

Aerospace

igus® solutions for aviation and aerospace



• Tech up, Cost down. It's our job.

igus®.eu

www.igus.eu/aircraft

motion plastics® for all aviation and aerospace applications

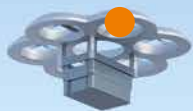


Aerospace engineering/
space observation

Exterior/structural parts

Ground support equipment

Drones/charging stations



Interior



Airport equipment

Passenger boarding bridges



www.igus.eu/aircraft

Reduce cost ... improve technology ...



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Lightweight, quiet, fail-safe and as small as possible. igus® products fulfil these requirements for aircraft interiors with the added benefit of being lubrication and maintenance-free.

The development of components for aircraft interiors focuses on specific criteria. igus® offers the optimum solution for virtually any moving application in the interior.

- **Lubrication-free** – entirely clean operation and 100% maintenance-free thanks to igus® high-performance polymers (**FAR 25.853 or UL94 V0 certification upon request**)
- **Lightweight** – thanks to the use of lightweight components such as plastic, aluminium or carbon
- **Quiet** – igus® bearings, linear guides and energy chains slide smoothly and virtually silently since they are designed without balls
- **Small** – igus® products adapt to any installation space ... while remaining fully functional

For these reasons, igus® products are ideally suited for a variety of applications in the aircraft interior, including seating kinematics, in headrests that can be height-adjusted in fixed steps, in table extensions, footrest adjustments, mobile cabin partitions or for the adjustment, function and maintenance of entertainment systems.

Customised special parts as well as machined prototypes are always possible.

Advantages of igus® products at a glance:

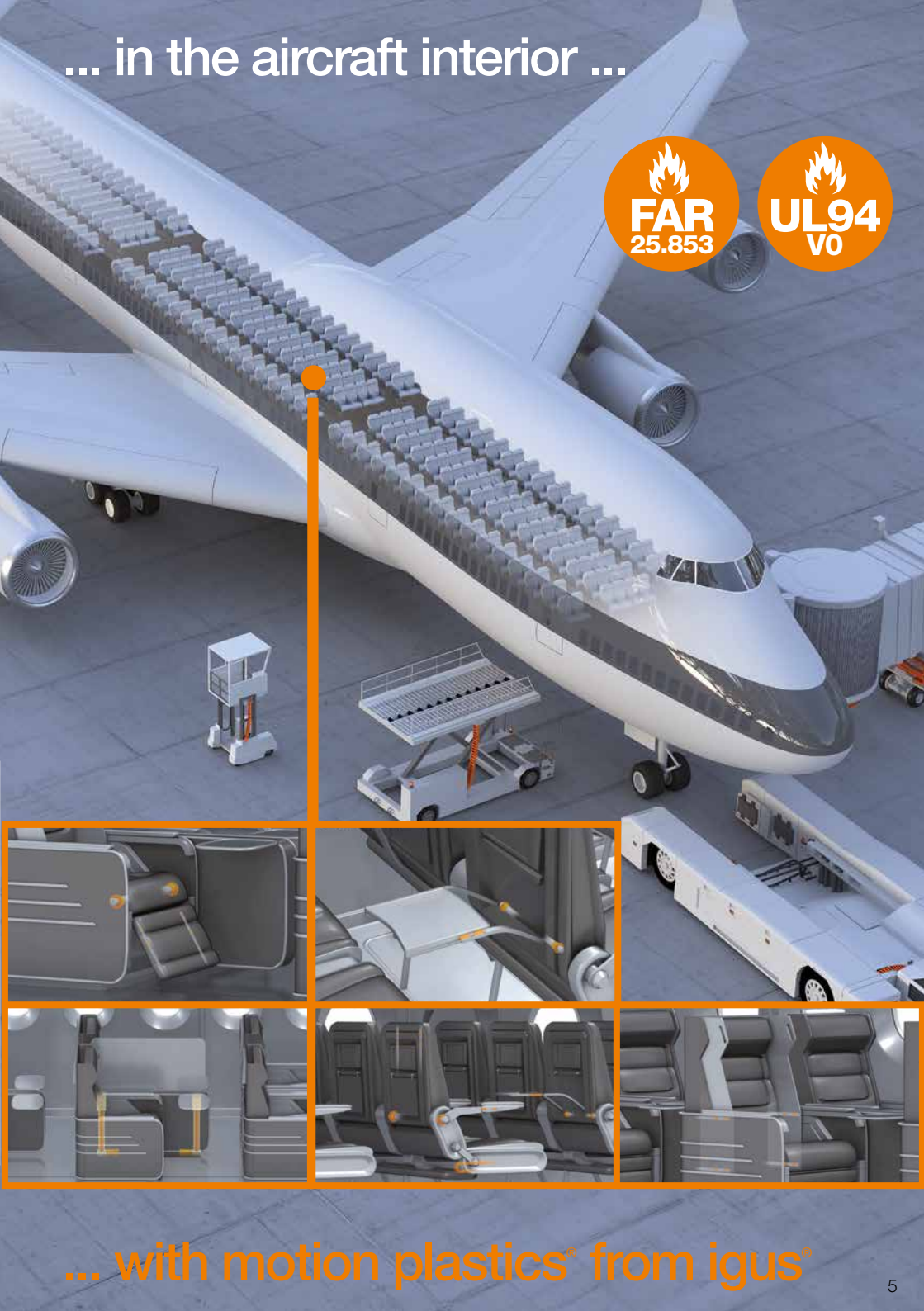
- **Lubrication-free and maintenance-free**
- **Weight saving**
- **Quiet operation**
- **Vibration-dampening**
- **Available from stock**

Our 30 online tools can calculate function and service life, and our product finder quickly guides you to the igus® product you need. Also visit our industry website!

 www.igus.eu/aircraft

We hope you enjoy reading this edition.

... in the aircraft interior ...



... with motion plastics® from igus®

Save weight ...

with motion plastics® from igus® ...



Adjustable armrests



igidur® GV0 bearings

- Wear-resistant
- Many standard dimensions; also available in accordance with FAR 25.853/UL94 V0

www.igus.eu/GV0



drylin® N low-profile guide

- Lightweight
- Low installation height between 6 and 12mm
- Many carriage options

www.igus.eu/drylinN



Adjustable leg support/footrests



igidur® MCM clip bearings

- Easy assembly
- Captive with double flange
- Abrasion-resistant

www.igus.eu/MCM



drylin® T rail guide

- Corrosion-free
- Lightweight
- Compact design
- Lightweight and quiet

www.igus.eu/drylinT



Height-adjustable headrests



drylin® NT telescopic guide

- Adjustable
- Optional adjustments in fixed steps
- Extremely quiet

www.igus.eu/NT



drylin® W profile guide

- Large linear modular system
- Single or double rails
- Linear bearings and complete carriages

www.igus.eu/drylinW

... dispense with lubrication ...

... in aircraft cabins

Table adjustment (economy class)



iglidur® J plain bearings

- Vibration-dampening
- Extremely low coefficient of friction
- For rotary, pivoting and linear movements

 www.igus.eu/J



drylin® N low-profile guide

- Lightweight
- Low installation height between 6 and 12mm
- Many carriage options

 www.igus.eu/drylinN



Table extension (business class)



iglidur® JVSM plain bearings

- Clearance-free, pre-loaded
- Rattle-free
- Maintenance-free

 www.igus.eu/JVSM



drylin® T low-profile linear guide system

- Compact design:
- Same dimensions as recirculating ball bearings
- Carriages with V0 certification optional

 www.igus.eu/drylinT



Cabin doors



iglidur® J350 plain bearings

- Temperatures up to 180°C
- Classification in accordance with UL94 "Safety Tests for Flammability", V0 rating
- Extreme wear resistance

 www.igus.eu/J350



SFRJ350 bar stock

- Round bars up to Ø 100mm
- For prototypes and small quantities
- Media-resistant

 www.igus.eu/barstock



... reduce noise level ...

with motion plastics® from igus® ...



Adjustments of tablets, pads, smartphones



igubal® EGLM spherical bearings

- Angle compensation
 - Lightweight
 - Shock-resistant
- www.igus.eu/igubal



drylin® W curved guide

- Customised radii
 - Best possible field of view
 - Adjustable without the need for lubrication
- www.igus.eu/drylinW



Luggage compartment flap



igidur® M250 plain bearings

- Excellent level of vibration dampening
 - Durable against edge loads
 - Thick-walled, DIN 1850
- www.igus.eu/M250



drylin® W profile guide

- Precise guidance
 - Curved; can be delivered with customised radii
 - Hybrid bearings with integrated roller for easy movement
- www.igus.eu/drylinW



Horizontal seat adjustment



e-chain® micro

- For extremely small installation spaces and bend radii
 - UL94-HB (optional V0)
 - Cable-friendly
- www.igus.eu/E2micro



e-chain® easychain®

- Easy to fill even with connectors or cable bundles
 - Flexible, highly dynamic and quiet
 - UL94-V2
- www.igus.eu/easychain

... dampen vibrations

... in aircraft cabins

TV monitor



igubal® KSTM + ESTM pillow block bearings

- Lightweight
- Compensation for misalignments
- For all shaft materials
- Lubrication-free
- High durability
- Compensation for edge loads

 www.igus.eu/igubal



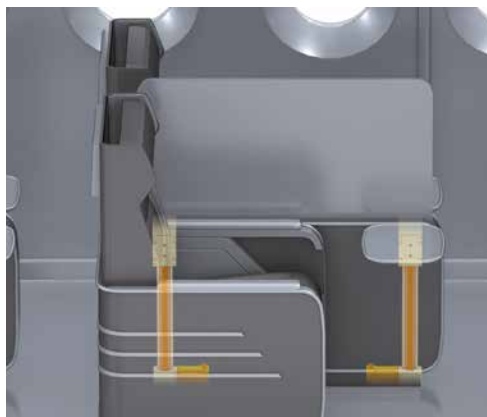
Partitions



drylin® ZLW toothed belt axis

- Ready-to-install linear axes
- Lead screw or toothed belt drive
- Customised stroke lengths
- Can be configured with NEMA stepper motors or DC motors
- Lightweight and low noise
- Can also be delivered with a carbon linear guide (100% metal-free)

 www.igus.eu/drylinZLW



Seat adjustment



e-chains® for rotary applications

- Lightweight, quiet and abrasion-resistant
- Reliable cable guidance
- V0 and V2 fire classes possible
- Easy to fill and assemble
- Can be delivered harnessed with chainflex® cables

 www.igus.eu/ZF



igus® solutions for the ...

Not only in the aircraft ...

Failsafe energy chain systems and maintenance-free linear guides

... improve technology and reduce costs of the vehicles on the runway.

Weather-resistant igus® polymer solutions

... help you to reduce logistics and assembly times as well as throughput times and virtually eliminate the need for maintenance.

Our energy supply solutions

... for failsafe guidance of cables and hydraulic / pneumatic hoses for almost all vehicles.

Eliminating the need for lubrication

... makes our polymer plain bearings and linear bearings maintenance-free and ideally suited for outdoor use.



Learn more at:

 www.igus.eu/aircraft

... Ground support equipment

... but also on the runway: igus® has the necessary experience



Boarding bridges: guide heavy cables and hoses safely and reliably



Ambulifts: strength and reliability even with large vibrations



Aircraft tractors: high resistance against dirt and other environmental conditions



De-icing vehicles: failsafe operation for temperatures between -40°C and +120°C



Container stackers: e-chain® E4.1 – easily openable from both sides



Boarding bridges: for any movement and environment – e-chains® and chainflex® cables

igus® solutions for aerospace engineering

Robust components for aerospace engineering

In aerospace and related disciplines, such as space observation, component reliability and robustness are especially important. Our **energy chains and cables** represent 60 years of experience with high-performance plastics. That is why they are installed in aerospace applications all over the world. Areas of use include space telescopes and rocket launch pads. Thanks to our engineering team and with certified chainflex cables, we also offer ready-to-connect complete systems that are tailored to meet your needs.

igus® **bearing and guide technology products** allow high load capacities to be achieved in tough environments. Application examples include space exploration vehicles such as the Mars Rover and model and prototype construction in research and development.

Advantages of igus® products

- Complete solution from a single source
- No minimum order quantity
- High load capacity
- Materials for a wide variety of environmental conditions
- Maintenance-free and durable
- 36-month guarantee



Satellites and ground stations



Space shuttles, rockets and launch pads



Space exploration



Space observation

igus® solutions at the airport

Lubrication-free components for airports and runways

Worldwide, about 50 million planes take off every day. A complex infrastructure is necessary if such operations are to go smoothly. Airports are a central component of this infrastructure. Wherever something has to move in an airport, igus® products win over customers with their reliability, quiet operation and freedom from lubrication: at automated checkpoints, luggage transport, body scanners and in flight simulators.

To minimise ground times for planes, ground support equipment that remains functional in all weathers is indispensable. Our energy chains and cables have proven themselves for years with their corrosion-resistant, maintenance-free materials and long service life. They are used in passenger boarding bridges, de-icing vehicles and systems, cargo lifters and conveyor belt vehicles.

Advantages of igus® products in the airport:

- Quiet and low vibration
- Lubrication-free and maintenance-free
- Worldwide 24/7 service



Airport security



Passenger boarding bridges



Luggage management



Flight simulators

igus® solutions for drones

Lightweight bearing technology without lubrication for drones and UAVs

Unmanned flights will affect our lives more and more in the form of flying taxis and drones delivering packages. Low weight, all-weather use and long service life are among the stringent requirements of drone components. Our products made of high-performance polymers are ideal for such applications, since they require no additional lubrication and are quiet and corrosion-free. Many iglidur® materials also fulfil the requirements of the FAR 25.853 fire protection standard.

Advantages of igus® products

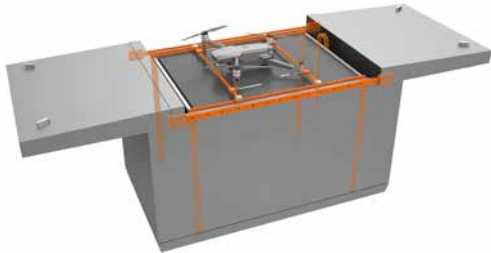
- Cost-effective
- Save installation space and weight
- Quiet and low vibration
- Resistant to chemicals, dirt and corrosion
- Fast delivery
- Complete systems or individual components from batch size 1



Fixed-wing aircraft



Drones with rotors



Drone-in-a-Box

Materials certified according to ...

... Fire protection standard FAR 25.853

iglidur® plain bearing materials such as the three standard materials iglidur® X, J350 and A350 as well as iglidur® H and GV0 now officially fulfil the fire prevention requirements of the Federal Aviation Administration of the USA (FAA) for aircraft interiors. The plain bearing materials have been tested by an independent test institute in accordance with the FAR CS 25.853 fire test method, App F, Part 1a 1(ii) with positive results.

- All five materials have V0 classification in accordance with UL94
- iglidur® bearings are used inside aircrafts for folding tables, seat adjustment mechanisms, door hinges and overhead lockers
- Extensive standard range from stock



 www.igus.eu/iglidur

Fire protection standard UL94 V0

The iglidur® polymer plain bearing material GV0 achieves the UL94 V0 rating and is therefore ideally suited for applications with stringent fire protection regulations (vehicle and aircraft interiors, building interior systems, etc.). Other properties are similar to the all-rounder material iglidur® G.

- Lubrication-free and maintenance-free
- UL94 V0 rating
- Abrasion-resistant
- Universal application
- Vertical burn test; CS-25.853 APP F Part 1a 1(ii) (12 seconds) is available for a selection of iglidur® materials



 www.igus.eu/GV0

... the right solution ...

Maintenance-free plain and linear bearing solutions ...

... extremely low profile

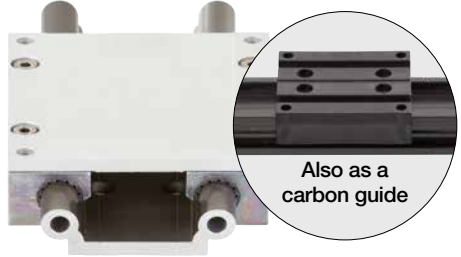


drylin® N low-profile linear guides

- 100% lubrication-free
- Low installation height between 6 and 12mm
- Lightweight
- Numerous carriage options - also with pretension

 www.igus.eu/drylinN

... for almost unlimited leeway in design

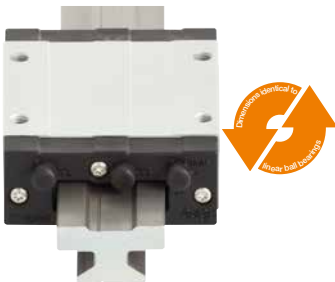


drylin® W linear system

- Easy installation, maintenance-free
- Resistant to dirt due to dry operation
- Lightweight and quiet
- Square rail with floating bearing function for 90 degree installation
- Manually adjustable bearing clearance (optional)
- VA stainless steel version or full carbon version: non-magnetic, lightweight and strong

 www.igus.eu/drylinW

... as an alternative to recirculating ball bearing guides



drylin® T linear guides

- 100% lubrication-free
- Automatic clearance adjustment
- High static load capacity
- Dirt resistance
- Low vibration and quiet

 www.igus.eu/drylinT

... linear drive through rotational motion



drylin® lead screw technology

- Efficient and durable dryspin® technology
- Self-locking trapezoidal and metric threads
- Split lead screw nuts made from 5 iglidur® materials
- High helix thread from 1/4 inch to 20mm diameter and 1/10 inch to 90mm pitch

 www.igus.eu/leadscrew-technology

... available from stock.

For example ...

... the best shaft for your linear plain bearings



drylin® R shaft guides and shafts

- 100% lubrication-free
- Dimensions identical to standard commercial ball bearings
- Shafts, shaft support blocks and accessories available from stock
- Replaceable liners
- 8 different shaft materials
- Lightweight, round or supported

 www.igus.eu/drylinR

... complete systems

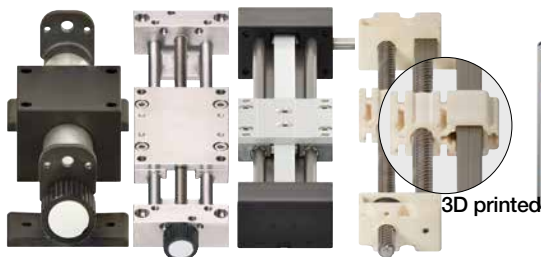


Lift/swivel unit

- Very light and dynamic due to plastic and aluminium
- Lubrication-free and maintenance-free
- Compact structure and modular design
- 4-square profile with hollow chamber suitable for supply cables and media
- Delivered ready to install with NEMA stepper motors

 www.igus.eu/HSQ

... drive: trapezoidal, high helix thread or toothed belt



drylin® linear axes

- 100% lubrication-free, extensive accessories
- For format adjustments up to quick small parts handling
- **NEW:** The first lubrication-free linear carriages 3D printed using iglidur I3 material



 www.igus.eu/drylin-drive

... linear axis with motor and control unit, ready-to-connect



drylin® E drive technology

- Complete systems delivered in 3-4 days
- NEMA stepper motors / DC motors
- Can also be configured online
- With dryve control unit (optional)

 www.igus.eu/drylinE  www.igus.eu/dryve

More igus® products ...

Lubrication-free bearing made easy ...

... moves neatly without lubricants



igidur® plain bearings

- Wear-resistant polymers
- FDA-compliant and antibacterial materials
- Customised special solutions - no minimum order quantity
- High wear resistance
- High load capacity and good coefficient of friction
- Service life can be calculated online

 www.igus.eu/igidur

... lubrication-free, compact slewing ring bearing



igidur® PRT slewing ring bearing

- Cost-effective, low maintenance, lubrication-free
- Easy to install and replaceable sliding elements
- High wear resistance
- For high loads and high rigidity
- Extensive accessories (e.g. toothing, locking, ...)

 www.igus.eu/PRT

... ball bearings with completely dry operation



xiros® polymer ball bearings

- Lubrication-free and maintenance-free
- High corrosion resistance for temperatures up to +150°C
- Non-magnetic
- Lightweight


 www.igus.eu/xiros

... insensitive to dirt



igubal® spherical bearings

- Self-aligning bearing elements, made of polymers
- Different types of designs, e.g. spherical, double, joint, flanged and pillow block bearings
- Different spherical ball materials
- Extremely cost-effective
- Service life can be calculated online

 www.igus.eu/igubal

... and solutions

... as you need it.

... material from prototypes to volumes

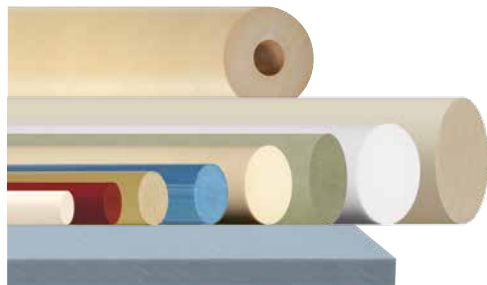


igidur® tribo-filament for 3D printing

- Can be processed by commercially available 3D printers
- Choice of 5 materials: iglidur® I150 excellent wear resistance. iglidur® I170-PF sophisticated processing. iglidur® I180-PF good wear resistance. iglidur® I210 chemical resistance. iglidur® J260PF extremely wear-resistant, especially when used with plastic shafts

 www.igus.eu/tribofilament

... for free design



igidur® bar stock

- iglidur® materials as round bars, tubes and plates
- Currently 26 iglidur® materials to choose from
- Cut to required size without offcut removal
- Machining with no minimum order quantity
- Maintenance-free and predictable

 www.igus.eu/barstock

... special geometries



Special parts made of tribo-polymers

- Special solutions
- Self-lubricating and maintenance-free plain bearing solutions in accordance with your requirements
- Specifically tailored to your application
- Machined or moulded

 www.igus.eu/speedimold

... cut and glue



tribo-tape

- Suitable for lining surfaces and shapes where wear is an issue
- Easy to cut and glue
- Less space required
- Optional self-adhesive back

 www.igus.eu/tribotape

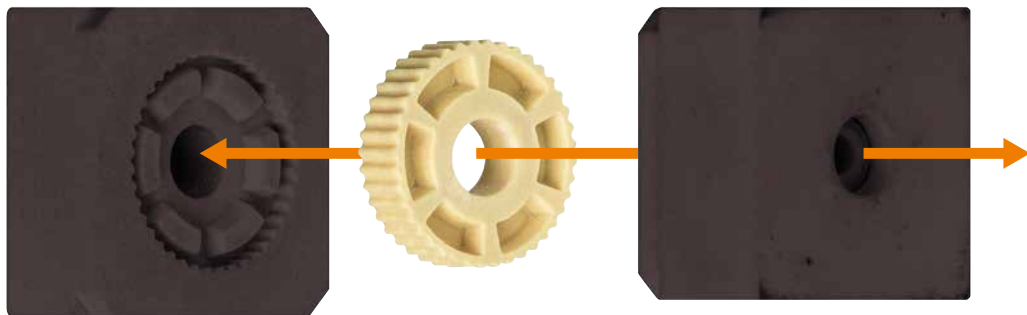
iglidur® tribo 3D printing ...

3D printing for wear-resistant parts ...



3D printed wear-resistant polymer parts

iglidur® tribo-filaments are the only 3D printing materials specially developed for moving applications. The printed parts can be used directly in the moving application and convince their users due to the typical tribo characteristics - they are lubrication-free and extremely wear-resistant. The degree of wear is up to 50 times lower than that of other 3D printing materials.



Injection moulding tools, quick and inexpensive from the 3D printer

Due to 3D printing, igus® is able to make customised injection moulds in a short time with up to 80% lower costs. Maintenance-free polymer plain bearings in the required shape can be made quickly and, above all, cost-effectively.

- A wide array of material types: iglidur® J - extremely wear-resistant,
- iglidur® W300 - withstands high stress
- iglidur® A180 - FDA-compliant
- iglidur® UW - for underwater applications and much more
- Cost-efficient and delivered quickly, no minimum order quantity
- For simple geometries

Find more information at  www.igus.eu/tribo-printing

... as good as injection-moulded

... made of high performance polymers

... makes printing even easier



iglidur® I150

- Very good resistance to wear with a pv value of up to 0.2Nm/s
- Can be processed even without a heated printing plate
- Recommended printing surface: igus® adhesive film or "BuildTak"

... highly abrasion-resistant for printing



iglidur® C210

- Wear-resistant
- Chemical-resistant
- Diameters: 1.75mm and 3mm
- Can be processed by commercially available 3D printers

... highly abrasion-resistant, lubrication-free



iglidur® I180-BL

- Wear-resistant
- Can be processed by commercially available 3D printers
- Diameters: 1.75mm and 3mm
- Now also in black

... specifically developed for laser sintering



iglidur® I3

- At least 3 times more wear-resistant
- Detail accuracy with exact surfaces
- Processing similar to commercially available SLS materials

Just shop for individual 3D parts.

Wear parts from the 3D printing service: online and at lightning speed.

We print your individual component made of lubrication-free and abrasion-resistant iglidur® polymers; easy to order and quickly installed: everything from prototypes to complex special parts.



Energy chains for large-scale applications

Large e-chains® for ground support equipment

e-chains® – designed to guide and protect.

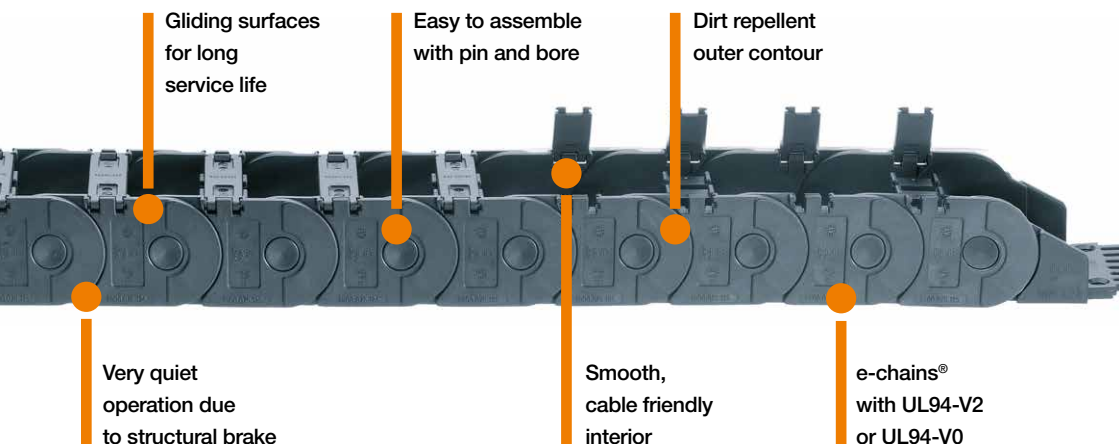
e-chain systems® are the "umbilical cord" of modern machines. They reduce downtime and increase the service life of cables and hoses. Polymer energy chains have been developed, produced and tested by igus® since 1971. e-chain systems® carry sensitive bus, data and fibre optic cables, as well as energy forms such as electricity, gas, air and hydraulics.

- Up to 350mm inner height/200-1,000mm inner width
- Fill weights up to 600kg/m
- Travel speeds up to 600m/min.
- Maintenance-free – no grease or oil needed to lubricate the joints
- Modular design reduces assembly time
- Highly resistant to wear, corrosion and sea water
- Easy to lengthen and shorten
- The polymer material reduces noise and has a vibration dampening effect
- Electrically insulating
- Resistant to dirt, sea water, chemicals, extreme temperature
- Diverse modular interior separations
- Lightweight and high strength



... and the smallest installation spaces

... and small e-chains® for aircraft cabins



Small, strong, flexible – E2 micro

- For the smallest installation spaces
- UL94-V2 (optional V0)
- Strong, light and quiet
- For all installation types

 www.igus.eu/E2micro



Excellent stability/size ratio – E2 mini

- Good size/strength ratio
- Quiet operation
- UL94-V2
- Openable, quickly filled

 www.igus.eu/E2mini



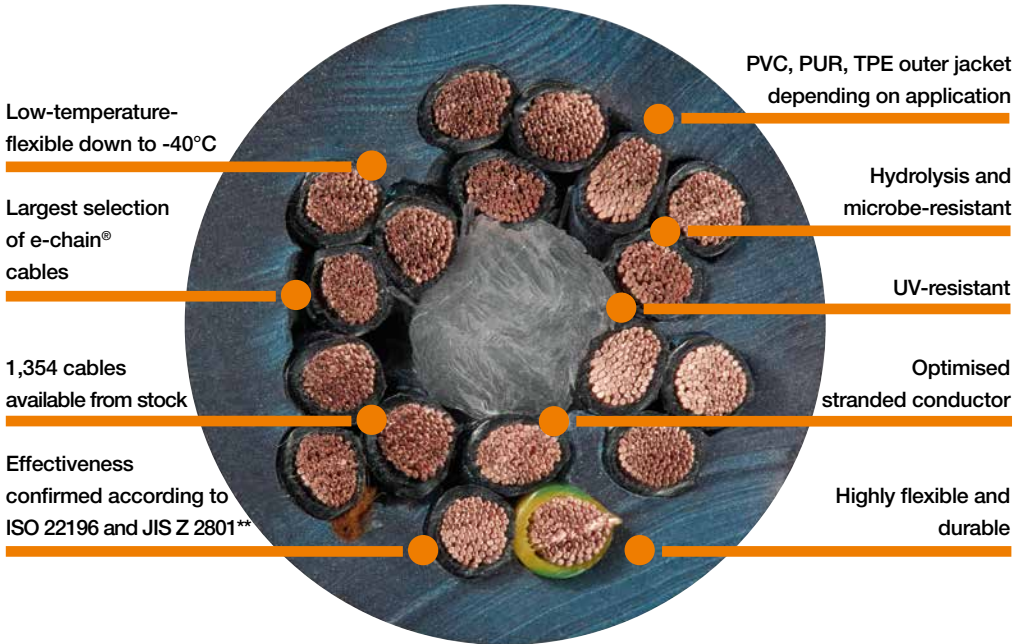
Light, flexible, easy to fill - easychain®

- Easy to fill
- UL94-V2 (optional V0)
- Flexible, highly dynamic and quiet
- Lightweight and low-cost

 www.igus.eu/easychain

chainflex® works ...

More than 1,354 chainflex® cable types from stock



Almost 30 years of chainflex® - cables with the special structure for a very long service life in energy chains and unique 36-month guarantee*.

Flexible cables in energy chains need special features to last through many cycles, high speeds and accelerations, as well as demanding environmental conditions. Electromagnetic compatibility and compliance with standards and guidelines, such as DIN EN 45545, NFPA 79, UL, CSA, VDE, Inter and Profibus are also taken for granted today. The igus® chainflex® product line ranges from control cables, servo cables, motor cables and robot cables to bus cables, data cables, encoder cables and fibre optic cables; all have been specially developed for e-chains®.

- Temperatures -40°C to +90°C
- For highly dynamic applications in energy chains
- Special design prevents cable failure and "corkscrewing"
- Highly abrasion-resistant jacket materials (PUR, PVC, TPE)
- 36-month guarantee for all cables*
- Effectiveness in line with ISO 22196 and JIS Z 2801 and achieved an R value ≥ 2 in the test**
- Cleanroom-compatible, ISO Class 1 or 2



* 36 months or up to 10 million double strokes (5 million for cables of the chainflex® M family); whichever is first

** CFSPECIAL.544.001

... guaranteed

Special solutions for your industry, for example:



e.g. **chainflex® CF9 / CF10** - shielded TPE control cables for extreme demands in outdoor applications, for small bend radii, hydrolysis and bio-oil resistant

 www.igus.eu/CF10



e.g. **chainflex® CF98/CF99** - for heavy duty use and especially for small radii. TPE - outer jacket, PVC and halogen-free, cold-flexible, resistant to hydrolysis and bio-oil

 www.igus.eu/CF99



e.g. **chainflex® CFBUS.052** - largest selection of e-chain® bus cables for extremely small radii, e.g. CAT7, CAN bus, USB 3.0, DVI cable etc.

 www.igus.eu/CFBUS



e.g. **chainflex® CFLG88** - preferably indoor applications, PVC outer jacket, maximum EMC protection, flame-retardant

 www.igus.eu/CFLG88



e.g. **chainflex® CFSPECIAL.544** - antimicrobial, for use in moving applications with greater hygiene requirements, effectiveness in line with ISO 22196 and JIS Z 2801

 www.igus.eu/CFSPECIAL544



**Save money with reliability and innovation ...
3 year igus® guarantee for every chainflex®
cable.**

Guarantee statements are often associated with considerable risks in plant construction. With our unique igus® guarantee for ALL chainflex® cables, we are providing predictable security for 36 months, or up to 10 million double strokes (5 million double strokes for the very cost-effective chainflex® M cables).

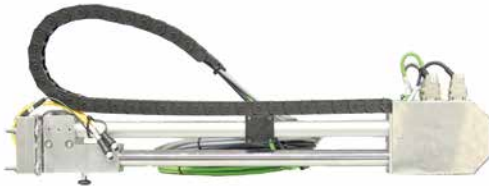
Guarantee
igus chainflex

36

 month guarantee

Harnessed systems ...

readychain®: chain - cable - guarantee ... delivered in 3-10 days



igus® drylin® linear systems completely assembled with cables and e-chains®

readychain® - fully harnessed systems in 3-10 days

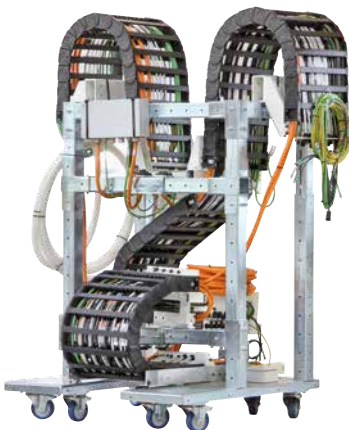
1,600 systems produced per week in 12 readychain® factories around the world – assembly time optimised to increase your cash flow. The largest factory for harnessed readychain® systems with 4,700m² and 160 employees in Cologne.

- Eliminate storage costs for cables, e-chains® and connectors
- Cut lead times by half
- Flexibility when orders vary
- Reduce the number of suppliers and orders by 75%
- Minimise your machine downtime
- System guarantee – depending on the application

 www.igus.eu/readychain

readychain® assembly rack

80% savings during prototyping. Assembly transport rack for ready-to-install energy supply systems.



... delivered ready to install

readycable®: harnessed drive cables ... in 24-48hrs



readycable® - in 24-48hrs or today

igus® provides more than 4,400 harnessed drive cables according to 24 different manufacturer standards. Professionally produced, 100% tested.

- Servo, motor and signal/encoder cables
- No cutting costs, no surcharges for small quantities and packaging

- Cable length accurate to the centimetre to customer specifications
- Smallest bend radii from 7.5xd
- Reduce storage costs and increase cash flow

 www.igus.eu/readycable



Intercontec SpeedTec

Connector service packs (starting at 1 piece) or harnessed directly to your specifications. Also available as over-moulded version.

Condition monitoring ...

smart plastics eliminate downtime.

Intelligent products predict failures in advance and can be integrated in your predictive maintenance processes.

The isense family of igus® products consists of various intelligent sensors and monitoring modules. They measure wear during operation and alert the user early enough to plan a repair or an exchange. The igus® Communication Module (icom) makes the seamless integration into your IT infrastructure possible. This enables scenarios such as continuous monitoring or automatic triggering of maintenance work. An optional connection with the igus® data centre widens the options: individual lifetime optimisations and faster operational processes like automatic ordering of external maintenance teams or ordering of spare parts. These include maintenance commissioning or spare parts ordering. Thanks to smart plastics your equipment runs continuously and your maintenance costs go down. Improved safety is an additional benefit.



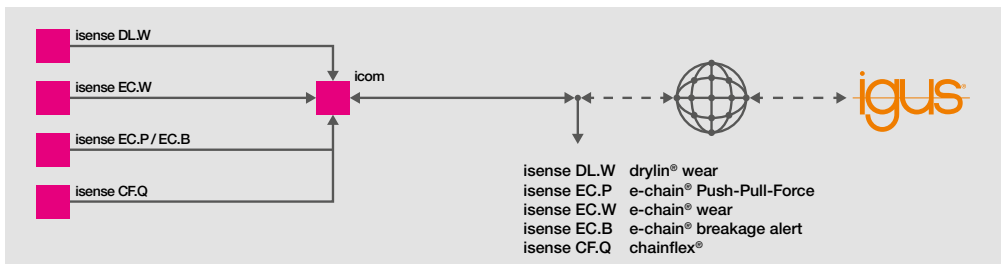
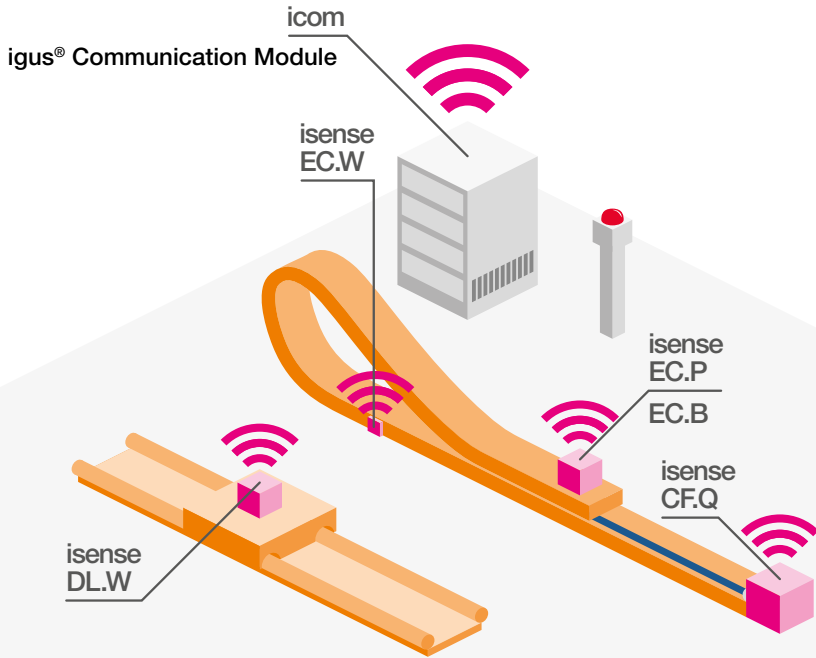
Integrated sensors indicate maintenance and issue warning before critical wear occurs

The engineers in the igus® 3D printing team have now achieved a further great step: sensors are printed into the tribo-component via multi-material printing. Long before failure, it signals that a replacement is imminent. It can also detect overload in order to stop the application immediately and prevent further damage to the bearing position and the entire system. This enables predictive maintenance for special parts as well, with the result that machine downtime and maintenance work can be reduced. Due to additive manufacturing, such intelligent 3D isense components can now be delivered in a cost-effective way from five business days.

3D isense is suitable for the manufacture of intelligent plain bearings, sliding elements, lead screw nuts and all other special parts that are susceptible to friction and wear.

... eliminate downtime

... with intelligent igus® products



- Reduce maintenance costs
- Eliminate unplanned downtime
- Increase service life
- Increase equipment efficiency
- Save time - faster detection of the reasons for anomalies
- Reduce energy consumption
- Typical application areas: wherever predictive maintenance is required, e.g. harbour installations, cranes, car plants, etc.

... fast and reliable.



igus® delivery service

Over 97% availability of all catalogue parts

- Over 100,000 products from stock
- No minimum order value
- No surcharges for small quantities
- No costs for cutting cables
- No packaging costs

 www.igus.eu/24



Modern injection moulding technology

The igus® GmbH quality policy is based on the objective of identifying and meeting customer needs, and of always being a professional partner and reliable supplier. igus® has always been committed to producing products of the best possible quality and consistently developing innovative solutions.



The igus® lab

The industry's largest test lab (3,800m²) conducts more than two billion test cycles per year on a total of 107 test rigs.

- Extensive test databases
- Customised tests upon request

 www.igus.eu/test



igus® motion plastics®

One vision has been driving us for 50 years – motion plastics®: moving parts made of plastic that cost less and last longer. Our core technology consists of tribo-polymers – high-performance plastics, which we have optimised for friction and wear. The technology has made us into a world-wide leader for developing and manufacturing energy supply systems and plain bearings.



/9001:2015 /16949:2016

igus® is certified in accordance with ISO 9001:2015 and ISO/TS 16949:2016 in the field of energy supply systems, cables and harnessing, as well as polymer bearings.

/14001:2015

igus® is certified according to ISO 14001:2015. This accepted basis for environmental management systems supports us on our way to a CO²-neutral factory.

/newsletter

Get more information about motion plastics® innovations and trends: exciting applications, videos, test results, online seminars and much more. Compact and free of charge. Register here:

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You can find out more about aerospace technology at www.igus.eu/info/industries-aviation



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