spool, 有更长的拓展长度

e-spool standard and HD – flexible use.

e-spool 21 – up to 21m extension length.

e-spool compact – space-saving, spring-driven.

e-spool for manual operation – reliable and space-saving.

e-spool power – motor-driven for long extension lengths.



交货期 Available

夏季起供货 from summer



[www.igus.com.cn/e-spool](http://www.igus.com.cn/e-spool)

[www.igus.eu/e-spool](http://www.igus.eu/e-spool)

## DESIGN STUDY



可用最大的管线直径为10mm,  
可拓展的长度为 15m。  
Maximum cable diameter  
10mm, maximum extension  
lengths up to 15m possible.

... supply without interruption ...

# ...e-spool flex ...

## e-spool flex – 传输不间断

e-spool flex 是igus® 电缆卷筒的一种，拥有优化设计的外壳，内部装有可转动的Twisterband，适用于直径不大于10mm的管线。装有一个弹簧驱动伸缩机制和可锁定机制。管线通过一个导孔进出，保证系统能安全拉伸及回收。

根据系统需求，卷筒长度有 5m, 10m 和 15m 可供选择

安全传输能量，数据，油，液体；也适用于光缆和总线电缆

管线直径可达  $\varnothing$  10mm

无滑环

高可靠性的数据传输

可更换电缆

可用于水平和垂直悬挂应用

带锁定机制

典型的应用领域：

控制面板，工作站，装配设备

## e-spool flex – continuous panel feed

The e-spool flex is the igus® version of a cable drum. It combines an intelligent housing design with a twisterband for rotary motion on the inside. This results in the flexibility of being able to use any cable with a diameter of up to 10mm. The system has a spring-driven retraction mechanism and a locking function. The cable is always safely routed through a feed-through to ensure that it is properly wound up at all times.

Up to 5m, 10m and 15m drum depending on system

Safe guidance of energy, data, oil, liquids; also FOC and bus cables

For cables up to  $\varnothing$  10mm

No slip ring

Data transmission is highly reliable

Cables can be replaced later

For easy horizontal and vertical suspension

Inertia locking function

Typical application areas:

Control panels, workstations, assembly facilities



# 传输不间断...

产品代码 Part No.	twisterband twisterband	管线直径 Max. cable diameter	可拓展的长度 Max. extension length
SPF10.5000.01	TBHD12.24.11.RRR.01.0	10mm	5m
SPF10.10000.01	TBHD12.24.11.RRR.01.0	10mm	10m
SPF10.15000.01	TBHD12.24.11.RRR.01.0	10mm	15m

此技术数据仅供参考。  
This is a design study. Technical data have not yet been fully determined.

igus® twisterband用于内部的  
旋转运动。导向能量，数据，  
气体和液体的传输，无滑环。

igus® twisterband for rotary  
motion on the inside. Guidance of  
energy, data, air and liquids  
without slip ring.



交货期 Available  
根据需求 upon request



[www.igus.com.cn/e-spoolflex](http://www.igus.com.cn/e-spoolflex)  
[www.igus.eu/e-spoolflex](http://www.igus.eu/e-spoolflex)



新品



...rotary motion in confined spaces ...

## ... 极小安装空间的

2种小尺寸的twisterband新品 - 在小的安装空间做旋转运动, 传输能量, 数据, 气体和液体

twisterband的紧凑设计, 旋转角度可达7,000°, 高性价比, 可用于小安装空间, 能够安全的导向能量, 数据等介质的传输。

旋转角度可达 7,000°\*

旋转运动的速度可达 180°/s

无滑环

拖链链节通过钩/销式连接, 使用寿命长

小尺寸, 紧凑型, 模块化且自重轻

易于调节长度

贴近旋转轴紧凑安装, 适用于小的安装空间

高性价比, 易于填充管线

典型的应用领域:

适用于多种旋转运动, 机械工具, 转盘, 机器人

\*取决于安装方向, 垂直方向的安装角度可达 3,000°, 水平方向的安装角度可达 7,000° 及更多选择。

twisterband - two new, small sizes - rotate energy, data, air and fluids in a confined space

With the compact igus® twisterband, rotations of up to 7,000°\* can be achieved cost-effectively, even in confined spaces. Energy, data and media are securely guided.

Rotary movement up to 7,000°\*

Rotary speeds up to 180°/s possible

No slip ring

With strong pin and hook connection for an even longer service life

Small, compact, modular and lightweight

Easy length adjustment

Minimum installation space, fits very closely around the rotary axis

Cost-effective and easy to fill

Typical application areas:

Compact rotary movements of all kinds, machine tools, turntables, robots

\*Depending on installation orientation, vertical: up to 3,000°, horizontal: 7,000° and more possible



twisterband HD包含稳固的“钩/销”连接的独立链节。

The twisterband HD consists of individual e-chain® links with pin/hook system, resulting in a defined radius with higher stability.



拖链链节由增强纤维材料制成- 延长了拖链的使用寿命。

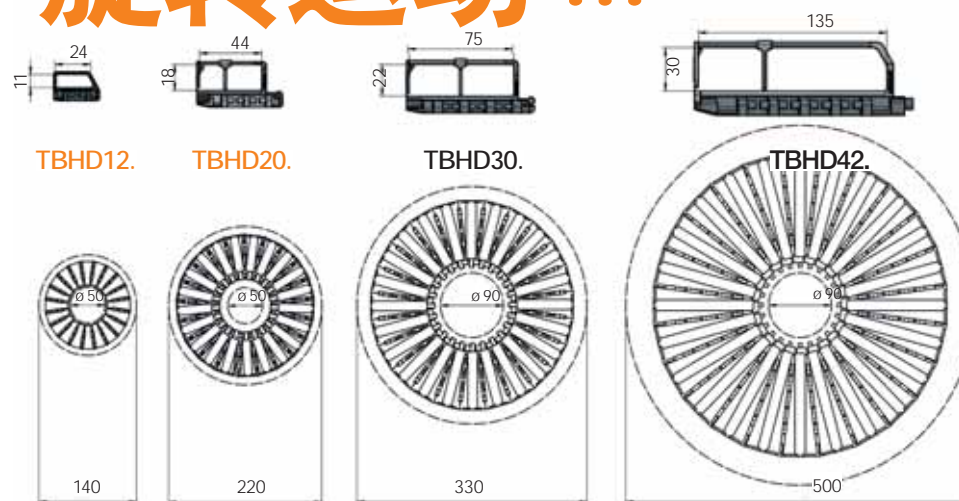
e-chain® links made of fibre-reinforced material - this enables significantly increased strength and service life.



标准的交付包含底板, twist-erband的模块化部件!

The new base plates are delivered as standard as part of the twisterband module!

## 旋转运动 ...



产品代码 Part No.	内宽 Inner width	内高 Inner height	X <sub>1</sub> 和 X <sub>2</sub> X <sub>1</sub> und X <sub>2</sub>	最小弯曲半径 Bend radius min.	最大弯曲半径 Bend radius max.	最大电缆尺寸 Ø Cable Ø max.
TBHD12.	24mm	11mm	40mm / 140mm	24mm	35mm	10mm
TBHD20.	44mm	18mm	50mm / 220mm	37mm	63mm	14mm
TBHD30.	75mm	22mm	90mm / 330mm	44mm	77mm	17mm
TBHD42.	135mm	30mm	90mm / 500mm	56mm	119mm	24mm

X1 = 设备安装空间内部尺寸 Ø X2 = 设备安装空间外部尺寸 Ø

X1 = Ø inner machine installation space X2 = Ø outer machine installation space



交货期 Available

夏季起供货 from summer



[www.igus.com.cn/twisterband](http://www.igus.com.cn/twisterband)

[www.igus.eu/twisterband](http://www.igus.eu/twisterband)

2019 亮点 2019 highlight

在恶劣天气的情况下,怎样确保在石油平台上安全传输供能?

Stormy weather around an oil platform – what protects our power cables?

新品

e-loop – 适用于重载环境中的三维运动。  
e-loop – for three-dimensional movements in heavy-duty applications.



在线快速配置系统和计算使用寿命  
Configure systems and calculate their service life online in seconds.

## 移动供能更便捷: moving energy made easy: 行业解决方案 industry solutions

### 可靠引导电缆运行, 可用于悬挂应用

e-loop材料在恶劣的环境中, 如海水和高海拔。大风和海水侵蚀下, 仍可平稳运行。e-loop可安全地传输能量, 数据, 气体和油等。它有效保护了电缆和介质管免受振动和横向冲击。e-loop由重载纤维绳悬吊, 管线非常容易填充, 适用于高动态运动, 对管线起到很好的保护。

### Reliable cable guidance for hanging applications

Harsh conditions prevail at sea and at high altitudes. Strong wind and aggressive seawater are a hard test for all materials. Now there is e-loop for the safe guiding of energy, data, air and oil. It significantly protects cables and hoses from vibration and lateral impacts. It is easy to open and easy to fill. Being suspended on a heavy-duty Dyneema rope, it can respond dynamically to movements, which additionally protects the cables.



您可以在线找到更多的新品及应用, 以及高柔性电缆chainflex®:  
[igus.com.cn/chainflex](http://igus.com.cn/chainflex)  
Matching chainflex® cables for every application and more news can be found online: [igus.eu/chainflex](http://igus.eu/chainflex)

# ... motion plastics ...

新品



e-loop – 适用于重载环境中的三维运动。  
e-loop – for three-dimensional movements in heavy-duty applications

新品



在导向槽外侧布置管线。  
Trough clip guides cable in guide troughs.



plane-chain: 更安全的长行程自动化应用方案。  
plane-chain: fail-safe automation for long travels.

新品



易安装的耐磨滑条, 可用于高速运动。  
Easy to assemble and low-abrasion glide bar for extreme speeds.



micro flizz® – 在同一个系统中安全传输能量, 数据, 气体和液体。  
micro flizz® – guide energy, data, air and fluids safely in ONE system.

DESIGN STUDY



YE.42: 坚固且耐磨, 适用于工程机械和升降设备  
YE.42: strong and vibration-resistant for construction machinery and lifting platforms



新品



## ... safe cable guidance for service loops... loops安全的引导

e-loop – 竖直应用重载型拖链可用于油，气，岸电，海工及土木工程机械等行业。

e-loop结合了拖链和高强度绳索的优点于一体，可用于多轴应用。e-loop抗拉绳可吸收高强度的拉力，因此，电缆是不受力的，这样有效地保护了电缆。

通过内部分隔片分隔成2个内腔，有效保护管线

拥有最小弯曲半径

耐磨的PU材料的外护套

可通过螺栓二次锁紧

快速且易于安装的接头

典型的应用领域：

顶驱系统，FSU岸电，钻井平台，风力涡轮机电缆运行系统，土木工程机械供能系统，船厂供能系统

e-loop – the e-chain® for vertical heavy-duty applications in oil, gas, offshore, shore power and civil engineering.

The e-loop combines the advantages of a polymer e-chain® with those of a high-tensile Dyneema rope. Ideal for multi-axis applications. The tensile forces are absorbed by the rope and passed through the mounting brackets into the support structure. As a result, the cables are completely free of strain.

Cable-friendly 2-chamber design interior separation

Enforces minimum bend radius

Protects against impact due to robust PU outer body  
Offers operational reliability due to secondary locking tension of all bolted connections

Special mounting brackets allow quick and easy installation

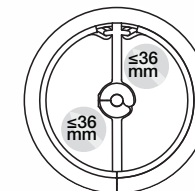
Typical application areas:

Top-drive energy supply, FSU shore power supply, drill rig service loops, wind turbine cable loops, energy supply system for civil engineering machinery, shipyard energy supply systems



高强度的球状关节，可万向转动。

The e-loop is movable in all axes, with high tensile strength due to ball and socket joint.



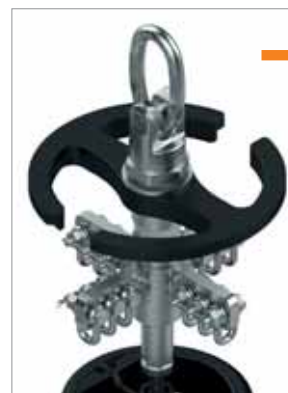
最大电缆尺寸可达 36mm (弯曲半径 500mm)。  
Maximum cable diameter up to 36mm (radius 500mm) possible.

## 电缆运行...

产品代码 Part No.	内宽 Inner width	外宽 Outer width	弯曲半径 Bend radius	重量 Weight
ELP.300.01	230mm	300mm	500mm	≈ 22kg/m

所有的产品和部件的技术参数，都经过测试得到，适合一般行程的应用。

Accurate data on possible travels and dynamics will follow with approval of the parts and completion of all product tests.



特殊接头  
按需提供。  
Special  
mounting  
brackets  
available.



超过370种高柔性电缆chainflex® 可用于海上安全持续的传输能量和数据，常备库存，提供36个月质保。

Over 370 chainflex® cables for safe and long-lasting energy and data supply at sea, available from stock with 36-month guarantee.



交货期 Available

夏季起供货 from summer



[www.igus.com.cn/e-loop](http://www.igus.com.cn/e-loop)

[www.igus.eu/e-loop](http://www.igus.eu/e-loop)



这种设计有较低的安装高度，  
可用于小的安装空间。  
The design ensures a low  
installation height for space-  
saving use on gantries.

## ...自动化...可用于长

plane-chain – 可靠紧凑的解决方案，  
适用于直线型机器人和机床。

在一些高速高频运行同时需求运行稳定高效的应用中，例如：机械手和直线型机器人。一个特殊轮廓的导向槽安全导向侧倒安装的拖链。

紧凑的设计  
稳定运行，免维护  
整套系统带安全密封盖  
高速运行  
低噪音运行（可选带屏蔽）

典型的应用领域：  
直线型机器人，机床

plane-chain – dependable compact  
solution for linear robot applications  
and machine tools.

For maximum fail-safety in applications with high speeds and cycle rates, e.g. in gantries and linear robots. A special trough contour guides the side-mounted e-chains® safely in a deepened channel.

Very compact structure  
Fail-safe and maintenance-free  
Fully protected by enclosure  
For high speeds  
Quiet with optional insulation

Typical application areas:  
Linear robots, machine tools



新品：封闭式拖运行（可选项）  
New: plane-chain –  
enclosure, optional.

## 行程 ...



外部安装有隔音层的低摩擦系数的不锈钢导向槽，延长了拖链的使用寿命，且低噪音运行。整套系统带安全密封盖。

The use of stainless-steel troughs with a low friction factor and a plastic layer of insulation fitted on the outside offers a long service life and low-noise operation. The complete system can be enclosed securely with a cover.



交货期 Available  
夏季起供货 from summer



[www.igus.com.cn/planechain](http://www.igus.com.cn/planechain)  
[www.igus.eu/planechain](http://www.igus.eu/planechain)





\*新品: **isense CF.D** - 监测总线电缆的传输率 (可选项)。  
\*NEW: option with **isense CF.D** technology for intelligent monitoring of chainflex® bus cables.



新品: 经优化的外框支架和连接系统。低成本, 易于安装。  
NEW: optimised retainer and connector system. Lower price and easier assembly due to new plastic connectors.

... guide data, air, energy, ...

# ...传输数据, 气体和 能量 ...

在同一个系统中传输能量, 数据, 气体和液体 - 带单芯电缆和总线电缆

micro flizz® - 在同一系统导向安全传输能量, 数据, 气体和液体。免维护, 紧凑型, 低噪音运行, 高性价比的整套系统。

易清洁

摩擦, 无污染

低噪音运行, 免润滑, 易安装

在高加速度下, 速度可达 6m/s

数据传输率10Gbit/s

安全导向光缆和总线电缆

行程可达100m

可安装在水平和垂直方向上

很小安装空间

**isense CF.D** - 监测总线电缆的传输率 (可选项)

可提供导电的ESD拖链

典型的应用领域:

仓库存储和提取设备, 室内起重机, 移门, 移动工作站, 污水处理厂, 电动门, 音响设备, 输送设备

Energy, data, air and fluids in ONE system - with single cores and bus cable

micro flizz® - guide energy, data, air and fluids safely in ONE system. Maintenance-free, compact, quiet and cost-effective complete system - the alternative to busbar systems.

Easy to clean

No particle pollution due to abrasion

Quiet, lubrication-free and easy to install

Operating speeds of up to 6m/s in high acceleration applications

Data rates up to 10Gbit/s

Safely guides FOC and bus cables

Travels up to 100m

Can be installed horizontally and vertically

Less space required

Optionally available with **isense CF.D** technology for monitoring bus cables

Also available with a conductive ESD e-chain® material version

Typical application areas:

Storage and retrieval equipment, indoor cranes, industrial gates, workstations, sewage treatment plants, sliding doors, studio equipment, material handling equipment



模块化系统

\*包含移动端和长度为1m的铝制导轨, 2个反向拖链MF10.050.075.0, 4个横截面积为35mm²的单芯电缆, 1个总线电缆, 如: CFBUS.060

Harnessed modular system

\*Offer over 65€ per metre includes moving end and 1 metre aluminium channel each, 2 opposing e-chains® MF10.050.075.0, 4 single cores with 35mm² each, 1 bus cable, e.g. CFBUS.060.

产品代码 Part No.	内高 Inner height	外高 Outer height	内宽 Inner width	外宽 Outer width	弯曲半径 Bend radius	行程 Travel
MF06.10.018	11mm	17mm	10mm	19mm	18mm	30m
MF08.18.035	13mm	21mm	18mm	29mm	35mm	50m
MF10.50.075	20mm	27.5mm	50mm	63mm	75mm	100m



单芯电缆, 光缆和总线电缆常备库存, 提供36个月质保。

Single core, fibre optic cable and bus cables available from stock with 36-month guarantee.



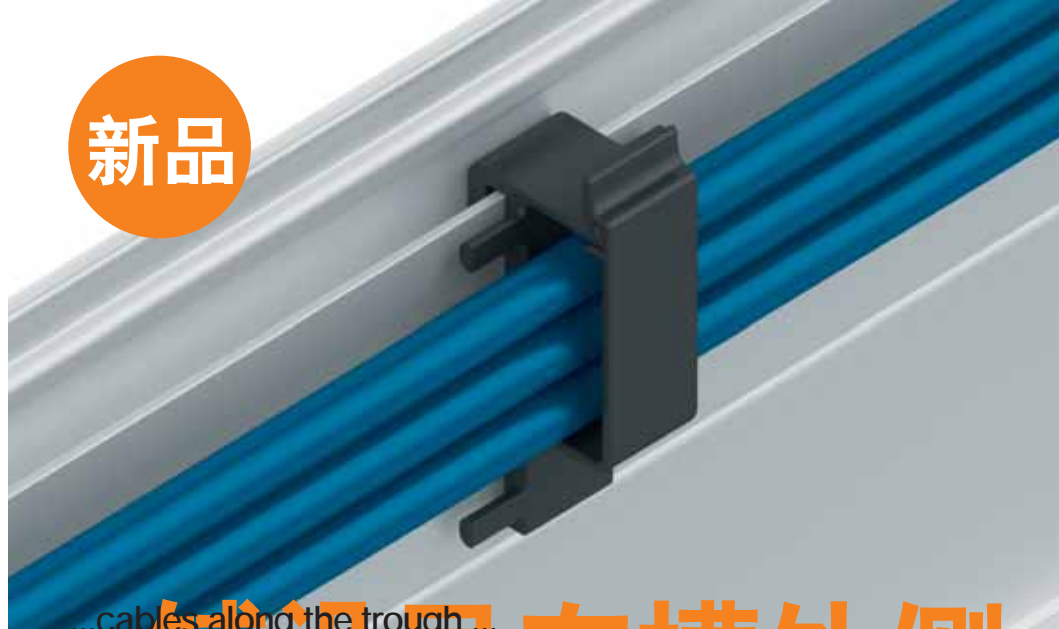
交货期 Available  
常备库存 from stock



[www.igus.com.cn/microflizz](http://www.igus.com.cn/microflizz)  
[www.igus.eu/microflizz](http://www.igus.eu/microflizz)



新品



## ... 铺设导向槽外侧

适用于静态电缆的铺设。导向槽夹具，引导电缆在导向槽外侧路径。

卡夹用于在铝制超级导向槽外侧静态电缆的安装。电缆易于从导向槽外侧引入拖链固定端。夹具可轻松固定在凹槽上。通过一个简易的卡扣可打开和闭合电缆夹，用扎带从槽两侧安全地固定电缆。

易安装

易于在铝制超级导向槽外侧铺设电缆

带卡扣式的锁定机制

可匹配电缆扎带

典型的应用领域：

应用于长行程铝制导向槽外侧线缆铺设

Energy supply for static cables.  
Trough clip, guides cable along the guide trough.

The trough clip is a cable guide for the statically installed cable on the outside of a aluminium SuperTrough. For centre fixed e-chains®, the cable filling can simply be guided to the fixed end outside the trough. The trough clip is simply clipped into the groove of the trough. A simple snap hook closes the clip and the cables can be secured from both sides with cable tie wraps.

Easy installation

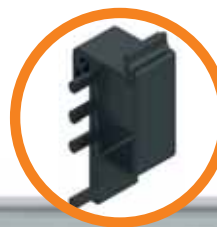
Simple cable layout on igus® aluminium SuperTrough

Simple snap-on hook locking mechanism

Strain relief with cable tie wraps is possible

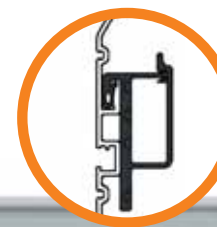
Typical application areas:

Long travels with aluminium SuperTrough for statically installed cables



铺设易格斯铝制超级导向槽外侧的管线。

Practical cable guidance for the outside of igus® aluminium troughs.



可用在绝大多数的易格斯铝制超级导向槽上。

Suitable for most igus® super aluminium troughs.

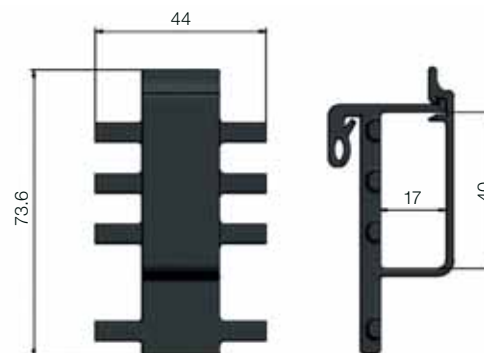


## 电缆 ...

产品代码 Part No.	内高 Inner height	外高 Outer height	内宽 Inner width	外宽 Outer width
SLC.40.17.0	40mm	73.6mm	17mm	44mm

导向槽的夹具可用于以下型号的导向槽：

The trough clips can be used with the following troughs:



不带耐磨条 Without glide bars	带耐磨条 With glide bars
971.30.SL(A)	971.31.SL
972.02.30.SL(A)	972.02.31.SL
972.30.SL(A)	972.31.SL
972.30.SL(A)	972.31.SL
972.30.SL(A)	972.32.SL
973.30.SL(A)	973.31.SL
974.30.SL(A)	974.31.SL
975.30.SL(A)	975.31.SL



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[www.igus.com.cn/SLC](http://www.igus.com.cn/SLC)

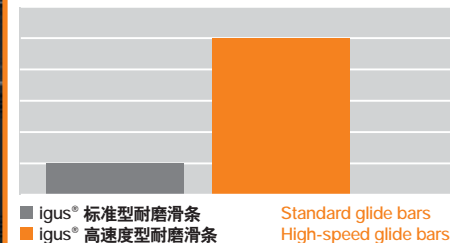
[www.igus.eu/SLC](http://www.igus.eu/SLC)

新品



与一般的耐磨滑条相比，  
耐磨性能增加了5倍。  
5 times more durable  
than conventional  
glide bars.

耐磨滑条的使用寿命对比  
Service life - glide bars comparison



... 5 times more wear-resistant ...

# ...耐磨滑条的耐磨

适用于拖链长行程运行中寿命更长。耐磨性能优化并且更容易安装的滑条更适合高速运行。

在拖链的高速运行时，铝制超级导向槽中的耐磨滑条是个消耗件。其损耗要比拖链本体快。耐磨滑条的耐磨性经过优化后，得到了提升，但价格仍保持不变，今后将有更多尺寸可供选择。

经优化的耐磨材料

适用于3种尺寸的导槽的耐磨滑条

耐磨性能增加了5倍

典型的应用领域:

直线型机器人，7轴机器人

Energy supply made even more durable on long travels. Installation and wear-optimised glide bar for high speeds.

In very fast gliding applications, the glide bars in the aluminium SuperTrough have been a maintenance part. They wear faster than the more abrasion-resistant e-chains®. For these applications, an abrasion-optimised, injection-moulded glide bar has now been developed. This is much more durable for the same price and will be used in future in all matching trough sizes.

Tribo-optimised material

A glide bar for 3 trough sizes

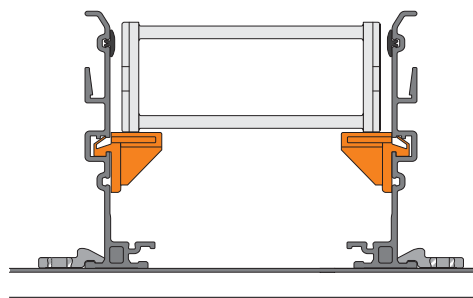
Five times longer service life

Typical application areas:

Linear robots, axis 7 robots

新的可选项:  
isense EC.T  
监测耐磨滑条的状态。  
New option:  
isense EC.T  
wear monitoring.

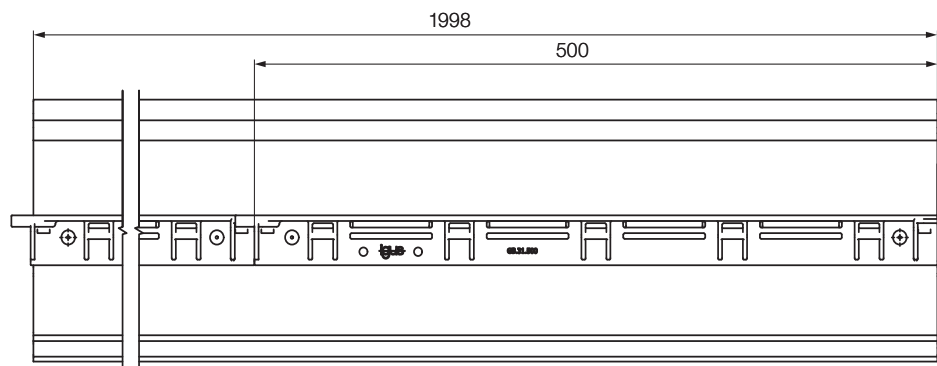
# 性能增加了...5倍...



新型的耐磨滑条可用于以下的铝制超级导向槽中:

The new glide bars can be used in the following aluminium SuperTroughs:

产品代码 Part No.	铝制超级导向槽 Aluminium SuperTrough
GB.31.500	973.31.SL
GB.31.500	974.31.SL
GB.31.500	975.31.SL



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[www.igus.com.cn/superalu](http://www.igus.com.cn/superalu)  
[www.igus.eu/superalu](http://www.igus.eu/superalu)

## DESIGN STUDY



与塑料拖链相比，架空长度超过50%。  
50% more unsupported length than a comparable plastic chain.



与钢制拖链相比，重量轻50%。  
50% lighter than a comparable steel chain.

... tough ... vibration-proof ... compact ...  
**... 坚固 ... 抗振动 ...**

**紧凑 ...**

拖链结合了自重轻的塑料拖链和坚固的钢制拖链的优点，架空长度长比纯钢制拖链的重量更轻

外部的塑料链节，更易于拖链的组装  
内部的钢制链节，增加了拖链稳固性  
抗振动，且无需螺丝，铆钉，螺栓固定  
孔/销连接，易于做简单的运动  
舌榫设计，高稳固性  
多种类型的内部分隔

典型的应用领域：  
存储平台，工程机械

The best mix of lightweight plastic and tough steel for an e-chain® that can handle high unsupported lengths with ease

Significantly less weight than a pure steel chain

Easy installation due to plastic outer links

High strength due to steel inner links

No screws, rivets or bolts can get loose under vibration

Easy movement through plastic pin connection

High tensile strength and stability due to undercut design for locking under load

Wide range of elements for interior separation

Typical application areas:

Access platforms, construction machinery



快速安装，自重轻：塑料链节通过螺栓的连接，使拖链有高的稳固性，快速安装，平滑运行。  
Fast installation, light weight: plastic outer links. High tensile force absorption through plastic bolts, quick installation and smooth operation.



高稳固性：钢制内侧链节配塑料外侧链节的限位块能吸收较强剪切力。

High strength: inner side links made from steel absorb the force of the fixed stop-dogs of the plastic outer links.



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根据需求 upon request



多种宽度的横杆：经测试的模块化的E4拖链系统。内宽的范围：50mm-400mm。横杆可沿内/外半径方向拆卸。

Variable width: crossbars from the proven E4 modular system. Available from 50mm-400mm inner width. Removable along inner and outer radius.



坚固，防水，紧凑：行程长度为10m，负载可达4kg，紧凑的设计，自重轻。

Strong, vibration-proof and compact: 10m travel with 4kg load with compact dimensions and low weight.



[www.igus.com.cn/YE.42](http://www.igus.com.cn/YE.42)

[www.igus.eu/YE.42](http://www.igus.eu/YE.42)

产品代码 Part No.	内高 Inner height	外高 Outer height	内宽 Inner width	外宽 Outer width	弯曲半径 Bend radius
YE.42	42mm	76mm	50 - 400mm	68 - 418mm	100mm

技术参数仅供参考。

This is a design study. Technical data have not yet been fully determined.





抗振动，且无需螺丝，铆钉，螺栓固定  
No screws, rivets or bolts can become loose under vibration

... construction machines... lifting platforms...

# ... 工程机械 ... 升降 ... 平台 ...

## YE.42 系列拖链适用于工程机械和升降平台

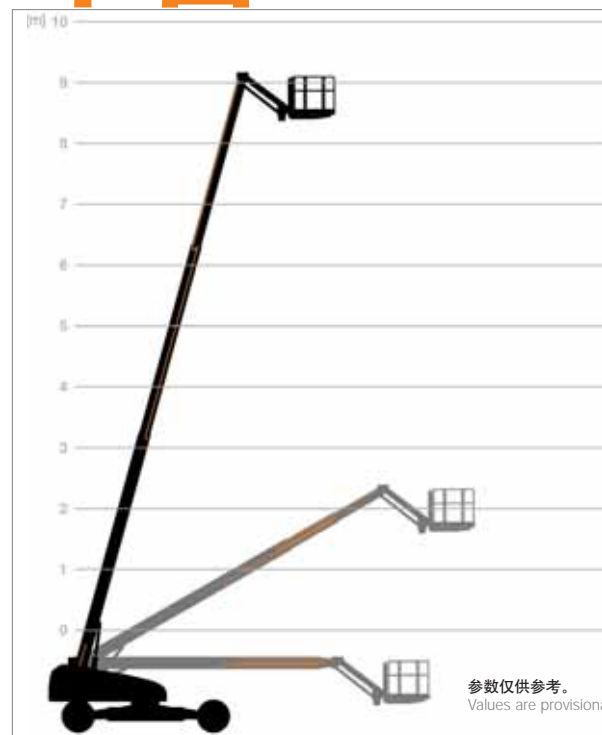
YE.42系列拖链有长的架空长度，紧凑化，自重轻。钢制拖链与YE.42系列拖链相比，有很多缺点，如：高成本，较大的重量。而YE.42系列拖链集合了钢制拖链高稳固性的优点，且自重轻，高灵活性，抗振动，且无需螺丝，铆钉，螺栓固定。

The design study YE.42 was developed to meet the requirements of construction machinery and lifting equipment

The requirement was to implement the maximum possible unsupported length with compact dimensions and the lowest possible weight. However, pure steel energy chains have the disadvantages of high assembly costs and weight. The igus® design study YE.42 combines the higher strength of steel elements with the low weight and flexibility of plastic components. No screws, rivets or bolts are used which can become loose under vibration.

每一克都精打细算：  
伸缩臂的自重轻，能  
承受更大的负载。

Every gram counts:  
the lower the weight on  
the telescopic boom,  
the more payload  
can be carried.



60°角度常态下：  
行程可达7m，负载可达4kg/m  
At an angle of 60°:  
7m with 4kg/m fill weight

30°角度常态下：  
行程可达6m，负载可达4kg/m  
At an angle of 30°:  
6m with 4kg/m fill weight

0°角度常态下：  
行程可达2m，负载可达10kg/m  
At an angle of 0°:  
2m with 10kg/m fill weight



交货期 Available  
根据需求 upon request



[www.igus.com.cn/YE.42](http://www.igus.com.cn/YE.42)  
[www.igus.eu/YE.42](http://www.igus.eu/YE.42)

2019 亮点 highlight 2019

电缆可扭转 $\pm 360^\circ$ ，且提供36个月的质保？

Is there a cable for  $\pm 360^\circ$  torsion with 36 month guarantee?



CFROBOT8.PLUS 可扭转  $\pm 360^\circ/\text{m}$ ，且提供36个月质保。  
CFROBOT8.PLUS with  $\pm 360^\circ/\text{m}$  torsion and with a 36-month guarantee



可在线选型，计算电缆的使用寿命  
Calculate service life and order online

## 移动供能更便捷： moving energy made easy: chainflex® 高柔性电缆 chainflex® cables

我们能提供满足您需求的高性价比电缆，经测试且提供36个月质保。

igus®是全球第一的拖链专用高柔性电缆供应商。1,354种电缆型号常备库存，我们能够提供最大选择范围的拖链专用高柔性电缆。得益于业内最大的拖链电缆专用测试实验室(2,750m²)，我们是市场上唯一一家对所有的chainflex®高柔性电缆提供36个月质保的供应商。无论是用在不同的驱动系统上的混合电缆，提供CMX认证的以太网电缆还是弯曲半径仅为4xd的电缆，或是可扭转360°/m的电缆。您可使用在线使用寿命计算工具精确地计算出所选电缆的使用寿命。快速响应，无最小起订量。

Always find a cable that works, for less. Tested and with 36 month guarantee.

igus® is the number 1 for cables in e-chains®: with more than 1,354 cables available, we have the largest selection of cables especially for use in energy chains. Thanks to the industry's largest test laboratory (2,750 m²), we are able to give a guarantee on all chainflex® cables, whether these be hybrid cables for different drive systems, cost-effective Ethernet cables with CMX certifications or cables with extremely small bend radii from 4 x d upwards and up to 360°/m torsion. With the on-

line service life calculator you can precisely calculate the expected service life of your cable. Available immediately with no minimum order quantity.

# ... motion plastics ...



64

9种质量等级Profinet电缆  
Profinet cables in nine qualities



66

经过CMX认证的PVC和PUR外护套总线电缆，适用于拖链  
PVC and PUR bus cables for the e-chain® – now with CMX approval



70

CFBUS.PVC和CFBUS.PUR总线电缆，通过CC-Link IE Field Network测试  
CFBUS.PVC and CFBUS.PUR successfully pass the test of CC-Link IE Field Network



72

CFROBOT8.PLUS电缆可扭转 $\pm 360^\circ/\text{m}$ ，提供36个月的质保  
CFROBOT8.PLUS with  $\pm 360^\circ/\text{m}$  torsion and with a 36-month guarantee



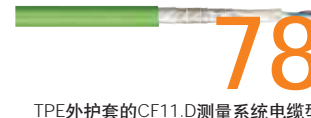
74

新增小截面系列规格的CF77.ULD.PUR控制电缆  
Addition of smaller cross sections for CF77.ULD.PUR control cable



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新增小截面规格规格的CF240.PUR数据电缆  
New small cross sections for PUR data cable CF240.PUR



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TPE外护套的CF11.D测量系统电缆型号拓展，符合DriveCliq标准  
Extension of TPE measuring system cable CF11.D by DriveCliq standard



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新一代的动力和伺服电缆芯线绝缘，可通过小接头传输大电流  
New generation of core insulation for motor and servo cables for high currents in small connectors



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新一代的绝缘材料  
New generation insulation material



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新一代带单元屏蔽的伺服电缆  
Servo cable with a new-generation pair shield



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新一代的测量系统电缆  
New generation Measuring system cables



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CFBUS.045和CFBUS.049以太网电缆，通过600V UL认证  
Ethernet cables CFBUS.045 and CFBUS.049 now with 600V UL

CFBUS.LB.060 Profinet 电缆 Profinet cable

chainflex® CFBUS.LB.060

CFROBOT8.PLUS.060 Profinet 电缆 Profinet cable

chainflex® CFROBOT8.PLUS.060



9种质量等级的Profinet 电缆。  
Profinet cables in nine qualities.



...Profinet – for all movement ...

# ... Profinet电缆...

Profinet 电缆用于各种运动-经测试，提供36个月的质保，常备库存。

多种质量等级的Profinet电缆，适用于拖链，满足您的需求。

4种外护套材质可选

4种弯曲半径可选

2种扭转角度可选

可用于低温应用的要求

通过国际认证 (UL, NFPA, EAC, CTP)，常备库存

可提供readycable® 装配电缆

典型的应用领域:

仓库存储和提取设备，加工中心/机床，输送设备，室内起重机

Profinet cables for all movement types with guaranteed service life. from stock. Tested.

Profinet cables in different quality levels for your various requirements in e-chains® applications.

Four jacket materials

Four bend radii

Two torsion angles

For low-temperature applications

Worldwide certifications (UL, NFPA, EAC, CTP) from stock

Also available as harnessed readycable®

Typical application areas:

Storage and retrieval units, machining units/packaging machines, handling, indoor cranes

高柔性电缆chainflex® 经易格斯实验室测试 ... Tested in the igus® chainflex® lab ...

测试号 Test No.: 4866

电缆类型 Cable type: CFBUS.060

弯曲半径 Bend radius: 63 mm

使用寿命 Service life: 6,500 万次的双循环 Mio strokes

igus.com.cn  
/test4866



... 常备库存 ... 无剪切费 ... 无最小起订量 ...

# 用于各种运动 ...

外护套 Jacket material	产品代码 Part No.	拖链内 R min. e-chain®	芯数/截面积 Number of cores/ Cross section [mm²]	最大外径 Outer Ø approx. [mm]	铜含量 Copper index [kg/km]	重量 Weight [kg/km]
PVC	CF888.060	15 x d	(4x0.34)C	7	25	56
iguPUR	CF898.060	15 x d	(4x0.34)C	7	25	58
PVC	CFBUS.PVC.060	12.5 x d	(4x0.38)C	7	33	67
PUR	CFBUS.PUR.060	12.5 x d	(4x0.38)C	7	33	64
TPE	CFBUS.060	10 x d	(4x0.38)C	7.5	39	73
TPE	CFBUS.LB.060	7.5 x d	(4x0.38)C	7.5	39	64
PUR	CFSPECIAL.182.060	10 x d	(4x0.38)C	8.5	36	121
PUR	CFROBOT8.060	10 x d	(2x(2x0.34))C	8.5	34	68
PUR	CFROBOT8.PLUS.060	10 x d	(4x0.38)C	7	32	64

您可以在chainflex® 电缆样本册中找到这些电缆的质保使用寿命信息。

Detailed information for guaranteed service life of this cable to be found in the latest chainflex® catalogue.



交货期 Available

常备库存 from stock



[www.igus.com.cn/Profinet](http://www.igus.com.cn/Profinet)

[www.igus.eu/Profinet](http://www.igus.eu/Profinet)

... from stock ... no cutting charges ... no minimum order quantity ...



igus® chainflex® CFBUS.PVC.045 CAT5e



通过CMX (UL-列名)认证的PVC总线电缆。  
PVC Bus cables now with CMX approval  
(UL-Listed).



可在线模拟，配置和计算使用寿命：  
chainflex® 高柔性电缆产品查找器，使用寿命计算器  
Simulate, configure and calculate online:  
chainflex® product finder, chainflex® service life calculator

## ... PVC 总线电缆 ... UL-Listed ...

## UL-列名认证 ...

PVC外护套的总线电缆，适用于拖链 -  
通过CMX认证，常备库存。

CFBUS.PVC通过CMX(UL-列名)认证。因此可在  
USA用于户外拖链，无需任何额外保护。

用于中等应用要求

PVC 外护套

耐油

阻燃

UL-列名

典型的应用领域:

仓库存储和提取设备，加工中心/机床，输送设  
备，室内起重机

PVC Bus cables for e-chains® - now  
from stock with CMX rating.

CFBUS.PVC now have the CMX certification (UL-  
listed). Therefore they can also be used in the USA  
outside of e-chains® without additional protection  
in the machine.

For medium duty applications

PVC outer jacket

Oil-resistant

Flame retardant

UL-listed

Typical application areas:

Storage and retrieval units, machining units/pa-  
ckaging machines, handling, machine tools

总线 Bus	产品代码 Part No.	拖链内 R min. e-chain®	芯数/截面积 Number of cores/ Cross section [mm²]	最大外径 Outer Ø approx. [mm]	铜含量 Copper index [kg/km]	重量 Weight [kg/km]
Profibus	CFBUS.PVC.001	12.5 x d	(2x0.25)C	8.5	25	75
CAN-Bus	CFBUS.PVC.020	12.5 x d	(4x0.25)C	7	23	57
CAN-Bus	CFBUS.PVC.021	12.5 x d	(2x0.5)C	8.5	32	86
CAN-Bus	CFBUS.PVC.022	12.5 x d	(4x0.5)C	8.5	43	94
CC-Link	CFBUS.PVC.035	12.5 x d	(3x0.5)C	8	40	82
CAT5	CFBUS.PVC.040	12.5 x d	(4x0.25)C	6.5	29	68
CAT5e	CFBUS.PVC.045	12.5 x d	(4x(2x0.15))C	7.5	33	67
CAT6	CFBUS.PVC.049	12.5 x d	(4x(2x0.15))C	7.5	34	67
CAT6A	CFBUS.PVC.050	12.5 x d	4x(2x0.20)C	9.5	65	120
CAT7	CFBUS.PVC.052	12.5 x d	(4x(2x0.15)C)C	9.5	89	136
FireWire	CFBUS.PVC.056	12.5 x d	(2x(2x0.15)C+2x0.38)C	9	59	96
Profinet	CFBUS.PVC.060	12.5 x d	(4x0.38)C	7	33	67

您可以在chainflex® 电缆样本中找到这些电缆的质保使用寿命信息。

Detailed information for guaranteed service life of this cable to be found in the latest chainflex® catalogue.



交货期 Available  
常备库存 from stock



[www.igus.com.cn/CFBUSPVC/CFBUSPUR](http://www.igus.com.cn/CFBUSPVC/CFBUSPUR)  
[www.igus.eu/CFBUSPVC/CFBUSPUR](http://www.igus.eu/CFBUSPVC/CFBUSPUR)

... 常备库存 ... 无剪切费 ... 无最小起订量 ...

... from stock ... no cutting charges ... no minimum order quantity ...

igus® chainflex® CFBUS.PUR.045 CAT5e



... PUR Bus cable ... UL-listed ...

# ... PUR总线电缆...

PUR外护套的总线电缆，适用于拖链 - 现通过CMX认证，常备库存。

CFBUS.PUR通过CMX(UL-列名)认证。因此可在USA用于户外拖链，无需任何额外保护。

用于中等应用要求

PUR 外护套

耐油

阻燃

UL-列名

典型的应用领域:

仓库存储和提取设备, 加工中心/机床, 输送设备, 室内起重机

PUR Bus cables for e-chains® - now available with rating.

CFBUS.PUR now have the CMX certification (UL-listed). Therefore they can also be used in the USA outside of e-chains® without additional protection in the machine.

For medium duty applications

PUR outer jacket

Oil-resistant

Flame retardant

UL-listed

Typical application areas:

Storage and retrieval units, machining units/packaging machines, handling, machine tools

高柔性电缆chainflex® 经易格斯实验室测试 ... Tested in the igus® chainflex® lab ...

测试号 Test No.: 5064

电缆类型 Cable type: CFBUS.PUR.049

弯曲半径 Bend radius: 75 mm

使用寿命 Service life: 1,700 万次的双循环 Mio strokes

igus.com.cn  
/test5064



... 常备库存 ... 无剪切费 ... 无最小起订量 ...



PUR外护套的总线电缆，现通过CMX(UL-列名)认证。  
PUR Bus cables now with CMX approval (UL-Listed).



可在线模拟，配置和计算使用寿命:

chainflex® 高柔性电缆产品查找器，使用寿命计算器

Simulate, configure and calculate online:

chainflex® product finder, chainflex® service life calculator

# UL-列名认证...

总线 Bus	产品代码 Part No.	拖链内 R min. e-chain®	芯数/截面积 Number of cores/ Cross section [mm²]	最大外径 Outer Ø approx. [mm]	铜含量 Copper index [kg/km]	重量 Weight [kg/km]
Profibus	CFBUS.PUR.001	12.5 x d	(2x0.25)C	8.5	25	72
CAN-Bus	CFBUS.PUR.020	12.5 x d	(4x0.25)C	7.5	23	66
CAN-Bus	CFBUS.PUR.021	12.5 x d	(2x0.5)C	8.5	32	82
CAN-Bus	CFBUS.PUR.022	12.5 x d	(4x0.5)C	8.5	43	90
CC-Link	CFBUS.PUR.035	12.5 x d	(3x0.5)C	8	40	77
CAT5	CFBUS.PUR.040	12.5 x d	(4x0.25)C	6.5	29	67
CAT5e	CFBUS.PUR.045	12.5 x d	(4x(2x0.15))C	7.5	33	66
CAT6	CFBUS.PUR.049	12.5 x d	(4x(2x0.15))C	7.5	34	66
CAT6A	CFBUS.PUR.050	12.5 x d	4x(2x0.20)C	9.5	65	118
CAT7	CFBUS.PUR.052	12.5 x d	(4x(2x0.15)C)C	9.5	89	129
FireWire	CFBUS.PUR.056	12.5 x d	(2x(2x0.15)C+2x0.38)C	9	59	91
Profinet	CFBUS.PUR.060	12.5 x d	(4x0.38)C	7	33	64
CAT6	CFBUS.PUR.H01.049	12.5 x d	((4x(2x0.15))C+4x1.5)C	12.5	126	207
Profinet	CFBUS.PUR.H01.060	12.5 x d	((4x0.38)C+4x1.5)C	11.5	121	199

您可以在chainflex® 电缆样本册中找到这些电缆的质保使用寿命信息。

Detailed information for guaranteed service life of this cable to be found in the latest chainflex® catalogue.



交货期 Available

常备库存 from stock



[www.igus.com.cn/CFBUSPVC](http://www.igus.com.cn/CFBUSPVC) /CFBUSPUR

[www.igus.eu/CFBUSPVC](http://www.igus.eu/CFBUSPVC) /CFBUSPUR

... from stock ... no cutting charges ... no minimum order quantity ...

CFBUS.PVC.045|.049 PVC外护套的以太网电缆 PVC-Ethernet cable

igus® chainflex® CFBUS.PVC.045 CAT5e

CFBUS.PUR.045|.049 PUR外护套的以太网电缆 PUR-Ethernet cable

igus® chainflex® CFBUS.PUR.049 CAT6

CFBUS.045|.049 TPE外护套的以太网电缆 TPE-Ethernet cable

igus® chainflex® CFBUS.045 CAT5e

CFBUS.LB.045|.049 TPE外护套的以太网电缆 TPE-Ethernet cable

igus® chainflex® CFBUS.LB.049 CAT6



## ... 以太网电缆 ...

以太网电缆 (CAT5e 和 CAT6) 常备库存, 有多种外护套材质供选, 现通过CC-Link IE Field 认证。

我们能提供满足您需求的高性价比CC Link IE Field 电缆。

除了用于小弯曲半径的CFBUS和CFBUS.LB系列, CFBUS.PVC和CFBUS.PUR也已通过CC-Link IE Field 认证, 满足亚洲市场需求。易格斯能够为您提供广泛的产品范围和高性价比的解决方案。经测试, 确保长效的使用寿命。

典型的应用领域:

加工设备/机床, 高架仓库存储和提取设备, 无尘室, 快速输送设备, 低温环境

Ethernet cables (CAT5e and CAT6) now stock in all jacket qualities with CC-Link IE Field Network approval.

Always find the CC Link IE Field cable that works, for less.

In addition to the Ethernet cables CFBUS and CFBUS.LB for very small radii, the CFBUS.PVC and CFBUS.PUR have now passed the test for CC-Link IE Field Network and are perfect for use according to asian standards. We are able to offer you a wide range of options and therefore the most cost-effective solution that is guaranteed to work on your application. Tested, with a guaranteed service life.

Typical application areas:

Machining units/machine tools, storage and retrieval units for high-bay warehouses, clean room, quick handling, low temperature applications

**CC-Link IE Field**

以太网电缆有多种外护套材质供选, 现通过CC Link IE Field认证。  
Ethernet cables in all jacket qualities with CC Link IE Field approval.

## CC-Link IE Field...

外护套 Jacket material	总线 Part No.	产品代码	拖链内 R min. e-chain®	芯数/截面积 Number of cores/ Cross section [mm²]	最大外径 Outer Ø approx. [mm]	铜含量 Copper index [kg/km]	重量 Weight [kg/km]
PVC	CAT5	CFBUS.PVC.040	12.5 x d	(4x0.25)C	6.5	29	68
PVC	CAT5e	CFBUS.PVC.045	12.5 x d	(4x(2x0.15))C	7.5	33	67
PVC	CAT6	CFBUS.PVC.049	12.5 x d	(4x(2x0.15))C	7.5	34	67
PVC	CAT6A	CFBUS.PVC.050	12.5 x d	4x(2x0.20)C	9.5	65	120
PVC	CAT7	CFBUS.PVC.052	12.5 x d	(4x(2x0.15)C)C	9.5	89	136
PUR	CAT5	CFBUS.PUR.040	12.5 x d	(4x0.25)C	6.5	29	67
PUR	CAT5e	CFBUS.PUR.045	12.5 x d	(4x(2x0.15))C	7.5	33	66
PUR	CAT6	CFBUS.PUR.049	12.5 x d	(4x(2x0.15))C	7.5	34	66
PUR	CAT6A	CFBUS.PUR.050	12.5 x d	4x(2x0.20)C	9.5	65	118
PUR	CAT7	CFBUS.PUR.052	12.5 x d	(4x(2x0.15)C)C	9.5	89	129
TPE UL	CAT5	CFBUS.040	10 x d	(4x0.25)C	7.0	33	64
TPE UL	CAT5e	CFBUS.045	10 x d	(4x(2x0.15))C	8.5	41	86
TPE UL	CAT6	CFBUS.049	10 x d	(4x(2x0.15))C	8.5	42	86
TPE UL	CAT6A	CFBUS.050	10 x d	(4x(2x0.15)C)C	10.5	82	135
TPE UL	CAT7	CFBUS.052	10 x d	(4x(2x0.15)C)C	10.5	89	137
TPE	CAT5	CFBUS.LB.040	7.5 x d	(4x0.25)C	7.0	33	64
TPE	CAT5e	CFBUS.LB.045	7.5 x d	(4x(2x0.15))C	8.5	41	86
TPE	CAT6	CFBUS.LB.049	7.5 x d	(4x(2x0.15))C	8.5	42	86

您可以在chainflex® 电缆样本册中找到这些电缆的质保使用寿命信息。

Detailed information for guaranteed service life of this cable to be found in the latest chainflex® catalogue.

... 常备库存 ... 无剪切费 ... 无最小起订量 ...

... from stock ... no cutting charges ... no minimum order quantity ...



CFROBOT8.PLUS.045 可扭转的以太网电缆  
Twistable Ethernet cable

CFROBOT8.PLUS.045



可扭转 $\pm 360^\circ/\text{m}$ 的机器人电缆，提供清晰的质保（最高1,000万次的循环）。  
 $\pm 360^\circ/\text{m}$  robot torsion cable with clear service life guarantee statement (10 million cycles).

为机器人  
优化



可在线模拟，配置和计算使用寿命：  
chainflex® 高柔性电缆产品查找器，使用寿命计算器  
Simulate, configure and calculate online:  
chainflex® product finder, chainflex® service life calculator

# ...可扭转 $\pm 360^\circ/\text{m}$ ... 提供质保...

新的CFROBOT8.PLUS 总线电缆可实现  
两倍扭转角度( $\pm 360^\circ/\text{m}$ )。经测试，提供  
质保的使用寿命。

机器人总线电缆的最佳选择 – 使用寿命提升100%，  
扭转角度翻倍，经易格斯实验室测试。

用于带扭转运动的极高应用要求  
PUR 外护套  
带屏蔽和不带屏蔽可供选择  
耐油和冷却剂  
阻燃  
耐滑痕  
通过UL和CSA认证

典型的应用领域：  
机器人，输送设备

New CFROBOT8.PLUS bus cable  
with twice the torsion angle ( $\pm 360^\circ/\text{m}$ )  
and guaranteed service life. Tested.

The best bus cable for use on robots – now with  
100% longer service life and with twice the tor-  
sion angle. Tested in a real application in the igus®  
laboratory.

For extremely heavy duty applications with  
torsion movements  
PUR outer jacket  
Shielded with latest braiding technique  
Oil-resistant and coolant-resistant  
Flame retardant  
Notch-resistant  
UL/CSA

Typical application areas:  
Robots, handling

高柔性电缆chainflex® 经易格斯实验室测试 ... Tested in the igus® chainflex® lab ...

测试号 Test No.: 4888  
电缆类型 Cable type: CFROBOT8.PLUS.045  
扭转角度 Torsion angle:  $\pm 180^\circ/\text{m}$   
使用寿命 Service life: 1,500 万次的双循环 Mio strokes

igus.com.cn  
/test4888



总线 Bus	产品代码 Part No.	拖链内 R min. e-chain®	芯数/截面积 Number of cores/ Cross section [mm²]	最大外径 Outer Ø approx. [mm]	铜含量 Copper index [kg/km]	重量 Weight [kg/km]
Profibus	CFROBOT8.PLUS.001	10 x d	(2x0.25)C	9	30	75
CAT5e	CFROBOT8.PLUS.045	10 x d	(4x(2x0.15))C	7.5	32	60
Profinet	CFROBOT8.PLUS.060	10 x d	(4x0.38)C	7	32	64

您可以在chainflex® 电缆样本中找到这些电缆的质保使用寿命信息。  
Detailed information for guaranteed service life of this cable to be found in the latest chainflex®  
catalogue.

机器人电缆提供质保的使用寿命 ...  
Guaranteed service life on robots ...

1 百万次循环 1 million cycles	5 百万次循环 5 million cycles	1 千万次循环 10 million cycles
$\pm 360^\circ/\text{m}$	$\pm 270^\circ/\text{m}$	$\pm 180^\circ/\text{m}$



交货期 Available  
常备库存 from stock



www.igus.com.cn/CFROBOT8.PLUS  
www.igus.eu/CFROBOT8.PLUS

... 常备库存 ... 无剪切费 ... 无最小起订量 ...

... from stock ... no cutting charges ... no minimum order quantity ...

CF77.UL.D PUR 控制电缆 PUR control cable

chainflex® CF77.ULD



适用于直线运动和机器人的控制电缆。  
Control cable for linear movements and robots.

为机器人  
优化



可在线模拟，配置和计算使用寿命：  
chainflex® 高柔性电缆产品查找器，使用寿命计算器  
Simulate, configure and calculate online:  
chainflex® product finder, chainflex® service life calculator

... PUR control cable ... for linear & torsion ...

## ... PUR 控制电缆 ...

新增小截面系列规格的 CF77.UL.D  
PUR 控制电缆

用于高应用要求  
PUR 外护套  
耐油和冷却剂  
阻燃  
不含PVC和卤素  
耐划痕  
抗水解和微生物

Addition of smaller cross sections  
for CF77.UL.D PUR control cable

For heavy duty applications  
PUR outer jacket  
Oil-resistant and coolant-resistant  
Flame retardant  
PVC and halogen-free  
Notch-resistant  
Hydrolysis and microbe-resistant

Typical application areas:  
Machining centres / machine tools, storage and  
retrieval systems, packaging industry, handling,  
refrigerating areas, robotics

典型的应用领域:

加工中心/机床, 仓库存储和提取设备, 包装行业,  
输送设备, 制冷设备, 机器人



... 常备库存 ... 无剪切费 ... 无最小起订量 ...

## 直线或扭转运动...

产品代码 Part No.	拖链内 R min. e-chain®	芯数/截面积 Number of cores/ Cross section [mm²]	最大外径 Outer Ø approx. [mm]	铜含量 Copper index [kg/km]	重量 Weight [kg/km]
CF77.UL.02.03.INI	6.8 x d	3x0.25	5	8	29
CF77.UL.02.04.D	6.8 x d	4x0.25	5.5	11	35
CF77.UL.02.05.D	6.8 x d	5x0.25	6	13	41
CF77.UL.02.07.D	6.8 x d	7x0.25	6.5	18	51
CF77.UL.02.12.D	6.8 x d	12x0.25	9	30	77
CF77.UL.02.18.D	6.8 x d	18x0.25	10.5	45	114
CF77.UL.02.25.D	6.8 x d	25x0.25	11.5	63	154
CF77.UL.03.04.INI	6.8 x d	4x0.34	6	16	39
CF77.UL.05.04.D	6.8 x d	4G0.5	6	21	43
CF77.UL.05.05.D	6.8 x d	5G0.5	6.5	26	50
CF77.UL.05.07.D	6.8 x d	7G0.5	7.5	39	78
CF77.UL.05.12.D	6.8 x d	12G0.5	10	63	129
CF77.UL.05.18.D	6.8 x d	18G0.5	12	94	179
CF77.UL.05.25.D	6.8 x d	25G0.5	14	129	238
CF77.UL.05.30.D	6.8 x d	30G0.5	15	155	315

您可以在chainflex® 电缆样本册中找到这些电缆的质保使用寿命信息。  
Detailed information for guaranteed service life of this cable to be found in the latest chainflex® catalogue.

您可以在电缆样本或网站中找到更多CF77.UL.D的型号。  
Many other CF77.UL.D types to be found online and in the new chainflex® catalogue.



交货期 Available  
常备库存 from stock



[www.igus.com.cn/CF77](http://www.igus.com.cn/CF77)  
[www.igus.eu/CF77](http://www.igus.eu/CF77)

... from stock ... no cutting charges ... no minimum order quantity ...

CF240.PUR 数据电缆 Data cable

chainflex® CF240.PUR



高耐油的数据电缆，光学覆盖率90%  
Data cable with high oil resistance and  
90 % coverage.



可在线模拟，配置和计算使用寿命：  
chainflex® 高柔性电缆产品查找器，使用寿命计算器  
Simulate, configure and calculate online:  
chainflex® product finder, chainflex® service life calculator

... PUR Data cable...excellent shield ...

## ...PUR数据电缆...

新增小截面系列规格的PUR外护套数据  
电缆 CF240.PUR

用于高应用要求  
PUR外护套  
光学覆盖率90 %  
耐油和冷却剂  
阻燃  
不含PVC和卤素  
耐划痕  
抗水解和微生物

Addition of smaller cross sections  
for PUR data cable CF240.PUR

For heavy duty applications  
PUR outer jacket  
90 % optical coverage  
Oil-resistant and coolant-resistant  
Flame-retardant  
PVC and halogen-free  
Notch-resistant  
Hydrolysis and microbe-resistant

典型的应用领域:

加工中心/机床，仓库存储和提取设备，包装行  
业，输送设备，制冷设备，机器人

Typical application areas:

Machining centres / machine tools, storage and  
retrieval systems, packaging industry, handling,  
refrigerating areas

高柔性电缆chainflex® 经易格斯实验室测试 ... Tested in the igus® chainflex® lab ...

测试号 Test No.: 4221

电缆类型 Cable type: CF240.PUR.02.18

弯曲半径 Bend radius: 75mm

使用寿命 Service life: 3,300 万次的双循环 Mio strokes

igus.com.cn  
/test4221



交货期 Available  
常备库存 from stock



www.igus.com.cn/CF240PUR  
www.igus.eu/CF240PUR

... 常备库存 ... 无剪切费 ... 无最小起订量 ...

## 带屏蔽...

产品代码 Part No.	拖链内 R min. e-chain®	芯数/截面积 Number of cores/Cross section [mm²]	最大外径 Outer Ø approx. [mm]	铜含量 Copper index [kg/km]	重量 Weight [kg/km]
CF240.PUR.01.04	10 x d	(4x0.14)C	6	15	39
CF240.PUR.01.07	10 x d	(7x0.14)C	6.5	22	53
CF240.PUR.01.08	10 x d	(8x0.14)C	7	26	64
CF240.PUR.01.14	10 x d	(14x0.14)C	8	40	79
CF240.PUR.01.18	10 x d	(18x0.14)C	8.5	51	94
CF240.PUR.01.25	10 x d	(25x0.14)C	9.5	67	124
CF240.PUR.02.03	10 x d	(3x0.25)C	6	17	41
CF240.PUR.02.04	10 x d	(4x0.25)C	6	21	45
CF240.PUR.02.05	10 x d	(5x0.25)C	6	24	50
CF240.PUR.02.07	10 x d	(7x0.25)C	7	32	65
CF240.PUR.02.08	10 x d	(8x0.25)C	7.5	35	71
CF240.PUR.02.14	10 x d	(14x0.25)C	8.5	59	103
CF240.PUR.02.18	10 x d	(18x0.25)C	9	71	122
CF240.PUR.02.25	10 x d	(25x0.25)C	10.5	96	161
CF240.PUR.03.03	10 x d	(3x0.34)C	6	25	47
CF240.PUR.03.04	10 x d	(4x0.34)C	6.5	30	54
CF240.PUR.03.05	10 x d	(5x0.34)C	7	34	60
CF240.PUR.03.07	10 x d	(7x0.34)C	8	45	84
CF240.PUR.03.14	10 x d	(14x0.34)C	9.5	74	126
CF240.PUR.03.18	10 x d	(18x0.34)C	10.5	92	156

您可以在chainflex® 电缆样本中找到这些电缆的质保使用寿命信息。  
Detailed information for guaranteed service life of this cable to be found in the latest chainflex® catalogue.

... from stock ... no cutting charges ... no minimum order quantity ...

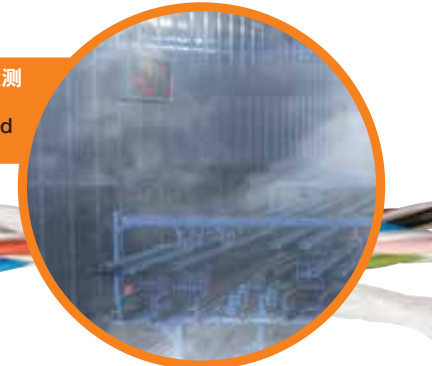


CF11.028.D TPE 测量系统电缆 TPE Mess-Systemleitung

igus® chainflex® CF11.028.D



适用于最低温度环境的DriveCliq ... 经真实环境测试，提供质保  
DriveCliq for the lowest temperatures ... tested under real conditions. With guarantee



可在线模拟，配置和计算使用寿命：  
chainflex® 高柔性电缆产品查找器，使用寿命计算器  
Simulate, configure and calculate online:  
chainflex® product finder, chainflex® service life calculator

... Measuring system ... DriveCliq x7 ...

# ...测量系统电缆...

TPE外护套测量系统电缆CF11.D型号拓展，符合DriveCliq 标准。经测试，提供质保的使用寿命，常备库存。

用于极高应用要求  
TPE外护套  
小弯曲半径  
可用于频繁的运动  
耐油，耐生物油  
不含PVC和卤素

典型的应用领域：

仓库存储和提取设备，加工设备/包装设备，机床，快速输送设备，室内和室外起重机，无尘室，半导体行业，低温应用

Extension of TPE measuring system cable CF11.D by DriveCliq standard. Guaranteed service life. Tested. From stock.

For extremely heavy duty applications  
TPE outer jacket  
For small radii  
For very frequent flexible movements  
Oil and bio-oil-resistant  
PVC and halogen-free

Typical application areas:

Storage and retrieval units for high-bay warehouses, machining units/packaging machines, machine tools, quick handling, indoor and outdoor cranes, Clean room, semiconductor insertion, low temperature applications

高柔性电缆chainflex® 经易格斯实验室测试 ... Tested in the igus® chainflex® lab ...

测试号 Test No.: 3479

电缆类型 Cable type: CF11.028.D

弯曲半径 Bend radius: 75mm

使用寿命 Service life: 6,600 万次的双循环 Mio strokes

igus.com.cn  
/test3479



... 常备库存 ... 无剪切费 ... 无最小起订量 ...

# DriveCliq x7 ...

产品代码 Part No.	拖链内 R min. e-chain®	芯数/截面积 Number of cores/Cross section [mm²]	最大外径 Outer Ø approx. [mm]	铜含量 Copper index [kg/km]	重量 Weight [kg/km]
CF884.028	15 x d	(2x(2x0,15)+(2x0,38))C	7,5	41	41
CF211.028	10 x d	(2x(2x0,15)+(2x0,38))C	7,5	35	35
CF894.028	15 x d	(2x(2x0,15)+(2x0,38))C	7,5	41	41
CF111.028.D	10 x d	(2x(2x0,15)+(2x0,38))C	7,5	35	35
CF113.028.D	7.5 x d	(2x(2x0,20)+(2x0,38))C	7,5	44	44
CF11.028.D	7.5 x d	(2x(2x0,20)+(2x0,38))C	7,5	44	44
CFROBOT4.028	10 x d	(2x(2x0,20)+(2x0,38))C	7,5	44	44

您可以在chainflex® 电缆样本册中找到这些电缆的质保使用寿命信息。

Detailed information for guaranteed service life of this cable to be found in the latest chainflex® catalogue.



交货期 Available  
常备库存 from stock



www.igus.com.cn/CF11D  
www.igus.eu/CF11D

... from stock ... no cutting charges ... no minimum order quantity ...



降低成本... 更长寿命... 113 种动力电缆, 常备库存, 经测试, 提供质保。  
Cost down ... service life up ... 113 motor cables from stock. Tested and with guarantee.



## ...经优化的绝缘...

新一代芯线绝缘材料的动力和伺服电缆, 适用于大电流和小尺寸接头的情况。经优化的绝缘材料, 更加安全可靠, 尤其适用于高温环境。

大电流的情况下, 使电缆更安全可靠。可用于带接头的小安装空间。

用于chainflex® 高柔性动力和伺服电缆  
PVC, PUR和TPE外护套

典型的应用领域:  
加工设备/机床, 低温应用

New generation of core insulation for motor and servo cables for high currents in small connectors.

The insulation material has been improved through extensive research in order to ensure that it is safe and reliable to use, even at high temperatures.

This offers improved reliability and safety when supplying high levels of current, especially for smaller installation spaces requiring connectors.

Now for chainflex® motor and servo cables  
PVC, PUR and TPE outer jackets

Typical application areas:

Machining units/machine tools, low-temperature applications

## 动力&伺服电缆...

外护套 Jacket	系列 Series	拖链内 R min. e-chain®	带屏蔽 Shield	截面积 Cross section [mm²]
<b>动力电缆 Motor cables</b>				
PVC	CF30	7.5 x d		1.5-50
PVC	CF31	7.5 x d	✓	1.5-70
TPE	CF34.UL.D	7.5 x d		1.5-25
TPE	CF35.UL	7.5 x d	✓	0.5-50
TPE	CF37.D	7.5 x d		1.5-50
TPE	CF38	7.5 x d	✓	1.5-50
<b>伺服电缆 Servo cables</b>				
PVC	CF21.UL	7.5 x d	✓	
PUR	CF27.D	7.5 x d	✓	0.75-50
TPE	CF29.D	6.8 x d	✓	1.5-4.0

您可以在chainflex® 电缆样本中找到这些电缆的质保使用寿命信息。

Detailed information for guaranteed service life of this cable to be found in the latest chainflex® catalogue.

高柔性电缆chainflex® 经易格斯实验室测试 ... Tested in the igus® chainflex® lab ...

测试号 Test No.: 5034

电缆类型 Cable type: CF29

弯曲半径 Bend radius: 100 mm

使用寿命 Service life: 4,500 万次的双循环 Mio strokes

igus.com.cn  
/test5034



交货期 Available

常备库存 from stock



www.chainflex.com.cn

www.chainflex.eu

... 常备库存 ... 无剪切费 ... 无最小起订量 ...

... from stock ... no cutting charges ... no minimum order quantity ...

CF27.D 伺服电缆 servo cable

igus® chainflex® CF27.D



PUR外护套的伺服电缆，通过更高温要求的UL 认证。  
Servo cable with PUR outer jacket now with UL approval for even higher temperatures.



# ...伺服电缆...

新一代的绝缘材料，通过UL更高温测试认证。

用于高应用要求  
通过UL认证，1000V，90°C  
PUR 外护套  
耐油和冷却剂  
阻燃

典型的应用领域：  
加工设备/机床，低温应用

New generation insulation material for improved temperature stability with higher UL temperature.

For extremely heavy duty applications  
UL 1000V, 90°C  
PUR outer jacket  
Oil-resistant and coolant-resistant  
Flame-retardant

Typical application areas:  
Machining units/machine tools, low-temperature applications

高柔性电缆chainflex® 经易格斯实验室测试 ... Tested in the igus® chainflex® lab ...

测试号 Test No.: 4826  
电缆类型 Cable type: CF27  
弯曲半径 Bend radius: 100 mm  
使用寿命 Service life: 2,800 万次的双循环 Mio strokes

igus.com.cn  
/test4826



交货期 Available  
常备库存 from stock

www.igus.com.cn/CF27.D  
www.igus.eu/CF27.D

... 常备库存 ... 无剪切费 ... 无最小起订量 ...



可在线模拟，配置和计算使用寿命：  
chainflex® 高柔性电缆产品查找器，使用寿命计算器  
Simulate, configure and calculate online:  
chainflex® product finder, chainflex® service life calculator

# 1000V 90°C...

产品代码 Part No.	拖链内 R min. e-chain®	芯数/截面积 Number of cores/Cross section [mm²]	最大外径 Outer Ø approx. [mm]	铜含量 Copper index [kg/km]	重量 Weight [kg/km]
1 对控制对线带屏蔽 1 Control pair shielded					
CF27.07.05.02.01.D	7.5 x d	(4G0.75+(2x0.5)C)C	11.5	89	178
CF27.15.15.02.01.D	7.5 x d	(4G1.5+(2x1.5)C)C	13	149	254
CF27.25.15.02.01.D	7.5 x d	(4G2.5+(2x1.5)C)C	14.5	205	325
CF27.40.15.02.01.D	7.5 x d	(4G4.0+(2x1.5)C)C	16	265	415
CF27.60.15.02.01.D	7.5 x d	(4G6.0+(2x1.5)C)C	18	343	530
CF27.100.15.02.01.D	7.5 x d	(4G10+(2x1.5)C)C	21	542	762
CF27.160.15.02.01.D	7.5 x d	(4G16+(2x1.5)C)C	24.5	797	1074
CF27.250.15.02.01.D	7.5 x d	(4G25+(2x1.5)C)C	28.5	1163	1539
CF27.350.15.02.01.D	7.5 x d	(4G35+(2x1.5)C)C	32.5	1592	2104
2 对控制对线带屏蔽 2 Control pairs shielded					
CF27.07.03.02.02.D	7.5 x d	(4G0.75+2x(2x0.34)C)C	12.5	109	205
CF27.10.07.02.02.D	7.5 x d	(4G1.0+2x(2x0.75)C)C	13.5	157	263
CF27.15.07.02.02.D	7.5 x d	(4G1.5+2x(2x0.75)C)C	14	178	297
CF27.25.15.02.02.D	7.5 x d	(4G2.5+2x(2x1.5)C)C	17	266	421
CF27.40.15.02.02.D	7.5 x d	(4G4.0+2x(2x1.5)C)C	18	324	490
CF27.60.15.02.02.D	7.5 x d	(4G6.0+2x(2x1.5)C)C	20	420	634
CF27.100.15.02.02.D	7.5 x d	(4G10+2x(2x1.5)C)C	23.5	606	882
CF27.160.15.02.02.D	7.5 x d	(4G16+2x(2x1.5)C)C	26.5	889	1202
CF27.250.15.02.02.D	7.5 x d	(4G25+2x(2x1.5)C)C	31	1224	1701
1 组四星式绞合带屏蔽 1 Star-quad shielded					
CF27.15.05.04.D	7.5 x d	(4G1.5+(4x0.5)C)C	13	136	240
CF27.25.05.04.D	7.5 x d	(4G2.5+(4x0.5)C)C	14.5	185	302
CF27.40.05.04.D	7.5 x d	(4G4.0+(4x0.5)C)C	16	253	395
不带控制对线 without control pair					
CF27.15.04.D	7.5 x d	(4G1.5)C	10.5	89	163
CF27.25.04.D	7.5 x d	(4G2.5)C	12.5	133	227
CF27.500.04.D	7.5 x d	(4G50)C	37	2244	2832





高端伺服电缆带新型单元屏蔽，减少30%的装配工作量。  
High end servo cable with new pair shielding for 30% faster harnessing.

质保承诺  
igus chainflex  
36  
个月质保

... new pair shielding ... servo cable ...

## ...新型单元屏蔽...

伺服电缆，带新型单元屏蔽，加快了装配时间，增加了耐久性。

用于高应用要求

新型单元屏蔽，加快了30%的装配时间

PUR, PVC和TPE外护套

最小弯曲半径可达 6.8 x d

高耐磨损

耐油，耐生物油

架空和滑行应用

典型的应用领域：

仓库存储和提取设备，加工设备/机床，快速传输设备，无尘室，半导体，室内起重机，室外起重机，低温应用

Servo cable with a new-generation pair shield to reduce harnessing work and increase durability.

For heaviest duty applications

New pair shielding for 30% faster cable harnessing

PUR, PVC and TPE outer jacket

Smallest bend factor in e-chains®: down to 6.8 x d

Highest abrasion resistance in e-chains®

Oil and bio-oil resistant

Unsupported and gliding travels

Typical application areas:

Storage and retrieval units for high-bay warehouses,

Machining units/machine tools, quick handling,

Clean room, semiconductor insertion, indoor cranes,

outdoor cranes, low temperature applications

高柔性电缆chainflex® 经易格斯实验室测试 ... Tested in the igus® chainflex® lab ...

测试号 Test No.: 5034

电缆类型 Cable type: CF29.25.15.02.01.D

弯曲半径 Bend radius: 100 mm (可达7.2 x d)

使用寿命 Service life: 4,500 万次的双循环 Mio strokes

igus.com.cn  
/test5034



... 常备库存 ... 无剪切费用 ... 无最小起订量 ...



可在线模拟，配置和计算使用寿命：

chainflex® 高柔性电缆产品查找器，使用寿命计算器

Simulate, configure and calculate online:

chainflex® product finder, chainflex® service life calculator

## 伺服电缆...

外护套 Jacket	系列 Series	拖链内 R min. e-chain®	带屏蔽 Shield	截面积 Cross section [mm²]
伺服电缆 Servo cables				
PVC	CF21.UL	7.5 x d	✓	0.34-35
PUR	CF27.D	7.5 x d	✓	0.75-50
TPE	CF29.D	6.8 x d	✓	1.5-4.0

以下系列也更新为新型单元屏蔽：

New pair shielding also available for ...

CF29.D TPE 伺服电缆 TPE Servo cable



延长了40%的使用寿命 40 % longer service life



交货期 Available

常备库存 from stock



www.igus.com.cn/CF21.UL /27.D

www.igus.eu/CF21.UL /27.D

... from stock ... no cutting charges ... no minimum order quantity ...

CF211 PVC 测量系统电缆 PVC Measuring system cable

igus® chainflex® CF211



CF111.D PUR 测量系统电缆 PUR Measuring system cable

igus® chainflex® CF111.D



CF113.D PUR 测量系统电缆 PUR Measuring system cable

igus® chainflex® CF113.D



## ... measuring system cables... 300V UL... ... 测量系统电缆... 300V UL ...

## 300V UL ...

新一代测量系统电缆(PVC, PUR 或TPE 外护套), 通过UL 300V认证。

用于中等应用的要求  
通过UL 300V认证  
PVC, PUR和TPE 外护套  
耐油  
阻燃  
架空和滑行应用

典型的应用领域:  
加工设备/机床, 低温应用

New generation Measuring system cables (PVC, PUR or TPE outer jacket) with higher UL approval of 300V.

For medium duty applications  
300V UL approval  
PVC, PUR or TPE outer jacket  
Oil-resistant  
Flame-retardant  
Unsupported and gliding travels

Typical application areas:  
Machining units/machine tools, low-temperature applications

测量系统电缆常备库存... Measuring system cables from stock ...

Allen Bradley, B&R, Baumüller, Beckhoff,  
Bosch Rexroth, Berger Lahr, Control Techniques,  
ELAU, FAGOR, FANUC, Festo, Heidenhain, Jetter,  
Lenze, LTi DRIVES, Moving Horst, NUM, Omron,  
Schneider Electric, SEW, Siemens, Stöber

高柔性电缆chainflex® 经易格斯实验室测试 ... Tested in the igus® chainflex® lab ...

测试号 Test No.: 3479

电缆类型 Cable type: CF111.D

弯曲半径 Bend radius: 75 mm (可达7.2 x d)

使用寿命 Service life: 6,600 万次的双循环 Mio strokes

igus.com.cn  
/test3479



... 常备库存 ... 无剪切费用 ... 无最小起订量 ...

交货期 Available  
常备库存 from stock

... from stock ... no cutting charges ... no minimum order quantity ...

CFBUS.045 TPE 以太网电缆 TPE Ethernet cable CAT5e

igus® chainflex® CFBUS.045 CAT5e

CFBUS.049 TPE 以太网电缆 TPE Ethernet cable CAT6

igus® chainflex® CFBUS.049 CAT6

高端的TPE 以太网电缆，通过UL 600V认证 ...  
High-End TPE Ethernet cable now with 600 V UL approval ...

质保承诺  
igus chainflex  
36  
个月质保



可在线模拟，配置和计算使用寿命：  
chainflex® 高柔性电缆产品查找器，使用寿命计算器  
Simulate, configure and calculate online:  
chainflex® product finder, chainflex® service life calculator

# ...TPE以太网电缆... 600V UL...

CFBUS.045 和CFBUS.049以太网电缆，  
现通过UL 600V 认证。

Ethernet cables CFBUS.045 and  
CFBUS.049 now with 600V UL approval.

用于高应用要求  
通过UL 600V认证  
CAT5e 和 CAT6  
TPE 外护套  
耐油，耐生物油  
适用于低温  
抗水解和微生物  
架空和滑行应用

For extremely heavy duty applications  
600V UL approval  
CAT5e and CAT6  
TPE outer jacket  
Oil and bio-oil resistant  
Low-temperature flexible  
Hydrolysis and microbe-resistant  
Unsupported and gliding travels

典型的应用领域：  
加工设备/机床，低温应用

Typical application areas:  
Machining units/machine tools, low-temperature  
applications

总线 Bus	产品代码 Part No.	拖链内 R min. e-chain®	芯数/截面积 Number of cores/Cross section [mm²]	最大外径 Outer Ø approx. [mm]	铜含量 Copper index [kg/km]	重量 Weight [kg/km]
CAT5e	CFBUS.045	10 x d	(4x(2x0.15))C	8.5	41	86
CAT6	CFBUS.049	10 x d	(4x(2x0.15))C	8.5	42	86

高柔性电缆chainflex® 经易格斯实验室测试 ... Tested in the igus® chainflex® lab ...

测试号 Test No.: 3089

电缆类型 Cable type: CFBUS.045 (以太网电缆)

弯曲半径 Bend radius: 75 mm (可达9.4 x d)

使用寿命 Service life: 7,700 万次的双循环 Mio strokes

igus.com.cn  
/test3089



交货期 Available  
常备库存 from stock



www.igus.com.cn/CFBUS  
www.igus.eu/CFBUS

... 常备库存 ... 无剪切费用 ... 无最小起订量 ...

... from stock ... no cutting charges ... no minimum order quantity ...





... find, filter, calculate ... data sheets ...

# ...查找, 筛选, 计算... 参数表...

在线快速查找满足要求的电缆。

Find the right cable online.

使用产品在线查找器，您能够比以前更快速的找到合适的电缆产品。在产品页面上，简单选择电缆类型和必要条件。您可以直接下订单，申请样本或计算电缆的使用寿命。

从超过1,354种电缆中快速选择

1m起订货，无剪切费，无最小起订量

“从电气到机械”：

点击即可将所选的电缆关联至e-chain® 专家工具

输入电缆的相关参数，即可计算使用寿命直观的价格指数和交货时间

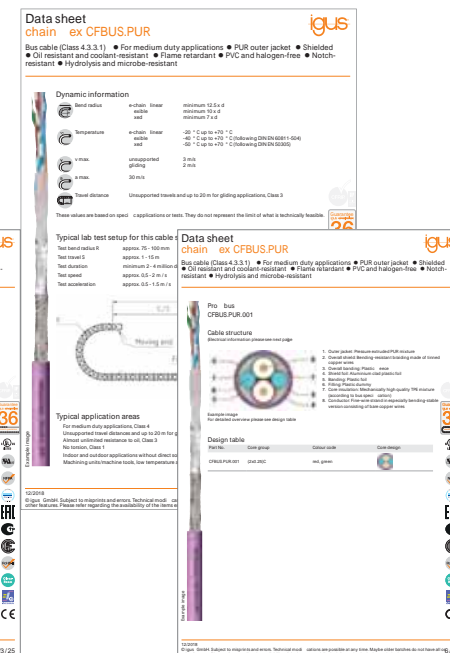
Thanks to the igus® online tools, you can now find the cables you need even more quickly than before. Simply select the type of cable and your essential requirements then make your choice from the hit list. You can order directly, request samples or calculate the service life of the cable.

Fast selection from among more than 1,354 chainflex® cables for e-chains® in the online shop

Delivery from 1m, no cutting charges, no minimum order quantity

“From electrical to mechanical”：

Pass the selected cables to the filling of the e-chain® expert with just one click  
Individual service life calculation of the cable with your application parameters  
Direct display of prices and delivery times of the selected cables



[www.igus.com.cn/quickcable](http://www.igus.com.cn/quickcable)  
[www.igus.eu/quickcable](http://www.igus.eu/quickcable)  
[www.igus.com.cn/chainflexlife](http://www.igus.com.cn/chainflexlife)  
[www.igus.eu/chainflexlife](http://www.igus.eu/chainflexlife)

chainflex® 高柔性电缆... 可配接头 ... 常备库存...  
网站有多种语言供浏览: [www.igus.com.cn/](http://www.igus.com.cn/)  
download

Details of all chainflex® cables ... for real cable-lovers ... available online in more and more languages: [www.igus.eu/download](http://www.igus.eu/download)

2019 亮点 highlight 2019

质保期限  
36 MONTHS



能否找到高性价比的驱动电缆，提供3年质保？

How do I find the **most cost-effective** drive cable, which is **guaranteed** to work in my application for **3 years**?

装配电缆readycable® 在线商店可方便地查找、配置和订购驱动电缆。  
New readycable® shop simplifies finding, configuring and ordering of harnessed cables



可在线计算，比较使用寿命和价格。  
Calculate & compare service life and price online.

## 移动供能更便捷： moving energy made easy: readycable® 驱动电缆 readycable® harnessed cables

总能找到适配的驱动电缆，方便使用。经测试，提供36个月质保。

易格斯可提供超过4,600种驱动电缆，有最高7种质量标准，您可以从中找到符合您要求的电缆和接头。您可以通过在线商店找到合适的接头，无最小起订量，且常备库存。易格斯也可提供预装配的电缆包，可用于ABB机器人。您可通过在线商店，选型和配置整套驱动系统，并在线进行使用寿命计算。经测试的使用寿命，快速响应。

Always find a drive cable that works, for less. Tested and with 36 month guarantee.

With now more than 4,600 drive cables, in up to seven qualities, you can find the right drive cable, harnessed ready-to-connect with the matching connectors. And speaking of connectors. In our brand-new Connector Shop you will also find connectors, from batch size 1 and from stock, of course. For robots, igus® now also offers ready-to-connect cable packages, including ABB from now on. Harnessed complete systems

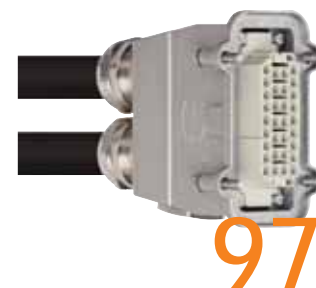
can be easily selected and configured via the online shop with the help of the online service life calculator. Tested and proven service life. Available immediately.

... motion plastics ...



94

驱动电缆的产品范围更新了Siemens, Heidenhain, SEW, B&R 和 Allen Bradley Range of drive cables supplemented with new Siemens, Heidenhain, SEW, B&R and Allen Bradley drive cables



97

易格斯装配电缆readycable® 可用于7轴机器人  
igus® readycable® for 7 axis robots



95

装配电缆readycable® 商店可方便的查找、配置和订购驱动电缆。  
New readycable® shop simplifies finding, configuring and ordering of harnessed cables



98

即插即用的以太网和Profinet电缆，带注塑接头  
Ready-to-connect with Ethernet and Profinet cables with molded connectors

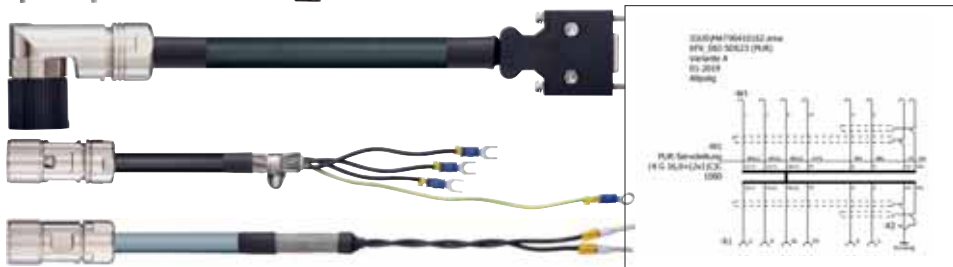


96

即插即用的驱动电缆，带M12 x-编码接头的延长线  
Ready-to-connect harnessed network cables as extension with M12 x-coded connectors



总能找到适配的驱动电缆，方便使用。  
Always find a drive cable that works, for less.



... 4,600 drive cables...

# ...4,600种装配电缆...快速查找...

新增的装配电缆包括Beckhoff, SEW, Siemens OCC 等...您可以从电缆目录册中找到更多的即插即用的预装配电缆，提供质保。

总能找到适配的驱动电缆。

- 超过4,600种预装配电缆，符合 24 种制造商标准
- 可符合7种质量等级标准
- 可根据电缆目录册直接订购，提供质保的使用寿命
- 提供满足您需求的电缆长度（精确到cm）
- 高品质的高柔性电缆chainflex®
- 可快速查找所有类型的电缆：在线装配电缆 readycable® 查找器 2.0

典型的应用领域：  
伺服驱动和转换器

New drive cables for Beckhoff, SEW, Siemens OCC ... harnesses ready-to-connect from catalogue with guaranteed service life.

Always find the drive cable that works, for less.

- Now more than 4,600 ready-to-connect drive cables in accordance with 24 manufacturer standards
- Up to 7 cable qualities
- Can be ordered directly from the catalogue, with guaranteed service life
- To your required length (with centimetre accuracy)
- Proven chainflex® quality
- All cables can be found in just a few seconds: Online tool readycable® Finder 2.0

Typical application areas:  
Servo motors and converters



... found in seconds ...

readycable® 装配电缆商店方便查找，配置和订购驱动电缆。

使用新的产品查找器，您能够比以前更快速的找到驱动电缆产品。在目标列表中，更容易选择符合您要求的电缆类型。如果一款电缆能够准确地到您的要求相匹配，它将会被明确的推荐出来。在产品细节页面，您将可以看到相关细节信息，技术参数，相关下载和应用案例，您也可以直接下订单，申请样品，计算电缆的使用寿命。

- 您可以在很短的时间内，找到超过4,000种的电缆
- 在线可直接计算所选电缆的使用寿命
- 有世界上最多种类的驱动电缆可供选择
- 每个驱动电缆提供 7 种价格等级
- 使用寿命说明都是通过易格斯实验室的实际测试的结果

New readycable® shop simplifies finding, configuring and ordering of harnesses cables.

Thanks to the new product filter, you can now find the harnesses cables you need even more quickly than before. Simply select the type of cable and your essential requirements then make your choice from the hit list. On the product details page, you will find detailed information, technical data, relevant downloads and examples of applications. You can order directly, request samples or calculate the service life of the cable.

- More than 4,000 cables found in just a few seconds
- Direct online calculation of the service life of the selected drive cables
- The world's largest selection of drive cables for moving applications
- Up to 7 price ranges per drive cable
- With an indication of service life based on real test results from the igus® laboratory

新品：驱动电缆符合Siemens的ePLAN® 电气标准。

NEW: Integrate drive cables according to Siemens standard from the ePLAN® data portal directly into the electrical construction.



[www.igus.com.cn/readycable](http://www.igus.com.cn/readycable)  
[www.igus.eu/readycable](http://www.igus.eu/readycable)





# ... M12 x-编码电缆 ... 用于 7 轴机器人 ...

即插即用的装配电缆 (CAT5e 和 CAT6A)  
，可配拓展的M12 x-编码接头

- 符合6种电缆质量等级标准
- Harting CAT6A 接头
- 无最小起订量，可定制长度
- 100% 经测试，提供 36个月质保

典型的应用领域：

机床设备，自动化设备

Ready-to-connect harnessed network  
cables (CAT5e and CAT6A) as extensi-  
on with M12 x-coded connectors

- Six cable quality levels
- Harting CAT6A connector
- From batch size 1, to your required length
- 100% tested, 36-month guarantee

Typical application areas:

Machine tools, automation

igus® 装配电缆readycable® 用于 7 轴  
机器人，也可用于 ABB机器人。

- 可用于机器人的即装即用的电缆，如:FANUC, KUKA 和 ABB
- 高品质的 PUR 外护套的高柔性电缆chainflex® (弯曲半径可达10 x d)
- 甲冑式挤压成型的外护套，可延长拖链的使用寿命
- 电气性能符合Fanuc标准
- 无最小起订量，满足您不同长度的需求，100% 经测试
- 多种类型的电缆可供选择

典型的应用领域：

7轴机器人，例如：工业自动化，自动化装配生  
产线

igus® readycable® for 7 axis robots.  
Now also harnessed for ABB.

- Ready-to-connect cables for robots, for ex-  
ample FANUC, KUKA and ABB
- chainflex® PUR quality (bend radius down to  
10 x d)
- Gusset-filling extruded jacket developed for  
extremely long service life in e-chains®
- Electrical characteristics in line with Fanuc  
specifications
- No minimum order quantity, to your required  
length, 100% tested
- More various cables Upon request

Typical application areas:

Axis 7 of robots, e.g. automotive industry, auto-  
mated assembly lines



[www.igus.com.cn/readycable](http://www.igus.com.cn/readycable)  
[www.igus.eu/readycable](http://www.igus.eu/readycable)



[www.igus.com.cn/axis7](http://www.igus.com.cn/axis7)  
[www.igus.eu/achse7](http://www.igus.eu/achse7)

M8 直角 straight



M8 直角 straight



M8 弯角 angled



RJ45 直角 straight



M12 直角 straight



M12 直角 straight



M12 弯角 angled



... Industrial Ethernet ...

# ...工业以太网...

即插即用的以太网和Profinet 电缆，带注塑接头

- 可配 M12, M8 或 RJ45 接头
- 可配置以太网和 Profinet 电缆
- 2 种外护套材质 (PVC, PUR) 可供选择
- 无最小起订量，可定制长度
- 100% 经测试，提供 36 个月质保

典型的应用领域:

工业数据的传输，自动化技术，网络技术

Ready-to-connect with Ethernet and Profinet cables with molded connectors

- Ready-to-connect with M12, M8 or RJ45 connector
- Ethernet and Profinet configurations
- 2 cable qualities (PVC, PUR)
- From batch size 1, to your required length
- 100% tested, 36 month guarantee

Typical application areas:

Industrial data transmission, automation technology, network technology

## Ethernet

Cables up to CAT7



chainflex  
cable works

...如果您想了解更多关于CAT7电缆的信息，您可以查找CAT7的电缆样本册。  
... please find the complete range of chainflex® cables up to CAT7 online or in the printed edition of Ethernet catalog.



[www.igus.com.cn/ethernet](http://www.igus.com.cn/ethernet)  
[www.igus.eu/ethernet](http://www.igus.eu/ethernet)



... service life calculation ...

# 使用寿命计算器...

装配电缆readycable® 查找器 2.0，在线的使用寿命计算器

通过一键轻松点击，总能找到适配的驱动电缆，方便使用。

- readycable® 装配电缆产品查找器，有新的，更友好的用户界面
- 可直接在线计算所选电缆的使用寿命
- 有世界上最多种类的驱动电缆可供选择
- 可快速找到超过4,000种电缆
- 装配电缆的使用寿命都是经过易格斯实验室实际测试所得到的。
- 提供36个月质保

readycable® product finder 2.0 with direct service life calculation online.

Simply click to find the harnessed drive cable that works, for less.

- readycable® product finder with new, more user-friendly interface
- Direct online calculation of the service life of the selected drive cables
- The world's largest selection of drive cables for moving applications
- More than 4,000 cables found in just a few seconds
- With an indication of service life based on real test results from the igus® laboratory
- 36 month guarantee

24个制造商标准的所有驱动电缆 ...

Find all drive cables harnessed to 24 manufacturer standards online ...

Allen Bradley, B&R, Baumüller, Beckhoff, Berger Lahr, Bosch-Rexroth, Control Techniques, Danaher Motion/Kollmorgen, ELAU/Schneider Electric, Fagor, Festo, Fanuc, Heidenhain, Jetter, Lenze, LinMot, LTI DIVES, Mitsubishi, NUM, Omron, Parker, SEW, Siemens, Stöber



[www.igus.com.cn/rc-finder](http://www.igus.com.cn/rc-finder)  
[www.igus.eu/rc-finder](http://www.igus.eu/rc-finder)