

# 267 motion plastics® news

igus®

November 2025



## solutions for dry cleanrooms

Page 4

IPA-tested motion plastics®  
for battery production

## Tested reliability

Page 18

Tested chainflex® cables for all  
industries, with guarantee

## All news at a glance

Page 30

An overview of this year's  
motion plastics® news

New 11/2025

# drylin® D1 firmware update

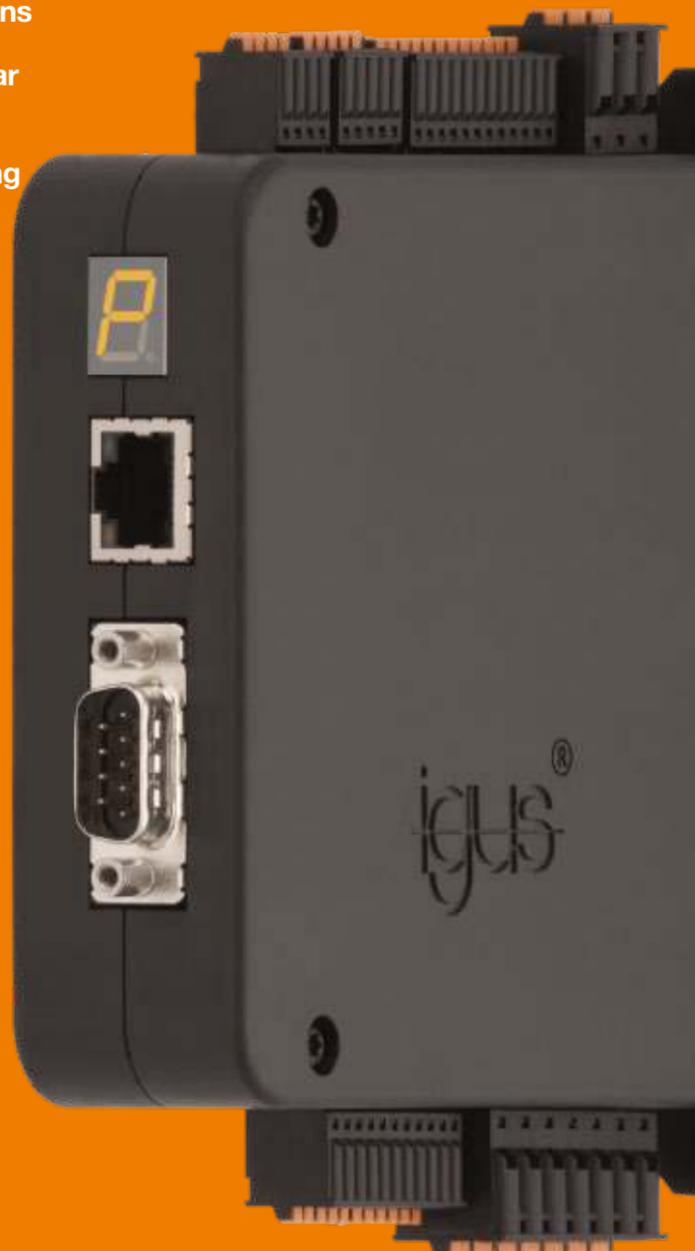


## Motor boost current (I<sup>2</sup>T):

- The D1 provides a boost current for a maximum of 2s to achieve powerful and dynamic accelerations
- This boost current is now displayed in a clear bar graph with a percentage value
- This display supports commissioning by showing the power availability in the entire motion cycle

## PROFINET/PROFIdrive parameters can be written and read:

- Adding more options to the PN/PD functionality for creating an individual automation solution
- All D1 parameters can now be written or read
- Controlling digital and analogue inputs and outputs at all times
- Flexible adaptation and evaluation of the motor currents
- Complete parameterisation with PN/PD



[igus.eu/d1-news](https://igus.eu/d1-news)



# motion plastics® News 2025

## New products in November



e-chains® and e-chain systems®

Page 2



smart plastics

Page 10



chainflex® cables

Page 14



readycable®  
readychain®

Page 24

## Highlights

**6** C6 energy chain with cleanroom guide system for travels of up to 30m

**12** triflex® TR.P Early detection of commissioning damage and damage to the dress pack

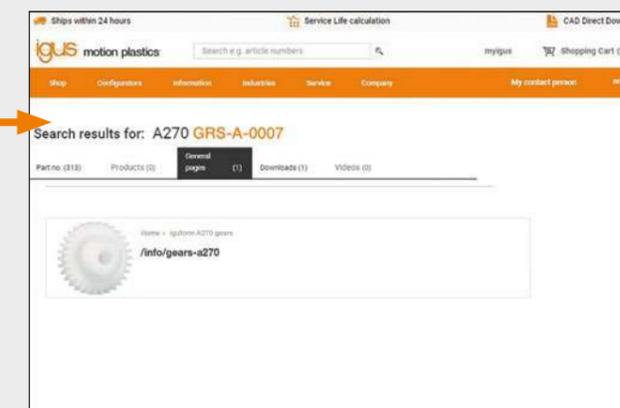
**20** CFSPECIAL.381 New cable series for theatre and stage technology

**26** Suitable for 41 manufacturers New ready-to-connect cables for drive technology

## Print2Digital made easy ...



GRS-A-0007



Two ways, one goal: the QR code takes you directly to the respective page on the igus® website. No mobile device? No problem! You can also use the text code to go directly to the product page via the search function on our website.



GO ZERO Waste ... sustainable energy supply

# e-chain systems<sup>®</sup> for cleanroom



Tech up



Cost down



Proof



Sustainability



Digital

6

**Suitable for cleanrooms over long distances**

C6 energy chain with cleanroom guide system

8

**Automated design**

e-skin<sup>®</sup> flat configurator

9

**ESD protection for cleanrooms**

e-skin<sup>®</sup> soft ESD

**Quick consultation anywhere at any time**



**In person**

**Bastian Lenz**

+49-6262 9162-982

blenz@igus.net



**Chat**

**Online and WhatsApp**

igus.eu/chat



**On site**

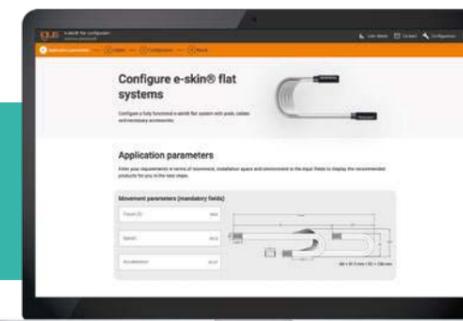
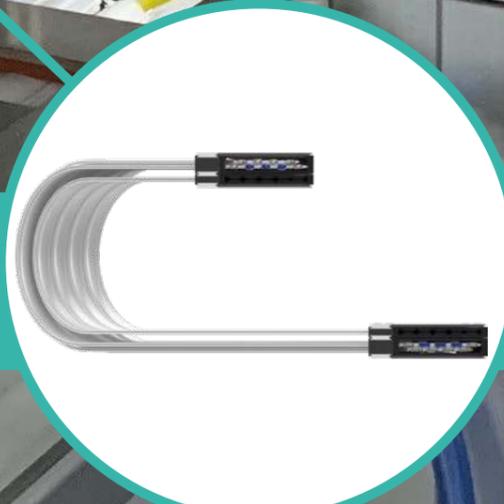
**Field service roadshow/ trade show**

igus.eu/on-the-move



## Workpiece transfer machine

e-skin<sup>®</sup> flat energy chains with chainflex<sup>®</sup> CFCLEAN cable cores were used to minimise abrasion of energy and data cables



## e-skin<sup>®</sup> flat configurator

e-skin<sup>®</sup> flat energy supply systems: quickly configure your own flat cable for cleanroom applications via drag & drop: [igus.eu/skf-configurator](https://igus.eu/skf-configurator)

# igus.eu/cleanroom

# Particle-free. Lubrication-free. IPA-approved.

motion plastics® for battery production

## Next-level battery manufacturing

With the growing demand for electric cars, the need for high-quality lithium-ion batteries is also increasing. Manufacturing batteries requires several crucial components. Every component must contribute to maximising quality, safety and performance. With igus® components such as plain bearing and linear technology, energy chains, cables and energy chain systems, you can increase efficiency, reduce downtimes and improve the automation of battery production systems.

Ideally, the battery production environment should be as dry and particle-free as possible. Our cleanroom-compatible and dissipative cable guiding systems for the dry cleanroom support this process and ensure reliable performance in battery production.

### Application areas:

- Material handling
- Electrode generation
- Cell assembly
- Sealing, further processing, controlling and inspecting

Free download: [igus.eu/wp-battery-production](https://www.igus.eu/wp-battery-production)

Find out in this white paper how motion plastics® not only makes your production cleaner, but also more efficient and economical.



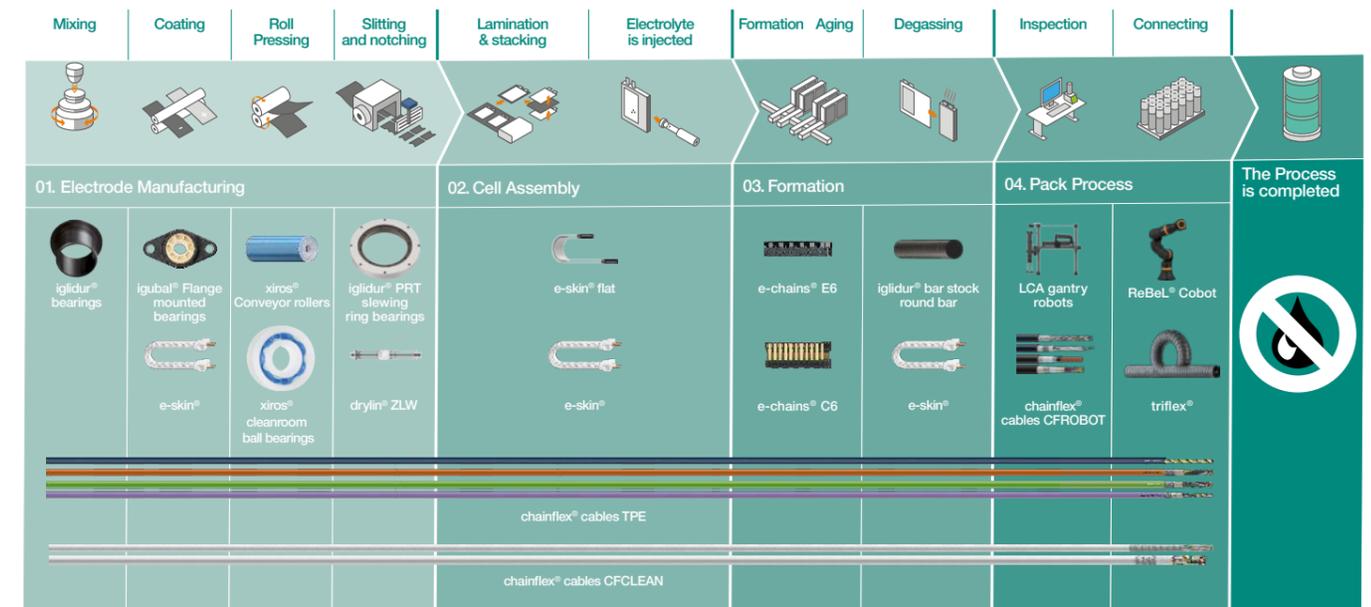
### Certified products for dry cleanrooms

## What is a dry cleanroom?

A dry cleanroom for battery production is a special controlled environment that is characterised by extremely low humidity and virtually no particles. There, humidity is reduced to below 1%, often below 1% relative humidity, which corresponds to a dew point of -40°C. That way, there is no condensation, and no moisture gets into the materials. This is of great importance in some process steps of battery production because even small amounts of water can lead to battery fires.

- Higher product quality: reduced contamination leads to higher battery cell quality and reliability.
- Longer service life: minimising chemical reactions extends battery service life.
- Safe working environment: strict control of hazardous materials increases safety for staff.

## Plastic components for dry cleanrooms in the "gigafactories" of battery production



### Tested quality for dry cleanrooms

In addition to our already certified energy chains that are suitable for dry cleanrooms, the tried and tested chainflex® cables have now also been certified in the dry cleanroom. The abrasion-resistant TPE outer jacket minimises particle emissions and has been tested by the Fraunhofer Institute. This means that we meet the requirements of ISO Classes 4 and 5 for all halogen-free chainflex® TPE cables. [igus.eu/battery](https://www.igus.eu/battery)



C6 energy chain with cleanroom guide system

# Long travels in cleanrooms



New

## Innovative cleanroom solution for travels of up to 30m

C6 energy chain with cleanroom guide system

The new version of the C6 cleanroom energy chain has a revolutionary guide system. It is compact and durable, enabling manufacturers to guide energy and data even on very long travels in production environments involving cleanrooms.

- ▲ Innovative cleanroom solution with special guide, so that virtually no particles are produced even over long distances
- ▼ Secure power and data supply without further particle emissions on long transport distances in one system
- Complete system with 8m certified by Fraunhofer IPA with ISO Class 4.
- Higher production yield due to particle reduction saves resources
- 🔗 C6 e-chain® configurable online: [igus.eu/eke](https://igus.eu/eke)



Solution to the challenge of "long travels in cleanrooms"

## Automated wafer transport in cleanrooms

In modern semiconductor factories, silicon wafers undergo numerous process steps - from lithography and etching to doping and metallisation. These processes take place in different plants, which are often located far away from each other. Due to the strict requirements for cleanliness and freedom from particles, manual transport within the cleanroom is not feasible. Instead, automated material handling systems (AMHS) carry out the safe and efficient transport of wafer cassettes (FOUPs - front-opening unified pods) over long

distances. One proven solution is the overhead hoist transport (OHT) - a rail-guided transport system that moves the FOUPs overhead and makes optimum use of cleanroom space. In addition to transport, storage in so-called stockers is also extremely important. These systems place high demands on the energy supply: the cables supplying the OHT units with power and transmitting data must be reliably guided in dynamic and often cramped cleanroom environments - igus now offers an innovative solution for this.

**Our new cleanroom solution for travels of up to 30m offers decisive advantages:**

- Abrasion-resistant and ISO-certified by the Fraunhofer IPA
- Reliable for long travel lengths
- Modular and low-maintenance - ideal for highly automated cleanroom environments



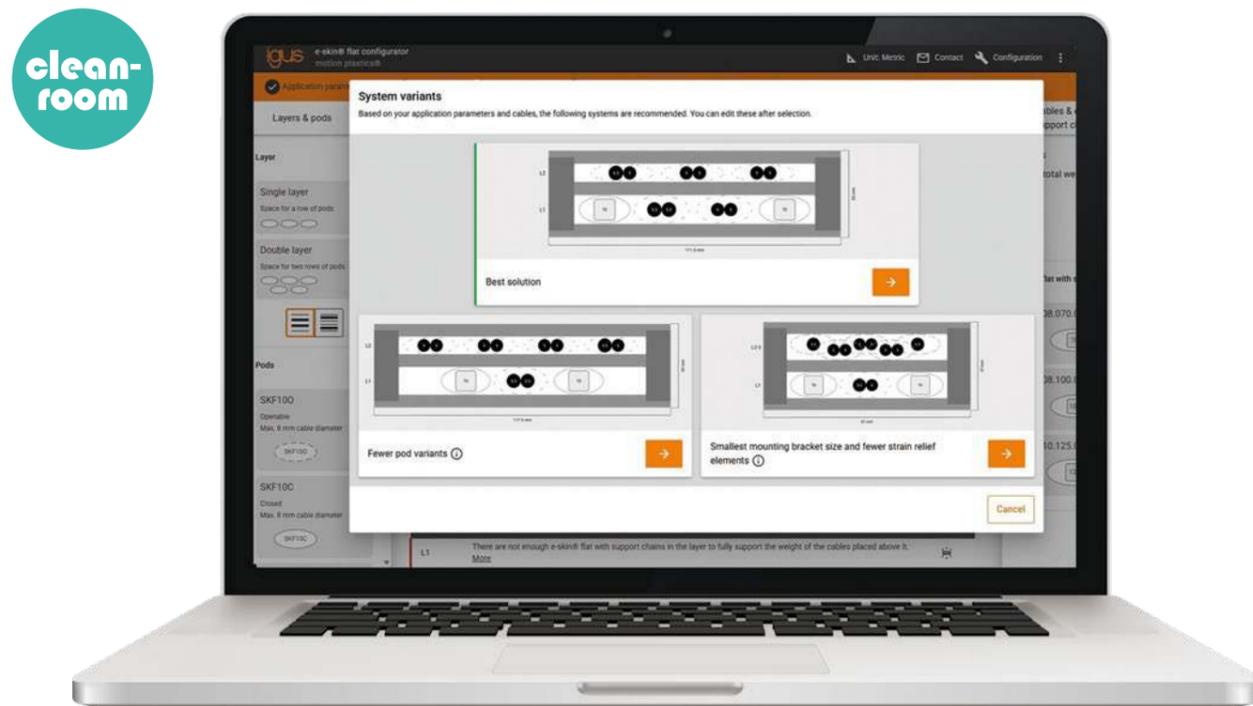
Free download: [igus.eu/WP-cleanroom](https://igus.eu/WP-cleanroom)

Find out in this white paper how motion plastics® not only makes your production cleaner, but also more efficient and economical.



# Automated design

# ESD protection for cleanrooms



**New**

## Configure your energy supply system with certified cleanroom suitability in just a few steps

### e-skin® flat configurator

With the new e-skin® flat configurator, anyone can quickly design a suitable e-skin® flat system and download a technical drawing and parts list. The tool provides access to the large chainflex® cable pool, prioritising suitable cables for the e-skin® flat system. You can also add your own cable. Thanks to automatic entries, the optimum result is suggested for the known application data - manual adjustments are possible at any time.

- ▲ Automatic design with all criteria for the best result
- ▼ Complete e-skin® flat system design in under five minutes including the preparation of a drawing
- Cleanroom class ISO 1 certification from Fraunhofer IPA for e-skin® flat systems with one and three layers
- Project-based production without minimum purchase quantities for clean cables conserves resources
- 🌐 Configure online: [www.igus.eu/ESC](http://www.igus.eu/ESC)



**New**

## Cleanroom classes, small installation space and ESD protection

### e-skin® soft ESD

The tried-and-tested e-skin® soft made of dissipative material is now available in sizes 20, 24, 28.068 and 40. This prevents the formation of electrostatic fields and the abrupt discharge caused by the movement of the black e-skin® soft due to the material. The e-skin® soft ESD is suitable for the highest cleanroom classes and requires very little installation space. It has a self-supporting function and a closed design.

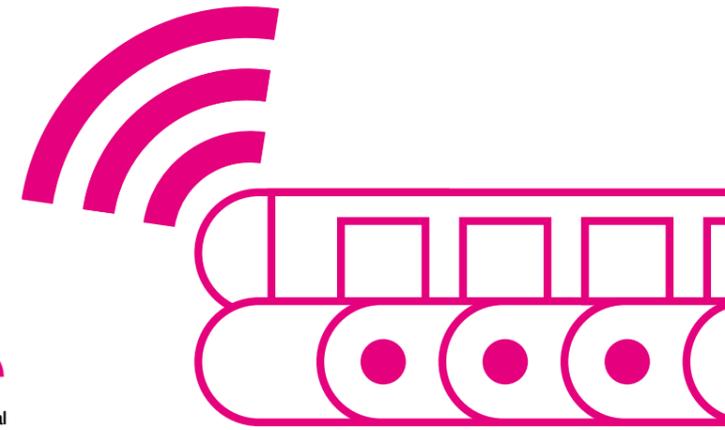
- ▲ A series for all areas, whether cleanroom or ESD area
- ▼ Fewer faults with ESD-sensitive parts, due to abrupt discharge or particles
- Discharge and cleanroom capability tested in the igus® internal (ISO 1 cleanroom) laboratory
- Long service life (more than 10 million double strokes) with low installation space requirements (200mm with a radius of 55mm)
- 🌐 Configure online: [www.igus.eu/ESC](http://www.igus.eu/ESC)





GO ZERO Downtime ... no unplanned downtime

# smart plastics



-  Tech up
-  Cost down
-  Proof
-  Sustainability
-  Digital

**12** Protects robots at an early stage  
triflex® TR.P

**Quick consultation**  
anywhere at any time



**In person**

**Richard Habering**  
+49-173-5403904  
rhabering@igus.net



**Chat**

**Online and WhatsApp**  
igus.eu/chat



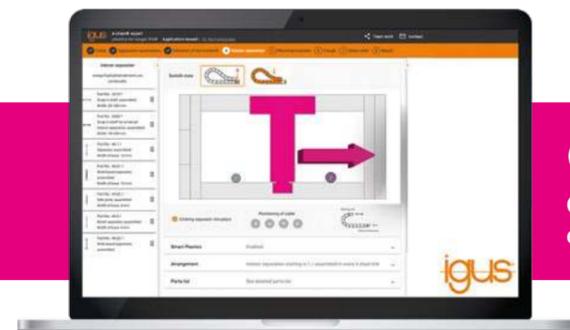
**On site**

**Field service roadshow/  
trade show**  
igus.eu/on-the-move



**Condition monitoring in automotive production**

Condition monitoring made by igus®:  
reliable condition monitoring with high cycle rates



**Configure condition monitoring**

Configuration of smart plastics EC.P, EC.W and EC.WLC now in the  
e-chain® expert: [igus.eu/ece](https://igus.eu/ece)

[igus.eu/news-smartplastics](https://igus.eu/news-smartplastics)

# Protects robots at an early stage



New

## Tensile-strength monitoring for robots with multi-axis e-chain systems®

triflex® TR.P

The TR.P system offers an innovative solution for the early detection of commissioning damage and problematic movement patterns for dress packs. This modular measuring system detects excessive bending, overextension and jamming at an early stage without the need for complex camera installation and image evaluation.

- ▲ Early detection of commissioning damage and damage to the dress pack
- ▼ No complex camera installation and image evaluation, detection by TR.P system
- Proven in numerous smart plastics projects
- Reduced CO<sub>2</sub> emissions due to exploitation of maximum, risk-free product service life
- 🔗 Integration in Condition Monitoring (i.Sense)



### Background

## Early detection of mechanical load

With TR.P, you can rely on a smart solution that reliably protects your robot applications. The system monitors the tensile forces on the robot head in real time - thanks to innovative sensor technology on the moving arm of the triflex® dress pack. Critical movements such as excessive bending, overextension or jamming are recognised at an early stage before the system is damaged.

The advantages are obvious: early detection of mechanical loads, predictable maintenance and a significant reduction in production downtime. If defined limits are exceeded, a message is issued or the robot is automatically stopped via switching contacts connected to the PLC - for maximum operational safety. Integration is extremely simple: the modular sensor system is easy to retrofit and does not



The sensor unit measures tensile forces using a 200kg load cell. It is assembled on the quick exchange kit for the axis 6 clamp.

require an additional element in the dress pack. TR.P is seamlessly integrated into existing control systems via a potential-free contact.

### It can be that easy - these are the benefits of TR.P.:

- Early detection of mechanical load
- No damage or production downtime
- Predictable maintenance
- Increased operational safety
- Easy retrofit
- No image evaluation necessary
- No additional element required in the dress pack - sensors are assembled on the moving arm [MM1]



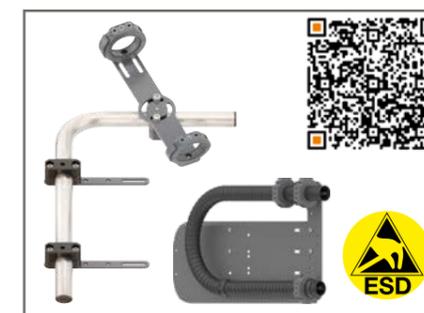
**Richard Habering**  
Head of Business Unit smart plastics

# Further highlights

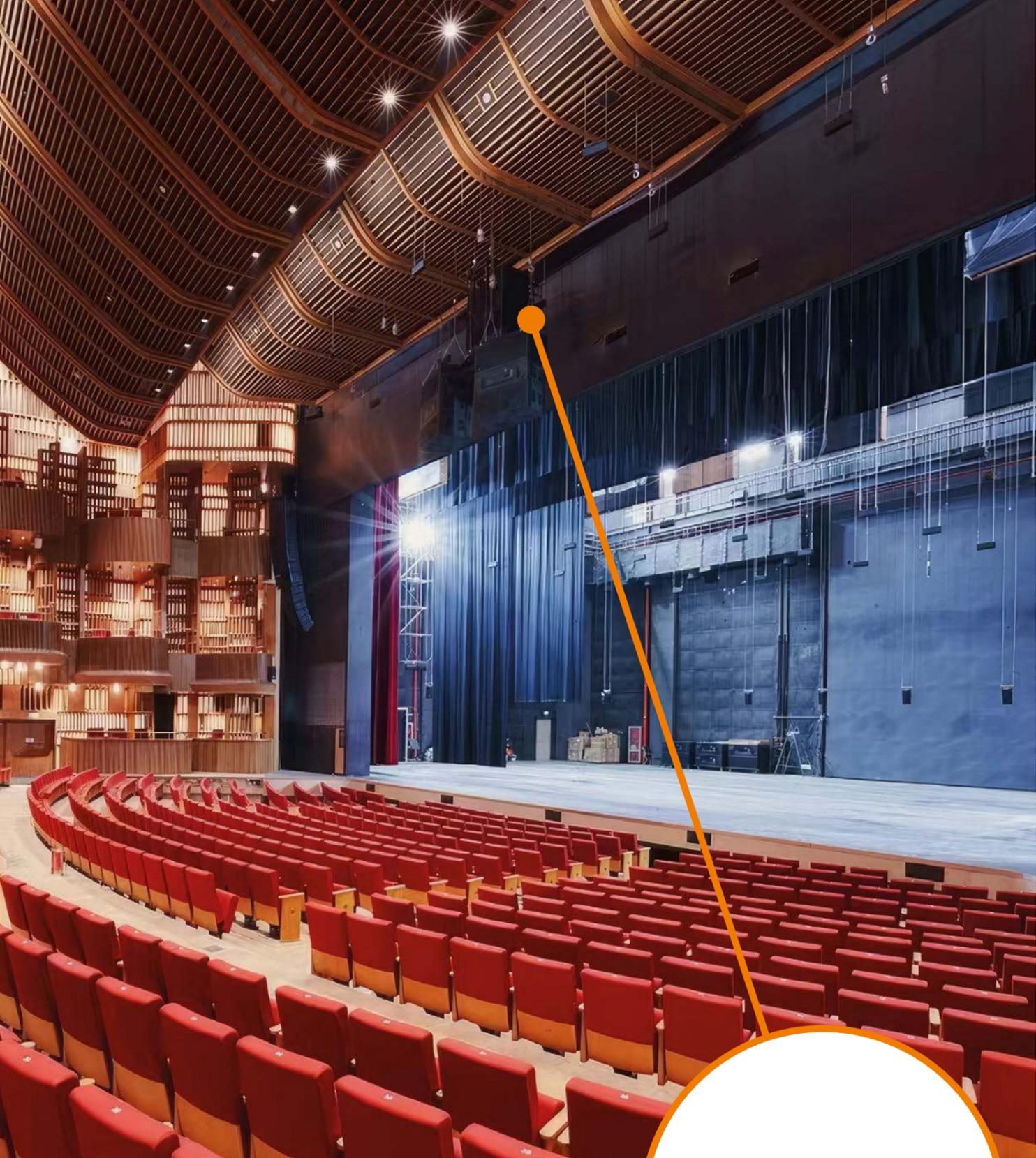
of (smart) robotics solutions



**i.Sense TR.B**  
Condition monitoring for multi-axis energy chains



**triflex® ESD product range**  
Dissipative dress packs for industrial robots



GO ZERO downtime ... guaranteed service life

# chainflex<sup>®</sup> cables



Tech up



Cost down



Proof



Sustainability



Digital

## 20

### Safe performances

chainflex<sup>®</sup> CFSPECIAL.381 special cable for theatre and stage

## 22

### Fail-safe implementation of long travels

chainflex<sup>®</sup> CF340 single-core cable

## 22

### More choice for high-end motor cables

chainflex<sup>®</sup> CF38 motor cable without protective conductor

## 23

### Low-cost version suitable for Lenze in dry applications

chainflex<sup>®</sup> CF884.032 measuring system cable

## Quick consultation anywhere, at any time



### In person

**Katharina Wielpütz**  
+49 (0) 2203 9649-7082  
kwielpuetz@igus.net



### Chat

Online and  
WhatsApp  
igus.eu/chat



### On site

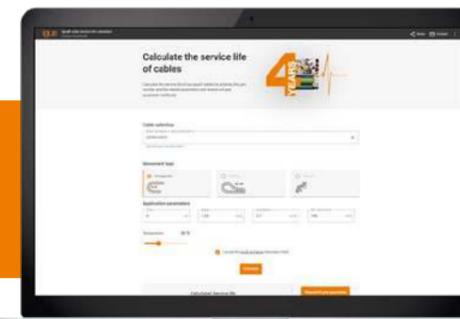
Field service  
roadshow/trade show  
igus.eu/on-the-move



## Theatre and stage technology

Thanks to the new chainflex<sup>®</sup> series, the system scores with reliability and a long service life

chainflex<sup>®</sup> CFSPECIAL.381.043



## Calculate the exact service life

Precisely calculate the service life of your cable for your individual application! Find out how long the cable will last - including guarantee certificate and price check. [igus.eu/chainflexlife](https://igus.eu/chainflexlife)

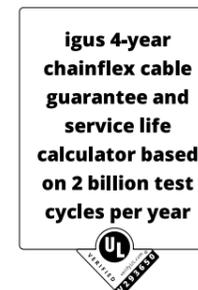
# igus.eu/news-chainflex

Reliable cables for your industry

# No matter where, no matter when, chainflex® can!



Our chainflex® cables keep the world moving - every day, around the clock, in over 50 industries worldwide. To date, more than one billion metres of cable have been sold in over 80 countries!



## Versatility for every industry

Every industry has its own challenges and our chainflex® cables are versatile enough to ensure that your application works reliably in your industry.

Our large product portfolio with over 1,350 cables for your industry is available from stock and ready to ship in 36 hours. Whether machine tools, cranes, the woodworking industry, material handling, robotics, theatre and stage technology or amusement rides: the versatile cables from igus® are designed to deliver maximum performance in almost any industry and work reliably even under challenging conditions.

### Versatility thanks to specialised outer jackets and construction

The requirements for industrial applications could not be more different - each environment demands unique solutions. This is exactly where the chainflex® cables prove their strength. With seven outer jacket materials (including PVC, iguPUR, PUR and TPE), they offer the right solution for every environment. Whether at low, high or room temperature, in dusty or oily environments, chemical load,

in sunlight or in a normal workshop - chainflex® ensures optimum durability and reliability. But the absolute highlight is the mechanical variety: with an electrically identical cable, igus® offers up to seven different mechanical structures, depending on the mechanical requirements of the application. Radii, travels, types of movement, jacket materials and service life can be selected to meet the requirements of your specific application. In addition to our standard product portfolio, we offer CFSPECIAL cables from stock, which have been specially developed for demanding and industry-specific applications. Examples from our product range are the CFSPECIAL.532 cable for top drive applications with DNV approval as well as the CFSPECIAL.182 and CFSPECIAL.192 that can withstand extreme tensile forces and are ideal for hanging applications. Other products such as thermal compensation cables, flat cables (CFFLAT) for tight installation spaces and solutions for the 7th robot axis demonstrate our versatility for special applications. The technical details of the cables can be called up online and more than 1,350 cables are available from stock.

## Specialised solutions for every industry

The chainflex® cables focus in particular on the specific requirements of different industries, e.g.



### Machine tools:

High precision and trouble-free movements for maximum productivity.



### Cranes:

Long travels, climatic conditions such as sea air, UV, rain, high number of cycles, no downtimes.



### Woodworking industry:

Resistance to high levels of dust and particles in the production environment.



### Material Handling:

Long service life with constant movement and low maintenance.



### Robotics:

Flexibility with multidimensional movements and high performance with complex axis rotations.



### Theatre and stage technology:

Quiet and reliable operation, even with close mechanical integration.



### Amusement rides:

Maximum safety and robustness, even under heavy loads due to dynamic movements.

Regardless of the requirements in your industry: chainflex® cables deliver proven quality that is characterised by flexibility and reliability.

chainflex® cables with a 4-year guarantee

# Tested reliability



chainflex® cables

## Optimised for moving applications

Downtime in industrial automation not only costs time and money, but also jeopardises the competitiveness of your processes. With chainflex® cables, you get a specially developed solution for moving applications in energy chains - a world leader in quality, service life and cost efficiency. And best of all: igus® is the only manufacturer on the market to offer you a 4-year guarantee on chainflex® cables.

The largest test laboratory in the industry

## Cables that deliver what they promise

For over **30 years** we have tested our cables under extreme conditions. In the world's largest test laboratory for moving cables - with a total area of **5,500m<sup>2</sup>**, over 64 test systems and 800 parallel tests, and with over **2 billion** test cycles per year - we simulate real application scenarios. Whether linear or torsional movements, cleanroom conditions or temperatures down to -40°C in the cold chamber: every chainflex® cable is tested for maximum reliability to ensure that it works safely even in the most demanding applications. The unique 4-year guarantee and UL-verified certification emphasise the quality of our cables.



### An idea that changed everything - the story behind the first chainflex® cable

In the early 1980s, igus® took a bold step as a small family business from Cologne: the world's first plastic energy chain. Lightweight, quiet, low-maintenance - perfect for the automated industry. But the cables soon failed. The industry showed no interest in finding a solution. So igus® developed the right cable itself. Inspired by steel ropes, the first

chainflex® cable was created. It saved the energy chain - and paved the way for a new era. Today, the portfolio comprises over 1,350 cable types for moving applications. Since then, igus® customers have successfully used more than 1 billion metres of chainflex® cables in over 50 different industries. And there are more every day. And best of all: chainflex® are still the only cables with a 4-year guarantee - certified by UL.

### Advantages with chainflex®:

- Guarantee up to 4 years and UL verified - unique on the market
- Extremely small bend radii - up to **3 x d** in the energy chain
- Suitable for every industry. Over **1,350** cable types directly from stock
- Electrically identical cables available in up to seven different mechanical qualities

### We do without:

- Minimum order quantity
- Cutting costs
- Packaging costs

Find out more about the advantages and possible applications of chainflex®! On our website we provide you with a

large number of detailed test reports with technical background information. You can download these reports free of charge and find out in detail how our solutions can optimise your projects and make them more efficient.



FABRIK DER ZUKUNFT.com

### Podcast "Factory of the Future":

How can an inconspicuous cable cause an entire production shutdown and result in enormous costs? Rainer Rössel, Vice President and Head of Business Unit chainflex® cables at igus®, explains in an interview with host Tobias Herwig why cables are often underestimated. It also shows how the right selection and procurement can make a significant contribution to the productivity and competitiveness of your factory.



Podcast only available in German.



igus 4-year chainflex cable guarantee and service life calculator based on 2 billion test cycles per year



# Safe performances



New

## Fail-safe, cost-effective, subtle

chainflex® CFSPECIAL.381

With the new CFSPECIAL.381, specially developed for the igus® e-chain systems® in theatre and stage technology, we now offer a chainflex® cable product range optimally tailored to the needs of this industry. In addition to the necessary electrical requirements and the visually inconspicuous jacket colour, this cable series offers cable assemblies that are especially required in theatre and stage technology applications.

- ▲ Optimised for moving applications in confined installation spaces, visually unobtrusive
- ▼ Fail-safe and cost-effective PVC outer jacket
- Tested in the 5,500m<sup>2</sup> test laboratory
- Free from harmful PFAS
- 🔗 Calculate the cable service life online: [igus.eu/chainflexlife](https://igus.eu/chainflexlife)



From development

## Special cable product range for theatre and stage

As a manufacturer of cables for the energy chain, we feel at home in the industry. Whether machine tools or the woodworking industry, whether on a crane or in a cleanroom, the chainflex® cables with their seven quality levels offer an optimum cable selection for all the many areas of industry. However, there are always a few sectors where values other than pure technology also count. One example of this is theatre and stage technology, which not only has technical requirements with special e-chain systems®, but also attaches great importance to visual appearance in addition to special electrical requirements. Striking colours can

disrupt the overall appearance - which is why all cable in the CFSPECIAL.381 series have a black PVC outer jacket that blends discreetly into the surroundings. With the new CFSPECIAL.381, specially developed for the igus® e-chain systems® in theatre and stage technology, we now offer a chainflex® product range specifically for the needs of this industry. In addition to the technically necessary requirements and the visually inconspicuous jacket colour, this cable series offers cable assemblies that are particularly required in theatre and stage technology. The product range comprises three bus cables:

- Ethernet cables in CAT6 and CAT7 for reliable light and sound control and the secure transmission of various data
- A 2-channel cable for microphone applications such as our microphone reeler or DMX control applications

And all this in the usual chainflex® quality, because "chainflex® works! guaranteed and certified!" The CFSPECIAL.381 offers a reliable solution for your stage and enables trouble-free operation.

# Further highlights

## For stage and theatre technology



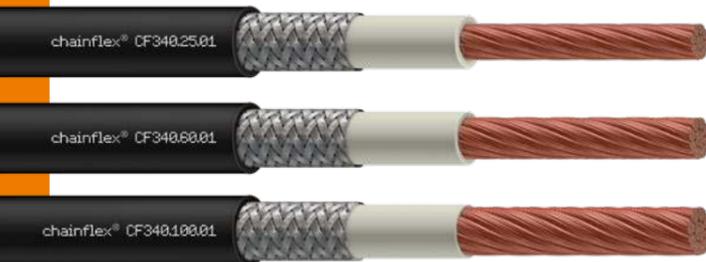
**e-spool® theatre HD**  
Compact guiding of different media up to 15m, without slip ring



**zig-zag E4.56**  
For vertical travels up to 40m



**e-spool® microphone stereo**  
Sound transmission up to 30m without interruption, without slip ring



Plus

## Cross section expansion for long travels up to 400 metres

chainflex® CF340 single-core cable

Addition of further cross sections and therefore even more choice with our TPE single-core cable CF340. Ideal for long travels in outdoor use on cranes or our e-loop® in offshore environments.

- ▲ New cross sections of 2.5mm<sup>2</sup>, 6.0mm<sup>2</sup> and 10mm<sup>2</sup> extend the range of outdoor and offshore applications
- ▼ 38.58% cost savings by selecting single cores
- Test no.: 5384: CF340 successfully tested with 32 million strokes
- Longevity is how we conserve resources
- 🔗 Calculate the cable service life online:  
[igus.eu/chainflexlife](https://igus.eu/chainflexlife)



Guarantee  
igus chainflex

4  
YEARS

up to 4 years guarantee

igus 4-year  
chainflex cable  
guarantee and  
service life  
calculator based  
on 2 billion test  
cycles per year



Plus

## More choice, maximum performance: high-end motor cable for the highest demands

chainflex® CF38 motor cable with shield without protective conductor

The chainflex® CF38 motor cable with the new cross sections 6.0mm<sup>2</sup> and 25mm<sup>2</sup> is ideal for long travels of up to 400m in demanding environments with oil contamination or in low-temperature applications.

- ▲ Can be used in the e-chain® with the smallest bend radius of 7.5 x d thanks to high-end quality
- ▼ Service life increased by 25% to 12.5 million guaranteed double strokes and with UL approval
- Test no. 4904: CF38.250.04 successfully tested with 43 million strokes achieved
- Free from harmful PFAS
- 🔗 Calculate the cable service life online:  
[igus.eu/chainflexlife](https://igus.eu/chainflexlife)



Guarantee  
igus chainflex

4  
YEARS

up to 4 years guarantee

igus 4-year  
chainflex cable  
guarantee and  
service life  
calculator based  
on 2 billion test  
cycles per year



Plus

## Low-cost version suitable for Lenze in dry applications

chainflex® CF884.032 measuring system cable

We are adding the cost-effective PVC cable CF884.032 to our portfolio of measuring system cables suitable for Lenze. Optimised and tested for use in dry environments. From stock and with a 4-year chainflex® guarantee.

- ▲ Optimised for continuous-motion e-chains® use in dry environments
- ▼ Up to 57.34% more cost-effective than cables with a PUR outer jacket
- Test no. 4843: CF884.001 successfully tested with 14 million strokes achieved.
- Longevity is how we conserve resources
- 🔗 Calculate the cable service life online:  
[igus.eu/chainflexlife](https://igus.eu/chainflexlife)



Guarantee  
igus chainflex

4  
YEARS

up to 4 years guarantee

igus 4-year  
chainflex cable  
guarantee and  
service life  
calculator based  
on 2 billion test  
cycles per year



NEW

# Future-proof solutions:

New certifications for dry cleanrooms and maritime applications

## Certified solutions for dry cleanrooms

The new certificates for dry cleanrooms set an important standard in battery production. All halogen-free chainflex® TPE cables fulfil the requirements of ISO Classes 4 and 5 and impress with minimised particle abrasion, efficiency and safety - confirmed by tests carried out by the Fraunhofer Institute.

See further information on page 4



## DNV certificates: Quality for maritime applications

Over 370 DNV-certified chainflex® cables guarantee reliability, safety and durability at sea. The approval simplifies use in offshore and onshore installations and ensures the highest standards in demanding maritime environments.



GO ZERO Downtime ... no unplanned downtime

# readycable<sup>®</sup> readychain<sup>®</sup>



Tech up Cost down Proof Sustainability Digital



## 26

**Suitable for 41 manufacturers**  
Drive cables suitable for Infranor - Mavilor Motors

## 28

**Seven times more choice**  
Expansion of the readycable<sup>®</sup> drive technology product range

**Quick consultation**  
anywhere, at any time



**In person**  
**Markus Hüffel**  
+49 (0) 2203 9649-347  
mhueffel@igus.net



**Chat**  
Online and  
WhatsApp  
igus.eu/chat



**On site**  
Field service  
roadshow/trade show  
igus.eu/on-the-move



## Interface in CNC machining centres

The Module Connect interface ensures a secure connection between the linear robot and the machine board.



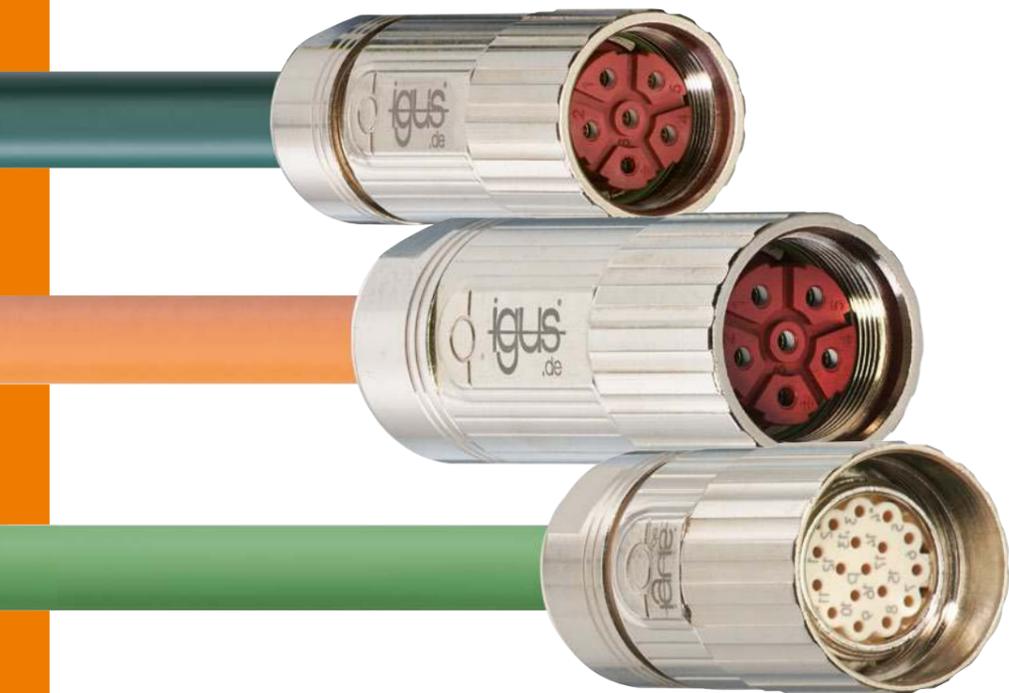
## Find drive cables in 2 steps

Find and order the right drive cable online in only two steps. Select a product with the new readycable<sup>®</sup> finder, ready to ship in five working days: [igus.eu/rc-finder](https://igus.eu/rc-finder)

# [igus.eu/news-readycable](https://igus.eu/news-readycable)

readycable® cables for drive technology

# Suitable for 41 manufacturers



The igus® readycable® service

## Harnessing, service life calculation, guarantee

Cable harnessing according to your specifications or industrial standards is one of the core competences of igus®. We rely on the high-quality, flexible chainflex® cables and combine these with plug-in connectors from renowned manufacturers such as Harting, Binder, TE Intercontec, Yamaichi and others. On request, we can manufacture harnessed cables with no minimum order quantity - precisely tailored to your requirements and applications.

**A special benefit:** our wide range of jacket materials that are customised to your application. This allows you to avoid unnecessary costs - for example by using an inexpensive PVC cable in a dry environment instead of a more expensive TPE jacket. We guarantee a service life of up to four years for all cables in energy chains. With over 6,000 harnessed motor, servo, signal and encoder cables suitable for 41 manufacturer standards, igus® is the world's leading supplier of

harnessed cables for energy chains. Our range comprises seven cable qualities so that you can find the suitable and most cost-effective solution for every application. Thanks to our online service life calculator, you can quickly and easily calculate the expected service life of your ready-to-connect cable. In addition, igus® is the only manufacturer to offer a guarantee of up to four years on its cables.



**Markus Hüffel**  
Product Manager  
readychain® and  
readycable®

New

## New cables suitable for Infranor - Mavilor Motors

readycable® cables for drive technology

We are adding cables that are suitable for Infranor - Mavilor Motors to the readycable® product range for drive technology. This means that harnessed, ready-to-connect and quality-checked cables suitable for 41 manufacturers are ready to ship in five working days. They are available in the length you require, industrially harnessed with no minimum order quantity and no cutting charges. You can calculate and order them online 24/7.

- ▲ The seven qualities always give you the most cost-effective cable that is guaranteed to work in your application
- ▼ Reduce storage space: ready to ship in five business days, in your required length, no minimum order quantity, no cutting charges
- 100% tested (test seal of approval and test report)
- Individual service life calculation, exactly what you need
- 🔗 Get the right drive cable in just two steps, online: [igus.eu/readycable](https://igus.eu/readycable)



Extension readycable® drive cables

# Seven times more choice



New

## Harnessed, ready to connect and tested

Expansion of the readycable® drive technology product range

The readycable® portfolio of harnessed, ready-to-connect drive cables suitable for manufacturer standards continues to grow. We now offer 142 new harnessed, ready-to-connect cables suitable for seven manufacturers.

- ▲ The seven qualities always give you the most cost-effective cable that is guaranteed to work in your application
- ▼ Reduce storage space: ready to ship in five business days, in your required length, no minimum order quantity, no cutting charges
- 100% tested (test seal of approval and test report)
- Individual service life calculation, exactly what you need
- 🔗 Get the right drive cable in just two steps, online: [igus.eu/readycable](https://igus.eu/readycable)



readycable® drive technology

## Delivered in 5 business days, to your required length, no minimum order quantity

Offering more than 6,000 harnessed motor, servo, signal and encoder cables that can be used in energy chains and are suitable for 41 manufacturer standards, igus® has the right drive cable

for almost any application. The selection of drive cables is so large because there are up to seven cable qualities per cable specification. This means you will always find the most cost-effective cable that is

guaranteed to work in your application. New cables suitable for the following manufacturers are now being added to the range of drive cables:



23 new cables suitable for Bosch Rexroth

6 new cables suitable for Delta

25 new cables suitable for Fanuc

5 new cables suitable for Harmonic Drive

10 new cables suitable for SEW Eurodrive

55 new cables suitable for Siemens

18 new cables suitable for Stöber

## Find and order the right drive cable online in 2 steps

Select with the new readycable® finder, ready to ship in 5 working days



# motion plastics®



**Bicycle components**



**drylin® linear technology**



**iglidur® plain bearings**



**dryspin® lead screw technology**



**iglidur® rollers**



**drylin® drive technology**



**drygear® gear and gearbox technology**



**Low Cost Automation**



**iglidur® slewing ring bearings**



**RBTX® market place**



**iglidur® bar stock**



**e-chains® and e-chain systems®**

Page 2



**iglidur® 3D printing**



**smart plastics**

Page 10



**igubal® spherical bearings**



**chainflex® cables**

Page 14



**xiros® ball bearings**



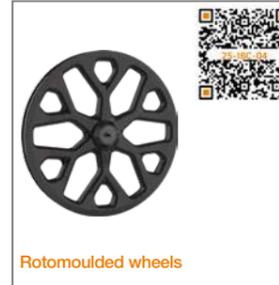
**readycable® readychain®**

Page 24

## Bicycle components



Bike frame made of plastic - made in Germany



Rotomoulded wheels



Guide pads made of iglidur® GLW



Pulleys made of iglidur® JB



Apiro® trapezoidal lead screw with 4:1 ratio



Roller adapters made of iglidur® P360 and A500



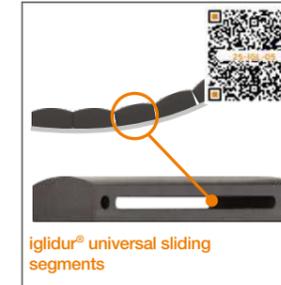
iglidur® A500 gears



Study: Tribo-optimised plastic handlebar with light



iglidur® standards without PTFE



iglidur® universal sliding segments



P360BRLBM plastic outer



drygear® worm gear with hand wheel and manual clamp



Tribo-optimised plastic handlebar



iglidur® W300E multi-component plain bearings



Stainless-steel fabric with iglidur® coating



JRLFM track rollers



Aluminium profile with plastic gear rack components



drygear® worm gear with hand wheel and position indicator



drygear® universal joint



### iglidur® slewing ring bearings



New 10/25

iglidur® PRT-02-20-AL-CP



New 10/25

iglidur® PRT-02-20-AL-DRI



New 10/25

PTFE-free materials for the igubal® series

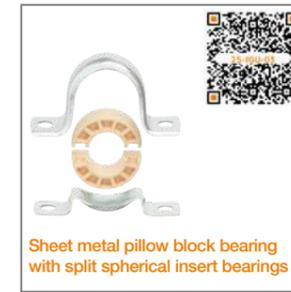


New 10/25

Metal rod ends with plastic inner ring



Split flange mounted bearings



Sheet metal pillow block bearing with split spherical insert bearings



New 10/25

Study: iglidur® PRT-05-94-PC



iglidur® PRT-05 with angle stop



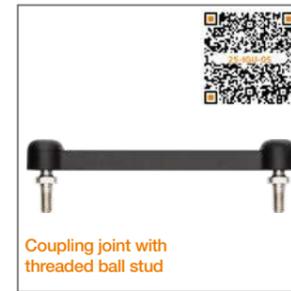
iglidur® PRT-04 compact version



iglidur® PRT-04 with angle stop



Spherical insert bearings made from iglidur® H3



Coupling joint with threaded ball stud



Study: Heavy duty pillow block bearing



Split fixing collar for square profiles



iglidur® PRT-04 with PTFE-free sliding elements



### iglidur® bar stock



New 10/25

iglidur® C300 round bars



New 10/25

Chain guide profile



### xiros® ball bearings



New 10/25

Cleanroom ball bearings



New 10/25

Conveyor roller with ceramic bearings



New 10/25

Thrust bearings with cage



New 10/25

CNC service



New 10/25

iglidur® liner tribotape® A160 soft



New 10/25

Anti-slip tape



New 10/25

iglidur® W301 round bars



Ball bearings made of ceramic and high-performance plastic



Saturn ball transfer unit



Conductive ball transfer unit



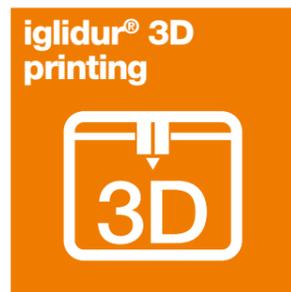
### drylin® linear technology



iglidur® ECO A500 round bars



iglidur® B250 round bars



### iglidur® 3D printing



New 10/25

iglidur® i2000 resin for DLP 3D printing



New 10/25

Liner iglidur® JPF



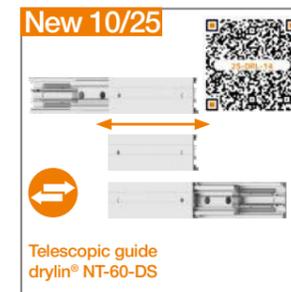
New 10/25

drylin® W single bearing with pretension



New 10/25

drylin® NSV-20



New 10/25

Telescopic guide drylin® NT-60-DS



iglidur® i4000 resin for DLP 3D printing



### igubal® spherical bearings



New 10/25

Universal joint



New 10/25

Pillow block bearings with quick-release fastener



drylin® W installation size 06-70



Slim Line linear housing in installation size 06



Slim Line linear carriages in installation size 06-70



Curved guide in installation size 06

drylin® W exchange bearings made of zinc die-casting

Narrow linear carriage for food technology

Pre-loaded hybrid roller bearings

Linear carriages with pre-loaded hybrid roller bearings

New 10/25  
Expansion of the series of stepper motors with 24V encoder

New 10/25  
Expansion of the series of stepper motors with 24V encoder

drylin® NTM telescope with motor

drylin® SLX linear module

Pre-load prism slide in installation size 20

drylin® NSV pre-load prism slide in installation size 20

dryspin® lead screw technology

New 10/25  
Extension of the product range

drylin® ZLW-1050-ES-EX and ZLW-1050-ES-HYD

drylin® SLR linear system new in installation size 30

drylin® SLW XY tables

drylin® SLW XY tables

New 10/25  
New dryspin® lead screw nut geometry

New 10/25  
New pitch with DS32x32-RH

New dimensions: lead screw nuts

New dimensions: lead screw nuts with machined thread

drylin® SLW with left-hand/right-hand thread

Control unit for inching and jog mode

Hand wheels for double-shaft motors

Stepper motors with brake in IP65

Pre-load lead screw nut with dryspin® thread

Zero-backlash lead screw nuts with dryspin® threads

LH/RH lead screws

drylin® drive technology

Stepper motors with 24V encoder

Stepper motors in long version

Gearbox in installation size 60

Low Cost Automation

New 11/25  
Motor control system D1 with PROFINET/PROFIdrive

New 10/25  
drylin® linear module SLW-60-70-FLS

New 10/25  
drylin® linear module SLW-0620-Ds08

New 10/25  
drylin® linear module SLW-0620-BB-ES

New 10/25  
Automation at the motion plastics® specialist igus®

New 10/25  
Humanoid robot: iggyRob

New 10/25  
Mobile robot platform - ReBeLMove Pro - from €39,800

New 10/25  
Autonomous forklifts

New 10/25  
drylin® stainless steel linear module SLW-ESAX500-1040-FDA

New 10/25  
drylin® SLR-60-32x32

New 10/25  
DLE-CU-9 quick and easy to set up

New 10/25  
DLE-CU-7 easy, safe and quick to install

New 10/25  
Mobile robot platform ReBeL® EduMove

New 10/25  
ReBeL® new features and improvements

New 10/25  
ROS 2 packages for ReBeL® and EduMove

New 10/25  
ReBeL® Environment

**New 10/25**



Linear robots with two or three axes

**New 10/25**



Operate robot kit with modular system and industrial iRC software

**New 10/25**



Rotary-drive unit for laboratory and medical technology

**New 10/25**



igus Robot Control - free and licence-free control software

**New 10/25**



Linear robot with Siemens S7 control system

**New 10/25**



XXL 3-axis delta robot with up to 96 picks/min.

**New 10/25**



Four-legged robot with cobot

**New 10/25**



Customised telescopic lifting units for your automation solution

**ReBeL® 03:**  
new features and improvements



**ReBeL® Environment,** plug them together and get started!



**ReBeL® Environment:** Firm grip guaranteed!



**Study: Imitation allowed:** Show to program



**New 10/25**



Practical tips and concrete solutions on the "Learn More" pages of RBTx

**New 10/25**



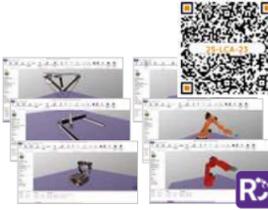
RBTx online tools

**New 10/25**



Heavy lifting made easy

**RobotCtrl - robot control system from RBTx by igus**



**ReBeL® EduLab**



**ReBeL® EduMove**



**ReBeLMove**



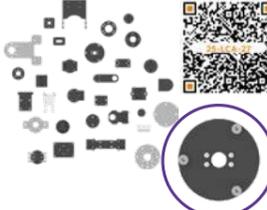
**ReBeLMove Pro**



**Seventh axis for a reach of up to 6,000mm**



**Adapter plates for easy connection of grippers and robots**



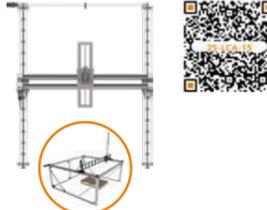
**Live webinar with tips and tricks for your automation project**



**Complete solutions between €2,000 and €49,970**



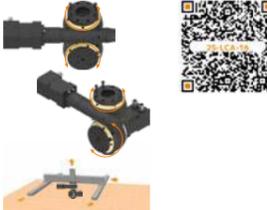
**XXL linear robot for up to 25kg**



**Study: Profile axes for linear robots**



**Extending linear robots' degrees of freedom**



**Study: Stainless-steel delta robot**



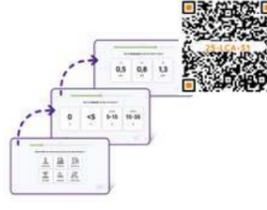
**RBTx Academy**



**Study: Universal step conveyor for separating small parts**



**RBTx online tools: five clicks to your recommended price offer**



**Play before you pay: test robots interactively**



**Study: Pipetting robot**



**Modular robotics: endless possibilities**



**Study: RoboBuilder**



**Complete automation cells including CE service**



**ROI calculator: calculating instead of puzzling**



**AI robot expert: your robot solution is waiting**



**e-chains® and e-chain systems®**



**New 11/25**

**C6 energy chain with cleanroom guide system**



Page 6

**igus® Robot Control: program more than 100 igus® robots**



**igus® Joint Control (iJC) for kinematics with one to three axes**



**RBTx® market place**

**RBTx by igus®**



**New 10/25**

**Machine planner - create the right robot solution online**



**New 11/25**

**e-skin® flat configurator** Page 8



**New 11/25**

**e-skin® soft ESD** Page 9



**Office Chain Oval OCO.32.37.0**



**E2.1 e-chain® product range made from igumid® CG LW**





Extender crossbar clip for E2(i).26/ E2(i).38 / E2(i).48 series



Study: E2C.48 one-piece e-chain®



One-piece e-chain® E1



R4Q.64L



e-skin® soft SKS28.100.02.1



e-skin® soft ESD



ESD SCARA Cable Solution TR.SCS.29.01.DD.LL.01.0.ESD



TR.CSCS.20.01.DD.LL.02.1



Extender crossbar clip for series E4.64L and E4Q



Study: Plastic-carbon hybrid chain YC.56



Study: YE.32



Study: YE.200



Study: SCARA Cable Solution TR.CSCS.20.0X.DD.LL.01.1.ESD



triflex® ESD product range



triflex® R light mounting bracket TL.50.01.Z0 & TL.50.01.Z2



TRCF.65 radius stabilisation protector



guidelok slimline GLSL.P.S.2



guidelok swing for 038 width



Study: plane-chain mini



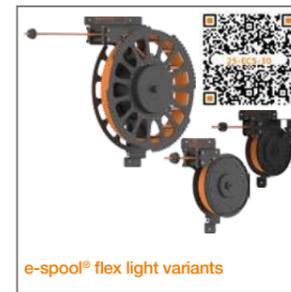
Study: pull-e-cable



triflex® R heavy duty - TRHD.142.300.0



e-spool® 4.0 for crane systems and handling equipment



e-spool® flex light variants



Study: e-spool® theatre HD42e



Study: e-tract mini



e-tract DC



Study: glide-chain G4.42



e-dispenser



e-spool® theatre HD42



e-spool® theatre HD30



Study: zig-zag E4.56



ReBeL-Twist



Fraunhofer IPA Certification



C6.22 Cleanroom e-chain® and assembly tool



Strain relief separators C6.29, C6.38 and C6.22



GLO.56.CRF roller supports



Steel guide trough ST200



iMSPO cruise



smart plastics



New 11/25

triflex® TR.P

Page 12



e-skin® flat ESD



e-skin flat® strain reliefs



e-skin® flat layer holder



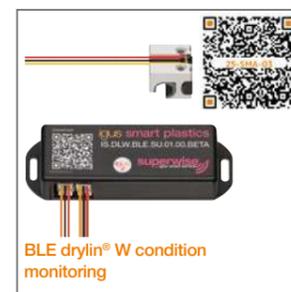
SKF.S.10.055.01.0 e-skin® flat with support chain for e-skin® flat



superwise - service rethought and made smart



Data concentrator BLE



BLE drylin® W condition monitoring



Intelligent residual length measurement for CF CASEs



EC.WLC status indicator for the E4.Q system



Condition monitoring i.Sense for vertical e-chain systems



Firmware release for i.Sense condition monitoring



chainflex cables



New 11/25  
chainflex® CF381 special cable for theatre and stage Page 20



New 11/25  
chainflex® CF340 single-core cable Page 22



New 11/25  
chainflex® CF38 motor cable with shield without protective conductor Page 22



New 11/25  
chainflex® CF884.032 measuring system cable Page 23



New 11/25  
New certifications for dry cleanrooms and maritime applications Page 23



New 11/25  
New UL Temperature Rating for chainflex® servo/motor cables



New 11/25  
PVC control cable CF130.40.04.UL



readycable readychain



New 11/25  
Drive cables suitable for Infranor - Mavilor Motors Page 26



New 11/25  
Expansion of the readycable® drive technology product range Page 28



New 11/25  
New readycable® cables for industrial camera technology



readycable® adapter cables for Kuka Quantec 1 to 2



HARTING T1 Industrial Mini PushPull connector



RFID access control for Module Connect interface



readychain® eco rack

# vector award 2026



For unique energy supply solutions – energy supply systems with cables

## Wanted: Creative & unique applications with e-chain systems®

Your energy chain has to perform better than ever before: higher payloads, increasing speeds, more complex motion sequences and trends such as Industry 4.0. Not a job for standard solutions. Your creativity, perseverance and courage are often required to develop an energy supply system that sets standards.

## We are of the opinion that such achievements should be in the spotlight.

igus® provides the perfect stage for this with the **vector award 2026**. Every two years, the competition honours the most extraordinary applications of energy chains made of high-performance plastic. Apply now. Present your project to the global audience. You can also win prize money of up to 5,000 euros.

## Convince the independent jury of experts!

The vector award enters its tenth round. The competition has long since established itself internationally: over 320 applications from 37 countries were received in 2024. A high-calibre jury from research, the specialist press and industry guarantees a well-founded evaluation of your idea. Take your chance! Will you be there?

## Registration and conditions of participation

You can apply for the **10th vector award** if your project fulfils the following conditions:

- You use energy chains from igus® made of high-performance plastic or plastic hybrid solutions.
- Your project is not in the planning stage, but has already been implemented.
- You give your legally binding consent for igus® to mention your company in advertising and reporting.

Deadline:  
**30. January 2026**

Apply online now:  
**www.igus.eu/vector**

## Your benchmark: the vector winners 2024



**Gold: Space spectrograph**



**Silver: Vehicle test system**



**Bronze: Nightclub mirrored ceiling**



**Green: Machine for regrooving tyres**

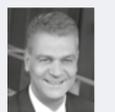
## Jury



Olaf Katzer  
Head of Training (AS-GL)  
Autostadt GmbH



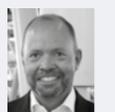
Madeleine Mickleit,  
Engineer, Founder &  
CEO IoT Use Case



Prof. Dr.-Ing.  
Christian Brecher  
Head of the  
Machine Tool  
Laboratory  
RWTH Aachen  
Chair (WZL)



Arno Reich  
Business Unit Manager  
Trade show & Product  
management  
Deutsche Messe AG



Michael Blaß  
CEO  
e-chain systems®  
igus® GmbH



Ken Fouhy  
Editor-in-Chief  
VDI news  
& patron vector  
award

## Look forward to publicity & prize money

The vector award is gaining increasing international attention every year. The competition thus offers a large stage on which you can present the innovative strength of your company to the industry. The following four prizes are up for grabs:

The **golden vector** –  
Prize money of **€5,000**

The **silver vector** –  
Prize money of **€2,500**

The **bronze vector** –  
prize money of **€1,000**

The **green vector** for an  
exceptionally sustainable project –  
prize money of **€1,000**

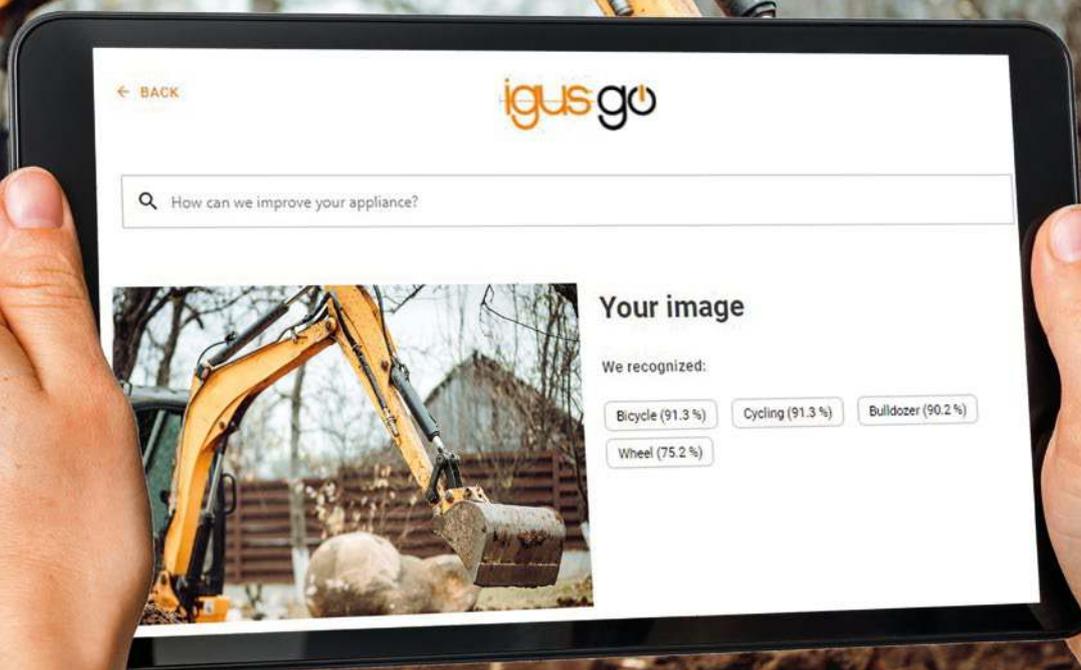
All winners will also receive a **free marketing package worth over €10,000**. The in-house igus® agency produces a user report in an industry medium (DACH + international) and professional video material of the application.

# GO ZERO lubrication

igusGO® - identify lubrication-free potential in seconds ... with AI



Try it now:  
[igus.eu/igusgo](https://igus.eu/igusgo)



igus® SE & Co. KG  
Spicher Str. 1a, 51147 Cologne, Germany  
Phone: +49 2203 9649-0  
[www.igus.eu](http://www.igus.eu)