



## plain bearing

### iglidur® - Plain bearings made of high performance polymers:

- Maintenance-free
- Self-lubricating
- Salt water resistant
- High resistance to wear, temperature and chemicals
- High shock absorption
- Predictable lifetime
- Special design bearings possible



**iglidur**® **X** – Almost universal chemical resistance and high wear resistance



iglidur® J – Low coefficient of friction on different shaft materials, lowest value on V4A shafts

Be creative with our iglidur® materials: available now as a round stock bar, or even as mechanically machined components – for tests, prototy-

pes or small volume orders.



**iglidur**<sup>®</sup> **P** – Higher precision in hot and wet applications



iglidur® H 370 – Cost effective material. Up to 200° C possible



iglidur® stock bar

- iglidur® materials as a machinable stock bar ex-stock
- Any dimension bearing possible in just 3-5 days
- Fast and economical
- Predictable life when used as a plain bearing

...igus®/...marine range.../...polymer bearings.../...iglidur®



## s/spherical b

### igubal® - Self-aligning spherical bearings:

- Exceptionally cost-effective
- Maintenance-free
- Lubrication-free
- Resistant to dust and dirt

- Corrosion-free
- Can be used in liquid media
- Vibration dampening



KBRM igubal® Rod End Bearing – simple assembly due to hexagonal housing. Integrated lock nut



KARM igubal® Rod End Bearing 2nd Generation – new design with male thread complements the new female range



igubal® Flange Bearing EFSM



**ECLM igubal® heavy duty clips bearing** – For use in high radial and axial load applications, Easily clips into sheet material



igubal® Pedestal Bearing ESTM



KGLM igubal® ball bearing "low cost" – Easy to install

"low cost" - Easy to install and extremely cost effective



igubal® Flange Bearing EFOM



### linear bearing

### DryLin® – Linear bearings with high performance polymer liners:

- All DryLin® bearings can be used in wet environments.
- New: DryLin® W Stainless can be completely submerged underwater
- Maintenance-free
- Dry running performance
- Resistant to dirt, dust or moisture



DryLin® WK-ES-20 Highest chemical- corrosion- and temperature resistance up to 250°C, Ø 20 mm



**DryLin® WK-ES-10** as a Ø 10 mm double rail

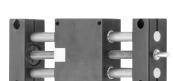
- When weight reduction is important
- For short stroke applications
- Self-lubricating
- Extremely quiet operation
- Wear resistant and corrosion resistant
- Resistant to shocks and vibrations
- Low friction value
- High static load capacity
- High speed and high acceleration



**DryLin® WK-ES-20** Highest chemical- corrosion- and temperature resistance up to 250°C, Ø 20 mm







DryLin® SHT Leadscrew slide units, optimum use of installation space, Lubrication-and corrosion-free



## gs/e.chains/...

The igus® E-Chain® range includes over 70,000 products exstock – including accessories and Chainflex® cables developed and tested especially for use in EnergyChains®. Series E4 (4 piece E-Chain® design) was designed especially for long travel and high load applications and for harsh conditions.

Extension link support for E-ChainSystem® with several extension links

Clamps for safe cable strain relief

The igus Chainflex range – designed for use in Energy Chains – contains over 750 cables ex-stock. Every type of cable has been tested over and over. Chainflex lasts, or your money back.

### E.g. E4/4 Energy Chains - rigid, strong, durable, reliable

- Available as gliding and rolling version
- E4/4 Heavy Duty strengthened version
- Closed and open designs can be combined
- High side-mount stability due to overlapping grip (tongue and groove design)
- High torsional stability
- Highly secure double lock



Long travels with aluminum and steel guide troughs



Floating towning arm, to counter misalignment

The range includes: Control cables, bus cables, power cables, motor, data and servo cables.





### Remote Offshore Vehicle

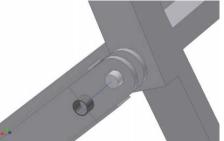
← The Seaeye Falcon is the first Remote Offshore Vehicle (ROV) designed by UK-based Seaeye Marine to meet the operational requirements of inshore, coastal and portable applications. Setting a new standard at depths of up to 300 metres in coastal and inshore waters, the Seaeye Falcon uses igubal® Clevis Joints as an integral part of the vehicle chassis due to their high strength, low part mass and corrosion resistance.

### ./../existing a

### Tether management system for ROVs

SMD Hydrovision's tether management system has various pivot, linear and rotary motion points. It works like a subsea parking point for a Remote Offshore Vehicle (ROV) and can operate at depths of over 900 metres. Stainless steel, PTFE coated bearings were considered, but these were expensive with long lead times. iglidur<sup>®</sup> bearings were chosen for their economic price, quick lead times and corrosion resistance. Standard length bearings could also be easily machined to the special sizes required. →





**† Drill rig**: The British Geological Survey designed a drill rig to collect samples from seabeds at depths of 3,000 metres. iglidur® X self-lubricating bearings eliminate the potential contamination associated with grease in normal bearings.



### Battery charger for yachts

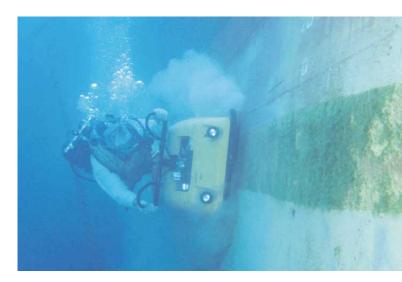
The DuoGen is a patented water and wind powered battery charger for use on cruising yachts and developed by Eclectic Energy. The charger needed tough and reliable bearings due to the hostile environment. Additionally, if bearings needed to be replaced, this had to be possible mid-ocean with a minimum of tools available. The main drive shaft runs through an igubal® polymer plain spherical bearing, which allows the shaft to deflect under loading and still rotate. →



### opications/...

### Hull cleaning machine

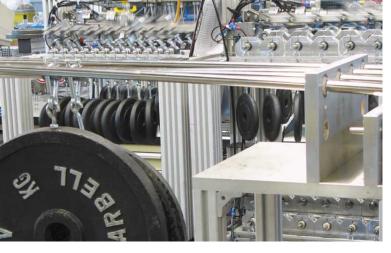
UMC International design and manufacture hull cleaning machines for use by underwater divers. They are hydraulically powered and typically have 2 rotating brushes. The vehicle can be powered forward or reversed, steered and the brushes raised and lowered on a gimbal mechanism. Typical cleaning speed is 1000 sqm per hour iglidur<sup>®</sup> H bearings support various parts of the brush lift and articulation mechanism to insulate the stainless pivots from the aluminium supports. The steering mechanism is a handlebar at the front, connected to a propelled castor at the rear. Each is supported by large bore iglidur<sup>®</sup> Z bearings, which provide substantial weight reduction, zero maintenance and no corrosion in saltwater. →





### ← Underwater torque tool

The bearing which supports the rotor of Rovtech's underwater torque tool is subjected to both rotary and side loads. The tool turns at between 6 and 10 rpm, depending on the load, is made from stainless steel and operates in seawater. An inexpensive, lightweight and lubrication-free iglidur® bearing is used in the rotor. The tool is over 5 years old and the bearings have needed no attention other than routine visual inspection.



igus<sup>®</sup> is the largest producer of injection moulded polymer bearings and reinforced plastic Energy Chains<sup>®</sup>. These seemingly unrelated products are linked together



through the belief in making functionally advanced, yet affordable polymer components and assemblies.

# Order your personal catalogues: www.igus.co.uk/catalogues

### **Polymer Bearings Catalogue**

Over 9,600 products – the standard reference for igus® polymer plain bearings

- Handy DIN A5 size
- Greater selection and more accessories
- More solutions and practical tips
- Quick web links (3D CAD data, configurators, downloads in PDF downloads)



### Chainflex® cables catalogue

Over 750 cables ex-stock – especially designed for the use in Energy Chains® – and tested, tested and tested. Chainflex® lasts. Or your money back.



### E-Chain®-Catalogue

Over 70,000 products – inc. useful accessories – developed and tested for Chains.



E-Chains® and -Systems® ReadyChain® Chainflex® special cables iglidur® igubal® DryLin® plain bearings

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